

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

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**AGENCY:** COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION

**TOPIC:** Solar research

**REFERENCE:** Written Question – Senator Carr

**QUESTION No.:** AI-120

1. What is the CSIRO's level of investment in Solar research per year over the past five years?
2. What is the level and source of external funding supporting CSIRO research in solar and other renewable technologies per year over the past five years?

**ANSWER**

The requested data is not easily available as the solar aspects of CSIRO's renewable energy work are not accounted for separately. Furthermore, there have been several structural changes over the last five years which prevent extraction of accurate historical data.

Given these constraints, the most relevant estimate of the CSIRO spend (CSIRO appropriation plus external revenue, \$M) on renewable energy is based on Australian and New Zealand Standard Research Classification Socio-economic Objective (SEO) code data. CSIRO generates this data as part of the Australian Bureau of Statistics R&D survey held every two years which classifies research against SEO codes. This classification has some limitations:

- it relies on self-assessment of research effort at a particular point in time,
- research cannot be double counted against more than one code (for example, work on solar photovoltaics may be split across the "renewable energy" and "manufacturing" codes but cannot be fully counted against both categories). This means results tend to under-estimate effort for an area, and represent a minimum total spend.

Based on the SEO code data, the estimated CSIRO spend (CSIRO appropriation plus external revenue, \$M) on renewable energy research:

2011/12	2012/13	2013/14	2014/15	2015/16
25.7	35.7	20.8	20.0	17.5

Note that the proportion of external revenue in this research area is currently approximately 55%, although in the past it has been significantly lower than this.