



MOTAENGI
Renewing

SMART ENERGY

RENEWABLE ENERGY COMMUNITIES - REC

VERSION 01



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* In this paper we refer to Energy Communities (RECs) to describe the various energy aggregation solutions: Collective self-consumption - CSC, the Energy Citizens' Communities and the Renewable Energy Communities.



1. MOTA-ENGIL RENEWING

Speed up the energy transition and decarbonization of large cities, companies and industry is Mota-Engil Renewing's strategic view.

The Group's cleantech was incorporated in 2019 and integrated in the sub-holding Mota-Engil Capital.





Smart Energy

Production, storage and smart management of energy

- **Renewable energy production and exploration solutions for individual self-consumption**
- **Development and operation of Renewable Energy Communities (RECs)**



Smart Charging

Development and exploration of electric charging solutions

- **Corporate electric charging solutions**
- **Private and public electric charging hubs**



2. HOW A REC WORKS

HOW A REC WORKS

THE CONCEPT

It is a new model of energy management and optimisation, consisting of a set of members, which can be citizens, businesses, industries, public entities and local actors, who group together to produce, store, consume locally renewable energy, sharing and trading among themselves and or with third parties outside the Community.

In addition, RECs can also provide grid services, for example flexibility, either directly or through aggregation.

RECs are key in accelerating the energy transition by providing green, decentralized, more competitively priced energy available to all!



DIFFERENCES BETWEEN THE TRADITIONAL MODEL AND REC

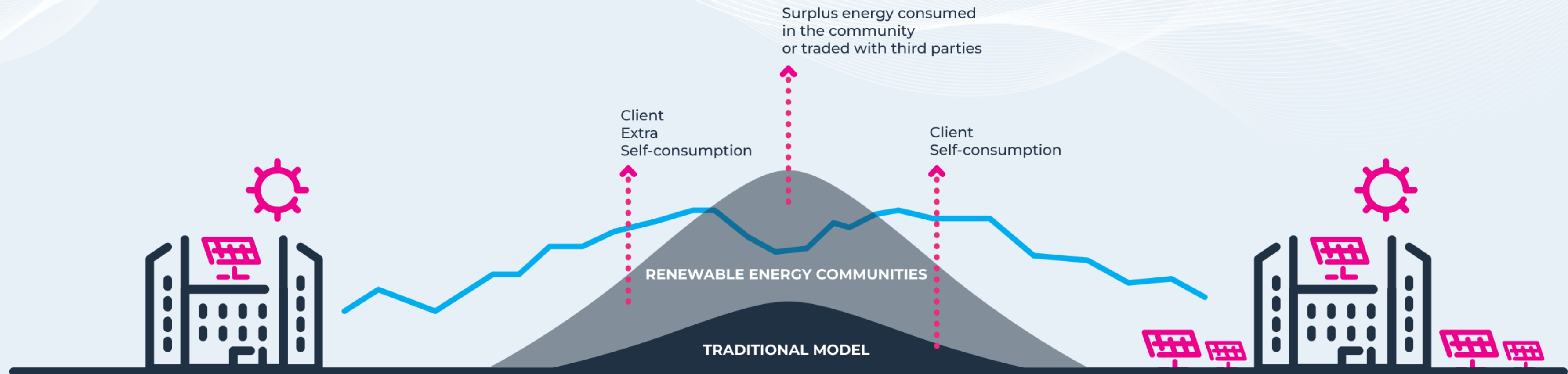
TRADITIONAL MODEL

(SELF-CONSUMPTION AND TURNKEY)

- Client investment
- Pays for the surplus energy not consumed
- Photovoltaic capacity optimized for self-consumption
- Smaller photovoltaic systems
- Self-consumption limited to own building
- Excess production undervalued and therefore avoided
- Less impact on CO2 reduction

RENEWABLE ENERGY COMMUNITIES

- No initial investment by the client
- Only pay for the consumed energy
- Maximization of production and use of rooftops and land
- Larger photovoltaic systems
- Maximization of energy savings
- Surplus energy consumed in the community or traded with third parties
- Increased decarbonization of property assets



HOW A REC WORKS



Consumers

Shared energy usage



Smart Platform



Consumers

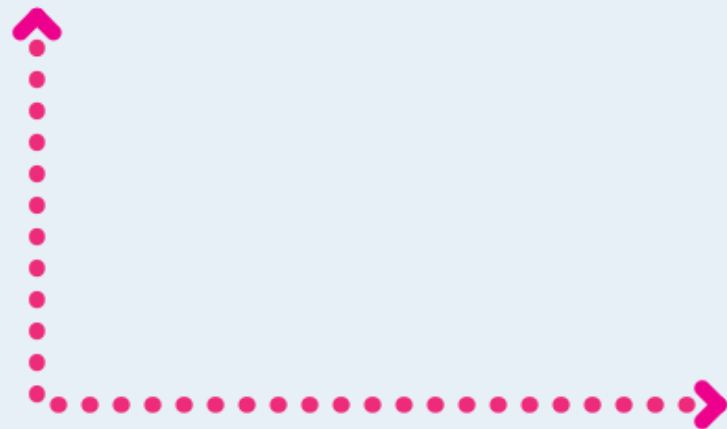
Shared energy usage



Producer

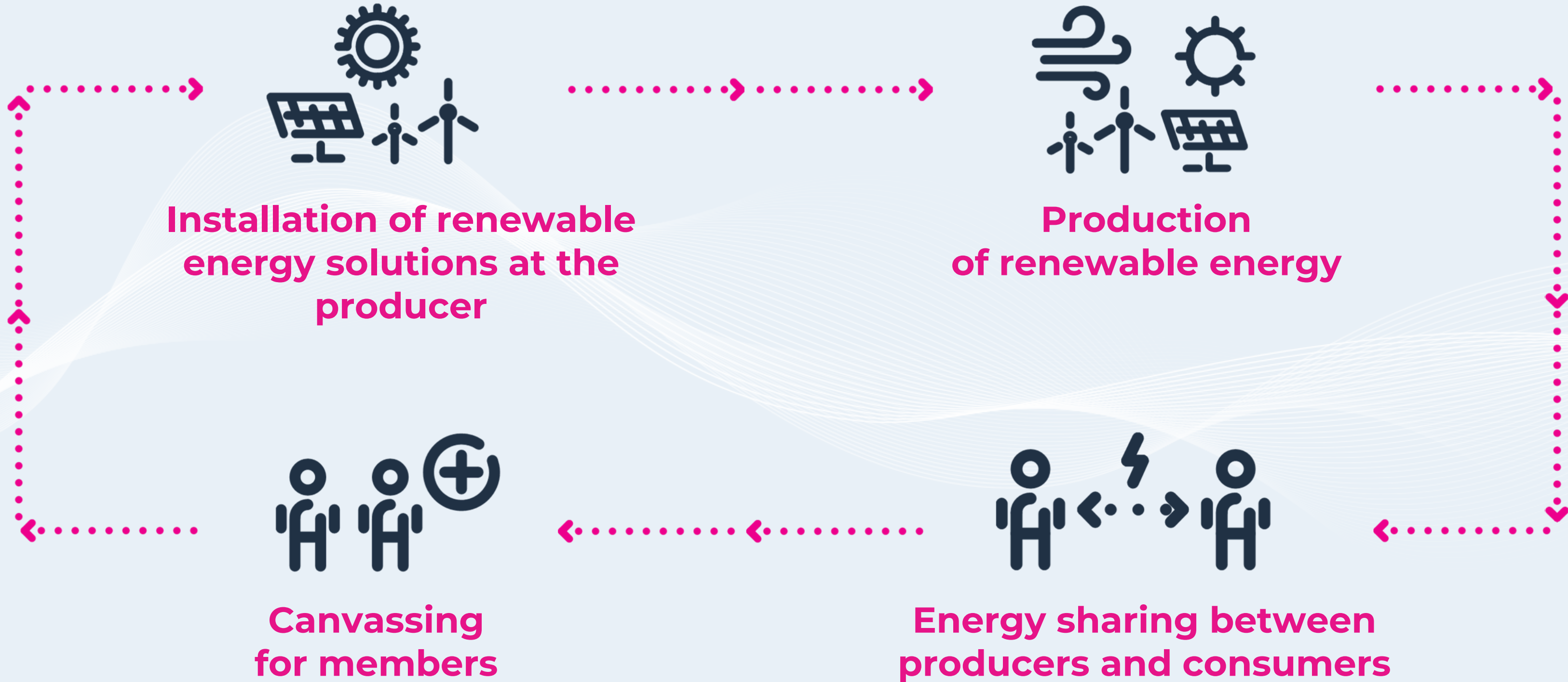
Producer-consumer

Self-consumption and commercialization
of shared energy



ONLY PAYS CONSUMED ENERGY
MONETIZES NON-CONSUMED ENERGY

HOW A REC WORKS





3. OUR COMMUNITY MODELS (REC)

TYPES OF MODELS AND SERVICES INCLUDED



REC

FULL OPERATING MODEL

Clients do not have initial renewable energy production and storage infrastructure.

SERVICES INCLUDED

- ✓ 100% Investment, engineering, design, installation of initial infrastructure
- ✓ 100% Investment in infrastructure expansion (power increase)
- ✓ Operation and maintenance of assets
- ✓ Support in the creation and development of the RECs, including the relationship with the regulatory bodies
- ✓ Operation of the RECs (EGAC) - Management of the operation, maintenance and financial process
- ✓ Digital platform

TYPES OF MODELS AND SERVICES INCLUDED



REC

EXPLORATION MODEL WITH OR WITHOUT EXPANSION

Clients already have initial renewable energy production and/or storage infrastructure in place.

SERVICES INCLUDED

- ✓ 100% Investment or co-financing in infrastructure expansion (power increase)
- ✓ Operation and maintenance of assets
- ✓ Support in the creation and development of REC, including the relationship with the regulatory bodies
- ✓ Operation of RECs (EGAC) - Management of the operation, maintenance and financial process
- ✓ Digital platform



4. ADVANTAGES OF JOINING A REC

ADVANTAGES FOR PRODUCER AND CONSUMER



PRODUCER

0%
Initial investment

Turnkey
**Installation of
panels**

Pay only
consumed energy

Reduction
of CO₂ emissions

Increased
energy
efficiency

Savings
for the entire
community



CONSUMER

Greater savings
on the electricity
bill

Just join
a REC

Consumption
of 100% renewable
energy

Reducing
the carbon
footprint

Fixed price
for contract

Positioning
of sustainability

ADVANTAGES OF JOINING A REC
GLOBAL ADVANTAGES

0%

investment

-(20 a 30)%

In electricity bill

-CO₂

Consumption of renewable energy with significant reduction of emissions, being able to aspire to achieve carbon neutrality

100%

Clean energy





5. REC MANAGEMENT PLATFORM

WHAT ENABLES US TO DO

Mota-Engil Renewing's digital platform allows managing, among others, the following aspects:



**Producers
and consumers
registration**



**Energy production
and consumption
management**



**Requests
for joining
the community**



**Communication
between
community
members**



**Accompanying
the community
creation process**



**Invoicing and
financial flow
control**



**Different
interfaces and
functionalities for
producers and
consumers**



**Monitoring and
sharing of
community
benefits**



6. REFERENCE PROJECTS

REFERENCE PROJECT

TÂMEGA PARK INDUSTRIAL COMPLEX

INDUSTRIAL ENERGY COMMUNITY

Creation, development and operation of a REC in the context of an industrial and business park, integrating solutions for photovoltaic production, storage, charging of electric vehicles, intelligent energy management, such as "grid to vehicle".

PROMOTION MODEL



0% CLIENT INVESTMENT

ANNUAL ESTIMATED SAVINGS

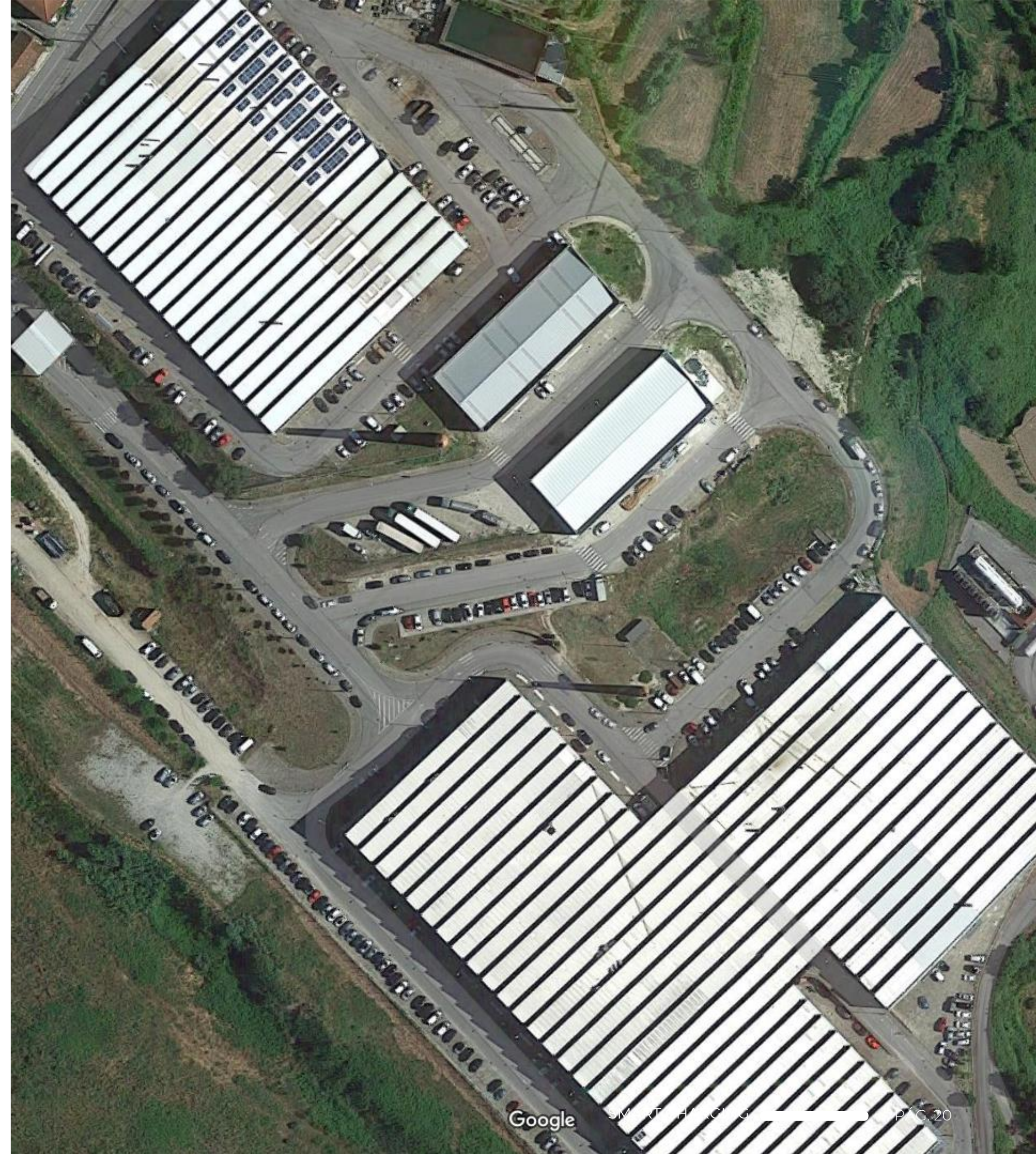


30%

DECARBONIZATION GOAL:



MAXIMISE REDUCTION IN CO2 eq EMISSIONS



REFERENCE PROJECT

SERVICE BUILDINGS, IN LINDA-A-VELHA

URBAN ENERGY COMMUNITY

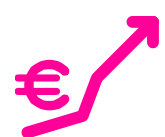
Creation, development and operation of a REC, within the scope of an application to the RRP, in an urban environment, which arises from the headquarters of Mota-Engil in Lisbon and aggregates a set of service buildings in the surrounding area, integrating solutions for photovoltaic production, storage and charging of electric vehicles.

PROMOTION MODEL



0% CLIENT INVESTMENT

ANNUAL ESTIMATED SAVINGS

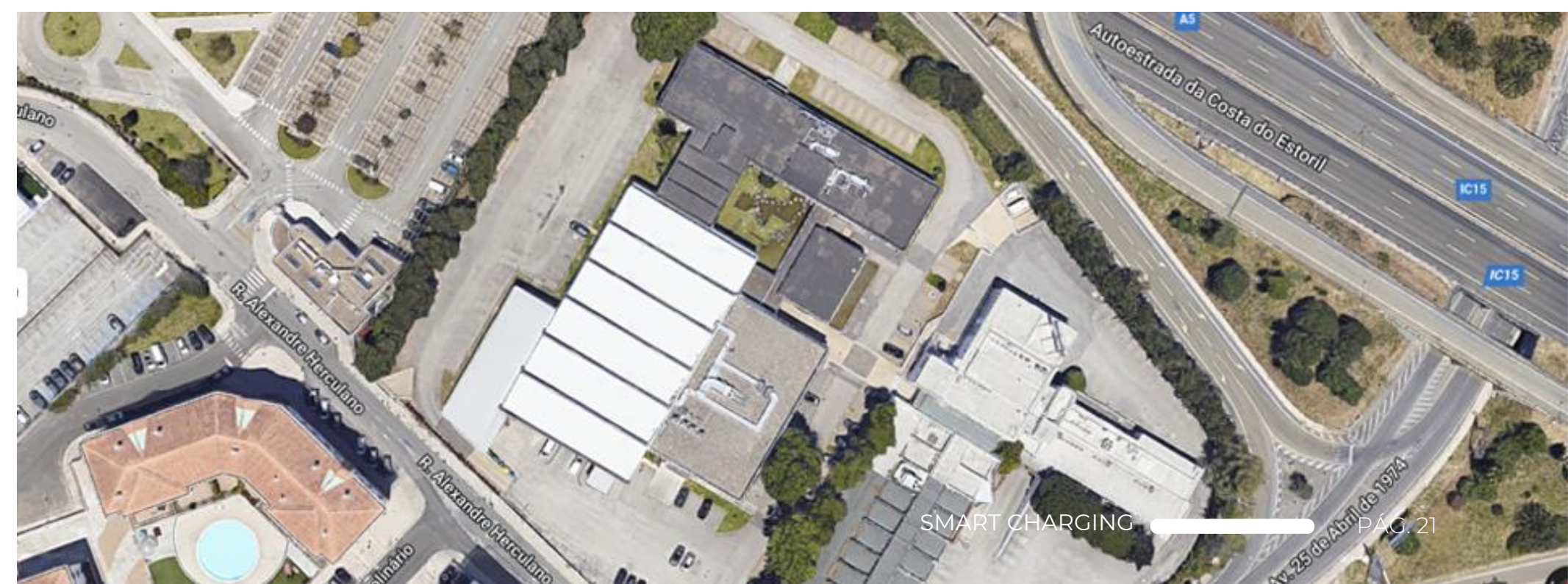


20 - 30%

DECARBONIZATION GOAL:



MAXIMISE REDUCTION IN CO2 eq EMISSIONS



Let's create a community?

Contact us and we will explain how.



REnewwing MOTAENGIL
ENERGY IN TRANSITION