

# "GLOBAL ENERGY AFTER COVID-19: NEW RISKS AND OPPORTUNITIES FOR DEVELOPMENT"

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Leena Srivastava

Deputy Director General – Science

IIASA

# COVID-19: Implications for energy

- The pandemic has forced rapid changes in behaviour: from new working-from-home models to cuts in business and leisure air travel. (IEA 2021)
- Global oil consumption to increase by ~4.4 mbd over 2019 by 2026 driven by emerging and developing countries. Refining sector may be challenged substantially though
- Government policies can accelerate peak oil
- According to Irena "2020 was a record year for wind and solar photovoltaic (PV) markets,
   ... New records for low priced solar PV were achieved (less than 2 US cents per kilowatt
   hour [kWh]). The electrification of transport is showing signs of disruptive transition –
   the global sales of electric cars grew by 43% compared to 2019, to reach 3.2 million
   units, accounting for 4.2% of global new car sales."
- Many market innovations accelerating push towards an efficient service economy

These, and other innovations taking place, will result in long-term changes that may be difficult to reverse



## **Rethinking Energy Solutions**

#### Lead Authors:

Behnam Zakeri, Katsia Paulavets, Leonardo Barreto-Gomez, and Luis Gomez Echeverri

#### **Contributing authors:**

Shonali Pachauri, Joeri Rogelj, Felix Creutzig, Diana Urge-Vorsatz, David Victor, Benigna Boza-Kiss, Caroline Zimm, Sarah Alexander, Morgan Bazilian, Steffen Fritz, Dolf Gielen, Harish Hande, David McCollum, Clay Nesler, Michaela Rossini, Varun Sivaram, and Leena Srivastava

IIASA-ISC Consultative Science Platform

Bouncing Forward Sustainably: Pathways to a post-COVID world







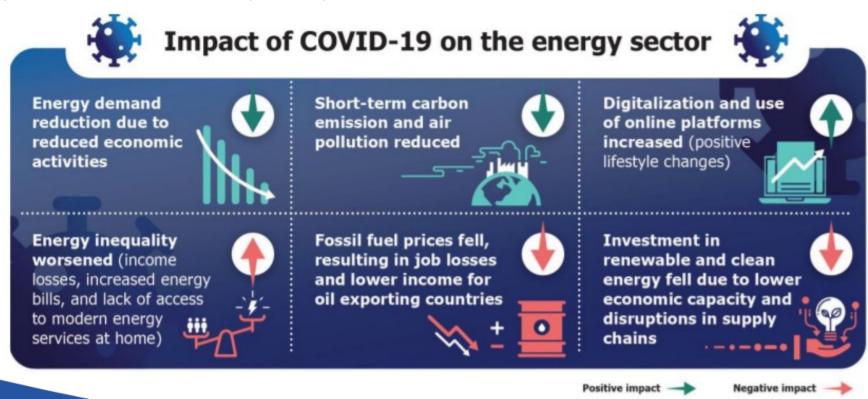






## Impact of Covid-19 on the energy sector

- Positive (opportunities)
- Negative (revealing vulnerabilities and injustice)





## Main areas of recommendation in Energy

### I. Re-imagining consumption

o through advancement of circular, sharing economy and citizens engagement

### II. Re-inventing urban space, infrastructure, and mobility

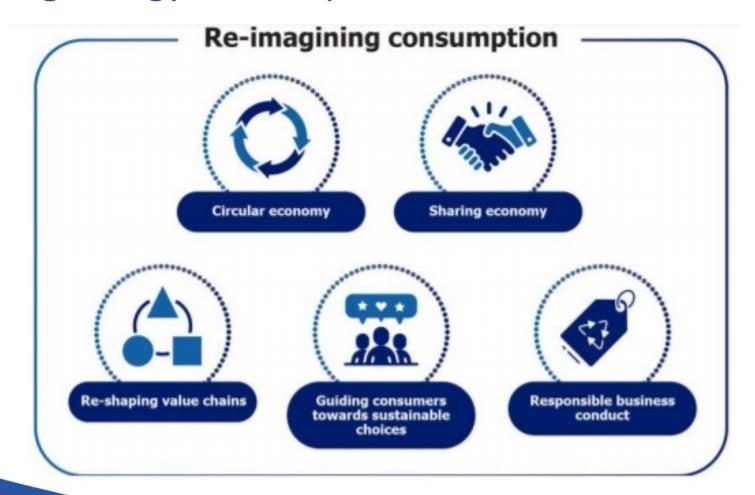
- o a) promotion of urban compact development with reduced car dependency and with access to key services, including public, shared and active mobility
- o b) transformation towards low-carbon, flexible and resilient built environment

## III. Advancing decentralized, efficient and resilient energy solutions





## Re-imagining energy consumption







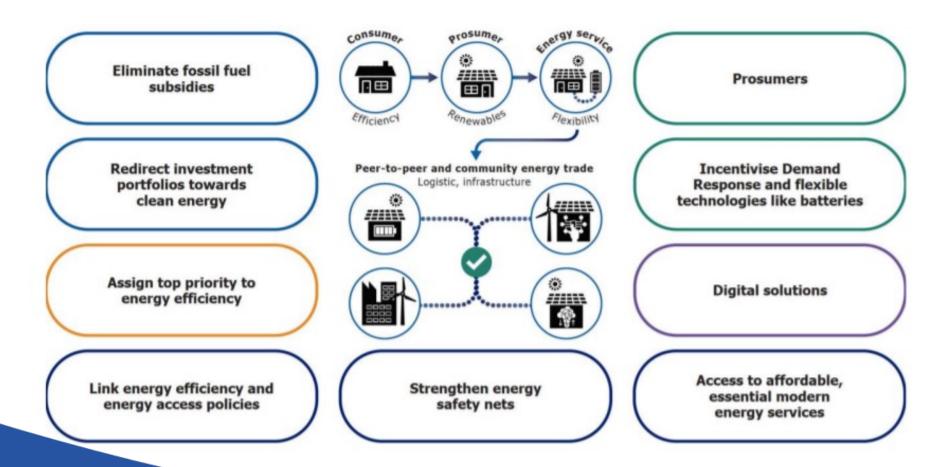
## Re-inventing urban space, infrastructure, and mobility







## Decentralized and efficient energy solutions







## Thank you very much!

