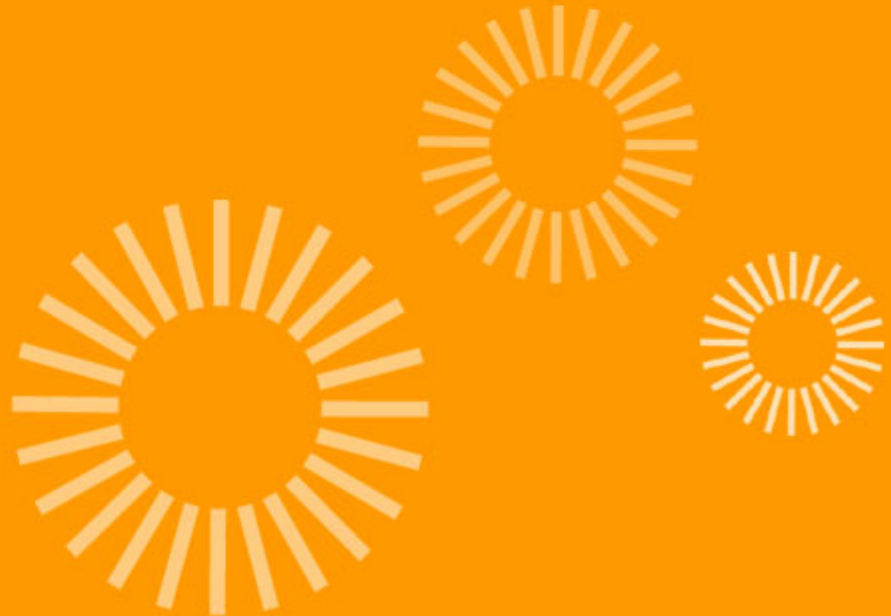




Australian Government  
Australian Trade Commission

# CARBON TECHNOLOGY EXPORTING

Robert Sutton - National Manager: Agribusiness & Consumer



# Austrade's Mission

**We contribute to community wealth by helping more Australians succeed in export and international business.**



Australian Government

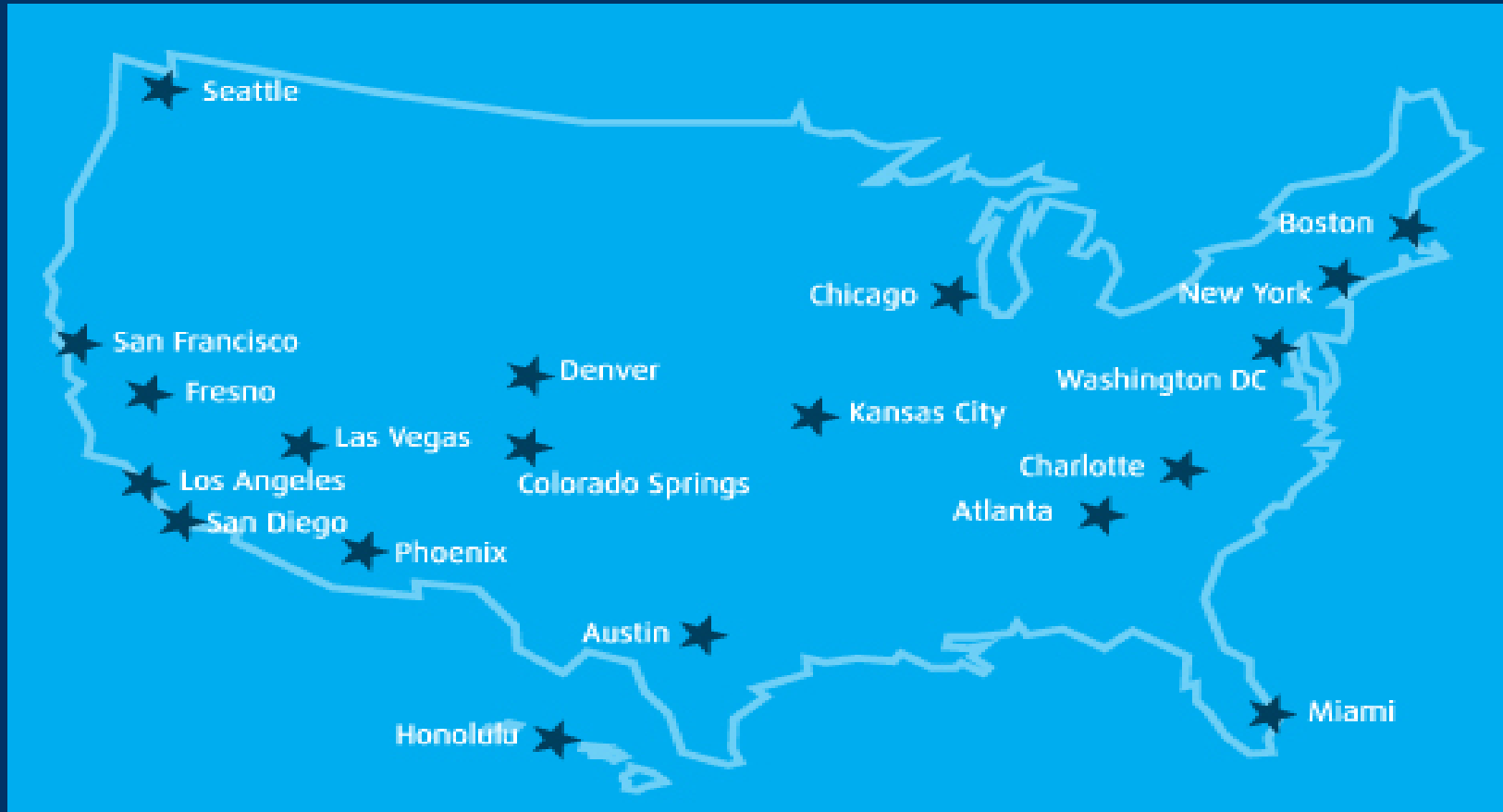
Australian Trade Commission

# Austrade's Global Network



# Austrade USA

Unprecedented Geographic Reach.



- **AUSFTA commenced 1 January 2005**
- **19 locations**



# International Carbon Credit Trading:

- “There is every reason to believe that the cost of reducing GHG emissions varies widely among sources and across countries. Accordingly, trading can provide the flexibility needed to allow GHG reductions to be achieved using the lowest-cost abatement options.”

PEW CENTRE ON GLOBAL CLIMATE CHANGE

- Issues for consideration:
  - What are Australia’s globally competitive low cost abatement products ?
  - Australian credits developed should be internationally tradeable.
  - Credits should have common standards & preferably be exchange tradeable within Australia.
  - Who are likely to be our largest international customers ?



# DEFINING THE MARKETS:

- “ The emission credit markets are rapidly expanding & are as diverse in their structure as the regulations that govern them”

EVOLUTION MARKETS LLC, San Francisco, USA

- GHG'S ( GREEN HOUSE GASES )
- REC'S (RENEWABLE ENERGY CREDITS )
- SO2 ( SULPHUR DIOXIDE )
- NOX ( NITROGEN OXIDE )
- VOC ( VOLATILE ORGANIC COMPOUNDS )
- VOLUNTARY REDUCTION INITIATIVES
  
- The World Bank's Umbrella Carbon Facility (UCF) traded US\$1 billion Certified Emission Reductions with 24.5% of the private sector trade purchased by Natsource LLC related parties.

NATSOURCE ASSET MANAGEMENT, 29.08.2006



# VOLUNTARY REDUCTION INITIATIVES:

## CHICAGO CLIMATE EXCHANGE - CCX

- CCX trades CFI's ( Carbon Financial Instruments ) as a voluntary initiative of emitter members.

THE CFI IS BASED ON A STANDARD 100 metric tonnes in quantity.

- An Offset Provider needs to register on the exchange.
- Cost of INITIAL REGISTRATION US\$5000 & ANNUAL FEE US\$1000
- Australian firms may consider project consolidation by establishing a project aggregator.
- Australian firms do not market these as Kyoto approved credits.
- Projects traded include :
  - Forest Carbon Emission Offsets
  - Agricultural Soil Carbon Offsets
  - Renewable Energy Credits



# CCX FOREST CARBON EMISSION OFFSETS:

- The typical specification for forestry projects include :
- Forest projects initiated after 1 Jan 1990
- Demonstrated that the entity wide forest holding is sustainably managed
- Demonstrated long term commitment to maintain carbon forest stock
- Use of approved methods to quantify carbon stocks



# RISKS:

- Shorting the market, are you selling more credits than you produce ?
- Why would private firms buy credits? Public relations & ...
- Are the current value of credits in Australia valued correctly ?
- Are you informed with current market conditions ?
- Who is your broker & what market intelligence are they providing ?
- When Australia exports a credit, does this create a potential future deficit ?
  
- Big Picture: Does Australian industry have a surplus of credits to sell ?



# SOLAR POWER STATIONS :



- SOLAR SYSTEMS GENERATION PTY LTD  
AUD\$75M – AUSTRALIAN GOVERNMENT GRANT  
LOW EMISSIONS TECHNOLOGY DEMONSTRATION FUND (LETDF)



# REWARDS :

- **Carbon Disclosure Project (CDP)**

The Carbon Disclosure Project (CDP) provides a secretariat for the world's largest institutional investor collaboration on the business implications of climate change. CDP represents an efficient process whereby many institutional investors collectively sign a single global request for disclosure of information on Greenhouse Gas Emissions.

- **Dow Jones Sustainability Index (DJSI)**

The Dow Jones Sustainability Indexes assess, for investment purposes, the quality of a company's strategy and management and its performance in dealing with opportunities and risks deriving from economic, environmental and social development.

- **Index reporting drives share prices via ethical investment fund decisions.**



## Greenhouse Gas-Credits Aggregation Pool (GG-CAP) and standard industry terminology:

- “GG-CAP is soliciting candidate projects that create ERs from 2005 to 2012 and conform to the rules that create compliance instruments under the European Union Emissions Trading Scheme (EU ETS). Independent of the Kyoto Protocol's (KP) entry into force, Certified Emission Reductions (CERs) created by Clean Development Mechanism (CDM) projects and Emission Reduction Units (ERUs) created by JI projects will be usable for compliance by installations with emissions reduction requirements. CERs will be usable for compliance in the first phase of the EU program that runs from 2005-2007. Both ERUs and CERs will be usable for compliance in the program's second phase from 2008-2012. “

Source: Natsource Asset Management (NAM) Corp



# GG-CAP's Project Information Form.

- Type of project;
- Country/State/City;
- Expected emission reductions per year;
- Baseline methodology (indicate if using an approved or a new methodology, in which case a brief description should be provided);
- Proponent's name and affiliation;
- Credit rating of project owner or counterparty of carbon contract;
- Crediting period;
- Project stage of development (e.g., Concept, Feasibility study, Licensing, Under construction, In operation for less than 1 year, In operation for more than 1 year)
- Status of approval by host country's DNA (not requested, requested, letter of non-objection in place, letter of approval in place);
- Financing structure (debt to equity structure and percentages, equity holders) and status of negotiation (not started, under negotiation, 50% completed, 100% completed);
- Indicative price in US\$ per tonne of carbon dioxide equivalent reduced;
- Percentage of projects ERs under contract to other parties; and
- Where volumes are committed under other contracts, indication whether first rights to emission reductions are available



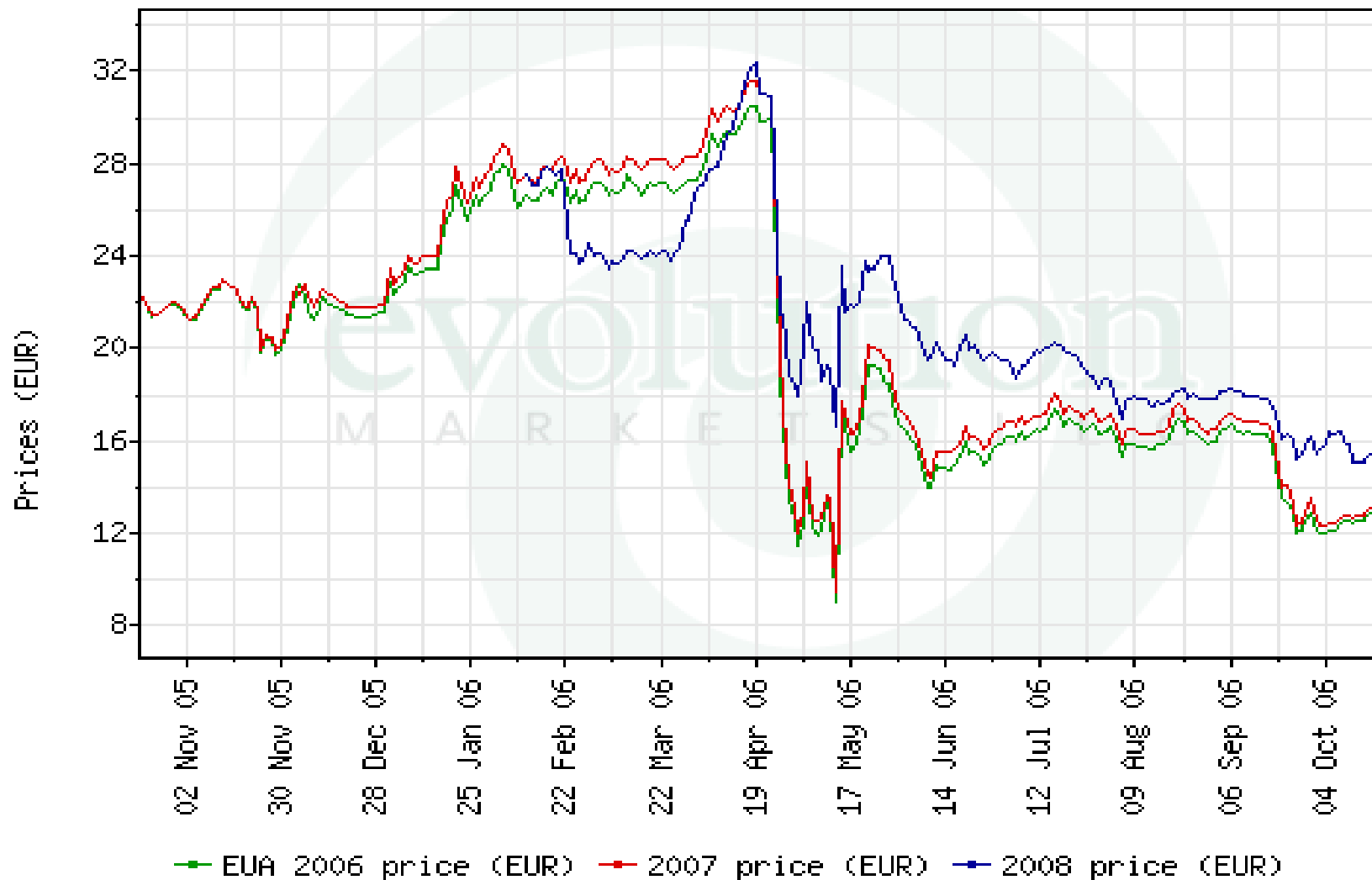
# Current market size, prices & who owns the credit:

- WORLD WIDE TRADES (A\$29b) – rapid growth.
- CX CFI's traded March2006 US\$2.25 = AUD\$3.00 mt
- CONSIDERABLE PRICE VOLITILITY 14EURO = AUD\$23.30 mt
- CAP & TRADE SYSTEMS CREATE A FINITE SUPPLY ASSUMING A GLOBAL SYSTEM WITH NO CARBON LEAKAGE
- HOW ARE CREDITS ISSUED & ARE THEY A COMMUNITY ASSET ?
- WHEN A CREDIT IS CREATED & SOLD WHO WAS PAID ?
  - Free issue to emitters
  - Private property issued by accredited surveyors,
  - or are initial issues sold to the highest bidder...
- HOW DO YOU GET PAID WHEN YOU SELL A CARBON CREDIT ?



# EU Market Prices:

EUA 2006, 2007, 2008 price  
19-Oct-05...19-Oct-06



# THE NEW ZEALAND MARKET:

- **New Zealand maintains a formal audit of the current Kyoto Provision**

“The Kyoto Provision, as at 2 June 2006, is \$606 million. This is based on a New Zealand/US dollar exchange rate of NZ 0.6332 cents, an estimated deficit of emission units of 64 Mt (million tonnes) and a price per tonne of carbon of \$US6.00 (or \$NZ 9.48) per emissions unit. The price of Kyoto-compliant emission units is updated annually by Treasury and will be updated in 2006.”

SOURCE: [www.climatechange.govt.nz](http://www.climatechange.govt.nz)

Note: Values provision at AUD\$527m (AUD1=NZ1.15)

The average price for the tender round in which Meridian Energy agreed to sell its units to the Netherlands Government was NZ\$10.50 a unit. This is a good indication of the current worth of emission units.

Source: [www.beehive.govt.nz](http://www.beehive.govt.nz) 18.05.2005



# Emerging carbon technology opportunities:

- Lets imagine forward some years....
- A global, national or regional trade bloc regulated GHG market ?
- Significant increased demand for alternate energy fuels
- PPP purchase price parity theorem continues to explain global market price relationships .....
- Australian low emission fuel supplies are in demand
- Developing nations require low cost alternate fuel supplies
- New clean technologies leverage the marketing of an existing resource
- Micro power generation ( Intensive dairies & feedlots e.g Pakistan)
- Cellulosic Ethanol fermentation ( yeasts & process technologies e.g Chile)
- Algae fermentation pond & bioreactor products (BioEnergy, Ethanol -China)
- Continuing demand for raw inputs sugar, sorghum & canola
- PV & wind turbine developments, a multi-path approach.
- Hydrogen ... processing, packaging, transport & demand creation



# GLOBAL ETHANOL MARKET :

EX-WORKS (litre cost AUD\$) :	FEEDSTOCK COST	PROCESSING COST	TOTAL ex CAPITAL COSTS
US CORN WET MILLING	0.14	0.22	0.36
US SUGAR BEET	0.56	0.27	0.83
US MOLASSES	0.32	0.13	0.45
BRAZIL SUGAR CANE	0.11	0.18	0.29
EUROPEAN SUGAR BEET	0.34	0.68	1.02
Note: AUD\$1 conversion rate @ US\$0.745 (July 2006)			
US GALLONS 1= 3.785 Litres			

Source: USDA ETHANOL FEASIBILITY REPORT , JULY 2006

Note : USA Retail Fuel Price in Fresno, California @ 21-11- 2006  
was AUD 88.51 cents per litre for 92 octane rated gas.



# NEW EXPORTER DEVELOPMENT PROGRAM - Services & Benefits for Exporters

- Assistance for new exporters

Austrade has developed a package of services to assist companies make their first export sale. Elements of the program include:

- ▶ Export capability assessment and preparation
  - - Review your export capability and evaluate export readiness
  - - Identify target markets
  - - Provide advice on financial and management issues
- ▶ Export planning - including market selection
  - - Advise on international marketing strategies and marketing plan
  - - Information of economic conditions and commercial practices
  - - Evaluate the suitability of your product/service for target market

# Services & Benefits continued..

- ▶ Export plan implementation - involving a market visit
  - ▶ - Make appointments with selected relevant business contacts
  - ▶ - Arrange interpreters and translation of documents (at your cost)
  - ▶ - Briefings by Austrade staff in-market on local practices and culture
- ▶ Ongoing one-on-one export coaching
  - - Assess the outcomes of your visit
  - - Assist you to achieve maximum impact from the visit




# Are you eligible to apply?

- Your business must have:
  - A current ABN
  - Australia as your main place of business
  - Not completed TradeStart, the former Export Access program, or received Austrade's new exporter services, during the last three years (some exceptions apply).
  - No recurrent export revenue in the same market over the last three years




# What is EMDG & how can you finance export?

- **EMDG is the Government's principal export marketing assistance program**
- **EMDG reimburses 50% of eligible export expenses, less the first \$15,000 threshold**
- **EMDG is aimed at assisting new and emerging exporters**
- **The maximum grant for eligible applicants is \$150,000, subject to fund available in the scheme**
- **CONSIDER EFIC HEADWAY WITH YOUR BANK**  
**[www.efic.gov.au](http://www.efic.gov.au)**



**Australian Government**  
Austrade



**FarmConnection**  
Showcasing Australian Agribusiness

Home | Register your Company | Opportunities Online | Agnews | Read Success Stories | Agribusiness Search  
Bale Track Search | Log In | About Us | Contact Us | Resources

### Register your company

Please create a member account below, or [click here](#) to login.

Registering your agribusiness-related company on Austrade's FarmConnection is a great way to showcase your products and services to Austrade and the world.

Austrade is the Australian Government agency that helps Australian companies win overseas business for their products and services by reducing the time, cost and risk involved in selecting, entering and developing international markets.

After completing the registration process your details will be sent internally within Austrade for approval. Following the approval, your profile can be viewed through FarmConnection (you will be notified via email when your profile has been approved). The registration process should only take a few minutes, however, you should have photos of your product or service ready to upload them to FarmConnection.

Registering your company with FarmConnection will assist Austrade in demonstrating your products to the world.

**Email:**

**Password:**

**New Password:**

# OVERSEAS MARKETING EVENTS:

- WASHINGTON CARBON CONFERENCE 17-18 January 2007
  
- AGRITECH CHANDRIGARGH, INDIA - December 2006
- YANGLING AGRICULTURAL Hi TECH FAIR – November 2007
  
- WORLD AG EXPO, TULARE CALIFORNIA. USA  
Opportunities to demonstrate new BioEnergy products & services at the World's Largest Farm Show. 150,000 visitors & 1600 exhibitors  
Feb 13-15 2007

**EXPORT HOTLINE**

**13 28 78**

**or**

**[www.austrade.gov.au](http://www.austrade.gov.au)**



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**Thankyou & Questions ?**

