Climate Alliance Digital Days
LOCAL SOLUTIONS TOWARDS A GREEN RECOVERY
online from 6–9 October | #CADigitalDays
Financing Solutions for Sustainable Climate Investments

Wednesday, 07 October 13.00–14.30 p.m.
Technical details Zoom

- **Rename yourself** – click on participants, find yourself, and click rename to display name and municipality
- Use the **chat** to pose questions
- Mute yourself when not speaking
- For questions or **technical difficulties**, send a direct chat message to Nina Stiehr

Italian translation

→ click inactive for English audio
→ click Italian for simultaneous translation
EU framework

EU budget 2021-2027 and recovery plan

EU expenditure 2021-2027

Total €1 824.3 BILLION

- €1 074.3 BILLION
- €750 BILLION

Multianual financial framework (MFF)
The EU’s 7-year budget

Next Generation EU (NGEU)
COVID-19 recovery package front-loaded over the first years
- €390 bn grants
- €360 bn loans
Capital raised on financial markets

Climate spending: 30%

- Renovation Wave Strategy to boost decarbonisation of the building sector
- Just Transition Fund
- Horizon Europe

Source: europa.eu
AGENDA

• BUILDING ROBUST INVESTMENT CASES – THE EUROPEAN CITY FACILITY
  Tatjana Veith, Climate Alliance
  Luigi Acquaviva, Municipality of San Giuseppe Vesuviano (IT)

• INNOVATIVE FINANCING SOLUTIONS FOR CLIMATE INVESTMENTS – FALCO
  Luc Wittebolle, SuMa Consulting

• PROJECT Zero: Vision for a carbon-zero Sonderborg until 2029
  Torben Esbensen, Danish Energy Management, Project Zero
The European City Facility – EU Framework

- 2030 Energy and Climate goals
- 150 - 200 Billion Euros/year
- Public Money will not be enough
- Private sources

Source: Energy Cities
AIMS AND OBJECTIVES

Provide technical, legal and financial expertise

Deliver more than 200 investment concepts

Build capacity of more than 400 municipal staff

Facilitate access to private & EU finance and advisory services

Reach out more than 10,000 cities encouraging replication
EUCF CALLS

Call 1: 25 May 2020 – 2 October 2020
Call 2: March 2021
Call 3: Autumn 2021
Call 4: Spring 2022
Luigi Acquaviva

- Why is it interesting for cities?
- WHY does a city need an Investment Concept?
- WHAT can a city use it for?
- Results of 1st call?
- HOW would you plan to use it?
Overall Application Process

1. ELIGIBILITY CHECK
   - YES/NO answers to 5 requirements
   - Simple automatic check
   - Not eligible

2. FULL APPLICATION
   - Application form and supporting documents
   - Assessment based on 5 evaluation criteria
   - Application rejected

3. GRANT AGREEMENT
   - Best scored applications

ELIGIBILITY CHECK
- YES to all questions
- Application rejected

EUCF Helpdesk
- Application rejected
Are you a municipality/local authority or grouping of municipalities/local authorities?

Is your municipality/local authority or grouping located entirely in the EU-27 Member States / UK?

Does your municipality/local authority have a politically approved SEAP, SECAP or plan of similar ambition?

Will you be able to provide a proof of political commitment to develop the investment concept by your mayor or other political representative?

Do you commit to the EUCF monitoring period of two years?

About the check

- Simple, automatic and online eligibility check
- Eligible applicants must answer YES to all questions
- Non-eligible applicants are redirected to EUCF helpdesk
Summary of the planned investment
“Teaser” with key information on the investment project:
• Total investment planned
• Funding sources
• Location of the planned investment
• Municipality/local authority or grouping
• Sector(s) targeted
• Overview and objectives of investment
• Estimated costs and revenues
• Economic viability
• Expected impacts

Annexes
Set of supporting documents to complement the main part of the investment concept

Structure of the template
1. Description of planned investment project
2. Promoter(s) and (local) stakeholders
3. Legal analysis
4. Economic and financial analysis
5. Investment Roadmap
DISCUSSION

Any questions around the European City Facility?
Financing Ambitious Local Climate Objectives

- Building blocks for financing solutions
- Energy renovation loan 2.0 (ER2.0)
- Forfeiting solution - Sale of accounts receivables
- Financing local authorities’ real estate portfolio
## Building blocks for financing solutions
### Barriers & solutions matrix

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<tr>
<th>Ambition level</th>
<th>Financing solution</th>
<th>Return deemed insufficient</th>
<th>Cashflow problem</th>
<th>Creditworthiness is insufficient</th>
<th>Status quo of credit position/lending capacity</th>
<th>Economic lock-in</th>
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Approx 40 solutions
Energy renovation loan 2.0 (ER2.0)

Key features and rationale

- Personal loan for energy renovation & ancillary investments
- Golden quadrant / triangle of deep energy renovation:
  - 0) low interest rates: taken care of by market
  - 1) low monthly installments => loan period up to 20 years
  - 2) adapted to investment amounts => loan of up to 50KEUR
  - 3) managing complexity of combining measures: technical assistance service
    Combination not available on the market

- Target group:
  - Loan approval criteria aligned on average income households
  - Low-income households that do meet loan approval criteria may be granted a loan
    subject to an additional guarantee covering credit default risk
Energy renovation loan 2.0

Structuring the loan

1. **Equity - Local authorities**
2. **Debt - EIB (other private banks)**
3. **Fee for Technical Assistance**

- **Equity**
- **Debt**

**Additional revenues**

**Debt fund (originator)**

**Energy houses**

**Borrower**

**SPV (Re-financing)**

**Investors**

**Membership Card System (MCS)**
Forfeiting solution

Key features and rationale

What?
- Prefinancing of energy efficiency investments by ESCO at SME client
- Installment sale + performance contract
- Sale of accounts receivables to a financial institution

Why?
- Performance guarantee + Off-balance (SME)
- Refinancing mechanism (frees up capital for new investment cycle (ESCO)
- Adapted risk allocation (credit vs technical performance risk) (Bank)
- First cases during FALCO: school & retirement/elderly homes
- Limits to this approach : creditworthiness of SME
Forfeiting - Sale of accounts receivables

*add-on solution*

- **ESCO**
  - Proceeds of the sale allow new prefinancing cycle
  - Sale of receivables linked to investment
  - Prefinancing energy efficiency investments + maintenance contract

- **Bank + Public Guarantee or Forfeiting Fund**

- **SME 1, SME 2, SME 3**
Financing local authorities’ real estate portfolio

**Key features and rationale**

**What?**

- *Portfolio* financing strategy optimising energy efficiency
- *Needs assessment* via SPREM analysis (Sustainable Public Real Estate Management (cont’d in SURE 2050))
- *Sale* of real estate that does not fit the needs and use of *proceeds & avoided expenses* to finance energy efficiency investments
- Use of *natural renovation moments*

**Why?**

- Suboptimal energy efficiency investments at single building level is not compatible with high ambitions (e.g. climate neutrality)
- Putting public service delivery at the center of the real estate strategy allows a more holistic real estate vision
- Adequate timing of investments is key to reduce costs
Real estate portfolio local authorities: an accelerated vs a staged approach

Accelerated approach

Modular approach
Further information

General inquiries
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Inquiries on specific solutions (see below)

Energy Renovation loan 2.0
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lucwittebolle@sustainablemarketsconsulting.com

Forfeiting solution
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Antoon Soete
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antoon.soete@wattson.be

Financing local authorities’ real estate portfolio
Factor 4
Geert Goorden
+32 477 59 89 03
geert.goorden@factor4.eu
- How to create synergies between FALCO and EUCF?

- What conditions must be met in order to implement / upscale / replicate these solutions?
Project Zero and the smart en city Project

Financing Energy Retrofitting of Buildings

Torben Esbensen
Danish Energy Management
07.10.20

TOWARDS SMART ZERO CO, CITIES ACROSS EUROPE
VITORIA-GASTEIZ + TARTU + SONDERBORG

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 601883
Sonderborg Municipality

- 76,000 citizens
- 500 km² territory – 2/3 on an island
- Main income from industry, farming/food-production and tourism

Ambition since 2007: Transitioning into a ZERO carbon energy-system by 2029

- 44% reduction achieved by 2019

Use public-private partnership as the basis for our climate-transition

- Remove 700,000 tons of carbon emissions (baseline 2007) - based on a co-creation participatory platform!
The ambition is ZEROcarbon by 2029 enabled by lower energy consumption and transition all energy consumption into renewables - based on participatory and smart energy solutions. Roadmap2025 consists of 52 such (energy) transition projects.
ProjectZero - a true Public Private Partnership
Carbon reduction per sector

Total annual carbon reduction in the 8 areas in 2025

- 392,000 tonnes (Total)
  - 21,000 tonnes
  - 14,500 tonnes
  - 5,500 tonnes
  - 9,000 tonnes
  - 8,000 tonnes
  - 4,000 tonnes
  - 295,000 tonnes

Agriculture
Businesses
Energy/Transport
Industry
Residential
Services
Transport
Publications
Financing Methods for Housing Associations

- Own reserves in the department
- Borrow from reserves in other departments in the housing association
- Loans from credit unions over 20 years. Cheap solution. Guarantees from municipality needed.
- Financing from Sustain Solutions (see slide below)
The ZEROhome program - engaging 18,600 homeowner-families

- House construction, thermostats, insulation, installations, green district heating, heat pumps, appliances, mindset, ..
- Concept
  - easy, safe and economic viable for owners
  - strengthen craftsmanship competencies
  - secure financial support
  - lean processing across sectors
- Impact
  - 1,600 homes visited by Charlie
  - 65% have initiated retrofit with average €21,000 generating €15 mio in craftsmen sales
  - Energy savings up to 45% per household
Solar PV Cells – SAB dept. 22
Roof integrated solar panels:

- 460 kW solar cells (3.000 m² panels) produce 408.000 kWh electricity per year corresponding to 37 % of the total electricity consumption in the 432 apartments.
- The solar system is designed in such a way, that 80 % of the produced electricity is used hour-by-hour directly in the apartments, and 20 % is sold to the public grid.
- By using the solar electricity directly, the apartments save 0.30 Euro per kWh.
- The 20 % can be sold to the grid for 0.11 Euro per kWh, which is a special support arrangement from the government.
SAB, Dept. 22. Solar PV + Battery Financed by Sustain Solutions

- The tendering included: Delivery and installation of the solar panels, the electrical installations, the roof construction by integrating the panels and the financing scheme for the whole contract.
- The financing scheme means, that the contractor provides the financing, and only the actual value of the solar produced electricity is used as repayment of the investment.
- This means, that the residents do not get any savings on their electricity bills the first 10-15 years, but after that they will have a considerable reduction of their bills without increase in the rent of the apartments and without providing guarantees.
- The solar cells have a lifetime of 25-30 years, and will deliver free electricity to the apartments after the first 10-15 years.
- This financing scheme does not needs guarantees and does not result in rent increase.
SOBO Housing Association, Dept. 11 – 88 apartments.
Solar photovoltaic 950 m2.
B42 Housing: Solar + Batteries
Battery Storage Solutions in Combination with Solar Cells

- Battery storage solutions are planned to be implemented and demonstrated in combination with solar PV plants in 16 housing departments belonging to the 5 housing associations SAB, B42, SOBO, GAB and Danbo.
- The demonstration project covers 60 housing blocks with 3,000 apartments + 106 townhouses.
- The total investment for this demonstration project is budgeted to 4 million Euro.
SAB Department 24 with 324 appt. to host the Battery Solution Project
SAB Depart. 30 with 232 appt. to Host the Battery Solution Project
Torben Esbensen
Consulting Engineer M.Sc.

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www.smarteincity.eu Twitter: @SmartEnCity
- What sectors are foreseen to have most potential to contribute to the city’s decarbonization pathway?
THANK YOU!

For more information on the Working Group on Financing or to become a member, please contact 
financing@climatealliance.org