



The Role of Energy Efficiency in the Global Energy Trends

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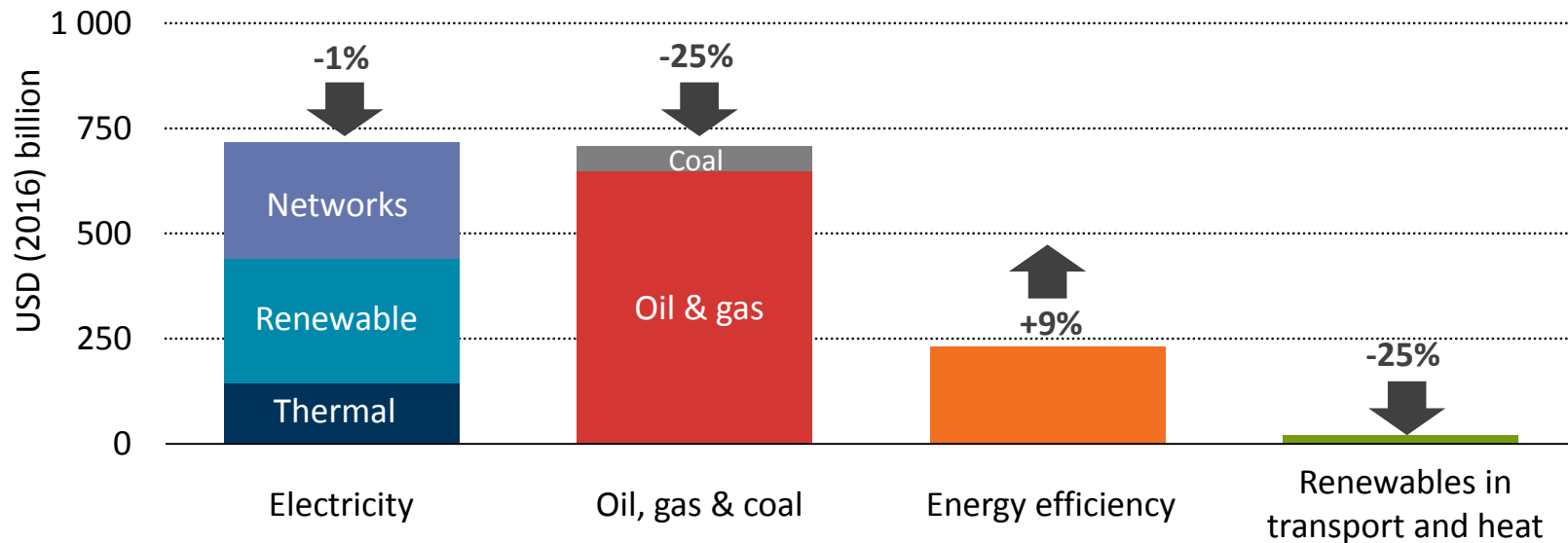
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Global energy investment fell 12% in 2016, a second consecutive year of decline



Global energy investment 2016

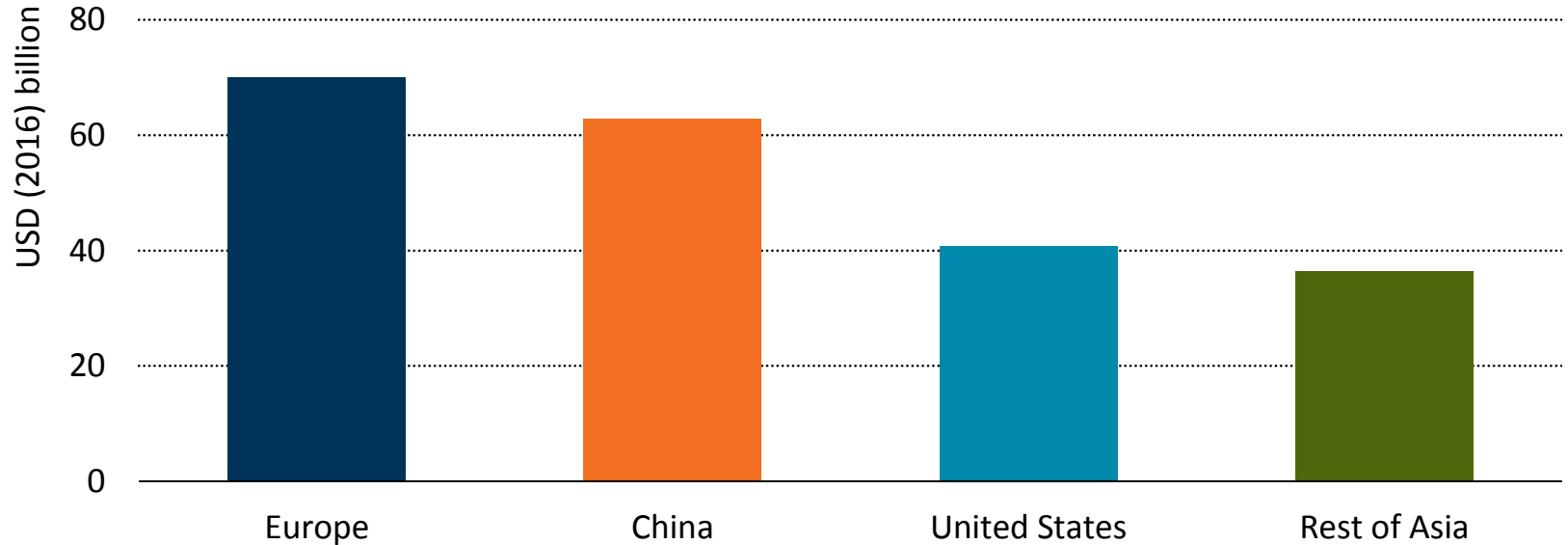


Total energy investment was \$1.7 trillion in 2016. Electricity sector investment overtook oil and gas for the first time, while energy efficiency was the biggest growth sector.

Europe leads efficiency spending but China is set to overtake it by 2018

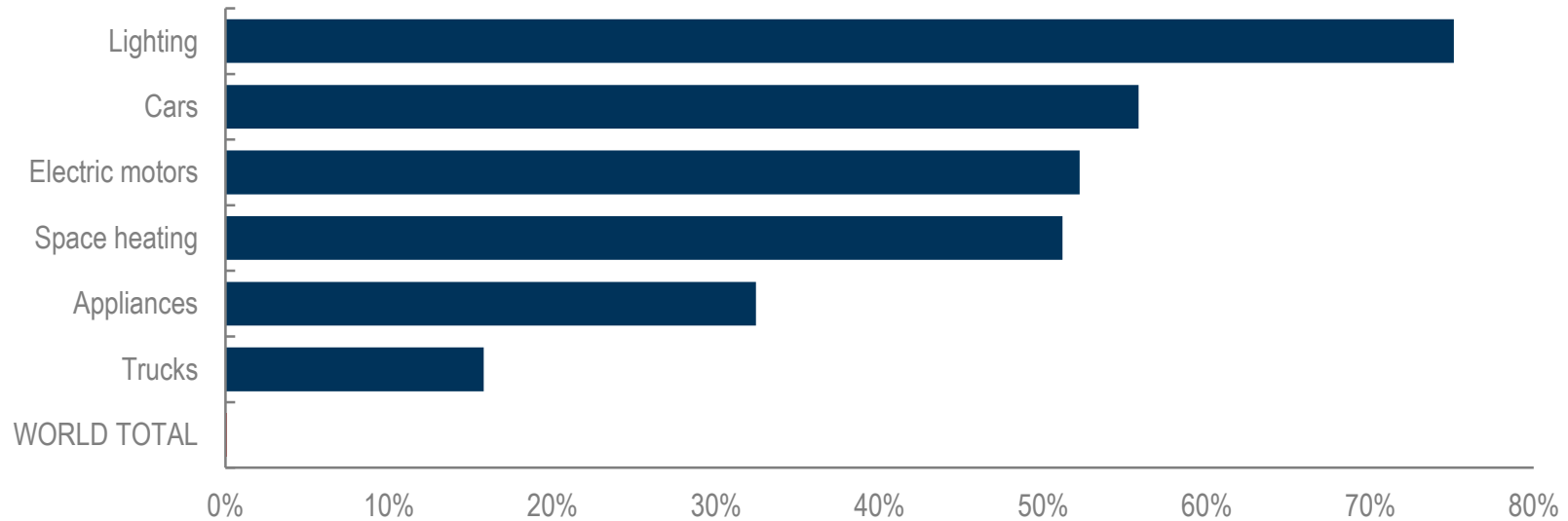


Global energy efficiency investment, 2016



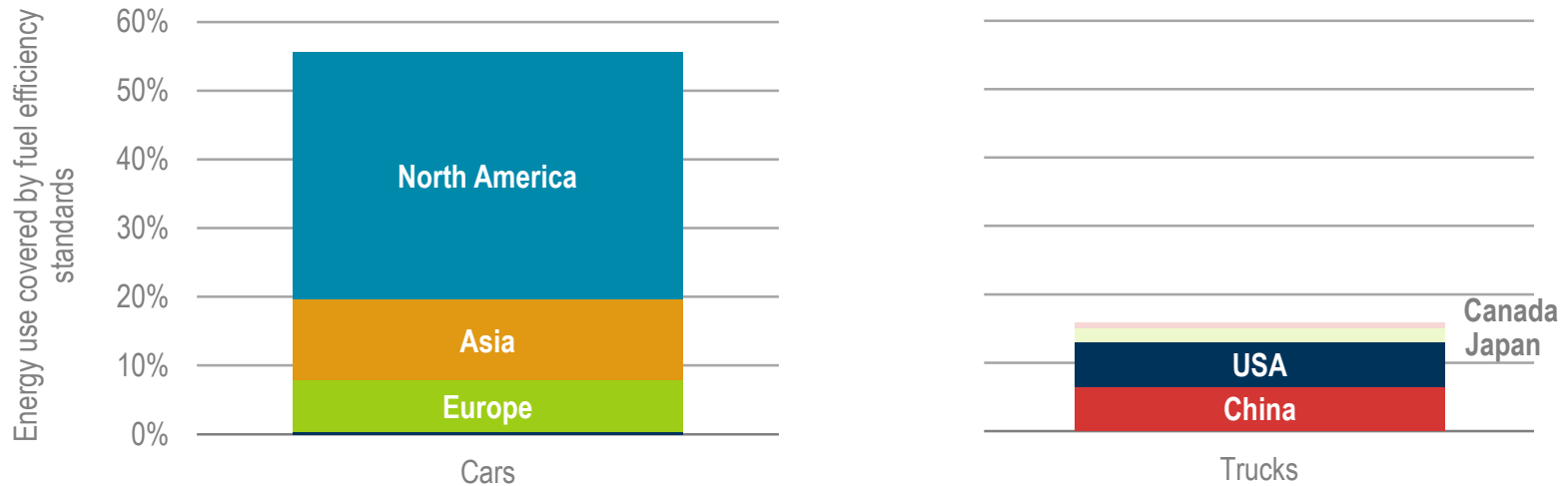
Policy continues to underpin efficiency spending, especially in buildings insulation, heating systems and home appliances. Much of the growth in transport efficiency spending is in electric vehicles.

Share of global energy use covered by mandatory efficiency policies, 2016



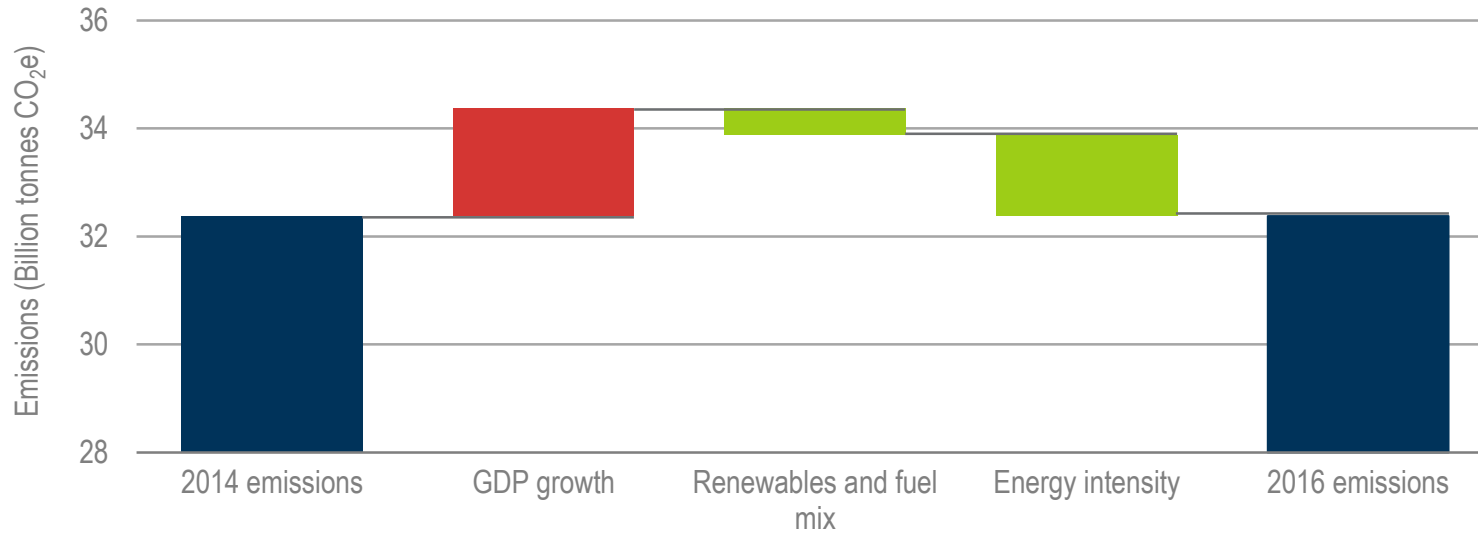
The amount of global energy use covered by mandatory efficiency policies grew in 2016, but 68% of energy use remains uncovered. We owe the efficiency gains of today to the policies of the past.

Efficiency standard coverage by transport end-use, 2016



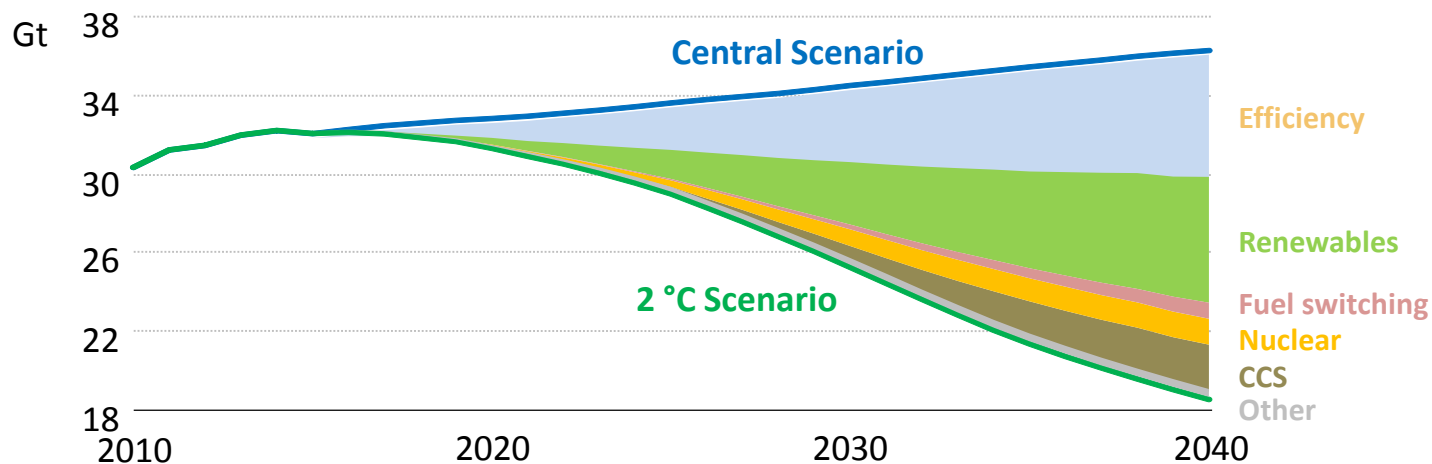
**Nearly 40 countries have fuel efficiency standards for cars.
Only Canada, China, Japan and the United States have standards for trucks.**

Factors influencing greenhouse gas emissions, 2014-16



The combination of energy efficiency improvement and the move towards renewables and cleaner fuels has been key to avoiding 2 billion tonnes of additional greenhouse gas emissions

Global CO₂ emissions reductions in the Central & 2 °C Scenario by technology



Supply-side investment needs to be re-directed, not increased; demand-side investment for energy efficiency, electrification & renewables needs to ramp up significantly

- **Investment fell by 12% in 2016, a second consecutive year of decline, but the good news is that spending in energy efficiency is bucking the trend**
- **There has been a step up in efficiency gains in recent years, despite lower energy prices, and this is having many positive impacts.**
- **However, 68% of global energy use remains uncovered by mandatory efficiency policy and the current low rate of policy implementation needs to accelerate.**
- **Decarbonisation requires the integration of efficiency and renewables into the energy system through a harmonised policy approach.**
- **The IEA is attacking the unmet energy efficiency potential by facilitating knowledge sharing and providing concrete policy recommendations.**

