

Economics Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Industry, Innovation and Science Portfolio
2016 - 2017 Additional Estimates
2 March 2017

AGENCY: COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION

TOPIC: Announcement of the Low Emissions Technology Roadmap

REFERENCE: Written Question – Senator Carr

QUESTION No.: AI-115

In regards to the announcement by the government on 20 May 2016 by Ministers Pyne, Hunt and Frydenburg that CSIRO will be developing a Low Emissions Technology Roadmap:

- a) When was CSIRO made aware of this announcement?
- b) Was the roadmap initiated by CSIRO?
- c) Was any new funding tied to this announcement?
- d) What resources (financial and staff) have been allocated internally by CSIRO?
- e) Is there any external funding?
- f) Are there any external partners?
- g) Apart from the CSIRO who else is involved in the development of this low emissions technology roadmap? Have there been any contact or consultation with external organisations? If so, who?
- h) Is there any information on the development of this roadmap on the CSIRO website?
- i) When will the roadmap be completed?
- j) What are the milestones for this roadmap?

ANSWER

- (a) CSIRO was aware of the Low Emissions Technology Roadmap prior to its announcement on 20 May 2016. CSIRO had been in discussions since late 2015 about the potential development of a roadmap, and was aware of the proposed announcement in mid-April 2016.
- (b) No.
- (c) A Work Order for \$600,000 (GST inclusive) was issued by the Department of Industry, Innovation and Science for CSIRO's work on the Roadmap.
- (d) CSIRO allocated an experienced team of researchers to conduct the work on the Low Emissions Technology Roadmap over a period of nearly 10 months. This team included a dedicated, full-time project leader; a dedicated, full-time senior energy analyst; significant contributions from CSIRO's energy economics group to conduct energy modelling; and significant contributions from a large number of CSIRO experts across a wide range of relevant technologies. CSIRO has estimated that the total cost to deliver the project was approximately \$760,000 (GST inclusive), which makes CSIRO's contribution \$160,000 (GST inclusive).
- (e) There was no additional external funding beyond the \$600,000 provided by the Department of Industry, Innovation and Science. During the course of this project, responsibility for its oversight transferred to the Department of Environment and Energy due to Machinery of Government changes.

- (f) In accordance with the terms of the contract, and with the approval of the Department, CSIRO sub-contracted to ClimateWorks Australia for assistance with modelling of emissions from “direct combustion” and for assistance with the development of one of the four pathways.
- (g) As part of the report, CSIRO conducted broad consultation with nearly 150 external stakeholders, through both one-on-one interviews and workshops. These stakeholders represented a range of government, industry and research organisations. Key stakeholders consulted included ARENA, AEMO, AEMC, CEFC, and the Office of the Chief Scientist.
- (h) No.
- (i) CSIRO delivered the final draft of the report to the Department of the Environment and Energy on 14 February 2017. The Department and Minister will decide on the release of the material once it is finalised.
- (j) The original Work Order, included milestones as follows:

- 1: Execution of agreement (April 2016)
- 2: CSIRO Steering Committee presentation: identify technology pathways (24 June 2016)
- 3: Conduct technology assessment (23 September 2016)
- 4: Draft Australian supply chain opportunities assessment (21 October 2016). Second Steering Committee Meeting.
- 5: Final report (16 December 2016). Final Steering Committee Meeting.

A Deed of Variation was executed by the Department of the Environment and Energy and CSIRO in late 2016 to allow additional time for the Department to review the report and for CSIRO to make any necessary modifications. This varied the final report completion date to 27 January 2017 and created a new milestone for “Report Design and Production” (web publication and printing) by 27 February 2017.