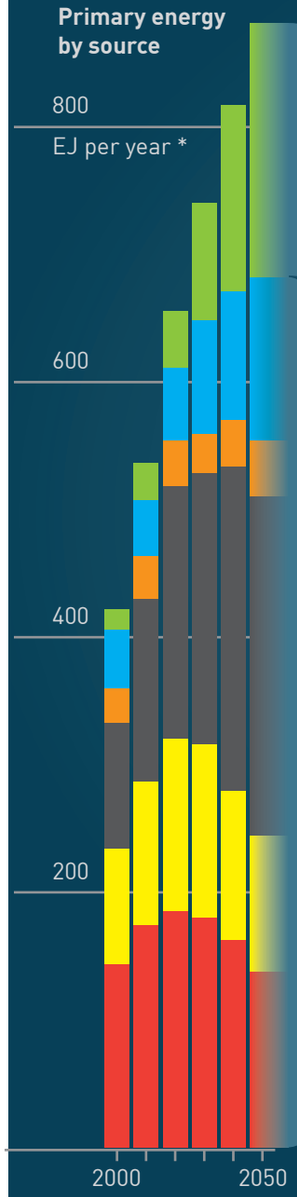
The Energy Mix of 2050

Technologies that will transform our world

- Pro-action
- Lower emissions
- Status Quo change
- Political will

Primary energy by source



* 1 EJ is equal to 10^{18} joules

Renewable energy mix grows fast

In the next 40 years, renewable energy resources will be exploited at accelerated speed -faster than anticipated.

Faster technology development & deployment

Future - changing technologies

1. Smart Cities
2. Large Renewable Energy Grids
3. Ocean Energy
4. Space Solar Power

Smart green buildings, zero emission transportation, heating-cooling, waste management

Global renewable energy sources concentrated in large grids

This energy mix will continue to contribute

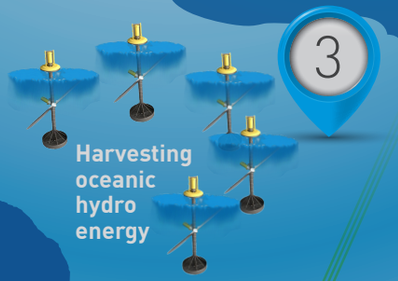
- Same Status Quo
- No actions taken
- No decision making
- Impact continues

- Best case scenario
- Common ground
- Worst case scenario

Population Growth

Energy Demand

A future energy mix projection is explored through alternative best-worst case scenarios, all influenced by six major parameters: *Sustainable environment, Politics changing, Mutual collaboration, Technology & Education, Global solutions, Successful deployment.* Choosing a modest common ground scenario and introducing important technologies that employ high capacity renewable energy sources, a glance at 2050 energy mix is presented. As population and energy demand will inevitably increase, this projection reveals how innovative technology can lead the way towards a sustainable and green future.



Harvesting oceanic hydro energy

High orbit platforms collect solar energy and send it to earth

References

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