

Achieving SDGs by 2030: Importance of Climate Change Regime under the Paris Agreement

UNOSD Training Workshop

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Sustainable Development



- Our Common Future by Brundtland Report
- Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainable Development Goals

Rebalancing and integration of the three dimensions of sustainable development



- Adopted on January 1, 2016
- Built on the success of MDGs & aims to go further to end all forms of poverty by building economic growth and addressing a range of social needs while tackling climate change and environment
- SDGs are for “all”
- SDGs are about implementations

SDG AGENDA PRINCIPLES



UNIVERSALITY

- **Implies that goals and targets are relevant to all governments and actors:** integration
- Universality does not mean uniformity. It implies differentiation (What can each country contribute? – CBD R principle)



INTEGRATION

- **Policy integration means balancing all three SD dimensions:** social, economic growth and environmental protection
- An integrated approach implies managing trade-offs and maximizing synergies across targets



'NO ONE LEFT BEHIND'

- **The principle of 'no one left behind'** advocates countries to go beyond averages.
- The SDGs should benefit all – eradicating poverty and reducing inequalities.
- Promotion and use of disaggregated data is key

The SDGs are different from previous global goals



Global



Comprehensive



Implementation and Measurement Focused



Combatting Climate Change

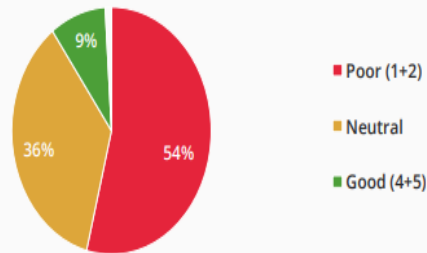


Elements for Effective Implementation of SDGs

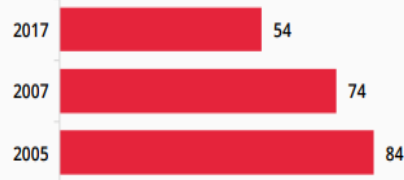


Progress of Implementation

Progress on transition to sustainable development to date (% of experts)



All Respondents, 2017



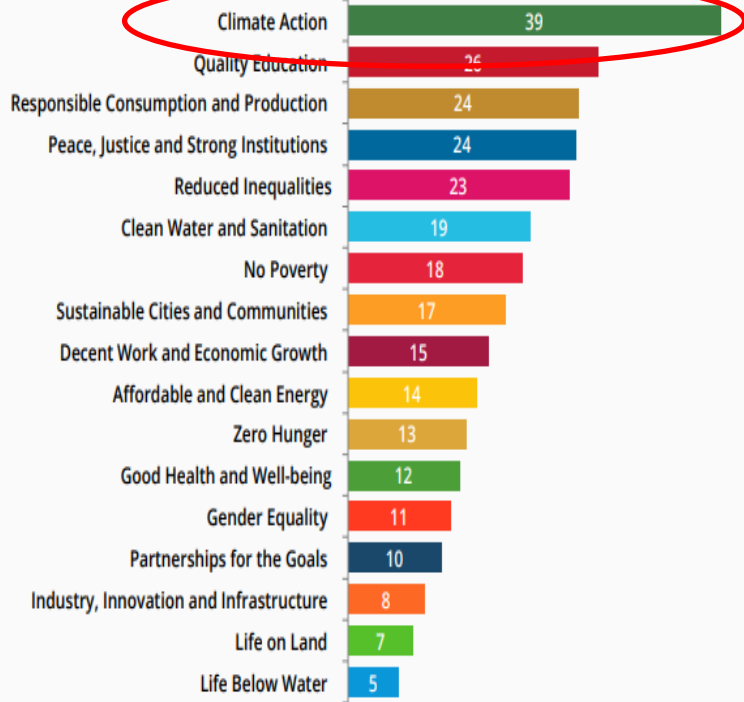
*"Poor," All Respondents, 2005-2017

Contribution of organizations to progress on the SDGs (% of experts)



All Respondents, 2017

Most important SDG for society to focus on to achieve the most progress (% of experts)



Total Mentions (Ranked #1, 2, and 3), All Respondents, 2017

Most important SDG for society to focus on to achieve the most progress (% of experts)

	Most Important Goal	2nd Most Important Goal	3rd Most Important Goal
Government*	36% Climate Action	34% Quality Education	28% Peace, Justice & Strong Institutions
NGO	34% Climate Action	26% Quality Education	26% Reduced Inequalities
Academic & Research	34% Climate Action	31% Peace, Justice & Strong Institutions	24% Reduced Inequalities + Responsible Consumption
Corporate	33% Climate Action	31% Quality Education	24% Reduced Inequalities
Service & Media	31% Climate Action	26% Quality Education	25% Responsible Consumption
Asia	31% Climate Action	25% Quality Education	25% Responsible Consumption
Africa / Middle East*	14% Quality Education	31% Peace, Justice & Strong Institutions	28% Zero Hunger
Europe	39% Climate Action	29% Quality Education	28% Responsible Consumption & Production
North America	43% Climate Action	28% Clean Water & Sanitation	23% Quality Education + Responsible Consumption
Latin America	40% Reduced Inequalities	33% Climate Action	31% Peace, Justice & Strong Institutions

* Small sample size

Total Mentions (Ranked #1, 2, and 3), by Sector and Region, 2017

Perceived importance of SDGs vs achieved progress



Importance of SDG vs attention received



Climate Change is just more than one goal!



Climate Action is the key to achieve SDGs: A case of Australia

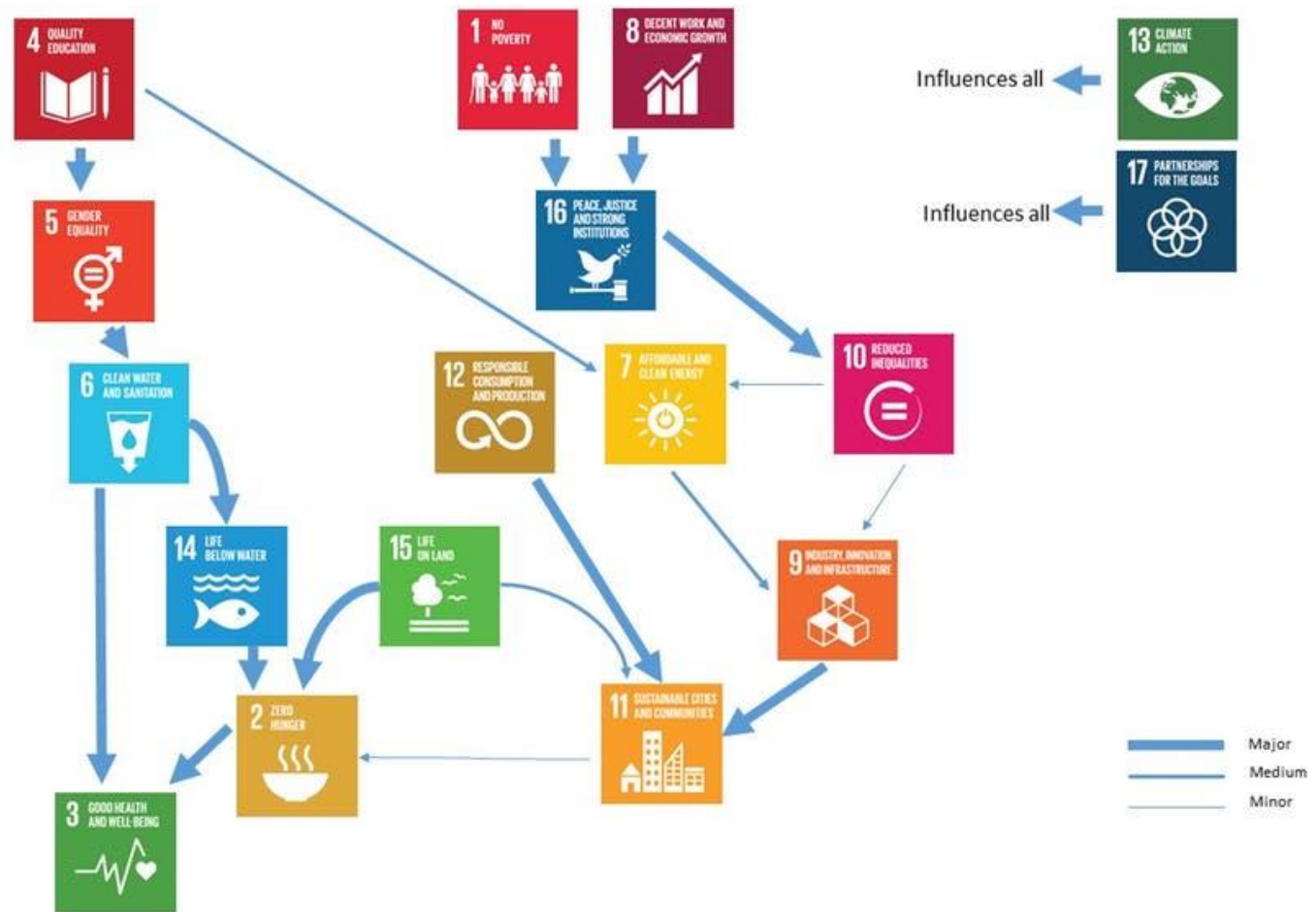
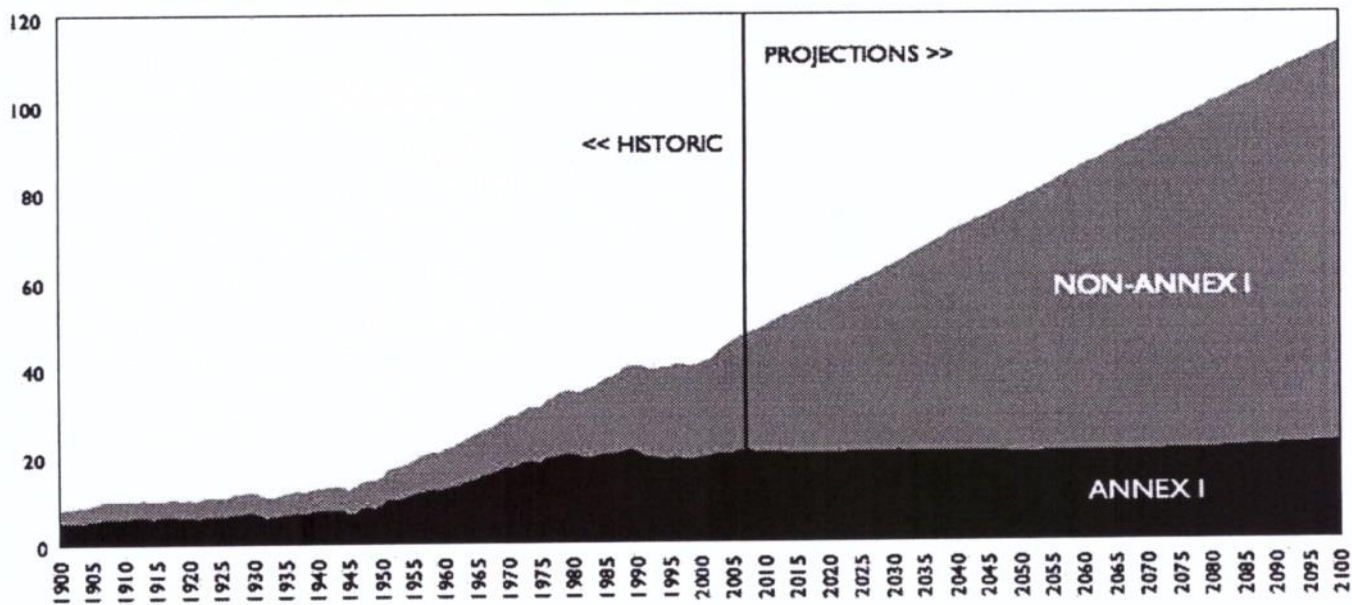


Figure 1: GHG Emission Growth

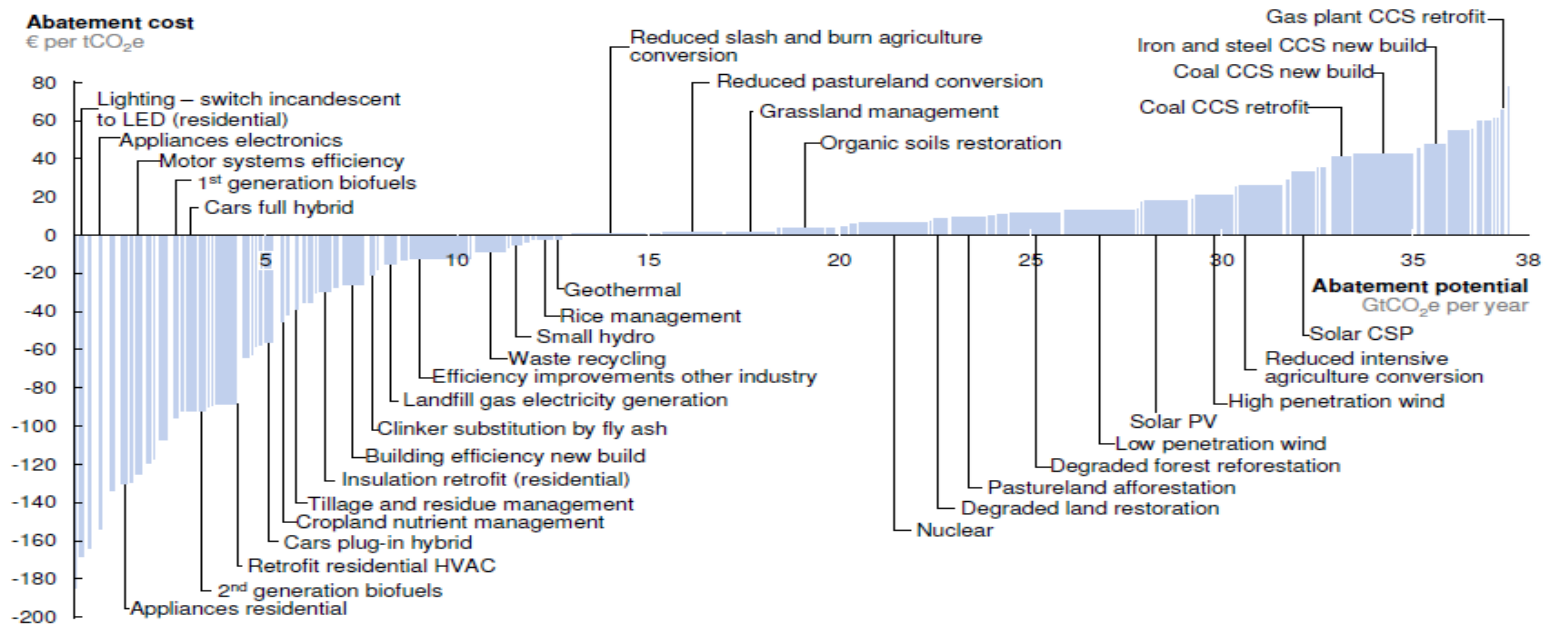
Billion tons CO₂e, includes land-use change.



Source: *Historic Emissions from Carbon Dioxide Information Analysis Center (2009); and Projected Emissions Growth from International Energy Agency (2009)*

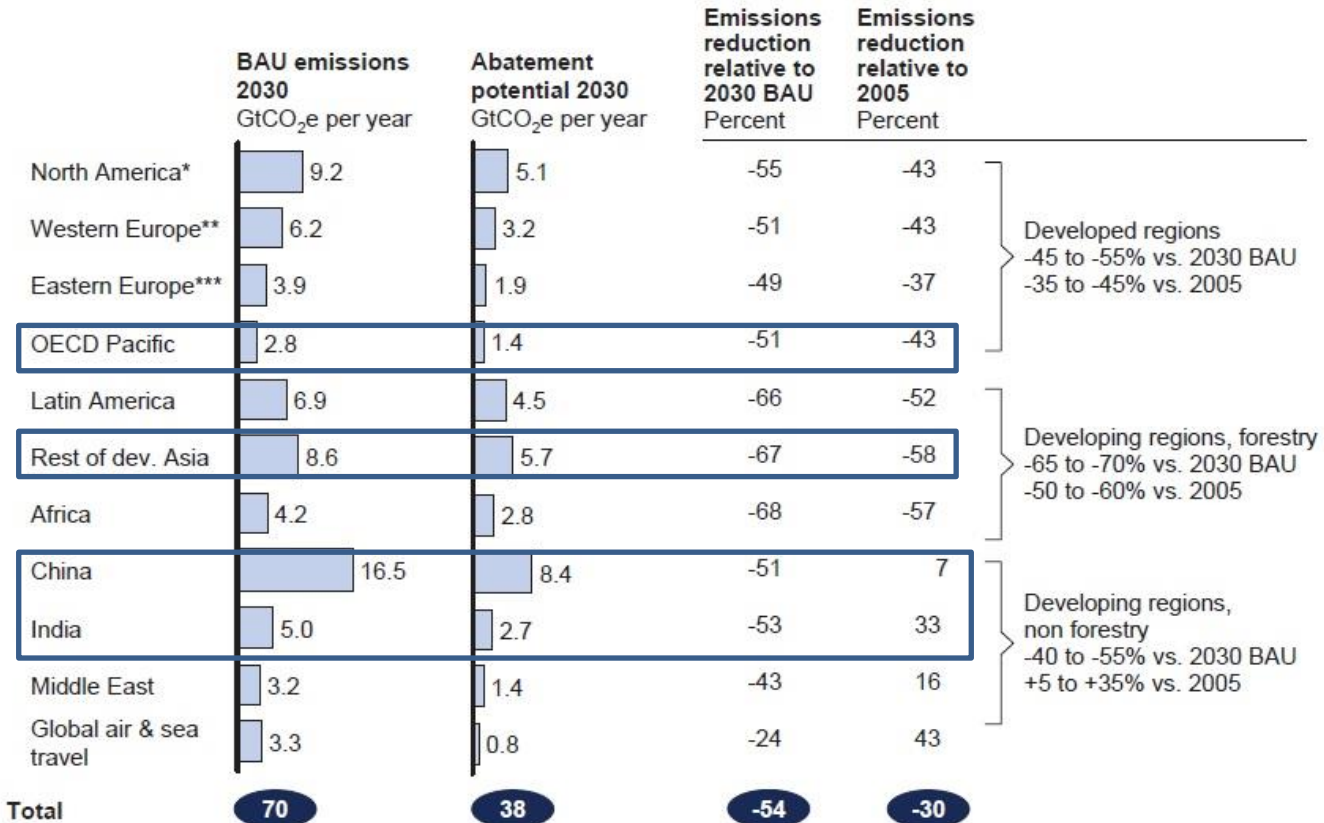
Exhibit 6

V2.1 Global GHG abatement cost curve beyond BAU – 2030



Note: The curve presents an estimate of the maximum potential of all technical GHG abatement measures below €80 per tCO₂e if each lever was pursued aggressively. It is not a forecast of what role different abatement measures and technologies will play.
 Source: Global GHG Abatement Cost Curve v2.1

Regional split – BAU emissions and abatement potential



* United States and Canada

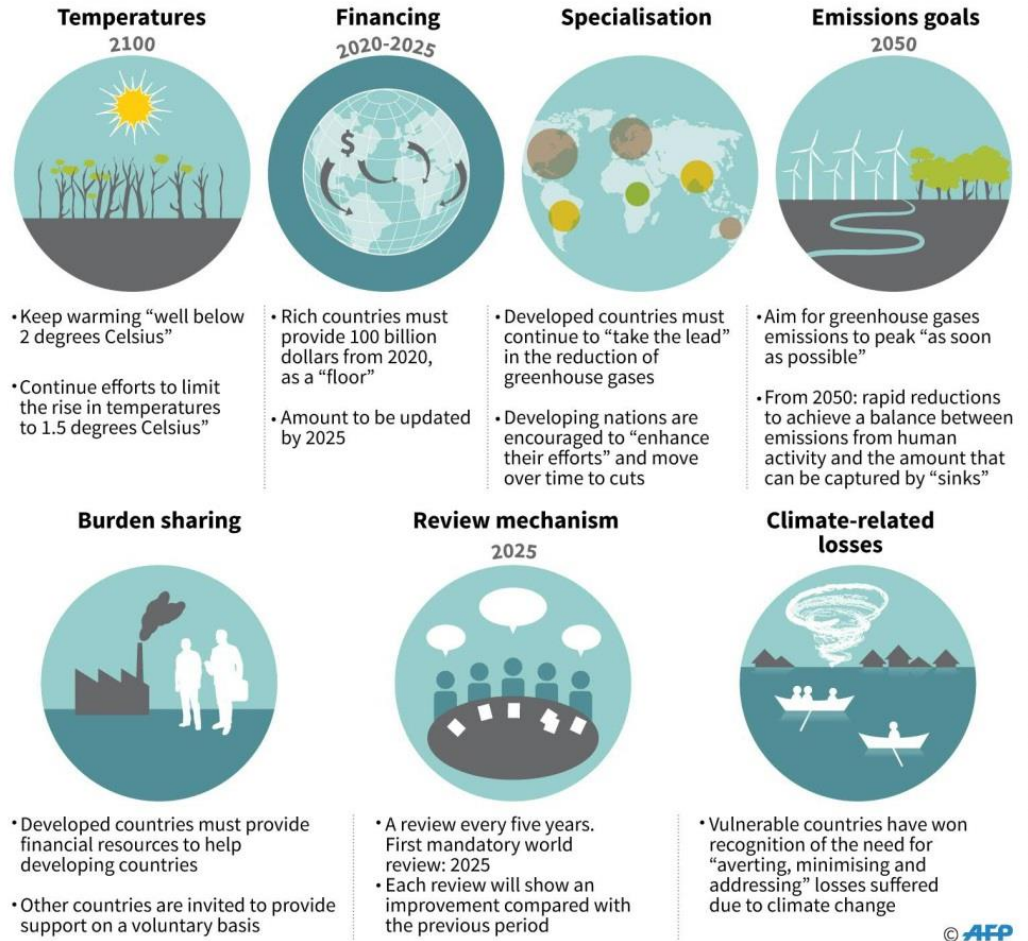
** Includes EU27, Andorra, Iceland, Lichtenstein, Monaco, Norway, San Marino, Switzerland

*** Russia and non-OECD Eastern Europe

Paris Agreement

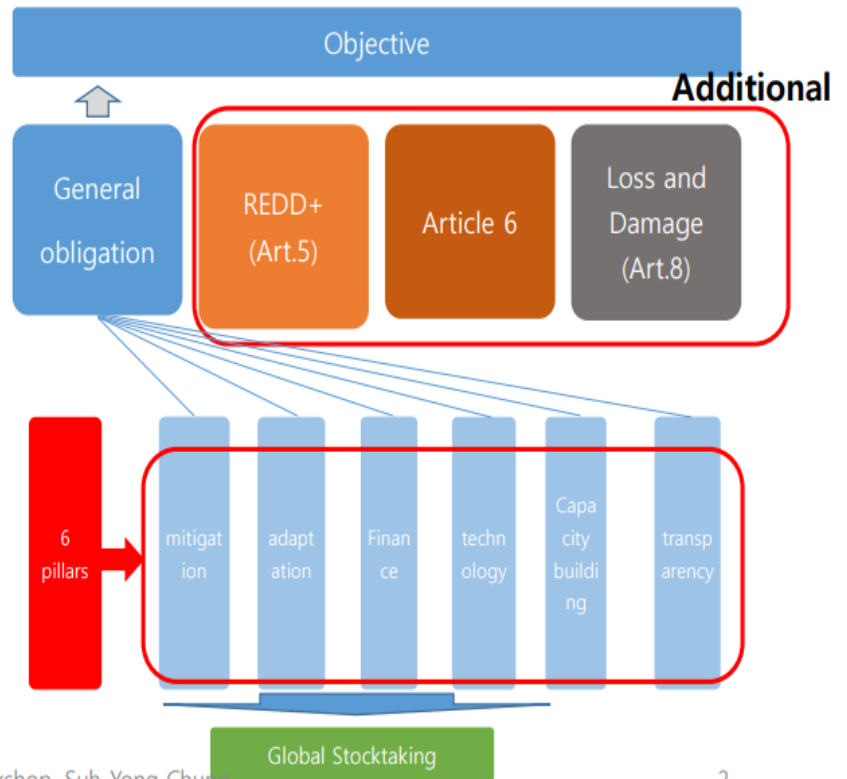


The Paris climate agreement: key points



Structure of Paris Agreement

- Objective (Article 2)
- General obligations (Article 3)
 - 6 pillars: mitigation (Art.4) adaptation (Article7), Finance (Article 9), Technology (Art. 10), Capacity building (Art. 11), Transparency (Art. 13)
- Global Stocktaking (Art.14)
- Additional
 - REDD+ (Art.5)
 - Article 6
 - Loss and Damage (Art.8)



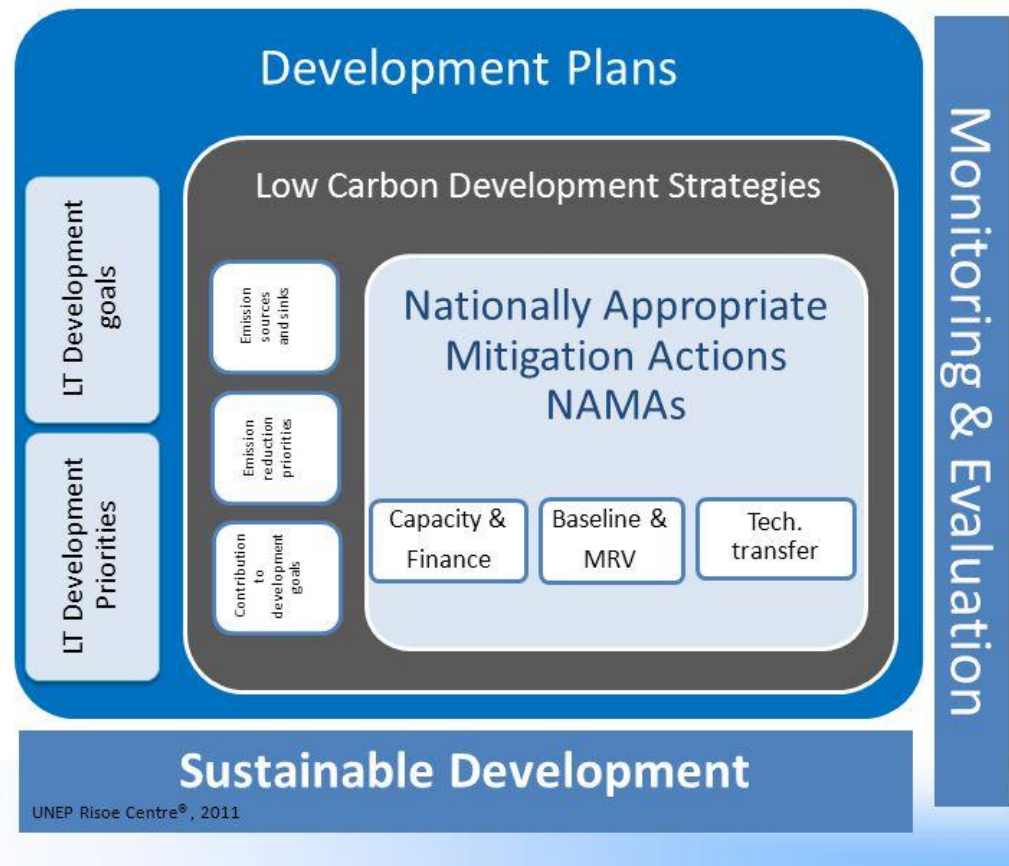
2017-09-27

Harvard Shanghai Workshop, Suh-Yong Chung

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Linkages between SD-LCDS-NAMAs

- Defining a strategy in context of medium to long term development plans:
 - Decouple economic growth from GHG emission growth
 - Reduce the carbon intensity of the economy
 - Leapfrog the high-carbon development path of today's business-as-usual trajectory



Low Emission Development Strategies



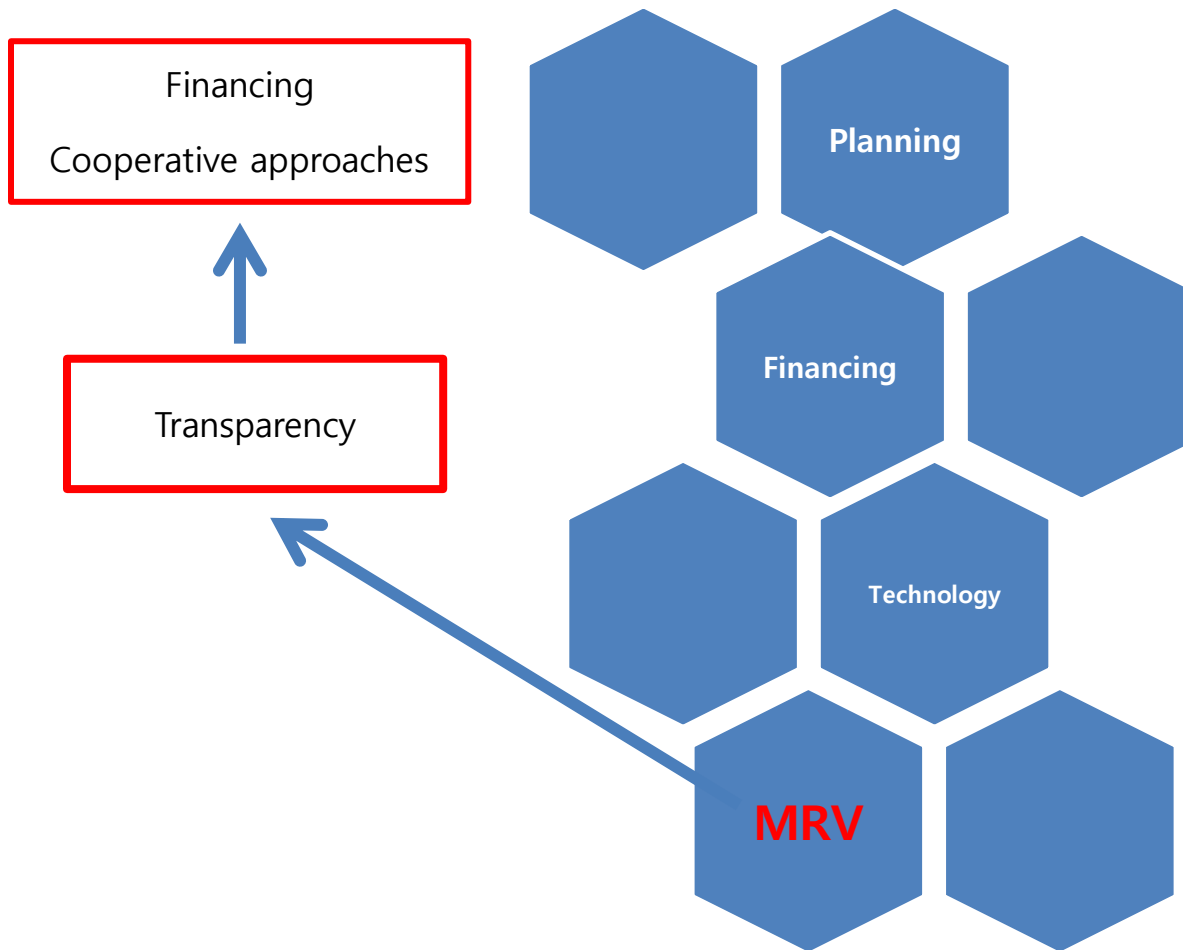
Figure 2: Existing strategies of relevance to LEDS



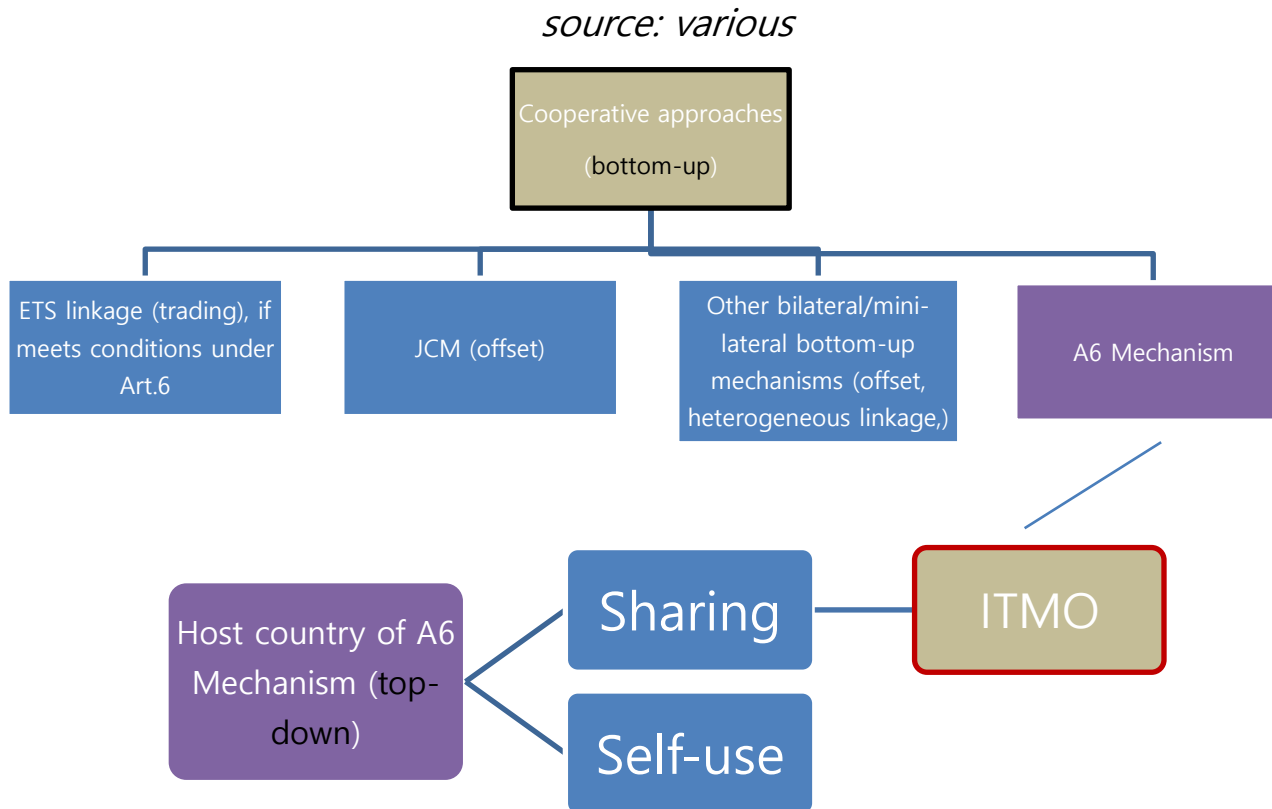
Low Carbon Development



Framework to Implement LCD



Article 6



2050 Low-carbon Roadmap

- Identifies cost-effective pathway, with intermediate milestones
- Identifies key technologies guiding R&D
- Identifies investments needs and benefits
- Identifies opportunities and trade-offs
- Guides EU, national and regional policies
- Gives direction to private sector and private households for long term investments



Moving to a Low-Carbon Economy: The Financial Impact of the Low-Carbon Transition

Climate Policy Initiative
 David Foray
 Wolfgang Martner-Weigand
 Sabine Stiggle
 Sarah de Waard
 Felix Wimmer

October 2018

Climate Policy Initiative
 Energy Transition Series

GGGI Strategic Plan 2015 - 2020

Accelerating the Transition to a New Model of Growth



Pathways to Deep Decarbonisation in 2050: How Australia can prosper in a low carbon world

2°C Paris Agreement target: world average temperature increase below 2°C

World leaders have agreed that to avoid a world average temperature increase of more than 2°C, global average surface temperature must rise by less than 2°C above pre-industrial levels.

Ambitious Energy Efficiency

In all sectors leads to a halving of the energy intensity of the economy.

Low Carbon Electricity

is supplied by renewable energy or a mix of renewable energy and either CCS or nuclear power at similar costs.

Electrification and Fuel Switching

from fossil fuels to bioenergy and from coal and oil to gas reduces emissions from transport, industry and buildings.

Non-Energy Emissions

are reduced through process improvements and CCS in industry, while a profitable shift from livestock grazing to carbon forestry offsets any remaining emissions.

CCS

How can business and Government prepare?

- 1) Accelerate emissions reductions activities that are already profitable.
- 2) Take the long-term into account for investment decisions, to avoid lock-in of carbon-intensive assets.
- 3) Invest in research and development to prepare for technologies that will be needed in the future.

Economic growth to 2050

Australia can decarbonise whilst maintaining economic prosperity. This study shows that real GDP grows at 2.5% per annum, a similar rate to the past 5 years.

Key economic indicators, 2010-2050

Year	Real GDP (per capita)	Population
2010	~\$40,000	~22M
2020	~\$45,000	~24M
2030	~\$50,000	~26M
2040	~\$55,000	~28M
2050	~\$60,000	~30M

Emissions in 2050

Australia can reach net zero emissions by 2050 and live within the global carbon budget.

Category	2010	2050
Industry	~1.5 Gt	~0.5 Gt
Transport	~1.0 Gt	~0.5 Gt
Buildings	~1.0 Gt	~0.5 Gt
Land Use, Land-Use Change, and Forestry (LULUCF)	~0.5 Gt	~1.5 Gt
Total	~4.0 Gt	~3.0 Gt

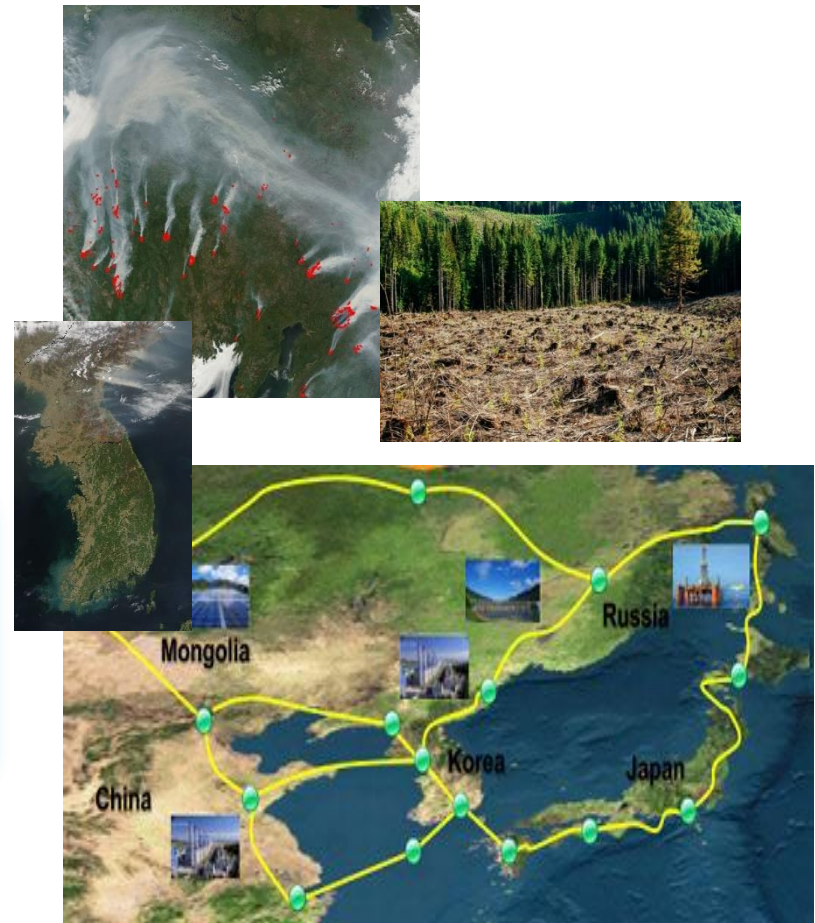
Regional Implementation: A Case of Northeast Asia

Building political
momentum

Creating shared interests
(e.g. supergrid, forestry)

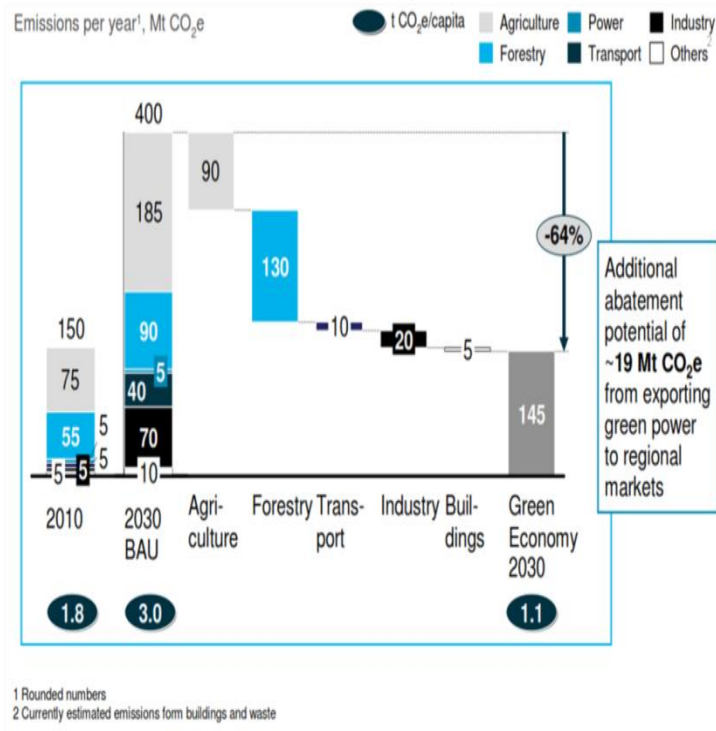
Securing broad
participations (e.g.
Mongolia, North Korea,
Russia)

Ensuring compatibility with
PA (voluntary cooperative
approaches measures, Art
6.4 Mechanism)



INDC: Ethiopia

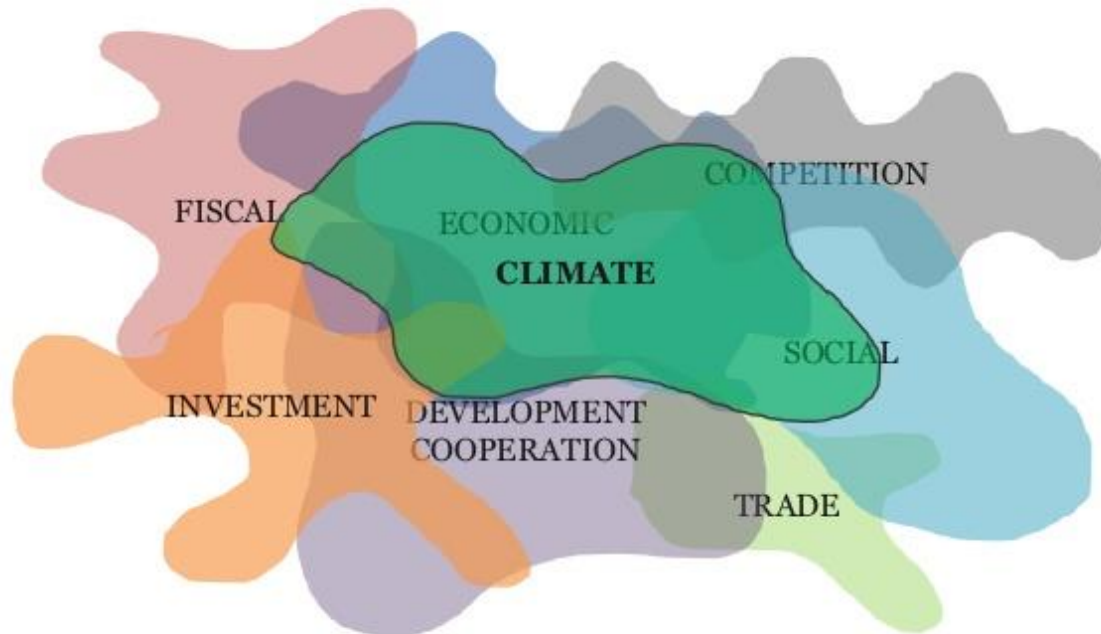
Target



Actions

- Climate Resilient Green Economy Strategy (CRGE)
 - Strategy for addressing climate change mitigation (and adaptation)
 - Integrated into the 2nd Growth and Transformation Plan (national development plan)
 - Vision of becoming a carbon neutral and middle income country
 - Plan to sell credits in the market

Climate policy comes on top of an existing framework of policy goals and instruments, developed for a fossil-fuel based economy



OECD

Thank you!

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