

Financing green energy in a post-COVID world

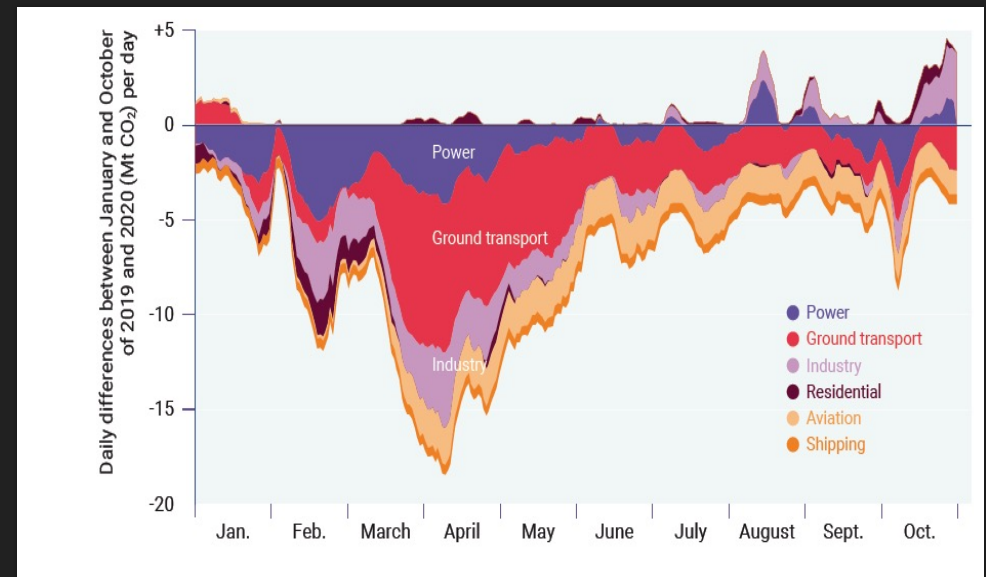
Building back cleaner, and more resilient energy systems

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Disclaimer: The views expressed herein are those of the author(s) and do not necessarily reflect the views of the United Nations.

Background

- **Global emissions in 2020 were down 6.4%**
 - **Insufficient** to meet the Paris Agreement, which requires annual decrease of 7.6%. No change in climate change trajectory (UNEP)
- **Recovery from recessions tends to be very carbon intensive.** 80% of this decrease will be reversed in 2021. (IEA)
- Economic and social challenges from the pandemic
 - In 2020, **8.8 per cent of global working hours were lost** relative to the fourth quarter of 2019, **equivalent to 255 million full-time jobs.** (ILO, 2021)



UNEP Emissions Gap Report 2020, <https://www.unep.org/emissions-gap-report-2020>

Role of Green Recovery

With **agile systems** and **new stimulus funds**, COVID recovery presents a “make or break moment” to address climate change.

- **Economic benefits** of **green recovery** through renewable energy and energy efficiency
 - Lower LCOE– could save \$23 billion/yr (IRENA)
 - Creates **4-6x as many jobs** as the fossil fuel industry
- **Early Global Trends**
 - **Net Zero emissions** commitments in **34 countries** and many companies
 - **Increasing “greenness of stimulus,”** especially in developed economies (Vivid Economics)

Purpose

Examine

- Early trends in government policies and investments in green energy in Asia
- Opportunities & challenges by sector
- Actionable recommendations

METHODOLOGY: Analysis & case studies of 9 countries in Asia.

Data is from Energy Policy Tracker. <https://www.energypolicytracker.org/>.

Early trends in energy policy commitments in Asia

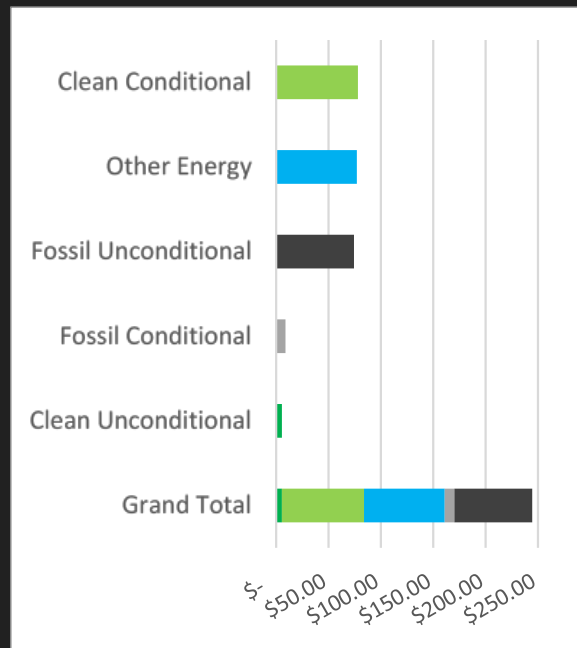
Assessment of energy policies post-January 2020 in Bangladesh, China, India, Indonesia, Japan, Republic of Korea, Saudi Arabia, and Viet Nam

Types of energy policies and commitments

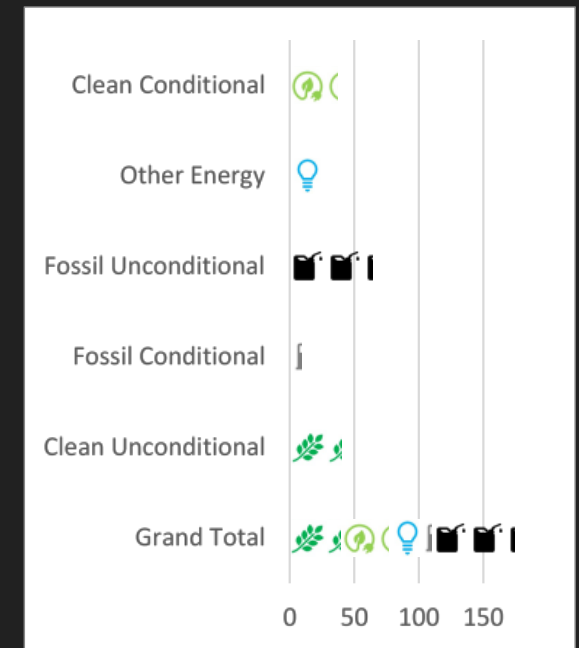
- Clean Conditional:
 - Electric vehicles
 - Green city initiatives
- Other Energy:
 - Hydro, nuclear & multi-fuel
- Fossil Unconditional:
 - Coal plants
 - Bailouts to aviation industry
- Fossil Conditional
- Clean Unconditional:
 - LNG
 - Emissions standards & fossil fuel taxes
- Clean Unconditional:
 - Net zero emission commitments in China, Japan, & Republic of Korea

174 new policies support energy, with **\$245 billion** in financial commitment

Value committed by policy type (billions USD)

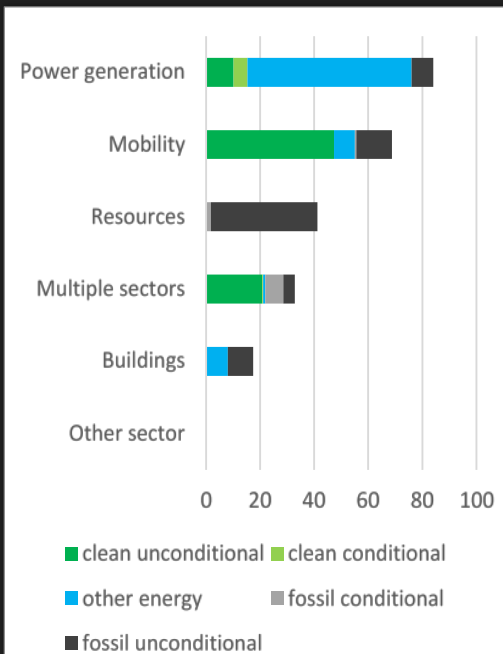


Number of policies by type

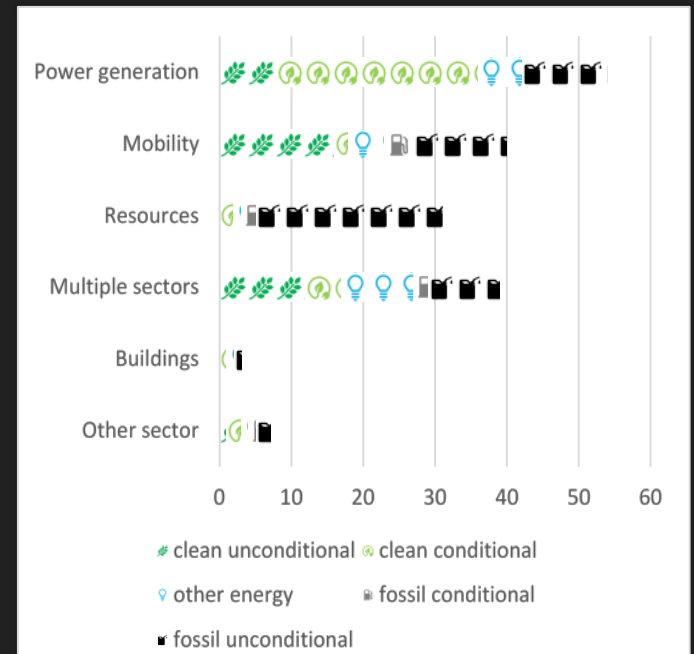


Energy trends by sector

Value committed by sector (billions USD)



Number of policies by sector



Power Generation & Resources

Opportunities

Coal-fired power generation accounts for 30% of global CO2 emissions (IEA)

- Expand & modernize electricity grid
- Reduce fossil fuel subsidies
- Accelerate renewables, particularly wind & solar
- Manage gas- and coal-fired power plants with a view toward their eventual phaseout
- Expand electricity access in developing countries

Early Trends

- Green
 - All countries had policies to boost **solar and wind power**.
 - Some policies for hydro, and 1 for nuclear
- Gray
 - Increased fossil fuel subsidies
 - New coal plants to stimulate the economy

Global coal demand is projected to increase by 4.5% in 2021, 80% of which is driven by the Asia region (IEA).

Mobility

Opportunities

Globally, the transport sector accounts for about 23% of emissions (IPCC)

- Sustainable & resilient **mass transit systems** and **rail**
- Improve **urban transportation** systems
- **Low-carbon and electric vehicles**
- **Sustainable freight transportation**, particularly for road transport

Early Trends

- Green
 - Investments in large scale greening of rail transport in India
 - Investments in EVs & EV infrastructure in China & Japan
 - Support for low-income users such as rickshaw drivers
- Gray
 - Bailout packages for fossil-fuel based industries such as aviation, without any climate targets or green incentives

Transport accounted for the largest drop in emissions in 2020, and the sector has still not recovered. Increase in transport demand will further boost energy usage & emissions.

Buildings

Opportunities

Globally, buildings account for 30% of energy-related CO2 emissions

- Retrofits to increase efficiency of existing buildings
- Efficient household appliances

Early Trends

- Green
 - Several policies support energy efficiency upgrades for buildings, including public and government buildings
 - Sustainable city initiatives
- Subsidies to help renters & homeowners may be socially beneficial, but lack climate targets.

Conclusions

- **With many countries both globally, and in the Asia region committing to zero emissions, there is a clear prioritization of climate change issues. Will it be enough?**
- Current trajectory shows little progress towards reducing global warming
- Beneficial policies include:
 - An abundance of policies supporting renewable energy generation and energy efficiency
 - Investments in sustainable mobility and green cities
- Continuing obstacles include
 - Continuing fossil fuel subsidies as well as investment in new fossil fuel plants, particularly coal
 - Bailouts to fossil fuel-intensive companies and industries with no climate targets

Policy Recommendations

1. **Direct recovery package funds toward green policies** and investments to support economic growth, job creation, and long-term sustainability.
2. Ensure that the recovery is both **green and socially inclusive** by prioritizing universal energy access and including equity considerations for each initiative receiving funds.
3. Create an **enabling environment for companies** to invest in green projects; restructure incentives to ensure that climate considerations factor into business decisions.
4. **Remove fossil fuel subsidies** while energy demands are low, and with consideration for social equity; **put a price on carbon**.

Paper to be published in the upcoming book, "Fiscal Policy Instruments and Green Development," launched by the Asian Development Bank Institute (ADBI)

Thank You

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