

Senate Finance and Public Administration Legislation Committee

—Budget Estimates Hearing—May 2011

Answers to Questions on Notice

Parliamentary departments, Department of Parliamentary Services

Topic: **Solar panel integration trial**

Question: **17**

Written **Senator Fifield**

Date set by the committee for the return of answer: 8 July 2011

- (a) Was a cost benefit analysis conducted on the operation of the solar panels that are being installed on the rooftop of the Senate Wing and the Gardener's Compound?
- (b) How much electricity will these panels generate?
- (c) Will the electricity generated be fed back onto the grid or will it be used solely in Parliament House?
- (d) What further costs are associated with integrating the solar panels into the infrastructure?
- (e) What is the expected saving in Parliament House's electricity costs from the installation of these panels?
- (f) At the conclusion of this trial, what factors will be taken into consideration when determining whether to install any further panels?
- (g) Have any solar panels that have been installed resulted in a saving in electricity costs?

Answer

- (a) Yes, a cost benefit analysis was conducted at the beginning of the project and again as more information became available during tender evaluation.
- (b) There will be 43.3 kW of PV modules (ie panels) (42 panels—7.8 kW on the Gardeners Compound roof and 192 panels—35.5 kW on the Senate wing roof). The total annual production from the pilot modules is estimated at 65,000 kWh. Figures quoted are peak power outputs.
- (c) The electricity generated will be used solely in Parliament House.
- (d) Construction will fully integrate the Solar system into the Parliament House electrical and Building Management Systems. No contractor costs beyond the construction stage are anticipated. Some other incidental DPS staffing costs will be incurred during the integration and review stages such as for temporary isolations of power during connection.
- (e) The pilot is expected to result in electricity savings of just under \$10,000 in the first year, potentially rising to \$17,000 per year within the first five years.

Continued over the page

- (f) DPS will consider the following factors, when determining whether to install any further panels.
 - (i) Value of the electricity saved versus capital cost.
 - (ii) Lessons learned in connecting the Solar system to the Parliament House electrical system and Building Management System (BMS).
 - (iii) Lessons learned about maintenance costs.
 - (iv) Whether there have been changes in electricity prices or imperatives to use green electricity.
 - (v) Electrical authority requirements.
 - (vi) Whether any additional work would impact on heritage matters.
 - (vii) The priority of solar panel investment compared to other building needs.

- (g) Not yet. The solar panel system is scheduled to be switched on and commissioned at the end of June 2011.