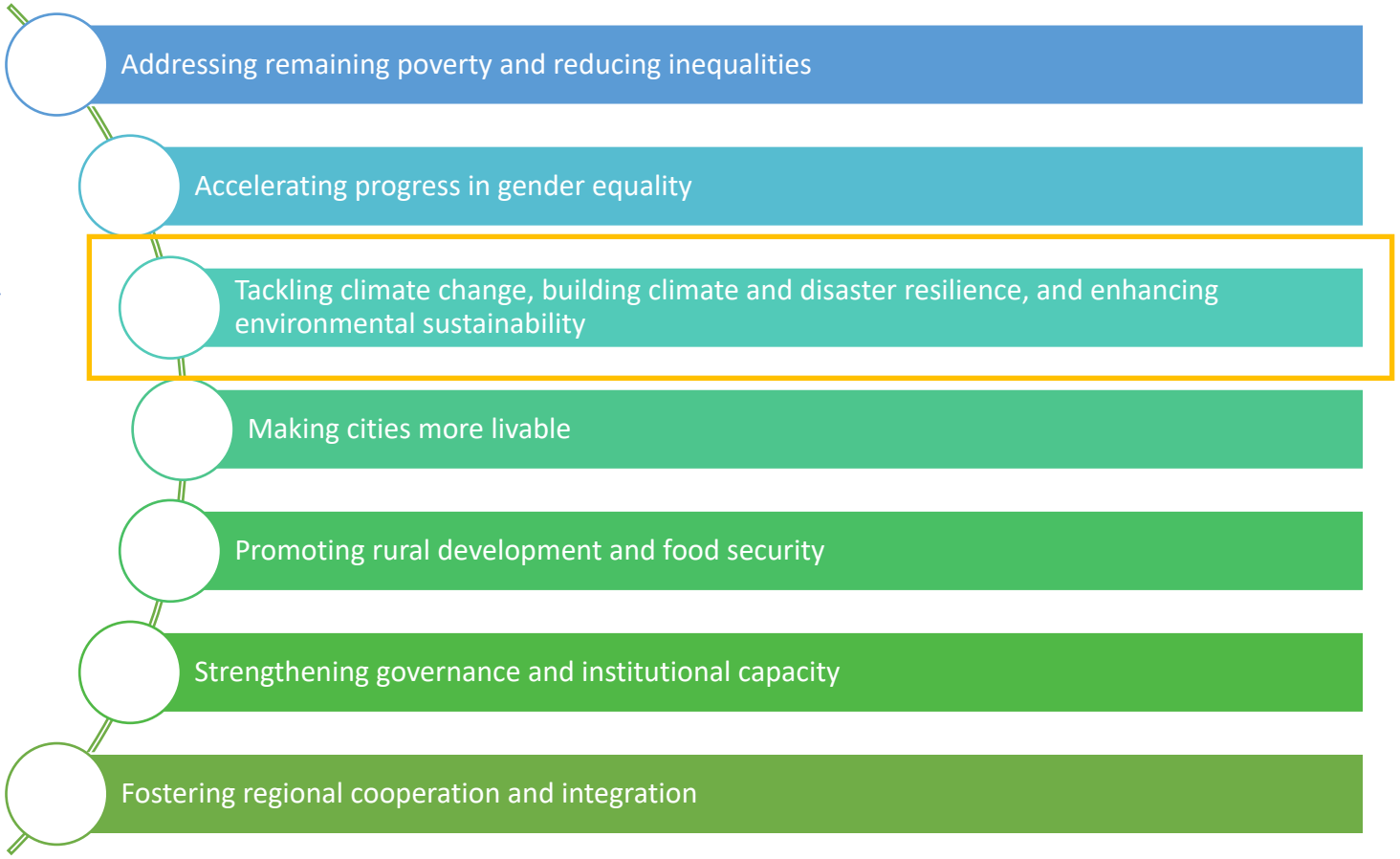
ADB Energy Sector Operations and Energy Policy Update

Yongping Zhai
Chief of Energy Sector Group, ADB

15 June 2021

Guiding Principles of ADB Lending

ADB Strategy 2030 Seven Operational Areas



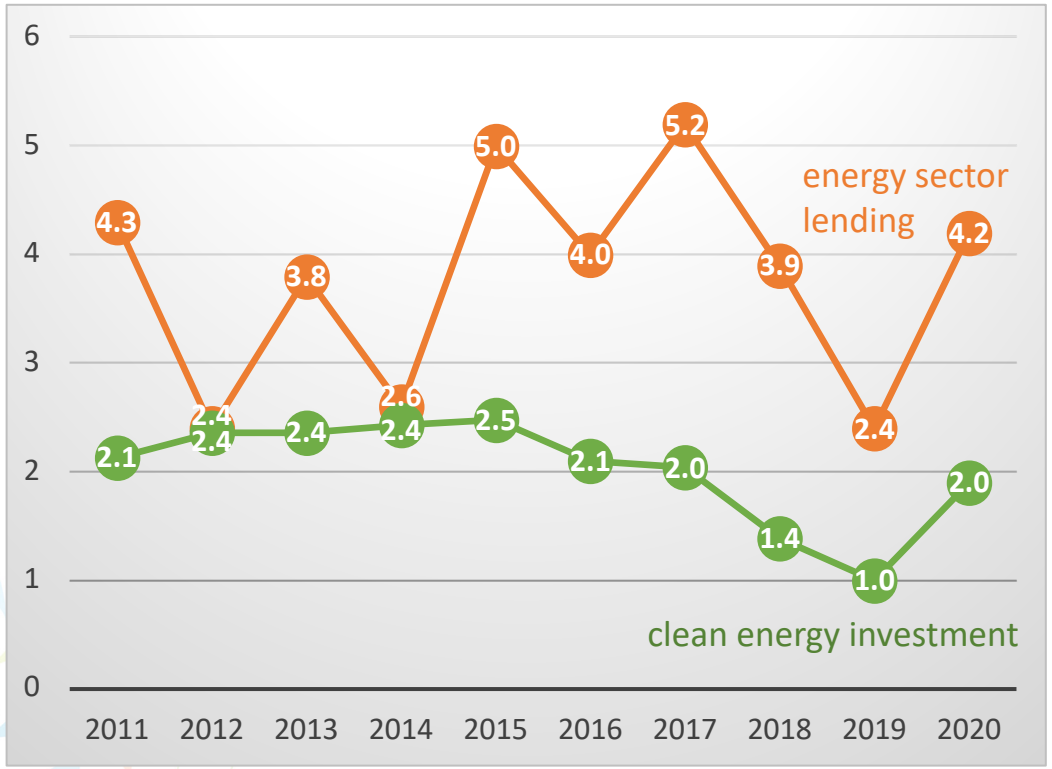
At least 75%

of ADB's committed operations will support climate change mitigation and adaptation by 2030

$80 billion

from 2019 to 2030 to combat climate change

Trend: ADB Clean Energy Investments in Asia

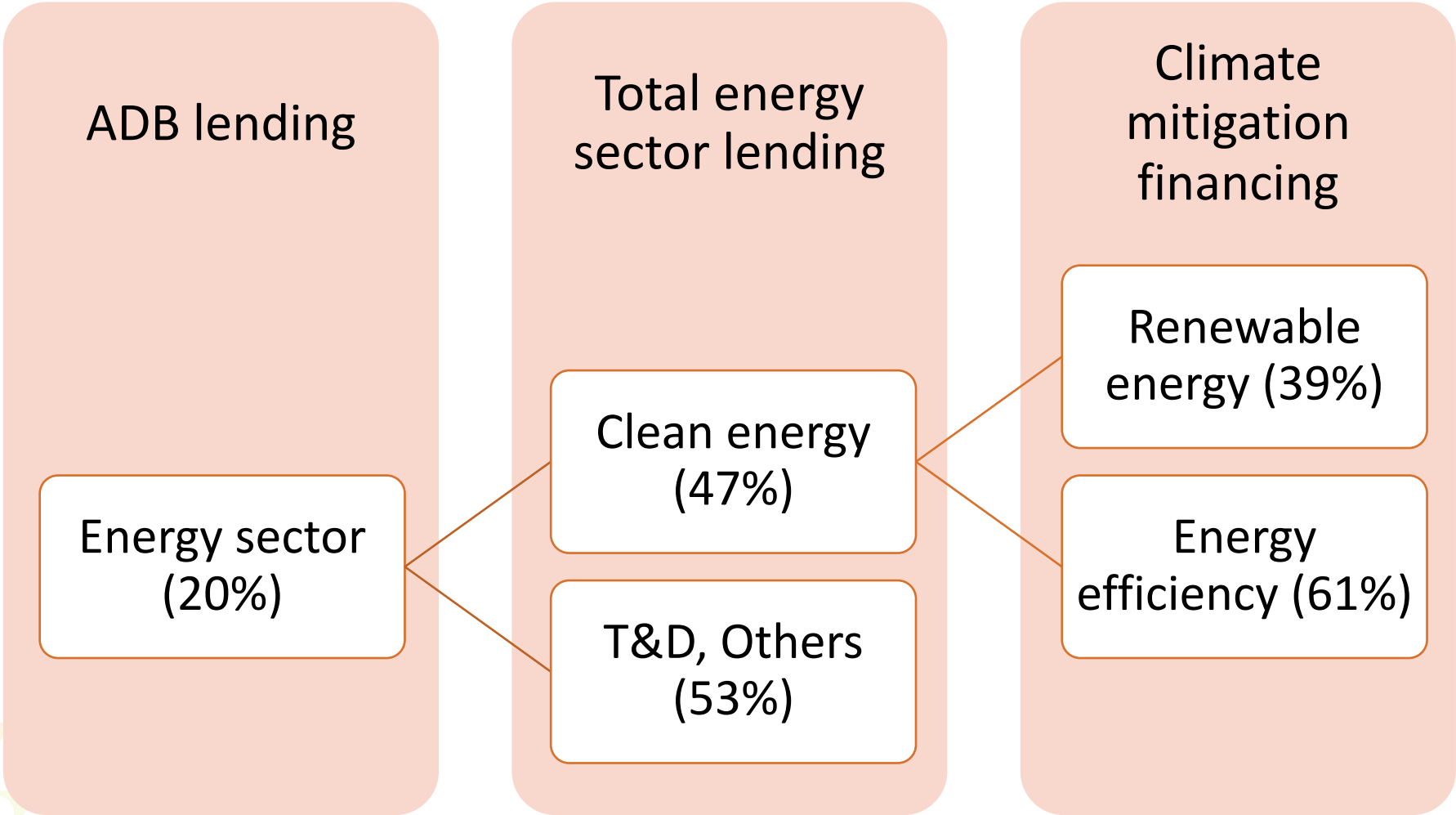


- Developing Asia on track in meeting SDG 7 for electricity access by 2030; but will not be able achieve 100% clean energy access by 2030.
- High share in coal for power generation (60%+) in East, Southeast and South Asia, and high share of oil in the Pacific, low carbon transition is more difficult than in other regions.
- Most developing countries in Asia cannot meet their NDCs without external support; new technologies are needed.

DURING THE COVID-19 PANDEMIC

- The energy sector is performing well, renewable energy is showing strong performance.
- Many energy utilities suffering liquidity problems due to drop in demand and difficulties in revenue collection.
- Renewable energy projects in many developing member countries were delayed due to supply and travel interruptions – need to develop local manufacturing capacity and technical skills.

2020 Energy Sector Lending



ADB Energy Policy Review and Update

ADB Energy Policies since 1981

1981

First energy policy in the aftermath of global oil price shocks

1995

2nd energy policy recognizing the changing needs of DMCs

2000

Energy policy reviewed to reflect ADB's revised operational priorities

2009

3rd energy policy prioritizing energy access, renewable energy and energy efficiency

Why New Energy Policy?

Energy Landscape

Profound changes in energy landscape of Asia and the Pacific
- Falling cost of renewable energy vs. conventional energy
- Emerging new and innovative low-carbon energy technologies

Global Commitments

Global commitments to universal access and climate action
- SDGs – Goal 7: Universal Energy Access by 2030
- Paris Agreement: Nationally Determined Contributions (NDCs)

ADB Strategy 2030

To remain relevant and effective in assisting DMCs and to be in line with Strategy 2030
- ADB is reviewing and updating its Energy Policy 2009

Long-Term Planning for Low-Carbon Transition

- ✓ ADB will support DMCs to develop long-term roadmap and planning for low-carbon transition in the energy sector including 3 milestones
  - Decreasing the carbon intensity
  - Peaking of carbon emissions
  - Achieving carbon neutrality
- ✓ Energy sector roadmaps will dovetail into the development of national long-term strategies which establish sustainable, equitable, low-GHG and climate-resilient development pathways
- ✓ The roadmap will deploy appropriate technologies:
  - Low-carbon technologies (energy efficiency, renewable energy)
  - zero carbon technologies (carbon capture, utilization and storage combined with fossil fuels)
  - negative emission technologies (sustainable bioenergy with carbon capture and storage)
- ✓ ADB will pursue the development of competition and private sector participation through market-based mechanisms

Fossil Fuels

- ✓ ADB will not finance any coal mining, oil and gas field exploration and drilling activities
- ✓ ADB will not finance any new coal-fired capacity for power and heat generation
- ✓ ADB will support DMCs to develop strategic approaches and policies for a Just Transition that addresses the socioeconomic impacts of transitioning away from fossil fuels
- ✓ ADB may finance natural gas pipeline, gas-to-power, industrial and household use of gas projects subject to the following conditions:
    - Meeting basic energy access requirement
    - Consistent with country's long-term low-carbon transition plan, AND
    - Contribute to lower CO_2 emissions compared to grid emission factor, AND
    - Use high-efficiency and best available technologies AND
    - Does not (indirectly) support activities that are not Paris aligned.
- ✓ Detailed guidance note will be issued to staff in processing natural gas projects

Natural Gas Can Support Low-carbon Transitions

- ✓ Natural gas can be used where it is consistent with a country's Paris-aligned long-term low-GHG emissions transition plan in particular, and the MDB Paris Alignment framework
- ✓ CO2 reduction and air quality improvement because of lower carbon contents compared to other fossil fuels such as coal (-50% CO2 emissions) and minimal SOX and particulate matter;
- ✓ Providing comparatively clean energy access for house heating/cooking using gas instead of coal;
- ✓ Co-generation/tri-generation (power generation, heating and cooling) with high efficiency up to 90%;
- ✓ Flexible power supply, balancing intermittent renewable energy power supply;
- ✓ **Need to consider long term impacts to avoid stranded assets and prepare decarbonization with new technologies such as carbon capture and storage and hydrogen**

Large Hydropower

- ✓ ADB will selectively support large hydroelectric power plants (including pump storage) with seasonal storage reservoirs with multipurpose benefits subject to:
  - Positive contribution to low-carbon transition with life cycle greenhouse gas emission analysis
  - Incorporation of climate resilient designs
  - Robust environmental mitigation strategies; and
  - Proper resettlement and economic rehabilitation of the affected people
- ✓ Detailed guidance note will be issued to staff in processing large hydropower projects

Waste-to-Energy

- ✓ ADB will support waste-to-energy investments as they provide an opportunity for integrated cross-sectoral projects enhancing the livability and health in cities and rural areas, and prevents environmental hazards caused by landfills

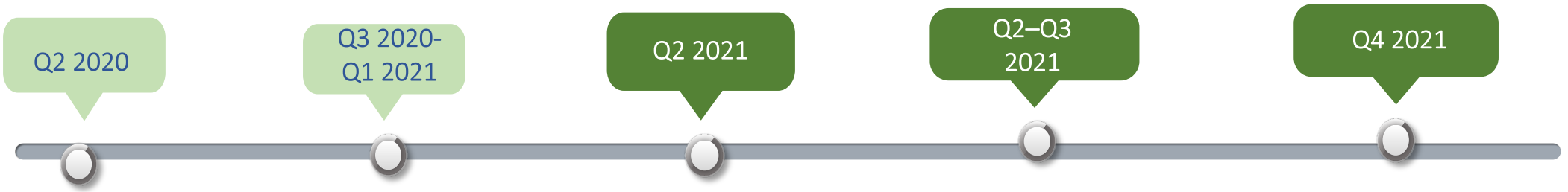
- ✓ In such waste-to-energy projects, the choice for combustion prudently follows the waste management order to prioritize:
  - Reducing waste generation and waste to landfills, whilst supporting ICT technologies to extract valuable materials as early as practical in the waste logistics chain;
  - Increased integration with waste re-use and recycling, notably the integration of biological and mechanical and recycling;
  - Using waste to generate energy within the confines of planned eco-industrial parks which integrates the above

- ✓ Detailed guidance note will be issued to staff in processing waste-to-energy projects

Other Technologies

- ✓ ADB may participate in financing projects with hybrid electricity solutions involving fossil fuels together with renewable energy for isolated grids in islands and remote areas
- ✓ ADB will support DMCs to be informed and participate in new technologies such as battery storage, carbon capture, utilization and storage, green hydrogen, and ocean energy
- ✓ ADB will support cross-sectoral technologies (electric vehicles, solar pumps for irrigation, renewable energy for clinics/cold chain for vaccines)
- ✓ ADB will continue its policy of not to be involved in financing investments in nuclear energy.

Indicative Timeline of Energy Policy Update



Q2 2020	Q3 2020-Q1 2021	Q2 2021	Q2–Q3 2021	Q4 2021
IED Evaluation of Energy Policy 2009	Technical Stakeholder Consultation	IBS Energy Policy Update ESG	Draft Energy Policy for Formal Consultation with Shareholders	R-Paper Updated Energy Policy for Board Consideration
Completed	Completed	9 April 2021	7 May 2021	

Thank you