

Annex 5 - India



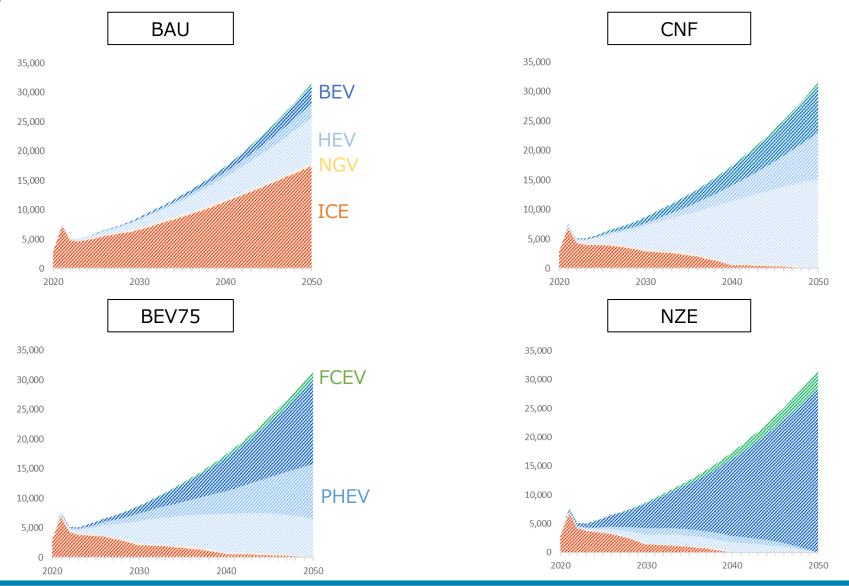
Trends in India @2050

Scenario		Trends in India	2050/2020 CO ₂ emissions
All	Market Passenger cars and commercial vehicles: Significant increases in both new vehicle sales and in-use fleets; for motorcycles, gradual declines in new vehicle sales and in-use fleet.		
	Energy mix	Share of clean energy is approximately 80%.	
CNF	Electrified vehicles	 Share of electrified vehicles in new vehicle sales for all vehicle types is almost 100%, with about 30% of new passenger cars being BEVs/FCEVs. Share of BEVs/FCEVs in the in-use passenger car and commercial vehicle fleets is approximately 20%. 	+21% approx. (In CNF+, -16% approx.)
	Fuel mix	 Just under 50% is CNF (synthetic fuels, biofuels) + electricity + hydrogen. CNF share represents approx. 30% of total fuel consumption n 2050. (In the CNF+ scenario, that share is approx. 52%.) 	
BEV75	Electrified vehicles	 Share of electrified vehicles in new passenger car and commercial vehicle sales is 100%, with about 50% being BEVs/FCEVs. Share of BEVs/FCEVs in the in-use passenger car and commercial vehicle fleets is approximately 40%. 	-1% approx.
	Fuel mix	 More than 60% is CNF (synthetic fuels, biofuels) + electricity + hydrogen. CNF share represents approx. 25% of total fuel consumption in 2050. 	
NZE	Electrified vehicles	 Share of BEVs/FCEVs in new vehicle sales for all vehicle types is 100%. Share of BEVs/FCEVs in the in-use passenger car and commercial vehicle fleets is approximately 90%. 	-24% approx.
	Fuel mix	 About 80% is biofuels + electricity + hydrogen. (Assumption: Synthetic fuels = 0%.) Biofuel share = approx. 6% of total fuel consumption in 2050. 	

CO2 emission levels range between about +21% to -24% compared to 2020. (CO2 emissions in two scenarios are within the IPCC 2050 2.0°C climate scenarios' -14% to -44% range.)

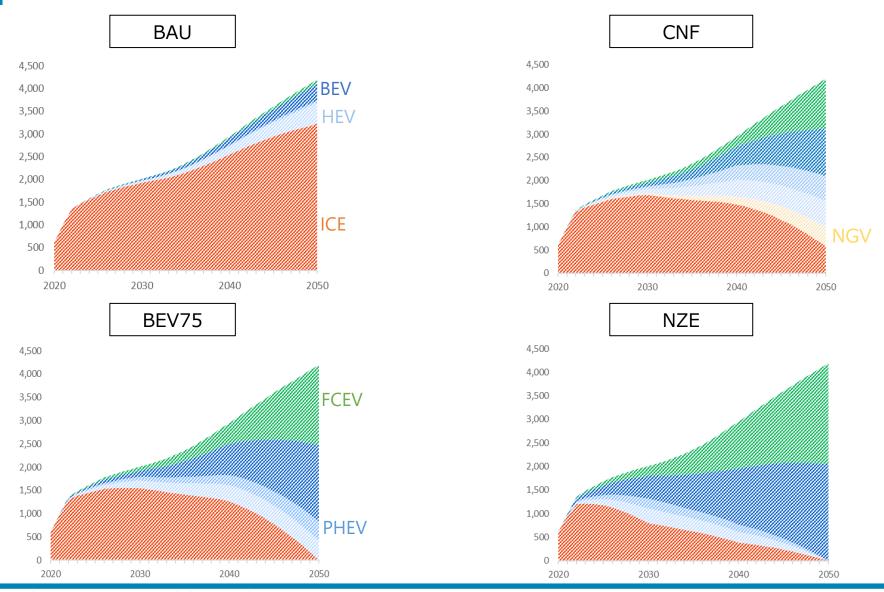


New Passenger Car Sales (India)



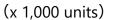


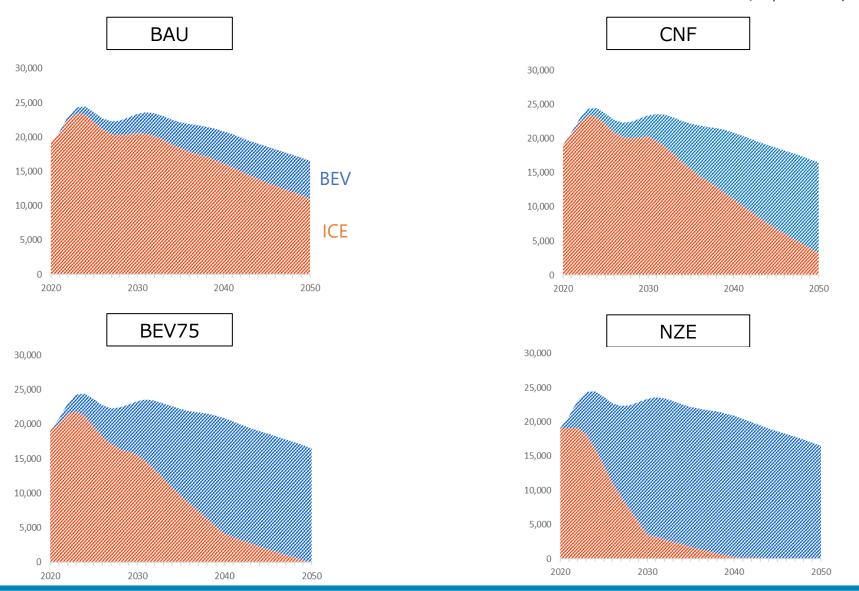
New Commercial Vehicle Sales (India)





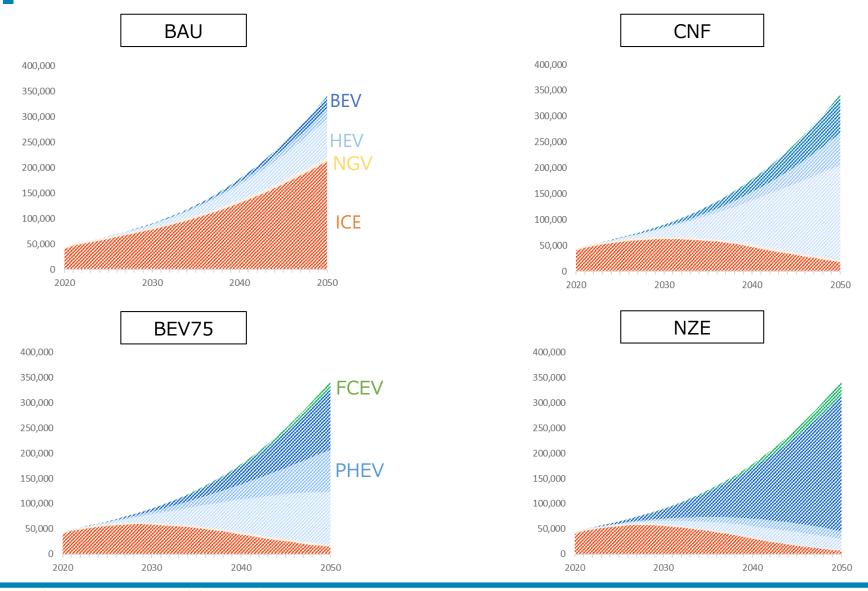
New Motorcycle Sales (India)





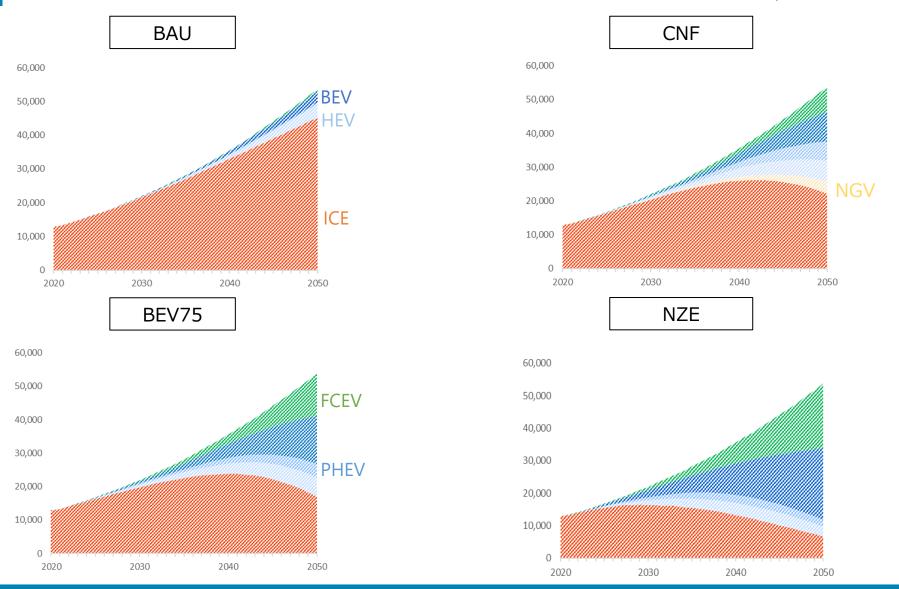


In-Use Passenger Car Fleet (India)



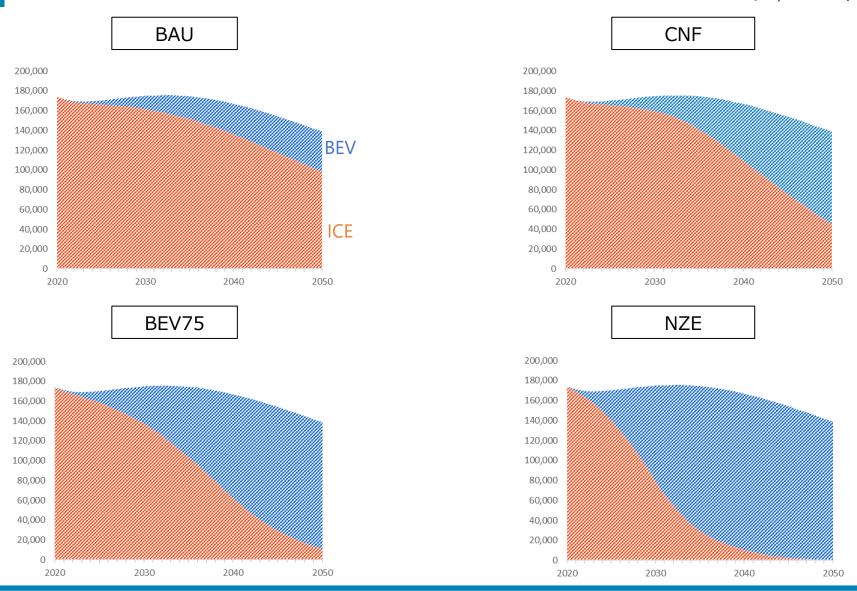


In-Use Commercial Vehicle Fleet (India)



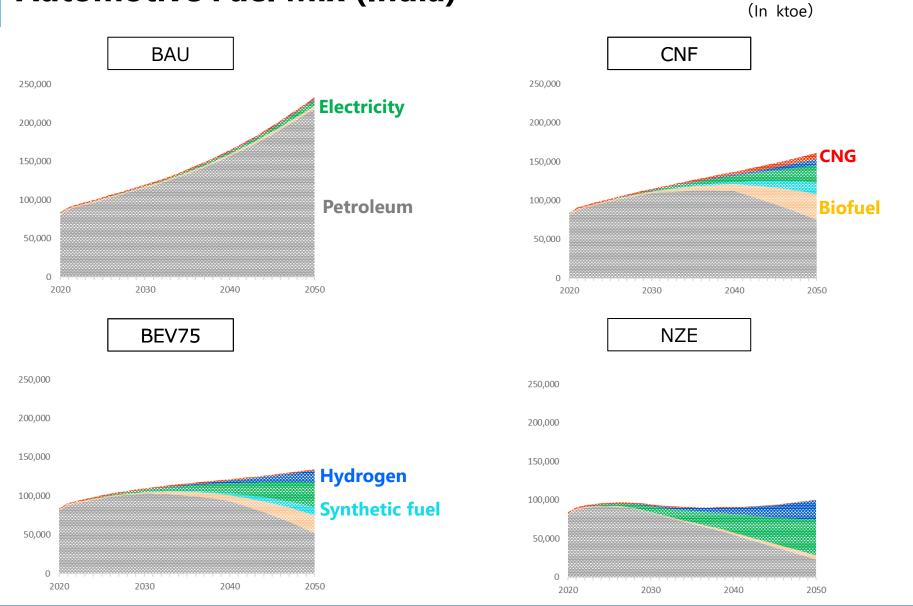


In-Use Motorcycle Fleet (India)





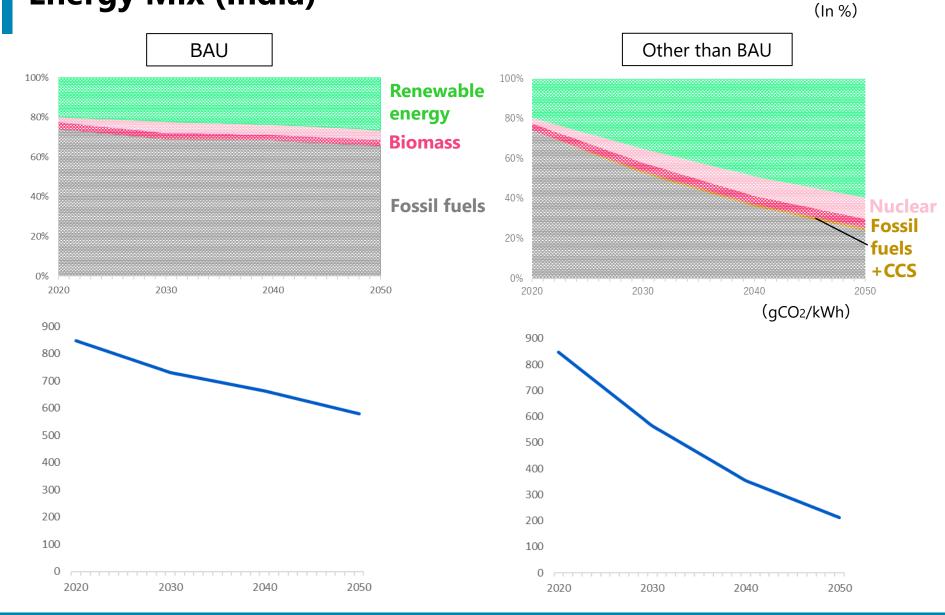
Automotive Fuel Mix (India)





Energy Mix (India)

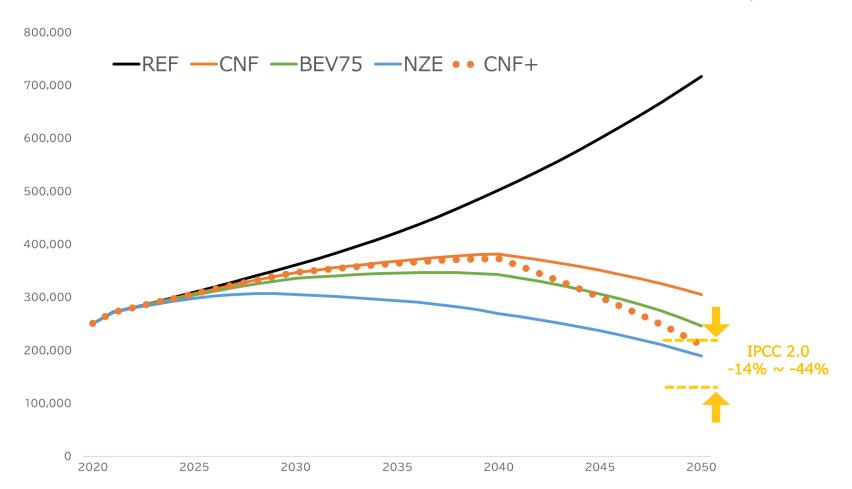






CO2 Emissions (India)

(In ktCO₂)



Note: The CNF+ scenario assumes that CNF supply is 1.25 times greater than in the CNF scenario, has a 40% (approx.) instead of 30% share (approx.) in the fuel mix and that most of the increase will be supplied to Africa, the Middle East, India, and ASEAN where the supply of decarbonized energy is a major challenge.

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