

Proposed case power system		Incremental initial costs	
Technology	Wind turbine		
Analysis type	Wind turbine		
Power capacity	kW	1,000.0	
Manufacturer			
Model			
Capacity factor	%	95.0%	
Electricity exported to grid	MWh	8,322	
Electricity export rate	\$/MWh	100.00	

Emission Analysis				
Base case electricity system (Baseline)		GHG emission factor (excl. T&D)	T&D losses	GHG emission factor
Country - region	Fuel type	tCO2/MWh	%	tCO2/MWh
New Zealand	All types	0.256		0.256
Electricity exported to grid	MWh	8,322	T&D losses	
GHG emission				
Base case	tCO2	2,132.9		
Proposed case	tCO2	0.0		
Gross annual GHG emission reduction	tCO2	2,132.9		
GHG credits transaction fee	%			
Net annual GHG emission reduction	tCO2	2,132.9	is equivalent to	391 Cars & light trucks not used
GHG reduction income				
GHG reduction credit rate	\$/tCO2	0.14		
GHG reduction credit duration	yr	25		
GHG reduction credit escalation rate	%			

Financial Analysis				
Financial parameters				
Inflation rate	%	1.0%		
Project life	yr	25		
Debt ratio	%	50%		
Debt interest rate	%	7.00%		
Debt term	yr	10		
Initial costs				
Power system	\$	0	0.0%	
Other	\$	1,000,000	100.0%	
Total initial costs	\$	1,000,000	100.0%	
Incentives and grants	\$		0.0%	
Annual costs and debt payments				
O&M (savings) costs	\$	2,000		
Fuel cost - proposed case	\$	0		
Debt payments - 10 yrs	\$	71,189		
Total annual costs	\$	73,189		
Annual savings and income				
Fuel cost - base case	\$	0		
Electricity export income	\$	832,200		
GHG reduction income - 25 yrs	\$	299		
Total annual savings and income	\$	832,499		
Financial viability				
Pre-tax IRR - equity	%	154.6%		
Pre-tax IRR - assets	%	77.9%		
Simple payback	yr	1.2		
Equity payback	yr	0.7		

