

### **3.6. Water and Energy Management Programs Update**

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**ATTACHMENTS:** Nil

Nil.

#### **EXECUTIVE SUMMARY:**

This report provides an update from the last 18 months on the implementation of Council's Greenhouse Action and Water Management Plan 2015-2020 and more recent water and energy audit reports.

#### **FINANCIAL IMPLICATIONS:**

The water and energy programs discussed in this report are funded through a combination of Council's Environment Levy and property maintenance budgets.

#### **RECOMMENDATION:**

- 1. THAT** the report on Council's Water and Energy Management Programs is noted.

## LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

### 1. Our Living Environment

#### 1.1 Protected and enhanced natural environment and biodiversity

### 4. Our Social Vitality

#### 4.3 North Sydney supports lifelong learning

## BACKGROUND

The Environment Reference Group last received a report on 11 November 2019 providing an update on the implementation of Council's Greenhouse Action and Water Management Plan 2015-2020 and water and energy audit report that were carried out in 2019 and 2020. The implementation of the plan and reports is funded largely through Council's Environment Levy.

## CONSULTATION REQUIREMENTS

Community engagement will be undertaken in accordance with Council's Community Engagement Protocol.

## DETAIL

In pursuit of Council's aims to address its Greenhouse Action and Water Management Plans, a range of initiatives have been introduced or implemented in the past 18 months as summarized below:

### Recently implemented projects:

- **New solar power installations** at the following Council locations:
  - Coal Loader – a further 25kW
  - Holtermann St Carpark – 94kW solar carpark roof
  - Forsyth Park Community Centre - 20kW system
  - McMahons Point Community Centre - 22kW
    - 15kW is directed to the North Spoon Café in a 'solar for rentals' arrangement. This is the second such installation, where Council has installed a photovoltaic (PV) system on its property, to allow commercial tenants to save money on billing, while simultaneously re-imbursing the Council investment to install the systems. It's a financial win-win for the business and Council while also mitigating substantial green house gases (GHG).

These installations have increased Council's solar power capacity to 435kW. The electricity generated could power an electric vehicle (EV) for 3.7 million kms annually.

- **Replacement of gas hot water with solar** powered electricity at the Coal Loader. This has achieved cost savings and GHG mitigation and is part of a program to disconnect the site from fossil fuel gas to renewable heat and electric power.

- **Specification of heat pump instead of gas for hot water heating at Council Chambers end or trip facilities.** For the new bathroom facility, cost and emissions mitigation will result from these sustainability specifications in new works.
- **Water audit for Parks and Gardens**  
This audit indicated that the overall volume of water use per unit of area in parks was consistent with best practice. (Variations around optimum were identified for individual parks.)
- **Energy and Water Audits for Council Property Assets**  
These were conducted during 2019-20 and will help guide and prioritise Council's energy and water management decisions for the coming 4-5 years. The audits identified a range of upgrade opportunities, some of which have already commenced implementation.

### **Futureproofing Apartments Program**

- 120 residential strata buildings assessed. With many of those buildings currently undergoing upgrades including:
  - Lighting upgrades to LED with smart controls
  - Transitioning from gas to heat pumps for hot water
  - Solar PV installations
  - Car park fan efficiency
- Results as at July 2020:
  - The early outcomes were: 220 tons GHG mitigation from \$99000 of investments by the apartment owners
  - Current projects at that time: a further 195 tons GHG mitigation
  - Further identified potential: 5100 tons GHG mitigation, with a potential investment value of all identified opportunities to July 2020 of \$4.5 million.