
	Project analysis
	Contact



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Basic data

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3			1) Basic data																		
4			Basic technical project parameters																		
5			Project name		Solar																
6			Project location		HR																
7			Nominal PV capacity	MWp	0,030																
8			Panel degradation rate	%/yr	0,80%																
9	Parameter selection		Capacity factor	%	15,26%																
10			Full-load hours	h	1337																
11			Annual energy generation	MWh	40,10																
12																					
13																					
14			Project financing																		
15			Discount rate (for equity)	%	10,00%																
16			Debt ratio	%	75,00%																
17			Interest rate	%	7,00%																
18			Loan duration	yr	12																
19			Equity	€	22.208																
20			Loan	€	66.623																
21			Annual debt payment	€	8.388																
22																					
23			Tax and depreciation																		
24			Income tax rate	%	20,0%																
25			Depreciation share	% of CAPEX	90,0%																
26			Depreciation period	yr	10																
27			Depreciation rate	%	10,00%																
28			Annual depreciation	€	7.994,7																
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Zoom: 85%

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2) Income

Inflation and lifetime

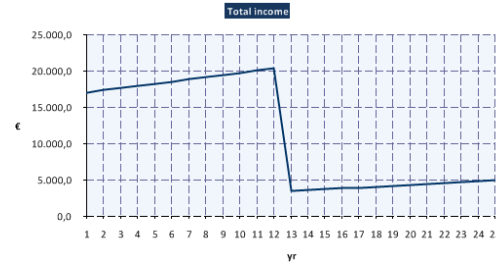
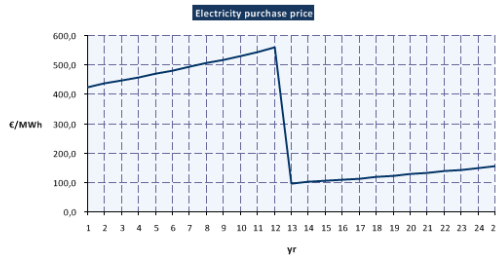
Inflation rate	%	2,50%
Project lifetime	yr (12-28)	25

Electricity price

Price assumption	Model hr (pessimist)	
Exchange rate	kn/€	7,40
Factor for "local component"		0,93
Feed-in tariff duration	yr	12
Feed-in tariff (1st yr)	kn/kWh	3,3880
Current electricity market price	kn/kWh	0,4500
Electricity price growth rate	%	4,00%
Feed-in tariff (1st yr)	€/MWh	425,8
Current electricity market price	€/MWh	60,8

Electricity price, annual production, gross income

Year	Model hr (pessimist)	Annual energy generation	Total income
	€/MWh	MWh	€
1	425,8	40,1	17.078,4
2	436,4	39,8	17.365,3
3	447,3	39,5	17.655,9
4	458,5	39,1	17.950,2
5	470,0	38,8	18.248,1
6	481,7	38,5	18.549,7
7	493,8	38,2	18.855,0
8	506,1	37,9	19.164,0
9	518,8	37,5	19.476,6
10	531,8	37,2	19.792,9
11	545,0	36,9	20.112,9
12	558,7	36,6	20.436,4
13	97,4	36,3	3.530,2
14	101,3	35,9	3.638,9
15	105,3	35,6	3.750,7
16	109,5	35,3	3.865,6
17	113,9	35,0	3.983,7
18	118,5	34,7	4.105,0
19	123,2	34,3	4.229,7
20	128,1	34,0	4.357,8
21	133,2	33,7	4.489,3
22	138,6	33,4	4.624,4
23	144,1	33,1	4.763,1
24	149,9	32,7	4.905,6
25	155,9	32,4	5.051,8





Zoom: 100%
 Construction costs

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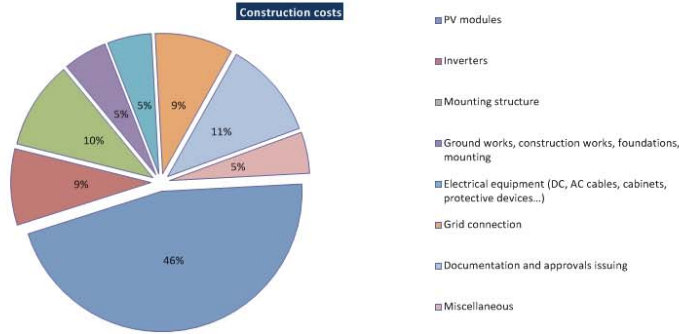
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3) Construction costs			
Component	Total (€)	Total (€/kW)	Total (%)
PV modules	40.800	1360,0	45,9%
Inverters	7.800	260,0	8,8%
Mounting structure	9.000	300,0	10,1%
Ground works, construction works, foundations, mounting	4.500	150,0	5,1%
Electrical equipment (DC, AC cables, cabinets, protective devices..)	4.500	150,0	5,1%
Grid connection	8.000	266,7	9,0%
Documentation and approvals issuing	10.000	333,3	11,3%
Miscellaneous	4.230	141,0	4,8%
Total investment costs	88.830,0	2.961,0	100%

Share of miscellaneous costs	%	5,00%
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Operating costs

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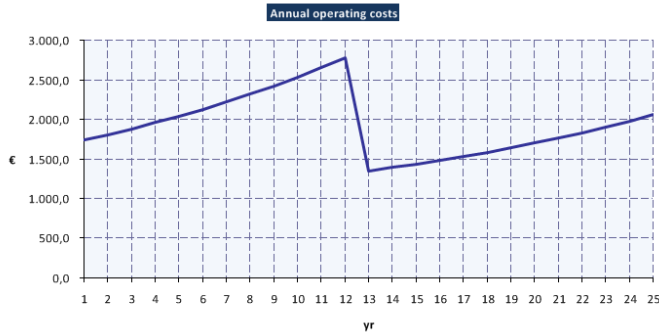
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4) Operating costs

Periodical costs		
Inverter replacement	% of inverter price	60,00%
	€	4.680
	yr.	12
Concession and fees		
Land / roof lease	% of gross income	
Specific land lease costs	% of income	5,00%
Lease costs annual growth	% / yr	5,00%
Maintenance and insurance		
Maintenance costs	% of investment	0,50%
Maintenance costs annual growth rate	% / yr	2,50%
Insurance costs	% of investment	0,50%
Insurance costs annual growth rate	% / yr	0,00%

Annual operating costs						
Year	Maintenance(€)	Fees(€)	Insurance(€)	Total (€)	Total (€/MWh)	Total (% of income)
1	444,2	853,9	444,2	1.742,2	43,4	10,20%
2	455,3	911,7	444,2	1.811,1	45,5	10,43%
3	466,6	973,3	444,2	1.884,1	47,7	10,67%
4	478,3	1.039,0	444,2	1.961,4	50,1	10,93%
5	490,3	1.109,0	444,2	2.043,4	52,6	11,20%
6	502,5	1.183,7	444,2	2.130,4	55,3	11,48%
7	515,1	1.263,4	444,2	2.222,6	58,2	11,79%
8	528,0	1.348,3	444,2	2.320,4	61,3	12,11%
9	541,2	1.438,8	444,2	2.424,1	64,6	12,45%
10	554,7	1.535,3	444,2	2.534,1	68,1	12,80%
11	568,5	1.638,1	444,2	2.650,8	71,8	13,18%
12	582,8	1.747,7	444,2	2.774,6	75,8	13,58%
13	597,3	1.870,0	444,2	2.911,4	80,5	14,00%
14	612,3	1.995,1	444,2	3.061,5	85,9	14,46%
15	627,6	2.132,0	444,2	3.223,7	92,0	14,97%
16	643,3	2.281,0	444,2	3.398,4	98,9	15,54%
17	659,3	2.442,0	444,2	3.585,4	106,8	16,18%
18	675,8	2.615,0	444,2	3.784,9	115,8	16,89%
19	692,7	2.800,0	444,2	4.006,8	126,1	17,68%
20	710,0	2.997,0	444,2	4.251,1	137,9	18,56%
21	727,8	3.207,0	444,2	4.518,9	151,4	19,54%
22	746,0	3.430,0	444,2	4.810,1	166,8	20,64%
23	764,6	3.667,0	444,2	5.125,8	184,3	21,89%
24	783,8	3.920,0	444,2	5.477,9	204,1	23,34%
25	803,3	4.189,0	444,2	5.866,4	226,6	24,99%





Zoom: 85%
Financial analysis

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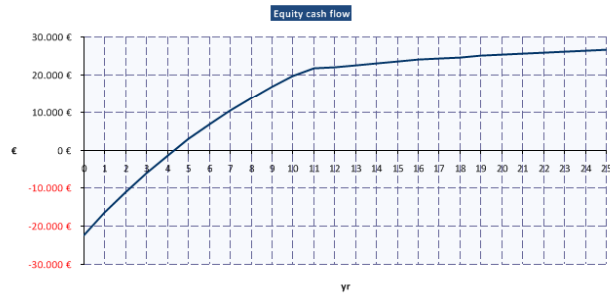
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Equity cash flow					
Year	Gross profit (without tax)	Net profit (incl. tax)	Discounted	Cumulative	Payback time
0	-22.208 €	-22.208 €	-22.208 €	-22.208 €	
1	6.948 €	6.413 €	5.830 €	-16.378 €	
2	7.166 €	6.535 €	5.401 €	-10.977 €	
3	7.384 €	6.653 €	4.999 €	-5.978 €	
4	7.601 €	6.767 €	4.622 €	-1.356 €	
5	7.817 €	6.876 €	4.269 €	2.913 €	5
6	8.031 €	6.979 €	3.940 €	6.853 €	
7	8.245 €	7.077 €	3.631 €	10.484 €	
8	8.456 €	7.167 €	3.344 €	13.828 €	
9	8.665 €	7.251 €	3.075 €	16.903 €	
10	8.871 €	7.326 €	2.825 €	19.728 €	
11	9.074 €	5.794 €	2.031 €	21.758 €	
12	4.594 €	1.171 €	373 €	22.132 €	
13	2.172 €	1.737 €	503 €	22.635 €	
14	2.239 €	1.792 €	472 €	23.107 €	
15	2.308 €	1.846 €	442 €	23.649 €	
16	2.376 €	1.901 €	414 €	24.062 €	
17	2.445 €	1.956 €	387 €	24.349 €	
18	2.515 €	2.012 €	362 €	24.711 €	
19	2.584 €	2.067 €	338 €	25.049 €	
20	2.653 €	2.122 €	315 €	25.365 €	
21	2.722 €	2.177 €	294 €	25.659 €	
22	2.790 €	2.232 €	274 €	25.933 €	
23	2.858 €	2.286 €	255 €	26.189 €	
24	2.924 €	2.339 €	238 €	26.426 €	
25	2.990 €	2.392 €	221 €	26.647 €	



Financial viability			
Internal rate of return (IRR)	%		26,72%
Net present value (NPV)	€		26.647
Equity payback time	yr		5
Benefit-cost ratio	-		2,20