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16-11-07

To

The Greenhouse and Energy Reporting Taskforce
Australian Greenhouse Office
Department of the Environment and Water Resources

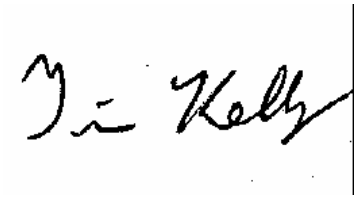
RE: Submission on the Regulations Discussion Paper for the National Greenhouse and Energy Reporting Act 2007.

Dear Greenhouse and Energy Reporting Taskforce

Thankyou for the opportunity to comment on the Regulations for the *National Greenhouse and Energy Reporting Act 2007.*

I support the consultation process that the Taskforce is undertaking on such an important framework that will help support State, National and potentially International initiatives that are required to reduce greenhouse gas emissions and stabilise our climate for current and future generations.

Kind regards



Tim Kelly
Private Citizen

Tim Kelly - Submission on the Regulations Discussion Paper for

National Greenhouse and Energy Reporting.

The need to address double counting

There are three key documents that need to work together to create the framework for National Energy and Greenhouse reporting. These are:

- The *National Greenhouse and Energy Reporting Act 2007* (Act).
- The Regulations to support Act.
- The Australian Greenhouse Office Factors and Methods Workbook

At least one of these documents, and preferably both the Regulations and any new AGO Factors and Methods Workbook should address the current problems of widespread double accounting of renewable energy, and reform the methods for creating and using aggregated and product specific electricity emissions factors (see *Greenhouse Confusion – Renewable energy, smoke and mirrors* as attachment 1).

Because the new Act does not contain clear guidelines that tackle this problem, I urge that a more affirmative approach is taken in the Regulations to prevent double counting through introducing mandatory requirements and penalties to prevent any combination of possible multiple claims. Penalties are required to prevent misleading advice, including through perpetuating belief that hard wiring equates renewable energy use despite of renewable energy certificates (RECs) sale to others (for example – by not telling household PV systems owners and solar hot water system owners what it means when they sell their RECs, or through state aggregated emissions factors that don't net out renewable energy sold separately or across state borders, or through selling old hydro power as something additional to standard electricity).

It will then be important to introduce specific guidelines and requirements in the AGO Factors and Methods Workbook that provide clarity and detail in how individuals, businesses, and states can avoid and prevent double counting.

For this reason, I ask to be involved in consultation on the greenhouse gas emissions calculation methods which are to be held as a separate process.

QUESTIONS FOR FEEDBACK: Chapter 2 – Interpreting the legislation

Under 2.6.2, The importance to define facility as a single physical area or location is acknowledged. Assuming that the Regulations will guide this process, the next step is to provide adequate rules for trading products such as accredited renewable energy, greenhouse offsets and other products into and out of a facility, across the boundary where these may alter the emissions profile of the facility and the organisation as a whole.

It is important that the regulations ensure that there are no opportunities for using boundary rules to double count greenhouse benefits or prevent the legitimate trading of products that may have a benefit into or out of a facility.

Tim Kelly - Submission on the Regulations Discussion Paper for

National Greenhouse and Energy Reporting.

FEEDBACK: Chapter 4 – Reporting obligations

4.1 Energy Production and consumption

It is acknowledged that there will be consultation on energy production and consumption definitions and methodologies through a separate consultation process as described in section 2.3 however, it is worth noting that the greenhouse emissions intensity is an essential requirement of any generation data and of any energy use reporting. These critical aspects must be dealt with in a detailed manner, not by just using an aggregated state emissions factor because many unique and different renewable and low emission energy products are now being sold separately to the standard grid electricity product.

It is important to provide separate definitions for the *consumption of energy* and the *consumption of renewable energy*. If there is going to be a voluntary market for renewable energy based RECs, it cannot be based on hard wired or connection to a grid. The use of all renewable energy associated with accredited grid connected systems must be based on the ownership of the RECs certificates and surrender of those certificates to the Office of the Renewable Energy Regulator (ORER) on behalf of the user.

The exception would occur for renewable energy from hard wired renewable energy systems when there are no RECs created or sold and no other form of the renewable energy is sold.

To do less would continue to encourage situations where a hard wired claim and a RECs claim are made at the same time.

4.4 State and Territory Data

It is welcome that the discussion document reminds readers that the object of the Act is to introduce a "*single national framework for reporting and dissemination of information on greenhouse gas emissions, greenhouse gas projects, energy consumption and energy production*".

The document goes on to inform that the provision for regulations may be made under s19(9) of the Act to assist in "*the process of streamlining reporting requirements nationally*".

In doing so, the approach to dealing with States should be similar to the approach that covers corporations and facilities because when States make claims in relation to targets such as renewable energy use or State emission offsets from re-afforestation within their borders, they are suggesting a level of operational control and responsibility over the facilities operating within their boundary (the State borders).

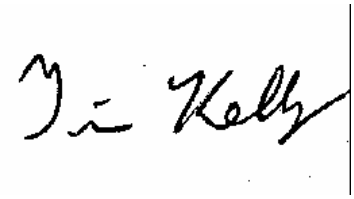
Therefore the State reporting of Greenhouse gas emissions, energy production and energy consumption and renewable energy consumption are essential data reporting elements.

Claims should deal with the trading of accredited greenhouse offsets and renewable energy certificates into and out of State borders. States should comply with the same standards for reporting and verification as for any other organisation under National rules. It is only through such an approach, that emissions trading and the trading of renewable energy and low emissions energy can be supported with confidence by Australian businesses and consumers.

> Some have suggested that it may be to difficult to achieve a framework that nets out renewable energy sold across State borders and that therefore we must continue the approach that double counts renewable energy into state aggregated emission factors. If this were the case (and I do not believe it is) , there should be a single National aggregated electricity emissions factor, no State based claims and no voluntary market for renewable energy.

Thankyou again for providing the opportunity to comment on the Regulation Discussion Paper.

Kind regards



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APPENDIX 1 ***Greenhouse Confusion Renewable Energy, Smoke and Mirrors***

Greenhouse Confusion
Renewable Energy, Smoke and Mirrors

Taking a look at double counting, confusion and misleading claims in greenhouse and renewable energy accounting in Australia.

Tim Kelly

May 25, 2007

Revised November, 2007 #17

INTRODUCTION

The purpose of this paper is to encourage policy makers, scheme administrators, businesses and individuals to support renewable energy and other low emissions technology in a way that is robust and avoids claims of renewable energy being used more than once. The paper explores the problems associated with the accounting of greenhouse and renewable energy in Australia and how current systems contribute to confusion and, double counting.

As Australia moves into an increasingly carbon constrained environment, carbon transactions are increasing and greenhouse accounting systems need to be closely scrutinised. It is important to ensure that greenhouse accounting methodologies are robust and consistent in the same way that society demands financial accounting systems meet the highest scrutiny.

There are three key players involved in reducing greenhouse gas emissions from electricity generation:

1. Government Policy

2. Electricity producers to provide low emissions electricity

3. Electricity consumers that voluntarily buy renewable and low emissions electricity from the market in addition to any mandatory component.

From a market perspective, consumers are embracing their role to manage and reduce their greenhouse footprint in ever growing numbers and therefore problems in the accounting of market transfers can no longer be seen as trivial.

The current patchwork of overlapping programs and accounting frameworks creates traps and causes individuals, businesses and even states to make misleading claims regarding their greenhouse emissions reporting and greenhouse mitigation. Although mistakes may have been unintentional in the past, it is already apparent that there will be some difficulty to break the shackles and reform the un-planned patchwork of greenhouse and renewable energy accounting frameworks because of the impact this might have on existing market players.

So which frameworks allow greenhouse confusion, smoke and mirrors to happen, what can be done, and which jurisdictions could fix the problems?

ACCOUNTING FRAMEWORKS

The Australian Greenhouse Office (AGO) Factors and Methods Workbook

The AGO Factors and Methods Workbook is the main reference document for Australian organisations in their greenhouse gas emissions reporting. *The AGO Factors and Methods Workbook* (2006)[1] includes a wide range of emission intended to be default factors - to be used in the absence of better information. The workbook states that it is "designed to be consistent with both international reporting frameworks" namely the World Resources Institute/World Business Council for Sustainable Development, Greenhouse Gas Protocol: *A Corporate Accounting and Reporting Standard* (2004).

The AGO Factors and Methods Reporting guides the reporting of direct greenhouse gas emissions (Scope 1 emissions), indirect emissions from electricity consumption (Scope 2 emissions) and other indirect emissions from embodied in purchased or sold goods and services, or from outsourced activities (Scope 3 emissions).

The AGO also established the Greenhouse Challenge Program for business organisations to voluntarily identify and monitor their emissions, report their emissions and develop action plans to reduce their emissions

Mandatory Renewable Energy Target

In relation to renewable energy, the Federal Government established a market and accounting framework to implement the Federal Governments renewable energy generation target under the *Renewable Energy (Electricity) Act 2000* (the Act), *Renewable Energy (Electricity) Charge 2000* and the *Renewable Energy (Electricity) Regulations 2001*.

The legislation established the Mandatory Renewable Energy Target (MRET)[2] requiring renewable energy generation of 9,500 GWh per year by 2010, and to

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[1] Australian Greenhouse Office (2006) AGO Factors and Methods Workbook accessed online on May 25, 2007 http://www.greenhouse.gov.au/workbook/pubs/workbook2006.pdf

[2]Australian Government, Office of the Renewable Energy Regulator (200), About the Mandatory Renewable Energy Target (MRET) Accessed online May 25, 2007, http://www.orer.gov.au/about/mret.html

continue until 2020, facilitated by liable electricity wholesalers and retailers to acquire or in effect cause the use of renewable energy. The Office of the Renewable Energy Regulator (ORER) was established as the statutory authority to oversee the implementation MRET, and created a Renewable Energy Certificate (REC) Register that is publicly accessible such that each MWH of renewable electricity that is traded is tracked and publically reported on creation and ultimate surrender to ORER.

Other Accounting or Accreditation Frameworks

Other accounting or accreditation frameworks have been established in State based initiatives or specific branding accreditation schemes. These include the New South Wales Greenhouse Gas Abatement Scheme, GreenPower and Greenhouse Friendly to name a few.

The accounting or accreditation frameworks that are in place are not integrated and the end result is a overlap, inconsistent greenhouse reporting and double accounting.

SO HOW DOES DOUBLE ACCOUNTING OCCUR?

Trap 1 - Using electricity from a renewable source versus using renewable electricity.

There is a key difference between '*purchasing electricity from a renewable electricity provider'* and '*purchasing renewable electricity'*. This is because the trading of renewable electricity is carried out through certificates and accounting, not through the wires. Once the renewable electricity provider has created a REC it must be considered that no further renewable electricity exists from that source in any physical sense or else the whole concept of trading becomes invalid. Unfortunately the guidelines that cover REC transactions don't spell this out clearly enough and there are wide differences of opinion such that some players still see RECs as separate to renewable electricity.

Large scale customers are being caught up by the lack of guidance that presently exists, and are making claims that are unsustainable and investment decisions which don't budget for the cost of purchasing RECs.

It is important that issues associated with RECs are addressed, particularly since legislation changes in 2006[3] now enable RECs to be purchased as an emissions abatement product by any person or organisation, whereas previously this trading was limited to MRET liable energy wholesale and retail companies. The traps will persist until the guidelines are made much clearer.

Trap 2 – Aggregated State Emissions Factors

The first big problem is caused by the way the AGO Factors and Methods Workbook in its state aggregated emissions factors for standard electricity. These factors convert the kilowatt hours to equivalent carbon dioxide greenhouse gas emissions (CO2-e) in kilograms and are used on electricity billing information of greenhouse gas emissions on standard electricity bills for consumers, and by Greenhouse Challenge Members.

Electricity emissions factors for consumers (as scope 2 emissions) are based on the following formula from the 2006 edition of the AGO Factors and Methods Workbook.

$$EFG\ scope2_i^t = \frac{Combustion\ emissions\ from\ electricity\ consumed\ from\ the\ grid\ in\ state\ i\ (CE\_C_i^t)}{Electricity\ sent\ out\ consumed\ from\ the\ grid\ in\ state\ i\ (ESO\_C_i^t)}$$

where 'combustion emissions from electricity consumed from the grid in state i' ($CE\_C_i^t$) and 'electricity sent out consumed from the grid in state i' ($ESO\_C_i^t$) are defined in terms of the state's electricity grid production, imports and exports as follows:

$$CE\_C_i^t = CE\_P_i^t + \sum^{j}\left(\frac{ESO\_M_{j,i}^t}{ESO\_P_j^t} \bullet CE\_P_j^t\right) - \sum^{k}\left(\frac{ESO\_X_{i,k}^t}{ESO\_P_i^t} \bullet CE\_P_i^t\right)$$

$$ESO\_C_i^t = ESO\_P_i^t + \sum^{j} ESO\_M_{j,i}^t - \sum^{k} ESO\_X_{i,k}^t$$

where $CE\_P^t_i$ = total CO_2-e emissions from fuel combustion at generation attributed to the electricity generated/produced for the grid in state i in financial year t,

$CE\_P^t_j$ = total CO_2-e emissions from fuel combustion at generation attributed to the electricity generated/produced for the grid in state j in financial year t,

$ESO\_M^t_{j,i}$ = imports of electricity sent out from state j to state i in financial year t,

$ESO\_P^t_j$ = total electricity sent out on the grid that is generated/produced within state j in financial year t,

$ESO\_X^t_{i,k}$ = exports of electricity sent out from state i to state k in financial year t, and

$ESO\_P^t_i$ = total electricity sent out on the grid that is generated/produced within state i in financial year t.

[3] Government of Australia, Office of the Renewable Energy Regulator (2007), **V*oluntary Surrender of*** RECs accessed online May 25, 2007, http://www.orer.gov.au/new.html

This formula reveals that the emissions factors are not adjusted to net out the sale of renewable electricity, lower emissions electricity (such as specific contracts for from natural gas based electricity) and interstate flows of renewable energy.

Another way to show the equation above is as follows:

$$EFG\ Scope\ 2 = \frac{\text{Emissions from } [\text{All voluntary and mandatory renewables, and low emission electricity sources}] + [\text{Standard Fossil Fuels}]}{\text{Electricity consumed in the state (including electricity from SA renewables and low emission sources)}} \quad \text{(Tonnes } CO_2\text{-e)} \quad \text{(MWh)}$$

The obvious question is "*Why are renewables (including their emissions reduction benefit and related electricity) that are sold separately interstate or to voluntary green power customers, still being counted in an emissions factor used for standard electricity bills*?"

The result is that every MWh of renewable electricity sold interstate as RECs, and every MWh of renewable electricity sold to a renewable energy customer, is still counted to reduce the emissions intensity of standard electricity sales.

All renewable electricity sold in specific renewable energy products is still counted to reduce the emissions intensity of standard electricity sales.

With growing sales of renewable electricity across state borders, to businesses and residential customers, double counting looks set to increase.

A solution would be for the Australian Greenhouse Office to prepare a state *Standard Electricity Emissions Factor* that has made adjustment for renewable electricity that is imported or exported interstate and netted out any renewable electricity sold as separate products within a state. The *Standard Emissions Factor* would only include the emissions and electricity consumed that remained in the standard pool.

With increasing trade of zero emission electricity products or electricity products of differing emissions intensity (such as purchasing natural gas electricity in preference to coal based electricity), it can be argued there is a greater need for product specific emissions factors to be used. If this was to happen, each time a product of specific emissions intensity was sold, it would not be counted towards a suggested *Standard Electricity Emissions factor.*

Issues with RECs

Inadequate guidelines for reporting and accounting of RECs cause significant confusion that leads to double accounting.

Trap 3 – Inadequate State reporting

The Office of the Renewable Energy Regulator does not report on interstate flows of RECs so there is no reliable data on the use of renewable electricity by states and this paves the way for state claims that ignore the trading of renewable energy sold across their borders. South Australia provides the most dramatic example. The State produces approximately 45% of the nations Wind Power and has a Tackling Climate Change Strategy with the following targets:

- Increase the proportion of renewable electricity generated so that it comprises 20% of electricity generated in South Australia by 2014
- Increase the proportion of renewable electricity consumed so that it comprises at least 20% of electricity consumed in South Australia by 2014 target of 20% renewable energy generation and use by 2014[4].

The State has no Mandatory Renewable Energy Target of its own yet it has excellent wind resources and has played its part to bring the Federal MRET driven renewable energy development to South Australia. There is no question, that there has been progress towards 20% Renewable generation. Regarding renewable energy use however, the vast majority of RECs from South Australia's renewable generators are likely to be sold to wholesalers and retailers liable for MRET obligations in other

[4] Government of South Australia, (2007) *South Australia's Strategic Plan*, accessed online May 25, 2007, http://www.saplan.org.au/plan_targets_obj3.php

states. Claims on South Australia's high use[5] of renewable electricity use are therefore misleading.

Claims on South Australia's high use of renewable electricity are misleading. It is a trap to equate State based renewable energy <u>generation</u> with <u>use</u>.

Indeed this situation could soon create the perfect double counting system whereby South Australia could generate renewable electricity that is around 20% of its total demand and claim this as use, whilst at the same time selling almost all of this to other states to meet their Federal MRET obligations or to the recently announced New South Wales NRET scheme. NRET is intended to allow for the purchasing of renewable energy from other states to achieve 10% renewable energy use by 2010 and 15% by 2020 in New South Wales.

<u>Trap 4 - Hot Water System RECs and Transaction Disclosures</u>

The Federal Government has allowed Renewable Energy Certificates to be created from solar hot water heaters for the standard electricity they displace. Indeed hot water RECS now make up a staggering 21% of the total RECs produced in Australia (958,814 certificates in 2005)[6]. The problem becomes evident in the many householders that have received RECs payments for their solar hot water systems, whilst still believing that they are using the renewable energy. It is not made clear on the ORER website or in standards for RECs transactions that once their RECs are sold they are no longer the users of the renewable energy. In effect, once they have sold the renewables it could be argued that they are using the equivalent of standard electricity to heat their water.

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[5] South Australia's Strategic Plan Audit Committee June (2006), *South Australia's Strategic Plan Progress Report 2006, accessed online May 25, 2007,* http://www.saplan.org.au/documents/SASPProgressReport_June2006_Objective3.pdf

[6] David Rossiter D & Amarjot S.,Office of the Renewable Energy Regulator (2006) *Australia's Renewable Energy Certificate System,* Accessed online 25, May 2007, http://www.orer.gov.au/publications/pubs/rec-system0506.pdf

Many Householders do not understand that when they sell their RECs, another party legitimately claims the use of their renewable electricity.

Trap 5 - Solar Hot Water RECs and claiming future carbon benefits

Another problem with Solar Hot Water RECs[7] is that they can be deemed for the life of the system at the time of installation and sold in advance. With forestry, greenhouse benefits can only be claimed for trading as the trees grow. It is inconsistent for future greenhouse benefits to be counted from one activity, and not another. Establishment of future greenhouse benefits is very important and the Australian Greenhouse office could consider alternative incentives and rewards for household solar hot water systems.

Trap 6 – Residential-Photo Voltaic System RECs

Many householders that have received RECs payments for their household photo-voltaic systems are of the belief that they are using the renewable electricity. It is not made clear on the ORER website or in standards for RECs transactions that once their RECs are sold they are in effect using the equivalent of standard electricity. This must be the case as another party that has bought the RECs then has the right to the claim renewable energy use as their own, as per solar hot water RECs.

With the recent announcement of the Australian Government's new $150 million solar power rebate for household photo voltaic systems, the lack of disclosure about RECs sales could result in many more householders signing across their RECs to a third party without full knowledge about what this sale represents.

Trap 7 - Industry User-Generators.

In businesses and industries there are often opportunities for on-site renewable power generation systems including wind, solar, mini hydro and biogas from sewage treatment. RECs guidelines and transaction documents do not provide sufficient

[7] Australian Government, Office of the Renewable Energy Regulator (2006), *Fact Sheet - Determining Eligibility and Renewable Energy Certificate (REC) Entitlement For Solar Water Heater and Heat Pump Water Heater Installations*, accessed online, May 25, 2007, http://www.orer.gov.au/publications/pubs/swh0906.pdf

checks to prevent the user from claiming to reduce their greenhouse emissions and at the same time selling the RECs. Specific examples are not identified in this paper but they do exist and can be observed by examining annual reports of organisations and also by tracing the list of accredited generators and individual RECs transactions via the ORER RECs Registry (although this is extremely time consuming).

Trap 8 - NSW Greenhouse Abatement Certificates (NGACs) and RECs?

Sales of RECs do not necessarily preclude the sale of benefits into the New South Wales Greenhouse Gas Abatement Scheme[8]. The scheme does however require that "A REC and an New South Wales Abatement Certificate (NGAC) cannot be created for the same abatement activity (ie, if a REC is created for a MWh of output, an NGAC cannot be created with respect to that output)". However, different aspects of the same activity (such as capturing and burning methane to become carbon dioxide, and generating renewable electricity) can be counted separately and there may be some potential (though probably remote) for double counting.

GreenPower - Trap Fixed

GreenPower recently improved their renewable electricity accreditation system. It had significant problems whereby Green Power Rights (GPRs) from wind farms were being sold outside the GreenPower scheme, at the same time as RECs were being sold to a third party. From August 2006 the GreenPower administrators started to fix the problems, warning generators and users in their E-Bulletin[9] that those using GPRs inappropriately would be pursued. GreenPower then released new marketing guidelines and a revised accreditation standard.

The GreenPower accreditation and system is now a market leader with the improvements providing customers with more confidence in the products they are buying.

DOUBLE ACCOUNTING PROBLEMS ARE WELL KNOWN

These matters, either in part or full, have been made known through submissions and correspondence to the Australian Greenhouse Office, Office of the Renewable Energy

[8] Details on The NSW Greenhouse Gas Reduction Scheme (GGAS) and RECs can be found on http://www.greenhousegas.nsw.gov.au/print.asp?REF=/overview/other_schemes/national.asp&PRINTABLE=YES

[9] GreenPower (2006), *Archive of GreenPower E-bulletins: Issues 18&19*, accessed online May 25, 2007,http://www.greenpower.gov.au/news/e-bulletin-11-19.htm

Regulator, National Pollutant Inventory Review Team, the National Energy and Greenhouse Reporting Task Force and Department of Environment and Water Resources. Various responses have ranged from noting that correspondence has been received, to total denial of double accounting, or suggesting that matters need to be dealt with by a different agency. With the effort to streamline National greenhouse and energy reporting there is an ideal opportunity for the AGO to address the challenges of double counting and emissions factors in the near future.

LOOKING TOWARDS THE FUTURE

As a carbon constrained economy further develops, businesses and society will rely on greenhouse accounting to have the same rigour as financial accounting. There is likely to be increasing pressure to ensure that any emissions factors used are relevant and appropriate to the situation. A single state emissions factor is not sufficient to apply for every situation.

On the electricity consumer's side of the market system, (where scope 2 emissions are important), the current problems occur at a significant scale, robbing consumers of the '*full value'* of the renewable energy products they buy.

Consumers that pay a premium for renewable electricity are robbed of the worthiness of *their* electricity products *because they are double counted.*

ECONOMIC IMPACTS OF GREENHOUSE MISTAKES TO BUSINESSES

There is a risk that if nation wide greenhouse and renewable energy accounting frameworks and programs are not reformed, businesses could make considerable errors in greenhouse claims and mitigation planning with significant financial consequences. For businesses to meaningfully participate in a renewables market system, reliable product data is essential.

It might also be useful for summary market and state data to be publicly available including:

- How much renewable energy is surrendered as RECs under mandatory obligations.
- Annual interstate net imports or exports of renewable energy.

- How much renewable energy remains in the standard pool where it is justified for this to be shared by consumers of *standard pool electricity*.
- The amount of total renewable energy and dedicated lower emission electricity that is sold outside the standard pool

RECOMMENDATIONS

Each of the problems identified in this paper can be remedied by the Federal Government through the Australian Greenhouse Office in collaboration with the Office of the Renewable Energy Regulator and State Governments. Minimum changes to legislation are required. If a simple principle that '*Renewable energy and greenhouse benefits should only be counted once'*, was to be enforced, this would help to craft the rules and guidelines that govern participation in Federal and State schemes. The following reforms and improvements are suggested:

Reforming State Aggregated Emissions Factors

1. The Australian Greenhouse Office should prepare a state *Standard Electricity Emissions* factor that has made necessary adjustments for renewable electricity that is imported or exported across state borders and netted out any renewable electricity or lower emissions electricity sold as separate products within a state.

Hot Water RECs

2. The Office of the Renewable Energy Regulator (ORER) could review and improve their website to make hot water user-generators aware that once their RECs are sold they should no longer think that they are using renewable energy to heat their hot water.
3. This disclosure should be mandatory in all hot water RECs transactions.
4. The claiming of renewable energy use from **future** standard electricity displacement should be re-considered as this is inconsistent with the rules that apply to forestry.
5. A better solution would be to remove hot water systems from RECs generation and establish an alternative reward system for owners of hot water heaters, such as a true rebate.

Small Scale Generation Systems

6. ORER could review and improve their website to make PV user-generators aware that once their RECs are sold they should no longer think that they are using renewable electricity.

7. This disclosure should be mandatory in all residential PV RECs transactions.

8. The claiming of renewable energy use from deemed **future** generation should be re-considered as this is inconsistent with the rules that apply to forestry.

Industry Scale Generation Systems – User-Generators

9. ORER could review and improve their website to make it clear to industry user-generators that once their RECs are sold, they should no longer think that they are using renewable electricity or make any claims for the use of renewable electricity.

10. A pre-condition for selling RECs should be that there is no parallel claim for the use of the same renewable electricity.

Prevent Play-on-word claims

11. The Federal Government should provide clear direction that '*Play on Word* claims' that are misleading to stakeholders will not be tolerated and will result in a legal consequence. For example, 'buying electricity from a renewable energy resource' without the RECs, is not the same as 'buying renewable electricity' in an accredited product that includes the RECs.

Summary Market Data

12. The Australian Greenhouse Office should establish key market reporting measures and a system to present this information regularly to allow businesses and states to have access to essential information on the trading of renewable and lower emissions energy.

CONCLUSIONS

There is a great deal of good intention amongst Government, businesses and communities generally to voluntarily contribute to tackling climate change. Initiatives such as the Federal MRET and emerging state schemes will develop as even higher value clean energy or renewable energy targets are confirmed and at the same time

there is a rapidly expanding voluntary market of GreenPower customers and household solar PV or solar hot water owners.

This paper has outlined a number of significant Greenhouse accounting traps and the solutions to address these traps. Accounting frameworks and programs which have failed to prevent double accounting, should be improved quickly and a proactive approach should be adopted to identify and avoid future traps.

With the focus on carbon trading and permit trading schemes being historically focussed on the energy production side, we must not forget to ensure that accounting systems are appropriate and robust on the energy users side.

TERMS.

MRET	Federal Mandatory Renewable Energy Target, requiring liable electricity retailers and wholesale buyers to acquire of renewable electricity each year, increasing in steps to 9500 GWh.
RECs	Renewable Energy Certificates traded under the mandatory Renewable Energy Scheme, based on a unit of one megawatt hour of renewable energy from an eligible renewable energy source.
GreenPower Rights	A tradeable entity produced in addition to RECs under the Green Power program, based on 1MWh. When used in the Green Power scheme, a 1MWh Right is designed to be used with a 1MWh REC that is withheld from further trading.