CELSIUS Talk: Public and private funding for DE systems

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District Energy Systems Financing

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What the European Energy Efficiency Fund can do for you

eeef EUROPEAN ENERGY EFFICIENCY FUND

If you are a

Public Entity

- As we have done with: City of Venlo (Netherlands), CHAP Social Housing Association (UK)

Private company liasing with a public entity

- As we have done with: ISOM (Italy), Enertika (Spain), Bolloré (France), RBE (France), Orléans (France), SPL-Ôser (France), JMB JC (Germany), Munich University JC (Germany)

Financial Institution financing the above

- As we have done with: Banca Transilvania (Romania)

Developing a project of

Renewable Energy

- As we have done with: City of Orléans (France), City of Rennes (France), CHAP Social Housing Ass. (UK)

Energy Efficiency

- As we have done with: City of Venlo (Netherlands), Region Rhône Alpes (France), Sant'Orsola Hospital (Italy), Polytechnique of Madrid (Spain), Banca Transilvania (Romania), Jewish Museum of Berlin (Germany), Munich University (Germany), CHAP Social Housing Ass. (UK)

Clean Urban Transport

- As we have done with: Bolloré – Paris, Lyon, Bordeaux (France)

With these features

Avoiding **CO2e emissions** at least for **20%** of the baseline

Looking for **funding** in a (flexible) range between **5** and **25 €m**

In one of the **28 EU countries**

eeef can support your project providing

Funding

- Debt
  - As we have done for projects of: City of Venlo (Netherlands), Bolloré (France), Region Rhône Alpes (France), CHAP Social Housing Ass. (UK), Sant'Orsola Hospital (Italy), Polythecnique of Madird (Spain), Banca Transilvania (Romania), Jewish Museum of Berlin (Germany), Munich University (Germany)
- Equity
  - As we have done for projects of: City of Rennes (France), City of Orléans (France)

Technical Assistance

(see following slide)

European Investment Bank cdp

eeef founder investors

New Technical Assistance facility for a higher succes rate of projects

eeef coordination&monitoring activities and bankability-oriented TA enhance the implementation rate of projects

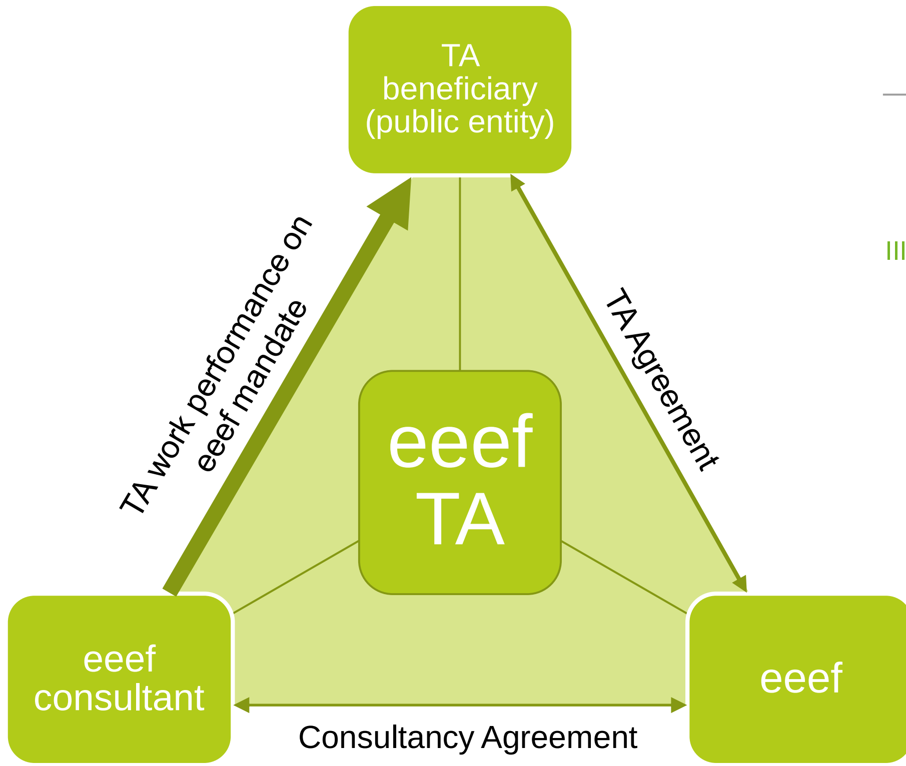
TA boundaries

All activities necessary to prepare investments - feasibility studies, energy audits, assessment of economic viability of investments, legal support etc.

No reimbursement required if the agreed conditions are met e.g. timeframe, leverage factor, eeef (co-)funding

Background experience

COM TA: **16** TA **projects** in **8 countries**, a total project volume of **€155m facilitated**



How TA works

I. eeef selected consultants

II. Consultant assigned to municipality

III. Joint definition of project scope

IV. Progresses monthly monitored by eeef

V. Bankability built all along the development process. eeef participating to project funding otherwise reimbursement of costs

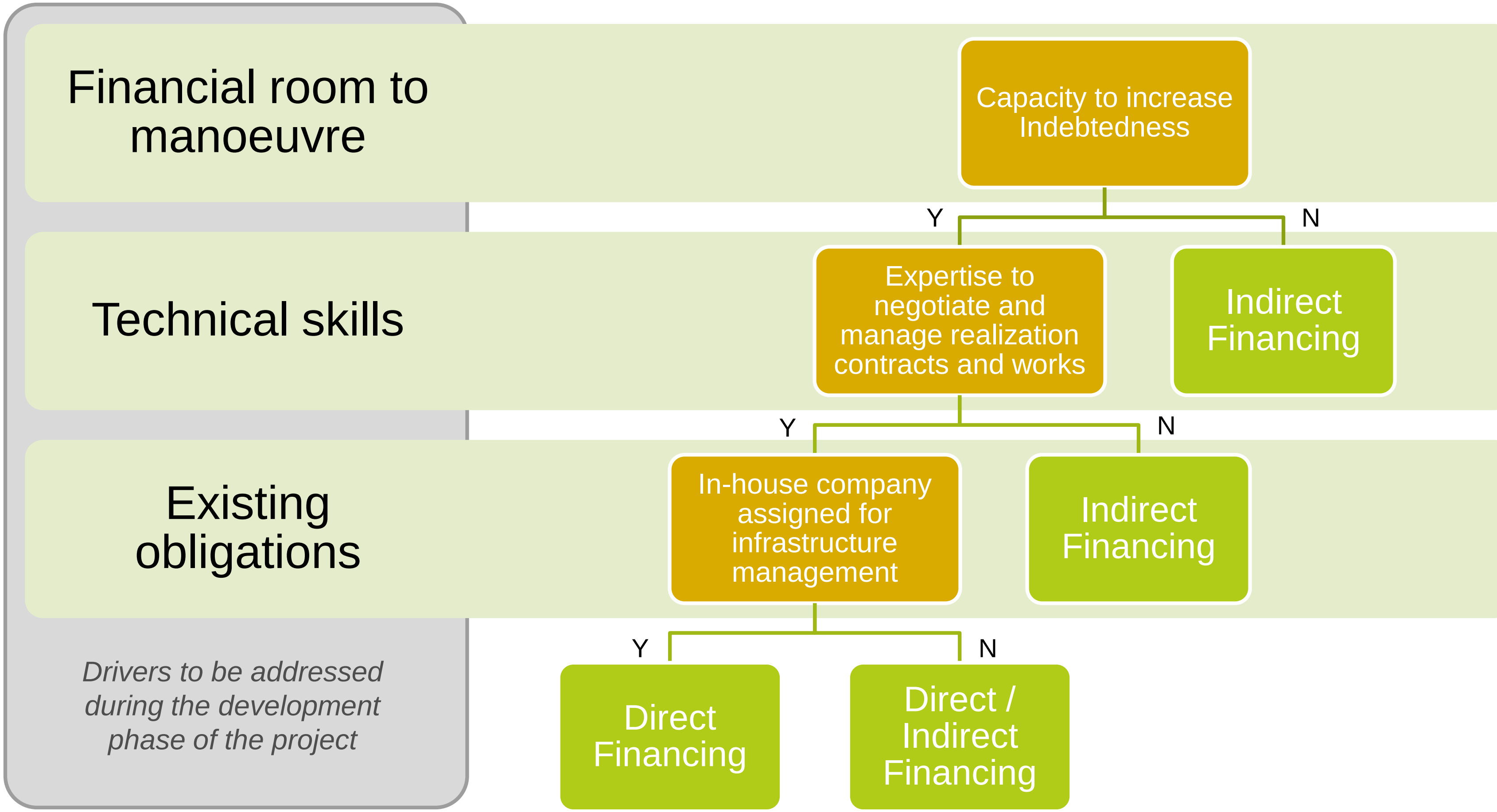
Current status: selected municipalities of Gijón (Spain) and Ferrara (Italy).

Further funding available

How to apply as beneficiary

Remaining funding available on a first-come-first-serve basis
Application to submit to technical_assistance@eeef.eu
All info at http://www.eeef.eu/eeef-ta-facility.html

Key decision factors for Cities when it comes to define the financial approach



Model and key drivers for indirect financing of energy production with district distribution

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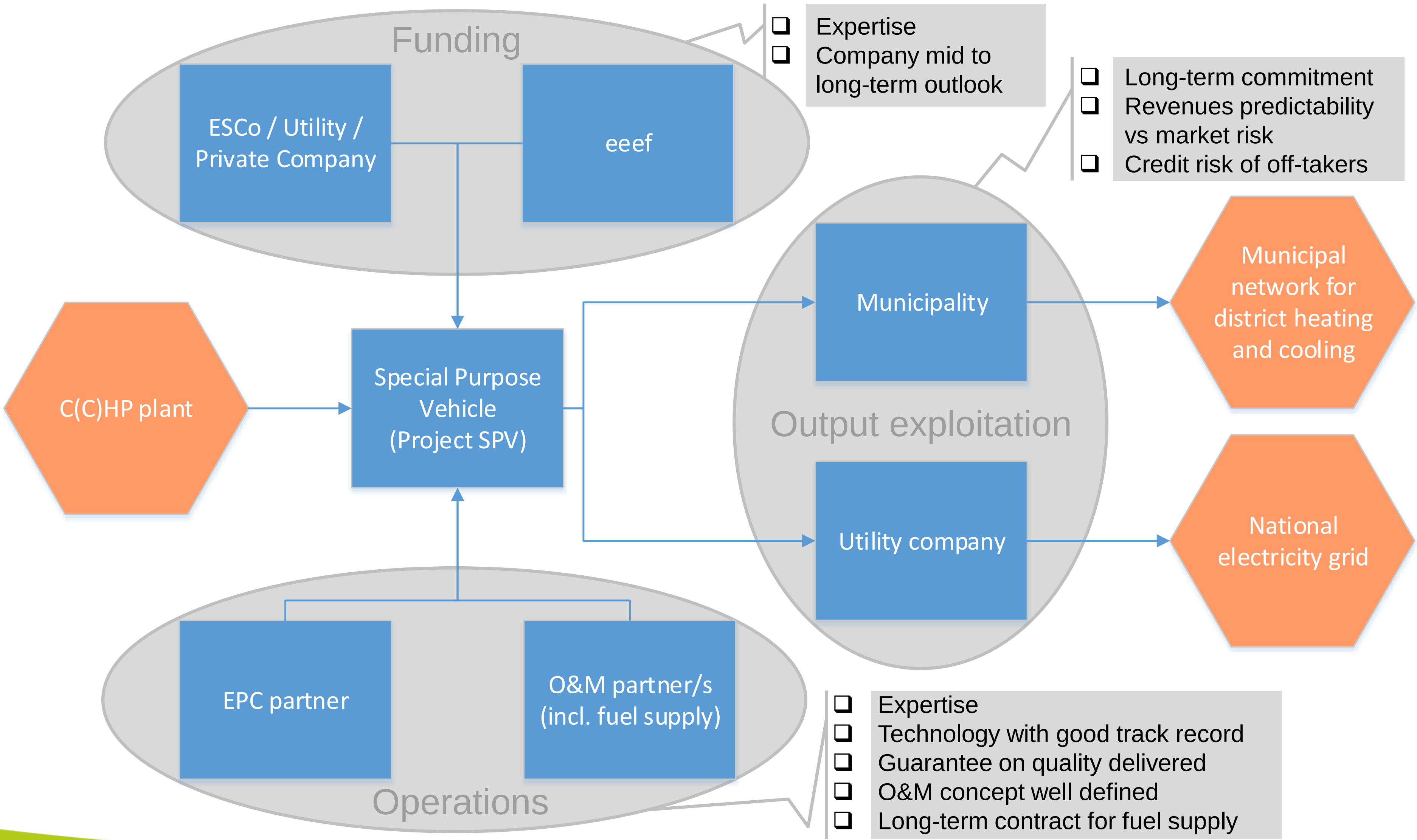
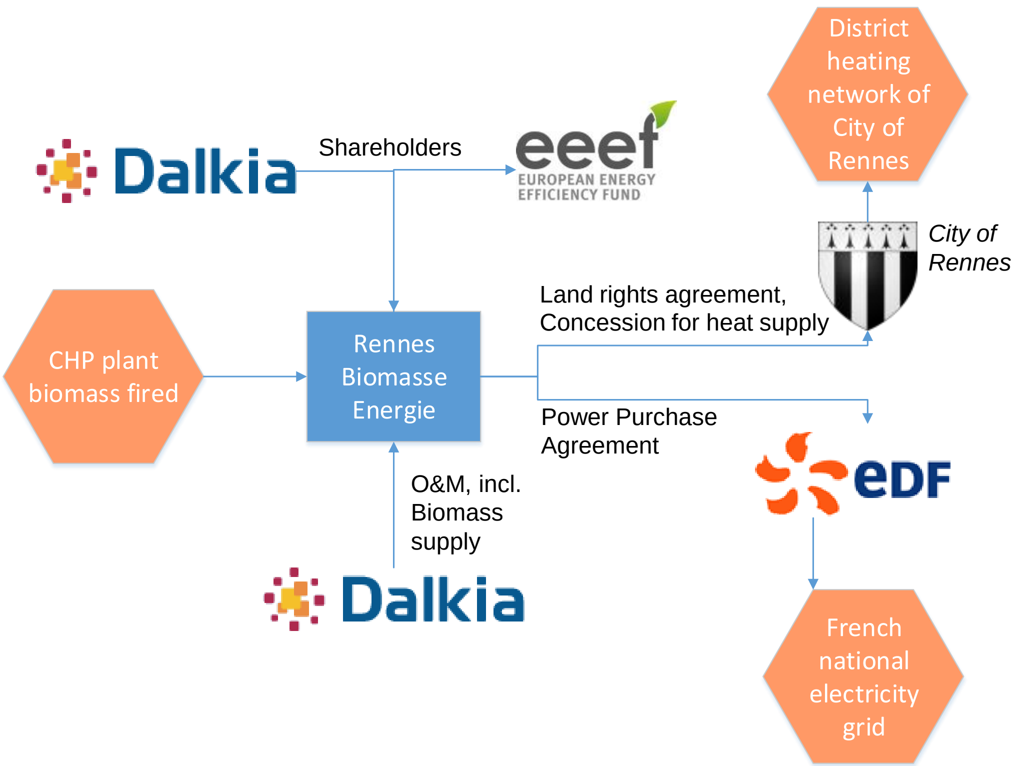
EUROPEAN ENERGY EFFICIENCY FUND



Case study funded by eeef as equity investor

CHP Plant biomass fired in the City of Rennes, France

Project structure



Project summary

- Partners: City of Rennes, Dalkia France
- Scope: Greenfield biomass-fired CHP plant with a capacity of 9.8 MW_e and 22 MW_{th}
- Background: Dalkia won a public tender run by a French Tender Regulation Commission („CRE3“) for generation of electricity / heat fired on biomass
- Results:
  - i) energy production of 67,000 MWh/year
  - ii) reduction of CO2e emissions of 37,000 t/year, 59% compared to baseline

Investment key info

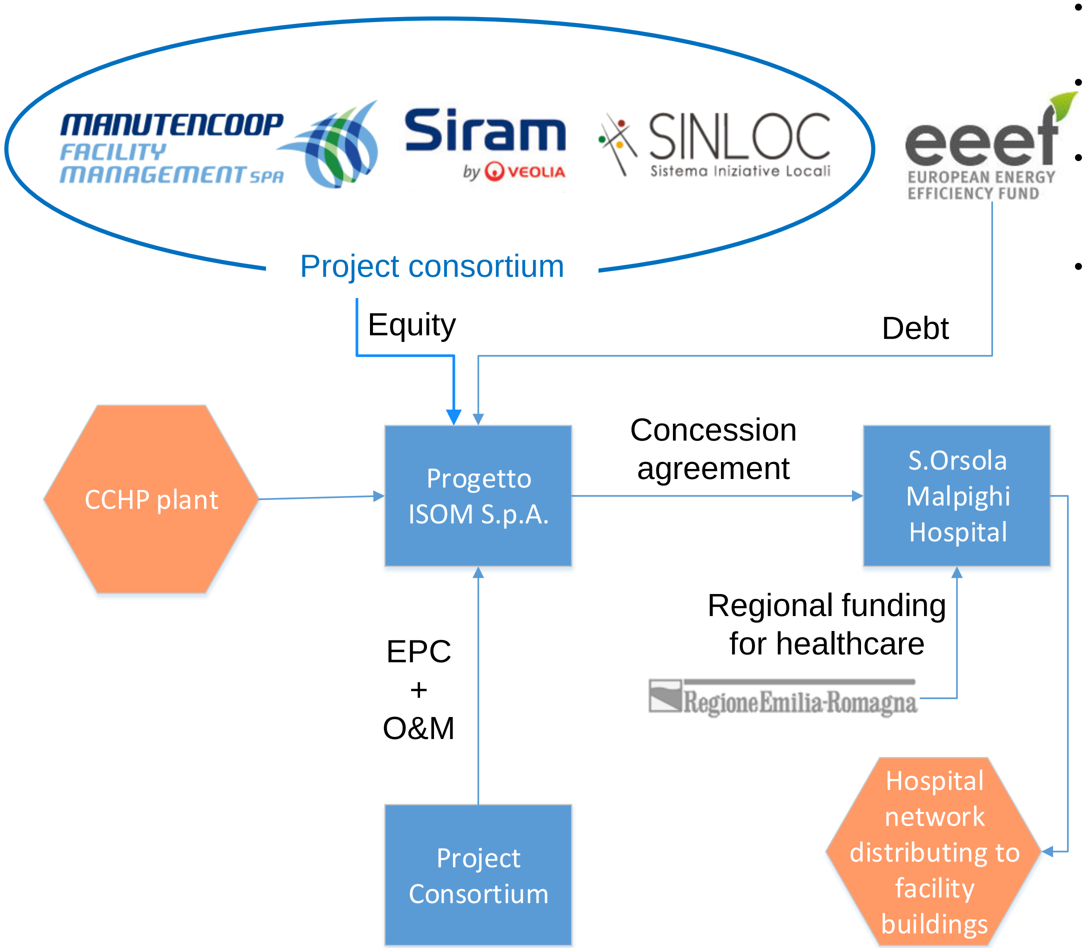
- eeef is a 84.4% shareholder of Rennes Biomasse Energie s.a.s. alongside with Dalkia at 15.6%
- Total project volume: €47.6m
- eeef investment size: €7.3m
- Financial instrument: junior funds – shareholder loan
- Duration of financing: 10 years

- Decentralized energy supply using existing district heating network
- Long term heat off-take agreement with delegated utility company on behalf of the City of Rennes
- Supply of biomass within 100km

Case study funded by eeef as lender

CCHP Plant natural gas fired in the City of Bologna, Italy

Project structure



Project summary

- Partners: Policlinico S.Orsola Malpighi, Manutencoop Facility Management, Siram, Sinloc
- Scope: Greenfield trigeneration plant + upgrade of entire fluid distribution network of the hospital
- Background: Project consortium won a public tender run by the Hospital backed by Emilia Romagna Region
- Results: Reduction of CO2e emissions of 14,136 t/year, 31% compared to baseline

Investment key info

- eeef is the long-term lender covering 73% of project volume
- Total project volume: € 41m
- eeef investment size: € 32m
- Financial instrument: project bond + VAT facility
- Duration of financing: 20 years

- Major energy efficiency upgrade in Italy under a Public Private Partnership (PPP)
- Relevant technical complexity
- Replication potential

Contacts

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