

The reality of charging when electrifying your fleet

by **SIRIUS**

A row of white electric vehicles parked at a charging station. The vehicles are parked in a line, and each has a charging cable plugged into its charging port. The background shows green foliage.

**A power scarcity
solution for fleet
electrification
has arrived.**

**Make your existing
power go further.**

MULTILEVEL DYNAMIC POWER SHARING

Charge your fleet with fewer big investments

Fleet electrification requires power, more power than many sites have! Current facilities are forced to invest in retrofitting the electrical installation or replacing the transformer substation to get the power needed=££££££

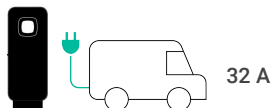
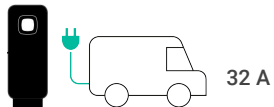
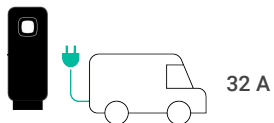
Multilevel Dynamic Power Sharing by Sirius is a smart feature that enables charging your fleet with the available power, balancing and smart queuing all the vehicles in the fleet.



The challenge

Standard Installation

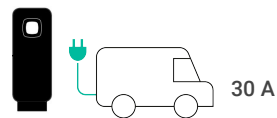
UPGRADE
installation to
128A - retrofit



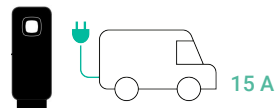
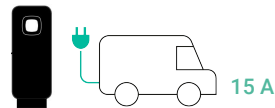
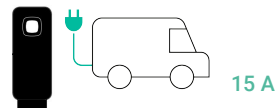
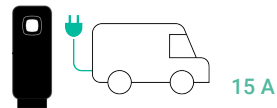
Power Sharing Installation

No retrofit needed!

Available
current: **60A**



Available
current: **60A**



Why Multilevel Dynamic Power Sharing?



Avoid risk of power outages

Multilevel Dynamic Power Sharing by Sirius balances the charging power in real time according to the restrictions and vehicles needing to be charged.



Reduce investment for fleet electrification

Instead of retrofitting your electrical installation, use Multilevel Dynamic Power Sharing by Sirius to get the most out of your existing installation/power.

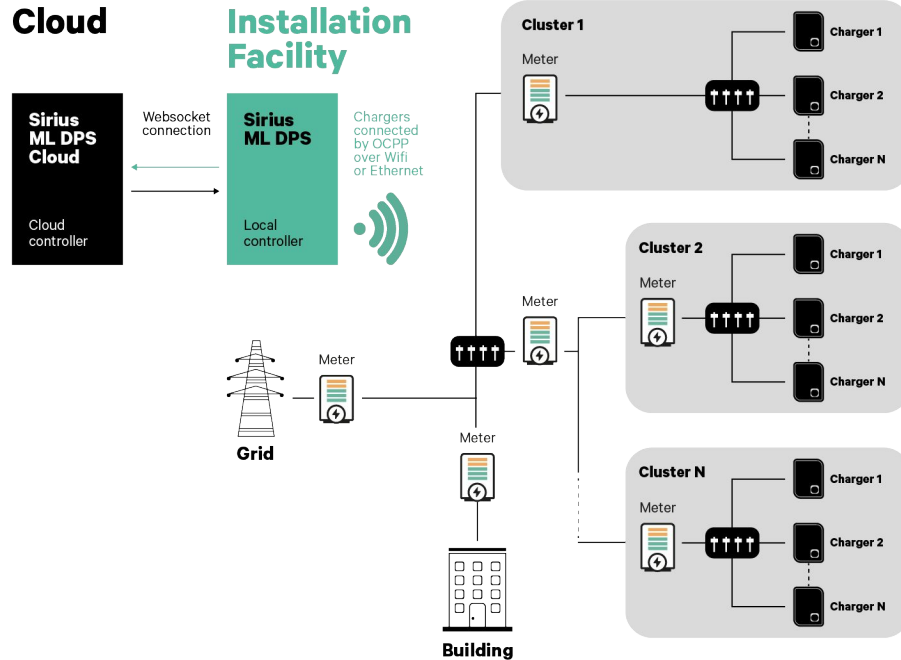


Use all power available, in a smart way

No matter if you have one or multiple groups of chargers. The system monitors in real time all the facility loads and balances the power delivered to chargers according to your rule set or priority of vehicles schedules.



How it works?



Cloud & local secured controller

A hybrid cloud-local gateway is deployed. The user can change restrictions, update the installation setup or prioritise a charging from the cloud, while the chargers are controlled locally using a secure network

Energy meters

The system monitors in real time all relevant loads of the facility, plus all the charger clusters. This way, in real time, it balances the power available.

Charger clusters

You can deploy unlimited number of clusters with as many hierarchy levels as needed. The system is flexible to optimize, in real time, the power to be delivered to each charger and reduce the black out risks.



Main features



**Hardware agnostic
through OCPP 1.6***



**Integration with Solar
PV and Batteries**



**Unidirectional and
bidirectional charging**



**Phase based
optimization**



**Compatible with any
electrical installation**



**Multilevel metering and
restrictions**



Monitoring portal



**Real time load
balancing**



**Unlimited number of
connected chargers**



**Easy to scale, configure
and add new chargers**

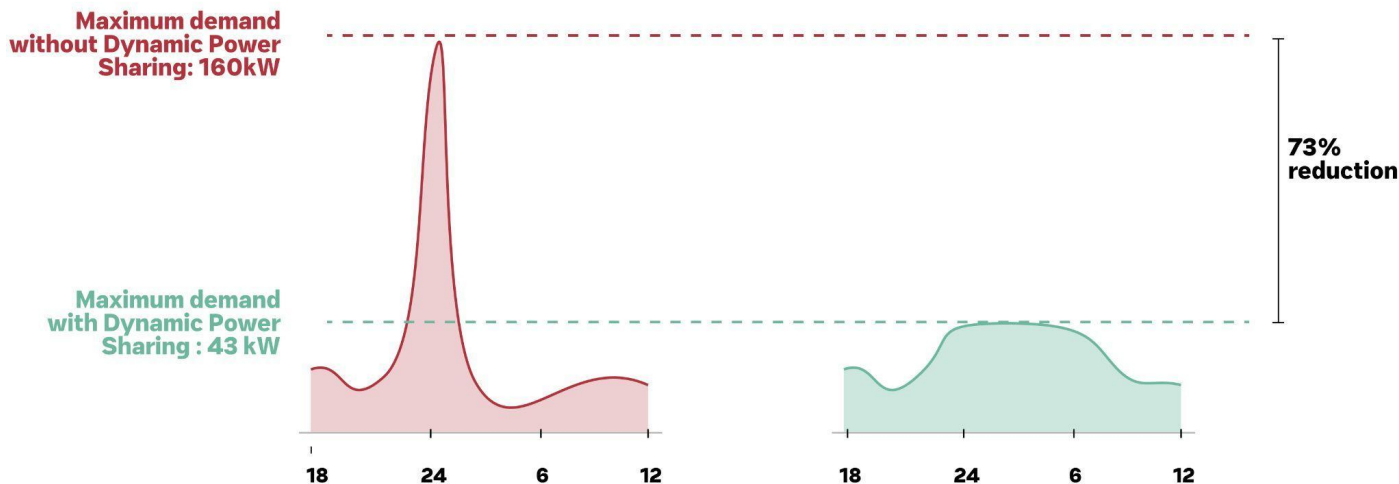


**Different charging
prioritization strategies**

* New chargers must be validated by Wallbox tech team before being officially integrated



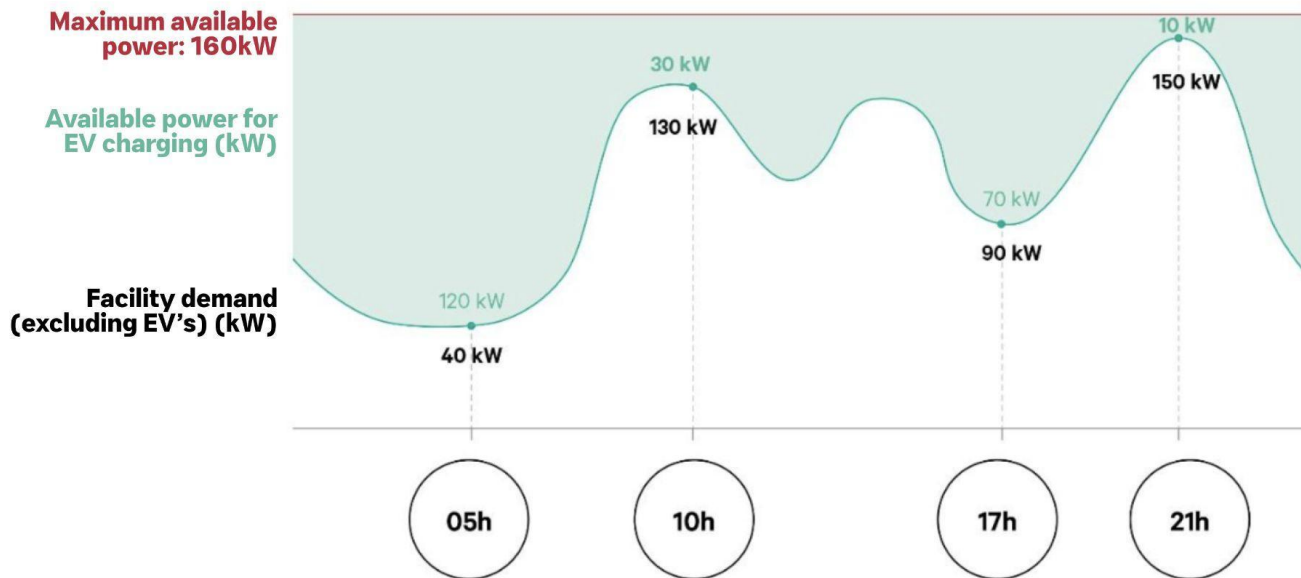
Reducing peak when returning to depot



It is 9 p.m. and all drivers are coming back to the depot and plug-in the Vans to the chargers. **SIRIUS Multilevel Dynamic Power Sharing** will start to charge the vehicles based on a **smart queue, reducing the peak of power needed**, thus saving money and taking care of your electrical installation.



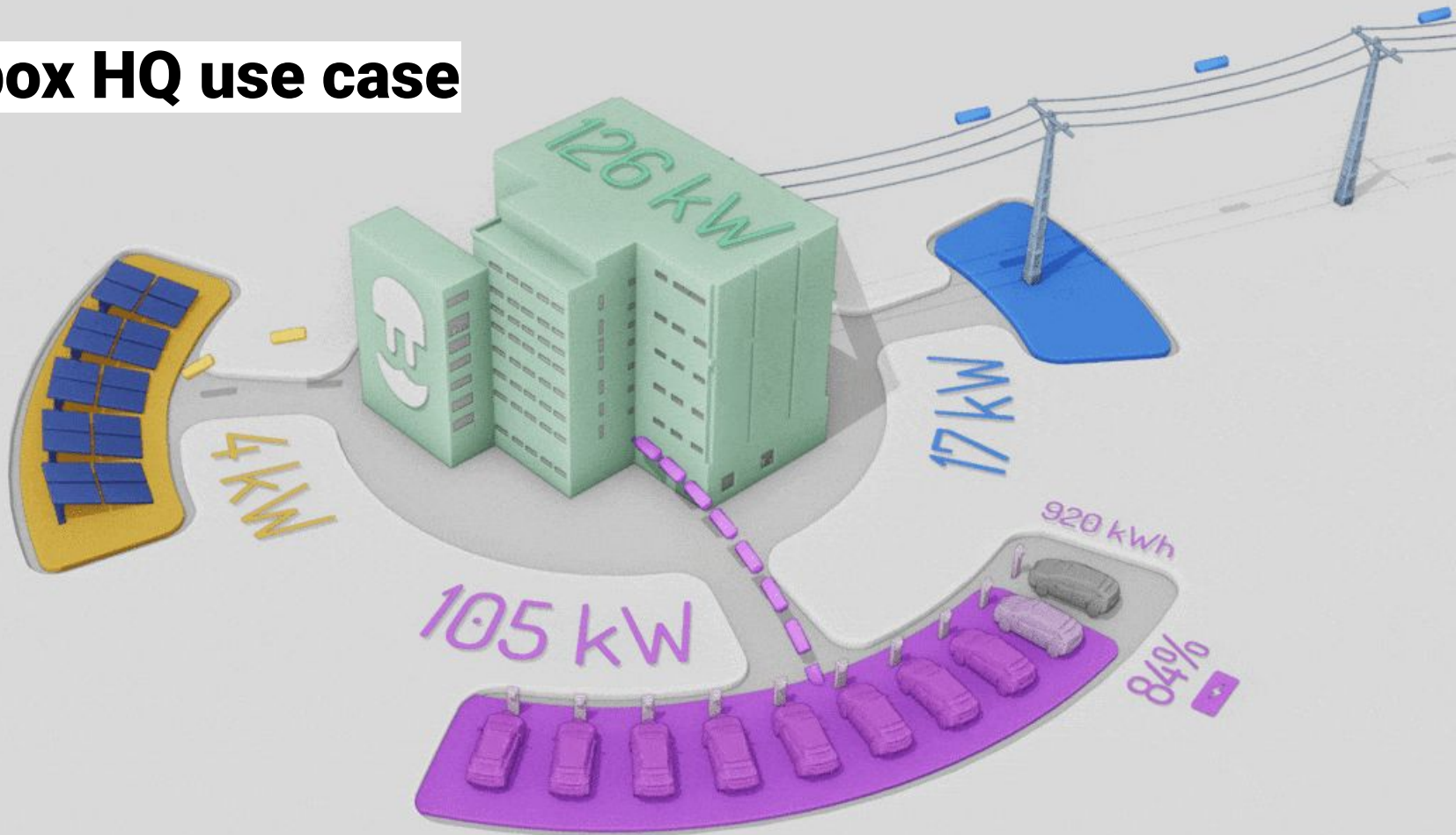
Using every single Watt available



Your site power demand is not constant throughout the day. **SIRIUS Multilevel Dynamic Power Sharing** will always balance and deliver in real time the maximum available power to the EV's, so you can **charge them as fast as possible**.



Wallbox HQ use case





4th Oct 2022

Sunny day

Min: 15°C Max: 25°C

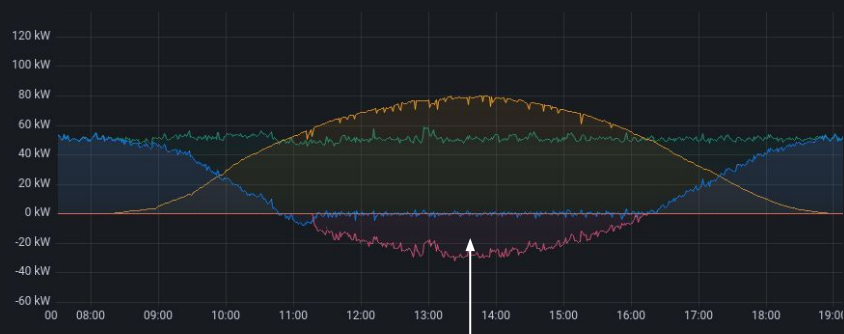
~400 people on site

Grid consumption
almost 0 from 9 to 21h.

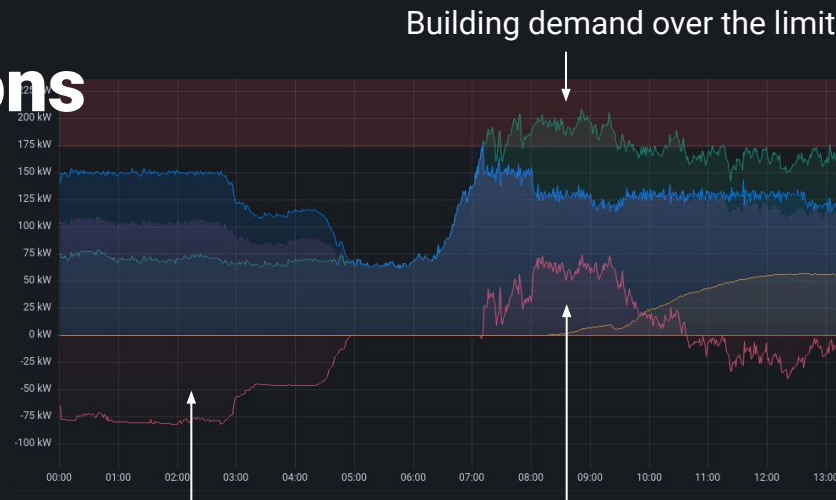
60% difference vs
January.



Sirius automated operations



Charge during excess solar generation

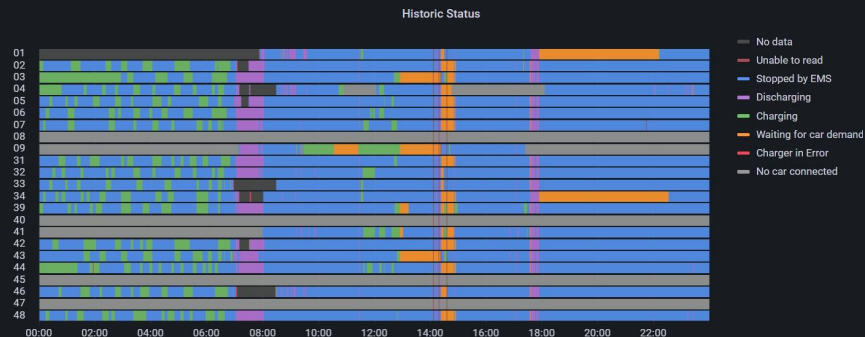


Building demand over the limit

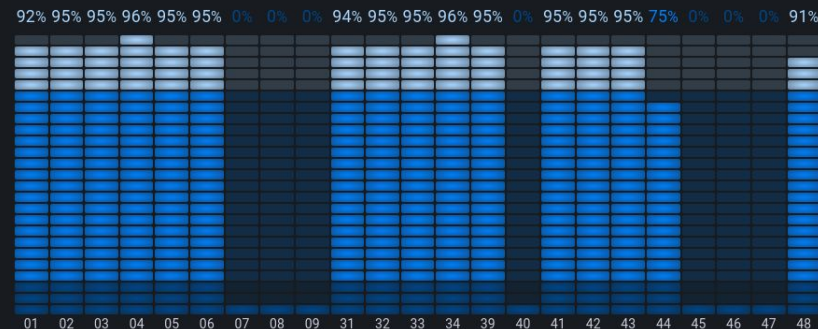
Charge at cheaper times

Discharge at expensive times

Management EV fleet



Monitor EV fleet State of Charge





**Come and see us
at booth 10**

The reality of charging when
electrifying your fleet





Any questions?

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EV charging you can rely on

