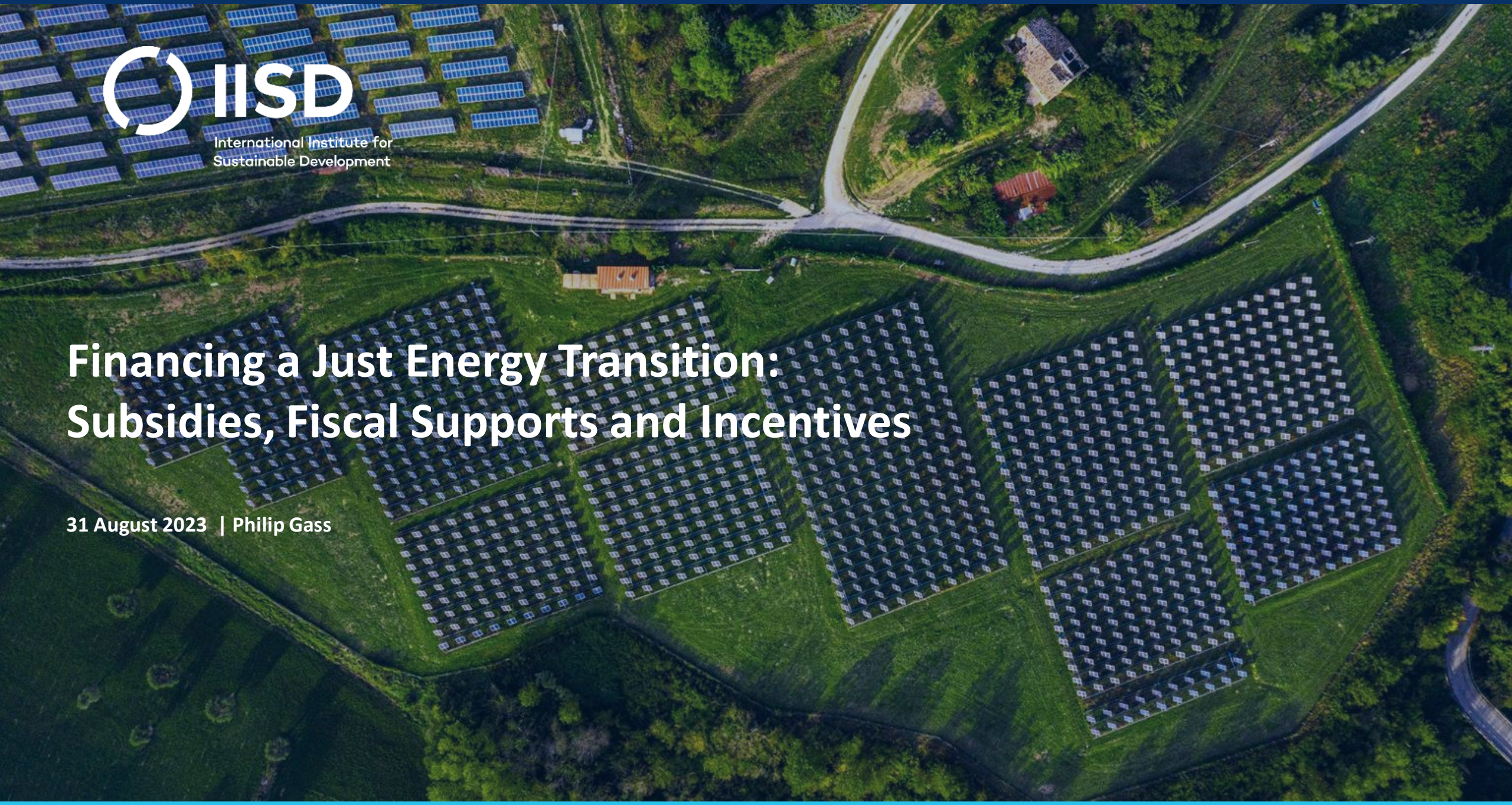

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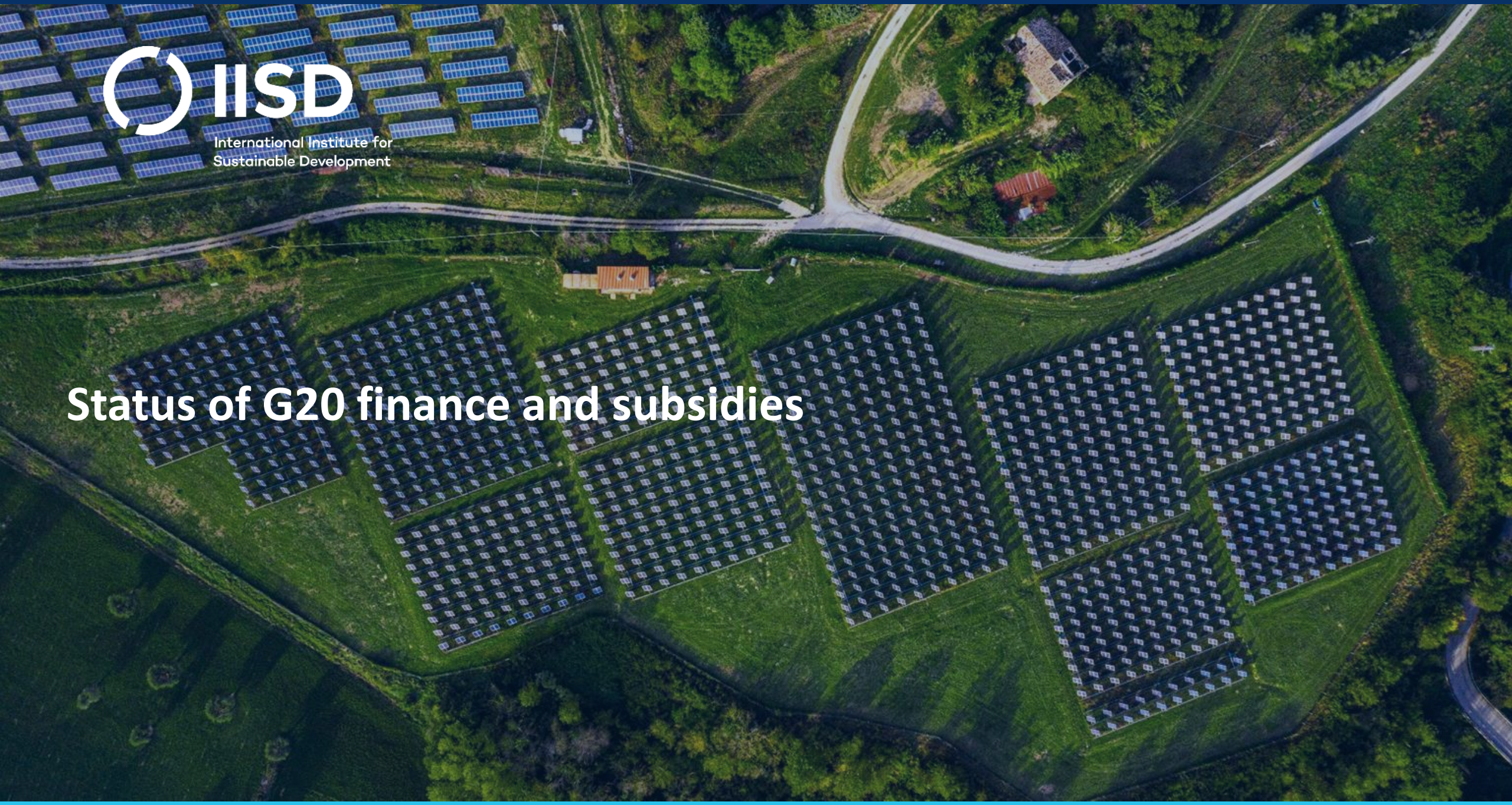
Financing a Just Energy Transition: Subsidies, Fiscal Supports and Incentives

31 August 2023 | Philip Gass

International Commitments on subsidies and finance

2009: G20 committed “to **phas[ing] out and rationaliz[ing] over the medium term inefficient fossil fuel subsidies**”

2015: Paris Agreement pledged to **make “finance flows consistent with a pathway toward low GHG emissions** and climate-resilient development”

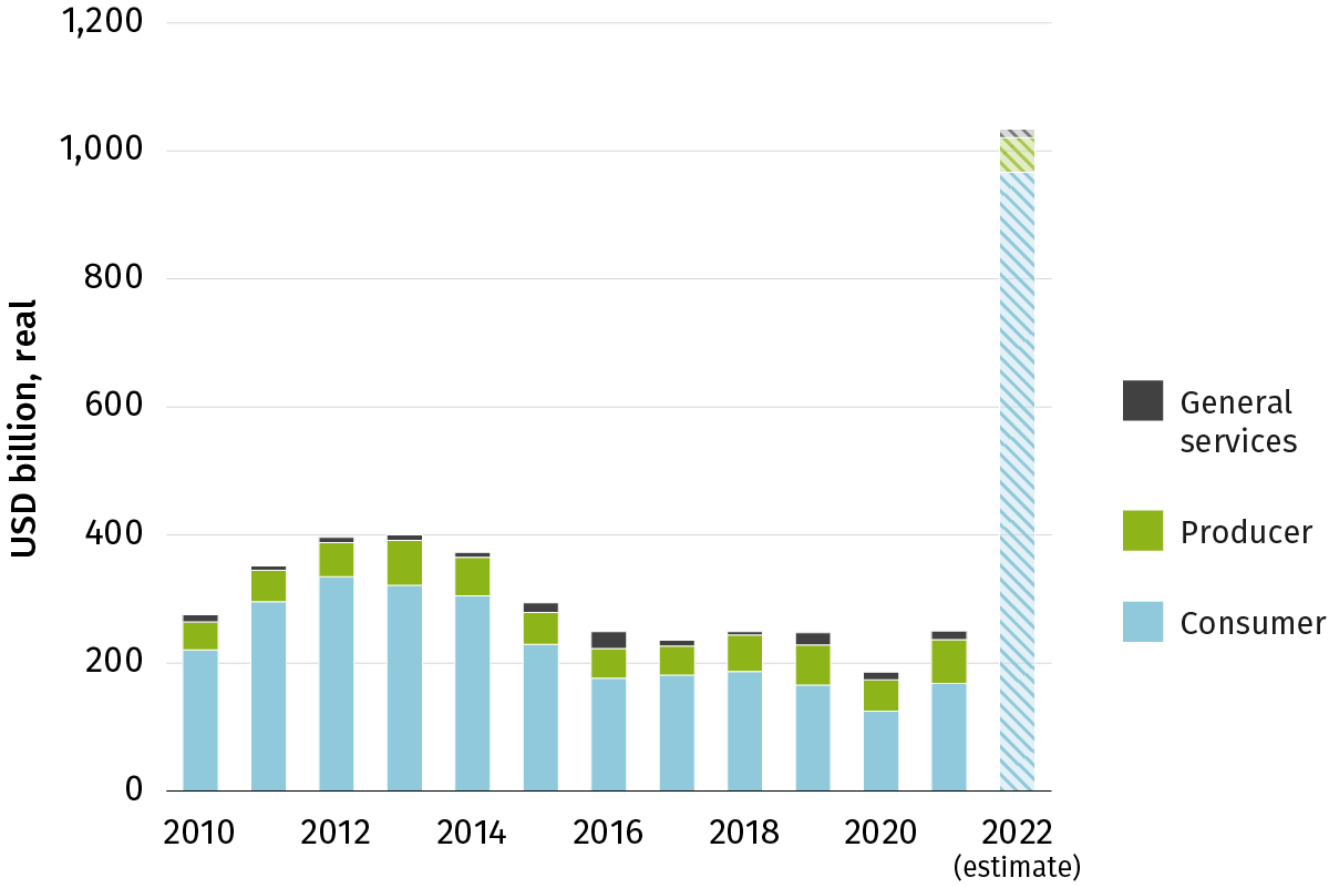


Status of G20 finance and subsidies

KEY MESSAGES

Fossil fuel subsidies from G20 countries in 2022 amounted to at least USD 1 trillion

- More than four times the annual average in the previous decade
- Driven by vast consumption subsidies implemented in response to energy price crisis related to invasion of Ukraine
- Not an efficient way to help the poor
- Instead use subsidy savings to provide social welfare through other mechanisms



Investments in fossil fuel infrastructure by SOEs USD 322 billion in 2022

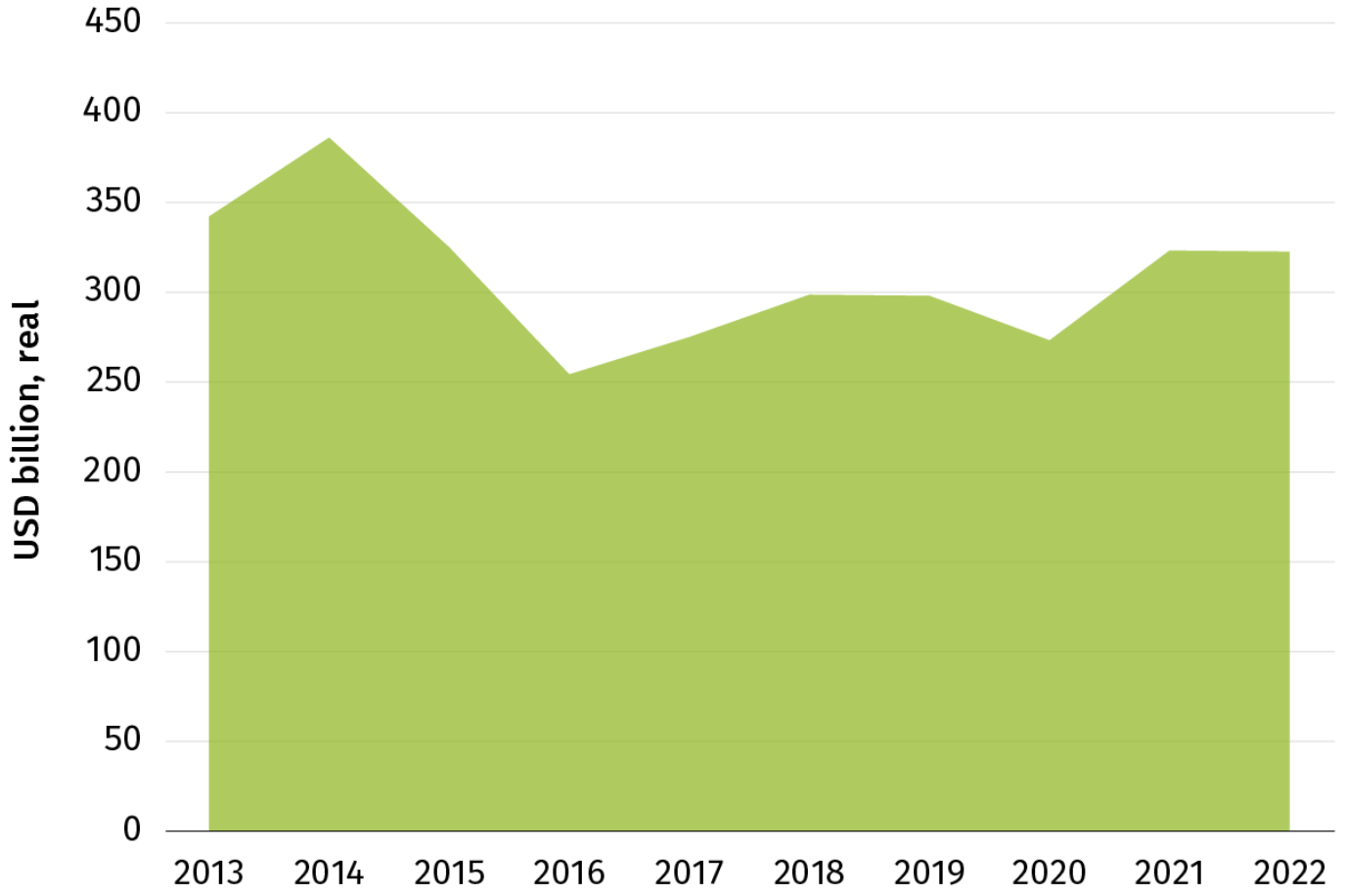
Above pre-pandemic and pre-energy crisis levels

Down payment on new fossil production

Higher planned capital investment on upstream activities from 2023

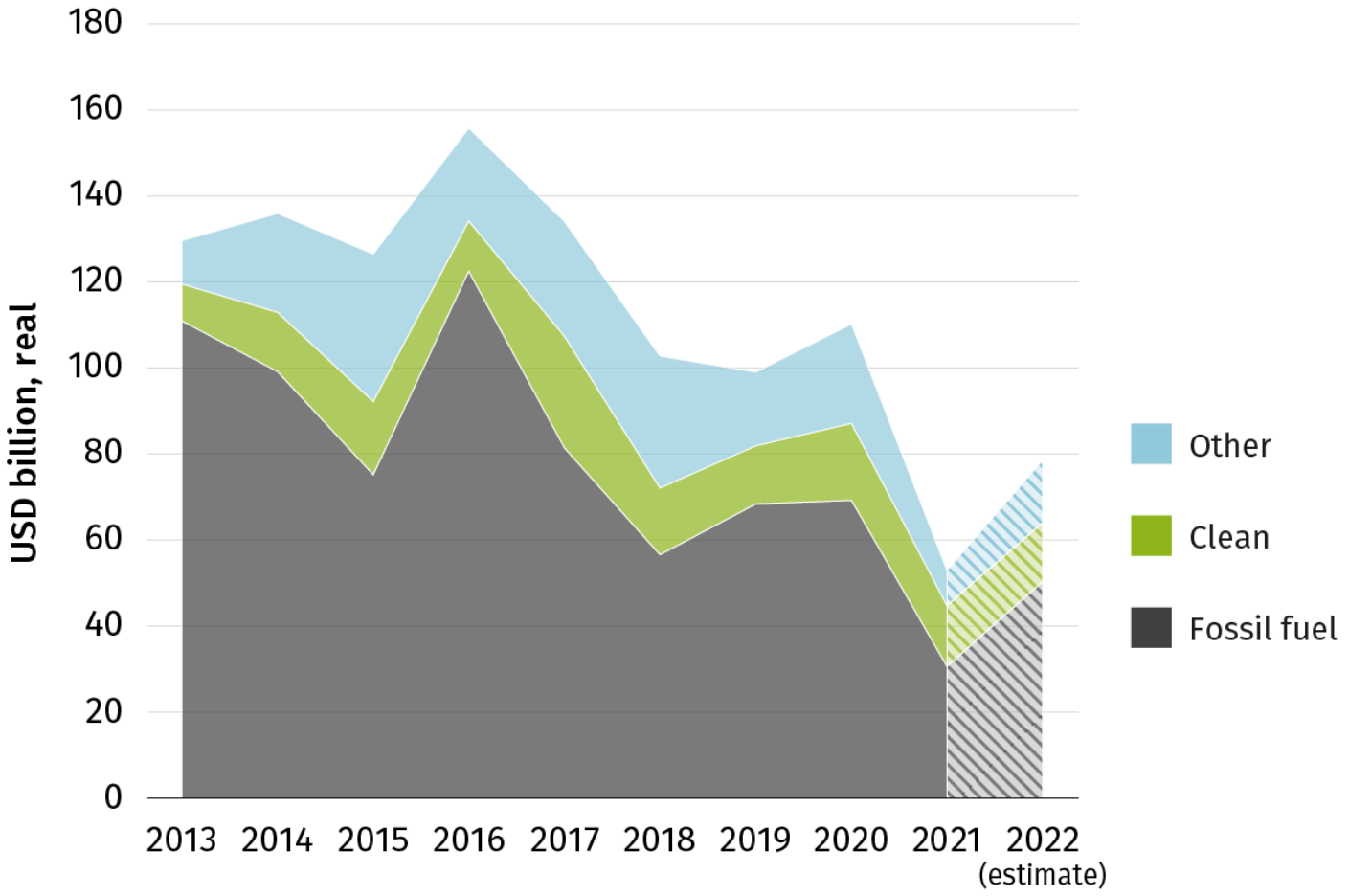
At odds with climate science

- IEA declared in 2021 that there could be “from today, no investment in new fossil fuel supply projects.”



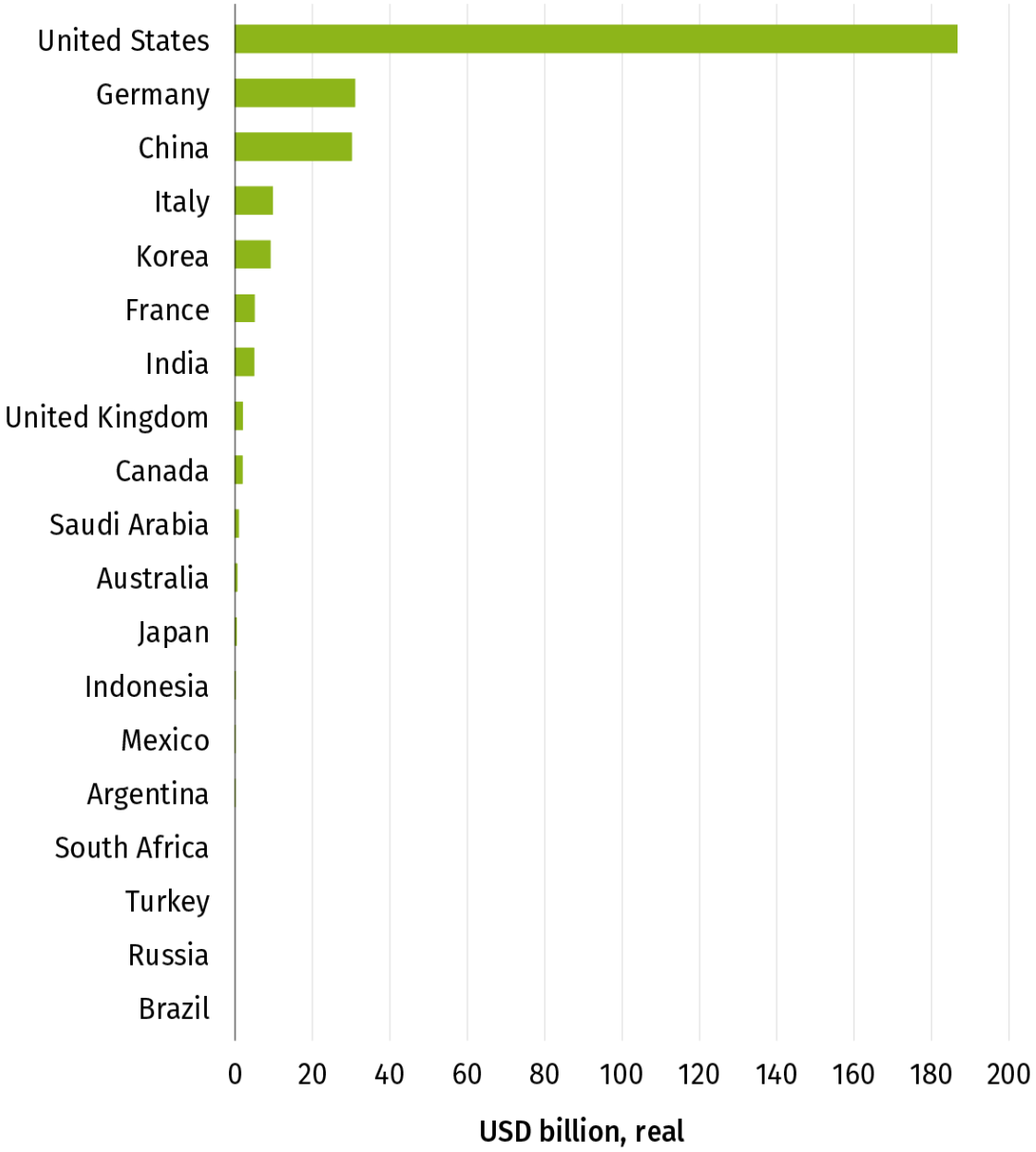
International Public Finance for Energy

- FF PF Averaged USD 50 billion/yr from 2019 to 2021
- Nearly 4x greater than support to clean energy over same period (USD 13 billion/yr)
  - clean energy finance increased only USD 2 billion since last 3-year period
- Locks countries further into reliance on fossil fuels



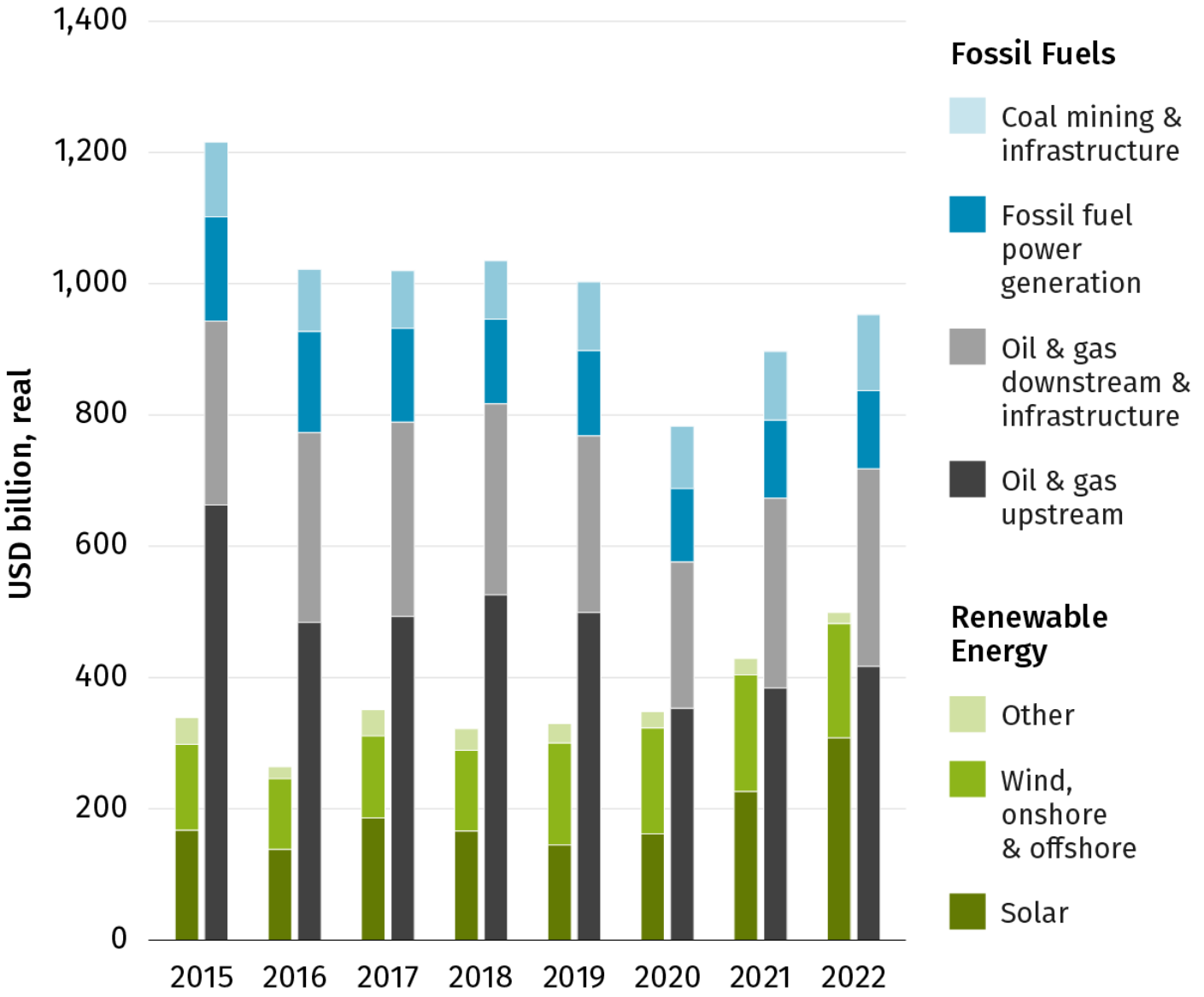
G20 Subsidies for Renewable Energy

- Announced USD 265 billion in subsidies for renewable power generation between Q1 2020 and Q2 2023
- Commitments - not spending!
- Dwarfed by subsidies for fossil fuels (over USD 1.4 trillion over same period)
- Shift public financial support from fossil fuels to renewables



Global investment in renewables reached a record high of USD 500 billion in 2022

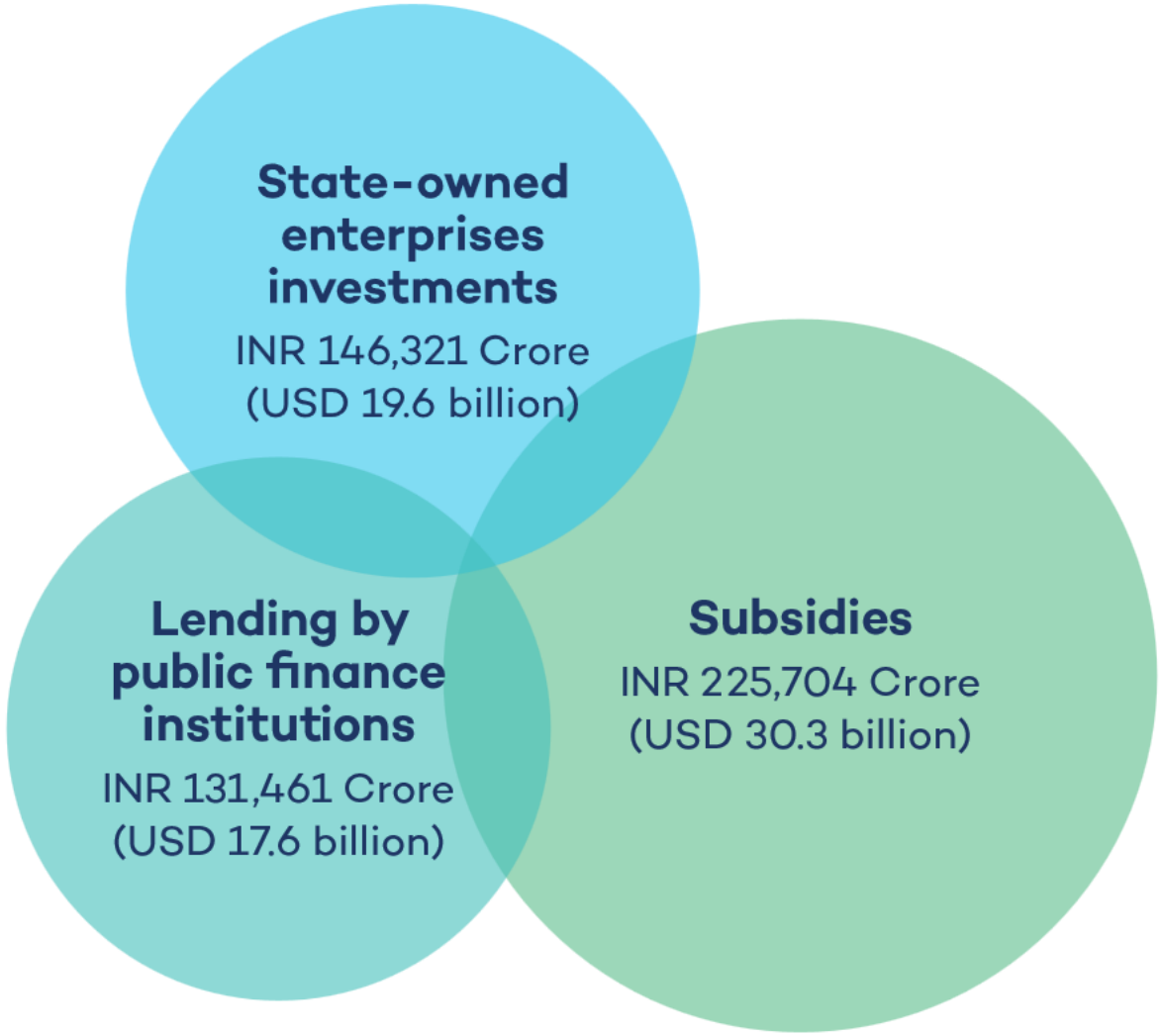
- 83% of global investments in renewable energy occurred in G20 –
  - 31% of which was from the public sector
- Still only around half of investment in fossil fuels (USD 950 billion)
- Investment needs to increase 3x to be consistent with a 1.5C



Mapping India's energy investment approach: Unlocking clean energy finance

Government support for energy is estimated to be at least INR 5 lakh crore (USD 68 billion) in FY 22

- Growing support for renewable energy (RE) but needs to increase to align with the 2030/2070 targets
- Oil and gas (O&G) subsidies fell, but fuel tax cuts shielded consumers from soaring oil prices
- Coal and electricity subsidies remain stubbornly high

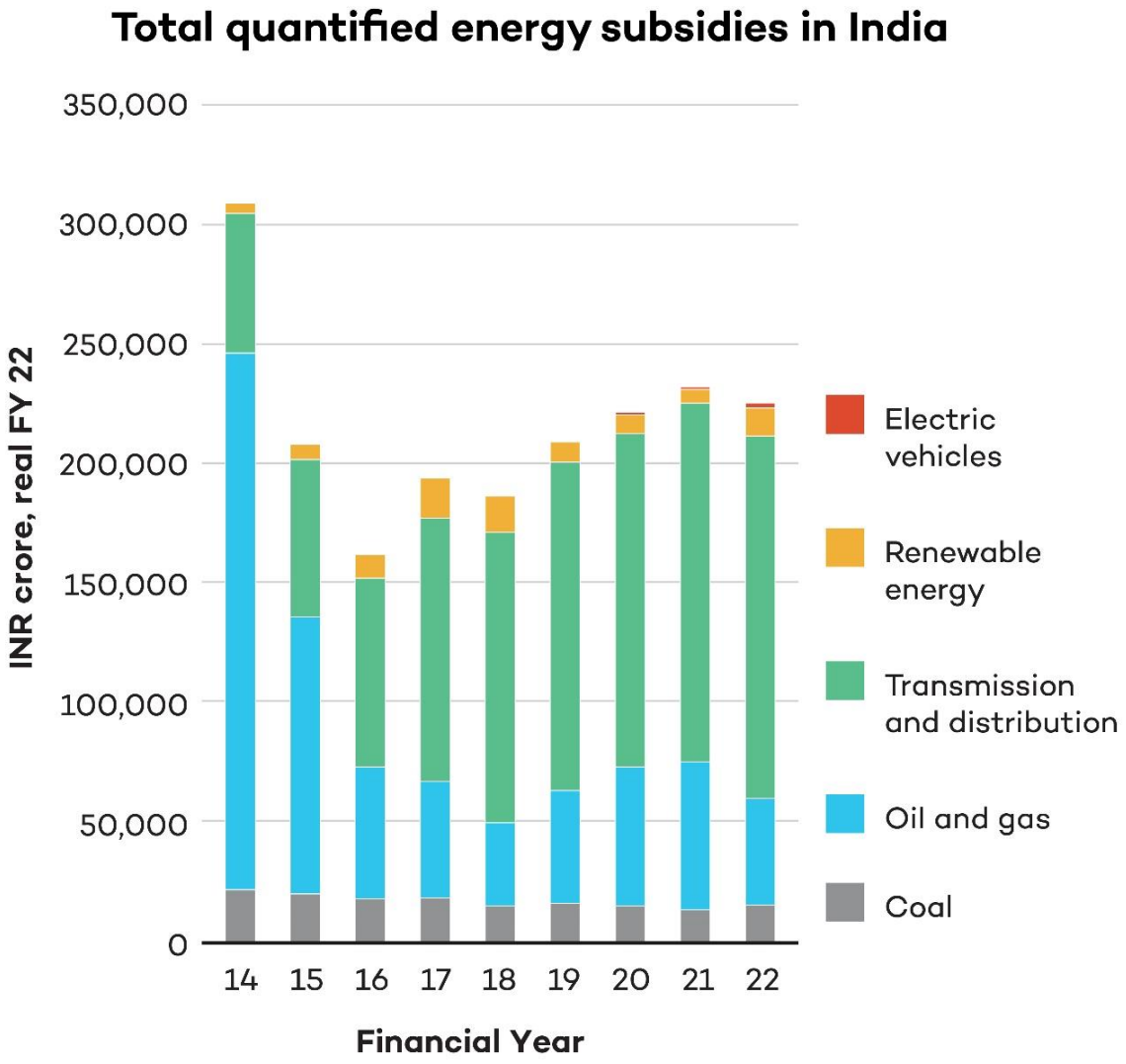


*Note: *SOE stands for state-owned enterprises also known nationally as public sector undertakings*

KEY MESSAGES

Energy Subsidies

1. Total energy subsidies have fallen since 2014; they fell a further 3% in FY 22.
2. Post-COVID-19 recovery evident in higher uptake of RE and EV subsidies.
3. Fossil fuel subsidies remain four times higher than clean energy (RE and EVs) in FY 22.
4. O&G subsidies fell by 28% in FY 22, but this does not account for foregone revenue from cuts in excise and VAT on fuel.

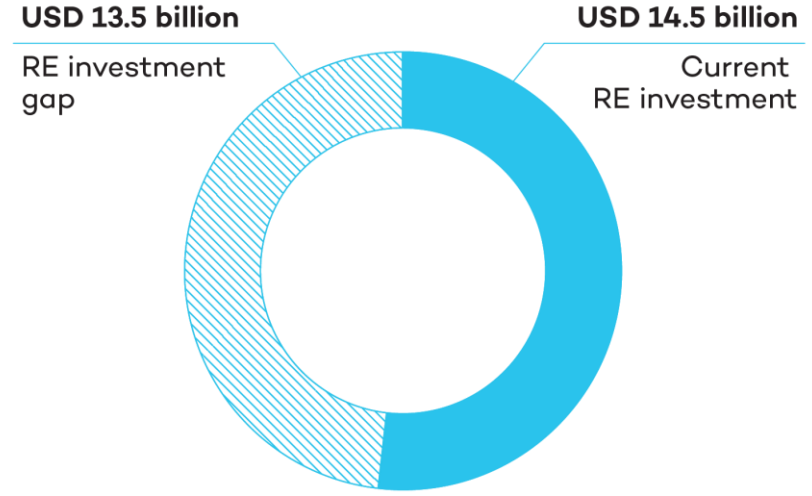


INDIA'S INVESTMENT NEEDS

Public sector financing needs to increase to crowd in private investments in clean energy

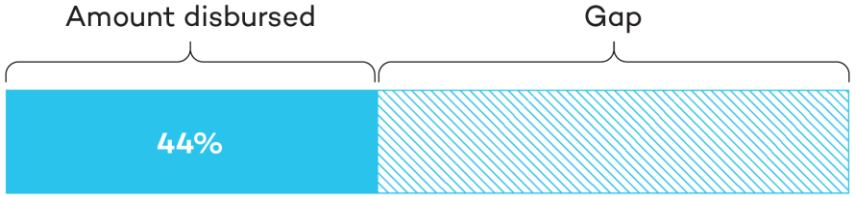
1. India needs INR 2.1 lakh crore (USD 28 billion) per year in investments to meet 2030 RE targets
    - Double current levels.
2. To date, multilateral climate funds pledged to provide INR 8,700 crore (USD 1.2 billion) toward energy projects in India
    - Less than half (44%) of that amount has been received.

India's investment needs



Source: BNEF (2022); IEEFA (2022)

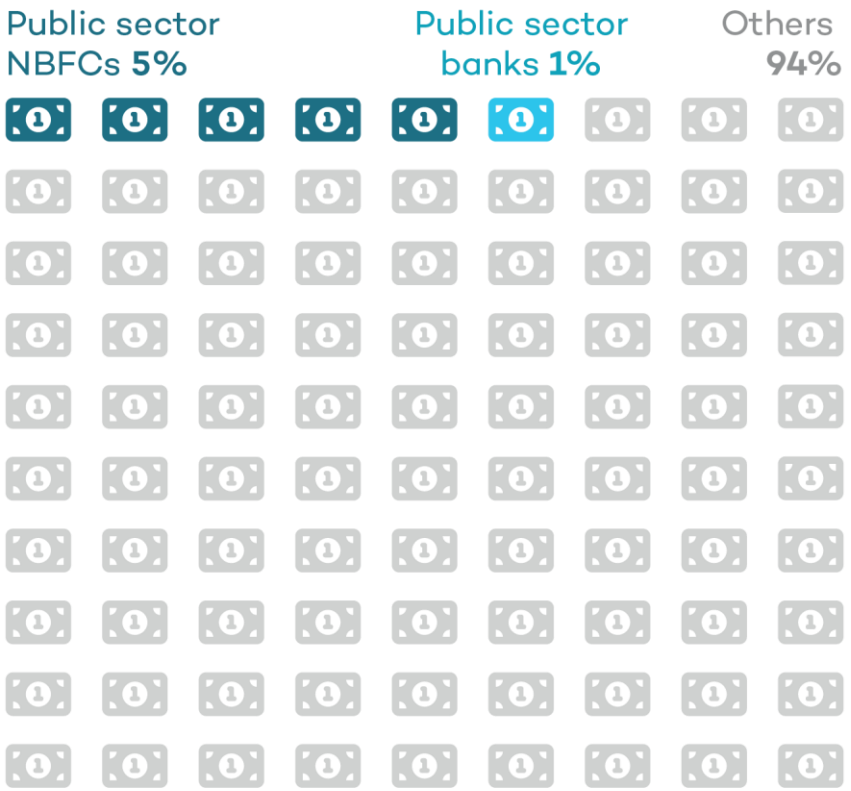
Cumulative financing for energy projects by multilateral climate funds



Source: Climate Funds Update, updated as of January 2022

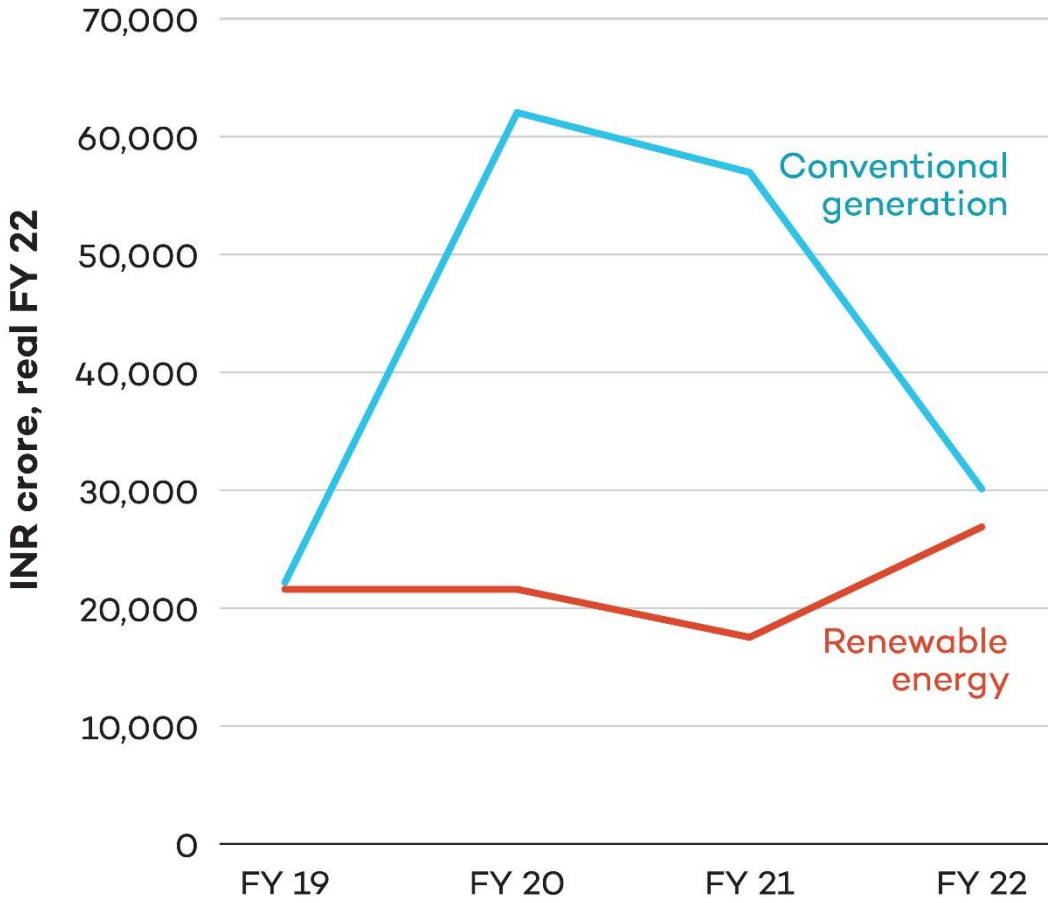
Lending by Domestic PFIs

Debt financing for renewable energy projects



Source: [BNEF (2022). Financing India's 2030 Renewables Ambition.]

Lending by three major NBFCs



Note: Includes annual disbursals by top three state-owned power financiers—namely PFC, REC and IREDA.

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Indonesia & the ADB region: Fossil fuel subsidies encourage wasteful consumption of fossil fuels with wide-ranging impacts, including hindering clean energy investment

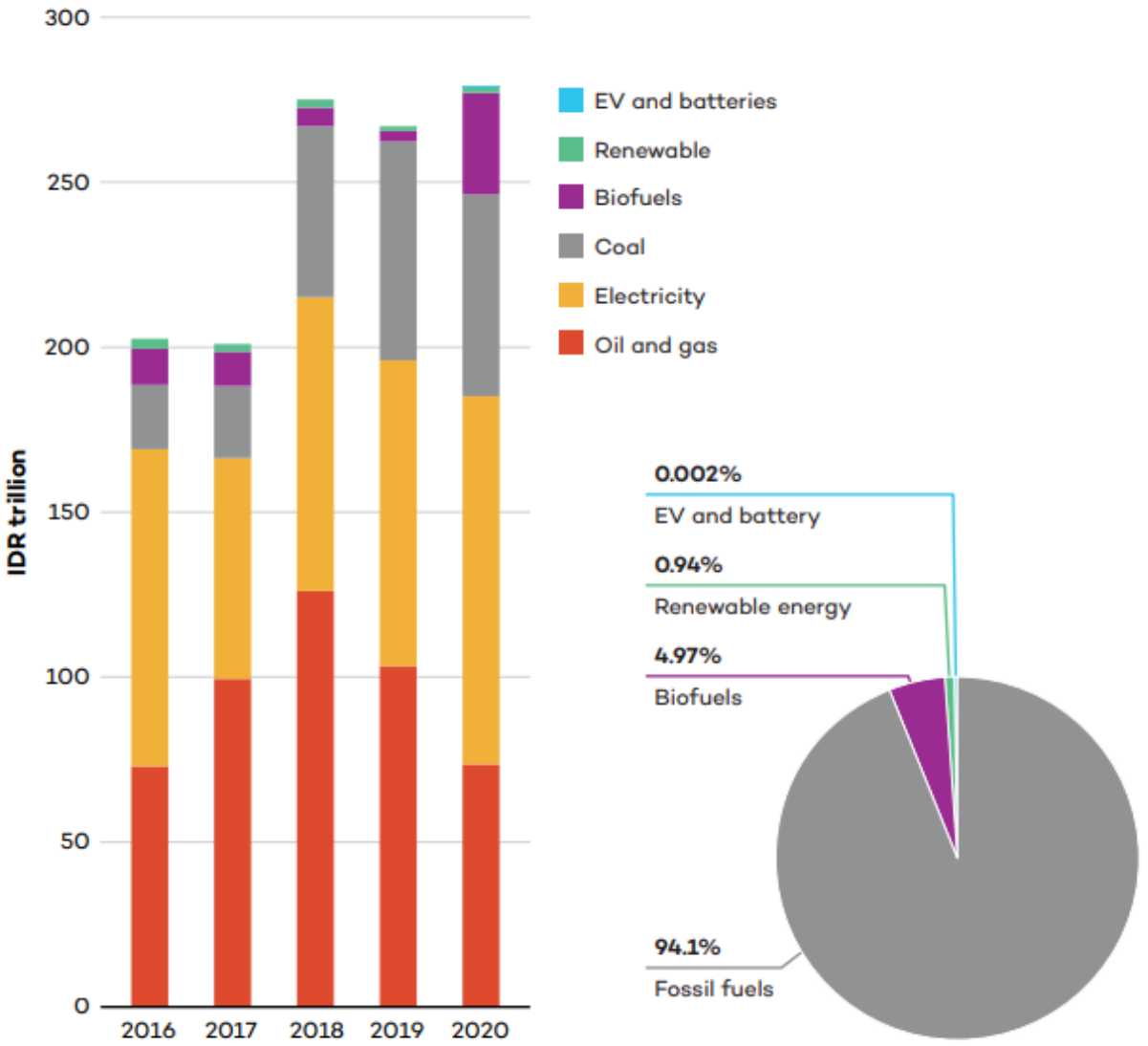
Indonesia

- Incentives for renewable energy are undermined by the support given to fossil fuels
- Support for biodiesel from the Crude Palm Oil (CPO) export levy accounted for the majority of subsidies for biofuels
- Since both the EV and EV battery industries are emerging sectors, most of the identified measures are relatively new, and they were not readily quantifiable

Indonesia

- Support for fossil fuels and fossil fuel electricity electricity remains substantially higher than support for renewable energy
- Support for oil and gas has fluctuated significantly
- Support for coal has risen considerably

Figure ES1. Support measures provided to the energy sector in Indonesia, FY 2016 to FY 2020

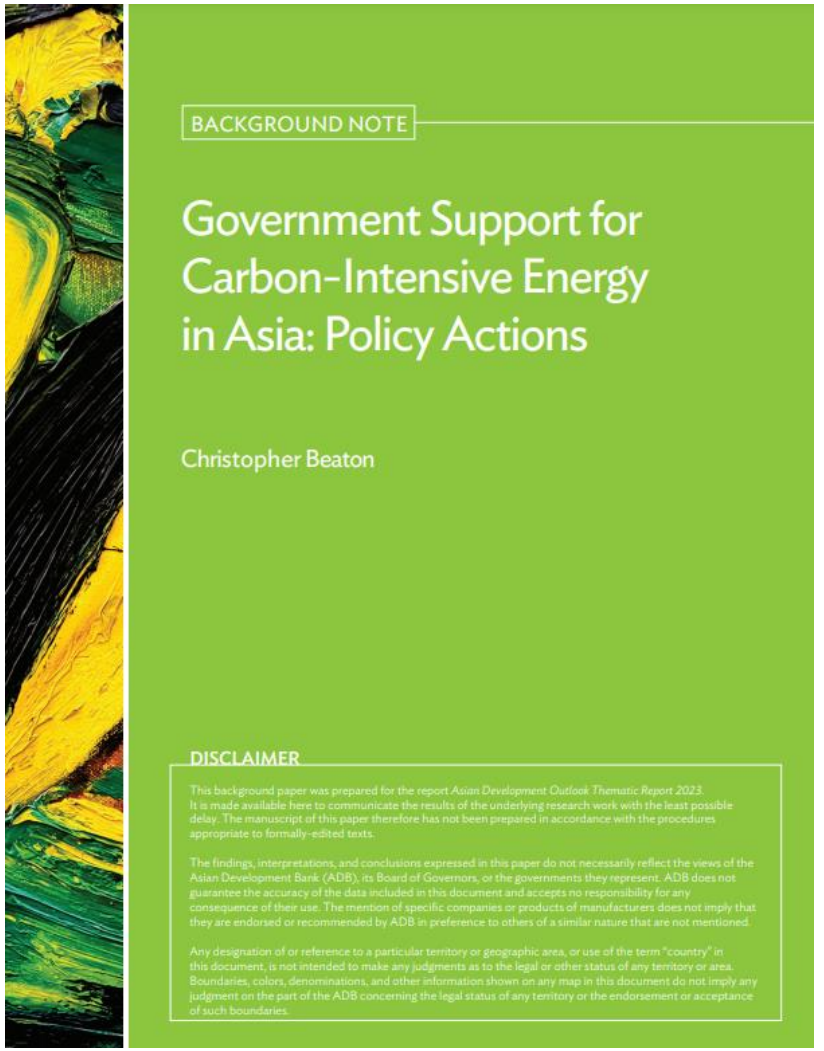


Source: Authors' calculations.

Fossil Fuel Subsidies in ADB Region

Key Highlights

- Asian Development Bank (ADB) regional members provided at least $119 billion in fossil fuel subsidies in 2021, and subsidies will likely be significantly higher when data are available for 2022.
- ADB regional members have committed to reform fossil-fuel subsidies in numerous agreements since 2009
- Some limited support may be needed in the short term for energy access reasons, but governments can take a “remove, target, swap” approach and timelines



Fossil Fuel Subsidies in ADB Region

FFSR is needed to unlock clean energy finance

Internationally Governments can take action by:

- Increasing ambition and accountability in agreements for FF energy
- Improving reporting on FFS under SDG 12.c.1
- Expanding & strengthening commitments in new fora

Nationally Governments can take action by:

- Tracking government support for energy & publishing data
- Setting national targets to align public resources with climate commitments
- Establishing a strategy to reform socially and economically sensitive support measures
- Implementing reforms and preventing backsliding

JETPs as a model for clean energy investment in major economies

Just Energy Transition Partnerships

A new model for FF to renewable energy transition

- JETPs are a financing cooperation mechanism, looking to assist a selection of coal-dependent emerging economies make a just energy transition.
- The goal is to support these countries' self-defined pathways from coal production and consumption in a way that addresses the social consequences
- Ensuring training and alternative job creation for affected workers and new economic opportunities for affected communities.
- South Africa: COP 26 – 8.5 billion announced, COP 27 – JETP IP USD 98 billion
- Indonesia G20 Bali – Indonesia 20 billion JETP announced

Ensuring JETP can deliver on their promise

Recommendations

- Avoid the coal to gas transition & avoid locking in long-life gas infrastructure
- Focus on considerable solar and wind potential
- JETP can be a public finance signal and driver to the investment community for renwable energy transition if we avoid diversions to false solutions

Figure 1. Annual CO_2 emissions from coal in the five JETP countries (in tonnes)

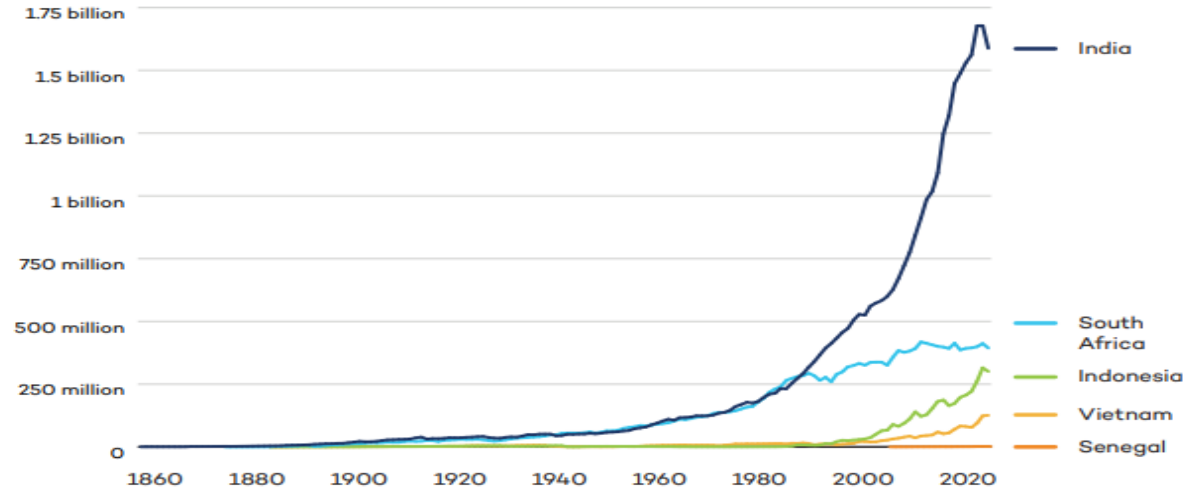
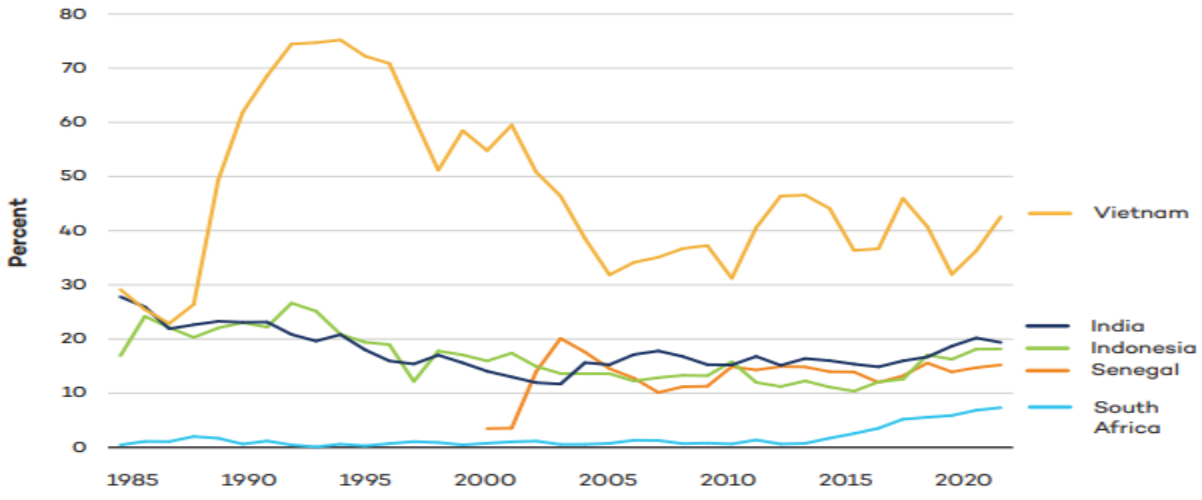


Figure 2. Share of electricity from all renewable sources for South Africa, Indonesia, India, Vietnam, and Senegal



Thank You!

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