

# The Carbon Marketplace

An examination of the low carbon economy & how to position for success in the changing business environment

A presentation made at the Macquarie Graduate School Networker Forum on 30<sup>th</sup> March 2009

This material was used by Carbon Training International Pty Limited to assist an oral presentation and is not a complete record of the discussion or information presented

# What's Covered

- 1. The Carbon Training International Business*
- 2. The Low Carbon Economy & the Carbon Marketplace*
- 3. Likely impacts of the Global Financial Crisis on the proposed Australian Emissions Trading Scheme*
- 4. Business Risks & Opportunities in the Low Carbon Economy*
- 5. Opportunities for Individuals – positioning for success*



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# About The CTI Business

Who We Are: CTI is a specialist training, coaching, mentoring and enterprise collaboration business in climate change risk and carbon management

Why We Exist: The development & delivery of workplace training solutions that are focused on creating a *carbon conscious, carbon skilled and carbon responsive workforce*

*Our focus is on the delivery of capacity building solutions for the low carbon economy*

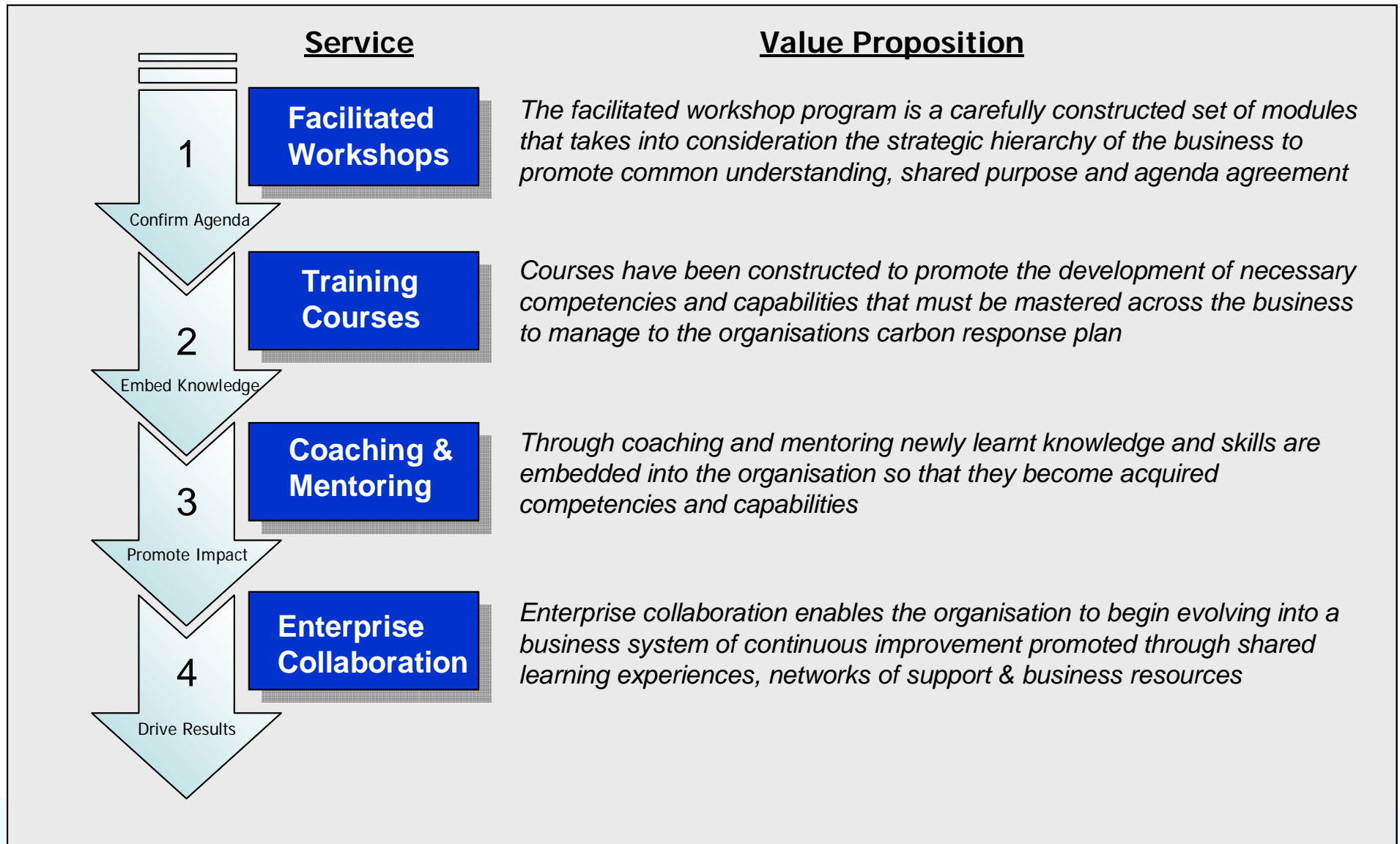
*When established: CTI was founded in October 2008 (though work began on setting up the business many months before)*

*How many people are involved:*

*The business has 6 Directors appointed with an equal equity interest in the business. Each director has a defined set of responsibilities & works across different functional work streams & product sets.*

*Support resources are being engaged & recruited as part of the next stage of growth & close skills gaps*

# CTI's Services



# CTI's Facilitated Workshops

[www.carbontraininginternational.com/our-services/workshops](http://www.carbontraininginternational.com/our-services/workshops)

## Modules

Module 1  
Climate Change  
In Context

+

Module 2  
Impacts on  
Industry & the  
Organisation

+

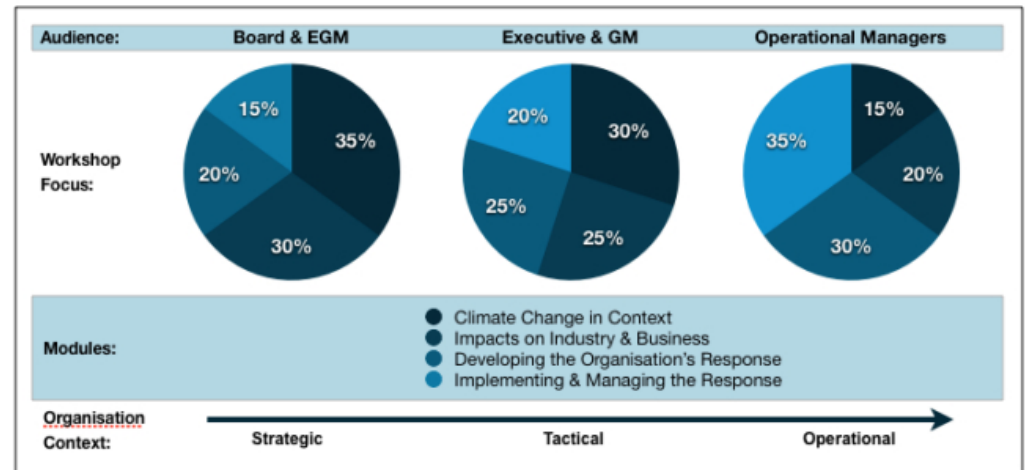
Module 3  
Developing the  
Organisations  
Response

+

Module 4  
Implementing &  
Managing the  
Response



## Program Structure



### Outcomes:

- Aligned organisation with a clear carbon agenda & strategic response framework
- An integrated organisational carbon management response plan
- Prioritised activities and actions
- Clear link to capacity building requirements i.e. carbon training needs

# CTI's Carbon Management Courses

[www.carbontraininginternational.com/our-services/courses](http://www.carbontraininginternational.com/our-services/courses)

## Certificate III

### Carbon Management

Total Units:5  
Core:4  
Electives:1

Target: operational frontline & some team supervisors, job seekers, trainees & apprentices

## Certificate IV

### Carbon Management

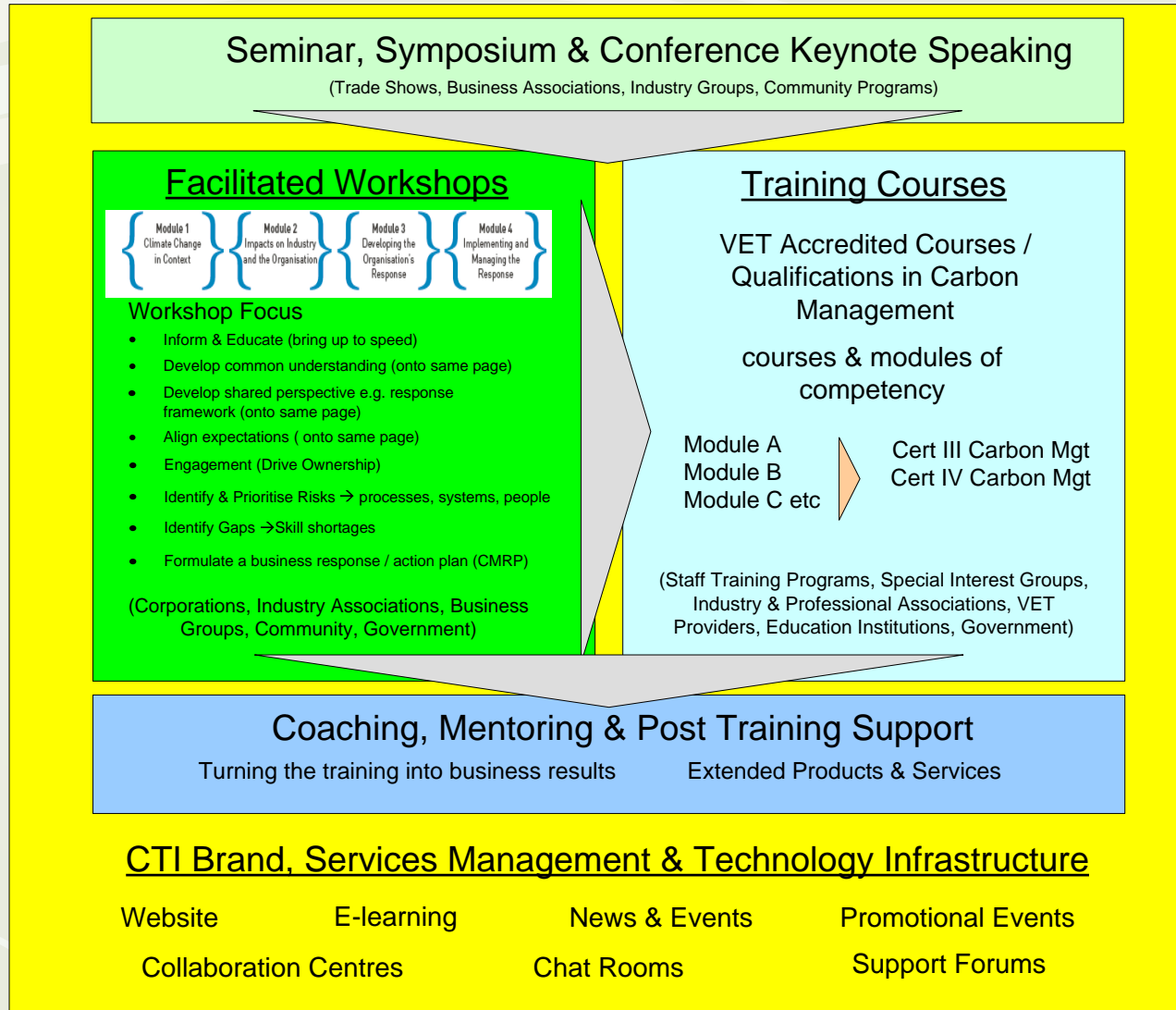
Units:10  
Core:8  
Electives:2

Target: general & middle managers right through to line supervisors. Professionals looking for carbon management accreditation

Both courses have been developed in accordance to the AQTF2007 guidelines & standards under the National VET Framework

Mode of Delivery: Face2Face & web-based e-learning

# The CTI Business Model



# CTI's Market Focus

## Target Market:

- Enterprise
- Industry Associations
- Individuals

(Core)

- Government  
(including agencies & associated entities)
- Community Groups

(Emerging)

Our focus is on assisting organisations, community groups & their people to understand

- Climate change risks, carbon policy & carbon management strategies & response plans
- the importance of the skills & competencies that will be needed to operate & compete within the low carbon economy
- the types of carbon management roles and functions within organisations will emerge
- ensuring the right individuals are recruited or internally appointed to areas of carbon emissions responsibility.

# The Low Carbon Economy

What is it, how will industry, business, community  
& individuals be affected?

How should we respond?

# What is low carbon economy

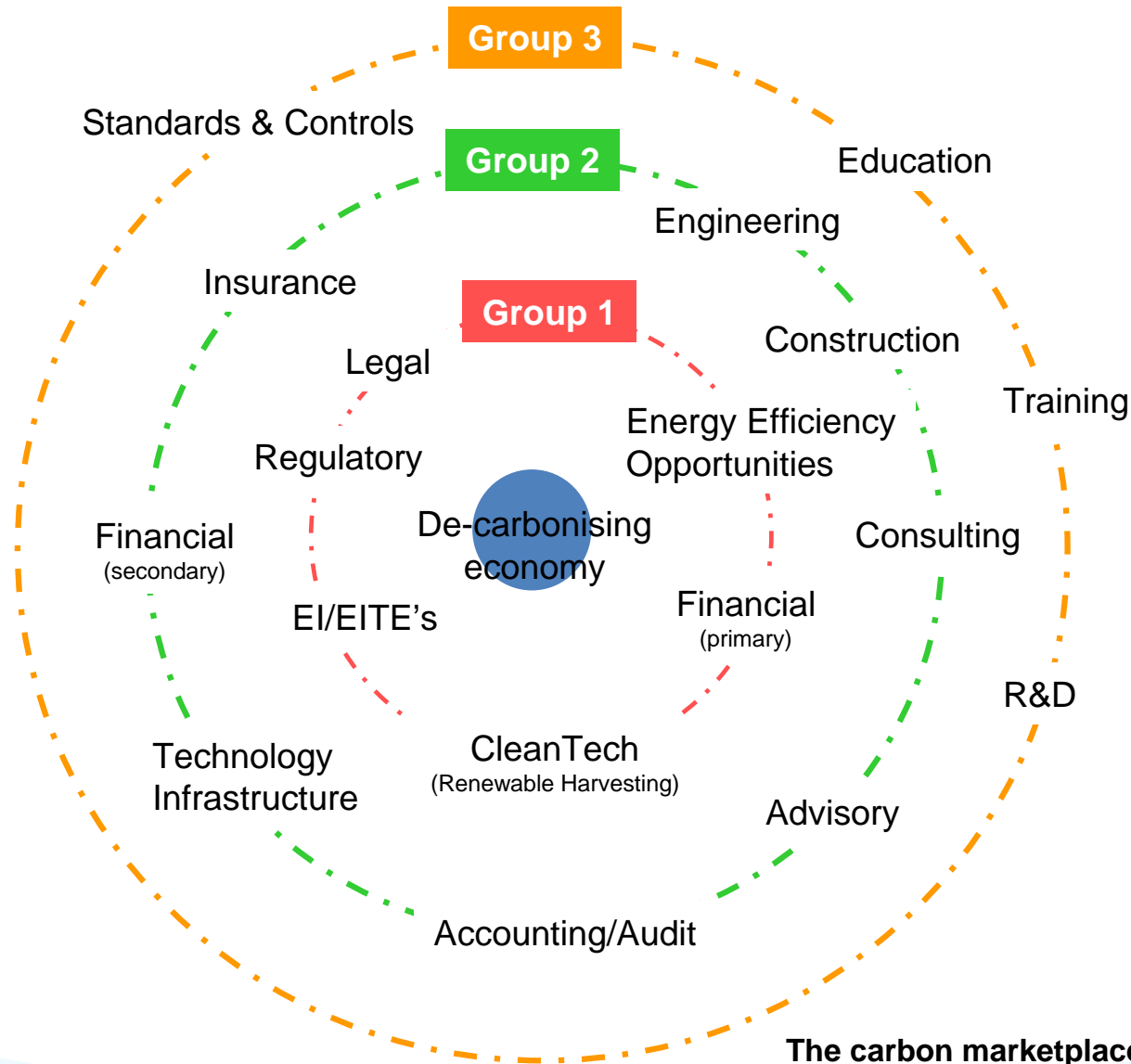
- *At its core is the structural reform of the industrial economy where the focus is on de-carbonising the value chain to be less energy & emissions intensive for the purpose of stabilising the earths atmospheric CO2 concentrations to 450 ppm (as determined by the IPCC & documented in AR4)*
- *Mandate to change our industrial business practices & consumption patterns to be less emissions intensive*
- *Emergence of evolutionary business practices & redesign of business systems*
- *Requirement to find ways to combust our fossil fuel resources to produce energy without emitting damaging carbon emissions – clean energy solutions*
- *Requirement to develop commercially viable renewable energy solutions*
- *About changing our attitudes, behaviours & approaches to our existing business practices as well as our energy intensive consumption*
- *Emergence of new regulators & administrators*
- *A new era of international cooperation amongst governments & industry*

## How will business/community/Individuals be affected?

- *Across the board price increase for energy products (electricity, gas, fuel)*
- *Rise in the price of many commodities – especially those which come out of the ground*
- *Rise in the price of general purpose goods as cost increases are pushed through the product value chain to the end consumer*
- *Communities with an over-dependence on industry which is emissions intensive have the potential to face a greater proportion of economic hardship re: employment opportunities*
- *Transforming of industry that will require evolved, adapted & extended ‘green based’ skills within the labour force*
- *Carbon intensity to quickly become the new KPI of performance management and on which activities such as investor decision making will be made*
- *New business policies, systems & processes to emerge that will be focused on managing carbon risk in the business as well as for securing opportunities in the marketplace*
- *Emergence of new low energy, clean technology industries as well as new management practices will require broader competencies than those which exist today – a need to understand emission sources & relative intensity of different business practices*

# The Carbon Marketplace

The carbon market place is represented by far more than the trading of carbon permits & related financial instruments



EITE = emissions intensive trade exposed

**The carbon marketplace will be characterised by a variety of players seizing market opportunities**

# Impacts of the GFC on the planned Australian ETS/CPRS

# Impact of GFC on AETS

## Window of Opportunity

- *Adaptability & innovative capacity of Australia*
- *Unprecedented times that represent opportunity to rejuvenate, revitalise & re-position for the next cycle of prosperity*
- *The crises is forcing financial reform that everyone accepts – this should be carried across into broader sustainability reform*

## Key Risk

- *The risk that not enough revenue is raised from the auctioning of permits and therefore a shortfall in the income needed to provide transitional & transformational assistance (target is \$11.5b)*
- *Impact of the global carbon price slump (25% fall on budget) within AAUs (emission permits) & CERs*
- *Reason → declining emissions from less production, liquidation of permits to free up cash → excess supply*

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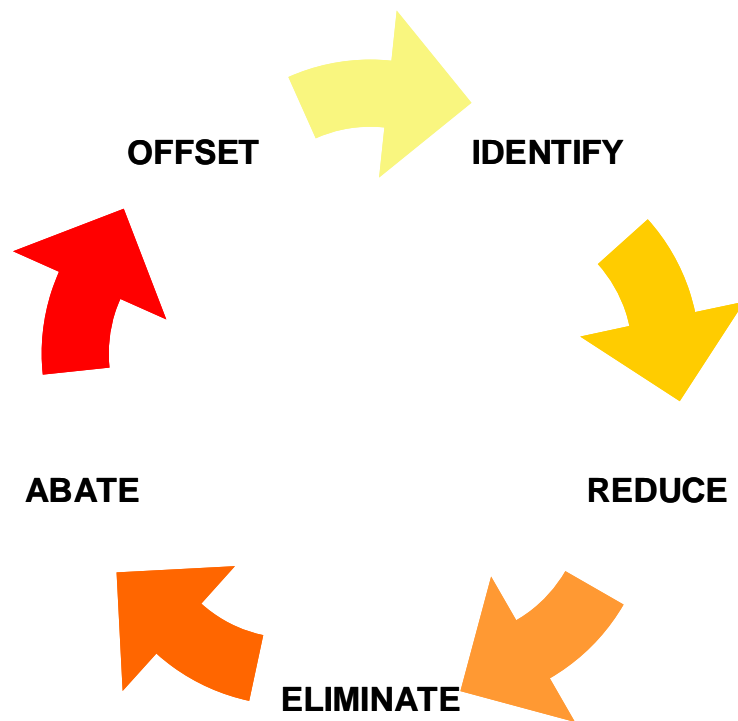
# Business Risks & Opportunities

# Types of Business Risks

- Regulatory Risk
- Compliance Risk
- Supply Chain Risk
- Product & Technology Risk
- Competitive Risks
- Litigation Risk
- Reputation Risk
- Physical Risk

# Business focused carbon management response framework

## Continuous Management



<b>Identify</b>	Calculate, monitor, manage, report Select a CO2 calculation methodology Baseline your business CO2 emissions
<b>Reduce</b>	Efficiency and business practice and operations process improvements Quick Wins
<b>Eliminate</b>	New work practices, business processes, systems and more energy efficient machinery Redefine & Improve
<b>Abate</b>	Innovation in work practices including radical business process re-engineering, new facilities design, adoption of clean technology
<b>Offset</b>	Purchase verified carbon offsets certified from a legitimate offset program e.g. GreenHouse Friendly™

# Emerging Opportunities

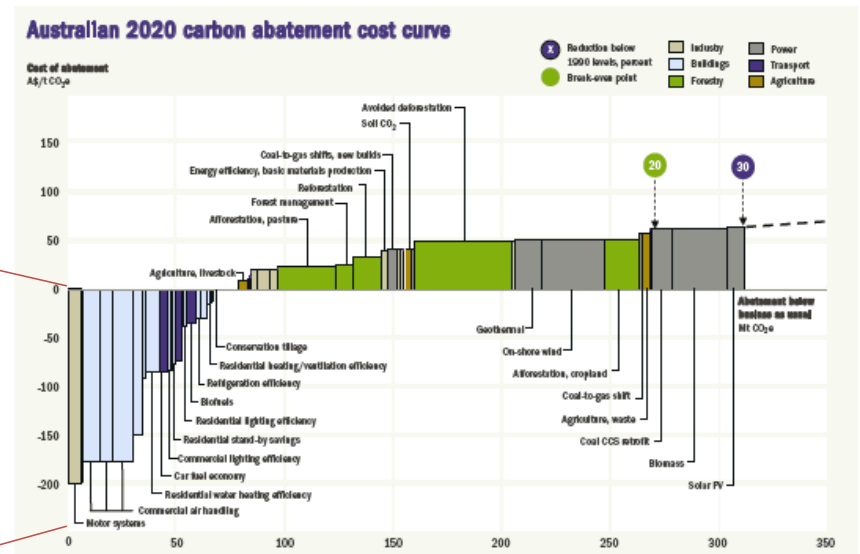
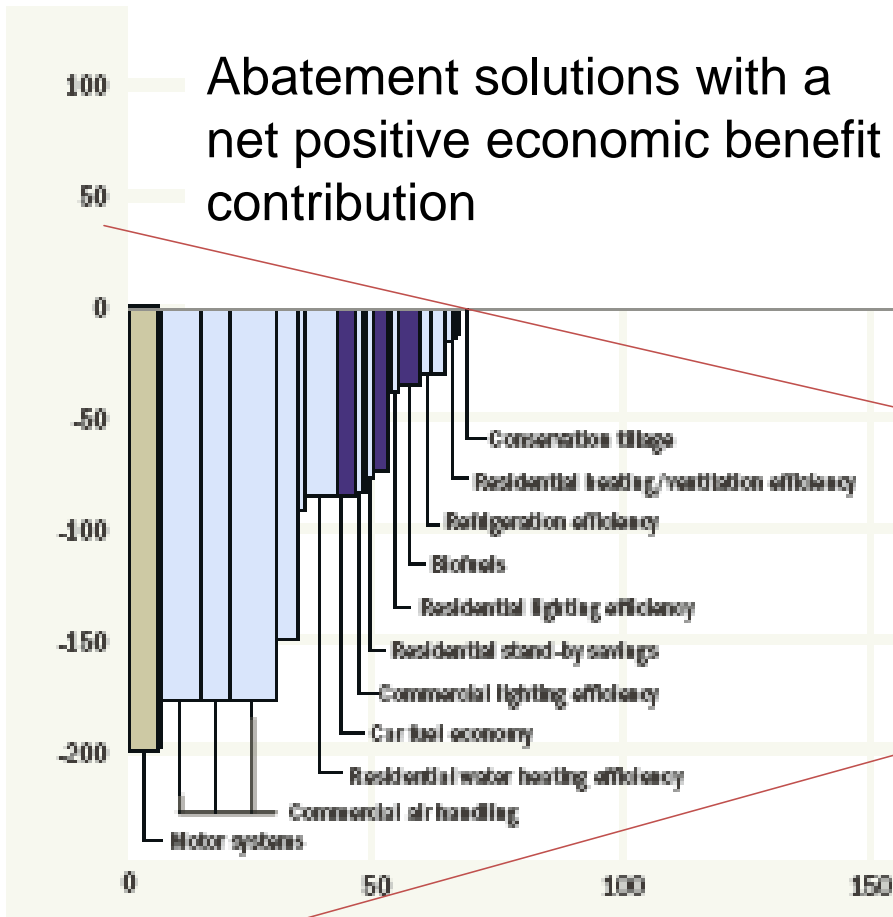
## Business Opportunities

- Emissions (permit/CER) Trading
- Preferred Supplier
- Employer of choice
- Positive Brand Image
- Capture new Customers
- Extend into new markets
- Bottom line contribution
- Reduce Waste & Save Money

## Market Opportunities

- Developing market based solutions for carbon emissions mitigation & abatement
- Energy Efficiency Solutions
- Commercial Renewable / Alternate Energy Solutions
- Sequestration Technologies

# Carbon Emission Reduction Solutions - Market Opportunities



Source: McKinsey & Co  
"An Australian Cost Curve for Greenhouse Gas Reduction"

If fully captured these solutions will represent \$8billion of cost savings to the economy whilst abating over 54M t Co<sub>2</sub>-e

Are these the commercial opportunities with strong ROI opportunities attached?

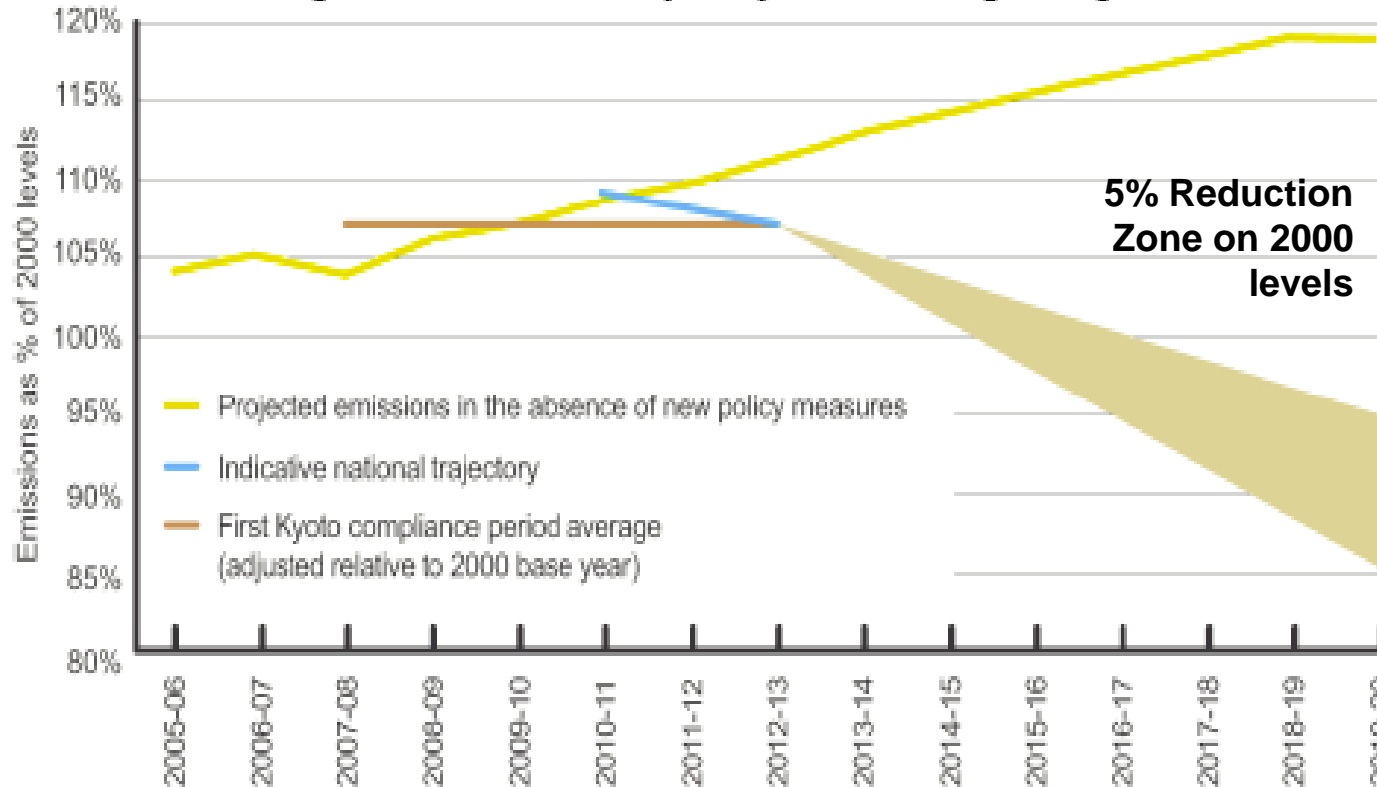
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# Individuals in the carbon marketplace

# Even a minimum emissions reduction target of 5% will require concerted effort by all stakeholder groups

Figure 4.4: Indicative trajectory and 2020 target range



**25% Reduction on Business-As-Usual Emissions which equates to 702 Mt Co2-e**

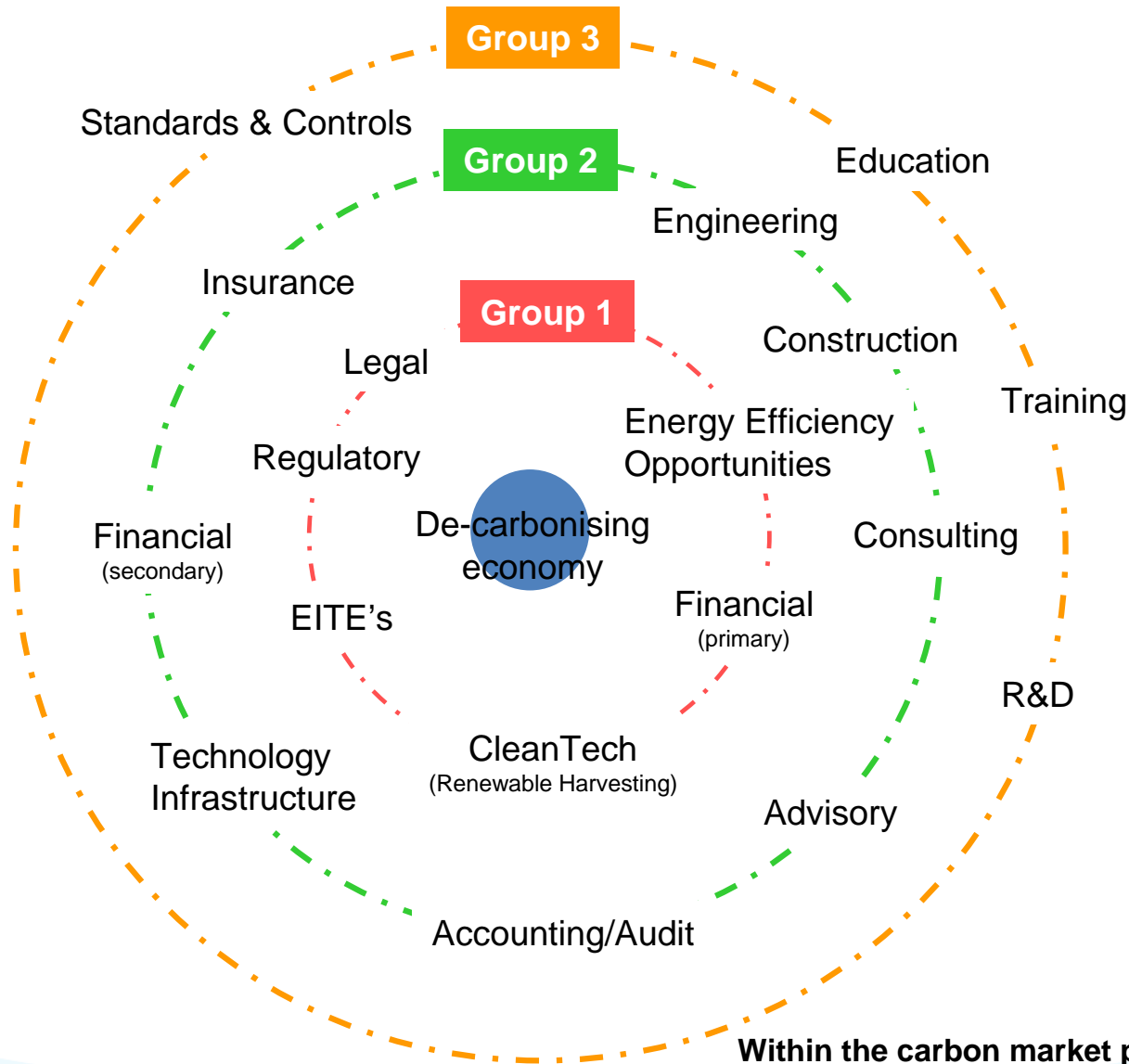
Sources:

2005-06 data published in the National Greenhouse Gas Inventory relative to a 2000 base year

**The transition to the low carbon economy & the achievement of the emission reduction targets will require the expertise of a great many different people across a range of capacities – everyone can & needs to play a role**

# Individuals in the Carbon Marketplace

There are plenty of areas in which individuals can chose to participate



Within the carbon market place how will you seize your own business &/or career opportunity?

# Become informed, stay informed & shape your skills to support the emerging career opportunities

- *Know the critical policy & business issues that will be influential in creating the low carbon economy & supporting carbon market place*

## Literature Review – Key Material

- *IPCC's Fourth Assessment Report (AR4) (Authority on climate change science)*
- *CSIRO Reports - impact, mitigation & adaptation reports*
- *Garnaut Climate Change Review – Final Report*
- *Carbon Pollution Reduction Scheme White Paper (& draft legislation)*
- *Senate Review Committee Inquiry Reports into CPRS & climate change policy*
- *Federal Treasury Modelling – 'The economics of climate change mitigation'*
- *National Greenhouse & Energy Reporting Act (Mandatory Reporting Guidelines)*
- *Renewable Energy Draft Legislation*
- *Various Industry (commissioned) White Papers e.g. Business Council of Aust, Aust Industry Group, Minerals Council, Property Council of Australia*
- *Current Issues – Australian Financial Review (regular commentary & articles)*

Source relevant short courses – e.g. finance, legal, carbon management

# About The CTI Business

*What was the inspiration & motivation behind CTI:*

*As a group we quickly recognised that the carbon market place was missing a reputable provider of training solutions in carbon management that could assist organisations develop the skills & competencies that would be critical to becoming carbon ready.*

*Most importantly....*

*We all had a common interest in climate change and the importance of industry & business to begin responding as part of the broad collective action needed to combat its effects & that the best way to do this was through changed attitudes & behaviours which were fostered by carbon centric skills & competencies acquired through training.*

*Most challenging:*

*Transitional arrangements → straddling non CTI income generating work while building the business*

*Cynicism & scepticism → could CTI succeed in the current marketplace & at such an early stage*

*Success:*

*Being clear about the strategy & the critical components for building up the business*

*Knowing the critical contributions that each team member would make*

# CTI – Next 12months

*Extensive workplan ahead -*

- *National VET accreditation of our Carbon Management Courses*
- *Continuing development & evolution of our facilitated workshops along with our carbon management courses*
- *Expansion of our technology infrastructure – more functionality & capability*
- *Rollout of our carbon management pilot program under the sponsorship of NSWDET & their Green Skills program*
- *Facilitated workshop roadshow to roll-out in conjunction with a leading industry association across Australia/NZ & China*
- *Development of our national green skills training program in conjunction with the National Employment Services Association*
- *Looking to secure contracts with various green skills industry & climate change adaptation support programs*
- *Working diligently to secure a training contract with a major international government department*
- *Lock down of the international expansion strategy*

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# Q&A

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