

ClimateFlex Assets

2-slide CETP CM08 matchmaking presenter script (16/06/26)

interconnected problems

At The Climate Assets Company, we address a set of **interconnected problems** that are usually treated separately: high energy prices, grid stress and blackouts, the energy transition, heat waves, thermal stress, the expansion of renewables, the expansion of e-mobility, and the fact that many urban and coastal spaces remain passive, hot, mono-functional and underused.

Our starting point is that these problems are not only technical. They are also spatial, urban, social and economic. The energy transition needs new distributed assets, but those assets must be located where people live, move, work, wait, consume and experience climate risk.

Slide 1: one scalable ecosystem of distributed climate-energy assets

We propose to address these challenges simultaneously with one scalable solution: ClimateFlex Assets - an ecosystem of distributed climate and energy assets.

The idea is to **transform passive objects and passive spaces into technological and digital skins** for the **local** generation, storage and circulation of clean energy. These assets are not only solar devices. They are **service platforms** that support multiple interconnected functions: climate protection, local energy exchange, mobility charging, lighting, safety, data, operation and future flexibility services.

The basic unit is the Solar Patio. It is conceived as a researchable **MVP platform**: a human-scale node that can integrate a lightweight or flexible PV skin, storage-ready power architecture, shade and thermal comfort, lighting, e-bike and small EV charging, sensors, monitoring and digital control.

In other words, the Solar Patio is the first unit of a new family of climate-energy assets. It can start as a local climate refugium for heat waves and thermal stress, but it also becomes a measurable, controllable and replicable energy node.

Slide 1: R&I ambition and technology roadmap

For CETP, the important point is that this is not presented as a finished commercial product. It is an R&I and demonstration pathway.

The roadmap is already defined: within 24 months, the objective is to move from concept and **TRL 3-4** to prototype, fixed and mobile MVPs, a measured pilot, and the first replicable climate-energy asset package.

This allows the project to reduce technological, operational and commercial risk step by step: first the prototype, then the MVP, then real data from a pilot, then the documentation and **KPIs** needed for replication.

Slide 2: from Solar Patio to regional flexibility platform

The innovation is not only the object. The innovation is the aggregation logic.

One Solar Patio can operate as a **climate refugium**: shade, comfort, local solar generation, lighting and charging. Several Solar Patios become a Solar Garden, **or e-agora**: a cluster where energy can be generated, stored, exchanged locally and connected to services for nearby premises or users.

At the next scale, networked Solar Gardens become Solar Forests. These can operate as **EV Oasis networks**: distributed charging points for e-bikes and small electric vehicles, while also providing lighting, security, comfort and local energy services.

At corridor scale, Solar Forests become Solar Landscapes or e-corridors. At that point the system can be measured, modelled and operated as distributed energy resources: microgrid-ready spaces and, when aggregated and controlled, VPP-ready regional energy corridors.



So the same modular logic grows from climate refugia to e-agoras, from e-agoras to EV Oasis networks, and from EV Oasis networks to microgrid and VPP-ready landscapes. This is why we believe ClimateFlex Assets can contribute to integrated regional energy systems.

Our 24-month roadmap moves from concept and TRL 3-4 to prototype, fixed/mobile MVP, measured pilot and first replicable asset package. For CM08, we want to measure, model, operate and validate this pathway with partners in flexible PV, storage, DSO/VPP integration, digital twin, mobility charging, municipalities and energy-service operation.

CM08 R&I questions and partner ask

For a CM08 consortium, the research questions are very concrete.

First, measure: energy generation, storage, comfort, use, charging, **O&M** and local demand.

Second, model: generation, loads, storage, local exchange and flexibility potential.

Third, **operate** (testing how the assets are digitally controlled in real conditions: how energy is stored, dispatched, used for charging and services, and potentially coordinated with DSOs or VPP platforms):

charging logic, **storage dispatch**, **digital control**, and possible **DSO** or **VPP interfaces**.

Fourth, **validate** (using the pilot to generate evidence: KPIs, maturity progression, unit economics and a replication package showing that ClimateFlex Assets can scale from one site to a regional network of distributed climate-energy assets):

pilot KPIs, **TRL**, **ORL** and **CRL** progression, **unit economics**, **replication package** and **regional scalability**.

We are looking for partners to co-develop and **validate** this pathway: universities and **RTOs**, **DSOs**, **VPP aggregators**, **storage and BMS partners**, **flexible PV and fabrication partners**, **digital twin and sensor partners**, **mobility charging actors**, **municipalities or pilot sites**, and **energy-service operators**.

Our contribution is the Climate Assets concept, the modular architecture, pilot use cases, stakeholder access, business-model logic and IP direction. The next step is to test consortium fit and identify complementary demonstration contexts where ClimateFlex Assets can be measured as part of an integrated regional energy-system pathway. Thank you.

Backup Q&A lines

Why CM08? Because the core research question is how modular local assets can be aggregated, measured and operated as part of integrated regional energy systems: generation, storage, demand, charging, microgrids and VPP-ready corridors.

Why not only CM02? There is a clear connection with flexibility, but for this matchmaking session the strongest angle is regional integration: how distributed climate-energy assets can connect places, users, mobility, local services and energy-system operation.

What is the first demonstrator? A Solar Patio or small Solar Garden in a real urban or coastal context, with measured KPIs for energy, comfort, use, charging, O&M, service uptake and replicability.

What makes it more than solar shade? The value is the integrated service stack: climate protection, energy generation and storage, local exchange, mobility charging, lighting and security, data, O&M, subscriptions, and future flexibility services.

What partners are essential? Flexible PV/fabrication, storage and BMS, sensors and digital twin, DSO/VPP or aggregator expertise, e-mobility charging, pilot hosts/municipalities, and energy-service operators.

Final closing sentence to memorize

We are looking for partners to co-develop and validate ClimateFlex Assets as a scalable ecosystem of distributed climate-energy assets - from Solar Patio climate refugia to e-agoras, EV Oasis networks, and microgrid/VPP-ready Solar Landscapes.

We are looking for partners across the full innovation chain: RTOs for research validation, DSOs and VPP aggregators for grid and flexibility integration, storage and BMS partners for energy management, flexible PV and fabrication partners for the Solar Patio MVP, digital twin and sensor partners for monitoring and control, mobility charging actors for e-bike and small EV services, municipalities or pilot sites for real-world validation, and energy-service operators for the platform and subscription model.

