



## POLICY: CHARGING OF ELECTRICAL CARS

# Policy: charging arrangements for electrical cars in the garage

**Background:** The proportion of electrical cars has increased quite significantly in the recent couple of years. This seems to be a trend that has a steady increase, also in Tenerife and possibly in La Colina.

We have gotten the information from the administrator that we already have a few electrical cars that are charging regularly in our garage.

This fact arises some concerns that need to be dealt with as soon as possible:

**a) The economical aspect:** The actual owners charge their cars on the common garage subscription of La Colina. This seems like an unfair solution in the long run, as the whole community is sponsoring the charging cost for the said owners.

**b) The vulnerability aspect:** We would have a disturbing problem in the future, if we continue to allow the number of such charging installations to increase. Based on experience from other apartment blocks, there is a high risk that this will lead to frequent situations with power outage for the whole complex or major parts of it.

Charging of several el-cars imposes a total different load on the power infrastructure of an apartment complex from what was the case before. We should be prepared that a scenario of power outage will happen, as the increasing amount of charging cars during evenings and nights lead to a power consumption that exceeds the available capacity in our current power infrastructure.

It is difficult to predict exactly where the threshold of breakdown lies in terms of how many el-cars can charge before we are facing overloads and breakdowns. Anyway, it seems very risky to continue to allow more cars to charge without protecting our power infrastructure from such breakdowns.

**Specialised infrastructure solutions** with dynamic and automatic load balancing between charging of el-cars and the general power consumption in apartment blocks have been on the market for quite some years. When delivered by competent partners/vendors, we could have a safe and robust infrastructure protecting both consumer groups from power breakdowns.

**a) It seems fair as the short term solution** that the relevant owners of el- cars should pay an increased amount of Community Fee to cover the increased cost for the charging of their cars. This can be based on a robust estimated cost or they can pay for the installation of their own dedicated power meter. Such solution can only be a preliminary one, as described in section b) below.

**b) As a further evolvement by the current short term setup will not be sustainable,** we should immediately stop allowing new el-car charging to be added. We should start inviting offers for a modern automatic and dynamic load balancing infrastructure that protects our power supply from overloading and breaking down. The cost of establishing such infrastructure should be carried by all owners of electrical cars, the current as well as the future ones.

The administrator should be assigned to initiate a request for proposals from relevant professional solution providers as soon as possible.

**Status:** This policy was decided by the AGM on February 27<sup>th</sup> 2020.