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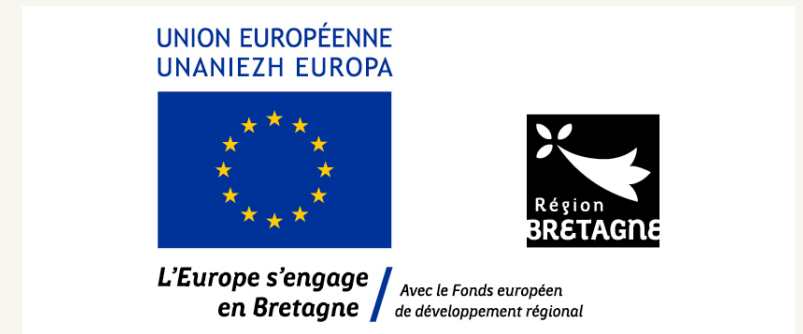
European Week of  
Regions and Cities

Thriving Regions, Stronger Europe



## Europe : a key driver for the energy transition in the Morbihan

**Danielle Havard**  
Deputy Chief Executive  
Morbihan Energies, France



#EURegionsWeek



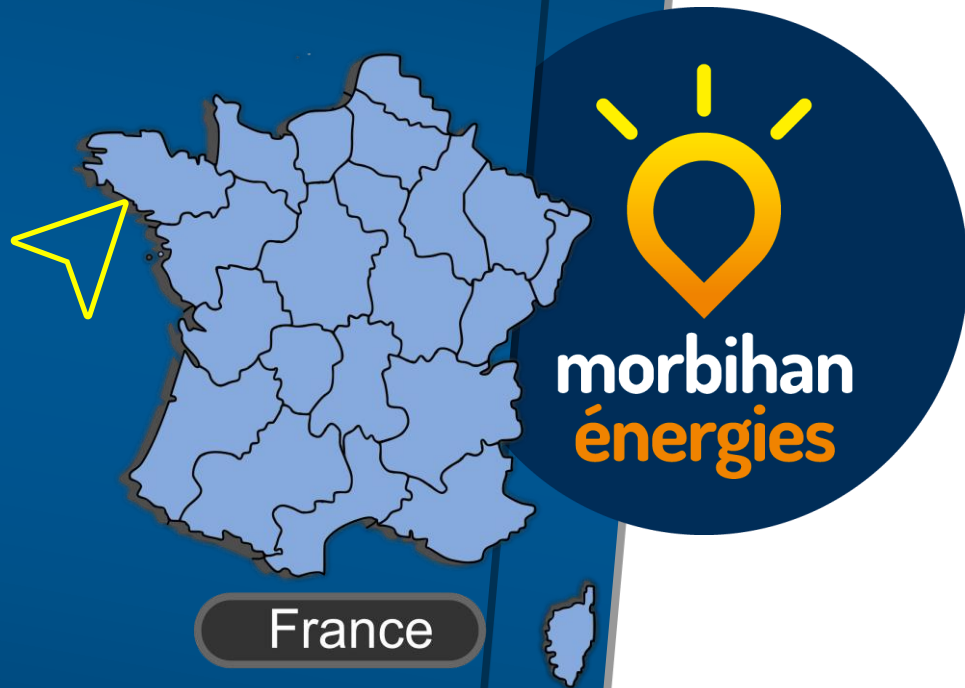
## Morbihan Energies : Who are we?



- Morbihan énergies, departmental union, since 1965, brings together all the municipalities of Morbihan + 10 EPCI
- A "mixed" department, a fairly dense coastal area and a rural area- + 764,000 inhabitants-6,823 km<sup>2</sup>
- Owner of low and medium voltage electricity networks, Organizing Authority for electricity distribution
- Owners of 70+ PV plants – 33 projects under study
- A public network of electrical terminals (477 charging points)
- An experimental site (small hydrogen station, smart grid, solar energy production)



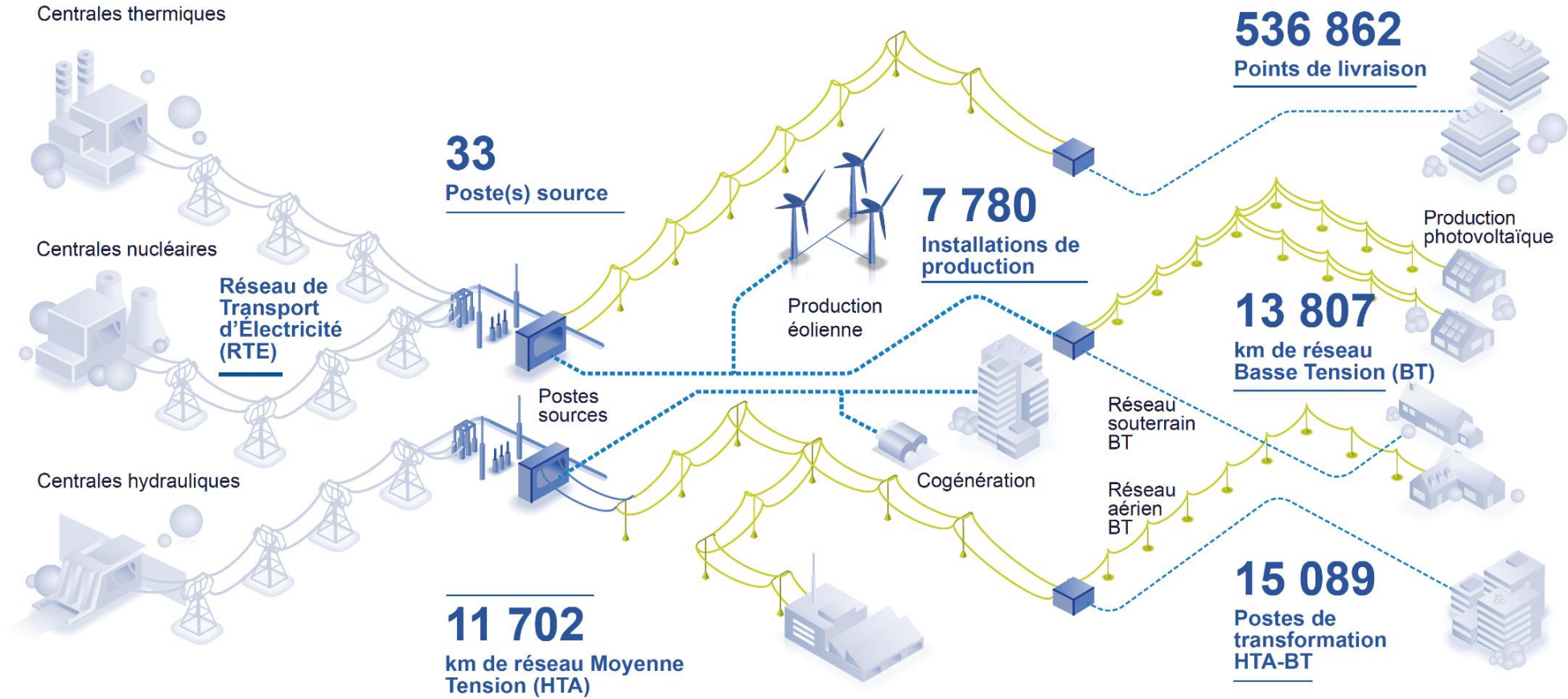
## Morbihan Energies : Where are we?



# Our public electricity distribution network

## Le réseau public de distribution d'électricité

# Electricity



# Morbihan Energies: Our main areas of activity



Électricité



Éclairage public



Achats groupés



Production énergies renouvelables



Rénovation des bâtiments



Système d'information géographique



Sécurité protection des données



Ouverture des données publiques



Data center



Vidéoprotection



Certificats d'économie d'énergie



Éducation à la transition énergétique



Réseaux numériques



Conseils



Smartcity



Mobilité électrique



Mobilité gaz



Mobilité hydrogène



Autopartage



- EU support allows us to innovate, experiment and boost new practices  
Some illustrations of co-financed projects
- Strong help and support from Brittany Region, which is studying these projects alongside us
- Complex files to mount
- Open to working with new European partners







**Winner for the financing of a platform to offer a car-sharing service.**

**Carbon-free mobility (electric vehicle) Response to the problems of the last kilometres:**

**to get to work to get to the doctor Between public transport & places of residence**



**Clem'**



# Local energy loops with the support of Brittany Region



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L'Europe s'engage  
en Bretagne / Avec le Fonds européen  
de développement régional

L'autoconsommation collective, un levier  
pour les collectivités



## Local energy loops

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### Experimentation on 14 sites

- Balance of the project over 20 years  
Control of the energy bill, fixed price over 20 years  
**An inexhaustible source of energy**  
A work of pedagogy and animation with the consumers and partners

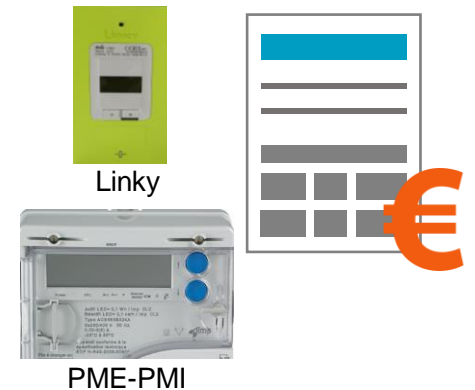
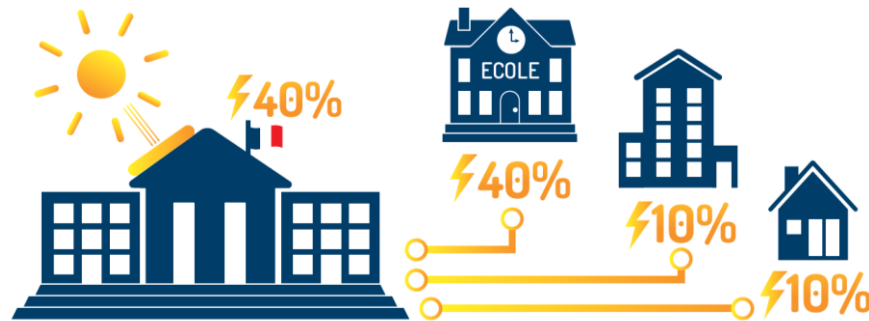
### Replication and innovation at 12 additional sites

- EU support to continue to innovate and boost local energy loop initiatives  
Balance of the project over a maximum of 20 years
- Modify the way of consuming energy (period ..), raise awareness among consumers, recall eco-gestures, create emulation

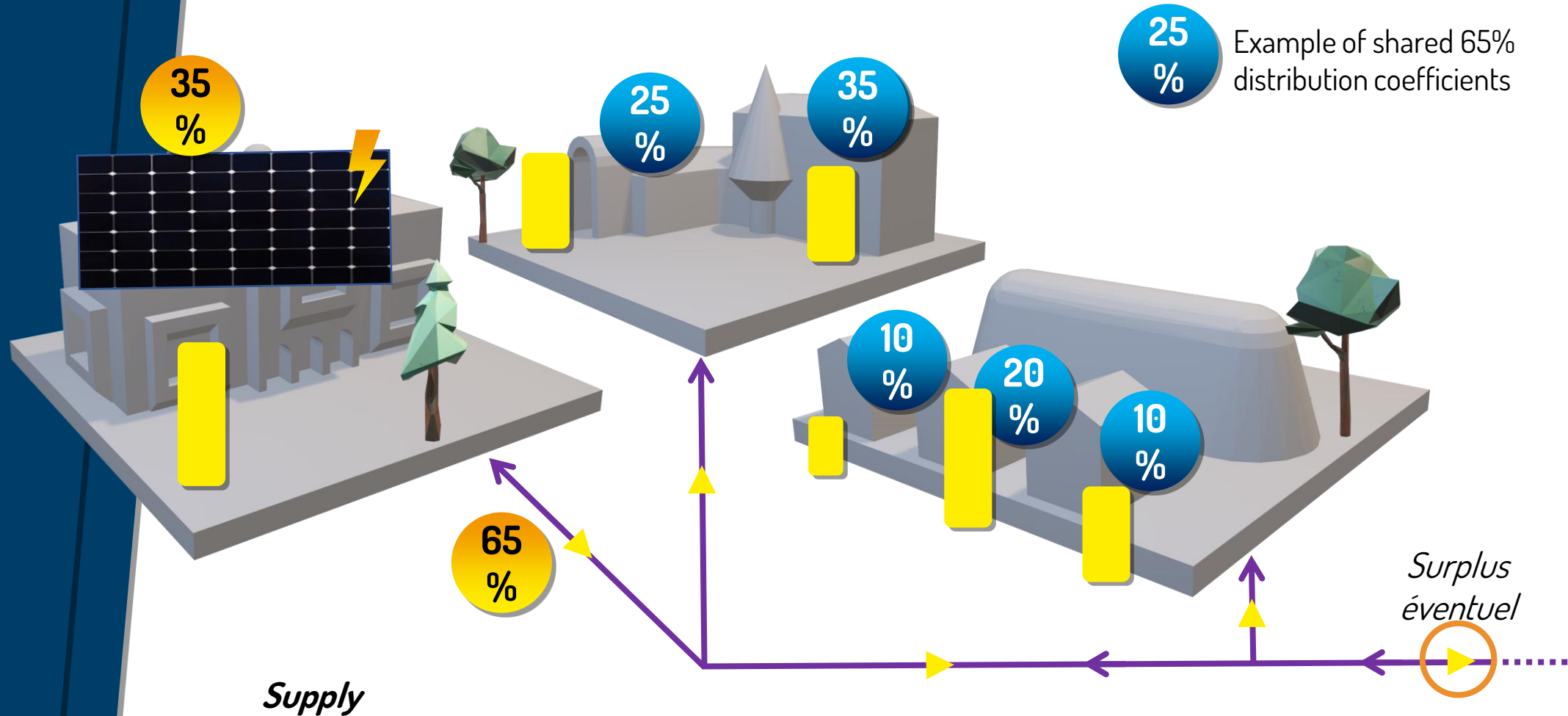
## Local energy loops

### What is collective local consumption?

- Share locally produced electricity using the existing public distribution network.  
All participants (producer and consumers) are connected to the low-voltage (<250 kVA) or medium-voltage network.  
The distance between each participant shall not exceed two kilometres.  
Producer and consumers are brought together within a legal structure: organizing legal entity (PMO).  
Consumers retain their usual electricity supplier.  
Producers and consumers must be equipped with a communicating meter.



# Collective local consumption: Sharing electricity in short circuits



*Supply*

**Complement**

Local = self-consumed share

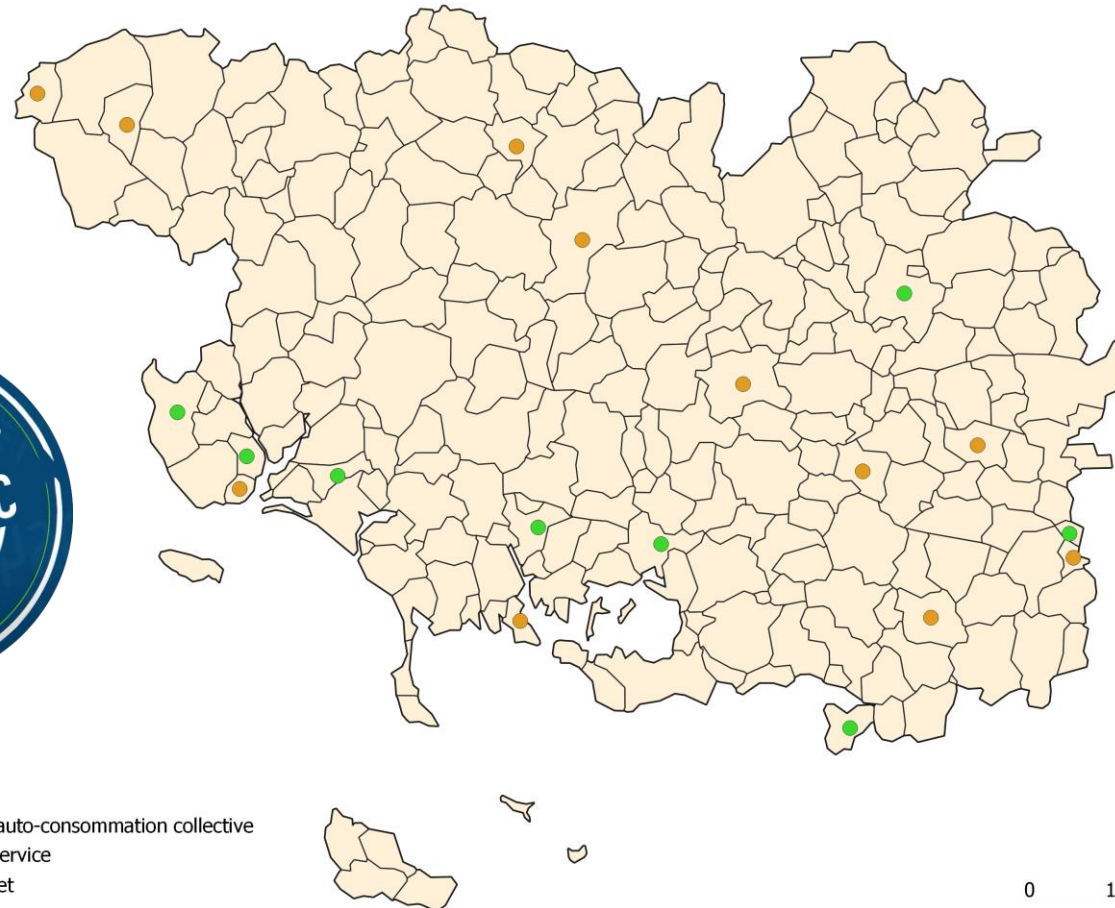


# 14 local energy loops in Morbihan



Sites en auto-consommation collective

- En service
- Projet



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# Flexibility: experimentation The V2G vehicle, a new approach meaning to mobility

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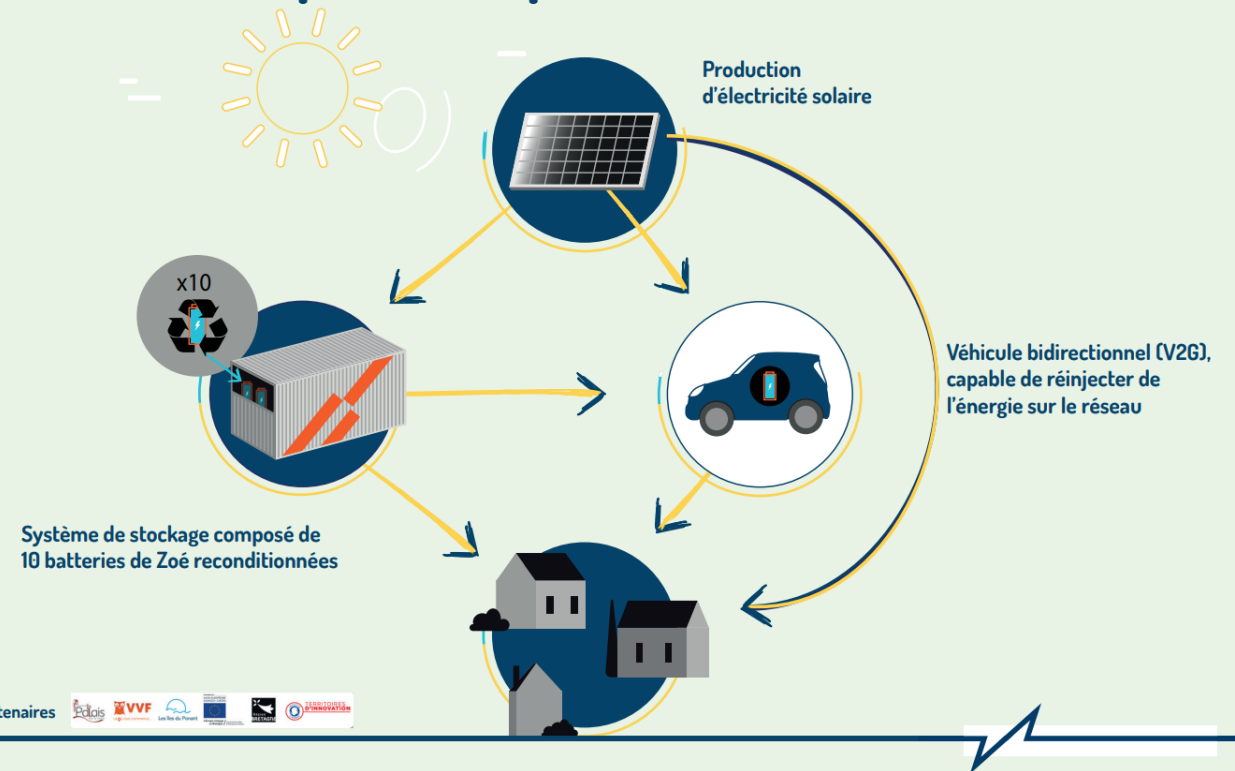
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## A Belle-Île, sur le site du VVF, on optimise la production d'électricité locale

Microgrid c'est :

- > Un système de pilotage intelligent
- > 100 % d'autoconsommation
- > Un impact minimisé sur le réseau électrique
- > Des véhicules qui ont une valeur énergétique



Projet porté par



**MOBILIZE**  
BEYOND AUTOMOTIVE

Avec le soutien financier de l'Europe



Partenaires



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# Training and employment, a challenge for the energy transition

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en Bretagne /





# INTERREG NESSIE – New Skills & Spaces Impulse for the Education of aspirant installers energy-transition

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- Partnership between islands and coastal regions from the Netherlands, Germany, Belgium, Denmark and France and vocational schools
- Common challenge: overcoming the lack of engineers and technicians in the energy transition professions
- Objective: to offer accelerated and practical training, internships or work-study programs on the technologies of tomorrow  
Give training organizations access to these new technologies  
Establish international cooperation around these cross-cutting issues
- Work to promote these professions and recruit

**Accelerating skills  
for the energy  
transition**



**Thank you for listening**

[www.morbihan-energies.fr](http://www.morbihan-energies.fr)

