

Bundesamt für Energie BFE Dienst Geoinformation

Key figures about the charging infrastructure for electrical vehicles - Documentation

Summary information

Electric mobility is a key technology for more sustainable mobility and is one way of achieving ambitious energy and climate policy goals. Electric engines are efficient, and using electricity means that renewable energies can also be used. The availability of public charging stations is a critical factor in the success of the increasingly widespread use of electric cars, which is why <u>www.recharge-my-</u><u>car.ch</u> displays charging station availability for electric vehicles in real time.

The charging infrastructure for electric vehicles in Switzerland is constantly being developed. We use real-time data from <u>www.recharge-my-car.ch</u> to regularly evaluate the ever-increasing number of charging stations, charging points, and types of plug in Switzerland. Since November 2020, this data has been and will continue to be collected on a daily basis for the whole of Switzerland and for the individual cantons, and then averaged each month. This gives an overview of how the charging infrastructure is expanding. Detailed documentation is available for a better understanding of the data.

Visualization of the key figures: www.recharge-my-car.ch/keydata

Download data: opendata.swiss/en/dataset/kennzahlen-offentliche-ladeinfrastruktur-elektromobilitat

Attribute	Meaning
year	Year in which the key figures were collected.
month	Month in which the key figures were collected. The key figures are collected on a daily basis and are then averaged each month.
stations_CH_count	Number of charging stations in Switzerland. A charging station can have multiple charging points.
stations_XY_count	Number of charging stations per canton. A charging station can have multiple charging points. This attribute is available for each canton. XY stands for the official abbreviation of the canton.
locations_CH_count	Number of locations in Switzerland. A location can include several charging stations.

Data content

locations_XY_count	Number of locations per canton. A location can include several charging stations. This attribute is available for each canton.
plugs_CH_count	Number of charging points in Switzerland.
plugs_XY_count	Number of charging points per plug type in Switzerland. This attribute is available for each plug type. XY stands for the plug type based on the Open Intercharge Protocol (OICP) Version 2.2 (see below).
chargingPower_CH_sum	Summed maximum charging power in kilowatts of the charging stations in Switzerland. Only charging stations for which the charging power is known are considered (see chargingPower_CH_count).
chargingPower_XY_sum	Summed maximum charging power in kilowatts of the charging stations within a canton. XY stands for the official abbreviation of the canton. Only charging stations for which the charging power is known are considered (see chargingPower_XY_count).
chargingPower_CH_count	Number of charging stations in Switzerland for which the information of the maximum charging power is known and which was considered for the summation (chargingPower_CH_sum).
chargingPower_XY_count	Number of charging stations per canton for which the information of the maximum charging power is known and which was considered for the summation (chargingPower_XY_sum).
chargingPower_10kW_count	Number of charging stations in Switzerland for which the information of the maximum charging power is known and which has a maximum charging power of up to 10 kW.
chargingPower_21kW_count	Number of charging stations in Switzerland for which the information of the maximum charging power is known and which has a maximum charging power of more than 10 kW up to 21 kW.
chargingPower_42kW_count	Number of charging stations in Switzerland for which the information of the maximum charging power is known and which has a maximum charging power of more than 21 kW up to 42 kW.
chargingPower_100kW_count	Number of charging stations in Switzerland for which the information of the maximum charging power is known and

	which has a maximum charging power of more than 42 kW up to 100 kW.
chargingPower_100pluskW_count	Number of charging stations in Switzerland for which the information of the maximum charging power is known and which has a maximum charging power of more than 100 kW.

Plug types in accordance with OICP 2.2

Option	Description
Small Paddle Inductive	Defined plug type.
Large Paddle Inductive	Defined plug type.
AVCON Connector	Defined plug type.
Tesla Connector	Defined plug type.
NEMA 5-20	Defined plug type.
Type E French Standard	CEE 7/5.
Type F Schuko	CEE 7/4.
Type G British Standard	BS 1363.
Type J Swiss Standard	SEV 1011.
Type 1 Connector (Cable Attached)	Cable attached to IEC 62196-1 type 1, SAE J1772 connector.
Type 2 Outlet	IEC 62196-1 type 2.
Type 2 Connector (Cable Attached)	Cable attached to IEC 62196-1 type 2 connector.
Type 3 Outlet	IEC 62196-1 type 3.
IEC 60309 Single Phase	IEC 60309.
IEC 60309 Three Phase	IEC 60309.
CCS Combo 2 Plug (Cable Attached)	IEC 62196-3 CDV DC Combined Charging Connector DIN SPEC 70121 refers to ISO / IEC 15118-1 DIS, -2 DIS and 15118-3.
CCS Combo 1 Plug (Cable Attached)	IEC 62196-3 CDV DC Combined Charging Connector with IEC 62196-1 type 2 SAE J1772 connector.
CHAdeMO	DC CHAdeMO Connector.
Unspecified	Defined plug type.

Source: https://github.com/hubject/oicp/releases/download/v2.2/OICP-CPO-2.2.pdf