

A vertical image on the left side of the slide showing a sea turtle swimming underwater. The turtle's shell is brown and textured, and the water is a clear, vibrant blue. The image is partially obscured by a teal vertical bar on the right side.

Advanced Energy Communities

A bottom-up approach to enhance Sustainability, Affordability and Security of Supply

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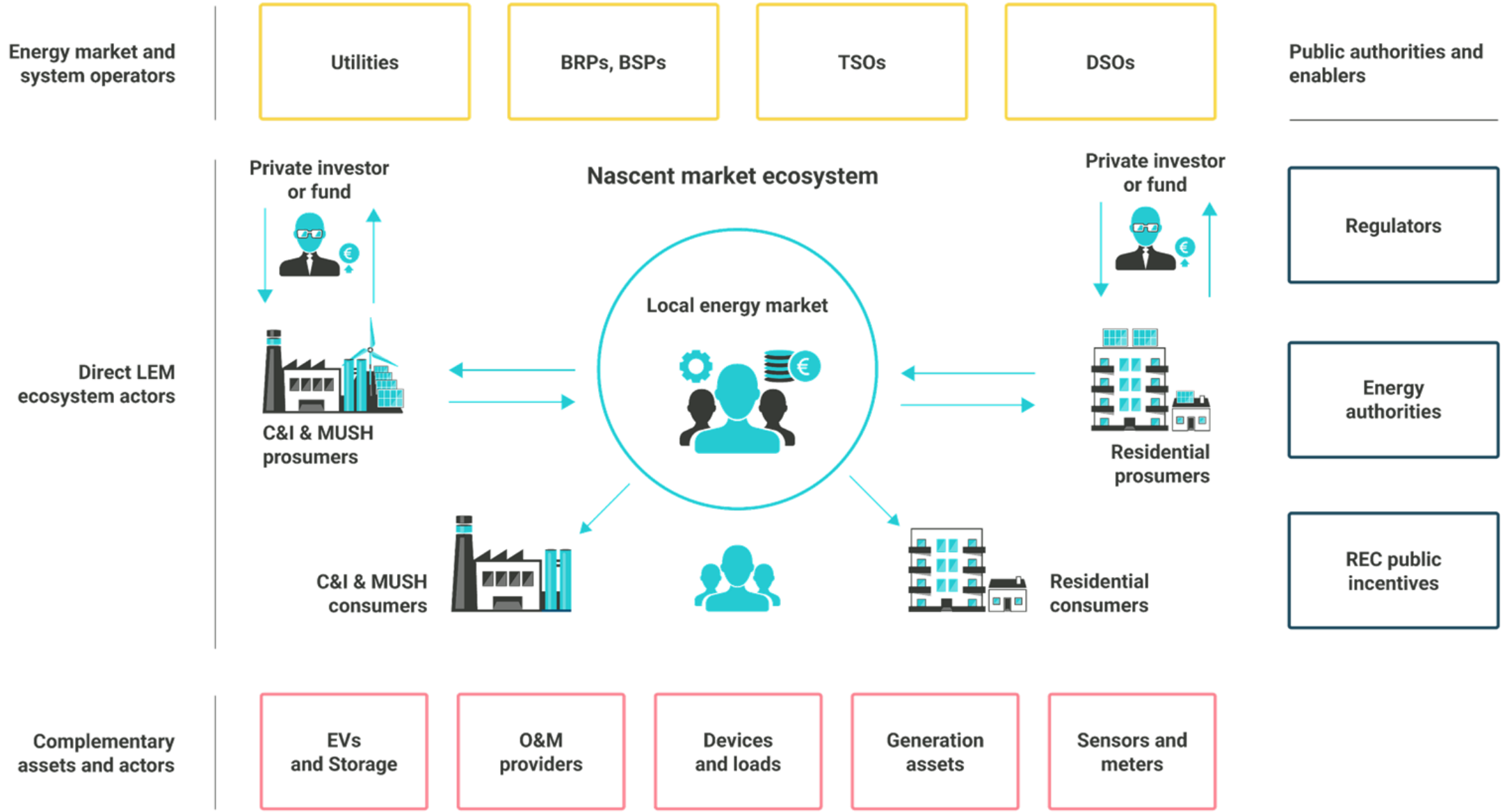
Energy communities have the potential to accelerate energy transition, provide affordable energy, **democratize access to energy markets** and support security of supply

Energy Communities – our way to tackle the energy transition

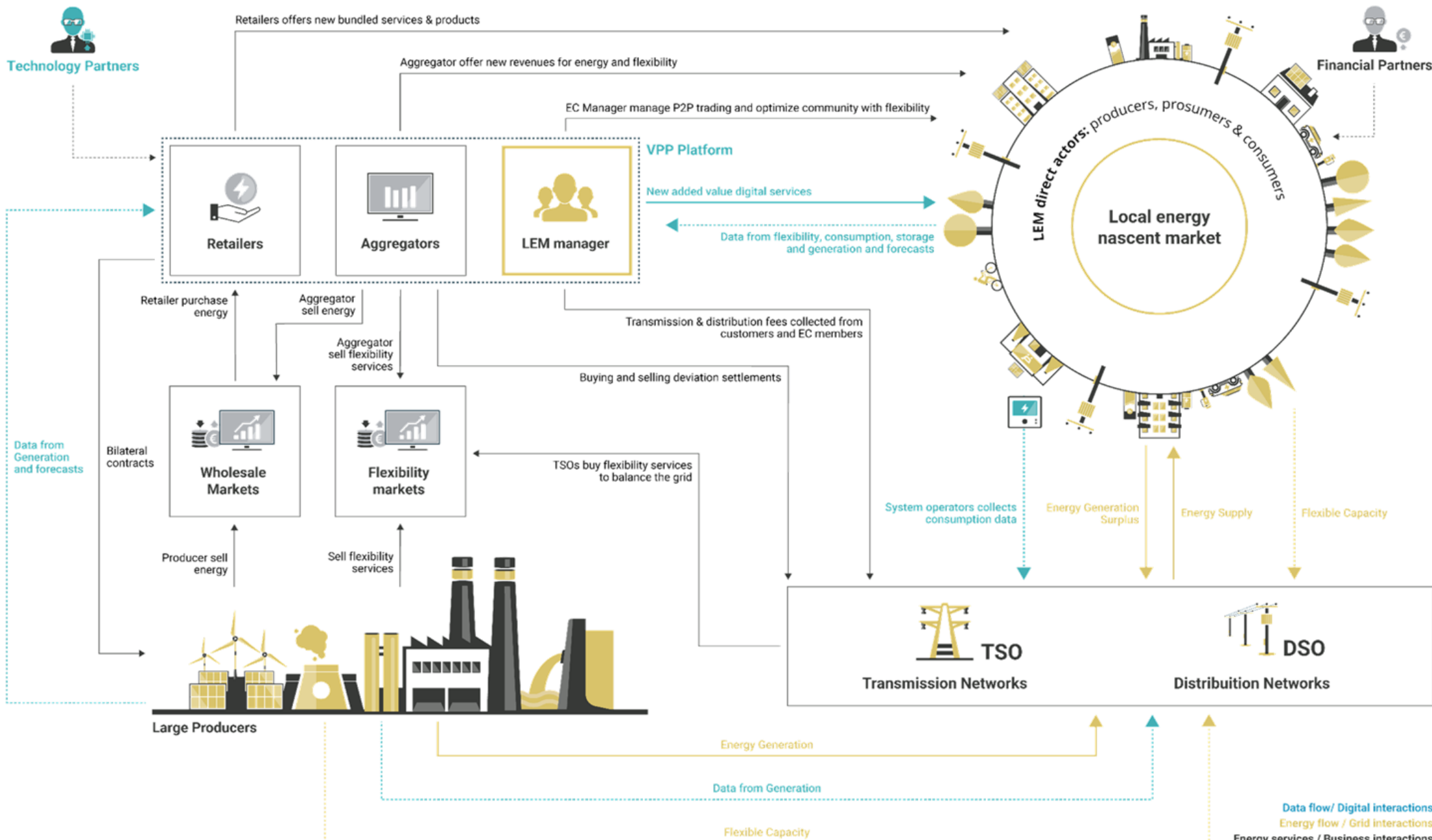


Renewable Energy Communities (RECs) are joint initiatives of companies, private citizens and public administration joining together towards a common idea: tackle the energy transition, democratize and make accessible the energy market

Energy Communities & Local Markets value chain



Local Nascent Energy Markets



A bottom-up approach business model that enhance Sustainability, Affordability and Security of Supply

Cleanwatts simplifies, amplifies and accelerates the energy transition for local communities, while reducing energy costs, decarbonizing the grid and improving energy security.

Cleanwatts provides a turn-key bundle solution (EaaS) that helps developing Renewable Energy Communities, with

0

Zero upfront investment



Technology:
Cleanwatts OS™



Domain
Expertise

We are committed to building a world in which clean energy is decentralized, digitalized, and democratized.

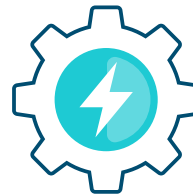
Most consumers struggle with energy prices.

Cleanwatts helps strengthen consumers' energy security by developing new power generation and optimizing consumption. Consumers can fight rising energy prices with zero initial investment and be a sustainability leader in their community.

Cleanwatts provides a turn-key solution that helps:



Lower energy costs
up to 60% (anchor) and
30% members

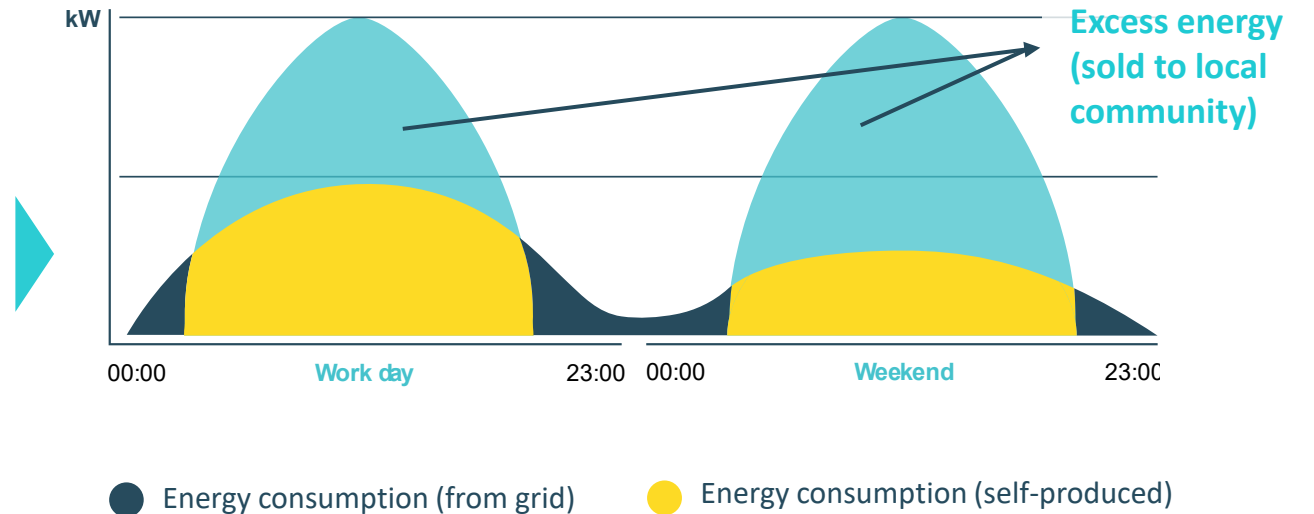


Generate your own clean energy
and reduce emissions



Increase energy stability for
you and your community

Industrial Anchor Client economics



Up to **60%** of savings thanks to:

26%

traditional
self-consumption

8%

enhanced
self-consumption

11%

selling excess generation
to the community

15%

energy efficiency
solutions

Case Study

Client **Industrial Manufacturer** ————— WHO 

The client is a leader in the manufacturing, sale and rental of equipment used in the construction, industry and infrastructure sectors, namely scaffolding, formwork, shoring and special engineering structures.



Challenge ————— WHAT 

The client had the following goals:



Install solar panels on their rooftops to establish a Renewable Energy Community



Reduce energy costs and environmental impact of their energy consumption



Improve energy optimization & efficiency



Increase energy supply security

Case Study

Solution

HOW 

630 kW

Solar capacity installed on the client's rooftops



All paperwork necessary to set up Energy Community handled by Cleanwatts

15 year

Lease contract



Energy consumption and generation optimized by Cleanwatts™ OS

20 to 30 years

Average lifespan of installed solution



Cleanwatts assures the operation & maintenance of all installed assets

40%

Self-consumed energy discount when compared with current tariff*

10 € per MWh



Fixed prices during duration of contract (protection against price volatility)

*0,07 €/kWh with an annual increase of 1%

Case Study

Results ————— Initial results 2 months after installation of PV capacity and Cleanwatts™ OS

Without our system

June 2022	Energy (kWh)	Weight (100%)	Average cost (€/kWh)	Total cost (€)
Total consumption	33 730	100	€0.14	€ 4 554
Total				€ 4 554



With our system

June 2022	Energy (kWh)	Weight (100%)	Average cost (€/kWh)	Total cost (€)
Solar Generation*	21 570	64	€0.07	€ 1 510
Grid	12 160	36	€0.13	€ 1 556
Total				€ 3 066

Savings



* Anchor client is currently limiting their energy generation until the REC is fully established as they receive no compensation from the grid operator for the excess generation

338 425€

Total estimated returns during the duration of the lease contract (15 years)

- ✓ Savings from optimized self-consumption: € 235 803
- ✓ Surplus sold to community: € 70 573
- ✓ Savings from optimization & efficiency by Cleanwatts™ OS: € 32 049

753 422€

Returns in the 10 years after the lease period

1 091 867€

Total returns in 25 years

Cleanwatts OS

One platform: modular, interoperable and localizable



Behind the meter

- ✓ Optimization for community members

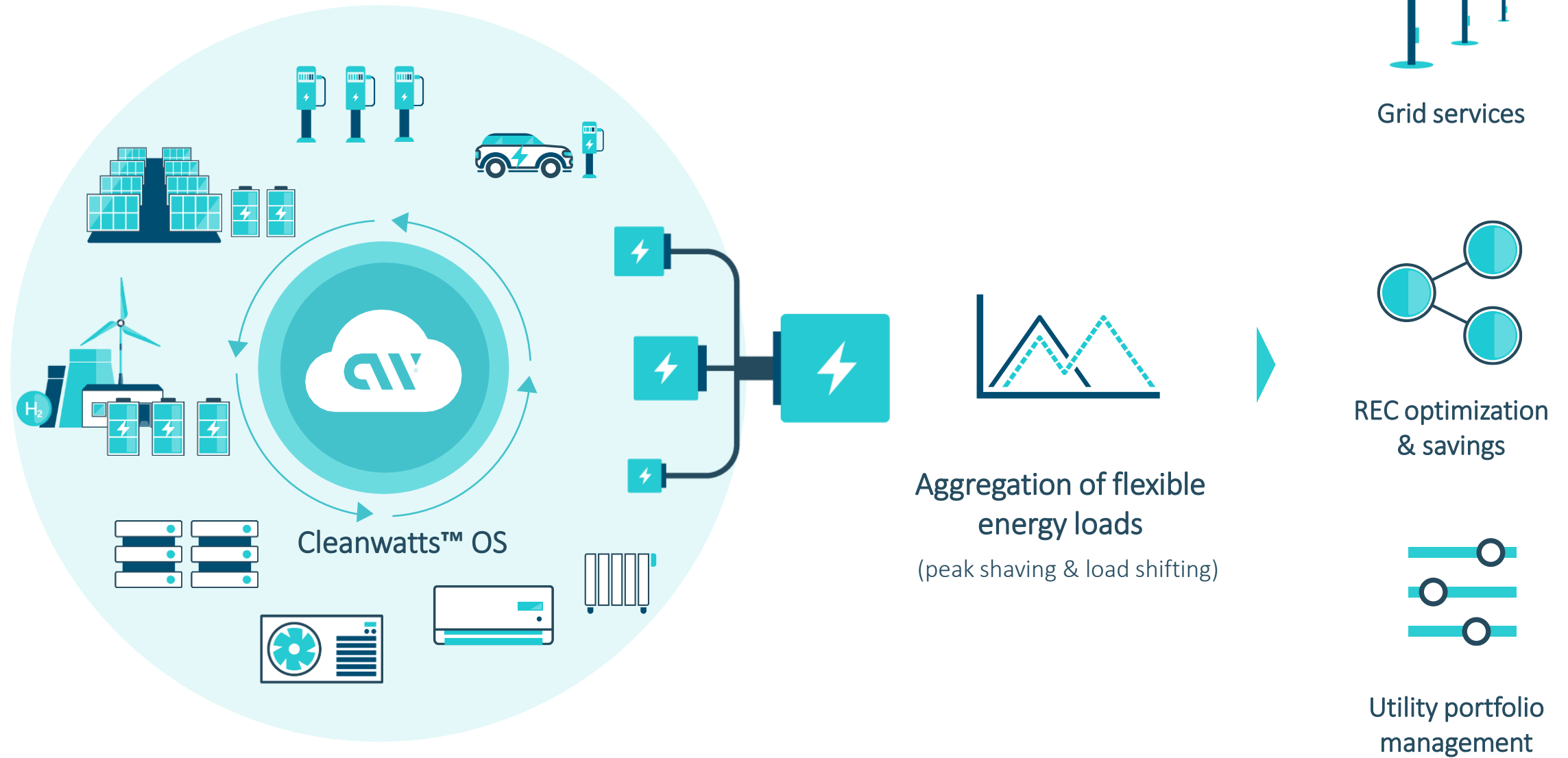
Front of the meter

- ✓ Flexibility aggregation, and transaction management for local energy markets

App

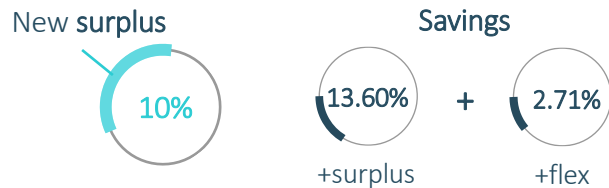
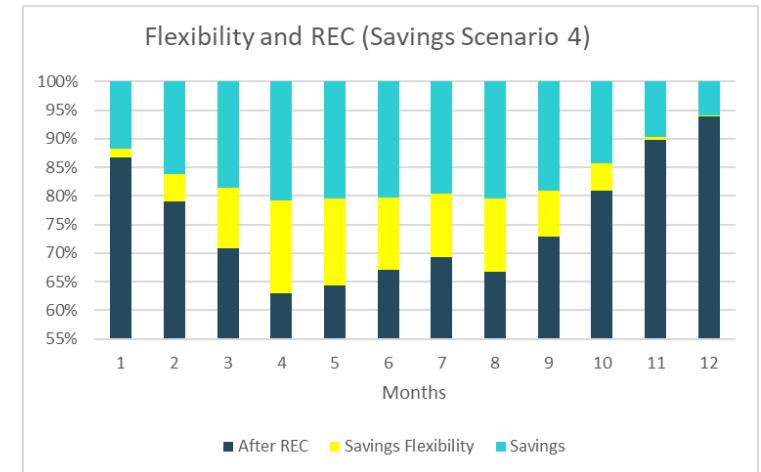
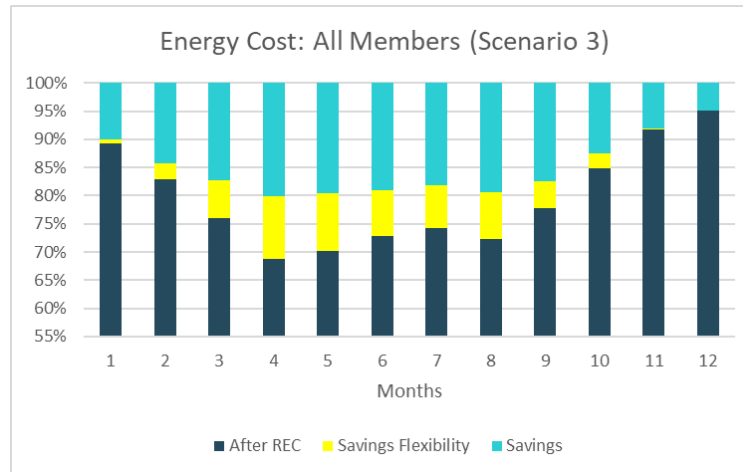
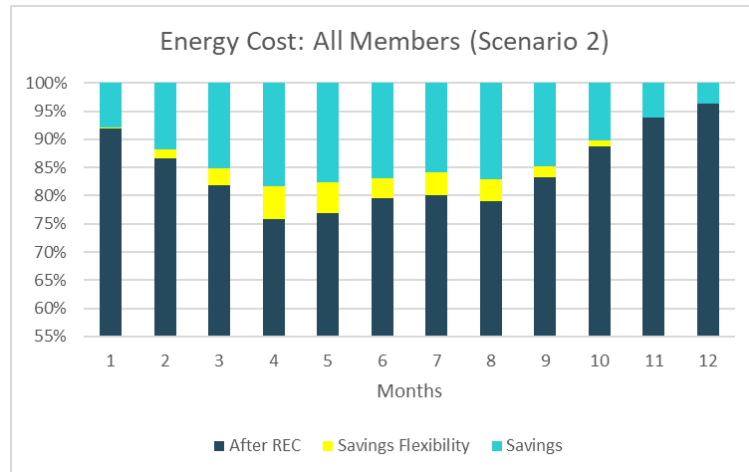
- ✓ App for end users

Value growth with flexibility BTM & FTM

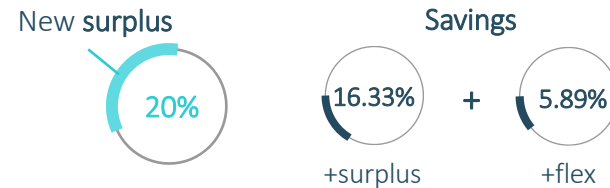


FleXunity pilot case with P2P energy sharing with flexibility for DER optimization with centralized ownership

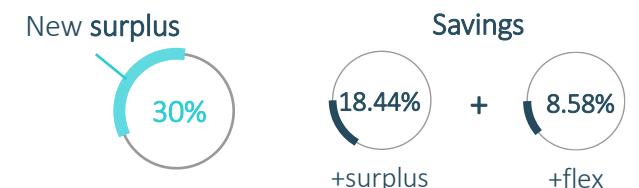
EC with P2P and centralized ownership enhanced with additional surplus and flexibility



Scenario 2: original generation was multiplied by 1.5, resulting in a surplus of 10%



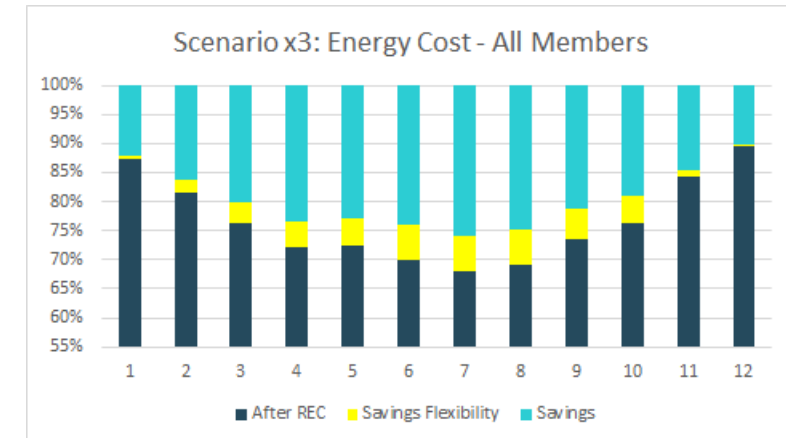
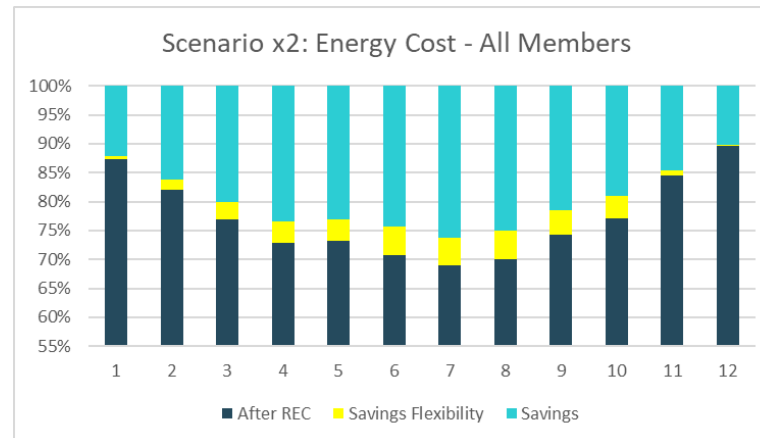
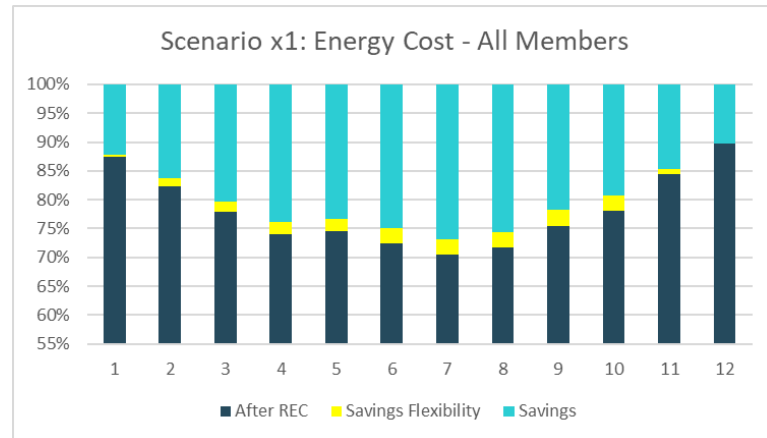
Scenario 3: original generation was multiplied by 2, resulting in a surplus of 20%



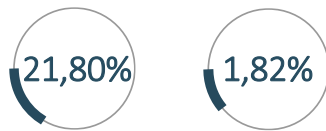
Scenario 4: original generation was multiplied by 2.5, resulting in a surplus of 30%

FleXunity pilot case with P2P energy sharing with flexibility for DER optimization with centralized ownership

EC with P2P and centralized ownership surplus of 20% and additional flexibility



Savings



+total +flex

Scenario 1: original flexible load was used

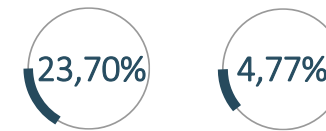
Savings



+total +flex

Scenario 2: flexible load was multiplied by 2

Savings



+total +flex

Scenario 3: flexible load was multiplied by 3

 Where we are



✓ Europe ✓ U.S.A. ✓ Brazil ✓ Japan

 Who we are

90+

Team members

2000+

Active clients

 Efficiency & management through Cleanwatts™ OS

2+ TWh

Energy managed

10+ tCO₂

Emissions reduced

23000+

Metering points

 Cleanwatts Energy Communities

100+

Number of REC managed

1500+

Community members

18+ MWp

Total capacity

30%

Average abatement of energy cost



Clean energy.

Decentralized, digitalized and democratized.



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Join the
energy
transition
today.

