

**DETAILING THE POLICY INTERACTIONS BETWEEN  
THE QUEENSLAND SOLAR BONUS SCHEME AND  
THE SMALL-SCALE RENEWABLE ENERGY SCHEME,  
INCLUDING THE SOLAR CREDITS MULTIPLIER,  
WHILE DETAILING THE SOCIAL, ECONOMIC AND  
ENVIRONMENTAL EFFECTS OF THESE SCHEMES.**

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## Abstract

The emergence in the need to evaluate the effectiveness of policies as a whole mix rather than evaluate the effectiveness of policies in isolation is becoming more useful as the policy environment becomes more crowded. This need is heightened considering the growing challenges of issues related to the sustainability of our energy resources. It's optimal if energy policies are not restricted to suit only economic objectives but social and environmental objectives as well, to suit emerging concept of sustainability, as energy underpins all the activity within our economy and society. The analysis of policy interactions is a relatively new approach in determining and evaluating appropriate policy mixes, rather than focusing on the effectiveness of a single policy. Sorrell (2003) has developed a systematic process for developing policy options by breaking them down into different categories for comparison.

Oikonomou and Jepma (2008) have further built upon this framework in analysing policy interaction by establishing a qualitative framework as part of their methodology. The Queensland Solar Bonus Scheme (QSBS) and Small-Scale Renewable Energy Scheme (SRES) have similar objectives of increasing the implementation of small-scale renewable energy technologies. This dissertation investigates the policy interactions between the QSBS and SRES using the frameworks provided by Sorrell (2003) and Oikonomou and Jepma (2008). The results find the majority of the interactions between these policies are complementary and non-duplicative. This research recommends two policy options which support their beneficial interactions outlined in the discussion. The first policy option assumes a reduction in the tariff rate for the QSBS whilst increasing the PV system limit to 10 kW. The second policy option assumes the same system limit increase to 10 kW plus a reduction in the tariff rate for non-peak full-tariff payments during peak demand to customers who have invested in battery storage.



## List of Abbreviations

RE technology – Renewable Energy Technology

RET – Renewable Energy Target

QSBS – Queensland Solar Bonus Scheme

SRES – Small Scale Renewable Energy Target

SCS – Solar Credits Scheme

FiT – Feed-in Tariff

RPS – Renewable Portfolio Standard

Solar PV – Solar Photovoltaic

eRET – enhanced Renewable Energy Target

SGUs – Small-scale generation units

GHG – Greenhouse Gas

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## Introduction

This research is based upon the subject of policy interactions. Two different policy mechanisms are used to discuss the issue of these interactions. These are renewable portfolio standards and feed-in tariffs. The aim of this research is to detail and investigate the policy interactions between the Small-Scale Renewable Energy Scheme and the Queensland Solar bonus scheme. This is achieved using systematic processes outlined in the following (two) journal articles titled:

Oikonomou, V. and Jepma, C. (2008). A Framework of interactions of climate and energy policy instruments. *Mitigation and Adaptation Strategies for Global Change*, 13: 131- 156.

Sorrell, S. (2003). Interaction in EU Climate Policy. Final Report. March 2001 to March 2003.

The specific objectives of this research are:

- To explore the operation of renewable portfolio standards and feed-in tariff policies whilst briefly exploring the variety of policy approaches different countries adopt around the world.
- To detail and analyse the policy interactions between the Small-scale Renewable Energy Scheme (SRES) and the Queensland Solar bonus Scheme (QSBS) incorporating the systematic process employed by Sorrell (2003) using the following criteria: scope, objectives, operation, implementation and timing.

- To detail and analyse the policy interactions between the SRES and QSBS using the following criteria as described in Oikonomou and Jepma (2008): measure/identification, objectives, scope, market arrangement, market flexibility, financing, technological parameters, timing, compliance parameters and institutional set up.
- To investigate where the interaction of these schemes have complementary effects, and where these schemes have counterproductive effects.
- Develop a basic evaluation of the impacts the SRES and QSBS have on a few similar topics described in Oikonomou and Jempa (2008).
- To discuss the social, economic and environmental impacts of these schemes in the realm of sustainability.
- Make suggestions and recommendations of how the performance of these policies can be improved based upon the findings of interaction analysis between the SRES and QSBS.
- Provide and discuss two possible integrated policy schemes.

## **Limitations to this research**

Some of the limitations to this research include:

- It proved to be difficult to source accurate data from various Government bodies, as some data is protected and not available to the public.
- I did not have sufficient time or capacity to fulfill the full multi-criteria assessment as employed through the methodology of Oikonomou and Jepma's (2008) in order to suggest possible integrated schemes.
- As the Renewable Energy Target policy changed to the enhanced Renewable Energy Target mid-project, some of the results and data released from the Office of the Renewable Energy Regulator was indirect.
- There was a very small amount of data released about the financial aspects of the SRES since it is so young in implementation and certain data was not made available to the public.
- There was very limited statistical data for the QSBS available for the public. Most of the information I have sourced is from Mark Hazle, a policy officer from the Office in Clean Energy in Queensland and annual reports from energy retail providers such as Ergon Energy and Energex.
- As the study of policy interactions has not been sufficiently explored, there is a limitation in research papers directly

regarding policy interactions. (Some research papers were inaccessible in doc format).