

WEBINAR

# From Fuel to Future

## India's adoption towards Zero Emission Vehicles

FEB 17, 2025 | 3:30PM-5:00PM IST

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THE INTERNATIONAL COUNCIL  
ON CLEAN TRANSPORTATION

**ET** **Auto**



# Webinar | From Fuel to Future: India's adoption towards Zero Emission Vehicles

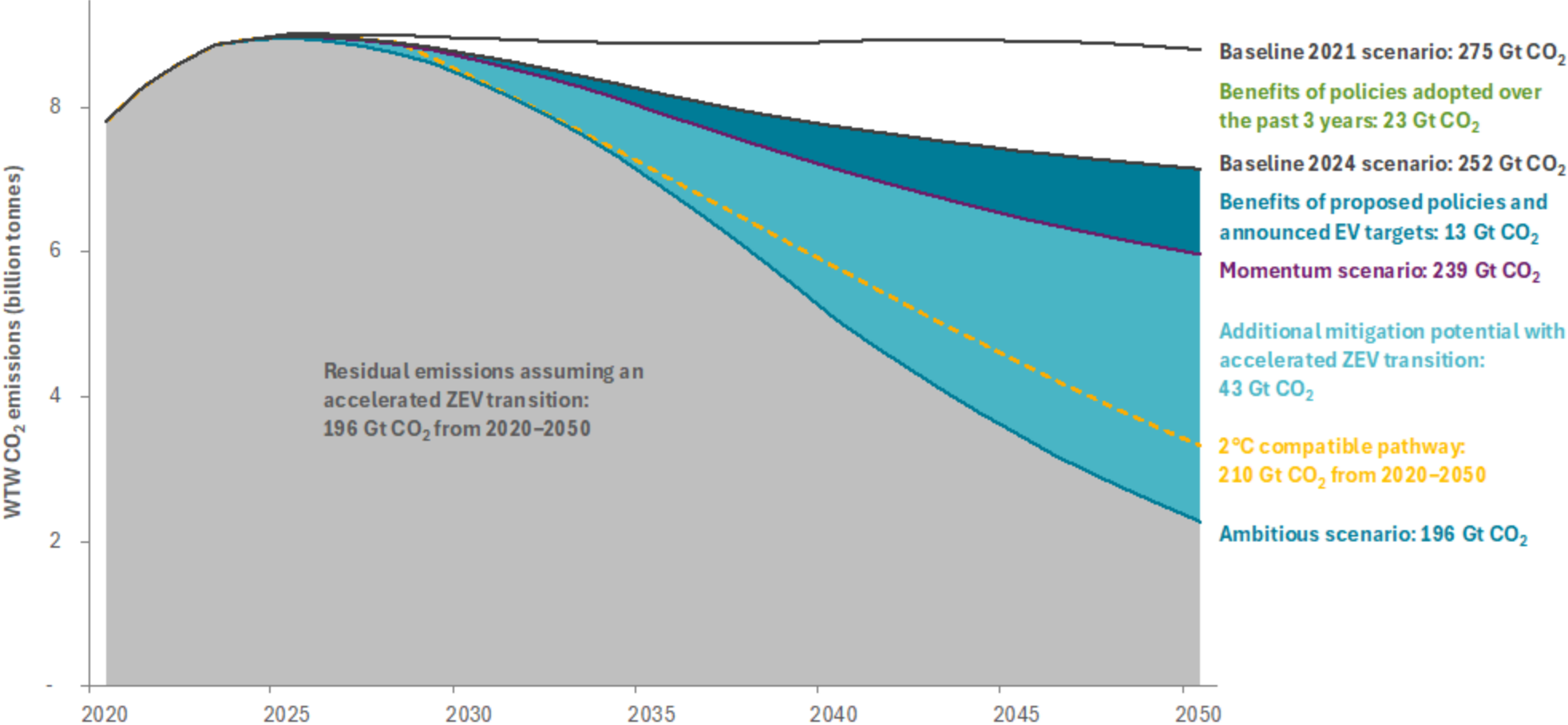
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Independent Advisor and Program Consultant with ICCT

# Vision 2050: 2024 Update on the global zero-emission vehicle transition

- To align with Paris climate goals, the transport sector must transition from its dependence on oil to low-carbon technologies in little more than a generation
- Road transport accounts for more than 20% of global CO<sub>2</sub> emissions from human activities
- **ZEV Transition Update** series updates on policy and technology progress toward cutting CO<sub>2</sub> emissions to limit the impacts of climate change
- Learn more at: [theicct.org/publication/vision-2050-global-zev-transition-2024-jan25/](https://theicct.org/publication/vision-2050-global-zev-transition-2024-jan25/)

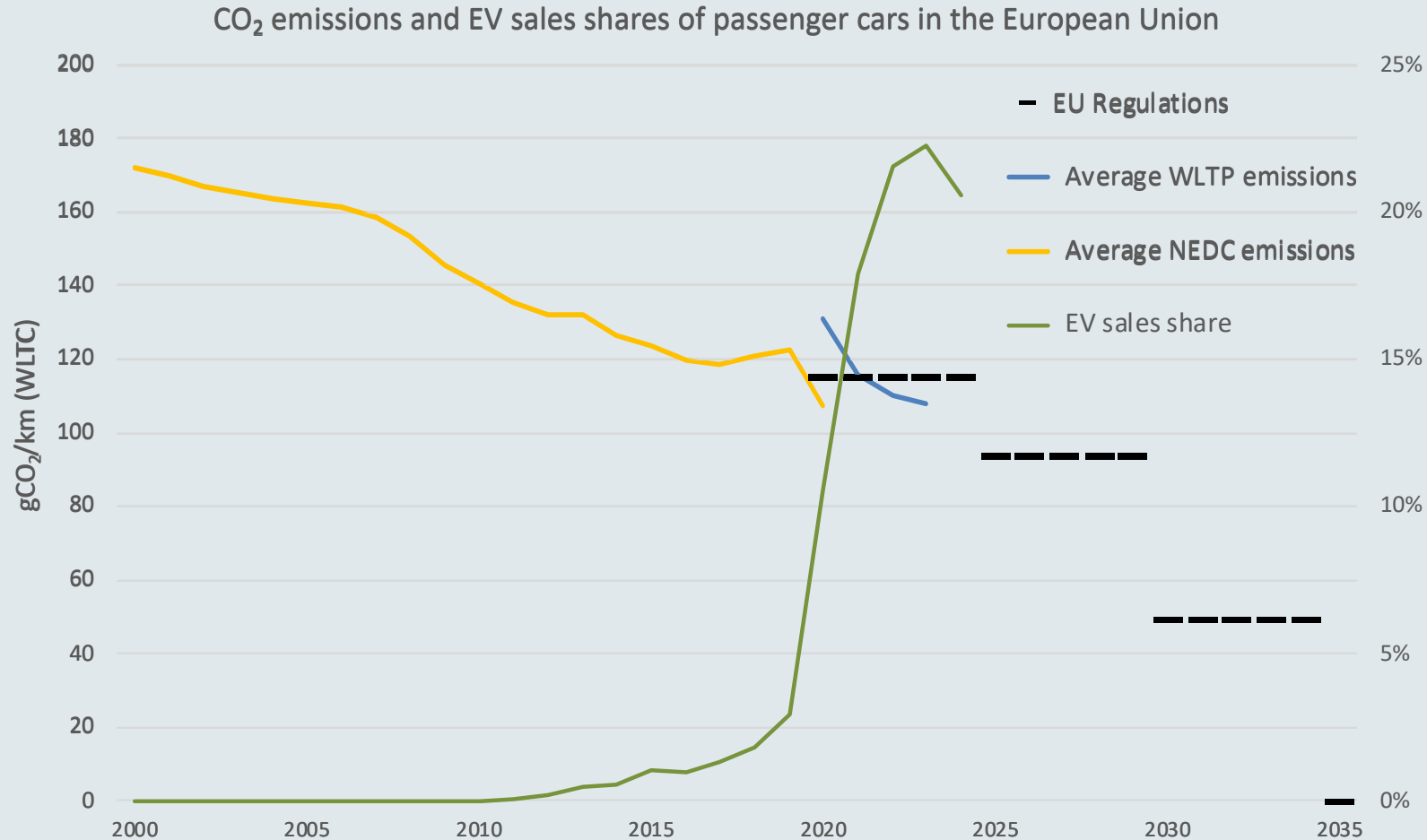


# Supply-side regulations adopted over past 3 years will cut cumulative emissions to 2050 by around 30% of what's needed to align with Paris goals



They will also avoid ~240 EJ of fossil fuels through 2050, equivalent to the lifetime fuel consumption of nearly one-third of the cars on the world's roads

# Case Study: The EU's CO<sub>2</sub> standards for cars and vans demonstrate the benefits of supply-side regulations



Supply side regulations include

- Fuel economy standards
- Zero-emission vehicle (ZEV) sales requirements

Measurable benefits

- Reduced fuel consumption
- CO<sub>2</sub> emissions reductions
- Reduced consumer expenditures (e.g. on fuel)

The main mechanism for compliance with the EU's CO<sub>2</sub> standards for cars and vans was to increase sales of EVs

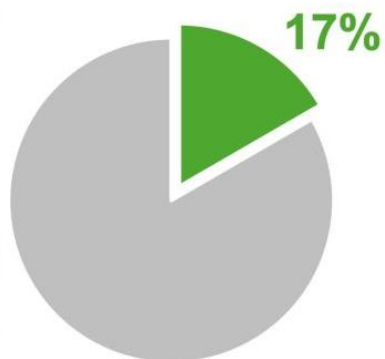
# Supply side regulations lead to changes in automakers' investment, production and marketing strategies

**2019** (CO<sub>2</sub> target reduction: 0%)

Exemplary ad:



Ad-share electrified:

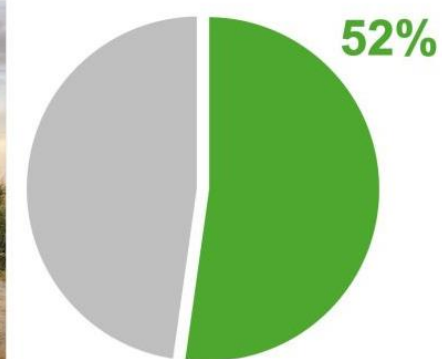


**2020** (CO<sub>2</sub> target reduction: -27%)

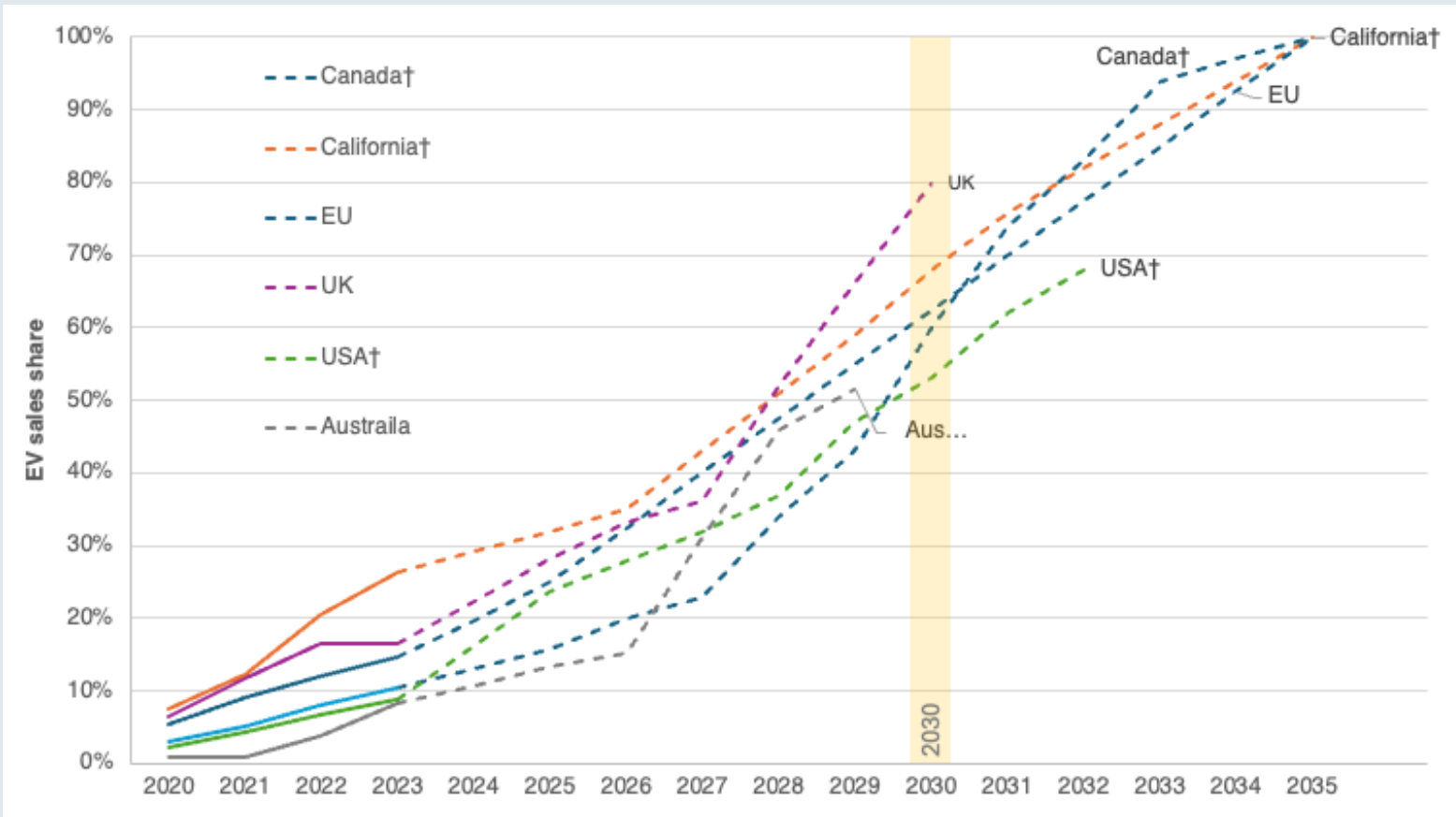
Exemplary ad:



Ad-share electrified:



# Supply side regulations will continue to drive EV adoption across other markets in the coming decade

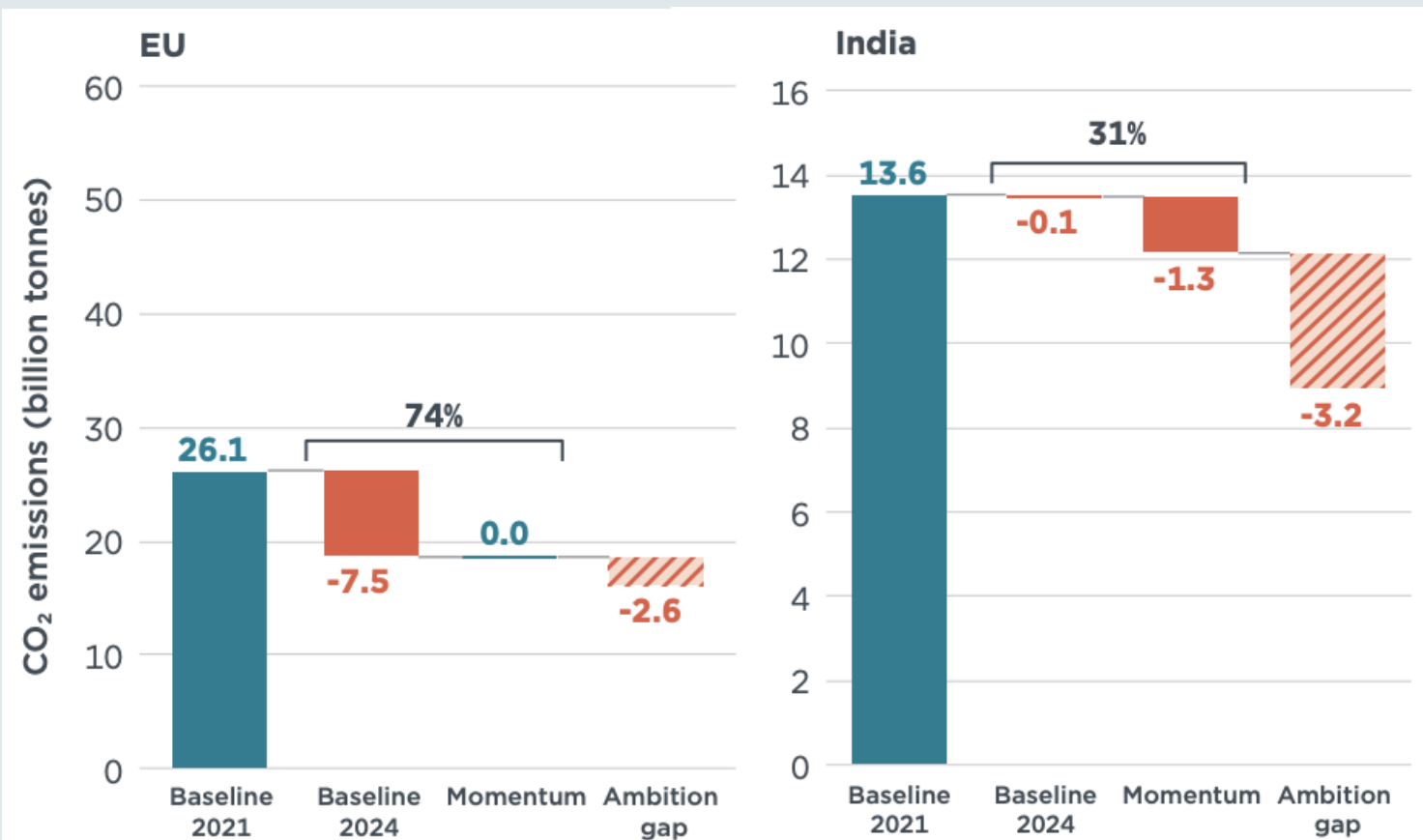


† In selected markets, some PHEVs are included in future EV targets.

Key elements for effective supply-side regulations:

- ✓ Pairing flexibilities with feasible but ambitious requirements
- ✓ Sufficient penalties
- ✓ Gradual performance improvements

# EU's emission abatements are driven by their regulations, as is India's LDV and HDV mitigation potential



In EU, adopted regulations have realized 74% of the CO<sub>2</sub> emissions cuts that could be achieved under the Ambitious scenario:

- LDVs: EU CO<sub>2</sub> standards for cars and vans
- HDVs: EU HDV CO<sub>2</sub> standards

In India, as shown in the Momentum scenario, proposed policies could capture one-quarter of the emissions cuts that could be realized under the Ambitious scenario:

- LDVs: Proposed CAFE III and IV standards + ZEV Declaration
- 2/3Ws: Expected impact of fiscal policies
- India HDV mitigation potential (Ambitious): Expected to be driven by new regulations

**Thank you**

**For any questions, you can also write at  
[communications@theicct.org](mailto:communications@theicct.org).**

