Covenant of Mayors in Sub-Saharan Africa

CoM SSA is co-funded by:

Co-implemented by:
Example from a city partner

Solar PV and thermal systems were installed between 1998 and 2000 in a coastal city's provincial hospital to serve the maternity wing and RO/water pumping systems. However, the two systems are not operational due to a lack of proper maintenance.
Urban Smart Energy (USE) is a standardized support product for the implementation of decentralized energy systems and energy efficiency measures on city-owned sites, thus enhancing access to clean and resilient energy, creating savings through lower energy bills, boosting employment and local income.

CoM SSA supports:

- Technical and economic assessment to identify viable project sites
- Cooperation between local governments administration and the private sector for project realization
- Legal support to the local administration (i.e. tendering, contracting)
Urban Smart Energy (USE)

The project specifically targets public infrastructure owned by the city or municipality (e.g. city or town hall, schools, high schools) and public spaces (e.g. markets, bus stations) to assess the technical and economic feasibility of solar energy systems and energy efficiency measures.

The technological options considered are mainly rooftop and ground-mounted solar systems.

CoM SSA support is provided in 7 steps.
USE – 7 Step Process for CoM SSA

Expected role of the county at each step:

- Supervision of the projects
- Adherence to the local regulations

- Identify focal point for tendering procedures (e.g. publication)
- Guide the procurement process and negotiations

- Provide access to site for load measurements
- Time for site team to do on job training

- Share one year power bills
- Share comprehensive list of city-owned facilities and their location
- Share proof of ownership

CoM SSA
C County
LE Legal experts
TE Technical experts
Steps 1-4: Identification of viable project sites

Our assessment criteria for the city-owned building envelope:

- Ownership
- Status of the site (e.g. renovation)
- Condition of building and electric system
- Entity responsible for electricity bill
- Energy access and consumption
- Economic viability of measures (solar, energy efficiency)
- Savings for City
Steps 1-4: Identification of viable project sites

CoM SSA uses an evidence-based approach to identify viable project sites:

1. An **initial review of sites** in cooperation with the city.

2. A **technical evaluation** of sites through visits with standardized questionnaires.

3. Installation of **smart meters** for electric load data.

4. An **economic evaluation** of measures based on electric load data.
Highlight: Cloud Based Energy Intelligence

• Cloud-based web-interface tracking real-time, processed electric load data to quantify, monitor and verify sustainable energy measures;
• Coverage: City-owned sites throughout SSA for a period of two years;
• Different user cases/benefits: for city administrations, for private sector, for financiers, for policymakers;
• Smart Meter roll-out in several countries this year.
Steps 5-7: Presentation of results to Local Government, Tendering process and PPA Final Agreement.

Once the evaluation has been concluded, the results will be presented to the local government to establish the final list of sites and define the tendering process.

CoM SSA will assist its partner cities in conducting the tendering procedure, overseeing the necessary documentation and evaluating the proposals from private sector participants.

Upon selection of a winning bidder, CoM SSA will support the local government in the negotiation process until the signature of a power purchase agreement (PPA) comprising an energy as a service model.
Proposed Business Model: Energy as a Service

LOCAL GOVERNMENT
owns public facilities

Service Company (to be set up by LG)
Invoices energy services and pays SPV

PRIVATE COMPANY
Energy Service Provider
100% Financed and owned

DFI
Liquidity Support
First loss for debt to LG

Derisking Device
Local Bank
Private Equity

Special Purpose Vehicle

kWh
Service Fee
Default Payment
Debt

Fees

The advantages of the financing model are:

• A private supplier could receive funding faster.

• No burden on the public budget.

• The private sector is in charge of the operation and maintenance. The local government pays only for electricity and not for nonfunctional panels.

However, a guarantee might be necessary to achieve public-private cooperation, in particular, when the LG does not have a good track record of paying electricity bills.
Benefits of USE for Local Governments

1. **Easy to access electric load** data for **two years**.

2. Provision of a **summary of technical and economic viability** of solar energy systems and **energy efficiency measures**.

3. **Establishment of organizational and financial structure** for solar rooftop projects.

4. **No upfront investment and maintenance required** by the city itself.
Thank you for your attention

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