

Institutional and Regulatory Assessment of the Extractive Industries in Myanmar

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Acronyms / Abbreviations

ASM: Artisanal and Small-scale mining	FDI: Foreign Direct Investment
AWC: Asia World Co. Ltd	FESR: Framework for Economic and Social Reforms
BGF: Border Guard Force	FIL: Foreign Investment Law
BOT: Build Operate Transfer	FLEGT: Forest Law Enforcement, Governance and Trade
CBO: Community Based Organisation	FPIR: Free, Prior and Informed Consent
CDA: Community Development Agreement	GAAP: Generally Accepted Accounting Principles
CDOI: China Datang Overseas Investment Co Ltd.	GAD: General Administration Department
CEP: Core Environment Programme	GAIL: Gas Authority of India Ltd
CPI: China Power Investment	GIS: Geographical Information System
CNMC: Chinese Nickle Mining Company	GMS: Greater Mekong Sub-Region
CNPC: China National Petroleum Corporation	GOUM: Government of the Union of Myanmar
CSO: Civil Society Organisation and Central Statistical Office	GPOA: Gas Pipeline Operations Agreement
CSR: Corporate Social Responsibility	GSA: Gas Supply Agreement
CTGC: China Three Gorges Corp.	GWh: Gigawatt hour
DGSME: Department of Geological Service and Mineral Exploration	HLRHC: Huaneng Lancang River Hydropower Co.
DHPP: Department of Hydropower Planning	HPGE: Hydropower Generation Enterprise
DHPI: Department of Hydropower Implementation	HTMC: Htun Thwin Mining Co.
DICA: Directorate of Investment and Company Administration	IATA: International Aid Transparency Initiative
DUHD: Datang (Yunnan) United Hydropower Developing Co.	IBA: Impacts and Benefits Agreement
DKBA: Democratic Karen Buddhist Army	ICG: International Crisis Group
DRC: Democratic Republic of Congo	IDP: Internally Displaced Persons
DSI: Defence Services Institute	IFRS: International Financial Reporting Standards
EAG: Ethnic Armed Group	IOC: International Oil Company
ECD: Environmental Conservation Department	IOGEC: International Group of Entrepreneurs Co
EDC: Energy Development Committee	INTOSAI: International Organisation of Supreme Audit Institutions
EGAT: EGAT International Ltd	IPRC: Improved Petroleum Recovery Contracts
EGTA: Export Gas Transport Agreement	IRD: Internal Revenue Department
ESIA: Environmental and Social Impact Assessment	ITD: Italian-Thai Development Co. Ltd Thailand
EITI: Extractive Industries Transparency Initiative	JICA: The Japan International Cooperation Agency
ESIA: Environmental and Social Impact Assessment	JV: Joint Venture
ESMP: Environmental and Social Management Plan	JVA: Joint Venture Agreement
	KOGAS: Korea Gas Corporation
	KIO: Kachin Independence Organization

KSDC: Kayin State Development Company	MSMCE: Myanmar Salt and Marine Chemical Enterprise
KSDP: Kachin State Democracy Party	MGE: Myanmar Gems Enterprise
KNU: Karen National Union	MICPA: Myanmar Institute of Certified Accountants
LTO: Large Taxpayers Office	MSEZL: Myanmar Special Economic Zone Law
MoA: Memorandum of Agreement	NCDP: National Comprehensive Development Plan
MAC: Myanmar Accountancy Council	NEMC: National Energy Management Committee
MATA: The Myanmar Alliance for Transparency and Accountability	NESAC: National Economic and Social Advisory Council
MDCF: Myanmar Development Cooperation Forum	NLD: National League for Democracy
MDI: Myanmar Defence Industries	NPV: Net Present Value
MDCF: Myanmar Development Cooperation Forum	NRGI: Natural Resource Governance Institute (formerly known as Revenue Watch Institute)
MDRI: Myanmar Development Resource Institute	OAG: Office of the Auditor General
ME: Mining Enterprise	OECD: Organisation for Economic Cooperation and Development
MEC: Myanmar Economic Corporation	PAPD: Project Appraisal and Progress Department
MEITI: Myanmar EITI	PCC: Performance Compensation Contract
MEPE: Myanmar Electric Power Enterprise	PEFA: Public Expenditure and Financial Accountability
MFTB: Myanmar Foreign Trade Bank	PFM: Public Financial Management
MFMA: Myanmar Federation of Mining Association	PPA: Power Purchase Agreement
MGTC: Moattama Gas Transportation Company	PSC: Production Sharing Contract
MIC: Myanmar Investment Commission	RCDP: Regional Comprehensive Development Plans
MNPED: Ministry of National Planning and Economic Development	RCSS: Restoration Council of Shan State
MNRMC: Minerals and Natural Resources Management Committee	SDN: Specially Designated Nationals List
MoA: Memorandum of Agreement	SEE: State Economic Enterprise
MOD: Ministry of Defence	SESA: Strategic Environmental and Social Assessment
MOE: Ministry of Energy	SEZ: Special Economic Zone
MOECAP: Ministry of Environmental Conservation and Forestry	SIA: Social Impact Assessment
MOECO: Mitsui Oil Exploration Company	SIC: Standing Interpretations Committee
MOEP: Ministry of Electric Power	SLORC: State Law and Order Restoration Council
MOF: Ministry of Finance	SME: Small and Medium Enterprise
MOGE: Myanmar Oil & Gas Enterprise	SNDP: Shan Nationalities Development Party
MOHA: Ministry of Home Affairs	SOE: State-Owned Enterprise
MOU: Memorandum of Understanding	SLORC: State Law and Order Restoration Council
MPC: Myanmar Peace Centre	SLP: Social and Labour Plan
MPE: Myanmar Petrochemical Enterprise	SLRDP: Settlement and Land Records Department
MPPE: Myanmar Petroleum Products Enterprise	SNDP: Shan Nationalities Development Party
MSG: Multi-Stakeholder Group	SOEEL: State Owned Economic Enterprises Law
	SPDC: State Peace and Development Council

STH: Shwe Taung Hydropower Co
TAC: Terms and Conditions
tcf: Trillion Cubic Feet
TNLA: Ta-ang National Liberation Army
TOR: Terms of Reference
TRG: Transcontinental Group
UMEHL: Union of Myanmar Economic Holdings Ltd.
UNDP: United Nations Development Programme
UNFC: United Nationalities Federation Council
USDP: Union Solidarity and Development Party
UWSA: United Wa State Army
YPIC: Yunnan Power International Energy Co. Ltd

Table of Contents

Acronyms / Abbreviations	4
Table of Contents	7
Executive Summary	9
Chapter 1: Introduction	15
Chapter 2: Institutional Analysis	17
Chapter 3: Foreign Investment	43
Chapter 4: Sub-National Governance	53
Chapter 5: Contracts and Beneficial Ownership	71
Chapter 6: Financial Flows	86
Chapter 7: Hydropower	105
Chapter 8: Society and the Environment	116
Chapter 9: Implications for EITI	124
Annex 1: References	130
Annex 2: Large Scale Mining Leases	136
Annex 3: TOR	141
Annex 4: Mineral Belts of Myanmar	147
Annex 5: Myanmar Mineral Reserves	148
Annex 6: Good and Bad Dams	150
Annex 7: Production Sharing Contract Terms	152
Annex 8: Review of Reports by CSOs on Myanmar's Extractives Industries Sector	159
Annex 9: The Development of Myanmar's Power Sector	164

Figures

Figure 1: Extractive Industries Sector Value Chain Methodology	16
Figure 2: Institutional Structure for the Extractives Industries Sector in Myanmar	18
Figure 3: Ministry of Mines Structure	20
Figure 4: Process for Acquiring a Mining Exploration Permit	25
Figure 5: The Process for Awarding of a Mining Permit	26
Figure 6: Ministry of Energy Organisation Chart	30
Figure 7: Myanmar Oil and Gas Block Locations	32
Figure 8: Contracting and Bidding Process for Oil and Gas Blocks	36
Figure 9: Pipeline Network in Myanmar	38
Figure 10: FDI into various sectors of the economy (DICA, GOUM, 2013)	44
Figure 11: FDI into Myanmar (in US\$) since 1989 (DICA 2013)	46
Figure 12: Approved and Actual FDI in Myanmar by Sector and Source (Bissinger 2012)	46
Figure 13: Investment into Myanmar's border regions (Buchanan 2012)	50
Figure 14: Large mining operations per State / Region	53
Figure 15: Administrative Map of Myanmar	56
Figure 16: Typical Structure of State / Region GAD (from "State and Region Governments in Myanmar")	58
Figure 17: MATA structure from national to sub-national	62
Figure 18: The MATA regional working group structure (taken from the MATA Process Paper)	63
Figure 19: Map of 33 villages covered by the SEP programme	66
Figure 20: Antimony mine in Mon State	69
Figure 21: Contractual Arrangements of the Yadana Field	77
Figure 22: Flows of Revenue and Information in Myanmar's Extractive Industries Sector	87
Figure 23: The Legal Context for Tax and Non-Tax Resource Revenues in Myanmar	89
Figure 24: Myanmar's Oil and Gas Revenue Flows	93

Figure 25: Mining Revenue Flow Diagram – the Case of a Large Scale Mining Company	98
Figure 26: Mining Enterprise No 1. Revenue Flows	99
Figure 27: Gold Project - Payment in Kind	100
Figure 28: Gems Association - Revenue Flows	101
Figure 29: Month by Month Hydro Generation Data 2013-2014 (Central Statistics Office)	109
Figure 30: Myanmar's Electric Power Financial Flows (Chinese JV Project example)	114
Labour (Social Protection) Figure 31: Jade Mining in Myanmar (Thevelvetrock.com)	118
Figure 32: Armed Forces move in to stop protesters ploughing fields near the Letpadaung Copper Mine development (EarthFirstNews.org)	120
Figure 33: Proposed MEITI Reporting Process	128
Figure 34: Myanmar Grid System (from the ADB Energy Sector Initial Assessment Report, 2012)	165

Tables

Table 1: Current Status of Formal Regulatory Processes	27
Table 2: Offshore companies (MOGE Presentation, Jan 2014). Bold blocks indicate producing fields)	31
Table 3: Onshore companies (MOGE Presentation, Jan 2014)	31
Table 4: FDI net inflows to Myanmar (World Bank)	44
Table 5: FDI brought into Myanmar through formal, registered companies (DICA, 2013)	45
Table 6: Proportion of Onshore and Offshore Block Ownership by Country (MOGE Presentation, Jan 2014).	49
Table 7: Production Share Arrangements for Onshore blocks – Crude Oil	72
Table 8: Production Share Arrangements for Onshore blocks – Natural Gas	72
Table 9: Oil and Gas Projects Registered by the Ministry of Energy	78
Table 10: Shareholder Categories	84
Table 11: UMEH Mining Interests (non-exhaustive)	85
Table 12: MEC Mining Interests (non-exhaustive)	85
Table 13: Corporate Income Tax Rates	90
Table 14: Other Taxes	91
Table 15: Summary of Non-Tax Instruments contained in the Standard Terms and Conditions for PSCs	94
Table 16: Operational Hydro Plants in 2012	106
Table 17: Ministry only Planned Hydro Development	110
Table 18: Local entrepreneurs' hydro plants to be developed on a Joint Venture BOT basis	110
Table 19: Foreign Direct Investment under consideration by the Ministry of Energy	111
Table 20: Environmental Protection Legislation	117
Table 21: Key Social Protection Safeguards – Labour Legislation	118
Table 22: Public Reaction to Social and Environmental Problems Related to Mining	121
Table 23: Social and Environmental Problems Related to Oil and Gas Development	123
Table 24: Overview of the Myanmar Electricity Sector, as of July 2013	164

Executive Summary

This report provides a baseline institutional and regulatory assessment of the oil and gas, mining (including jade and gemstones) and the hydropower sectors in Myanmar.¹ As such the report is an input to Extractive Industries Transparency Initiative (EITI) in Myanmar. However, it is not exhaustive with respect to all the sectors that may be considered under a scoping study for EITI. This report is the first in-depth study of the context within which EITI will be implemented in Myanmar, and can inform broader efforts to improve natural resource governance. This includes support for developing natural resource policy, law and regulations, fiscal regime design, tax administration (including support to the Large Tax Payers Office on the extractive industries sector), licence management and cadastre systems, community development agreements, strategic environmental and social mitigation and management, training needs assessments and capacity building.

Before all else, a baseline assessment must begin by acknowledging how recent the reform process is in Myanmar. In 2011, following five decades of authoritarian rule, Myanmar commenced a multi-faceted economic and political reform process. In the context of a long history of economic mismanagement, conflict and military rule, the extractive industries face a daunting task of adopting sustainable and inclusive practices. This is apparent in the institutions organised around natural resource management as elsewhere. From a political economy perspective, Myanmar is a country in transition – a democratic system still deeply conditioned by its recent militarised past, with Defence Services personnel still holding 25% of seats in parliament.

The extractive industries sector is still operating within a framework of limited information and relations between government, companies and civil society (and communities) which are characterised by grievances and disputes about benefit sharing. The starting position at the beginning of the reform process two years ago was poor. With EITI candidacy announced in July 2014, the work of the Myanmar Extractive Industries Transparency (MEITI) will be a significant challenge for all involved. Previously, many grievances with the extractive industries sector were resolved by fiat or use of force, rather than through policy-making, mediation or dialogue. We must therefore begin

by acknowledging the reality that misinformation and historically derived distrust still exists. The implementation of EITI will not provide a quick fix; it will take several years for the quality of data on the extractive industries sector to live up to international standards and for platforms for dialogue on sector governance to emerge. What follows below is a summary of the key findings of the report, beginning with a review of the three sectors defined as the scope for this report.

The Mining Sector

- The Ministry of Mines (MOM) has six State Economic Enterprises (SEEs) and two administrative departments.
- Estimated export value of minerals for the year 2013/2014 was US\$1,150.2 million².
- The SEEs are shifting from being owner/operators to regulator/administrators (although this transition is far from complete).
- Under proposed reforms to the Mining Legislation local authorities would gradually receive increasing responsibility for mining inspection and regulation.³
- The last geological survey took place in 2008. The most significant minerals are copper, gold, nickel, antimony, silver, lead, zinc, tin and tungsten. But few mineral reserves have been confirmed according to international standards due to the poor quality and availability of data.
- The northern regions of Myanmar contain the highest quality of jadeite (a variety of jade) in the world. Recorded exports in 2013/2014 from Jade amounted to US\$1,011.6mn. Over the same period Myanmar produced 17,286,64 carats of gemstones⁴.
- The Myanmar Gem Emporium, which holds annual gem and jade sales, sold US\$3.4 billion in the 2014 sale.
- There are currently 139 large-scale licences and 1,315 small-scale licences, but questions remain about validity, terms and actual ownership of the licences.

¹ While other extractives sectors such as forestry and fisheries are not assessed, the MEITI MSG may discuss and agree to include these sectors as in-scope for EITI reporting

² Data for July 2013- June 2014 taken from the GOUM Central Statistics Office, Selected Monthly Economic Indicators (June 2014). <https://www.csostat.gov.mm/sdetails01.asp>

³ International Growth Centre (July 2014) Natural Resources and Subnational Governments in Myanmar, pg. 30

⁴ Data for July 2013- June 2014 taken from the GOUM Central Statistics Office, Selected Monthly Economic Indicators (June 2014) <https://www.csostat.gov.mm/s14MA02.htm>

- Two parliamentary committees exist which are directly related to the extractive industries sector, from both the upper and lower house of parliament.
- There are many well-documented cases of poor industry practice: a lack of community engagement, widespread pollution, transparency deficits, forced relocation and land grabbing. There are numerous reports by Civil Society Organisations (CSOs) documenting the key issues with specific projects.
- Environmental and Social Impact Assessments (ESIAs) for existing projects are not generally available, although a new legal framework for ESIAs (in the Foreign Investment Law and the Environmental Conservation Law) will shortly be finalised.
- The lack of a mining cadastre contributes to inefficient administration and licensing processes.
- There are currently 24 artisanal (referred to as "subsistence mining" in Myanmar) mining permits and 141 small scale processing permits, where royalties and land rent are collected. However there is currently limited regulatory control over or support to artisanal mining, and the use of toxic chemical agents such as mercury.
- Considered analysis estimates that well over 50% of jade in Kachin State is smuggled to China.
- Security of tenure and high up-front fees are both perceived to be a deterrent to foreign investment.
- Mineral assets are viewed as overpriced due to liquid Chinese investors not shouldering the high cost of financing and reinvestment in property due to sanctions keeping cash within the country.

The Oil and Gas Sector

- The Ministry of Energy (MOE) has an Energy Planning Department and three SEEs: Myanma Oil and Gas Enterprise (MOGE), Myanmar Petrochemical Enterprise (MPE), and Myanmar Petroleum Products Enterprise (MPPE).
- Myanmar produced 6.2 million barrels of crude oil and 500,190 million cubic feet of natural gas between July 2013 and June 2014⁵
- The legal framework is out of date (the Petroleum Act dates to 1934), and a new Petroleum Bill is currently being discussed. Contracts currently take precedence over legislation.
- There are currently 16 onshore and 19 offshore blocks in exploration and production. The offshore fields provide natural gas for the Shwe Gas, Yadana and Yetagun pipelines. While the Shwe Gas pipeline started producing

in 2013, Yadana has been producing since 1998 and Yetagun since 2000.

- During the 2013-14 onshore and offshore bid rounds, 36 new blocks were awarded. New entrants include Shell, Eni, Statoil, BG and Woodside.
- Queries have been raised about beneficial ownership transparency in the recent bid rounds.
- The United States Geological Survey (USGS), in 2012 estimated 2.3 billion barrels of oil and 79.6 trillion cubic feet of gas reserves.
- Tax payments are made directly to the Internal Revenue Department in the Ministry of Finance (MOF), whereas non-tax payments (such as royalties) are sent to MOGE.
- Use of foreign accounts is permitted.

The Hydropower (Hydro) Sector

- The Ministry of Electric Power (MOEP) is responsible for the hydropower sector. Specifically, there is a Department of Hydropower Planning, a Department of Hydropower Implementation and a Hydropower Generation Enterprise (HPGE).
- The regulatory structure for the power sector is in a transition phase.
- A new Electricity Law and regulations will set up an Electricity Regulatory Commission.
- Three joint-venture hydro plants are currently in operation: Shweli 1 (600MW installed capacity), Dapein 1 (240MW installed capacity) and Chipwi (99MW installed capacity) However, only Shweli 1 generates electricity in commercially significant amounts at present.
- Total capacity of hydro plants increased to 2,780MW in 2013, however during the summer months generation capacity can decrease to 35% of installed capacity.
- Joint Venture (JV) partners send monthly fiscal reports to the Budget Department of the MOF which includes reporting on domestic sales of the free share of electricity sold by the Myanmar Electric Power Enterprise (MEPE).
- There are 18 other hydro plants also in operation (some owned/run by the HPGE) and, some in private hands, however, little is known about their combined generation capacity.
- The Government of the Union of Myanmar (GOUM) plans that by 2030; hydro will be the main source of domestic power in the country.
- Seven projects on the Ayeyarwaddy are suspended (most significantly, the Myitsone dam). There is a paucity of data and high-quality planning with respect to river use. GOUM has recognised this gap and created the National Water Resources Management Committee, and launched a programme to improve data quality.
- Hydropower nonetheless represents an opportunity for export revenue (US\$120m exports from Shweli 1 and

⁵ Data for July 2013- June 2014 taken from the GOUM Central Statistics Office, Selected Monthly Economic Indicators (June 2014). <https://www.csostat.gov.mm/S11MA0206.htm>

Tapein 1 projects in 2011), but there are also huge domestic energy needs.

- The potential value of annual hydro production exceeds US\$15bn (41 GW) if all proposed FDI projects are approved.

- Taxes (commercial, withholding, income) from Chinese Joint Venture companies are paid via the Export Import Bank of China.

Inter-Governmental Coordination

- Given that government agencies have historically been run in relative isolation from each other, this report reviewed existing inter-governmental coordination mechanisms regarding the extractive industries sector.

- The two line ministries (mines and energy) have historically operated on a self-funded basis (hence non-tax payments still being returned to ministry-controlled SEEs).

- From the perspective of EITI, the Leading Authority and the EITI Working Committee strike a potentially positive balance between executive-level buy-in and managerial oversight in contributing to the governance of EITI (via the Multi-Stakeholder Group) from the perspective of the GOUM.

The coordinating body for energy matters is the National Energy Management Committee (NEMC), with the Energy Development Committee as its implementing body.

- The Ministry of National Planning and Economic Development (MNPED) is a key coordinating agency, particularly in terms of development partner coordination.

- The MNPED recently signed up to the International Aid Transparency Initiative (IATI).

- The MNPED has a working group on Public Financial Management (PFM) but currently no working group on Natural Resources.

- The PFM project supported by the World Bank includes some support related to EITI implementation.

- There is a potential information-sharing arrangement between MEITI and the Central Statistical Organisation (CSO) which will provide better quality data and analytical competency to the CSO and may contribute to evidence-based macro-economic policy-making and planning.

Role of Parliament

- As well as the MNRMC, the Public Accounts Committee (PAC), which has a lower house body and a joint-committee, may play a critical role in the implementation of EITI. The PAC works closely with the Office of the Auditor General (OAG), receiving summary reports bi-annually, which it uses to conduct engagements with sector stakeholders.

The EITI Multi-Stakeholder Group (MSG) and the GOUM will need to decide what role may be appropriate for the Public Accounts Committee in EITI reporting.

Sub-national Governance

- The General Administration Department (GAD) under the Ministry of Home Affairs plays a dominant role in sub-national administration.

- State or Region governments do not have a substantive role in governing the sector and in some states have limited resources and access. This has led to limited accountability at sub-national levels.

- There are some large (multi-million dollar) Corporate Social Responsibility (CSR) projects, managed by the private sector companies operating extractive sector projects in the region.

- Examples include CSR projects implemented in connection with Shwe Gas and Yadana pipelines. However, as with ESIA reports, there is little availability of data on these projects, still less public domain budgets or audited reports.

- A number of civil society organisations have organised around EITI remarkably quickly. The Myanmar Alliance for Transparency and Accountability (MATA) was established in early 2014. Members of its Steering Committee represent civil society on the MSG. The decentralised decision-making structure of the coalition should ensure that a diverse range of views filter up from all the MATA coalitions and platforms at sub-national level.

- The challenge for MATA will be to balance a focus on EITI with other initiatives of interest to the coalition. While MATA may function effectively at the national level, it is likely that the sub-national coalitions are on the one hand closer to the real issues that communities face from extractive industries sector operations in their midst. On the other hand, they will require increased capacity to effectively address those challenges and advocate responses to the sub-national government.

- In addition, historical legacies and the contemporary political economy realities of state and regional governments mean that local groups often have limited space to operate in than those operating at national level, and therefore face a restricted "enabling environment." The question of a responsive and inclusive set of strategic priorities that at the same time addresses sub-national capacity needs may continue to occupy MATA in the years to come.

- There are six self-administered sub-national units recognised in the 2008 constitution and more than 18 opposition Ethnic Armed Groups, who have historically opposed the Myanmar government and in some cases run parallel administrations. Findings from two field trips

(to Shan and Kayin states) show that comprehensive nationwide EITI reporting will be difficult initially. This is partly because data may not be available from self-administered areas, but also because the legacy situation of “brown and black” contested areas⁶ and shifting patterns of mining ownership and management mean that certain operations are difficult to access for data collection and research purposes.

Contracts and Beneficial Ownership

While contract transparency is encouraged but not required by the EITI 2013 Standard, it remains a topic for MSG discussion and the Standard was expanded in 2013 to incorporate these issues.

The contemporary global trend is for extractive industries sector contracts to be increasingly publicly available. Myanmar has an opportunity to support this trend.

Some well-known beneficial owners are keen to expand their business internationally, and be removed from the Specially Designated Nationals (SDN) lists. They have a strong incentive in favour of transparency and EITI. However, there is also likely to be resistance from other entrenched vested interests.

Extractive assets have in some cases been granted on an individual basis (for example, equity stakes in mines).

For these reasons, ultimate beneficial ownership analysis is likely to be a sensitive topic for EITI.

The military holding companies Union of Myanmar Economic Holdings Limited (UMEHL) and the Myanmar Economic Corporation (MEC) both have interests related to extractive industries. MEC is a joint venture partner in some mines.

Both MEC and UMEHL are considered private sector entities by GOUM, not SEEs.

There needs to be a formal mechanism to engage with these companies for a comprehensive assessment of the mining sector to take place within the terms of the EITI Standard.

Financial Flows

The Budget Department of the MOF collects information on revenue flows from oil and gas, mining and hydropower and is projected to become the institutional home of the Myanmar EITI Secretariat. Taxes (such as Corporate Income Tax, Commercial Taxes and Capital Gains) are paid to the Internal Revenue Department (IRD) in the MOF.

⁶ Brown, black and white are often used to explain Myanmar's conflict affected territories. The terms come from the Defence Service's categorises of insurgent held areas (black), mixed areas of Defence Services and EAG control (brown) and controlled areas (white).

Non-Tax payments (such as royalties, production shares, signature bonuses) are paid to the SEEs.

Accounting standards in Myanmar have been historically based on British accounting standards and Generally Accepted Accounting Principles (GAAP).

Myanmar Accounting Standards still need to adopt five remaining International Financial Reporting Standards (IFRS) measures.

Ministries and SEEs have off-budget “Other Accounts” lodged in the Myanmar Economic Bank which are not reported in the fiscal reports (financial regulations only allow for the Ministries of Defence and Home Affairs to have these types of accounts).

The MOE has three Other Accounts (in Singapore) and MOGE has 14 Other Accounts. It is not clear what each of these accounts is used for and to what extent oil and gas revenues flow through these accounts.

Myanmar has multiple Other Accounts. Other Account receipts for FY2011-12 total 2.54 trillion kyat, 44% of total budgeted revenue. While use of Other Accounts is not unusual, bringing these accounts into the formal budget process will ensure higher levels of transparency.

Accounts overseas that receive payments from extractive industries sector operations in Myanmar are a transparency risk. Consideration may be given to ensuring that these accounts are also on budget and that the respective revenue flows go through Government's State Funds Account. Similarly direct payments in Forex from these accounts should be reflected in foreign exchange budget appropriations. EITI may play an important role in assessing the use of overseas accounts, exchange rates and financial flows.

Auditing

The OAG is formally expected to receive bi-annual and annual project-by-project audits from the SEEs (fiscal and production volumes). These reports would be the basis for EITI annual reconciliation reports, as well as potentially for interim reporting, analysis and dissemination by the MEITI Secretariat.

OAG sends bi-annual summary reports both to the Presidency and to the PAC. However, there are no penalties for delayed submissions and even some IOCs are years behind on audit submission. In some cases, it may take up to a decade to produce an audited report. These delays are a risk to the timeliness of EITI reporting.

The OAG has the power to audit joint venture partners and also MEC (but not UMEHL) but lacks capacity to do this effectively. This means that, for example, it may be difficult (at least initially) to source information on extractive projects in which UMEHL is a partner for EITI purposes.

The Directorate of Defence Industries has its own audit function for UMEHL.

For the first EITI report to be a success, the OAG will require support. This may come from a variety of sources, including development partner technical assistance, or back-office sub-contracting and capacity building in advance of the first EITI report.

Society and the Environment

A fully-fledged new legal framework for the environment will shortly be in place, and it will subsequently require implementation across government. However, this framework still has shortfalls: most significantly, there is a powerful exemption clause in the Environmental Conservation Law. The on-going review of the draft ESIA for Letpadaung will be a test case for how effective the new governance framework is.

The legacy of poorly regulated oil and gas and mining operations and the lack of publicly available information have created a huge backlog of work for the newly regionalised Environmental Conservation Department, which is in charge of implementing the legal framework concerning ESIA's.

Implications for EITI

The analysis summarised above and found in more depth in the main body of the report has a number of implications for the effective implementation of EITI in Myanmar:

The Peace Process

Many of Myanmar's most rich natural resource areas are affected by the country's long-running civil wars. Myanmar is in the midst of the most comprehensive attempt at securing a national ceasefire and political dialogue since independence. This process will require careful sequencing for EITI reporting requirements for extractive operations in these areas.

EITI stands to provide information on revenues, which can help inform discussions of revenue sharing, a key issue in the political dialogue.

Contracts and beneficial ownership.

Current contracts are being negotiated with MOGE, the Myanmar Investment Commission (MIC) and the President's Office. The OAG has weak capacity in comparison with the IOCs.

Ultimate beneficial ownership is a sensitive topic in every country and Myanmar is no exception. It may not be possible to draw definitive conclusions on this question in the short term.

Access To / Quality of Information

Data quality presents a serious problem for EITI report reconciliation. Consultations have revealed an institutional culture of producing information by arrangement, rather than by empirical assessment. For instance, recorded production volumes in the mining sector cannot be verified and are based on an agreement between officials, rather than by measurement. Meanwhile, there appears to be instances of tax evasion in the mining sector, with two sets of books a common practice and under-reporting of revenues by up to ten times the apparent norm, according to private sector stakeholders.

The Myanmar Accountancy Council (MAC) should adopt and institutionalise IFRS measures 9-13 ahead of the first MEITI report.

Confidentiality clauses in oil and gas, mining, and hydropower agreements will require legal measures (perhaps via a second Presidential Decree on EITI) to facilitate access to commercial data in audited accounts, both for the planned scoping study and for the reconciliation process.

There is an early opportunity to include initial transparency reporting provisions in the Mining, Petroleum and Electricity laws currently being amended/drafted, such as "Reports submitted by licence-holders must be in accordance with the Myanmar Extractive Industries Transparency Initiative."

The first EITI report should aim to map onto political incentives and timeframes, and the MSG could perhaps consider whether it would be beneficial to first produce a "pilot" report focusing on oil and gas, in the context of a reporting roadmap recommended by the scoping study. This would be in line with the EITI move away from large single-volume annual reports towards more targeted reports. MEITI could consider taking a sectoral approach to EITI reporting from the outset.

The scoping study may therefore include contextual analysis which will satisfy Requirement 3 of the EITI Standard (that the EITI requires EITI Reports that include contextual information about the extractive industries), separately to the first reconciliation report.

Hydropower (hydro)

Hydro joint ventures are apparently audited annually and can be included within the first EITI report, however only the Shweli 1 dam is a significant revenue earner for the GOUM at present.

Given the ramifications of the suspension of the Myitsone dam project (and the reality that the project is not likely to be restarted in the near, middle or even long term), the political significance of the hydropower sector should not be underestimated. Reconciling financial flows in the

hydropower sector should be a relatively easy quick win to garner further support for EITI.

Managing Expectations

- EITI provides a dialogue platform and high quality information and analysis, but not solutions.
- MEITI requires a sophisticated and well-resourced communications framework that enables both targeted messaging but also a responsive feedback mechanism.
- The bigger strategic question: “what should we extract and when?” is not addressed by EITI and should be asked elsewhere. This is an opportunity for macro-level policy-making in the MNPED.

Role of Government

- EITI can help to connect the finance function with extractive line ministries and planning.
- A Memorandum of Understanding (MOU) between the MEITI Secretariat and the Central Statistical Organisation could strengthen links between the MNPED and the MOF at an operational level, and perhaps lead to greater collaboration at the macro-economic policy making level.
- Given their potentially increased role on EITI, the MSG may wish to consider participation from other ministries, such as MNPED (or MOEP if hydro is included in EITI) on the MSG, as well as participation from the new IOC entrants.

The Scoping Study

The follow-up to this baseline assessment is a scoping study, which will determine which companies should be included within the first MEITI report and what payment flows they will need to report on. It is likely (and widely expected) that the oil and gas sector will require full reporting, in terms of disaggregated “project-by-project” reporting, as well as beneficial ownership analysis (including the most recent bid rounds). It is also likely that the major mining projects in the country will also be required to report under EITI. A reasonable expectation would be that the materiality threshold would be set to include the top twenty or thirty mining projects – any smaller number would be too small a percentage of total mining sector contributions to the economy, any larger number might pose too many logistical and information-based challenges to the independent administrator, although all large mining licences may be considered.

The jade and gemstones sector brings with it a unique set of challenges for EITI reporting, however it is in principle possible to reconcile payments to and from the annual government Gems Emporium.

The MSG will also need to consider whether the hydropower sector should be included in scope (whether in the first report, or in subsequent reports). Additionally it

needs to assess whether other extractive sectors which are potential large revenue generators, such as forestry and fisheries could also be included at some point within EITI reporting, despite being non-core EITI sectors and not taken into account by the EITI system when a country's validation of EITI takes place.

The MSG will draw up the detailed terms of reference for this scoping study, with advice as needed from the EITI International Secretariat. Consideration may be given to the following for inclusion in the scoping study TOR:

- Contextual analysis (fulfilling Requirement 3 of the EITI Standard);
- Recommend which companies/projects/sectors should report and when;
- Recommend a materiality threshold for the mining sector;
- Assess quality of data from small-scale mining licence-holders;
- Assess the quality of the audit reports received by the OAG;
- Detailed assessment of the receipt records/reports maintained in the MOF;
- Financial flow analysis for the SEEs (especially non-tax flows from the SEEs to the budget);
- Assessment of the Other Accounts;
- Assess pipeline transit fees;
- Recommend a 5 or 10 year reporting road-map (trade-off between comprehensiveness and feasibility), which takes into account political timeframes and incentives;
- Assess major CSR programmes;
- Analyse social development funds at state/region level;
- Provide training, allow for shadowing to local partner and GOUM agencies; and
- Design specifications for simple web-based data upload gathering process.

Chapter 1: Introduction

1.1 Background

2013 saw dramatic progress in the extractive industries sector in Myanmar on several fronts. The Myanmar Oil & Gas Enterprise (MOGE), ran bid rounds for onshore and then offshore blocks. In the offshore bid round, a total of 60 companies, including many International Oil Companies (IOCs) bid for 30 blocks. At the end of the process, in March 2014, 13 companies were successful in bidding for 20 blocks, (with ten blocks yet to be awarded), including companies such as BG, Chevron, Woodside Energy, Shell and Eni. The offshore bid round process placed Myanmar on the international oil and gas map, and a vote of confidence was placed in the Government of the Union of Myanmar (GOUM) with the entrance of a number of super-major companies into Myanmar. The GOUM committed to implementing EITI in 2012 and after a period of stakeholder consultation, the first Multi-Stakeholder Group (MSG) meeting took place in February 2014 in Nay Pyi Taw. There have subsequently been regular MSG meetings on monthly or bi-monthly basis. Meanwhile, the Myanmar Extractive Industries Transparency Initiative (MEITI) applied for candidacy of EITI on 17th April 2014 and was accepted as a candidate country on the 2nd July 2014.

As Myanmar is increasingly viewed as a new destination for investment in the extractive industries sector, highlighted by the recent bid rounds and its EITI candidacy approval, the country will come under increasing focus from international non-governmental organisations (outside of human rights organisations, who have long focused on Myanmar) and from international media organisations. In the wake of the 2013-14 bid rounds, and just before Myanmar was recognised as an EITI Candidate Country, precisely this happened with the publication of a Global Witness report on beneficial ownership in the bid rounds (Global Witness, 2014). The report quickly gathered media attention, with the Financial Times running a story the day after publication of the report casting a critical glance at the hidden ownership structures behind some of the bid winners.⁷

Given the centrality of EITI to reform efforts, and as a result of the importance of natural resources to the development of Myanmar's economy, MEITI will need to begin preparing to implement its work plan, focusing on the most important task of planning the first MEITI report. This report will need to be completed by January 2016. In advance of these work-streams, this report provides a baseline assessment of the extractive industries sector in Myanmar, focusing on the systems, processes and institutions involved in the governance of the sector. It should be noted that the scope of the present report does not pre-empt the selection of sectors to be included under EITI reporting. This report has both a broad and a narrow focus. The broad focus takes a holistic view of natural resource governance from an institutional and regulatory perspective, including political-economy considerations where relevant. The narrow focus is to assess the implications for EITI.

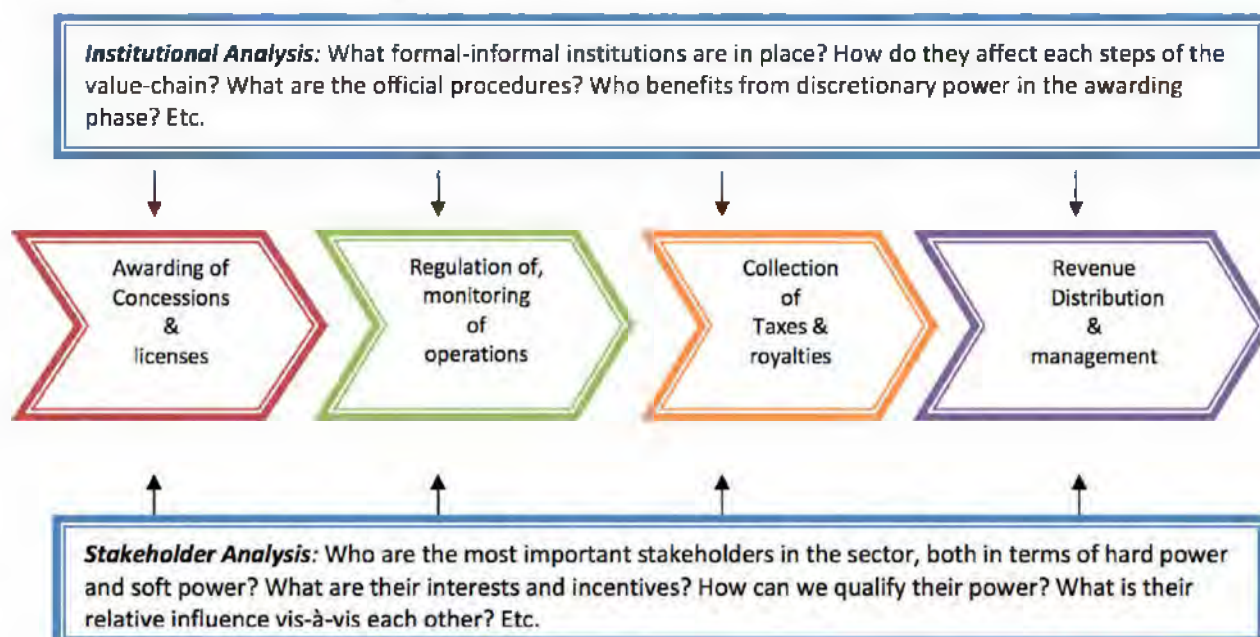
The report aims to provide a stock-take of the extractive industries sector in Myanmar, rather than provide substantive recommendations for improvements in governance or ways in which EITI should best be implemented. The focus is on governance, examining institutions, processes and the relationship between formal and de facto arrangements. For this reason, the report does not provide comprehensive industry data and quantitative analysis and is a broad based document.

1.2 Methodology

Our approach is based on the “extractive industries sector value chain” model, which covers in broad outline all the key processes and operations involved in natural resource governance, from the awarding of concessions and licences to how revenue is distributed and managed. Our aim was to assess the role of institutions, formal and informal processes and the incentive structures of key stakeholders. This can be represented diagrammatically in Figure 2:

⁷<http://www.ft.com/cms/s/0/bb0e732c-fc6e-11e3-86dc-00144feab7de.html?siteedition=uk#axzz35U5CuX5>

Figure 1: Extractive Industries Sector Value Chain Methodology



Institutional analysis requires first of all identifying the core organisations involved in the governance of the extractive industries sector and the key people to meet within those organisations. We identified the recently-formed EITI Multi-Stakeholder Group (MSG) as the priority body to engage, and focused on meeting as many MSG members as possible during the two missions. In terms of government representatives, the MSG has six GOUM representatives from the Ministry of Finance (MOF), the Ministry of Energy (MOE), the Ministry of Mines (MOM), the General Administration Department (GAD) within the Ministry of Home Affairs (MOHA), the Ministry Of Environmental Conservation and Forestry (MOECAF), the Internal Revenue Department of the Ministry of Finance (IRD), MOGE within the Ministry of Energy and the Auditor General's Office (OAG). As well as the six representatives from the government on the MSG, GOUM has also established a working group on the implementation of EITI, which includes the Ministry of Electric Power (MOEP), the Ministry of National Planning and Economic Development (MNPED), the Myanmar Investment Commission (MIC) and a representative from the President's National Economic and Social Affairs Commission. The MSG has six representatives from private sector operators and nine representatives from civil society.

As well as meeting as many civil society and private sector representatives on the MSG at national level, we decided to visit Shan and Kayin States. We selected Shan State because there is a range of extractive operations across the state, including oil and gas, mining and gemstones. In addition, Shan State has a complex set of actors involved in the extractive industries sector, including ethnic armed groups (EAG). Kayin State was selected for the second field trip due to the heritage of attempted alternative forms of governance (the KNU), which facilitated an assessment of the impact of this history for the extractive industries sector in contemporary terms. Taken together, the field trips aided in the understanding of the sub-national complexity of Myanmar from the perspective of the extractive industries sector.

Existing Analyses

Although Myanmar is only a few years into the reform process, there is already a substantive body of research that has been produced, this was read and assessed during desk study prior to the first mission. There are several substantive assessments of specific extractive operations produced by civil society organisations. These reports detail the negative outcomes associated with specific operations. There are reports which assess the changing role of the Defence Services in Myanmar and others which attempt to provide economic forecasts. Most recently, Myanmar Development Resource Institute (MDRI) has, in association with the Asia Foundation, published two reports examining sub-national government and business in Myanmar which were particularly helpful for this report. A full list of references is included in Annex 1.

Chapter 2: Institutional Analysis

2.1 Introduction to the Governance Structure of Myanmar's Extractive Industries Sector

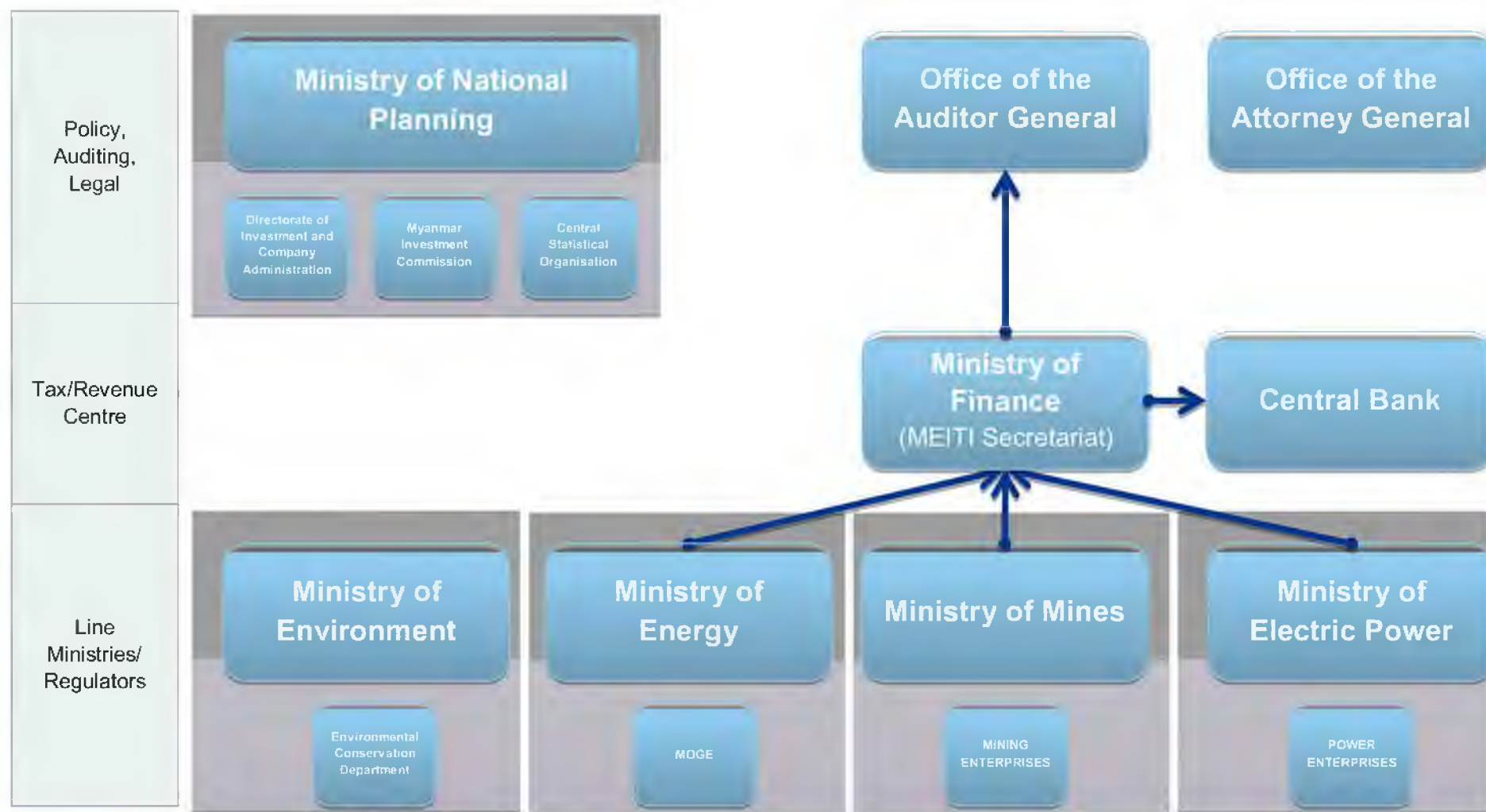
This chapter will present the institutional and regulatory framework governing extractive industries in Myanmar. It will start with a review of the institutions and legislation which regulates mining, oil and gas. Regulatory and institutional issues concerning hydropower are found in Chapter Seven. Other potential sectors for EITI, such as forestry and fishing, are not assessed in this report, although the MSG may decide to include these sectors as within scope for EITI reporting.

A visual overview of government institutions most closely involved in the extractive industries sector is provided in figure 3. While not exhaustive, this diagram presents the core organisations involved in policy, legal, financial and regulatory aspects of the sector. Throughout this report, the words “ministry”, “institution”, “organisation” and “agency” are used interchangeably to refer to government entities.

As well as describing formal institutional arrangements, the chapter will also include information on informal practices related to the governance of the three sectors throughout the value chain, from awarding of concessions to monitoring and regulating. Detailed discussions regarding taxation of natural resource wealth, the consequent financial flows and the management of these revenues is the subject of Chapter Six.

Given that Myanmar is a country in transition with an increasingly significant number of revised laws and mandates, it is unsurprising that extractive industries sector development is still transitioning from the forms of business operations that took place under the pre-2010 government. The GOUM has stated its intention to introduce greater transparency in decision-making and better oversight mechanisms, which will entail changes in long-standing practices and relationships which moulded development and the economy under previous governments.

Figure 2: Institutional Structure for the Extractives Industries Sector in Myanmar



2.2 Institutional and Regulatory Mapping of the Mining Sector

Ministry of Mines

The MOM is the government agency responsible for implementing the GOUM's mineral policy, for planning, and for enforcing the laws and regulations related to the mining sector. As this report notes, the mineral policy is yet to be fully developed. The Ministry's core functions include mine inspection and safety, mineral conservation and mining related environmental control. The Ministry evaluates and processes all licence applications for the prospecting, production and beneficiation of minerals (value added processing) in accordance with the 1994 Mines Law; it also monitors production operations and promotes investment in the mineral sector. According to the Mines Law, any naturally occurring minerals found on or under the ground and on Myanmar's continental shelf belong to the State of Myanmar.

There are six enterprises and two departments under the Ministry of Mines.

Department of Geological Survey and Mineral Exploration (DGSME). The department is directly responsible for countrywide geological mapping, mineral prospecting and exploration using geological, geochemical, geophysical and exploratory drilling techniques.

The Department of Mines is responsible for administration of mineral policy and planning mineral legislation, mine inspection and safety, mineral conservation and environmental conservation. The Mines Law 1994 specifies oversight responsibility for monitoring of all exploration and mining permits residing in the Ministry of Mines. Under the Myanmar Mines Law, the Director General is the Chief Inspector of Mines and also responsible for scrutinising applications and granting of permits.

The investment promotion function is also located under the Department of Mines. Although there is no substantive mining policy guiding foreign investment, the Ministry has been engaged in promotional activities and has been attempting to attract foreign investment into the mining sector, particularly calling for investors in light of the on-going privatisation of mines process.

The Mining Enterprises: (According to the Myanmar Mines Law, 1994)

- ❖ No 1 Mining Enterprise (ME1) is to undertake mining, production and marketing of antimony, lead, zinc, silver, iron, nickel and copper ores.
- ❖ No 2 Mining Enterprise (ME2) is responsible for mining, production and marketing of gold, platinum, tin, tungsten, molybdenum, niobium, columbium, heavy mineral and gold ores.
- ❖ No 3 Mining Enterprise (ME3) is responsible for productions and supply of industrial raw minerals such as barites, bauxite, bentonite, gypsum, limestone, dolomite, clay, manganese and coals.
- ❖ Myanmar Gem Enterprise (MGE) is responsible for mining and marketing of various precious gemstones and jade.
- ❖ Myanmar Pearl Enterprise (MPE) handles breeding and cultivating of mothers of Pearl, and production of Pearl.
- ❖ Myanmar Salt and Marine Chemical Enterprise (MSMCE) is responsible for production and marketing of common salt, marine chemical and soda ash.

GOUM officials stated that all mines are now either JVs or have been privatised, with none operated either by the State Economic Enterprises or ministry staff, who have a regulatory role.

Figure 3: Ministry of Mines Structure



Evolving Role for the Mining Enterprises

The role of the six mining enterprises has evolved from the country's socialist era when SEEs were set-up in all sectors of the economy. Up to the late 1980's mining was predominately conducted by the state and only certain mining activities were permitted for cooperatives and private individuals based on privileged relationships with the Defence Services.

In 1989 Myanmar adopted a policy of encouraging foreign investment and invited foreign companies to invest in the mineral sector in Myanmar. The Foreign Investment Law was promulgated in 1989. The government initially focused on attracting private sector investment into copper, gold, lead, zinc, iron and steel.

Types of possible investment are via production sharing (sharing of the physical proceeds from mines) or profit sharing (sharing of the profits) arrangements and either by JV with the relevant mining enterprise or via fully-privatised ownership. Going forward, the MOM is not planning on making new investments by itself; rather, it wants to encourage investors to develop mineral assets. The MOM notes that it is prepared to offer new areas or deposits for new projects, as well as offering existing facilities as its participation in the joint ventures. The stated aim of the Ministry is to value participation on a fair and equitable basis so that the foreign investor receives reasonable returns and the Ministry and people of Myanmar enjoy the mutual benefits. (Ministry of Mines website, 2012).

According to the privatisation policy, the MOM is gradually shifting its mandate from owner/operator to regulator/administrator according to the government's adoption of market oriented policies and privatisation objectives. The enterprises are responsible for negotiating contracts, marketing the share of the mineral product defined in the Production Sharing Contracts and monitoring the operations.

The following outlines the conditions for private sector investment:

- SEEs may enter into Joint Venture Agreements (JVAs) with private sector companies that hold mineral licences. Both local and foreign companies are engaged by the Enterprises;
- In the case of the production sharing type of agreement the investor is required to contribute 100% of the cost of investment in which case the government would expect a share of the production (usually 30%) that is to be agreed through a negotiation process;
- As part of the negotiation process, the MOM can provide raw materials and existing facilities as part of its participation in JV agreements. Raw materials are inputs required for mining or processing operations such as industrial minerals used for the construction of mine equipment. Raw materials also include the supply of water and electricity. Existing facilities include mine and processing plant infrastructure;
- In addition to the share of mineral production, companies must also pay a number of different taxes including royalties on the amount and value of production; and
- JVs are run by a Board of Directors (equal membership – between the SEE and the operator). PSCs are run by a Joint Management Committee. Both bodies have quarterly meetings and audited accounts from all projects are sent to the Auditor General.

Ministry of National Planning and Economic Development

The other key Ministry that is involved in the process of mineral development is the Ministry of National Planning and Economic Development (MNPED).

The key Directorate of the MNPED in charge of foreign investment matters is the Directorate of Investment and Administration (DICA). It was formed in 1993 and as the laws on foreign investment have changed, the role of the directorate has been required to adapt to the new policy of attraction of Foreign Direct Investment (FDI) and promotion of the private sector.

The major functions of DICA lies in assessing proposals for projects that are submitted for investment in Myanmar, monitoring and reporting the implementation of licenced enterprises, the registration and administration of limited companies; JVs; partnerships and associations; and taking part in regional cooperation relating to investment matters. DICA has departments responsible for foreign investment and company registration, the two main areas of interest for foreign investors. According to the DICA website, the Company Administration Department has an oversight role in terms of ensuring compliance with the relevant legislative framework. The department is responsible for monitoring the implementation of registered enterprises to ensure that they are in line with existing laws, rules and regulations.

According to the Myanmar Foreign Investment Law, 1988 and 2012, DICA's Foreign Investment Department is responsible for providing information regarding foreign investment opportunities; for clarifying regulations concerning foreign investment; and working under the guidance of the Myanmar Investment Commission (MIC) to promote investment. The department provides a review of required documentation before sending on to the MIC. Following approval by the MIC, the department issues the approval letter and notifies the applicant of the status of their investment proposal.

The MIC is referred to in sections of this chapter that relate to the procedures for mining licences and also in the following chapter on foreign investment. As noted above, together with the DICA, the MIC is the main government agency that grants permission to foreign investors and companies who wish to invest in Myanmar. Potential investors need to fill out an application form requesting permission from the MIC and must submit the application to the MIC's head office in Nay Pyi Taw and a branch office in Yangon.

Proposals are then submitted to a Proposal Assessment Team meeting held weekly in the capital Nay Pyi Taw, and the team decides and informs respective organisations whether their applications have been accepted or rejected. The team also seeks advice from regional governments and respective ministries concerning the proposals. In addition, the MIC has wide authority under the Foreign Investment Legislation to supervise and monitor foreign investments in Myanmar and ensure compliance with the conditions imposed on foreign investments. (Tun, 2013).

There have been suggestions that the MIC has historically favoured influential companies and had less focus on issues of transparency and corruption. The MIC is heavily involved in the current offshore oil and gas negotiations following on from the 2013-14 bid rounds, along with MOGE and the President's Office. The MIC has undergone a restructuring process so that it is arm's length from the Office of the President, and includes a focus on energy and tourism sectors. The Ministry of Planning will remain the secretary of the MIC, but with the participation of the Ministers of Energy and Tourism.

The Regulatory Regime for the Minerals Sector

The relevant instruments for regulating Myanmar's minerals sector are listed below:

Minerals Resources Policy – Not Formalised

There is no formal written mineral policy that would be comparable to the GOUM Energy Policy. However, the MOM has a "policy direction". This policy direction sets out the privatisation goals of the government as a whole, which is to encourage private sector investment into the mining sector, and not maintain a reliance on public sector funds.

However there is currently no formal standalone mineral policy that was informed by a stakeholder engagement process and managed by the type of inter-ministerial committee as with the MOE.

This informal policy states⁸ that the objectives are:

- To upgrade the state mines through the implementation of modern technologies, in order to produce quality minerals with minimal wastage;
- To support and improve the private sector and local entrepreneurship;
- To develop strong local minerals and gems markets with fair, competitive pricing;
- To replace the use of imported minerals with local produce and to increase domestic production;
- To produce and keep stock of strategic minerals important to national security and defence; and
- To focus on the prevention of environmental degradation in Myanmar as a result of mining.

Mines Law, 1994 – Currently being amended

Key outstanding issues concern devolving some level of mining regulation to the states/regions; and/or sharing some portion of mineral revenue in a formal agreement with states/regions. The amended law will give greater consideration to environmental production; add new and adjust the terms and conditions of existing production permits; and conform to aspects of the new Foreign Investment Law, 2012.

Mines Law Rules, 1996 – Currently being amended

⁸ Ministry of Mines Presentation: Current Mining Activities in Myanmar, 2013

⁹ Provided by Ministry of Mines (December 2014)

Changes relate to the time period of licences and to the size of the land area under permit. The Rules include several new permits (not previously included in the Mineral Rules, 1996), including a Medium Scale Mineral Production Permit; a Trading Permit; and a Mineral Processing Permit.

Foreign Investment Law, 2012 – Promulgated and in use

The law includes considerable financial incentives for investors including income tax holiday (5 years), depreciation clauses, access to land rights, repatriation of profits/foreign currency allowances as well as relief from customs duty on import/export of machinery.

The Law specifies definition of investment, restricted activities; investor responsibilities are related to local engagement quotas, ensuring environmental protection, acceptable labour practises.

There are moves to consolidate (and perhaps merge) the Myanmar Citizen's Investment Law so there is no conflict or duplication with the FIL.

The Gemstone Law and Rules, 1995 – Promulgated and supersedes related provisions in the Mines Law.

The Legislation provides that all matters relating to gemstones shall be governed by that law, notwithstanding anything contained in the Mines Law, 1994 (Tun, 2013).

The objective of the Law is to establish and develop a gemstone and jewellery market within the country and to permit companies and cooperative societies to operate freely in the production and marketing of gemstones; to open and maintain gem markets; to eradicate illegal production and trade of gemstones.

The Pearl Law and Rules, 1995 – Promulgated and in use

The Law specifies the permitting and inspection process related to oyster farming and pearl production; and conservation of the marine environment around oyster farms.

The Salt Enterprise Law and Rules, 1992 – Promulgated and in use

The objective of the legislation is: to produce only solar (evaporation) salt to reduce deforestation; to enhance the volume and enlarge areas of salt production; provide assistance for the production, sale, exportation of salt.

Mining Exploration and Exploitation Contracting Processes

The policy direction of the MOM specifies that approximately 90% of the mines should be private sector owned, with the remaining 10% still owned and operated by the MOM. Where MOM allows the private sector to operate the mine it maintains an equity ownership share of 30% (which is also the portion of product it retains through the PSC).

Currently there is no public register of mining permits and concessions in Myanmar and limited information can be obtained. According to the Ministry of Mines (December 2014), there are 139 large-scale mining permits (See Annex 2).

Currently, amendments to the Mines Law are in Parliament to facilitate environmental conservation, to decentralise mining sector governance and to promote better investments in the country. According to the MOM website, the amendments are now ready for promulgation and shall be put into effect soon.¹⁰ Under the new regulations, the investor will be required to indicate which type of exploration mechanism it is willing to engage in (such as a greenfield exploration or to confirm existing deposits). Funds for exploration are 100% provided by the investor; they are also encouraged to add value to the minerals locally by processing minerals in refinery plants or smelters with the most up-to-date technology.

The mining legislation specifies six types of permits that can be issued (prospecting permit, exploration permit, large scale production permit, small scale production permit, subsistence production permit and an integrated permit). However, it is understood that MOM no longer issues subsistence production permits and integrated permits. (Tun, 2013).

In addition to the procedural information included below, several key points include the following:

- › exploration of metallic or industrial minerals can only be undertaken through a JVA with citizens of Myanmar; and
- › awarding of the permit is based on the availability of land and compliance with the procedures listed below.

¹⁰Source: Ministry of Mines website (July 2014)

Procedures for the Award of Mineral Concessions and Licenses:

The following general procedures are required both for licensing of mineral exploration and exploitation. The focus of the discussion is on requirements for foreign investors as they represent the level of investment most germane to EITI requirements. However, the procedures noted below are also required for domestic investors. The specific technical processes for applying for an exploration permit and a mining permit are represented diagrammatically in figures 5 and 6 below.

Stage One: The Field Visit

If the company is foreign, it must send a request letter for a courtesy call to the Union Minister for the Ministry of Mines through the respective Embassy in Myanmar to the Ministry of Foreign Affairs for onward forwarding to the Ministry of Mines officially.

A meeting will then take place between the Union Minister or responsible personnel from the Ministry and the company to discuss the opportunities of investment. The mineral of interest and geographical area of the property in question will be discussed.

A field visit is arranged if requested by the investor or company and technical discussions will follow. In preparation for the site visit, the investor may access geological data supplied by the DGSE, assess historical records of previous activity in the area, study mineral maps and gather local knowledge.

Stage Two: The Proposal

After the field visit, if the investor decides to invest in an exploration project, a proposal or letter of intention must be submitted to the Ministry of Mines and copied to the DGSE. The proposal should clearly mention the area of interest and include coordinates, kinds of mineral, proposed activities (prospecting, exploration, feasibility study), amount of capital investment, technical capacity, methods that apply for the specific mining operation, duration and general terms preferred by the company;

The following documents are required with the proposal.

- Company Registration
- Company Profile and other relevant facts about the company
- Recommendation and endorsement of the respective Embassy in Myanmar
- Financial bank statement
- List of the Board of Directors
- Initial work programme
- Map of the proposed area with coordinates

Stage Three: Draft Agreement

After the MOM approves the proposal, the investor meets and discusses with DGSE for the preparation of a draft Agreement (either the technical terms and conditions of an exploration permit or a PSC). The DGSE will provide the draft Agreement model and all relevant information about financial requirements.

The investor prepares the draft Agreement and submits to DGSE, which (in the case of a mining licence) should consist of Signature Bonus, Dead Rent, Performance Bank Guarantee and minimum expenditure.

DGSE will submit the draft Agreement to the "Scrutinising Committee" of the Ministry for assessment.

After the approval from the Scrutinising Committee, DGSE will submit the application to the Ministry. From the MOM the application will be sent to the Union Attorney General Office and the Office of the Auditor General of the Union for their recommendations.

At this stage the company needs to apply for the following recommendation documents

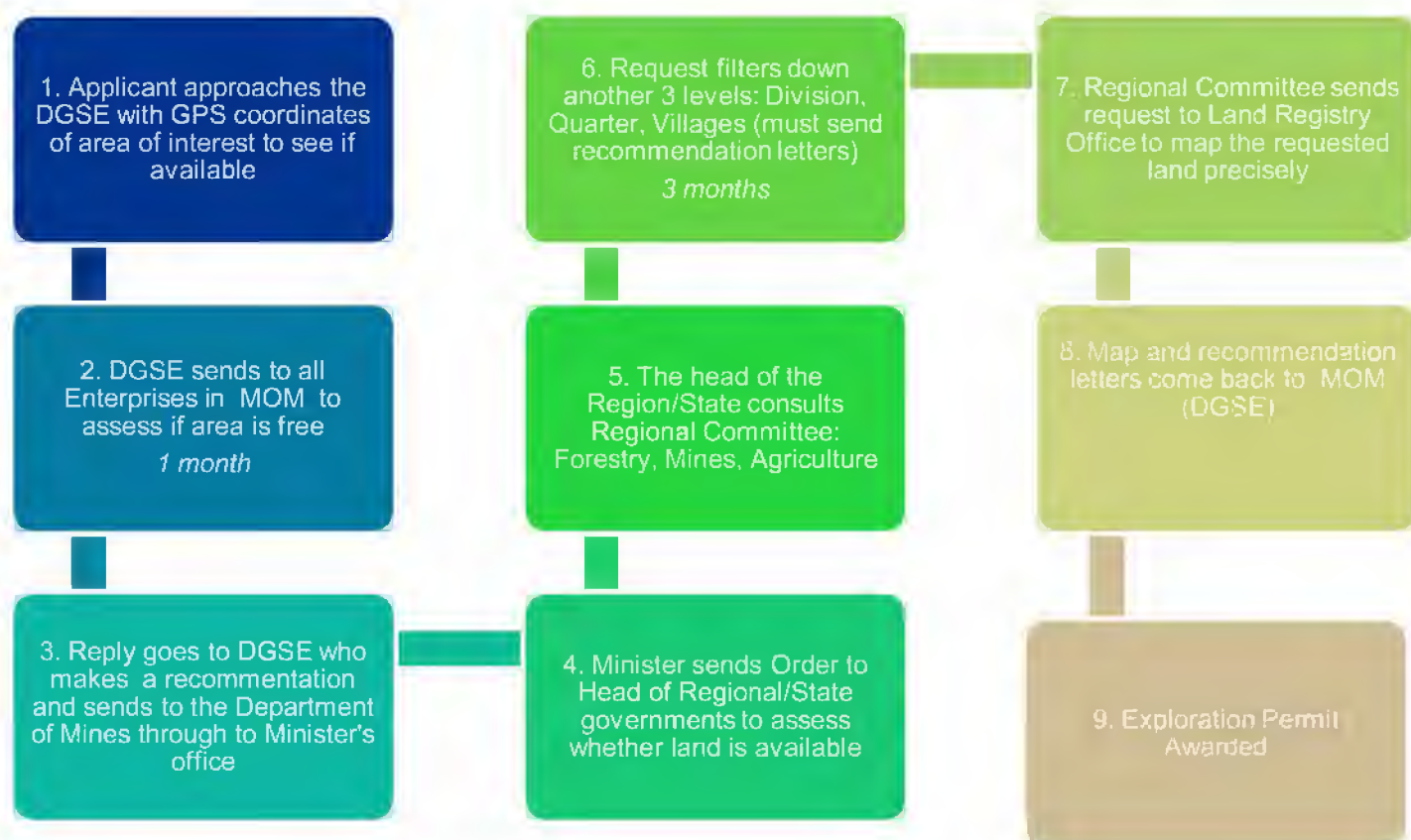
- Recommendation letter from the relevant State/ Region Government
- Recommendation letter from Township Administrative Department
- Recommendation letter from the Township Forestry Department

- Recommendation letter from Township Land Records Department

After the completion of all the required recommendation documents, the proposal and the draft Agreement are sent to the Myanmar Investment Commission (MIC)

While submitting the relevant documentation to the MIC, the company applies for company registration to the Department of Investment and Company Registration under the Ministry of Economic and National Planning

Figure 4: Process for Acquiring a Mining Exploration Permit



Exploitation Permit

If the exploration activity leads to a feasibility study that is approved by the DGSE, the applicant may apply for an exploitation permit to the relevant Mining Enterprise in the MOM that is responsible for the particular mineral of interest. The proposal must specify that the Investor has agreed to undertake the project based on a Production Sharing Contract⁷⁷.

The proposal must include:

- › An initialled draft PSC;
- › Lump sum amount of signature bonus;

⁷⁷ Information for the two process flow charts and accompanying information sourced from Laws, Regulations and Procedures in Myanmar's Mining Industry, U Sann Htun, Managing Director, No 3 Mining Enterprise, MOM, 2013; and from a DICA New FDI Law PP Presentation, Cho Cho Wynn, Deputy Director, 2013.

- Company's undertaking to place a certain amount of funding under a Performance Bank Guarantee (PBG terms to be negotiated);
- Detailed cash flow including the internal rate of return and economic justification based on projections;
- A production sharing ratio; and
- ESIA, ESMP and CSR provisions

Figure 5: The Process for Awarding of a Mining Permit

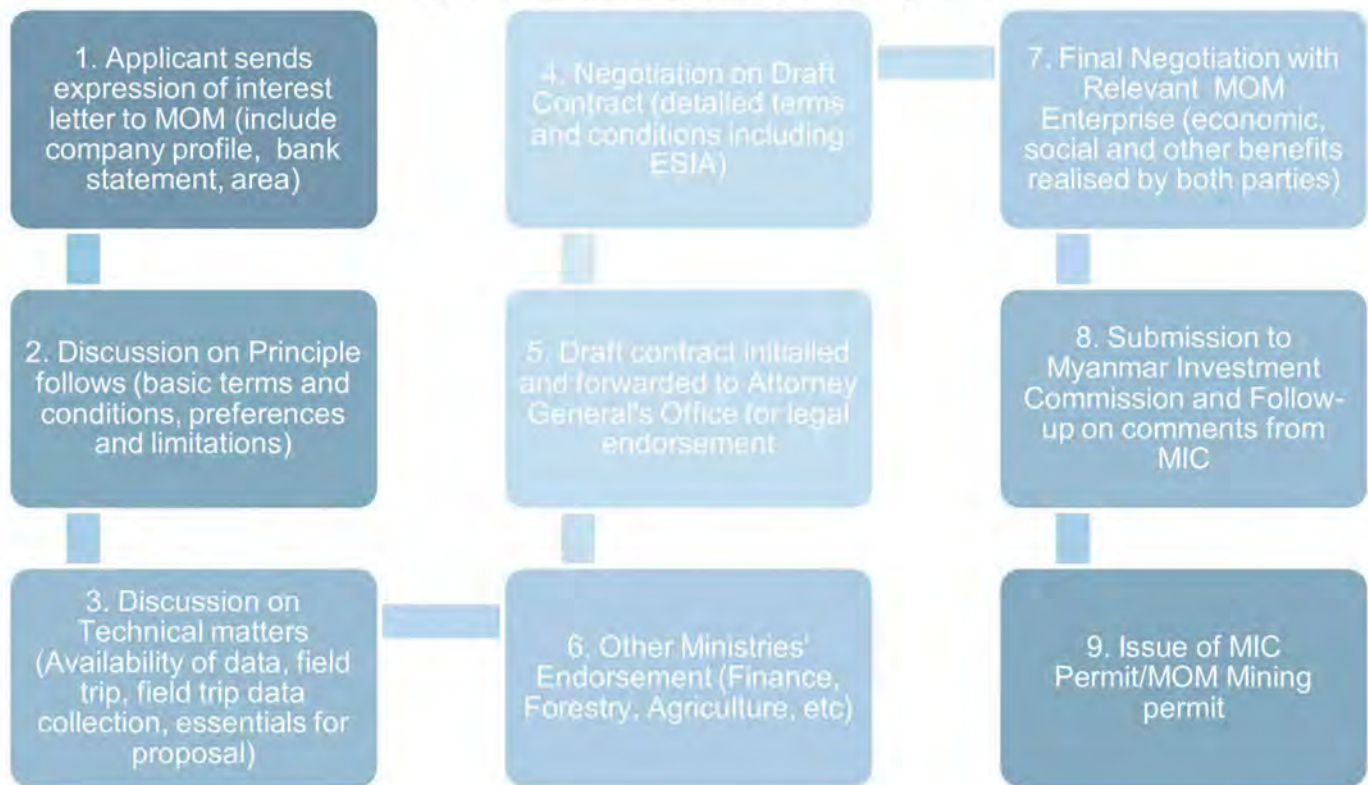


Table 1: Current Status of Formal Regulatory Processes

Regulatory Instrument	Recent Changes	Regulatory Comments
Foreign Investment Law, 2012	Provides clarity around investment terms and conditions; includes an attractive fiscal regime; defines clear restrictions on types of foreign investment into the mining sector.	The law appears generally sound. However, the mandate and capacity of MIC charged with enforcing the FIL is not clear.
Mineral Resources Policy	None	The lack of a formal mineral policy that has been developed through broad stakeholder engagement has meant that the mining legislation cannot fully reflect the aspirations of the people as affected stakeholders of the mining sector.
Roles and Responsibilities of Mining Administration Regimes	The GOUM maintains its 2008 Constitutional right to own and manage all mineral resources in Myanmar. This principle has come into question in the last several years, however, especially in light of the decentralisation policy of the new government.	The presence of a formal Mines Ministers in States/Regions means that there is a lack of clarity over the responsibilities of the Regions/States in mining regulatory affairs.
Inter-Ministerial Coordination Regarding Permitting	The new National Environmental Conservation Committee is charged with approval of ESIA's; it is chaired by MOECF and includes 25 Ministers; there are working committees that undertake the ESIA review (according to a number of issues related to water, transportation, competing land use, agriculture).	Although the establishment of an inter-ministerial body to approve ESIA's is positive, the Committee lacks influence and efficiency as it only meets several times per year and is not chaired at a sufficiently senior or neutral level. Further, there is limited technical capacity to provide sound advice regarding the developer's ESIA. The MOECF has complained that the MOM issues permits for mining without consulting MOECF regarding the national land cadastre. There are conflicts regarding the awarding of permits particularly in areas designated for forests.

Examples of Informal Practices Related to the Mining Regulatory Framework

There are a number of areas where de facto practice deviates from formal administrative processes.

- Negative impacts on host communities.** Negative impacts experienced by host communities often result either from illegal mining that is unregulated or from mining that has been permitted but is insufficiently and inadequately monitored. It is entirely possible that the mines in question have received permits and fall under the responsibility of the MOM. The reasons why point to varying combinations of a lack of capacity, conflict preventing access to operational sites and influence of vested interests. Further information on social and environmental issues can be found in Chapter Eight.
- Defining informal practices:** Most the illegal mining in Myanmar occurs in the border areas that are sometimes either partly or completely under the control of EAGs or other quasi-military/non-state individuals or bodies (such as border guard forces and people's militias). In some cases, licensed companies undertake mining but the sales of product are not transacted within the formal regulatory framework (either partly or entirely). Therefore, it is difficult to break down the illegal activity according to the stages in the minerals value chain as in some cases the entire process is non-legal due to the particular nature of how mineral resources have been linked to conflicts. Chapter Four further explores the issue of informal mining sector governance in more detail and provides case studies on this in both Shan and Kayin States.
- Lack of Application of Automatic Right to Mine Provision:** Although the 1996 Mines Law Rules provides a degree of formal security of tenure by specifying that the Ministry shall:

"Grant a large-scale mineral production permit pursuant to Rule 24, if the application is made by a holder of mineral exploration permit who has "already made a discovery of a mineral to which his permit relates and is made in accordance with the Law and conditions of the mineral exploration permit."

In practice, companies must submit a feasibility study for the deposit they wish to exploit at the end of the exploration period (as noted in the licence process analysis above). However, it is not clear if the company submitting the feasibility study has the right of first refusal due to the clause in the law, or if another company can submit an exploitation proposal for the same property for consideration by the MOM (the language in the English translation of the Mining Rules is unclear). Mining companies that are investing significantly in exploration projects require security of tenure, otherwise they will choose to place their exploration funding elsewhere (there is a fierce worldwide competition for exploration funding).

Lack of a Mining Cadastre and Implications: Most modern mining regimes have a mining cadastre that includes details of the ownership, the tenure, the precise location (some include GPS coordinates), the dimensions (and area) of land for which an exploration or mining permit is granted. Cadastres can be used in conjunction with other records regarding land use such as a title register. Modern land use systems normally use a Geographical Information System (GIS) that facilitates the “first come, first served” principle that is used worldwide to ensure fairness and transparency with regard to the process of licensing. The absence of such a system in Myanmar contributes to the potential for transactional irregularities and overlaps in tenements.

The mining cadastre is linked to the previous issue regarding the investment community’s requirement for security of tenure and the question of discretionary decision making vs. transparent business processes. If the process for granting exploration or exploitation permits is perceived to be opaque or lacking in transparency, this will result in a deterrent to investment. Additionally, access to the type of information normally included in a mining cadastre (such as the type of permit, the owner, the land coordinates, the stage of activity, the life of the permit and the work done to date on the property) is required for external processes such as the EITI to ensure that all extractives industry operations are captured through a neutral (i.e. computerised) system that reduces discretion in licence-application and management administrative processes and ensures completeness of information. The MOM cannot regulate or manage the mining industry as effectively without the kind of in-depth and up-to-date information on mining titles that a cadastre would provide. The implications of this lack of formal system for managing permits relates to the increased potential for informal practices, either illegal mining on available areas, or mining that has been permitted without due process that a cadastre would highlight and require.

Cost / Expense: From our investigations, it is difficult to obtain the exact expenses/costs for equipment used in the mining sector. Cost is of course important in order to calculate the real income and profits for each operation in the sector. Profit = Total Income – Production Cost. Therefore, to express the real income (profit) from extractive industries, production cost data must be correct. Vehicles, machineries, mine instruments are bought for mining sector operations. Most mining operations buy vehicles and machineries on credit and pay back with instalments gradually when there is revenue from the mine.

2.3. Institutional Mapping of the Oil and Gas Sector

Oil and Gas Sector Overview

The first exports of oil in Myanmar date back to 1854. Between 1886 and 1963, the country’s oil industry was dominated by Burmah Oil Company, which discovered the Yenangaung field in 1887 and the Chauk field in 1902. Both are still in production. The oil and gas sector was nationalised in 1962. The State owned MOGE has the exclusive right to carry out all oil and gas operations with private contractors. Currently, there are 17 onshore blocks and 20 offshore blocks in exploration and production (see Table 2 and 3). The offshore Yadana (TOTAL, Chevron and PTTEP) and Yetagun (Petronas, PTTEP) natural gas projects started production in 1998 and 2000 respectively under gas sales contracts to the Thai state oil company, PTT. The Daewoo (Daewoo and three partners) natural gas project (often called the “Shwe Gas Project”) started production in 2013. Natural gas produced is sold to China National Petroleum Corporation. The offshore Zawtika (PTTEP) natural gas project started production in March 2014. The Zawtika project includes a new 300km long pipeline (270km of which will be offshore and only 30km onshore).

Myanmar’s output of oil is small. The country produces around 20,000 barrels of oil equivalent per day¹². According to the US Energy Information Administration, Myanmar produced 416 billion cubic feet of gas in 2012.

The Irrawaddy–Andaman and Indo-Burman Geologic Provinces were recently assessed for undiscovered technically recoverable oil, natural gas, and natural gas liquids resources as part of the U.S. Geological Survey’s (USGS) World Oil

¹² Information provided by MOE during consultation on report

and Gas Assessment. Using a geology-based assessment methodology, the USGS estimated mean volumes of 2.3 billion barrels of oil, 79.6 trillion cubic feet of gas, and 2.1 billion barrels of natural gas liquids (USGS, 2012).

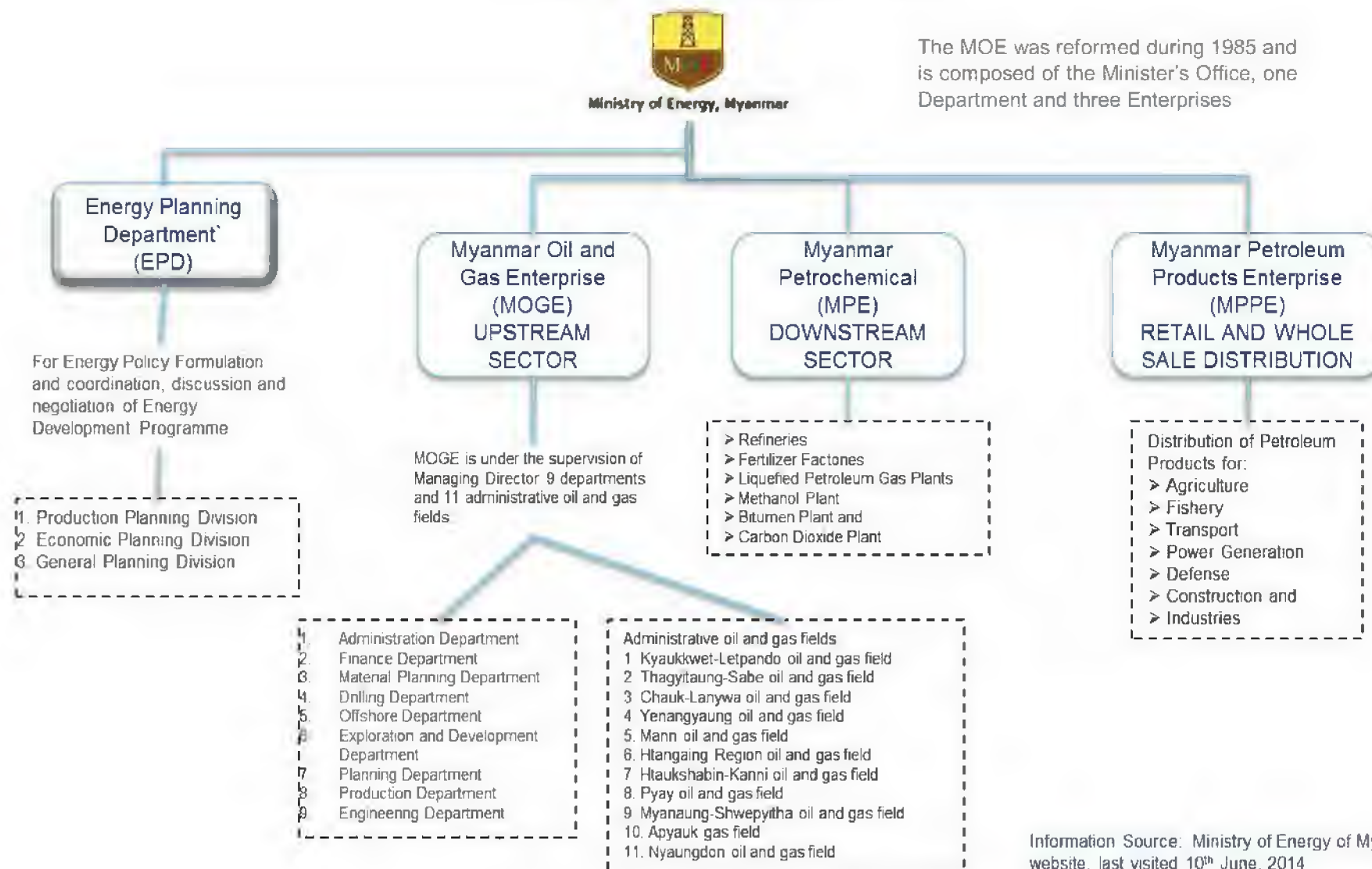
Early in 2014 the MOE announced the selected operators for 10 shallow water and 10 deep-water blocks from the 2013 offshore oil and gas tender. Shell re-entered Myanmar as the only company awarded 3 deep-water blocks in a consortium with Mitsui Oil Exploration Company (MOECO). Other deep-water blocks include BG/Woodside, Eni, Statoil/Conoco Philips, Ophir Energy and Total. Shallow water blocks were awarded to Reliance and the Oil India consortium.. BG/Woodside, Chevron, ROC Oil/Tap Oil, Transcontinental Group (TRG) and Berlanga (VDB-Loi, 2014). A breakdown of the blocks is provided in Tables 2 and 3 and a map of the corresponding block locations is provided in Figure 7.

Institutional Framework Governing the Oil and Gas Sector

The Ministry of Energy is the coordinating body for all types of energy in Myanmar, including the oil and gas sector. It has oversight of three state-owned enterprises:

- **Myanmar Oil and Gas Enterprise (MOGE):** Created in 1963, MOGE is responsible for exploration/production and land transmission of oil and gas through a 2,488 km onshore transmission pipeline network, and to oversee Production Sharing Contracts (PSC) entered into with foreign investors.
- **Myanmar Petrochemical Enterprise (MPE):** Operates three refineries, five urea fertilizer plants and a number of other processing plants.
- **Myanmar Petroleum Products Enterprise (MPPE):** Responsible for retail and wholesale distribution of petroleum product.

Figure 6: Ministry of Energy Organisation Chart



The MOE was reformed during 1985 and is composed of the Minister's Office, one Department and three Enterprises

Information Source: Ministry of Energy of Myanmar website, last visited 10th June, 2014

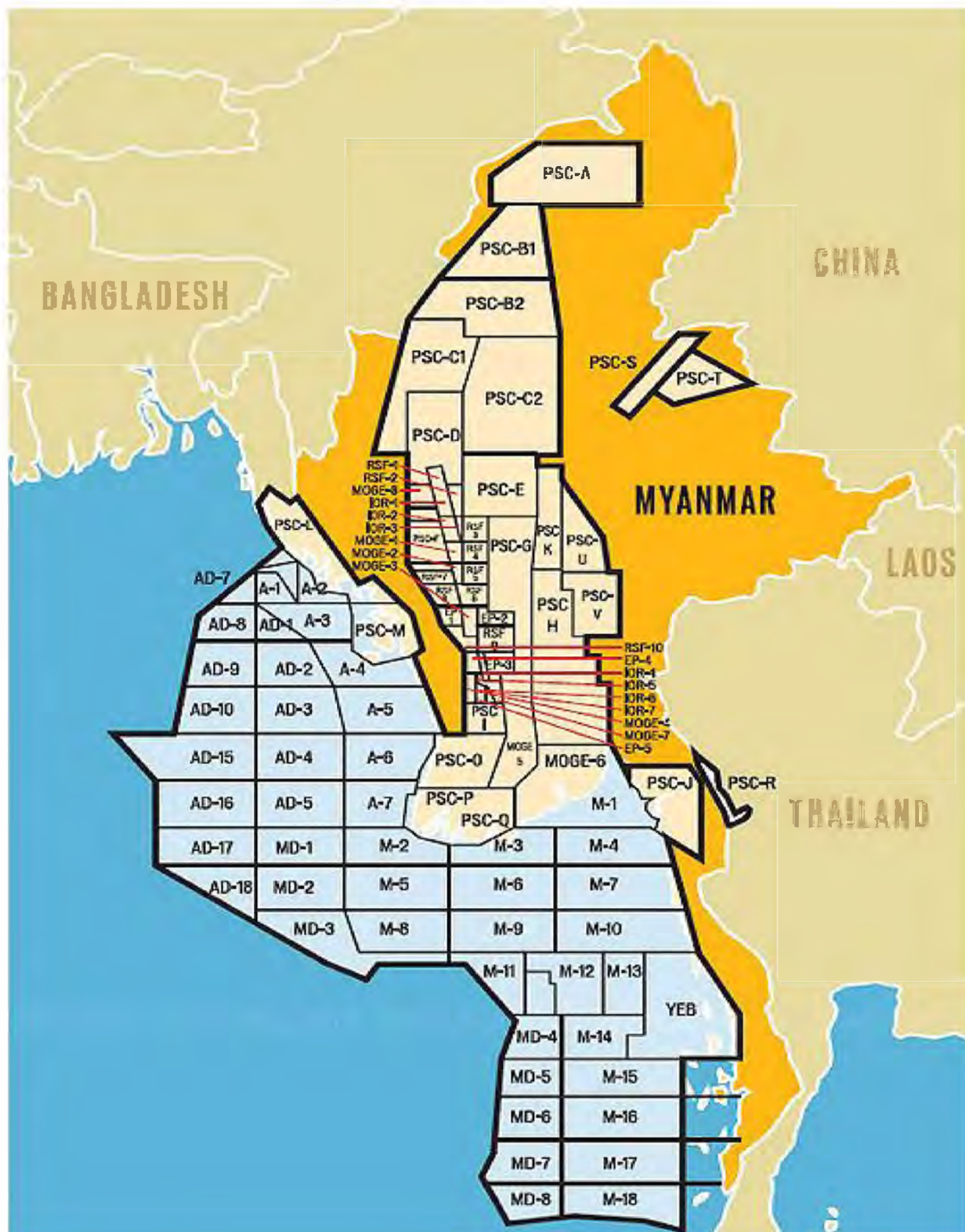
Table 2: Offshore companies (MOGE Presentation, Jan 2014). Bold blocks indicate producing fields)

Operator Company	Block
Total	M-5, M-6 (Yadana Project)
Petronas	M-12, M13, M-14 (Yetagun Project)
Daewoo International	A-1, A3, AD7 (Shwe Project)
PTTEPI	M-3, M-11, M-9 (Zawtika Project), MD7, MD8
CNOOC	M-10
CNPC International	AD-1, AD-6, AD-8
MPRL E&P	A-6
Petrovietnam	M-2

Table 3: Onshore companies (MOGE Presentation, Jan 2014)

Operator Company	Block
Nobel Oil	PSC-A PSC-B 1
SIPC Myanmar (China)	PSC-D
North Petro-Chem (China)	PSC-F
GOLDPETROL	IOR-2 MOGE-1
MPRL E&P	MOGE-2 (N)
SNOG, UPR (Singapore)	PSC-R
Geopetrol Intl	RSF-9
Petronas	RSF-2 RSF-3
Jubilant	PSC-I
PTTEPI	PSC-G EP-2
Istech Energy	EP-5
Asia Orient	PSC-E

Figure 7: Myanmar Oil and Gas Block Locations



Legal Framework Regulating the Oil and Gas Sector

The legal review conducted for the MEITI Coordination Office in 2013 considered the following legislation to be most relevant to the management of the oil and gas sector. It is of note that these laws are viewed as out-dated and that in practise, all oil and gas operations in Myanmar are today governed by the terms of contracts entered into between MOGE and private operators, including PSCs and improved petroleum recovery contracts. (Tun, 2013).

- › Oil-Fields Act 1918;
- › Oil-Fields Rules 1918;
- › Notifications under the Oil-Fields Act 1918;
- › Petroleum Act 1934; and
- › Petroleum Rules 1934.

The information highlighted below is provided in the interests of illustrating the history of oil and gas related legislation and to provide a more complete legislative review

Energy Policy

The new Energy Policy represents a step forward by the GOUM to provide a new framework for a coordinated energy strategy, including all current forms of energy sources (oil and gas) along with policies to develop alternative energy.

The new energy policy represents a positive step forward, providing an overall, future looking energy development framework that takes into account all energy sources in the country and identifies goals and priorities in terms of addressing domestic needs while ensuring that the energy supply also promotes international investment.

The Energy Policy aims:

- to maintain the status of energy dependence;
- to promote wider use of new and renewable sources of energy;
- to promote energy efficiency and conservation; and
- to promote use of alternative fuels in household.

While the policy is credible, a strategy needs to be developed that includes an implementation plan to realise the objectives in the policy.

Oil Fields Act, 1918 – Existing law, and a new law is being prepared

These laws put in force in the early part of the 20th century are mostly based upon British Law Codes of the pre-independence Indian Statutes.

The Essential Supplies and Services Act, 1947 – No longer in force, with a new law promulgated in 2012

Information not available

Petroleum Act, 1934 and Petroleum Rules 1937 – Promulgated and still the underlying legislative authority for Petroleum Development in the country

Replaced by the PSC (or the Performance Compensation Contracts or Improvement of Recovery Agreements and Activation Agreements as the legal instruments for oil and gas development. A new Petroleum Law is being drafted and is under review by the Attorney General's office.

The Myanmar Petroleum Concession Rules, 1962 – Passed but not widely in use

Amendments and revisions are planned

Foreign Investment Law, 2012 and Foreign Investment Rules, 2013 – Promulgated and in use

This legislation includes tax and duty incentives; land use; large energy projects and protects against nationalisation

Companies Law – To be introduced in the near future

Myanmar plans to pass a new company act by the end of 2014. It aims to improve transparency and update rules governing the operations of companies in Myanmar. The current act has been in existence since 1914 and has not been revised for the last 100 years.

Trademark Law – A draft Trademark Law is before Parliament

The introduction of new company related laws make Myanmar a more practical place for multi-nationals to place their investment.

Environmental Conservation Law, 2012 – Promulgated and in use

Oil and gas projects will be subject to ESIA requirements, when these are passed.

Competition Law

The President signed the Competition Law in February 2015.

It is hoped that the new Competition Law will ensure a more open and fair environment in terms of transparency of decision-making (particularly around awarding of selected bidders for oil and gas processes as well as large-scale mining projects).

Production Sharing Contracts (PSCs)

The Production Sharing Contract (PSC) is the legal instrument most commonly used in Myanmar to establish the terms and conditions to develop petroleum or natural gas areas in Myanmar.

The major objectives of the Myanmar PSC are to:

- Facilitate the exploration and development of Myanmar's oil and gas resources;
- Provide the Government with a fair share of income from the production operations;
- Provide a reasonable rate of return to the oil company, taking into account geological, geographic and other risks;
- Provide an incentive to evaluate properly the oil/ gas potential of the country and to encourage as much as possible the development of marginal fields; and
- Provide for a system that can be easily administered within technical capabilities.

Incentives usually Included in the PSC are:

- During the implementation period exemption of duties on the import of oil and gas industry-equipment and materials;
- No export duty is levied on the export of oil/gas;
- Negotiated rates of accelerated depreciation;
- Domestic market supply required is satisfied by pricing close to fair international market value; and
- A re-negotiation or "stabilisation" clause which allows necessary adjustments/amendments in the event of situations arising not envisaged in the original contract.

The Model PSC has not changed to accommodate companies accustomed to the standards in place in more developed economies. There are a number of provisions which companies accustomed to operating in other countries may find difficult.:

- The parent company guarantee, whereby the parent not only guarantees the work commitment of the operator, but all its obligations. The fear is that this might be taken to include all unforeseen liabilities which might conceivably result from oil and gas exploration and development, including liability for environmental and social issues;

- The reference to a future agreement on gas transportation. At this stage, it is difficult to appreciate what will happen once the PSC will be replaced with, at least where gas is concerned, a Gas Supply Agreement (GSA). If the exploration is successful, the GOUM will conclude a GSA with the contractor. The operator will propose a development plan which includes wider economic terms, including those related to ownership, financing and construction of pipeline and/or transportation facilities. Such pipeline and transportation will be under a separate contract between the GOUM and the contractor. This is part of where contractors make their investment back. However, it is actually very difficult to pin down the financial conditions of such agreements in advance¹³;
- Additional concerns relate to the arbitration system in Myanmar generally, model terms regarding work obligations, bonuses, and production splits. Additionally it is not clear if the pending new Petroleum Law will impact the terms of the PSCs.¹⁴

Contracting (Bidding) Process for Oil and Gas Blocks (for exploration and development)

In practice direct contracting (without competitive tender) is used for lower value contracts. MOGE informed us that open tendering is required for projects larger than US\$50,000 on domestic procurement and larger than US\$100,000 for foreign currency transactions. MOGE also suggested that, for ministry procurements below US\$5,000 in value, direct contracting would be used and for contracts of above US\$5,000 (and presumably up to US\$50,000) some form of requests for quotations is required¹⁵.

It was suggested that before 2010, there was no oil and gas bidding process and the senior authorities allocated certain blocks to certain companies. However, since 2010, a bidding process and evaluation procedure has been implemented for the award of licenses.

A technical team provides recommendations to the Energy minister for the bidding process, aimed at ensuring a more professional and transparent bidding process compared to the past (pre-2010).

For the bid rounds under the new process, MOGE set out the bid assessment criteria:

- Technical capability;
- Financial capability;
- Prior experience in Myanmar;
- Financial terms for the block; and
- Experience relevant to the block (e.g. deep-water).

Figure 9 outlines the application process for available oil and gas blocks¹⁶. As noted above the process relates more to procedures that the GOUM has employed for many years to manage the development of the oil and gas sector than to requirements contained in a specific Petroleum Law. It is speculated (by interviewed investors in the sector) that the new Petroleum Law may include provisions that will reduce the reliance on the negotiated PSC process, thereby reducing the possibilities for discretion.

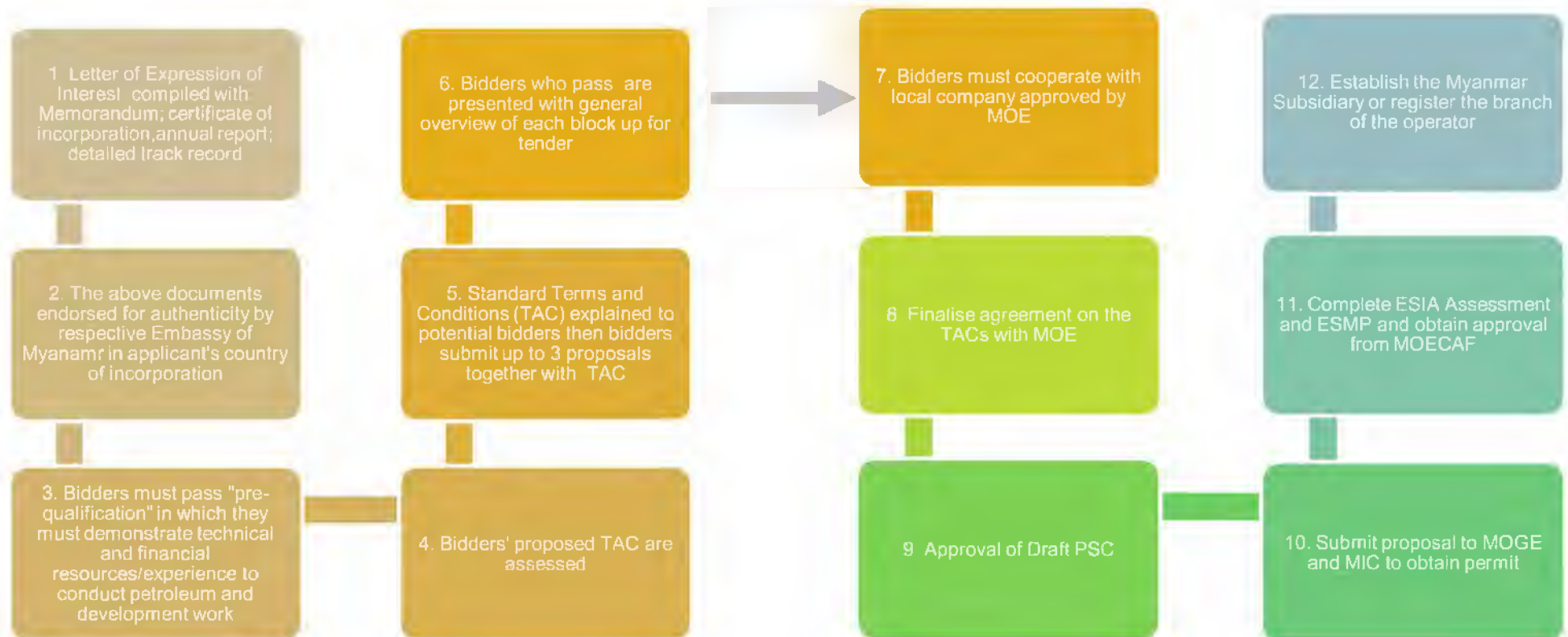
¹³ See Client Briefing Note: VDB/Loi What is Next for winners of Myanmar's offshore oil and gas blocks, March 2014

¹⁴ See Myanmar Upstream Oil and Gas Sector, Albert Chandler Law Offices, Thailand, August 2013

¹⁵ Republic of the Union of Myanmar Procurement Assessment Report, the Electric Power Sector (Ministry of Electric Power and Ministry of Energy), The World Bank, 2013

¹⁶ *The Oil and Gas Sector in Myanmar* PP Presentation. Ministry of Energy, Myanmar Oil and Gas Enterprise.2013

Figure 8: Contracting and Bidding Process for Oil and Gas Blocks



Deviations from Formal Rules Related to the Oil and Gas Regulatory Framework (Licensing, contracting, oversight, tax, community issues)

Awarding process of oil and gas blocks

Companies submit a proposal with a training fund and signature bonus amounts included. The President has emphasised that he wants a transparent and fair bidding process, but there are allegations that this direction does not seem to be carried out at the middle management level of MOGE. The criteria against which companies were selected or the evaluation criteria were not published. The GOUM hopes that the new Competition Law will address issues around transparency, public governance, and disclosure so that the process is fair.¹⁷ The UK-based NGO, Global Witness published a critical initial report on the bid rounds (in June 2014). This is discussed in Chapter Five.

Oversight, disclosure and management of revenue from oil and gas¹⁸

Gas exports are a major source of revenue for the Myanmar government. However historically there have not been standards of accountability and transparency for transactions and revenues in this sector, leading to allegations of mismanagement. Myanmar has lacked an efficient public accounts system, including mechanisms for revenue reporting and transparency. Efforts are underway to introduce these systems (and also with the implementation of MEITI) so that revenues must be accounted for, reported, and on budget

Signing of an MOU on energy cooperation between Myanmar and China

In June, 2009, Myanmar and China signed several new cooperative agreements. The Shwe Gas Pipeline was one of these agreements. Some commentators observed that these agreements did not include sufficient terms and conditions to ensure that social and environmental issues would be resolved adequately. Hence, the project has been the subject of protest and controversy.

Environmental and social standards that were in place during earlier pipeline construction projects (Yadana and Yetagun) were not used as standards for the negotiation of the Shwe pipeline contract. This was probably due to the different standards required by the companies involved. Further information on Myanmar's oil and gas pipelines are included in Figure 10.

¹⁷ Interview with an oil and gas company

¹⁸ Arakan Oil Watch, 2012

Figure 9: Pipeline Network in Myanmar



Domestic Pipeline (not represented above):

- MOGE has been laying the pipes throughout Myanmar to expand its national pipeline network.
- Various size from 6" to 24" of pipeline were constructed
- Total length is about 2,100 miles

Export Pipeline

	Offshore	Onland
Yadana (36")	216 miles	39 miles
Yetagun (24")	126 miles	43 miles
Zawtika (28")	143 miles	42 miles
Shwe (32")	65 miles	3 miles
China - Myanmar (40") Gas	Nil	495 miles
China-Myanmar (32") Oil	Nil	481 miles

2.4 Inter-Ministerial Decision Making and Capacity Constraints

The award of contracts and licenses and the management and operations of contracts require coordination between Union and sub-national government institutions. The roles of agencies throughout these levels will be required for the EITI implementation process.

There are clear channels of information and decision-making regarding permitting that flow from the MOM to the executive branches in the Regional/State governments, down to the Quarter and Village levels, and back again (Chapter 4 will provide further in-depth analysis of sub-national governance). For example exploration and production permits are only granted once there has been approval from the respective State / Region government, GAD, MOECAP, Settlement and Land Records Department, Village Administrators and local communities¹⁹.

However, it appears that the MOM does not always communicate sufficiently with other Union Ministries who also have a regulatory responsibility over the sector. MOECAP expressed concern over this siloing and lack of communication. It has been pointed out that there have often been land use conflicts as a result of the MOM not following due process in terms of allocation of land for mineral exploration or exploitation.

The lack of a coordinated land use strategy was expressed as a serious concern and the source of many land use conflicts between the two ministries. There is a land use planning process underway, including a strategy for implementation. The development of a coherent land management system (including a land cadastre) would simplify the process of land allocation for the use of various industrial sectors including mining, forestry, agriculture, oil and gas development and manufacturing and increase inter-ministerial collaboration²⁰.

The MOM's permitting process not only involves the Union-level Ministry and State/Regional governments, but also the MIC. The MIC also has a role in the approval of ESIs/ESMPs that are part of the licensing process.

The MOE's Planning Department is in charge of coordinated energy management across all ministries with a regulatory responsibility related to energy. The MOE has an influential role in setting policy and direction for the overall energy sector, including MOGE, the state enterprise in charge of negotiating and managing contracts with oil and gas companies.

Inter-Ministry Coordination Mechanisms

There are several other legal mechanisms that have been put in place to coordinate the involvement of all ministries with a regulatory role in the energy sector. These include the National Energy Management Committee (NEMC) and an Energy Development Committee (EDC) that were created in early January 2013.

National Energy Management Committee

The NEMC is a minister-level committee and sits under the Vice President, Sai Mauk Khan. The NEMC secretariat is composed of staff seconded from the energy-related ministries, with its office under the Ministry of Energy.

The membership of the NEMC is as follows:²¹

- Chairman - Union Minister for Energy;
- Vice Chairman - Union Minister for Electric Power;
- Members (9) - Ministers from Agriculture, MOECAP, Mines, National Planning, Industries and representatives from NGO's focused on renewable energy;
- Secretary - Deputy Minister for Energy; and
- Joint Secretary - Deputy Minister for Electric Power.

The core functions of the NEMC are:

¹⁹ Comment from MoM (December 2014)

²⁰ Attempts to obtain the draft Land Use Planning documents were not successful in the course of the research gathered for this report.

²¹ Geopolitics and Myanmar's Petroleum Sector, PP Presentation, Energy Planning Department, Ministry of Energy, 2013

- ❑ To formulate a National Energy Policy and Energy Regulation;
- ❑ To encourage private sectors in Energy Development;
- ❑ To plan when necessary to fulfil short term requirements;
- ❑ To develop long term plans to generate electricity by coal to meet domestic demands;
- ❑ To develop three sectors: energy, industrial and electrical; and
- ❑ To develop and adopt a national energy security strategy.

The Energy Development Committee

The EDC meanwhile is composed primarily of deputy ministers and is broadly responsible for implementing the policies and plans of the NEMC.

The membership of the EDC is as follows:

- ❑ Chairman - Union Minister for Energy;
- ❑ Members (12) –Deputy Ministers and senior managers from Agriculture, Energy, MOECAP, Mines, National Planning and Industries as well as former experienced retired ministry personnel and NGOs;
- ❑ Secretary - Director General, Energy Planning Department

The core functions of the EDC are:

- ❑ To implement a National Energy Policy;
- ❑ To encourage private-sector development;
- ❑ To estimate energy demand and adjust energy policy when required for short to long term needs;
- ❑ To develop strategies and opportunities for energy development;
- ❑ To attract the foreign and domestic investment in renewable energy projects;
- ❑ To regulate energy development projects;
- ❑ To seek technology and management assistance; and
- ❑ To gather information regarding the energy sector.

EITI Coordination within Government

At the most senior level, the Leading Authority was constituted by Presidential Decree in December 2012, with U Soe Thane from the Office of the President as Chair and the ministers from the MOE, MOF, MOM and MOECAP as the other members. In April 2013, the Leading Authority set up an implementing committee of Director General and Director level staff to coordinate and support the implementation of EITI from the GOUM side. The committee's full name is the "Committee on Implementing Transparency in Natural Mineral Resources." The committee has the following membership:

- ❑ Chair: Deputy Minister, Ministry of Finance and Revenue
- ❑ Director General, MOECAP
- ❑ Director General, Directorate of Hydro-Electric Power MOEP
- ❑ Director General, MOGE, MOE
- ❑ Director General, Directorate of Mines, MOM
- ❑ Director General, MIC
- ❑ Director, Directorate of General Administration (MOHA)
- ❑ Deputy Director General, Budget Department, MOF
- ❑ Director, Directorate of Foreign Commerce, MNPED
- ❑ Director, Attorney-General's Office
- ❑ Director, Accountant General's Office
- ❑ Member of the President's National Economic and Social Affairs Committee

The Ministry of National Planning and Economic Development

The Ministry of National Planning and Economic Development (MNPED) has a key role in coordinating other government agencies, both at national and subnational level. For example, the MNPED is the institutional author of the five-year National Comprehensive Development Plan (NCDP), the umbrella framework which guides the formation of Regional Comprehensive Development Plans (RCDP) at sub-national level (see Chapter Four). The MNPED plays a key role in coordinating development partner input to the GOUM. At the highest level, the Foreign Aid Management Central Committee, which is chaired by the President with the Minister of MNPED as the committee's secretary. The Foreign Aid Management Working Committee is chaired by Minister No.3 in the President's Office, with the Deputy Minister of MNPED as the committee's secretary. The National Economic and Social Advisory Council (NESAC) is an independent body that provides expert advice on Myanmar's national development priorities, with members from the private sector, civil society and academia. The MNPED meets and engages with NESAC members. Development partners may engage with the GOUM through the annual Myanmar Development Cooperation Forum (MDCF). A more frequent engagement is provided by seventeen sector working groups, which were established in 2013. While there are working groups for electric power and public financial management, there isn't an equivalent group for extractives, natural resources, oil and gas or mining. Meanwhile, the GOUM has recently (in June 2014) signed up to the International Aid Transparency Initiative (IATI), a publishing standard for development projects, which enables the comparison of project data.²²

The MNPED plays a role at the project-level within the extractive industries sector, with, three ministry officials sitting on the 39 member ESIA Review Committee (which is currently assessing the draft ESIA report for the Letpadaung copper mine). The Central Statistical Organisation, an agency within the MNEPD, produces data, which includes extractive industries sector information (and hydro generation data), via a monthly indicators publication as well as a statistical yearbook

2.5 The Role of Parliament

During this period of transition, Myanmar's Parliament has proven to be a dynamic body and has played an active role in oversight and budget scrutiny, as well as an increasing role in constituent services. The Myanmar Parliament consists of an upper house, the *Amyothar Hluttaw*, and a lower house, the *Pyithu Hluttaw*. The 2008 Constitution defines the role of certain key standing committees, such as the Bill Committee and the Public Accounts Committee (PAC). Section 117 of the constitution authorises the formation of joint committees. The lower house currently has 24 committees, whereas the upper house has just four committees (including the Bill Committee and the PAC). The lower house has a maximum of 440 members, whereas the *Amyotha Hluttaw* has a maximum of 224 members²³.

Both the lower house PAC and the joint PAC meet weekly to review reports submitted by the Office of the Auditor General (OAG). Following on from submitted reports, the joint PAC will conduct hearings with the relevant ministry, before filing its report to the speaker before onward submission to the plenary sessions.

Because of its foundation as a standing committee defined by the constitution, as well as its substantive role in scrutinising audited information from the sectoral line ministries (sent via the OAG), the PAC will arguably play the most significant role in parliament in terms of the implementation of EITI.

The Minerals and Natural Resources Management Committee (MNRMC) of the upper house and its equivalent, the Natural Resources and Environmental Conservation Committee of the lower house, is responsible for providing input on relevant issues regarding the development of the natural resources sector (such as input into legislation), for mediating conflicts between the state/region and Union governments and between the mining companies and GOUM; for promoting investment into the sector, and for building capacity of its members through study tours and other kinds of training initiatives. The MNRMC does not appear to discuss social issues or engage with citizen complaints regarding the mining sector in the course of its duties.

The MNRMC engages with issues regarding the following Ministries: MOE, MOM, MOEP and MOECAP. The terms of reference of the MNRMC are as follows:

²² <http://www.aidtransparency.net/news/myanmar-endorses-iatl>

²³ See <http://www.president-office.gov.mm/en/?q=hluttaw/pyithu-hluttaw>

- If there are any relevant issues related to the extractive Industries sectors that need to be resolved or action taken by region and state governments or the national government, the respective case is prepared and presented in detail to the chairman of the *Hluttaw*.
- The committee has a role in developing and mediating for the rights and mandates of mine operators in accordance with the law. If there are grievances, depending on the case presented, the committee will contact the respective ministries for mediation, testimonies, etc., and submit the findings (the recommendations must not have any adverse effect on the country and the people) to the upper house in a timely manner.
- The committee can conduct press conferences with the permission of the upper house speaker (*Amyothar Hluttaw Chairman*).
- The committee will report relevant discussions with those who are officially contacted and would like to invest in the mining and extractive industries sector to the upper house speaker. Then, with the agreement of the chairman, the committee will discuss with the investors and, if necessary, the agreements will be submitted to the GOUM through the chairman. Therefore, the committee can invite foreign investors to discuss investment opportunities in this manner.
- If necessary, the committee will make field trips and surveys for sites where there is conflict regarding the location of mineral and natural resources and where new sites should be explored, that will support the GOUM planning.
- The committee can make study tours to foreign countries with the permission of the chairman upon an invitation for studying the development in mineral and extractive industries sector

The *Hluttaw* chooses the chairman and members of the MNRMC. The committee does not engage with the ministries administering the mining industry with regard to administrative matters. However, if there are any problems between the GOUM and the public on administering the sector, the *Hluttaw* can have them meet and resolve the issue.

Chapter 3: Foreign Investment

3.1 Introduction

This chapter will explore issues related to FDI into the extractive industries sector, highlighting the types of reforms the GOUM is putting in place in order to attract foreign investment, the amount of investment coming into the country and the sectors of the greatest concentration of FDI (with a focus on natural resources); geopolitical issues related to FDI with particular reference to China, the largest investor in Myanmar; and a discussion on investor perceptions of the impacts of MEITI on extractive industries sector governance in Myanmar.

Government Reforms to Attract FDI

Myanmar's transition from a centrally-planned to a market economy has proceeded in fits and starts. Following the 1988 uprising there was an attempt to open the economy, but this was only a partial attempt, which arguably contributed to the rise of a small group of businessmen with privileged access to the exclusion of others. The current transition started in 2010. Myanmar has unified its currency exchange rate and reached out to international investors across a range of sectors. A presentation to the Organisation for Economic Cooperation and Development²⁴ included the following points, noting that the GOUM was in the process of:

- Enacting the new Foreign Investment Law in 2012: a milestone towards a more open and secure legal environment and followed quickly by implementing rules to provide more detailed regulation of investment;
- Providing strong protection to foreign investors through bilateral investment treaties but few BITs signed yet;
- Ratifying recently the New York Convention on Arbitration;
- Sequencing private sector development reforms, allocating responsibilities among agencies, elaborating a strategic vision with all relevant stakeholders;
- Strengthening SMEs, through the SME Development Centre launched in April 2012 and an upcoming SME law;
- Entrenching DICA's role as a coordinator of investment attraction by creating a new Investment Promotion Department and an investor one-stop-shop in Yangon; and
- Enacting an ambitious programme of Special Economic Zones (SEZ) and industrial parks and completing the Thilawa SEZ by 2015.

Additional financial sector reforms communicated included:

- The development of a financial sector roadmap to: foster monetary development with a new foreign exchange management law; and
- Further opening the banking sector to foreign participation; and developing the country's capital market.

Improvement of regulatory capacity was also highlighted through the following:

- In the 2012 Framework for Economic and Social Reforms (FESR) significant regulatory developments are planned for energy, transport and communications sectors;
- Resolution in the lack of clarity in the Foreign Investment Law and its implementing rules; and uncertainties surrounding the protection of investment is planned;
- Attention will be paid to out-dated framework for the protection of Intellectual Property rights; and
- It was noted that there was room for improving contract enforcement and dispute settlement mechanisms; need to strengthen judicial independence.

²⁴ Power Point Presentation, OECD Investment Policy Review of Myanmar Aung Naing Oo, Director General, DICA.

3.2. Foreign Direct Investment into Myanmar

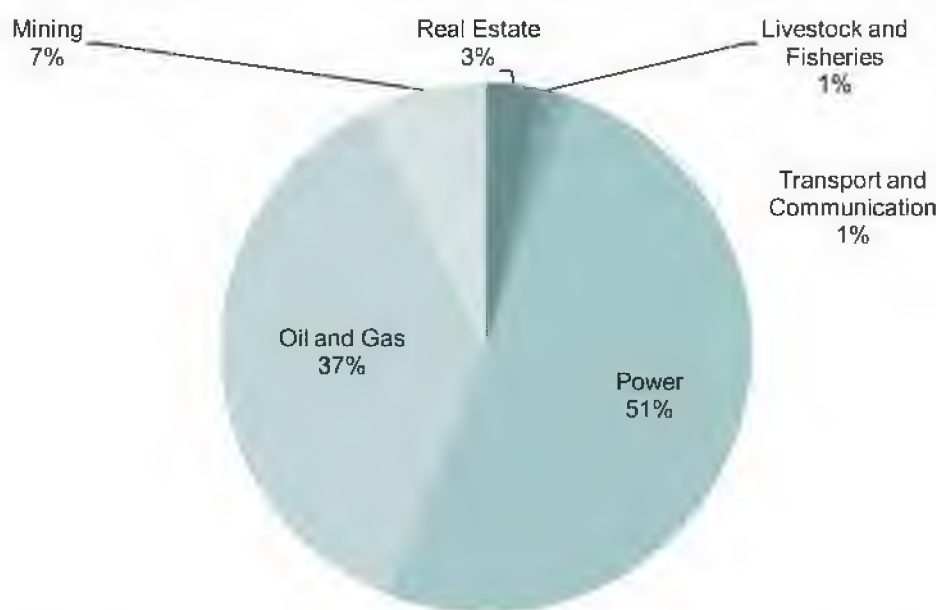
Myanmar is largely perceived (due to the presence of natural resources and the improving investment climate) to have significant economic opportunities for the extractives sector, and although some researchers have noted that the operating environment is more challenging than anticipated (Bissinger, 2012), FDI has been increasing steadily since 2010 (see table 4).

Table 4: FDI net inflows to Myanmar (World Bank)

Year	Amount (US\$)
2009	1,078,972,201
2010	901,133,535
2011	1,000,557,266
2012	2,242,980,000

Official figures indicate that FDI into the power, oil and gas and mining sectors accounts for the majority of foreign investment into Myanmar (see Figure 11 below). However, these figures do not take into account informal aspects of the economy, including illegal mining and gems trade. Myanmar has a significant "shadow economy" made up of informal investments that the UNDP noted comprised as much as nearly 50% of the country's GDP in 2005. It should be noted that the GOUM presents approved figures that come directly from the MNPED's Central Statistics Office. In this regard, approved investment means the total number of projects and amount of foreign investment that the MIC approves annually. It is not disaggregated by source country and sector and it does not represent foreign funds that have already entered the country. Actual investment is recorded directly by the Central Statistics Office.

Figure 10: FDI into various sectors of the economy (DICA, GOUM, 2013)



Notwithstanding increasing FDI figures, it is important to note suggestions that Myanmar's mineral assets are overpriced, not taking into account the frontier nature of the market place and the lack of precedent for success stories for international companies. One company interested in investing in the mining sector in Myanmar suggested that the price inflation was due to two factors;

- The liquid capital of regional investors, without the high cost of finance shouldered by foreign companies lead to Chinese companies raising prices; and
- Sanctions restrictions led to a reinvestment in the country by investors hit by capital transfer restrictions, inflating real estate prices, which have filtered down to the EI sector asset.

Table 5: FDI brought into Myanmar through formal, registered companies (DICA, 2013)

Particulars	Permitted Enterprises		
	No.	Approved Amount (US\$ Millions)	%
Power	5	18,874	47.68
Oil and Gas	104	13,815	34.17
Mining	64	2,794	6.19
Manufacturing	164	1,761	4.35
Hotel and Tourism	45	1,065	2.65
Real Estate	19	1,056	2.61
Livestock and Fisheries	25	324	0.80
Transport & Communication	16	314	0.78
Industrial Estate	3	193	0.48
Agriculture	7	173	0.43
Construction	2	38	0.09
Other Services	6	24	0.06
Total	460	40,431	100.00

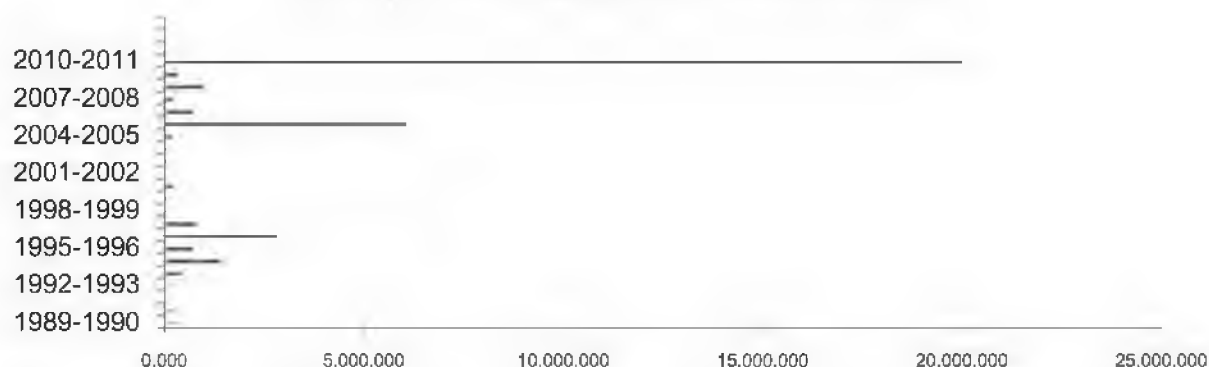
After oil and gas, investment in Myanmar's power sector is the most significant. In the border areas there are hydropower mega-projects planned (discussed in more detail in Chapter Seven below), although as noted above, it is doubtful if the massive hydro projects on the upper reaches of the Ayeyarwaddy will recommence in the near or medium term. Meanwhile, coal-fired plants are also significant, with the GOUM announcing in June 2014 an increase in the energy mix from clean coal technology²⁵. Countries that have invested in power in Myanmar include China, Bangladesh, India and Thailand. The power sector has long been attractive to regional governments due to the high need for energy and the availability of water sources in the border lands of Myanmar.

Pre-2011 FDI Amounts

While Figure 12 does not differentiate between sectors, it is clear that FDI pre-2011 was significantly lower than current levels. Approximately US\$3.24 billion of FDI went into the oil and gas sector up to November 2007, representing 22% of the country's total FDI, which stood at \$14.736 billion for the same period. Foreign investment into more than 80 oil and gas concessions comprised US\$3.24 billion. Notable is the relatively new interest of Asian multinational companies, particularly from China and South Korea who have bid on these offshore and onshore blocks in addition to International oil and gas companies (from France and US).

²⁵http://www.elevenmyanmar.com/index.php?option=com_content&view=article&id=6629:myanmar-to-use-coal-energy-to-increase-power-supply&catid=44:national&Itemid=384

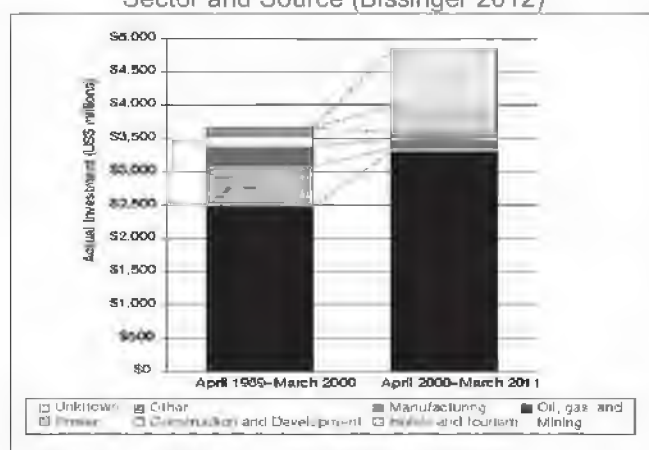
Figure 11: FDI into Myanmar (in US\$) since 1989 (DICA 2013)



2010 saw an enormous surge in Chinese interest in Myanmar. By mid-2010 more than US\$8 billion in investment accords had been signed, which boosted total contracted FDI since 1988 by more than 50 percent.

As a Myanmar Times article noted, "The US\$8.173 billion was spread across four projects in the oil and gas, electric power and mining sectors, with the two power investments coming from mainland China and the mining and oil and gas FDI from Hong Kong, figures from the Central Statistics Office show. The projects that materialised in the Central Statistics Office data in May 2010 were two hydropower dams in Kachin State, valued collectively at US\$5.030 billion (one of which was Myitsone); CNPC's Shwe gas pipeline (US\$2.146 billion) and Norinco's subsidiary Wanbao's planned development of the Letpadaung copper deposit near Monywa (US\$997 million)."²⁶

Figure 12: Approved and Actual FDI in Myanmar by Sector and Source (Bissinger 2012)



China was the biggest investor in the year's overall FDI total of almost \$20 billion, more than the previous twenty years combined. As Bissinger notes, "The FY 2010–11 FDI figures exemplified a decade long trend of investment being overwhelmingly concentrated in the extractives (mining and oil and gas) and power sectors. Only 1% of the FDI from FY2010–11 was outside these sectors, evidence that foreign investors saw few other viable investment opportunities in Myanmar's challenging business climate."²⁷

Figure 13 charts the pattern of FDI (approved and actual figures) over the past several decades. It illustrates the predominance of investment into the extractive industries sector, with investment into tourism, real estate and manufacturing also receiving significant attention from foreign investors (these latter sectors enjoyed a much greater

proportion of FDI in the earlier part of the period examined below). Since 1988, mining and quarrying have attracted the majority of actual inflows, around 68% of Myanmar's total. (Bissinger, 2012)

Recent Bid Rounds

Discussions with participants in the most recent offshore bid round have indicated the high level of sophistication with which the tender was conducted. The model PSC (which is based on the Indonesian model PSC) is one of the more advanced in Asia (a PSC overview is provided in Annex 7). Additionally, in contrast to many other countries in a similar stage of development, the signature bonus was not seen as core criteria for award of contract or licence, instead stating that this fiscal tool will be used in the evaluation of the contract, only in the case of a tie. This represents a long-term thinking from the GOUM perspective. A number of institutional constraints were observed in the tender process, including

²⁶ <http://www.mmmtimes.com/index.php/business/4759-fdi-jumps-by-more-than-half-in-july-says-cso.html>

²⁷ Bissinger, Jared. 2012. Foreign Investment in Myanmar: A Resource Boom but a Development Bust? *Contemporary Southeast Asia* Vol. 34, No. 1, pp. 23–52

the lack of communication and interaction between GOUM Institutions. In light of the differing mandates between GOUM ministries and the silo-based nature of their operations, very strong local representation was required in order to gain sign off from all agencies. Although detailed enough to identify prospectively, the 2D geological data presented for the tender involved a relatively widely-spaced grid structure²⁸. Informants suggested there were a number of inconsistencies in the PSC, such as Singapore as the seat of arbitration even though GOUM does not recognise the country as such.

Timing was presented as a risk to the tender process, with investors noting that the climate of Myanmar requires the tender round to be closed (and contracts signed) in August or September 2014 in order to conduct seismic surveys within a limited weather window. Should the contracts and licences not be awarded at this time, it was suggested that exploration operations may be delayed by a year. However, other observers (without any commercial interest) noted that these comments are simply a pressure tactic; that seismic surveys will take several years to complete and that it is well that the GOUM takes time to review any variations from the model contract, given that agreements will last for the next 20-30 years.

3.3 Investment Impact on Fiscal Status

Revenue Related to Natural Resources

A large share of GOUM's revenue is directly or indirectly related to investment in the extraction of natural resources, in particular gas. New fields coming on stream in 2013/14 will boost gas revenues in the next few years, with a peak economic output of 6.5% of GDP projected in 2014/15. In 2014 natural gas exports were \$4.2 billion, equivalent to 34 percent of total exports and 7 percent of GDP. In the medium term, however, gas production is expected to level.²⁹ Under current projections, which exclude revenues from potential new discoveries, all gas revenues are needed to finance the public sector budget (which would still leave fiscal deficits of around 5 percent of GDP, in line with the GOUM's fiscal strategy). Windfall receipts may also occur as the GOUM licences the use of state-owned assets, such as the telecommunications sector, and oil and gas blocks, or privatises productive state owned enterprises (IMF 2013).

The ultimate goal of Myanmar's economic policies is to attain sustainable growth and poverty reduction

In addition to the institutional and macroeconomic policy reforms outlined above, the focus of Myanmar's reforms is on improving health and education and attracting domestic and foreign investment to enhance human capital and attain higher growth. In addition to increased allocations for health and education in the budget the GOUM is also working with development partners to build strategies to maximise the impact of expenditure, and obtain additional funding.

The Foreign Investment Law, 2012 and accompanying regulations are intended to encourage the flow of foreign direct investment into the country. Laws on SEZs to incentivise investment and SMEs that provide clarity and guidance for small business development are proactive legislative measures that the GOUM has undertaken. There are also specific infrastructure requirements that affect the country's investment profile, including hard infrastructure such as transportation networks, and provision of energy, as well as soft infrastructure such as telecommunications. The GOUM's foreign investment strategy is focusing on attracting foreign investors into these infrastructure sectors. Improved transparency around the bidding process has been illustrated in the recent tenders for oil and gas concessions and for telecommunications licensing. Agricultural development is a significant priority for the GOUM, and in response to the need to further develop the sector, new micro financing and land laws were passed recently by Parliament. (IMF, 2013; Myanmar Bank Governor Speech, 2013).

3.4 Geopolitical Issues Related to Myanmar's FDI

Myanmar is strategically positioned to take advantage of regional interests in the development of its natural resources. Due to its location, situated between China, India and South East Asia, it is potentially well placed to take advantage of the massive market these countries represent, although the question remains whether these overseas markets would be interested in manufactured goods as well as natural resources and therefore to what extent Myanmar's geopolitical position might feed or avoid the resource curse.

²⁸ The US State Department is funding support by the US Geological Survey to MOGE, beginning in August 2014.

²⁹ IMF Staff Report For The 2013 Article IV Consultation, p17

Both approved and actual investments correspond well with major political and economic events. Following the passage of the Foreign Investment Law in 2012 there was a surge in initial investment, but FDI interest waned as a result of lack of progress on reforms and political uncertainties related to the fall of Senior General Saw Muang, Chairman of the ruling State Law and Order Restoration Council (SLORC) and rise of his successor Senior General Than Shwe. When the U.S. imposed trade sanctions in the late 1990's, combined with a global economic downturn, investment levels also started to fall. The recent international investment interest in the country has closely followed Asia's (particularly that of China) increasingly urgent requirement for mineral and energy resources, the recovery in the global economy, as well as the recent political changes in Myanmar.

China's Involvement in Myanmar's Extractive Industries Sector

An important change in the source of investment is the rise of China, which has been especially pronounced in the latter half of the 2000's, mostly because of approvals for Chinese investments in the extractives and power sectors for year 2010–11 (Bissinger, 2012).

Such transactions, including financing for the Shwe Gas pipeline, have significantly increased China's approved investment figures in recent years. As we shall explore in more detail in the following chapter and in Chapter Eight, Chinese investments have attracted significant controversy in Myanmar. Their operations have frequently faced protests from local communities. As public discontent has mounted, Chinese executives have sought to assuage the concerns, with some implementing social programs in Myanmar that have included the provision of schools and medical facilities. From discussions with GOUM officials and other well-informed stakeholders, it is doubtful whether even large-budgeted CSR programmes will be sufficient to restart projects such as the suspended Myitsone hydro project. National sentiments against non-tributary dam projects in Kachin state are often vehemently strong.

Meanwhile, discussions with commodity traders based in the Chinese provinces bordering Myanmar illustrated that the smelters, furnaces and mills operating in these regions are currently trying to move away from using agents to source raw materials, instead moving towards taking direct investments or offtake interest in Myanmar's resources. Investments in domestic retail in China have been in decline and both individual and institutional investors are assessing new markets for their money. The Chinese government is prepared to allow investment outside of China if it sees a strategic interest, as is the case with Myanmar. Although other countries bordering China - such as Laos and Vietnam - present a more attractive investment destination, it was noted by Chinese commodity traders that Chinese investors still view opportunities in the extractive industries sector in Myanmar positively, placing it above Cambodia in terms of its enabling environment.

The biggest constraints to Chinese investment were presented as follows by both international and Chinese businessmen operating in the commodities and extractive industries sector in South West China:

- Security of Tenure: uncertainty over the political stability and therefore the security of tenure;
- Logistics: currently those importing ore from Myanmar into China are unable to use the same logistics company from mine head to processing destination and the border crossing is often subject to lengthy delays,
- Finance: mine operators are unwilling to let ore leave the mine head unless a Letter of Credit is in place at this point. A reduction in the traditional / informal credit arrangements for jade and gemstones was also suggested to have occurred due to the experience of scams.
- Language barrier; and
- Layers of middle men.

Other International Investors

The GOUM has taken steps to reduce the Chinese dominance in FDI into Myanmar. DICA officials have attended OECD and related meetings to stress that Myanmar is open for business to the International community. In a DICA presentation in October 2013, it is noted that "Investment is dominated by Chinese investors in the power and oil and gas sectors, but change is underway nonetheless: Only one new investment by Chinese enterprises was approved in 2012-13, worth US\$ 0.76 million." (Oo Naing, 2013).

Thailand has been another source of FDI funding into the extractive industries sector, almost US\$3 billion of investment into projects in Myanmar, including the Zawtika gas field and the Dawei Port projects. While investment from many other Asian countries has risen in the last half-decade, investment interest from India never materialised. Some commentators attribute this phenomenon to India's focus on mergers and acquisitions, a business development model not favoured in

Myanmar. Most Chinese investors prefer greenfield opportunities whereas the majority of Indian outward investments are mergers or acquisitions.

Discussions with competitors for deep-water blocks in the offshore bid round suggested that the latest round, open to international companies, was a means for GOUM to diversify its exposure to China and Thailand and bring in international companies, from which it believes it can learn. Table 6 illustrates the trend away from Chinese and Thai ownership.

Table 6: Proportion of Onshore and Offshore Block Ownership by Country (MOGE Presentation, Jan 2014).

Country	% Blocks
Azerbaijan	6%
France	6%
Malaysia	14%
South Korea	9%
Thailand	20%
China	20%
Myanmar	6%
Vietnam	3%
Singapore	14%
India	3%

Many international business environment indexes place Myanmar near the bottom of their rankings as a desirable place to invest.³⁰ But it should be noted that surveys have been completed after the effects of the reforms starting in 2012, for this reason, an up-tick in investor perceptions can be expected as the reforms trickle down. As has been noted in this chapter, the extractive industries sector (particularly oil and gas) is one economic sector that continues to attract geographically diversified investment into Myanmar.

FDI and Conflict

The somewhat challenging FDI investment climate is exacerbated by Myanmar's conflict-ridden border areas, which are endowed with high levels of natural resource wealth.

Foreign investment in Myanmar's ethnic areas occurs both as formal FDI and through informal channels. Foreign investment in hydropower and in oil and gas projects goes through formal channels as these sectors are controlled by the state and entail massive investment. The remaining foreign investment is largely informal, involving local proxy investors to facilitate resource-extraction and production deals.

³⁰ See for example <http://www.doingbusiness.org/data/exploreeconomies/myanmar>

Figure 13: Investment into Myanmar's border regions (Buchanan 2012)



3.5 Relationship between Transparency Initiatives and FDI

The reputation of Myanmar as an investment destination has been negatively affected by the decades-long stranglehold of a military regime. Under the previous government, a system of patronage gave rise to a small, favoured business elite, and although the current government has taken steps to create a more level playing field, such as requiring open procurement processes, it will take a long time for a more level playing field to emerge.

Complementary to an investor-friendly policy and legal framework, greater transparency of revenues paid and obtained from the extraction of natural resources is widely acknowledged to be a critical step in any country's progression toward improved governance of the sector. Multinational companies that are listed on national stock exchanges to obtain financing for their projects are familiar with good governance requirements, including the disclosure of payments to government, as well as many other requirements related to the social and environmental aspects of an extractive industries operation. These companies will view Myanmar's EITI candidacy as a positive step. Interviews with junior mining companies and their financiers demonstrated compliance with EITI has tangible financial value, with EITI compliance decreasing the discount on the valuation of an EI sector asset. Consequently, EITI compliance is a standard which financiers look for when assessing investment opportunities.

Without exception, industry representatives strongly endorsed the reforms the GOUM is putting in place to increase fairness and transparency in the extractives sector governance. For example, one smaller company noted that it was difficult to compete with the "big guys" and that contracts were still awarded on the basis of personal relationships and entrenched mind-set. The hope expressed was that EITI will provide impetus to move toward the President's stated objectives of modernising Myanmar's economy and attracting responsible investment into its extractives sector.

Petronas noted that as a company already operating internationally in countries implementing EITI, it was familiar with reporting and disclosure requirements in all jurisdictions in which it operates.³¹ Hence, it viewed EITI positively, noting that the process should assist Myanmar in moving more quickly toward modernising its administration and ways of doing business. The smaller, oil and gas company MPRL also indicated a willingness to participate fully in MEITI, again confirming that such transparency initiatives would only serve to increase the credibility of the MOGE, and improve the reputation of the GOUM as a safe place to invest.³²

The Chinese Nickel Mining Company (CNMC), represented on the MEITI MSG, noted that the EITI process was an opportunity to share information on CSR programmes with civil society members also sitting on the MSG. Given the negative image of many Chinese companies operating in Myanmar, EITI can be viewed, at least by the larger companies that are operating under a spotlight, as a process where different stakeholders can come together and share information related to many aspects of a project, not just related to financial disclosure.

The Myanmar Federation of Mining Association (MFMA) was equally supportive, noting that many of its member companies were currently involved in Joint Venture arrangements with foreign investors. The Myanmar Gemstone Association was also outwardly pleased about the introduction of EITI into Myanmar, although the interview with the group did not include discussions about the prevalence of informal jade mining in Kachin State, or whether formal companies would welcome greater transparency and disclosure around their operations.³³

However, regional governments with existing extractive industries sector investment in Myanmar, and especially those that we are led to believe were negotiated with little transparency may be less pleased about the new reforms directed at ensuring greater control and management over revenue flows from extractive resources.

Moreover, the question remains whether increased transparency through initiatives such as EITI and increased foreign investment will lead to a more equitable distribution of resources from the extractives sector. The International Crisis Group (2012) warned that economic liberalisation does not necessarily lead to a fairer distribution of resources. It argued that a new, more transparent system will simply provide different opportunities for fifteen to twenty individuals that have controlled a major part of the national economy for decades to consolidate their business interests and maintain their power over how natural resources are developed. These "cronies" received privileges because they were useful to the former military regime, not because they wielded any particular influence over it. The reforms being initiated are a

³¹ Interview with Petronas, Yangon, May 2014

³² Interview with MPRL, Yangon, May 2014

³³ Interviews with the Mining Federation of Myanmar and the Gemstone Association, Yangon, May 2014

challenge to the dominance of these business interests, but the cronies may well have the resources and know-how to adapt to the new rules of the game.

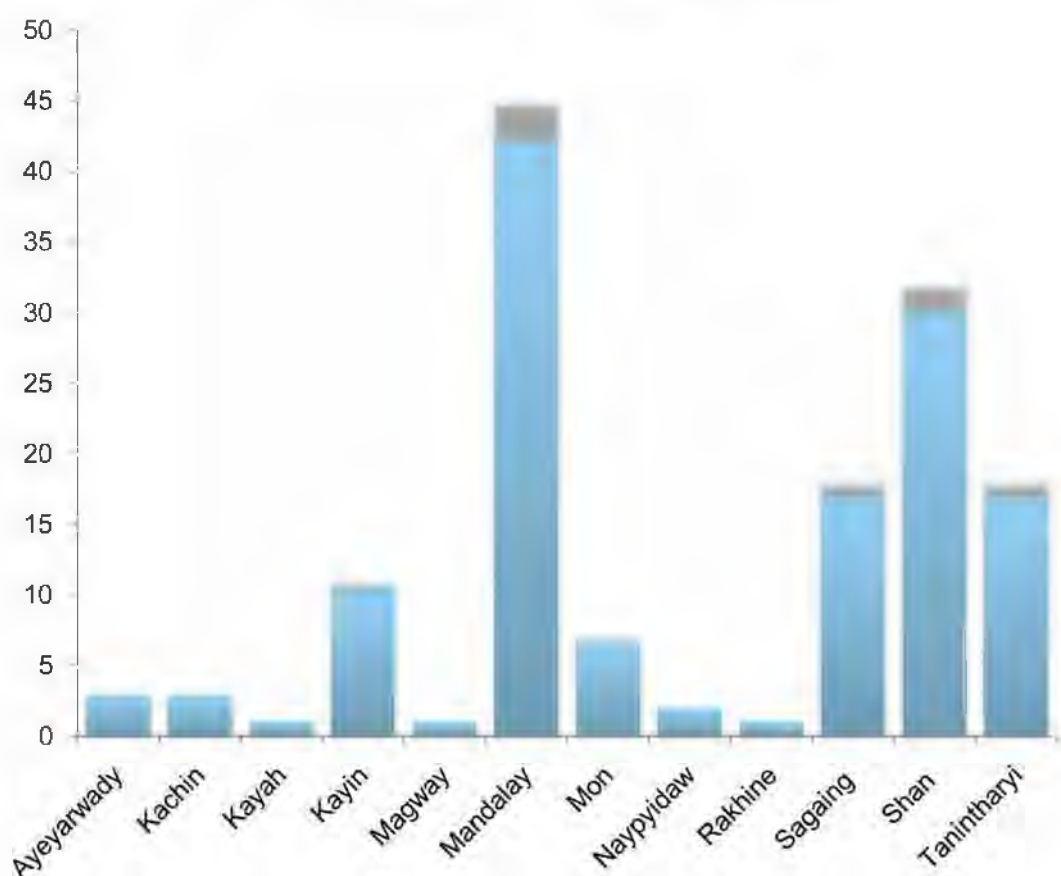
It will be a challenge for Myanmar to seek positive foreign investment partners that are performing at a best-practice level internationally, and who can view Myanmar's future potential without inadvertently supporting to some extent the negative aspects of its past. In this respect, the oil and gas sector will likely lead the way, with the mining (and jade/gemstones) sectors playing catch-up in the years to come.

Chapter 4: Sub-National Governance

4.1 Introduction

In Myanmar lucrative natural resources such as jade, timber and hydropower are found in border areas such as Kachin and Shan State, regions which suffer disproportionately from the negative impacts of extractive industries sector operations, ensuring that the question of devolution and federalism (and the economic aspects of the peace process) include a significant focus on the management and ownership of extractive industries sector revenues³⁴. However, as the chart below indicates, from the perspective of mining, many large-scale operations are also found in the central areas of Myanmar, in particular in Mandalay Region

Figure 14: Large mining operations per State / Region³⁵



At present, given overall economic reforms (such as the telecom expansion and the pending finance sector changes) and ongoing political change, the extractives sector remains carefully balanced between the previous rules of the game, top-down centralised management from the GOUM, and increasing demands from the states and regions for greater control and ownership of the natural resources in their area. It is regularly asserted, particularly by state and region governments, that more power to make decisions and benefit from proceeds from the extractive industries sector should devolve to sub-national governments. However, there is a question of degree, with different sets of stakeholders likely to put forward positions ranging from limited local level control and ownership to claims toward majority ownership and control at the

³⁴ See for instance, "Natural Resources and Subnational Governments in Myanmar" by the International Growth Centre (June 2014) and "The Political Economy of Myanmar's EITI Process", Pyoe Pin, July 2013

³⁵ Visualisation of data supplied by MOM

local level. It is too early in the deconcentration process, however, for specific negotiations and calculations on the distribution of natural resource management and ownership across Myanmar to begin.

Since late 2011, the Myanmar government and 18 opposition Ethnic Armed Groups (EAG) which have historically fought against the government have been engaged in a peace process aimed at ending Myanmar's long-running wars. This process is quite distinct from the government's administrative initiative toward greater deconcentration. The EAGs do not have administrative or political links with the state and region administrations, which are under the administration of the central government. The larger EAGs administer, including providing services, to varying degrees territories they control, mostly along the borders. Some EAGs represent populations spread across multiple states. However, as the peace process progresses toward increasingly substantive political dialogue, discussions of economic issues, including resource sharing, will assume increased importance. As a representative of the Myanmar Peace Centre noted, "one of the biggest issues of the political dialogue is to negotiate on resource revenue sharing."³⁶

With the political and economic opening, there is widespread expectation of greater revenue sharing. For example, the Arakan National Conference, held on 28 April 2014, included a call for the region 'to get 50% of oil and gas revenues', including those from sites offshore, and for local groups to be included in resource management.³⁷ The expectation from the Shan State Mining Minister is that 70% of the revenues from natural resources should stay within the state³⁸.

MEITI may contribute to these discussions on resource sharing by providing an independently verified dataset on the extractive industries sector, disaggregated by revenue type, by project and by mineral type, which will facilitate evidence-based negotiations. MEITI may also be able to provide case studies on how resource sharing has been managed elsewhere from the perspective of a distributed approach to natural resource management and ownership.

4.2 The Constitutional Powers of Sub-National Governments

Under the 2008 Constitution, state and region governments are empowered to enact laws and collect taxes in relation to the extractive industries sector, but only for marginally significant types of operation. In each state or region, there is a unicameral *Hluttaw* (with two elected members per township, and 25% of the parliament sourced from the Defence Services), as well a Chief Minister and a Cabinet. The Chief Minister is selected by the President and confirmed by the *Hluttaw*. The sub-national *Hluttaw* is entitled to set its own budgets (under Article 252), based on the envelopes set by the annual Union budget. Under Article 188, the sub-national *Hluttaw* is empowered to enact laws related to matters defined by Schedule Two of the constitution. In terms of the scope of the report, this relevant part of Schedule Two is section 4:

- Medium and small scale electric power production and distribution that have the right to be managed by the Region or State not having any link with national power grid, except large scale electric power production and distribution having the right to be managed by the Union;
- Salt and salt products;
- Cutting and polishing of gemstones within the Region or State;
- Village firewood plantation; and
- Recreation centres, zoological garden and botanical garden.

Under Article 254, the Region/State is also entitled to collect those taxes and revenues listed in Schedule Five (and deposit them in the Region/State fund), which are:

- Land revenue;
- Excise revenue;
- Water tax and embankment tax based on dams and reservoirs managed by the Region or State and tax on use of electricity generated by such facilities managed by the Region or State

³⁶ International Growth Centre Report, p36.

³⁷ *ibid*, p38.

³⁸ Interview with the Shan State government, May 2014.

- Toll fees from using roads and bridges managed by the Region or State;
- Royalty collected on fresh water fisheries;
- Royalty collected on marine fisheries within the permitted range of territorial water;
- Taxes collected on vehicles on road transport and vessels on inland waterway transport, in accord with law, in a Region or a State;
- Proceeds, rent fees and other profits from those properties owned by a Region or a State; and
- Fees, taxes and other revenues collected on services enterprises by a Region or a State.

4.3 The sub-national political units of Myanmar

The Republic of the Union of Myanmar comprises seven ("Ethnic") states and seven ("Bamar") regions named in the 2008 Constitution, as well as six self-administered zones or divisions, and one union territory containing the capital Nay Pyi Taw and surrounding townships. The smallest formal administrative unit is the village, with several villages grouped together into "village tracts". Meanwhile, urban wards and village tracts are grouped into townships, where the lowest levels of government offices are generally located. Collections of townships are organised as districts, which in turn form the core components of the region or state.³⁹

³⁹ For more detail and analysis on this point, see the report *State and Region Governments in Myanmar*, published by MDRI and the Asia Foundation in September 2013, especially page 9.

Figure 15: Administrative Map of Myanmar



4.4 The Central Role of the General Administration Department at Sub National Level

The backbone of government at the sub-national level is the General Administration Department (GAD), which is a unit of the Union Ministry of Home Affairs. This ministry is one of three union ministries whose minister is constitutionally appointed by the Commander-in-Chief of the armed forces from among active duty military personnel. At sub-national level, the GAD takes the form of the "Office of the Region or State Government" with its head being the Executive Secretary of the Region or State Government.⁴⁰ Typically, the Executive Secretary oversees a staff of several hundred GAD staff that run the General Administrator Office, the Government Office and the *Hluttaw* Office. While the Executive Secretary for each region or state is directly accountable to the Union Ministry of Home Affairs, he or she is also expected to report to the Chief Minister. Nonetheless, it is the Executive Secretary (not the Chief Minister) that has the power to release the state or region budget.⁴¹ The MDRI/Asia Foundation report notes that, "How this relationship actually functions is ambiguous and likely varies from one state/region to another, and depending on the personalities involved."⁴² A State/Region auditor general, appointed by the Chief Minister, audits the state/region budget and reports to the *Hluttaw* on the findings. However, the role of the state/region level Auditor General is ambiguous, as it involves reporting to both the President and the Auditor General of the Union (through the Chief Minister).

At district level, a township administrator, also a GAD official manages individual townships within the state or region. Township administrator encompasses a wide variety of functions, including land registration, tax collection, water provision and local dispute resolution. The GAD also extends its administration down to the village level, with village tract and village-level administrators appointed by the township administrator and paid for under the GAD payroll. As the MDRI/Asia Foundation report notes:

The GAD is an exceptionally important actor within Myanmar's subnational governance structures and deserves greater emphasis and consideration by policy-makers. Its lack of change relative to other institutions, its placement within the military-led Ministry of Home Affairs, and its ubiquitous role in the administration and coordination of government actors in the wider context of decentralization and democratic reform, raises questions about GAD's contribution to decentralisation. At the same time, any decentralization effort must engage and acknowledge this organisation.⁴³

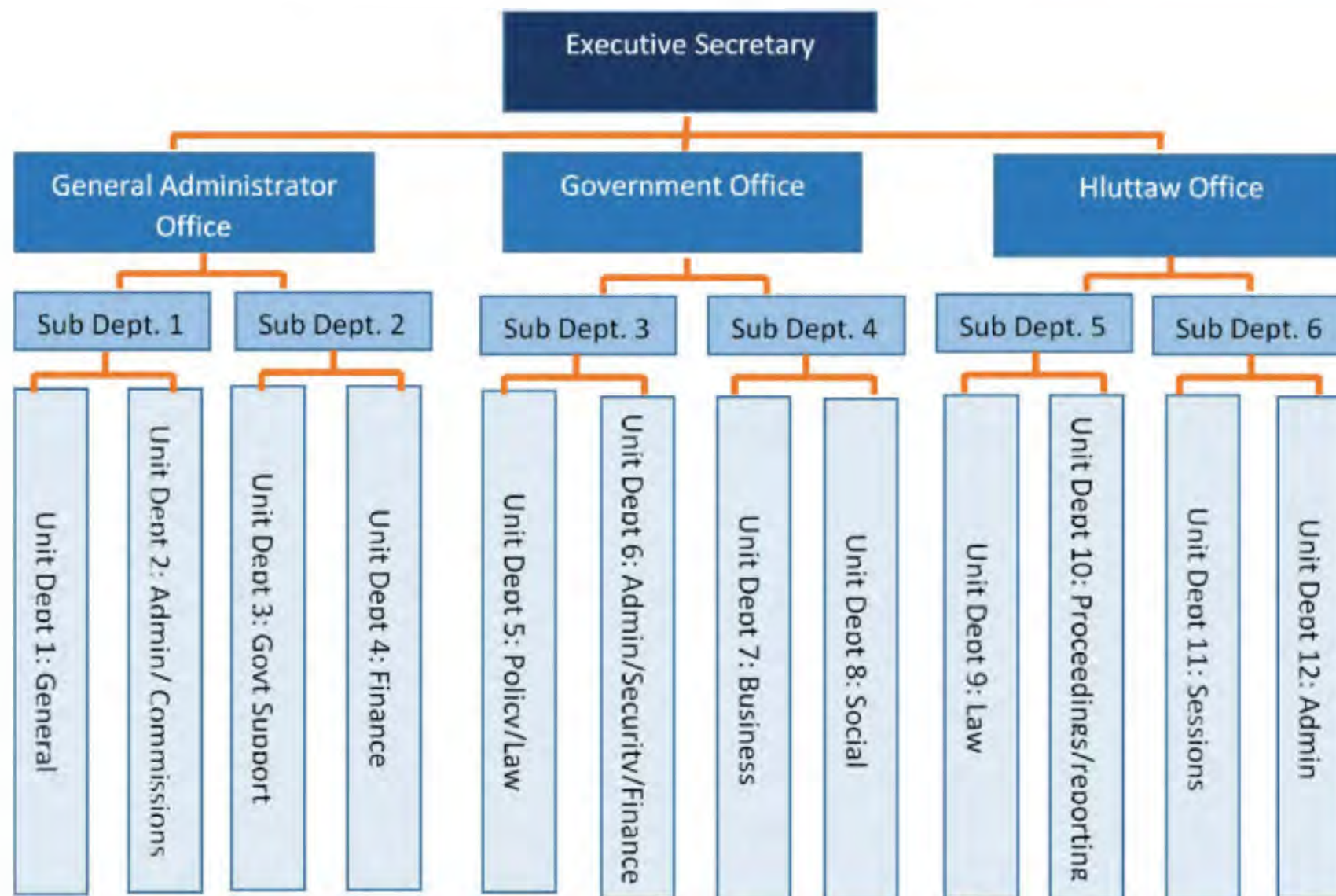
⁴⁰ State and Region Governments in Myanmar, p14.

⁴¹ Natural Resources and Subnational Governments in Myanmar, p27-8

⁴² State and Region Governments in Myanmar, p33.

⁴³ Ibid. p34.

Figure 16: Typical Structure of State / Region GAD (from "State and Region Governments in Myanmar")



4.5 The Organisation Structure of State and Region Ministry of Forests and Mines

In Chapter 4, Section 96 of the 2008 Constitution, the power to enact laws is granted to the *Pyidaungsu Hluttaw* for all schedule one sectors, which includes, under section six of this schedule:

Energy, Electricity, Mining and Forestry Sector

Petroleum, natural gas, other liquids and substances declared by the Union Law to be dangerously inflammable;
Production and distribution of electricity of the Union;
Minerals, mines, safety of mineworkers, and environmental conservation and restoration;
Gems;
Pearls;
Forests; and
Environmental protection and conservation including wildlife, natural plants and natural areas.

Section 96 effectively centralises government control of the extractive industries sector, foreclosing any powers at state or region level to enact laws related to environmental protection or natural resources. At the sub-national level, the only powers granted in terms of legislation is to enact laws regarding salt and timber (under Schedule 2 of the constitution).

This effectively means that at state or region level, in terms of natural resource administration, there are "Ministers but no ministries."⁴⁴ The core role of the sub-national mines minister, from what we could gather from our field trips, is to carry out land checks on behalf of the GOUM as part of the licence application process (checking that the land to be surveyed or exploited is not a forest area, does not include a cemetery or place of religious significance) and inspections. However, as the IGC report notes, "Although state/region governments are able to endorse applications, they generally do not have the power to veto them."⁴⁵

4.6 Trends Towards Revenue Sharing

It is important to note that discussion on sharing of natural resource revenues is in itself significant, given that such discussions were not possible in the past. These are at a very early stage, but some first steps have been taken in the form of revised legislation and increased revenue sharing with the states and regions.

Analysis of the Draft Mining Law

The Draft Mining Law has gone through two series of amendments, with the latest version before parliament during the time of writing this report, with over thirty rewritten clauses and some debate on whether a new mining law should be drafted from scratch. While there was preference for a new mining law in the lower house, representatives in the upper house argued for amendments to existing code. A key change in the proposed amendments is to devolve the management of small-scale and subsistence mining to state and regions and to empower them to collect taxes on behalf of the GOUM. These proposed changes may create an incentive problem for the state and regional governments: if they are charged with collecting revenue from mines but not retaining any of this revenue, the revenue collection process may at best be inefficient, and at worst lead to corruption. As the IGC report notes, "For local governments to collect effectively, they generally should be able to retain what is collected without decreasing their other sources of support. Where the discretion to issue licences and the benefits of good enforcement are separated, corruption has a tendency to flourish."⁴⁶

⁴⁴ Natural Resources and Subnational Governments in Myanmar, p27

⁴⁵ Ibid p29

⁴⁶ Ibid. p30.

4.7 Increased Transfers to Sub-National Governments

As noted above, Schedule Five of the 2008 Constitution entitles state/region governments to collect and keep revenues from land, excise, water resources, vehicles, royalties from fisheries and payments from tolls. The GAD collects most but not all of these taxes. Because of the small size of sub-national budgets, these revenues comprise 58% of the state or region budget on average. 65% of this retained revenue comes from SEEs, of which 99% comes from the Department of Public Works⁴⁷. From the perspective of the extractive industries sector and EITI, the most significant payments collected and retained at sub-national level that the MSG may consider to be material for reporting purposes are land and excise payments, as well as contributions to state/region social development funds (where they exist). For example, as we will see in the case study below, Shan State has a social development fund, which takes one-off payments from companies, calculated by mineral type and size of the mine. There are currently no derivation type transfers (whereby the subnational unit may retain a share of what is collected within their boundaries), from Union government to state or region budgets based on extractive industries sector production volumes (either for oil and gas or for minerals).

There are planned increases in the transfers to sub-national governments from the Union budget. In the 2013-14 fiscal year, the share of the Union budget estimate assigned as grants or loans to state and region budgets is 3.6% of overall public spending. Meanwhile, in the 2014-15 budget estimate, this amount has more than tripled to 11.8% of overall public spending.⁴⁸ The question remains whether these increases will be perceived to be sufficient from the sub-national government perspective as the deconcentration process transitions from a political to an economic discussion.

4.8 Self-Administered Zones, EAGs and extractives

Apart from the fourteen states and regions of Myanmar, there are five self-administered zones:

- › Naga (Sagaing Region)
- › Danu (Shan State)
- › Pa-O (Shan State)
- › Pa Laung (Shan State)
- › Kokang (Shan State)

And one self-administered division:

- › Wa (Shan State)

These six self-administered sub-national units are all recognised in the 2008 Constitution (in section 56) and are the result of earlier ceasefire agreements. Each self-administered unit is run by a Leading Body, which has at least ten members and includes State or Region *Hluttaw* members and other members nominated by the Commander-in-Chief. According to officials at the MOM, the ministry currently receives little or no information on the extractive industries sector from these self-administered areas. This poses the question of the extent to which these areas will either be willing to comply with EITI reporting, or alternatively are sufficiently capacitated to be able to provide data based on international accounting standards. It also leaves unaddressed the question of whether any of these areas contain significantly large mineral resources to be of relevance for EITI purposes. It may be that there are varying degrees of willingness to participate.

4.9 Expanding Role of the Environmental Conservation Department

The Environmental Conservation Department (ECD) under MOECAF has one core function: to implement the rules and regulations of the new Environmental Conservation Law, which include carrying out ESIA and SIA assessments. Five regional offices have been established thus far:

- Yangon (Yangon Region)
- Mandalay (Mandalay Region) Central Myanmar
- Patheingyi (Ayeyarwaddy Region) Delta Area
- Monywa (Sagaing Region) Upper Myanmar

⁴⁷ State and Region Governments in Myanmar, p46-7.

⁴⁸ Natural Resources and Subnational Governments in Myanmar, p24

Dawei (Thanintharyi Region) Southern Myanmar

There are plans to open up (starting from next year) a further five offices in:

- Taunggyi (Shan State)
- Bago (Bago Region) Lower Myanmar
- Sittwe (Rakhine State)
- Mawlamyine (Mon State)
- Mylitkyina (Kachin State)

4.10 Civil Society at Sub-National Level

Any analysis of governance at sub-national level would be incomplete if the focus relies solely on an assessment of administrative processes within sub-national government institutions. As well as top-down decision making by local government, governance also refers to market-based processes and decision-making (corporate governance) as well as community-based governance, which most often takes the form of research, advocacy and demands for increased transparency and accountability among government agencies and the private sector. The question of governance (both at national and sub-national level) therefore mirrors closely the three core stakeholder groups at the institutional core of the EITI framework

The starting point of the analysis is an appreciation of the history of civil society in Myanmar, including organizations established originally in neighbouring Thailand. CSOs and Community Based Organisations in the country were responding to a situation where the standard relationship to government was based on authority and control.

While community confidence levels to engage with the government at a local level are gradually improving, there is a long way to go. Civil society organizations still face scrutiny from state and region governments and in practice must frequently seek permission prior to carrying out their activities. There are now many new civil society organisations, many of which are well organized. A review of some of civil societies' contribution to the discussion on the impact of the extractive industries sector at the sub-national level may be found at Annex 8.

The Myanmar Alliance for Transparency and Accountability (MATA)

The Myanmar Alliance for Transparency and Accountability (MATA), formally established in April 2014, is a civil society umbrella body that supports civil society actors to advocate for transparency and accountability in all sectors across Myanmar. MATA currently has 448 member organisations across the country. Although some CSOs (notably Spectrum and EcoDev) have been working with EITI for a number of years, the first large civil society gathering for the extractive industries sector (as part of the EITI preparation to sign-up process) took place in October 2013 at the Strand Hotel. This was the initial stimulus that eventually led to the formation of MATA. MATA was therefore formed as a mechanism for civil society coordination with the EITI process. MATA is the body through which the nine civil society members of the MEITI MSG are selected. However, MATA has defined its remit well beyond EITI toward the promotion of transparency and accountability in general. The coalition is also engaged, for example with the Forest Law Enforcement Governance and Trade (FLEGT), an EU initiative which aims to improve the governance of the forestry sector globally.

MATA has rapidly organised itself in the past few months. By January 2014, civil society working groups had been set up in each state and region and had finalised the selection of representatives to participate in the national steering group where they join civil society MSG representatives to make decisions collectively. As noted in the draft "MATA Process Paper", MATA's mission and strategic objectives are as follows:

Mission

- To advocate for transparency and accountability by government, elected representatives, companies, donors and civil society; and
- To promote the freedom of public participation in, and scrutiny of, Myanmar's legal frameworks and guidelines relating to resources.

Objectives

Advocate for transparency and accountability in the management of natural resources by Government, private sector and civil society organisations;

- Raise awareness of the importance of transparency through education and training sessions;
- Build partnerships with INGO, NGO, Government, CSOs and other stakeholders;
- Strengthen the capacity of CSO and communities to improve Natural Resources Governance,
- Increase freedom of information, monitoring mechanisms and the accessibility of data; and
- Promote the freedom of CSO participation in Myanmar.

Figure 17: MATA structure from national to sub-national

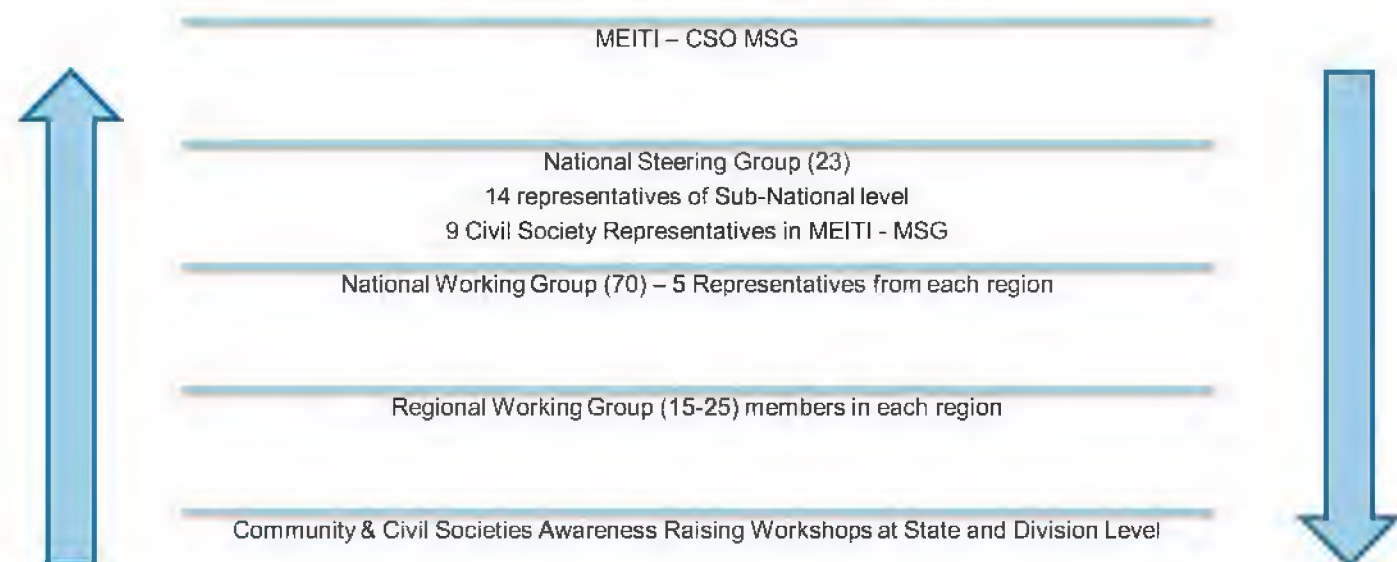


Figure 18: The MATA regional working group structure (taken from the MATA Process Paper)



All strategic decisions by MATA are made by the National Steering Group which is formed of the nine MSG CSO representatives from CSO and 14 representatives from the 14 sub-national units of Myanmar. The National Steering Group meetings are quarterly. At the regional level, each working group's structure and representation are decided autonomously without interference from the national body. MATA therefore has adopted a decentralised approach to decision-making at the sub-national level.

4.11 Corporate Social Responsibility

The private sector's contribution to good governance in the extractive industries sector typically comes through either individual projects (which can be classed, in EITI terms, as "social payments"), as Corporate Social Responsibility (CSR) programmes, or in a more structured form as Community Development Agreements which are incorporated into legal contracts between the operator and the government. Under the EITI 2013 Standard, all forms of social payment must be recorded in the annual EITI reports, whether these social payments are either mandated by law or included within the contract⁴⁹. A comprehensive survey of all significant CSR programmes in the extractive industries sector in Myanmar should be included in the scoping study that will follow this report. Here, we shall refer to two major CSR programmes, for the Yadana and Shwe Gas pipelines. In the course of the research for this report, it was discovered that Wanbao, the JV partner with UMEHL in the Letpadaung copper operation, has an annual \$1.8m CSR budget. However, it was not possible to find further information to substantiate this claim or unpack the major elements of the CSR budget during the course of our research. MEITI may wish to play a role in ensuring greater transparency and accountability in these programmes by requiring detailed reporting on revenue and expenditure for all the major extractive industries sector CSR programmes in Myanmar.

Yadana Pipeline

The Yadana consortium is comprised of Total Exploration & Production Myanmar (31.24%, operator), Chevron (28.26%), Petroleum Authority of Thailand Exploration & Production (25.5%) and MOGE (15%). The consortium produces natural gas from the Yadana field, which is located in the Andaman Sea, approximately 60 kilometres from the shore in Myanmar. The gas is transported through a 346-kilometer offshore pipeline and a 63-kilometer onshore pipeline for delivery to Thailand and also to the Myanmar domestic market. Since 2010, part of the gas is transported to Yangon directly from Yadana through a MOGE pipeline, for delivery to Myanmar market. The consortium has a Yadana Socio-Economic Programme (SEP) which is implemented by Total on behalf of the consortium partners. The SEP has been in operation since 1995 and has invested a total of \$34.6m to date. Since 1998, the consortium is also supporting socio-economic projects outside its area of operations, mainly in the field of public health and social welfare. The SEP budget for 2013 was \$3,78m, with 61% being spent on development projects along the pipeline, and 39% funding projects on HIV, blindness prevention and orphanages in Yangon. Reports on SEP investments are not publicly available documents.

Shwe Gas Pipeline

As highlighted in the reports by the Shwe Gas Movement reviewed in Annex 8 and quoted below, by far the most significant extractive industries sector project in Shan state is the Shwe oil and gas pipeline that runs from the Andaman sea, through the state onwards to China. The officially named "Myanmar-China Pipeline Project" involves two pipelines, one for crude oil and another for natural gas. The oil pipeline is a joint venture between CNPC and MOGE. Meanwhile, the gas pipeline is a joint venture between CNPC, MOGE, Daewoo International, KOGAS, Indian Oil and GAIL. The oil pipeline starts at Maday Island, while the gas pipeline starts at Ramree Island, both in Kyaukphyu, Rakhine State, on the west coast of Myanmar. The pipeline crosses Rakhine State, Mandalay Region and Shan State. The gas pipeline became operational in the last quarter of 2013, while the oil pipeline is expected to operate imminently. As the below quote highlights concerns exists over the damage which the pipeline will occur to the environment and society due to the pipeline.

"Environmental degradation is a harsh consequence of the Shwe Gas Project. The Shwe Gas Project passes through biodiversity heartlands, splitting forests into two sections, impacting one of the ten most vulnerable forests in the world by requiring deforestation all along the pipeline's path. As infrastructure development for the Shwe Gas Project continues, the local fishing industry is additionally threatened. Fishermen are physically restrained from coming within a 10-mile radius of the gas and oil pipelines and drilling locations. There also exist severe environmental contamination from the out-flow of chemicals, gas blowouts and other hazardous substances that reach waterways and deplete oxygen levels, raising concerns about the sustainability of marine life. Environmental Impact Assessments have been carried out arbitrarily, but to date there has been no disclosure of results by government or corporations."

⁴⁹ See the EITI Standard, 4.1 (e)

⁵⁰ Good Governance and the Extractive Industry in Burma, Shwe Gas Movement, pp5-6

Despite the detailed documentation of negative social impacts highlighted by the Shwe Gas Movement and other non-governmental organisations, CNPC purports to have a CSR programme that is much larger than the programme run by Total for Yadana. As of March 2012, CNPC reports a contribution of US\$20m to the GOUM and local communities on social projects (infrastructure provision, health service provision, education and disaster relief).⁵¹ CNPC also reports a US\$10m donation towards Rakhine States new transmission line project. A municipal water system was installed for the villagers on Madaya Island, capable of providing 220,000 tons of fresh water per year to more than 2,000 local residents. Meanwhile, between December 2010 and January 2011, two chemical fertilizer plants were constructed by a CNPC subsidiary, HQCEC. Again, in April 2011, CNPC signed an agreement with the MOE to spend \$6m on building or reconstructing local hospitals and schools. There are 45 primary and secondary schools and 24 hospitals and medical centres planned, covering approximately 20,000 students and 800,000 residents. So far, 30 schools and 18 medical centres have been completed. Previously, CNPC contributed \$300,000 in funds and \$30,000 in relief supplies in the wake of Cyclone Nargis.⁵² However it must be noted that there has also been concerns over the delivery of this assistance.

⁵¹[http://csr.cnpc.com.cn/en/press/Features/Caring for Myanmar communities along the pipeline.shtml?COLLCC=3706698166&COLLCC=2938205027&](http://csr.cnpc.com.cn/en/press/Features/Caring%20for%20Myanmar%20communities%20along%20the%20pipeline.shtml?COLLCC=3706698166&COLLCC=2938205027&)

⁵² Ibid

Figure 19: Map of 33 villages covered by the SEP programme



4.12 Case Study 1: Shan State

Background

With 12 Districts, 40 Townships and a population of approximately 5 million, Shan State is the largest sub-national unit in Myanmar. It is also the most socio-politically complex, with five self-administered areas and a variety of on-going tensions between border guard forces (aligned with the Defence Services), EAGs and militias, which are less formal local groups set up to fight the EAGs. The area east of the Salween River is largely outside of GOUM control. The Shan State Army-South (whose political wing is the Restoration Council of Shan State – RCSS) is largely oppositional to the GOUM (whereas the Shan State Army-North has a more conciliatory stance), as does the Ta-ang National Liberation Army (TANL) and, as noted above, the United Wa State Army (UWSA).

Significant Mining & Gemstone Operations

Shan State is rich in lead, silver, antimony, manganese, gold, coal, tin, wolfram and gypsum (as well as, in former times, rubies). The major extractive operations include⁵³:

- The Namtu/Bawdwin silver-lead mine in Northern Shan, which was once the world's largest single source of lead and silver. The Namtu mine also produces zinc and nickel;
- The Baw Sai silver-lead mine in Kalaw township in Southern Shan State;
- The Yadanar Theingi silver/lead mine;
- The Mong Hsu ruby mines near Lashio, (whose rubies are not as well-known for their quality as those found in Mogok and have often been heat treated.)⁵⁴;
- The Nampaka gold mine in Kutkai township (very little is known about this operation as it is in a black area, however the Shan State chapter of the Mining Federation identified it as a significant deposit);
- The Tigylt coal mine. This mine is 16 miles from Inle Lake and produces approximately 2,000 tons of coal daily⁵⁵;
- Pinpet (also known as Pangpek) – see the analysis of the Robbing the Future report above; and
- Sanlong coal mine. This mine has approximately 12m tonnes of reserves.

Mining Sector Governance in Shan State

Shan State is an example of weak decentralisation of governance arrangements, where a minister at state or region level may have been appointed, but lacks a legal framework and an institutional structure to be a significant administrative force. The "Ministers but no ministries" portrait of sub-national administration outside of the GAD characterised above is apparent in the case of the mining sector in Shan State. Both the Shan State Ministry of Finance and the Ministry of Forestry and Natural Resources have little visibility on revenue flows to the Union government from the mining sector in their state. The Ministry of Forestry and Natural Resources' only significant role lies in performing a series of checks in advance of the Union Ministry of Mines awarding a licence to explore or to mine (on land ownership, the presence of a forest or settlement in the designated area). However, Shan State has a social development fund, which takes one-off payments from companies, calculated by mineral type and size of the mine. For gold, the fee is 100,000 kyat per acre, whereas for other minerals, the charge is 50,000 per acre. The Shan State Mining Minister's preference is for Shan state to have a far greater degree of control and ownership of natural resources in the State, suggesting that 70% of revenues to be held for expenditure by the state.

Informal Mining Practices in Shan State

The lack of accurate geological knowledge in Shan State (as elsewhere in Myanmar) turns small-scale mining into a form of gambling with the ground, relying on local village-level knowledge (which may or may not be accurate). This fact alone makes it difficult to mine legally. Under Production Sharing Agreements, there is a minimum production required each year, which is the basis for which the government calculates its withholding tax charges. This minimum production

⁵³ Although not published in this report the authors have the beneficial ownership breakdown for these mineral assets

⁵⁴ See <http://www.ruby-sapphire.com/foreign-affairs.htm>

⁵⁵ http://www.sourcewatch.org/index.php/Tigylt_coal_mine

requirement may or may not be feasible. This leads to licences being sold-on informally to other operators, who then face the same production deficit issues. In addition, licence processes are commonly flouted; mining operations often begin in advance of a licence being granted or community consent being given. If a commercially viable deposit is identified, the local township officer is bribed and GAD officials pressure villagers into accepting the presence of the mine. Meanwhile, seasonal artisanal mining is prevalent across Shan State, partly because farming revenue is low during the dry season.

4.13 Case Study 2: Kayin State

The Context for Mining in Kayin State

The historical context of conflict between the central government and EAGs continues to exert an influence on mining in Kayin State. The Karen National Union (KNU) and Government of Myanmar agreed to a ceasefire on 12 January 2012. Other, smaller Kayin armed groups already had or have also concluded ceasefires. Many of the state's mines reportedly are in areas control by EAGs or contested between government and EAGs. While the KNU maintains a form of civil administration, mostly centred on health and education services, in their areas this does not constitute a full parallel administration to government. Further it is not clear how much the EAGs actually earn from mining, given that majority of the EAGs are not well-resourced and have conventionally relied on timber and fees on transport and border trade. The reality of historical conflict has meant limited access to, inspection, and regulation of mining operations in Kayin State by government staff. Although ceasefires are in place, these limitations remain and are likely to continue for some time to come.

The Government Regulated Mining Sector

To place mining sector governance in an administrative context, according to government classification, there are three districts, seven townships and four thousand and ninety-two villages in Kayin. Each district has a planning office, and five out of the seven townships have a planning office. As noted in Chapter Two there are two levels to planning in Myanmar.; first, the National Comprehensive Development Plan (NCDP - the first plan spans the 2011-16 period).⁵⁶ Secondly, state and region governments have their own Regional Comprehensive Development Plans (RCDP). As part of the preparation and implementation of its own RCDP, the Kayin State Ministry of Planning compiles its own economic statistics, based on data provided from township level. The data is categorised according to three macro sectors: services, production and trade. The largest production sector is agriculture, which contributes 41% to the GDP of the state. Second is industry, which contributes 21%. The combined services sector contributes 27.9% to the GDP total. Meanwhile, the mining sector only contributes 0.7% to the GDP of the state (and the forecast is for mining to shrink slightly to 0.6%) in coming years. The data for mining is calculated based on production reports and the local market price. The only payments from the mining sector are the one-off payments mine operators pay to contribute to the state development fund. Consequently, the State Mining Ministry in Kayin State is not a front line ministry in the state.

The five major minerals in Kayin State are gold, antimony, zinc, tin and tungsten. The four large-scale mines under official government purview are a zinc mine, a coal mine in exploration/development phase and two antimony operations. There are twenty other smaller mining companies extracting antimony, and a further 16 other (non-antimony – zinc, tin and tungsten) mines. In terms of inspections, we were informed that there are only 87 Union-level inspectors for the whole of Myanmar, and only two working in Kayin State. It is therefore not possible for the inspectors to visit all parts of the state, due to security concerns. This means it is impossible for all the mines in the state to be regularly inspected. The Kayin State Ministry of Mines therefore has to rely on monthly reports sent by the companies.

In terms of antimony production, the twenty companies mentioned above reported 3,640 tons last year. With a market price of above US\$600 per ton, this implies that the formal antimony sector is worth over US\$2m in revenue terms in the state. The price is set by quality-testing of samples at the Ministry of Mines geological laboratory in Yangon. The Ministry of Mines mining enterprises also have staff stationed in Hpa'an, seconded there on a rotational basis. Mining Enterprise 1 has two staff (whose focus is on antimony mining). Meanwhile, Mining Enterprise 2 has six staff, whose role is regulating gold mining in the state. Finally, Mining Enterprise 3 has one staff member seconded to the state who monitors limestone mining.

⁵⁶ See <http://www.european-times.com/countries/union-minister-national-planning-economic-development/>

Despite Mining Enterprise 2 having six staff based in Kayin (reporting both to the state mining minister and the Union-level ministry), officials from the state government appear to have limited information on gold mining in the state and also state that they have no access to the gold mining areas. They add that there is an informal agreement between the Kayin State Government and the EAGs that the state government will not interfere in business conducted in areas under the control of EAGs. When asked to estimate how much more of a contribution to the state's GDP the mining sector might make if gold mining were included, officials suggested between two and ten times the current amount, if the gold were based on international market prices.

There are two official reporting mechanisms for mining companies, whether domestic or foreign-owned. If the company has a registered headquarters (via DICA) in the state, they must report to the Kayin state government. The report is sent to the government, the Ministry of Mines, the Ministry of Finance and the Ministry of Planning. Alternatively, if the company is headquartered outside the state, the report is sent to the Union Ministry of Mines in Nay Pyi Taw. Government officials in Kayin State informed us that there is coordination on reports between the Union Ministry of Mines and the Union Ministry of Planning. In terms of applications for exploration licences, as noted in Chapter 2, the Union Ministry of Mines requires the state government to fulfil a series of checks, in terms of land records, proximity to forests and settlements and community consent, all of which require engagement of the relevant state government departments. Although there is reported to be plentiful illegal mining in the state (in riverine areas), the government reports signs of improvement via demands to formalise artisanal mining. For example, in June, the state Minister of Mines was invited to Myawaddy to meet miners who are interested in acquiring formal licences.

Geological data in the area, as elsewhere in Myanmar, is poor, resulting in a “wildcat” approach to mining. As an example of this, during the field trip, the mission team visited a small antimony mine across the state boundary in Mon State. The mine was located in the middle of a rubber plantation. Although the mine had been explored for two years (and was under previous ownership of a Chinese company), antimony had yet to be found in commercial quantities.

Figure 20: Antimony mine in Mon State



Mining Practices in Kayin State not Regulated by Government

There appears to be a wide disparity between mining practices as laid out in formal terms under the regulation of Kayin state government and informal realities. During our mission, it was learnt from discussions with informants that four or perhaps five foreign companies (from Korea, Thailand, Japan and China) are working in Kayin State, with benefit streams (such as taxes and fees) from these operations accruing to EAGs, militias and to the state government. Chinese companies specialise in gold mining whereas Korean, Thai and Japanese companies mine antimony. The licences are bought from local companies who sell on their leases. The operations are small in scale and both open pit and underground, often based on old mines exploited since colonial times. Villagers are often involved in the mining, selling minerals to the companies, renting their pit from the operator.

Informants also explained that the state government requires a minimum amount of product per mine, thought to be between 5-6 ounces of gold ore per month. The company is responsible for paying for security fees to EAGs to protect the mining area. In addition, the government's inspector receives both an official and an unofficial payment, which is known as a "production tax". The gold mines do not make payments directly to local army commanders, although they did in previous years before the reforms. Payments to the EAGs may be made locally, to local officials or commanders, although the team did not seek detailed information on this topic.

Licence acquisition in gold mining sometimes involves a meeting with the Chief Minister. The recently established the "Kayin State Development Company" (KSDC), is a conglomerate of local companies, including mining companies and the Kayin State government is promoting the company as a vehicle for investment. Whether the KSDC evolves into a mechanism for facilitating investment and levelling the playing field, or a means of concentrating interests in the reform era remains to be seen. Environmental standards in the brown or black area gold mines of the state are weak. There is widespread (if not universal) use of mercury. Gold ore is placed in containers with mercury and left overnight.

Civil Society Engagement on the Mining Sector

There are 21 members in the local MATA coalition group in Kayin State, with representatives from ten organisations. The local group has made contact with several hundred community-based organisations (CBOs) (there are estimated to be 1,000 CBOs in the state) and has begun outreach activities on the extractive industries sector. The key priorities of the local group are the peace process, increasing the participation of civil society in politics, education and civic empowerment and finally, EITI implementation. However, there is little full understanding of EITI - what the process is, how it works in practice and its benefits at sub-national level. It is therefore difficult for coalition members to explain to others in the network and to grow the coalition. One of the stated core extractives concerns at present for the coalition is a proposed cement factor in Myaing Ka Lay track, in Hpa-An Township. The coalition is currently self-funded, out of the pockets of seven key members. A funding request has been submitted to Paung Ku, but the coalition is not focusing on funding in advance of developing a strategic plan for their work. The coalition has no access to areas where there is gold mining because the mines are to some extent in areas controlled by the EAGs. The members do not try to access the areas because they do not wish to compromise relationships with the EAGs. Despite this restrictive operating environment, relations between the coalition and the government have improved in recent years; there is therefore a perceived opportunity to create some space for reform, with sufficient "push" from civil society, which did not exist previously.

Chapter 5: Contracts and Beneficial Ownership

5.1 The 2013 EITI Standard

EITI reporting requirements, as set out in the EITI 2013 Standard, require increasingly more information on industry structure. For example, the reconciliation report must now describe the legal and fiscal structure governing extractive activities⁵⁷. Again, the 2013 Standard requires an explanation of the prevailing rules regarding transfers of funds between state owned companies (SOEs), subsidiaries and joint ventures and the state regarding:⁵⁸

- Retained earnings
- Reinvestment practices
- Third-party financing
- Quasi-fiscal expenditures such as payments for social services, public infrastructure, fuel subsidies and national debt servicing.
- SOE(s) level of beneficial ownership in mining, oil and gas companies in subsidiaries and joint ventures
- Any changes in the level of ownership during the reporting period.
- Responsibility of SOEs to cover expenses at various phases of the project cycle, e.g. fully-paid equity, free equity, carried interest.
- Changes in the level of government and SOE(s) ownership
- The terms of the transaction, including details regarding valuation and revenues.

The EITI 2013 Standard also requires reporting on:

- Licence holder(s)
- Coordinates of the licence area
- Date of application, date of award and duration of the licence
- In the case of production licences, the commodity being produced.

It is anticipated that governments will disclose information on licences held by individuals, companies or groups as stated above, even though the amounts paid fall below the agreed materiality threshold, to be able to consider all licence holders authorised to explore for and exploit non-renewable resources. However, only those operations above an agreed materiality threshold will have their payments to government reconciled against receipts.

5.2 Extractive Industries Sector Contracts in Myanmar

Oil and Gas

As noted in Chapter Two, oil and gas operations in Myanmar are governed largely by contract terms and conditions entered between MOGE and private investors via either Production Sharing Contracts (PSCs) and the Improved Petroleum Recovery Contracts (IPRCs). In contrast to the PSC under the IPRC (akin to a Risk Service Contract) the oil company provides the technical, financial and managerial services from exploration through to the production phase for the government in exchange for an agreed on fixed fee or some other form of compensation. Other contracts used within the petroleum sector are Performance Compensation Contracts (PCCs), Improvement of Marginal Recovery Agreements and Reactivation Agreements. The model PSC for onshore and offshore blocks provided bidders with the main contractual framework to enter into exploration, development and production of oil and gas with MOGE (see Annex 7 for

⁵⁷ EITI Requirement 3, 3.2

⁵⁸ EITI Requirement 3.6

the standard terms and conditions for onshore and offshore contracts). What follows is an analysis of the model contract for an onshore block. The model contract states that the contractor and contracting party shall be individually and jointly liable for all obligations established within such PSC. This agreement provides the fundamental context for analysing tax and non-tax payments and obligations for both parties (MOGE and the contractor) within the revenue structure described in the following chapter.

Under these PSCs, MOGE has an equity stake but is not the operator. The operator's main responsibilities are:

- Provide all the financial and technical assistance required for such operations
- Carry the risk of Operating Costs required in carrying out operations
- Have an economic interest in the development of the Petroleum deposits in the Contract Area

During the term of this contract, total production achieved in the conduct of such operations shall be divided, according to a share arrangement described in the tables below (in the case of onshore blocks see Annex 7).

Crude Oil

Table 7: Production Share Arrangements for Onshore blocks – Crude Oil

Production Rate in Barrels per Day	MOGE Share (%)	CONTRACTOR Share (%)
0-10,000	60	40
10,001-20,000	65	35
20,001-50,000	70	30
50,001-100,000	80	20
100,001-150,000	85	15
>150,000	90	10

Natural Gas

Table 8: Production Share Arrangements for Onshore blocks – Natural Gas

Production Rate in Million Cubic Feet per Day	MOGE Share (%)	CONTRACTOR Share (%)
Up to 60	60	40
61-120	65	35
121-300	70	30
301-600	80	20
601-900	85	15
>900	90	10

What follows is an analysis of some of the key points of the onshore model contract, Reference to the "Contractor" refers effectively to the operator. The extent of the variance with the offshore model contract is not known, as the team did not have access to this during the project.

Clause 9.11 of the model contract describes payment of Income Tax imposed upon the Contractor, which shall be determined under the applicable provisions of the Income Tax Laws of the Republic of the Union of Myanmar and as per the below:

- The Contractor shall comply with filing of returns, assessment of tax, keeping and showing of books and records;
- The Contractor's annual taxable income for Myanmar Income Tax purposes shall be an amount equal to the Contractor's net income attributable to the Profit Petroleum allocated to the CONTRACTOR pursuant to Section 9.7. In other words, only with regards to Contractor's share of profit petroleum;
- The Contractor shall also be subject to the entitlement under the provisions of the new Foreign Investment Law MOGE shall assist the Contractor to obtain proper official receipts evidencing the payment of Contractor's Myanmar Income Tax; and
- Such receipts shall be issued by an official authority for the collection of Myanmar Income Taxes and shall state the amount and other particulars customary for such receipts. Provisional receipts shall be issued within ninety (90) days following the commencement of the next Financial Year and final receipt shall be delivered not later than ninety (90) days after provisional receipts have been issued.

In terms of royalty payments, for both onshore and offshore blocks, the contractor must pay the GOUM (through MOGE) a royalty of 12.5% of the value of available petroleum from the contract area. Royalty fees shall be paid in whole or in part, in cash or in kind, at the option of the GOUM. In the absence of such option on the part of the GOUM, royalties accruing during an accounting period shall be paid in cash within thirty (30) days after the end of that accounting period. Unless otherwise agreed by the Government and contractor, royalties taken in kind by the Government shall be delivered at the delivery point.

The contractor shall pay to MOGE within thirty (30) days after the signature of the Contract a signature bonus negotiated by the parties and production bonuses, divided by crude oil and natural gas production is payable to MOGE as set out below.⁵⁹ The idea is to ensure that production bonuses are in step with an increasing rate of production.

Crude Oil:

- US\$500,000 within thirty (30) days of approval of the Development Plan;
- US\$1,500,000 within thirty (30) days after the first date when total average daily Crude Oil Production from the Development and Production Area over any consecutive ninety (90) days period reached Ten Thousand (10,000) Barrels per day;
- US\$2,000,000 within thirty (30) days after the first date when total average daily Crude Oil Production from the Development and Production Area over any consecutive ninety (90) days period reached Twenty Thousand (20,000) barrels per day;
- US\$3,000,000 within thirty (30) days after the first date when total average daily Crude Oil Production from the Development and Production Area over any consecutive ninety (90) days period reached Fifty Thousand (50,000) Barrels per day;
- US\$4,000,000 within thirty (30) days after the first date when total average daily Crude Oil Production from the Development and Production Area over any consecutive ninety (90) days period reached One Hundred Thousand (100,000) Barrels per day; and
- US\$6,000,000 within thirty (30) days after the first date when total average daily Crude Oil Production from the Development and Production Area over any consecutive ninety (90) days period reached One Hundred and Fifty Thousand (150,000) barrels per day.

Natural Gas:

- US\$500,000 within thirty (30) days of approval of the Development Plan;
- US\$1,500,000 within thirty (30) days after the first date when total average daily Natural Gas Production from the Development and Production Area over any consecutive ninety (90) days period reached Sixty Million Cubic Feet (60,000,000 ft³) per day;

⁵⁹ Chapter 6 also provides a summary of Non-Tax Revenues under Production Sharing Contracts.

- US\$2,000,000 within thirty (30) days after the first date when total average daily Natural Gas Production from the Development and Production Area over any consecutive ninety (90) days period reached One Hundred and Twenty Million Cubic Feet (120,000,000 ft³) per day;
- US\$3,000,000 within thirty (30) days after the first date when total average daily Natural Gas Production from the Development and Production Area over any consecutive ninety (90) days period reached Three Hundred Million Cubic Feet (300,000,000 ft³) per day;
- US\$4,000,000 within thirty (30) days after the first date when total average daily Natural Gas Production from the Development and Production Area over any consecutive ninety (90) days period reached Six Hundred Million Cubic Feet (600,000,000 ft³) per day; and
- US\$6,000,000 within thirty (30) days after the first date when total average daily Natural Gas Production from the Development and Production Area over any consecutive ninety (90) days period reached Nine Hundred Million Cubic Feet (900,000,000 ft³) per day.

Under rights and obligations defined in section 17:

MOGE shall:

- Be responsible for the management of the operations and assist and consult with the Contractor in the execution of the work programme;
- Except as provided in Section 17.2(b)⁶⁰ and 17.2(c)⁶¹ and in Section 9.11⁶², take on the obligations of all Myanmar's taxes imposed upon the Contractor, its contractors and sub-contractors, including import and export duties, customs duties, sales tax and other duties levied on materials, equipment and supplies brought into Myanmar by Contractor, its contractors and sub-contractors;
- Assume and discharge all exactions applicable under the laws of the Republic of the Union of Myanmar in respect of property, capital net worth and operations, including any tax imposed upon goods procured domestically, sales, gross receipts or transfers of property or any levy on or in connection with operations performed hereunder by the Contractor, its Contractors and Sub-contractors; and
- Not be obliged to pay taxes on tobacco, liquor, and other taxes charged on goods and services, import and export duties, customs duties and sales tax and any other tax levied upon clauses imported for personal use by the Contractor's, its contractors' and sub-contractors' employees engaged in Petroleum Operations; amongst other cost controls and petroleum operational related activities.

The contractor shall:

- Be responsible to withhold and pay the withholding tax for the payments made for goods and services and for all Income Tax and other levies if any, for which expatriate personnel of the Contractor, its Contractors and Sub-contractors are liable under the Income Tax Laws of the Republic of the Union of Myanmar for the portion of their income in Myanmar;
- Be responsible to pay to appropriate authorities import duties, customs duties, sales tax and other duties levied on motor vehicles brought into Myanmar for personnel use and not for field use by the Contractor, its Contractors and Sub-contractors;
- Submit to MOGE weekly staff returns, agreed daily drilling reports (where applicable), weekly and monthly progress reports;

⁶⁰ Withholding tax for the payments made for goods and services and for all Income Tax and other levies if any, for which expatriate personnel of Contractor.

⁶¹ Payment to appropriate authorities import duties, customs duties, sales tax and other duties levied on motor vehicles brought into Myanmar for personnel use and not for field use by Contractor.

⁶² Income Tax imposed upon Contractor under the Income Tax Laws of the Republic of the Union of Myanmar.

- Submit to MOGE copies of all such original and interpreted geological, geophysical, drilling, well production and any other data and reports as it may compile during the term of the PSC;
- Allow duly authorised representatives of MOGE to have access to the Contract Area covered by this Contract and to the Petroleum Operations conducted thereon; and
- Such representatives may examine data, books, registers and records of the Contractor, and make a reasonable number of surveys, drawings and tests for the purpose of enforcing the Contract. Amongst other cost controls and petroleum operational related activities

With regards to State Participation, clause 19.1 of the onshore model contract states that MOGE shall have the right to demand from Contractor a 15% undivided interest in the total rights and obligations under this Contract and MOGE may extend up to 25% at its own discretion.

For the assignment of the undivided interest in the total of the rights and obligations arising, MOGE shall reimburse the Contractor an amount equal to the same percentage of the sum of Operating Costs which the Contractor has incurred for and on behalf of its activities as well as the same percentage of the Signature Bonus paid to MOGE referred to in Section 11.1 of the PSC.

According to the above analysis, it is clear that the agreement gives MOGE the responsibility to declare and pay taxes upon their portion of revenues as is the case for Contractors.

MOGE may also decide that the above-referred amounts shall be reimbursed:

- Either by transfer by MOGE within three (3) months after the date of its acceptance of the Contractor's offer referred to in Section 19.3, to the Contractor's account with their chosen banking institution, in the currency in which the relevant costs have been financed; or
- By way of "Payment out of Production" of fifty percent (50%) of MOGE'S production entitlement under this Contract valued in the manner as described in Section 12 of the PSC, commencing as from the beginning of Commercial Production.

When MOGE accepts a contractor offer, it shall state whether it wishes to reimburse in cash or out of production in the manner indicated in Section 19.7. In Section 23.1, the Contractor shall supply all funds necessary for Petroleum Operations in Myanmar in freely convertible currency from abroad except to the extent that Myanmar currency is generated in connection with the performance of the Petroleum Operations.

In addition, in accordance with the Foreign Investment Law and the Foreign Exchange Regulation Act in force, the contractor shall have the right to open and maintain foreign bank accounts in Myanmar at authorised banks and to receive, remit, retain abroad and use the entirety of the Foreign Exchange proceeds which are received from export and local sales of its share of Petroleum and generated in connection with the performance of the Petroleum Operations.

The rate of exchange for transactions referred to in Section 23.3 shall not be less favourable to the contractor, expatriate employees, foreign controlled Contractors, Sub-contractors than the market rate through Government recognised exchange centres applicable for similar transactions undertaken by any private or state enterprise on the date the transaction is initiated.

Section 23.7 states that unless otherwise expressly agreed, all payments by the Contractor to MOGE or the Government and all payments by MOGE or the Government to Contractor shall be made in US\$ at a bank in Myanmar or abroad as specified by the recipient.

In terms of accounting and auditing, MOGE and the GOUM (through the OAG, as described in more detail in the next chapter) have the right to inspect and audit the contractor's books and accounts relating to the contract for any financial year. Any exception must be made in writing within sixty (60) days following the completion of such audit. Such audits shall be performed within two financial years after the closing of the accounting year.

The section on accounting procedures establishes that accounting books and records will be kept in accordance with a generally accepted and recognised accounting system consistent with modern petroleum industry practices and procedures and in the English language and in US\$. In this regard, the Contractor is entitled to appoint an independent auditor "of international standing", to audit annually the accounts and records of its petroleum operations.

Note that there is no reference to reporting in terms of EITI in the model onshore contract provided by MOGE for this report. It is not clear whether a clause on EITI will be included in the new onshore and offshore PSCs to be signed shortly.

In the below diagram, the Yadana field has five different contractual arrangements:

- A PSC and Petroleum Production JV with the following participants: Total as operator with 31.24%, Chevron with 28.26%, PTT Exploration and Production Plc (PTTEP) with 25.50% and MOGE with 15.00%.
- An Export Gas Sales Agreement (EGSA) with the above PSC and the buyer of gas PTTEP to be used in Thai power plants.
- An Export Gas Transportation Agreement (EGTA) between Moattama Gas Transportation Company (MGTC) and the above PSC with the same shareholders, participants and interest percentages.
- A Production Operating Agreement for the above PSC and
- A Gas Pipeline Operating Agreement (GPOA) in which Total is the operator.

Using recommendations provided from the forthcoming scoping study as a guide, the MSG will need to discuss and agree on which revenue types should be reported on and the materiality threshold for including those revenue types. For instance, withholding taxes on employee's salaries would be a source of revenues for the country but these taxes are, for the purposes of defining materiality for EITI reporting, not linked with the main extractive activity of the operator or joint venture. Table 9 shows oil and gas projects registered by the Ministry of Energy in 2011-12:⁶³

⁶³ Ministry of Energy, 2011-2012 Oil and Gas Companies Information, excel file 2011

Figure 21: Contractual Arrangements of the Yadana Field

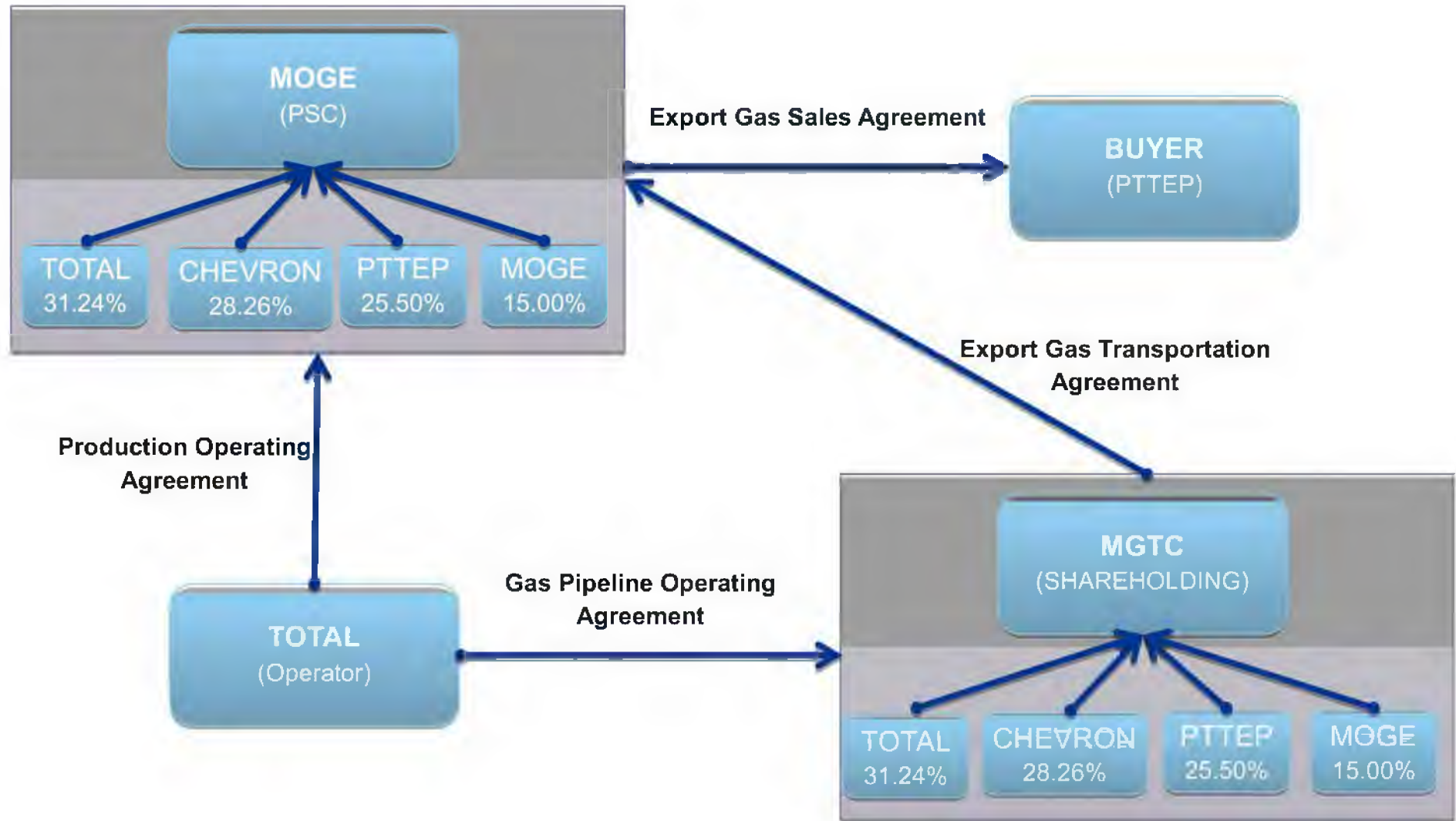


Table 9: Oil and Gas Projects Registered by the Ministry of Energy

Company Name	Origin of Company	Location	Initial Year	Workplace Area (Square Miles)	Initial Capital (MMSUS) (MIC Permit)	Block
TEPM (Yadana Natural Gas Project)	France	Mottama Offshore	9.7.1992	5150/4988	455.00	M-5, M-6
PCML (Yetagun Natural Gas Project)	Malaysia	Tanintharyi Offshore	3.5.1990/ 29.9.1992	4834/2712/3205	338.50	M-12,M-13,M-14
Daewoo (Shwe Natural Gas Project)	Korea	Rakhine Offshore	4.8.2000/ 18.2.2004	1519/2618	58.40	A-1,A-3
PTTEPI (Zawtika Natural Gas Project)	Thailand	Mottama Offshore	12.11.2003/ 7.8.2004/ 25.7.2005	3000/4535/2810	22.00	M-3,M-9,M-11
CNOOC	China	Rakhine Offshore/ Mottama Offshore InnTaw/Monywar	14.12.2004 25.1.2005/4.1.2005	2888/5320 6.294/10.234	32.30 43.40	A-4,M-10 C-1,C-2
MPRL	Myanmar	Rakhine Offshore/ Man	18.1.2007/6.10.96	3795/ 31.52	27.60	A-6/MOGE-2
Goldpetrol	Indonesia	Chauk/ Yenanchaung	4.10.1996	389/306	21.00	IOR-2,MOGE-1
Rimbunan Petrogas	Malaysia	Mottama Offshore	9.3.2007	4013	35.00	M-1
Daewoo	Korea	Rakhine Offshore (Deep Site)	25.2.2007	650	13.00	AD-7
MGTC(Natural Gas Transportation)	France	Yadana Gas Pipeline	30.1.1995			
TPC(Natural Gas Transportation)	Malaysia	Yetagun Gas Pipeline	10.3.1997			
Geopetrol International Holding Inc	Panama	Pyalo, Pakhuku	11.3.2012	984	26.00	RSF-9
SINOPEC	China	Mahutaung	3.9.2004			D
Nobel Oil	Russia	OoRu	6.9.2008			A,B-1
North Petro Chemical Corporation	China	Ngahlaingtwin	16.6.2010			F
Chinnery Assets Limited	China	Rakhine Offshore	15.1.2007			AD-1,AD-6,AD-8
Petrovietnam Exploration	Vietnam	Mottama Offshore	2.10.2008			M-2

Mining Contracts

As we saw in Chapter Two, mining legislation in Myanmar is principally composed of a Mines Law (and accompanying rules as well as laws governing gemstones, salt and pearls). These legal instruments are partially applied in conjunction with the Myanmar Mines Rules which includes procedures on how to obtain licences and PSCs for exploration, feasibility studies and production of minerals. The preferred type of contractual arrangement within the mining sector is either through production sharing or profit sharing arrangements. It is also the intention of MoM not to make new investments by itself but rather have investments come through foreign and private national investors. As indicated in Chapter Two, MoM can enter into agreements with mining operators through joint ventures with state owned enterprises (Mining Enterprise 1, 2 or 3 etc.) on a production sharing basis. However, these joint ventures only happen for the most significant large-scale projects. Currently there are 139 large-scale mining licences out of approximately 1,315 licences⁶⁴ in total (see Annex II).

A parliamentarian interviewed for this report explained that mining companies' reports to the government typically hide up to 10 times the actual revenue from the mines to avoid paying tax. He explained that mine owners sometimes have two versions of their financial reports (one for the IRD and the "real" one to indicate profits for shareholders). The informant also complained that mine owners have difficulty obtaining loans from outside as the government doesn't help the operators to access finance. Without solving these problems by reforming laws and the banking system, he stated candidly that MEITI would not have access to the real reports from the mining sector. This raises the issue of the extent to which EITI in Myanmar will be successful in obtaining reliable information from companies through the annual reporting and reconciliation process.

5.3 State Owned Enterprises

The State Owned Economic Enterprises Law promulgated in 1989 grants the government the sole right to develop economic activities such as:

- › The exploration, exploitation, production and sale of oil and gas
- › The exploration and exploitation and export of pearls, jade and precious stones
- › The exploration and exploitation and export of metals

It also allows the government to participate in Joint Venture agreements with other parties and provides wide powers to the government to prescribe conditions regarding the products used or produced by state owned operations.⁶⁵

Even though the law remains in effect, the Foreign Investment Law largely determines, in practical terms, how the GOUM exercises its involvement in the extractive industries sector. For example, in contrast to the State Owned Economic Enterprises Law, the GOUM no longer exercises its right to monopolise resource extraction.

5.4 Contract Disclosure

In Myanmar, the MOE currently does not publish the signed contracts but has published on its website the Standard Terms and Conditions of PSCs for Onshore, Offshore and Deep Water blocks as of 9th July 2012 and the Standard Terms and Conditions of IPRC for Onshore Blocks (referred to in the analysis above and included in Annex 7 of this report). Under such terms and conditions, information regarding the exploration period, the work programme and expenditures, production period, royalty, production split, data fee (only for offshore blocks), production bonus for both crude oil and gas, domestic requirements, cost recovery provision, training and research and development funds, state participation, income tax and tax holiday period, profit sharing and arbitration, governing law are described. What is not mentioned is the amount of signature bonus to be paid within thirty days of contract signature. Even though signature bonuses are normally a significant and material amount of and source of revenue for governments they are in many cases very politically and commercially sensitive information and could affect negotiations for future investments in the country.

⁶⁴Information provided by the MFMA.

⁶⁵ Baker and McKenzie, 'The Extractive Industries Transparency Initiative in Myanmar', Legal review report

The MoM does not currently publish either a model contract or existing signed contracts on its website. Table 22 highlights some of the issues felt by communities with regard to the implementation of contractual terms or the lack of rigour within contracting.

There are now many precedents for extractives contracts being made public, such as in Afghanistan, where petroleum and mining contracts or contract terms are published on the Ministry of Mines and Petroleum website,⁶⁶ as well as in the DRC, Liberia, Peru, Azerbaijan, Ghana and Mongolia.⁶⁷ The MEITI MSG may wish to consider publishing the main contracts and agreements for the mining and oil and gas sectors, in line with the trend towards open availability of contract information globally and the encouragement to do so by the EITI 2013 Standard.

5.5 Beneficial Ownership & EITI

The term *Beneficial Ownership* refers to the publication of the names of the owners of the individuals who own and control entities which operate or invest in the extractive industries. The EITI 2013 Standard (in Requirement 3.9) requires implementing countries to produce a Register of Licences which provides timely, comprehensive and publically available information on each of the licences covered in the EITI Report. The information must include:

- Licence holder(s) including companies, individuals or groups included or not in the EITI Report;
- Coordinates of the licence area;
- Date of application, date of award and duration of the licence;
- In the case of production licences, the commodity being produced.

In cases where there are legal or practical impediments preventing such disclosure, reasons should be well documented and disclosed in the EITI Report as well as government plans put in place to overcome such barriers. The EITI 2013 Standard also recommends (in Requirement 3.11) that implementing countries maintain a publicly available register of the beneficial owners of the corporate entity that bids, operates or invests in extractive assets. Where such registers do not exist or are incomplete, it is recommended that implementing countries request companies participating in the EITI process provide this information for inclusion in the EITI Report. It is also required that the government and/or state-owned enterprises disclose their level of beneficial ownership in oil, gas and mining companies operating within the country, and any changes in the level of ownership during the accounting period covered by the EITI Report⁶⁸. The definition of beneficial ownership should take international norms and relevant national laws into account. Publicly listed companies and joint ventures, including wholly-owned subsidiaries, are not required to disclose information on their beneficial owner(s). But when not available, each entity is responsible for the accuracy of the information provided.

Ownership of extractive industries sector assets is a sensitive and somewhat secretive issue in Myanmar. There is no comprehensive and publicly available database on beneficial ownership. It is nonetheless possible to obtain information on beneficial ownership, by online research, consultation with informants and with beneficial owners themselves. Some of the so-called "cronies" with interests in the extractive industries sector are not opposed to reform or to EITI. With the economic opening, many of these companies no longer have the favoured position with respect to the government which they had under the military government. The attitude of most extractive industries sector cronies towards governance reforms such as the implementation of EITI in Myanmar is likely to be largely positive. The companies on the remaining sanctions lists, notably the US, would like to be removed and their commercial interests tend to focus on more lucrative and less risky businesses such as banking, airlines, hotels, trading, tourism, construction, transportation and retail. In some cases, interest in the extractive industries sector, especially mining, is in fact waning. A number of companies engaged with during the research for this report stated explicitly that they would be interested in cooperating with the EITI process as they believe that this will improve their corporate image. A recent report by the Myanmar Centre for Responsible Business documented the progress some companies have made toward greater transparency.⁶⁹ Despite the largely favourable attitude towards EITI among the cronies, some with extractives interests may pose certain challenges for the implementation of MEITI.

⁶⁶ Ministry of Mines and Petroleum of Afghanistan, <http://mom.gov.af/en/page/1384>

⁶⁷ Natural Resource Governance Institute, <http://www.resourcegovernance.org/rci/reporting>

⁶⁸ EITI Requirement 3.6 (c)

⁶⁹ Transparency in Myanmar Enterprises Report, July 2014, Myanmar Center for Responsible Business

Conflict of interest among public officials, including parliamentarians, who also own extractive companies, may also pose a challenge. Some parliamentarians and former extractive industries officials have expressed the view that the participation of parliamentarians with extractive industries interests on the MNRMC should be viewed as a conflict of interest, as their influence may still be used to protect and promote personal business interests.

Another challenge comes from illegal mining business operations whose income and reports will be difficult to access. This is highlighted in the Harvard Ash Report (2013) which argued that jade revenue is likely to be far higher than that of gas and oil, with at least 50% of jade revenues flowing through informal (non-taxed) networks

A recent Global Witness Report “The shell starts to crack,” published in October 2014 highlights that there are 17 out of 36 oil and gas blocks where all companies owners have been declared. This followed the publication of a previous report, ‘Who are the real winners of Myanmar’s latest oil and gas block sale,’ in June 2014, which criticized companies for not releasing beneficial ownership. This demonstrates the potential for reporting on beneficial ownership in the face of public demand for this information. However 7 Myanmar companies and 11 international companies have not yet declared their ownership, and the report suggests that some of the published names of the winning companies were incorrect or incomplete.

“Citizens have the right to know who has been granted access to their most valuable resources, and companies should seize the opportunity to show they have nothing to hide.” The Global Witness report highlights how important analysis of beneficial ownership is in order to truly understand who the final owners of wealth in resource-rich countries are and to be able to minimise corrupt practices. That said, the setting up of a Securities Exchange Commission (anticipated in 2014) and a stock market in Myanmar (to be established in 2015) will require companies operating in Myanmar to disclose beneficial ownership arrangements. Discussions with informants on the stock market and its beneficial ownership reporting requirements indicated a degree of confidence that beneficial ownership issues would be gradually addressed and resolved in Myanmar.

5.6 State-owned Economic Enterprises vs. Military Holdings Companies

State involvement in the economy dates to independence in 1948, when the ascendant postcolonial government faced dire economic circumstances. Politically, all elites, regardless of partisan or ideological leanings, blamed the European-dominated colonial economy, along with the devastation wrought by multiple occupations during World War II, for the hardships they faced.

In this context, foreign capital was highly suspect, while domestic wealth was neither concentrated nor particularly open to risk. Hence, the legal architecture that emerged in early postcolonial Burma was one that enshrined a significant state planning and regulatory apparatus along with direct government roles in SEEs. Throughout the postcolonial period, cabinet ministries, government departments and the armed forces have operated formal national economic enterprises, as well as wide-ranging small-scale formal and informal businesses that served local officials’ procurement, revenue and other needs.

Privatization did not occur until the early 1990s, despite the enormous inefficiencies that characterized public and private enterprises, and efforts at privatization have been almost entirely opaque and piecemeal, at best, in nature.

The Legal Architecture of SEEs

Nearly all state-involved firms are regulated under the combination of two laws, all of which arose from particular historical contexts that are reflected in their provisions, restrictions and content.

Drafted in the first two years after independence, The Special Companies Act of 1950 provides the basic legal classification system that distinguishes private from public companies. Reflecting the ideological and pragmatic mind-set of the time, it promotes public or state companies as vehicles for large-scale capital investment, as required for modernization. As such, privileges such as tax exemption were likely intended to increase the capacity of these firms to use capital productively.

Since then, a succession of laws has regulated the category of companies that came to be known as “state-owned economic enterprises.” These legal instruments were also products of their times and reflective of ideological, popular and supply- and demand-driven interests and concerns.

Today, most formal, state-based economic enterprises are regulated under the State-owned Economic Enterprises Law (The State Law and Order Restoration Council Law No.9/89), decreed in March 1989. After the collapse of the autarchic,

centrally-controlled socialist economy and the Burma socialist government in 1988, the military took direct authority over the government and declared an interest in opening the economy to foreign investment. Law 9/89, however, revealed its ambivalence to foreign influence, as it declared government monopolies in major sectors, including most mineral and energy exploration, extraction, production and trade. Section 4 of the law allowed exceptions in the form of government-based joint ventures. The law was amended in March 1997 (SLORC Law No. 4/97) to allow the Government to “constitute any organization to enable enterprises to be carried out without subscribing from State finances but by causing investment [to] be made from the funds owned by the relevant employees’ organization.” This clause allowed government bodies and their employees to become shareholders in SEEs.

5.7 The Military Holding Companies

Although founded in the 1990s, the two military holdings companies prominent in today’s economy, UMEHL and MEC, have their roots in the same context that gave rise to SEEs in the early days of independence. In a period of widespread insurrection and an almost defunct tax collection process, the military had to rely upon its own devices for supply, funding, and logistics. By 1950, the War Office formalised and centralized its role in the economy with the establishment of the Defence Services Institute (DSI). Initially intended to supply consumer goods to soldiers as well as the public, DSI eventually grew into a conglomerate that included the nation’s largest shipping company, banks, popular magazines, and major department stores. In the socialist era (1962-88), DSI’s holdings were transferred to the new Burma Economic Development Corporation (BEDC), but many of the subsidiary firms remained largely intact. Some thirty years later after DSI closed down, most of its businesses were transferred to the Union of Myanmar Economic Holdings (UMEHL).

Early in the post-Socialist era, the military as an institution reclaimed a considerable presence in the economy, with the emergence of two major holdings companies. First in 1990, UMEHL was established under the 1950 Special Companies Act. Originally under the Adjutant General, it was later moved to the Office of Defence Industries. According to Dr Maung Aung Myoe, who cites internal UMEHL reports and other internal military records, UMEHL formed 77 companies between 1990 and 2007, in addition to those inherited from the DSI/BEDC. Its breadth of investment covered garment factories, wood-based industries, hospitality, construction, telecommunications, gems, automobile imports and sales, cement production, cosmetics and stationery.

In 1997, the SLORC established the Myanmar Economic Corporation (MEC) under the terms of both 1989 State-Owned Economic Enterprise Law and the 1997 amendment. Administered by the Quartermaster General, its express purpose was “to contribute towards the development of the State economy, to decrease defence expenditure by fulfilling the needs of the Defence Services, to carry out the welfare of the Defence Services personnel” MEC invested capital in all industries and sectors that the 1989 SEE Law protected from foreign investment. However, it must be noted that MEC and UMEHL are considered private sector entities by GOUM, not SEEs.

Other State Businesses Relevant to EITI

As noted in Chapter Four above, other military units, whether locally-based infantry battalions, staff, logistical platforms in regional or higher commands, are likely to be involved in gem and precious metals businesses and other EITI-covered endeavours. It is also likely that they are involved in energy production and distribution. Reliable information – such as whether these are legally-recognized entities (and if so under what legal code), what kind of accounting practices are or are not followed, where revenue goes – about these activities is difficult to obtain.

Locally based military garrisons engage in a wide variety of economic activities to support themselves, although in some cases we are led to understand they also report to or finance regional commands. There are probably similar small-scale enterprises undertaken by other kinds of government departments at township and district levels. The most likely sectors of relevance to EITI would be mining and small-scale energy projects in rural areas.

A Note on Conflict Implications

For Myanmar citizens who live in areas heavily impacted by conflict, there is widespread recognition that the Defence Services gained control over much of the extractives industries in the period during which tenuous ceasefires between ethnic armed groups and the government were in place from early-mid 1990s to 2010s. Some leaders of, or entrepreneurs associated with the “ceasefire groups” in the 1990s and 2000s are also believed to have received profits. For non-elites in these areas, their economic interest is to remove “the military” (by which they mean soldiers on the ground, as well as a range of SEE-linked ventures, including those associated with the military holdings companies) from their daily lives and to privilege local control over extractives.

5.8 UMEHL and MEC

The two large military holdings companies, UMEHL and MEC, hold important positions in Myanmar's economy, including in the energy, mining and gems sectors. These two conglomerates which report to directorates of the Defence Services are organized under laws that provide protections and privileges to state-based companies. Although there is a Ministry of Defence in the executive branch of the government, the 2008 Constitution provides for no significant executive or legislative oversight of any Defence Services activities, policies or finances.

Overview

In some ways, these military holdings companies are neither atypical in comparison with the economic activities of other Asian militaries, nor are they unusual given Myanmar's history', as state institutions have long operated businesses to finance both small and large-scale enterprises, supplement budgets and raise funds for the welfare of employees and their families.

What stands out about Myanmar's military companies both from a regional and domestic comparative perspective are the following characteristics:

- › The secrecy that surround their activities;
- › Their supposed size (both in terms of capital and geographical coverage); and
- › The range of lucrative monopolies held (although some of these monopolies are now in the process of being dismantled).

It is very difficult to obtain information on either of these holding companies. There are no reliable public sources on revenue flows, decision-making and governance structures. What follows is a summary of existing literature on these military holding companies.

The stated purpose for establishing both companies was to generate funds for the welfare of both active-duty and retired Defence Services personnel and their families. This has been accomplished through a combination of profit distribution and job provision for family members of military personnel as well as for veterans themselves. We are led to believe that, in all likelihood, these holdings include numerous businesses that operate at a loss, but would be politically difficult to shut down due either to vested interests of senior military officials or to concerns about unemployment of existing personnel. These holding companies have also suffered significant – but unknowable – losses as a result of the modification of currency exchange policy. Since 2011, their tax-exempt status has eroded. The tax exemptions which the military holding companies previously enjoyed are reported to have been eliminated, and some joint ventures were among the top taxpayers reported by the Internal Revenue Department in 2013. However, shifts in economic policy have also yielded opportunities for the holding companies. For example, in November 2012 subsidiaries of both received licences to start insurance businesses

UMEHL

Founded in 1990, UMEHL is the more diversified of the two holding companies. Its early base was in manufacturing, but in the mid-2000s it expanded into services and trading activities. Its current holdings include stakes in almost all sectors of the Myanmar economy. It is understood to constitute a de facto military pension system.

In terms of revenue flows, UMEHL probably does not channel resources directly to the military-as-an-institution; in other words, it would appear that UMEHL revenues do not directly impact the Commander-in-Chief's budget. However, military directorates and units are among shareholders that received distributions of profits.

According to Maung Aung Myoe, shareholders are divided into two categories, as follows:

Table 10: Shareholder Categories

Shareholder Category		2007 capital held by categories stakeholders (in millions of kyat)	Distributions of profits 1990-2007 (in millions of kyat)
A	Directorate of Procurement	330	789.73
	Ministry of Defence	808.33	
B	35,444 Active duty military personnel	1,196.81	43,885.52
	1,467 military units	33,745.31	
	6,069 retired military personnel	1,265.53	
	89 veteran's organisations	427.96	

There is conflicting information about UMEHL's current reporting and revenue arrangements within the military command structure, which is largely independent of the executive and legislative branches of the GOUM. The International Crisis Group (ICG) recently stated that it operates out of the Adjutant-General's office, but Nakanishi and Maung Aung Myoe reported several years ago that it was moved to the Office or Directorate of Defence Industries. Both are in the Defence Services' chain of command, which ultimately reports to the Commander-in-Chief. According to Maung Aung Myoe, UMEHL is overseen by a ten-member board of directors.

UMEHL classifies its holdings into three kinds: fully-owned and-operated, affiliate subsidiaries and joint ventures. During the 20 years of SLORC/SPDC rule, the prevailing wisdom was that foreign investors had to go through UMEHL, either as a formal JV partner or as service contractors.

Fully-owned UMEHL companies have significant roles in extractives industries. These include Myanmar Imperial Jade Company and Myanmar Ruby Enterprise, which operates mines at Mogoke, Mongshu, Nayar, Mawchi and Thabeikkyin. Some of these operations are subcontracted to other domestic companies.

In addition to the recent new tax burden, UMEHL has lost important monopolies it held in the past, including – according to ICG – “tobacco products, alcohol, the rice trade and imports of vehicles, refined petroleum products and edible oils.”

UMEHL is reported to produce annual reports to its board. Such reports will help in determining what EITI reporting may be required from the company. Access to annual reports of this kind might be a first step toward understanding UMEHL's financial practices.

MEC

The Myanmar Economic Corporation (MEC) was established in 1997, during the Asian financial crisis. It was situated in the Quartermaster General's Office, and – like UMEHL – undertook investments in most of the major sectors protected from outright foreign ownership under SLORC SEE laws. Unlike UMEHL, MEC was more explicitly focused on serving the industrial and technological needs of the armed forces, as well as on larger-scale infrastructure projects.

There is even less information about the operations of the MEC than UMEHL. Maung Aung Myoe calls it “perhaps the most secretive business organisation of the Defence Services,” noting that “it is a government within a government in reality.” Most analysts view MEC as more closely aligned with national security institutions, although – like UMEHL – it has diversified into a wide range of sectors. In terms of EITI, it will be important to determine what documentation can be obtained of the MEC's role in the construction of dams along the Salween River, and in particular, the 7,110 MW Tasang Dam.

Although less is publicly known about MEC than UMEHL the OAG has the power to request audits from MEC but not from UMEHL. It is thought that there is an auditing department within the Directorate of Defence Industries, which has the power to audit UMEHL.

Table 11: UMEH Mining Interests (non-exhaustive)

Region/State	Area	Type
Mandalay	Kyaukpukhet	Limestone
Mandalay	Hsin Mountain	Granite
Mon	Mayangon	Granite
Mon	Kyauk Mae Mountain	Granite
Mon	Tin War Mountain	Granite
Sagaing	Kyay Sin Mountain	Copper
Sagaing	Kyauk An Che	Coal
Sagaing	Letpadaung Mountain	Copper

Table 12: MEC Mining Interests (non-exhaustive)

Region/State	Area	Type
Kayin	Than Dai Mountain	Limestone
Mandalay	Yathayt Mountain	Marble
Shan (East)	Mongku	Coal
Tanintharyi	Maw Taung	Coal
Shan (North)	Man Kaung	Gypsum

Chapter 6: Financial Flows

6.1 Introduction

The EITI Standard requires that there should be timely publication of EITI reports⁷⁰ within established reporting deadlines, which are:

- The production of a first EITI Report within eighteen (18) months after the country is recognised as an EITI Candidate country; and
- The data included in the report must cover the second to last complete accounting period.

In addition to the above, the standard requires information on the total government revenues from extractive industries sector operations in kind and in cash, with a materiality threshold set by the MSG defining which companies make sufficiently large payments to government to be fully reconciled in the EITI report, and which companies should provide data for information purposes only.

A recently published paper⁷¹ notes the difficulty of capturing information on the extractive industries sector in Myanmar, whether in terms of accurate reserves estimates and also financial information. The paper notes that financial data on oil, gas, mining and hydro available to the MOF is not disaggregated by sector or by project but aggregated at the level of the line ministry's total contribution to the budget. The paper states that:

"The exact share of Myanmar's revenue deriving from natural resources is difficult to measure because 1) tax revenue collected by the IRD includes taxes paid by companies in the extractive industries sector and tax payments from state-owned enterprises (SOEs), as well as taxes not related to natural resources; 2) state-owned enterprise revenues from loss-making and profit-making enterprises are now aggregated at the level of the supervising ministry, making it hard to tell how much loss or how much profit each enterprise makes; 3) payments, royalties and fees collected by Union line ministries and subnational entities are not all uniformly recorded and made public (although some are available)."⁷²

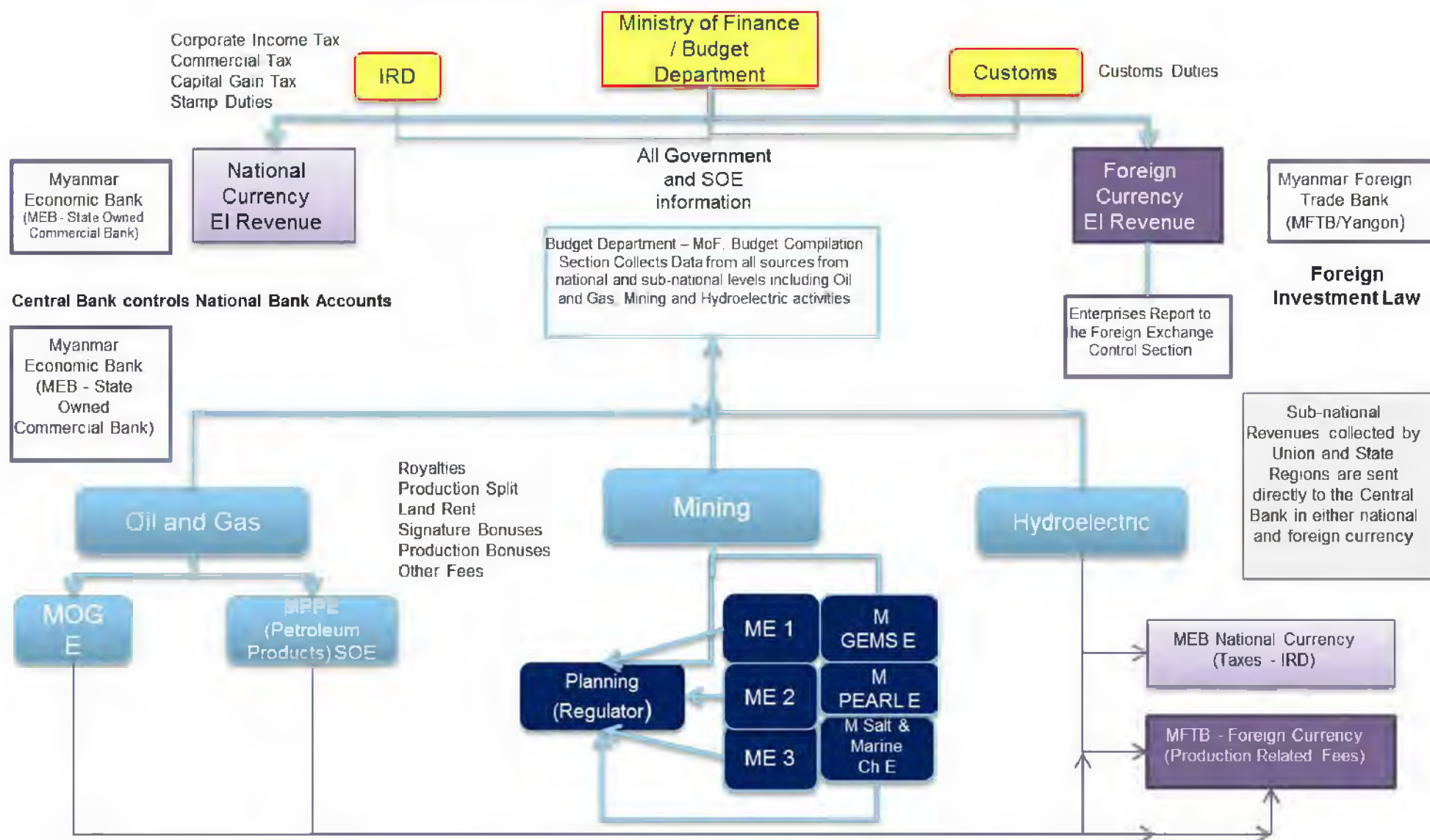
In addition there is a "Union Dividend" whereby the State Economic Enterprises contribute 20% of their net profit to the Union Budget. It wasn't possible to determine how this revenue is allocated in terms of expenditure. As well as the line ministries and the IRD collecting extractive industries sector payments, in some cases the GAD (under the Ministry of Home Affairs) receives land tax, dam tax, and mineral tax payments (paid at the Township level); in addition, some taxes are collected by state and region governments. Figure 23 describes the general revenue flow for the oil, gas, mining and hydropower activities in Myanmar after discussions with the Budget Department at the MOF and experienced commentators in the country.

⁷⁰EITI 2013 Standards, Requirement 2

⁷¹ "Natural Resources and Subnational Governments in Myanmar: Key Considerations for Wealth Sharing." MDRI & The Asia Foundation, June 2014

⁷² Ibid. p11.

Figure 22: Flows of Revenue and Information in Myanmar's Extractive Industries Sector



Further Explanation of Figure 23 – Flows of Revenue and Information in Myanmar's Extractive Industries Sector

In Figure 23, the Budget Department within the MOF coordinates the receipt of information on the types on tax and non-taxes⁷³ received from the MOE, MOM and MOEP respectively.

Meanwhile, IRD within the Ministry of Finance collects taxes such as corporate income tax (including withholding taxes), commercial tax, capital gains tax, stamp duties and customs duties either in local or foreign currency.

All government SEEs including MOGE, MPPE, Mining Enterprises 1,2,3, the Myanmar Gems Enterprise, the Myanmar Salt and Marine and Chemical Enterprise and the Myanmar Pearl Enterprise, as well as hydroelectric enterprises are required to submit reports about their revenue sources and expenditures in cash and in kind at the time of the budget review on an annual basis.

Normally, the SEE's are in charge of collecting all non-tax revenues such as royalties, production sharing split, land fees, signature bonuses and other compulsory payments mandated by contracts as per the corresponding extractive operation. On the other hand, the hydropower sector generates taxes and fees by the IRD and the MOEP. In general terms, oil, gas, mining and hydropower revenue payments in cash are transferred by the taxpayer or the contractually responsible entity to the Myanmar Economic Bank (MEB) when the payment is in national currency and to the Myanmar Foreign Trade Bank (MFTB) when it is in foreign currency. Both MEB and MFTB are state owned commercial banks and are controlled by the Central Bank of Myanmar as well as by the MOF through its reporting line process.⁷⁴

It is suggested⁷⁵ that over 40% of revenues, mostly from extractives industries sources, are managed by ministries and SEEs through "Other Accounts" at the MEB. Other Accounts are used to manage own-source revenue and are by definition off-budget (they are not reported on), which weakens external oversight and raises concerns about accountability and transparency practices. The MOE has three Other Accounts (based in Singapore), whereas MOGE has 14. In total, the GOUM has 4,319 Other Accounts, while at state/region level, there are 517.⁷⁶ Total Other Account receipts for 2011-12 were 2.54 trillion kyat (44% of total budgeted revenue). It has been suggested that these accounts are in existence in order to beat government sanctions and in order to facilitate payments outside of Myanmar.

Sub-national revenues collected by Union and states and regions are sent directly to the Central Bank in either national or foreign currency. However during the study there was no clear indication of the destination of revenue flows from extractive operations once received by the SEEs, however other sources of information gathered showed that there are currently procedures in place to transfer at least some parts of these revenues to the MOF. The above circumstances should be acknowledged by the MSG during the scoping phase when determining how the EITI reconciliation reporting process will minimise duplications and delays in reconciling taxes and non-taxes.

⁷³ The "non-tax" term is normally used to indicating mandatory payments, which differ from regular taxes paid to the Ministry of Finance/Tax Administration that have its origin in resource rents as per laws, regulations and agreements within hydrocarbon and mining projects.

⁷⁴ PFM World Bank 2014 report

⁷⁵ PFM World Bank 2014 report

⁷⁶ See the World Bank PEFA report for Myanmar (2012), p26.

Figure 23: The Legal Context for Tax and Non-Tax Resource Revenues in Myanmar

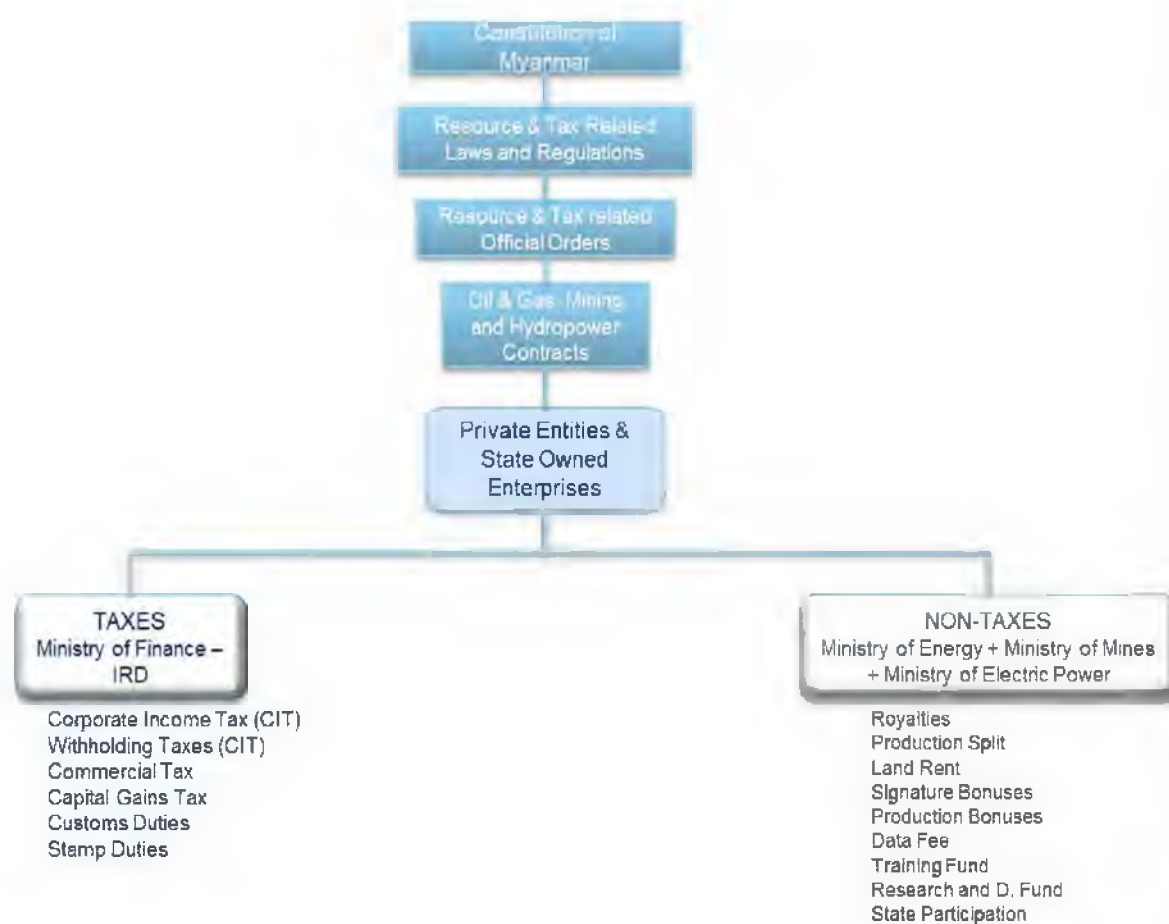


Figure 24 describes the legislative hierarchy of taxes and non-taxes. This legal framework is the basis for the Union to receive revenues from resource operations as owner of the soil and sub-soil wealth. Non-tax revenues are defined within contractual terms.

These Tax laws and regulations establish which types of fiscal instruments are applicable to individuals, companies and enterprises that are dedicated to explore and exploit oil, gas, mining and hydroelectric activities in Myanmar.

The 2008 Constitution states that all natural resources found within the territory of Myanmar are owned by the Union and provides for the enactment of laws to supervise the extraction and use of natural resource. The Foreign Investment law (FIL) and the Notifications No. 11/2013 of the Ministry of Planning and Economic Development and 01/2013 of the Myanmar Investment Commission govern foreign investments in Myanmar. Given such legislation and Presidential orders investors can obtain several tax advantages including a 5 year income tax holiday (this was previously 3 years under the old FIL provisions), a 5 year exemption on commercial tax for exported mineral products¹ and 50 years plus two further extension rent periods of 10 years on property leases.

During May 2014 the IRD announced that around 600 large taxpayers would be included in a list that from year 2015 will begin self-assessment activities controlled by a Large Taxpayers Office (LTO). Firms that would like to be included in this new system would need to submit requests to the IRD by June 13, 2014.¹ In addition to the above, media coverage of the IRD announcement stated:

“The government generated some K3.5 trillion in revenue for the fiscal year 2014, with tax-to-GDP ratio of 7%. State-owned enterprises contributed some revenue to state coffers, though most is generated from tax collection efforts”.

6.2 Extractive Industries Sector Taxes

The accounting and taxable year are the same in Myanmar, which is from April 1st until the 31st of March. Normally, tax returns should be filed within three months after the end of the year by the 30th June. Advance tax payments are required under the Income Tax Law and Regulations on both a monthly and quarterly basis calculated based on estimated total income for the corresponding year. These advance payments as well as withholding taxes are creditable against the final tax liability indicated in the noticed of demand issued by the IRD after the final tax assessment. The taxes⁷⁷ applicable to all companies and state owned enterprises that develop extractive projects in Myanmar are assessed in turn below:

Corporate Income Tax (CIT)

Myanmar residents and legally registered companies are subject to an income tax levied on net taxable profits at a 25% tax rate. Non-resident companies authorised under the Foreign Investment Law to develop resource activities in Myanmar are levied on Myanmar source income at a flat rate of 35% on net taxable profits. Companies and legal entities are required to deliver advance payments on a monthly or quarterly basis within the taxable period (April 1st to March 31st) calculated based on the estimated total income for the corresponding taxable year. Dividends paid to shareholders are exempt from corporate income tax.

Companies are generally required by the IRD to file income tax returns together with the audited financial statements by the end of June, within three months after the end of the taxable and accounting year if they have any taxable income. Corrections can be made and the revised income tax return should be submitted before being assessed. Companies must also file an annual report (Form E) with audited accounts and minutes of the annual general board of directors meeting to the Directorate of Investment and Company Administration⁷⁸.

Withholding Taxes within CIT

Withholding tax collected from non-resident individuals are regarded as income tax after final assessment. Apart from payments related to trade market and property rights, other deductibles can be collected from the accessed tax amount. Foreign resident citizens and resident foreigners, income taxes are being assessed based on their income and back interest.

Table 13: Corporate Income Tax Rates

CIT Taxable Income or Taxpayer	Tax Rates
Salaries received by foreigners under special permission in State-sponsored projects	Resident 0% to 25% (Kyats) Non-resident 35% (related currency)
Salaries received by foreigners working for entities created under the Foreign Investment Law (Progressive rates)	1%-20%
Salaries received by foreigners working for non-Foreign Investment Law companies – not approved by the MIC (Progressive rates)	
Resident foreigners	0%-25%
Non-resident foreigners	35%

⁷⁷The mandatory process established within laws and regulations by which charges and payments are imposed to individuals and entities derived from economic activities, the transfer of goods and services and the ownership of a property generally controlled by the tax administration.

⁷⁸E&Y Myanmar Tax Guide January 2014

Capital Gains Tax.

The sale or transfer of capital assets are levied for income tax purposes on gains calculated based on the difference between gross sales and the purchase cost of assets plus any additions less depreciation. Capital assets for income tax purposes are defined as lands, buildings, vehicles or any other asset owned by an entity including shares, bonds and intangibles. Companies and non-resident individuals involved in hydrocarbon projects are taxed at a different rate.

Table 14: Other Taxes⁷⁹

Tax	Tax Rates for Residents
Net profit on business activities	0-25%
Net profits on business activities for foreign entities under Foreign Investment Law	(5) Years of consecutive income tax exemption from the beginning of business on commercial scale and 25% from net profit before deductibles in the later years.
Capital gains tax	10%
Withholding tax on Interests	-
Withholding tax on Royalties from patents, trademarks and know-how	15%
Withholding tax on payments made by State organizations, foreign companies, local authorities, co-operatives, partnerships, entities formed under existing laws for procurement and service rendered in Myanmar under agreements	2%
Advance income taxes on import and export of goods and services collected by the IRD	2%

Commercial Tax.

In Myanmar, a commercial tax is levied on the domestic sales of goods and services, imports of goods and business activities, sales of goods and services and applies to certain transactions as defined in the Commercial Tax Law. Commercial tax is applied to the gross sales of goods and gross income from services. For imported goods, commercial tax is calculated based on landed cost derived from the cost determined by the customs, the custom duty levied, cargo unloading charges combined. The tax rate varies from 5% to 100%. There are (60) goods and services exempted from commercial tax.

Commercial tax is not applicable for exports, except in the case of natural gas, crude oil, timber, teak, jade, ruby, sapphire, emerald, diamonds and other precious raw gemstones. Even though the Commercial Tax is not technically a Value Added Tax (VAT), it contains certain characteristics of the latter, in the sense that companies and entities could collect this charge from customers and consider it as an "output tax" payable to the tax administration on the one hand, and as "input tax" when the business purchases goods in connection with the product or service sold (with the exception of special items indicated in the Commercial Tax Law). It is important to note that only commercial tax paid on the

⁷⁹ Source: PWC, Myanmar Business Guide February 2014

acquisition of goods can be claimed as input tax and only under certain conditions are met. The MOF has plans to void commercial tax and to introduce a value added tax⁸⁰.

Customs Duties.

The Customs Tariff of Myanmar regulates the applicability of Customs Duties for the import of goods at rates that vary from 0% to 40%. Companies registered under the Foreign Investment Law who have obtained permits by the MIC may be exempted from customs duties, especially for pre-existing Production Sharing Contracts in the hydrocarbon industry.

Tax relief can be granted by the MIC for the import of machinery, instruments, equipment, machinery components, spare parts and materials during the preoperative stage or construction phase. Raw materials for the first three years of commercial production may also be exempted.

Stamp Duties.

The Myanmar Stamp Act defines the rules to implement Stamp Duties for various types of instruments payable in Kyats such as:

- Sale or transfer of immovable assets. The rates are 5% of the sale or transfer value fixed assets or immovable properties plus 2% if the property is located in the Yangon development area,
- Sale or transfer of shares, 0.3% tax rate;
- Amount or value of secured bonds, 2% tax rate; and
- Inheritance transfers of properties, 2% tax rate.

If the instrument is paid in other currencies, stamp duty payable in Myanmar currency is converted into a foreign currency based on the prevailing foreign exchange rate of the day signing the instrument.

Property Tax.

This tax is levied on immovable assets located within the city development area imposed by the city development committee with the aim of covering maintenance costs in the cities. Within Myanmar's tax legislation, there are a variety of tax levies that apply to all taxpayers including entities that develop resource activities.

6.3 Extractive Industries Sector Non-Taxes: Oil and Gas

As of January 2014, there are 16 onshore and 19 offshore oil and gas blocks either in exploration or production, all of which may be included in the first reconciliation process for oil and gas operations in Myanmar (due to be concluded in January 2016). Under Myanmar law, each partner or participant in a hydrocarbon project is responsible for paying their own taxes and non-taxes. Income tax is paid on a quarterly basis for the fiscal year starting the 1st of April and ending the 31st of March. Income tax for the previous years are assessed retrospectively when the annual statements and proper documents are submitted. As noted in the section on auditing below, we were informed that the relevant SEE submits audited accounts on behalf of the consortium, although this was not confirmed independently, via access to any sample audited accounts.

With the exception of income taxes, since 2010, oil and gas companies have acted as withholding tax agents collecting and paying taxes on salaries for national and expatriates. A land fee is also paid on a yearly basis for the area covered by pipelines. Old Production Sharing Contracts are exempt from Customs Duties and Commercial taxes. In addition to the above MOGE audits the cost recovery items on a yearly basis. All the above payments are delivered to MOGE as shown in Figure 25.

⁸⁰World Bank, PEFA, 2012

Figure 24: Myanmar's Oil and Gas Revenue Flows

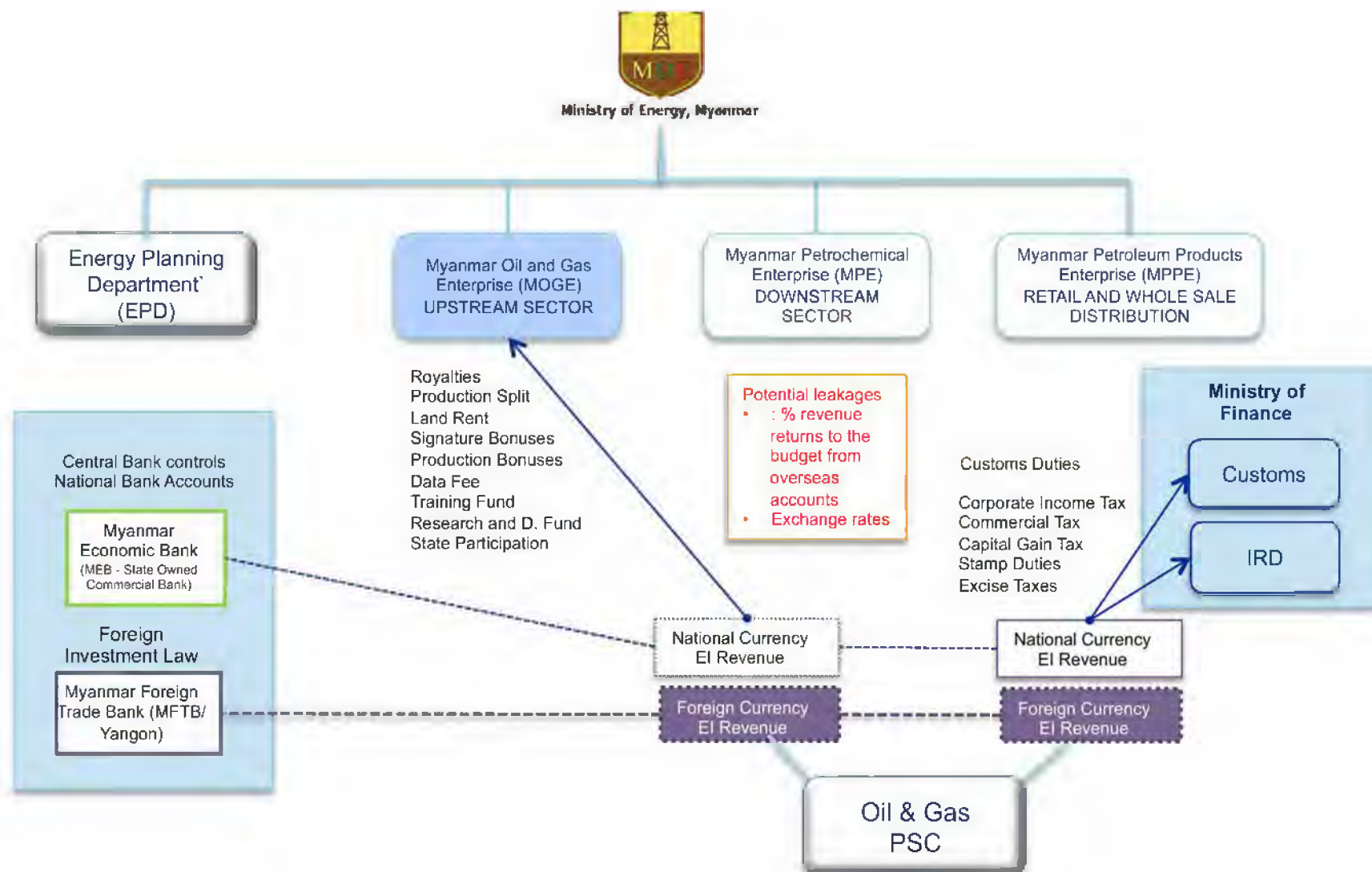


Table 15: Summary of Non-Tax Instruments contained in the Standard Terms and Conditions for PSCs

Non-Tax Instruments	PSC Onshore Blocks	PSC Offshore Blocks	PSC Deep Water Blocks	IPRC Onshore Blocks
Data Fee	None	Amount not specified (3)	None	Amount not specified (6)
Signature Bonus	Amount not specified (2)	Amount not specified (2)	Amount not specified (5)	Amount not specified (7)
Royalty	12.5%	12.5%	12.5%	12.5% (8)
Production Split	Crude Oil: <i>Lowest threshold; up to 10,000 BOPD 60% MOGE and 40% Contractor</i> <i>Highest threshold; Above 150,000 BOPD 90% MOGE and 10% Contractor</i> Natural Gas: <i>Lowest threshold; up to 60 MMCFD 60% MOGE and 40% Contractor</i> <i>Highest threshold; above 900 MMCFD 90% MOGE and 10% Contractor</i>	Crude Oil: 600 feet or less of water depth <i>Lowest threshold; up to 25,000 BOPD 60% MOGE and 40% Contractor</i> <i>Highest threshold; Above 150,000 BOPD 90% MOGE and 10% Contractor</i> More than 600 feet of water depth <i>Lowest threshold; up to 25,000 BOPD 60% MOGE and 40% Contractor</i> <i>Highest threshold; Above 150,000 BOPD 85% MOGE and 15% Contractor</i> Natural Gas: 600 feet or less of water depth <i>Lowest threshold; up to 300 MMCFD 65% MOGE and 35% Contractor</i> <i>Highest threshold; above 900 MMCFD 90% MOGE and 10% Contractor</i> More than 600 feet of water depth <i>Lowest threshold; up to 300 MMCFD 60% MOGE and 40% Contractor</i> <i>Highest threshold; above 900 MMCFD 90% MOGE</i>	Crude Oil: 2,000 feet or less of water depth <i>Lowest threshold; up to 25,000 BOPD 60% MOGE and 40% Contractor</i> <i>Highest threshold; Above 150,000 BOPD 90% MOGE and 10% Contractor</i> More than 2,000 feet of water depth <i>Lowest threshold; up to 25,000 BOPD 60% MOGE and 40% Contractor</i> <i>Highest threshold; Above 150,000 BOPD 85% MOGE and 15% Contractor</i> Natural Gas: 2,000 feet or less of water depth <i>Lowest threshold; up to 300 MMCFD 65% MOGE and 35% Contractor</i> <i>Highest threshold; above 900 MMCFD 90% MOGE and 10% Contractor</i> More than 2,000 feet of water depth <i>Lowest threshold; up to 300 MMCFD 55% MOGE and 45% Contractor</i> <i>Highest threshold; above 900 MMCFD 80% MOGE</i>	Incremental Crude Oil: <i>Lowest threshold; up to 5,000 BOPD 60% MOGE and 40% Contractor</i> <i>Highest threshold; Above 30,000 BOPD 85% MOGE and 15% Contractor</i> Incremental Natural Gas: All additional CFD 60% MOGE and 40% Contractor

		and 10% Contractor	and 20% Contractor	
Non-Tax Instruments	PSC Onshore Blocks	PSC Offshore Blocks	PSC Deep Water Blocks	IPRC Onshore Blocks
Commerciality Bonus	None	None	None	Amount not specified (9)
Production Bonus	Crude Oil: Upon approval of Development Plan 0.50 MMUS\$ <i>Highest threshold; Above 150,000 BOPD for 90 consecutive days of prod. 6.00 MMUS\$</i> Natural Gas: Upon approval of Development Plan 0.50 MMUS\$ <i>Highest threshold; above 900 MMCFD for 90 consecutive days of prod. 6.00 MMUS\$</i>	Crude Oil: Upon approval of Development Plan 1.00 MMUS\$ <i>Highest threshold; Above 200,000 BOPD for 90 consecutive days of prod. 10.00 MMUS\$</i> Natural Gas: Upon approval of Development Plan 1.00 MMUS\$ <i>Highest threshold; above 900 MMCFD for 90 consecutive days of prod. 10.00 MMUS\$</i>	Crude Oil: Upon approval of Development Plan 1.00 MMUS\$ <i>Highest threshold; Above 200,000 BOPD for 90 consecutive days of prod. 10.00 MMUS\$</i> Natural Gas: Upon approval of Development Plan 1.00 MMUS\$ <i>Highest threshold; above 900 MMCFD for 90 consecutive days of prod. 10.00 MMUS\$</i>	Incremental Crude Oil: Lowest threshold; up to 2,000 BOPD for 60 consecutive days of production 0.20 MMUS\$ Highest threshold; above 30,000 BOPD for 60 consecutive days of production 3.00 MMUS\$ Incremental Natural Gas: Lowest threshold; up to 15 MMCFD for 60 consecutive days of production 0.50 MMUS\$ Highest threshold; above 150 MMCFD for 60 consecutive days of production 2.00 MMUS\$
Training Fund	Exploration period: 25,000 US\$ per year Production period: 50,000 US\$ per year	Exploration period: 50,000 US\$ per year Production period: 100,000 US\$ per year	Exploration period: 50,000 US\$ per year Production period: 100,000 US\$ per year	Initial joint study period: 10,000 US\$ Pilot project period: 50,000 US\$ per year Production period: 50,000 US\$ per year Excess average production over 30,000 BOPD: 100,000 US\$ per year
Research and Development Fund	0.5% of Contractor's share of Profit Petroleum	0.5% of Contractor's share of Profit Petroleum	0.5% of Contractor's share of Profit Petroleum	0.5% of Contractor's share of Profit Petroleum
State	15% to MOGE with extension up to 25% at	Up to 20% after commercial discovery and up to 25% is	Up to 20% after commercial discovery and	15% undivided interest

Participation	MOGE's discretion	the reserves are greater than 5 TCF	up to 25% if the reserves are greater than 5 TCF	
Non-Tax Instruments	PSC Onshore Blocks	PSC Offshore Blocks	PSC Deep Water Blocks	IPRC Onshore Blocks
Income Tax (1) (4)	25% of Contractor's Net Profit	25% of Contractor's Net Profit	25% of Contractor's Net Profit	According to the Myanmar Income Tax Law
Sharing Profits on sale or transfer of shares	40% of net profit up to 100 MMUS\$ 45% of net profit between 100 MMUS\$ and 150 MMUS\$ 50% of net profit above 150 MMUS\$	40% of net profit up to 100 MMUS\$ 45% of net profit between 100 MMUS\$ and 150 MMUS\$ 50% of net profit above 150 MMUS\$	40% of net profit up to 100 MMUS\$ 45% of net profit between 100 MMUS\$ and 150 MMUS\$ 50% of net profit above 150 MMUS\$	40% of net profit up to 100 MMUS\$ 45% of net profit between 100 MMUS\$ and 150 MMUS\$ 50% of net profit above 150 MMUS\$

Notes

- 1 Payable within 30 days after contract is signed.
- 2 Payable within 30 days after contract is signed.
- 3 3 years of Tax Holiday as from the start of production.
- 4 Payment within 30 days after entering into the exploration period.
- 5 Payment within 30 days after the commencement of the initial joint study period.
- 6 Payment within 30 days after the commencement of the pilot project period.
- 7 Of all incremental production.
- 8 Payment within 30 days after the commencement of the production period.

Pipeline transit fees

It was not possible to find full information on pipeline transit fees during our project. However, we discovered that an annual US\$1m in transit fees is paid to Kanbauk township (both the Yadana and Yetagun pipelines pass through this township in Tanintharyi Region). The fee is apparently paid directly by Total, however it is unclear to which account the fee is paid into and whether this contributes directly to the budget. It was not possible to discover whether the Shwe Gas pipeline also requires transit fees, or where and to whom these fees are paid. The scoping study should try to make further assessments of this revenue stream with the support of MOGE.

Potential Leakages

All upstream activities are coordinated and controlled by MOGE. Investors are required to report and pay non-tax payments and other contractual payments to MOGE on a regular basis in both local and foreign currencies. As noted above, private companies have reported that they were sometimes requested to submit tax payments to MOGE instead of to the IRD.

Section 23.7 of the model onshore contract assessed above (in Chapter Five) stipulates that payments to MOGE (which are non-tax in nature) must be made in US\$ but can be paid either to a bank in Myanmar or overseas. There is an unfortunate precedence to this arrangement in Myanmar, involving both foreign accounts (based in Singapore and "facilitated by the MFTB") and currency manipulation.⁶¹

⁶¹ <http://www.dw.de/is-money-from-gas-deals-fuelling-the-myanmar-junta/a-5212992> and page 43 of the ERI report on the Yadana Pipeline <http://dg5vd3ocj3r4t.cloudfront.net/sites/default/files/publications/total-impact.pdf>

The MSG may decide that the scoping study should determine which overseas banks are still used by the MFTB for the extractive industries sector; what exchange rates are used and whether it will be possible to assess inflows and outflows from these accounts into MFTB accounts. The MSG may also wish that the scoping study should also examine whether there is a relationship between the Other Accounts held by the SEEs and these offshore payments and reconcile payments made by companies to offshore accounts with revenue returns into the Myanmar banking system.

There is additionally the potential for the transfer of profits between downstream and upstream sections of oil and gas operations in Myanmar, due to shared corporate ownership, which may reduce GOUM revenues.

6.4 Mining

The Foreign Investment Law allows foreigners and Myanmar citizens or ministries and organisations to engage in mining exploration and exploitation through JVAs. Mining operators are required to contribute all capital investment and the government receives a negotiated share of production. Operators are also required to pay signature bonuses, dead rent and royalties.

Non-tax instruments that typically apply to the Mining industry in Myanmar are Royalties, Production Split, Land Fees, Signature Bonuses and Licence Fees.

Royalties for Mining Projects are:

- ▮ Precious metallic minerals from 5% to 7.5%;
- ▮ Iron, copper, zinc, lead, etc. from 3% to 4%, and
- ▮ Gold, silver, platinum from 4% to 5%.

The Signature Bonus should be paid within 30 days after the agreement is signed and Land Rent (also called "Dead Rent") is payable on mineral prospecting and exploration stages, depending on the type of minerals. The PSC split is generally 30% for State Owned Enterprises and 70% for investors. The MOM production take can be increased if production increases.

Compared to the hydrocarbon and hydropower sectors, revenue collection for the mining industry is of greater complexity. Not only is the taxation diversified by commodity value chains and mineral types but due to its interest and outreach within the military holding companies. To add to the complexity, mining often takes place in "brown" areas where there is at least partial control of mineral rents by EAGs.

Figure 26 below describes the general tax and non-tax rent dynamics within the mining sector for the a Large-Scale mining company interviewed as part of this study: As per the responsibilities of each state owned mining enterprise, Mining Enterprise 1 is in charge of controlling the exploration and production of Lead, Zinc, Silver, Copper, Iron and Nickel. But during our interview with the company's representative, the production sharing split, land fees, and bonuses generated from the exploration and exploitation of nickel are reported and paid to Enterprise No. 3. Royalties, which are a non-tax rent, are apparently in one case paid directly to the IRD as well as all other taxes.

However, another informant well versed in mining finance stated that all non-tax revenues from mining operations (including royalties) are received and controlled by mining enterprises and taxes by IRD. This discrepancy over who collects royalties suggests that there is little or no clarity or consistency in revenue practices within the mining sector from the very initial understanding of who should manage what within the mining enterprises. It was also not clear from our interviews if there was a certain rule to pay in cash or in kind and if the payment was delivered in cash in which type of currency for which kind of revenue type (taxes or non-taxes). The potential leakages described for the oil and gas sector above (via the use of overseas accounts and questions to be asked about exchange rates and the amounts returned to Myanmar) should also be asked of the mining sector.

Figure 25: Mining Revenue Flow Diagram – the Case of a Large Scale Mining Company

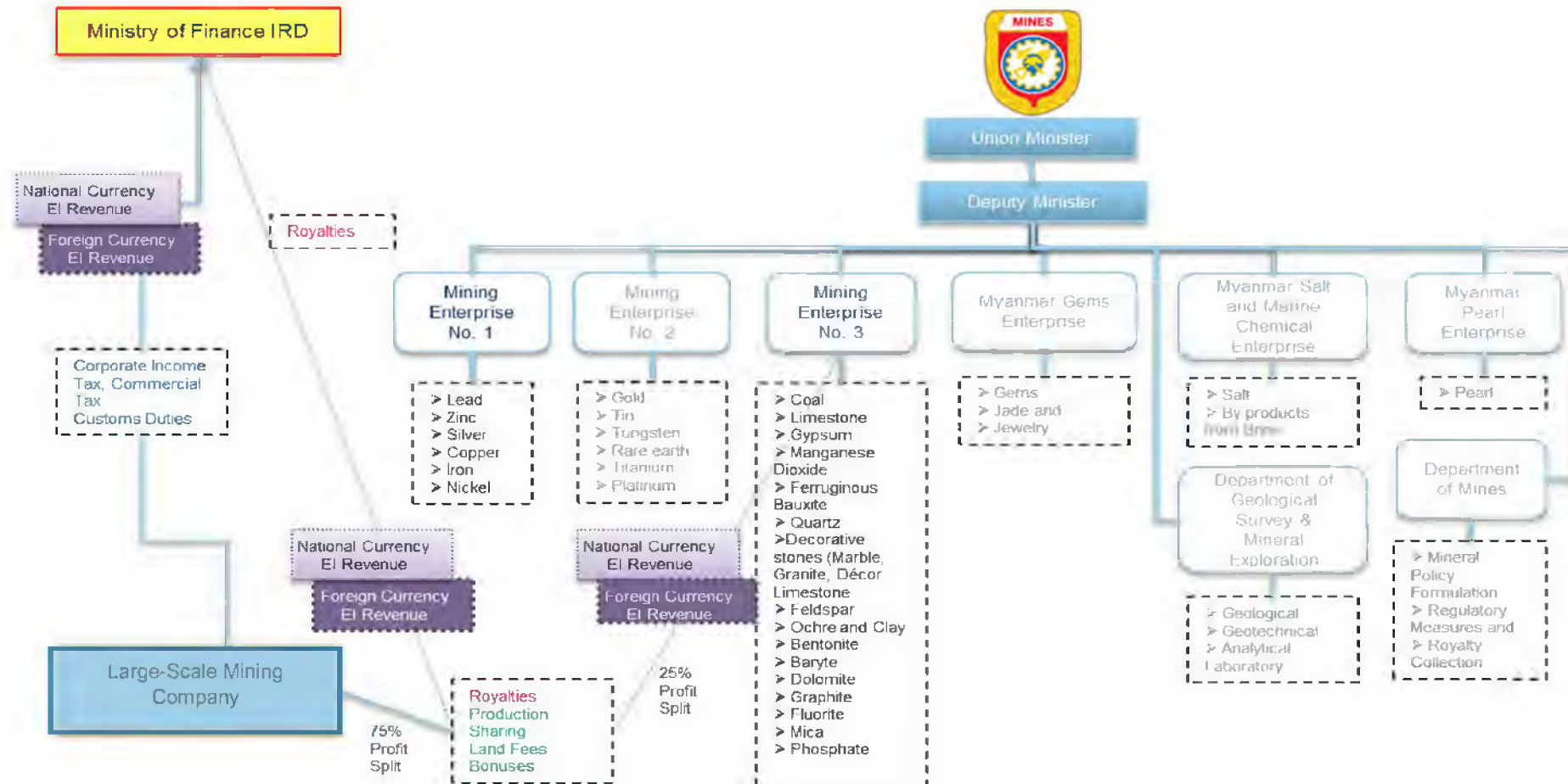
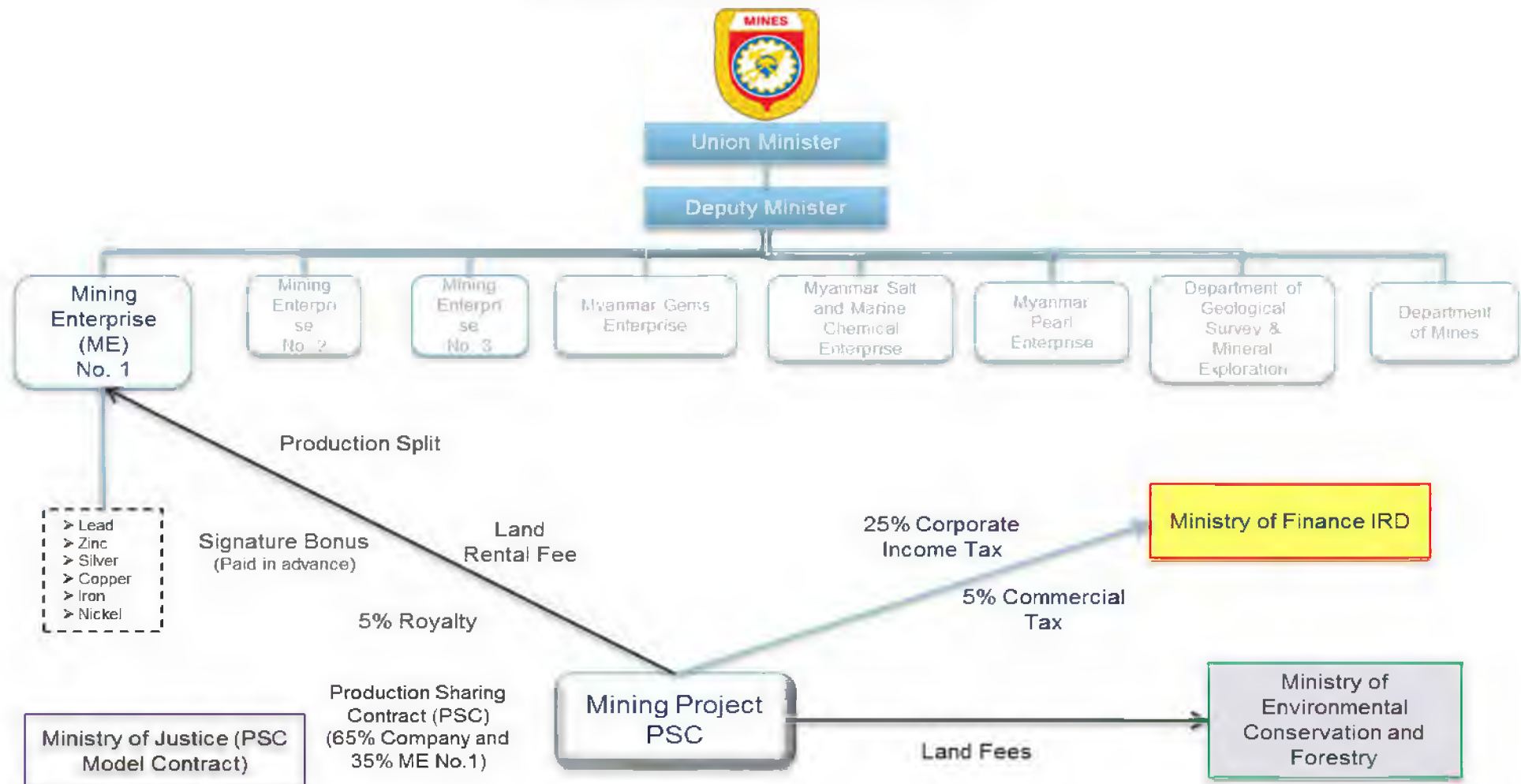
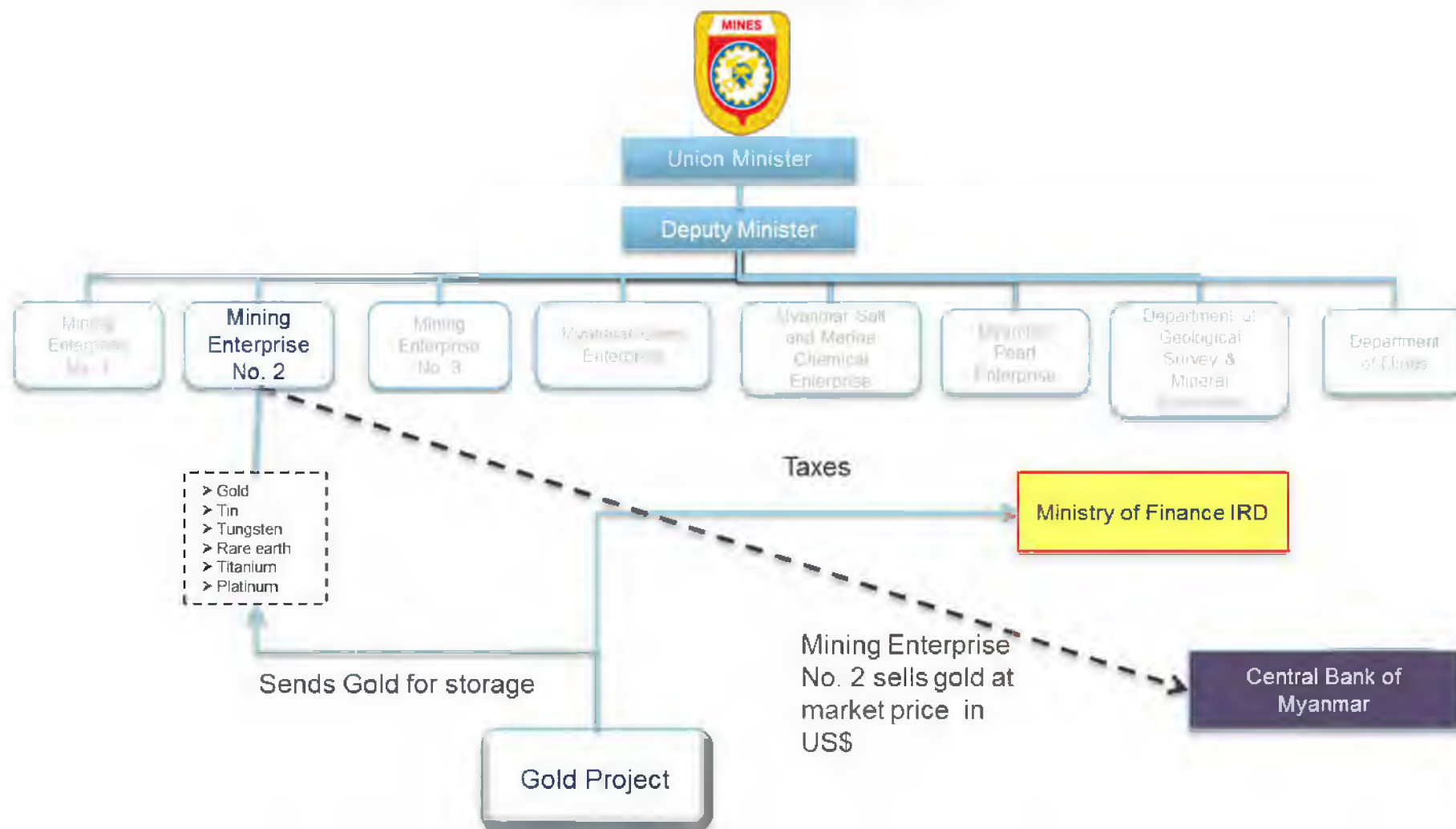


Figure 26: Mining Enterprise No 1. Revenue Flows



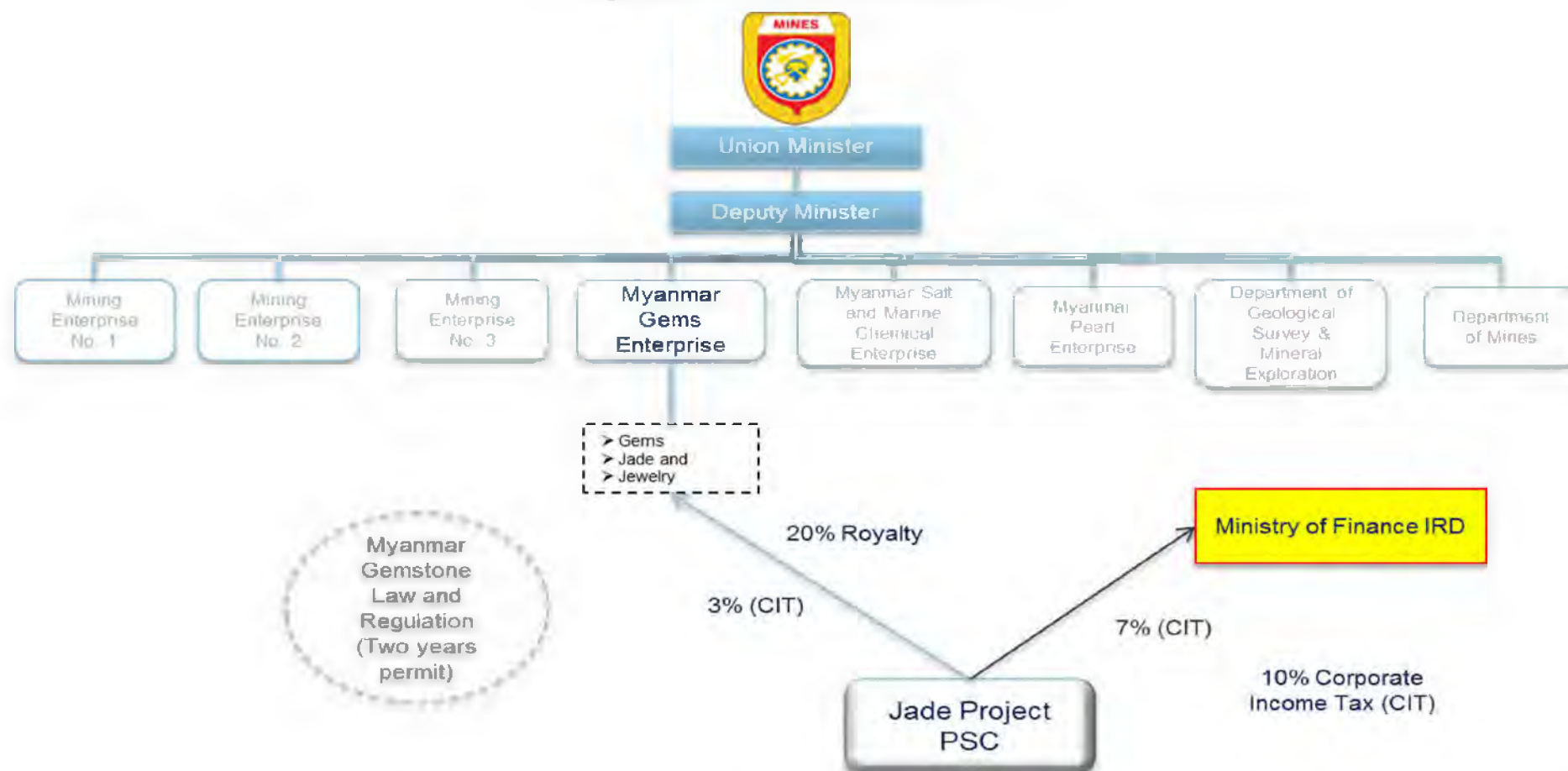
Some informants within the MFMA described that non-tax revenue flows generated by a mining project consist of Production Split, Land Fee, Signature Bonus and Royalties which are paid directly to the relevant mining enterprise. In Production Sharing Contracts controlled by Mining Enterprise No. 1 the production is generally divided in 65% to the investor and 35% to ME No. 1. Corporate Income Tax rate which is 25% calculated on net profits and a 5% Commercial Tax is directly paid to the Ministry of Finance, Internal Revenue Department.

Figure 27: Gold Project - Payment in Kind



The mining sector also includes payments in kind. Figure 28 shows that for the production of gold, Mining Enterprise No. 2 receives quantities of gold for storage from a particular project, which it sells it to the Central Bank at the market price in US\$. In this case, all taxes are directly paid to the IRD.

Figure 28: Gems Association - Revenue Flows



Gems, Jade and Jewellery are managed by the Myanmar Gems Enterprise (MGE), which receives royalties produced by jade projects and a portion of Corporate Income Tax (in this case 3%). The remaining 7% is sent to the Ministry of Finance, Internal Revenue Department

Estimates show that Myanmar produces up to 90 percent of the world's rubies, with its best quality products, often described as "pigeon-blood" gems, fetching higher prices than diamonds at some international auctions. Figures from the 2011-2012 fiscal year recorded 43,185 tonnes of jade and 13.398 million carats of precious stones were recorded through official export channels. GOUM representatives were unable to provide data on the monetary value of these exports or how much was recouped in tax.

Currently, there is a 30% commercial tax on all gem exports payable to the government and 10% retail tax at emporiums.

6.5 Accounting Standards

The Myanmar tax regime is outdated and assessments are based on audited annual financial statements submitted from the companies. Currently, the Internal Revenue Department is transforming its tax regime to "Self-Assessment System: SAS" with the tax payer assessing his own tax liability.

Now, the EITI report must describe the distribution of revenues from resource rents⁸² whether in cash or in-kind recorded or not in the national budget with reference to the relevant financial reports from entities such as sovereign wealth and development funds, sub-national governments, SOE and other extra-budgetary sources. During the reconciliation process, the Independent Administrator should apply international accounting and professional standards and be perceived by the MSG as credible, trustworthy and technically competent. The Independent Administrator within Requirement 5.2 for EITI implementation will be required to examine the audit and assurance procedures within government and companies participating in the EITI reporting process and propose assurances to be provided by companies and government entities. This could include the below:

- Providing a letter from a senior government or company official ratifying the data collected is complete and accurate
- A confirmation letter from the company external auditor ratifying that the information delivered is comprehensive and consistent with their audited financial standards; and
- Where relevant, government reporting entities may be requested to obtain a certification of accuracy of the government's disclosures from their external auditor or equivalent.

Accounting practices in Myanmar have been historically based on British accounting standards and Generally Accepted Accounting Principles (GAAP). For several years, Myanmar adopted International Accounting Standards for reporting purposes, while the Myanmar Accountancy Council (MAC), through the Myanmar Institute of Certified Accountants (MICPA) has adopted the majority of International Accounting Standards that existed in 2003 and 2004. In 2010, the MAC withdrew all 30 of International Accounting Standards and replaced them with 29 new Myanmar Accounting Standards and 8 new Myanmar Financial Reporting Standards that were identical to the 2010 International Financial Reporting Standards (IFRS). Such standards were notified in the Official Gazette and became effective on 4th January 2011.

Myanmar currently has no stock exchange, only an over the counter market for the sale of a number of publicly accountable companies share. Even though the MAC has made significant progress in adopting the latest International Accounting Standards in Myanmar, it still needs to adopt the following:

- IFRS 9: Financial Instruments;
- IFRS 10: Consolidated Financial Statements;
- IFRS 11: Joint Arrangements;
- IFRS 12: Disclosure of Interests in Other Entities
- IFRS 13: Fair Value Measurement; and
- Interpretations from the Standing Interpretations Committee (SICs) and International Financial Reporting Interpretations Committee (IFRICs).

Such IFRS measures would significantly assist in the implementation of EITI, given that the first reconciliation report must be produced within 18 months after Myanmar becomes an EITI Candidate country. The MSG (perhaps advised by the planned scoping study that follows this report) must also agree on appropriate provisions to safeguard confidential information, agree on the level of disaggregation for the publication of data from the extractive industries and if possible make EITI reports machine readable and code or tag EITI reports and data file so that the information can be compared with other publicly available information.

The Foreign Investment Law allows foreign entities to open bank accounts prescribed by the Myanmar Investment Commission in foreign and national currency authorized within a formal licence or contract. Also foreigners serving in any

⁸²EITI 2013 Standard, 3.7 Requirement

economic organisation authorised within a particular licence and contract shall open a foreign currency account and a kyat account in any bank prescribed by the Commission.

Income Tax incentives within the mining industry are:

- 5 years tax holiday;
- Possibility of receiving additional tax exemptions should the State considers it beneficial;
- Relief from income tax on profit which is reinvested within one year;
- Right to accelerate depreciation for income tax purposes;
- Relief from income tax up to 50 percent on the profit from exports;
- Right to deduct research and development expenditures; and
- Carry forward and set off losses up to 3 consecutive years.

Recently Myanmar implemented the following new laws/amendments:

- Amendment of Income Tax Law (dated 24th March 2014);
- Amendment of Commercial Tax Law (dated 24th March 2014); and
- 2014 Union Tax Law (dated 28th March 2014).

On the 1st April, 2014 the IRD opened a Large Taxpayers Office in Yangon, suggesting that in the near future Myanmar will modify its tax payment process for hydrocarbon activities to move to a self-assessment system.

6.6 The Auditing Process and EITI

In March 2012, the World Bank published a Public Expenditure and Financial Accountability (PEFA) report for Myanmar, which includes details on the audit process. According to the PEFA, the OAG performs audits consistent with the International Organisation of Supreme Audit Institutions (INTOSAI) audit standards. All SEEs are required to submit financial reports that are in accordance with Generally Accepted Accounting Standards. However, as noted above, this does not include reporting on the Other Accounts, nor does it include auditing the Ministry of Defence (and companies owned by the military, such as UMEHL). As the PEFA notes, the OAG was established under the 2008 constitution as an independent agency, which is a ministerial equivalent under the law. The appointment of the Auditor General is made by the President with the approval of Parliament. The Auditor General reports through the President to the Parliament and is thus not fully independent. At present the OAG performs mainly financial audits, with limited performance and procurement audits. Audit reports are expected to be submitted to the Parliament six months after the time the MOF submits the financial statements to the OAG. However, in practice, audits can take many years to complete, with the process taking a minimum of eight months after the financial year and, according to officials, up to ten years in some cases. During the mission, our team learnt that one IOC has not submitted an audit for several years.

There is apparently no legally defined time limit for the submission of audit reports to the OAG. The IRD reported that there is no direct recourse to companies to request that they speed up the reporting process, and that sometimes they are forced to pressurise the State/Region government where the company is based to access reports in a more timely fashion.

All SEEs send financial reports to the OAG every six months. Meanwhile according to an interview with the OAG the annual audit includes all tax and non-tax payments made by all partners to the extractives industries sector project (as we were not able to view audited accounts this report is unable to confirm this). The OAG has the power to audit private companies, but currently lacks the capacity and the resources to do so. The OAG works closely with the Public Accounts Committee in Parliament, sending bi-annual summary reports to the PAC.

Role of the Public Accounts Committee in EITI

As noted in Chapter Two, the Pyithu Hluttaw PAC is a powerful standing committee that also operates as a joint committee. One generic risk with EITI reporting whenever EITI is implemented is that EITI reports are not closely integrated with public financial management processes in the executive branch, and analysis generated by EITI implementation is therefore perceived by government (and parliament) as an external body of information, and are therefore often not as relevant to good governance as they might be. The opportunity often missed is to integrate EITI

reporting processes more closely into reporting flows within government. One option here is for the PAC to be granted powers of review over the draft EITI reports (along with the Office of the President). The other (weaker) option is for the PAC to formally receive the final report once it has been concluded (discrepancies reduced/reconciled to a minimum) but with no powers of review.

6.7 Final Remarks

During the research it was observed that the petroleum, mining and hydropower sectors have made significant progress to come in line with international best practice by incorporating formal processes that will assist in managing Myanmar's current resource wealth, with MOGE and the MOE taking the lead.

However, more efforts should be dedicated to reduce informal processes to control the possible leakage of revenues that may be occurring, particularly within the mining industry. For the purpose of preparation of the MEITI scoping study, it is suggested that the MSG evaluate the possibility of including companies and SEEs that are both already producing and also those which expect to begin production of oil and gas, minerals, precious metals, gems and hydropower within the 18 month period after Myanmar became an EITI Candidate Country (in July 2014), in order to be able to reconcile tax and non-tax payments originating from these sectors. Resource rents derived from the production of natural resources typically occur several years after exploring and evaluating the commerciality of the natural resource through long-term forecast of projected cash flows. Significant revenue streams start from the moment contracts are signed with the payment of signature bonuses. This would therefore include the new PSCs resulting from the 2013-14 bid rounds.

In order to meet the first reporting date, which is due by or before 18 months from the time Myanmar becomes candidate country, the MSG should review recommendations from the planned scoping study and agree on which types of tax and non-tax instruments the extractive industries sector should consider. This will allow the GOUM to be able to effectively evaluate the performance of the extractive industries sector and its impact in the economy of the nation and how these rents contribute to the wellbeing of its citizens. In addition a "materiality threshold" should be agreed, below which companies will not have their payments to government reconciled.

Finally, it is suggested that the MSG takes into consideration that there could be transfers of cash from the SEEs within the MOE, MOM and MOEP to the MOF after oil, gas, mining and hydropower projects have paid their taxes and royalties. It would be important to examine this potential issue during the scoping study, when determining how the EITI reconciliation reporting mechanism will minimise duplications and delays in reconciling taxes and non-taxes.

Chapter 7: Hydropower

7.1 Introduction

The regulatory framework for the power sector in Myanmar includes:

- The Electricity Act 1948 (as amended in 1967),
- The Myanmar Electricity Law (1984), and
- The Electricity Rules (1985).

A new 2014 Electricity Law is currently being drafted.⁸³ This Law will make provision for the formation of a new Electricity Regulatory Commission and will define its roles and responsibilities.

As noted in Chapter Two, in January 2013 the GOUM established the National Energy Management Committee (NEMC). The Military Vice President of the GOUM (currently U Nyan Tun) is the Committee Patron and the Union Minister for Energy is its Chairman. It is intended that the implementation of the Myanmar Energy Policy will be guided by the NEMC and supported by all concerned organisations, agencies and civil society. The GOUM has also constituted an Energy Development Committee (EDC) to support the activities of NEMC. The EDC's role is to assess the appropriateness of the institutional structure and the organisation of the energy sector entities, and to formulate a capacity building programme to fulfil the long term needs of the sector.

The decision making power for medium-sized hydro plants (i.e. less than 30 MW), which had been directly under the central government control has now been transferred to regional and state levels of government, in accordance with the 2008 Constitution. However, if the medium-sized hydro plant is to be connected to the national power grid, it will remain under the decision making power of the GOUM.

The regulatory structure for the power sector is thus in a transition phase with the future framework to be established in the new Electricity Law and the detailed regulation of the sector to be governed by the, yet to be established, Electricity Regulatory Commission. The GOUM is also considering options for the privatisation of the power sector however it has come across difficulties including low electricity tariffs and the poor condition of the distribution networks.

The Ministry of Agriculture and Irrigation is responsible for the construction of reservoirs and dams for water storage and distribution to agricultural lands for the whole country.

7.2 The Ministry of Electric Power

The Ministry of Electric Power⁸⁴ (MOEP) is responsible for the power sector. The MOEP has three departments with responsibility for hydroelectric power:

- The Department of Hydropower Planning (DHPP),
- Department of Hydropower Implementation (DHPI), and
- Hydropower Generation Enterprise (HPGE).

The DHPP plans hydropower projects that are to be implemented by:

- MOEP itself,
- By local provincial enterprises
- By joint ventures with foreign investors

The DHPI has four institutes that are responsible for design, investigation, and mechanical work. The department also has seven engineering construction companies for undertaking large hydropower projects. HPGE operates and maintains

⁸³ This Bill is still being actively drafted and it is thus premature to comment upon it at this stage.

⁸⁴ Formed by the merger of MOEP1 and MOEP2 in September 2012

all of MOEP's hydropower stations, and participates in the operation and maintenance of power plants that are built as joint ventures. HPGE also operates a coal-fired power plant. The construction of hydropower joint venture projects is contracted out and the operator is the JV company.

7.3 Existing Hydro Projects

Before 1960, the Myanmar generation system consisted mainly of isolated grids supplied by diesel generators and mini-hydropower. The first medium-scale hydropower plant, Baluchaung-2 (in central-east Myanmar about 420 km north of Yangon), was commissioned in 1960 with an installed capacity of 84 MW. The plant was designed for an annual production of 595 Gigawatt hours (GWh)s. The second stage of Baluchaung-2 was commissioned in 1974, with the same rating and energy production as stage 1.

During the subsequent 30 years, another eight hydropower plants with a total capacity of 264MW were built with station sizes ranging from 12 MW to 75 MW. In 2005, the 280 MW Paunglaung Hydropower Plant (about 20 km east of Nay Pyi Taw) was commissioned. From 2005 to 2011, eight further power plants with a total capacity of 1,934 MW were built.

Two large-scale hydropower plants, Shweli-1, (600 MW) and Yeywa, (790 MW), were commissioned in 2008 and 2010, respectively. Shweli-1 was built with the intention that part of its output was for export to China. The 240 MW Tapein-1 hydropower plant is also being developed by Chinese investors with 10% of the generated electricity to be made available to the Myanmar central grid.

The agreement with China for Shweli-1 is that three of its six generating units will provide power to the Myanmar grid. Of the total electricity generated, 50% will be provided at zero cost to Myanmar with the option of an additional 15% to be provided at cost if this is required.

The hydroelectric power plants that were operational in 2012 are listed in Table 16.

Table 16: Operational Hydro Plants in 2012⁸⁵

Power plant	Location	Operational	Rated capacity (MW)	GWh/annum
Small				
Baluchaung BHP 1	Kayah	1992	28	200
Ye'naw	Bago	2007	25	123
Zaungtu	Bago	2000	20	76
Sedawgyi	Mandalay	1989	25	134
Zawgyi 1	Shan	1995	18	35
Zawgyi 2	Shan	1998	12	30
Large				
Thaphanseik	Sagaing	2002	30	117
Mone	Magwe	2004	75	330
Paunglaung	Mandalay	2005	280	911
Khabaung	Bago	2008	30	120
KengTawn	Shan	2008	54	378
Shweli 1	Shan	2008	600	4,022
Yeywa	Mandalay	2010	790	3,550
Dapein 1	Kachin	2011	240	1,065
Shwegyin	Bago	2011	75	262

⁸⁵ Source ADB Energy Sector Initial Assessment: Context and Strategic Issues

Power plant	Location	Operational	Rated capacity (MW)	GWh/annum
Kun	Bago	2011	60	190
Kyee On Kyee Wa	Magwe	2012	74	370
Baluchaung BHP 2	Kayah	1960	84	595
Baluchaung BHP 2	Kayah	1974	84	595
Kinda	Mandalay	1985	56	165
Totals			2,635	13,268

The total operational capacity of hydro plants increased to 2,780MW in 2013. However, it is important to note that during the summer months of 2013, hydro generation capacity was only 986MW (i.e. 35% of installed capacity) the hydro output is reduced as a consequence of the low water inflow (see Figure 30). Despite the list of operating hydro plants in the table above, it has been reported that only Shweli 1 is producing commercial quantities of electricity at present, with Dapein 1 still in start-up phase.

The Ministry of Electric Power is planning to complete the construction⁸⁶ of:

- Nancho (40MW) and Phyu Chaung (40MW) in 2013/14
- Upper Paunglaung (140MW) and Baluchaung 3 (52MW) in 2014/15
- Upper Baluchaung (30MW) in 2015/16.
- For on-going projects such as Tha-htay (111MW), Upper Yeywa (280MW), Upper Kyaing Taung (Keng Tawng) (52MW), loan facilities are already in place. Middle Paunglaung (100 to 115MW) and Dedote (40 to 60MW) are scheduled for implementation.
- By 2013, the total number of dams and reservoirs was around 240 with most of the dams (including the multipurpose dams) having hydro units installed. The Sedawgyi, Kinda, Thaphanseik, Mone, Yenwe, Khapaung, and Kyi-on-Kyiwa (Kyee On Kyee Wa) power plants generate power as determined by the availability of water for irrigation.

The GOUM strategy⁸⁷ for the expansion of the power system over the period to 2030 is to develop the following energy mix:

- 44.5% hydropower;
- 17% of natural gas;
- 34.5% of coal; and
- 4% other renewable sources.

7.4 Power Exports

With the commissioning of the Shweli 1 (2009) and Dapein 1 (2011) projects, Myanmar commenced preparation for power exports to China. Total exports to China in 2011 were 1,723GWh.⁸⁸ If these exports are valued at 7 US cents per kilowatt hour⁸⁹ (the reported market price in the Southern Union Grid in China), they would have been worth US\$120 million for that year. If hydro projects continue to be developed for export then the value of energy exported could rise dramatically. There are no operational joint ventures with Thailand at present, although there are proposals for hydro plants close to the Thai border.

⁸⁶ Note that the capacities of these stations quoted here are not fully consistent with those given in tables 17 and 18 below.

⁸⁷ The National Energy Policy Chapter 4

⁸⁸ This represented 26% of total hydro production in 2011

⁸⁹ Equation for tariff or charges per unit of energy consumed or produced

7.5 Potential for Hydro Development

The MOEP defines three categories of hydro development:

- Ministry only development (i.e. funded from their budget);
- Local entrepreneurs - on a Joint Venture (JV) Build Operate Transfer (BOT) basis; and
- Foreign Direct Investment on a Joint Venture BOT basis.

Under a BOT contract the private sector will build and operate the plant and eventually transfer ownership of the project to the government.

Details of the proposed projects⁹⁰ under each of these three categories are listed in tables 17, 18 and 19 below. The hydro potential is huge and offers the possibility of some very large business opportunities.

The value of annual hydro production would be in excess of US\$15 billion were all the FDI projects (41GW) to proceed. However (and as will be explored in more depth in the following chapter) it is vital that any such projects are developed within an appropriate regulatory framework and that careful attention is paid both to the environmental impact and the equitable sharing of project benefits.

7.6 Hydro Project Economics

In order to establish whether a given hydro scheme will be economic, the net present value⁹¹ (NPV) of the benefits associated with the electricity produced should be compared with the NPV of the costs (capital and operating costs).

Each of the cost streams (capital and operating costs) is discounted from the time at which costs are incurred to the reference date that is being used for the analysis (often the first year in which expenditure takes place). Likewise the project revenue streams are also discounted from the year in which the revenue is generated to the reference date. If the NPV of the revenues exceeds the NPV of the project costs then, from an economic perspective, the project is economic at the chosen discount rate and the project should proceed as soon as funding is available.

There are a number of specific issues that need to be resolved for a multipurpose scheme including:

- The ownership of the overall scheme and the ownership of the electro-mechanical equipment for power generation;
- The operational responsibilities of the dam and power generation equipment;
- A water sharing agreement between the various interested parties;
- The allocation of the costs and benefits of the scheme between the parties involved; and
- To whom is the power output sold and on what commercial terms.

Annual operation and maintenance costs for a hydro plant are often quoted as a percentage of the investment cost per kW per annum. Typical values range from 0.5% to 4% and the International Energy Agency assumes a figure of 2.2% for large hydropower projects. This figure would usually include the refurbishment of the mechanical and electrical equipment such as turbine overhaul, generator rewinding and replacement of communication and control systems after around 20 years of operation.

⁹⁰ Note that there appear to be various inconsistencies in the project details provided in these tables. The spelling of a given power plant can also vary

⁹¹ The present value of a time series of cash flows. It is a standard method for using the time value of money to appraise long-term projects

Figure 29: Month by Month Hydro Generation Data 2013-2014 (Central Statistics Office)

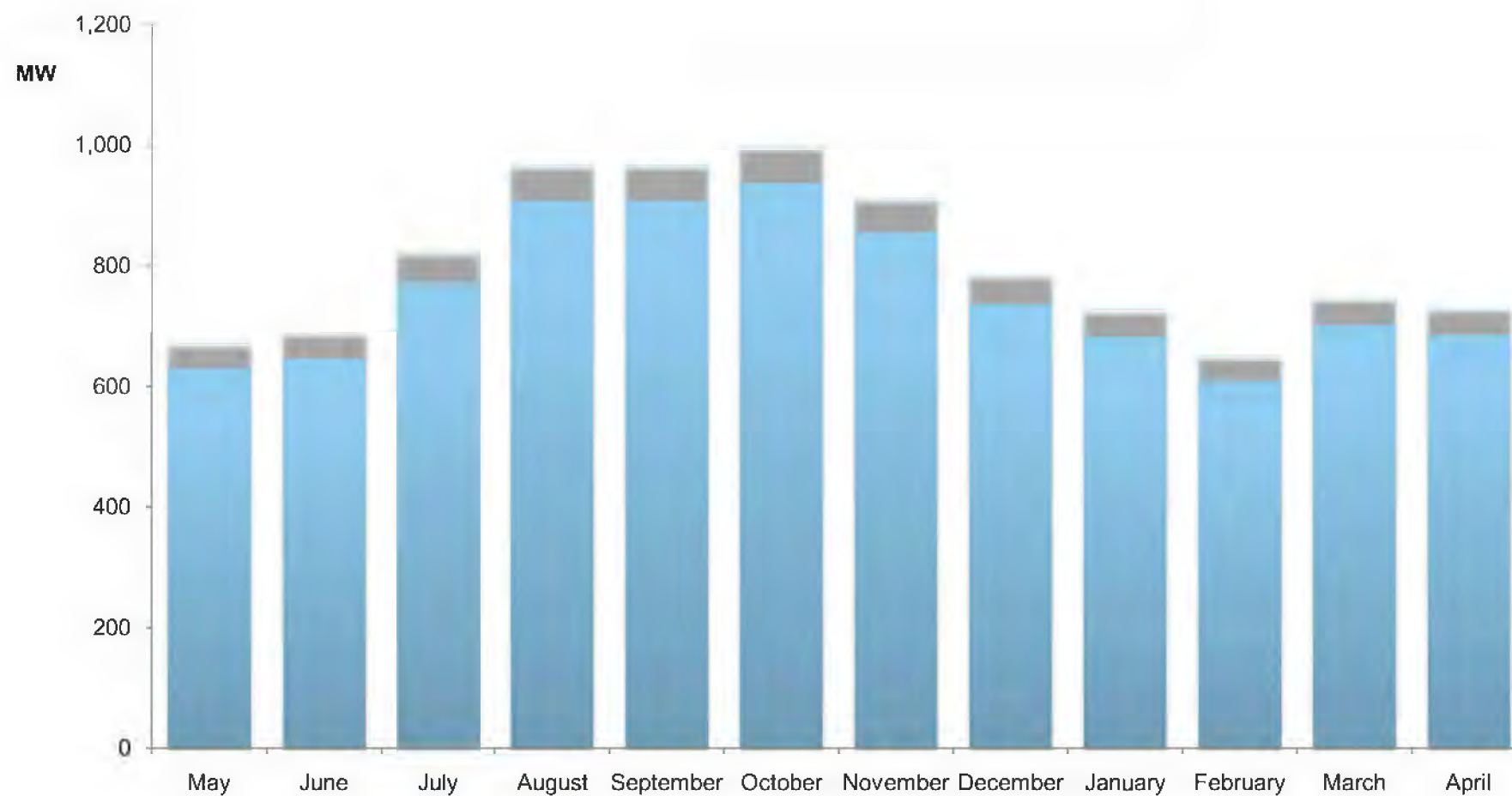


Table 17: Ministry only Planned Hydro Development

Power Plant	MW	GWh
Upper Paunglaun	104	454
Nancho	40	152
Middle Paunglaun	100	500
Shweli 3	1,050	3,500
Kun	60	190
Phyu	40	120
Upper Yeywa	280	1,600
Bawgata	160	500
Manipur	380	1,903
Tha-htay	111	386
Ann	10	44
Upper Buywa	150	534
Upper Keng Tawng	51	267
Totals	2,536	10,150

Table 18: Local entrepreneurs' hydro plants to be developed on a Joint Venture BOT basis

Power Plant	MW	GWh	Local Implementing Companies
Thaukyegat-2	120	605	Gold Energy Co., Ltd
Baluchaung-3	52	334	Future Energy Co., Ltd
Middle Paunglaun	29	134	
Shweli 3	9	38	
Kun	64	236	
Phyu	280	1512	
Upper Yeywa	6	45	
Upper Baluchaung	30.4	-	New Energy Oasis Development Co, Ltd.
Bilin	280	-	Asia World Co., Ltd.
Ngotechaung	16.6	-	New Energy Oasis Development Co, Ltd.
Totals	887	2,904	

Table 19: Foreign Direct Investment under consideration by the Ministry of Energy

Power Plant	Capacity	Energy	Implementing Companies	
	MW	GWh	International	Local
Myitsone (suspended)	6,000	30,860	CPI	Myitsone
Chipwi	3,400	17,770	CPI	AWC
Wutsok	1,800	10,140	CPI	Wutsok
Kaunglanhpu	2,700	14,730	CPI	Kaunglanhpu
Renam (Yinang)	1,200	6,650	CPI	Renam (Yinang)
Hpizaw (Phisaw)	2,000	11,080	CPI	Hpizaw (Phisaw)
Laza	1,900	10,440	CPI	Laza
Chipwinge	99	599	CPI	Chipwinge
Dapein (Tarpain) ²	168	775	DUHD	Dapein 2 (Tarpain)
GawLan	100	552	YPIC	GawLan
Wu Zhongze (Wukyoungkye)	60	327	YPIC	Wu Zhongze (Wukyoungkye)
Hkan Kawn (Khetkan)	140	769	YPIC	IGOEC
Tongxingqiao (Htonshinche)	320	1,746	YPIC	IGOEC
Lawngdin (Laungdin)	435	2,401	YPIC	IGOEC
Upper Thanlwin (Kunlong)	1,400	7,338	HHGL	AWC
Naopha (Naungpha)	1,000	5,290	HYDROCHINA Corp.	IGOEC
Mantong	200	924	HYDROCHINA Corp.	IGOEC
Upper Thanlwin (Mongton)	7,110	35,446	CTGC + EGAT	IGOEC
Hutgyi (Hatkyi)	1,360	7,325	Sinohydro Corp & EGAT	IGOEC
Tamanthi	1,200	6,685		
Shwezaye	660	2,908		
Saingdin (Saidin)	76.5	236	CDOI	STH
Lemro (Laymyo)	600	3,576	CDOI	STH
Lemro (Laymyo) ²	90	273	CDOI	STH
Ywathit	4,000	21,789	CDOI	STH
Nam Tamhpak (Nanttabat)	180	920	CDOI	STH

Power Plant	Capacity	Energy	Implementing Companies	
	MW	GWh	International	Local
Htu Kyan (Htonkyang)	105	551	CDOI	STH
Hseng Na (Hannu)	45	234	CDOI	STH
Tha Hkwa (Thakwa)	150	776	CDOI	STH
Palaung	105	536	CDOI	STH
Bawlake (Bawlakhe)	180	918	CDOI	STH
Taninthayi (Thaninthayi)	600	3,476	ITD	
Shweli (2)	520	2,814	HLRHC	AWC
Keng Tong (Kyaingtong)	96	536	YNPG	
Wan Ta Pin (Wantaping)	25	138	YNPG	
So Lue (Silu)	165	742	YNPG	
Mong Wa (Maingwa)	50	274	YNPG	
Keng Yang (Kyaingyang)	28	155	YNPG	
He Kou (Hiku)	88	483	YNPG	
Nam Kha (Nangkha)	200	937	YNPG	
Mawlaik (Mawlite)	520	3,310	China Guodian Corp.	HTMC
Nam Tamhpak (Nanttabet)	200	1,106	China Guodian Corp.	HTMC
Totals	41,276	218,535		

Abbreviations:

CTGC - China Three Gorges Corp.
CPI - China Power Investment Corp
DUHD - Datang (Yunnan) United Hydropower Developing Co., Ltd.
YNPG - Yunnan Power Grid Corp
ITD - Italian-Thai Development Co., Ltd. Thai
CDOI - China Datang Overseas Investment Co., Ltd.
YPIC - Yunnan Power International Energy Corp.
EGAT - EGAT International Co., Ltd. (Thai)
AWC - Asia World Co., Ltd.
IGOEC - International Group of Entrepreneurs Co., Ltd.
STH - Shwe Taung Hydropower Co., Ltd.
HLRHC - Huaneng Lancang River Hydropower Co., Ltd.
HHGL - Hanergy Holding Group Ltd.
HTMC - Htun Thwin Mining Co., Ltd.

7.7 The Approval Process for Developing New Hydro Plants

The development of a new FDI Joint Venture BOT hydro project⁹² involves the following stages:

- A Memorandum of Understanding (MoU) is signed with the developer. This requires approvals from the Union Attorney General's office, the MNPED and the MOF. The MoU enables the developer to undertake pre-feasibility and feasibility studies within 12 months and 18 months respectively (i.e. a total of 30 months). Failure to submit the associated reports in time results in the MoU being rescinded;
- A Memorandum of Agreement (MoA) is signed with the developer. During this 18 month stage the developer undertakes technical and financial analysis,⁹³ which are discussed and agreed with MOEP. The project must be "win-win" from a financial perspective in order to proceed. The MoA requires approval by the Union Attorney General's office, the MNPED and the MOF;
- The signed Memorandum of Agreement (MoA) is submitted to the Myanmar Investment Commission (MIC) for review and approval. At this stage, the developer conducts Environmental and Social Impact Assessments (ESIA and SIA)⁹⁴ together with any mitigation measures and submits them to the MOECAP for approval;
- A draft JVA defining the duties and responsibilities of both parties is submitted to Union Attorney General's office, the MNPED, and the MOF for comment and approval. Upon approval a draft Joint Venture Agreement is submitted to the Union Cabinet for approval and signature;
- Once the JV Agreement is signed it is submitted to MNPED such that the project complies with relevant legislation and the developer also obtains the rights to construct and operate the project, and to transmit, distribute and sell the electricity generated. Once the developer has obtained (i) a company registration certificate from the MNPED, (ii) legal opinion issued by Union Attorney General's office and (iii) a Concession Right from the MOEP, then a Permit for electricity production is issued by the MIC.

Concession rights are granted to developers for between 30 and 60 years.

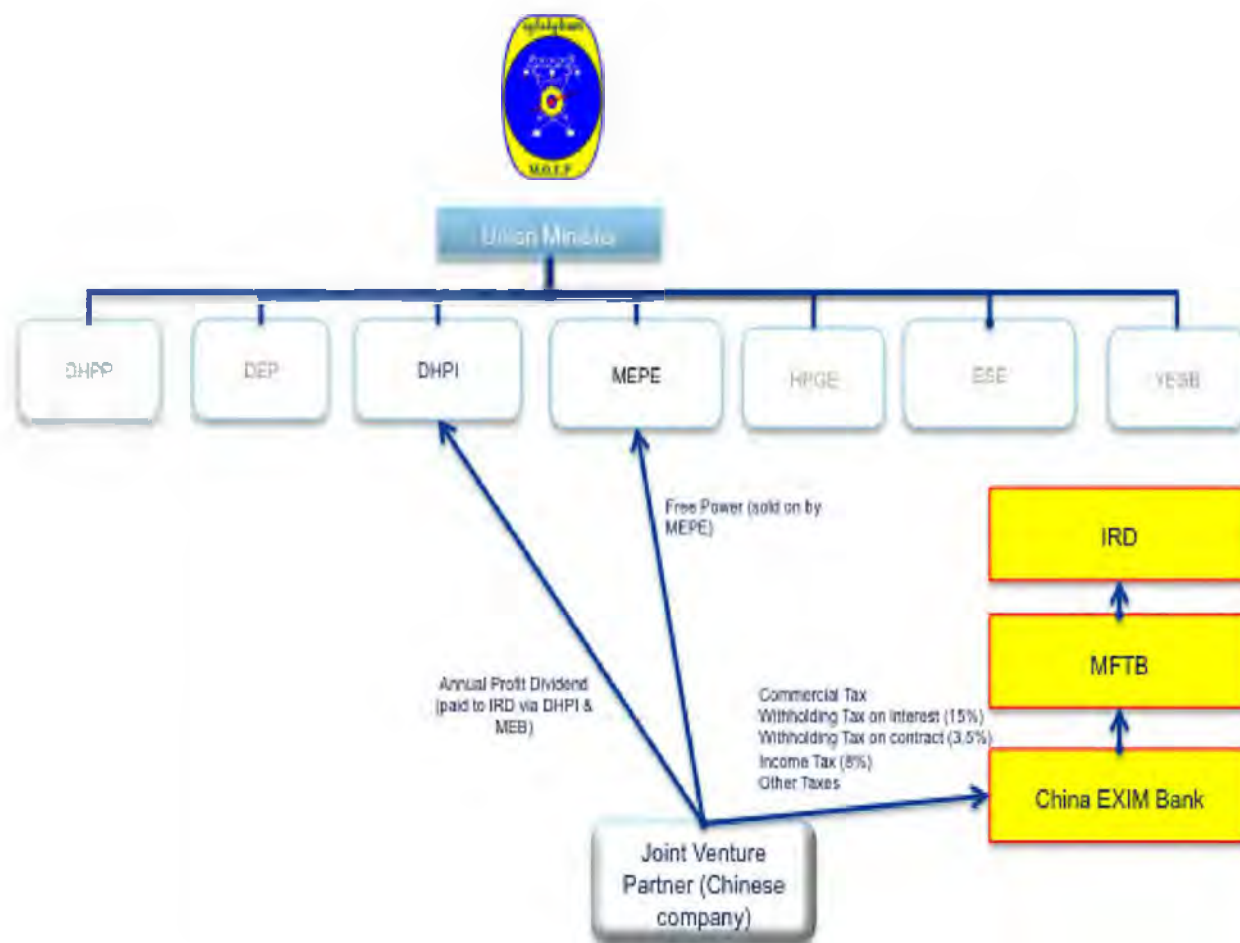
A similar process is required for a JV BOT project to be built by local entrepreneurs but for such projects the final stage is not required.

⁹² Hydro projects with a capacity of less than 30MW are the responsibility of the State governments. The development procedures are the same and the Ministry of Power will provide assistance to the State as required.

⁹³ Projects are normally financed on the basis of a 70/30 debt equity ratio. In the past most debt for hydro projects has been raised in China. We were informed that the first call on project revenues is to pay the interest on the loan and to repay the project loan itself. The loan should be fully repaid within the BOT term of 30 years.

⁹⁴ These must be produced by an independent third party.

Figure 30: Myanmar's Electric Power Financial Flows (Chinese JV Project example)



As the diagram indicates, in the case of Chinese joint venture partners, taxes are remitted directly to the China EXIM bank, whereas annual profit dividends are paid to the Department of Hydropower Implementation (DHPI), which then forwards the funds to the IRD.

7.8 Joint Venture Companies

Once a concession has been approved a JVA is signed which establishes a JV company comprising the developer and the MOEP. The JVA specifies the Board of Directors (which must include two directors from the Ministry of Electric Power) and the laws and regulations that must be observed (the tax law, FDI law).

A JV company can be responsible for a number of hydro projects⁹⁵. Each hydro project, however, requires a separate JVA.

The JVA agreement will specify:

- The amount of "free power" to be supplied to Myanmar (between 10% and 15% dependent upon project capital cost);
- The "free share" i.e. the Ministry of Power shareholding in the JV (the sum of the percentage of "free power" plus "free share" is 25%);
- The "Commercial" Tax (a sales tax payable after a five year exemption period);
- The Income tax (based upon profit);
- The withholding tax on interest 15%;
- The withholding tax on contract 3.5%.

The MOEP will also have an option to purchase up to 40% of the project output at the "market price". The market price is defined as the price in the Southern Union Grid in China (as stated above the current market price of the Southern Union Grid in China is 7 US cents per kilowatt hour⁹⁶). However the price is also adjusted according to the capacity of the hydro project (the larger the project, the lower the applicable price).

There are thus a total of four taxes that a developer of a hydroelectric project would pay to the IRD. In addition, the Government would be entitled to a dividend stream associated with its free equity in the JV Company. The dividend stream would be dependent upon (a) the profitability and (b) the dividend policy of the JV Company. Profitability would be the difference between the revenue (i.e. the unit sale price times the number of units sold) and the project cost (return to equity holders, debt repayment and operating costs).

The annual operation and maintenance cost is deemed to be 3.5%⁹⁷ of the capital cost.

A Power Purchase Agreement (PPA), which specifies the purchase price for the hydro output, is agreed annually with the buyer. This annual agreement of the power price implies a significant risk for a long-term (30 to 50 year) concession arrangement.

7.12 Reporting

Joint venture partners to MOEP send monthly fiscal reports to the Budget Department of the MOF. These reports provide information on domestic sales of the free share of electricity sold by the MEPE. In addition, each JV company is externally audited annually, with the audit reports submitted to the Office of the Auditor General and the MOF. At the time of completing this report (July 2014), Shweli 1 has been audited five times, whereas Tapein 1's first audit is currently being prepared. The audited accounts for each joint venture company are confidential. Making the accounts available for an EITI-appointed independent administrator would therefore require a legal framework developed by the MSG and formalised and approved by the GOUM.

⁹⁵ e.g. the CPI JVC has seven hydro projects

⁹⁶ Equation for tariff or charges per unit of energy consumed or produced

⁹⁷ The International Energy Agency assumes a figure of 2.2% of capital cost for the O&M cost of large hydropower projects

Chapter 8: Society and the Environment

For decades, Myanmar citizens who live in project-affected areas have been subjected to large-scale natural resource extraction and development without adequate environmental management and social protection controls in place.⁹⁸ This is slowly changing as the current administration begins to establish improved environmental legislation. The GOUM is also developing the technical capacity to allow greater public participation in decision-making around natural resource development. While a new environmental law is in place and rules for ESIAs are beginning to be enforced, there is little legislation on social impacts. Additionally social impacts have conventionally received very little attention in Myanmar, as under the previous government the freedom of speech and association necessary to gain attention for these issues did not exist.

This chapter provides information on environmental and social matters as they relate to the extractive industries operating in Myanmar. Firstly, a brief “snapshot” of the key social and environmental conditions or indicators will be presented to provide context. The chapter will then outline the existing regulatory and institutional framework for environmental and social impact assessments (ESIAs) and impact management related to the extraction of minerals and oil and gas. Finally, some key current environmental and social impacts of the extractive industries sector will follow the discussion of the formal legal framework to provide concrete examples of where the government’s current environmental and social safeguards practices are inadequate. Specific regulatory information related to hydropower development is found in Chapter Seven above. Reference will be made to the controversial (and now suspended) Myitsone Dam at the end of this section to provide an example of how social (including peace and security issues) and environmental concerns related to its construction have been serious enough to halt the project, in all likelihood for the short, medium and perhaps even long term.

8.1 The Policy and Legal Framework

The 2008 Constitution of Myanmar provides for the conservation of Myanmar’s physical environment and enables the passing of environmental legislation by Parliament. Informing Myanmar’s environmental management framework is the National Environment Policy of Myanmar, 1994. Based on this policy, the MOECAP developed the current Environment Conservation Law, 2012. Since the law was promulgated, the ministry has been preparing accompanying regulations to bring life to the principles embedded in the law, including the ESIA Procedures, which, at the time of writing have not yet been finalised.

The National Environment Policy

“To establish sound environment policies in the utilization of water, land, forests, mineral, marine resources and other natural resources in order to conserve the environment and prevent its degradation, the GOUM hereby adopts the following policy: The wealth of a nation is its people, its cultural heritage, its environment and its natural resources. The objective of Myanmar’s environment policy is aimed at achieving harmony and balance between these through the integration of environmental considerations into the development process to enhance the quality of life of all its citizens. Every nation has the sovereign right to utilize its natural resources in accordance with its environmental policies; but great care must be taken not to exceed its jurisdiction or infringe upon the interests of other nations. It is the responsibility of the State and every citizen to preserve its natural resources in the interest of present and future generations. Environmental protection should always be the primary objective in seeking development.”

The policy was proclaimed through the Gazette in accordance with Notification No. 26/94 dated 5 December 1994, of the GOUM. A description of environmental legislation that has been developed on the basis of this policy is included in Table 20.

⁹⁸ See the various CSO reports listed in Annex 8.

Table 20: Environmental Protection Legislation⁹⁹

Legislation	Status	Key Objectives
Environmental Conservation Law, 2012	Promulgated	Provides the overarching framework for environmental protection and conservation of natural resources in Myanmar. Specifically: To integrate environmental conservation values in the sustainable development process; to enable a healthy and clean environment, as well as cultural preservation; to reclaim disappearing ecosystems; to prevent or manage loss of natural resources; to promote public awareness; to enable international cooperation; to promote cooperation between government, international organisations, NGOs and individuals in matters of environmental conservation. (These objectives summarise Chapter II, Objectives, of the Environmental Conservation Management Law, 2012). Note that this law does not include provisions for MOECF to conduct Strategic Environmental and Social Assessments (SESAs). Nonetheless, MOECF is considering undertaking SESA and may require development partner support in this regard.
Environmental and Conservation Rules, 2013 (for the Environmental Conservation Law)	Approved in June 2014	These are regulations for the Environmental Conservation Law.
ESIA Environmental Impact Assessment Procedures, 2013	Drafts have been completed and stakeholders consulted. The Procedures are due to be submitted to the Minister of MOECF at the time of writing.	Provide guidance on how to operationalise the requirements outlined in the Environmental Conservation and Foreign Investment Laws.
Environmental Quality Standards	Being drafted at the time of writing	To be used alongside ESIA procedures to specify the environmental thresholds that must be met by development projects and activities. These are proposed interim ambient air, noise and water quality standards, and industry emission standards referenced against those being applied internationally and by Greater Mekong Sub-region (GMS) countries.
ESIA Technical Guidelines	Being drafted at the time of writing	To provide ESIA practitioners and third parties with a common framework for ESIA reporting.
Foreign Investment Law, 2013	Passed	Sets out foreign investor ESIA requirements for identification and management of negative social and environmental impacts of development.
Foreign Investment Rules, 2013	Passed	The rules specify that the investor's protection or mitigation measures on the social and environmental impact must be submitted with the proposal for investment and subjected to comment by the MOECF.

⁹⁹ In the legislation reviewed, it is frequently implied or explicitly stated that "social" protection is included under the term, "environment".

Social Obligations

Some extractive industries sector companies are engaged in quite substantive CSR initiatives on a voluntary basis (as outlined in section 4.11 of this report). In the absence of any kind of legal requirement or framework for community development, such as a Community Development Agreement (CDA); an Impacts and Benefits Agreement (IBA); or a Social and Labour Plan (SLP), companies are only required to mitigate negative impacts around the extractive industries (as per the Environmental Conservation Law, 2012), not to contribute to development. The tendency is for companies to contribute voluntarily to obtain a de facto "social licence to operate", especially in areas where there is conflict, competing land uses, relocation of people or economic activities.¹⁰⁰ Some CSO sceptics maintain that it is easier for foreign owned companies to construct schools and hospitals, than address land expropriation issues, human rights concerns and environmental management.

Labour (Social Protection)

Labour laws in Myanmar are out-dated. There is no single employment law, instead a number of laws including the Leave and Holiday Act (1951), the Factories Act (1951), Workman's Compensation Act (1923), Employment and Training Act (1950) and others, are used as required. The country is in the process of strengthening its labour laws and has passed legislation providing worker rights regarding organised labour. In Myanmar, strikes were effectively banned until modern labour legislation was enacted in October 2011, notably, the Labour Organisation Law. Additions to the legal labour management framework such as the Settlement of Wage Dispute Law, 2012 have been recognised as a positive step forward but weaknesses still exist (ILO, 2013).

Figure 31: Jade Mining in Myanmar (Thevelvetrock.com)



In addition to the above-mentioned laws, the International Labour Organisation (ILO) and the GOUM have agreed to a mechanism that gives Myanmar citizens the right to lodge complaints alleging the use of forced labour. This complaints mechanism is designed to allow genuine victims of forced labour, with the assistance of the ILO Liaison Officer, an opportunity to seek redress and/or remedies from the government authorities in full confidence that no retaliatory action will be taken against them.

Table 21: Key Social Protection Safeguards – Labour Legislation

Legislation	Status	Key Objectives
Settlement of Wage Dispute Law, 2012	Passed and being implemented.	To provide guidance dealing with labour-management issues and to recommend mechanisms for dispute resolution. Disagreements between employers and workers are to be settled by an ascending system of dispute resolution bodies (workplace coordinating committee, conciliation body, arbitration body, arbitration council). Only after the dispute has gone through the arbitration body may the union call a strike.
Foreign Workers Law and Rules	The Ministry of Labour, Employment and Social Welfare is, at the time of writing drafting a foreign workers law and accompanying rules.	The law will cover the appointment, dismissal, suspension, entitlements of the foreign workers working in Myanmar. It will also specify employer requirements regarding job site safety and occupational health.

¹⁰⁰See CSR programme of MPRL E&P Pte Ltd as an example of voluntary community development contributions.

Legislation	Status	Key Objectives
Labour Organisation Law, 2011	Passed and being implemented.	To provide a framework for Unions in Myanmar. ILO has commented that although the law provides the right of workers to organise for the first time since military rule, protection against dismissal and discrimination are still weak. There are no effective penalties against employers who fail to comply with reinstatement orders from the arbitration bodies and the arbitration council

8.2 Institutional Arrangements for Social and Environmental Regulation

Since the development of larger scale mining, oil and gas projects require foreign investment, the institutional arrangements most relevant to this study are included here. The overarching legislative framework for these requirements can be found in the Foreign Investment Law and the Foreign Investment Rules, both of 2013 (and already analysed in Chapter Two above).

Key Institutions Related to Social and Environmental Management

Ministry of Environmental Conservation and Forestry (MOECAF)

"Responsible for environmental protection (including ESIAs/ESMPs) related to any development project and for managing the forests of Myanmar. In terms of how decisions are made internally (within MOECAF), The National Environmental Conservation Committee was formed in 2004 and re-formed in April 2011, and now serves as the focal organisation for environmental matters. It is chaired by MOECAF, formerly the Ministry of Forestry; the Committee's membership includes 19 ministries. The Director General of the Department of Planning and Statistics in MOECAF serves as the secretary. In September 2011, the name of the Ministry of Forestry was changed to Ministry of Environmental Conservation and Forestry (MOECAF) with the aim of developing a body dedicated to environmental conservation measures. Four institutions under MOECAF are performing their specific duties and responsibilities mainly related to environmental conservation and forestry." (ADB, 2013).

Ministry of National Planning and Economic Development (MNPED)

The MNPED is responsible for coordinating economic development initiatives through coordinated planning across all ministries as noted in Chapter Two. Three officials from the MNPED sit on the thirty-nine member ESIA Report Review team which is currently assessing the draft ESIA report for the Letpadaung copper project.

Myanmar Investment Commission (MIC)

The MIC is responsible for assessing proposals for investment into all business related sectors in Myanmar; ensures that the social and environmental responsibilities of investors are vetted through MOECAF before a permit is awarded. The MIC has a key role in implementing the Foreign Investment Law, 2013.

Line Ministries

The line ministries are responsible for managing particular sectors (economic, social and administrative). They provide technical input into proposals for investment, ensuring that the investor has the technical, financial and other relevant capabilities related to the project. As noted above, the Mines Law 1994 contains provisions related to environmental conservation and to compensation for land expropriation. The PSCs that MOGE manages and that govern the petroleum sector (at least the model PSC) has general environmental protection provisions, but lack specificity.

Region/State Administrations

These are responsible for the administration of local governance in the regions and states of Myanmar. The sub-national units provide comments on the social and environmental aspects of an application for investment into Myanmar.

The Ministry of Labour, Employment and Social Welfare

The ministry is responsible for the social security and labour relations in Myanmar; as well as for the development of social and labour legislation and monitoring, including a Social Impact Assessment (SIA) framework.¹⁰¹

8.3 Social and Environmental Issues Related to Extractive Industries Sector Development (where the formal regulatory system has failed)

This section presents examples of social and environmental issues related to mining (various sizes) and energy related projects. The discussion is not intended to be exhaustive, rather to illustrate the prevalence and types of problems experienced by project-affected communities who often suffer the consequences of negative impacts, either on their air, soil and water supply, or from dislocation, lack of compensation and loss of economically generating activities.

The examples put forward here are mostly legacy problems, resulting from years of military rule and civil war in which communities, particularly but not exclusively in conflict areas, had little power to vocalise their dissatisfaction with the way natural resource extraction affected their lives. Although the country is undergoing reform, mindsets, influences, and hierarchies of power from earlier eras persist and will take years to change.

While the MOM has been bound by a degree of environmental conservation application in the 1994 minerals legislation, the detail of these requirements has been lacking and the enforcement extremely weak. In addition, the MOM was the direct operator of many mines (with privatisation only starting in 2011), and hence, occupied a position of being both operator and regulator, untenable in terms of good governance or public accountability.

The Mines Law also specifies requirements related to labour-management matters but as the examples presented here illustrate, there has been limited enforcement of these requirements. Interviews with officials from the relevant ministries during our research indicated unfamiliarity with internationally accepted practices of mine inspection.

Tighter regulations related to ESIA/ESMP processes and social protection through labour legislation have only recently been introduced into the country. It is recognised that it will take some time before there is sufficient technical and resource capacity to implement the new regulations and mainstream them across the relevant government departments.

However, for the purpose of this study, it is useful to present examples of how poor environmental, social and labour practices of the past continue to affect communities of Myanmar – those under formal government control, those under EAG control, and those in areas where there are formal and informal governance structures.

Figure 32: Armed Forces move in to stop protesters ploughing fields near the Letpadaung Copper Mine development (EarthFirstNews.org)



¹⁰¹ Our team did not meet with the Ministry of Labour, therefore this report contains no substantive information on the SIA framework under that ministry.

Table 22: Public Reaction to Social and Environmental Problems Related to Mining¹⁰²

Issue	Description of Problem	Relevant Regulatory Framework (formal or informal)
Compensation for Negative Impacts The community is seeking compensation for years of damages to houses and farmlands allegedly caused by wastewater from a large tin mine.	A lawsuit brought by local villagers in the Tanintharyi Region seeks judicial resolution to their complaints concerning a tin mine.	Even in the absence of approved environmental assessment rules, the Department of Mines and Mining Enterprise 2 are required to follow the existing environmental requirements in the Mining Law, The Environmental Conservation Law, 2012 also specifies requirements for environmental management plans that should mitigate negative environmental impacts of mining activity.
Conflicts over Minerals Two EAGs are fighting for the control of gold in Eastern Myanmar.	Fighting between the Shan State Army South and the United Wa State Army was reportedly taking place as recently as April 2014 with the fighting brought on by a dispute over Wa gold mining activities in southern Shan State.	Territories between the two ethnic rebel groups have been delineated via mutual agreement, and rules are in place that prohibits incursions into the other's area of control. Both EAGs provide security for affiliated gold mining enterprises in Shan State. See the case study on Shan state towards the end of Chapter Four above for more on mining in the area.
Labour Disputes Protests have been taking place at a major copper mine in central Myanmar over labour issues. The recent protests (April/May 2014) follow many others taking place over the past 12 months regarding various social and environmental problems related to the mine.	The most recent dispute involved 224 local trainees from 26 villages in the area staging a protest along the main road leading up to the mining company's office. Workers are protesting for higher wages and better working conditions. Allegations of extremely poor wages and lack of proper safety equipment have been raised. Many of the trainees are the sons and daughters of parents whose land was confiscated to develop the mine.	The new Settlement of Wage Dispute Law should be implemented in these types of disputes, as well as the Organisation of Labour Law, (the former specifying conditions to be followed before strike action is considered to be legal). However, significant discrepancies in these legal frameworks have been noted by the ILO.
Destruction of Sacred Sites Local residents fear destruction of a pagoda on a mine site where significant development is occurring for copper mining. The structure was recently deconsecrated (March 2014).	Rumour regarding the planned destruction of the religious buildings has fuelled local protests.	The ESIA for one of the major copper mines is the first of its kind of a large scale mining project in Myanmar. It has been the subject of much discussion and scrutiny and is still in draft form (and is currently being reviewed by the ESIA Review Committee, as noted above). Community consultations were scheduled to be completed in a six-week period from the beginning of March 2014. It is expected that issues related to the preservation of sacred sites will be raised during this process and incorporated into the environmental and social management plan.
Abuse of Workers Labour conditions and environmental management practices are acknowledged by many CSOs and media outlets to be extremely poor in the jade mining sites in Kachin State.	According to the Kachin Development Networking Group, jade miners are working in unsafe conditions, facing abusive managers, and are exposed to numerous additional risks. "Shooting galleries" for heroin users operate openly alongside some	

¹⁰² It should be noted that the examples here have been reported in the media or in studies undertaken by CSO groups. It was beyond the scope of this study to investigate all sides of the issues to determine their veracity. www.minesandcommunities.org provided the source of much of the material unless otherwise stated.

	large jade mines. The common use of needles contributes to the high rates of HIV in the township of Hpakant in Kachin state. There are estimates that up to 40% of heroin-using jade miners are infected with HIV.	
Issue	Description of Problem	Relevant Regulatory Framework (formal or informal)
Waste Water Damage The villages of Chaung, Hmawbi and Gyan Kap located in the Ayeyarwaddy Valley are reported to have been affected for many years from the significant environmental impacts of the nearby firms that are mining for pebbles, considered to be valuable construction materials. Residents in the Three Pagodas Pass Townships have experienced widespread health issues.	It appears as though the farmland and houses of many families in the villages have been affected by poor discharge of waste water. Sludge is created by high pressure jets used to expose pebbles beneath the sand, creating a constant stream of muddy water that causes flooding. Careless storage of Antimony without adequate groundwater or seepage preventions has led to health issues.	The local township has stated that 13 mining firms received 1-year licences to mine an area of around 100 acres.
Relocation of Communities Development of Myanmar's second largest iron ore deposit in Shan State could result in additional relocation of communities (NOTE: it has been alleged that those already relocated have not received adequate compensation for destroyed farmland although this has not been verified).	The Pa-O Youth Organisation has noted (Robbing the Future, 2009) that "excavation of the site began in 2004, and work includes the conversion of around 11,000 acres of surrounding land for construction of a cement factory and iron processing plant. The steel factory is still under construction and due to open 2015." The Pa-O Youth Organisation has also reported that more than 25 villages' home to around 7000 mainly ethnic Pa-O people could be destroyed by the mining project and that a number of people have already been forced to move and have not received adequate compensation.	An ESIA was completed but has not been published. The Ministry of Industry now owns/manages the mine.

The table below cites examples where the regulatory process failed to deal adequately with problems related to oil and gas development in Myanmar. It is important to note that given the lead role that MOGE occupies in this sector's operations and regulation, the PSC between MOGE and the company is the primary legal mechanism that governs corporate behaviour, including social and environmental management. For new PSCs, the Environment Conservation Law of 2012 specifies that before a contract is signed an ESIA must be conducted and an ESMP must be prepared following the ESIA. The current model PSC requires that the developer initiate corporate social responsibility activities in the contract area.

Much has been written and discussed regarding the Shwe Oil and Gas Pipeline (including in Chapter Four above) and the negative impacts suffered by communities located close to the pipeline construction area, as well as the implications for

the national peace process. The table will not go into these matters in detail but will reference them as an example of the inadequacies of the regulatory system.

Table 23: Social and Environmental Problems Related to Oil and Gas Development

Issue	Description	Relevant Framework	Regulatory
Shwe Oil and Gas Pipeline The controversial Shwe Gas Pipeline, a joint venture between the China National Petroleum Corporation (CNPC) and MOGE as well as three other foreign firms: Daewoo International Ltd. (51 percent stake) in consortium with the Korea Gas Corporation (KOGAS), ONGC Videsh Ltd. of India, and GAIL Ltd. of India. The oil transport pipeline is constructed parallel to the gas pipeline and will enable oil to be imported to China from the Middle East and Africa. The 2,380 km crude oil pipeline will run from Maday Island in the Bay of Bengal off the coast of Arakan to Kunming, China. It is estimated to cost US\$ 1.5 billion and although already operating, once at full operational capacity transport 12 billion cubic meters of crude oil per year to China.	The pipeline connects Western Myanmar's Arakan State to China's Yunnan Province, cutting through many ethnic minority territories including those in Shan and Kachin States where conflicts are still ongoing. Human rights groups have protested the project, claiming that there have been farmland seizures without compensation or unfair compensation; forced labour; unfair working conditions, threats and intimidation against locals; increased militarisation of territories and other forms of human rights abuses. The pipeline may be responsible for increased fighting in Northern Shan state between rebels and the State Army.	An ESIA was completed by the project but has not been released for public information. Therefore, it is unclear as to the social and environmental impacts identified. It is also not clear whether an ESMP was ever drafted to deal with risks identified in the ESIA. Many concerned CSOs have called for the provision of "free, prior and informed consent" as a condition for ESIs, particularly in the case of the Shwe Pipeline, a project that has far-reaching ramifications for large groups of people living along its pathway.	
Maday Island Port CNPC is heading up the Maday Island deep-sea port construction project. The construction of the facility has been the subject of CSO scrutiny and protests.	The construction has already taken its toll on the Maday Island's mountainous environment and about 2,400 residents living in six villages. Locals have complained that farmlands are being confiscated on Maday Island in order to build the port and refinery and in Kyaukpyu, for construction of an international airport, hotels, golf courses and hospitals. In addition, about 500 acres of farmland near Gangawta Pagoda in Kyaukpyu were confiscated for the construction of a gas refinery. Some CSO groups contend that "five mountains on Maday Island have already been demolished and many plots of garden land have already been confiscated and cleared."¹⁰³ They further allege that operations for seaport construction in late October 2009 around Maday island killed hundreds of fish and destroyed important local fishing grounds where local people have been fishing for centuries.¹⁰⁴	It is assumed that the ESIA for the entire pipeline project would have included the identification of social and environmental impacts of the construction of the deep sea port. However, as noted, this has been difficult to determine due to the secrecy surrounding the ESIA process.	

¹⁰³ <http://www.burmanet.org/news/2011/03/01/irrawaddy-maday-island-deep-sea-port-no-boon-to-locals-%E2%80%93-khin-oo-thar/>

¹⁰⁴ <http://news.nationalgeographic.com/news/energy/2014/09/140905-myanmar-china-burma-drilling-oil-energy-asia-petroleum/>

Chapter 9: Implications for EITI

While this report serves as a baseline assessment of the extractive industries sector in Myanmar with a focus on information, context and analysis rather than providing explicit recommendations, there are nonetheless aspects of the analysis above that have clear implications for the future implementation of EITI in Myanmar. Now that Myanmar has been recognised officially as an EITI candidate country and has until January 2016 to produce its first EITI report, what follows are a set of broad reflections on how the findings of this report can be brought to bear on the next eighteen months of EITI implementation in Myanmar. These “implications for EITI” will take into account the broader reform agenda and a brief capacity assessment within the institutions that will directly implement EITI. Given the specificity of Myanmar’s history and the complex nature of its extractive industries sector (defined for the purpose of this report as oil and gas, mining and hydropower), what is required above all else is an innovative approach to implementing EITI that takes account of the key features of the political economy of the country. It may be, for instance, that instead of a monolithic approach to EITI reports, the MEITI MSG decides to take a sector-by-sector route, producing separate but parallel reports on oil and gas, mining and other sectors it decides to include in the scope of EITI.

Peace Process

There is a wealth of literature on the linkage between natural resource extraction and the long-running conflict in Myanmar. Research for this report, particularly the field visits, highlighted this linkage. Careful consideration will need to be given to sequencing of EITI reporting and how to incorporate extractive operations currently in conflict affected areas, in the context of efforts to secure a national ceasefire and the ensuing political dialogue.

Contracts and Beneficial Ownership

There is no reason why new contracts and agreements in the oil and gas, mining and hydropower sectors cannot become public documents, in line with emerging global trends towards contract transparency. The MSG may wish the scoping study that follows this report to explore this idea in some depth.

The EITI 2013 Standard introduced the idea that beneficial ownership of extractive industries sector operations should be considered as part of the work of EITI reporting. A publicly available register (including beneficial ownership information) is recommended, whereas government and state-owned enterprises, as well as joint ventures not publicly listed must also disclose their beneficial owners. This requirement may be a significant issue for MEITI, starting from the first report (for the 2014-15 financial year). In the course of conducting research for the preparation of this report, a list of nearly 30 beneficial owners in the oil, gas and mining sectors was identified, indicating that despite sensitivities, it is possible to obtain beneficial ownership information. A study on beneficial ownership is planned as part of the MEITI work plan, and the MSG will need to take a holistic perspective on the issue, balancing the recommendations and requirements of the 2013 Standard against what is collectively taken to be in the realm of being feasible in Myanmar.

Access To / Quality of Information

There are a range of issues related to access to and the quality of information in circulation about the extractive industries sector in Myanmar. The first major issue is philosophical in nature and involves an appreciation of the means by which information and knowledge was historically produced under military rule. Wherever required, reports within government stated the necessary context, hierarchies, relationships and patronage networks and often had no relationship with the truth. For example, the production data reporting system upon which mining statistics are generated likely bears little relationship to actual mining production volumes. This issue is compounded by widespread tax avoidance in the mining sector, with revenues often up to ten times larger in reality than the figures that appear in government reports. The culture of companies having two sets of books is endemic and will take considerable time and upgrading of enforcement practices to wean out.

Sequencing

Information from mining in conflict-affected areas is likely to be a challenge in the first years of EITI reporting. Information forwarded for EITI reporting may be patchy and involve under-reporting of the production volumes. In particular, this

applies to jade, gemstones and gold mining in Kachin State, various mineral types in Shan state, as well as gold mining in Kayin State. A sensitive and gradualist approach to increasing the scope of EITI reporting applies to Myanmar more than to perhaps any other EITI implementing country.

International Financial Reporting Standards (IFRS)

A more technical issue is the Myanmar Accountancy Council adopting the remaining IFRS measures (9-13) in good time ahead of the first MEITI report. The MSG may wish the scoping study to examine what would be involved in the adoption of these measures from a legal, institutional and technical perspective.

Confidentiality clauses in existing extractive industries sector contracts and agreements will need to be reviewed, in order to facilitate EITI reporting. Alternatively (or in addition), some form of executive order or formal notification from the GOUM will be required to mandate the submission of audited accounts to the independent administrator. This process of authorisation will also need to take place in advance of the scoping study.

There is a “quick win” opportunity to include a short reference to compliance with EITI reporting requirements in the draft laws currently in parliament (for mining, petroleum and hydropower). The clause need only have words to the effect of “Reports submitted by licence-holders must be in accordance with the requirements of the Myanmar Extractive Industries Transparency Initiative as determined by the multi-stakeholder group.”

A government directive will need to be put in place in advance of any MEITI reports relating to the mining sector, to ensure that all companies required to report, do report.

Auditing Delays

In terms of EITI reporting processes, delays in the submission of audit reports by the SEEs to the OAG will necessarily mean delays to the production of EITI reports themselves. On present form, it will not be possible for all oil and gas operations (whether from producing fields or acreages in exploration) as well as all large-scale mining companies to be audited in time for an EITI report to be published within a year on the financial year in question. The MEITI MSG may therefore decide, at least initially, for the first EITI report to be based on a previous financial year (e.g. for the 2016 MEITI report to be based on 2013-14), or the decision may be made to include and reconcile 2014-15 data, but not on the basis of audited reports. Alternatively, the MSG may decide to do both. The scoping study following on from this report should recommend options in this regard. Again, the MSG (and the GOUM) may choose to solicit back-office capacity support to the OAG specifically for the first EITI report to ensure that audit reports have been comprehensively assessed within the time window permitted to conclude a first report by January 2016. Finally, support to the OAG should also take into account both the Ministry of Finance's Modernization of Public Financial Management programme and the planned support to MOGE on reporting and management processes from the US State Department.

Inclusion of Pre-Operational Companies

The MSG may wish to consider for inclusion in the first reconciliation report extractive operations currently in planning/exploration phase that may come on stream within 18 months of July 2014 (the date MEITI became an EITI candidate country), as significant payments such as signature bonuses will be made to government in this period.

Hydro

Hydro development in Myanmar has huge potential with billions of dollars of annual revenues possible, depending upon the extent of the development. EITI platforms and even sub-national MSGs (developed in time) would provide the ideal space for this dialogue to happen. More practically, in terms of EITI reporting, the MOEP informed us that they already produce audited accounts for the power sector which could be submitted as part of the EITI process. There is therefore no significant reason why the hydropower sector should not be considered by the MEITI MSG to be included within scope of the first EITI report.

The Dangers of Over-Expectation

Despite the tireless outreach efforts of both MDRI and the recently formed MATA coalition, there is relatively weak understanding of EITI even among core stakeholder groups in Yangon and Nay Pyi Taw. The risk most closely associated with this sketchy understanding is that EITI can quickly be viewed as a panacea to the governance challenges

In Myanmar. The reality is, implementing EITI in Myanmar will not directly address the problem of land appropriation/confiscation and human rights abuses, or offer solutions to pollution and other environmental damage.

**** Finally, EITI will not provide recommendations on how best to distribute natural resource wealth to promote economic development across the country. EITI is most effectively implemented where it plays a narrow but focused role in improving the quality of extractives information and analysis and being a platform for discussions around that information to take place. This therefore poses a specific set of communication challenges for the MEITI MSG and the MEITI Secretariat. MEITI therefore must design and implement a sophisticated, well-resourced and responsive communication campaign to clearly communicate what EITI is and the specific benefits it can provide, but also to manage expectations and communicate what EITI is *not* and what benefits it cannot be expected to deliver.

Role of Government Institutions

MDRI's role as the secretariat for EITI will slowly transition to government during 2015, with the MEITI Secretariat in future residing in the Budget Department of the MOF. This will require transition planning. This will shift the question of whether there is sufficient capacity to effectively implement EITI onto the core government institutions, the MOF, the Auditor General and the line ministries. One risk of EITI everywhere is that the appointed independent administrator (the firm contracted to conduct the EITI report) does not transfer analytical and methodological knowledge to the institution that hosts EITI (and the government agencies most closely associated with EITI through MSG participation).

In addition, in the immediate aftermath of candidacy recognition, there is now an opportunity for the MSG to discuss whether the full range of government institutions are involved in EITI. There should, for instance, be a discussion on whether the MNPED should play a more central role. More specifically, the MSG may want to consider whether the Central Statistical Organisation (CSO) should be involved in EITI, in particular if this organisation and its capacity is strengthened. One option would be for EITI data to be given the CSO imprimatur. If the CSO were involved in the EITI reporting process, EITI capacity building into the CSO would have the added benefit of improving the statistical competence of the CSO more generally. This is however only a suggestion, not a recommendation and there may be good reasons why EITI should be kept separate from the work of the CSO that the MSG may also wish to consider.

Civil Society

The MATA coalition has developed remarkably quickly and benefits from a disciplined informed and focused leadership. In addition, the decentralised decision-making structure of the coalition will contribute to a diverse range of views. While MATA may function effectively at the national level, it is likely that the sub-national coalitions are on the one hand, closer to the real issues that communities face from extractive industries sector operations in their midst, on the other hand, less capacitated to effectively address those challenges and advocate responses to the sub-national government. In addition, historical legacies and the contemporary political-economy realities of state and region governments mean that local groups often face more pressure to stay silent than those operating at national level. EITI in Myanmar is likely to be tested by pressures to limit the free expression of civil society views at sub-national level. For Myanmar to proceed from being a candidate country to full compliance with EITI, further legal protection for CSOs may need to be considered in future.

The Scoping Study

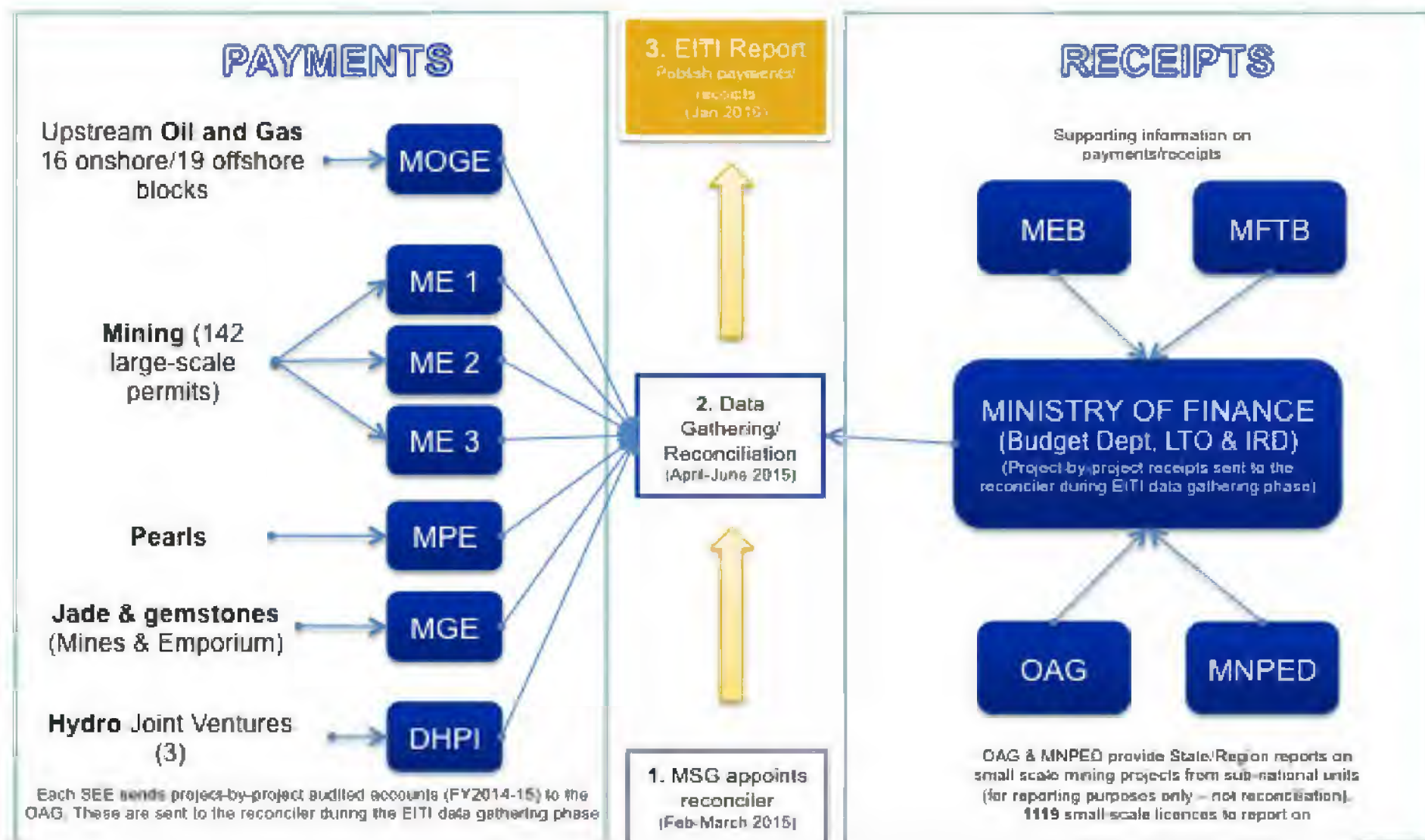
The scoping study will determine which companies should be included within the first MEITI report and what payment flows they will need to report on. It is likely (and widely expected) that the oil and gas sector will require full reporting, in terms of disaggregated "project-by-project" reporting, as well as beneficial ownership analysis (including the most recent bid rounds). It is also likely that the major mining projects in the country will also be included (a reasonable expectation would be that the materiality threshold could be set to include the top twenty or thirty mining projects, any smaller number would be too small a percentage of total mining sector contributions to the economy, any larger number might pose too many logistical and information-based challenges to the independent administrator, although all large mining licences may be considered). The jade and gemstones sector brings with it a unique set of challenges for EITI reporting, however, there is in principle no issue with reconciling payments to and from the formal annual government Gems Emporium.

The MSG will have to draw up a detailed terms of reference for this scoping study and will receive advice and support in doing this from the EITI International Secretariat. The MSG may wish to consider the following for inclusion in the scoping study:

- Recommend which companies/projects/sectors should report and when;

- Recommend a materiality threshold for the mining sector;
- Assess quality of data from small-scale mining licence-holders;
- Assess the quality of the audit reports received by the OAG;
- Detailed assessment of the receipt records/reports maintained in the Ministry of Finance,
- Financial flow analysis for the SEEs (especially non-tax flows from the SEEs to the budget);
- Assessment of the Other Accounts and the relationship between the MFTB and associated accounts held overseas (such as in Singapore) and exchange rate practices;
- Assess pipeline transit fees,
- Recommend a 5 or 10-year reporting road-map (trade-off between comprehensiveness and feasibility), which takes into account political timeframes and incentives. This roadmap can also provide options, such as a pilot report on oil and gas in 2015;
- Assess major CSR programmes (those mandated by law/the contract and voluntary schemes);
- Analyse social development funds at state/region level;
- Provide training, allow for shadowing to local partner and GOUM agencies;
- Design specifications for simple web-based data upload gathering process,
- Identify the weaknesses in the OAG and define the kind of support that may be required to conduct the first report; and
- In line with the new approach to break up the annual EITI Report into smaller reports, the MSG may also with the scoping study to provide the analysis required to fulfil requirement 3 of the EITI Standard.

Figure 33: Proposed MEITI Reporting Process



Annex



Annex 1: References

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Annex 2: Large Scale Mining Leases

No.	Organization	Region/State	Township	Mineral Type
1	Myanmar Porcelain & Earthenware Enterprise	Ayeyarwady	Kyankin	Limestone (industrial raw)
2	Myanmar Porcelain & Earthenware Enterprise	Ayeyarwady	Kyankin	Limestone (industrial raw)
3	Myanmar Porcelain & Earthenware Enterprise	Ayeyarwady	Ngapudaw	Glass Sand
4	Ayarwaddy Myit Phyar Co. Ltd	Kachin	Moe Mauk	
5	Htoo International Industry Group Co., Ltd.	Kachin	Wai Maw	Iron Ore
6	San Linn International Export, Import Co.Ltd	Kachin	Wai Maw	Limestone (Industry)
7	Kayah State Mining Co. Ltd	Kayah	Hpasauung	Tin + tungsten
8	Mayflower Mining Enterprise Ltd.	Kayin	Myawadi	Zinc
9	Myanmar Economic Cooperation	Kayin	Hpa-an	Limestone(Industrial Raw Material)
10	No.(1) Cement Factory (Myaing Kalay)	Kayin	Hpa-an	Iron Ore
11	No.(1) Cement Factory (Myaing Kalay)	Kayin	Hpa-an	Clay
12	No.(1) Cement Factory (Myaing Kalay)	Kayin	Hpa-an	Clay
13	Tha Byu Mining Co. Ltd	Kayin	Kya-In-Seik-Kyi	Antimony
14	Silver Lion Mining Co. Ltd.	Kayin	Hpa-an	Granite
15	United Cement Co. Ltd	Kayin	Hpa-an	Limestone(Industrial Raw Material)
16	Mayflower Mining Enterprise Ltd.	Kayin	Kya-In-Seik-Kyi	Coal
17	Mayflower Mining Enterprise Ltd.	Kayin	Kya-In-Seik-Kyi	Coal
18	Mayflower Mining Enterprise Ltd.	Kayin	Kya-In-Seik-Kyi	Coal
19	Myanmar Porcelain & Earthenware Enterprise	Magway	Thayat	Limestone(Industrial raw)
20	No (3) Heavy Industries Enterprise	Mandalay	Mattaya	Marble
21	No (3) Heavy Industries Enterprise	Mandalay	Myitthar	Marble
22	No (3) Heavy Industries Enterprise	Mandalay	Kyaukse	Marble
23	Myanmar Golden Point Family Co. Ltd.	Mandalay	Patheingyi	Gold
24	Union of Myanmar Economic Holdings Ltd.	Mandalay	Kyaukse	Limestone
25	No(3) Heavy Industries Enterprise	Mandalay	Kyaukse	Limestone
26	No(3) Heavy Industries Enterprise	Mandalay	Myitthar	Feldspar
27	Myanmar Economic Cooperation	Mandalay	Mattaya	Marble
28	U Taw Taw and Sons Co. Ltd	Mandalay	Mattaya	Marble

No.	Organization	Region/State	Township	Mineral Type
29	No(3) Heavy Industries Enterprise	Mandalay	Pyin Oo Lwin	Bauxite
30	No(3) Heavy Industries Enterprise	Mandalay	Thazi	Feldspar
31	No(3) Heavy Industries Enterprise	Mandalay	Kyaukse	Iron Ore
32	No(3) Heavy Industries Enterprise	Mandalay	Thazi	Feldspar
33	Union of Myanmar Economic Holdings Ltd.	Mandalay	Sint Gaing	Granite
34	UE Export and Import Co.Ltd.	Mandalay	Kyaukse	Limestone
35	Max Myanmar	Mandalay	Lewe	Limestone
36	Htoo International Industry Group Co., Ltd.	Mandalay	Thazi	Limestone
37	Myanmar Naing Group Co. Ltd.	Mandalay	Thazi	Limestone
38	Madalay Cement Industries Co. Ltd.	Mandalay	Kyaukse	Limestone
39	Shwe Taung Mining Com.Ltd	Mandalay	Thazi	Limestone
40	Myanmar Naing Group Co. Ltd.	Mandalay	Kyaukse	Limestone
41	Triple A Cement International Co. Ltd.	Mandalay	Kyaukse	Limestone
42	Green Asia LTD	Mandalay	Thazi	Limestone
43	Tet Lu Investment Group Industry Company	Mandalay	Sint Gaing	Limestone
44	Tet Lu Investment Group Industry Company	Mandalay	Thazi	Limestone
45	Tet Lu Investment Group Industry Company	Mandalay	Thazi	Limestone
46	Tet Lu Investment Group Industry Company	Mandalay	Thazi	Limestone
47	Tet Lu Investment Group Industry Company	Mandalay	Thazi	Limestone
48	Tet Lu Investment Group Industry Company	Mandalay	Thazi	Limestone
49	Directorate of Defence Industries	Mandalay	Pyin Oo Lwin	Iron Ore
50	Directorate of Defence Industries	Mandalay	Patheingyi	Limestone
51	No(3) Heavy Industries Enterprise	Mandalay	Kyaukse	Glass Sand
52	No(3) Heavy Industries Enterprise	Mandalay	Kyaukse	Limestone
53	NayPyitaw City Development Committee	Mandalay	Lewe	Limestone
54	Good Brothers Missionary Company	Mandalay	Pyin Oo Lwin	Limestone
55	Triple A Cement International Co. Ltd.	Mandalay	Kyaukse	Limestone
56	Edin Energy and Natural Resources Development Co.	Mandalay	Pyin Oo Lwin	Barytes
57	Edin Energy and Natural Resources Development Co.	Mandalay	Pyin Oo Lwin	Barytes
58	Edin Energy and Natural Resources Development Co.	Mandalay	Pyin Oo Lwin	Barytes

No.	Organization	Region/State	Township	Mineral Type
59	Myanmar National Prosperity Public Co. Ltd	Mandalay	Yamethin	Gold
60	Shwe Moe Yan Co. Ltd	Mandalay	Yamethin	Gold
61	No(1) Heavy Industries Enterprise	Mandalay	Thazi	Limestone
62	Mandalay Cement Industries Co. Ltd.	Mandalay	Kyaukse	Limestone
63	Shwe Pauk Pauk Mining Co. Ltd.	Mandalay	Thazi	Coal
64	Shwe Pauk Pauk Mining Co. Ltd.	Mandalay	Thazi	Coal
65	Union of Myanmar Economic Holdings Ltd.	Mon	Bee Linn	Granite (Decoration)
66	Union of Myanmar Economic Holdings Ltd.	Mon	Bee Linn	Granite (Decoration)
67	Union of Myanmar Economic Holdings Ltd.	Mon	Kyaikhto	Granite (Decoration)
68	Myanma Swan Pakar Industrial Company	Mon	Kyaik Mayaw	Limestone (Industrial Raw Material)
69	Zon Industrial and Production Ltd (?)	Mon	Kyaik Mayaw	Limestone (Industrial Raw Material)
70	Pacific Link Cement Industry Ltd.	Mon	Kyaik Mayaw	Limestone (Industrial Raw Material)
71	Farmer Pho Yarzar Mining Co. Ltd.	Mon	Kyaik Mayaw	Limestone (Industrial Raw Material)
72	Max Myanmar Co. Ltd.	Naypyidaw	Lewe	Limestone(Industry)
73	Naypyidaw Development Committee	Naypyidaw	Lewe	Limestone(Industry)
74	SumcoSong Da Joint Stock Company	Rakhine	Taung Koke	Marble
75	Union of Myanmar Economic Holdings Ltd.	Sagaing	Sar Lin Gyi	Copper
76	Htoo International Industry Group Co., Ltd.	Sagaing	Kalaywa	Coal
77	Tun Twin Mining Co. Ltd.	Sagaing	Kalaywa	Coal
78	Union of Myanmar Economic Holdings Ltd.	Sagaing	Kalaywa	Coal
79	Asia World Industries and Mining Co. Ltd	Sagaing	Maw lite	Coal
80	Yangon City Development Committee	Sagaing	Maw Lite	Coal
81	Union of Myanmar Economic Holdings Ltd.	Sagaing	Sar Lin Gyi	Copper Mineral
82	Myanmar CNMC Nickel Co,LTD	Mandalay/Sagaing	Thabeikkyin/Htee Chike	Nickel
83	Dagon Mining Co. Ltd	Sagaing	Maw Lite	Coal
84	Shwe Taung Mining Co. Ltd.	Sagaing	Kalaywa	Coal
85	Lay Oo Group Mining Co. Ltd.	Sagaing	Maw lite	Coal
86	Max Myanmar Co. Ltd.	Sagaing	Kalaywa	Coal
87	Htoo International Industry Group Co., Ltd.	Sagaing	Kalaywa	Coal
88	Tet Lu Investment Group Industry Company	Sagaing	Maw Lite	Coal

No.	Organization	Region/State	Township	Mineral Type
89	Asia World Industries and Mining Co. Ltd	Sagaing	Maw Lite	Coal
90	Mandalay Distribution and Mining Co. Ltd	Sagaing	Maw lite	Coal
91	Asia Phyto Mining Co. Ltd	Sagaing	Kanbalu	Limestone
92	Htarwara Mining Company	Sagaing	Kawlin	Gold
93	Myanmar Economic Cooperation	Shan (East)	Mongsat	Coal
94	Triple A Cement International Company Ltd	Shan (North)	Thi Paw	Coal
95	Myanmar Economic Corporation	Shan (North)	Lashio	Gypsum
96	UE Export Import Company Ltd	Shan (North)	Thi Paw	Coal
97	Win Myint Mo Industry Company Ltd	Shan (North)	Namatu and Lashio	Lead-Zinc Mixed Mineral
98	Linn Pyae Mining Company Ltd	Shan (North)	Naung Cho	Lead-Zinc Mixed Mineral
99	Ngwe Yi Pa Le' Mining Company	Shan (North)	Thi Paw	Coal
100	Asein Yaung Byuu Har Mining Company	Shan (North)	Namn Kham/Kut Khaing	Quartz
101	Tet Lu Investment Group Industry Company	Shan (North)	Naung Cho	Iron Rich Bauxite
102	Mine Htet Company	Shan (North)	Tant Yan	Coal
103	Mine Htet Company	Shan (North)	Lashio	Coal
104	Padamya Ooyin Mining Company	Shan (North)	Lashio	Coal
105	Ngwe Yi Pa Le' Mining Company	Shan (North)	Kyauk Mae	Iron Rich Bauxite
106	Ngwe Yi Pa Le' Mining Company	Shan (North)	Naung Cho	Limestone (Industry)
107	Ngwe Yi Pa Le' Mining Company	Shan (North)	Tant Yan	Coal
108	Ngwe Yi Pa Le' Mining Company	Shan (North)	Thi Paw	Gypsum
109	Ngwe Yi Pa Le' Mining Company	Shan (North)	Lashio	Coal
110	Defense Industry	Shan (North)	Lashio	Coal
111	First Resource Co. Ltd	Shan (North)	Thi Paw	Gypsum
112	Htun Khwe Paw Industrial Company	Shan (North)	Kyauk Mae	Coal
113	Dragon Cement Co., Ltd.	Shan (South)	Panglong	Industrial Limestone
114	Cornerstone Resources (Myanmar) Ltd.	Shan (South)	Mine Pon	zinc
115	Shan Yoma Nagar Co., Ltd.	Shan (South)	Panglong	Coal
116	No (3) Heavy Industries Enterprise	Shan (South)	Mauk Mai	Gypsum
117	Lay Oo Group Mining Co. Ltd.	Shan (South)	Ywangan	Coal
118	Top Ten Star Production Co. Ltd.	Shan (South)	Kalaw	Lead Enriching
119	Ngwe Yi Pa Le' Mining Company	Shan (South)	Yat Sauk	Coal
120	KBZ Industries Ltd.	Shan (South)	Taunggyi	Industrial Limestone

No.	Organization	Region/State	Township	Mineral Type
121	San Pya Industry Co., Ltd.	Shan (South)	Ywangan	Barytes
122	Asia World Co. Ltd	Shan (South)	Kalaw	Gold
123	GPS Joint Venture	Shan (South)	Kalaw	Lead mixture
124	Dragon Cement Co., Ltd	Shan (South)	Nam Sam	Coal
125	Myanmar Economic Corporation	Tanintharyi	Tanintharyi	Coal
126	Myanmar Pongpipat Company	Tanintharyi	Dawei	Tin + Tungsten
127	Myanma Tin - Tungsten Company	Tanintharyi	Tanyintharyi	Tin + Tungsten
128	Ngwe Kabar Myanmar Company Ltd	Tanintharyi	Pa Law	Tin + Tungsten
129	ANA	Tanintharyi	Ye Phyu	Tin + Tungsten
130	Myanmar Porcelaine & Earthenware Enterprise	Tanintharyi	Bote Pyin	Maganese
131	Ngwe Tun Taut Company	Tanintharyi	Dawei	Tin + Tungsten
132	Production Development Creating Limited (?)	Tanintharyi	Ye Phyu	Tin + Tungsten
133	Mayflower Mining Enterprise Ltd.	Tanintharyi	Dawei	Coal
134	Mayflower Mining Enterprise Ltd.	Tanintharyi	Dawei	Coal
135	Mayflower Mining Enterprise Ltd.	Tanintharyi	Dawei	Coal
136	Than Phyo Thu Mining Co. Ltd	Tanintharyi	Bokpyin	Coal
137	Mayflower Mining Enterprise Ltd.	Tanintharyi	Dawei	Coal
138	Mayflower Mining Enterprise Ltd.	Tanintharyi	Hta Wei	Coal
139	Mayflower Mining Enterprise Ltd.	Tanintharyi	Dawei	Coal
140	Sein Nga Man Mining Company Ltd.	Tanintharyi	Tanyintharyi	Tin + Tungsten
141	Ngwe Kabar Myanmar Company Ltd	Tanintharyi	Kyun Su	Tin + Tungsten
142	24 Hour Mining Co. Ltd.	Tanintharyi	Tanyintharyi	Limestone

Annex 3: TOR

Terms of Reference **Institutional and regulatory assessment of the extractive industries in Myanmar** **January, 2014**

Analytical Context

Studies have shown that when governance is good natural resources can be an important engine for growth and sustainable development. On the other hand, when governance is poor, countries dependent on these resources are disproportionately susceptible to poverty, corruption and conflict. For countries with extractive industries, a central developmental challenge is how to turn the resource curse into a resource blessing. Broad agreement exists on the appropriate macroeconomic and technical policies and institutional mechanisms to put in place to manage the resource paradox successfully. But it is also recognized that the key determinants of success for countries rich in extractive industries are the overall governance framework and the political economy of rent extraction and natural resource management. The Extractive Industries Transparency Initiative (EITI) is a global reporting standard which promotes greater transparency and accountability in extractive industries through reporting of government revenue collection, analysis of industry structures and facilitation of stakeholder consultation. Thirty-nine countries are members of EITI, of these 23 are fully compliant while 16 are candidate countries. Initiated in 2001, EITI has grown in reach and importance as a measure for improving extractive industries governance and helping countries manage the resource paradox. Several developed economies, including Australia, Germany, and the US are piloting or working toward EITI candidacy. In 2013 the reporting requirements were expanded.

EITI and Myanmar's Reform

In less than two years, Myanmar has undergone unprecedented political and economic reforms. Elections were held in December 2010 and a mostly civilian government took office in March 2011. The new Government has embarked on a range of political and economic reforms aimed at attaining national reconciliation, improving political and economic governance, re-integration of Myanmar with the global economy, and economic development. Key reforms include agreements with non-state armed opposition groups, release of political prisoners, free by-elections, the first ever open parliamentary discussions of the budget, near elimination of the previously very stringent controls on media and public expression, and a general push for enhanced transparency and accountability of government.

These changes are dramatic but there is much to be done. Myanmar has suffered from decades of authoritarian military rule, the longest running civil wars in the world, entrenched rural poverty, and mistrustful state – society relations. The country has among the worst social indicators in Asia, GDP per capita is between \$800 and \$1,000, and perceptions of corruption surveys rank the country as the second most corrupt in the world. The reform is still fragile and has yet to translate into improved well-being for citizens, amid high expectations.

Improved economic governance will play an essential role in securing the success of the reform process, credibility for the government, and translating reform into socio-economic gains for the majority of the population. A critical area is Myanmar's large and growing natural resource sector, including oil, gas, mining, and gemstones. Currently these sectors officially account for an estimated 35% of total exports, most of which attributed to gas. With the commencement of new gas operations during 2013, the contribution from extractives to total export is expected to exceed 50%. This does not account for large, unreported earnings from the gem trade.

Current off-shore gas production is estimated at 1,200 million cubic feet (MCF) per day, of which 900 MCF is exported. Central Statistical Office reported total sales figures in an amount of US\$ 3.5 billion in 2011-12. 2013 is expected to see new gas fields coming into production at a rate of 800 MCF per day. The bulk of earnings come from the Yadana and Yetagun off-shore gas fields which export gas directly to Thailand. A newly constructed gas and crude oil pipeline from near Sittwe to Yunnan was inaugurated in July, 2013, to export gas from the Shwe fields. All operations are guided by standard Production Sharing Contracts in which government revenue is to be collected from (a) sign-on bonus, (b) royalty, (c) production split, and (d) taxes. These contracts are managed by Myanmar Oil and Gas Enterprises, a state owned company.

Gemstone sales are considered to be the second-most important revenue stream for government although exact figures are not available. Presently, mining activities are conducted in a limited scale with reported export figures in 2011-12 of some US\$ 70 million. Notwithstanding, the number of operators is large with an estimated 2,500 gemstone licenses plus an additional 1,500 active mining licenses. At the same time, investor interest indicates that a strong surge in activity can be expected over the coming years.

Although an important source of government revenue, impacts from the extractive sector on the local economy are less notable since employment creation in the industry is limited and supply of oil and gas for the domestic market does not meet the actual and potential demand (e.g. national electrification rate is less than 25%). Further, oil, gas, and mining have been frequently subject of allegations of lack of transparency and accountability, due to the lack of publicly available information about contracting arrangements, payments made by companies, volumes of revenues received, and destination of revenues and extent to which revenues are included in budget. In addition, joint venture companies owned by the Myanmar military have participating interests, particularly in the mining sector. Finally, many of Myanmar's natural resources are concentrated in the ethnic minority states and regions, home to the world's longest running civil wars, and have fuelled generations of conflict.

Government Commitment

In December 2012, the Myanmar Government announced its intention to implement the EITI. This constitutes a welcome step in improving governance in Myanmar. Not only will compliance with EITI provide an unprecedented level of transparency with regard to revenues, it will provide a platform for discussion of larger policy goals with regard to accountable development of mineral and hydrocarbon resources and the use of the revenues earned from their extraction. As investment increases and mineral and hydrocarbon exploitation rises, it is of great importance that the extractive industries in Myanmar are subject to an accounting process which transparently records the licensing procedures and reports the flow of funds from companies to central or local authorities. Such a system would help to improve Myanmar's investment climate, sustain tax collection, support the national dialogue on development of natural resources, and enhance the credibility of the reform process.

Since the public announcement, there has been substantial progress toward EITI candidacy, and the President and leading Cabinet ministers continue to make strong statements of support the EITI. A cabinet-level Leading Authority has been established to oversee the implementation of the EITI, under the leadership of U Soe Thane, Minister in the President's Office and one of the lead reformers. The members of the Leading Authority include (i) the President's Office, (ii) the Ministry of Finance and Revenue, (iii) the Ministry of Energy, (iv) the Ministry of Mines, and (v) the Ministry of Environmental Conservation and Forestry. The Center for Economic and Social Development under Myanmar Development Resources Institute (MDRI-CESD) was asked by the President to take on the role as Coordinator to implement all the necessary tasks required to form the MSG and accomplish other EITI-related objectives. MDRI-CESD has established a Myanmar EITI office and appointed/recruited an EITI team. Capacity and knowledge of EITI within the MDRI team has deepened significantly. MDRI has undertaken a continuous stream of meetings, formal and informal, with Government,

civil society, and operators in order to build awareness, maintain support, and complete the steps necessary for Myanmar to become a candidate. In addition civil society, with support from Pyoe Bin and Revenue Watch Institute, has undertaken a wide range of outreach and awareness raising activities. EITI receives regular attention in Myanmar's recently free and vibrant media.

It is anticipated that the MSG will hold its first meeting in early January 2014. Civil society has created a representative national structure for the purposes of selecting MSG representatives. In July 2013 Government appointed a Working Committee of high level officials to progress EITI candidacy and it is anticipated that this will form the basis of Government representation on the MSG. The Working Committee includes an expanded suite of ministries, as well as the Union Attorney General's office. Deputy Minister of Finance, Dr. U Maung Maung Thein is chair of the Working Committee. Operators have selected their representatives to the MSG. Work has started on a TOR for the MSG. It is anticipated that Myanmar will prepare its candidacy application to target the March or June 2014 EITI Board meeting, and that the October Board meeting will be held in Myanmar.

The World Bank, together with DfID, is the lead source of international support to EITI in Myanmar, providing advice on task planning, sequencing, and technical matters to MDRI, as well as coordinating overall donor support to EITI through informal monthly donor meetings. With funding from DfID, the World Bank is also recruiting high-level technical expertise to carry out a series of studies, including Scoping Study, Legal Review, and technical training.

Purpose of the Assignment

It is proposed to conduct an institutional and regulatory analysis of the extractive industries in Myanmar including hydrocarbon, mining, gemstone and hydropower. The outcome of the study is expected to be an improved understanding of the political economy context and the value chain of moving mineral deposits to the market, including the various drivers that stand to influence EITI implementation and extractive sector governance in general. The analysis will be designed and conducted jointly with MDRI and draw on a recent political economy analysis conducted by the Pyoe Bin, a civil society strengthening project funded by DfID. The output will be a report.

1. Scope of work

The consultant will undertake a political economy analysis, focused particularly on institutional and regulatory arrangements, of the extractive industries in Myanmar along the lines of the "Extractive Industries Value Chain" approach and in light of the implementation of EITI. The study both build on an Options Study already completed and will also serve as a "pre-scoping" study in anticipation of a full scoping study once the MSG has been established and taken decisions on the scope of EITI in Myanmar, based on the Options Study.

The EI value chain is focusing on:

1. Transparent, non-discretionary award of extractive contracts, including assessment of land issues related to extractive contracts;
2. Good practices in legal, contractual, regulatory, and institutional frameworks, including continuous capacity building for monitoring and regulatory compliance;
3. Sound and fair fiscal practices for the collection of taxes and royalties, including adequate administrative and audit capacity, internationally accepted accounting and reporting standards, and regular public reporting;
4. Fair and transparent allocation of revenue, including a macro/fiscal framework adapted to volatile and finite resources and a transparent savings mechanism;

5. Sustainable policies to safeguard the environment and maintain social priorities in the development of mineral resources to ensure they were used for the public good.



. The study will focus on institutional structures, revenue flows and reporting, award of licenses, monitoring of operations, redress and grievance mechanisms, domestic operators and ownership structures, informal as well as formal trade in gems and minerals, regulatory structures among non-state armed groups, and interactions of operators, government, and civil society. The study will encompass hydrocarbons, minerals, gems, and hydropower as the areas proposed for EITI in Myanmar, and will look at the operations of Myanmar's two military holding companies, UMEHL and MEC together with other domestic operators. For each area the consultant will provide an institutional and a stakeholder analysis as well as identifying the entry points and the existing reform space for an effective and fair revenue management of the sector. The consultant will work under the guidance of the World Bank task team and the MDRI EITI team.

The consultant(s) specifically will examine:

- Baseline description of hydrocarbons, minerals, gems, and hydro-power sectors, with reference to approximate number of operators/license holders and planned operations. This will also document what the ownership structures are for operations in different sectors.
- Institutional analysis for each of the three industries – this include the formal regulatory, licensing, and oversight bodies within government; the 'rules of the game', both formal (laws, regulations, institutional mandates) and informal (social norms, *de facto* practices), that shape the behaviour, interactions, incentive and power of the stakeholders in the sector. The analyses must consider award (and suspension) of licenses, negotiation and approval of contracts, monitoring and oversight of operations, tax administration, and community/ public relations.
- The institutional analysis will document the decision-making, both official and *de facto*, for each sub-sector and regulatory functions. What are the official procedures? Are they clear and known from the different stakeholders? Is there a clear chain of responsibility between the different public institutions? Who benefits from discretionary powers? How has sector governance changed since the start of the reform process in 2011? In this regard the assessment will also document ownership structures of both private sector operators and related SEEs, such as Myanmar Oil and Gas Enterprises and the SEEs under the Ministry of Mines. The assessment should also look institutional capacities and gap analysis in light of an expected rapid increase in investor interest and sector operations.
- Revenue flow – how do payments of taxes, fees, royalties, and production shares move from operators to the Ministry of Finance/Treasury. This will include a review of contract arrangements, identify major points of leakage or underpayment and who benefits from these, and identify which payments stay within relevant ministries, authorized under which legal frameworks.

- Provide an overview of MEC and UMEHL . These are military-owned holding companies, but treated as private enterprises by Government. This overview will include the scope of their investments in the extractive sectors, decision-making, governance structures, use of revenues (i.e. military pension funds), and accountabilities. Analysis will also include assessment of links formal and informal between companies, Ministry of Defense, and key decision-makers .

Analysis of role of Ministry of Finance. Parliament, and the Office of the Auditor General and the Accountant General, with respect to the audit function. The study will look at existing capacities for tax administration and revenue collection. Moreover, the Consultant must assess the performance of audit, by whom, how frequently, and how used. The study will also examine the role of Parliamentary committees in providing oversight for extractive sectors and also interaction of voters, members of Parliament and state politicians vis-à-vis extractive sector, including the increasing demand for constituency services.

- Analysis will encompass the findings of the recent political economy study conducted by Pyoe Bin and discuss how the interests, views, and pressures brought to the EITI process by civil society will interact with those of other stakeholders. Review governance and regulatory arrangements at sub-national level and in the conflict affected areas. This will also include examining institutional, legal, and constitutional issues which may affect EITI and extractive industries at the sub-national level. It will further include how non-state armed groups have licensed, taxed, or overseen extractive industries, largely but not exclusively mining. At a minimum this should look at how two groups, preferably including the Kachin Independence Organization h interact with the extractive operations. This portion of the study should be well-coordinated with the conflict analysis conducted by MDRI in conjunction with International Alert.

Based on the above, the consultants will provide an analysis of implications for EITI and selected entry points for improved governance in the extractive sectors. This analysis will also include a review of how EITI fits into and strengthens the overall reform agenda. The analysis will assess whether institutional structures and regulatory agencies are in possession of sufficient capacity and information to answer the needs and questions of the EITI. The analysis should also consider prevailing incentive structures (formal and informal) in order to assess whether regulation and requirements are likely to be implemented.

The consultant will take into account the potential political opposition related to each entry points, and include strategies for (i) navigating stakeholder opposition and shaping political constituencies of support; (ii) addressing the challenges associated with weak institutional capacity, and (iii) enhancing the participation of non-government stakeholders. The consultant will work closely with the World Bank task team and MDRI in developing methodology and carrying out study.

In addition to the analysis and study report, the consultant must conduct two one-day seminars targeted the members of the National EITI Committee (and possibly other representatives with strong engagement in the Myanmar EITI). The agenda of the seminars will be agreed in consultation with MDRI and representatives from the EITI Committee. Topics to be covered may include: 1) Natural Resource Management, 2) Fundamentals of the EITI, 3) Regional and international experience of implementing the EITI, 4) Case stories of outcomes from EITI implementation, 5) Good practice of EITI communication strategies. The dates of the seminars will agreed as part of the initial planning, but tentative timing would be for the first seminar to take place as part of the first country visit, whilst the second would be conducted immediately before or after the workshop presenting the final report.

1. Methodology

TBD in consultant technical proposal.

2. Skills and Experience Required

The assignment will be undertaken by a team of specialists which comprise the following areas of expertise and experience:

- Oil and gas sector expertise
- Mining sector expertise
- Hydropower sector expertise
- Advanced (masters) degree in political science, public policy or equivalent and not less than 8 years of proven experience in political economy analysis in natural resource-rich developing countries.
- Extensive knowledge of relevant political economy literature with particular relevance to the political/institutional setting, legal, fiscal regimes, revenue management and governance in extractive resource-rich developing countries.
- Proven knowledge of Myanmar, preferably with previous experience of political economy analysis
- Strong knowledge and, experience, and network in extractive industries and preferably the EITI.
- Ability to synthesize and organize complex information from various written and oral sources into a comprehensive, policy oriented document.
- Understanding and commitment to ensure that the recommendations are operationally driven and meet the needs of EITI implementation and improved extractive industry governance in Myanmar.
- Strong interpersonal and diplomatic skills, as well as proven ability to communicate orally and in writing effectively and credibly with senior government officials in developing countries.
- Excellent written and spoken English are required.

3. Organization of work and Bank supervision

The contract will be administered directly by the World Bank, but will be carried out together with MDRI. The location of the assignment will be at Consultant's home office and the premises of MDRI-CESD in Yangon with travel to Naypyitaw, as deemed necessary. The Consultant will provide updates and report to MDRI-CESD with copies to the World Bank and DFID, which may be shared with other development partners supporting EITI in Myanmar.

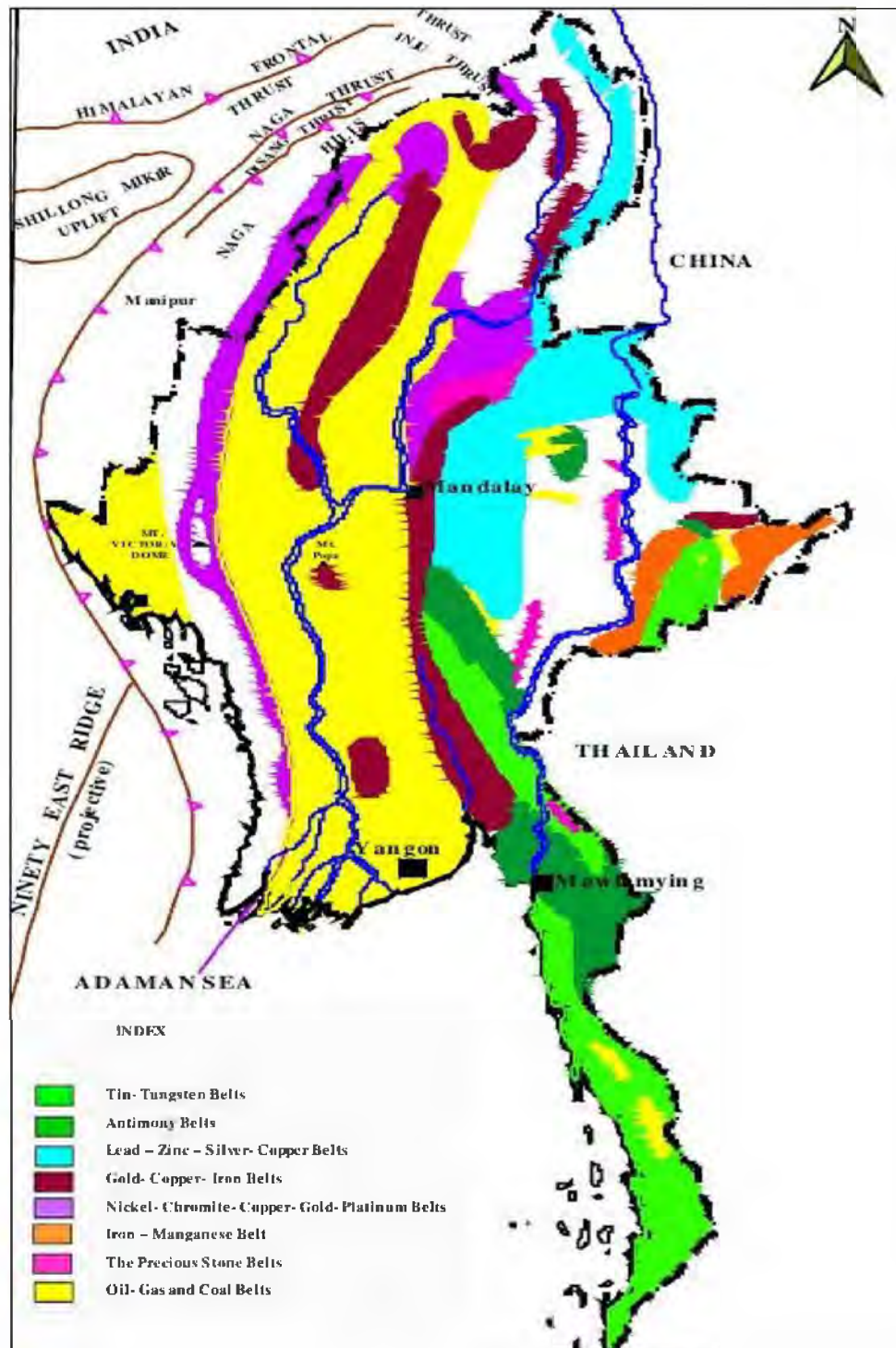
4. Deliverables and Timing

- First draft to be completed by – TBD
- Full-day workshop presenting draft final report by TBD
- Final report is to be available by TBD

5. Payment Schedule (covering fees and expenses)

- 10% upon signing contract
- 40% upon receiving the first draft report
- 50% upon completion

Annex 4: Mineral Belts of Myanmar



Annex 5: Myanmar Mineral Reserves¹⁰⁵

Mineral	Occurrences/deposits	Total Reserves (P2-P4) – Millions Tonnes
Columbine Tantalite	5	0.0036
Coal	495	491.84
Gemstones	68	1.25
Copper	115	1997.3
Feldspar	24	0.865
Antimony	132	1.0
Chromite	43	0.08
Lead	291	44.09
Graphite	35	2.62
Tin/Tungsten	483	39.39/0.14
Gypsum	37	35.99
Zircon sand	11	31.48
Limestone	452	58818
Dolomite	41	37
Nickel	10	162.86
Fluorite	19	0.006
Phosphate rock	17	10.88
Baryte	72	1.70
Bauxite	26	274.9
Porzolan	6	651

¹⁰⁵ Data from the Department of Geological Survey and Mineral Exploration, March 2012

Mineral	Occurrences/deposits	Total Reserves (P2-P4) – Millions Tonnes
Molybdenum	19	0.025
Manganese	52	10.9
Kaolin	67	36.97
Bentonite	22	24.1
Glass Sand	39	131.14
Gold	341	66.11 (primary) 1240.2 (alluvial)
Platinum	19	32.52
Mica	30	0.0036
Quartz	47	83.05
Iron	393	495.42
Zinc	29	19.95
Heavy Mineral	14	0.026
Decorative Stone	93	52924

Annex 6: Good and Bad Dams



Latin America and Caribbean Region
Sustainable Development Working Paper 16

Good Dams and Bad Dams: Environmental Criteria for Site Selection of Hydroelectric Projects

November 2003



George Ledec
Juan David Quintero

The World Bank
Latin America and Caribbean Region
Environmentally and Socially Sustainable Development Department (LCSES)

Executive Summary

Large dams vary considerably in their adverse environmental and related social impacts. From an environmental standpoint, there are relatively good dams and bad dams. While some large dams are relatively benign, others have caused major environmental damage. The severity of environmental impacts from a hydroelectric project is largely determined by the dam site. While dams at good sites can be very defensible from an environmental standpoint, those proposed at bad sites will inherently be highly problematic, even if all feasible mitigation measures are properly implemented.

This paper provides a simple, yet robust, methodology for comparing proposed hydroelectric project sites in terms of their expected negative environmental impacts, and relating these to power generation benefits. The paper also summarizes the environmental mitigation options for large dams. If properly implemented, these mitigation measures can effectively prevent, minimize, or compensate for many (though not all) of a hydroelectric project's negative impacts. Nonetheless, **the most effective environmental mitigation measure is good site selection**, to ensure that the proposed dam will cause relatively little damage in the first place.

The paper presents quantitative indicators (using data that are relatively easy to obtain) for rating and ranking proposed new hydroelectric projects in terms of their likely adverse environmental impacts. Projects with a small reservoir surface area (relative to power generation) tend to be most desirable from both an environmental and social standpoint, in part because they minimize natural habitat losses as well as resettlement needs. **In general, the most environmentally benign hydroelectric dam sites are on upper tributaries, while the most problematic ones are on the large main stems of rivers.**

Power expansion planning should ensure that environmental criteria, of the type outlined in this paper, are given appropriate weight in hydroelectric project site selection. Many of the more problematic dam sites are best left undeveloped, because the environmental or related social impacts are likely to be unacceptably high. In those cases, other power generation technologies are likely to be more environmentally desirable. Conversely, hydroelectric dams at good sites (with relatively low adverse impacts) and with effective implementation of proper mitigation measures are likely to be more attractive from an environmental standpoint than the most likely power generation alternatives.

Annex 7: Production Sharing Contract Terms

STANDARD TERMS AND CONDITIONS OF PRODUCTION SHARING CONTRACT FOR ONSHORE BLOCKS (As of 9-7-2012)

Page-1

Sr. No.	Particulars	Standard Terms and Conditions of Production Sharing Contract for Onshore Blocks																																										
1.	Contract Area																																											
2.	Area of Block																																											
3.	Type of Contract	Production Sharing Contract (PSC)																																										
4.	Exploration Period Work Commitment and Expenditure	= 3 years Year 1 - G&G study and Seismic Acquisition, Processing, Interpretation (API) Year 2 - drill minimum 1 (one) well Year 3 - post- well evaluation & to drill 1 (one) well (or) to drill 2 (two) wells during Year 2 & 3 (Contractor will have the option to back-off) 1st Extension (2 year x 1 time) Year 4 - prospect evaluation Year 5 - To drill 1 (one) well (Contractor will have the option to back-off) 2nd Extension (1 year x 1 time) Year 6 - To drill 1 (one) well (Contractor will have the option to back-off)																																										
5.	Production Period	20 years from the date of completion of development in accordance with Development Plan (or) according to Petroleum Sales Agreement, whichever is longer.																																										
6.	Signature Bonus	US\$ (Payment within 30 days after the signing of the Contract.)																																										
7.	Royalty	12.5% of all Available Petroleum.																																										
8.	Cost Recovery	Maximum 50% of all Available Petroleum.																																										
9.	Production Split (Profit Petroleum Allocation)	Crude Oil <table> <tr> <th>BOPD</th><th>MOGE(%)</th><th>CONT(%)</th></tr> <tr> <td>0 - 10,000</td><td>60</td><td>40</td></tr> <tr> <td>10,001 - 20,000</td><td>65</td><td>35</td></tr> <tr> <td>20,001 - 50,000</td><td>70</td><td>30</td></tr> <tr> <td>50,001 - 100,000</td><td>80</td><td>20</td></tr> <tr> <td>100,001 - 150,000</td><td>85</td><td>15</td></tr> <tr> <td>> 150,000</td><td>90</td><td>10</td></tr> </table> Natural Gas <table> <tr> <th>MMCFD</th><th>MOGE(%)</th><th>CONT(%)</th></tr> <tr> <td>up to 60</td><td>60</td><td>40</td></tr> <tr> <td>61 - 120</td><td>65</td><td>35</td></tr> <tr> <td>121 - 300</td><td>70</td><td>30</td></tr> <tr> <td>301 - 600</td><td>80</td><td>20</td></tr> <tr> <td>601 - 900</td><td>85</td><td>15</td></tr> <tr> <td>above 900</td><td>90</td><td>10</td></tr> </table>	BOPD	MOGE(%)	CONT(%)	0 - 10,000	60	40	10,001 - 20,000	65	35	20,001 - 50,000	70	30	50,001 - 100,000	80	20	100,001 - 150,000	85	15	> 150,000	90	10	MMCFD	MOGE(%)	CONT(%)	up to 60	60	40	61 - 120	65	35	121 - 300	70	30	301 - 600	80	20	601 - 900	85	15	above 900	90	10
BOPD	MOGE(%)	CONT(%)																																										
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601 - 900	85	15																																										
above 900	90	10																																										
10.	Production Bonus	Crude Oil Upon approval of Development Plan = 0.50 MMUS\$ 10,000 BOPD (for 90 consecutive days production) = 1.50 MMUS\$ 20,000 BOPD (for 90 consecutive days production) = 2.00 MMUS\$ 50,000 BOPD (for 90 consecutive days production) = 3.00 MMUS\$ 100,000 BOPD (for 90 consecutive days production) = 4.00 MMUS\$ 150,000 BOPD (for 90 consecutive days production) = 6.00 MMUS\$ Natural Gas Upon approval of Development Plan = 0.50 MMUS\$ 60 MMCFD (for 90 consecutive days production) = 1.50 MMUS\$ 120 MMCFD (for 90 consecutive days production) = 2.00 MMUS\$ 300 MMCFD (for 90 consecutive days production) = 3.00 MMUS\$ 600 MMCFD (for 90 consecutive days production) = 4.00 MMUS\$ 900 MMCFD (for 90 consecutive days production) = 6.00 MMUS\$																																										

**STANDARD TERMS AND CONDITIONS OF PRODUCTION SHARING CONTRACT
FOR ONSHORE BLOCKS
(As of 9-7-2012)**

Page-2

Sr. No.	Particulars	Standard Terms and Conditions of Production Sharing Contract for Onshore Blocks
11.	Domestic Requirement	20% of Crude Oil and 25% of Natural Gas of CONTRACTOR's share of profit petroleum at 90% of Fair Market Prices.
12.	Training Fund	Exploration Period = 25,000 US\$ per Year. Production Period = 50,000 US\$ per Year.
13.	Research and Development Fund	0.5% of CONTRACTOR's share of Profit Petroleum.
14.	State Participation.	15 % undivided interest and MOGE has the option to extend up to 25% at its own discretion.
15.	Income Tax	25% on CONTRACTOR's Net Profit. (3 years Tax Holiday starting from the Production.)
16.	Governing Law	Laws of the Republic of the Union of Myanmar.
17.	Arbitration	Myanmar Arbitration Act, 1944.
18.	Sharing of Profits made from the sale or transfer of the shares in the Company formed under the contract	If the Company formed under the provisions of the Contract sell or transfer its shares of the Company and If a Profit is being made, CONTRACTOR is liable to pay to the Union Government of the Republic of the Union of Myanmar the following tranches out of the Net Profit made on the sale or transfer of the shares of the Company, registered under the Contract:- - If the amount of Net Profit is up to 100 MMUS\$ 40% - If the amount of Net Profit is between 100 MMUS\$ and 150 MMUS\$ 45% - If the amount of Net Profit is over 150 MMUS\$ 50%

UOMT'Std T&C(July,2012) stdOnshore sheet

Note: Above Terms and Conditions may vary subject to changing condition.

**STANDARD TERMS AND CONDITIONS OF PRODUCTION SHARING CONTRACT
FOR OFFSHORE BLOCKS**
(As of 9-7-2012)

Page-2

Sr. No.	Particulars	Standard Terms and Conditions of Production Sharing Contract for Offshore Blocks
15	Training Fund	Exploration Period = 50,000 US\$ per Year. Production Period = 100,000 US\$ per Year.
16	Research and Development Fund	0.5% of CONTRACTOR's share of Profit Petroleum.
17	State Participation	Undivided up to 20% after Commercial Discovery and up to 25% if the reserves is greater than 5 TCF.
18	Income Tax	25% on CONTRACTOR's Net Profit. (3 years Tax Holiday starting from the Production.)
19	Governing Law	Laws of the Republic of the Union of Myanmar.
20	Arbitration	UNCITRAL Arbitration Rules.
21	Sharing of Profits made from the sale or transfer of the shares in the Company formed under the contract	If the Company formed under the provisions of the Contract sell or transfer its Shares of the Company and if a Profit is being made, CONTRACTOR is liable to pay to the Government of the Republic the Union of Myanmar the following tranches out of the Net Profit made on the sale or transfer of the shares of the Company, registered under the Contract:- - If the amount of Net Profit is up to 100 MMUS\$ 40% - If the amount of Net Profit is between 100 MMUS\$ and 150 MMUS\$ 45% - If the amount of Net Profit is over 150 MMUS\$ 50%

Note: Above Terms and Conditions may vary subject to changing condition.

**STANDARD TERMS AND CONDITIONS OF PRODUCTION SHARING CONTRACT
FOR DEEP WATER BLOCKS
(As of 9-7-2012)**

Page-1

Sr. No.	Particulars	Standard Terms and Conditions of Production Sharing Contract for Deep Water Blocks																																																																				
1	Contract Area																																																																					
2	Area of Block																																																																					
3	Water Depth																																																																					
4	Type of Contract	Production Sharing Contract (PSC)																																																																				
5	Study Period	TEA Period -2 Years - Seismic Acquisition/Processing - Interpretation / Geological Studies																																																																				
6	Exploration Period Work Commitment and Expenditure	Exploration Period (3 Years) - Seismic and Drilling Extension 1 year x 2 times																																																																				
7	Production Period	20 years for each Commercial Discovery (or) according to the Petroleum (Crude Oil/ Natural Gas) Sales Agreement, whichever is longer.																																																																				
8	Signature Bonus	Payment within 30 days after entering Into the Exploration Period.																																																																				
9	Royalty	12.5% of Available Petroleum.																																																																				
10	Cost Recovery	Water Depth,	Less than or equal to 600 feet	50%																																																																		
			Between 600 and 2,000 feet	60%																																																																		
			Over 2,000 feet	70%																																																																		
11	Production Split (Profit Petroleum Allocation)	Crude Oil <table><tr><td>Water Depth</td><td colspan="2">Less than 2000 feet</td><td colspan="2">Over 2,000 feet</td></tr><tr><td>BOPD</td><td>MOGE(%)</td><td>CONT. (%)</td><td>MOGE(%)</td><td>CONT. (%)</td></tr><tr><td>0 - 25,000</td><td>60</td><td>40</td><td>60</td><td>40</td></tr><tr><td>25,001 - 50,000</td><td>65</td><td>35</td><td>65</td><td>35</td></tr><tr><td>50,001 - 100,000</td><td>80</td><td>20</td><td>75</td><td>25</td></tr><tr><td>100,001 - 150,000</td><td>85</td><td>15</td><td>80</td><td>20</td></tr><tr><td>> 150,000</td><td>90</td><td>10</td><td>85</td><td>15</td></tr></table> Natural Gas <table><tr><td>Water Depth</td><td colspan="2">Less than 2000 feet</td><td colspan="2">Over 2,000 feet</td></tr><tr><td>MMCFD</td><td>MOGE(%)</td><td>CONT. (%)</td><td>MOGE(%)</td><td>CONT. (%)</td></tr><tr><td>0 - 300</td><td>65</td><td>35</td><td>55</td><td>45</td></tr><tr><td>301 - 600</td><td>75</td><td>25</td><td>65</td><td>35</td></tr><tr><td>601 - 900</td><td>85</td><td>15</td><td>75</td><td>25</td></tr><tr><td>> 900</td><td>90</td><td>10</td><td>80</td><td>20</td></tr></table>				Water Depth	Less than 2000 feet		Over 2,000 feet		BOPD	MOGE(%)	CONT. (%)	MOGE(%)	CONT. (%)	0 - 25,000	60	40	60	40	25,001 - 50,000	65	35	65	35	50,001 - 100,000	80	20	75	25	100,001 - 150,000	85	15	80	20	> 150,000	90	10	85	15	Water Depth	Less than 2000 feet		Over 2,000 feet		MMCFD	MOGE(%)	CONT. (%)	MOGE(%)	CONT. (%)	0 - 300	65	35	55	45	301 - 600	75	25	65	35	601 - 900	85	15	75	25	> 900	90	10	80	20
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BOPD	MOGE(%)	CONT. (%)	MOGE(%)	CONT. (%)																																																																		
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> 150,000	90	10	85	15																																																																		
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12	Production Bonus	Crude Oil Upon approval of Development Plan = 1.00 MMUS\$ 25,000 BOPD (for 90 consecutive days production) = 2.00 MMUS\$ 50,000 BOPD (for 90 consecutive days production) = 3.00 MMUS\$ 100,000 BOPD (for 90 consecutive days production) = 4.00 MMUS\$ 150,000 BOPD (for 90 consecutive days production) = 5.00 MMUS\$ 200,000 BOPD (for 90 consecutive days production) = 10.00 MMUS\$ Natural Gas Upon approval of Development Plan = 1.00 MMUS\$ 150 MMCFD (for 90 consecutive days production) = 2.00 MMUS\$ 300 MMCFD (for 90 consecutive days production) = 3.00 MMUS\$ 600 MMCFD (for 90 consecutive days production) = 4.00 MMUS\$ 750 MMCFD (for 90 consecutive days production) = 5.00 MMUS\$ 900 MMCFD (for 90 consecutive days production) = 10.00 MMUS\$																																																																				
13	Domestic Requirement	20% of Crude Oil and 25% of Natural Gas of CONTRACTOR's share at 90% of Fair Market Values.																																																																				
14	Training Fund	Exploration Period = 50,000 US\$ per Year. Production Period = 100,000 US\$ per Year.																																																																				
15	Research and Development Fund	0.5% of CONTRACTOR's share of Profit Petroleum.																																																																				

STANDARD TERMS AND CONDITIONS OF PRODUCTION SHARING CONTRACT1
FOR DEEP WATER BLOCKS
(As of 9-7-2012)

Page-2

Sr. No.	Particulars	Standard Terms and Conditions of Production Sharing Contract for Deep Water Blocks						
16	State Participation	Undivided up to 20% after Commercial Discovery and up to 25% If the reserves is greater than 5 TCF.						
17	Income Tax	25% on CONTRACTOR's Net Profit. (3 years Tax Holiday starting from the Production.)						
18	Governing Law	Laws of the Republic of the Union of Myanmar.						
19	Arbitration	UNCITRAL Arbitration Rules.						
20	Sharing of Profits made from the sale or transfer of the shares in the Company formed under the contract	If the Company formed under the provisions of the Contract sell or transfer its Shares of the Company and if a Profit is being made, CONTRACTOR is liable to pay to the Government of the Republic of the Union of Myanmar the following tranches out of the Net Profit made on the sale or transfer of the shares of the Company, registered under the Contract:- <table><tr><td>- If the amount of Net Profit is up to 100 MMUS\$</td><td>40%</td></tr><tr><td>- If the amount of Net Profit is between 100 MMUS\$ and 150 MMUS\$</td><td>45%</td></tr><tr><td>- If the amount of Net Profit is over 150 MMUS\$</td><td>50%</td></tr></table>	- If the amount of Net Profit is up to 100 MMUS\$	40%	- If the amount of Net Profit is between 100 MMUS\$ and 150 MMUS\$	45%	- If the amount of Net Profit is over 150 MMUS\$	50%
- If the amount of Net Profit is up to 100 MMUS\$	40%							
- If the amount of Net Profit is between 100 MMUS\$ and 150 MMUS\$	45%							
- If the amount of Net Profit is over 150 MMUS\$	50%							

Printed at T&C July, 2012; on Deep Sheet

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Note: Above Terms and Conditions may vary subject to changing condition.

**STANDARD TERMS AND CONDITIONS OF IMPROVED PETROLEUM RECOVERY CONTRACT
FOR ONSHORE BLOCKS**

Page-1

Sr. No.	Particulars	Standard Terms and Conditions of Improved Petroleum Recovery Contract for Onshore Blocks																								
1.	Contract Area																									
2.	Area of Block																									
3.	Type of Contract	Improved Petroleum Recovery Contract (IPR)																								
4.	Preparation Period (EIA/SIA/EMP)	- 6 months (after the signing of the Contract) - Contractor shall conduct Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA) and shall submit the final report including executive summary and mitigation plan to MOGE for MIC approval. Min. Expenditure =US\$ {Contractor shall enter into Initial Joint Study Period after approval of MIC on EIA / SIA reports}																								
5.	Data Fee	US\$ (Payment within 30 days after the commencement of the Initial Joint Study Period)																								
6.	Initial Joint Study Period	<u>Initial Joint Study Period - 6 Months</u> (Existing Petroleum Production for the whole field will be determined by both parties base on the decline curve.) Min. Expenditure =US\$																								
7.	Signature Bonus	US\$ (Payment within 30 days after the commencement of the Pilot Project Period)																								
8.	Pilot Project Period (Minimum Work Commitment and Expenditure)	Pilot Project Period (3 years) Year 1 - Year 2 - Year 3 - } FDP will be based on the outcome of Initial Joint Study Period between MOGE and Contractor. Min. Expenditure US\$ US\$ US\$ Total =US\$ {Contractor will have the option to back-off} Extension (2 year x 1 time) Year 4 - Year 5 - } Work Program Min. Expenditure US\$ US\$ Total =US\$																								
9.	Production Period	15 years from the date of commercial declaration on incremental petroleum production (or) until the expiration of Contract Term																								
10.	Royalty	12.5% of all Incremental Petroleum.																								
11.	Cost Recovery	Maximum 40% of all Incremental Petroleum.																								
12.	Profit Petroleum Allocation	<u>Incremental Crude Oil</u> <table><tr><th>BOPD</th><th>MOGE(%)</th><th>CONT(%)</th></tr><tr><td>0 - 5,000</td><td>60</td><td>40</td></tr><tr><td>5,001 - 10,000</td><td>70</td><td>30</td></tr><tr><td>10,001 - 20,000</td><td>75</td><td>25</td></tr><tr><td>20,001 - 30,000</td><td>80</td><td>20</td></tr><tr><td>> 30,000</td><td>85</td><td>15</td></tr></table> <u>Incremental Natural Gas</u> <table><tr><th>MMCFD</th><th>MOGE(%)</th><th>CONT(%)</th></tr><tr><td>All</td><td>60</td><td>40</td></tr></table>	BOPD	MOGE(%)	CONT(%)	0 - 5,000	60	40	5,001 - 10,000	70	30	10,001 - 20,000	75	25	20,001 - 30,000	80	20	> 30,000	85	15	MMCFD	MOGE(%)	CONT(%)	All	60	40
BOPD	MOGE(%)	CONT(%)																								
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20,001 - 30,000	80	20																								
> 30,000	85	15																								
MMCFD	MOGE(%)	CONT(%)																								
All	60	40																								
13.	Commerciality Bonus	US\$ (Payment within 30 days after the commencement of the Production Period)																								
14.	Production Bonus	<u>Incremental Crude Oil</u> <table><tr><td>2,000 BOPD (for 60 consecutive days production)</td><td>= 0.20 MMUS\$</td></tr><tr><td>5,000 BOPD (for 60 consecutive days production)</td><td>= 0.50 MMUS\$</td></tr><tr><td>10,000 BOPD (for 60 consecutive days production)</td><td>= 1.00 MMUS\$</td></tr><tr><td>20,000 BOPD (for 60 consecutive days production)</td><td>= 2.00 MMUS\$</td></tr><tr><td>30,000 BOPD (for 60 consecutive days production)</td><td>= 3.00 MMUS\$</td></tr></table> <u>Incremental Natural Gas</u> <table><tr><td>15 MMCFD (for 60 consecutive days production)</td><td>= 0.50 MMUS\$</td></tr><tr><td>30 MMCFD (for 60 consecutive days production)</td><td>= 1.00 MMUS\$</td></tr><tr><td>60 MMCFD (for 60 consecutive days production)</td><td>= 1.50 MMUS\$</td></tr><tr><td>150 MMCFD (for 60 consecutive days production)</td><td>= 2.00 MMUS\$</td></tr></table>	2,000 BOPD (for 60 consecutive days production)	= 0.20 MMUS\$	5,000 BOPD (for 60 consecutive days production)	= 0.50 MMUS\$	10,000 BOPD (for 60 consecutive days production)	= 1.00 MMUS\$	20,000 BOPD (for 60 consecutive days production)	= 2.00 MMUS\$	30,000 BOPD (for 60 consecutive days production)	= 3.00 MMUS\$	15 MMCFD (for 60 consecutive days production)	= 0.50 MMUS\$	30 MMCFD (for 60 consecutive days production)	= 1.00 MMUS\$	60 MMCFD (for 60 consecutive days production)	= 1.50 MMUS\$	150 MMCFD (for 60 consecutive days production)	= 2.00 MMUS\$						
2,000 BOPD (for 60 consecutive days production)	= 0.20 MMUS\$																									
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150 MMCFD (for 60 consecutive days production)	= 2.00 MMUS\$																									
15.	Domestic Requirement	10% of Crude Oil and 15% of Natural Gas of CONTRACTOR's share of profit petroleum at 75% of Fair Market Prices.																								

**STANDARD TERMS AND CONDITIONS OF IMPROVED PETROLEUM RECOVERY CONTRACT
FOR ONSHORE BLOCKS**

Page-2

Sr. No.	Particulars	Standard Terms and Conditions of Improved Petroleum Recovery Contract for Onshore Blocks
16.	Training Fund	Initial Joint Study Period = 10,000 US\$ Pilot Project Period = 50,000 US\$ per Year Production Period = 50,000 US\$ per Year If any average daily gross production rate exceeds 30,000 BOPD, Production Period = 100,000 US\$ per Year
17.	Research and Development Fund	0.5% of CONTRACTOR's share of Profit Petroleum.
18.	State Participation.	15 % undivided interest.
19.	Income Tax	According to the "Myanmar Income Tax Law"
20.	Governing Law	Laws of the Republic of the Union of Myanmar.
21.	Arbitration	Myanmar Arbitration Act, 1944.
22.	Sharing of Profits made from the sale or transfer of the shares in the Company formed under the contract	If the Company formed under the provisions of the Contract sell or transfer its shares of the Company and if a Profit is being made, CONTRACTOR is liable to pay to the Union Government of the Republic of the Union of Myanmar the following tranches out of the Net Profit made on the sale or transfer of the shares of the Company, registered under the Contract:- - If the amount of Net Profit is up to 100 MMUS\$ 40% - If the amount of Net Profit is between 100 MMUS\$ and 150 MMUS\$ 45% - If the amount of Net Profit is over 150 MMUS\$ 50%
23.	EITI	MOGE and CONTRACTOR shall collaborate to implement the Extractive Industries Transparency Initiative.

Annex 8: Review of Reports by CSOs on Myanmar's Extractives Industries Sector

Shwe Gas Movement

The Shwe Gas Movement has produced a series of reports that focus on the Shwe Gas pipeline project. The two main reports on the pipeline the CSO has produced are "Corridors of Power: China's Trans-Burma Oil and Gas Pipelines" (published in September 2009) and "Drawing the Line: The Case Against China's Shwe Gas Project, For Better Extractive Industries in Burma (published in September 2013). They have also published a more general overview of extractive industries sector governance, "Good Governance and the Extractive Industry in Burma from June 2013" (as well as several other interesting reports on the extractive industries sector in Myanmar, including an assessment of CNPC).

Good Governance and the Extractive Industry in Burma

This report takes a critical look at the reform process and initial preparations to implement EITI. It suggests that the reform process has been relatively superficial so far (from the perspective of human rights (and labour rights), transparency and the environment) and will require wholesale legal reform in order to place natural resource governance on a firmer footing. In addition, the report makes specific recommendations on GOUM signing up to the principles of full, independent Free, Prior and Informed Consent, ESIA and Social Impact Assessment frameworks and also to ensure there is "meaningful participation" of civil society within the EITI process. The report is also specifically highly critical of the Shwe Gas project,

"Environmental degradation is a harsh consequence of the Shwe Gas Project. The Shwe Gas Project passes through biodiversity heartlands, splitting forests into two sections, impacting one of the ten most vulnerable forests in the world by requiring deforestation all along the pipeline's path. As infrastructure development for the Shwe Gas Project continues, the local fishing industry is additionally threatened. Fishermen are physically restrained from coming within a 10-mile radius of the gas and oil pipelines and drilling locations. There also exist severe environmental contamination from the out-flow of chemicals, gas blowouts and other hazardous substances that reach waterways and deplete oxygen levels, raising concerns about the sustainability of marine life. Environmental Impact Assessments have been carried out arbitrarily, but to date there has been no disclosure of results by government or corporations."¹⁰⁸

Corridors of Power

Although published nearly four years ago, Corridors of Power is still an interesting read because it was written during the time of the planning and early construction of the pipelines and anticipated the problems that are now associated with it. This report gives a good background on the regional politics behind the pipeline and the battle between India and China to secure the gas from the fields and also the previous military junta's relationship to natural resource revenues (using oil and gas money to buy weapons). The report accurately predicts many of the problems that are now associated with the pipeline in terms of environmental hazards, use of forced labour and so on.

Drawing the Line

Drawing the Line is effectively an update on Corridors of Power, published just after gas had started flowing through the Shwe Gas pipeline (in the last quarter of 2013). It includes detailed (and documented) reports of land confiscation, environmental damage, labour abuses and loss of livelihood (fishing and farming). The report also points to the relationship between the pipeline and increased conflict in Shan state:

"The primary direct consequences of the Shwe Gas project are land confiscation, labour abuse, loss of livelihoods and environmental degradation. In northern Shan state, these core problems have reignited frequent conflict between the

¹⁰⁸ Good Governance and the Extractive Industry in Burma, Shwe Gas Movement, pp5-6

Burma Army and four separate ethnic armies, which will continue intermittently unless these core problems are addressed in a political settlement.¹⁰⁷

The report notes that the environmental and social impact assessments carried out (in 2010) for the pipeline have never been released into the public domain. The report notes that the ESIA carried out by Environmental Resources Management (a UK firm); whereas the SIA was carried out by International Environment Management (Canadian-owned firm based in Thailand). The report concludes by calling for the postponement of the project until adequate compensation has been paid, a disaster preparedness plan has been developed and there is greater CSO involvement in EITI among other things.

Karen Human Rights Group

Losing Ground: Land Conflicts and Collective Action in Eastern Myanmar

While land issues are not core to EITI, they are a major issue at the beginning of the extractives value chain and cannot be left out of any discussion of the history of natural resource acquisition and management in Myanmar.

The survey took place in seven geographic research areas across eastern Myanmar (Kayin, Mon, Bago and Tanintharyi), assessing projects such as hydropower dams, infrastructure development, logging, mining and commercial plantation agriculture undertaken or facilitated by various civil and military State authorities, foreign and domestic companies and armed ethnic groups. The report found that the key issues across the projects were a lack of consultation (an absence of Free, Prior and Informed Consent), land confiscation (including encroachment beyond the project site and confiscation of land belonging to refugees and internally displaced persons), disputed compensation, displacement and resettlement, loss of livelihood, physical security threats, environmental damage and forced labour. The report has over 600 pages of documented testimony by 809 affected peoples (collected between January 2011 and November 2012) as an appendix. The report also highlights attempts at collective action by project-affected people in areas of natural resource development.

Molo Women Mining Watch Network

Lost Paradise

The Lost Paradise report examines the impact of the Mawchi Tin Mines in Pasaung Township in Kayah State. High quality Tin and Tungsten has been mined at Mawchi since British colonial times in the 1830s. The Molo Women Mining Watch Network was formed to research information about the mines, which are perceived to have brought no discernible benefit to local people since the time operations began. There are plans to extend the mines into Lohkarlo village, which may involve resettlement away from ancestral lands, with associated fears that water resources will be affected. The report begins by making a comparison with the Heinda tin mine in Tanintharyi and the negative impacts at that operation. Lost Paradise also provides an analysis of the beneficial ownership of Mawchi. According to the report, the mine is operated by the Kayah State Mining Product Company (KMPC), with ownership of the company shared between UMEHL and Mining Enterprise Number 2. The manager of KMPC is the appropriately named Ye Tun Tin, a USDP MP for Pasaung township. The report makes the (unverified) claim that UMEHL shares 30% of the products with the Ministry of Mining No.2. The report then provides an assessment of some of the negative impacts of mining operations at Mawchi. It details the lung and arthritis problems for people working in the mine, the low wages for women workers (who receive 5000 kyats per day for hard labour). The report also describes the pollution from mining waste (a particular problem being toxic run-off from tailings dams during the monsoon season). This pollution affects the Molo river (which was a source of drinking water for the local population). The report also describes the deforestation of the area due to logs used for mine tunnel supports and the consequent landslides. Lost Paradise concludes by making the recommendations that there must be Free, Prior and Informed Consent (FPIC), local involvement in decision-making and no forced resettlement in the project-affected areas.

Ta'ang Students and Youth Organisation

Pipeline Nightmare

This report provides background on the Shwe Gas pipeline project along the lines of the Shwe Gas Movement's reports. However, the report specifically highlights the "civil war and human rights abuses" of the pipeline on the Ta'ang ethnic

¹⁰⁷ Drawing the Line, p2.

group in Shan State (also known as the Palaung), focusing specifically on 6 townships and 51 villages. There are approximately one million Ta'ang people living in the mountains mostly in north-western Shan State. The Ta'ang customary lands have the richest ruby and sapphire mines in the world, including the well-known Mogok gemstone area (which is now part of Mandalay Region).

The report contains strongly critical language, along the lines of the "blatant disregard for the human rights of the local people affected by the project adds fuel to the already blazing fire of discontent in an area where many of the inhabitants have no access any of the resources being exported."¹⁰⁸

The main body of the report focuses on the many negative impacts of the Shwe Gas Pipeline. It refers to land confiscation without prior consultation or consent, giving the example of four townships where 551 households had their land confiscated. The report details the inadequate compensation given for land appropriation, in some cases compensation is not paid, in others it was not paid in full, with different methods of distributing compensation payments from village to village. The report also examines the impacts of the increased military presence during the construction of the pipeline, with increased drug use (amphetamine and heroin), increased prostitution (attracted by the Chinese migrant workers) and notes the impacts on local women (sexual harassment and rape being the two main negative impacts). Pipeline Nightmare also notes the increased flooding due to poor pipeline construction, documents cases of forced labour, health and safety violations and the confiscation of tea farms, forest areas, and paddy fields. As with the Shwe Gas Movement's report, Pipeline Nightmare highlights the fact that the ESIs and SIAs have not been made available. The report also notes how the pipeline construction exacerbated conflicts between the KIA, Burmese troops and the Ta'ang National Liberation Army (TNLA). The TNLA sided with the KIA in fighting the Myanmar army, which lead to an increase in internally displaced persons.

Pa-O Youth Organisation

Robbing the Future

This report is the result of a three-year (2006-9) investigation by the Pa-O Youth Organisation into the planned Pinpet mine project. The Pa-O is an ethnic group with a population of approximately one million people, making the group the second largest nationality in Shan State. Pinpet is Myanmar's second largest iron ore deposit (the first being in Hpakant, Kachin State). Pinpet means "Pine Tree Mountain" and is known as "Pinngo" in the Pa-O language (and Pangpek in the Shan language). The mountain is seven miles South East of Taunggyi, the capital of Shan State. Pinpet mountain is also rich in copper, limestone, wolfram and tin, with uranium deposits suspected by some to be present on the mountain also. There are an estimated 10 million tons with 56.4% iron reserves of hematite and reserves of 70 million tons of limonite at with 42.6% iron (the best grades of iron in the world contain 60% iron). In addition, the mountain also has a deposit of an estimated 30 million tons of limestone.

Exploration of the mining prospectivity of Pinpet began in 1951 and started again in 1961 after a decade of unrest in the area

Robbing the Future provides details on the 11,000 acre Pinpet project itself, the companies involved as well as the likely social and environmental impacts. The report suggests that the project will involve 7,000 homes displaced and 25 villages destroyed. While there has been a ceasefire since 1991 in the area, the Myanmar military has set up three battalion camps nearby.

The report provides information on how the iron process plant, the cement plant and the mine itself will be powered. Construction of a natural gas pipeline from Magwe in central Myanmar, to Mount Pinpet is complete, with the capacity to transport 8 million cubic feet of natural gas, producing 20 MW of electricity. In addition, a small hydro power plant and a 65MW coal-powered facility are apparently being planned. The companies involved in the project include:

- Tyazhpromexport – a Russian Company
- MEC
- Kyaw Tha Company Limited
- Kanbawza Development Co. Ltd.(owned by U Aung Ko Win)
- Danieli & C. Spa – An Italian company

¹⁰⁸ Pipeline Nightmare, page 6

Tyazhpromexport has apparently already invested \$150m into the Pinpet Iron Processing Plant, Cement Factory, whereas Kanbawza has invested 60m US already into the cement factory.

In terms of the rumours of uranium being present in the mountain, the report states,

"Burma's Ministry of Energy has officially announced five uranium deposits in the country, but there have been no public reports of these deposits being mined as of yet. While the five sites do not include Pinpet, several sources have indicated the presence of uranium near Taunggyi and there is persistent speculation of uranium on Mount Pinpet."

According to local villagers, uranium is located southwest of the village of Leng Ngock on the mountain. The area is called "Kong Tyu" or "Sharp Mountain." A military camp has been set up on the mountain, and villagers are prohibited from entering the vicinity, even to collect firewood.¹⁰⁹

The report also provides details on the potentially negative social and environmental impacts of the Pinpet project. Potentially 35,000 people rely on the water from the Thabet river (which flows into the Pawn River, which itself is a tributary of the Salween). There is therefore a risk of pollution if the tailings dams carrying mine waste overflows in monsoon season. Meanwhile, there has been no community consultation, there is evidence of land confiscation, lack of compensation, forced relocation, destruction of property, loss of livelihood (farming), as well as an influx of migrant workers leading to vulnerability of local women to sexual harassment and rape and prostitution. Again, the report documents increasing food insecurity, lack of shelter and fuel, as well as restricted access to herbal medicine due to forest areas being sectioned off. Finally, the report notes the destruction of culture in the area through damage and knocking-down of pagodas and other places of spiritual significance. The report notes that the entire Pinpet mountain will be excavated for the project, which in itself reduces the natural beauty of the area.

Kachin Development Networking Group

Valley of Darkness

The Valley of Darkness report dates back to 2007, well before the reform period started. It is nonetheless interesting to compare with the more recent reports reviewed above to see if there is any difference or change between seven years ago and more recently.

Rather than jade, which is mostly commonly associated with Kachin, the study assesses gold mining in the Hugawng Valley in Kachin State (close to the Indian border in the West of the state). This valley is home to the world's largest tiger reserve and is an area of high biodiversity. The report was based on stakeholder research conducted from 2004 to 2006. It is instructive for the outside analyst to learn from the report that "the Kachin" is not in fact a singular ethnic group but rather a collection of groups, the major ones being the Rawang, Zaiwa (Azi), Lowao (Maru), Lachik (Lashi), Lisu, and the Jinghpaw.

Commercial gold mining increased dramatically in the valley following on from the 1994 ceasefire agreement between the KIO and the SPDC. Eight concessions were sold in the Hugawng Valley in 2002, with gold mining operations increasing from 14 sites in 1994 to 31 sites in 2006. During this time, the nature of the mining transformed from artisanal riverine panning to mechanised forms of mining.

Among other things, the report gives an interesting insight into traditional forms of mining prior to mechanisation/commercialisation:

"When it [stone or jade] is discovered, favourable omens are anxiously awaited before the discovery is announced to the Kachin community. A meeting is then convened by the chief and again sacrifice and other methods of divination are resorted to in order to ascertain if the mine should be worked at once or be allowed to remain undisturbed for a period of years. If indications are favourable, the land is marked out by ropes into small plots a few feet square, which are then appropriated among all the Kachins present. No Kachin belonging to the same family is refused a share, no matter how far away he may live."¹¹⁰

The report gives an interesting breakdown of the fiscal structure of mining during that period, with the Ministry of Mines collecting between 35-50% profit tax, with additional payments due to the military command in the region and also to the KIO (where the KIO maintained a local administrative role).

¹⁰⁹ Robbing the Future p15

¹¹⁰ Valley of Darkness, page 15.

In terms of the strength of governance over gold mining in the valley at the time, the report points to a wholesale lack of regulation, with deforestation, destruction of river banks, poor health and safety protection for workers, as well as mercury and cyanide contamination in water systems being common. The report highlights the fact that the 1994 mining law and the 1995 mining rules do not provide guidance on the use of chemicals and that there are no formal requirements for an ESIA/SIA. The report notes however that the most negative impact of the growth in gold mining in the areas is the influx of migrant workers, which has led to the expansion of drugs, sex and gambling in the area. The report notes that in one mining area, 80% of inhabitants in one mining area addicted to opium. The report concludes that people in affected areas in Hugawng Valley have not benefited from the expansion in gold mining in the area, with revenues from gold sales going to the SPDC authorities and a handful of businessmen and companies.

Earth Rights International

The Washington-based Earth Rights International (ERI) has had a longstanding focus on Myanmar, most closely following the Yadana pipeline project and more recently the Shwe Gas project.^{'''} ERI has published several in-depth reports on the Yadana pipeline, taking a critical stance against Total and Chevron in reports such as "Getting It Wrong" and "Total Impact". It should be noted that both reports were written prior to the reform period.

^{'''} <http://www.earthrights.org/campaigns/burma-project>

Annex 9: The Development of Myanmar's Power Sector

The installed generating capacity by fuel source on the Myanmar Grid¹¹² system as of July 2013 is listed in table 24.¹¹³ There are a total of 31 grid-connected power stations with a combined nameplate capacity of 3,831MW. Due to maintenance and operational limitations the firm capacity is 1,655MW¹¹⁴ which is below the peak demand of 1,930MW. This capacity shortfall results in rolling power cuts. The available hydro capacity is 1,552MW in the rainy season and 1,315MW during the summer season.

The MOEP plans to construct the gas fired power plants at the following locations:

- Tharkayta (two plants 503MW and 513MW);
- Hlawga (486MW);
- Kanbauk (525MW);
- Mawlamyine (230MW);
- Kyaukphyu (50MW);
- Thaton (106MW); and
- Ayeyarwady/Yangon (500MW),

Table 24: Overview of the Myanmar Electricity Sector, as of July 2013

Fuel	Installed capacity (MW)	Firm capacity (MW)	Energy (GWh)
Hydropower	2,780	986	13,872
Coal	120	27	600
Gas- MOEP	715	427	3,946
Gas- BOT	216.5	215	1,457
Totals	3,831.50	1,655	19,875

¹¹² In addition, there are a total of 649 diesel and small hydro stations with a combined capacity of 112MW providing off grid supplies.

¹¹³ Source National Energy Policy 2013

¹¹⁴ Source National Energy Policy 2013

Figure 34: Myanmar Grid System (from the ADB Energy Sector Initial Assessment Report, 2012)



The Power Sector Master Plan

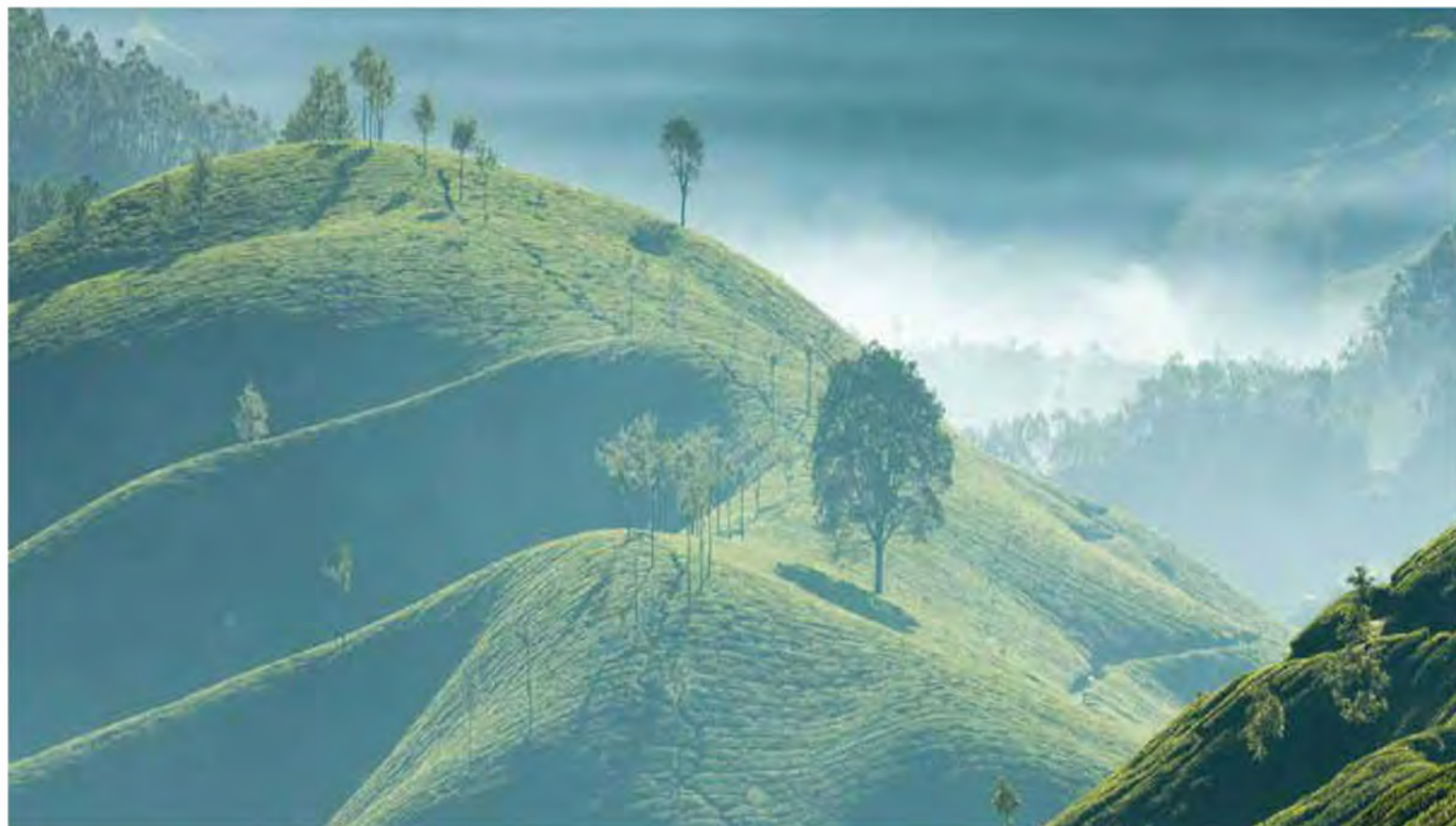
The Japan International Cooperation Agency (JICA) is currently funding a Master Plan (least cost expansion plan) for Myanmar¹¹⁶. The final Master Plan report should have been completed by August 2014 and delivered to the NEMC for review. The forecast demand growth in the Master Plan is 13% per annum.

The objective of a least cost plan is to establish the long term generation and transmission plan that meets the forecast national electricity demand at the lowest economic cost while at the same time meeting a specified reliability of supply standard. The plan should thus establish the mix of additional generation capacity and the associated transmission reinforcement that results in the lowest cost (i.e. in present valued, real terms) that will reliably meet the forecast demand subject to the National Energy Policy.

The Master Plan should establish any differences between the optimal expansion of the hydro sector in Myanmar for meeting the needs within Myanmar and what is currently proposed in the various joint ventures that are under discussion with developers. It is not known at this stage whether the master plan will include any reporting requirements that may have implications for EITI

Exploiting Myanmar's hydro resources for the purposes of a source of revenue from exports is a perfectly legitimate objective so long as (i) it takes due account of environmental and societal issues and (ii) that the economic benefits are shared on a fair and reasonable basis.

¹¹⁶ Mr Satoshi YAMAOKA is the Team leader for the JICA master plan



Adam Smith International