

**ITEM 12. PROPOSED GRANT TO AUSGRID - PERMANENT DEMAND REDUCTION PROGRAM****FILE NO: X011796****SUMMARY**

Sustainable Sydney 2030 was developed following extensive consultation with residents, business and other stakeholders in the City of Sydney. It sets a target of a 70% reduction in greenhouse gas emissions for activities in the City of Sydney local government area by the year 2030.

The City has resolved to accelerate actions to reduce greenhouse gas emissions and increase renewables in the electricity supply for our area. To this end, the City drafted, exhibited and adopted an Environmental Action Plan 2016 to 2021. The Plan sets a target that 50% of electricity supply in the City of Sydney be sourced from renewable generation by the year 2030.

The City expects to achieve targeted reductions in emissions for its own operations through increased operational efficiency, extra on-site generation, fuel substitution and voluntary purchases of renewables. Already, operational emissions have reduced by more than 25% compared to the baseline year (2005-06).

Achieving targeted reductions in Local Government Area-wide emissions is challenging. The City can only encourage and influence LGA-wide emissions reductions. LGA-wide emissions are reducing, but so far by only 17%. Some sectors have achieved dramatic reductions, eg, members of the Better Building Partnership reduced emissions by more than 40%. However, the results for some other sectors have been modest. The City will need to continue to advocate and influence, and promote further initiatives and activities (both on its own and with other organisations) if LGA-wide targets are to be achieved.

The City has been approached by Ausgrid, operator of the local electricity distribution network. Ausgrid has requested financial support from the City for a program to deliver energy conservation measures and onsite renewable generation in our area. The program is the Permanent Demand Reduction Incentives Program. It is part of the Demand Management Innovation Scheme, which encourages electricity networks to find ways to reduce investment in new network assets (eg, poles, wires, substations). Over time, this means lower electricity costs for residents and businesses, in line with the City's long-standing advocacy of more efficient network investment.

The Permanent Demand Reduction Incentives Program will be delivered by third-party providers like renewable energy financiers and electricity retailers. They will seek out properties in the City area which suit on-site solar photovoltaic (PV) projects and energy efficiency upgrade projects (eg, lighting upgrades, variable speed pumps). Projects funded by the program must be additional to projects already planned to happen.

Modelling by the City indicates the City's contribution towards the cost of co-funding incentives via the Permanent Demand Reduction Program will be less than \$6 per tonne of carbon abated. This is based on Ausgrid's benchmarks for program incentives, the life expectancy of energy saving measures and solar PV generation, and a 50/50 mix of energy saving measures and solar PV. The cost to the City is very competitive compared to some other incentives.

The City's investment in this program will be leveraged by a substantial co-investment by Ausgrid and property owners. Typically, for every \$1 of City funds invested in a project, another \$19 (combined) will be invested by Ausgrid and the property owner. This is a highly effective way to catalyse change. The City will only fund projects where this high level of leverage occurs and permanent carbon abatement is achieved.

The program will incentivise permanent demand reduction projects in parts of the Ausgrid network where replacement of network assets (poles and wires and so on) may be required in the short to medium term. This includes the City of Sydney area.

Ausgrid proposes that the City co-fund projects located in our area. In return, Ausgrid will substantially increase the value of funding available for projects in our area. Matched funding would be up to \$750,000. That means a combined investment of up to \$1.5 million, in addition to which property owners and others would invest up to \$13.5 million. The leverage means that more projects can be funded with higher outcomes achieved when compared to a scheme that was only funded by the City.

Ausgrid will pay providers only if demand reduction projects are successfully delivered and verified. Only permanent measures will be considered. The proposed level of funding is sufficient for quite large scale projects to be undertaken. For example, if an incentive of \$50,000 for solar PV is offered to a site or group of sites, an array of at least 200 kW would be installed, based on Ausgrid's benchmarks. This works out at around 280 MWh of electricity a year, enough to power 50 homes.

The program is expected to deliver up to 8,000 tonnes of abatement a year in the City area on a permanent basis - a significant contribution to the City's overall target.

As Ausgrid is now partly privately owned, the City's intention to provide financial assistance must be publicly notified.

## RECOMMENDATION

It is resolved that Council:

- (A) note the importance of enduring energy conservation measures and increased solar PV generation in the City of Sydney local government area in order to achieve the goals of Sustainable Sydney 2030;
- (B) approve for public exhibition for 28 days a proposed resolution to grant financial assistance of \$750,000 to The Trustee for Blue Op Partner Trust & Others (ABN [78 508 211 731](#)) trading as Ausgrid for the purpose of promoting enduring energy conservation measures and increased solar PV generation in the City of Sydney local government area by way of Ausgrid's Permanent Demand Reduction Program; and
- (C) note that the intended terms and conditions for the grant of financial assistance are set out in the subject report.

## ATTACHMENTS

**Attachment A:** Letter to the City from Ausgrid dated 4 December 2017

**CONTEXT**

1. Based on extensive consultation with residents and business and other stakeholders, Sustainable Sydney 2030 sets a target of a 70% reduction in greenhouse gas emissions related to the City of Sydney area by the year 2030.
2. This is in addition to a target for a 70% reduction in greenhouse gas emissions attributable to the City's own operations by the year 2030.
3. The City has resolved to accelerate actions to increase renewables in the electricity supply system and reduce greenhouse gas emissions for our area. To this end, the City drafted and exhibited an Environmental Action Plan 2016 to 2021. The finalised Plan was adopted in March 2017.
4. The Environmental Action Plan sets a target for 50% of electricity supplied in the City of Sydney area to be sourced from renewable generation by the year 2030. For the purposes of target, electricity supply means on-site generation plus renewables in grid plus voluntary off-site purchase (eg, GreenPower).
5. This goal is in addition to a target for 50% of electricity supplied to the City's own operations to be sourced from renewable generation by the year 2021.
6. One of the initiatives in the Environmental Action Plan is to invest up to \$10 million over the next decade to accelerate uptake of renewable energy by local businesses and residents, with a preference for local sources where feasible.
7. This is extra to the City's already-established program of activities to reduce greenhouse gas emissions, eg, participation in the Better Building Partnership, the City's environmental grants program, advocacy of energy market reform etc.
8. As well, the City is undertaking a major program for reduction in greenhouse gas emissions at its own sites and facilities, and has already reduced greenhouse gas emissions by around 25% compared to the baseline year (2005-06).
9. The City expects to achieve future targeted reductions for its own operations through ongoing improvements in operational efficiency, increased on-site generation from solar PV and trigeneration, fuel substitution and voluntary purchases of renewables.
10. However, reductions of greenhouse gases in the electricity supply system (the main source of greenhouse gas emissions in our area) need to occur to achieve targets for the City of Sydney area as a whole by the year 2030.
11. Accordingly, the City continue to advocate and influence and undertake activities over time (both on its own and with other organisations) to ensure that the goals of Sustainable Sydney 2030 are achieved, most likely through greater emphasis on energy conservation and accelerated rollout of local renewables.

**OUTLINE OF AUSGRID INITIATIVE**

12. The City was recently approached by Ausgrid, the electricity distribution network provider for eastern Sydney, the Central Coast and the Hunter Valley. A letter from Ausgrid has now been received (see Attachment A).

13. Ausgrid requests support from the City for a program of energy conservation measures and onsite renewable generation to be delivered for Ausgrid by service providers such as renewable energy financiers, energy service companies and energy retailers. Suitable service providers are currently being identified through a competitive publicly-advertised request for proposals.
14. The program is called the Permanent Demand Reduction Incentives Program. This is the principal component of Ausgrid's Demand Management For Replacement Initiative. Ausgrid intends to fund the program as part of its current approved five-year regulated revenue proposal, which is paid for by electricity consumers.
15. The initiative has been developed to address the Demand Management Innovation Scheme, which encourages electricity networks to undertake activities that reduce the need for investment in new network assets (eg, poles, wires, transformers and substations) both for replacement and augmentation. In the long run, this should lead to lower electricity costs for both residents and businesses.
16. Ausgrid has established that permanent demand reduction measures, both energy conservation and on-site generation, can defer, reduce or avoid need for investment in replacement assets.
17. At the same time as delivering better understanding of the effectiveness of permanent demand reductions, this program will also achieve substantial reductions in greenhouse gas emissions and substantial increases in local renewables.
18. Ultimately, as permanent demand reduction becomes more and more established as a method to bring down network expenditure in new poles and wires, this methodology will be self-sustaining, and not require supplementary funding by the City. However, in the short term, financial support by the City is beneficial in increasing the uptake of permanent demand reduction measures.
19. The interests of Ausgrid and the City in this program are closely aligned, and also align closely to the long-term interests of City businesses and residents.
20. The City has undertaken modelling which suggests that the cost to the City of co-funding incentives offered under the Permanent Demand Reduction Program will be less than \$6 per tonne of carbon. This figure is based on Ausgrid's published benchmarks for incentives, the life expectancy of energy conservation measures and on-site generation, and a 50/50 mix of energy conservation and solar PV.
21. This figure is very cost effective compared to many other incentives offered for energy conservation and on-site generation (eg, small-scale renewable energy certificates).

#### **BENEFITS OF PARTNERING WITH AUSGRID**

22. There are numerous reasons for the City to consider partnering with Ausgrid and giving financial support to the Permanent Demand Reduction Incentives Program.
23. As noted earlier in this report, achieving the City's 2030 targets for renewable energy in the electricity supply system and greenhouse gas reductions across the local area will require further actions at the local level. Partnering with Ausgrid is a cost-competitive way to accelerate reductions in greenhouse gas emissions and increase roll-out of local renewables.

24. Partnering with Ausgrid will give the City more strategic influence over the choice of funded projects and the intensity of focus on permanent demand reduction in the City area (as opposed to other parts of the Ausgrid network) will be much greater.
25. Partnering with Ausgrid means that the value of projects funded in the City area will more than double. Providing funding of \$750,000 means an amount equivalent to the total value of incentive payments previously earmarked across the whole Ausgrid area will now be spent in the City of Sydney area.
26. Partnering with Ausgrid is a good choice for energy conservation and solar PV projects. Ausgrid's expertise and skill puts it in a strong positive position to influence consumer decisions and broker productive outcomes and Ausgrid is relatively well trusted (especially for technical matters) by users of the electricity supply system.
27. Ausgrid's leading role in the program is likely to increase the certainty and timeliness of new connections of solar PV undertaken as part of the program.
28. Partnering with Ausgrid mitigates against competing objectives and offers. Coordination between the City and Ausgrid will be maximised, and the risks of competing initiatives (applying slightly different methodologies to achieve slightly different outcomes) will be minimised. The Permanent Demand Reduction Incentives Program is well structured, has a defined methodology, has clearly specified incentives, and is beneficial to both the City and Ausgrid.

#### **PROGRAM DELIVERY**

29. Ausgrid plans to incentivise permanent demand reduction projects in parts of its network where short to medium replacement of network assets (poles and wires and so on) is likely to be required. Such areas include the City of Sydney area.
30. Providers engaged by Ausgrid will seek out suitable sites and groups of sites where energy conservation measures and on-site renewable generation can be cost-effectively deployed.
31. All investments will be subject to the financial benchmarks set out in Ausgrid's request for proposals. These incentives are up to \$250 per kW of installed solar PV and up to \$250 per MWh of permanent energy conservation.
32. Ausgrid proposes that the City should co-fund projects undertaken in the City of Sydney area, up to a maximum of \$750,000 of City funds. That means a combined investment in demand reduction measures (and in turn greenhouse gas reductions) of up to \$1.5 million in the City of Sydney area.
33. Ausgrid has already commenced a procurement process to engage a number of providers to identify and implement individual projects. Providers may be renewables energy financiers, energy retailers or energy service providers. A request for information was issued in November and it is understood more than 20 potential providers have responded. The evaluation process is now underway.
34. Ausgrid will pay providers when and only when individual projects are successfully delivered and verified. Only measures which are effectively permanent will be considered.
35. Involvement by the City would occur in a series of steps.

- (a) Providers would investigate potential sites and options and identify proposals to Ausgrid, then Ausgrid and the City would review proposals submitted by providers.
  - (b) Only sites which are in the City area will be considered for co-funding. The City will reserve the right not to fund any particular project at its absolute discretion. The City's ethical guidelines will be taken into account.
  - (c) Ausgrid and the City would commit combined funding up to the agreed incentive benchmarks. In the event that Ausgrid funds are exhausted earlier than the City (eg, if the City elects not to support some projects), the City may fund extra projects at a higher level than the 50/50 level, but is not obliged to.
  - (d) Ausgrid will institute a methodology for verifying project completion and expected savings. Once projects are finalised and verified, Ausgrid invoices the City for 50% of the cost of incentives.
36. It is undesirable to set a specific cap on co-funding for a particular site, project or project beneficiary (eg, property owner, tenant). A particularly high abatement may be identified at acceptable cost via a particular project or set of projects.
37. Discussions with Ausgrid suggest that at least 30 to 50 projects are likely to be funded in the City area, and that a similar number of property owners and site occupants are likely to be beneficiaries. Ausgrid is keen to involve a diversity of building types and occupancies (eg, warehouses, retail premises, cold stores), so as to be able to apply the project learnings broadly in the future.
38. The proposed level of investment per project is sufficient for large scale projects to be undertaken. For example, were an incentive of \$50,000 to be offered to a particular site or group of sites, a solar PV array of 200 kW could be installed, delivering close to 280 MWh a year (this is enough to power about 50 homes).

## ENVIRONMENTAL OUTCOMES

39. Based on the incentive benchmarks set out in the Ausgrid request for proposals, total matched funding of \$1.5 million for projects in the City area, and a 50/50 split between solar PV installations and energy conservation measures, the following outcomes have been calculated.
40. Benefits associated with project outcomes (solar PV and energy conservation) are calculated on an annual basis and over 20 years (nominal project lifetime) and shown in the tables below. While energy savings may be perpetual, and solar PV projects have a lifetime of at least 25 years, the nominal project lifetime incorporates an allowance for churn. That is, buildings may be demolished, may undergo major change of use, or may undergo future refurbishment.

### Abatement outcomes – yearly

	Energy saving measures	Solar PV installations
Investment	\$750,000	\$750,000
Avoided grid electricity	3,000 MWh	4,160 MWh
Avoided CO2	2,850 tonnes	3,950 tonnes
Total annual abatement – 7, 800 tonnes		
NB – NSW grid coefficient of 0.95t/MWh applied (reference: Commonwealth Govt National Greenhouse Account Factors 2017)		

Abatement outcomes – nominal project lifetime

	Energy saving measures	Solar PV installations
Avoided grid electricity	60,000 MWh	83,200 MWh
Avoided CO2	57,000 tonnes	79,000 tonnes
Total abatement over 20 years – 136,000 tonnes		

41. Cost of abatement to the City is calculated as follows:

\$750,000 divided by 136,000 tonnes = \$5.50 per tonne of CO2-e

42. Assuming 50% of matched funds in the City area are applied to on-site solar PV, this will lead to an increase of 3MW, equal to about 20% in the current level of renewable generation in the City area. This is estimated at 10 MW -15 MW of capacity. This figure is inclusive of some sites which are not included on the APRI website, such as the City's own solar PV installations
43. The reduction in greenhouse gas emissions represents about 0.15% of emissions currently attributable to the City area.

**BUDGET IMPLICATIONS**

44. It is expected that funding will be spread across three financial years, primarily the year from 1 July 2018 to 30 June 2019. Only a small number of projects will be fully completed and verified before 30 June 2018; equally, the offer of incentives is expected to close by 31 December 2018, and most projects will be completed and verified prior to 30 June 2019.

45. Accordingly, the following funding allocations are proposed:

2017-18 financial year – \$100,000  
(to be allocated from the existing acceleration program)

2018-19 financial year – \$600,000  
The City's operating expenditure budget for 2018-19 will be adjusted to incorporate funding provided through this program. Correspondingly, the Renewable Energy Other (LGA) capital program budget will be reduced, effectively re-allocating funding from the capital program to the operating expenditure budget.

2019-20 financial year – \$50,000  
The City's operating expenditure budget for 2019-20 will be adjusted to incorporate funding provided through this program. Correspondingly, the Renewable Energy Other (LGA) capital program budget will be reduced, effectively re-allocating funding from the capital program to the operating expenditure budget.

**CRITICAL DATES**

46. This report has been presented direct to Council on account of the urgent timing. Ausgrid provided details of the Permanent Demand Reduction Incentives Program to the City a month ago and the City has been undertaking due diligence on the program over the last month. A formal letter of offer from Ausgrid outlining proposed involvement by the City was received in the first week of December.

47. Meanwhile, Ausgrid has issued a request for information to potential solution providers. This request closed late last month and Ausgrid is now poised to start negotiations with respondents. Selection of providers is expected to finish by the end of summer and, ideally, the first round of projects will be confirmed by March. For the City to effectively influence the program, it is highly desirable to indicate an intent in principle to participate this month, and to confirm this by February. For Ausgrid, it is important to keep moving, both to achieve early demand reductions and to meet the funding deadline of mid-2019, when Ausgrid's five-year regulated funding ends.
48. The following milestones have been provisionally identified:
- (a) December 2017 – period of public notification starts;
  - (b) January 2018 – period of public notification ends;
  - (c) February 2018 – Council confirms participation by resolution;
  - (d) February 2018 – City and Ausgrid enter funding agreement;
  - (e) March 2018 – selection of preferred solution providers is finalised;
  - (f) March 2018 - first round of projects are identified by solution providers;
  - (g) April 2018 – first round projects are confirmed, after Ausgrid/City consultation;
  - (h) June 2018 – initial projects completed, verified and invoiced (eg, quick-to deliver activities like commercial lighting changes);
  - (i) December 2018 – final round of projects are confirmed for funding;
  - (j) June 2019 - final projects are completed;
  - (k) July 2019 – final projects are verified and invoiced; and
  - (l) September 2019 – Ausgrid complete program administration and assessment and provides findings to the Australian Energy Regulator and to the City.

#### RELEVANT LEGISLATION

49. The grant of funding will be made under section 356 of the Local Government Act.
50. Ausgrid is now partially privately owned, and in part acts for private gain. Section 356(2) of the Local Government Act states: "A proposed recipient who acts for private gain is not ineligible to be granted financial assistance but must not receive any benefit under this section unless at least 28 days public notice of the council's proposal to pass the necessary resolution has been given."
51. The proposed resolution has been duly worded to reflect this requirement and has been reviewed by the City's legal services team.
52. A further report will be provided to Council to approve the proposed grant once the public notification period has expired.

**CONCLUSION**

53. Ausgrid is a reputable and well-trusted partner in the electricity supply sector and has offered the City an excellent opportunity for partnership in a well-considered and cost-effective program for delivery of significant reductions in grid electricity use and greenhouse gas emissions at the local level.
54. By agreeing to co-funding projects undertaken as part of the Permanent Demand Reduction Program in the City area, the City will be able to significantly enhance both local and the overall outcomes of this program.
55. The program is expected to achieve ongoing annual greenhouse gas reductions of nearly 8,000 tonnes and achieve a significant increase in local renewables generation at a very competitive cost to the City.
56. By demonstrating the role that on-site generation and energy conservation can play in reducing the need for replacement investment in network poles and wires, the program will also help bring down the long-term cost of electricity for businesses and residents

**KIM WOODBURY**

Chief Operating Officer

Chris Barrett, Commercial Manager Green Infrastructure