Industry Transition in India

- Current impacts of COVID-19
- Transition challenges
- Signs of hope
Current impacts of COVID-19

- Lockdown began early – and was highly restrictive
- Cases continued to grow rapidly, despite restrictions
- Weak public healthcare infrastructure
- Crisis still very much unfolding

Source: COVID-19 Dashboard (John Hopkins University, 2020)
Even before COVID, the Indian manufacturing sector was in decline (Sep-2019).

It was poorly prepared for such a significant and sustained shock, with limited ability for investment in new technologies.

Heavily reliant on domestically available energy sources, namely coal.
Transition Challenge 2: Scale of demand growth

Demand for key materials is set to explode over the coming decades as India develops.

Resource efficiency measures will have relatively lesser impact vs. Europe, as supply of basic services still needs to drastically improve.

Source: TERI analysis based on (WSA, 2018); (USGS, 2018); (CPIM, 2019)
Transition Challenge 3: Maintaining competitiveness

- Glut of production capacity in China
- Regional free trade deals putting pressure on domestic producers
- A need to expand into new overseas markets
- Keep abreast of latest tech developments from industry leaders
Signs of hope for a green recovery

- Continued cost reductions in renewable power
- Ambitions to develop new technology solutions, such as hydrogen
- World-leading companies setting new direction
- Avenues for international collaboration
Continued cost reductions in renewable power

A recent tender for solar + storage (part batteries, part pumped hydro), which is now competitive with coal-fired generation.

For optimal locations in India, *renewables plus storage is now competitive with coal*. This represents a tipping point in the sourcing of low emissions energy.
Ambitions to develop new technology solutions

Example, green hydrogen

2006
National Hydrogen Energy Roadmap

2016
Hydrogen Energy and Fuel Cells – A Way Forward

2020
Hydrogen Mission 2020

The ministry is in process of formulating #HydrogenMission for India.
World-leading companies setting new direction

- Industry leaders signing up to low carbon initiatives, such as **Science Based Targets**
Avenues for international collaboration

There are a number of opportunities for India to engage within international fora to collaborate on technology and policy for industry transition:

- Mission Possible Platform
- Leadership Group for Industry Transition
- Clean Energy Ministerial
- Mission Innovation