Implementing ISO 50001 Energy Management at Allwater

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Who is Allwater?

Allwater operate and maintain:

- 6 water treatment plants & 8,900 km of water mains
- 6 wastewater treatment plants & 7,200 km sewer mains
- 4 reuse plants & 3 stormwater schemes
- Over 400 pumping station & fan sites

Serving 1.3 million customers living and working within the Adelaide metropolitan area
Our Energy Profile

The majority of Allwater’s energy consumption is from key processes including:

- Treating raw source water to a drinking water standard
- Pumping drinking water through the distribution supply network
- Pumping wastewater through the sewer network
- Treating wastewater to a standard appropriate for discharge to receiving waters or for reuse
At the Bolivar, Glenelg and Christies Beach Wastewater treatment plants we have anaerobic digesters.

Over 40% of total power usage comes from biogas generated from Adelaide’s sewage.
ISO 50001 Journey

- **May-13**
  - Started to develop Energy Management Program

- **Jul-14**
  - 1st Energy Review
  - Achieved Energy Target of 3% (2,400 MWh) reduction by Jul-16

- **Jul-16**
  - 2nd Energy Review
  - Achieved Energy Target of 6% (6,000 MWh) reduction by Jul-18

- **Aug-14**
  - Gained ISO 50001

- **Jul-18**
  - 3rd Energy Review
  - Achieved Energy target of 1% (500 MWh) reduction by Jul-20
Challenges

• ‘Low Hanging Fruit’
• Keeping up the momentum
  – Training
  – Better Ways Program
  – Communication
• Energy data management

Keeping the message fresh!
The Results so Far

- Verified energy savings to client
- Challenging our understanding of treatment, and pushing innovation
- Award Winning
  - 2014 SA Water Energy Award
  - 2016 Australian Water Association Program Innovation Award
  - 2017 Water Industry Alliance Innovation Award
Why ISO 50001?

- Best-practice standard for energy management.
- Similar to ISO9001, ISO14001
- Ensures continuous optimisation
- Measurable financial impact
World Class Water Services for a Better Life

ISO 50001 Energy Management

Thank you for your attention

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