Overview of global fuel efficiency and CO$_2$ emission standards

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Emissions reductions are dominated by efficiency and electrification in light and heavy-duty vehicles.

Source: Vision 2050: a strategy to decarbonize the global transport sector by mid-century
Fuel efficiency/CO$_2$ emission standards have evolved in the past five years

Source: https://theicct.org/pv-fuel-economy/
There is a global race toward electrification

Source: 2021: Another chapter in the global race toward electrification https://theicct.org/2021-global-race-evs-mar22/
More and more countries show strong electrification commitment

- China: 20% by 2025
- United States (without California and New York): 50% by 2030
- Others

- California (United States): 100% by 2035
- United Kingdom: 100% by 2035
- Canada: 100% by 2035
- New York (United States): 100% by 2035
- Norway: 100% by 2025
- Costa Rica: 100% by 2050
- Iceland: 100% by 2030
- 27 European Union Member States, Proposal by the European Commission: 100% by 2035

Source: Global passenger car marketshare of countries planning to phase out new sales of internal combustion engine vehicles
Transitioning to zero tailpipe emission vehicle technology is the only effective approach to decarbonization of the on-road transport sector.
There is a need to close the real-world and laboratory gap

Divergence between real-world and type approval fuel consumption of new passenger car fleet by year in China

Thank you!
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