Innovation Competition Briefing Webinar

Waiting for Attendees to Arrive

Innovation Competition Briefing Webinar

Welcome!

State Government Victoria

isle

Melbourne Water

Agenda

1. Background – Melbourne Water and Scope 1 Challenge
2. The Innovation Competition
3. How to enter and Key Dates
4. Question and Answer Session

All attendees will be muted

Questions may be asked at any time using the Questions Box

www.melbournewater.com.au/innovation-competition

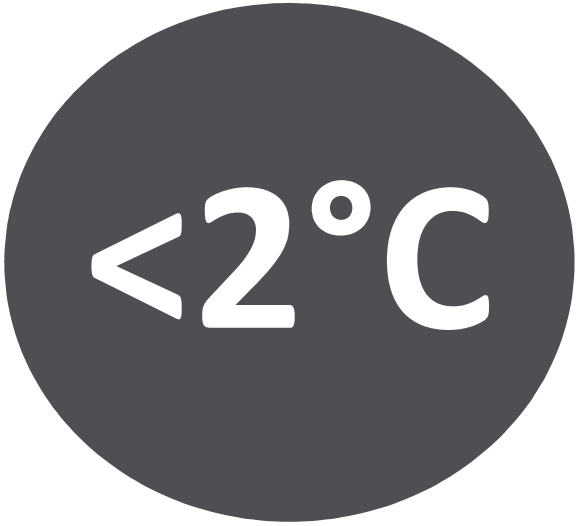
Background – Melbourne Water and the Scope 1 Challenge

Melbourne Water

TAKE2

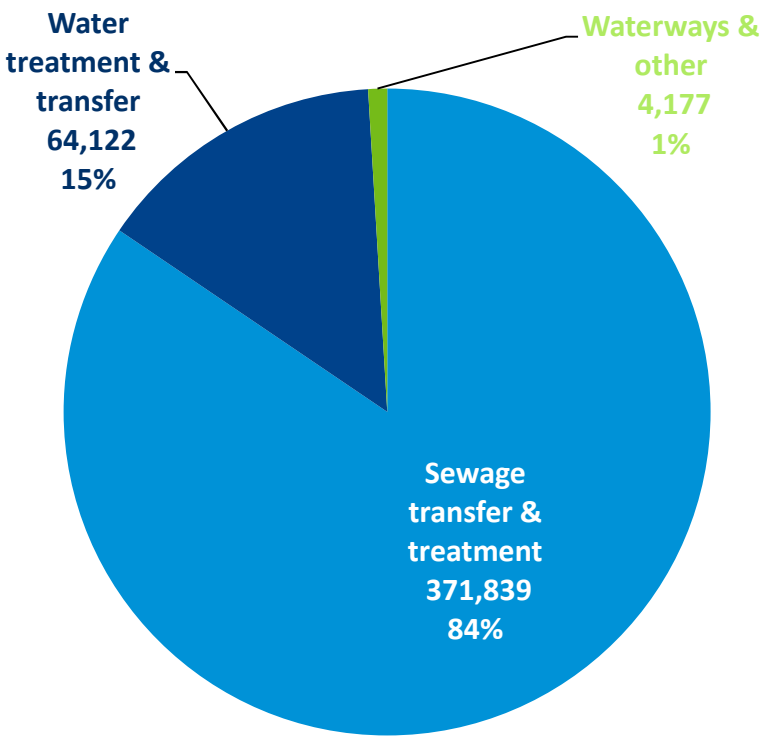
Victoria's climate change pledge

VICTORIA State Government

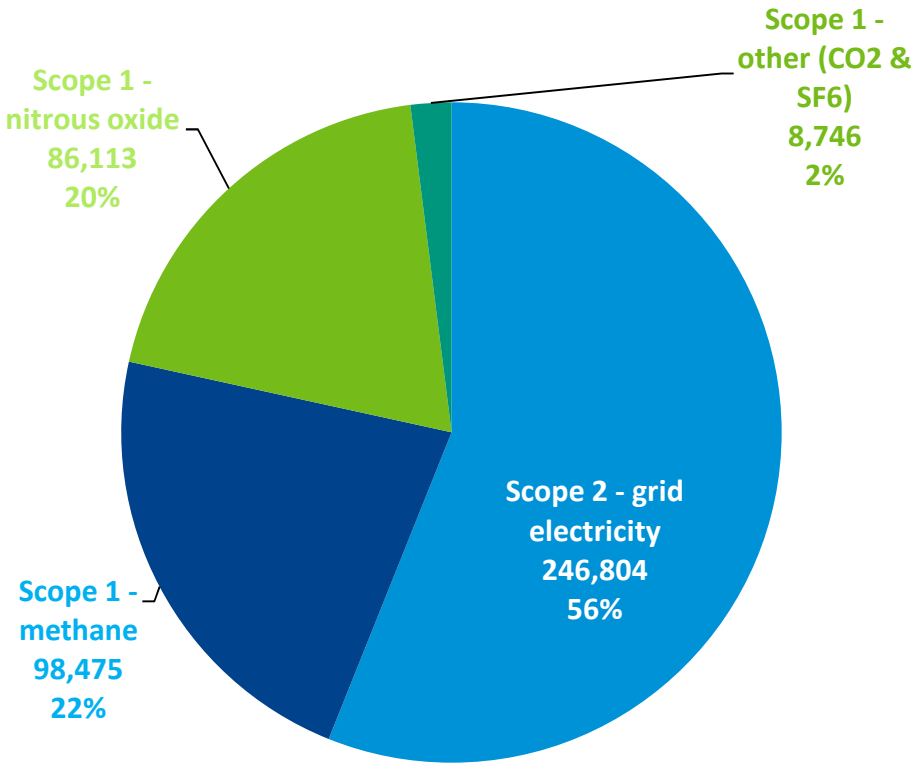


= ZERO NET CARBON

Melbourne Water emissions



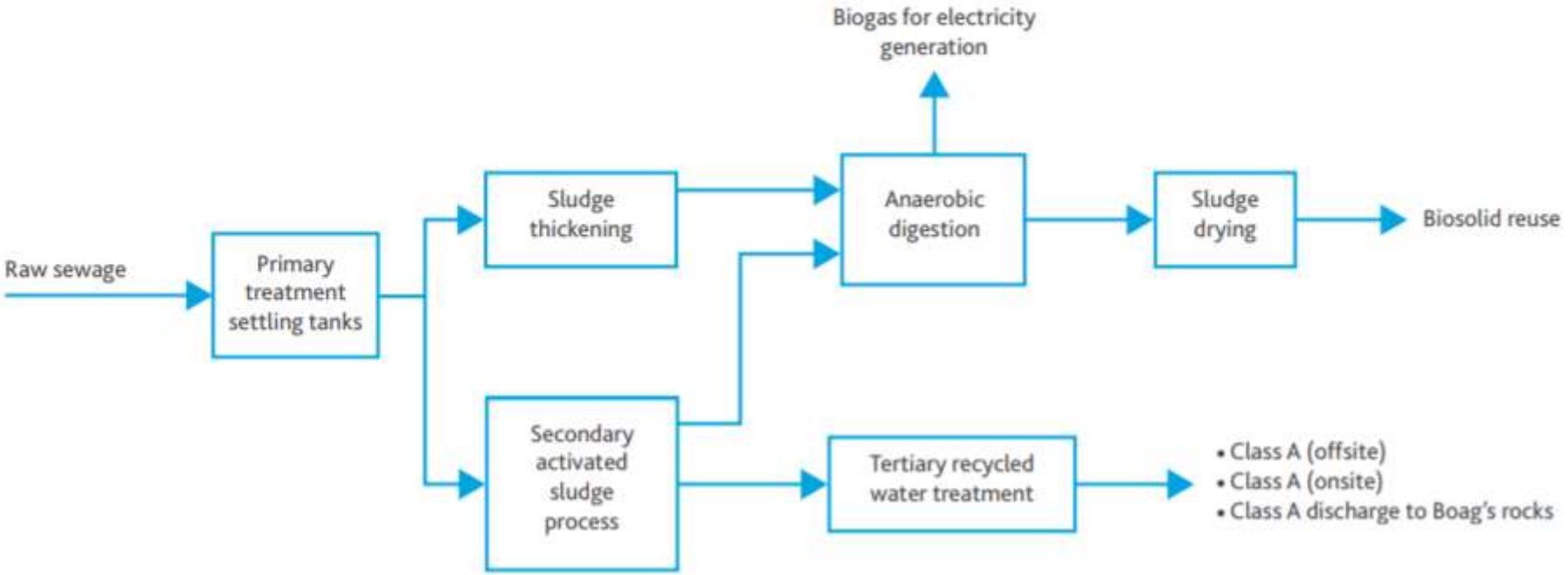
Emissions by Area



Emissions by type


Innovation Competition
Finding solutions to the global challenge of Scope 1 greenhouse gas emissions

Eastern Treatment Plant (ETP)



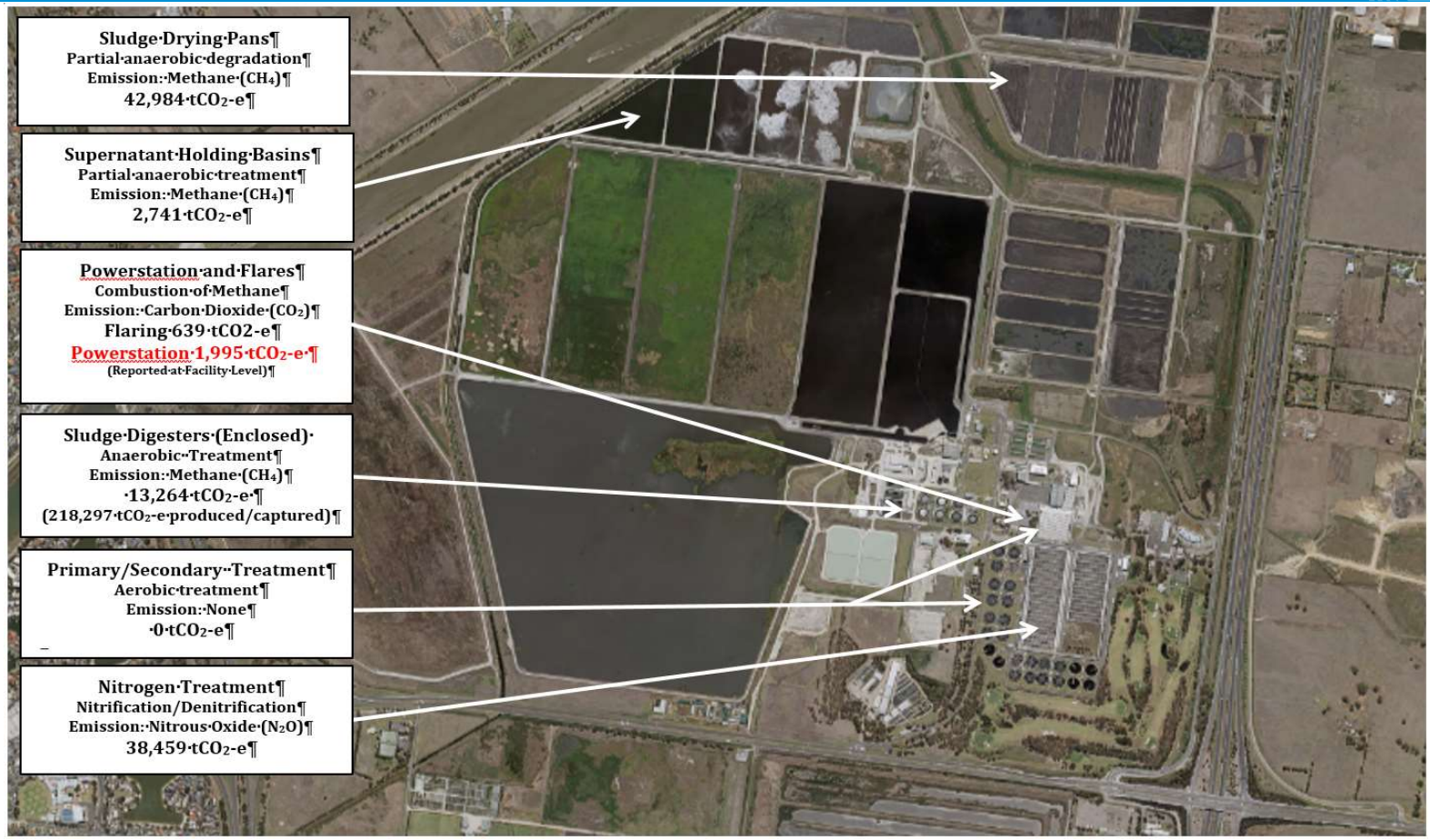
Eastern Treatment Plant (ETP)

Anaerobic Digestors

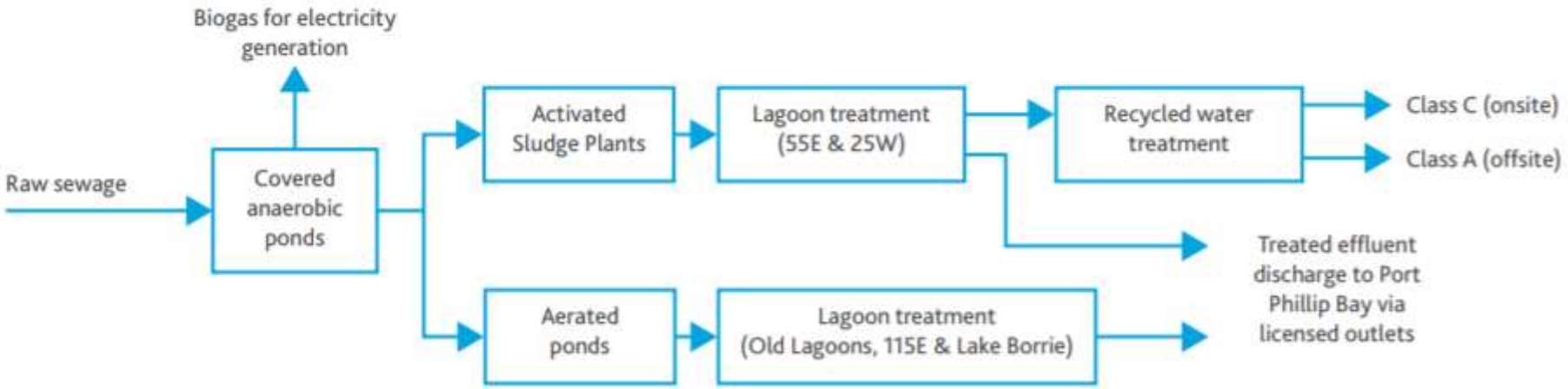
Eastern Treatment Plant (ETP)

Digested sludge drying pans

Eastern Treatment Plant (ETP)



Western Treatment Plant (WTP)



Western Treatment Plant (WTP)

Anaerobic Lagoons

Western Treatment Plant (WTP)

Activated Sludge plant

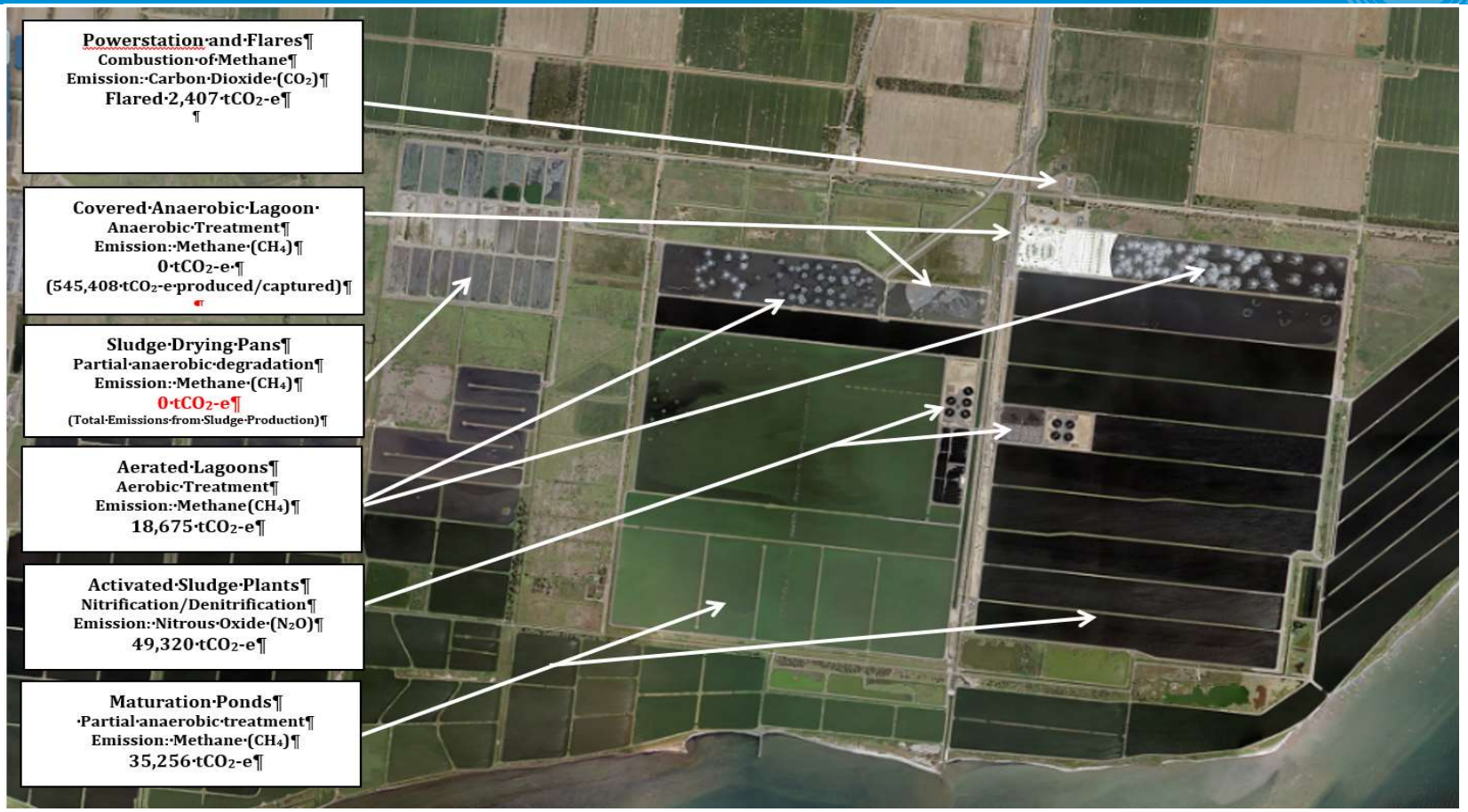
Western Treatment Plant (WTP)

Aerated Lagoons

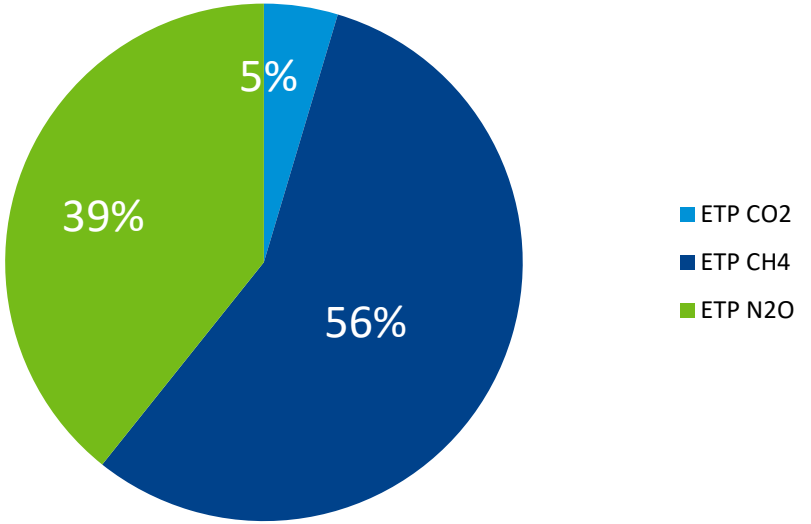
Western Treatment Plant (WTP)

Sludge drying pans

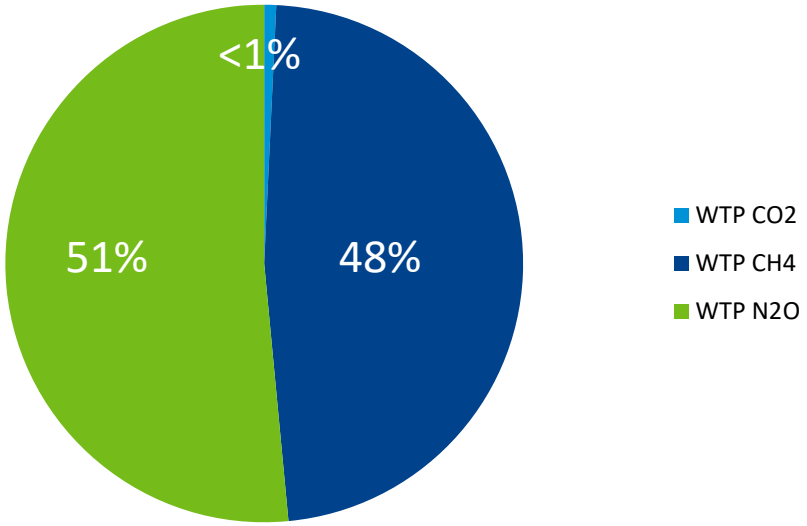
Western Treatment Plant (WTP)



Emission profiles at WTP and WTP



ETP: 88,288 tCO2-e/yr



WTP: 94,503 tCO2-e/yr

What we are looking for

- **Emissions measurement and modelling**
  - Quantification of greenhouse gas emissions through measurement and modelling
- **Optimisation of existing wastewater treatment processes**
  - Using current process understanding and/or existing control systems, technologies and equipment to reduce or eliminate the emissions.
- **Wastewater treatment processes of the future**
  - Develop future processes that eliminate greenhouse gas emissions, is energy efficient; adaptable to climate change (i.e. complete water recycling when in drought); as well as scalable with population growth.

Please Note – Emissions from sewer systems is out of scope

Examples of what we are looking for

- **Emissions measurement and modelling**
  - Atmospheric measurement of emissions from the treatment plant
  - Measuring dissolved methane or nitrous oxide in wastewater
- **Optimisation of existing wastewater treatment processes**
  - Process covers, emission capture and treatment
  - Real-time control system for process optimisation to minimise emissions
- **Wastewater treatment processes of the future**
  - Decoupling nitrogen removal from aerobic processes
  - Algae processes
  - Anaerobic processes

Please Note – Emissions from sewer systems is out of scope

Entry Evaluation

The Evaluation criteria the solutions will be judged against include:

- It being conceptually and technically sound
- The solution’s effectiveness
- The relevance and ease of integration into the existing wastewater treatment plants
- Any added value
- Financial viability; and
- Track record and key personnel experience

The Funding pool

- **Overall $200,000 AUD funding pool available**
- **Two phase allocation of funds**

- **First phase**
  - Competition Jury will select up to 5 top entries
  - Each will be engaged to produce a detailed solution for a fee of $10,000 AUD
- **Second Phase**
  - Competition Jury will review and select the best detailed solution or solutions
  - Remaining funding pool will be allocated between these winners to develop the detailed solution

How to Enter

COMPETITION NOW OPEN FOR APPLICATIONS!

Go to https://www.melbournewater.com.au/innovation-competition
And click on the link to the submissions portal

Email any questions to: innovationcontest@melbournewater.com.au

Key Dates

Q&A Period

Closes - 5pm 26th November 2018 (AEDT)

Any questions to be submitted via

innovationcontest@melbournewater.com.au

Deadline for submissions

5pm on 3rd December 2018 (AEDT)

Question and Answer Session

Joel Segal and Ken Baxter
Melbourne Water

Thank you!

innovationcontest@melbournewater.com.au

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