Shaping the Future of Sustainable Energy

October, 2024

cleanwatts
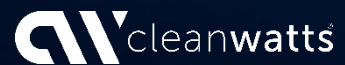
Maria João Benquerença
VP of Energy Communities

We are a **climate tech leader** committed to simplifying, amplifying, and accelerating the global energy transition for local communities around the world.

Join us as we reframe society's relationship with energy.

Values that drive our culture:

Accountability   **Empathy**   **Integrity**   **Initiative**   **Resilience**   **Responsiveness**

cleanwatts®

📍 Where we are

📊 How we're tracking

👥 Fast facts

Contracted RECs
224+

PV Power
70+ MWp

Community Members
4.500+

Team members
80+

Energy managed
2+ TWh

Emissions reduced
130+ t CO_2

Active clients
2.500+

Metering points
280 000+

We remove friction and complexity from **local energy markets** by originating and managing **Renewable Energy Communities**.

Digital

Develop, deploy and manage services and solutions via **Cleanwatts™ OS**

Projects

Design and commissioning of REC infrastructure at **zero upfront cost**

Energy

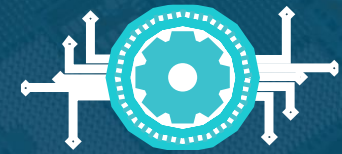Clean energy, efficiency and advanced energy management **as a service**

We provide everything you need to establish a **Renewable Energy Community.**
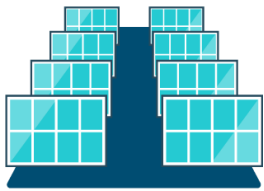
Financial Capital

Hardware

Advanced Digital Platform

We deliver tangible benefits to local communities and their members...

Clean energy

Affordable and locally sourced renewable energy

Security of supply

Protection against price increases and blackouts

Revenue

Peer to peer transactions and monetization through flexibility services

Additional savings

Smart energy efficiency and optimization

How do Renewable Energy Communities managed by Cleanwatts work?

1 Anchor Client
Self-consumption*

2 Community members
Excess capacity from anchor client is virtually matched to local consumption*

3 Grid (Off-taker)
Excess sold to the grid*

* Percentage of self-consumption, community uptake, and grid export are measured annually and price is fixed for the duration of each contract

# Reduce Energy Costs and Simplify Energy Management with Cleanwatts

An advanced energy OS that helps businesses can **save money** with efficiency and **make money** by selling energy locally and helping stabilize the grid.

Cleanwatts helps **optimize energy use** managing everything in one place

We manage energy **communities** building a better business case for solar
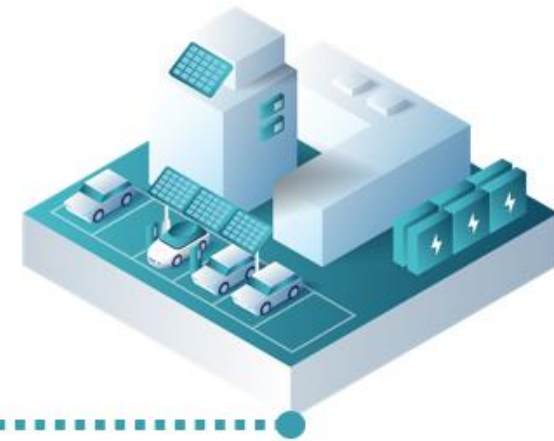
We control dispatchable **assets** like batteries and EVs providing additional revenue

Cleanwatts™ OS
One platform: modular, interoperable and localizable

kiplo
FLEXIBILITY MANAGEMENT

Front of the meter

Virtual Power Plant:
- ✓ Flexibility services
- ✓ Energy market Integration

Community management:
- ✓ Management of all energy assets Including generation, consumption & storage
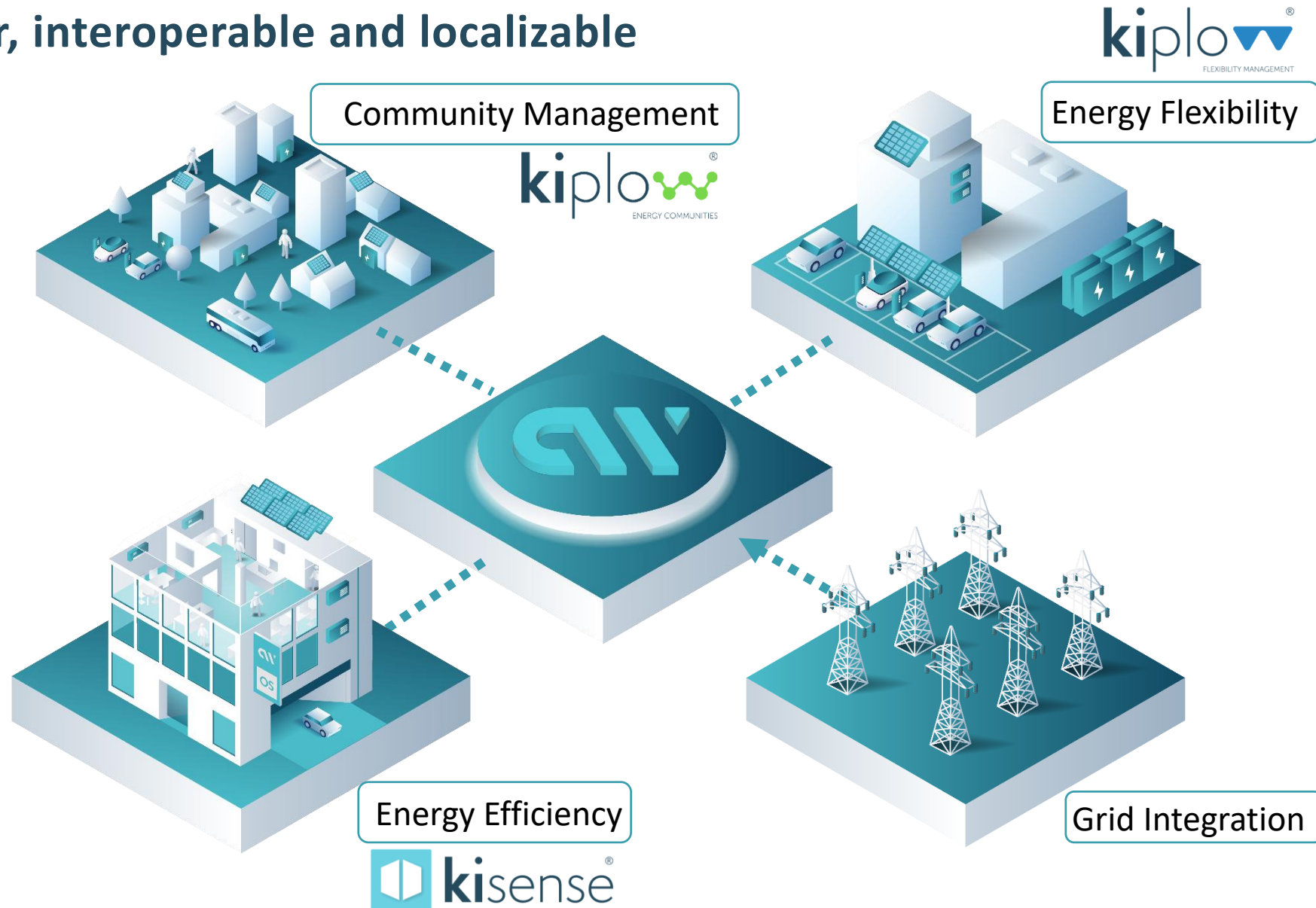- ✓ Peer to Peer sharing, trading and balancing

Behind the meter

Platform for Commercial and Industrial
- ✓ Behind the meter energy management & efficiency

App for Residential Users
- ✓ Smart home and Engagement app for energy community members

Community Management

kiplo
ENERGY COMMUNITIES

Energy Flexibility

Energy Efficiency

kisense

Grid Integration

Cleanwatts Solution
Typical Use Cases

Additional Services
Can be added or combined

☑ **EV Charging**
Infrastructure management

☑ **Ancillary Services**
Market participation

☑ **Microgrid Development**

PV > Flexibility > Community

PV + Efficiency Platform

Lower energy costs with solar and intelligent energy management

Intelligent Battery and EV Charge Optimization

Optimize energy assets for peak profitability with integrated battery and EV control.
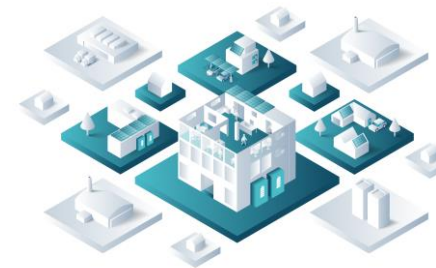
Energy Community Creation & Management

Sell excess energy locally as a source of revenue or local multi-site energy sharing

Efficiency > Community>Flexibility

Energy Efficiency

Reduce energy expenses through smart monitoring and optimized consumption

Community Energy Sharing

Generate revenue by distributing excess energy within the local community

Energy Market Participation

Maximize Earnings by participating in energy markets with battery storage solutions

Cleanwatts™ OS
Kiplo EC – Energy Community Manager

Interactive Dashboard
Centralize real-time data: energy flows, KPIs, member activities.
Facilitate informed decisions with visual data presentation.

Advanced Analysis Tools
Detailed breakdown of energy flows and consumption patterns.
Forecasting for optimizing community energy surplus.

Seamless Community Billing Integration
Streamline billing: integrate with ERP systems.
Export monthly consumption details for accurate billing.

Flexible Tariff Management
Customize energy tariffs per contract: static or dynamic.
Adapt to varying energy needs and market conditions.

Interactive Geographic Maps
Visualize energy community: generation sources, consumers.
Display performance indicators for operational efficiency.
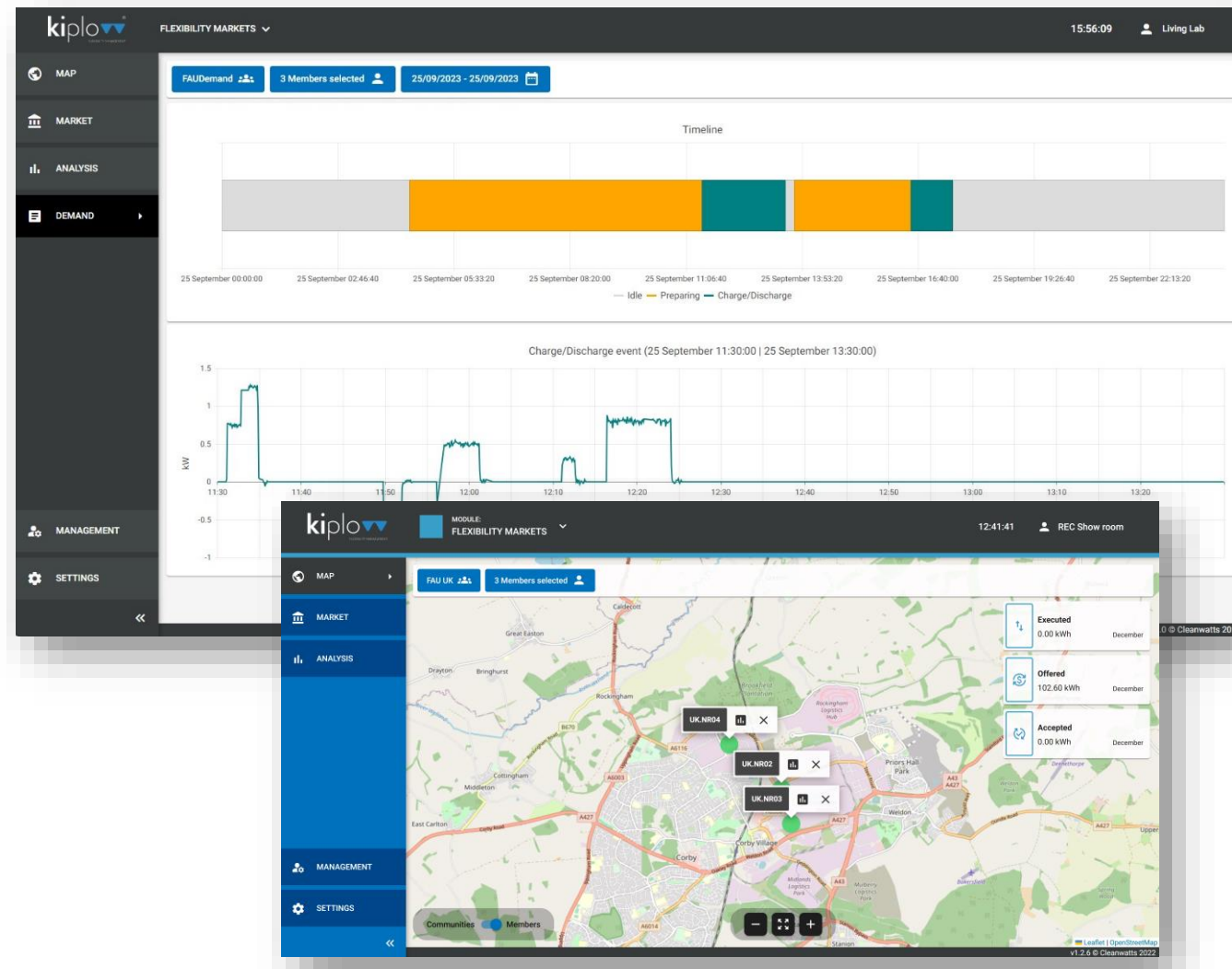
End User App
Comprehensive application for engagement and end user device
management. Channel for direct communication with members. Interface
for battery management and Smart Charging.
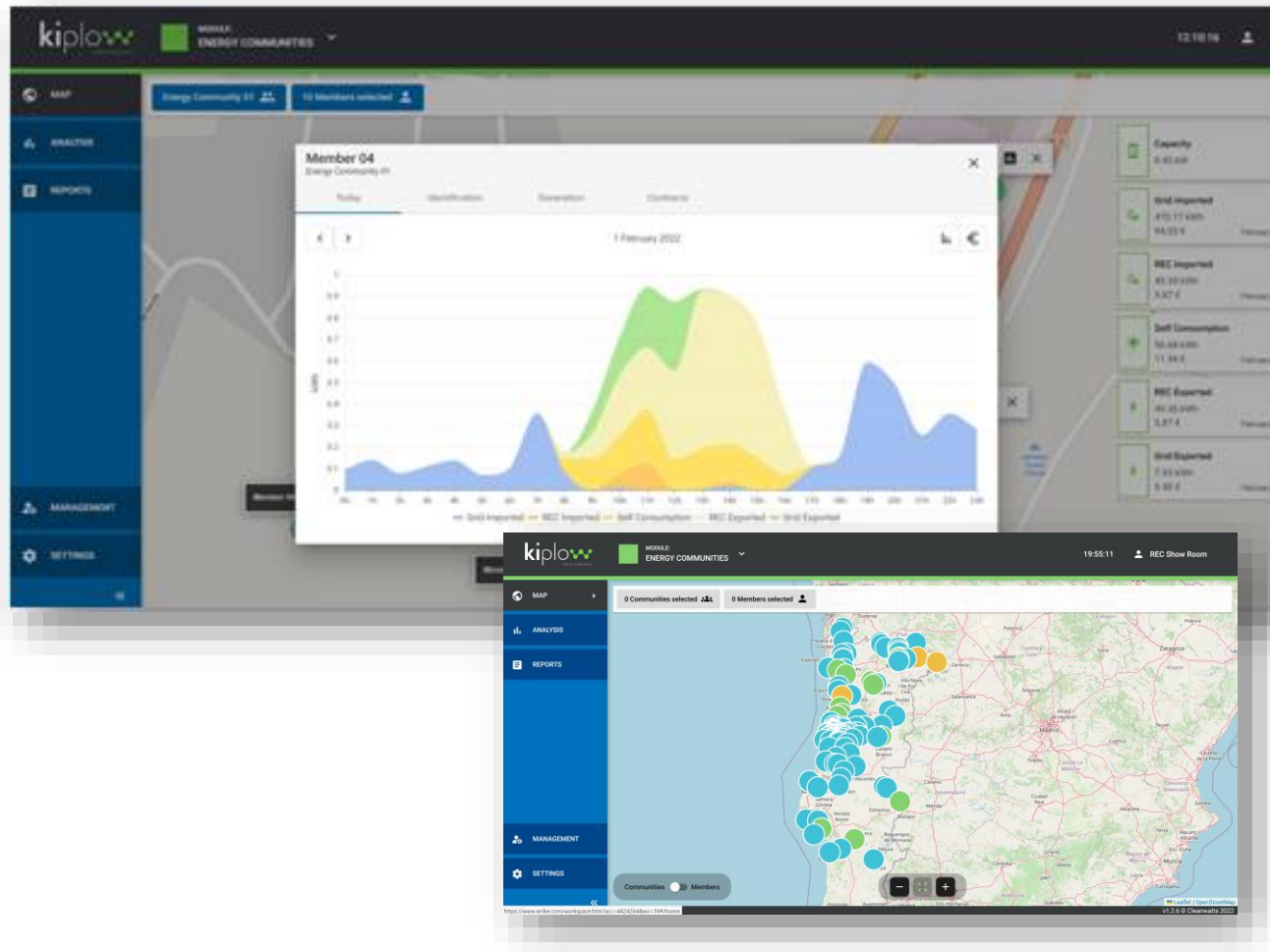
Cleanwatts™ OS
Kiplo Flex – Energy Flexibility Manager

Asset Management
View all managed assets and their specific attributes.

Program Management
Develop and administer flexibility programs for ancillary market participation and optimize scheduling for peak shifting and tariff adjustments.

Dashboard
Display assets, track flexibility transactions including executions, offerings, and acceptances.

Pool Management
Monitor the activation of flexibility programs and assess the operational KPIs of assets.

Dispatch Planning, Operation, and Optimization
Strategize and implement dispatch actions for operational efficiency.

Cleanwatts™ OS

Kiome – Residential end users app

Engaging community

Kiome lets you engage with you Energy Community and promote a sustainable way of consuming and learning about energy via messages, gamification and other features.
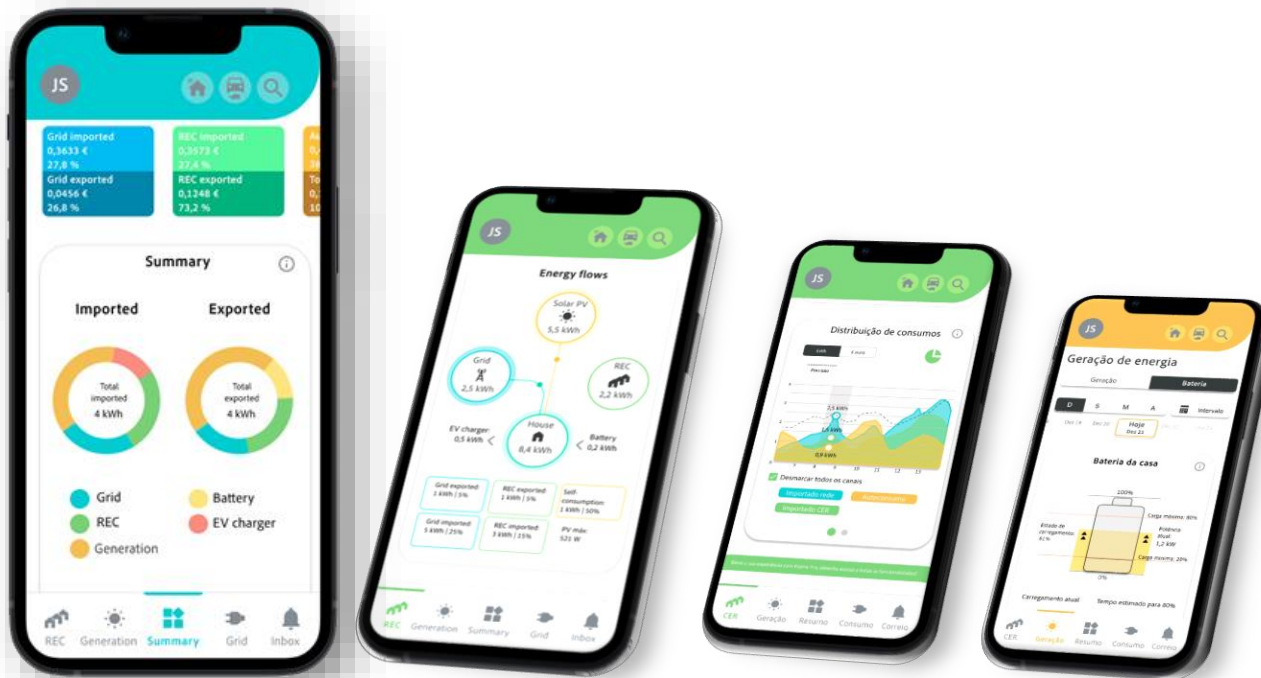
Friendly Dashboards

Dashboards tailored to User needs in a UX-Friendly manner allowing a better reach of the app

Asset Control
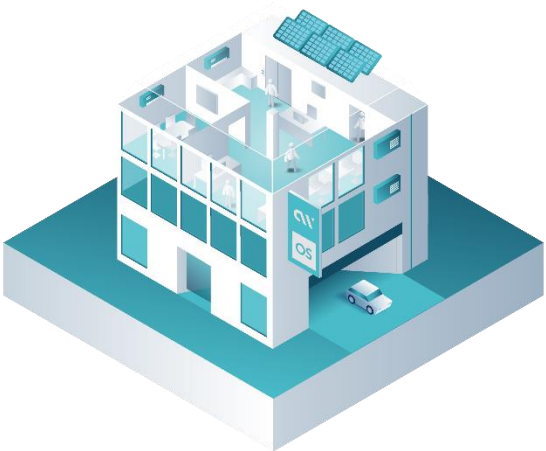
Control your home assets such as EV Charger via Kiome.

End User App

App focus on the residential end user to share the benefits of the Renewable Energy Community.

Cleanwatts™ OS

Kisense

Dashboard
Quick view of consumption, rankings, KPIs, alarms, with multiple dashboards

Explorer
Data exploration, with history or real time, formulas, comparisons

Alarms
Automatic anomaly detection, threshold setting, maintenance

Control
Real-time ON / OFF control or configuration of control programs for peak shaving

Analysis
Analysis of consumption profiles, comparisons, heatmap and trend monitoring

Reports
Activity overview and performance benchmark

Baselines
Immediate verification of savings, CO_2 and carbon footprint

Optimization
Optimization algorithms to reduce costs and maximize self-consumption

cleanwatts®

Shaping the future

of sustainable energy.