Background

There were 610 716 cars with electric or electric/hybrid drivline and 4 369 827 ice cars in use in Sweden in the end of 2022.¹

Year	Electric cars	Electric/hybrids	Other fuels	Summary
2018	16 664	139 667	4 714 452	4 870 783
2019	30 343	177 561	4 673 440	4 887 904
2020	55 790	252 695	4 635 582	4 944067
2021	110 177	342 236	4 534 337	4 986 750
2022	197 709	413 007	4 369 827	4 980 543

The data in comes from MSB – The Swedish Civil Contingencies Agency, the rescue services in Sweden sends incident reports to MSB after each ruscue operation. The reports vary in scope and content, MSB has therefore carried out its own analysis and categorization of each event. This includes all incident reports after rescue operations during the period January 2018 to December 2022 that involved fires in vehicles. Fires that have been assessed as arson are not included. The incidents include both ascertained damage, suspected damage and incidents to which the emergency services have been alerted. Events when charging are also included.

Due to limitations in the quality and scope of the data and in the way the selection has been made and analysed. The results does not constitute statistics in the sens that it is systematically collected data on all fires that occured during the period with electric or electric/hybrid vehicles. There may be some events that were not found during the free text search, i.e. if the author of the incident report was not aware of that it was an electric or electric/hybrid vehicle. The descriptions of how the battery has affected the course of the acciden are of varying level of detail.

Accidents

Fires in electric vehicles 2018-2022

	Driving	Charging	Unknown	Summary
Heavy vehicles	3	2	4	9
Light vehicles	17	18	46	81

During the same period it has burned correspondingly in 656 ice cars and 100 heavy vehicles, where batterys, charges or powerlines were involved in the course of fire.

During driving 20 vehicles burned and in some cases have the fires been connected to the batteries. In some electrical cars the fire started in the batteries after a frontal collision and very severe collision violence. För 50 cases the reason is unknown, 20 was during charging.

In total, roughly 3400 passenger cars and 700 trucks and buses regardless of fuel burn every year in Sweden, including arson.

¹ https://www.scb.se/hitta-statistik/statistik-efter-amne/transporter-ochkommunikationer/vagtrafik/fordon/# Statistiknyheter (hämtat från SCB 2023-04-14).