

RETScreen® Greenhouse Gas (GHG) Emission Reduction Analysis - Photovoltaic Project

Use GHG analysis sheet?

Type of analysis:

Background Information

Project Information

Project name: Planta fija 100 Kw
Project location: 0

Global Warming Potential of GHG

1 tonne CH₄ = 21 tonnes CO₂ (IPCC 1996)
1 tonne N₂O = 310 tonnes CO₂ (IPCC 1996)

Base Case Electricity System (Baseline)

Fuel type	Fuel mix (%)	CO ₂ emission factor (kg/GJ)	CH ₄ emission factor (kg/GJ)	N ₂ O emission factor (kg/GJ)	Fuel conversion efficiency (%)	T & D losses (%)	GHG emission factor (t _{CO2} /MWh)
Coal	0.0%	94.6	0.0020	0.0030	35.0%	8.0%	0.000
Natural gas	100.0%	56.1	0.0030	0.0010	45.0%	8.0%	0.491
Nuclear		0.0	0.0000	0.0000	30.0%		0.000
Diesel (#2 oil)		74.1	0.0020	0.0020	30.0%		0.000
Biomass		0.0	0.0320	0.0040	25.0%		0.000
Electricity mix	100.0%	135.5	0.0072	0.0024		8.0%	0.491

Proposed Case Electricity System (Photovoltaic Project)

Fuel type	Fuel mix (%)	CO ₂ emission factor (kg/GJ)	CH ₄ emission factor (kg/GJ)	N ₂ O emission factor (kg/GJ)	Fuel conversion efficiency (%)	T & D losses (%)	GHG emission factor (t _{CO2} /MWh)
Electricity system							
Solar	100.0%	0.0	0.0000	0.0000	100.0%	4.0%	0.000

GHG Emission Reduction Summary

Electricity system	Base case GHG emission factor (t _{CO2} /MWh)	Proposed case GHG emission factor (t _{CO2} /MWh)	End-use annual energy delivered (MWh)	Annual GHG emission reduction (t _{CO2})
	0.491	0.000	147.286	72.33
Net GHG emission reduction t _{CO2} /yr				72.33

[Complete Financial Summary sheet](#)