International Energy Agency

Economy, jobs and the climate: how an investment in green buildings can deliver it all

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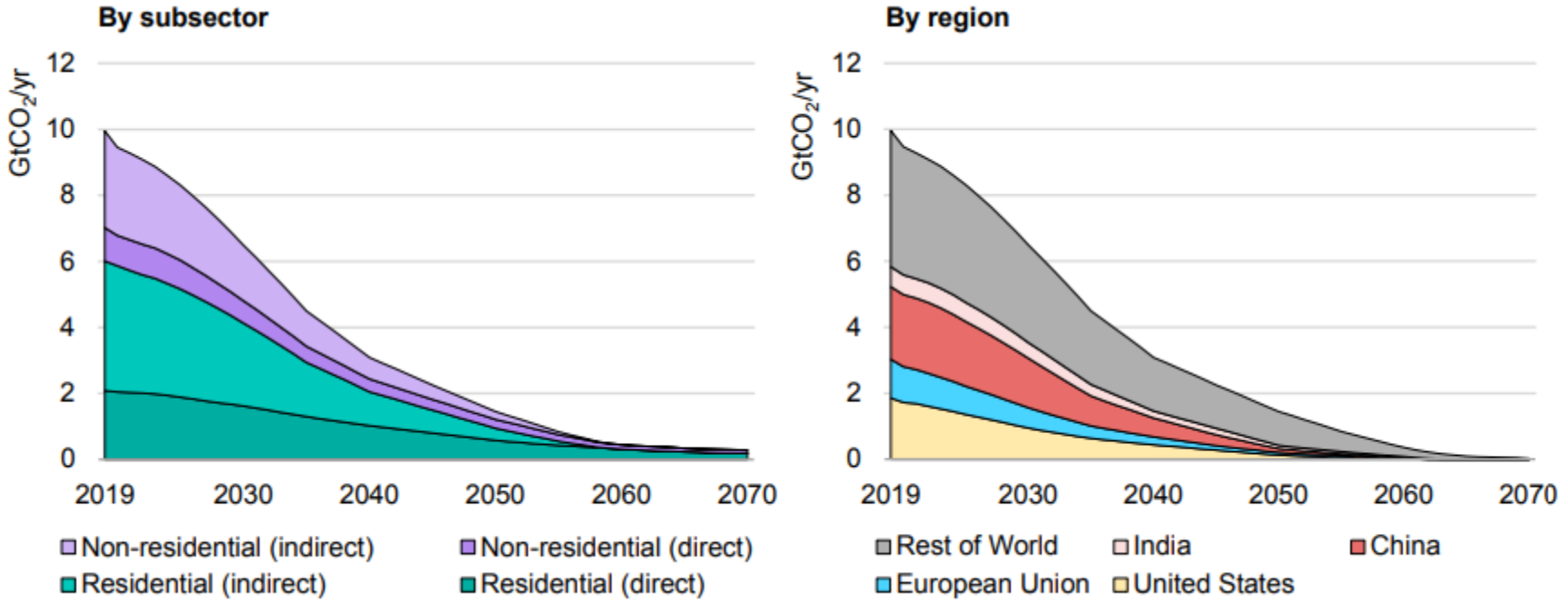
Buildings are critical to climate action

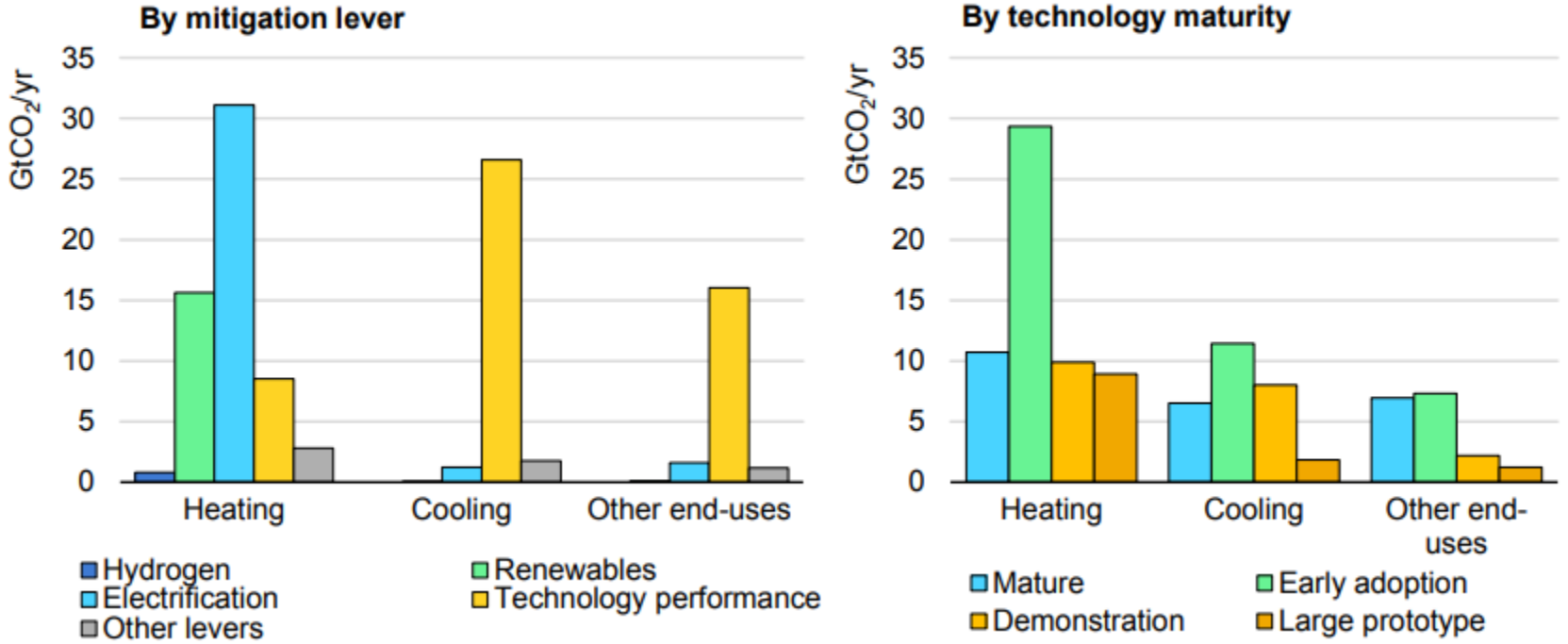
CO2 emissions from the use phase of buildings by sub-sector and region in the Sustainable Development Scenario, 2019-70



CO2 emissions in the buildings sector fall to net-zero by 2070 through measures such as high efficiency electric equipment, phasing out fossil fuel use and decarbonisation of heat and power supply

The technologies to drive CO_2 reductions exist today

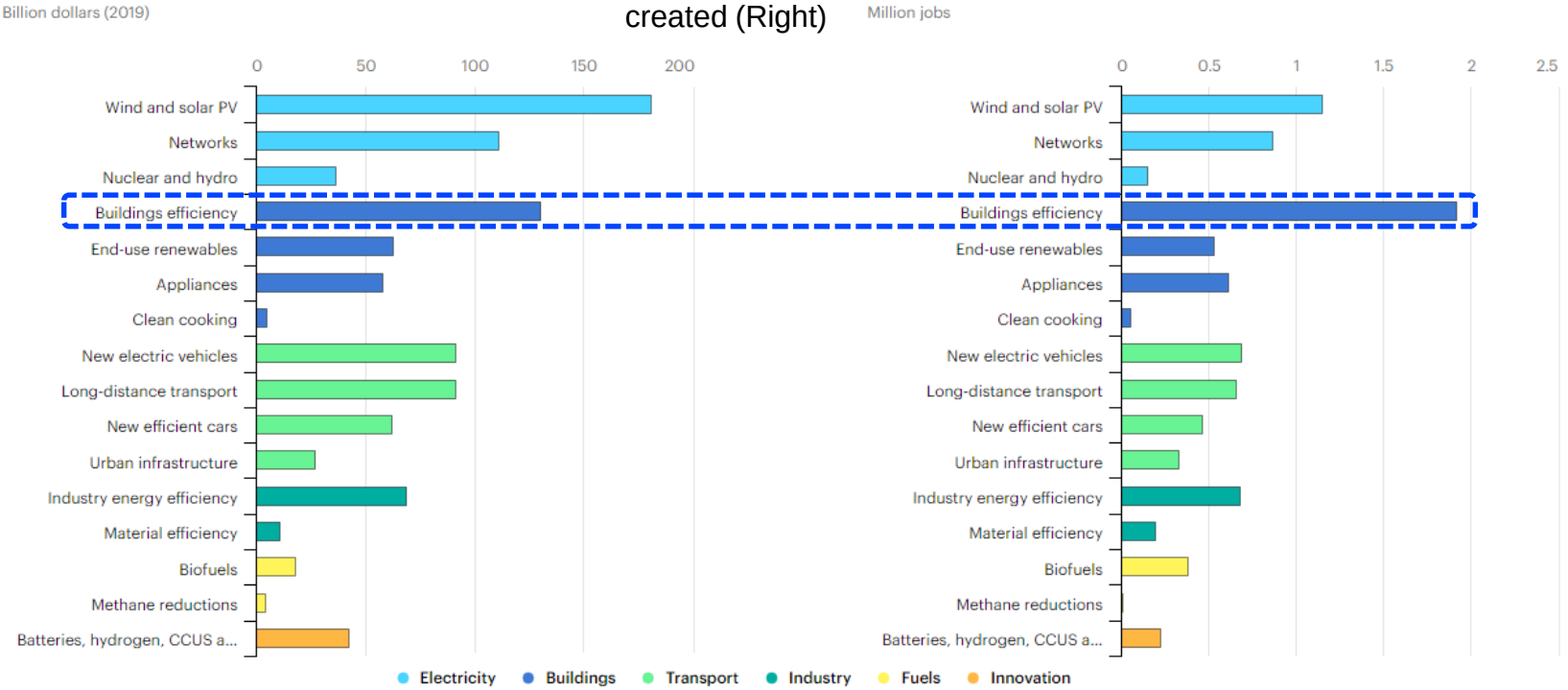
Global cumulative CO2 emissions reductions in the buildings sector by mitigation lever and technology readiness level in the Sustainable Development Scenario relative to the Stated Policies Scenario, 2020-70



Three-quarters of what is needed to decarbonise the buildings sector could be achieved through the use of mature and early adoption technologies: further innovation would bring additional gains.

Investing in buildings to drive the economic recovery

Sustainable Recovery Plan's average annual: spending by sector and measure (Left) and construction and manufacturing jobs created (Right)



An average annual investment of 130 million dollars in buildings efficiency can deliver 1.9 million jobs a year over under the 3-year Sustainable Recovery Plan

What can we learn from past programmes?

- **Consider shovel-ready options** – deep retrofits of government buildings can deliver improvements to hospitals, schools, social housing and offices.
- **Leverage existing programmes** – supercharging existing programmes and leveraging their administration, contracts, guidelines and delivery partners for faster and safer programmes.
- **Standardise** – whether contracts, designs, or lists of approved technologies reduce costs and risks and can make for a simpler customer journey.
- **Set the right level of ambition** – don't let perfect be the enemy of the good – set the energy efficiency requirements as high as possible while remaining realistic about considerations such as price, supply and demand side constraints.
- **Get the level of incentive right** – Find the right balance between a high enough incentive to drive uptake without introducing significant programme risks or creating boom-bust cycles.
- **Address regulatory barriers** – consider removing or simplifying unnecessary red-tape to support fast rollout of green building stimulus programmes.
- **Turn short-term impacts into long-term transformations** – harness the investment from stimulus programmes to lock-in changes through improvements to building energy efficiency codes.