



Renewable Energy Development Initiative (REDI)

First Round grant offers – 5 December 2005

- **Innamincka Hot Fractured Rock Power Plant**
Geodynamics Ltd (South Australia) -- \$5,000,000 - For a project that integrates sustainable heat mining from a Hot Fractured Rock (HFR) geothermal reservoir to produce zero-emission electricity. The project comprises the construction and operation of a high efficiency Kalina cycle generation plant based on existing geothermal wells near Innamincka, SA. The project will employ up to 50 people during construction and will be Australia's first HFR geothermal plant. [Contact: Mr Phillip Hutchings 0402 120 531]
- **World-Leading Reduced-Silicon Solar Photovoltaic Technology**
Origin Energy Solar Pty Ltd (South Australia) -- \$5,000,000 – For development of its Solar Photovoltaic SLIVER technology that is significantly more efficient, and will assist with fostering the uptake of solar power. The project will help Australia regain its global market share of the photovoltaic sector. [Contact: Mr Philip Mackey (08) 8245 8210]
- **5MW Solar Concentrating Array at Liddell Power Station**
Solar Heat and Power Pty Ltd (NSW) -- \$3,254,028 – For construction of a proof-of-concept solar-concentrating array, to provide pressurised hot water connecting to a coal fired power plant and to produce an additional 5MW of output solely from solar energy. [Contact: Mr Peter Le Lievre 0412 862 939]
- **Geothermal Power in the Limestone Coast (SA)**
Scopenergy Limited (South Australia) -- \$3,982, 855 – For a proof-of-concept project on the Limestone Coast which will lead to a 50MW geothermal power plant. The project will better define prospects for more than 1000MW of geothermal power in the region. The project will lead to an estimated greenhouse gas abatement of almost 40 million tonnes of carbon dioxide. [Contact: Mr Roger Massy-Greene (02) 9250 0100]
- **Solco low-cost, split, solar hot water system**
Solco Ltd (Western Australia) -- \$197,623 – To enhance a low-cost, plastic, high-pressure solar hot water system which will be suitable for frost/corrosive locations, providing pressurised or pump-boosted hot water, with a low environmental impact. The project will bring solar hot water systems within reach of developing overseas economies and communities, leading to export and employment opportunities in Australia. The project will assist families to have access to solar hot water technology that is reliable and cheap to run. [Contact: Mr Graham Leake (08) 9334 8120]

- **High-Penetration Wind/Diesel Product**
 Western Power Corporation (Western Australia) -- \$1,241,471 -- To deliver a flexible, reliable, Australian-produced wind/diesel product to the world market, capable of meeting the siting requirements of any location and the reliability and quality requirements of any technical standard. Australia will benefit in the long-term from using local technology and Australia's wind resource to displace diesel fuel, a finite resource. [Contact: Dr Paul Ebert (08) 9326 6339]
- **Strategic Well Location Procedure for landfill gas extraction**
 Renewable Australia Pty Ltd (NSW) -- \$70,886 – For a project to further develop strategic well location procedures. The project will find the ideal locations for gas extraction at landfill sites, resulting in increased efficiency, profitability and reliability. [Contact: Mr Jason Scarborough (02) 6337 1970]
- **Big Dish Solar Thermal Concentrator**
 Wizard Power Pty Ltd (ACT) -- \$3,478,876 – To develop a 2nd generation Big Dish with a 50 per cent solar-to-electricity conversion performance improvement and potentially a threefold reduction in overall manufacturing and maintenance costs resulting in commercially competitive cost per unit of energy output. [Contact: Mr Artur Zawadski (02) 6275 0750]
- **Vanadium Bromide Redox Cell Stack Design**
 V-Fuel Pty Ltd (NSW) -- \$290,000 – For a project to research and develop improved membranes, electrolytes and electrode manufacturing processes. This project will lead to prototype design, manufacture and testing of a new vanadium bromide redox fuel cell. It is estimated the project will generate \$8.5M in new export earning by 2011. [Contact: Mr Nick Kazacos (02) 9540 1939]
- **Fluid expander – small-scale solar thermal power generation.**
 Katrix Pty Ltd (Victoria) -- \$811,252 – To develop a new high-efficiency fluid expander to enable small-scale residential and commercial solar thermal power and heat systems. The project is expected to lead to significant reductions in consumer and commercial customer electricity costs of up to \$700 annually per unit. By 2007-08, 50% of the company's sales, worth \$20M, are forecast to be export sales, primarily to the United States. [Contact: Mr Attilio Demicheli (03) 9399 7102]