

IMPACT REPORT – 2021 ASSESSMENT

#### BARN INVESTMENTS

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# Introduction



#### INTRODUCTION

Dear colleagues, friends, and investors:

We are proud to present our third yearly impact report: 2021 assessment. We hope you enjoy the read!

The COVID-19 pandemic, the war in Ukraine, intensification of severe weather conditions, have disrupted food and energy supply chains and impacted production and prices across sectors.

According to the World Bank report 'The State of Food Security and Nutrition in the World (SOFI)" by the end of 2021, approximately 924 million people faced food insecurity at severe levels, an increase of 207 million in two years compared to before the outbreak of the COVID-19 pandemic. With the ongoing war these numbers will only increase.

As world population grows, natural resources are depleted, and climate changes, solutions for producing more food, energy, consumer goods, etc., in an efficient, secure, and sustainable way are demanded.

Latin America has a key role in helping the world deal with food security, decarbonization, and implementation of sustainable practices.

Our mission is to finance this transition in LatAm.

LatAm is 2<sup>nd</sup> largest food producer in the world, harbors the biggest share of freshwater resources, and is home to 22% of the forested areas globally. By 2030, Brazil alone is expected to be the main food supplier to the world. No doubt the region has relevant advantages to lead the green transition.

Having said that, the region also faces a multitude of inefficiencies when using and managing its natural resources. For instance, Brazil wastes ~39% of treated water, it is the 3rd largest user of pesticides, only 10% of its agricultural production is insured, and it is the 4th largest producer of waste.

The combination of competitive advantages, inefficiencies, and increase in demand of resources, results in unique opportunities to develop, scale, and deploy green technologies.

Barn investment thesis is built on investing in technologies that significantly improve efficiency in the use of natural resources, reduce waste, while contributing to climate mitigation and adaptation.

Companies that can develop green technologies that solve modern society's challenges have real competitive advantages. Barn's GreenTech thesis is not at the expense of financial reward, on the contrary, it is a strategy to create value, reduce risk, promote efficiency, and enhance investor returns.

For the past 10 years, Barn has built a resilient portfolio in the GreenTech space, investing in agriculture, food security, transportation, circular economy, and clean energy, consistently delivering financial returns alongside positive social and environmental impacts.

Throughout the years Barn has been recognized for its high-investment standards: in 2019 Barn won the EMPEA Award for Sustainability and Operational Excellence as the best GP for Emerging Markets and in 2022, Fund III won the Environmental Finance Award for the Best Environmental Fund for LatAm.

As we move forward into our next decade, we continue our pursue of excellency and commitment to deliver outstanding financial returns associated with long-lasting social and environmental impacts.

Lastly, this assessment is a work in process. Year after year as we measure and report the impact of our investments, aiming to develop and improve our methodology, in a continuous effort to contribute to the investment ecosystem.

All feedbacks and inputs are very welcome!

BARN TEAM

#### INTRODUCTION

2021 Aggregate Portfolio Companies Results

3.700 tons of avoided CO2e 283.000 smartphones & PCS recycled

850 direct jobs 200.0000 smallholder farmers served

5 MM

liters of water saved

388.000 hectares of agricultural production insured

# Our Green Tech Thesis

GREENTECH INVESTMENT THESIS

At Barn Investments we understand that the future is Green.

The solutions for humanity's major problems and challenges will necessarily have to come from innovative and disruptive green tech solutions.

Barn impact thesis is built on investing in technologies that significantly improve efficiency in the use of natural resources, reduce waste, while contributing to climate mitigation and adaptation.

We are convinced that clean technologies that can solve modern society's challenges have real competitive advantages.

# HOW TO PRODUCE MORE WITH LESS?

Businesses, investors and governments are looking to transition to netzero and accelerate the demand for green technologies that can solve the challenge of population growth while reducing GHG emissions.

#### GOVERNMENTS: PARIS AGREEMENT

Brazil has committed to reducing GHG emissions by 37% below 2005 levels by 2025, and by 43% below 2005 levels by 2030.

- Restore 12 million há of forests;
- Zero illegal deforestation;
- 45% of renewable energies in the energy matrix;
- 10% efficiency gains in the electricity sector;
- Promote the use of clean technologies in the industrial sector;
- Estimulate efficiency and infrastructure measures in public transport and urban areas.

# COMPANIES WITH NET-ZERO PLEDGES:

Technology Apple, Microsoft, Amazon, MercadoLivre

Banks Santander, HSBC, BlackRock, Deutsche Bank

Agri Bayer, Mafrig, Minerva Foods, BRF

Goods of consumption Nestlé, Walmart, Unilever, McDonald's, L'Oréal Population growth generates a sharp increase in demand for natural resources, including food, energy and water, as well as a significant increase in GHG emissions.

# By 2050: 10 billion people

+55% water demand

12% increase in global per capita food consumption

+70% food demand

+70% of the world's population will be urban

+60% energy demand

+ Climate change will further intensify pressure on the planet's natural resources

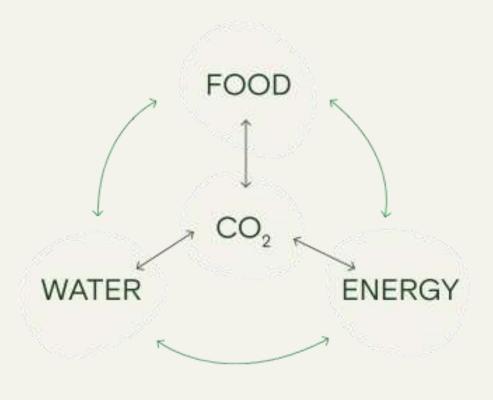
#### BRAZIL'S ROLE IN THE GREEN TRANSITION

#### **CHALLENGES AHEAD**

By 2050, food production is expected to increase by **70%**.

It is estimated that Brazil will be responsible for <u>40%</u> of this increase.

By 2030, Brazil is expected to represent **50%** of global soybean exports and will be the **largest food supplier** to the world, increasing its share from 39% (2020) to 43%.



#### **COMPETITIVE ADVANTAGES**

- 1º Biodiversity
- 12% of all fresh water available on the planet.
- **30%** territory are protected areas
- 28% territory used for Ag (USA 41%, CHINA 55%, GERMANY 39%)
- 2º Food producer
- 1º in available areas for agriculture.
- 5º largest land carbon sink
- 3º Installed capacity of renewable energy

#### **INEFFICIENCIES**

- **39%** of treated water is wasted due to leakage and improper use.
- 70% of freshwater is consumed by agriculture.
- **2<sup>nd</sup>** in tree coverage loss (deforestation) from 2001 to 2020 (after Russia)
- **45%** of all GHG emission are related to change in land use and 27% to agriculture.
- 10% of the agricultural area is insured.
- 3<sup>rd</sup> largest consumer of pesticides
- 4th producer of waste
- 4th producer of plastic waste

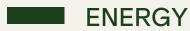
Highest cost of electricity for industrial customers:

# Brazil is the world's 6th largest GHG emitter





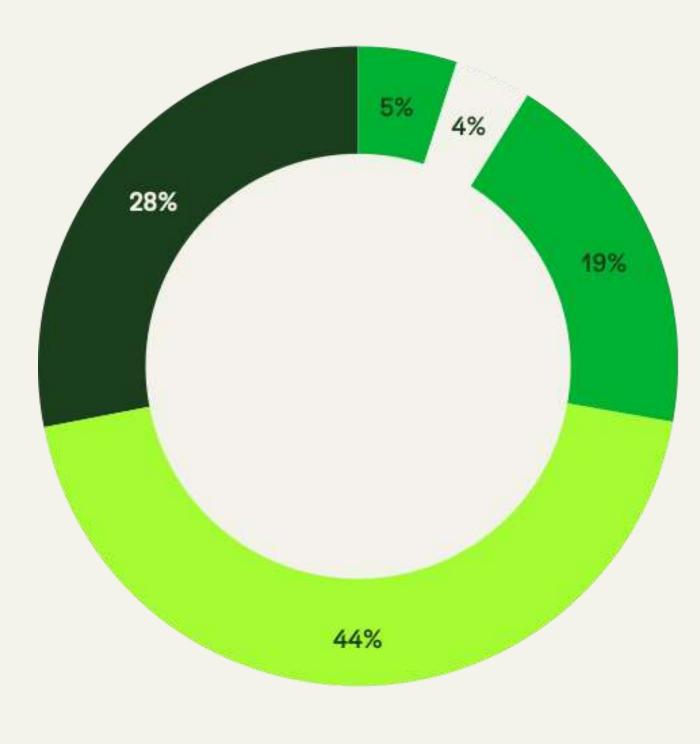




INDUSTRIAL PROCESSES



# Opportunities for new businesses and for new solutions



Sources: Capital Reset, UN 2019 - GLOBAL POPULATION, BEN, Statista, SPDE-MME,; EPE,; CEPEA PwC,; FAO; MAPA,; Fuglie, Wang, Ball, ACEEE,; FIRJAN, COPPE-UFRJ; CEBDS;, INPA, APRELPE,; SNIS/Abcon/Sincon

### GREENTECHS VERTICALS



#### Agtechs & Foodtechs

- Precision Agriculture
- Biological Inputs
- Livestock Management
  - Traceability
- Supply Management
- Financial Engineering
  - Carbon Credit
- Resource Efficiency



#### Logtechs & Mobilitytechs

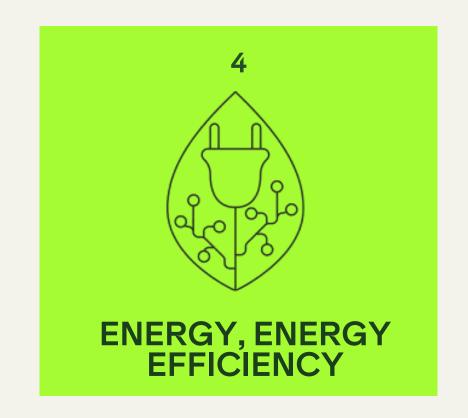
- Efficient Supply
- Micromobility
- Logistics Softwares
- Chain Management
   Electric Vehicles

• IOT



#### Clean Industry

- Resource Efficiency
- Waste Management
- Circular Economy
  - Traceability
    - Data
- Environmental Compliance



#### Renewable Energy

- Smart Grids
- Energy Efficiency
- Control Systems
- Renewable & Distributed
  - Marketplaces



#### **New Materials**

- Packaging
- Buildings
- Pharma
- Resource Efficiency
  - Traceability

# Impact Framework

#### FRAMING IMPACT

We developed our impact framework and assessment aligned with our investment thesis and core beliefs. Our methodology is framed within the United Nations (UN) Sustainable Development Goals (SDGs) and Harmonized Framework for Impact Reporting – ICMA. Our goal is to allow our investors to effectively understand and monitor, how their investment is coherent and contributes to the world's agreed sustainability agenda.

TRADITIONAL INVESTMENTS	RESPONSIBLE INVESTING	SUSTAINABLE INVESTING	THEMATIC INVESTMENTS	IMPACT-FIRST	VENTURE PHILANTHROPY
	COMPETIT	IVE RETURNS			
	ENV	/IRONMENTAL AND SOCIA	L EXTERNALITIES ASSESSME	NT	
			HIGH IMPACT SC	LUTION	
Return only, doesn't consider Environmental, social, and governance risks factors in investment analysis	Environmental, social, and governance risks are integrated in the investment analysis as a component of risk management	Positive and negative screening of environmental, social, and governance risks are used to align portfolio to management values	Market inefficiencies + social and/or environmental needs create commercial growth opportunities	Focus on issues that social and/or environmental needs may require financial trade-offs	Financial return disregard
	<ul><li>EX. NEGATIVE SCREENING</li><li>Tabaco</li><li>Weapons</li><li>Alcohol</li></ul>	<ul><li>EX. POSITIVE SCREENING</li><li>Carbon emission</li><li>Gender equality</li><li>Waste or water management</li></ul>	<ul> <li>EX. SOLUTIONS FOR:</li> <li>Population growth</li> <li>Urbanization</li> <li>Sustainable Food Production</li> <li>Sustainable Resource Mgmt.</li> <li>Climate change</li> </ul>	<ul> <li>EX. SOLUTIONS FOR</li> <li>Initial support for innovation, research, and development</li> <li>Enabling and fostering innovation ecosystem</li> </ul>	<ul><li>EX.</li><li>Social enterprises</li></ul>
			<b>T</b>		
			<b>BARN INVESTMENT</b>		

**FRAMEWORK** 

# ASSESSING IMPACT: PRE & POST INVESTMENT

Barn has developed a proprietary methodology to assess impact pre and post investment. The first step, pre-investment, which appraises the overall impact (BOIS), and a second assessment, post-investment, which monitors and reports a set of SDGs KPIs using the IRIS+ Catalog of Metrics.

### **INVESTMENT PROCESS – BARN**



# ASSESSING IMPACT: PRE INVESTMENT

Barn Overall Impact Score (BOIS) is our pre-investment assessment tool, that takes into consideration negative and positive impacts, using a total of 6 criteria: 3 environmental and 3 social.

# ENVIRONMENTAL CRITERIA

**RESOURCE EFFICIENCY** – how our investment will support the efficient use of resources?

ecosystems contribution – how our investment will contribute to protecting nature? (soil, water, waste/recycling, and biodiversity).

#### **CLIMATE MITIGATION & ADAPTATION**

how our investment will help tackle global warming and climate risk /adaptations?

# SOCIAL CRITERIA

**ECONOMIC IMPACT** – how will our investment benefit lower income groups?

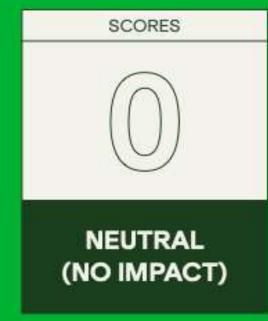
**WELLBEING** – how will our investment contribute to efficient spending on healthcare, education and other public services?

**DECENT WORK** – how will our investment support more jobs with decent pay and working conditions?

# BOIS SCORECARD SYSTEM

Each of the 6 criteria is evaluated and scored accordingly, on whether the investment has a:







Each set, Environment and Society, can score from '+3' to '-3'. Where:



# BOIS WORKING EXAMPLE



Barn invested in Strider in 2014 and exited in 2018. Strider is an AgTech that delivers precision agriculture solutions to address and reduce the ever-increasing use of pesticides on the field, allowing farmers to collect and analyze accurate data, increasing yields and lowering production costs.

	ENVIRONMENT			SOCIAL	
Criteria	Impact Assessment	Score	Criteria	Impact Assessment	Score
Resource efficiency	Technology optimizes the use of agricultural inputs (fertilizers, pesticides, water and land)	+1	Economic impact	Company provide tech for crop management and training for tech adoption small farm holders	+1
Ecosystems contribution	Technology reduces from 10% up to 40% the use of pesticide on the felds, diminishing land/water contamination	+1	Wellbeing	Technology has relevant and indirect impact on wellbeing, reducing pesticide use, and hence the number of intoxication by pesticide.	+1
Climate mitigation and adaptation	Technology does not have a relevant/direct impact on climate adaptation/nor mitigation	0	Decent work	Company creates direct jobs	+1

STRIDER BOIS SCORE
2 ENVIRONMENT + 3 SOCIAL = 5 BOIS

# ASSESSING IMPACT: POST-INVESTMENT

Post-investment, Barn utilizes the United Nations Sustainable Development Goals (SDGs) to measure and report impact using international standards. Our goal is to allow investors to effectively understand how their investment is aligned with the worlds agreed sustainability agenda.





































# International Standards

After determining the BOIS, we select at least 3 SDGs indicators from IRIS Catalog of Metrics per company to measure, monitor, and report on an annual basis. These KPIs follow the Impact Reporting Investment Standards (IRIS), one of the most accepted impact accounting system that leading impact investors use to measure, manage, and optimize their impact. Each portfolio company has a set of indicators particular to their sector/activity.

# Barn Investments No-Gos

- Zero or Negative BOIS scores (Environmental BOIS + Social BOIS)
- Startups/technologies that promote/enable high intensity carbon activities
- Startups/technologies that promote/enable ecosystem degradation
- Startups/technologies that promote inequalities, social injustice, or any human rights violations

# Portfolio Assessment

### PORTFOLIO IMPACT OVERVIEW

COMPANY	VERTICAL	BOIS	SDGs	IMPACT
TROCAFONE	Clean Ind.	6	1 NO PROPERTY  12 PERMANENT CHARGE TO CHARGE THE ACTION ACTION  AND PROPERTY CHARGE TO CHARGE THE ACTION ACTION  AND PROPERTY CHARGE TO CHARGE THE ACTION ACTION  AND PROPERTY CHARGE THE ACTION ACTION ACTION ACTION  AND PROPERTY CHARGE THE ACTION	Buys, refurbishes, and resells used smartphones. Promotes resource efficiency, reduces non-renewable activities related to smartphone production, avoid GHG emissions, and promote digital inclusion.
Agritask 🍃	Ag & Food	5	2 FERD THE CONSTRUCT CONSIDERATION AND PRODUCTIONS AND PRODUCT	Provide tools for farmers to make assertive decisions based on real-time information and facilitates access to financial services (rural insurance) for small and mid size farmers. Food security & climate adaptation.
- <b>₩</b> ORIGEM	Transport	4	11 SUSTANABLE COSTS  12 SESSENCE OF THE SOURCE OF THE SOUR	Electric motorcycle for last mile delivery that substitute combustion bikes, allowing large fleet owners to reduce their carbon print. The bikes are also a cheaper renting solution to motorcycle couriers in Brazil .
grãodireto	Ag & Food	5	10 RETUCES 12 DESPENSE ( CONSIDERATE AND PROTOCOLORS AND PROTO	Grain trading platform connects buyers to producers, providing liquidity, security, and traceability for digital grain transactions. Promotes financial inclusion as well as reinforces social environmental compliance.
agrolend	Ag & Food	6	2 700 10 RELICES 13 GUMATT ACTION CONTROL CONT	Simplifies financing for small and mid size farmers that have limited access to credit for financing agricultural inputs and technologies. Promotes financial inclusion as well as reinforces social environmental compliance.
G circular brain	Clean Ind.	5	8 ESTINATE CHICAGO CHI	Connects the value chain of the electronics with traceability and environmental control, creating the necessary infrastructure for reverse logistics and the management of electronic products lifecycle. Reduces waste, pollution, GHG emission, and non-renewable activities.
<b>agrotoken</b>	Clean Ind.	4	2 HENCER 12 HENCER CHARGEN TON HIGH PRODUCTION CON 13 CHMATT ACTION ACTI	Provide a stable coin backed by agricultural commodities, facilitating financing, liquidity, and simplifying processes from grain to cash for the entire agricultural commodity supply chain. Promotes financial inclusion and provides hedging against price vol, exchange rates, and currency devaluation.
AVICANNA INC.	Ag & Food	4	10 MEQUALITIES  12 MESSAGRIPH CONTROL OF CHARACTER CONTROL OF CONTROL OF CHARACTER CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL	Biotech company dedicated to scientific & evidence-based delivery of medical cannabis-based products

#### **SMARTPHONE RECYCLING**

# TROCAFONE

#### **PROBLEM**

The production of a smartphone is resource-intensive and non-renewable, using minerals and metals. The production of one smartphone uses 12k liters of water, emits 16 KG CO2, and impacts 18 M of soil (mining). Furthermore, smartphones have a short lifecycle, a two-year average. Brazil ranks as the seventh largest producer of electronic waste, producing ~1.5 million metric tons a year, and recycling less than 3% of its e-waste.

#### SOLUTION

Trocafone buys, refurbishes, and resell used smartphones on a hassle-free platform. The Company democratizes mobile and internet access, promoting digital inclusion by reselling high quality smart phones at accessible prices. Its circular economy model generates relevant positive impact decreasing e-waste and increasing life-span.

From 2016 to the end of 2021 Trocafone has refurbished over 1.5 MM smartphones, resulting in 20.000 metric tons of avoided CO2e and 15 MM of liters of water saved.



# TROCAFONE

## PRE-INVESTMENT (BOIS)

The Environment	Impact Assessment	<b>BOIS Score</b>
RESOURCE EFFICIENCY how our investments will support the efficient use of resources?	Solution reduces e-waste and increases life spam of device and resource efficiency (water, soil, minerals)	+1
ECOSYSTEMS CONTRIBUTION how our investments will contribute to protecting nature?	Contributes in reducing a non-renewable activity: mining and also reduce e-waste (pollution)	+1
CLIMATE MITIGATION AND ADAPTATION how our investments will help to keep global warming/tackle climate risk?	Climate mitigation solution reduces CO2 emissions, since producing a new phone emits ~16kg CO2	+1
Total Environmental		+3

Modern Society	Impact Assessment	<b>BOIS Score</b>
ECONOMIC IMPACT how will our investments benefit lower income groups?	Promotes digital inclusion and provides new tech services for lower-income groups through accessible prices	+1
WELLBEING how will our investments contribute to efficient spending on healthcare, education, culture, and other public services?	Democratizes mobile and internet access, contributing to education and culture	+1
DECENT WORK how will our investments support more jobs with decent pay and working conditions?	The company creates direct jobs	+1
Total Social		+3

# TROCAFONE

# POST-INVESTMENT (IRIS+ SDGs KPIs)

SDG	Code	Indicator	2015	2016	2017	2018	2019	2020	2021
1 Postery 小学中心	<u>PI7098</u>	% of revenue of products serving lower income groups	50%	50%	50%	50%	50%	50%	50%
8 DESERT WHEN AND ELEMENTS	<u>OI3160</u>	Number of full-time jobs (# people)	43	152	232	372	430	426	516
5 EDMER COLLINY	<u>OI6213</u>	% of women in workforce (full- time equivalent)	n/a	45%	52%	51%	54%	56%	54%
11 MINIMALICATION TO COMPANY ACTION A	<u>OI4328</u>	Avoided waste (# recycled devices)	41.211	84.472	175.787	208.842	259.886	178.916	230.691
13 GEMANT ACTION	<u>PI2764</u>	Amount of GHG emissions avoided by the organization ~16kg/device (CO2e metric tons)*	659	1.351	2.812	3.341	4.158	2.862	3.691
6 PLEAN MATTER 12 PERMANDER PROPERTY CONTROL C	<u>PD5786</u>	Volume of saved water usage achieved as a result of the organization's solution ~ 12,76L/device (liters)*	0.52MM	1MM	2.24MM	2.66MM	3.31MM	2.28MM	2.94MM
12 DESPENSE CONTROL OF LEVEL O	n/a	Avoided or reduced soil degradation ~ 18m² soil/device (m²)*	0.75MM	1.52MM	3.64MM	3.75MM	4.67MM	3.22MM	4.15MM

#### MITIGATING CLIMATE RISKS



#### **PROBLEM**

Climate change has significant effects on the ag sector, aggravating exposure to natural perils. These impacts are more severe in developing countries as they are more dependent on agriculture. The agri sector is responsible for ~25% of the Brazilian GDP; nevertheless, over 90% of agricultural producers are uncovered by insurance policies and are exposed to climate risks and external shocks.

<u>Click here</u> to access AgriTask's report: Securing the Supply Chain.

#### SOLUTION

AgriTask offers a one-stop-shop farm management platform. By combining a range of data gathering and processing tools, AgriTask allows farmers to make assertive decisions based on real-time information. The technology enables an accurate risk assessment and further development of agriculture insurance products.

With large global clients such as Starbuck, Heineken, and Nestlé, AgriTask enables large companies (Agri, Food & Beverage) to source sustainably and ensure transparent, reliable supply chains. To achieve these goals, AgriTask works closely with suppliers and growers to develop farming best practices and improve the livelihood of farmers around the world.





## PRE-INVESTMENT (BOIS)

The Environment	Impact Assessment	BOIS Score
RESOURCE EFFICIENCY how our investments will support the efficient use of resources?	Precision agriculture platform allow farmers to make real-time assertive decision when using resources (water, soil, fertilizer, inputs)	+1
ECOSYSTEMS CONTRIBUTION how our investments will contribute to protecting nature?	Do not impact	0
CLIMATE MITIGATION AND ADAPTATION how our investments will help to keep global warming/tackle climate risk?	Climate adaptation solution that provides agriculture insurance helping farmers to cope with climate risks	+1
Total Environmental		+2

Modern Society	Impact Assessment	<b>BOIS Score</b>
ECONOMIC IMPACT how will our investments benefit lower income groups?	Spurs development of agriculture insurance products in underdeveloped markets promoting food security and serving vulnerable small farm holders	+1
WELLBEING how will our investments contribute to efficient spending on healthcare, education, culture, and other public services?	Financial inclusion promote liquidity to spend on education and healthcare	+1
DECENT WORK how will our investments support more jobs with decent pay and working conditions?	The company creates direct jobs	+1
Total Social		+3



## POST-INVESTMENT (IRIS+ SDGs KPIs)

SDG	Code	Indicator	2019	2020	2021
8 DECEMBER CHANNEL CHENTER  THE CONTRACT CHE	<u>OI3160</u>	Number of full-time jobs (# people)	93	105	68
5 spiner spiner	<u>016213</u>	% of women in workforce (full-time equivalent)	34%	27%	29%
2 FIRST BASE SERVICED TO THE CONTROL OF THE CONTROL	<u>016912</u>	Area of land directly traced and monitored by the company (#hectares)	300.000	1.293.837	1.270.000
10 MEQUATIES  12 MESPENSING CONSIDER AND CON	<u>PI6372</u>	Number of smallholder farmers (SHFs) serviced (# people)	56.000	291.232	186.892
10 MAGNATINS  12 MESPHASER I CHARGAN THAN ACTION  13 CHART  ACTION  13 CHART  ACTION  10 MESPHASER I CHARGAN THAN ACTION  11 MESPHASER I CHARGAN THAN ACTION  12 MESPHASER I CHARGAN THAN ACTION  13 MESPHASER I CHARGAN THAN ACTION  14 MESPHASER I CHARGAN THAN ACTION  15 MESPHASER I CHARGAN THAN ACTION  16 MESPHASER I CHARGAN THAN ACTION  17 MESPHASER I CHARGAN THAN ACTION  18 MESPHASER I C	<u>PI2822</u>	# of SHFs receiving agricultural insurance	n/a	46.446	11.618
10 MEGANITHS  12 MESPHASER & COMMITTED ACTION  13 CENANT  ACTION  13 CENANT  ACTION	<u>PD3017</u>	Hectares insured (# hectares)	15.000	338.231	388.000



"Agritask helps us understand the situation of our producers, having all the agronomic data in a user-friendly platform according to the way we would like to work with. Our processes are now automated and well-structured."

Erik Alejandro López Valladaresermer, Procurement Manager at Heineken, AGRITASK customer

#### **ELECTRIC MOTOCYCLES AAS**



#### **PROBLEM**

Transportation and mobility accounts for 25% of total GHG emissions globally. With 28 million motorcycles, Brazil has the largest fleet in the west, including Europe and North America. In terms of motorcycle sales, Brazil occupies the eighth position in the world, behind only Asian countries, where the motorcycle is the main means of transportation. The Brazilian motorcycle fleet has grown an average of 7% per year in the last 12 years, more than doubling in this period. Motorcycle sales now represent ~30% of total vehicles sold. With urban centers rapidly growing in size and population and most cities already dealing with dangerous levels of pollution and congested streets, clean technologies that balance high efficiency and low carbon footprint are critical.

#### See our Medium article

#### SOLUTION

Origem designs, manufactures and rents electric motorcycles in a B2B model. Through its proprietary tech, Origem's motorcycles and swappable battery stations are transforming the last-mile logistics and DSP markets by providing a viable green and sustainable solution that significantly reduces carbon print.

Using the GHG Protocol, the conventional commercial combustion motorcycle mostly commonly used in Brazil, the Honda CG 160, emits an average of 2.65 tons of CO2 per year. Origem's circular business model is responsible for the bikes throughout their lifecycle, reducing waste significantly. Both motorcycles and swapping battery stations embed intelligence that optimizes routes and brings efficiency for electric mobility.



**BOIS Score** 



# PRE-INVESTMENT (BOIS)

ne Environment Impact Assessment	BOIS Score	Modern Society	Impact Assessme
SOURCE FICIENCY w our investments will pport the efficient use resources?  Origem presents a circular busine model that increases life-spam or products and reduces waste. Swa	apping +1	ECONOMIC IMPACT how will our investments benefit lower income groups?	The company has room cheaper renting to mo Brazil (lower income gropulation)
Do not impact ONTRIBUTION ow our investments will ontribute to protecting sture?	0	WELLBEING how will our investments contribute to efficient spending on healthcare, education, culture, and other public services?	Do not impact
AATE MITIGATION  ADAPTATION  our investments will  to keep global  ming/ tackle climate  Climate mitigation solution that of large fleet owners to reduce carb  related to last-mile deliveries at competitive pricing		DECENT WORK how will our investments support more jobs with decent pay and working conditions?	The company creates



# POST-INVESTMENT (IRIS+ SDGs KPIs)

SDG	Code	Indicator	2020	2021
8 INCOME CHANTE	<u>OI3160</u>	Number of full-time jobs (# people)	24	37
5 EGNER EQUILITY	<u>Ol6213</u>	% of women in workforce (full-time equivalent)	17%	23%
12 HERPHREE IN CHART AND CHART CHART AND CHART CHART AND CHART CHART AND CHART CHART AND CHART CHA	<u>PD5694</u>	Total amount of km traveled by electric motorcycles (Km)	60.000	300.000
11 SURTAMANIENCHES 12 SERVINSER? CONSCIONATE AUTHOR	<u>PI2764</u>	Amount of GHG emissions avoided by the organization during the reporting period (CO2e metric tons)*	2.7	13.5

<sup>\*</sup> Calculation using GHG Protocol. Company in early stage, in process of scaling production.

#### **EMPOWERING PRODUCERS**

# grãodireto

#### **PROBLEM**

Approximately ~70% of Brazil CO2 emission are related to agricultural production and change in land use for Ag. Brazil is the world's 2nd largest exporter of grains Effective technological solutions that addresses traceability, transparency, and reliable data are fundamental to transform the sector, while empowering producers.

#### **SOLUTION**

GrãoDireto's grain trading platform connects buyers to producers and sellers. The platform provides security, traceability and efficiency for digital grain transactions on the physical market. The platform was developed to support different stakeholders of the grain chain: small and mid size producers, cooperatives, logistic operators, tradings, brokers, feed factories, warehouses, etc. It is an innovative tool to disintermediate the chain, eliminates price asymmetries, and improve the penetration of financial services in agribusiness.

The platform promotes transparency and efficiency across the supply chain. Grao Direto has partnered with important players to integrate reliable traceability solutions that can ensure environmental and social compliance across the platform.



# grãodireto

## PRE-INVESTMENT (BOIS)

The Environment	Impact Assessment	<b>BOIS Score</b>
RESOURCE EFFICIENCY how our investments will support the efficient use of resources?	Do not impact	0
ECOSYSTEMS CONTRIBUTION how our investments will contribute to protecting nature?	The platform promotes transparency and efficiency. The company is also integrating traceability solutions that can minimize social and environmental risks associated with biome deforestation	+1
CLIMATE MITIGATION AND ADAPTATION how our investments will help to keep global warming/ tackle climate risk?	The technology disintermediates the chain and improves the penetration of financial services in agribusiness	+1
Total Environmental		+2

Modern Society	Impact Assessment	BOIS Score
ECONOMIC IMPACT how will our investments benefit lower income groups?	The platform reduces price/information asymmetries	+1
WELLBEING how will our investments contribute to efficient spending on healthcare, education, culture, and other public services?	Promotes financial inclusion, facilitates liquidity, and improve available income to spend on education and healthcare	+1
DECENT WORK how will our investments support more jobs with decent pay and working conditions?	The company creates direct jobs	+1
Total Social		+3



# POST-INVESTMENT (IRIS+ SDGs KPIs)

SDG	Code	Indicator	2021
8 DECEMBER AND DEC	<u>OI3160</u>	Number of full-time jobs (# people)	76
5 CHORER  EQUILITY	<u>016213</u>	% of women in workforce (full-time equivalent)	39%
5 EMBER  EQUILITY	OI1571	% of women in workforce (full-time equivalent) in C-Level	38%
10 PREQUALITIES  12 PRESPRISE T CHARGE PER PRODUCTION  13 CHARTE  10 PRESPRISE T CHARGE PER PRODUCTION  10 PRESPRISE T CHARGE PER PRODUCTION  10 PRESPRISE T CHARGE PER PRODUCTION  11 PRESPRISE T CHARGE PER PRODUCTION  12 PRESPRISE T CHARGE PER PRODUCTION  13 CHARGE PER PRODUCTION  15 PRESPRISE T CHARGE PER PRODUCTION  16 PRESPRISE T CHARGE PER PRODUCTION  17 PRESPRISE T CHARGE PER PRODUCTION  18 PRESPRISE T CHARGE PER PRODUCTION  19 PRESPRISE T CHARGE PER PRODUCTION  19 PRESPRISE T CHARGE PER PRODUCTION  10 PRESPRISE T CHARGE PER PRODUCTION  10 PRESPRISE T CHARGE PER PRODUCTION  11 PRESPRISE T CHARGE PER PRODUCTION  12 PRESPRISE T CHARGE PER PRODUCTION  13 PRESPRISE T CHARGE PER PRODUCTION  14 PRESPRISE T CHARGE PER PRODUCTION  15 PRESPRISE T CHARGE PER PRODUCTION  16 PRESPRISE T CHARGE PER PRODUCTION  17 PRESPRISE T CHARGE PER PRODUCTION  18 PRESPRISE T CHARGE PER PRODUCTION  18 PRESPRISE T CHARGE PER PRODUCTION  19 PRESPRISE T CHARGE PER PRODUCTION  19 PRESPRISE T CHARGE PER PRODUCTION  10 PRESPRISE T C	<u>PI6372</u>	% of small and mid size farmers clients	48%
10 MEDICES INCOME IN THE PROPERTY OF THE PROPE	<u>PI6372</u>	% of smallholder farmers clients - under 50 hectares	29%
11 SUSTAINMETERS 12 SEPTIMENT TO SEPTIMENT T	<u>PI6372</u>	% transacted on the platform by smallholder - under 50 hectares	7%
1 NO PRINCETY  2 THEN SOME SOUND SECURITY  \$\frac{10}{10}  PRINCETY NECESSARILY SECURITY NECESSARILY SECURITY SECU	<u>PI8330</u>	% of smallholder women on the platform - under 50 hectares	2%
1 NO PETRICES  2 VERIL STREET  5 CHAPTER  10 PETRICES  13 CLIPATE  13 CLIPATE  14 PARTICES  15 CHAPTER  16 PETRICES  17 PARTICES  18 CLIPATE  19 PETRICES  10 PETRICES  10 PETRICES  10 PETRICES  11 PARTICES  12 PARTICES  13 CLIPATE  14 PARTICES  15 PETRICES  16 PARTICES  16 PARTICES  17 PARTICES  18 PARTICES  18 PARTICES  18 PARTICES  19 PARTICES  10 PARTICES  11 PARTICES  12 PARTICES  13 PARTICES  14 PARTICES  15 PARTICES  16 PARTICES  17 PARTICES  18 PART	<u>PD5694</u>	# of producers or area indicating environmental compliances (KPI in progress)	n/a

#### **ACCESSING RURAL CREDIT**



#### **PROBLEM**

In a country like Brazil, where agribusiness represents approximately 25% of GDP and it is the 4th largest food producer in the world, rural credit undersupply is a major problem. The lack of capital for Small and Mid size Farmers (SMFs) hinders productivity, restricting investments in technology (inputs, automation, technical knowledge), augmenting food insecurity, and delaying the implementation of best agronomic practices.

#### See our Medium article here

#### SOLUTION

Agrolend is an AgFinTech company that seeks to simplify the process of financing for small and medium Brazilian rural producers that usually do not have easy access to credit for financing agricultural inputs and technologies.

All Brazilian rural producers that fall into these categories are eligible for Agrolend's loans, regardless of the type of crop grown and the geographical region.

Agrolend has robust policies to assess social, environmental and financial risks of its operations. After the rural producers' registration in Agrolend's credit platform, they are assessed on legal and environmental compliance, including potentially embargoed areas under Brazilian Institute of Environment and Natural Resources (IBAMA). Agrolend also verifies whether the producer is on restrictive lists such as EU, UK and France sanctions, World Bank and on lists of employers who have submitted workers to conditions analogous to slavery and others.





# PRE-INVESTMENT (BOIS)

The Environment	Impact Assessment	BOIS Score	Modern Society	Impact Assessment	BOIS Score
RESOURCE EFFICIENCY how our investments will support the efficient use of resources?	Access to capital is a building block to develop, implement, and scale a more efficient and sustainable agriculture (land, water, energy, inputs, etc)	+1	ECONOMIC IMPACT how will our investments benefit lower income groups?	Agrolend offers credit to producers that traditionally struggle to access credit	+1
ECOSYSTEMS CONTRIBUTION how our investments will contribute to protecting nature?	The platform integrates environmental risks assessment associated with biome deforestation	+1	WELLBEING how will our investments contribute to efficient spending on healthcare, education, culture, and other public services?	Promotes financial inclusion, facilitates liquidity, and improve available income to spend on education and healthcare	+1
CLIMATE MITIGATION AND ADAPTATION how our investments will help to keep global warming/tackle climate risk?	Climate adaptation solution, providing credit for small and mid-sized farmers, enabling producers to better cope with climate risks and external shocks	+1	DECENT WORK how will our investments support more jobs with decent pay and working conditions?	The company creates direct jobs	+1
Total Environmental		+3	Total Social		+3



# POST-INVESTMENT (IRIS+ SDGs KPIs)

SDG	Code	Indicator	2021
8 RECEIVED COLONIER	<u>OI3160</u>	Number of full-time jobs (# people)	14
5 EQUALITY	<u>OI6213</u>	% of women in workforce (full-time equivalent)	36%
1 M POWERTY 10 PRODUCTS 13 COMMT 人主 1	<u>PI6372</u>	% of loans transacted on the platform by smallholder and mid size farmers	75%
1 PRIVATE 2 THE STATE ST	<u>PI6372</u>	% of loans transacted on the platform by smallholder farmers	12%
1 MU PETRICATY 2 MINISTRAL STREET 5 GENERAL TO SERVICES NACIONALITY 13 CHANTE NACIONALITY 13 CHANTE NACIONALITY 15 CHANTE NACIONALITY 16 CHANTE NACIONALITY 17 CHANTE NACIONALITY 18 CHANTE NACIONALITY 19 CHANTE NACIONALIT	<u>PI8330</u>	% of loans transacted on the platform by women farmers	14%
1 POTENTY  2 PRINT 2 FORMULTY  5 STRIPER 5 STRIPER 10 PRESIDENT 13 SCHNART 13 SCHNART 15 STRIPER 16 STRIPER 16 STRIPER 17 STRIPER 18 SCHNART 18	<u>PI8330</u>	% of smallholder women farmer on the platform	5%
1 POTENTY  2 THE STREET SCHOOL STREET SCHOOL STREET SCHOOL STREET SCHOOL STREET SCHOOL	<u>PD5694</u>	# of producers indicating environmental compliances	198
1 MO RECOLUTE NOCOMAINES    The property   The prop	<u>PI5160</u>	Average loan size disbursed by the organization during the reporting period	70% of loans under ~U\$ 55.000



"I was born into a family of farmers in the District of Palmitópolis, in the city of Nova Aurora, in the interior of the State of Paraná. I work in agriculture with my husband on the farm, managing the logistics of planting.

I was introduced to Agrolend's credit platform by a local input reseller. I found the process of analyzing and granting credit very interesting, but I thought it would be bureaucratic, but to my surprise, the process was all automated. Digital signature, without the need for physical displacement, on WhatsApp and without the need to use any Registry Office. We requested a loan and everything that had been promised was fulfilled. Simple access and with the security of the partner reseller. "

#### **CONNECTING LINKS IN E-WASTE**

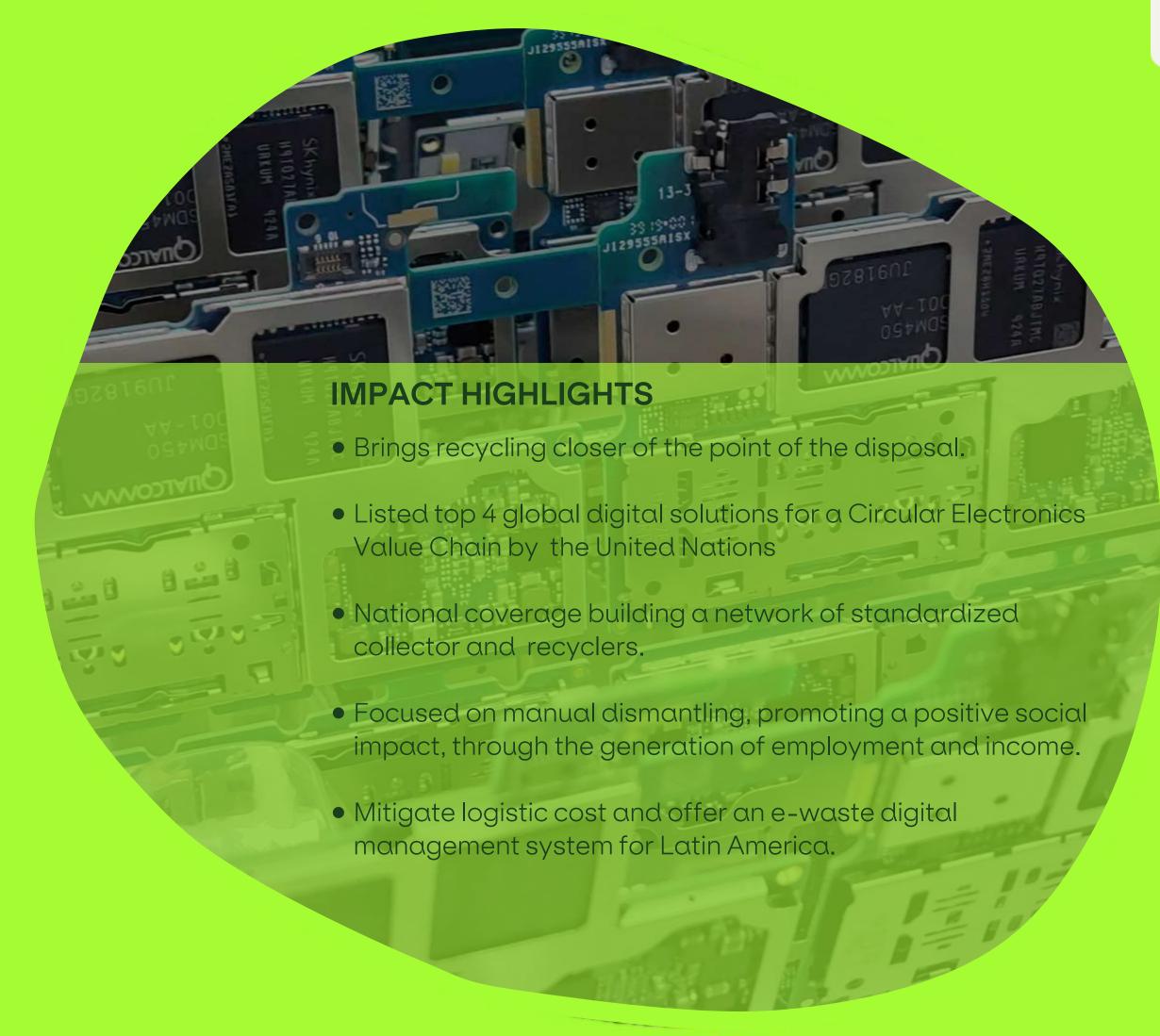


#### **PROBLEM**

The amount of e-waste worldwide has drastically increased from 20 mm to 50 mm tons per year. Brazil ranks as the seventh largest producer of electronic waste, producing ~1.5 million metric tons a year, and recycling less than 3% of its e-waste. It is estimated that only 1% of electronic devices are properly disposed. New legislation requires producers to collect 17% of it s produced e-waste by 2025.

#### SOLUTION

Circular Brain connects key players in the electronics and e-waste industry: consumers, producers, retail and recyclers. Circular Brain digital platform provides traceability and environmental control, creating the necessary infrastructure for reverse logistics and the management of product's lifecycle. Operating in 12 states in Brazil, the company has clients as Huawei, GE, Honda, and Intel. Circular Brain's partnership with the LogTech Kangu (Mercado Libre), reaching national coverage, with over 11.000 drop out points for electronic devices. In 2021 alone, the company recycled over 50.000 PCs.





# PRE-INVESTMENT (BOIS)

The Environment	Impact Assessment	<b>BOIS Score</b>
RESOURCE EFFICIENCY how our investments will support the efficient use of resources?	Solution reduces e-waste and increases life spam of device and resource efficiency (water, soil, minerals)	+1
ECOSYSTEMS CONTRIBUTION how our investments will contribute to protecting nature?	Contributes in reducing a non-renewable activity - mining and also reduce e-waste (pollution)	+1
CLIMATE MITIGATION AND ADAPTATION how our investments will help to keep global warming/tackle climate risk?	Climate mitigation solution reduces CO2 emissions	+1
Total Environmental		+3

Modern Society	Impact Assessment	BOIS Score
ECONOMIC IMPACT how will our investments benefit lower income groups?	Focused on manual dismantling, promoting a positive social impact, through the generation of employment and income to lower income groups.	+1
WELLBEING how will our investments contribute to efficient spending on healthcare, education, culture, and other public services?	Do not impact	0
DECENT WORK how will our investments support more jobs with decent pay and working conditions?	The company creates directs jobs. Focused on manual dismantling, promoting a positive social impact, through the generation of employment and income	+1
Total Social		+2



### POST-INVESTMENT (IRIS+ SDGs KPIs)

SDG	Code	Indicator	2021
8 INCOMPANIE CHIONIN	<u>OI3160</u>	Number of full-time jobs (# people)	22
5 EUNLIN	<u>016213</u>	% of women in workforce (full-time equivalent)	32%
11 MINIMARIA CONTES  12 MENDANTE CHARGON TRAIN AND PRINCIPAL ON PRINCIPAL PRINCIPAL ON PRINCIPAL PRINCIPAL PRINCIPAL PRINCIPAL PRINCIPAL PRINCIPAL P	<u>PI2073</u>	Amount of hazardous waste avoided through refurbishing, reusing, and recycling as part of delivering or developing the organization's products and services during the reporting period (metric tons)	1.86
11 SUMMARIAN COSTES  12 SESPENSER COSTES  13 COSTES  13 COSTES  14 COSTES  15 COSTES  16 COSTES  17 COSTES  18	<u>PI8177</u>	Amount of non-hazardous waste disposal avoided through refurbishing, reusing, and recycling as part of delivering or developing the organization's products and services during the reporting period (tons)	329
1 POWERTY  2 THE SECURITY SECU	<u>PI7867</u>	Value of payments to small and medium-sized recyclers that sold e-waste to the organization during the reporting period (BRL)	BRL 100.000
1 POTENTY  2 THE SECOND DEPOTE WHEN AND THE PROPERTY OF THE PR	<u>PI9495</u>	Number of small and medium-sized recyclers that sold e-waste or services to the organization during the reporting period	13
13 GINANT ACTION	<u>PI2764</u>	Amount of GHG emissions avoided by the organization (CO2e metric tons)	3.2
6 CLEAN MATER 12 PERMANERE CONSCIENTION INC. PRINCE CONSCIENTION INC. P	<u>PD5786</u>	Volume of saved water usage achieved as a result of the organization's solution (liter)	2.2 MM
12 BESMINSTRE CINGSIAN AND PRODUCEDIN	<u>014328</u>	Number of used computers evaluated (devices)	52.000 PCs



"The software, it is really sensational. It is every recycling operator's dream. With the software I can have all the control of my operation, something I had never seen before, being in the recycling market for over 15 years."

Jurandir, Recycler Operator, CIRCULAR BRAIN customer

#### **AG TOKENIZATION**



#### **PROBLEM**

In developing countries, small & mid scale farmers have limited access to financial services (credit, hedge, insurance, etc.) and are significantly more exposed to climate risks, currency volatility, and external shocks (i.e. Covid19). Many smallholder farmers suffer from volatile commodity prices, FX, and inflation, that can keep them trapped in a vicious cycle of poverty. This means they are unable to invest in more efficient, productivity-boosting farming practices that would enable them to maximize yields and meet the needs of our growing global population. Technologies and financial mechanism that can promote/facilitate financial inclusion are key.

#### **SOLUTION**

Agrotoken is the first Ag Tokenization Platform focus on creating a stable coin backed by Ag. Commodities, facilitating financing, liquidity and simplified processes from grain to cash for the entire agricultural commodity supply chain. Agrotoken makes agribusiness industry simpler and frictionless through blockchain technology improving liquidity, speeding up transactions and redistributing risk and wealth by making grains available and accessible to everyone in the form of Tokens.





## PRE-INVESTMENT (BOIS)

The Environment	Impact Assessment	BOIS Score
RESOURCE EFFICIENCY how our investments will support the efficient use of resources?	Do not affect	0
ECOSYSTEMS CONTRIBUTION how our investments will contribute to protecting nature?	Do not affect	0
CLIMATE MITIGATION AND ADAPTATION how our investments will help to keep global warming/tackle climate risk?	Climate adaptation: provides affordable and agile financing, hedging, and liquidity, enabling Small and Mid Size Farmers to better cope with climate risks and external shocks	+1
Total Environmental		+1

Modern Society	Impact Assessment	BOIS Score
ECONOMIC IMPACT how will our investments benefit lower income groups?	Agrotoken facilitates and democratizes affordable financing, provides grain liquidity, simplifies the processes from grain to cash, and hedges producers against inflation and currency devaluation	+1
WELLBEING how will our investments contribute to efficient spending on healthcare, education, culture, and other public services?	Financial inclusion promote liquidity to spend on education and healthcare	+1
DECENT WORK how will our investments support more jobs with decent pay and working conditions?	The company creates direct jobs	+1
Total Social		+3



## POST-INVESTMENT (IRIS+ SDGs KPIs)

SDG	Code	Indicator	2021
8 ECONOMIC GROWTH  THE STATE OF	<u>OI3160</u>	Number of full-time jobs (# people)	56
5 CHATER  THE PROPERTY OF THE	<u>Ol6213</u>	% of women in workforce (full-time equivalent)	27%
10 PREMITES  13 GENATE  APPLICATION	<u>PI6372</u>	Number of smallholder farmers clients (# people)	63
1 PORRATY  2 FINAL TO SETUTES 10 SETUTES 13 ACTION  \$\hat{\frac{1}{2}} \hat{\frac{1}{2}} \hat{\frac{1}	<u>PI6372</u>	% of transacted on the platform by smallholder farmers	87%
1 MI PRIMETY  2 MINOLE STREET  5 GENERAL TO REQUARTES  13 GENERAL TO REQUARTES  13 GENERAL TO REQUARTES  15 GENERAL TO REQUARTES  16 CONTROL TO REQUARTES  17 CONTROL TO REQUARTES  18 CONTROL TO REQUARTES  19 CONTROL TO REQUARTES  10 PRIMETY  10 PRIMETY  11 CONTROL TO REQUARTES  11 CONTROL TO REQUARTES  12 CONTROL TO REQUARTES  13 CONTROL TO REQUARTES  14 CONTROL TO REQUARTES  15 CONTROL TO REQUARTES  16 CONTROL TO REQUARTES  17 CONTROL TO REQUARTES  18 CONTROL TO REQUARTES  19 CONTROL TO REQUARTES  19 CONTROL TO REQUARTES  10 PRIMETY  10 PRIMETY  11 CONTROL TO REQUARTES  11 CONTROL TO REQUARTES  12 CONTROL TO REQUARTES  13 CONTROL TO REQUARTES  15 CONTROL TO REQUARTES  16 CONTROL TO REQUARTES  17 CONTROL TO REQUARTES  18 CONTROL TO REQUARTES  19 CONTROL TO REQUARTES  19 CONTROL TO REQUARTES  10 CONTROL TO REQU	<u>PI8330</u>	Amount transacted by woman on the platform	12%



"I accessed the platform through a client registration, as you access any virtual platform. We got to know how it worked, attaching supporting documentation that the collection sent us. The platform is very friendly, you follow the menus, the instructions, the processes advance electronically, it requests all the necessary documentation to specify the tokenization, the conversion of grains into Agrotokens, and thus have them to carry out any operation that one needs to."

Farmer, AGROTOKEN

"We never imagined that we were going to sell the tractor with digital grains, it was super simple."

Tomás Kelly, Finance Manager of Kelly, AGROTOKEN

#### PIONEERING RENEWABLE ENERGY



#### **ABOUT THE COMPANY**

Avicanna is an innovative biopharmaceutical company in the medical cannabis space. The company is dedicated to scientific & evidence-based delivery of medical cannabis-based products. Avicanna's R&D and cultivation activities are focused on the development of its key products, including plant-derived cannabinoid pharmaceuticals and phototherapeutics.

Avicanna's cultivation activities are based in Santa Marta - Colombia, where the company employs a large part of the local community. The research and development business is primarily conducted out of Canada at its headquarters in the Johnson & Johnson Innovation Centre, JLABS in Toronto. I

In 2020 Avicanna ranked number one amongst global cannabis companies in the SAM Corporate Sustainability Assessment (CSA). The 2020 Sustainability Yearbook was published on January 30th by S&P Global, and showcases the sustainability performance of some of the world's largest companies. Avicanna obtained the highest score out of all cannabis companies evaluated. With this achievement, Avicanna is proving its commitment to corporate governance, sustainable and responsible practices in the cannabinoid space.

The company is conducting a series of clinical trials related to treatments for epilepsy, cancer, COVID-19, chronic pain, as well as other diseases.





# PRE-INVESTMENT (BOIS)

The Environment	Impact Assessment	BOIS Score
RESOURCE EFFICIENCY how our investments will support the efficient use of resources?	Do not impact	0
ECOSYSTEMS CONTRIBUTION how our investments will contribute to protecting nature?	Avicanna presents organic and sustainable cultivation, ranking highest among cannabis companies in a corporate sustainability assessment, issued by S&P Global in 2020	+1
CLIMATE MITIGATION AND ADAPTATION how our investments will help to keep global warming/tackle climate risk?	Do not impact	0
Total Environmental		+1

Modern Society	Impact Assessment	BOIS Score
ECONOMIC IMPACT how will our investments benefit lower income groups?	Avicanna employee low income population in Santa Marta	+1
WELLBEING how will our investments contribute to efficient spending on healthcare, education, culture, and other public services?	Avicanna's cannabis-based products are more efficient than existing ones and have a relevant impact on wellbeing. The company is conducting clinical trials related to treatments for epilepsy, cancer, COVID-19, and chronic pain	+1
DECENT WORK how will our investments support more jobs with decent pay and working conditions?	Avicanna's cultivation activities are based in Santa Marta - Colombia, where the company employs a large part of the local community	+1
Total Social		+3



# POST-INVESTMENT (IRIS+ SDGs KPIs)

SDG	Code	Indicator	2020	2021
8 DECENT WORK JAID  LEDINGROE CHUNTER	<u>OI3160</u>	Number of full-time jobs (# people)	190	55
10 MEQUATITES	<u>018266</u>	Number of people employed by the organization who reside in low-income areas as of the end of the reporting period	32	25
10 MEQUATIES	<u>PI6372</u>	Number of unique smallholder farmer individuals who during the reporting period	8	10
2 /FIRO 6 MAS SANTTARIN 12 CENSISSERED 140 PROTOCOLOR 15 UPE 15 U	<u>016912</u>	Area of land directly controlled by the organization and under sustainable cultivation or sustainable stewardship (#hectares)	4.5	4.5



Thank you!

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