

INFRAC^{ASIA}

Webinar:

BritCham E&U Committee –
Singapore International Energy Week (SIEW)
'Making 'green' commercial'

29 October 2020

About InfraCo Asia

InfraCo Asia provides responsible leadership in **bridging the infrastructure gap** in South and South East Asia. Through early stage project development capital and expertise, InfraCo Asia is a **catalyst** for the private sector to invest in sustainable infrastructure projects in South and South East Asia.

InfraCo Asia is a commercially managed infrastructure development and investment company of the **Private Infrastructure Development Group (PIDG)**.

InfraCo Asia's awards include PFI Thomson Reuters' 2017 Smart Seed Investor Citation, BritCham's 2017 Excellence in Sustainability Award, IJ Global's 2018 Asia Pacific Hydro Deal of the Year (Coc San Hydropower), and Asian Power's 2020 Smart Grid of the Year (Philippines Smart Solar Network).

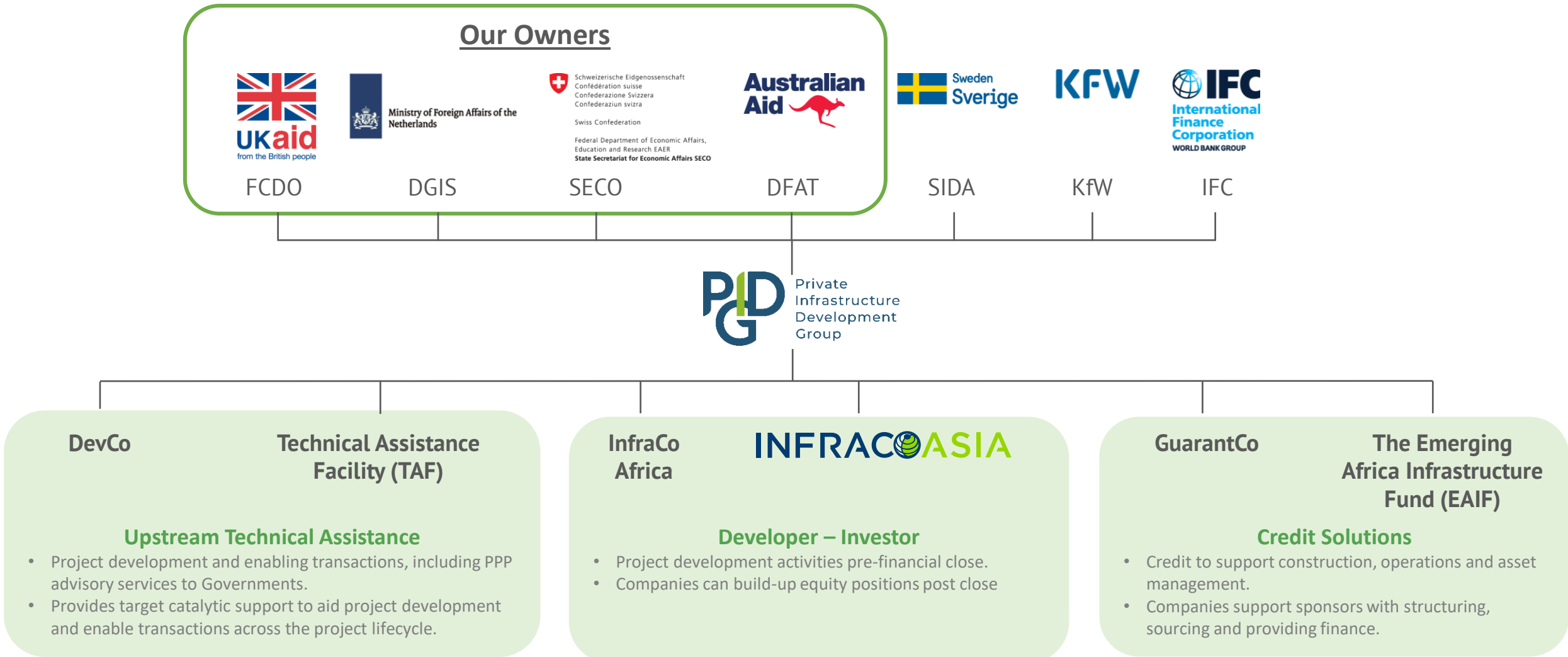


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Philippines
Smart Solar
Network

Introduction

InfraCo Asia is a company of Private Infrastructure Development Group (PIDG) – a multi-donor organisation that promotes private infrastructure investment in developing countries through specialised financing and project development facilities.



What We Do

Our Mandate

InfraCo Asia provides leadership capital for the development of infrastructure projects across South and South East Asia's frontier and emerging markets.



Social Benefit: The projects undertaken by InfraCo Asia give disadvantaged populations in south and south-east Asia better access to new or improved infrastructure. Projects must also be sustainable and adhere to environmental best practice.



Complement, Not Compete: We operate where the private sector is initially unable or unwilling to take on upfront risks and costs. Our aim is to 'crowd in' private sector investment when projects are sufficiently de-risked.



Commercial viability: Return for projects must be commercially attractive in order to mobilise private sector investment..

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★ Vietnam

Coc San Hydro Power

Institutional investors compete for projects in the later phases, shunning early-stage development due to the higher risk involved.

Unlocking funding (of just **2%-10% of project cost**) to developing pipeline and early-stage projects would accelerate growth in the industry.

InfraCo Asia **bridges the critical gap** by funding high-risk development costs to catalyse private sector investment in the industry.

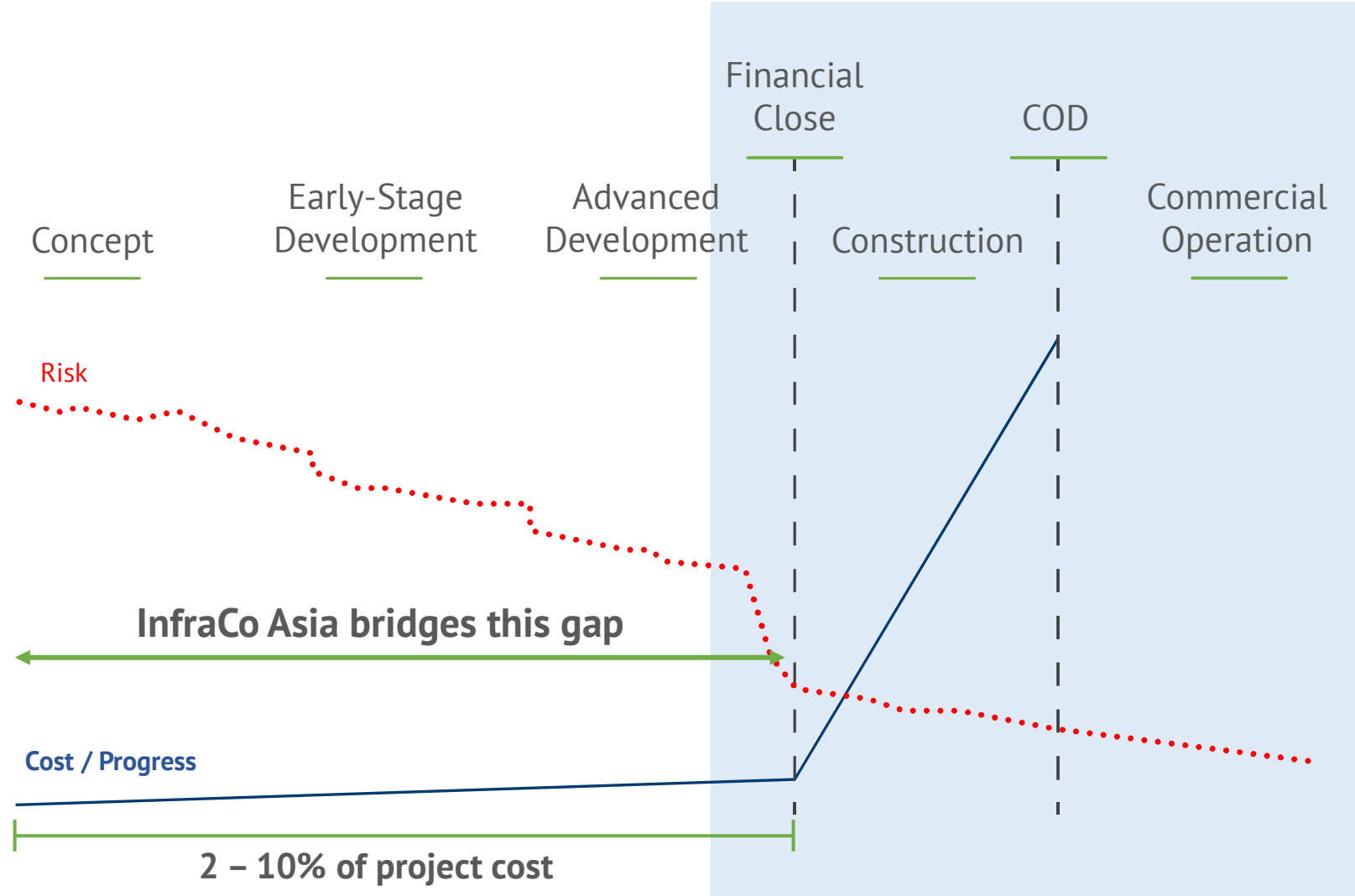
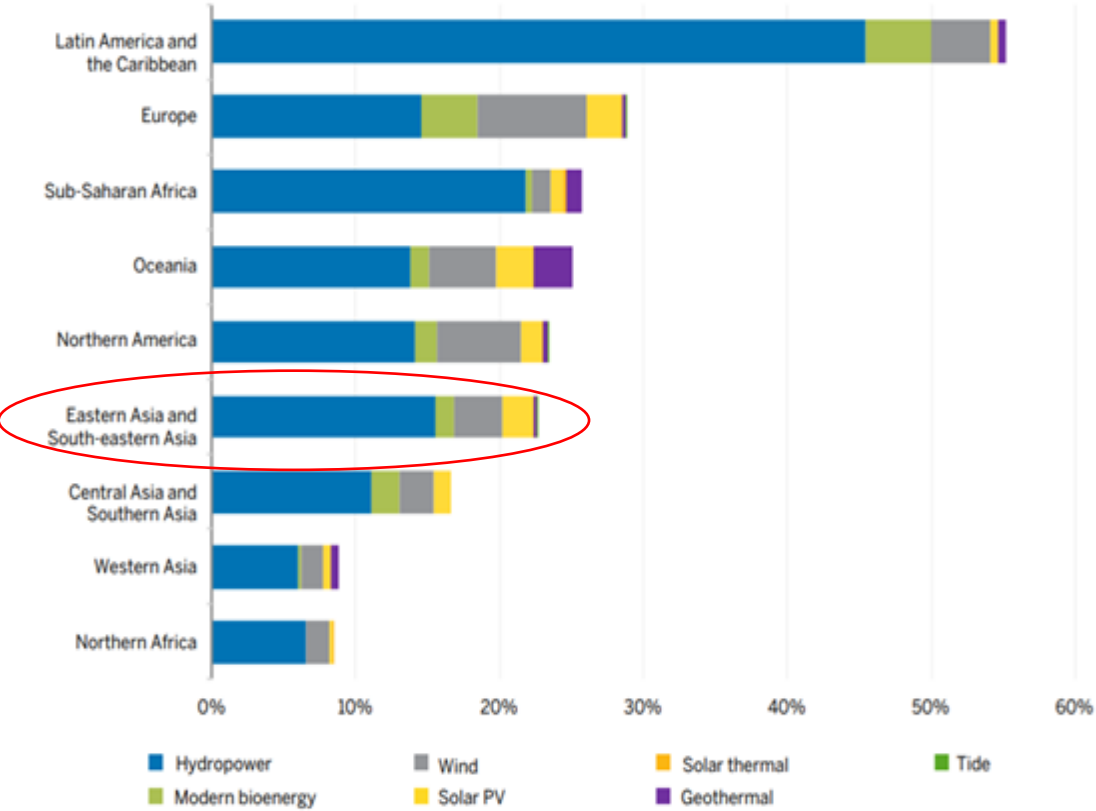
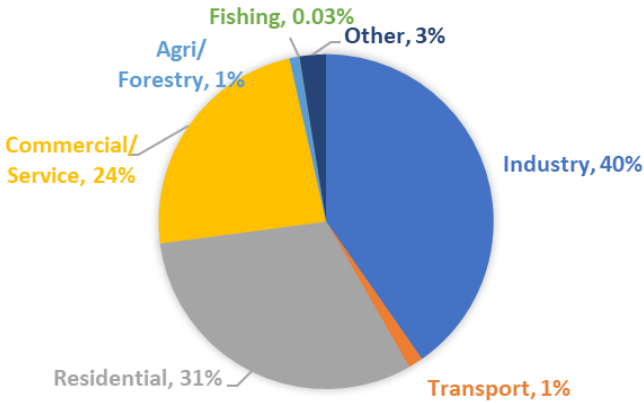


FIGURE 3.7 • Share of renewables in electricity consumption by region, 2017



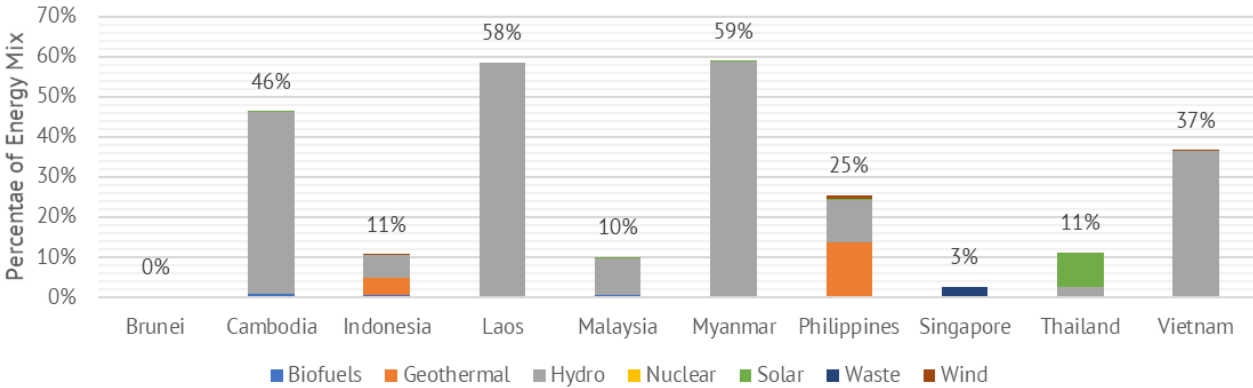
Source: IEA and UNSD.

ENERGY CONSUMPTION BY SECTOR IN SOUTH EAST ASIA



Hydro is a large component of the RE mix in SEA but these are typically large hydro projects and not run-of-river

Proportion of Renewables in Energy Mix



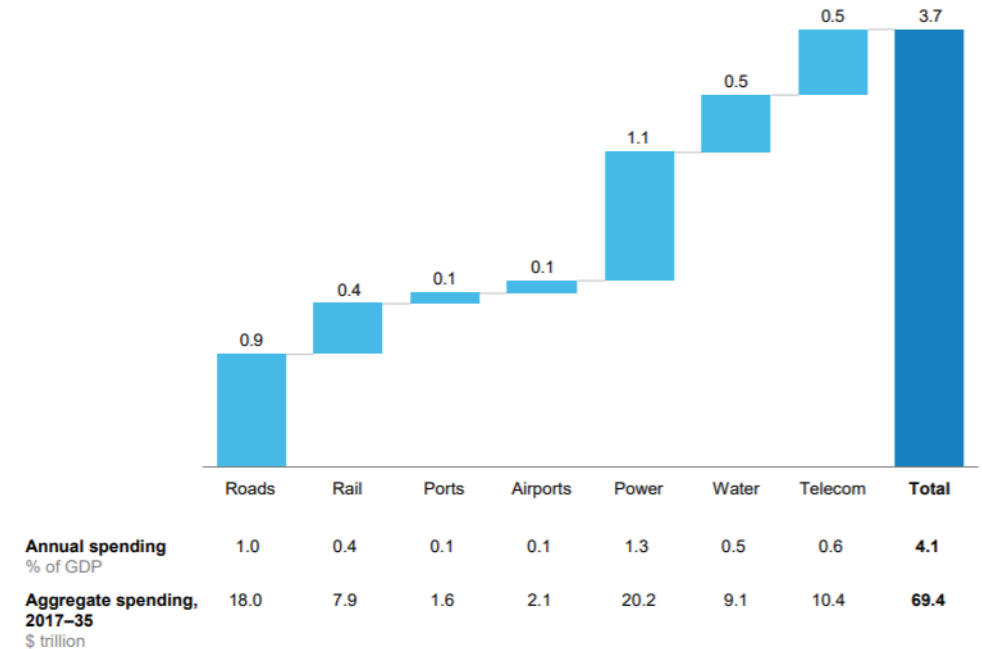
COVID-19 responses: A window of opportunity for change at the macro level

Many experts believe this is the moment to shift our power generation and transport systems to sustainable, climate-friendly alternatives.

- According to McKinsey & Company in a 2017 study, the world needs to invest \$3.7tn annually in economic infrastructure to keep pace with projected growth and 60% of the demand is likely to come from **emerging markets**.
- The need for resilient, sustainable infrastructure is now greater than ever before.

Average annual need, 2017–35

\$ trillion, constant 2017 dollars



NOTE: Numbers may not sum due to rounding.

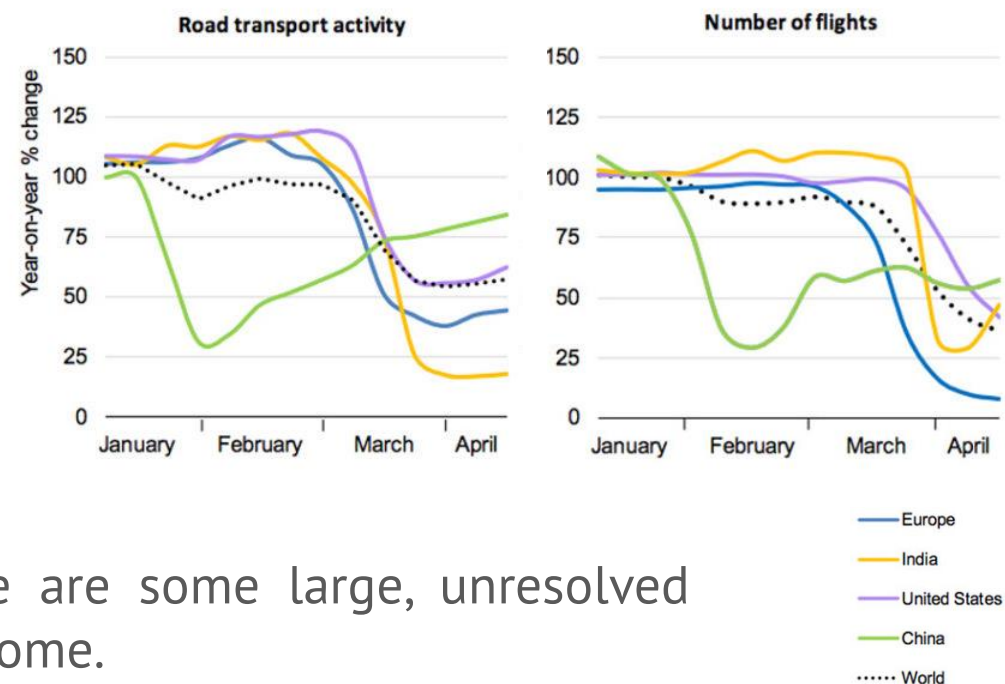
SOURCE: IHS Global Insight; ITF; GWI, National Statistics; McKinsey Global Institute analysis

Short term trends seen during COVID-19 could help build a foundation for the long term

The COVID-19 pandemic has seen carbon dioxide (CO₂) emissions fall and fossil fuel use decline. Will these trends stay with us?

- From electricity giveaways to the virtual end of fracking, the global lockdown has seen huge changes in the way we create and consume energy.
- Carbon emissions have dropped dramatically, and the air is clearer over major cities as road traffic has disappeared.
- But as demand for energy picks up once again, there are some large, unresolved questions about how we power our lives in the years to come.

Source: IEA Global Energy Review (2020)



Country	Renewable Energy Targets (as of 2018)
Brunei	954,000 MWh (10%) of total power generation mix from renewable sources by 2035
Cambodia	- By 2030, 30% of rural households powered through a Renewable Energy Development Program using mostly solar - Targeted 2241 MW hydro to meet electricity demand
Indonesia	23% and 31% renewable energy use by 2025 and 2050 respectively, with targeted RE in 2025 at 45 GW 620 MW of solar power plants by 2020 (including solar thermal power plants)
Laos	30% of RE in energy mix by 2025; Increase biofuel consumption in transport sector by 10%
Myanmar	Increase generating capacity to 15 GW by 2030. A third of new capacity through new or repowered hydro generator, remaining 3 GW combined cycle gas turbine, 2.88 GW of coal, 300 MW of solar, wind and geothermal
Malaysia	- RE Action plan 2050: RE to be 24% of total energy mix - Targeted RE capacity connected to power utility grid: 300 MW – Peninsular Malaysia; 50 MW – Sabah - Carbon intensity reduction target: 40% lower than 2005 levels by 2020
Philippines	Increase RE from 5438 MW (2010) to 15304 MW (2030) consisting of 57% hydro, 23% geothermal, 16% wind
Singapore	Aims to be 25% solar powered by 2025, (1GWp peak power from solar)
Thailand	- Target for renewable energy to make up 40% of all energy sources by 2036 - Total renewable power-generating capacity would be 40,000 MW, with an addition 21468 MW of renewable power plants till 2036 - Energy mix target: 15-20% imported hydro power, 20-25% clean coal, 15-20% renewable energy including hydro, 30-40% natural gas, 0-5% nuclear, 0% diesel
Vietnam	- Utilisation rate of RE at 7% in 2020 and 10% in 2030 - Wind capacity to 6 GW and solar to 12 GW by 2030. Rate of households using solar heating 12% in 2020, 26% by 2030, 50% by 2050

Thank You

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Ninh Thuan Solar Power

