

KEY FIGURES

City surface: 56.8 km²
Inhabitants: 99,000
Municipal building stock:
250 facilities
Total surface area: 174,000 m²

Energy Consumption (2015):

Heat: 15,200 MWh
Electricity: 11,800 MWh
Water: 590,000 m³
total energy cost: € 4.3 m

REVOLVING FUND

Size of revolving fund: € 32,000
Ratio Seed Fund to annual energy
cost: 1%
Number of measures implemented: 8
Investment covered:
€ 1,600 – € 24,000

4.2/ Udine

4.2.1/ Udine's Internal Contracting scheme at a glance

Special features of Internal Contracting in Udine

Financing retrofit measures through the fund is not the only result of the city council decision. **New know-how, expertise and skills** have been developed both by Udine's municipal staff and other Italian local authorities the Agency is cooperating with. Moreover, new information about the energy consumption of the municipal buildings, equipment and facilities allows for better use of them.

The biggest challenge in Udine was raising the initial fund, due to the very tight budgetary situation of the municipality. Finally, it was possible to create the fund with income from the EEC's investment on the National Energy Market. Aware of the small size of the fund, the city is aiming to increase its amount. Council decision No. 272/2016 identifies the following sources

- financial savings resulting from lower energy bills and maintenance costs (€11,000.00 for 2016);
- incomes from the Energy Efficiency Credits investment on the energy market (€30,000.00 for 2016-2021);
- the entire amount of the investment money allocated to the annual City Budget for implementation of Udine's SEAP measures.



4.2.2/ Organisational structure

Udine, considerably smaller than Stuttgart, represents a 'typical' small to medium sized EU city. The fund was set up at the end of 2015. In Udine the initial fund size was €32,000. This sum was the city's budget income from the EEC's investment on the National Energy Market for the 2007-2014 period.

In Udine a new council by-law has very recently been passed. It states that the revolving fund will be the financial tool through which the authority will finance any SEAP measure. So the fund has changed its name from "Climate Fund" to "SEAP Fund".

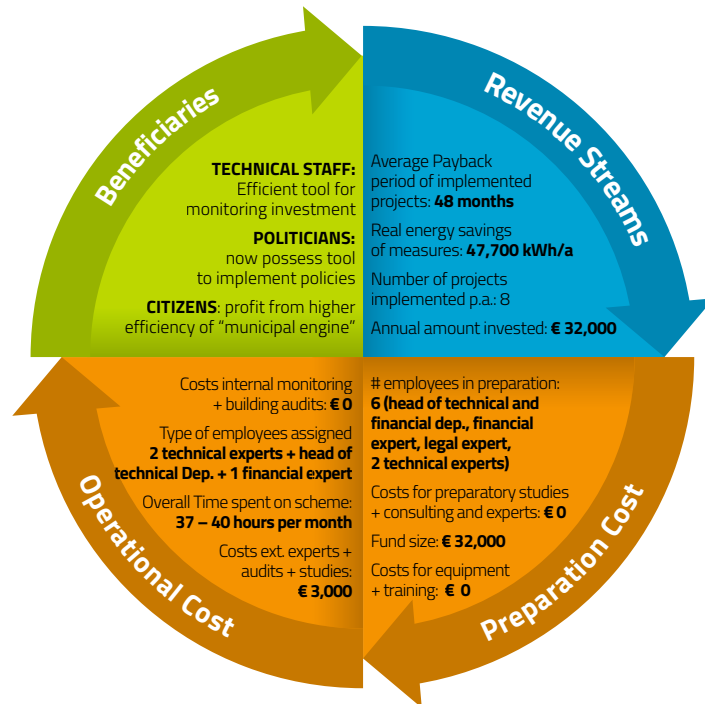


Figure 17: Udine Internal contracting scheme at a glance

4.2.3/ Management of the fund

In Udine technical management of the fund was assigned to the **Municipal Agency for Environmental Policies** that has the role of an Energy Service Company (ESCO). All municipal units and departments are invited to propose energy efficiency measures to be financed by the fund. The proposals are evaluated subject to a **cost-benefit analysis**, mandatory

criteria and the amount available in the fund. The Agency implements the measures and calculates the financial savings achieved which are redirected back into the Fund. The City Authority decided to start the Fund with energy savings generated by four **pilot measures** implemented in 2015.

To set up the fund, a "core management team" comprising the head of the technical department,

two technical experts, one financial expert, one political representative and two other external technical advisors was created and is still active today. However, the day-to-day business is now managed by the two technical experts.

The diagram below illustrates the business model and organisational functionality chosen for the Udine SEAP fund:

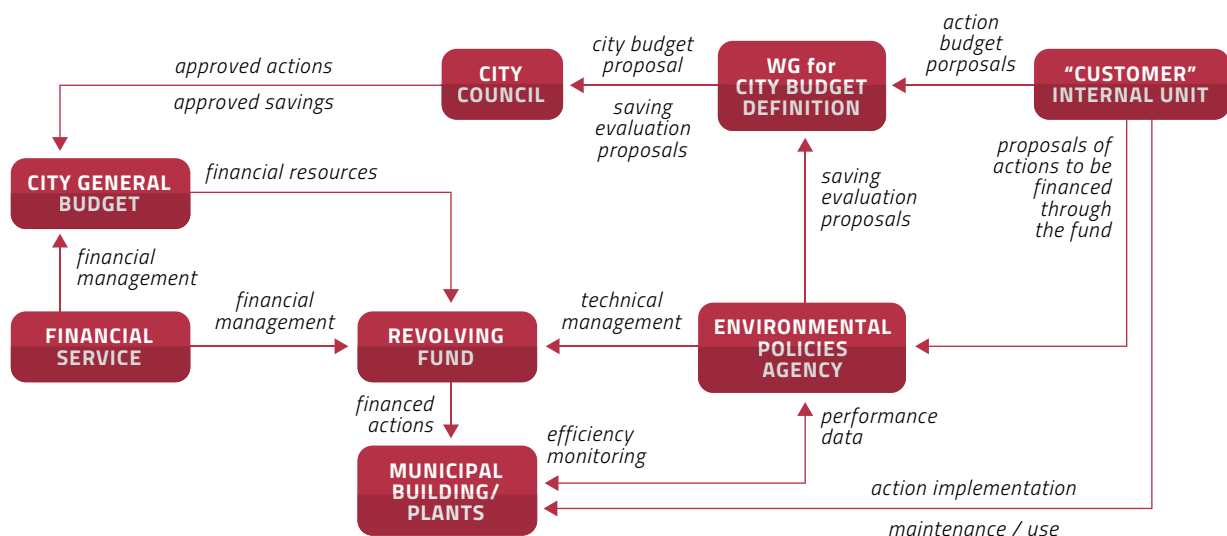


Figure 18: Business model and organisational functionality



Investment Criteria:

The City Council by-law No.289/2015 states that any measure financed through the fund has to fulfil four preconditions.

N.	Precondition	value
1	Reduction of CO ₂ emissions (for retrofit measure only)	> 10%
2	Return On Investment (ROI)	< 10 years
3	Intervention lifetime / ROI	> 1
4	Energy saving (for retrofit measure only)	> 10%

As to the score assigned to each measure applied, this is calculated based on the following five criteria.

N.	Criteria	Maximum score
1	Measure covered by the SEAP action pipeline (y/n)	10 points
2	Reduction of CO ₂ emissions (for retrofit measure only)	25 points
3	Return On Investment (ROI)	20 points
4	Intervention lifetime / ROI	10 points
5	Energy saving (for retrofit measure only)	35 points

4.2.4/ Measures financed through Internal Contracting

In Udine the economic savings are linked to the implementation of four pilot measures already financed in previous years through the City budget:

- 1/ Lighting plant renewal at "Parco della Rimembranza" - completed in 2015
- 2/ Lighting plant renewal at "viale Palmanova" overpass - completed in 2015
- 3/ New windows frames at "Forte" infant school - completed in 2015
- 4/ Roof insulation at "Fruch" primary school – completed in 2016

4.2.5/ Monitoring and evaluating the impact

In order to monitor the fund activity and evaluate performances, an annual document based on a cost-benefit analysis of each individual investment will be produced. The document will report the energy consumption performance measured during the months (12 if possible) following implementation of the investment. If consumption is higher than forecast, specific measures will be taken to ascertain the reasons for the discrepancy and restore proper operation. The measures may be technical (directly on the equipment) or "educational", focused on users' behaviour.

More information

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