Housing and Property Group

Celebrating our achievements
In the past the concept of innovation may have been more closely associated with the private sector rather than Government, but things have changed – and nowhere is this more evident than in the work of the Waste Asset Management Corporation (WAMC).

This team of quiet achievers sits within Environmental Services Group (ESG) and are comprised of an interdisciplinary team that has a strong track record of doing things differently.

WAMC manage the government’s closed landfill sites and have responsibility for rehabilitating and maintaining legacy contaminated land the government has inherited from private industry.

Managing landfill sites brings with it a vast range of significant challenges including mitigating the impacts on human health, social amenity, and the environment. WAMC are leaders in developing innovative approaches to addressing these issues.

WAMC landfill gas and energy systems at the Eastern Creek landfill site is a leading example of an innovative approach to supplying electricity to the grid and reducing greenhouse gas emissions.

As landfills are filled with waste, any organic compounds such as food waste break down to produce methane. During the fifteen years that the Eastern Creek landfill site was operational up until its closure in 2017, it would receive approximately 500,000 tonnes of putrescible waste each year. Methane is so much more efficient than carbon dioxide at trapping heat in the atmosphere that it is considered to have up to 84 times the global warming potential than carbon dioxide.

Peter Graham, Director ESG and Chief Executive of WAMC, said his team were quick to spot the opportunities that this problem presented.

"WAMC started putting in extraction systems from day one. As soon as we were putting waste into the landfill, we started collecting methane, and we started turning that methane into electricity," he said.

This was a move from what had been the industry norm. Usually methane capture wasn’t attempted until a landfill site had closed. But by commencing methane capture 10 to 15 years earlier than what was standard industry practice, WAMC have been able to extract more methane, make more electricity, and reduce the odour at landfill sites to benefit the health and wellbeing of nearby residents.

Despite its challenges, 2020 has been a big year for the ESG as they continue their remediation of contaminated sites.

On 28 May 2020, the NSW Government announced a landmark agreement with US Ecology to remove the waste to a landfill site in Idaho, rather than attempt to treat it on-site, has been met with relief by local residents.

"We have one resident on the street who moved there in the 1970’s who still has letters from the Government saying that the site is about to be cleared up. She’s hopeful now that it’s actually happening,” Peter said.

Managing landfills and implementing innovative solutions does bring with it challenges, particularly with the recent drought and bushfires in NSW. The drought has resulted in a decrease in methane capture at landfills. The Waste Asset Management Corporation cap landfills at their end of life with clay. However, clay requires a consistent level of moisture to avoid drying out and to prevent desiccated cracking. Once cracked, the methane gas will escape into the air rather than being diverted and supplying electricity.

"During the long dry period we had through the second half of last year we were losing a lot of methane, our production rate [of electricity] went down and our carbon emissions went up," said Peter.

"As soon as it started raining, our methane capture and electricity production went through the roof again."

The recent bushfires have also posed risks for WAMC operations. Detailed plans were developed and implemented to avoid and mitigate potential infrastructure damage at all landfill sites, particularly for those in Sydney’s outer west such as Castlereagh, that are surrounded by bushland. Despite a tense period during December and January, when the fires were burning WAMC were able to stay in regular communication with local RFS brigades, and all sites escaped damage from the bushfires this summer.

Hunters Hill is the former site of the Radium Hill refinery, where a small amount of uranium ore from South Australia was chemically processed to extract radium. Although the refinery ceased operations more than 100 years ago in 1915, the site remains contaminated, which poses an ongoing health risk to the area’s residents. In 2018, NSW announced spend of $30 million to undertake a full clean-up and remediation of the site.

A key challenge has been how to dispose of the waste removed from the site, and the recent agreement with US Ecology, to remove the waste to a landfill site in Idaho, rather than attempt to treat it on-site, has been met with relief by local residents.

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New life for old landfills

The ESG are also leading the way in showcasing the potential for former landfill sites to transform from a community eyesore to a community asset. Landfill sites that have reached their end of life have been transformed into golf courses, driving ranges and public parks.

Most recently, the old Belrose Landfill in Sydney’s Northern Beaches has been transformed into a mountain bike park which is scheduled to open in October 2020.

The NSW Government had long had the site earmarked for use as public space once it reached its end of life. This visionary forward-planning meant that a proportion of profits earned during the site’s operations was set aside to cover the costs of returning the site to public use and enabled the mountain bike park to take shape.
Peter Graham, Director Environmental Services Group and Chief Executive WAMC, said a number of ideas and options for the site had been on the table, including a walking track, solar panels or drone usage.

However, extensive consultation with local residents revealed there was a strong mountain biking community on the Northern Beaches who were looking for somewhere to ride.

WAMC have worked collaboratively with the Northern Beaches Council to achieve a great public space for local residents to enjoy, and the site will be handed back to the Northern Beaches Council to operate once construction is completed. ESG are continuing to look to future opportunities to use landfill sites for public benefit.

The next challenge that has Peter and his team excited is the option for a landfill site outside of Castlereagh in Sydney’s outer west, to house a 50-Megawatt solar farm, which would make it the largest urban solar farm in Australia.

The 350-hectare site is not suitable for building on due to the contamination from its prior land use, but the WAMC team can see a future where it could instead be transformed into a new clean energy precinct.

“The solar farm would take up a small portion of the site but we’re hoping to be able to expand that out in future. There are other options to do further solar and hydrogen creation on the site, so we’re really hoping we can further this and get a lot of interest from the Government,” said Mr Graham.

Next steps are to seek interest from the private sector to develop a partnership to help to bring the idea to life.

“We have already seen a lot of interest from the private sector on this project, it is now a matter of refining to ensure we can scope a project which gives the best possible outcome for NSW Government.”

Hydro Panels

The AHO has a broad remit to deliver access and choice in housing for Aboriginal people in NSW. One way to provide genuine choice is to enable people to live where they want to live, even in times of drought. The speedy provision of drinking water to some of the hottest and driest parts of the State was therefore a key priority for the Board and staff at AHO.

Climate conditions in the far west of NSW and anywhere prone to periods of extended heat and drought pose unique challenges to providing quality social housing, especially within Aboriginal communities.

This year, AHO embarked on an ambitious project of installing 818 Hydro panels on AHO and properties owned by Aboriginal communities that were most at risk from drought and bushfires.

“After two successful trials, we knew that our clients needed some urgent assistance to make sure they had access to clean, reliable drinking water,” said Simon Newport, Director Property & Finance, AHO.

Hydro panels collect water vapour from the air using solar energy and condensation. The panels do not require any electricity, are completely self-contained and they can collect 4-5 litres of pure drinking water from the air per day.

This project was initially trialled in NSW when the drought was at its most devastating. Even when there seemed to be little to no humidity in the air, the panels collected around 4 litres of water per day. The hydro panels can store water for up to 6 days at a time.

Delivering the program has achieved excellent environmental and cost benefits. It has cut down the need for tenants to buy expensive bottled water, meaning the panels save people money and the environment through reducing the use of plastic water bottles.

The project also created great employment and training outcomes for local people. Local community residents were employed to install the panels and were provided with training and skills for the future.

As with any AHO construction project, an ambitious target was set for Aboriginal employment, which typically is 20%. The hydropanel initiative achieved an amazing 40%, double what AHO was aiming at. And to top it all off - this impressive project was completed in just 13 weeks!

This project was well received by the communities who benefited from this project. Simon Newport from the AHO, reported that one elderly tenant reported saving around $80 per week as she no longer had to purchase bottled water from the local service station during the drought.

At the time of writing, the houses that HAP have installed with Hydro panels have already produced over 1.1 million litres of water.

Whilst AHO had the product and plan ready, it was only able to deliver this project through the provision of stimulus funding. It is hoped that sometime in the not too distant future, an additional 400 homes can be fitted with hydropanels.
This mammoth undertaking was led by HAP’s Development and Transactions (D&T) team and Department of Planning, Industry and Environment (DPIE) Property and Workplace Services team.

“Our team was involved from start to finish in the delivery of 4PSQ,” said Taylor Yankos, Senior Project Manager in D&T. Taylor worked with the team tasked with delivering this impressive project.

“We managed the request for tender, procured the space where the building currently sits, provided input into its design and final fit-out and executed the lease arrangements for the Department to be the anchor tenant for the building,” she said.

The DPIE move to 4 Parramatta Square (4PSQ) showcased effective reduction of the government-leased office footprint in the CBD. This has reduced future rent costs and provides public servants with access to quality office space through effective partnerships with the private sector, whilst stimulating the economy of Western Sydney.

The building was planned, implemented and delivered by HAP in partnership with Walker Corporation. HAP had an instrumental role in the design and fit out of the building.

Taylor highlighted the striking connecting staircases throughout the building as one of the features she is most proud of.

“The stairs, which we helped design, provide an opportunity for people to move freely between floors and interact with each other, making our workspace open, welcoming and connected.”

Taylor also mentioned the diversity of work settings, the winter garden and the natural light in the building as some of her favourite features.

The move to the new building has been hailed as a success with more people able to work closer to where they live, while the arrival of over 4000 public servants has provided an economic boost to Parramatta.

Taylor attributes the success of the project to the collaborative relationships D&T established with the developer and the architects, and with the DPIE Parramatta Move team, who were tasked with moving the 5,000 employees into the new building.

“Our partnership with Walker Corporation in the delivery of this impressive building has been a success and this approach will work well for other projects depending on their size and location. That is why we are establishing similar partnerships for the delivery of 6PSQ, 231 Elizabeth Street and projects in Orange and Newcastle,” said Taylor.
### Housing and Property Business Units

#### Our People

- Provide strategic oversight and coordination in development, land and property use.
- Play a critical role in the delivery and management of housing and property covering the lifecycle from design to completion.
- Mirror the values of the department and align our work to the vision. The community is at the heart of our decision-making.

#### Our Role

- The Housing and Property Group seeks to maximise economic outcomes and deliver community benefits through the more efficient utilisation of government owned land and property in the delivery of diverse housing and public spaces.
- Deliver the government’s priorities on the ground, managing the government’s property and asset portfolios.
- Partnering with core stakeholders across the community, local government and private sector to deliver on our priorities for the people of NSW and the wider economy.

<table>
<thead>
<tr>
<th>Aboriginal Housing Office</th>
<th>Property and Development NSW</th>
<th>Valuer General New South Wales (VGNSW)</th>
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<tr>
<td>AHO seeks to ensure that Aboriginal and Torres Strait Islander people have access to affordable, quality housing.</td>
<td>Property and Development are responsible for the management and delivery of large scale and/or complex real estate projects and transactions.</td>
<td>In NSW, the Valuation of Land Act 1976 establishes the Valuer General as the independent statutory appointment responsible for ensuring the integrity of land valuations in NSW.</td>
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<td>AHO manages and coordinates an annual capital works program, along with developing and implementing financial and resourcing strategies.</td>
<td>Property and Development NSW coordinate the development and implementation of accommodation strategies to support the Government commitment to developing flexible, fit for purpose office accommodation.</td>
<td>VGNSW manages the valuation system on behalf of the Valuer General.</td>
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<td>AHO actively promotes employment opportunities for Aboriginal people, both within the AHO and through opportunities for tradespeople and trainees with contracted Aboriginal and non-Aboriginal building companies.</td>
<td>Advisory and Transactions provides a range of real property services including advisory, development management, place creation and transaction management across the State.</td>
<td>The Valuer General:</td>
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<td>AHO is implementing the Strong Family, Strong Communities Plan, which aims to provide stable housing, positive health, education and employment outcomes for Aboriginal people and families.</td>
<td>Commercial Development provides advice and manages the instigation and delivery of commercial accommodation projects across the State anchored by government tenants.</td>
<td>• Sets the standards and policies for the land valuation system and the determination of compensation in the compulsory acquisition process.</td>
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#### Crown Lands

- Crown Lands is responsible for approximately half of NSW land (valued at over $61 billion) and manages some of the most iconic and diverse public land through the Crown reserve system.
- NSW Crown land covers 42% of NSW. The 35,000 Crown reserves managed by Crown Lands provide many of the state’s town squares and local parks, state heritage sites, buildings, community halls, nature reserves, coastal lands, waterway corridors, sporting grounds, racetracks, showgrounds, caravan parks, camping areas, travelling stock routes, rest areas, walking tracks, commons, community and government infrastructure and facilities.

#### Cemeteries and Crematoria (CCNSW)

- CCNSW assess current and future interment needs and develop planning strategies for cemetery spaces.
- CCNSW develop, approve and promote codes of practice for cemeteries and crematoria, reporting on adoption of those codes by the interment industry.
- CCNSW promote environmental, sustainable practices in the interment industry, reviewing the policies, operating procedures and activities of the interment industry.

#### Land and Housing Corporation

- The NSW Land and Housing Corporation (LAHC) is responsible for the NSW Government’s social housing portfolio.
- LAHC’s main role is to procure, recycle and maintain the NSW Government’s public housing portfolio in a way that is financially self-sustaining.
- LAHC designs and delivers new housing to meet increasing demand in the face of growing populations and changing demographics.

#### The Teachers Housing Authority (THA)

- THA provides an essential service for NSW’s rural and remote communities by providing quality housing to teachers and police.
- Undertakes, promotes and encourages research into the design, construction and maintenance of housing suitable for teachers and police.
- Provides, conducts, operates and maintains a housing service for teachers and police.

#### Valuer General New South Wales (VGNSW)

- VGNSW manages the valuation system on behalf of the Valuer General.

#### Project Management Office

- Oversees the delivery of the NSW Government’s Stimulus Package.
- Streamlining the flow of information HAP wide and to key stakeholders.
- Enabling teams to improve the way they deliver projects & programs.

#### Office of the Group Deputy Secretary

- Reporting - Outcome and Budget process, quarterly reporting, performance measure development, election commitments, priorities updates to OSEC, annual report coordination.
- Parliamentary and Government services - HAP Group briefing notes, correspondence, Parliamentary Folder Notes (including Budget Estimates), Questions on Notice, Contentious Issues Briefs, Notice of Motion speeches.
- Cabinet and Partnerships Team manage and support the submission of Cabinet submissions from HAP and coordinate input to submissions from other agencies.
- Facilitate partnerships and cooperative approaches to implementing whole-of-government policy initiatives within HAP.
- Support networking and professional development among HAP staff.
- All co-ordinate working groups for the HAP Group.

#### Innovation, Strategy and Integration Team

- Key land use, property and housing strategy teams working together and across HAP to foster opportunities and create value.
- Building capacity for collaboration across HAP to deliver integrated strategies and frameworks.
- Utilising design thinking to foster integrated approaches and deliver innovative outcomes.