Press release – FIRECE project

Use of financial instruments to support projects on energy savings and renewable energy

Together with other four project partners, ENVIROS participated in FIRECE Pilot Action 2 that focused on assessment of industrial sector energy projects using the Project level tool developed in previous project steps with the goal to verify projects quality and quantity their contribution to achieve energy plans targets.

The Project level tool main focus is to evaluate economic parameters of a particular project as well as its environmental benefits in terms of decreased carbon emissions. It enables to simulate and compare different financing options using the indicators mentioned above.

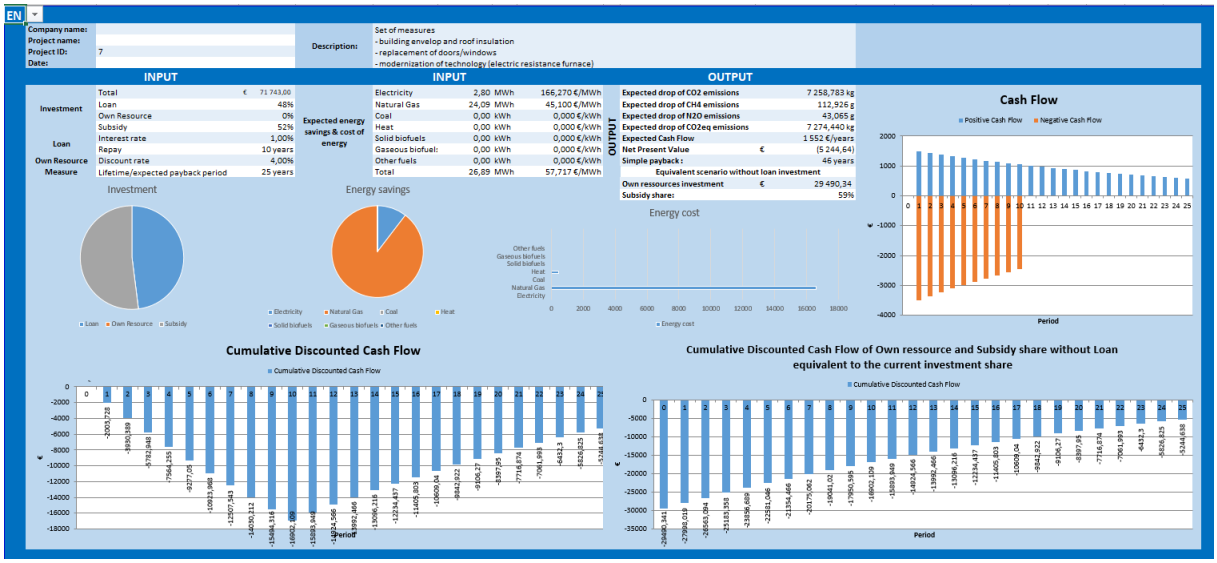
In the Czech Republic, eight projects of SMEs representing investments into energy saving measures and introduction of renewable energy sources were included into the testing. For each project, three financing options were calculated and evaluated with the objective to find the most appropriate alternative.

They included the following options:

- The *Basic scenario* consisted in the situation, when a project received a subsidy while the remaining part of the investment was covered by own resources of a company.
  It represents the way how the projects were funded in reality.
- The *Scenario 2* simulated the situation when the project received a subsidy (same amount as in the basic scenario) and the rest of the investment was financed through a soft loan (10 years with 1-2% interest rate).
  This combination of financial instruments was piloted in some operational programmes in recent years; however, not for energy-related projects.
- The *Scenario 3* consisted in financing through a soft loan (10 years, interest free) up to 70% / 90% (two alternatives) of the investment, while the rest was covered from the company's own resources.
  This type of financing is already used in the country for specific energy savings projects, and is considered to be more widely used in the next programming period, in particular for small-scale projects.

The financing options were compared based on two main indicators, which we the net present value (NPV) and cash flow (CF), in particular 'cash flow breakpoint' – i.e. a year when cumulative savings exceed cumulative expenses (cumulative CF = 0).

The calculation results revealed that while the substitution of own resources with a soft loan delivers better economic results in terms of slightly higher NPV and lower CF breakpoint, the substitution of a subsidy with a soft loan leads to considerable decrease of NPV and increase of CF breakpoint. The additional settings of a financial instrument (e.g. interest rate, ratio of a loan) have only a less significant impact on this overall trend.



When combining a subsidy with a soft loan (scenario 2), several projects generate positive cash flow since the beginning. Their annual financial savings are higher than the annual loan instalment and at the same time, the company does not need to provide its own initial investment.

However, when increasing the share of a loan (scenario 3), the annual instalment is too high to be recovered by annual financial savings, and so the annual cash flow turns into positive trend only after the repayment of the loan.

All the projects have the ability to generate energy and GHG savings, and so to contribute to the goals of national/region energy plans. Nevertheless, to make the projects also economically viable, a certain level of a subsidy component seems to be necessary to be involved into the financing schemes.

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