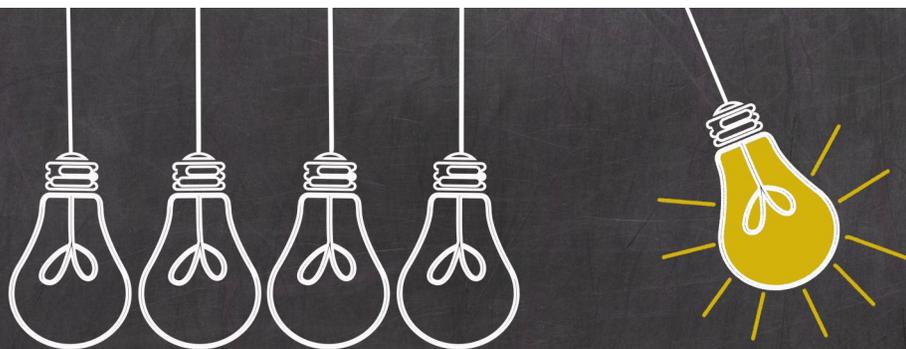


Weekly Briefing

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Electrified Vehicle Take-Off in Nordic Countries

- *The Nordic countries — Denmark, Finland, Iceland, Norway and Sweden — have spurred an acceleration in demand for electrified vehicles.*
- *Fiscal incentives on the purchase price of electric vehicles have fostered growing demand.*
- *Other incentives include a reduction or elimination of parking fees, the ability to use bus lanes, or reduced expenses for using toll highways.*
- *The net effect will be a reduction in CO₂ emissions emanating from the transport sector and a path to meet Paris targets.*

Nordic countries have moved decisively to incentivize the purchase of electrified vehicles in recent years. Remarkably, even though the population of these five countries is 26 million, or 0.3% of the world population, these countries account for the third largest share of such vehicles on the road, following China and the U.S.

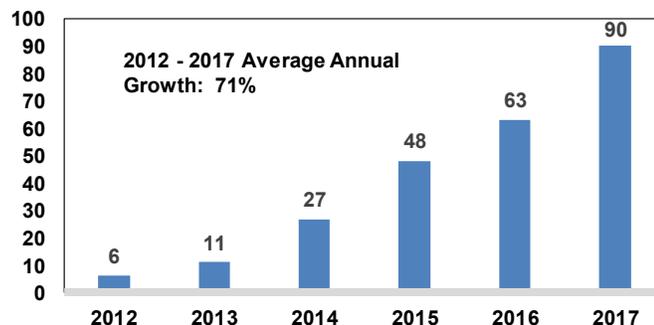
- Last year, EV sales grew by 43% to 90,000 units (see top chart). These data are available in a recent International Energy Agency (IEA) report on the Nordic EV Market found [here](#).
- Since 2012, sales have grown at an average annual rate of 71% to an EV market share of 10.5%. Norway’s penetration of EVs is most pronounced with a market share of nearly 40% in 2017.
- As sales growth accelerated, so too have the overall number of EVs in operation (see 2nd chart). As of 2017, nearly 250,000 EVs were on the road in the Nordics. IEA projects strong growth in the years ahead as these countries achieve their Paris Agreement targets.

Given today’s technology and product mix, this strong growth occurred because these countries have implemented a series of policies to incentivize EV purchases.

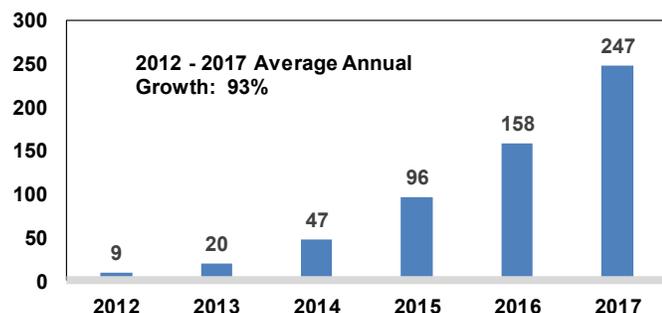
- The chart to the right includes a brief summary of the incentives offered to consumers buying EVs. Most countries provide relief to EV buyers from paying registration fees which can be quite onerous — between 20 - 30% in many Nordics.
- Exemption from VAT sales tax is also a stimulative policy used, as are tax credits in Sweden.
- So-called “circulation taxes” are also part of a rebate scheme. These are tolls for use of highways and roads.
- Finally, many local municipalities provide added benefits to EV owners in the way of access to bus lanes and free parking.

The behavior of car owners in the Nordics can provide interesting insights into “what it takes” to incentivize demand for EVs. This is especially important during the period when there is a substantial price gap between EVs and conventional vehicles (ICEs).

Electric Vehicle Sales in Nordic Countries
000s Units



Electric Vehicles in Operation
Nordic Countries
000s Units



	EV purchase incentives				EV use and circulation incentives				Waivers on access restrictions	
	Registration tax/sale rebates	Registration tax (excl. VAT) exemption	VAT exemption	Tax credits	Circulation tax rebates	Circulation tax exemption	Waivers on fees (e.g. tolls, parking, ferries)	Tax credits (company cars)	Access to bus lanes	Free/dedicated parking
Denmark	Local policy	No policy	No policy	No policy	Local policy	No policy	No policy	No policy	No policy	No policy
Finland	Local policy	No policy	No policy	No policy	Local policy	No policy	No policy	No policy	No policy	No policy
Iceland	No policy	Local policy	No policy	No policy	Local policy	No policy	No policy	No policy	No policy	No policy
Norway	Local policy	Local policy	No policy	No policy	Local policy	No policy	Local policy	No policy	Local policy	No policy
Sweden	Local policy	No policy	No policy	Local policy	Local policy	No policy	Local policy	Local policy	No policy	No policy

Legend: No policy (white), Local policy (light blue), National policy (dark blue)

“Electric cars (in these Nordic countries) are two-to-four-times more energy efficient than their ICE counterparts... (and) have pledged to reduce the CO₂ intensity of the electricity networks...” IEA Report, p. 77.

