



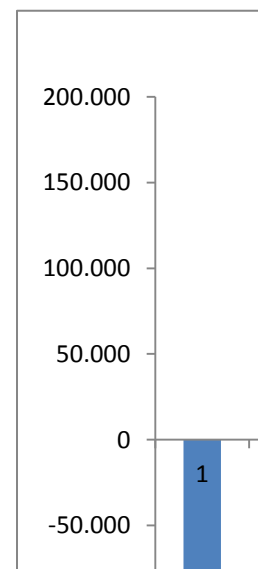
**TOOL TO DEVELOP FEASIBILITY ANALYZE OF ENERGY MEASURES**

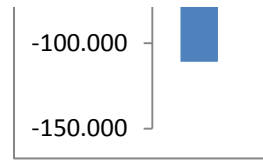
150.000	ahorro anual de energia (kWh)
0,15	coste de la energía (€/kWh)
5,0%	energy CPI
3,0%	CPI
1520	operation and maintenance cost (€)
10	amortization (yr)

	0	1	2	3
+ savings		22.500	23.625	24.806
- O&M cost		1.520	1.566	1.613
= <b>Gross profit</b>		20.980	22.059	23.194
- Amortization		20.000	20.000	20.000
+ Subsidies	0			
= <b>Benefit before interest</b>	0	980	2.059	3.194
- Interest		5.200	4.767	4.333
= <b>Benefit before tax</b>	0	-4.220	-2.707	-1.140
- tax		0	0	0
= <b>Net benefit</b>	0	-4.220	-2.707	-1.140
+ Amortizations		20.000	20.000	20.000
- <b>pay out</b>	120.000	6.667	6.667	6.667
= <b>Cash-flow</b>	-120.000	9.113	10.626	12.194
= <b>Cash-flow cumulative</b>	-120.000	-110.887	-100.261	-88.067

discount rate 3,00%

<b>IRR</b>	10,73%
<b>NPV</b>	98.019 €
<b>Payback</b>	8



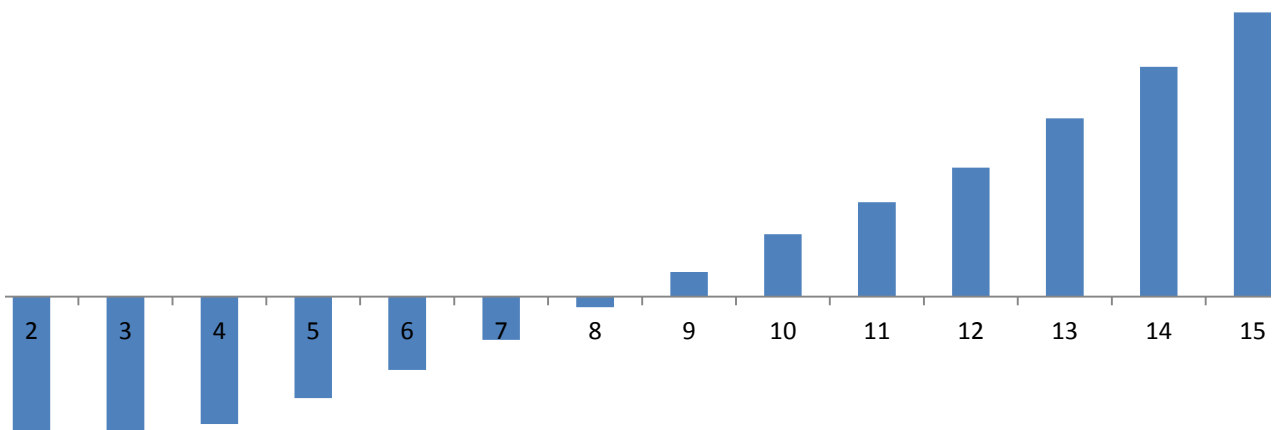




Initial data	
200.000	investment (€)
6,5%	interest rate (%)
12	years of the loan
0	subsidize
60%	own capital
40%	external capital
25%	tax

YEARS							
5	5	6	7	8	9	10	11
26.047	27.349	28.716	30.152	31.660	33.243	34.905	36.650
1.661	1.711	1.762	1.815	1.869	1.925	1.983	2.043
24.386	25.638	26.954	28.337	29.790	31.317	32.922	34.607
20.000	20.000	20.000	20.000	20.000	20.000	20.000	0
4.386	5.638	6.954	8.337	9.790	11.317	12.922	34.607
3.900	3.033	3.033	2.600	2.167	1.733	1.300	867
486	2.605	3.921	5.737	7.624	9.584	11.622	33.741
121	651	980	1.434	1.906	2.396	2.905	8.435
364	1.954	2.941	4.303	5.718	7.188	8.716	25.306
20.000	20.000	20.000	20.000	20.000	20.000	20.000	0
6.667	6.667	6.667	6.667	6.667	6.667	6.667	6.667
13.698	15.287	16.274	17.636	19.051	20.521	22.050	18.639
-74.369	-59.082	-42.808	-25.172	-6.121	14.400	36.450	55.089

cumulative cash-flow





<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
38.483	40.407	42.427	44.548
2.104	2.167	2.232	2.299
36.379	38.240	40.195	42.249
0	0	0	0
36.379	38.240	40.195	42.249
433	0	0	0
35.945	38.240	40.195	42.249
8.986	9.560	10.049	10.562
26.959	28.680	30.146	31.687
0	0	0	0
6.667	0	0	0
20.292	28.680	30.146	31.687
75.381	104.061	134.207	165.894



