



# **Silence/Acciona Battery Swapping Stations**

Final Event  
Barcelona Pilot

Pepe Martí (Silence) – 07/11/2024

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# Silence – Introduction



- Founded in 2012 in a garage near Barcelona; 100% electric vehicles since the beginning.
- Developed 2W in the B2B segment, launching its first scooter for the B2C segment in 2019.
- More than 50k vehicles manufactured; leader in Europe within the L3e category.
- Acquired by Acciona in 2021, with financial power to boost 2 projects:
  - The development of a 4W, to complement an ecosystem of 2W products, all of them with the same battery
  - **The development of a Battery Station, enabling the launch of a Battery as a Service offering to unlock mass-market usage**

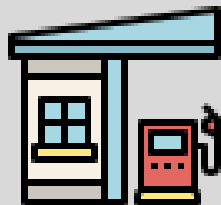


# Battery as a Service - Introduction



**Purchase  
Electric Scooter**

Retail Price: ~ 4.000€



**Consumption\***

Cost: 6,30€/100 km



**Purchase  
Silence S01 + BP 5,6 kWh**

Retail Price: ~ 6.500€



**Recharge at home\*\***

Cost: ~ 1€/100 km



**Purchase with BaaS  
Silence S01**

Retail Price: ~ 4.000€



**Lease of BP 5,6 kWh**

Deposit: 250€



**Access to Battery  
Swapping Stations**



**Recharge at Home  
(optional)**

## Modelo Suscripción BaaS

Fixed fee: 20€/month (3 cycles incl.)  
Variable fee: 5€/cycle extra

≈

Approx. cost:  
6€/100km

# Battery as a Service - Benefits



This new purchasing model generates 3 main advantages for the user:



## SAVINGS

Reduces up to 40%  
the purchasing price  
of the vehicle



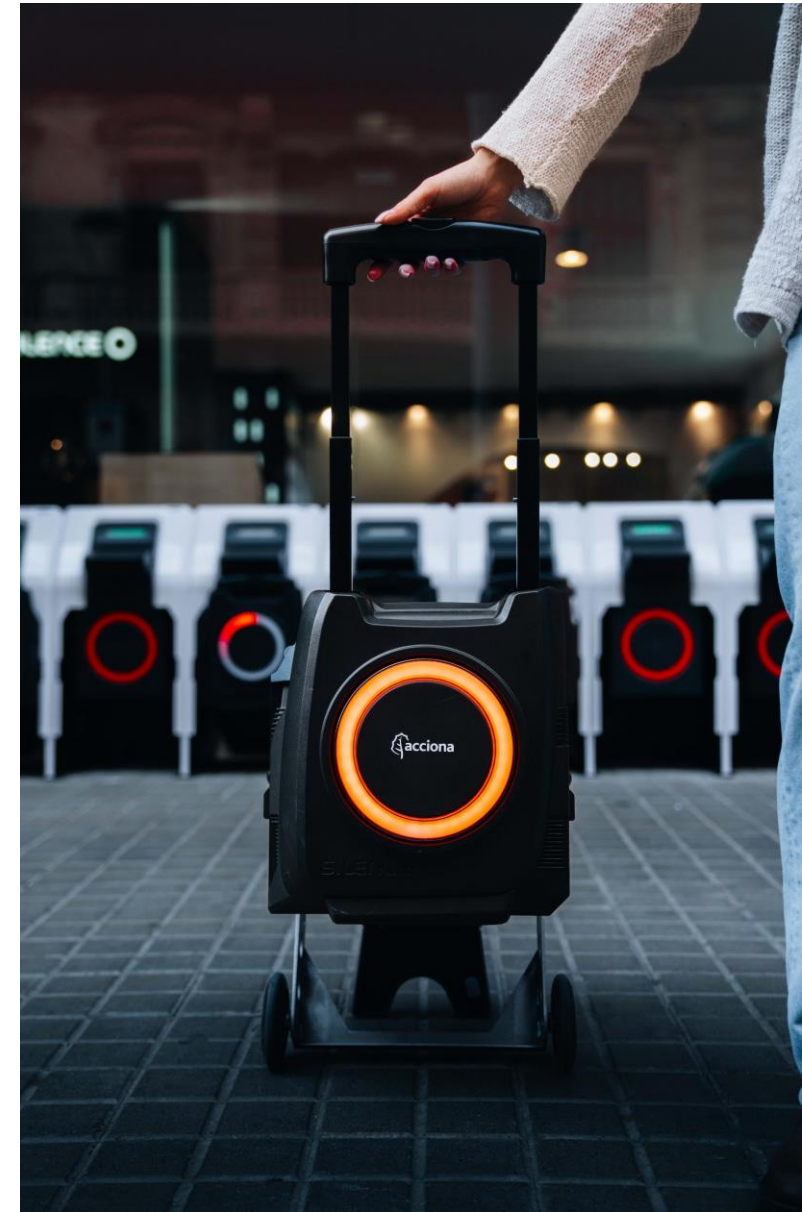
## PEACE OF MIND

Transfer of the obsolescence  
risk from user to  
manufacturer/operator;  
including maintenance costs.



## FAST RECHARGE

Allows to get a full  
recharge in less than 30  
seconds; available 24/7.





# Swapping Process – How it works



1 Select a station and book a battery



2 Extract the battery from the vehicle and introduce it into the empty dock of the station



If the LED of the dock turns green, the battery will have been recognized correctly



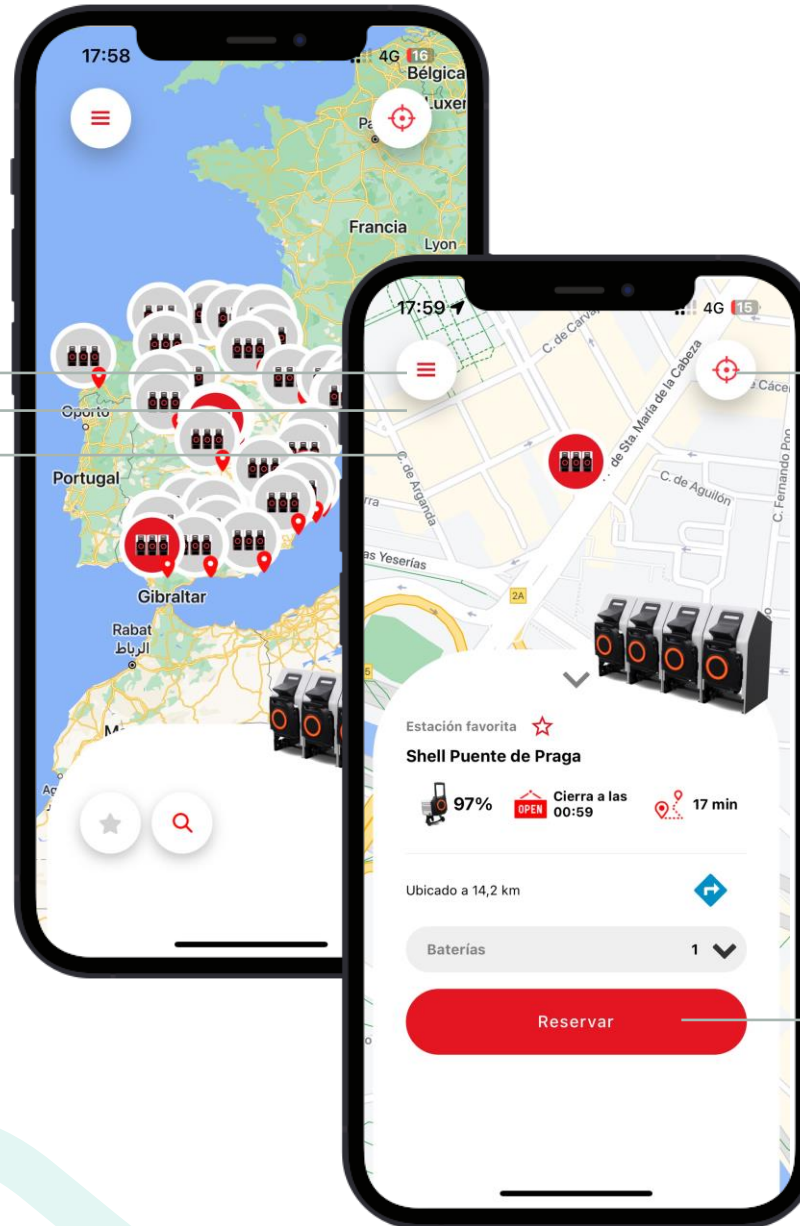
4 Look for another dock with the LED in green, and extract the battery to introduce it back to the vehicle



# Battery Station APP



- Manage your subscription
- Check the last swaps and consumption
- Download invoices



- Find a Battery Station or select one as favorite
- Swap your battery in seconds
- Book a battery for 20 min



# Battery Station in a gas station

Example of an operating BS in a gas station in Spain





# Battery Station in an underground parking

Example of an operating BS in an underground parking in Spain



# Battery Station – 6 unit module



## HOW DOES IT LOOK LIKE IN PLACE



## BUSINESS MODEL

Silence remunerates partner through the following scheme.

1. **Fixed remuneration:**  
Monthly/quarterly/yearly fixed fee.
2. **Possible variable remunerations:**
  - Location extra:  
Available 24/7  
Premium location in big city
  - Electric consumption:  
Silence pays back electricity consumed by the Battery Station.

\*Fixed remuneration is updated yearly according to CPI but limited to a maximum of 3% increase per year

## CONTRACT DURATION:

**5 years** contract.

Additional year automatic renovations if none of the parts notifies otherwise with 2 months' notice period.

\*If the partner unilaterally decides to cancel the contract before the agreed 5 year period, Silence is entitled to a penalty to cover installation costs not yet amortized.

## CONTRACT FORMAT

In order to structure the partnership, we sign by country two types of contracts:

- **Frame contract:**  
This contract summarizes all standard conditions applicable to all sites in the country where we have chosen to place a Battery Station
- **Specific site contract**  
This contract details only the particular conditions that location has. In case of contradiction the specific site contract prevails.

## INSURANCE & RESPONSIBILITY

Silence will subscribe an RC insurance that will be limited to a compensation of up to 500,000€ per accident & year.

## PARTNER OBLIGATIONS & RESPONSIBILITY:

Keep the Battery Station easily accessible for Silence users



SILENCE ○

silence.eco





## ¿What is the current status?

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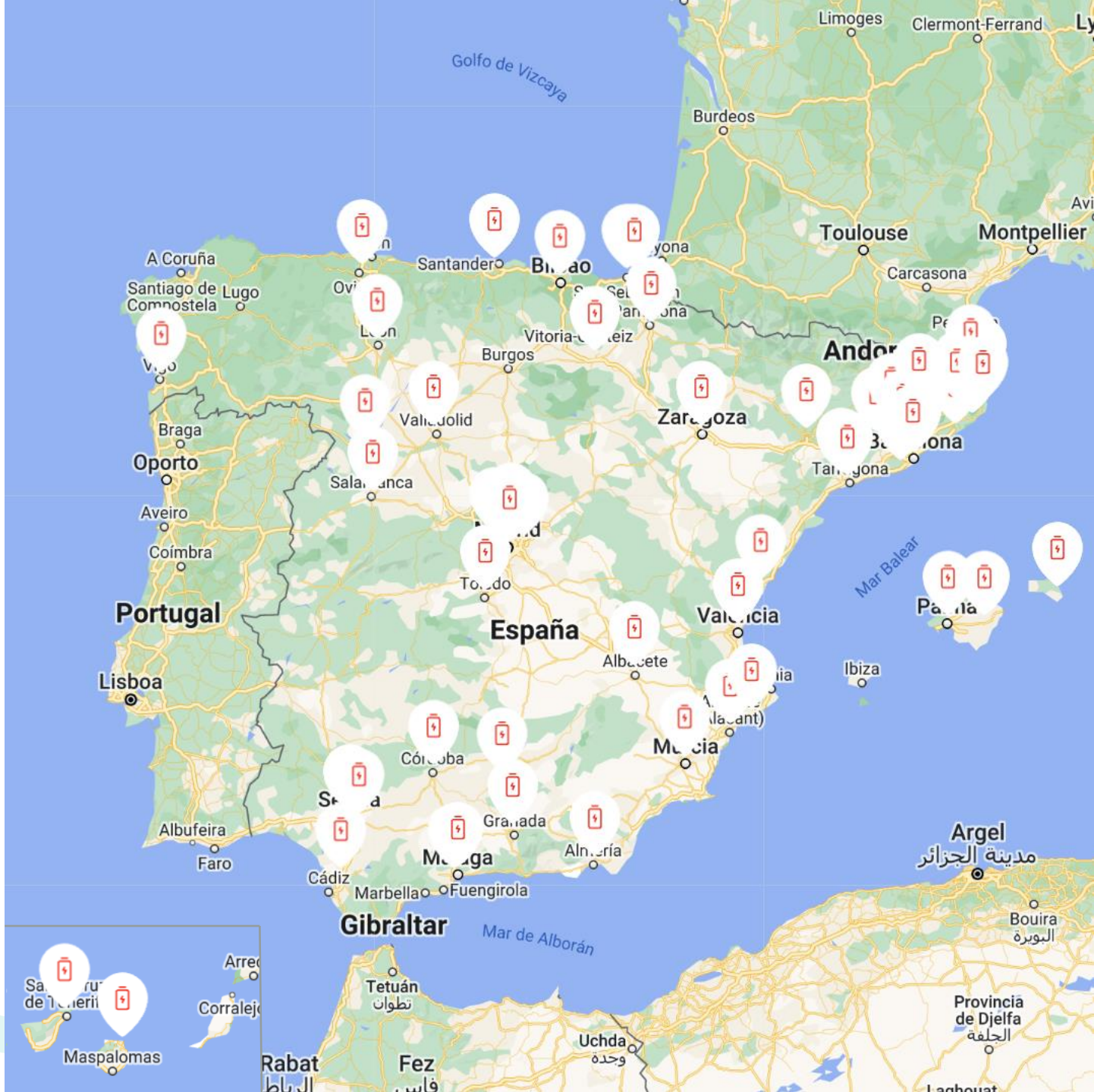
## Stations deployed\*

**\*+35 more already signed**

## Swaps/month

# Batteries under subscription

**cities**



# Challenges & lessons learned



- ✓ Standardization of Battery Station installations:
  - ✓ Electric installations, dimensioning for 9-12 dock installations
  - ✓ Floor surface; avoiding slopes and steps
  - ✓ Fire safety measures; defined with minimum distance requirements to fixed combustible elements
- ✓ Access to underground parkings:
  - ✓ 2W; solved through 10 min for free
  - ✓ 4W; working on it
- ✓ Business Model regarding rental of spaces:
  - ✓ Defined a fixed rent vs variable rent, since they cannot incentivize demand
  - ✓ Managed both national & regional partners, as well as SMEs for specific centric locations in certain cities



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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 875131 (Innovation Action)



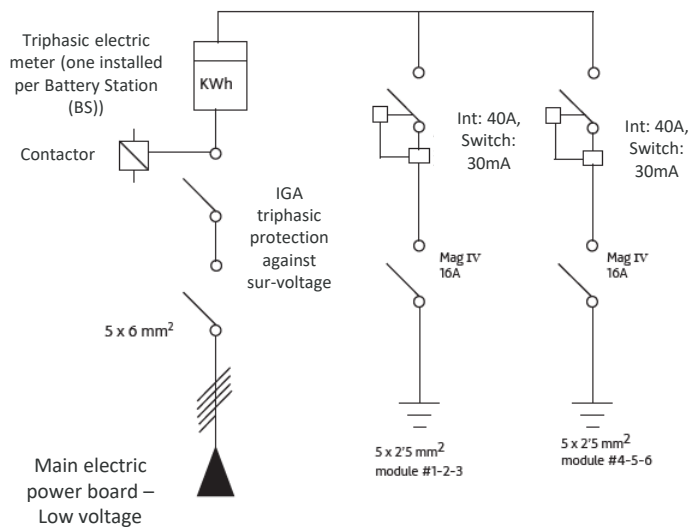
## Battery Station – 6 unit module



## HOW DOES IT LOOK LIKE IN PLACE



## ELECTRIC SCHEME



## ELEMENTS

6 charging modules  
(223x55x75cm)



\*With integrated SIM connection

5-batteries



BaaS Display with Slogan  
(300x100x5cm)



BaaS Protective cover  
(285x74x144cm)



**NOT FOR SALE, LEASE ONLY by SILENCE to Partner.**

## PURPOSE

Station within the Battery Stations network and tool to help the Partner attract new customers to their gas station, who can buy in store or use other station utilities.

## DAY TO DAY OPERATIONS

Contract to be signed with Silence.  
Electric consumption will be paid by Silence once per semester.  
Maintenance will be carried out by Silence.

### KEY CRITERIA:

Electric power needed 9 kW.  
Project & installation costs covered by Silence  
Ideally station would be accessible 24h / 7 days per week

## INSTALLATION PROCEDURE

1. Correct location analysis: easily accessible, good phone connectivity, enough free electric power, flat surface, protected from rain.
2. Signature of collaboration contract
3. Engineering project for site installation
4. Project execution (electric works, civil works & legalisation)
5. Station set in operation by Silence Team

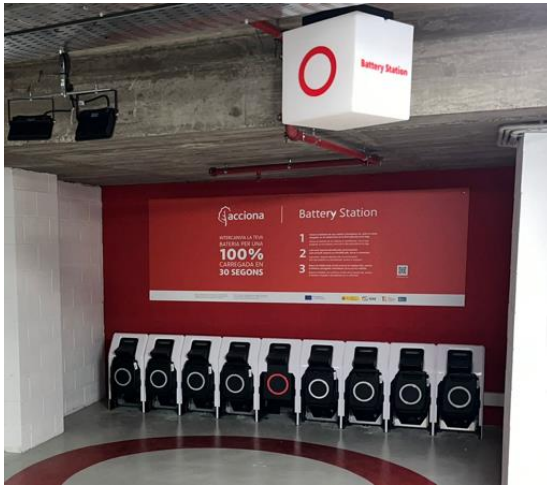
**NOTES:**

The station will be active in the Battery Station App.

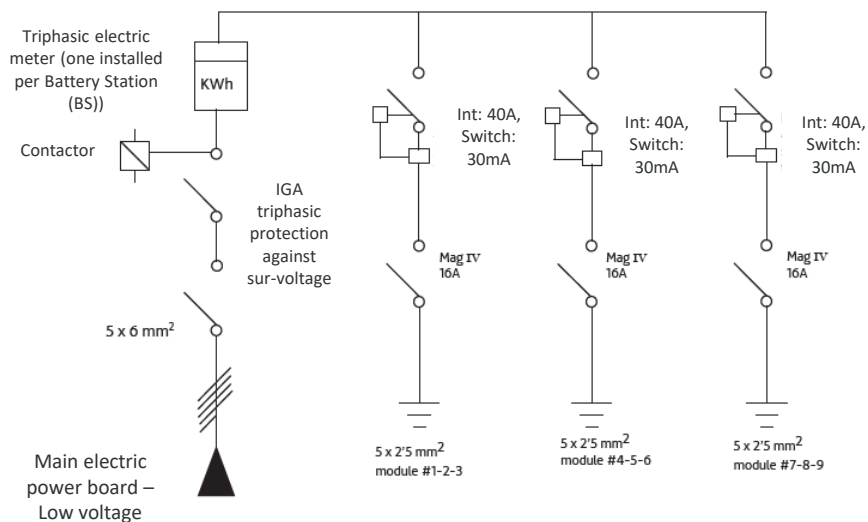
# Battery Station – 9 unit module



## HOW DOES IT LOOK LIKE IN PLACE



## ELECTRIC SCHEME



## ELEMENTS

9 charging modules  
(335x55x75cm)



\*With integrated SIM connection

8-batteries



BaaS Display with Slogan  
(300x100x5cm)



## PURPOSE

Station within the Battery Stations network, serves to monetize “dead spaces” and as a tool to help the Partner attract new customers to their parking, who can buy in vending machine see publicity banners or use other parking utilities.

## DAY TO DAY OPERATIONS

Contract to be signed with Silence.

Electric consumption will be paid by Silence once per semester. Maintenance will be carried out by Silence.

## KEY CRITERIA:

Electric power needed 14,4 kW.

Project & installation costs covered by Silence

Ideally site would be accessible 24h / 7 days per week

## INSTALLATION PROCEDURE

1. Correct location analysis: easily accessible, good phone connectivity, enough free electric power, flat surface.
2. Signature of collaboration contract
3. Engineering project for site installation
4. Project execution (electric works, civil works)
5. Station set in operation by Silence Team

## NOTES:

The station will be active in the Battery Station App.

**NOT FOR SALE, LEASE ONLY by SILENCE to Partner.**