Renewable energy accounting in the new policy environment

Tim Kelly Version 3, August 2009

Themes

- 1. How is Renewable energy accounted for
- 2. Has anything changed recently?
- 3. Current Risks for the users of purchased Renewable Energy

Renewable energy accounting before July 2008

There was no legislative framework that accounted for the 'greenhouse gas emissions' or 'use' aspect of renewable electricity.

Emissions

Without legislative foundation, the AGO Factors and Methods Workbook and subsequent National Greenhouse Accounts (NGA) Factors (2008) document allocated an averaged emissions rate (including from the renewables) to all electricity consumers in a state according to their use

<u>Use</u>

There was no legislative framework that legally assigned renewable energy 'use' to any party even in RECs and GreenPower transactions

RECs under the Manadatory Renewable Energy Act 2000

Renewable Energy Certificates were and are nothing more than a 'proof of generation' certificate

Has anything Changed?

NGERS DETERMINATION

- The Final Determination was released on June 27, 2008 and came into force on July 1, 2008.
- The use aspect and reduced emissions were legally assigned to all grid customers. "No other method is supported" (see Pages 305-307 of the NGERS Technical Guidelines 2008).
- The Department of Climate Change locked in the physical approach to accounting for electricity meaning that renewable energy is the same as standard electricity for customers.
- NGERs makes no provision yet for user renewable energy projects.

The Department of Climae Change built known problems into Australia's legal frameworks!

NGERS DETERMINATION

" $Y = Q \times EF/1000$ "

"Note There is no other method for this section" Pg 308, NGER Technical Guidelines.

"The scope 2 emission factors are state-based emission factors from on-grid electricity generation calculated systematically from the physical characteristics of the electricity grid".

"The state-based emission factor calculates an average emission factor for all electricity consumed from the grid in a given state, territory or electricity grid".

"All emissions attributable to a state territory or grid's electricity consumption are allocated amongst individual consumers in proportion to their relative level of consumption" *Pg 310, NGER Technical Guidelines.*

Renewable Energy Certificates

RECs are 1 MWh (of nothing) from an accredited renewable energy source.

RECs are not a carbon credit.

RECs do not enable reduced or avoided emissions to be reported under NGERs.

RECs are not a rebate.

RECs do not represent use of renewable energy.

RECs are the best we have to demonstrate a legitimate voluntary contribution towards Renewable energy.

BUT, Voluntary surrender of RECs to the Office of the Renewable Energy Regulator, or via GreenPower only works as a donation.

Complications surrounding RECs

GreenPower is founded on RECs.

GreenPower and voluntary retirement of *RECs to ORER* are presented in a false and misleading way in my view creating ongoing risk to consumers that make claims of reducing their emissions.

Th GreenPower double count involves close to one million voluntary customers.

Also

Selling RECs from an on-site power generation system either:

- 1.Displaces other renewable energy already required by law; or,
- 2.Has been used to create GreenPower (until July 2009) or voluntary RECs displacing other renewable energy that would that was already required by law
- RECS sold from household hot water systems and SGUs have not resulted in any additional renewable energy Australia wide.
- Solar credits For every 1MWh deemed, 5 RECs can be sold reducing Australia's renewable energy by 4MWh.

As of July 1, 2009, GreenPower will not allow Solar Credits

Carbon Pollution Reduction Scheme (CPRS) impacts on Renewable Energy

- Emissions Trading has severe crippling impacts on voluntary market mechanisms and the role of voluntary action including *GreenPower*.
- The Australian Government is now proposing to reduce Australia's Cap with *GreenPower* sales above a 2009 threshold. This is a manual fix to try to recognise this voluntary mechanism. (the 'Fix' can only work if the cap is reduced by Government in a way that does not influence scarcity of permits).
- The cap will not be reduced for voluntary REC retirements outside the GreenPower program (written confirmation has been sought on this matter from DCC since mid May).
- The fix does not remove the underlying accounting problems of voluntary renewable energy and will create greater confusion where 1) the National reduction will be claimed by one party 2) the actual reduced emissions will be assigned to all grid users and 3) the actual reduced emissions will also be claimed in context, belief and marketing by the paying GreenPower customer.

National Carbon Offsets Paper

NCOS Consultation Draft did not cover renewable energy

Mixed Messages from DCC leading up to the GreenPower announcement and continuing

NCOS reportedly to be finalised within 2- 4 weeks

Renewable energy considered against the suite of Policy Papers and Legislative Frameworks

The Renewable Energy (Electricity) Act 2000 does not address the accounting of greenhouse gas emissions from renewable energy in any way.

The CPRS GreenPaper, WhitePaper and first consultation draft of the legislation did not address renewable energy accounting matters. The *GreenPower* partial fix was created on May 4, released on May 9.

NCOS did not consider customer renewable energy as an option.

The National Energy Whitepaper did not address customer renewable energy matters.

The NGERs Legislation Package does not enable the concept of customer renewable energy.

GreenPower Marketing - Inconsistent and misleading Statements from the GreenPower Website

- "Make the switch and cut your greenhouse gasses today" NO
- "850,000 Australians have switched and are already reducing their impact on Climate Change." NO
- "GreenPower retailers' sales and purchases are independently audited annually to ensure the electricity they agree to buy on your behalf (NO) is actually purchased and is fed into the electricity grid". YES
- "GreenPower is your guarantee that you are getting what you pay for". NO
- "You can relax knowing it has the Government's tick of approval" NO
- ... "The only Government accredited renewable energy". NO- It is a donation scheme not a purchase scheme
- "What environmental benefits should accredited renewable energy deliver?

For the energy you use, purchasing accredited renewable energy should:

- cut your greenhouse gas emissions; YES but GreenPower doesn't do this !!!!!!
- reduce your contribution to climate change" YES but GreenPower Doesn't do this !!!!!!!
- "Where does the electricity go?
- Your purchase of accredited renewable energy does not mean your electricity will come directly from a renewable source to your property. Instead the equivalent amount of new renewable energy is added to the electricity grid on your behalf every year so you will be responsible for a reduction in greenhouse gas emissions" YES.

The full range of comments (some shown here) provided by GreenPower create a false and misleading picture. How the grid works is included, but how the benefits are legally assigned is not presented in an open and transparent manner. Some statements are blatantly wrong, others irrelevant green dribble.

Similar Problems reflected in marketing by State Governments

SA – "GreenPower is the Perfect Solution"

Victoria - "Debate continues as to whether RECs are an offset"

Victoria - "State Essential Services Commission guidelines No. 13 for customer billing as:

State Emissions Factor * (electricity used – GreenPower used) = 0 tonnes CO2-e.

Etc etc.

The issue is not about the physical transfer of electricity, or physically linking to a source.

The issue is about the accounting of 'use' and 'reduced emission' benefits, legal assignment of those benefits, and the double counting that results from creating a customer belief of what they are buying when the essential element of their purchase has already been given to others.

Some consequences

The low carbon economy can never make sense and can never be fair under the double counting of GreenPower.

GreenPower customers pay for more than 100 % renewables – 120% by 2020 + extra for others with exemptions.

Carbon costs are likely to be passed through to most GreenPower customers.

States and large businesses free-ride on renewable energy electricity use, and reduced scope 2 emissions.

Customers are given multiple and conflicting messages that do not align with Australia's law.

Renewable energy is an option to tackle the source of 50% of Australia's emissions but the market signals are perverted.

ACCC Website (4-8-2009)

"Renewable or 'green' energy has a role to play in reducing your carbon footprint". (No it does not reduce 'your' carbon footprint, it reduces the carbon footprint of all grid electricity users).

Renewable energy

"Burning fossil fuels such as coal and gas to produce electricity is a major source of greenhouse gas emissions. Generating energy from renewable sources such as wind, solar and others, produces less emissions". (Yes)

"Switching to electricity officially accredited as coming from these sources—known as GreenPower™—is a recommended way of reducing your carbon footprint". (No it is not under Australian Law! This statement is false and misleading. The ACCC should be explaining how the system works and where the benefits are allocated under NGERs. The ACCC should make it clear that GreenPower works as a donation whereby physically, the renewable energy is fed into the grid and a customer's electricity is fed is from all sources and legally, the benefits of reduced emissions and renewable energy use are assigned to all grid customers in proportion of use. This would then allow customers to make an informed choice)

"Some carbon offset providers also count renewable energy projects as a type of offset". (The ACCC Should make it clear that this refers to international offsets under the Clean Development Mechanism, etc, This is not a correct statement in regard to Australian renewable energy where no such mechanism exists).

ACCC Website continued

"If you pay for accredited renewable energy projects as an offset, you can be assured that a range of important factors have been taken into account. These factors include making sure the offset has not been counted towards other schemes, is permanent and secure". (This statement is not true. GreenPower has already been counted towards all electricity customers under NGERS)

"You can also be confident that the offset is above mandatory levels". (Not really. In the longer term, under the Exposure draft of the expanded Renewable Energy Target, GreenPower can be counted towards the Government's 20% target by 2020. Whilst the 45000 GWh is a mandatory component that does not include GreenPower, the total 20% target can include GreenPower). Energy companies are required by law to buy a certain amount of electricity from renewable sources, which means that some renewable electricity would have been generated whether you bought it or not. In other words, if the electricity is not above these 'business as usual' levels, its value as an offset may be limited. For more information visit www.greenpower.com.au. Important notice

"The ACCC material on carbon offset claims is currently under review in light of the Australian Government's development of a Carbon Pollution Reduction Scheme (CPRS)". (Why does the ACCC not review their advice under NGERS?????) "The ACCC's review of this material will be contingent on the CPRS being finalised". (NGERS has been finalised for over a year!!!).

Where does this leave GreenPower Customers

We can, do and should lobby for reform, to assign the benefits of renewable energy to the customer.

Policy decisions are made by Government so reforms are not assured.

Clarity however, is an essential aspect that we can demand.

The Trade Practices Act (1974) applies to all claims.

The Department of Climate Change does not force customers to make claims that are not founded in law – This is our choice.

If the Frameworks are not changed, renewable energy use, avoided emissions, carbon neutral claims should be replaced with donation to the grid claims.

Supporting renewable energy will still have many merits!

Buying Renewable Energy

- •There are no protections for renewable energy customers against carbon costs, MRET costs, or Feed-in scheme costs. We may end up paying for 103% increasing to 120% renewable energy + compensation for others.
- •Traditional *Green on Black* approaches can lock in carbon cost exposure
- •GreenPower customers should seek a total bundled approach that eliminates carbon pass through costs (firming up mechanism costs are acknowledged).
- •Buying RECs or GreenPower in isolation of energy is sometimes necessary but when doing so, carbon costs in energy contracts are not prevented.

What should GreenPower Customers Demand?

- A single set of rules that apply to both mandatory programs and voluntary markets for long term energy management decisions to be possible. Full integration and or linking between the CPRS, NGERS, MRET, and GreenPower.
- 2. The ability to chose away from GHG intensive electricity to low emissions electricity products and in doing so:
 - Avoid carbon costs
 - Avoid double payments for renewable energy
 - Avoid the need to pay extra to carry other customers that have exemptions from CPRS and the expanded Renewable Energy Target
 - Receive legal entitlements to use and avoided emissions of accredited renewable energy
 - Acknowledge that there is a different cost for renewable energy and the necessary firming up mechanism.
- 3. GreenPower to be reformed in a National Accreditation Scheme.

Notes with claims

In order to prevent double claiming of scope 2 emissions benefits, Customers should report GreenPower use as an action that benefits others to reduce their emissions.

Greenhouse benefits should be noted under the scope 3 emissions category until further clarity or reform is provided.

A suggestion is that GreenPower contribute to an equivalent net emissions number, being the net value that emissions would be if voluntary action was assigned to a customer's inventory.

Questions and Discussion

