

SEKCIJA S3 - SURADNJA S UDRUGAMA OBNOVLJIVIH IZVORA ELEKTRIČNE ENERGIJE

Šibenik, 7. studeni 2021.

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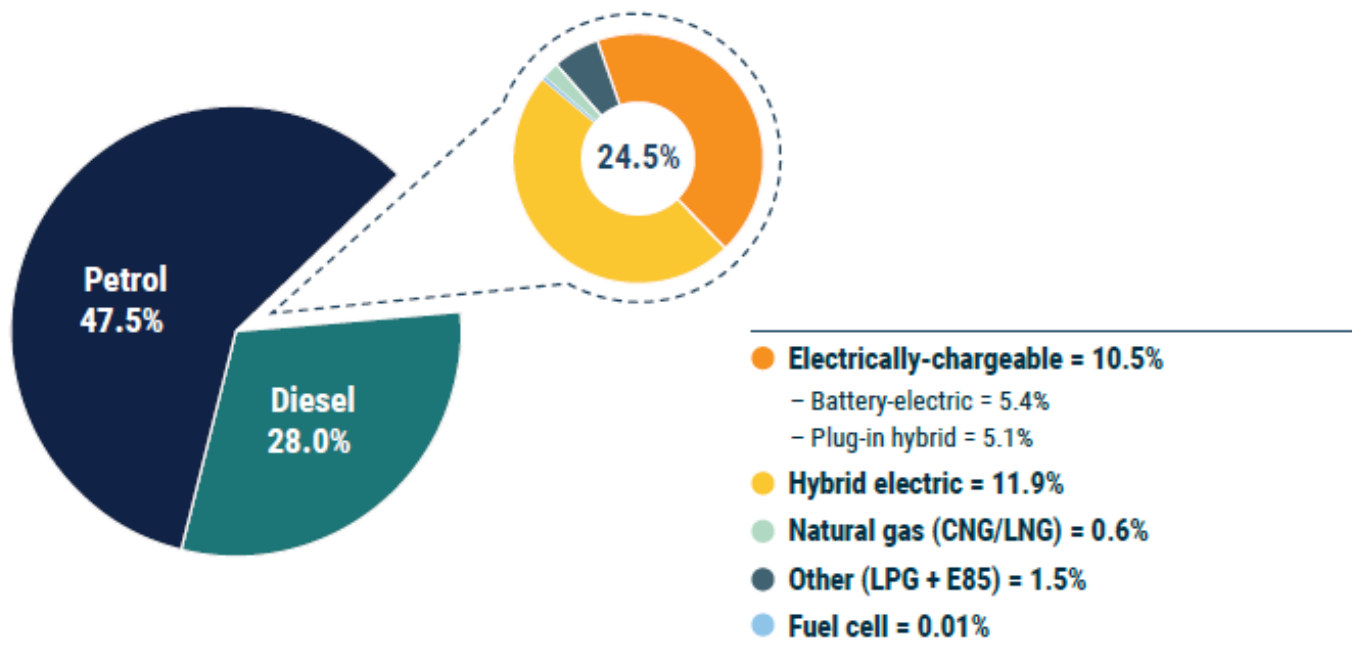
The European Automobile Manufacturers' Association, or ACEA, unites Europe's 15 major car, truck, van and bus makers.



<https://www.acea.auto/>



NEW CARS IN THE EU, BY FUEL TYPE (2020)



Source: ACEA

Izvor: Making the Transition to Zero-Emission Mobility, ACEA 2021 Progress Report





1.A.2. NEW SALES: SHARE OF ALTERNATIVELY-POWERED CARS

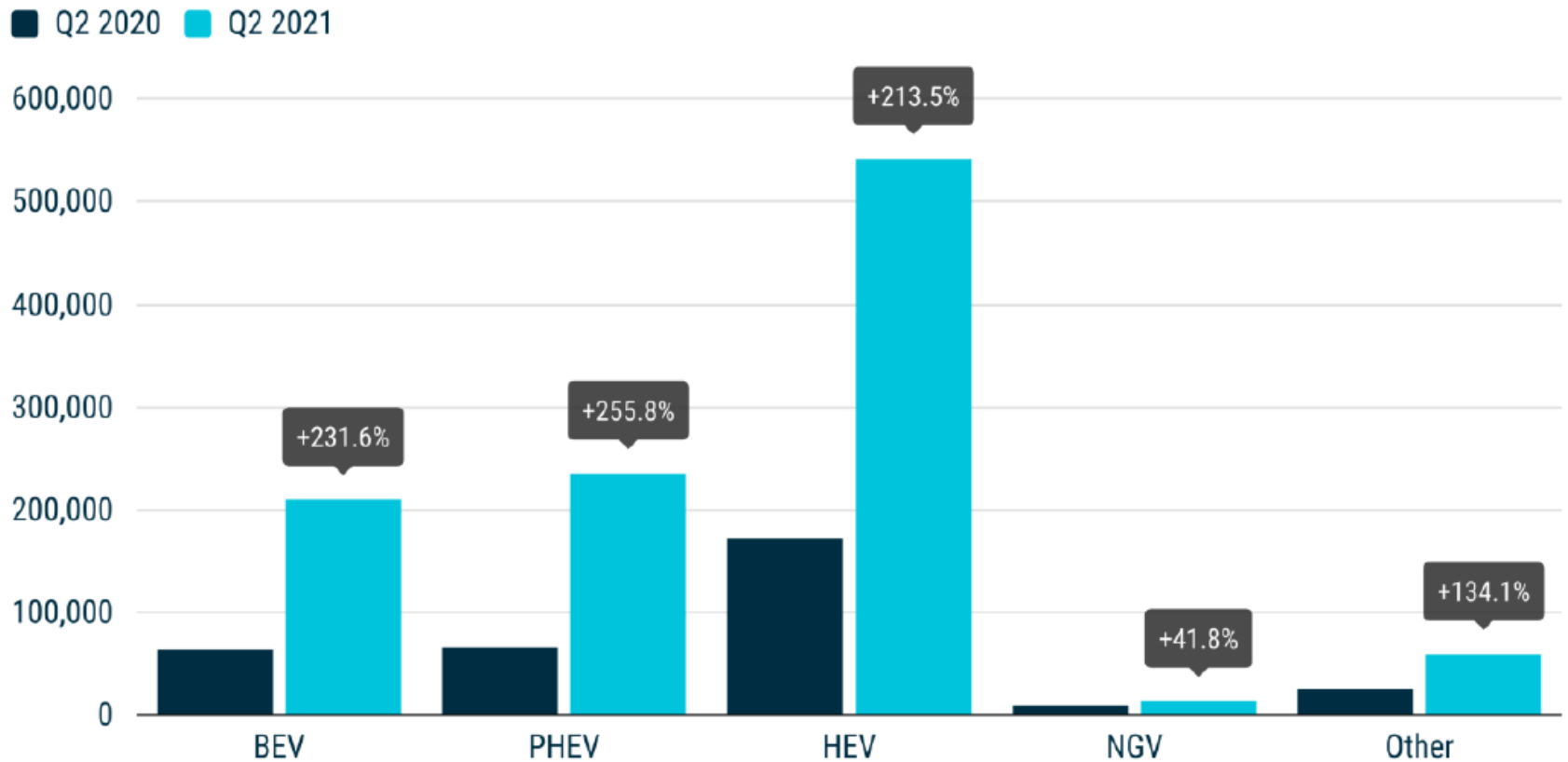
Trends over time in the EU (in units, 2014-2020)

	2014	2015	2016	2017	2018	2019	2020	Change 14/20
Electrically-chargeable	0.6%	1.1%	1.0%	1.4%	1.9%	3.0%	10.5%	+10.0% points
→ Battery electric	0.3%	0.4%	0.4%	0.7%	1.0%	1.9%	5.4%	+5.1% points
→ Plug-in hybrids	0.2%	0.6%	0.5%	0.7%	0.9%	1.1%	5.1%	+4.9% points
Hybrid electric	1.4%	1.6%	1.9%	2.9%	4.0%	5.7%	11.9%	+10.5% points
Fuel cell	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	+0.01% points
Natural gas (CNG)	1.0%	0.7%	0.5%	0.4%	0.5%	0.5%	0.6%	-0.4% points
Other (LPG + E85)	1.4%	1.3%	1.0%	1.3%	1.3%	1.4%	1.5%	+0.1% points

Source: ACEA

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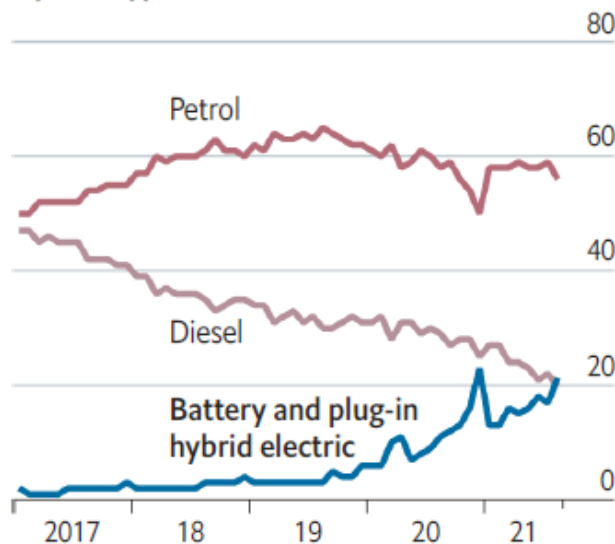
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Amped up

Europe, car sales

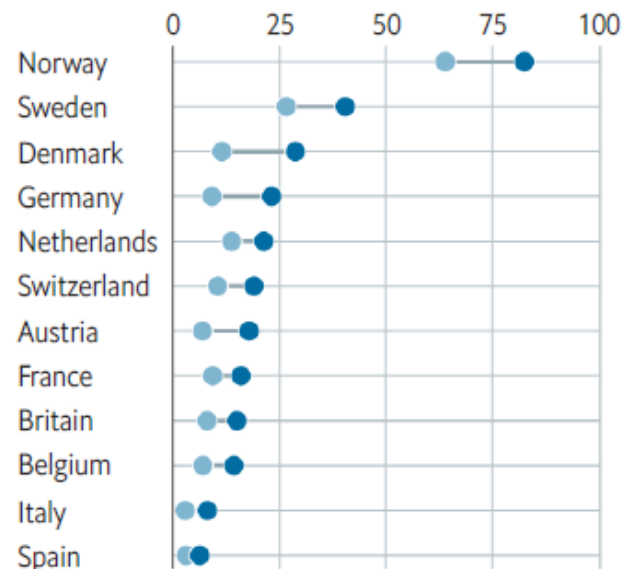
By fuel type, %



Source: JATO Dynamics

Battery and plug-in hybrid electric sales

% of total Jan-Aug 2020 Jan-Aug 2021



Izvor: <https://www.economist.com/graphic-detail/2021/10/01/european-sales-of-electric-vehicles-have-nosed-ahead-of-diesels>

15.

SAVJETOVANJE HRO CIGRE
HRO CIGRE SESSION
 ŠIBENIK, 7.-10. STUDENOGA 2021./NOVEMBER 7-10, 2021



cigre
Hrvatska Croatia

100 GODINA MEĐUNARODNE CIGRE • 30 GODINA HRO CIGRE • 70 GODINA CIGRE U HRVATSKOJ
 165 GODINA OD ROĐENJA NIKOLE TESLE • 100 GODINA KONČARA • 135 GODINA SIEMENSA • 70 GODINA ČASOPISA ENERGIJA

DISTRIBUTION OF ELECTRIC CAR CHARGING POINTS ACROSS THE EU

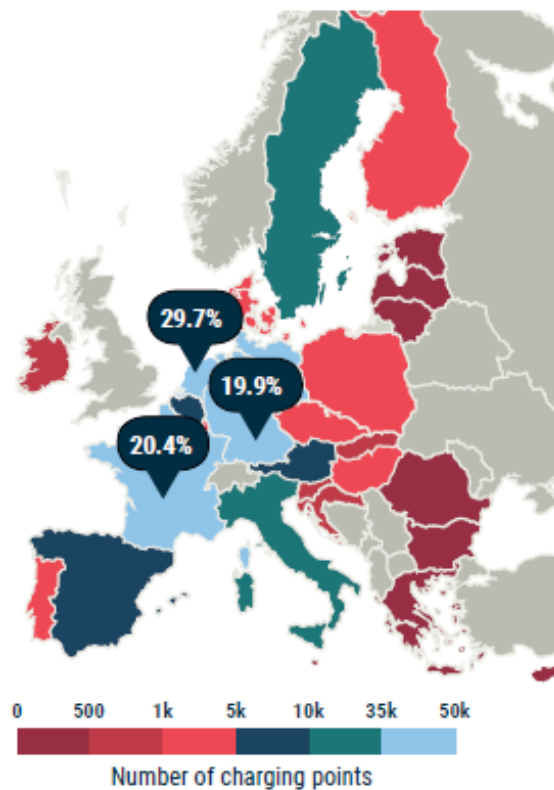
70% of all charging points:
Located in just 3 EU countries

29.7% Netherlands	20.4% France
19.9% Germany	

Top 5: Fewest charging points in 2020

Cyprus 70	Malta 96	Lithuania 174
Bulgaria 194	Greece 275	

'Electric car' = electrically-chargeable vehicles (battery electric vehicles + plug-in hybrid electric vehicles)
Source: ACEA, EAFO



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Normal and fast charging points (by country, 2020)

	Normal (≤ 22kW)	Fast (> 22kW)		Normal (≤ 22kW)	Fast (> 22kW)
Austria	6,724	1,347	Italy	11,842	1,231
Belgium	8,006	475	Latvia	56	235
Bulgaria	118	76	Lithuania	74	100
Croatia	483	187	Luxembourg	1,051	10
Cyprus	46	24	Malta	96	0
Czech Republic	590	610	Netherlands	64,236	2,429
Denmark	2,699	555	Poland	1,039	652
Estonia	223	176	Portugal	1,976	494
Finland	3,244	484	Romania	317	176
France	42,000	3,751	Slovakia	656	268
Germany	37,213	7,325	Slovenia	481	129
Greece	253	22	Spain	5,279	2,128
Hungary	1,008	283	Sweden	8,804	1,566
Ireland	736	254			
EU TOTAL =				199,250	24,987

Source: EAFO

Izvor: Making the Transition to Zero-Emission Mobility, ACEA 2021 Progress Report



ELECTRIC CAR CHARGING POINTS PER 100KM OF ROAD, BY COUNTRY



Top 5: **MOST** chargers per 100 kilometre

1	Netherlands	47.5
2	Luxembourg	34.5
3	Germany	19.4
4	Portugal	14.9
5	Austria	6.1

Top 5: **LEAST** chargers per 100 kilometre

1	Lithuania	0.2
2	Greece	0.2
3	Poland	0.4
4	Latvia	0.5
5	Romania	0.5

10 EU countries do not even have 1 charger per 100km of road

All these countries have an electric car share of < 3% (except for Hungary)

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EV charging plugs per 1,000 inhabitants in 2020: Netherlands (3.53) and Norway (3.40)

Izvor: LeasePlans 2021-EV Readiness Index 2021



ECV market share / charging points per 100km of road* (by country, 2020)

	ECV share	Charging points per 100km		ECV share	Charging points per 100km
Austria	9.5%	6.1	Italy	4.3%	5.1
Belgium	10.7%	5.5	Latvia	2.7%	0.5
Bulgaria	-	0.8	Lithuania	1.1%	0.2
Croatia	1.9%	2.3	Luxembourg	11.4%	34.5
Cyprus	0.5%	0.5	Malta	-	3.4
Czech Republic	2.5%	0.9	Netherlands	25.0%	47.5
Denmark	16.4%	4.4	Poland	1.9%	0.4
Estonia	1.8%	0.7	Portugal	13.5%	14.9
Finland	18.1%	3.3	Romania	2.2%	0.5
France	11.2%	4.1	Slovakia	1.9%	2.0
Germany	13.5%	19.4	Slovenia	3.1%	1.6
Greece	2.6%	0.2	Spain	4.8%	1.1
Hungary	4.7%	0.6	Sweden	32.2%	5.0
Ireland	7.4%	1.0			

Source: ACEA, EAFO, ERF, EUROSTAT

* Includes motorways, state, provincial and communal roads

Udjel e-vozila nije svugdje u uskoj korelaciji s brojem javnih punionica:

Švedska, Danska, Finska, Irska: veći udjel e-vozila, relativno manje punionica

Nizozemska, Luksemburg, Njemačka: broj punionica veći od udjela e-vozila

RH: na sredini europske ljestvice (broj punionica), pri dnu ljestvice (udjel električnih vozila na cestama)

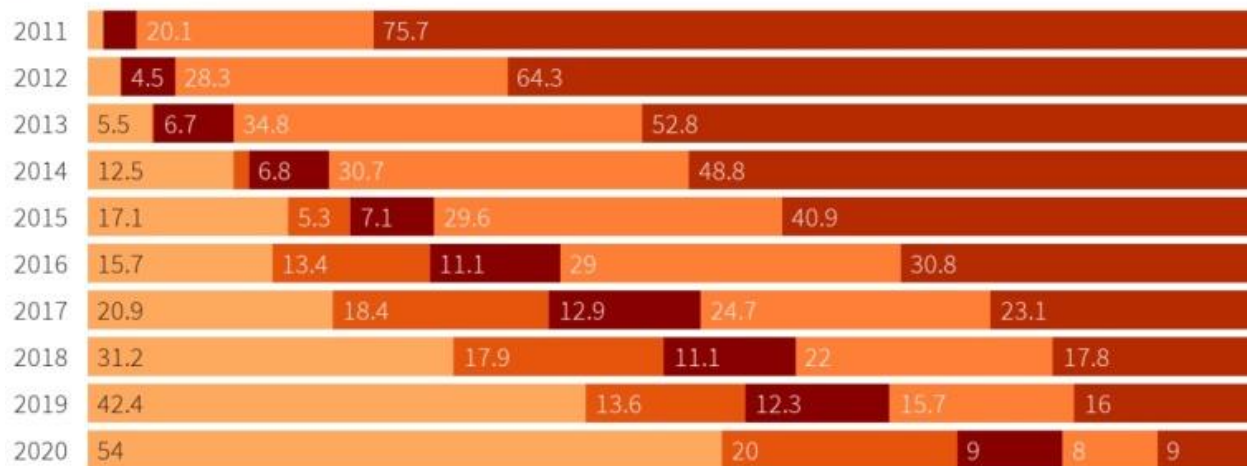
Izvor: Making the Transition to Zero-Emission Mobility, ACEA 2021 Progress Report



Norway new car sales

Years 2011-2020 in percentage of market per car type

● Electric ● Plug-in hybrid ● Non-plug hybrid ● Petrol only ● Diesel only



Source: Norwegian Road Federation (OFV)

Izvor: <https://electrek.co/2021/01/07/all-electric-cars-market-share-norway-2020/>



Croatia



Capital:
Zagreb

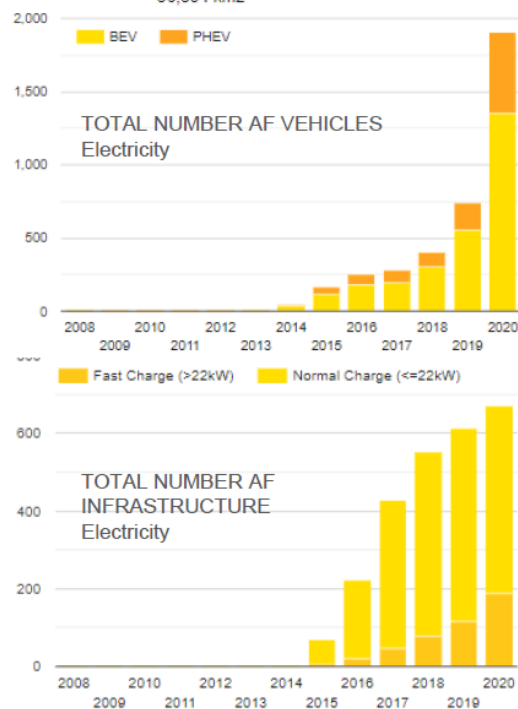
Population:
4,076,246

Total land area (km2):
56,594 km2

Passenger cars:
1,665,391

Highway (km):
1,310 km

GDP per capita
14,936.10 USD



Norway



Capital:
Oslo

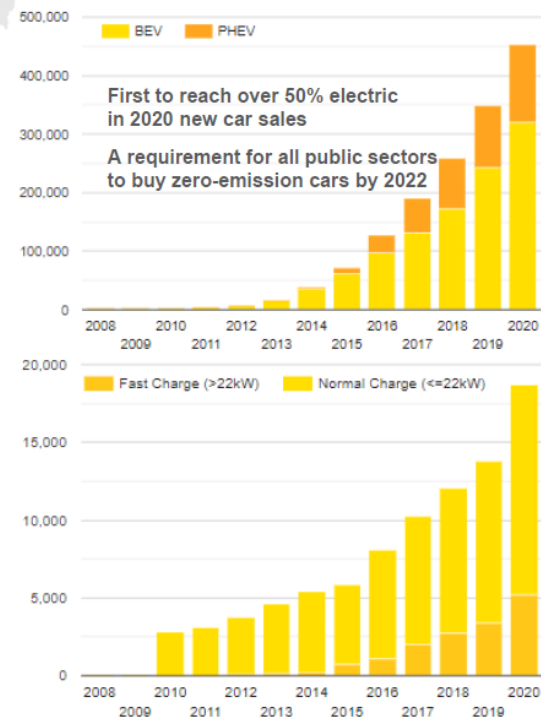
Population:
5,328,212

Total land area (km2):
323,802 km2

Passenger cars:
2,700,000

Highway (km):
523 km

GDP per capita
75,419.63 USD



Source: European Alternative Fuels Observatory – EAFO <https://www.eafo.eu/countries/croatia/1727/summary/compare>

Izvor: doc.dr.sc. Vedran Kirinčić: Uloga dekarboniziranog transporta u energetskej tranziciji

