

Ray Hezkial

Corporate, Infrastructure Services and Digital

Relevant key facts

- The Remuneration Committee met 3 times in 2018–19.
- The most recent independent expert review of Managing Director and Executive remuneration was August 2019.
- Our efforts to increase the number of women employed in non-traditional roles is proving effective, with a 13% increase from last year.
- In 2018–19 we delivered \$108.9m of capital works and achieved our budgeted spend.
- We currently have 11 contractors engaged in ICT-related project delivery activities.
- We have 22.8 permanent Icon Water staff engaged in ICT-related activities.
- ActewAGL manage 16 Corporate systems and the core infrastructure, branch networks and end user devices required to deliver ICT services to Icon Water.
- The Digital Technology Group manage the remaining 140+ applications, including the Works and Asset Management, Geospatial, SCADA and other operational systems on two separate infrastructure environments.

Relevant ACT Legislative Assembly questions

- Industry benchmark used to determine Board, MD, Executives, Managers and staff (Recommendation, BE June 2019)
- Comparison of Icon Water remuneration to other like utilities (Recommendation, BE June 2019 – not agreed)
- CEO recruitment (PAC Nov 2018)
- Executive remuneration, bonuses, non-ongoing employees and contractors (BE June 2018)
- List of 2019–20 capital works projects (Recommendation, BE June 2019)
- Network and cast iron pipes, Actual vs budgeted spends 2014 to 2019 (BE June 2019)
- Upgrades to electrical and instrumentation control systems, LMWQCC upgrades (BE June 2019).
- IT security, IT upgrades and ActewAGL (BE June 2018).

Executive remuneration (Annual Report ref: KMP pages 26-27; Page 147: 18–19, 148: 17–18)

- The salaries of key management personnel, our executive, are published in Icon Water’s Annual Report that is published on our website.
- Remuneration for Icon Water’s Managing Director, Executives and key Branch Managers is aligned with the “all utilities” remuneration market and a Fixed Annual Remuneration is determined for each role, within a percentile range. Icon Water accesses the services of a remuneration specialist to independently review the remuneration for these roles and to provide advice to the Remuneration Committee of the Icon Water Board.
- Our remuneration framework was independently reviewed by a remuneration specialist in August 2019.
- Icon Water has a Remuneration Committee and the Committee’s charter is publicly available from our website.
- The remuneration of the non-executive directors is set by the Voting Shareholders and is in line with the ACT Remuneration Tribunal Determination for part-time public office holders.

Employee remuneration

- Most Icon Water employees (excluding the Executive and some other key positions) are covered by the *Icon Water and Combined Unions Enterprise Agreement 2017* (the Agreement), and the salary structures contained within the agreement, which outline provisions for remuneration and salary progression through the Single Salary Spine (SSS) or competency based arrangements.
- The Agreement was approved by the Fair Work Commission on 4 September 2017 and expires on 1 July 2020.
- Consultation and negotiations on the next Enterprise Agreement will commence shortly.

ActewAGL operational matters

- ActewAGL is a joint venture between public and private companies. Management of ActewAGL is independent of the ACT Government.
- Icon Water participates in the ActewAGL joint venture with two other companies – AGL and Jemena. Icon Water has three representatives on the ActewAGL Board, and provides management oversight at the strategic level.
- Icon Water is not involved in the operational day to day management of the energy business.

Workforce (Annual Report ref: pages 30-31)

- Formal complaints of bullying and harassment in Icon Water are externally investigated. In 2018–19, there has been 1 complaint that has been externally investigated.
- We have 413 FTE staff (as at 30 June 2019) with an average of 10.4 years of service.

Icon Water staff numbers as at 30 June 2018		
Group	FTE	Headcount
Business Services	40.25	41
Customer Engagement	49.22	50
Finance	35.50	36
Infrastructure Services	244.19	245
Managing Director & Board	10.20	11
Strategic Projects & Technology	18.80	19
	398.16	402

Icon Water staff numbers as at 30 June 2019		
Group	FTE	Headcount
Business Services	42.80	43
Customer Engagement	51.29	53
Digital Technology	17.80	18
Finance I	29.90	30
Infrastructure Services	255.39	256
Legal & Secretariat	9.77	11
Managing Director & Board	2.00	2
	408.95	413

- 24% (100) of our workforce are women and 76% (313) are male.
- 2.2% of our workforce identify as Aboriginal and Torres Strait Islander; 7.7% have culturally diverse backgrounds, and 2.7% have a disability.

Attraction and retention (Annual Report ref: pages 30-31)

- We currently have four graduates (2 female and 2 male) and four apprentices (2 female and 2 male). Recruitment is underway to take on 4 more graduates on two year contracts in 2020.
- The initiative to attract females into non-traditional roles is progressing, the total number of females in non-traditional roles has grown to 41 (being 13 percent) – from 35 in the previous year, this includes trades, non-trades, STEM and leadership roles.

Leadership development

- The second iteration of the Next Wave Leadership Program for emerging leaders has been completed.

Engagement (Annual Report ref: pages 29 and 69)

- In May 2019 an employee engagement survey was conducted.
- The survey achieved a strong participation rate of 77 per cent.
- The three key focus areas for improvement are:
 - Setting clear expectations
 - Providing the right materials and equipment, and
 - Supporting development.
- The performance table for 2018–19 (page 68) shows a target of 60% of employees surveyed are moderately to highly engaged and a result of +1%. The survey methodology has changed since the target was set. The percentage of engaged employees rose from 25% in 2018 to 26% in 2019.
- Our new survey only distinguishes between engaged, not engaged and actively disengaged. Other measures commonly used in other surveys apply categories such as neutral, moderately engaged or highly engaged. Our current survey also considers a 'maybe' response as a 'no' and places the response in the not engaged category.
- In the 2019 employee engagement survey, 26% of employees were considered to be engaged, 52% not engaged (would be considered moderately engaged or neutral in other surveys), and 22% actively disengaged.

Capital expenditure (Annual Report ref: pages 59-63)

- In 2018–19, Icon Water delivered \$108.9m of capital works to further grow and improve the network to meet future demands and protect our natural environment. We achieved our budgeted spend this financial year.
- Our biggest investment has been a major program of works at the Lower Molonglo Water Quality Control Centre (LMWQCC) to replace aged assets at risk of failure and to meet environmental regulations. Our Annual report provides detail on several of the major projects for 2018-19.
- Icon Water's capital program is **\$416m nominal** over the regulatory period from 2018–23.
- The anticipated capital expenditure commitment for 2019–20 is approximately **\$105m**.

Lower Molonglo Water Quality Control Centre upgrades

(Annual Report references: pages 59-60, pages 61-63)

- LMWQCC was constructed in the 1970s and as such significant components of the plant are now in the process of being replaced or upgraded.

- The major projects continued or completed at LMWQCC over 2018–19 works are detailed on pages 59-60 of the Annual Report.
- Icon Water is currently investigating suitable ways for biosolids treatment and end use at LMWQCC to enable us to recover resources as efficiently as possible. This work will help us develop a long term management strategy to potentially replace the existing treatment system when it reaches end of its service life around 2030.
- Works are progressing on the waste stream investigation project which will lead into the planned closure of the Coppins Crossing discharge site which is required by late 2020. Consideration of management of the existing biomass stockpiles at LMWQCC and management of alum sludge coming from the WTPs will also be included in this investigation.

Network

- We operate and maintain more than **3,300 km of water and 3,300 km of sewer pipes** across ACT.
- Works within the network are summarised below:

Activity	2018–19 (to end June-19)	2017–18
Proactive mains cleaning	216 km	300 km
Burst water main repairs	491	541
Sewer main chokes unblocked	4854	3661
Sewer mains renewal	14.28 km	18.69 km
Water mains renewal	4.56 km	9.05 km

- These programs ensure we are continually maintaining and renewing the aging water and sewerage networks and replacing sections of infrastructure where faults have historically occurred.
- Over the 2019–2023 period, **80kms of sewer mains** and **28kms of water mains** are planned to be replaced or renewed.
- We are faced with a trade-off between network reliability and providing fair and affordable pricing. The decision to maintain the current level of sewer asset performance has been informed by the customer preferences and willingness to pay studies which identified that households were not willing to pay for increased spending on proactive investment in the sewerage network.
- Our sewer blockage rate has increased from 55.6 blockages per 100km in 2017–18 to 72.1 blockages per 100km in 2018–19 per year.
- Our proactive maintenance programs aim to clear tree roots and identify sewer mains for repair or replacement to manage the number of blockages.
- 90% of blockages are caused by tree roots infiltrating our sewer mains. This is predominately due to the dry weather conditions which has led to a decrease in the soil moisture content. There is a correlation between the decrease in soil moisture content and the increase in sewer blockages. However, there are some factors within Icon Water’s control which also impact on the number of sewer blockages. The UTR have previously been briefed on a range of improvement initiatives that have recently been implemented including a review of the methodology for cleaning, resource

utilisation and cleaning equipment. Further initiatives have been identified across the business that may address the risks associated with sewer blockages.

Dam Safety (not in Annual report but detailed in UTR Annual Compliance Report 2017-18)

- In the ACT Utilities Technical Regulator (UTR) Annual Compliance Report 2017-18, they noted that we were not yet fully compliant with regard to dam safety. The outstanding issue related to an administrative requirement for dam safety reviews which we successfully completed by December 2018. Testing of rock anchors at three dams has also been completed in 2018–19.
- Our recent reviews and routine inspection programs provide assurance that there are no significant structural issues with the dams, or dam safety risks to staff or to our community.
- Every 10-20 years, an independent **external Safety Review** is required for each dam. The status of this review for each of our dams is as follows:
 - Bendora Dam interim review is complete. Full review due 2020–21
 - Cotter Dam was reviewed when constructed and the next review is due 2028
 - Googong Dam review completed 2018 and accepted by the UTR
 - Corin Dam review completed 2018 and accepted by the UTR
 - LMWQCC bypass dam review completed 2018 and accepted by the UTR.

Fireflows (Annual Report ref: page 77)

- In December 2018, we signed a renewed Deed of Agreement with ACT Fire & Rescue, which provides for flows significantly greater than required in many major cities in Australia.
- We have higher fireflow standards than other jurisdictions. The non-complying sections of our water main were identified by a theoretical model which we are in the process of verifying against actual network performance. ACT Fire & Rescue has not reported any practical concerns on low flow or pressure experienced in these areas.
- Icon Water is working with the ACT Government (EPSDD) and ACT Fire & Rescue to assess and upgrade the current water supply to part of Pialligo in order to ensure compliance with the ACT Fire Brigade Deed of Agreement. Developments in this area have introduced a fire risk rating which is not usual for broadacre zoning and the design of this part of the network has not kept up with these developments. ACT Fire & Rescue is aware of the situation and have contingency measures in place. UTR has also been advised.

Drinking Water Quality (Annual Report ref: page 53)

- Overall our water quality is high. We provide over **130 million litres of treated water each day** and we take drinking water quality very seriously.
- In 2018-19 there were **six notifiable events** to ACT Health as per the Public Health (Drinking Water) Code of Practice (2007). These did not affect our compliance. In 2017–18 there were five notifiable events.
- Our **Annual Drinking Water Quality Report 2018–19** was publicly released in October 2019.

Digital projects (Annual Report ref: page 57)

- As the Canberra region grows and the regulatory environment changes, it is critical that we upgrade our systems and utilise technology to improve operational efficiencies.
- Icon Water, like many other businesses, is faced with the reality that many of our existing systems and applications are at end-of-life. This gives us an opportunity to consider new investments which will improve our ability to efficiently and effectively manage our assets, operations and service our customers.

- Our system renewals will ultimately bring about great levels of support for our customers. At the moment, benefits are primarily only visible internally. This will shift to the customers, as we progress with the digital projects.
- Our current focus is on improving the reliability, quality and efficiency of our **operational technology**, reporting and analytics as opposed to **information technology platforms** which will be addressed as part of our 3-5 year plan.
 - Operational technology – systems that are central to the management and operation of a water business that are key to our sustainable success (e.g. GIS, SCADA, Works & Asset management, Water quality management, Smart Metering).
 - Information technology – general technology employed by a business of our size (e.g. financial, human resources, payroll, billing).
- Initiatives include:
 - upgrading ageing infrastructure to improve overall performance and reduce costs
 - upgrading core applications to optimise capabilities provided to staff
 - removing legacy applications to reduce costs and lower risk
 - better managing digital data to improve protection of this key organisational asset
 - increasing cyber-security safeguards to better protect our digital assets.
- Projects include:
 - renewing core GIS, SCADA, Drawing Management, Document Management to improve security and performance
 - a new Works and Asset Management System
 - integrating mobility capability to increase operational efficiency
 - adding new business and asset analytical systems to improve data-driven decision-making
 - better use of cloud infrastructure to improve performance, resilience and reduce costs.

Works and asset management replacement

- A works and asset management system is fundamental to our business. It manages our water and wastewater assets and the works required to maintain those assets. This project replaces the existing end-of-life WASP (scheduling) and Waterworks (emergency corrective work in the network) and is based on the Oracle Works and Asset Management (WAMS) utility solution.
- Our new works management platform is aimed at improving performance and reducing impacts to customers.
- The Oracle WAMS product was selected through a competitive procurement process.
- This project is complete, with implementation activities underway across our business.

Geographic Information System – (GIS) - Geospatial asset repository upgrade

(Annual Report ref – refer to case study on page 58)

- We have upgraded our mapping system and created a new schema that is specific to our water and sewerage network. A schema defines the way data is set up, named and managed. We now have the flexibility to manage and change the system to meet our own needs and priorities.
- The upgraded GIS gives us a more advanced ‘connected model’ of our water and sewer network; more ways to use the information in the GIS and makes it much easier to keep our data up to date.

- We will be publishing outage maps on our website to show planned or unplanned interruptions to supply. Our customers won't have to ring us to find out if/why their service is interrupted.
- This is the first application to move into production utilising our new cloud infrastructure.

Cyber-security

- We face the same challenges that all businesses do in this technological environment.
- While we are not aware of any successful cyber-security attacks, we are regularly looking at the areas of vulnerability.
- Icon Water has a joint internet traffic monitoring program in place with ActewAGL. This has provided us with a number of minor alerts from time to time. Cyber-security remains an active initiative and we consider continued investment in this area worthy. Solutions relate to technology upgrades, infrastructure upgrades, staff education and improved processes to support our ability to detect, prevent, respond to and recover from any cyber based event.
- Icon Water is currently revising its Security Strategy and completed an independent assessment of its Cyber Security readiness, this has informed our security program priorities.
- All new cloud based applications undergo independent penetration testing and are the subject of well architected reviews (WAR) prior to going live.

Jane Breaden: Business services, customer and engagement

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Key facts

- 53 per cent reduction in **recordable injuries** over 2018–19
- Current dam levels are at 53%
- Daily consumption is 130-160 ML/day
- **M2G** is currently in operating mode
- In 2018–19 we installed 720kW of solar PV at LMWQCC, Mitchell, Stromlo and Cotter.
- We have approx. 179,000 water connections and 178,000 sewer connections.
- **Satisfaction** levels of our business customers has improved from 88% in 2017–18 to 93% this year.
- During 2018–19, we committed \$486,072 to sponsorships and donations through 55 groups, individuals and organisations.

Previous ACT Legislative Assembly questions

- TTO cancellation, independent audits, testing of risk/crisis management plan (BE June 2019)
- M2G: modes, costs, volume pumped (PAC Nov 2018)

- EAP, Bullying, renewable energy assets, mental health, strategies, Solar PV (BE June 2018)
- Internal audit (PAC Nov 2017)
- Community service obligations, schedule of charges (BE June 2019)
- Branding, customer service roles and service contracts, customer strategy and ActewAGL (BE June 2018)
- Sponsorship and community support program, penalties for faulty meter readings, communications and media expenditure, developer charging policy (PAC Nov 2017).

Bushfire risk management

(Annual Report ref: page 77)

- Icon Water's *Bushfire Operations Plan 2018–19* saw bushfire hazard reduction works completed at two water treatment plants, two sewage treatment plants, two major supply dams, 34 service reservoirs, three pump stations and three water mains, and a number of other assets.
- A total of 46 assets had hazard reduction works completed during 2018–19.
- We have over-performed on other customer sentiment measures e.g. business satisfaction.

Billing

Bundled account issue

- In December 2018, we had an issue with our delivery of accounts which resulted in water bills being bundled, packaged and sent to customers other than the account holder.
- An investigation revealed that this was caused by a programming error at the printing and mailing house.
- To ensure this does not occur again, processes have been improved to ensure that any programming changes are subject to appropriate testing and approval before going live in the billing process.

Background

- This affected approximately 5,000 customers.
- Upon identification of the issue, billing was suspended and was only re-commenced when Icon Water management was satisfied that the error had been resolved and satisfactory quality assurance processes were in place.
- We encouraged customers who had received other accounts to contact us and we made arrangements for these to be returned, collected or destroyed. Our customers greatly helped with these efforts and more than 90% of invoices have been accounted for.
- The data breach was reported to the Office of the Australian Information Commissioner (OAIC) and the Independent Competition and Regulatory Commission (ICRC).
- Immediately following the incident we commenced a process to reverse and re-bill customers and also wrote to all affected customers regarding the incident.
- Various arrangements have been put in place to ensure that this does not re-occur including:
 - The system change request processes have been reviewed to ensure appropriate testing and approval protocols are in place.
 - Additional governance arrangements have been developed.

- Improved capability in the corporate IT service function to administer changes on systems owned and operated by third party service providers has been identified.

Supply charges to carparks

- We have recently reviewed supply charges to carparks. Our investigations have determined there are two scenarios:
 - A block of land that is used as a commercial carpark that may or may not have a water and/or sewer connection and can be sold and/or redeveloped.
 - A car space within a unit complex that has an individual title that can be sold, is unlikely to be redeveloped and unlikely to ever have a water and/or sewer connection.
- There are 67 individually titled car spaces known to us.
- Icon Water has introduced a policy to exempt individually titled car spaces.
- The following criteria is proposed:
 - Separately titled car space within a unit complex, unlikely to ever be developed.
 - There is no water meter or sewerage connection to the car space.
 - An exemption is applied from the date of application.
- An exemption of supply charges has been applied from 1 July 2019, for separately titled car spaces within the residential unit complexes that have been identified in our billing system. To date, this has meant around \$11,000 worth of exemptions to those 67 customers.
- We will exempt any future separately titled car spaces as they become known to us either through reconciliation of ACT Government data or direct contact from a customer.
- We will work with ACT Government and ActewAGL Retail to develop a formal process for collecting data to ensure accurate categorisation within the billing system and proactive exemption of separately titled car spaces at the time the account is created.

Climate change

- As part of the current four-year business strategy, we are undertaking an initiative to build our resilience to climate change. The priority for the current financial year is to develop a **Climate Change Adaptation Plan**.
- In developing that plan, we are using the Water Services Association of Australia's *Climate Change Adaptation Guidelines* to assess our vulnerability to climate change and its potential impacts, plan and respond by identifying and prioritising adaptation options. Following that we will need to embed those plans in internal roles and responsibilities, and investment decisions; and finally, put in place arrangements to monitor and review our adaptation. ([E&S](#))
- The ACT Government's climate change policy is looking at actions to prepare for climate change and reduce greenhouse gas emissions.
- Icon Water's total **contribution to greenhouse gas emissions** in the ACT is 1.5%.

Community engagement

(Annual Report ref: pages 42-44)

- We engaged with the community on:
 - Infrastructure and network education
 - Googong Dam – appropriate recreation and management of the drinking water catchment.
 - Belconnen Trunk Sewer project.
- Over 2018-19, approx. 4,800 people have participated in 129 education sessions.

Belconnen trunk sewer projects

- Extensive community consultation has been conducted to inform the Development Applications (an Environmental Impact Statement was also required for project one):
 - Letterbox drops - Four **community newsletters** were distributed between November 2018 and June 2019. A total of 20,000 newsletters were distributed
 - **Drop-in community information sessions** - November 2018 x 2, January 2019 x 1, June/July 2019 x 2
 - **Community walks** - Sunday 14 April 2019 at the OCU locations for Projects 2,3, and 4
 - **Email distribution list** - stakeholders signed up to receive updates
 - Two **presentations** to the Belconnen Community Council.
- Representation made during consultation period for project one included 14 representations. Key themes included:
 - Footbridge to disguise sewer crossing and increase local amenity
 - General amenity
 - Environmental outcomes included tree removal
 - Location, design and planning.
- Ongoing consultation:
 - Finishes for OCUs (we expect to be using muralled art). Our intention is to work with local school at Florey OCU site.
 - Delany Court playground (Melba): Ongoing discussions with ACT Government regarding playground.
- The Belconnen trunk sewer upgrades will comprise four projects over the next few years. They include:

Project	Status of Project	Anticipated Construction Start
Belconnen trunk sewer augmentation pipeline	Draft Environmental Impact Statement (EIS) and Development Application submitted	Mid 2020
Latham North Odour Control Unit (OCU)	Final EIS being prepared	
Latham OCU	Development Application currently being prepared for this project	Mid 2020
Florey OCU	Development Application currently being prepared for this project	Mid 2020
Evatt OCU	Development Application lodged for this project	Mid 2020

Community Support Program

(Annual Report ref: pages 38-41)

- As a Territory-owned corporation, Icon Water has an obligation to 'show a sense of social responsibility by having regard to the interests of the community in which we operate'.
- We focus on initiatives that support the community, the environment and our operations, that are accessible and available to enrich the lives of every Canberran.

- In making decisions we seek to meet community expectations around our sense of social responsibility and to ensure a balanced approach to supporting a range of initiatives across the community.
- On 5 September 2019, we commenced provision of water carafes to Canberra venues. The carafes are being distributed free of charge as part of our Refill Canberra partnership with ACT Health. Cafes can apply for the carafes online at iconwater.com.au/drinktap. To date we have distributed 2,824 carafes, with 7,176 remaining to be delivered. The total cost of the carafes is \$51,500, and each carafe costs \$5.15.
- During 2018–19, we committed **\$486,072** to sponsorships and donations through 55 groups, individuals and organisations. Page 39 of the Annual Report lists the 55 organisations and related cost.

Consumer protection code

- We are required to meet certain standards in relation to the service we provide to our customers. In circumstance where our service obligations are not met, customers may be eligible for a Rebate.
- These rebates are applicable to the following service obligations not being met:
 - connection times (on the same day or as agreed) - \$60 per day/max \$300;
 - responding to a complaint (within 20 working days) - \$20;
 - response times to network faults (6 hours where fault has potential to cause substantial harm to public or within 48 hours) - \$60;
 - planned interruptions (two business days notice and interruption does not exceed 12 hours) - \$50;
 - unplanned interruptions (services restored within 12 hours) - \$20.
- This information is available to our customers via our website.

Customer

(Annual Report ref: page 45, Performance table 7: page 69)

- We have approximately 179,000 water **connections** and 178,000 sewer connections, with a service reach of approximately 460,000 people.
- The variation in the number of water connections to sewer connections can be for various reasons, such as unit complexes having multiple water meters but only one sewerage connection; or large customers that have multiple water connections but may manage their own sewerage networks.
- The three **most valued** aspects of Icon Water's services by the Canberra community are reliability of supply, quality of drinking water and our customer service.
- Overall customer satisfaction with our services is steady at 92%. (2017–18 was 91%)
- In 2018–19 we received around 650 customer complaints with the main issues related to site restorations and billing queries.
- There has been a 32 per cent reduction in overall complaints compared to the prior year.
- In addition to customer satisfaction we are also measuring positive word of mouth or advocacy (net promoter score) and ease of doing business, which are both accepted measures in the retail environment.

Ease of doing business

(Annual Report ref: performance table 69)

- Ease of doing business (also known as Net Easy Score) is a measure of how easy customers find it to interact with Icon Water. It reflects the amount of effort the customer needed to put forth to do business with Icon Water. It is an indicator that is used across the water industry
- The ease of doing business target was based on that used by high performing UK businesses and set before we had used the measure.
- In hindsight, the target of >50 was highly ambitious.
- The 2018–19 outcome of 17 is a 5 point increase on last year (2017–18 was 12).

Customer hardship

- Icon Water has a financial **hardship policy** for residential customers that may, at times, be unable to meet their payment obligations. Icon Water recognises that it provides essential services and strongly supports working in conjunction with customers to resolve and manage any issues that customers face as a result of financial hardship.
- Our financial hardship policy (Staying Connected) allows customers to set up a flexible and affordable **payment plan** if they experience times of hardship. The program stops debt recovery action and provides payment options. It also connects customers with other organisations who provide additional budgeting advice and support, such as Saint Vincent de Paul.
- Other supports include: **setting up automatic deductions**; referring customers to the **ACTSmart** program which provides water usage audits and financial assistance to switch to water saving appliances; **suspension of interest**; payment plans etc.
- There are 208 customers on the Staying Connected program (as at 1 October 2019).

Emergency management and business continuity

(Annual Report ref: page 78)

- During 2018–19, Icon Water has conducted **13** exercises.

Energy management strategy

(Annual Report ref: pages 70-71)

- From a water and sewerage perspective we actively look to manage our energy, the focus during the year has been on implementing solar panels on our assets in order to manage our electricity costs. Our longer term LMWQCC strategy includes exploring opportunities to improve use of embodied energy in bio-solids.
- In 2018–19 we installed 720 kW of **solar PV arrays** at LMWQCC, Mitchell, Cotter Dam and Stromlo WTP. These will generate approximately 1150 MWh of electricity per year (3% of total electricity use in a 'normal' year) saving over \$225,000 annually.
- Over 2018–19 we generated less renewable energy than the previous year due to the reduced operation of the hydroelectric turbines, changes in where we sourced our water and a reduction in some of our environmental flow releases, in response to the lower rainfall and dam reservoir levels across our catchments.
- We have four mini-hydros in operation: Bendora Dam, Googong Dam, Stromlo WTP and at the outlet of the M2G pipeline at the discharge point to Burra Creek. When operational these hydro systems generate energy from moving water and feed power to adjoining infrastructure with any surplus exported to the grid.

- The Mt Stromlo mini-hydro is now included as a renewable energy asset of the ACT Region Renewable Energy Trail. Tours of the mini-hydro are provided to the public as part of the South East Region of Renewable Energy Excellence community open day in November each year.

Environment and sustainability

(Annual Report ref: pages 64-65 and 70-71)

- As custodians of the region's water resources we have a strong commitment to protecting the environment and managing water resources sustainably – that is, meeting the needs of the present without compromising the ability of future generations to meet their needs.
- We reflect the principles of sustainability in a range of ways, including: certified EMS, E&S team supporting compliance with environmental licence requirements, EMPs for key activities, sustainability assessments for capital projects, installation of solar PV, energy management strategy, climate resilience initiative, waste management strategy, [sustainability snapshot](#), environmental monitoring of catchment health, focus on fish health, catchment management, commitment to UN's Sustainable Development Goals SDGs.
- There are three **SDGs** of particular relevance to Icon Water: gender equality, clean water and sanitation, responsible consumption and production.
- Information on our sustainability initiatives and commitment to the SDGs is detailed in our 2019 Sustainability Snapshot (which we launched on World Environment Day – 5 June 2019).
- A comprehensive implementation plan is supporting the delivery of our **Waste Management and Resource Recovery Strategy** to reduce waste to landfill and find alternative beneficial reuse alternative disposal options. On 7 July 2018, we became a licensed waste facility for our LMWQCC facility.
- We have continued to deliver research and management actions to protect threatened **Macquarie Perch** in the Cotter Reservoir in partnership with ACT and Commonwealth regulators.
- We undertake **weed and pest control** activities for land managed by Icon Water.
- We have continued delivery of our **Source Water Protection Strategy** encouraging appropriate activities in our drinking water catchments to protect water quality and public health.
- We released the **Googong Catchment Actions for Clean Water Plan** prioritising erosion hotspots for potential natural resource management investment.
- We met with government and community stakeholders regarding the potential impacts from feral horse management in Kosciuszko National Park adjacent to the Cotter Catchment.

Fraud prevention

(Annual Report ref: page 78)

- During 2018–19, we investigated and resolved 4 allegations, 2 were unsubstantiated. The remaining two were substantiated and of a minor nature.

Health and safety

(Annual Report ref: pages 34-36)

- Safety is a core value at Icon Water. Our safety core value encourages staff to accept personal responsibility to ensure a safe workplace and contribute to a safe community.
- There has been a 53 per cent reduction in **recordable injuries** over 2018–19.

- There were **four incidents** reported to the safety regulator in 2018–19. The incidents involved underground service strikes, equipment failure and a vehicle incident.
- A **high potential incident** is a near miss which has a potential consequence of major or severe, even though the actual consequence may have been insignificant or minor. There were two high potential incidents in 2018–19. One involved a sulphur dioxide leak at LMWQCC and the other related to a safety guard being removed on a lathe. (Annual report ref: Performance table page 68).
- A drug and alcohol education and monitoring program has been implemented. This involves random drug and alcohol testing at Icon Water office locations and major treatment plants.
- Formal complaints of bullying and harassment in Icon Water are externally investigated. In 2018–19, there was one complaint which was externally investigated and substantiated.

Internal audit

(Annual Report ref: page 74)

- The Board's Risk and Assurance Committee approved 14 audits to be conducted in 2018–19 under the internal audit program. These audits included: operational controls – water and sewerage network; ICT security management; management of environmental aspects and impacts; customer management; procurement; chemical management.
- The 2019–20 internal audit program includes audits in relation to: capital expenditure management, waste management, and compliance with the Work Health and Safety Regulation in regard to working at heights and excavation.

Recreational use of Googong Reservoir

- The Googong catchment is a critical source of water supply for the ACT and Queanbeyan. It is the primary source of water supply when the Stromlo water treatment plant is undergoing maintenance, when water storages are low across our system, or to supplement supplies during periods of high water demand.
- We apply a preventive risk management approach to minimise and control risks to drinking water quality in accordance with the Australian Drinking Water Guidelines. We have a multi barrier approach with hazard assessment, monitoring and influence of activities within the catchments.
- We maintain a strong relationship with the ACT Parks and Conservation Service who manage the immediate area around the Googong reservoir and recreational access to the water body and foreshore.
- Recreational activities are restricted to those that are compatible with the Googong Foreshore's primary purpose of providing raw water for potable water supply.

Metering

- The total domestic meter reactive and planned replacement figures for the previous regulatory period was 23,000 and the planned replacement figures for this regulatory period is 37,000.

Smart metering

- Market research conducted in late 2016 indicated that customers have an interest in smart water meters, however, they have a low level of willingness to pay for the service.
- A number of smart meter trials have been conducted within the water industry. Icon Water is participating in Evoenergy's Smart Network in Denman Prospect, with the intent to install and **trial**

400 smart water meters. Two meters have been installed, with the project likely to commence in early next year.

- The ACT Government Smart City network, which is currently being rolled out, is likely to provide opportunity for further smart metering trials. The NB-IoT network offerings from the telecommunication companies will also provide opportunities for smart metering technologies to be trialled in the short to medium term.

Unit metering

- The ACT Government is looking to reform legislation related to unit titles, including in relation to individual metering of all new unit title developments.
- Icon Water currently offers unit metering for single and low-rise developments, upon request – where unhindered access for meter reading and maintenance can be guaranteed.
- However, our current standards and processes do not accommodate unit metering where the meter does not sit on or near the boundary and cannot be readily physically accessed by meter readers and maintenance staff.
- We have a project underway to identify and implement changes to Icon Water’s internal processes, standards and procedures to ensure we can provide a service offering to customers once the new regulatory changes come into effect.
- We understand the ACT Government is looking to implement the change impacting unit metering in late 2020.

Metered standpipes

- Currently there are 335 standpipes being hired out.
- Standpipes are used to access water taken from the ACT’s approximately 33,000 spring hydrants (hydrants in the ground).
- Standpipes measure the amount of water taken and can draw water from any of these hydrants.
- Emergency services also have access to these hydrants to combat fires.
- The charge for consumption of water through a metered hydrant standpipe is \$4.94 per 1000 litres. There is also a standpipe hire fee, depending on size and hire term.
- The amount of water drawn from the Icon Water network using standpipes in the 2018-19 financial year was 211,616 kilolitres. This is less than half a per cent of total combined water consumption.
- The amount of water drawn in the first quarter of this year is just over half a percent of combined ACT/Queanbeyan consumption
- Customers must only use the standpipes to draw water from ACT hydrants. They are not constrained on where they use the water which is sometimes outside the ACT. There is a contract in place with conditions that allow Icon Water to provide alternative direction at any time during the hire period.
- The top three current uses are construction and development, irrigation and dust suppression.
- Water use through standpipes is accounted for in Icon Water’s total abstraction volumes. At less than 0.5% of total supply there is an insignificant impact on Icon Water’s 35GL net Sustainable Diversion Limit allowance.

Murrumbidgee to Googong pipeline (M2G)

(Annual Report ref: page 55)

- The final report of the Public Accounts Committee (November 2018), published in March 2019, recommended that Icon Water include in the annual report a clear definition of each operating mode of the M2G pipeline and record the time and associated costs in each mode. Icon Water's actions to meet this recommendation include: providing information on M2G in our Business Strategy and this year's Annual Report. Our response to the Committee's QToN-12 and QToN-13 provided detail on costs.
- Depending on the climate conditions, rainfall, river flows and water demand, the M2G can be in one of three modes.
 - **Operating:** the system is operating and transferring to increase Googong reservoir storage levels.
 - **Standby mode:** the system is ready to run, all components are in place and being operated routinely for maintenance purposes.
 - **Suspension mode:** parts of the system may be decommissioned requiring lead time before start up. No water can be transferred.
- The M2G is currently in operating mode (since 26 September 2019). However, low flows in the Murrumbidgee River are preventing us from using the pump station. Given the current water storage levels, we are continuously monitoring Murrumbidgee flows and will run the M2G when water is available.
- Icon Water will operate the M2G pipeline subject to:
 - the infrastructure operating as expected
 - sufficient flow and water quality being available in the Murrumbidgee River to allow pumping
 - Googong Reservoir storage remaining below 80%.

Water security and outlook

(Annual Report ref: pages 54-55)

- The ACT's level of water security remains high. The ACT Government has set a service level – to meet unrestricted water demand 95% of the time. We are meeting that service level.
- We plan and operate our water network to ensure that in any given year there is a less than 5% chance of water restrictions. Our source water guidelines recommend considering water restrictions when the total storage level drops to 35-40 per cent (a range is given because the decision depends upon the time of year and climate outlook).
- Icon Water considers a number of factors when making a decision to impose temporary water restrictions. These include **dam storage levels, the time of year, consumption levels and the climate outlook**. At this point in time, these and other decision factors are not indicating a need to impose water restrictions. After enlarging the Cotter Dam, Icon Water has more water storage per person than most utilities and can introduce restrictions at a lower percent of storage than Sydney or Melbourne. Further, the Permanent Water Conservation Measures, introduced in 2010 are similar to Level 1 water restrictions in Sydney (which were introduced in June 2019).
- Enlarging the Cotter Dam increased our **storage** from 207 GL to 278 GL, an increase of 35% (from 4GL to 76GL).
- Current daily consumption is 130-160 ML. Consumption ranges between winter averages of 110 ML/day and summer peaks of 270 ML/day.
- Icon Water assumes that **climate change** is influencing ACT weather and has considered the potential impacts of climate change when determining Canberra's water security. We factor in anticipated reductions in inflow due to Australia's changing climate. The factors were

determined using output from the CSIRO's South-East Australian Climate Initiative (SEACI) project (2012).

- We use the ACT Government **population projections** to forecast our future water demand. We also factor in a small allowance for possible future supply to NSW.
- Since the Millennium Drought our customers have achieved a sustained per capita water usage reduction of almost 40%. While consumption has increased in the past two years, this is primarily driven by hotter and drier weather conditions and is not necessarily indicative of a trend in water usage.
- Cotter Dam has supplied 25.5 GL of water in the last 12 months, or 48 per cent of total demand. This frees up space to capture natural runoff and high environmental releases from Bendora Dam during winter and spring.
- Inflows to Icon Water's dams over the past two years have been very low. In over 100 years of recorded streamflow, only the Millennium Drought has worse inflows.
- 98.8% of NSW is currently declared in a drought or drought affected following ongoing dry conditions since 2017. Sydney Water has introduced water restrictions in response to the drought.
- The Bureau of Meteorology currently forecasts about a 30% chance of reaching the median rainfall during the next 3 months.
- Icon Water storages have been impacted and are currently 53% full (as at 4 November 2019).
- If current dry conditions continue or worsen in the next 12 months then Icon Water may consider the need to implement temporary water restrictions by end 2020. The Canberra community is water-wise and we will continue to proactively encourage the community to apply the permanent water conservation measures in place.

Water for generations

- Icon Water works together with Government and the community to ensure *water for generations*, to meet the present needs for secure and safe drinking water, without compromising the ability of future generations to meet their needs. For Icon Water's part:
 - we protect the catchment (hazard identification, monitor, influence land managers)
 - we plan for the future through our Source Water Strategy (how we will go about achieving the level of service objective, set for us by the ACT Government)
 - we monitor water storage and consumption
 - we engage with the community through the 'Care for water' campaign
 - when required, we will adjust our own operations, support the community to reduce consumption and restrict water use.

Water sources

The table below shows when last each source was last used and the estimated cost.

Source	Year Built	Usage	When last used
Bendora	1961	Cheapest, preferred source when supply is plentiful	September 2019
Googong	1979	\$2x Bendora	October 2019
Murrumbidgee to Googong	2012	\$4x Bendora	August 2019

Source	Year Built	Usage	When last used
Cotter	1915 (2013 enlarged)	\$5x Bendora	September 2019
Murrumbidgee to Stromlo	2007		April 2010

Joy Yau: Finance, Economic Regulation and energy investment

Key facts

- Net profit for 2018–19 was \$87.1m (circa \$10m above budget and circa \$20m lower than prior year)
- (Accruals basis) Total contributions to ACT Government in 2018-19 were \$150.6m.
 - o Dividend \$67.8m
 - o Tax \$40.6m
 - o WAC \$31.5m
 - o UNFT \$10.7m
- Capital expenditure for 2018-19 was \$108.9m (Prior year \$102.3m, 2019-20 budget \$105m)

ACT Legislative Assembly questions

- BE Committee 2019 Report Recommendations: Gifted assets, impact of dividend on borrowings and interest (BE June 2019)
- Community service obligations and concessions, feed in tariff (BE June 2019)
- Service contracts, AAGL virtual power plant, debt, dividends, gifted assets, share of operating profit from energy investments, user charges, average household usage / trends (BE June 2018).

2018–2019 Financial Year end outcome (Annual report ref: 84)

COMPARED TO PRIOR YEAR

- In 2018–19, Icon Water achieved profit after tax of \$87.1m (2017–18: \$107.7m). The YOY reduction circa \$20m profit reduction is mainly due to
 - o lower prices set by the regulator in our 2018-23 five year determination (\$12m lower water and sewerage revenue)
 - o lower joint venture income (circa \$5m lower, reflects the higher wholesale energy costs in the year)
 - o lower other income (\$4m is lower gifted assets compared to the prior year)
 - o increased expenses (including \$4m higher electricity pumping costs arising from the drier conditions we are experiencing).

COMPARED TO BUDGET

- In 2018-19, Icon Water achieved profit after tax of \$87.1m circa \$10m favourable to budget, equating to \$3.9m more dividends vs budget. The outperformance vs budget is mainly due to
 - o JV FiT over-recovery due to wholesale market spot price compared to budget
 - o Increased water sales given warm summer/autumn and drier
 - o Offset by
 - ICRC final decision re prices
 - Increase costs for depreciation post-valuation of water assets 30 June, interest costs and WAC given volumes.
 - And increased elec costs

Accruals basis contributions to ACT Government

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
WAC for financial year	\$30.2m	\$31.5m	\$31.6m	\$32.7m	\$34.0m	\$35.4m
UNFT for financial year	\$9.8m	\$10.7m	\$11.1m	\$12.0m	\$12.9m	\$13.9m
Tax for financial year	\$47.1m	\$40.6m	\$31.4m	\$32.7m	\$37.7m	\$37.7m
Dividend for financial year	\$89.6m	\$67.8m	\$60.4m	\$61.2m	\$69.0m	\$73.7m
Total	\$176.7m	\$150.6m	\$134.5m	\$138.6m	\$153.6m	\$160.7m

Cash basis payments for dividend and tax

- Cash payments dividend, tax, total
 - 2017/18 93.9, 42.2, 136.1
 - 2018/19 71.3, 37.2, 108.5
 - 2019/20 62.3, 35.3, 97.5
 - 2020/21 61.1, 32.9, 94.0
 - 2021/22 67.5, 36.1, 103.6
 - 2022/23 72.8, 38.2, 111.0
- Year end audit - clean audit including satisfactory findings for all risk areas and significant estimates.

Actual 2018-19 compared to Budget and Prior Year

	2018–19 Actual	2018–19 Budget	2017–18 Actual	Variance to Budget	Variance to Prior Year
	\$'000	\$'000	\$'000	\$'000	\$'000
Water Revenue	183,021	177,498	196,724	5,523	(13,703)
Sewerage Revenue	129,671	128,706	129,180	965	491
Joint Venture Dividend	88,403	75,516	93,374	12,887	(4,971)
Other Income	30,285	29,895	35,669	390	(5,384)
Total revenue	431,380	411,615	454,947	19,765	(23,567)
Less Expenses	303,711	301,910	300,151	1,801	3,560
Net Profit before Tax	127,669	109,705	154,796	17,964	(27,127)
Less Income Tax (ITE)	40,604	32,912	47,106	7,692	(6,502)
Net Profit after Tax	87,065	76,793	107,690	10,272	(20,625)
Less Gifted Assets	19,285	12,886	18,108	6,399	1,177
Profits available for Dividend	67,780	63,907	89,582	3,873	(21,802)
Effective dividend rate	78%		83%		
Cash paid dividends	\$71.3m		\$93.9m		
Cash paid tax	\$37.2m		\$42.2m		
Cash paid TOTAL	\$108.5m		\$136.1m		Circa \$28m less. \$21m reg outcome, \$4m elec, \$5m JV.

SCI Budget 2019-20

	2018–19 Actual \$'000	2019–20 Budget \$'000	2020–21 Estimate \$'000	2021–22 Estimate \$'000	2022–23 Estimate \$'000
Water Revenue	183,021	186,292	190,772	197,872	205,347
Sewerage Revenue	129,671	131,504	133,714	136,060	138,446
Joint Venture Dividend	88,403	71,033	68,347	84,172	84,807
Other Income	30,285	31,563	34,068	38,216	33,913
Less Expenses	303,711	315,555	317,778	330,526	336,809
Net Profit before Tax	127,669	104,837	109,123	125,794	125,704
Less Income Tax (ITE)	40,604	31,451	32,737	37,738	37,711
Net Profit after Tax	87,065	73,386	76,386	88,056	87,993
Less Gifted Assets	19,285	12,998	15,151	19,005	14,251
Profits available for Dividend 2019–23 SCI	67,780	60,388	61,235	69,050	73,741
Effective dividend rate	78%	82%	80%	78%	84%
2018–2022 Budget	63,907	68,038	73,765	78,719	N/A
Increase/Decrease	3,873	(7,650)	(12,530)	(9,669)	N/A

COMPARE ACTUALS 2018/19 TO BUDGETED 2019-20

- \$7.4m forecast less dividends than 2018/19
 - Primarily driven by energy investment forecasting to be \$17m lower
 - Mainly from the Distribution part of the joint venture
 - Gas business \$8m gifted asset one off in 18/19, not expected in 19/20
 - Elec business includes repayment of over-recoveries on FiT to be repaid to customers. Circa \$8m impact in our forecast 19/20. (Detail: Evo have agreed with ACT Gov to repay \$33m to customers in 19/20 and 20/21).
- Overall 2019/20 to ACTG
 - Dividend \$60m
 - Tax \$31m
 - WAC and UNFT \$42m
 - TOTAL \$135m

NOTES ON CURRENT SCI VS PREVIOUS SCI

- Profit available for dividend over the four years 2018–19 to 2021–22 is forecast to be lower than the previous SCI.
- The annual water revenue is favourable compared to the previous SCI. The revenue reflects the updated ICRC prices which have an unfavourable impact on water revenue offset by an increase in the forecast demand for water due to drier conditions and observed usage.

- Sewerage revenue is unfavourable compared to the previous SCI reflecting the updated ICRC prices.
- The joint venture 10 year forecast has been revised down after finalisation of the Australian Energy Regulator's final decision for Energy Networks and the Final Gas Network Access Arrangement. The decision reduced the Electricity and Gas Weighted Average Cost of Capital (WACC) and the related returns affecting the Distribution business.
- The large-scale feed in tariffs continue to have an impact on the returns as past over-recoveries are returned to customers.
- Increased customer competition has also affected the forecast for the Retail business.
- Expenses are unfavourable to the previous SCI primarily as a result of the increased electricity cost reflecting the higher demand for water and related water source assumption combined with additional depreciation affected by the 30 June 2018 revaluation, offset by a reduced cost of interest.

2019–20 water prices

- We continue to deliver the outcomes our customers have told us are important, quality drinking water, reliable supply, quality customer service and environmental sustainability - all while ensuring prices are in line with inflation.
- From 1 July 2019, the combined water and sewerage bill for a typical Canberra household (using 200kL of water per year) increased by 1.9%, broadly in line with inflation. This means an increase of around \$22 a year, or 43 cents a week. The key drivers for the price adjustment have been the Consumer Price Index (CPI) and government charges. This price increase was approved by the ICRC, our economic regulator.
- Customers who use less water will see smaller increases in their combined bill. For example, customers using 100 kL per year will experience an increase of \$19 a year, while customers using 300 kL will receive an increase of \$28 a year.
- Detail: The 2019–20 price adjustment includes a \$20 per annum increase in the water supply charge. Consistent with the price direction, the supply charge will increase by \$20 in each year of the regulatory period as part of tariff reform to improve the alignment of prices to the underlying cost of service. To manage customer impacts, the water usage charges and sewerage charges have been set to increase by less than CPI, keeping overall bill impacts for the typical customer in line with inflation.
- In terms of the 'cost of living basket', a typical Canberra household pays around \$3.20 a day for their water and sewerage needs in 2019–20.
- Over the following three years – to 2023 – combined bills for residential customers are expected to stay in line with inflation.
- This will see Icon Water's prices remain comparable to its peers throughout Australia.
- The 2019–20 price change is part of a five year price direction set by the ICRC for the 2018–23 regulatory period.

Water and sewerage services charges 2017-18 – 2022-23 (\$nominal)

Water charges	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Supply Charge (\$/cust)	\$104.21	\$120.00	\$140.00	\$160.00	\$180.00	\$200.00
		15.2%	16.7%	14.3%	12.5%	11.1%
Tier 1 Usage Charge (\$/kL)	2.68	\$2.43	\$2.46	\$2.48	\$2.50	\$2.52
		-9.3%	1.2%	0.8%	0.8%	0.8%
Tier 2 Usage Charge (\$/kL)	5.38	\$4.88	\$4.94	\$4.97	\$5.02	\$5.06
		-9.3%	1.2%	0.6%	1.0%	0.8%
Sewerage charges						
Sewerage Charge (\$/cust)	537.34	\$531.19	\$527.34	\$531.06	\$531.00	\$530.93
		-1.1%	-0.7%	0.7%	0.0%	0.0%
Sewerage Fixtures (\$/fixture)	525.51	\$519.50	\$515.74	\$519.37	\$519.31	\$519.24
		-1.1%	-0.7%	0.7%	0.0%	0.0%

Actual charges payable from 2020-21 to 2022–23 may differ from the indicative charges in this table if actual inflation differs from forecast inflation, if the cost of debt differs to the forecast cost of debt, or if the cost pass-through mechanism is triggered. Sewerage fixtures fees are only applicable to non-residential customers who have more than two fixtures.

ICRC pricing determination 2018 to 2023

- The ICRC, on 1 May 2018, set the price direction for the five year 2018–23 regulatory period. The price direction included:
 - A reduction in Tier 1 and Tier 2 usage charges (9.3%) and a reduction in the sewerage charges too.
 - This represented a 3.5% (or \$42) reduction in combined annual bill for a typical 200kl pa household. Followed by an expected 2% increases each year thereafter (roughly in line with inflation).
 - This has largely been the driver of circa \$12m reduction in water and sewerage revenue from 2017-18 to 2018-19.
- Our prices are regulated and each 5 year cycle the ICRC perform an exercise to determine our prices and the price path. This includes a review of various key elements such as forecast population growth, forecast per capita consumption and our opex and capex forecasts. Our next regulatory cycle will be 2023 to 2028.

Volumes and per capita consumption

- Total volumes water consumed in 17/18 43.3GL ACT and 4.2GL Qbyn, total 47.4GL. Total water abstracted 52.2GL. (Difference is losses including unbilled, unmetered, meter errors, leakages)
- Total volumes water consumed in 18/19 45.4GL ACT and 4.7GL Qbyn, total 50.1GL. Total water abstracted 52.9GL. (Difference is losses including unbilled, unmetered, meter error, leakages)
- Total volumes water forecast to be consumed in 19/20 includes factoring in for population growth. Our SCI forecast consumption to remain at levels observed in 2018-19, however the reality is that this may differ given the continued drier conditions and our focus on ensuring the permanent water conservation messaging has increased awareness.
- Detail on forward forecast in SCI
 - Water and sewerage charges broadly in line with inflation
 - Volumes - less than 1% increase
 - Per capita consumption - decreasing (will be a further 3% lower by 2024)
 - Population growth - as per ACT Government projections
 - Resi is circa 70% and non resi 30% of total consumption
- Detail
 - Losses c 5-10% (say c 3-5GL pa) in 17/18 and 18/19
 - Real losses
 - No signif increase in real losses, actions we are taking include
 - Upgrade older connections
 - Planned maintenance program hydrants, valves and distribution mains
 - District water meter monitoring and water mains replacement
 - Apparent losses
 - Focus on apparent losses includes
 - Increasing standpipe inspections to identify unauthorised consumption
 - Implementation of exception and detection reporting
 - Obtain info on authorised unbilled such as fire services
- Detail
 - Average residential household around 200KL - equates 0.55kl/day equates 550 litres a day, equates to around 0.22kl/day per person in 2018-19 (broadly speaking we are

middle (higher end) of the pack. Melbourne has among the lowest residential consumption, and Perth and Adelaide have among the highest)

- Typically residential customers (consuming 200kL pa) stay in tier 1 most of the time, and step into tier 2 in the summer. Circa 9KL (4%) of their usage is charged at tier 2
- There are around 50,000 (30%) residential customers who consumed more than 200kL in 2018-19 and faced tier 2 (in other words, its not ALL customers spill into tier 2 for that 3.5%) .

WAC and UNFT – ACT government charges

- Water Abstraction Charges c\$30m pa
 - Applies to those licensed to take water.
 - Recovers cost incurred by Government including catchment management and environmental costs.
 - \$0.595/kl for year end 30 June 2019. Forecast +3%
 - WAC announced tail end of June each year, last year 3%, this year forecast 3%.
- Utilities Network Facilities Tax c\$10m pa
 - UNFT is payable by owners of any network facility in ACT
 - Tax on the water and sewerage pipes under land - length of route
 - \$1,265/km for year end 31 March 2019. Forecast +5%

Operating efficiencies

- We continually pursue efficiencies in our controllable opex
- Industry view (17/18 latest NPR)
 - Water operating costs per property are 10% below average for major utilities
 - Sewage operating costs per property are 10% higher than average major utilities
 - Relatively high rate of tree root incursion
 - Relatively high sewage treatment standards
- We continually seek to challenge ourselves and our operating costs. Efficiencies include
 - solar PV rollout (<5% saving to usage)
 - A review of our Fleet strategy
 - Ensuring we consider the balance of reactive vs preventative maintenance
 - Process improvements across the business
 - Electricity management, including active monitoring (elec normally \$6m pa, 2018/19 was \$10m pumping)
 - Activity based cost drivers for budgeting
 - Review of chemical purchases
 - Review as each major contract with a supplier comes up for renewal – ensuring we test the market and can demonstrate value for money.

Debt strategy, borrowings and gearing and dividend policy 100%

- We hold a legislative instrument from the Treasurer approving a maximum \$2.3b borrowing facility (face value).
- As at 30 June 2019 we had circa \$1.7bn of debt. (As at 5 November 2019 we will have circa \$2.1b of debt due to borrowing ahead of imminent facilities maturing. By May 2020 this will fall to \$1.8bn given maturing debt).
- Our current forecast shows the \$2.319 bn facility is sufficient for the remainder of the SCI period.
- The borrowings facility is revisited with ACT Government on an ongoing basis.

- Icon Water is able to service its existing debt for the foreseeable future. Our **gearing ratio** is 54.3% at 30 June 2019, and is forecast to remain below 60% for the next 10 years. (closer to 59% at 5 Nov 2019 due to borrowing early).
- Dividend policy 100% NPAT less gifted assets
 - Gifted assets circa \$15m-\$20m pa, effective dividend policy payout ratio 80%
- Borrow
 - Manage existing facilities as they mature, including refinancing.
 - Our borrowings are used to fund our business including our capex programme.
 - Recently we have borrowed c \$380m earlier than required. This will pay down maturing debt in Nov 2019 and May 2020.
- Servicing of debt
 - We are able to service existing debt for foreseeable future
 - We have sufficient cash flow to meet repayment obligations as they fall due
 - We manage debt ongoing including refinancing
 - As Canberra grows then our debt will grow as our asset base grows
 - Causes for our debt - invest water security major projects.

Gifted assets and capital contributions

- Gifted assts and capital contributions
 - Circa \$15m - \$20m pa. In 2018-19 IW \$11m and Evo \$8m, totally \$19m.
- Canberra continues to experience considerable growth and this places pressure on our infrastructure.
- The Capital Contributions Code introduced in January 2018 involves arrangements for funding augmentations required to support growth of our network and community in Canberra's established areas. Establish a long term servicing strategy to fund those required upgrades in equitable way as Canberra grows.
- This provides a fairer funding structure. Previously, there was inequity in the way costs were recovered for developments that triggered water and sewerage asset augmentation or upgrade in established suburbs.
- There was a transition period of 18 months during which customers who purchased their property before 1 January 2018 did not have to pay the charge for new developments provided that their development application was lodged before 1 July 2019.
- The charge for 2019-20 has been reviewed and remains unchanged from the previous financial year at \$1,200. Development applications with a net increase in Equivalent Population, lodged after 30 June 2019 will be therefore calculated at **\$1,200 per Equivalent Population**.
- Detail
 - The \$1200 is based upon our projections for asset augmentations required in the next 20 years. This includes circa 15 key projects such as North Canberra sewer augmentation, Woden Valley sewer augmentation, Constitution Avenue sewer upgrade. Circa \$4m on average spend and received, albeit spike and trough.
 - Collected c \$75k in 2018/19, and expected c \$5m in 2019/20 and c \$3-4m in following two years.

Costs associated with operations

- Given recent years drier conditions, we are carefully managing our assets to ensure water security and manage operational costs. Preserving water is the primary objective, as such we ensure that our dam levels are maintained at a lower level so that we reduce the risk of dam over spills. This may mean that we use more expensive sources in our network
- Since May 2018 we have been sourcing from Cotter Dam which is more expensive as involves pumping costs.
- More recently we have been sourcing from Googong Dam to manage the overall dam levels.
- In 2018/19 increased elec costs for pumping are c \$4m, and we anticipate this continuing until the end of the calendar year and possibly beyond too.
- COST OF SOURCES
 - Corin and Bendora are cheapest sources
 - Googong is 2-3 times that
 - Cotter is a further 50% above Googong (or 3-4 times Corin/Bendora)

Regional relationships

- We continue to collaborate with our regional partners on a range of topics of common interest.
- Ginninderry - We have been meeting regularly with the developers to ensuring servicing needs for the development are met. Beyond servicing, we have particular interest in the development due to its location relative to Lower Molonglo Water Quality Control Centre.
- We spent considerable time working with QPRC to explore options for a joint regional treatment plant. Following analysis of the options, we determined this joint regional solution would not deliver the best outcome for the region and therefore we have ceased exploration.
- We continue to have a positive working relationship with QPRC.

Regulatory strategy

- We operate in a highly regulated and multi-jurisdictional environment. Our multiple regulators mean that there are multiple objectives to be understood and balanced. Our regulatory strategy aims to drive greater coordination between regulators and work towards meeting a range of regulatory requirements at a sustainable cost to customers.

Water trading, efficiency measures and sub-regional water security

- ACT Government are leading an exploration into whether introducing interstate water trading will benefit the ACT. This also includes identifying opportunities for water efficiency projects to achieve Sustainable Diversion Limits reduction targets and forming a position on potential trade and delivery options to support regional water supplies.
- Icon Water are a key stakeholder and have been part of the working group. Icon Water's primary objective is to understand if revenue can be raised without compromising ACT's water security.
- Icon Water considers water security to be of paramount importance, both now and into the future.

Future of corporate and customer services provision after 2023

- The current services contracts expire in 2023. In preparation for and well in advance of this date, Icon Water are assessing our ongoing service requirements and options.
- A key focus for Icon Water will be to ensure that we can maintain access to the services required to operate our business efficiently and effectively, so that we can continue to provide high quality affordable water and sewerage services to our customers.

- A project was initiated in March 2019 to define a sourcing strategy for the required services. The project is broken up into four phases to facilitate a structured approach to the important decisions to be made. Implementation of the sourcing strategy will follow from completion of this project.
- The project is progressing to schedule and is expected to propose a sourcing strategy by the end of the 2019–20 financial year.

Phase 1	Phase 2	Phase 3	Phase 4	Post project
Project Initiation	Identify the desired future requirements and develop sourcing decision framework	Preliminary assessment of sourcing options	Detailed assessment of sourcing options	Implementation of sourcing strategy
COMPLETED	COMPLETED	Completion by late 2019	Completion by early 2020	Completion by mid-2023

- Since June 2019, Icon Water has been working with a strategic sourcing advisor with demonstrated experience and expertise in the definition and implementation of sourcing strategies to assist with the delivery of phases two to four. With the completion of phases one and two, Icon Water has undertaken preliminary assessment of sourcing options which is due to be completed shortly. As the preliminary assessment is seeking to define a sourcing strategy, rather than the identification of preferred providers, there has been no broad market engagement during this phase.
- We have made information available on our website and will be providing regular updates on the project.
- At this stage no options are off the table.
- Independent arbiter in Nov 2018 , upheld in part our claim for public interest immunity on commercial elements.

Energy investment

- Icon Water also manages an investment in electricity and gas networks through partnerships with other companies.
- To manage the energy investments Icon Water has two subsidiary companies
- Oversight of the energy investments is undertaken through: representation on the ActewAGL JV Partnerships Board; the IRIL and IDIL Boards, and annual energy investment strategy discussions.
- ActewAGL continue to explore opportunities such as hydrogen and biogas. During the year the exploration has been preliminary, including considering the acceptable levels of hydrogen that could be injected into the existing gas network. There needs to be further investigation, trials, validation and consultation.
- In May 2019, ActewAGL publicly announced its intention to build and operate a hydrogen refuelling station at the existing compressed natural gas (CNG) refuelling station on Mildura Street in Fyshwick.

Climate change and sustainability of gas and electricity network (ActewAGL)

- Evoenergy is committed to continuing to reduce emissions in the networks, and has worked in partnership with the ACT Government both in achieving the 100 per cent renewable energy target and now towards the net zero emissions by 2045 target.
- Evoenergy is already investigating the use of renewable gas including exploring production of hydrogen and biogas. These are part of Evoenergy's exploration to transition the network away from natural gas.
- Evoenergy will continue to work in partnership with the ACT Government on the pathway to 2045 and they will be considering the best interests of all Canberrans in terms of access to safe, reliable and affordable energy.

Utilities Concession Scheme

- From 1 July 2017, all pensioner rebates are applied to an electricity account. The intent of this change is to make the concessions accessible to more households. This now provides extra relief to eligible renters who previously were not able to access the water and sewerage rebate. The water and sewerage rebate was available to community members with an eligible concession card to reduce their water and sewerage charges and assist with the cost of living.
- The maximum rebate is currently **\$604 per household**.

Feed-in-Tariff

Premium feed-in-tariff (FiT) (same as small and medium scale FiT scheme)

- Premium FiT was offered to residents in the ACT from March 2009 to July 2011. It provides a tariff for customers who generate electricity from eligible solar photovoltaic systems, for 20 years from the date of installation, provided they stay connected to the network.
- Evoenergy is responsible for the administration of the ACT Government's premium solar feed-in tariff scheme (FiT) under the Electricity Feed-in (Renewable Energy Premium) Act 2008.
- ACT Climate Change Minister Shane Rattenbury initiated an audit into Evoenergy's reporting of data about the territory's feed-in-tariff scheme in June 2019 and my understanding is that this audit was completed in August 2019. Icon Water have not seen a copy of this report.
- Evoenergy also engaged an independent auditor to conduct its own audit into its administration of the scheme which found, using a sample size, that of the 10,000 customers receiving the premium FiT in the ACT, 52 customers had minor compliance issues with their solar system.
- Evoenergy is in the process of contacting the 52 affected customers to rectify these issues.

Large scale feed-in-tariff (FiT)

- The large scale FiT scheme started in 2012–13.
- The ACT Government has contracts with renewable energy suppliers, using a FiT to provide them with a constant market price.
- The FiT is equal to the ACT Government contract price less the current market price and is collected from customers by Evoenergy on the ACT Government's behalf and passed onto renewable energy suppliers.
- When forecasting customer prices each year, Evoenergy applies an estimated market price. If market prices are higher than budget, the FiT payments to suppliers are lower and if market prices are lower, the FiT payments to suppliers are higher.
- Due to significant fluctuations and volatility in the National Energy Market there have been over-recoveries of FiT payments from customers.
- The over-recoveries will be refunded to customers in future years via reduced network charges.
- The current approved total over-recovery to be passed back to customers is \$33m between 19/20 and 20/21.
- Continued volatility in the energy market is likely to impact on the FiT in future years and network charges will be balanced by Evoenergy accordingly.

New Energy

- Given the changing energy landscape, ActewAGL continue to pursue complementary activities to their core distribution and retail businesses.
- This includes initiatives to explore options towards net zero emissions, such as the production of hydrogen and biogas as alternatives to natural gas.
- Detail
 - Hydrogen - explore inject network, refuel station, in homes
- SolarHub - Acquired 50% share in 2017. Canberra based company operating in residential and commercial rooftop solar market.

ActewAGL electricity and gas pricing

- DMO - AER default market offer does not apply in ACT given ICRC regulate AAR. In NSW does apply, affects those standing offers.

- On 28 May 2019, the ICRC received a terms of reference^[1] from the ACT Treasurer to determine a price direction for standing offer prices for the supply of electricity to small customers.
- The price direction investigation applies for the four years from 1 July 2020 to 30 June 2024.
- This iteration of the terms of reference introduced a section aimed to improve the Transparency and Comparability of electricity offers in the ACT
- On 2 September 2019, the ICRC released an Issues Paper outlining its proposed approach to the 2020-24 electricity price investigation.
- ActewAGL Retail provided a response to the issues paper on 11 October 2019 including a response to the cost components of the model used to determine the maximum allowable annual price change and a response to Transparency and Comparability of electricity offers.
- The ICRC will hand down a draft decision in February next year followed by a public hearing to provide an opportunity for further consultation.
- Regulated ACT electricity prices increased by 1% on 1 July 2019. ACT regulated electricity prices will be reviewed at the end of the 2019/20 financial year in line with the ICRC final decision on the 2020-24 price investigation.
- Gas prices increased by 1.78% on 1 July 2019. ACT gas prices will be reviewed at the end of the 2019/20 financial year to determine the prices that will apply from 1 July 2020.
- AER elec determination
 - April 2019 final decision - 1 July 2019 to 30 June 2024, 5 years
 - Make up 27% of total retail bill
 - Roughly 2.5% higher in 2024 vs 2018/19 - therefore broadly flat
 - AER purview regulate distribution and transmission costs, then ICRC purview is determine retail elec prices which pass through those costs determined by AER.
- AER gas determination
 - Currently 2016-2021 - third year of five year period
 - Draft submitted mid 2020, final decision May 2021
 - Gas prices are unregulated in ACT and NSW.

Governance and monitoring performance of the energy investment

- Icon Water's two subsidiary boards monitor the performance of the energy investment. Metrics include
 - IRIL
 - Staff engagement
 - Customer satisfaction
 - New revenue streams
 - Churn
 - Long term retail price
 - IDIL
 - Reliability of supply
 - Safety
 - Staff engagement
- Governance of the energy investment
 - 3 members of our board are member of the JV Board
 - IRIL and IDIL board meetings, membership and frequency
 - Annual strategy day
 - Management of all three owners meet as required

^[1] <https://www.legislation.act.gov.au/View/di/2019-72/current/PDF/2019-72.PDF>

- Members on project boards as required (eg run up to reg determinations)
- Complement with external advisors as required