

Financial parameters

General

Fuel cost escalation rate

2%

Inflation rate

%

2.8%

Discount rate

%

9.5%

Reinvestment rate

%

9%

Project life

yr

25

Finance

Incentives and grants

AUD

250,000

Debt ratio

%

50%

Debt

AUD

13,638,399

Equity

AUD

13,638,399

Debt interest rate

%

7.5%

Debt term

yr

15

Debt payments

AUD/yr

1,545,057

Income tax analysis

☒

Effective income tax rate

%

30%

Loss carryforward?

Yes

Depreciation method

Straight-line

Depreciation tax basis

%

80%

Depreciation period

yr

25

Tax holiday available?

yes/no

No

Annual savings and revenue

Electricity export revenue

Electricity exported to grid

MWh

6,783

Electricity export rate

AUD/MWh

140

Electricity export revenue

AUD

949,604

Electricity export escalation rate

%

2.5%

GHG reduction revenue

Net GHG reduction

tCO₂/yr

4,260

Net GHG reduction - 25 yrs

tCO₂

106,497

GHG reduction credit rate

AUD/tCO₂

35

GHG reduction revenue

AUD

149,096

GHG reduction credit duration

yr

25

Net GHG reduction - 25 yrs

tCO₂

106,497

GHG reduction credit escalation rate

%

2%

Other revenue (cost)

☐

Clean Energy (CE) production revenue

☒

CE production

MWh

6,783

CE production credit rate

AUD/kWh

0.29

CE production revenue

AUD

1,967,037

CE production credit duration

yr

25

CE production credit escalation rate

%

2.5%

Electricity exported to grid MWh

6,783

Fuel type

Clean energy

Solar

6,783

Yes

Costs | Savings | Revenue

Initial costs

Feasibility study

0.28%

AUD

76,880

Development

1%

AUD

281,500

Engineering

3.1%

AUD

858,000

Power system

33%

AUD

9,006,400

Balance of system & miscellaneous

62.5%

AUD

17,054,018

Total initial costs

100%

AUD

27,276,798

Incentives and grants

AUD

250,000

Yearly cash flows - Year 1

Annual costs and debt payments

O&M

AUD

122,311

Carbon offsets cost

AUD

10,010

Debt payments - 15 yrs

AUD

1,545,057

Total annual costs

AUD

1,677,378

Annual savings and revenue

Electricity export revenue

AUD

949,604

GHG reduction revenue - 25 yrs

AUD

149,096

CE production revenue - 25 yrs

AUD

1,967,037

Total annual savings and revenue

AUD

3,065,738

Net yearly cash flow - Year 1

AUD

1,388,360

Periodic costs (credits)

Inverter - 10 yrs

AUD

3,150,000

Financial viability

Pre-tax IRR - equity

%

13.9%

Pre-tax MIRR - equity

%

10.9%

Pre-tax IRR - assets

%

6.7%

Pre-tax MIRR - assets

%

8%

After-tax IRR - equity

%

11.3%

After-tax MIRR - equity

%

9.9%

After-tax IRR - assets

%

4.7%

After-tax MIRR - assets

%

7%

Simple payback

yr

9.2

Equity payback

yr

11.1

Net Present Value (NPV)

AUD

2,342,233

Annual life cycle savings

AUD/yr

248,182

Benefit-Cost (B-C) ratio

1.2

Debt service coverage

-0.27

GHG reduction cost

AUD/tCO₂

-75.61

Energy production cost

AUD/MWh

513

Yearly cash flows			
Year	Pre-tax	After-tax	Cumulative
#	AUD	AUD	AUD
0	-13,398,409	-13,398,409	-13,398,409
1	1,460,553	1,460,553	-11,937,856
2	1,534,525	1,534,525	-10,403,331
3	1,610,319	1,610,319	-8,793,011
4	1,687,981	1,687,981	-7,105,030
5	1,767,557	1,313,272	-5,791,758
6	1,849,094	1,331,327	-4,460,431
7	1,932,639	1,372,942	-3,087,489
8	2,018,244	1,414,733	-1,672,756
9	2,105,958	1,456,641	-216,115
10	-1,956,017	-1,956,017	-2,172,133
11	2,287,924	2,088,858	-83,274
12	2,382,283	1,582,374	1,499,100
13	2,478,968	1,624,022	3,123,122
14	2,578,036	1,665,386	4,788,508
15	2,679,546	1,706,361	6,494,869
16	4,328,613	3,291,887	9,786,755
17	4,435,188	3,366,489	13,153,244
18	4,544,389	3,442,929	16,596,173
19	4,656,281	3,521,254	20,117,427
20	-701,406	-701,406	19,416,022
21	4,888,407	4,156,021	23,572,043
22	5,008,779	3,768,002	27,340,045
23	5,132,117	3,854,339	31,194,384
24	5,258,495	3,942,804	35,137,188
25	5,387,988	4,033,449	39,170,637

