Economics Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Industry and Science Portfolio
Additional Estimates 2014-15
26 February 2015

AGENCY/DEPARTMENT: Commonwealth Scientific and Industrial Research Organisation (CSIRO)

TOPIC: CSG – Gas Compression and Water Treatment

REFERENCE: Question on Notice (Hansard, 26 February 2015, page 97)

QUESTION No.: AI-5

Senator WATERS: Yes. Agreed. You mentioned in the response to that question on notice that the scientific evidence base about fugitive emissions for shale and tight gas 'would benefit from further Australian specific measurements'. You have just responded that you are not sure if that is going to be within CSIRO's scope. You said other work is being done but not on fugitives, if I understood your response correctly, so what level of confidence can we have in the energy emissions factors for shale and tight gas, the greenhouse reporting?
Dr Wonhas: The whole purpose of the study is to determine appropriate emissions factors for coal seam gas so at the end of the study we will be able to determine that.
Senator WATERS: And for shale and tight gas how can we be confident in the end-use methodology for ascertaining those levels if the studies would benefit from further specific measurements?
Dr Wonhas: We would have to do similar work. I should also say that I think the key issue in Australia is actually coal seam gas, not shale and tight gas, because that is obviously the major development that is currently underway, which is why we have certainly focused our efforts on understanding coal seam gas in particular.
Senator WATERS: That is certainly what is happening at the moment but, of course, many approvals for shale and tight gas are currently being sought, so clearly that is the next phase. Just sticking with phase 2—I am almost finished with the extraction questions—what stages of production will you examine? You mentioned well completion, gas compression and water treatment. Are there any other stages of production, or is it those three?
Dr Wonhas: My understanding is that is currently the planned scope for the study. However, there is obviously other pieces of work that we are doing in other contexts that might look at different aspects of the CSG production system.
Senator WATERS: Could you take on notice to give me a bit more detail on those other studies, given that the clock is ticking right now? I am interested in the full scope of work.
Dr Wonhas: I certainly can.

ANSWER

The main areas of production to be examined in the Department of the Environment ‘methane fugitive emissions' project are well completions and hydraulic fracturing operations. The secondary aim was to measure methane emissions from downstream processing (gas treatment plants, water treatment facilities).

Other work in CSIRO on methane emissions includes the Gas Industry Social and Environmental Research Alliance (GISERA) project ‘Characterising the regional fluxes of methane seepage in the Surat Basin, Queensland’. Full details of this project and reports are available on gisera.org.au.

Another project is currently underway funded by the NSW Environment Protection Agency (EPA). As part of this project, CSIRO will measure fugitive emissions from completed wells on petroleum leases licensed by the EPA in the Hunter Valley, Central West, North West, Sydney, and the South West. Work commenced in June 2014 and, once measurements have been completed and data analysed, a final report will be produced by early 2016.