

Low Carbon Economy as a Way of Achieving SDGs

Expert Group Meeting
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Sustainable Development Goals



- 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

Sustainable Development

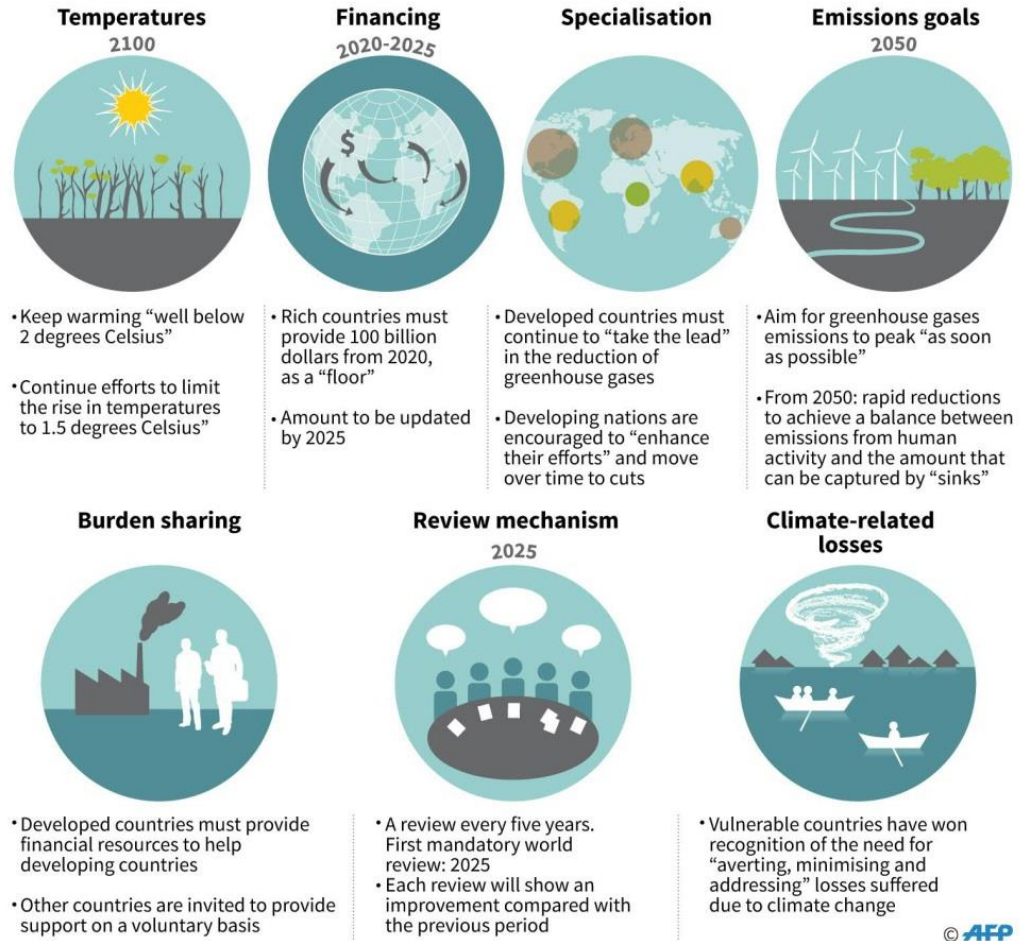


- Our Common Future by Brundtland Report
- Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Paris Agreement



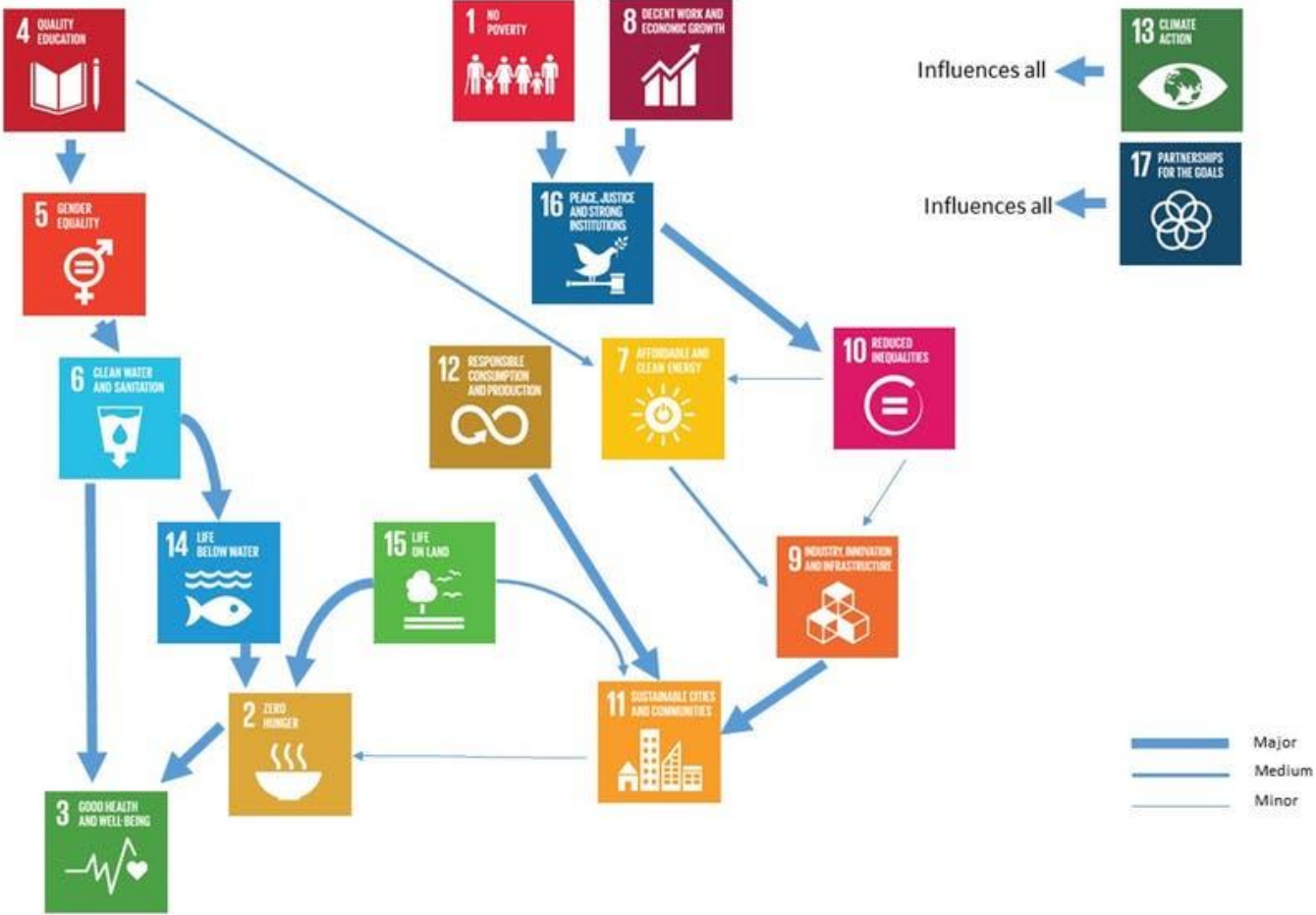
The Paris climate agreement: key points



Climate Change is just more than one goal!

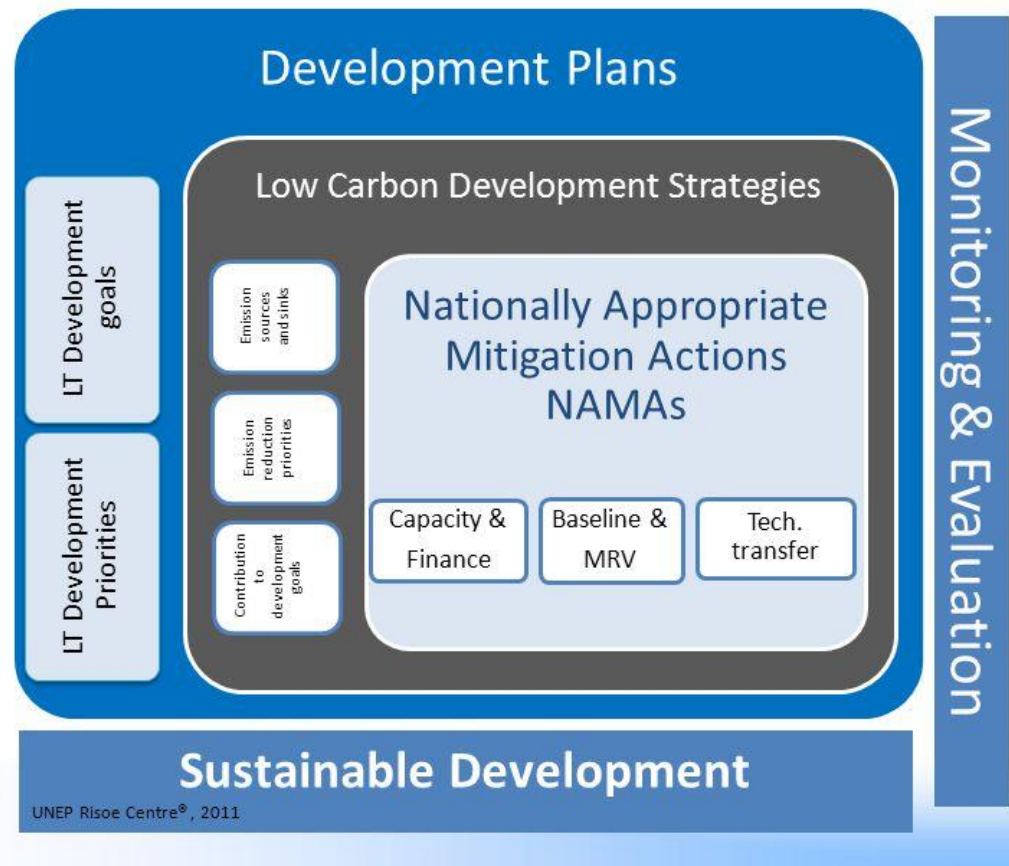


Climate Action is the key to achieve SDGs: A case of Australia



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



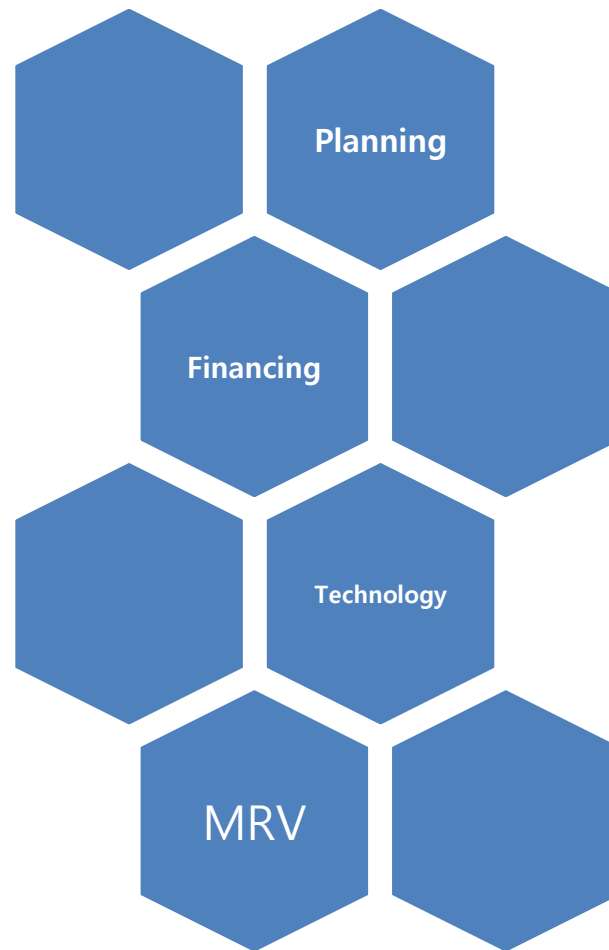
in the context of...



Low Carbon Development



Framework to Implement LCD



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

Thomas Fenchel (editor)
David Foray
Margaret Warner (editor)
Sudipto Ganguly
Sudipto Ganguly
Sudipto Ganguly

November 2018

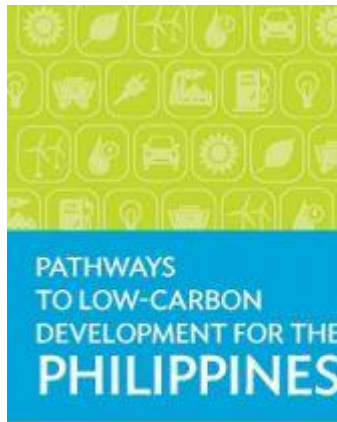
CEI Energy Transition Series

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



ASIAN DEVELOPMENT BANK



2°C
The Paris Agreement has been agreed that to avoid a world average global temperature rise of more than 2 degrees Celsius, global emissions must be cut by 45% from 2010 levels by 2030, and reach net zero by 2050.

2050
Net zero emissions by 2050

Pathways to Low-Carbon Development for Viet Nam
This report identifies key technologies and investment needs for Viet Nam to reach net zero emissions by 2050.

Pathways to Low-Carbon Development for the Philippines
This report identifies key technologies and investment needs for the Philippines to reach net zero emissions by 2050.

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

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.

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

How can business and Government prepare?

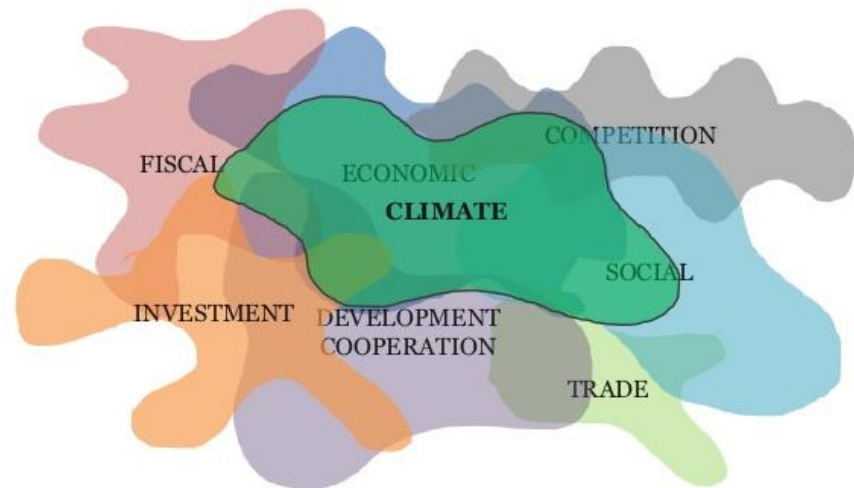
- 1) Accelerate emissions reductions activities that are already profitable.
- 2) Take the long-term into account for investment decisions, to avoid lock-in of carbon-intensive assets.
- 3) Invest in research and development to prepare for technologies that will be needed in the future.

TECHNOLOGIES	NOW	2030	2050
RENEWABLE TECHNOLOGIES	DEPLOY MORE	DEPLOY MORE	DEPLOY MORE
DECARBONISED TECHNOLOGIES	SAO	DEPLOY	DEPLOY
EMERGING TECHNOLOGIES	R&D	DEPLOY	DEPLOY

The development and ongoing review of deep decarbonisation pathways are fundamental to long-term planning for a low carbon future.



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



Thank you!

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