

ELECTRIC CARS: 225 chargers analysed, with variable costs for *slow* and *fast*. 1200 euros on average for "smart" wallboxes

the first survey of EV charging equipment. From May onwards, access to the ARERA trial for free increases of the available capacity (effective from 1 July).

Milan, 3 May 2021 - **225 different models of charging devices for electric cars (EVSEs), analysed by ARERA**, delivering from 2 kW to 350 kW, produced by 24 companies.

Devices ranging from **home wallboxes** to **street charging stations**, from *slow* and *quick* charging (86% of the devices) to *fast* and *ultra-fast charging*.

Prices ranging from 700 euros for devices designed for families, up to over 80 thousand for ultra-fast charging for professional charging point operators, with a unit price for each kW installed ranging from 36 to 580 euros, depending on the charging speed (i.e., electrical power involved).

These are only some of the standout elements of this first report about “**Market and features of charging devices for electric vehicles**”, recently published by ARERA, The Regulatory Authority for Energy, Networks and Environment. This is one of the results of the *focus group on electric mobility*, established by ARERA at the beginning of 2020¹, which also actively contributed to the design of the **experimental initiative launched by ARERA - starting from 1 July, with applications open from 3 May** - for the promotion of domestic charging **at night and on holidays** through **free increases of the available capacity**.

What are the technical features of charging devices? Equipped with constantly evolving technologies, useful to both the drivers and the electrical system, as charging equipment represents a crucial pivotal point allowing a fruitful interaction between vehicles and electrical grids. Nevertheless, further investigation would be needed to better assess the sustainability of *standby* power consumption.

Thanks to the wide variety of sizes and types of equipment analysed, this survey **delivers an exhaustive description of the products currently available on the market** and supports in assessing the impact on the operation of electricity markets and networks.

The study investigated the **technical and economic features of the charging systems currently available on the market** for purchase by consumers, companies, public institutions or charging point operators. No limitation was placed on either the power output or the type of electric current supplied to the vehicle (alternating or direct).

The information from the survey was collected by ARERA with the collaboration of RSE (Ricerca Sistema Energetico), by contacting device manufacturers, either directly or through the intermediation services of some of the organizations participating in the *focus groups*.

Participation requests were sent to several dozen **companies, both Italian and international, either with devices already installed in Italy** or with interesting products on offer. Thanks to the complete responses received by **24 companies**², **225 models** could be investigated and analysed. The study highlighted how the range of devices on offer is wide and varied, with Italian industry paying particular attention to this market sector.

All details in the press sheet.

¹In which the organisations, AIGET, ANFIA, ANIE, Elettricità Futura, Energia Libera, Federdistribuzione, Motus-E, UNRAE and Utilitalia are participating.

²A2A, ABB, ALFAZERO, ALPITRONIC, BTICINO, CIRCONTROL, DETAS, EFACEC, ENEL X, ENGIE / FCA, ENSTO, EVBOX, EVMETER, GEWISS, INGTEAM, MENNEKES, ORBISITALIA, S&H, SCAME, SCHNEIDER ELECTRIC, SILLAIES, SILLAIES, ELECTRIC WALLBOX