

## Inner Melbourne Action Plan

### Progress Report

#### Action 9.4 Green Demonstration Projects – Distributed Energy Project

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#### Purpose

1. To update the Committee on the progress of Action 9.4 Green Demonstration projects: Distributed Energy project.

#### Background

2. Action 9.4 consists of 3 parts:
  - a) Water Sensitive Cities
  - b) Green Roof Project
  - c) Distributed Energy project

The Distributed Energy Project is being led by the City of Melbourne in partnership with the CSIRO. The project is of national significance in that it is a first of its kind to be undertaken in Australia. Similar projects have been undertaken in New York and London.

3. The project will identify:
  - a. Opportunities for distributed generation, including district energy systems, renewable and low-carbon energy generation, and
  - b. Potential impacts for greenhouse gas and energy reductions through energy efficiency initiatives and demand management initiatives.
  - c. The economic costs and benefits of distributed generation and energy efficiency initiatives compared to up-stream purchase of renewable energy through the grid and network augmentation.
4. The study requires data input from the four councils and from utilities. Data gathering work is underway in each of the Councils. In the case of the City of Melbourne, the relevant rates and property data has been provided to the CSIRO. Data exchange agreements are required between the CSIRO and each of the IMAP Councils. These agreements are either in place or are being finalised between CSIRO and each Council's legal areas.

#### Discussion

##### **Project Timing**

5. The project timeframe has been revised to take into account delays in collecting necessary data both from the Councils and from the utilities.
6. Project timeframes have been adjusted to take into account delays in collating data. A new completion date of December 2013 has been negotiated with CSIRO, putting the project back by 6 months.
7. The following work has taken place:

- a. Grant agreement signed between CSIRO and City of Melbourne (on behalf of IMAP)
- b. Data exchange agreement in place between CSIRO and City of Melbourne
- c. Relevant City of Melbourne property and rates data provided to CSIRO
- d. CSIRO development of energy demand model underway and preliminary energy demand modelling using City of Melbourne data underway
- e. Relevant data identified and collated by remaining IMAP Councils (ongoing)
- f. Data exchange agreements between remaining IMAP Councils and CSIRO being considered and negotiated by Councils (ongoing).
- g. Data exchange agreement between CSIRO and CitiPower negotiated. One outstanding issue remains at time of writing to be resolved in coming weeks.
- h. Data requests being negotiated between CitiPower and CSIRO. Data collection underway.
8. CSIRO has managed the delay in collection of data by commencing the development of the energy demand model, and using available data from the City of Melbourne to commence the modelling work. Energy demand models for the remaining Councils will be undertaken as data becomes available.
9. The Stage 1 report, comprising the energy demand map for the IMAP region, will now be delivered by June 30 2013 (originally December 2012). Work on identifying energy saving opportunities will also have commenced by this time.
10. The Stage 2 Report, comprising modelling identifying the energy saving potential and impact on networks will be delivered by December 31 2013 (Originally June 2013).
11. Progress is dependent upon collection of data from the remaining Councils and from the utilities. Property and rates data from the remaining Councils must be received by late March to prevent further project delays. Further work will involve working with strategic planning branches in IMAP Councils to identify future growth projections and provide these to CSIRO.

### **Funding**

12. IMAP expenditure for the project has been approved by the IMAP Implementation Committee.
13. The total project budget is \$955,000. Of this, \$180,000 will be contributed by IMAP through a grant agreement with CSIRO. The balance, \$775,000, is being funded by CSIRO.
14. Funding through IMAP has been budgetted as follows:
 

2010/11	\$45K from accumulated IMAP funds [\$11.25K per Council]
2011/12	\$55K from the IMAP Councils [\$13.75K per Council]
2012/13	\$80K from the IMAP Councils [\$20K per Council]
15. The initial grant contribution of \$100,000 has been paid. The balance of \$80,000 remains in the budget and will be paid upon the delivery of the Stage 2 report.
16. CSIRO will seek additional funding to support the project through other channels, including the Federal Government and private research partnerships.
17. Aspects of the project contingent on additional funding include economic modelling and studying the impacts (positive and negative) of distributed generation and energy efficiency on the electricity networks.
18. The next update will be provided at the next IMAP Implementation Committee in May 2013.

### **19. Recommendation**

20. That the IMAP Implementation Committee resolves to:
  - a. **note** that there has been a delay in meeting the milestones, and
  - b. **note** the progress of Action 9.4 Distributed Energy project.