

# EV-internal combustion price parity forecast for 2023 – report

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*(Image courtesy of Roskill)*

A new report by Roskill suggests that the rising CO2 compliance costs that original equipment manufacturers within the automobile industry are facing in some jurisdictions are set to create a price parity between fully electric vehicles (BEV) and their internal combustion engine (ICE) counterparts.

According to Roskill, the emission caps that some countries are implementing are already making ICE cars increasingly expensive on an all-in cost basis.

***SOME AUTOMAKERS ARE ALREADY CHANGING THE FEE STRUCTURES OF DEALERSHIPS TO PROMOTE BEV OVER ICE SALES. OTHERS STILL HAVE YET TO ANNOUNCE THEIR FIRST MASS-MARKET ELECTRIC CAR***

“This is sometimes underestimated by forecasts. While some projections indicate that BEV cars may reach cost parity with internal combustion vehicles (ICE) late in the decade, they often obviate that the cost of selling an ICE in some jurisdictions is rising,” the report reads. “This will evidently impact the timeframe in which the production cost of BEV and ICE vehicles reach parity.”

The market analyst writes that in the European Union, even if auto OEMs comply with their voluntary plug-in sales targets, they will also need to drastically reduce the average CO2 footprint of their ICE models beyond 2021 to comply with the mandatory fleet-wide emissions limits.

“Roskill’s auto and battery supply chain team has estimated that the cost to reduce CO2 emissions to the future maximum limit permitted with today’s fuel-efficiency technologies (excluding 48V mild-hybrid systems) stands at \$3,500. This includes technologies like cylinder deactivation, micro-hybrid systems (12V), efficient alternators or LED lamps among many others considered in the study.”

In the firm’s view, in such a scenario, and with the cost of EV batteries decreasing, OEMs with fully dedicated e-platforms may achieve ICE-BEV cost parity as early as 2023.

“This scenario assumes a BEV car in the C-segment using a 50kWh NCM 811 battery pack. The scenario assumes aggressive \$/kWh battery price declines, however that could be stymied by commodity prices which will become an increasing share of the \$/kWh equation.”