

### CCGT Economics

Capacity	MW	0
Load Factor (Utilisation)	%	0%
Annual output	TWh	0.00
	MWh	0
	kW	0
Construction time	years	3
Project life	years	20

### Fuel

Efficiency		0%		
Fuel consumed	MWh	#DIV/0!	NPV	#DIV/0!
Gas cost	US\$/mmbtu	0.00	IRR	#####
	US\$/MWh	0.00		
Convert mmbtu to MWh	3.413			

US\$=€1

### EIA Estimates

Capital Cost	US\$/kW	978	0 US\$mm
Fixed Cost	US\$/kW	11	0.00 US\$mm
Variable Costs	US\$/MWh	3.5	0.00 US\$mm
Gas Cost	US\$/MWh	0.00	#DIV/0! US\$mm

Carbon output per MWh	Tonnes	0.18
Carbon price	US\$/t	0.00

Corporate Tax Rate 0%

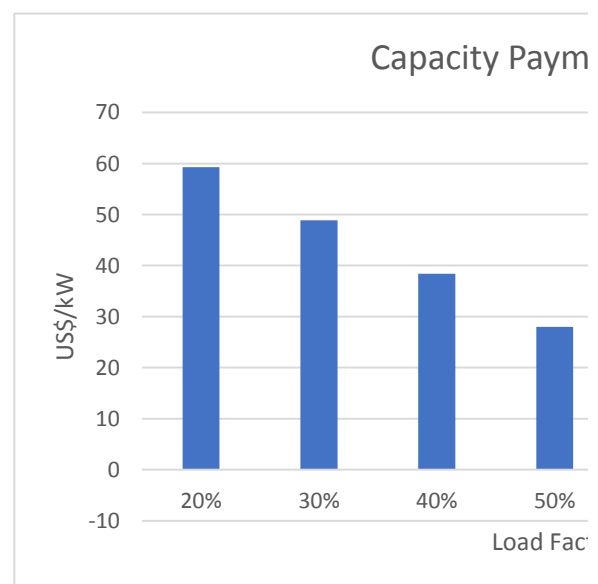
Electricity Price	US\$/MWh	0
Capacity Payment	US\$/kW	0.00

### Project Economics

		2020	2021	2022	2023	2024
Utilisation					0%	0%
Output	MWh				0	0
Price	\$/MWh				0	0
Revenues	\$mm				0.0	0.0
Capacity Payment	\$mm				0.0	0.0
Capex	\$mm	0	0	0		
Total	\$mm	0				
Variable Cost	\$mm				0.0	0.0
Fixed Cost	\$mm				0.0	0.0
Fuel Cost	\$mm				#DIV/0!	#DIV/0!
Cost of Carbon	\$mm				#DIV/0!	#DIV/0!
Total Costs	\$mm				#DIV/0!	#DIV/0!
Operating Cashflow	€mm				#DIV/0!	#DIV/0!

Depreciation		20 years			0.0	0.0
Pre-tax profit	€mm				#DIV/0!	#DIV/0!
Corporation Tax		0%			#DIV/0!	#DIV/0!
Net Income	€mm				#DIV/0!	#DIV/0!
Post-tax Cashflow	€mm				#DIV/0!	#DIV/0!
Net Cashflow	€mm		0.0	0.0	0.0	#DIV/0!
Cumulative Net Cashflow			0.0	0.0	0.0	#DIV/0!
Discount Rate		4.73%				
Discount Factor		1	1.05	1.10	1.15	1.20
Discounted Cashflow	€mm		0.0	0.0	0.0	#DIV/0!
NPV	€mm		#DIV/0!			
IRR	%		#HODNOTA!			
Payback (Years)		15				
Breakeven Utilisation		77%				
Breakeven Gas Price		0.00				
Breakeven Electricity Price						
Breakeven Carbon Price						

	Load Factor					
	20%	30%	40%	50%	60%	70%
<b>Capacity Payment</b>	59.27	48.85	38.43	28.01	17.59	7.17

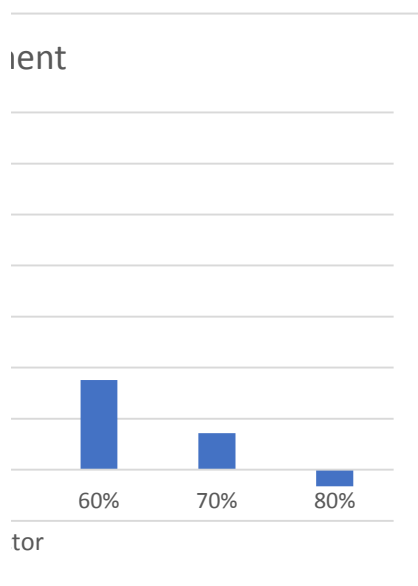




0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

1.32	1.38	1.45	1.52	1.59	1.66	1.74	1.82	1.91
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

80%  
-3.25





0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

#DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0!

#DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0!

#DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0!

#DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0!

#DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0!

#DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0!

2.00 2.10 2.19 2.30 2.41 2.52 2.64 2.77 2.90

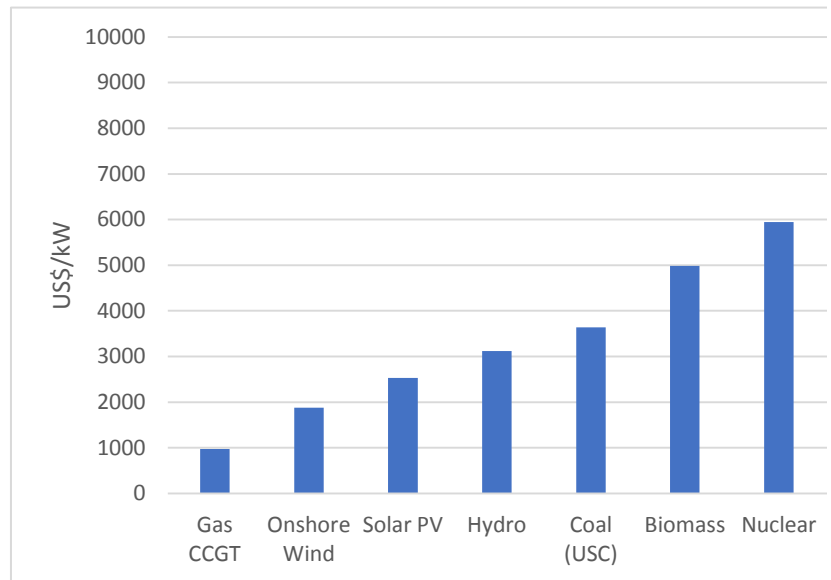
#DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0!

## WACC

Cost of Equity	
20-year return	10.53%
Risk Free Rate	1.75%
Beta	0.9
Cost of Equity	9.65%
Interest Rate	3.50%
Tax Rate	25%
Cost of Debt	2.63%
WACC	4.73%
% Debt	70%
% Equity	30%

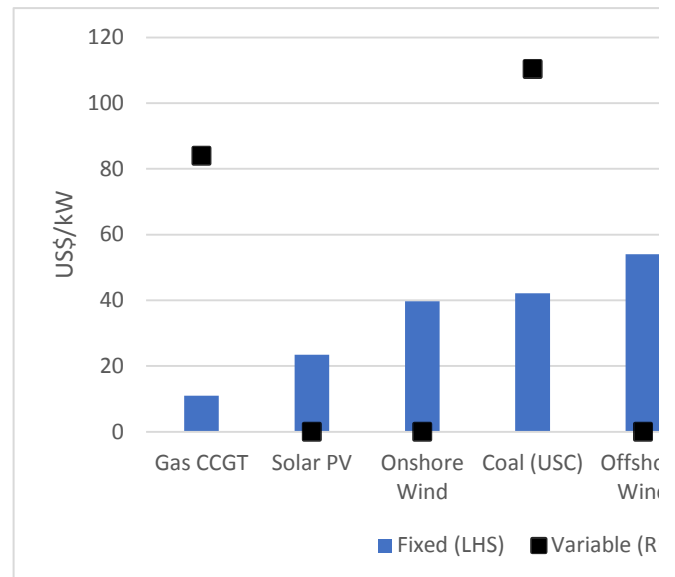
### Capital Costs

	US\$/kW
Gas CCGT	978
Onshore Wind	1877
Solar PV	2534
Hydro	3123
Coal (USC)	3636
Biomass	4985
Nuclear	5945
Offshore Wind	6628
Waste	8843

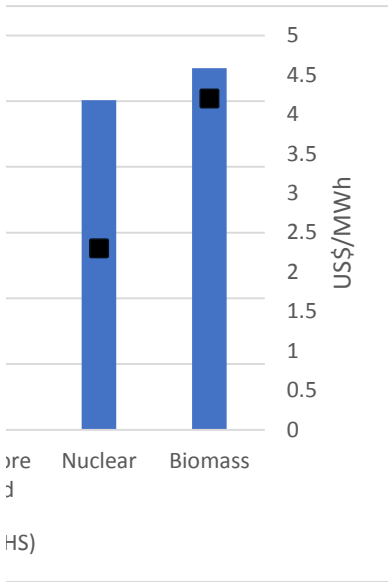
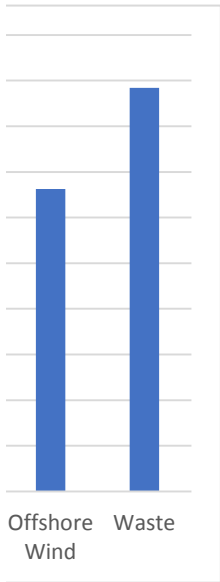


### Operating Costs

	Fixed (LHS)	Variable (RHS)
Gas CCGT	11	3.5
Solar PV	23.4	0
Onshore Wind	39.7	0
Coal (USC)	42.1	4.6
Offshore Wind	54	0
Nuclear	100.3	2.3
Biomass	110	4.2







2.205

Pounds per mmBtu Tonnes per Tonnes per MWh

Gas	117.0	0.053	0.181
Gasoline	157.2	0.071	0.243
Diesel	161.3	0.073	0.250
Lignite	215.4	0.098	0.333
Coal	228.6	0.104	0.354

