

06 February 2014

WSAA Submission to the Energy White (Issues) Paper

The Water Services Association of Australia supports:

1. measures that ensure reliability and long term energy security
2. transparency in energy markets to reflect the actual costs of supply and demand
3. incentives for research and development into renewable energy generation and other energy saving opportunities.

The Water Services Association of Australia (WSAA) welcomes the opportunity to provide comment on the above issues paper on behalf of the urban water industry. WSAA is the peak urban water industry body. We have 31 members, including the largest water utilities in Australia who provide urban water services to around 17 million Australians. Our Association facilitates collaboration, knowledge sharing, networking and cooperation within the urban water industry. We also provide a forum for debate on issues important to the industry and a voice for communicating the members' views.

WSAA members' vision for the sector is '*Customer driven, enriching life*' with four associated outcomes:

Outcome 1: The most efficient trusted and valued service providers in Australia

Outcome 2: A compelling voice in national policy-making

Outcome 3: A valued partner in urban and land use planning to enrich communities

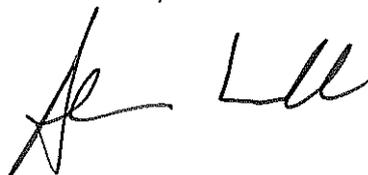
Outcome 4: Stewardship of the urban water cycle

The vision and outcomes highlight the urban water industry's commitment to anchor our services to customers' values, and to enrich communities where water services have broad economic, environmental and social values.

WSAA highlights the close relationship between water and energy use. Energy is required to pump and treat water and wastewater and transport it across large distances. The amount of energy consumed is influenced by local conditions such as water quality (and associated need for treatment), water use (changes in demand) and water sources (dams, desalination, etc.). While grid electricity remains the main energy source for urban water industry operations, the industry has a demonstrated commitment to reducing both costs and emissions that are ultimately borne by our customers and the broader community. As such, we welcome opportunities to achieve that end.

Please do not hesitate to contact Jennifer Bartle-Smith or myself at WSAA for further information on any of the topics contained in this submission. We look forward to continuing to work with you on behalf of the urban water industry.

Yours sincerely



Adam Lovell
Executive Director

1. The security of energy supplies

WSAA supports measures that ensure reliability and long-term energy security. Water utilities require robust and resilient energy security to ensure public health is protected through safe drinking water and adequate treatment of sewage. Recent extreme events (bushfires and cyclones) demonstrate the connectivity of energy, water and telecommunications. The urban water sector is looking to the energy sector to be focused on a future of more extreme events with potentially more devastating effects. Preparedness across the three sectors needs focus across Federal and State jurisdictions.

The water industry can contribute to this objective with its potential to expand its capacity for renewable energy generation through capture of methane from sewage at waste water treatment plants. Technology immaturity in this area means that a combination of investment in research and development, regulatory incentives and co-funding opportunities are required to realise these opportunities.

Integration of organic waste into the wastewater treatment process could further increase the potential for cogeneration. Frameworks and integrated planning approaches are required to foster the collaborative development of these opportunities.

2. Regulatory reform and the role of government

The challenges

The current system of network and tariff charges is complex and can vary across a single urban water utility area. This complexity makes it difficult for many of our members to procure the best contract prices, check the accuracy of their bills and manage their energy use to minimise costs. These costs are ultimately borne by customers.

WSAA encourages and supports:

- time-of-use based tariffs that are sufficiently attractive to provide an incentive for the industry to change the time of operation of non-essential services to save on energy costs
- simple and transparent electricity pricing
- measures to improve the availability of accurate and real time information to manage energy use and costs, such as the use of smart meters
- amendments to feed-in tariffs, time-of-use based tariffs and network charges that encourage renewable energy generation.

3. Growth and investment

The challenges

The urban water industry has the capacity to reduce its energy use through efficiencies and renewable energy generation. While some projects are cost effective now, others require incentives to improve the immediate business case for implementation. The cost curves for Sydney Water and Hunter Water in Figures 1 and 2 indicate the potential for renewable energy generation in their respective organisations with the obvious benefit of also reducing greenhouse emissions.

While the water industry has the potential to increase its renewable generation capacity, our members face many barriers to successful implementation. Some of these barriers include:

- a lack of willingness by electricity distribution companies to participate/facilitate the grid connection
- where there is little grid capacity, expensive augmentation may be needed
- expensive network investigations are required
- lack of financial incentives to build a financially viable business case.

Figure 1: Sydney Water cost curve by project type

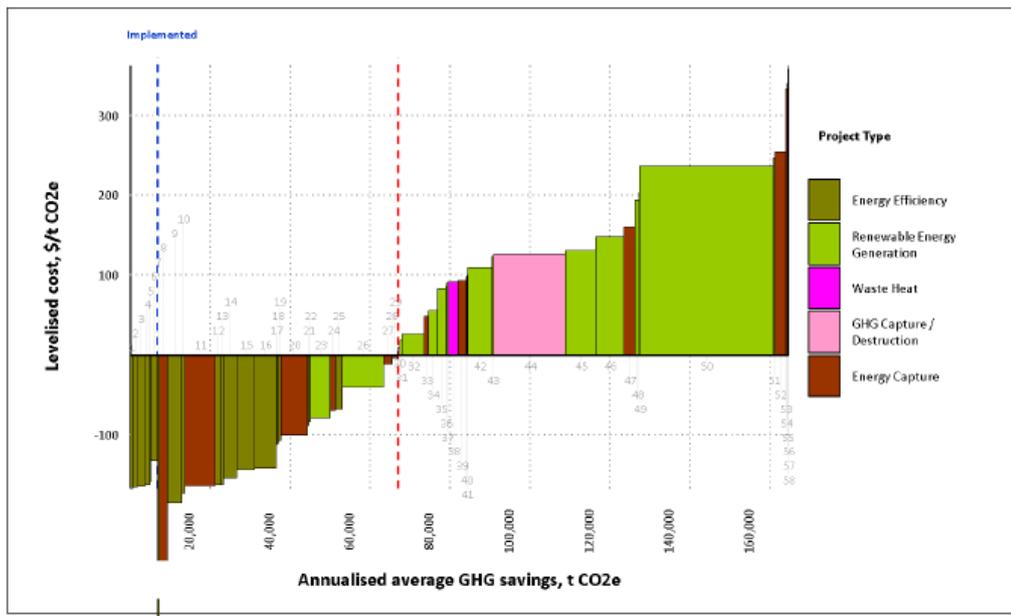
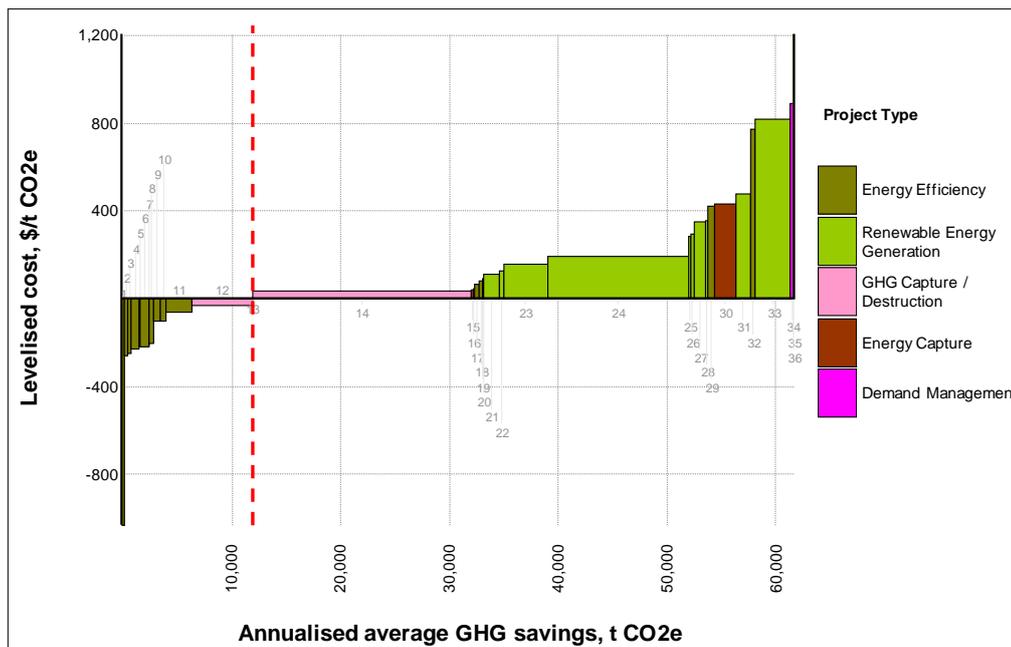


Figure 2: Hunter Water cost curve by project type



To improve the opportunities for renewable energy generation, WSAA encourages and supports:

- competitive feed in tariffs for businesses wishing to connect generator units into the grid (e.g. waste water treatment plant cogeneration units utilising biogas)
- streamlining the system of electricity export to the grid.

4. Trade and international relations

No comment

5. Workforce productivity

The opportunity

Consolidating existing state based schemes (including the NSW Energy Saver Scheme and the VIC Energy Saver Incentive) into a single national scheme would make it easier for businesses who work across state boundaries to understand, decrease the time required by business to get new measures added into schemes and enable states that do not currently have energy efficiency incentives to access these.

WSAA supports:

- continued government action on driving energy efficiency improvements
- funding for education and training packages for all energy users to improve their understanding of individual actions in delivering efficiency gains.

6. Driving energy productivity

The demand management opportunity

To manage highly dispersed assets in a cost-effective way, the urban water industry have systems in place to monitor and control many systems remotely. Where these systems are in place, the urban water industry can be a key player in demand management programs. While the industry has had some opportunities to participate in demand management initiatives, we believe that the industry can play a bigger part and that demand management can be an alternative to augmenting infrastructure.

Productivity through energy efficiency opportunities

In addition to driving peak demand savings, energy efficiency projects that reduce overall electricity consumption can also improve energy productivity. In at least some states, a trend towards standing and demand charges at the expense of consumption charges has led to a deferral of projects identified under energy efficiency opportunities as costs savings no longer provide a reasonable return on investment. To maintain industry investment in energy efficiency, we caution against restructuring network tariffs that further reduce the proportion charged as a variable (c/kWh) cost component.

WSAA supports:

- efforts to reduce peak demand as a way to avoid unnecessary infrastructure expenditure and keep energy prices down
- policy settings to ensure that electricity networks seek out and appropriately reward demand management activities.

7. Alternative and emerging energy sources and technology

The opportunity

The urban water industry recognises that it is both a key waste producer and waste processor, as demonstrated in the example in Figure 3. With increasing population and greater strain on the landfill sector, there is potential to process non-traditional waste streams at waste water treatment facilities. WSAA acknowledges that technological maturity is a barrier to the cost effectiveness of these and other opportunities for energy efficiency and renewable energy generation and supports ongoing investment in research and development.

Figure 3: Total waste in north eastern Melbourne area (waste in million tonnes per annum) – Source Yarra Valley Water 2013

