

Accelerating government support measures to attract private sector clean energy investment



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Recent Publications

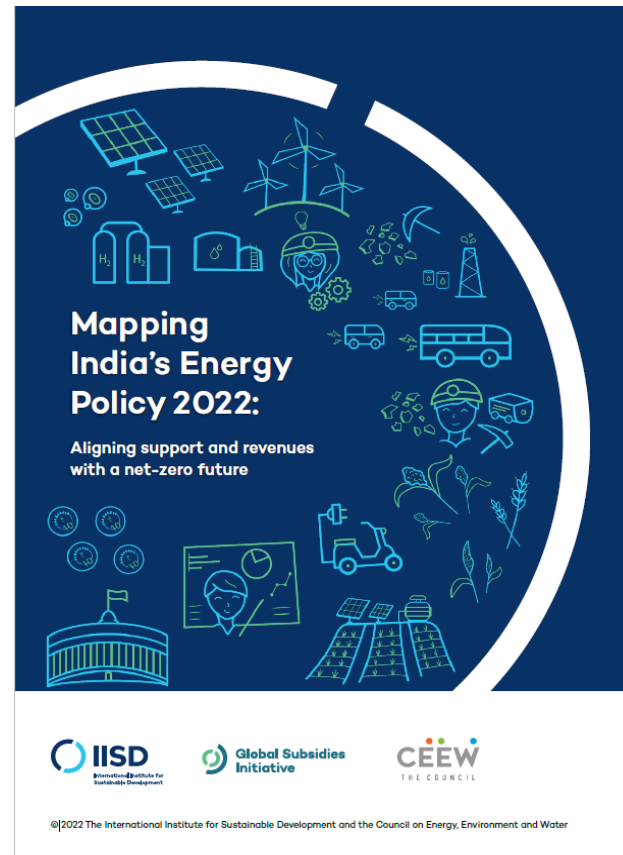


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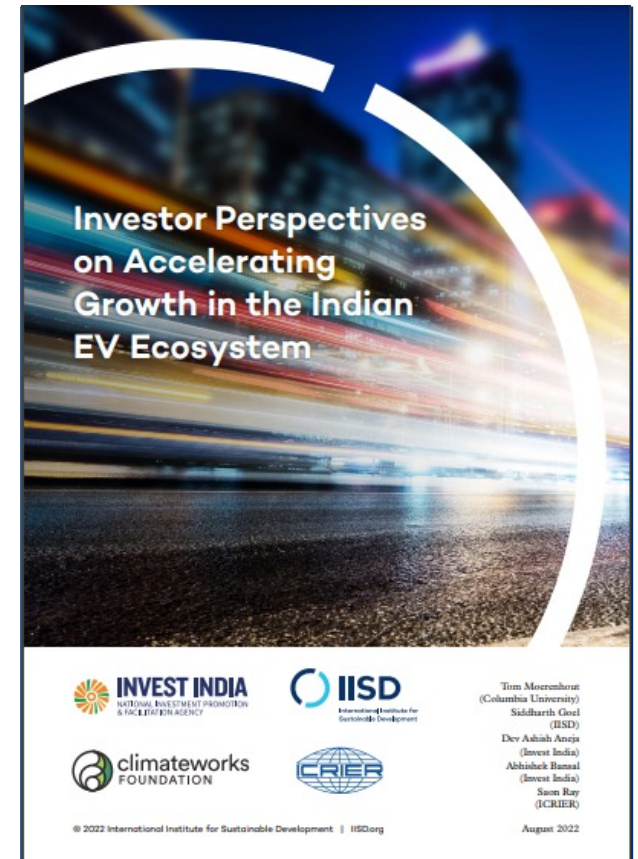


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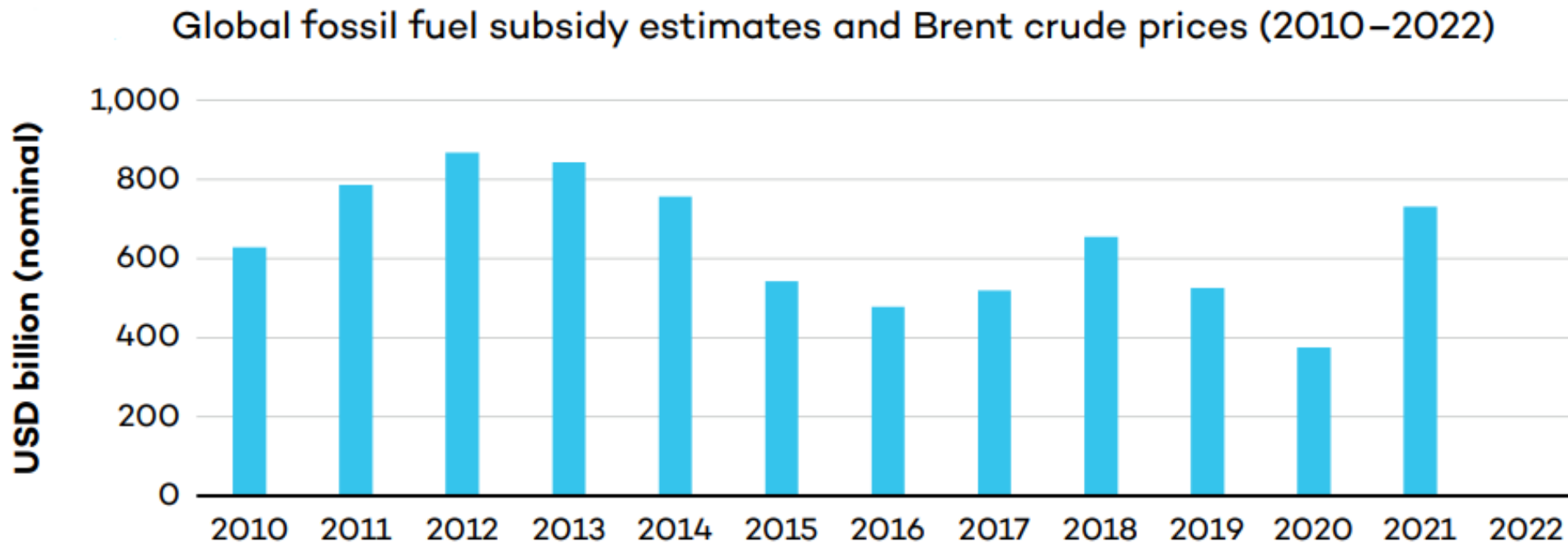
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A landscape photograph featuring a vibrant green field in the foreground. In the middle ground, a tall, lattice-structured power line tower stands prominently, with several power lines extending upwards and outwards. The background consists of rolling hills and mountains, some of which are partially obscured by a layer of mist or low clouds. The sky is filled with heavy, grey clouds, creating a dramatic and somewhat somber atmosphere. A dark blue, semi-transparent banner is overlaid on the left side of the image, containing the text 'Global findings' in white.

Global findings

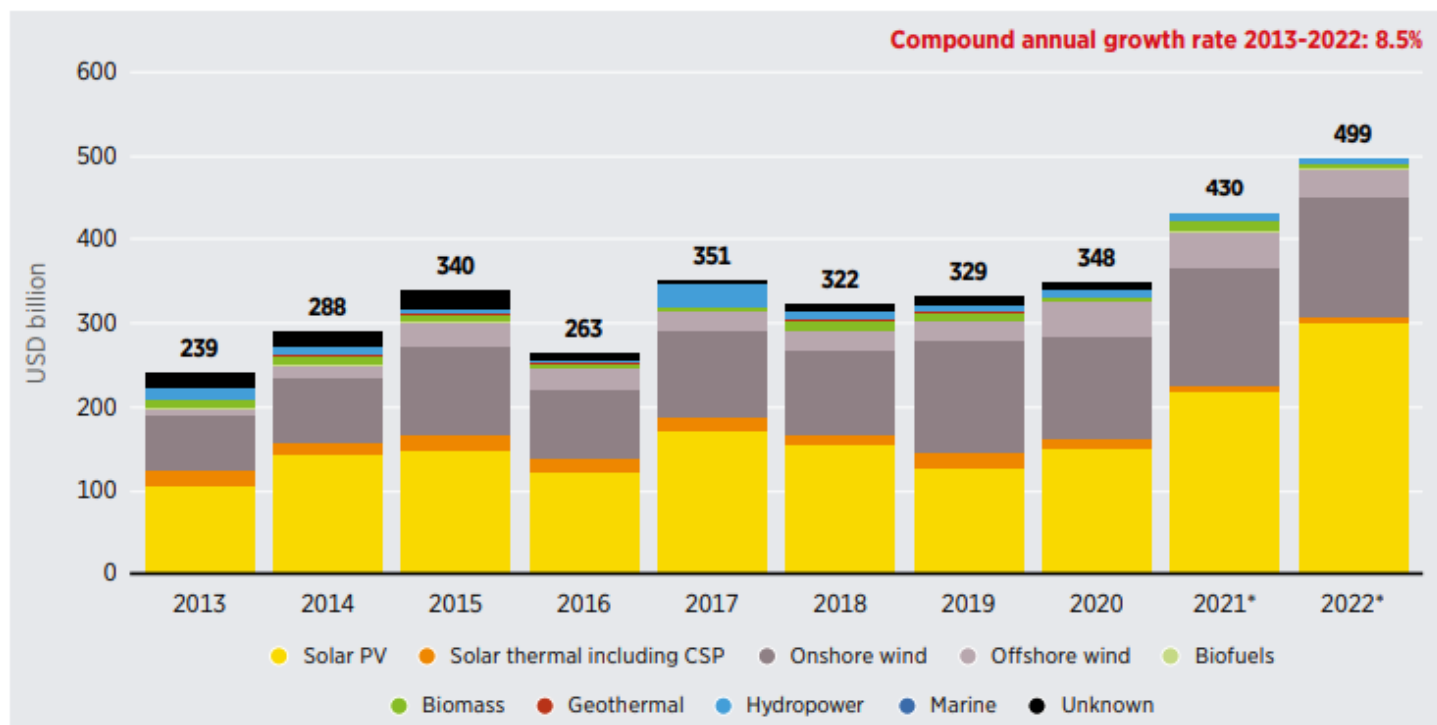
Fossil fuel subsidies misaligned with climate & RE goals



Source: Fossil Fuel Subsidy Tracker (2022)

- Renewable energy subsidies were significantly lower (USD 167 billion) in 2017 (IRENA, 2022)

Government support can plug clean energy investment gap



Source: Climate Policy Initiative (2022)

- Investment is less than one-third needed each year until 2030 under the IRENA's 1.5°C scenario (IRENA, 2023)



Country-level findings

India

Aligning support and revenues with a net-zero future for India

Scope	Support			Revenue	Externalities
	Subsidies	SOE Investments	Lending by PFIs		
What is it?	Government policies that confer a financial benefit on energy producers, consumers, or both	Capital investments in energy by majority government-owned energy sector companies	Lending to energy projects by majority government-owned financial institutions	Tax and non-tax revenue from consumption and production of energy	Costs or benefits that are imposed on others and are not reflected in the prices charged
Fossil vs. clean energy	4X (FY22)	11X (FY 14-20)	3X	-	-
Total value	USD 30 billion (FY22)	USD 20 billion (FY22)	USD 18 billion (FY22)	USD 120 billion (FY22)	USD 200-500 billion (FY22)

India needs an additional US\$ 300 billion investment to reach its 500 GW renewable energy target by 2030

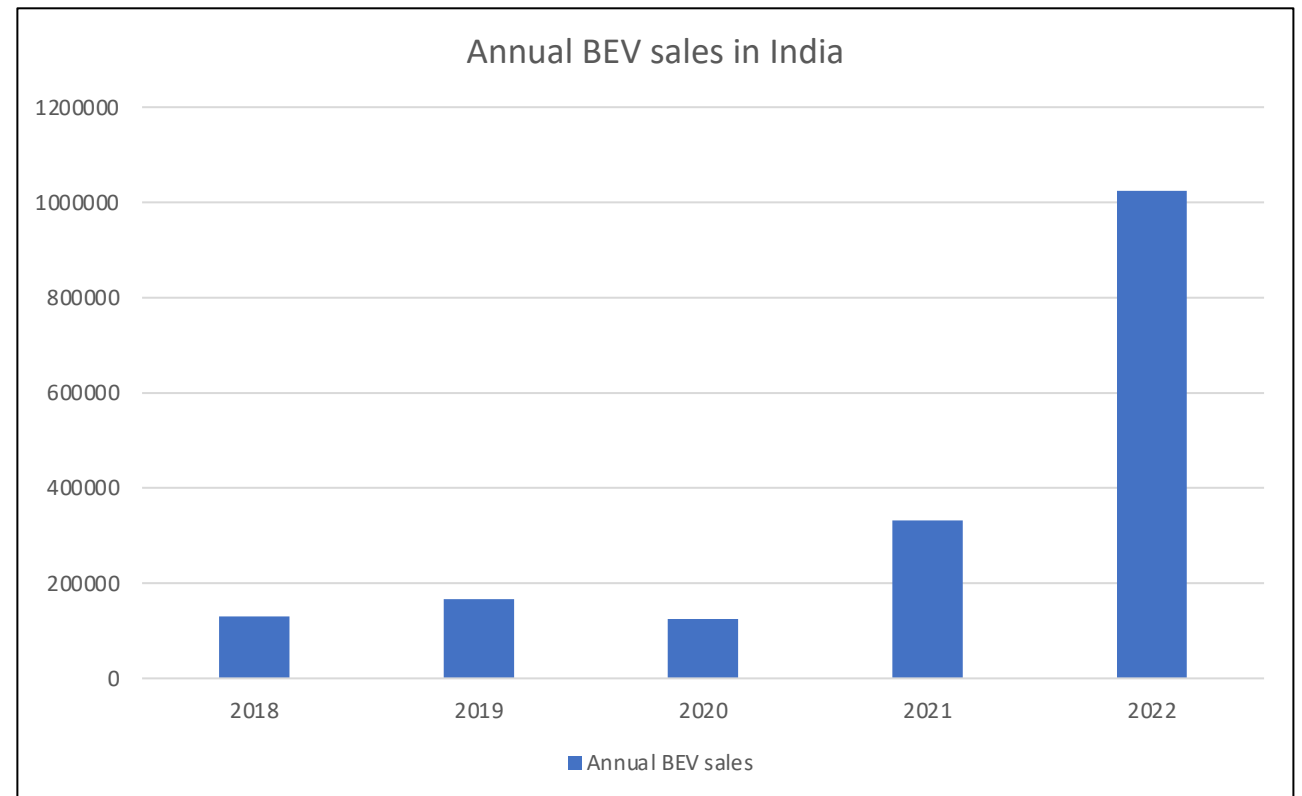
A landscape photograph featuring a vibrant green field in the foreground, a tall metal power line tower in the center, and rolling green hills in the background under a heavy, grey, overcast sky. The scene is partially obscured by a dark blue semi-transparent banner on the left side.

Investment findings

Consumer incentive policies key in driving EV deployment

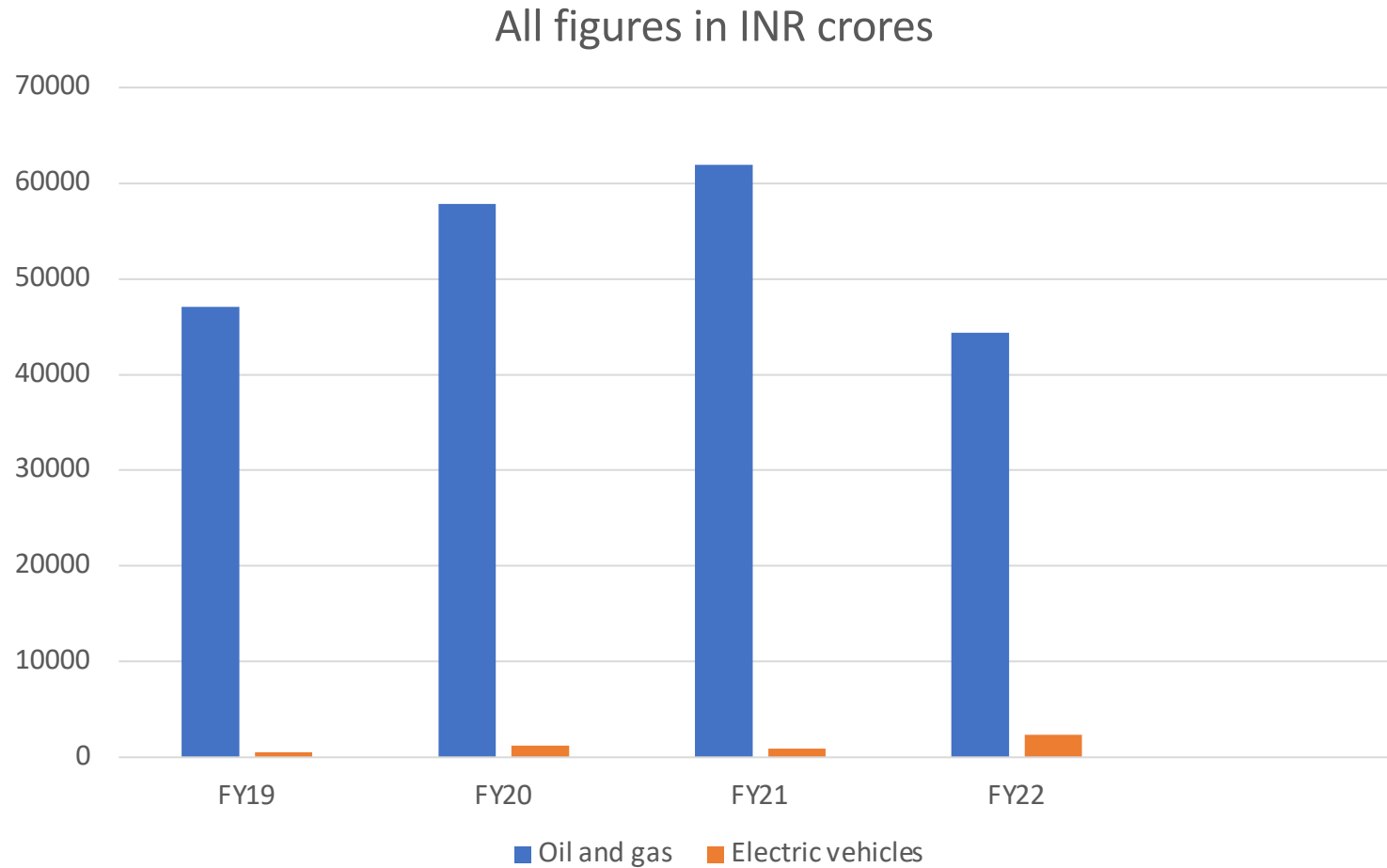
- Purchasing incentives under the FAME-II scheme have been successful in incentivizing demand
- Focused on e-commercial vehicles, 3w, and 2w (which represent 75% of the country's vehicle fleet)
- Helped boost sales in combination with state-level incentives and preferential tax treatment
- Imminent expiry of the scheme in 2024 is concerning to investors, creating regulatory uncertainty

200% growth of annual BEV sales in 2022



Source: Authors based on data from Vahan dashboard

Oil and gas vs electric vehicle subsidies in India



Source: Laan et al., IISD, 2022

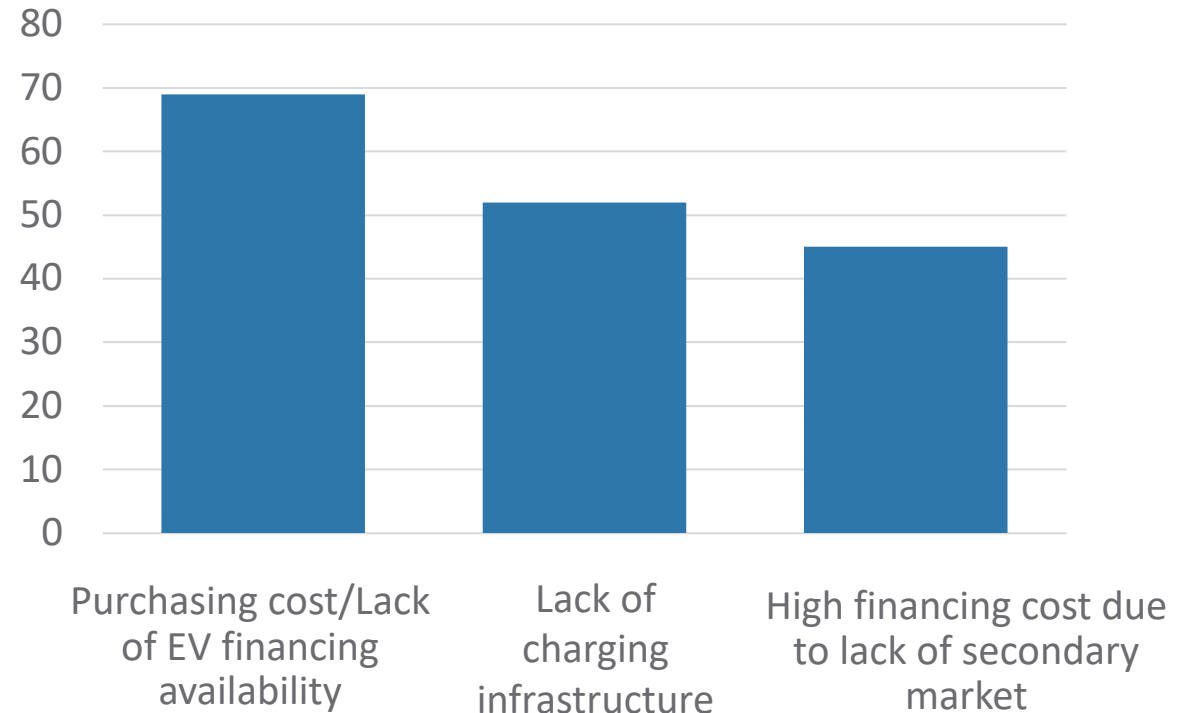
Financing and charging infra remain major barriers

- Investors highlight financing and charging infrastructure as the foremost consumer demand barriers for EV adoption

Role for government support

- 1) Financing - Need for loan guarantee mechanisms for banks, role of state-owned banks in promoting lending
- 2) Charging Infrastructure – Need for direct govt. subsidies, provision of public lands at concessional rates, strengthening the electricity grid

What are the three most frequently cited consumer demand barriers to upscaling EV investment in India?

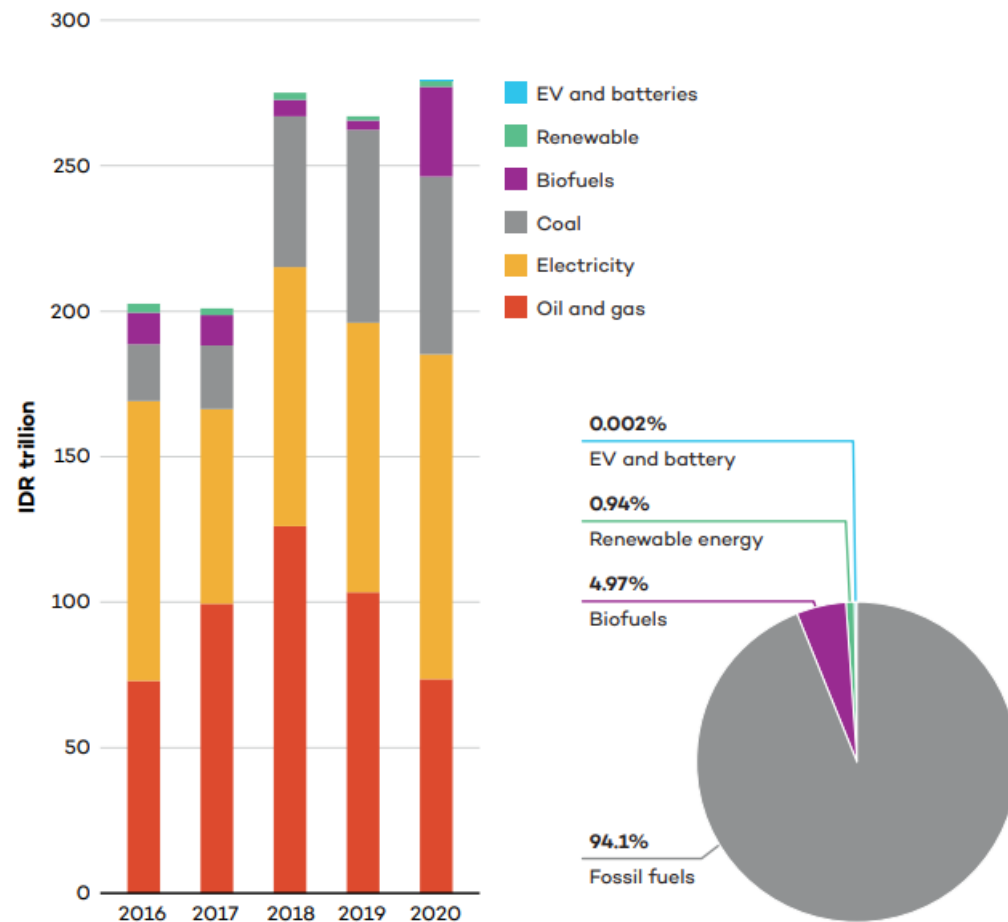


Source: Moerenhout et al. (2022)

Indonesia

Aligning support with Indonesia's climate commitments

- Renewable energy received less than 1% of all support provided to the energy sector over the past 6 years
- Need for increased government support to achieve Indonesia's target of a 23% renewable mix by 2025 and 31% by 2050 (Indonesia National Energy General Plan {RUEN})
- USD 37 billion in cumulative investment is required to meet Indonesia's renewable energy targets by 2025 (Pribadi, 2019)



Source: Suharsono et al. (2022)

Indonesia

Reform of fossil fuel subsidies could supplement JET-P resources

- Need to mobilize domestic capital in addition to global commitments to meet the country's investment requirements
- Fossil fuel subsidy reform and strategic taxation could raise up to IDR 166 trillion (USD 11.5 billion) annually which can support clean energy investments (Sumarno and Sanchez (2021))
- FFSR savings could be used to support investments in smart grids, incentivizing an energy efficiency market and financing energy access initiatives
- SOEs can be important change agents – PT PLN, PT Pertamina and other energy SOEs can diversify their business models



Recommendations

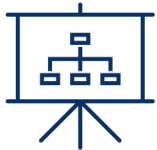
Policy Recommendations

1. Increased transparency and impact evaluation of energy support measures



- a) Governments should adhere to their reporting requirements on fossil fuel subsidies under SDG indicator 12.c.1
 - b) Removal of vague language such as “inefficient” subsidies in international agreements
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2. Shift support from fossil fuels towards clean energy in a socially responsible manner



- a) Ensure that FF subsidies are reformed in a gradual manner while protecting socially vulnerable groups
 - b) Accelerate support measures for clean energy to align with climate and clean energy targets
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3. Use government support strategically to accelerate clean energy deployment



- a) Fiscal and non-fiscal support measures should focus on lowering prices of emerging tech (battery storage, green hydrogen).
- b) Support should also aim to accelerate the maturity of key technologies (solar PV, wind, EVs) and create ecosystems of change

Thank You!

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