WATTBLOCK

Apartments Program Sustainability Report

Owners Corporation (SPXXXX)

<Address of Building>

7th September 2020

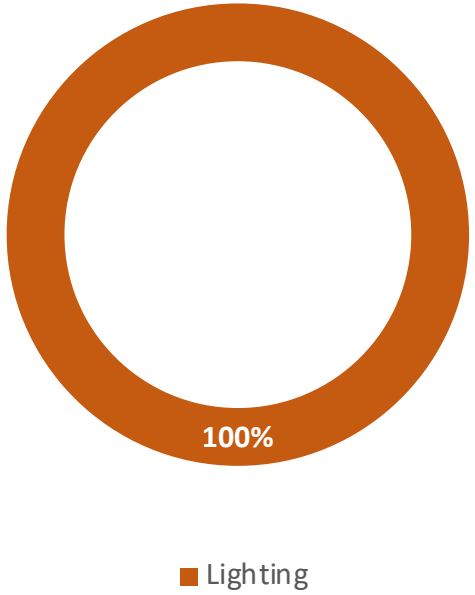
Council contact:

Wattblock contact: Brent Clark

How does our apartment block compare?

Energy consumption

How is energy consumed in our apartment block?



Sub-metering is required to accurately measure the electricity consumption of each circuit in your building over a period of 1 year. However, based upon other buildings which have been analysed, the following is an example showing the likely breakdown of energy consumption in your building.

Benchmarking

Some similar strata schemes to your strata scheme are listed below for comparison.

Apartment Block	Number of Levels	Number of Apartments	Lifts	Common Washer	Common Dryer	Electricity Costs p.a.
19 Meriton Street Gladesville NSW 2111	4	9	0	0	0	$447
34 Rangers Road Cremorne NSW 2090	4	15	0	3	3	$825
82-86 Undercliff Road Neutral Bay NSW 2089	4	16	0	4	4	$1,029

34 Rangers Rd building facilities are similar to 19 Meriton St Gladesville, except the laundry equipment is owned by the Owners Corporation and power is switchable to the individual lot owner in the common area laundries.

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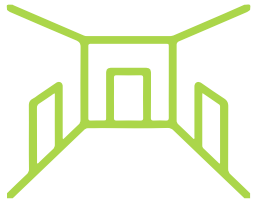
LED Lighting

Foyers

4 x Chameleon Deco Black Emergency, 1 x Standard, Remove 5 Push-buttons and put metal plate over top



Upfront Cost: $1,507

Savings p.a.: -$26

Payback: N/A

External / Gardens

5 x Chamaeleon Deco Black Standards

Upfront Cost: $1,272

Savings p.a.: $315

Payback: 4.0 years

Key metrics

Internal Rate of Return (IRR): 1%

Net present value (NPV): -$864

Tonnes carbon saved p.a.: 0.2

Cost of delay

Delaying the start of this project will lead to missed savings!

$24	$72	$290
savings missed if this project is delayed by one month	savings missed if this project is delayed by one quarter	savings missed if this project is delayed by one year

Assumptions:
Energy savings are based on average kWh usage rates for the common areas, being 17c (excl. GST) per kWh. Estimates are based on expected operation time of 24hrs/day for internal lights and 12 hrs/day for timer lights. Maintenance savings are based on conservative estimates of failure rates, and replacement costs for fittings and labour.

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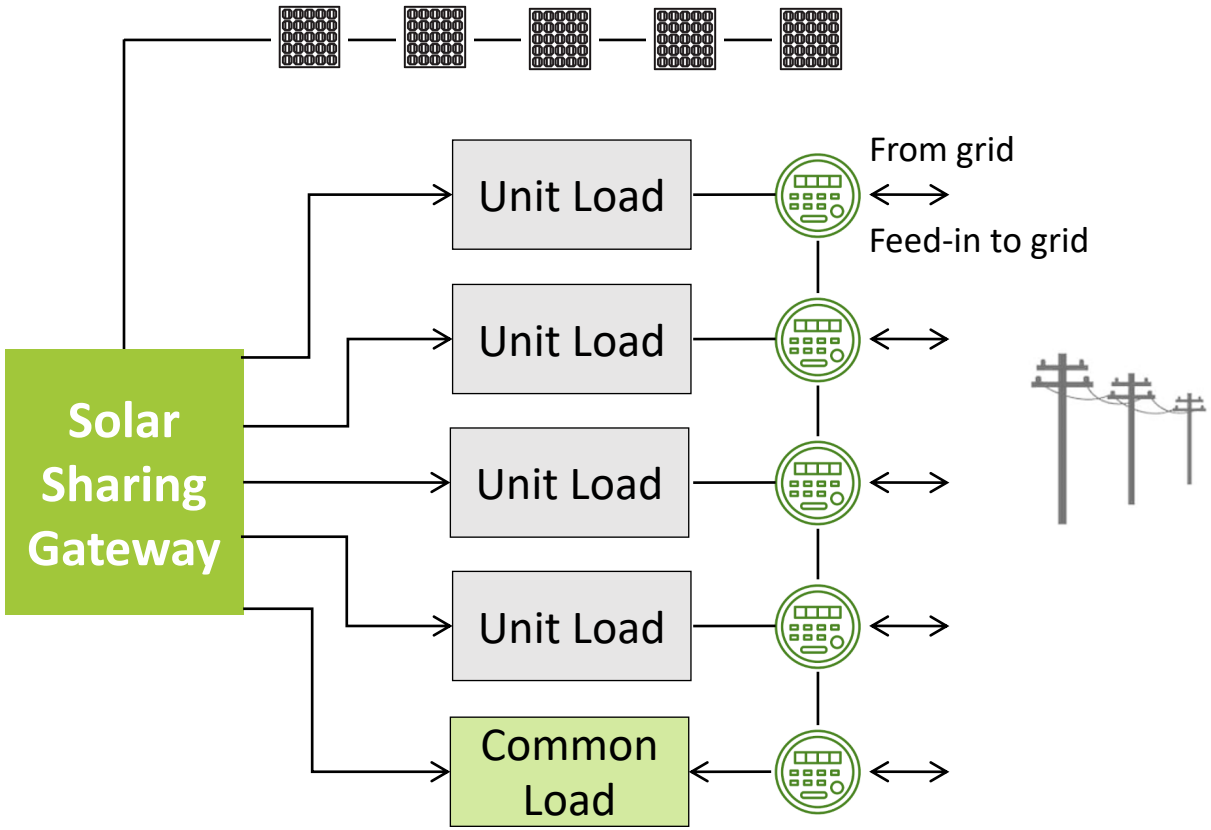
Solar

- **Model:** Solar sharing for apartments and common areas
- **Size of solar system:** 11.88kW
- **Upfront Cost:** $30,000
- **Savings p.a.:** $3,300
- **Payback:** 9.1 years



Key Metrics

Internal Rate of Return (IRR): 10%

Net present value (NPV): $5,227

Tonnes carbon saved p.a.: 16

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Hot Water

Current Setup

- Gas is not connected to the premises
- Each apartment has its own electric hot water tank
- Residents do not have access to off-peak hot water as no smart meters
- Smart meters cannot be installed until Owners Corporation upgrades switchboard/meter board

Proposed Solution

- Individual resident contacts electricity retailer to get a smart meter installed
- Individual resident calls plumber to upgrade electric hot water tank or put timer on existing electric hot water tank, to take advantage of off-peak hot water heating and reduce electricity bills

Ausgrid

Ausgrid Hot Water Guide

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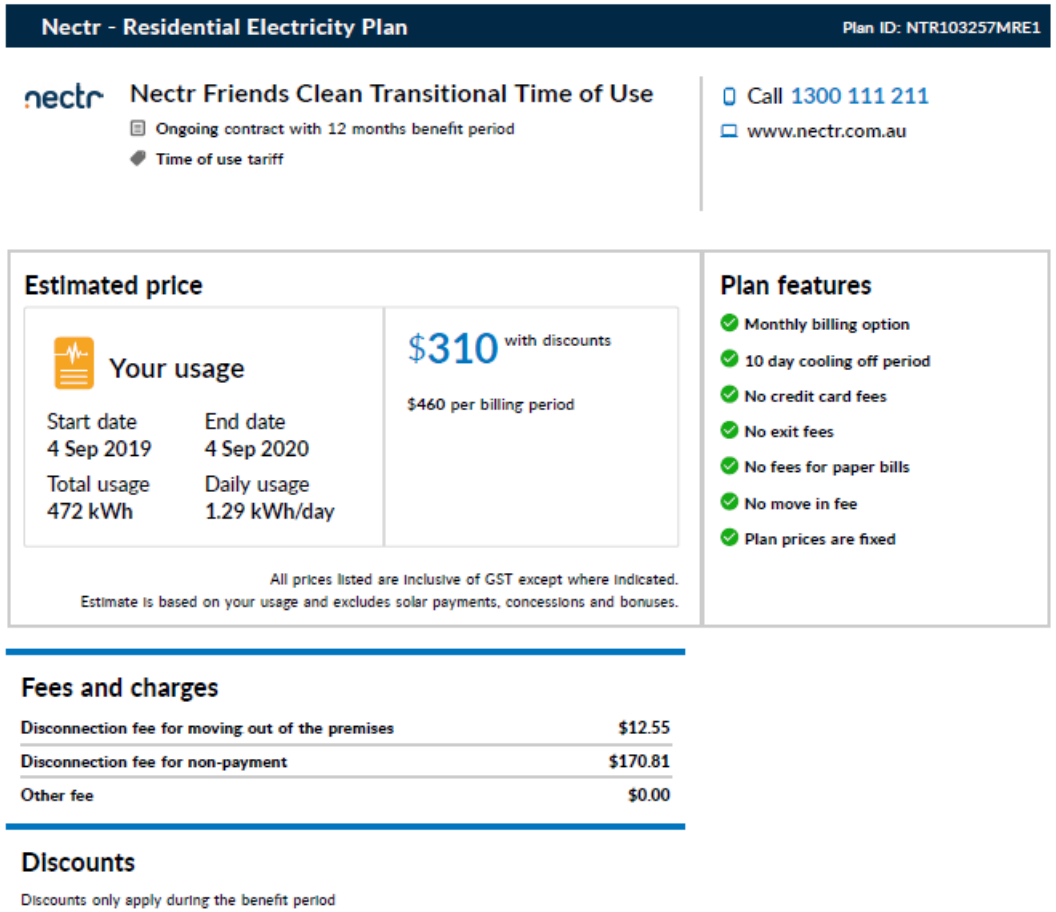
Energy Contract Switching

Energy Made Easy / Energy Switch suggests moving your Strata Scheme's common area electricity meter to the following provider:



Nectr - Residential Electricity Plan — Plan ID: NTR103257MRE1

nectr

Nectr Friends Clean Transitional Time of Use

- Ongoing contract with 12 months benefit period
- Time of use tariff

Call 1300 111 211
www.nectr.com.au

Estimated price

Your usage

Start date	End date
4 Sep 2019	4 Sep 2020
Total usage	Daily usage
472 kWh	1.29 kWh/day

$310 with discounts

$460 per billing period

All prices listed are inclusive of GST except where indicated.
Estimate is based on your usage and excludes solar payments, concessions and bonuses.

Plan features

- Monthly billing option
- 10 day cooling off period
- No credit card fees
- No exit fees
- No fees for paper bills
- No move in fee
- Plan prices are fixed

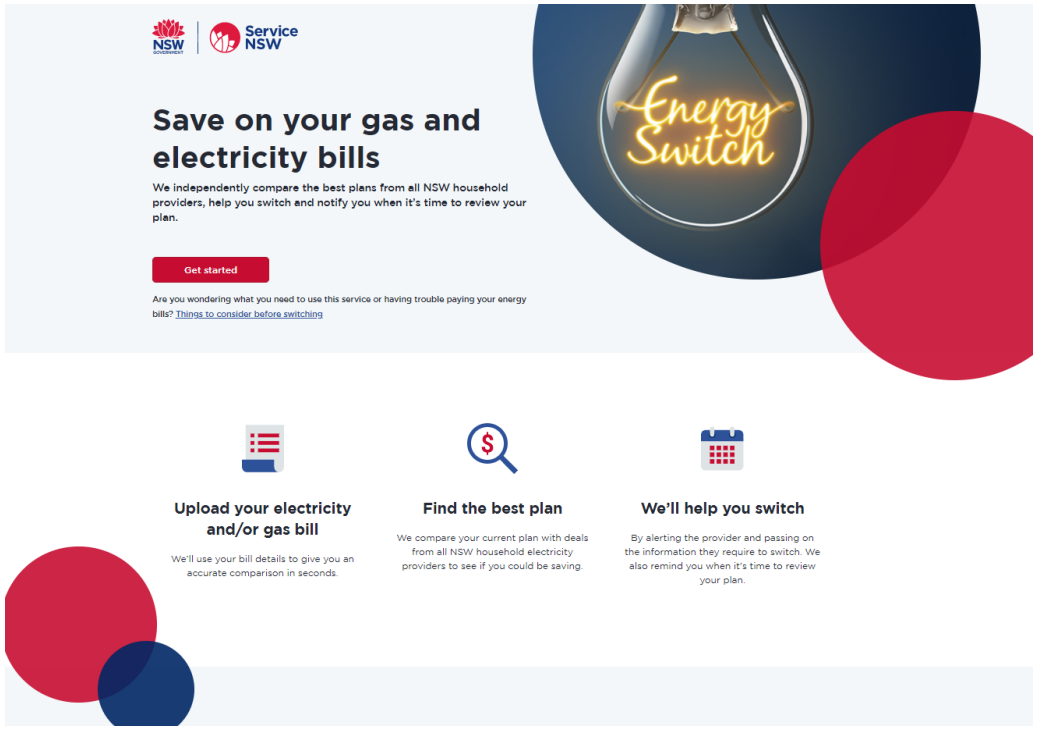
Fees and charges

Disconnection fee for moving out of the premises	$12.55
Disconnection fee for non-payment	$170.81
Other fee	$0.00

Discounts

Discounts only apply during the benefit period

Australian Government | ENERGY MADE easy The power to compare



NSW Government | Service NSW

Save on your gas and electricity bills

We independently compare the best plans from all NSW household providers, help you switch and notify you when it's time to review your plan.

Get started

Are you wondering what you need to use this service or having trouble paying your energy bills? Things to consider before switching

Energy Switch

Upload your electricity and/or gas bill

We'll use your bill details to give you an accurate comparison in seconds.

Find the best plan

We compare your current plan with deals from all NSW household electricity providers to see if you could be saving.

We'll help you switch

By alerting the provider and passing on the information they require to switch. We also remind you when it's time to review your plan.

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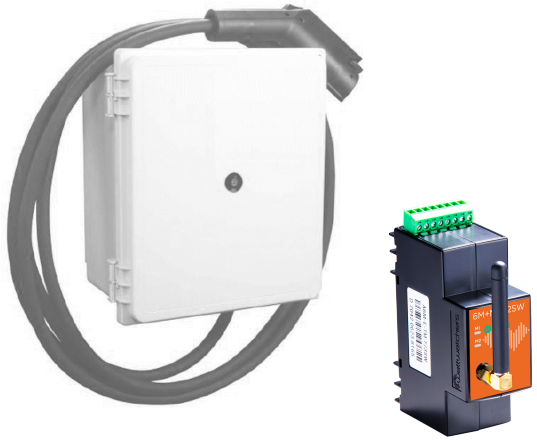
EV Charging

Use the sample by-law attached to start a discussion with your committee and pass a by-law now, before the 1st EV arrives.

OPTION 1: General Power Outlets

- Annual flat rate fee based on kilometres driven; OR
- Install a low cost sub-meter on an existing general power outlet near resident parking space (Est cost: $160)

OPTION 2: Standard Charger



- Pass by-law to limit charging speed to single phase 16 amps
- Install a sub-meter with 3G/4G to assist first 6 electric vehicles (est cost: $1,100 inc GST)

OPTION 3: Smart Charger

- Online automatic smart billing systems
- The supply and install cost of a smart charger is estimated to cost *$5,300
- Ongoing service fee of ~$165 per annum

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Water Saving

Community Water Saving Self Audit

Upfront Cost: $0

Savings p.a.: Immediate

Strata committee member leads “self audit” distributing paper form to each unit

Gardens – Smart Irrigation

- B-Hyve smart irrigation
- Requires a resident to donate some wi-fi and a powerpoint for Bluetooth receiver
- Multiple garden zones supported
- Checks local weather station and adapts water scheduling based upon recent precipitation and forecast
- $120 per zone

SUMS+ Water Monitoring Device

Are you interested to get a temporary water monitoring device put on the head water meter for a period of 2 weeks

Enquire today

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Switchboard and Meter board Upgrade

In June 2017, the electrical switchboard became a top issue for a small apartment block (10 units) in Sydney's south.

The early indicator sign that something was going wrong on the main switchboard was a single apartment losing power. Calls to Ausgrid showed that there was no power outage in the local area. Checking with the apartments next door showed that other apartments still had the lights on.

Next.....a persistent “buzzing” sound during the early hours of the AM was the sign something was seriously wrong....this was followed by a smell and a visit to the switch room by the resident whose apartment had lost power.

A smouldering switchboard prompted a call to Fire Services. Before the residents knew it, two fire trucks had lined up outside. In the middle of winter, the residents were evacuating their units in their dressing gowns, waiting for the burning switchboard to be contained.

Who owns the smart meters?

The Owners Corporation does not generally own the smart meters. The grid provider used to own the analogue meters. The model of ownership of smart meters is moving to the energy retailer who services the resident. Any owner-occupier or tenant can call up their energy retailer and request a smart meter to be installed and many energy retailers will supply one at no-cost.

However, if they come out to install the smart meter and it won't fit in the existing spot where an analogue meter is or the meter board is not compliant to AS3000 standard (e.g. ceramic fuses), then the energy retailers will refuse to install a smart meter.

The Owners Corporation needs to foot the bill for upgrading the meter board to provide enough space for smart meters, and have RCD protection installed behind each meter.

Benefits

1. Reduce fire risk
2. Reduce electrocution risk
3. Reduce asbestos risk
4. Achieve AS3000 compliance – change ceramic fuses to Residual Current Devices (RCD’s)
5. Enable residents to get smart meters installed, move to time of use tariffs, call plumber to access off-peak electric hot water
6. Prepare for induction cooktops
7. Prepare for electric vehicle charging
8. Prepare for community solar sharing
9. Access smartphone apps provided by innovative energy retailers in own apartment
10. Prepare for batteries

Ideas for communal garden

Strata Community Awards 2018: Generation W winner of the Strata Community Environmental & Engagement Award

Each year outstanding contributors to the NSW strata sector are recognised at the SCA Strata Community Awards

The winner of the 2018 Strata Community Environmental & Engagement award went to strata scheme 'Generation W', which was once a commercial store house that has been retrofitted and now embraces the principles of re-use, sustainability and community.

Activities undertaken to increase energy efficiency include an upgrade to the common hot water system for the apartments to a heat pump system.

The central location of the existing water boilers in the basement car park was ideally suited to a heat pump implementation and advantage was taken of existing piping infrastructure. The existing location of the boilers was sound proof and well ventilated for efficient operation. Heat pump technology is often overlooked, so this project serves as a useful demonstration for other strata schemes.

The strata committee also followed through with an LED lighting upgrade in common areas including basement carpark, fire escapes, stairwells, corridors, and external lights.

In addition to energy efficiency, water and renewable energy projects, the strata committee has also established an extensive community vegetable and herb garden. This includes implementation of a new food waste composting system and a worm farm.

The main ground floor common area now hosts a thriving open air communal garden which is used for growing food including: strawberries, paw paw, olives, asparagus, lemons, sweet potatoes, rhubarb, limes, kaffir limes, passionfruit, beetroot, eggplant, pumpkin, tomatoes, rocket and chillies. The herb garden includes parsley, thyme, oregano, sage, chives, basil, rosemary and bay leaves.

The use of the common area for a vegetable and herb garden has been a tremendous boost to community engagement and services as a food source, waste recycling as well as learning and social outlet. This has broken down barriers and raised enthusiasm in the discussion of other projects.

The strata scheme has also committed to obtain a NABERS for Apartment Buildings rating to formally show other strata schemes what is possible and how to achieve sustainability goals.

Posted on March 10, 2019 by Jennifer Ross
https://nsw.strata.community/2019/03/chu-strata-community-awards-2018-generation-winner-strata-community-environmental-engagement-award/

The Fine Print: Passing an Ordinary Resolution for a Sustainability Infrastructure Upgrade

The recent Sustainability Infrastructure amendments to the NSW Strata Schemes Management Act, only require passing of an ordinary resolution (rather than a special resolution which was previously required). Your Strata Manager can assist you with preparing an ordinary resolution for voting at your next Annual General Meeting (AGM) or Extraordinary General Meeting (EGM).

For the purposes of this amendment, sustainability infrastructure means changes to part of the common property (which includes the installation, removal, modification or replacement of anything on or forming part of that property) for any one or more of the following purposes—

a. to reduce the consumption of energy or water or to increase the efficiency of its consumption,
b. to reduce or prevent pollution,
c. to reduce the amount of waste sent to landfill,
d. to increase the recovery or recycling of materials,
e. to reduce greenhouse gas emissions,
f. to facilitate the use of sustainable forms of transport, Note. For example, installing electric vehicle charging stations.
g. a purpose prescribed by the regulations.

Sustainability infrastructure resolution means a resolution to do any one or more of the following that is specified to be a sustainability infrastructure resolution—

a. to finance sustainability infrastructure,
b. to add to the common property, alter the common property or erect a new structure on common property for the purpose of installing sustainability infrastructure,
c. to change the by-laws of the strata scheme for the purposes of the installation or use (or both) of sustainability infrastructure.

Passing an ordinary resolution can be easy

Keep in mind these three guidelines.

1. You don't need 50% of votes to pass the resolution
   - You only need 50% of the votes to not be against the resolution
2. A quorum is met with 25% of votes
   - Votes can be in person or by proxy
3. Strata scheme AGMs sometimes only just make a quorum, which means the decision is made by far fewer people than all owners
   - Of voters (present or proxy) at the meeting, the resolution will pass if not more than 50% vote against it

For example:

- Total unit entitlements: 100
- 100 owners, all with 1 unit entitlement
- Quorum: 25 unit entitlements present
- Ordinary resolution for solar system is passed if no more than 12 people vote against it (keeping in mind people have to be paid up on their strata levies to be entitled to vote!)

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Summary of Top Opportunities

Project Description	Cost	Payback	Rationale
Motion sensored LED Lighting in stairs/external areas	$2,810	9.7 years	• Improve security and amenity of the block
Community Water Saving Audit	$0	Immediate	• Worst offending tenant is increasing the water bills for all residents in the block, as there are no individual water meters for individual apartments
Switchboard upgrade	$10,000	N/A	• Reduce fire risk • Prepare the building for solar, batteries and electric vehicle charging

Contacts

Discuss this report

The next step is to arrange your conference call or Zoom meeting to discuss this report. Wattblock are the Program Consultants for Council.

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wattblock.com

Contact Council

To register your interest for waste and water, please contact Council.

Name

Sustainability Officer

Council

<phone number>

<email>

<web>

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Definitions

Cost	Estimated total upfront project cost including GST. Where relevant includes estimated labour for installation and commissioning.
Savings	Estimated annual savings including GST. Includes impact on usage costs and capacity demand charges where relevant. The saving also represent the cost of not doing the project. For example, the cost of delaying the project by 6 months would be approximately half the annual savings.
Payback	Estimated simple payback based on the estimated cost and savings. Does not account for potential changes in the annual savings estimate due to inflation or other factors.
IRR	Internal Rate of Return indicates the percentage annual return on the estimated investment in the project. This is comparable to interest rates that could be achieved by putting the same amount of funds in a term deposit.
NPV	Net Present Value. Imagine someone hands you a cheque for the calculated NPV amount. Executing the project is worth that much money in today's dollar value. Savings, based on energy prices, assume 0% growth. Discount rate is 8% (offsets sinking funds) with terminal value in year 10.
CO_2 tonnes	Estimated annual carbon abatement impact of the project. This is measures in tonnes of carbon dioxide.

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