

MANDATORY AND PROSPECTIVE ENVIRONMENTAL TRADING SCHEMES OPERATING IN AUSTRALIA

As can be seen from the table below there are currently seven Environmental Trading Schemes operating in Australia, one National scheme, (MRET) and six State-based schemes, (VRET (due to merge with the MRET in 2010), VEET, NSW GGAS, ACT GGAS, NSW ESS and 13% Gas Scheme). SA introduced a version of the VEET scheme from 1 January 2009, via licence obligations imposed on retailers rather than a formal trading scheme and this scheme is not therefore included in this report.

On the horizon is the Australian Carbon Pollution Reduction Scheme due to start on 1 July 2011 which will replace the NSW and ACT GGAS Schemes but probably not the 13% Gas Scheme (at least initially) or the other trading schemes.

This multiplicity of trading schemes has resulted in reduced liquidity, uncertainty of future pricing and significant transaction and compliance costs for scheme participants. There has also been a great deal of regulatory uncertainty in this area for many years and there seems little chance of this changing in the short term.

Recognising many of the problems facing scheme participants, the Australian Financial Markets Association established an Environmental Products Committee which, together with Johnson Winter & Slattery, produced:

1. a new Environmental Products section to the AFMA "Guide to Australian OTC Transactions" comprising standard Confirmations, a commentary and an Australian Environmental Products Addendum which sets out the terms for trading Environmental Products, and,
2. a contract for the spot trading of Environmental Products.

In addition, AFMA publishes a subscription-based forward curve for spot and forward pricing on Renewable Energy Certificates (RECs), Greenhouse Gas Abatement Certificates (GACs), Gas Electricity Certificates (GECs) and Green Power Rights (rights tradable under a voluntary trading scheme operated by the National Green Power Accreditation Steering Group).

The AFMA section was updated in March 2009 to include the VRET and VEET Schemes and September 2009 to include the NSW ESS.

AFMA has also established a Carbon Committee which focuses on the policy issues surrounding the Australian Carbon Pollution Reduction Scheme. The Carbon Committee has produced a Carbon section to the AFMA "Guide to Australian OTC Transactions" comprising a standard Part 6 to the ISDA Schedule and a standard Confirmation for trading carbon permits (including Kyoto permits).

Mandatory and Prospective Environmental Trading Schemes operating in Australia

Jurisdiction	Australia - Renewable Energy	Prospective Australia - Emissions Trading	Victoria - Renewable Energy	Victoria - Energy Efficiency	New South Wales and ACT	New South Wales - Renewable Energy	Queensland
Title	Renewable Energy (Electricity) Act 2000 (Cth)	Australian Carbon Pollution Reduction Scheme	Victorian Renewable Energy Act 2006 (VIC) This scheme will merge with the MRET during 2010	Victorian Energy Efficiency Target Act 2007	Electricity Supply Act 1995 (NSW) Electricity (Greenhouse Gas Emissions) Act 2004 (these mirror the NSW Scheme)	Electricity Supply Act 1995 (NSW)	Electricity Act 1994 (QLD)
	Scheme known as the MRET Scheme (Mandatory Renewable Energy Target Scheme)	Scheme known as the Australian Carbon Pollution Reduction Scheme	Scheme known as the VRET Scheme (Victorian Renewable Energy Target Scheme)	Scheme known as the VEET Scheme (Victorian Energy Efficiency Target Scheme)	Scheme known as the GGAS Scheme (Greenhouse Gas Emissions Abatement Scheme)	Scheme known as the Energy Saving Scheme	Scheme known as the 13% Gas Scheme
Purpose	Encourage 45,000 Gigawatt hours (GWhs) of new generation of electricity from renewable energy by 2020 = 20% of electricity consumption	Reduce CO _{2-e} by 5% on 2000 levels by 2020 or by 15% if a global agreement is reached for the post Kyoto period Reduce CO _{2-e} by 60% on 2000 levels by 2050 = cutting emissions from 555 Mt CO _{2-e} pa to 333 Mt CO _{2-e} pa	Encourage 3274 GWhs of new generation of electricity post 1 January 2007 in Victoria (= 10% of electricity consumption by 2016 and reducing back to 385 GWh by 2030)	For 2009-2011, the target is to achieve a reduction of 2.7 million tonnes of CO _{2-e} per annum = reducing emissions from households use of electricity and gas by 10% by 2010	Encourage reductions in greenhouse gas emissions associated with the generation and to encourage activities to offset greenhouse gas emissions to achieve 7.27t CO _{2-e} per person	Reduce emissions associated with electricity use in NSW by 3,500 GWh by 2014	To encourage the development of 13% new generation of electricity sourced from gas for years up to 2009, 15% for 2010 and 18% for 2011 and beyond

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Scheme administrator	Office of Renewable Energy Regulator (ORER)	Australian Climate Change Regulatory Authority	Essential Services Commission (ESC)	Essential Services Commission (ESC)	Independent Pricing and Regulatory Tribunal of New South Wales (IPART)	Independent Pricing and Regulatory Tribunal of New South Wales (IPART)	Chief Executive of the Department of Mines and Energy
Certificates	Renewable Energy Certificate (REC)	Australian Emission Unit AEU and eligible international emission units (CERs, ERUs and removal units)	Victorian Renewable Energy Certificate (VREC)	Victorian Energy Efficiency Certificates (VEECs)	Greenhouse Gas Abatement Certificate (GAC) (these can be used by liable parties in the ACT Scheme)	NSW Energy Saving Certificates (ESCs)	Gas Electricity Certificates (GECs)
Registry of certificates	Records the creation, registration, transfer and surrender of RECs https://www.rec-registry.gov.au	TBA	Records the creation, registration, transfer and surrender of VRECs http://www.esc.vic.gov.au/public/VR ET/Registers.htm	Records the creation, registration, transfer and surrender of VEECs http://www.esc.vic.gov.au/public/VEET/Registers.htm	Records the creation, registration, transfer and surrender of GACs https://www.ggas-registry.nsw.gov.au	Records the creation, registration, transfer and surrender of VEECs https://www.ggas-registry.nsw.gov.au	Records the creation, registration, transfer and surrender of GECs http://registry.l3percentgas.qld.gov.au/genpub/EnterRegistry.aspx
Start date	1 January 2001	1 July 2011	1 January 2007 (zero target for 2007)	1 January 2009	1 January 2003	1 July 2009	1 January 2005
Termination Date	31 December 2030	2050 ?	During 2010 VRECs will merge with MRET and for all intents and purposes the VREC will cease	31 December 2029	Earlier of 31 December 2012 or start of AETS	Earlier of 31 December 2019 or start of a National Energy Efficiency Trading Scheme	31 December 2020

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Review date	2015	By 30 June 2014	By 31 December 2011	By 31 December 2011	Not applicable	After 1 July 2014	Not applicable
Baseline date for certificate creation	1 January 1997 for new or increased generation and 1 July 2011 for waste coal mine gas	1 July 2010	1 January 2007 for new or increased generation	1 January 2009	1997 to 2001/2003 depending on the activity	1 July 2009	24 May 2000 (being the date the scheme was announced) for new or increased generation
Certificate creators	Accredited generators who generate electricity from renewable sources and accredited entities with the rights to claim RECs from solar water heaters	Government for sale to liable parties, plus Kyoto compliant offset creators, carbon sequestration and entities destroying synthetic greenhouse gases	Accredited generators who generate electricity from renewable sources	Accredited persons in respect of abatement activities which reduce the consumer's electricity or gas consumption	Accredited generators connected to the interconnected grid who generate electricity from low emission and carbon sequestration activities (Abatement Activities)	Accredited activities by electrical retailers, appliance retailers, service providers or other third parties	Accredited generators who generate electricity from natural gas, coal seam gas (including waste coal mine gas), liquefied petroleum gas and waste gases associated with conventional petroleum refinery
Registration fee	8 cents per certificate	TBA	15 cents per certificate	\$1.00 per certificate	15 cents per certificate	70 cents per certificate	16.49 cents per certificate (CPI indexed)

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Activities creating certificates	<p>Generation of electricity from renewable sources and waste coal mine gas above the baseline 1MWh = 1 REC</p> <p>Solar water heaters have preset quantities</p>	<p>Non sector offset providers, Kyoto offset creators and carbon sequestration</p> <p>1 t CO_{2-e} abated = 1 AEU</p>	<p>Generation of electricity from renewable sources above the baseline</p> <p>1MWh = 1 VREC</p>	<p>Prescribed activities include modifying, replacing, purchasing or installing equipment which results in greater efficiency, a reduction in the consumption of electricity and gas and/or reduction of greenhouse gas emissions</p> <p>1 t CO_{2-e} abated = 1 VEEC</p>	<p>Abatement Activities</p> <p>1 t CO_{2-e} abated = 1 GAC</p>	<p>Eligible activities must reduce energy consumption compared to a baseline Include replacement of inefficient electrical goods or installation of more efficient products</p> <p>Existing accreditation under the DSA Rule of GGAS</p> <p>1 t CO_{2-e} abated = 1 ESC</p>	<p>Generation of electricity from gas, above the baseline</p> <p>1 MW = 1 GEC</p>
Timing restrictions on certificate creation	<p>RECs must be created by the end of the year after the year of referable generation</p>	<p>Not applicable for creation</p> <p>AEUs are issued with a vintage code</p> <p>AEUs can be carried forward</p> <p>Liabe entities can surrender permits of a current and earlier vintages and up to 5% of next year's vintage</p>	<p>VRECs must be created by the end of the year after the year of referable generation and within 15 years from the start date of commercial operation for non small generation units and solar panels</p>	<p>A certificate must be created not later than 6 months after the end of the year in which the prescribed activity was undertaken and VEECs expire after 6 years.</p>	<p>GACs must be created and registered within 6 months of the end of the calendar year in which the abatement activity occurred</p>	<p>ESCs must be created and registered within 6 months of the end of the calendar year in which the activity occurred</p>	<p>A GEC must be created within 12 months of the month in which the referable electricity was generated and expires at the end of second year after the year in which it is created</p>

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Geographical restrictions on the creation of certificates	The power station must be located in Australia	Australia for AEU's	The power station must be located in Victoria or another State or Territory with a similar approved scheme	The activity must take place in Victoria or another State or Territory with a similar approved scheme	GACs from Low Emitting Generation must be from power stations connected to the grid in QLD, NSW, ACT, VIC, SA and TAS GACs from carbon sequestration must be created from forests located in NSW/ACT	The activity must take place in NSW or another State or Territory with a similar approved scheme	If the power station is located outside of Queensland a usage factor is applied equivalent to the quantity of electricity flowing into Queensland from the State in which the electricity plant is located Effectively this restricts accreditation to QLD generators
Double dipping	No restriction in reliance on restrictions in other schemes	Not applicable	A VREC cannot be created if the MWh of referable generation has been used to create a certificate under the MRET Scheme	Not specified	A GAC cannot be created if the MWh of referable generation or abatement has been used to create a certificate under another scheme	A ESC can not be created if supplied to another scheme eg Greenhouse Friendly	A GEC cannot be created if the referable generation created a GAC or a certificate under a similar scheme

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Liabe Parties with acquittal obligations	Electricity retailers and end use customers who purchase electricity directly from AEMO or from a generator (including generation for onsite use)	CO _{2-e} emitters electricity generators gas/coal/fuel producers and large users, waste and fugitive emissions, exceeding 25,000t CO _{2-e}	Electricity retailers and end use customers who purchase electricity directly from AEMO or a generator for consumption in Victoria (including generation for onsite use)	Electricity or gas retailers which have 5000 or more customers in Victoria	Electricity retailers and end use customers who purchase electricity directly from AEMO or a generator for consumption in NSW/ACT (including for onsite use)	NSW Electricity retailers, electricity generators selling directly to customers, and market customers taking supply directly from NEM (note: there is no elective participation)	Electricity retailers and end use customers who purchase electricity for consumption in Queensland (including generation for onsite use)
Acquittal process: Liabe party purchases required certificates from accredited certificate providers	Surrender of annual energy acquisition statement and certificates equal to the Liabe Quantity (with up to 10% being carried forward into the following year) or payment of a Shortfall Charge for shortage in certificates by 14 February of the following year	Surrender of permits equal to emissions (no provision for carry forward) or payment of a penalty for shortage in certificates (plus need to make good the shortfall in the next financial year) by 15 December following each financial year	Surrender of annual audited acquisition statement and certificates equal to the Liabe Quantity (no provision for carry forward) or payment of a Shortfall Charge for shortage in certificates by 30 April of the following year	Surrender an energy acquisition statement and certificates equal to the Liabe Quantity (no provision for carry forward) or payment of a Shortfall Charge for shortage in certificates by 30 April of the following year	Surrender of a greenhouse gas benchmark statement and certificates equal to the Liabe Quantity or payment of a greenhouse penalty for shortage in certificates by 1 March of the following year	Surrender of a greenhouse gas benchmark statement and certificates equal to the Liabe Quantity or payment of a greenhouse penalty for shortage in certificates by 1 March of the following year	Surrender of GECs or payment of a non-compliance penalty for the shortage in certificates by 30 April in the following year
Certificate surrender fee	8 cents per certificate	TBA	15 cents per certificate	nil	nil	nil	nil

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Shortfall charge in MWh	\$40.00 and increasing to \$65 from 1 January 2010	Prescribed amount or 110% of greater of average auction price of all auctions or last auction plus a make good provision Fixed price permits available for first five years at \$10 for the first year and \$40 for the next increasing by 5% and CPI each year	\$43.90 for the 2008 year (escalated annually by the change in CPI)	\$40 (escalated from 1/1/2010 by the change in CPI)	\$12.50 for 2009 year (escalated annually by the change in CPI on 1 July each year (and rising to \$15.50 from 2013))	\$23.03 for 2009	\$11.85 for 2007 year (2008 year TBA) (escalated annually by the change in CPI on 1 January)
Number of accredited certificate providers	362	Government, eligible international units, reforestation and destruction of synthetic gases	18	TBA	139	70	9
No of Market Participants	515	700 - 1000	41	TBA	150+	23+	57

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Number of liable parties	69 (for year 2005)	700 - 1000	23 (plus an unknown number of end use customers purchasing directly from generators or AEMO)	23	32 (23 mandatory, 11 elective)	23	37
Trading statistics	3.3 million RECs were traded/surrendered in 2005 and the target for 2006 is 4.5 million	Not yet implemented	TBA	749 VEECs traded in 2008	30.6 million GACs were traded in 2008 in 1754 trades	Not yet available	6.9 million GECs were traded in 2007 in 110 trades
Trading statistics estimates for 2010 [Based on the average of AFMA Cal 2009 and 2011 prices]	\$537 million @ \$43 per REC	Not applicable in 2010 But by 2012/13 \$8.4 billion @ \$20 per AEU(to emit 420 Mt CO _{2-e} pa = 75% coverage Mt CO _{2-e} pa = 1% - 1.1% lift in inflation)	Scheme due to merge with MRET in 2010	2.7 million certificates will need to be traded – the price is currently unknown if trading at penalty of \$40 = \$108 million	The Scheme should cease on introduction of the Carbon Pollution Reduction Scheme	1.06 million certificates will need to be traded – the price is currently unknown if trading at penalty of \$23 = \$24.4 million	\$82 million @ \$11 per GEC (based on No trades in 2007 and 2008)

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This update is not legal advice, but is a general communication on topics of legal interest.
You should not rely on it without obtaining specific advice.