Government of Western Australia
Department of Water and Environmental Regulation

Department of Water and Environmental Regulation

Carbon Innovation Grant Program

Round 2 – Financial Model

Feasibility Study & Pilot and Capital Works

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December 2024

Acknowledgement of Country

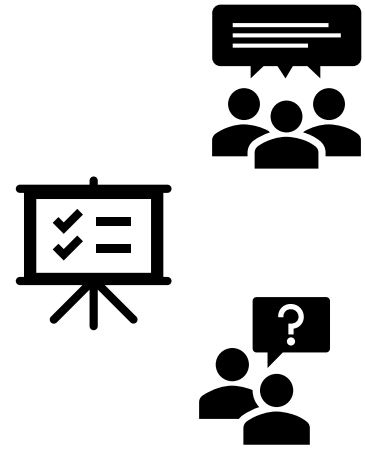
We begin today by acknowledging the Traditional Custodians of the land from which I am speaking today, the Whadjuk Noogar people, and pay my respects to their Elders past, present and emerging.

I want to extend that respect to Aboriginal and Torres Strait Islander peoples who may be joining us today.

Welcome to Country.

Welcome

- Your cameras and microphones will be muted throughout the session.
- Questions may be asked throughout the session via the online chat facility & will be addressed as they come in or at the end of the session.
- The session will be recorded and posted on the CIGP website.
- FAQs will be updated and posted to website after both sessions have been completed .



Agenda – CIGP R2 Financial Model

Topic	Time

• Financial Model Overview
  • Objectives
  • Limitations
  • Colours and Conventions
	10 mins

• Feasibility Studies • Sequence of Steps and Demo	20 mins
• Pilot and Capital Works • Sequence of Steps and Demo	20 mins
• Questions	10 mins

Financial Model Objectives

Reasons CIGP uses the financial model
Looking for “Goldilocks zone” projects
Clarity on project scope, costs and help assessors understand what you are proposing to do
Comparable data across grant applications and across project or technology types (technology agnostic data)
Assessment of project emissions, energy and financial viability
To capture reasoning or sources for each assumption to build confidence in the planned project
As a tool for applicants to optimise their projects

- Goldilocks zone is projects where the viability is “just right”. Low viability projects will still fail with a grant, high viability projects will still succeed without a grant. Goldilocks projects will succeed because of a grant.
- Seeing what money will be spent on helps assessors understand the project scope.
- The spreadsheet model for pilot and capital works is set up to enable applicants to test scenarios to optimise their projects.

Financial Model Limitations

Limitations
Models can compare before and after project scenarios
Before feasibility it can be difficult to model full scale costs and benefits, so please provide info to support your assumptions and help us understand the opportunity
Models ignore tax and depreciation effects.
They model cashflow yearly – don't show monthly issues.
No facility to model assumptions varying over project life.
Models assume inflation affects all costs and revenues at the same rate.
The outputs are only as reliable as the inputs. Please explain the sources for your assumptions and your confidence in them.

Conventions and Colours

Colour coding
Green is for user input.
Light green is for values with a default, but you can type over.
Peach is for energy.
Grey is for greenhouse gas (CO2 equivalent) emissions.
Gold is for money.
Yellow highlighting is for values typed over a formula.
Purple is used to indicate spreadsheet tabs that need your input.

- All money numbers are excluding GST
- Use the "Justification for assumptions" column

Conventions

There are two versions of the spreadsheet, one for feasibility studies and another for the pilot and capital works stream.

For each version, we provide a **blank template and a worked example**. It is easier to understand the worked example.

The **worked example is not real**. We have chosen input values to give specific outputs. You are responsible for finding the values for your proposal.

The **spreadsheets are not locked**. You can **add or delete** rows or columns if needed. You may need to copy formulae from neighbouring cells. You are **free to use it as you wish**.

The **Department of Water and Environmental Regulation takes no responsibility** for any use of these templates outside of the Carbon Innovation Grant Program (CIGP) grant application process.

Use **current year Australian dollars excluding GST** for all money values.

Emissions factors for the relevant energy inputs can be found here: National Greenhouse Accounts Factors – DCCEEW and future projections here: Australia's emissions projections 2024 – DCCEEW.

Sequence of Steps for Feasibility Studies Model

Tab	Feasibility Stream	
Project Summary	1	Validation
	2	Project summary
	3	CIGP feasibility parameters
	4	Assumptions
Financial Model	5	Project costs
	6	Project funding
	7	Milestones and expected expenditure
	8	Projected Operating Emissions and Costs
	9	Viability and Impact
	10	Financial Return
	11	Potential for wider adoption
	12	Cashflow projections
In-kind contributions	13	In-kind contributions

Excel Demo – Feasibility Study

This section will be a live demo in Excel

If you are reading the slide show after the live presentation, see speaker notes to this slide.

The heading numbers in the speaker notes follow the sections of the spreadsheet.

1 Validation

This section has some formulae that check for basic errors in the spreadsheet. If any of them indicates an error, you should review it before submitting.

2 Project summary

This section summarises the outputs from the project. There is only one input cell, the permanence of the abatement, marked in green.

3 CIGP feasibility parameters

These are the scheme parameters. You should not

change them.

4 Assumptions

This section pulls together the project's assumptions. You should be thorough in documenting the source or rationale behind each assumption, to help the assessors get confidence in the numbers.

5 Project costs (exclude GST)

This section lists expenses you will face to run the feasibility study.

6 Project funding (exclude GST)

This section shows where all the money for the feasibility will come from.

7 Milestones and expected expenditure

This shows the project stages and the associated costs and timing.

8 Projected Operating Emissions and Costs of Project Built if the Feasibility Study is Successful

This section looks beyond the feasibility study, assumes it is successful and measures the costs and benefits of a commercial scale version of the technology.

9 Viability and Impact

Focuses on the emissions impact of a full-scale project.

10 Financial Return

Focuses on the financial impact of a full-scale project.

11 Potential for wider adoption

This asks you how many copies of the project you expect to be built by 2035. You **must** explain how you reached your estimate.

12 Cashflow projections

This table lists cashflows over the lifetime of the project, and uses them to calculate financial measures of the project like internal rate of return and net present value.

13. In-kind contributions

If you use in-kind costs, you need to support them.

Sequence of Steps for Pilot and Capital Works

Tab	Pilot and Capital Works
Project Model	1 Construction or capital costs 2 Timing and grant allocation 3 Operating inputs or costs 4 Operating outputs or savings 5 Decommissioning 6 Net benefits (outputs less inputs) 7 Cash flow
Funding	8 Funding 9 CIGP parameters
Input-output Explorer	10 Validation 11 Project summary 12 Assumptions
Other tabs	13 In-kind contributions 14 Milestone Table 15 Charts

Excel Demo – Pilot and Capital Works

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1. Construction or Capital Costs

Talk about left (components or costs), top (products or cost centres), right (resources) then bottom (totals) components.

Include refurbishment, replacement etc. (especially solar and batteries).

Explain how the quantities work.

2. Timing and grant allocation

Conversion from capacity factor to hours per year – use your calculations if you have modelled it.

3. Operating inputs or costs

- Show conversion from hourly to yearly.
- Show toggles in operation.

4. Operating outputs or savings

Talk about putting in carbon credits

Trade-off, sell green products or sell carbon credits.

5. Decommissioning

6. Net benefits (outputs less inputs)

- Talk about the different emissions savings totals
- Last line – ROCE by module

7. Cash flow

- Misc cashflows – manual input (green)
- See cashflows kick in and out as time goes by
- Cumulative cashflow – red shows time to simple payback.

8. Funding

Show how you will fund the project.

9. CIGP parameters

Summary of scheme parameters – do not change.

10. Validation

If a value goes red, please provide an explanation.

11. Project summary

- Effectively the “outputs” of the spreadsheet.
- Placed next to Assumptions so you can easily see impact of changing assumptions.

12. Assumptions

Talk about override value

- Talk about goal seek.

- Example of solar panel North/EW.

13. In-kind contributions

- If you use in-kind costs, you need to support them.

14. Milestone table

- By default, this extracts costs and finish dates for each module.
- You can type over it.
- Main purpose is to know timing of grant payments.
- Will be negotiated for the funding agreement if successful.

15. Charts

Visual representation of key data.

Questions

Thank you