

MINISTER FOR THE ENVIRONMENT AND HERITAGE

(Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper)

Question No. 1

Senator Allison asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

How much remains of the \$400 million GGAP money and what will that now be spent on? What sort of purpose will the rest of that fund have?

Senator Campbell – I provide the following answer to the Honourable Senator's questions.

The GGAP appropriation under the *Appropriation Supplementary Measures Act (No 2)* 1999 specifies the GGAP appropriation for 1999-2000, 2000-01, 2001-02 and 2002-03 Financial Years. A specific GGAP grants program has been implemented under Ministerially approved guidelines from 2000-01 to 2012-13. GGAP grant funds committed under legally binding contracts are expected to be expended over the period 2001-02 to 2009-10 for the projects approved under Rounds 1 and 2 of GGAP.

GGAP is progressing well with most projects implemented and on track to deliver abatement in the 2008 to 2012 period. GGAP will conclude with Round 3 which will be completed in the first half of 2004-05 and successful projects announced. Given the proximity of the Kyoto target period (2008 to 2012) and that the average GGAP project requires 5 to 7 years for completion, further rounds of GGAP do not meet the current guidelines as they would not be completed before the end of the target period.

The Government therefore in the May 2004 Budget re-allocated GGAP program and appropriation funds to its streamlined climate change strategy programs that include a strong focus on strategic, long term abatement and technologies.

The purpose of the rest of the funds allocated to GGAP is to reduce Australia's net greenhouse gas emissions by supporting activities that are likely to result in substantial emissions reductions or substantial sink enhancement, particularly in the period 2008-12. GGAP uses Government funding to leverage private sector investment projects based on co-generation, energy efficiency, travel demand management, alternative fuels, coalmine gas technologies and fuel conversion.

See Table 1 for a breakdown of the \$400m GGAP appropriation as of the 2004-05 Budget.

Table 1: Breakdown of \$400 million GGAP appropriation for the period 2000-01 to 2012-13 (as of 2004-05 Budget)*

Funding Commitments	Funding Period	Sub-total \$million	Total \$ million
Expended or committed under contract on GGAP projects (including overheads)	2000-01 to 2012-13	145.2	145.2
Expended or reallocated for other greenhouse programs or activities consistent with GGAP appropriation	2001-02 to 2008-09		81.0
<ul style="list-style-type: none"> Budget 2001-02 New policy (domestic greenhouse policy development, greenhouse international policy and reporting and greenhouse sinks) 	2001-02 to 2004-05	45.1	
<ul style="list-style-type: none"> Budget 2002-03 New Policy (National Carbon Accounting System and Cool Communities) 	2002-03	5.2	
<ul style="list-style-type: none"> Budget 2002-03 Biofuels Market Barrier Study 	2002-03 to 2003-04	5.3	
<ul style="list-style-type: none"> 2003-04 Bridging Strategy for programs lapsing in 2002-03 	2003-04	25.4	
Budget 2004-05 Redirected for Climate Change Strategy	2004-05 to 2008-09	130.3	130.3
Provision for GGAP Round 3 and Climate Change Strategy beyond Forward Estimates period	2004-05 to 2012-13	43.5	43.5
TOTAL	2000-01 to 2012-13	400.0	400.0

* Figures are provided as per the 2004-05 budget as end of financial year figures are not yet available.

Question No. 2

Senator Allison asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

What are the implications of the diesel excise reforms for the use of recycled oil for energy generation, electricity generation, kiln burning and so forth? What work has been done to look at the impact of this decision on that sector?

Senator Campbell – I provide the following answer to the Honourable Senator's questions.

Diesel used in commercial power generation and as burner fuel is currently subject to excise of up to 40.143 cents per litre. From 1 July 2006, diesel used for these purposes will be effectively excise free. This means that producers of recycled oil for the power generation and fuel markets will need to increase the competitiveness of their product over the next two years and continue to explore new markets for recycled oil products. For example, in the last year the production of re-refined oil (for use as a lubricant or a hydraulic or transformer oil) has increased from 3 million litres in 2002/03 to over 5.5 million litres in 2003/04. The Government took the impact of the excise changes on the recycled oil industry into consideration in developing the Fuel Excise Reforms. The Government's Product Stewardship for Oil Program will continue to support the recycled oil industry.

Question No. 3

Senator Allison asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

What about the implications for rail of this measure? Rail currently has no excise on it. The 1998 inquiry showed there was likely to be a very significant shift away from rail, with huge greenhouse implications. Why would that not be the case under this arrangement?

Senator Campbell – I provide the following answer to the Honourable Senator's questions.

This question falls within the responsibilities of the Department of Transport and Regional Services and should be referred to that Department.

Question No. 4

Senator Allison asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

Is the excise credit likely to be extended to rail?

Senator Campbell – I provide the following answer to the Honourable Senator's question.

This question falls within the responsibilities of the Department of Transport and Regional Services and should be referred to that Department.

Question No. 5

Senator Allison asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

What, if any, work was done on whether road freight will be cheaper as a result of the excise reforms?

Senator Campbell – I provide the following answer to the Honourable Senator's question.

This question falls within the responsibilities of the Department of Transport and Regional Services and should be referred to that Department.

Question No. 6

Senator Allison asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

Please provide analysis, if available, from NEM managers on need for better wind forecasting.

Senator Campbell – I provide the following answer to the Honourable Senator's question.

A primary role of the National Electricity Market Management Company (NEMMCO) in ensuring a reliable and high quality electricity supply is balancing electricity supply and demand. NEMMCO does this by creating electricity demand forecasts to drive the scheduling of generation in the National Electricity Market (NEM).

As NEMMCO has identified, an effective wind forecasting system will be necessary to manage the technical and market-related impacts of increasing quantities of intermittent wind power (which generate whenever the wind blows) on the NEM.

NEMMCO estimates the impact of wind generation on minute-to-minute energy supply needs. The larger the error in the forecasts, the greater is the potential for impact on costs within the NEM. Forecast errors can impact on reserve margins, reduce efficiency in scheduled generators and reduce the potential for stable penetration of wind in the NEM.

NEMMCO has proposed changes to the National Electricity Code requiring wind generators of over 30 megawatts capacity to supply real-time data and generation forecasts. The key NEMMCO investigation supporting these changes, "Forecasting Intermittent Generation in the National Electricity Market (NEM)", was released for comment in April 2004. NEMMCO's proposed changes were also supported by findings of a CSIRO study and reports on wind penetration in the NEM that were commissioned by the Australian Greenhouse Office. These analyses, together with other relevant papers, are listed below (copies are provided).

Current commercial forecasting of individual wind farms generation includes errors in the order of fifteen percent. CSIRO has indicated that a centralised system could reduce this error by several percent, significantly increasing the NEM's ability to cost effectively absorb wind generation capacity. Benefits for the wind industry include reduced costs and duplication of effort, and significantly reduced technical barriers to industry growth.

Summary of key reports addressing wind forecasting and National Electricity Market Management:

1	CSIRO July 2004	<p>Integrating Significant Wind Energy Capacity in Australia CSIRO Atmospheric Research Peter Coppin, Jack Katzfey and Robert Davy Presented at AUSWIND conference July 2004 – available from Peter Coppin</p> <p>Summarises Australian wind behaviour and forecasting issues, as they relate to network management. Includes a comparison of Centralised and Distributed forecasting.</p>
2	NEMMCO 24 June 2004	<p>Proposed Code Changes: Intermittent Generation Forecasting Obligation</p> <p>National Electricity Market Management Company (NEMMCO) Submission to the National Electricity Code Administrator (NECA) www.neca.com.au</p> <p>Proposed necessary requirements for Intermittent Generation forecasts. Under consultation until 16 August 2004.</p>
3	NEMMCO 11 Feb 2004	<p><u>Forecasting Intermittent Generation in the National Electricity Market</u> National Electricity Market Management Company (NEMMCO) www.nemmco.com.au/operating/intermittent</p> <p>Final report investigating intermittent generation forecasting options and their impacts on electricity market management. Based on CSIRO consultation.</p>
4	NEMMCO 18 Mar 2003	<p><u>Intermittent Generation in the National Electricity Market</u> National Electricity Market Management Company (NEMMCO) www.nemmco.com.au/operating/intermittent</p> <p>Investigates intermittent generation impacts on electricity market management.</p>
5	AGO October 2003	<p>High level NEM Wind Penetration Assessment: An estimate of readily acceptable wind in the NEM. Hugh Outhred for the Australian Greenhouse Office (AGO) www.greenhouse.gov.au</p> <p>Highlights management issues in the NEM which limit secure management of wind generation and how these management implications can be reduced.</p>
6	AGO October 2003	<p>Wind Energy and the National Electricity Market, with particular reference to South Australia Hugh Outhred for the Australian Greenhouse Office (AGO) www.greenhouse.gov.au</p> <p>Investigates wind management issues in the NEM</p>

Question No. 7

Senator Wong asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

Please provide a copy of the McLennan Magasanik modelling on increasing the MRET target.

Senator Campbell – I provide the following answer to the Honourable Senator's question.

Copies of the publicly available modelling by McLennan Magasanik on increasing the MRET target, "Impacts of a 20,000 GWh Target for the MRET Scheme" and "Economic Impacts of Changes to the Mandatory Renewable Energy Target" are attached.

Question No. 8

Senator Allison asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

What amendments will be required to the *Petroleum (Submerged Lands) Act* as a result of the White Paper?

Senator Campbell – I provide the following answer to the Honourable Senator's question.

This question falls within the responsibilities of the Department of Industry Tourism and Resources and should be referred to that Department.

Question No. 9

Senator Allison asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

I understand there is a proposal to separate the marine planning process and the declaration of MPAs. Do you know if that is the case and how will the process of declaring MPAs fit with further prospecting for fossil fuels, particularly within the boundaries of the south-east regional marine park?

Senator Campbell – I provide the following answer to the Honourable Senator's question.

The former Minister for Environment and Heritage Dr Kemp announced the establishment of the DEH Marine Protected Areas Taskforce at the launch of the South-east Regional Marine Plan on Friday 21 May.

Under the Taskforce the MPA development work will continue to be integrated with RMP. DEH continues to have responsibility for the identification, selection, declaration and management of MPAs under the EPBC Act. NOO will provide logistical and other support to the taskforce and the taskforce will use RMP stakeholder consultation processes. The intention is that MPA development work and regional marine planning will commence together in each of the marine regions. However, due to the complexity of MPA development, the MPA component of regional marine planning may not be finalised within the same timeframe.

The Australian Government is committed to establishing MPAs in a way that meets biodiversity conservation objectives while minimising impacts on industry. Where the information supports it, areas of high conservation value will be highly protected. Where information gaps create uncertainties for management and decisions on zoning, the Australian Government will adopt a staged and adaptive approach to setting levels of protection as more information about the specific economic, cultural and ecological values in the area is gathered and assessed. Under this approach, MPAs will be designed to minimise overlap with existing and prospective oil and gas leases – where there is overlap pre-existing rights will be acknowledged. Initially areas where prospectivity is uncertain will be zoned ‘multiple use’ IUCN category VI with a provision to allow exploration to occur. In all cases exploration actions remain subject to provisions under the EPBC Act 1999 for listed protected species and environmental assessments and approvals.

Question No. 10

Senator Allison asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

How will the oil and gas operations in any marine parks, but specifically in the Zeehan and Murray areas, in the south east marine planning process, work with this new frontier exploration.

Senator Campbell – I provide the following answer to the Honourable Senator’s question.

The Australian Government is committed to ensure that marine protected areas identified through the RMP process will be managed in an effective and adaptive manner. Certain activities are prohibited from occurring in declared MPAs unless expressly provided for by a management plan. If petroleum activities are provided for in a management plan, then they are subject to assessment against the MPA objectives.

While MPA management will be responsive to new environmental management practices to ensure conservation values within MPAs are not compromised, the exploration for, and possible recovery of, petroleum resources can be approved after clear identification of risks and uncertainties based on the assessment of likely impacts of an activity.

Where MPAs and new frontier areas for oil and gas coincide, exploration access to resources will be maintained under a staged approach to zoning. Highly protected areas will not be proclaimed until there is sufficient information to ensure that industry is not precluded from accessing potential oil and gas reserves.

Question No. 11

Senator Wong asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

What is the timing for the finalisation of the criteria for the Renewable Energy Development Initiative?

Senator Campbell – I provide the following answer to the Honourable Senator’s questions.

The Renewable Energy Development Initiative was announced under the Prime Minister's Energy Statement on 15 June 2004. Since this announcement, a consultation process has been undertaken with stakeholders that ended on 13 August 2004. Following this consultation process, the program guidelines will be finalised and the program launched before the end of 2004.

Question No. 12

Senator Mackay asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

What is the AGO's view of the Hydro Tasmania costings of increasing the MRET target?

Senator Campbell – I provide the following answer to the Honourable Senator's question.

The Hydro Tasmania submission states that:

1. "the increased target proposed in the Tambling Report will result in residential electricity price increases of only 0.5 per cent per year above current target costs. It is estimated that there would be approximately a \$5 increase per quarter on the average household electricity bill representing an increase of just over 3 per cent per annum."
2. "the Charles River Associates Report found that a 5 per cent MRET target would have no change on GDP or employment."
3. "the Government's commissioned McLennan Magasanik Associates 2003 Report found that a 5 per cent target would result in an increase in GDP of 0.08 per cent."

In response, the AGO has provided advice that:

1. The 0.5 per cent increase per year above current target impacts is consistent with modelling available to the Australian Greenhouse Office. Any assessment of the impact on residential electricity prices involves a considerable degree of uncertainty concerning, for example, the proportion of cost pass-through of the MRET measure to the residential sector.

The relationship that Hydro Tasmania is asserting between "only 0.5 per cent per year" and "just over 3 per cent per annum" is not clear to the Australian Greenhouse Office.
2. The Charles Rivers Associates finding that a 5 per cent MRET target would have no change on employment simply reflects their underlying assumptions. To quote from p.8 of the Executive Summary of their report: "One of the standard modelling assumptions in MM600+ is that in the long-run the labour market attains an equilibrium, so that economic shocks, such as changes in MRET levels, have no lasting effect on total employment."
3. The MMA modelling referred to indicates that an increase in the MRET target would result in a reduction of GDP and employment.

Question No. 13

Senator Mackay asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

Hydro Tasmania alleges that investment will stall in 2007 under the current MRET. Has there been any work undertaken on how many projects, jobs and investments could be at risk?

Senator Campbell – I provide the following answer to the Honourable Senator's questions.

Available evidence suggests that MRET will trigger sufficient investment in renewable energy generation to meet the generation targets set out under the *Renewable Energy (Electricity) Act 2000* (the Act).

The Government has reaffirmed its commitment to MRET at the current level. Project proponents have presumably based their commercial investment decisions on the current MRET. The Government's recent decisions have not affected the broad parameters of the scheme and therefore it is unlikely that projects and their associated jobs and investment that are committed to proceed would be at risk as a result.

Question No. 14

Senator Allison asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

Will the standards for energy efficiency in commercial buildings be equivalent to those in Europe? What will the standards look like?

Senator Campbell – I provide the following answer to the Honourable Senator's questions.

The Australian Building Codes Board has reported that the proposed energy efficiency provisions for commercial buildings in the Building Code of Australia will be climatically appropriate, and that comparisons can only be made for equivalent climates and equivalent costs of construction and energy.

There is considerable variation across Australian climate zones. Our commercial building energy efficiency standards for Tasmania will be comparable, for example, to the UK.

Question No. 15

Senator Tchen asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

How much of China's 10% 2010 renewables target will be made up from hydro?

Senator Campbell – I provide the following answer to the Honourable Senator's questions.

Based on estimates from the International Energy Agency, in 2010, the vast majority of China's renewable energy generation will be made up of hydropower. China is currently developing a series of very large hydropower projects including the 18,000 megawatt Three Gorges project, which is expected to be completed by 2010.

Question No. 16

Senator Allison asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

What do you expect the reduction in diesel excise to mean by way of the take-up of alternative fuels like LPG? I focus particularly on LPG because it is the only one fuel with a significant sector of the market? What are the greenhouse implications for that? (transport use)

Senator Campbell – I provide the following answer to the Honourable Senator's questions.

The reduction in diesel excise is primarily for business use of heavy vehicles, ie vehicles over 4.5 tonnes Gross Vehicle Mass. LPG use in heavy trucks for the latest year available 2002 NGGI (2002 National Greenhouse Gas Inventory) was listed as effectively zero. This is primarily due to the lack of market ready commercially available engines. On this basis there will be no reduction in LPG use in this market.

Question No. 17

Senator Allison asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

What about the use of alternative fuels in forklift vehicles, so off-road use in factory applications, manufacturing applications and industry generally? Do you expect there to be a change?

Senator Campbell – I provide the following answer to the Honourable Senator's questions.

The Energy Task Force did not specifically examine the use of alternative fuels in off-road uses. The Department is currently examining policy options for off-road emissions through the Environment Protection and Heritage Council Air Quality Working Group.

Question No. 18

Senator Allison asked the Environment, Communications, Information Technology and the Arts References Inquiry - Energy White Paper, upon notice, 4 August 2004:

You talk about the 1100 power generation businesses. Do any of those currently involve cogeneration, use of gas? Is there likely to be a reduced take-up of cogeneration projects? There is quite a lot of cogeneration in GGAP; will there be in any of these measures?

Senator Campbell – I provide the following answer to the Honourable Senator's questions.

The expansion of Diesel Fuel Excise rebates is not expected to have any significant impact on the use of cogeneration in diesel generation in Australia.