

EMERGING ELECTRIC PASSENGER CAR MARKETS IN EUROPE: POLAND

Poland is one of the largest passenger car markets in Europe by sales, ranking sixth among the countries of the European Union and European Free Trade Association.¹ Although Poland's passenger car fleet is currently dominated by combustion engine cars, the country is committed to increasing the number and share of electric passenger cars.

KEY FACTS ABOUT POLAND'S VEHICLE MARKET

First registrations of new passenger cars (2019)

Poland: 550,000; European Union: 15.3 million

Passenger car fleet (2018)

Poland: 23.4 million; European Union: 271.5 million

Average age of passenger car fleet (2018)

Poland: 14 years; European Union: 11 years

Motor vehicles per 1,000 inhabitants (2018)

Poland: 719 vehicles; European Union: 610 vehicles

Average CO₂ emissions of new passenger cars (2019)

Poland: 132 g CO₂/km; European Union: 123 g CO₂/km

Top three countries of the European Union with most direct auto manufacturing jobs (2018)

1. Germany: 880,000 jobs

2. France: 230,000 jobs

3. Poland: 214,000 jobs

European Union: 2.7 million jobs

Note: Information on the average age of passenger car fleet in Poland from Poland Central Statistical Office, "Transport - activity results in 2018," <https://stat.gov.pl/obszary-tematyczne/transport-i-laczynosc/transport/transport-wyniki-dzialalnosci-w-2018-roku,9,18.html>. Information on auto manufacturing jobs from ACEA, "Direct automotive manufacturing jobs in the EU, by country," (January 8, 2020), <https://www.acea.be/statistics/article/direct-automotive-manufacturing-jobs-in-eu-by-country>. All other data from ACEA, "The automobile industry pocket guide 2020/2021," (July, 2020), https://www.acea.be/uploads/publications/ACEA_Pocket_Guide_2020-2021.pdf

ELECTRIC PASSENGER CAR MARKET AND PUBLIC CHARGING INFRASTRUCTURE

Almost 12,300 electric passenger cars were driving on Poland's roads by June 2020. Of those, over 6,800 (56%) were battery electric vehicles (BEVs) and over 5,400 (44%) plug-in hybrid electric vehicles (PHEVs).² Between October 2019 and June 2020, the electric passenger car fleet increased by 56% (Figure 1).

¹ ACEA - European Automobile Manufacturer's Association, "New passenger car registrations European Union," (2020), https://www.acea.be/uploads/press_releases_files/20200116_PRPC_1912_FINAL.pdf

² Polski Związek Przemysłu Motoryzacyjnego (Polish Association of Automotive Industry), "E-mobility index," (21 July, 2020), <https://www.pzpm.org.pl/en/Automotive-market/E-mobility-index/Year-2020/E-mobility-index-June-20202>

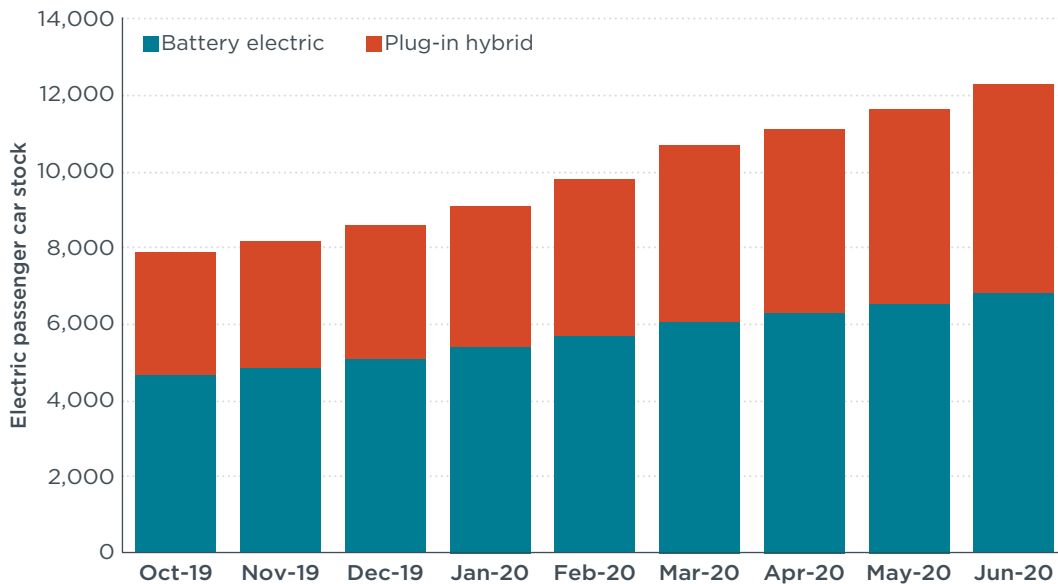


Figure 1. Development of electric passenger car stock in Poland between October 2019 and June 2020.

New electric passenger car registrations grew significantly in January 2020 with over 370 new BEVs and PHEVs registered, an increase of 55% compared to December 2019 (Figure 2). While in the last quarter of 2019 new electric (BEV and PHEV) passenger car registrations stood at 0.5%, the share doubled in the first quarter of 2020 to 1.1%. Despite a 18% decrease in absolute registrations in April compared to March, likely as a result of the COVID-19 outbreak, figures have recovered ever since with increases of 12% and 28% in May and June respectively. In the second quarter of 2020, registrations reached a historic high with 1.8% of all new passenger cars registered being BEVs and PHEVs.³ Yet, compared to the European average, registration shares for the first half of 2020 were significantly lower, 1.5% in Poland versus 7.8% in all of Europe.⁴

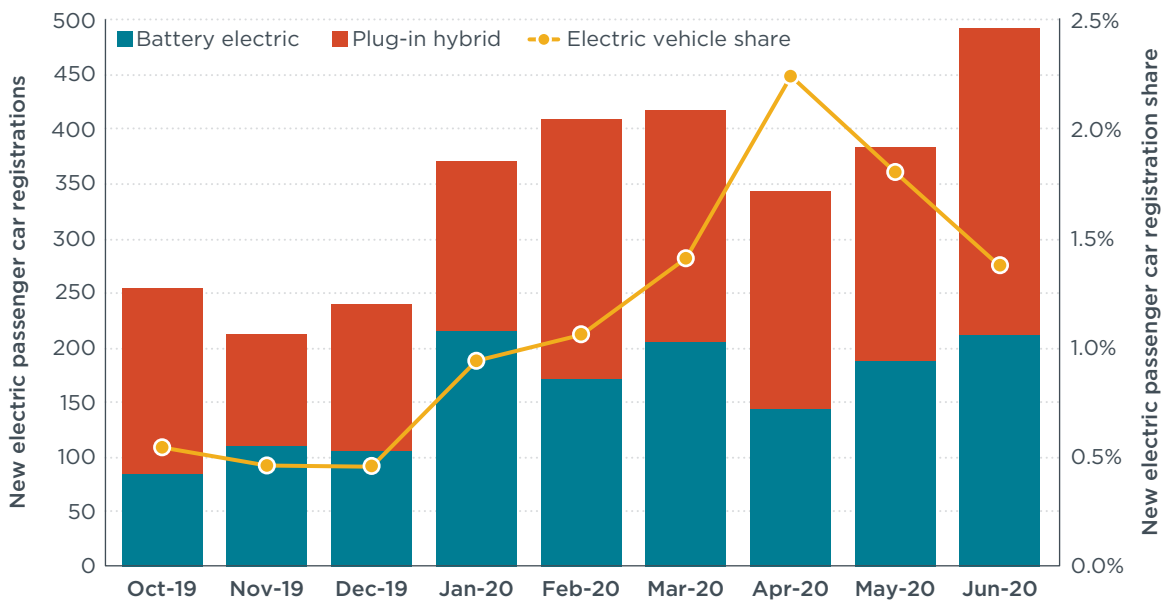


Figure 2. New electric passenger car registrations and shares in Poland between October 2019 and June 2020.

³ Peter Mock, *Market Monitor – European passenger car registrations: January-June 2020*, (ICCT: Washington, DC, 2020), <https://theicct.org/sites/default/files/publications/MarketMonitor-July-EN-20200805.pdf>

⁴ Based on the European Economic Area (EEA). This includes the 27 member states of the European Union, plus Iceland, Liechtenstein, Norway, and the United Kingdom.

In parallel with the increasing number of electric passenger cars, the public charging infrastructure network has been continuously extended. The number of charging stations increased by 25% between October 2019 and June 2020 (Figure 3).⁵ By the end of June 2020, drivers of an electric vehicle had access to over 2,200 public charging points at 1,200 charging stations, an electric vehicle to charging point ratio of 5:1.

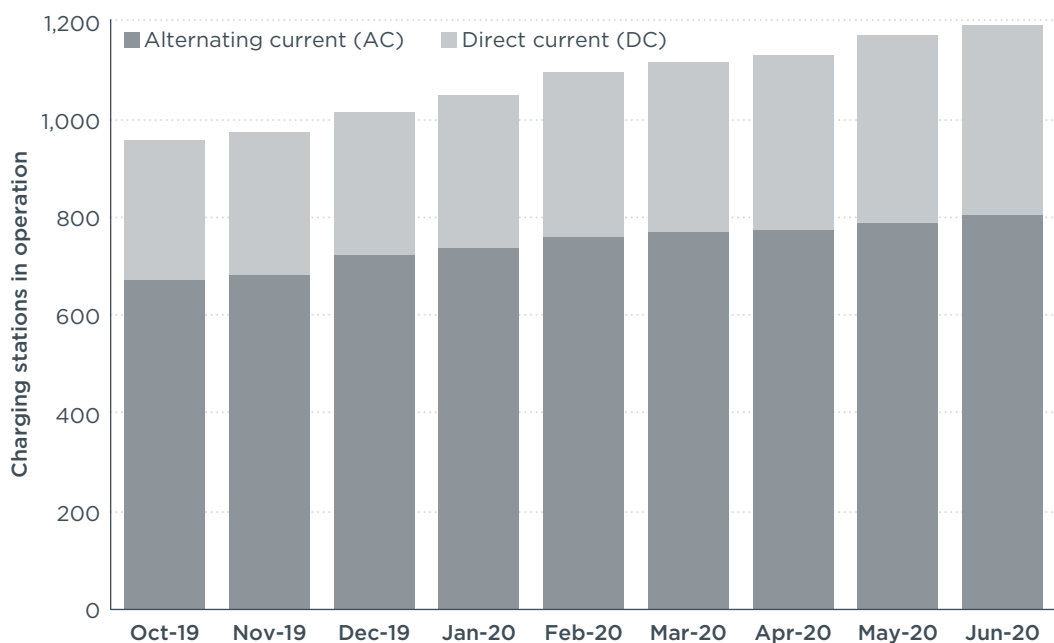


Figure 3. Charging stations in operation in Poland between October 2019 and June 2020.

POLICIES DRIVING THE ELECTRIC PASSENGER CAR MARKET

The Polish national government has adopted a variety of policies to drive the electrification of its vehicle fleet including passenger cars. The Law on Electromobility and Alternative Fuels, which came into force in February 2018, lists detailed targets and measures for the uptake and deployment of electric vehicles and charging infrastructure.⁶ Benefits for purchasers and owners of an electric passenger car adopted by the Polish government include:

- » **Tax incentives:** Excise tax, applied when registering a new or used imported passenger car in Poland for the first time, is waived for BEVs, PHEVs, and fuel cell electric vehicles (FCEVs). For all other vehicle types, the excise tax is 3.1% or 18.6% of a vehicle's net value depending on the engine capacity.⁷ Businesses purchasing an electric car receive a longer depreciation write-off term compared to conventional cars, and can deduct a maximum amount of PLN 225,000 (€52,000) compared to PLN 150,000 (€35,000) for combustion engine and hybrid cars.⁸
- » **Access and parking benefits:** The Electromobility Law directs local governments to allow BEV drivers access to bus lanes and exempts BEV drivers from parking fees in paid public parking zones. The law also allows local governments to implement

⁵ Polski Związek Przemysłu Motoryzacyjnego, "E-mobility index"

⁶ Kancelaria Sejmu (Chancellery of the Sejm), Ustawa z dnia 11 stycznia 2018 r. o elektromobilności i paliwach alternatywnych [Law of 11 January 2018 on electromobility and alternative fuels], (2018), <http://prawo.sejm.gov.pl/isap.nsf/download.xsp/WDU20180000317/T/D20180317L.pdf>

⁷ Kancelaria Sejmu, Ustawa z dnia 6 grudnia 2008 r. o podatku akcyzowym (Act of 6 December 2008 on excise duty), (8 May, 2020), <http://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20090030011/U/D20090011Lj.pdf>

⁸ PwC, Doing business in Poland 2019, (2019), <https://www.pwc.pl/pl/pdf/doing-business-in-poland-2019.pdf>

clean transport zones (CTZs) which permit access to electric vehicles (BEVs, FCEVs) and gas-powered vehicles (CNGs, LPGs) only. Municipalities can expand the catalogue of allowed vehicles to include PHEVs.

- » **Purchase incentives:** In June 2020, the Polish government launched three incentive schemes targeted at private individuals and businesses to support the purchase of a new purely zero-emission BEV or FCEV car or van.⁹ Maximum aid amounts range between PLN 18,750 (€4,400) and PLN 70,000 (€16,000) including price caps for eligible vehicles purchased. As part of the incentive schemes for BEVs and FCEVs, aid is also provided for installing charging infrastructure, ranging between a maximum aid of PLN 5,000 (€1,200) and PLN 25,000 (€5,800) for a charging point up to 22 kW.

RECOMMENDATIONS

A well-balanced mix of strong and reliable policy measures addressing the cost, charging infrastructure, and information gap could help to increase the share of electric passenger cars in Poland significantly, as leading markets such as France, Germany, the Netherlands, and Sweden show.¹⁰ A key policy in the initial phase is the offering of significant purchase and tax incentives for buyers of an electric car to make them economically attractive compared to conventional cars. To sustainably finance these purchase premiums, malus taxes for purchasers of a car with high CO₂ emissions could be established. In addition, the government should continue or implement policies to address workplace and home charging opportunities and provide the relevant funding in the early adoption phase, as a large proportion of charging is done at home or workplaces.

As one of the largest passenger car markets in Europe by new vehicle sales, Poland has the potential to serve as a model for other countries which are in the early stages of electric passenger car adoption. The implementation of strong policy measures and strategies can help to reduce transport-related CO₂ emissions and improve local air quality. In addition, the growing electric vehicle market could help to keep and create new jobs in Poland, turning the country into a major center of electric vehicle production.

9 National Fund for Environmental Protection and Water Management, "On June 26 at 9:00, calls for new programs for electromobility," (25 June 2020), <http://www.nfosigw.gov.pl/o-nfosigw/aktualnosci/art.1603,nfosigw-dofinansuje-zakup-pojazdow-elektrycznych.html>

10 Sandra Wappelhorst, Peter Mock, and Zifei Yang, *Using vehicle taxation policy to lower transport emissions: An overview for passenger cars in Europe*, (ICCT: Washington, DC, 2018), <https://theicct.org/publications/using-vehicle-taxation-policy-lower-transport-emissions>

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