RENEWABLE ENERGY POLICY: A LOCAL GOVERNMENT PERSPECTIVE

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To fulfill the requirements of a Masters of Science in Renewable Energy
School of Engineering
Murdoch University

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DECLARATION

This thesis contains no material that has been accepted for a degree or diploma by Murdoch University or any other institution, except by way of background information and has been duly acknowledged in this thesis, and to the best of the author’s knowledge and belief no material has previously been published or written by another person except where due acknowledgement is made in the text of this thesis.

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Signed:

Date: May 2011

Alison Johnson
ABSTRACT

This research project focuses on identifying barriers to new renewable energy electricity generation technology installations through Tasmanian local authority planning application processes.

Renewable energy technologies are expected to play a key role in the move towards a low carbon economy, providing local job opportunities and energy security (International Energy Agency 2009, 3). However, a wide range of economic, institutional, technical and cultural barriers currently prevent the renewable energy sector from achieving its full potential.

The private sector, research institutions and all levels of government each have key roles and responsibilities in identifying barriers and enabling support for appropriate renewable energy proposals.

The Australian Government has legislated through the expanded national Renewable Energy Target (RET) to increase renewable electricity generation to 20% by the year 2020 or 45,000 gigawatt-hour (Australia Department of Climate Change & Energy Efficiency (b) 2010, par.3-4), from an estimated 7% of total consumption in 2007-2008 (Geoscience Australia 2010).

Planning for increased appropriate renewable energy projects presents multiple benefits and opportunities for local communities. While each level of government has jurisdictional land use planning responsibilities, councils as the closest tier of government to the local community (International Energy Agency 2009, 19), play a central role as a local planning authority and as direct agents of change (United Kingdom Office of the Deputy Prime Minister (b) 2004, 43).
To provide further clarity on the nature of the problems surrounding local renewable energy proposals, this thesis gathered information on everyday council experiences assessing renewable energy applications in Tasmania. While Tasmania has a unique history with a relatively higher proportion of renewable generation, preventing the potential of renewable energy being overlooked by including renewable energy in urban planning is a similar approach in cities throughout the world (International Energy Agency 2009, 95). To identify end goals for the renewable electricity generation sector in Tasmania the current deployment of renewable energy, key government strategies and the number and type of recent planning applications in a single locality are analysed.

The public problem of how to support increased sustainable renewable energy deployment is discussed from a planning perspective, with various regulatory incentives and guidance/information policy deployment instruments (International Energy Agency 2009, 96) evaluated in the Tasmanian local government context.

It is proposed that by taking a proactive evidence-based approach to energy spatial planning, consistent, equitable, transparent and timely application processes can assist local governments to deliver the widespread implementation of sustainable renewable technologies.
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<td>Building Code of Australia</td>
</tr>
<tr>
<td>BOM</td>
<td>Bureau of Meteorology</td>
</tr>
<tr>
<td>CSIRO</td>
<td>Commonwealth Scientific Research Organisation</td>
</tr>
<tr>
<td>CSP</td>
<td>Concentrated Solar Power</td>
</tr>
<tr>
<td>DEWHA</td>
<td>Department of Water, Heritage and the Arts</td>
</tr>
<tr>
<td>EPHC</td>
<td>Environmental Protection and Heritage Council</td>
</tr>
<tr>
<td>GWh</td>
<td>Gigawatt-hour</td>
</tr>
<tr>
<td>IEA</td>
<td>International Energy Agency</td>
</tr>
<tr>
<td>LGA</td>
<td>Local Government Area</td>
</tr>
<tr>
<td>LGAT</td>
<td>Local Government Association of Tasmania</td>
</tr>
<tr>
<td>NEM</td>
<td>National Electricity Market</td>
</tr>
<tr>
<td>NIMBY</td>
<td>Not-In-My-Backyard</td>
</tr>
<tr>
<td>MUHEC</td>
<td>Murdoch University Human Ethics Committee</td>
</tr>
<tr>
<td>MWh</td>
<td>Megawatt-hour</td>
</tr>
<tr>
<td>ORER</td>
<td>Office of Renewable Energy Regulator</td>
</tr>
<tr>
<td>PIA</td>
<td>Planning Institute of Australia</td>
</tr>
<tr>
<td>PPS22</td>
<td>Planning Policy Statement 22</td>
</tr>
<tr>
<td>PV</td>
<td>Photovoltaic</td>
</tr>
<tr>
<td>REAA</td>
<td>Renewable Energy Atlas of Australia</td>
</tr>
<tr>
<td>REC</td>
<td>Renewable Energy Certificate</td>
</tr>
<tr>
<td>STCA, RCCI</td>
<td>Southern Tasmanian Councils Authority, Regional Climate Change Initiative</td>
</tr>
<tr>
<td>RET</td>
<td>Renewable Energy Target</td>
</tr>
<tr>
<td>TREIDB</td>
<td>Tasmanian Renewable Energy Industry Development Board</td>
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