



Energy and Climate Mitigation

How Demand Side Management
Contributes to Climate Mitigation.

Energy and Climate Change

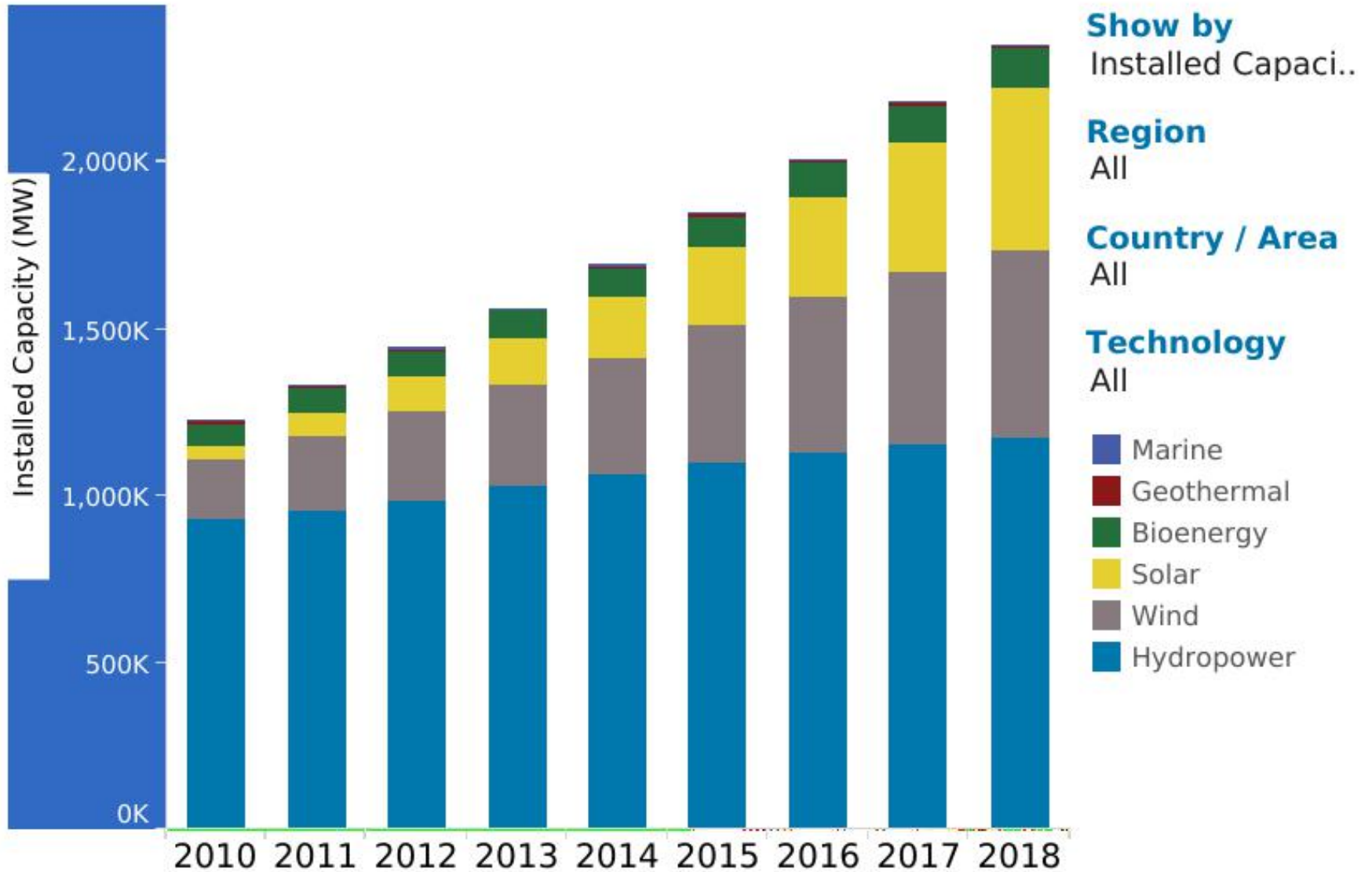
- Fossil Energy Use has been excessively increasing since the last 200 years
- The use of fossil energy has been scientifically proven to cause global warming that lead to climate change
- Global consensus reached in the Paris Agreement 2015, at the same year, in New York, Sustainable Development Goals had been globally adopted .
- Renewable Energy dan Energy Efficiency have been recognized as the main factors contributing to global warming mitigation from the energy sector.

Efforts to GW Mitigation

- The use of **Renewable Energy** has been rising significantly since the last 20 years, but it is still relatively low compared to the use of fossil energy.
- Increasing the impacts of using RE to mitigating the GW must be combined with the reduction of demand for fossil energy through **Energy Efficiency**
- **Could RE +EE + New low Carbon Energy meet the target of reducing/eliminating carbon emission by the end of this Century?**

Installed Capacity Trends

Navigate through the filters to explore trends in renewable energy



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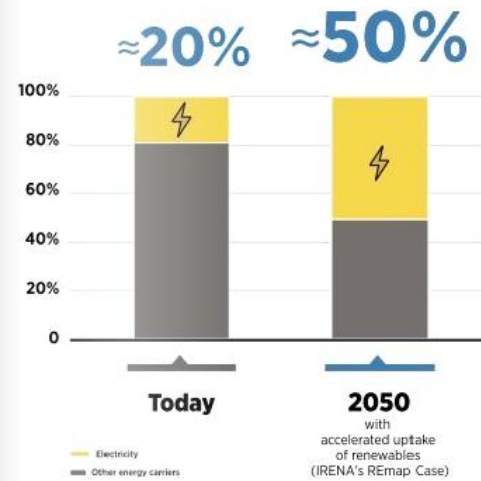
CLIMATE-SAFE ENERGY

Renewables and electrification technologies could achieve 90% of the emission reductions needed to fulfil Paris Agreement decarbonisation aims.

Today's plans and policies, including Paris-related pledges, would leave annual emissions in 2050 close to current levels.



Renewable electricity has to become the world's main energy source

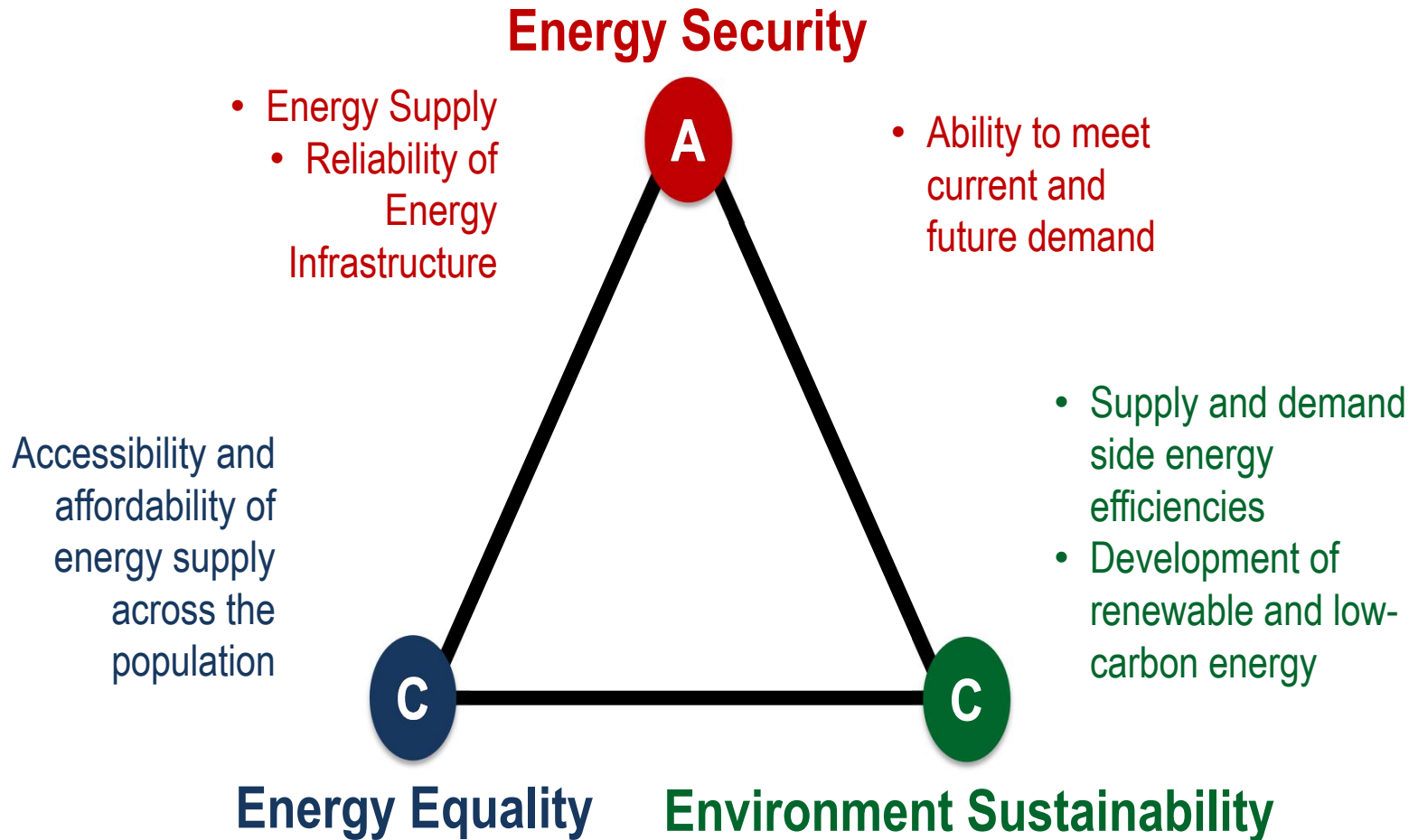


▶ Growing share of electricity in final energy consumption

How Should We Do It?

- Pay more attention on the demand side of the energy by increasing **Energy Efficiency** measures in ALL sectors of the economy (Industry, Transportation, Commercial Buildings, Households).
- Rigorous efforts to increase the use of **Renewable Energy** by improving regulations and providing incentives, fiscal and non-fiscal to developers and users.
- Applying “**Polluters Pay**” Principle → Carbon Pricing and Carbon Trading.

Address the “Energy Tri-lemma”



2014: A YEAR OF MOMENTUM



Indonesia's Energy Status

- “By default”, Indonesia has all sort of energy resources (primary energy) available on this Planet to build the country toward prosperity and sustainability.
- However, decades long **excessive exports** of non-renewable energy, **slow development of renewable energy**, and the **late efforts made on massive energy efficiency** have caused the country facing multi-challenges for its sustainability.

Energy Conservation Policy

- Core Regulation on Energy Conservation was issued in 2009, with some flaws that makes it produce less impacts than we expected.
- Efforts are being made to improve the regulation.
- Transportation Sektor is key to get quick impacts on emission reduction, others (industries, Buildings, Households are contributing, yet slow, needing stronger regulation and more supportive policies)
- Using RE must be seen as part of conservation efforts.

Implementing LCD Model

What do we expect?

- Needs clear direction toward integrating policies toward achieving emission reduction and sustainability
- Needs strong coordinated efforts to implement the policies
- Needs clear M&V to provide feed back used to steer implementation
- Needs strong discipline, consistency and public accountability