# UN TEC Session: Developing and strengthening NSI to drive climate action Scene setting: Context of Innovation in Asia and Pacific Hwanil Park / Chief Director Division of Global Innovation Strategy Research Nov 16th, 2023

### Why does Asia Pacific region matter?

#### SDGs Progress of Asia Pacific (as of Mar 2023)



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Source: UNESCAP(2023). SDG gateway. https://data.unescap.org/data-analysis/sdg-

progress? gl=1\*1f47f75\* ga\*MzIyNTE0NzM2LjE2OTk5NTAyNTM.\* ga SB1ZX36Y86\*MTY5OTk1MDI1Mi4xLjEuMTY5OTk1MDM2Mi40NC4wLjA

# Why does Asia Pacific region matter?

#### Climate risk, an urgent threat to the region

- 6 out of top 10 global carbon emitters
- More than half of global GHG
- Highly vulnerable to climate-induced disasters and extreme weather events (ESCAP estimates annual loss to climate-induced disasters in the region \$675 billion)

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 Four-fifths of the people who will face flooding in case of a <u>3°C rise in global</u> temperatures.

#### \* Efforts to respond the climate risk by establishing NSI

- Diversity in economic development, social, political and cultural conditions
- Developed own and unique NSI for each nation(Korea, US, Japan, China, etc.)
- Difficulty in generalizing the framework of NSI across the region

# NSI is a key enabler to drive and accelerate the climate action in the region

- Identify current status and issues regarding NSI with perspectives of climate action
- Collaborate to set the direction and establish
- Share knowledge and experience
- Make the Benefit of innovation > Cost of regulation

#### Each governments need be more ambitious and act with greater urgency in their STI policies to meet these challenges

# What does government need consider?

#### **\*** Different STI Policy framework and practice from the current one

- to help direct and accelerate the innovation cycle for low carbon technologies
- to design policy mixes that enable new markets to emerge, challenge existing fossilbased systems, and create windows of opportunity to break through

#### Significant level of investment across entire innovation chain

- To meet the scale and pace of the net zero transition
- To place more emphasis on RD&D
- Diversify and pool the investments to search, develop and deploy a portfolio of technologies
  - Technological innovation is inherently uncertain
  - Technologies can interact with one another in unexpected ways

Source: OECD(2023). OECD Science, Technology and Innovation Outlook 2023: enabling transitions in times of disruption

#### Encourage public-private partnerships and collaborative platforms

- To accelerate the pace of radical innovation
- Wider society engage in STI processes and policies to coincide with social behavior and lifestyles

• Cross government coordination as policy efforts are distributed across various areas

#### More international STI cooperation needed

- Global climate change requires collective actions for net zero targets
- Consider barriers of national level of R&D and funding regimes to international cooperation

#### **Reduce gaps in the skills and capabilities of innovation actors**

- Firms, governments, research institutes
- Multi-agency approach needed to consider both supply and demand side
- Supports people of working age and communities as part of just transition

Source: OECD(2023). OECD Science, Technology and Innovation Outlook 2023: enabling transitions in times of disruption

