



Emerging Renewables

Julia Gillard and Labor
Let's move Australia forward



EMERGING RENEWABLES

The Government will invest an additional \$40 million in emerging renewable energy technologies through the new *Emerging Renewables* program.

The program will deliver additional support for a range of cutting edge technologies that offer significant potential as future sources of large-scale base load power.

Why we are doing this – the facts

There are significant obstacles for private sector investment in emerging renewable technologies.

Much of the benefit of investment in emerging technologies is in the form of new learning, which accrues to the community as a whole and often cannot be fully captured by a private investor.

There is also an inherent incentive for firms to wait for other companies to bear the unpredictable 'first-mover' costs that are often associated with an unproven technology.

The up-front cost of investments in emerging renewables can be significant, with a high level of risk attached to future revenue streams which may be delayed for many years into the future.

In the absence of government assistance, investment in emerging renewable energy technologies would remain at an inefficiently low level.

While the Government is already providing significant assistance in this area, projects at different stages of the innovation lifecycle require different types of assistance.

How does this program relate to other assistance in this area?

The new program builds on the significant investment that Federal Labor has already made in the renewable energy sector, including through the Carbon Capture and Storage Flagship Program and the Solar Flagship Program.

This program is part of Federal Labor's plan to provide assistance to emerging renewable technologies right through the innovation chain, supporting projects from research and development and prototype design, through to demonstration, deployment and mature technologies.

Projects at the research and invention and prototype stages will be assisted by the R&D Tax Concession, the Australian Solar Institute and the Australian Research Council.

The *Emerging Renewables* program will target the prototype and earlier demonstration stages of the innovation lifecycle, where higher levels of risk can preclude private sector investment. It will help harness our unique combination of excellent universities and world class renewable resources in areas like geothermal and wave energy.

Projects at the later demonstration and deployment stages will benefit from the new \$100 million *Renewable Energy Venture Capital* program, which will make critical early-stage equity investments that leverage private funds into areas like large-scale solar thermal, wave and geothermal.

Renewable generation centres remote from grid connections will be linked to our homes and businesses through the new \$1 billion *Connecting Renewables* program, and all mature technologies will benefit from the 20 per cent by 2020 Renewable Energy Target, which will underpin \$19 billion of investment in renewable energy by 2020.

Who will benefit and what will change

The program will benefit renewable energy projects in technologies like wave energy and geothermal energy.

Wave energy offers significant potential as a concentrated and reliable source of renewable energy, with Australia having some of the best wave energy sites around the world. It is estimated that 1 million gigawatt hours of wave energy hits Australian shores annually.

Geothermal energy offers a potential source of zero emissions renewable energy suitable for base load electricity generation and direct-use applications, at prices comparable with fossil fuel sources.

Australia's geothermal resources place us in a strong position to build a world-leading geothermal industry. Geoscience Australia estimates that if just 1% of Australia's geothermal energy was extracted it could supply Australia's total annual energy requirements for 26,000 years.

The geothermal industry in Australia is at the cutting edge of technology development. It is currently in the process of drilling wells to determine accurately the heat resource, with a number of projects being funded by the Australian Government under its Geothermal Drilling Program. In addition, the Government is funding two geothermal demonstration projects through the Renewable Energy Demonstration Program.

The *Emerging Renewables* program will be open to existing geothermal projects already receiving assistance as well as new projects.

How will the funds be allocated?

Applicants will compete for limited grant funds based on the merit of their application.

The program will be administered by the Australian Centre for Renewable Energy, which will determine the best allocation of funding across competing technologies and projects.

As an indicative timeframe, it is expected that guidelines will be issued by November 2010, applications received by March 2011, and funding allocations announced in June 2011.

What is the impact on the Budget?

The \$40 million cost of this initiative has already been provided for in the Budget through the Renewable Energy Future Fund.

THE LIBERALS' RECORD

Tony Abbott broke the bipartisan consensus for action on climate change the night he became Leader of the Opposition, and reneged on his party's deal to support emissions trading.

- ✘ **Instead Tony Abbott is advocating a 'direct action' policy, under which emissions will actually increase.** Estimates from the Department of Climate Change show that under Mr Abbott's policy, emissions would increase by 13 per cent from 2000 levels.
- ✘ **Renewable energy went backwards under the former Coalition Government.** They let renewable energy drop backwards from 10.5 per cent of our national electricity supply in 1997 to only 9.5 per cent a decade later.
- ✘ **Under the former Coalition Government, Australia was part of the problem on climate change, not part of the solution.** If elected Prime Minister, Mr Abbott has already made clear he would cut funding for renewable energy:
- ✘ **The Coalition has promised to cut hundreds of millions of dollars of climate change funding.** This includes funding for renewable energy and energy efficiency.