

EDUCATION, SCIENCE AND TRAINING

SENATE LEGISLATION COMMITTEE - QUESTIONS ON NOTICE 2005-2006 SUPPLEMENTARY ESTIMATES HEARING

Outcome: CSIRO
Output Group: CSIRO

DEST Question No. E711_06

Senator Wong provided in writing.

Question:

What outcomes does CSIRO expect from its increased investment in each Flagship?

Answer:

CSIRO has provided the following response.

Flagships outputs and outcomes

At the broadest level, increased investment increases the likelihood that each Flagship will achieve its national goal and/or increases the rate of progress towards the goal. Examples of Flagship national goals are:

- *Light Metals: To lead a global revolution in light metals, doubling export income and generating significant new industries for Australia by the 2020s while reducing environmental impact*
- *Preventative Health: To improve the health and well being of Australians and save \$2 billion in annual direct health costs by 2020 through the prevention and early detection of chronic diseases).*

At a finer level of detail, the Flagships have very clear views about the outputs and outcomes they will be producing from their research programs. They outline via roadmaps in their business plans their expected outputs and outcomes from their activities over the short, medium and longer terms according to CSIRO's Program Performance Framework.

Each Flagship develops 'roadmaps' at the Flagship and theme levels (themes being major areas of research directed towards a clear and specific strategic goal that represents a key part of achieving the Flagship's national goal). Each theme has its own goal. For example:

- *The goal of the Innovative Processing theme in Food Futures is: To add \$700 million in value to the Australian agrifood industry by 2013 through the application of novel separation and advanced processing technologies for bioactive and physically functional food ingredients and 'preserved fresh' food industries*
- *The goal of the Low Emissions Electricity theme in Energy Transformed is: Cost effective, progressive reductions in greenhouse emissions from large scale (greater than 30MW) stationary energy generation (fossil fuel and renewable systems) by 5% to 2020, 15% by 2030 and 25% by 2050.*

These roadmaps show both the research deliverables and engagements with delivery partners that are required to transfer the research outputs into outcomes in the economy, society and the environment.

The Flagships produce Annual Performance Goals (APGs) at the stream level (streams are collections of projects). The APGs also address research outputs and engagement with

delivery partner milestones. The following examples come from the Oil and Gas stream in the Wealth from Oceans Flagship for 2005/6:

- *Complete the proof of concept for two technologies for subsea gas production.* [Research APG]
- *Enter a joint research agreement with at least one oil and gas company from the domestic market and with WA:ERA for both the Platform-Free Fields and Recovery Step Change programs.* [Engagement with delivery partners APG].

A Flagships progress report is due to be released in 2006 and CSIRO will provide copies to the Committee.