

RETScreen® Financial Summary - Photovoltaic Project

Annual Energy Balance				
Project name	Generador Fijo 100 KwP			
Project location	Zona 5	Nominal PV array power	kWp	100.00
Renewable energy delivered	MWh	146.536	Net GHG reduction	t _{CO2} /yr 69.08
Firm RE capacity	kW	10.920	Net GHG emission reduction - 25 yrs	t _{CO2} 1,727.02
Application type	On-grid			

Financial Parameters				
Avoided cost of energy	€/kWh	-	Debt ratio	% 0.0%
RE production credit	€/kWh	0.440		
RE production credit duration	yr	25		
RE credit escalation rate	%	2.0%		
GHG emission reduction credit	€/t _{CO2}	-	Income tax analysis?	yes/no Yes
			Effective income tax rate	% 30.0%
			Loss carryforward?	- Yes
			Depreciation method	- Straight-line
Avoided cost of capacity	€/kW-yr	-	Depreciation tax basis	% 100.0%
Energy cost escalation rate	%	0.0%		
Inflation	%	3.0%	Depreciation period	yr 15
Discount rate	%	4.0%	Tax holiday available?	yes/no No
Project life	yr	25		

Project Costs and Savings				
Initial Costs			Annual Costs and Debt	
Feasibility study	0.3%	€ 1,900	O&M	€ 9,925
Development	4.3%	€ 26,160	Fuel	€ -
Engineering	2.3%	€ 14,000		
Energy equipment	68.9%	€ 420,000	Annual Costs and Debt - Total	€ 9,925
Balance of equipment	19.5%	€ 118,862		
Miscellaneous	4.8%	€ 29,046	Annual Savings or Income	
Initial Costs - Total	100.0%	€ 609,968	Energy savings/income	€ -
			Capacity savings/income	€ -
Incentives/Grants		€ -	RE production credit income - 25 y	€ 64,476
			Annual Savings - Total	€ 64,476
Periodic Costs (Credits)				
Sustitución inversores	€	51,000	Schedule yr # 15	
Desmantelamiento y restitución	€	10,000	Schedule yr # 25	
	€	-		
End of project life -	€	-		

Financial Feasibility				
Pre-tax IRR and ROI	%	9.0%	Calculate energy production cost?	yes/no No
After-tax IRR and ROI	%	7.2%	Calculate GHG reduction cost?	yes/no No
Simple Payback	yr	11.2		
Year-to-positive cash flow	yr	11.1	Project equity	€ 609,968
Net Present Value - NPV	€	220,640		
Annual Life Cycle Savings	€	14,124		
Benefit-Cost (B-C) ratio	-	1.36		

Yearly Cash Flows			
Year #	Pre-tax €	After-tax €	Cumulative €
0	(609,968)	(609,968)	(609,968)
1	55,543	51,079	(558,889)
2	56,551	51,785	(507,104)
3	57,577	52,503	(454,601)
4	58,620	53,233	(401,368)
5	59,681	53,976	(347,392)
6	60,759	54,731	(292,661)
7	61,856	55,499	(237,162)
8	62,971	56,279	(180,883)
9	64,105	57,073	(123,811)
10	65,257	57,879	(65,931)
11	66,429	58,700	(7,231)
12	67,620	59,534	52,302
13	68,831	60,381	112,683
14	70,062	61,243	173,926
15	(8,143)	(8,143)	165,783
16	72,585	65,452	231,234
17	73,877	51,714	282,948
18	75,191	52,633	335,582
19	76,526	53,568	389,150
20	77,882	54,517	443,667
21	79,260	55,482	499,149
22	80,661	56,463	555,612
23	82,084	57,459	613,071
24	83,530	58,471	671,542
25	64,061	44,843	716,384

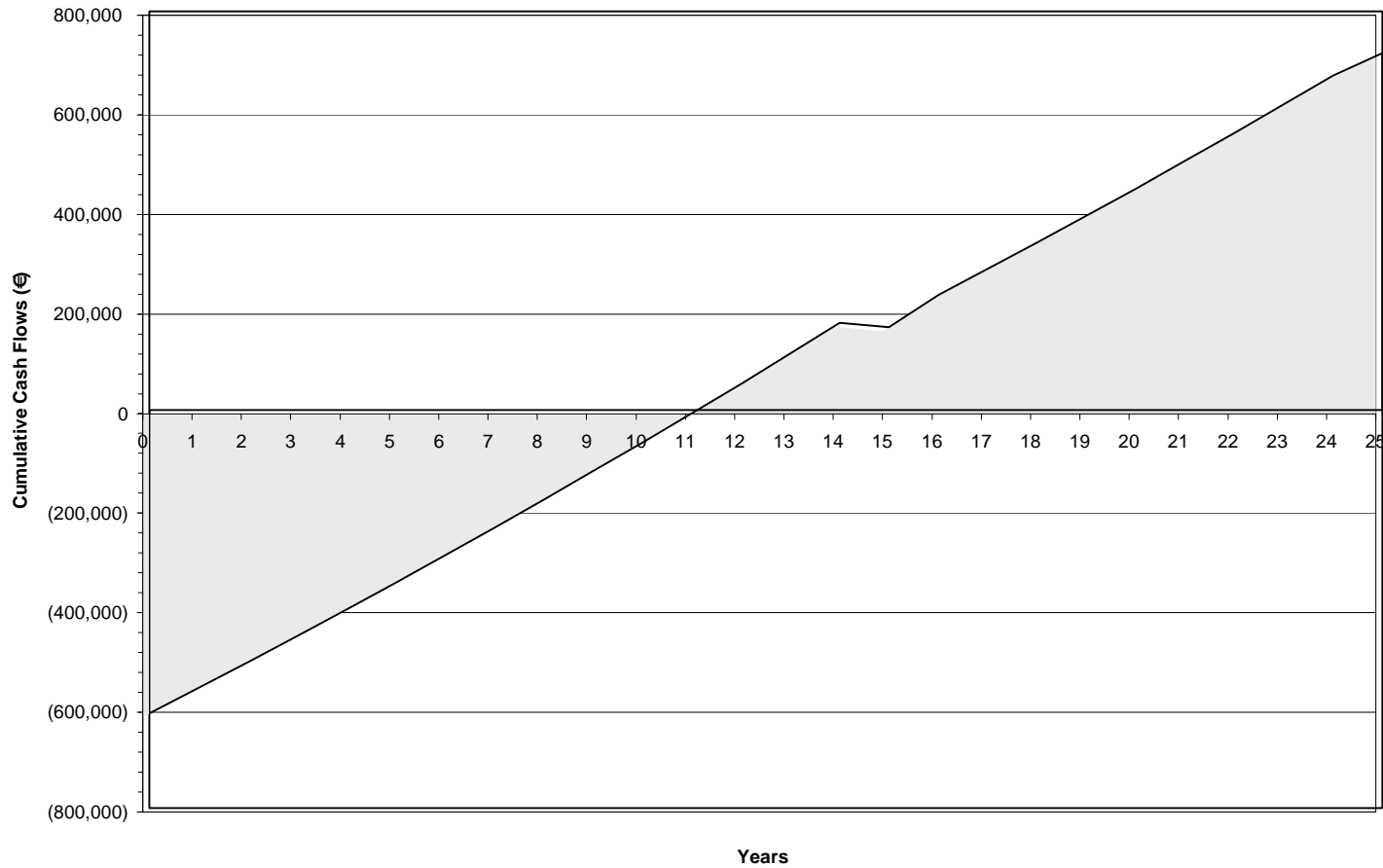
Cumulative Cash Flows Graph

Photovoltaic Project Cumulative Cash Flows Generador Fijo 100 Kwp, Zona 5

Renewable energy delivered (MWh/yr): 146.536

Total Initial Costs: € 609,968

Net average GHG reduction (t_{CO2}/yr): 69.08



IRR and ROI: 7.2%

Year-to-positive cash flow: 11.1 yr

Net Present Value: € 220,640