

## Annex: Assumptions

### Microgrid System Set-up

	Capacity	Units
PV	100	kWp
Li-ion ESS	250	kWh
Excess PV	55011	kWh/year

### Hydrogen CAPEX Values

	Unit Cost	Units	# of units	Total
EL 2.1	9782	USD/Module	6	58,696
Water purification System	3576	USD/Module	1	3,576
Water Tank Module	2163	USD/Module	1	2,163
Dryer	4831	USD/Module	2	9,663
Cabinet	3804	USD/Module	2	7,609
Hydrogen Storage	2717	USD/Nm3	5	13,587
Fuel Cell	4347	kW	5	21,739

### Hydrogen OPEX Values

	Cost	Units
Maintenance Cost	1%	% of CAPEX
EL Replacement Cost	2173	USD/Module
FC Replacement Cost	2608	USD/Module

### Diesel CAPEX Values

	Unit Cost	Units	# of units	Total
Diesel Generator	600	USD/kVA	50 kVA	30000

### Diesel OPEX Values

	Cost	Units
Fuel (Gas station prices)	0.71	USD/L
Fuel Logistics	0.2	USD/L
Fuel price escalation	1%	%/year
O&M	3	USD/op. hours

## Financial Values

	Unit	Units
Interest Rate	5	%
Loan Period	7	Years
Exchange Rate	0.92	EUR/USD
Project Duration	20	Years
Discount Rate	3	%