

Conference Report

ESITO Staff member name:	Brian Fawdray
Conference Name:	Clean Energy Summit 2009
Purpose and theme:	Developing and Commercialising Clean Energy
Date of Conference and Venue:	1 & 2 December 2009, Hyatt Regency, Auckland
Conference Summary	<p>Key stakeholders in the renewable energy sector presented on topics including: government policy, clean energy technologies and resources, clean energy projects, energy efficiency, emissions reduction, climate change and environmental initiatives.</p> <p>Although most presentations focussed on larger community scale renewable energy initiatives rather than at the micro generation level, regulatory and financial challenges were similar regardless of scale.</p> <p>Speakers and subjects are listed below, and most presentations can be viewed at the website also referenced below. Some interesting themes and comments made were:</p> <ol style="list-style-type: none"> 1. After Norway, New Zealand has the second largest proportion of electricity produced from traditional renewable energy sources, i.e. hydro and geothermal. Ironically the production of cheaper electricity relative to other countries has dampened demand for adopting new renewable energy technologies. As a result, many other countries are well ahead of NZ in the penetration of new renewable energy technologies and distributed generation. 2. Dry wood (a renewable fuel) contains about \$200 worth of energy per tonne but is exported for only \$75 per tonne. 3. All countries with successful renewable energy industries have feed-in tariffs. 4. When comparing generating technologies, only internalised (direct) costs are usually applied. Externalised costs, such those incurred though environmental damage, medical effects, and infrastructure support are not included. 5. Capital costs of renewable energy generation are decreasing with large scale PV approaching \$1.00 per watt, small scale PV to \$3.00 per watt and windpower expected to move from \$75 to \$30.00 per MWhr over the next 12-24 months. 6. 2% of NZ homes have solar water heating compared to 7% in Australia 7. One solar hot water heating panel replaces 1.4 tonnes of carbon per year.

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	<p>8. Wind energy represents 43% of new capacity in Europe and 42% in USA.</p> <p>9. Old forests and timber used for firewood are carbon neutral because they release as much carbon as they absorb when trees die or burn. Timber used for construction is environmentally positive because carbon is trapped in the wood.</p> <p>10. There is a worldwide shortage of skilled grid construction workforce. The existing workforce is “greying” with average age 45 and many over 50 years old.</p> <p>11. Wind and solar power present new control challenges for grid operators because generation capacity can vary rapidly, such as when a band of cloud passes over an area with a high density of PV installations.</p>
<p>Listing of Presentations</p>	<p>Mike Underhill, CEO, Energy Efficiency and Conservation Authority “Opportunities for New Zealand in the clean energy market”</p> <p>Hon David Caygill, Electricity Commission “Regulatory changes of renewable energy”</p> <p>Charles Chauvel, Labour Spokesperson on Energy & Climate Change “Fast tracking investments in clean energy”</p> <p>Dr David Wratt, NZ Climate Change Centre “Anticipating, mitigating and adapting to climate change”</p> <p>Nick Otter OBE, Carbon Capture and Storage Institute “Transitioning to a low-carbon economy – opportunities from CCS”</p> <p>Godfrey Bridger, Counties Power “Generating and transporting electricity generated from renewable resources”</p> <p>Graeme Ancell, Transpower “Fast-tracking investments in clean energy, industry challenges and opportunities”</p> <p>Murray Dyer, Simply Energy “Growing your clean energy portfolio through a mix of hydro, wind and other resources”</p> <p>Colin Harvey, GNS Science “Boosting investments in geothermal projects”</p> <p>Associate Professor Basil Sharp, The Energy Centre, The University of Auckland “Future of clean energy – developments and trends”</p> <p>Fraser Clarke, New Zealand Wind Energy Association “Managing investments in wind farms in the current economic climate”</p> <p>Terrence Currie, Major Electricity Users Group “Opening remarks from the Chair”</p> <p>Heinz Dahl, International Renewable Energy Alliance & World Wind Energy Assoc. “Prospects for a cleaner, smarter energy future”</p>

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	<p>Tim Cosgrove, Todd Energy “Growing your sustainability and renewable portfolio”</p> <p>Ken Humphrey, Energy 3 “Developing commercial distributed wind farm projects”</p> <p>Dr Tom Richardson, Scion “Assessing the potential of bioenergy – latest research & industry applications”</p> <p>Andrew Simcock, Biodiesel NZ “Developments in biodiesel”</p> <p>Brian Cox, NZ Solar Industries Association “Harnessing the power of the sun: future of solar energy”</p> <p>Fred Staples, PanPac Forest Products “Managing large-scale industrial production with clean energy”</p> <p>Rob Mclean & Russell Judd, N. Z. Climate Change Centre “Technical and practical developments in clean energy”</p> <p>Mike Allen, ReEx Capital Asia “Financing clean energy, global perspectives”</p>
<p>Website link for copies of presentations</p>	<p>http://www.activebusinesscommunications.com/cleanenergy09/protected.php Login: cleanenergy09 Password: summit</p>

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