

D.T2.2.3 Methodology to test the tool to assess public investments for industry's low carbon transition

Annex II - Project level tool calculator

Local specification: **Germany / Saxony**

The Project level tool calculator main focus is to evaluate economic parameters (e.g. NPV – net present values, CF – cash flow, etc.) as well as environmental benefits in terms of decreased carbon emissions of particular projects focused on energy efficiency improvement and/or use of renewable energy sources.

With reference to funding/financial support, the user is able to simulate how different types of instruments (subsidies, loans) and different shares of financial support affect economic parameters of the project and so its financial viability.

This local specification includes energy- and GHG-related data for the Germany (Saxony), and shall be use only in this regional context in order to obtain valid results.

For instructions how to use the tool, please refer to the main document "Methodology to test the tool to assess public investments for industry's low carbon transition".



Company name: _____
 Project name: _____
 Project ID: _____
 Date: _____

Description: _____

INPUT	
Total	€ 150,000.00
Investment	
Loan	40%
Own Resource	10%
Subsidy	50%
Loan	
Interest rate	5.00%
Repay	20 years
Discount rate	5.00%
Own Resource	
Measure	
Lifetime/expected payback period	20 years

INPUT		OUTPUT		
Electricity	18.00 MJ	0.139 €/MJ	Expected drop of CO2 emissions	1,705.441 kg
Natural Gas	3600.00 MJ	0.056 €/MJ	Expected drop of CH4 emissions	16,588.175 g
Coal	7200.00 MJ	0.056 €/MJ	Expected drop of N2O emissions	2,527.163 g
Heat	10800.00 MJ	0.083 €/MJ	Expected drop of CO2e emissions	2,933.240 kg
Solid biofuels	18000.00 MJ	0.056 €/MJ	Expected Cash Flow	4,503 €/years
Gaseous biofuels	18000.00 MJ	0.111 €/MJ	Net Present Value	€ (18,888.96)
Other fuels	0.00 MJ	0.056 €/MJ	Simple payback:	33 years
Total	57618.00 MJ	0.078 €/MJ	Equivalent scenario without loan investment	
			Own resources investment	€ 75,000.00
			Subsidy share:	50%

OUTPUT	
Expected drop of CO2 emissions	1,705.441 kg
Expected drop of CH4 emissions	16,588.175 g
Expected drop of N2O emissions	2,527.163 g
Expected drop of CO2e emissions	2,933.240 kg
Expected Cash Flow	4,503 €/years
Net Present Value	€ (18,888.96)
Simple payback:	33 years
Equivalent scenario without loan investment	
Own resources investment	€ 75,000.00
Subsidy share:	50%

Expected energy savings & cost of energy

