

# **IMPLICATIONS OF A CARBON TAX FOR LOCAL GOVERNMENT**

## **FINPRO CONFERENCE**

**13 October 2011**

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# OVERVIEW OF TODAY'S PRESENTATION

- Why is there a need for a carbon price?
- How will the Carbon Tax scheme work?
- What will be the implications for local government?
- What actions can you take to address price implications?

# WHO IS ACCSR?

- ACCSR is a consulting and training organisation wholly dedicated to building strategic advantage and stakeholder wealth through corporate social responsibility
- We help organisations create lasting value through responsible and sustainable business strategies and productive stakeholder relationships
- Our specialty areas are
  - Sustainability Strategy Development
  - Sustainability Program Implementation
  - Stakeholder Research and Engagement
  - Sustainability Reporting
- Partnership with La Trobe University Graduate School of Management since 2008

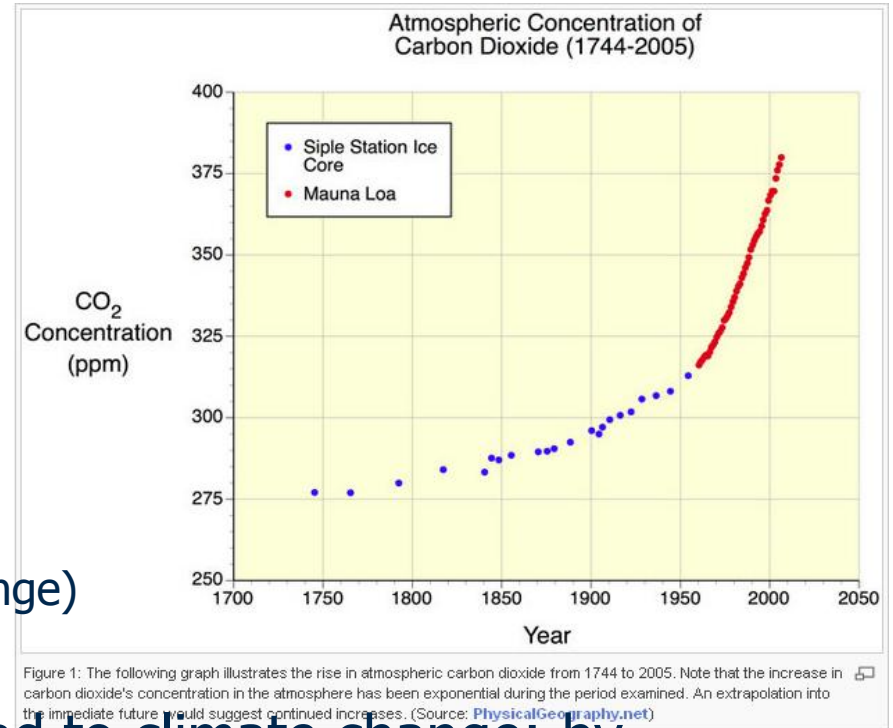


# WHY A CARBON PRICE?

To address climate change!

- Enough scientific evidence to prove it's happening (view the IPCC Reports Intergovernmental Panel on Climate Change)

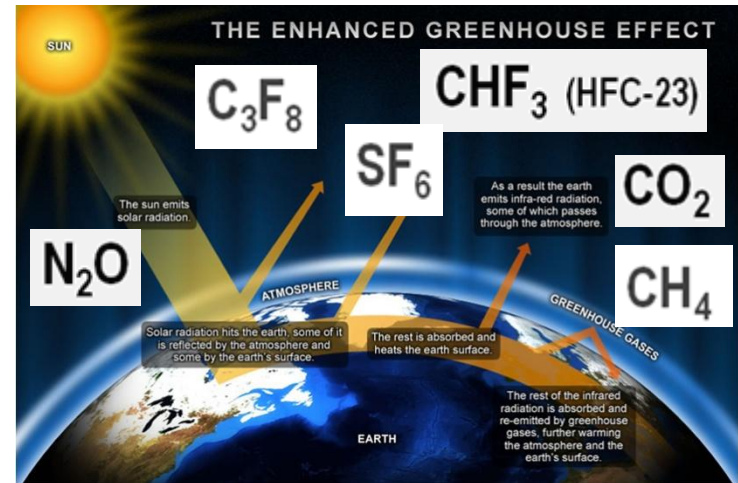
- Greenhouse gas emissions lead to climate change; by applying a price to emissions, the more intensive activities will cost more, which makes them less attractive. It's essentially a behaviour change mechanism



# WHAT IS 'CARBON'?





Carbon dioxide =  $\text{CO}_2$   
 $\text{CO}_2$  is one of 6 greenhouse gases

$\text{CO}_2\text{-e}$  = Carbon dioxide equivalent  
All 6 greenhouse gases converted  
to a common denominator  
(it's a bit like converting a basket of  
currencies to USD)



Therefore when referring to "carbon", generally referring to  $\text{CO}_2\text{-e}$ , which is a composite measure of all 6 greenhouse gases

# 6 KYOTO GREENHOUSE GASES

The 6 Kyoto GHGs	Chemical Formula	Global Warming Potential*	Uses/ Major Sources
 Carbon dioxide	<b>CO<sub>2</sub></b>	1	Fossil fuel combustion, Land use change, Cement
 Methane	<b>CH<sub>4</sub></b>	21	Natural gas Enteric fermentation Anaerobic decomposition
 Nitrous oxide	<b>N<sub>2</sub>O</b>	310	Fertilisers, Combustion
 Perfluorocarbons	<b>C<sub>3</sub>F<sub>8</sub></b>	7,000	Electronics, Cathodes for aluminium manufacture
Hydrofluorocarbons	<b>CHF<sub>3</sub></b> (HFC-23)	11,700	Refrigerant
Sulphur hexafluoride	<b>SF<sub>6</sub></b>	23,900	High voltage switchgear, Manufacture of magnesium

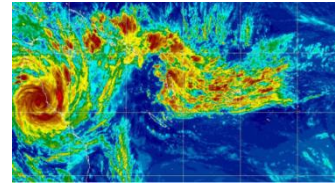
Source: DCC NGA Factors November 2008

 =covered by Australian scheme

# COSTS OF CLIMATE CHANGE

Climate change is already costing you and/or the businesses in your local government area

- Agriculture (floods, drought)



- Tourism (storms)

- Energy (new infrastructure, prices to double by 2015)



- Food processing (how much extra to import bananas when there are none in Australia?)

- Insurance premiums (rose 10% last year)

# HOW WILL THE CARBON PRICE SCHEME WORK?

## Scheme is called The Clean Energy Plan

- 60% of Australia's carbon pollution will be covered by a carbon price
- 2050 target of 80 per cent reduction in greenhouse emissions based on 2000 emission levels
- Liable businesses will purchase permits per tonne of CO<sub>2</sub>-e they produce and surrender them to the government (approximately 500 businesses)
- Liability will lie directly on the operator of the facility, not the controlling corporation (although liability can be transferred)



# HOW WILL THE CARBON PRICE SCHEME WORK (CONT'D)?

## Two phases

- Phase 1: 1 July 2012 – 30 June 2015
  - First three years the price per tonne of CO<sub>2</sub>-e known and fixed
  - Starting at **\$23 per tonne**, increase by 2.5% per year (Year 2 - \$24.15, Year 3 - \$25.40)
  - Exact number of permits available to equate to business requirements
- Phase 2: 1 July 2015 and beyond
  - From 1 July 2015 there will be a cap and trade scheme, much like what was originally proposed under the CPRS
  - The price will essentially be set by the market
  - Number of permits limited (ie capped) to equate to the government's targets on carbon pollutions

# COVERAGE

## Industries

- Stationary energy production
  - Business transport emissions
  - Industrial processes
  - Non-legacy waste
  - Fugitive emissions
- 
- Facilities with Scope 1 greenhouse emissions greater than 25,000 tonnes CO<sub>2</sub>-e per year



This does NOT include purchased electricity

# EXCLUSIONS AND ASSISTANCE

## Specific exclusions

- Agriculture and land sector
- Fuel used by agriculture, forestry and fisheries
- Transport fuel for household and light commercial vehicles or less)
- Fuels used in domestic aviation, shipping, rail transport are now dealt with through change to fuel tax credits or changes in excise, so excluded from scheme



(4.5 tonne

## Assistance

- Household assistance for low income families (50% allocated)
- Business assistance to support competitiveness and avoid job loss (\$9.2bn)
- Climate Communities Fund to work with local government and community organisations
- Clean Energy Finance Corporation to support innovation

# OFFSETS

Offsets will be available to reduce total emissions

## Carbon Farming Initiative

- Land abatement schemes that generate Kyoto-compliant Carbon Credit Units (or non-compliant under certain conditions)
- Forestry, agriculture activities
- Only available for 5% of obligation during Phase 1 (fixed price)
- No limit on quantity during Phase 2 (flexible price period)



## International carbon market offsets

- Linkage to international offset schemes
- Not all international offsets are eligible – based on quality (CERs, ERUs, RMUs)
- Will only be available during Phase 2 until 2020
- Can only use for a maximum of 50% of obligations



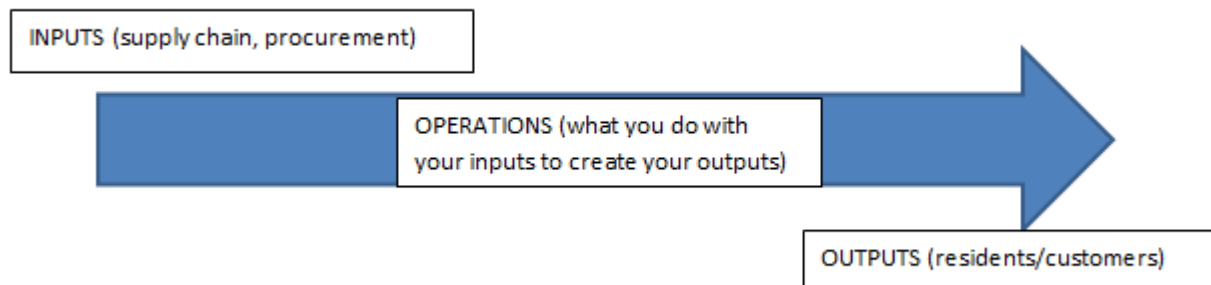
So that's the Carbon Tax...

But what does it mean for  
**LOCAL GOVERNMENT?**

# IMPLICATIONS FOR LOCAL GOVERNMENT

## Practical Implications

- Consider it from a lifecycle perspective
  - Inputs
  - Operations
  - Outputs



- For much of what you do in your day-to-day business these may overlap but a helpful starting point

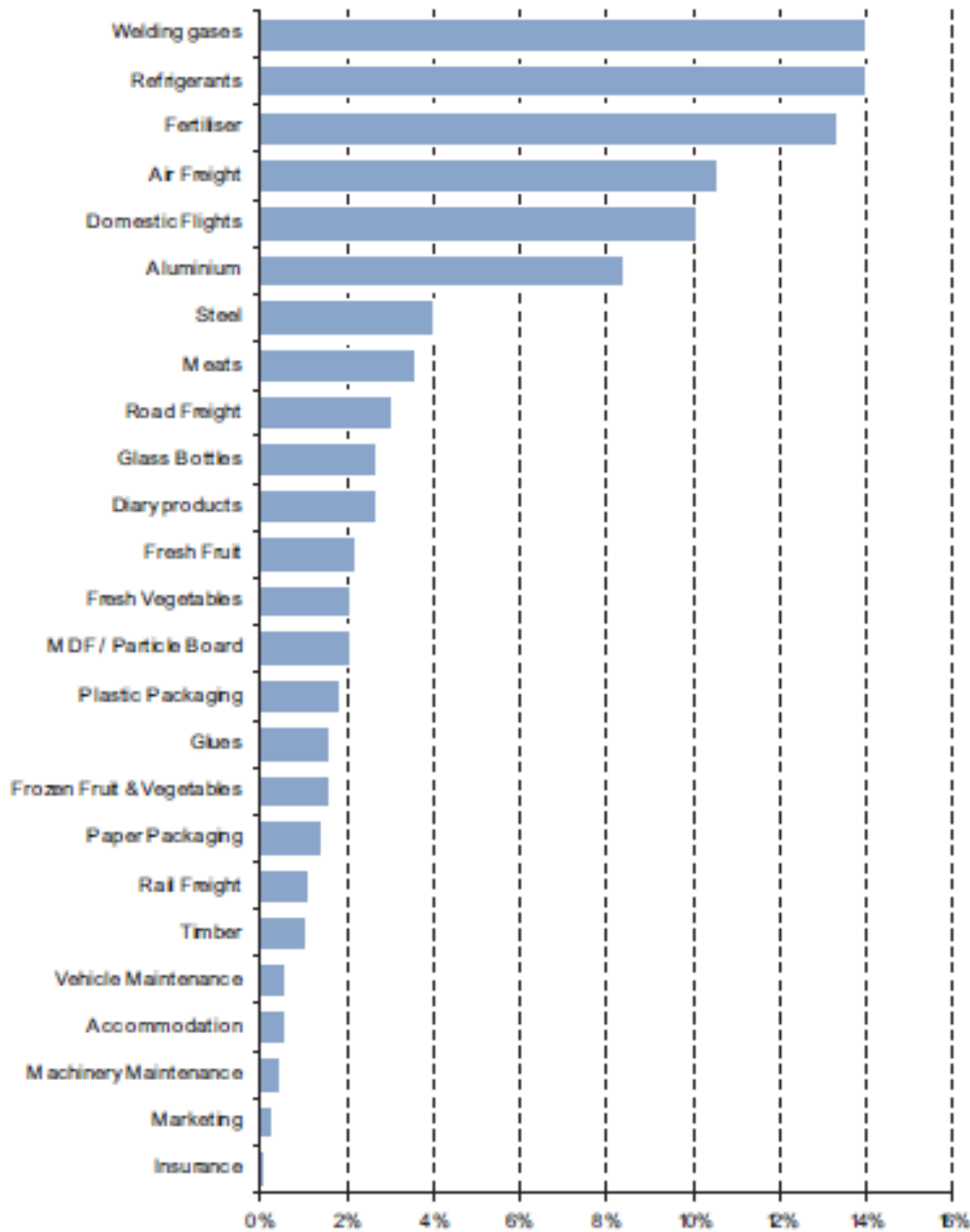
# INPUTS (SUPPLY CHAIN)

## Inputs (Supply chain)

Studies that have shown 60% of the impacts of a carbon price occur via the supply chain

- Reputex Dec 2009 <http://reputex.com.au/>
- KPMG/QLD Government study 2009  
<http://www2.business.qld.gov.au/documents/carbon-outlook-final-report-Oct09.pdf>
- NHS UK Oct 2008  
[http://www.resource-accounting.org.uk/uploads/Reports/NHS\\_Carbon\\_Emissions\\_modellingOct08.pdf](http://www.resource-accounting.org.uk/uploads/Reports/NHS_Carbon_Emissions_modellingOct08.pdf)

Figure 20 Potential Input Cost Increases Using Reputex Emissions Intensities, 2007/08



# OPERATIONS

Look at what your council does on a day-to-day basis

- Services you provide
- Buildings you occupy
- Vehicles you drive
- Interaction with residents



Some examples

- Street lighting
- Council offices
- Home care services (vehicles, food)
- Libraries (lighting, heating/cooling, computers, books/magazines)
- Kerbside collections (bins, trucks, disposal)
- Landfill management (emissions, vehicles)
- Information (paper, printing, envelopes)
- Stray animals (lights, food, vehicles)



# LANDFILLS

- Threshold for liability is 25,000 tonnes CO<sub>2</sub>-e during a financial year (main greenhouse gas is methane, which has Global Warming Potential 21 times CO<sub>2</sub>)
- Landfills which ceased taking waste before 1 July 2008 are specifically excluded
- Threshold based on emissions in the 2011/12 year
- “Prescribed Distance” rule – where smaller landfills are within a specified distance of a large (ie >25,000 tonnes) landfill, the threshold is reduced to 10,000 tonnes (stops selective waste disposal by a council to keep emissions below threshold)

UPDATE: IN CLEAN ENERGY BILL THIS AMENDED - SMALL LANDFILLS WON'T BE INCLUDED FOR AT LEAST FIRST THREE YEARS

- Even if don't own a landfill, you will use one, so carbon price implications

# OUTPUTS (RESIDENTS AND BUSINESSES)

## How will customers be impacted by carbon tax?

### Through local government services

- Rates – what capacity do you have to pass on additional costs to ratepayers?
- Will you still be able to provide all those services you've always done, in the same way you always have?
- Consider how customers access your services – will the carbon price influence this? Eg car travel - household fuel is not part of the scheme now, but likely in the future

### Other impacts

- Local Businesses – how will they be impacted by carbon costs? Businesses that require high energy intensive materials (eg manufacturing) or involve long distance transport (freight) will be more heavily impacted. What can council do to assist?
- Residential impacts (electricity – heating/cooling)

# IMPLICATIONS FOR LOCAL GOVERNMENT

## Accounting and Financial Implications

- Budgets and forecasts for next year and beyond
- Electricity contracts
- Other business contracts regarding pass-through of carbon price
- Permits are 'in the nature of assets' – consider legal and accounting implications of this (AASB Meeting Notes 9 September 2011)  
[http://www.aasb.gov.au/admin/file/content102/c3/AASB Action Alert 9 Sept 2011.pdf](http://www.aasb.gov.au/admin/file/content102/c3/AASB_Action_Alert_9_Sept_2011.pdf)
- AASB Memo (31 August 2011)  
[http://www.aasb.gov.au/admin/file/content102/c3/Sept 2011 AP 2 1.1 Memo Financial Reporting Implications Carbon Tax.pdf](http://www.aasb.gov.au/admin/file/content102/c3/Sept_2011_AP_2_1.1_Memo_Financial_Reporting_Implications_Carbon_Tax.pdf)
- Consider implications of Integrated Reporting, which will no doubt include a requirement for reporting on carbon emissions  
<http://www.theiirc.org/>

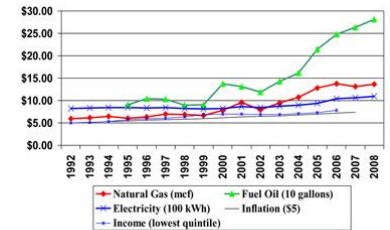


Fig. 2.1. Rate of increase in residential energy prices by fuel type (since 1992 nominal dollars). Source: DOE/EIA Short Term Energy Outlook, October 2007, Bureau of Labor Statistics, Bureau of the Census.

# ALL BAD? NO!

Don't consider this as "all bad", rather consider as an opportunity

MAV modelling in 2009 for previous CPRS showed the impact on total expenses was 2% and impact on rates around 3.3%

(MAV Carbon Price Members Brief August 2011)

Opportunity to do things differently, to save money, to be efficient; could offset price impacts

Local Governments have been at the leading edge in working with the community on sustainability issues, and particularly with climate change matters; plenty of scope to build on this leadership position

# CARBON PRICE READINESS CHECKLIST

- Identify your emission sources
- Calculate your emissions (prepare a “Carbon Account”)
- Analyse potential cost impacts, both direct and indirect
- Incorporate future cost impacts in profit and cash flow forecasts
- Stay updated on energy price forecasts
- Develop a carbon management strategy
  - Identify direct emission reduction opportunities
  - Implement energy efficiency measures
  - Engage suppliers
  - Educate employees
- Establish a reporting framework
- Incorporate carbon price into risk framework

Emissions source	Consumption units	Consumption	CO2-e (tonnes)	Proportion of total inventory (%)
<b>Direct emissions (Scope 1)</b>				
- Vehicles used for work	litres	3,330	7.64	2.14%
- Refrigerant leakage (office fridge)				0.00%
- Refrigerant leakage (vehicles)				0.00%
<b>Indirect emissions (Scope 2)</b>				
- Purchased electricity		4,500	4.01	1.12%
- Business lighting	kWh	19,554	17.40	4.88%
- Office equipment				
<b>Indirect emissions (Scope 3)</b>				
- Base building lighting	kWh	136	0.11	0.03%
- Employee travel to work	litres	2,426	5.56	1.56%
- Employee public transport				0.00%
- Office waste				0.00%
- Office electricity	kWh	24,180	4.38	1.22%
- Flights				
- Employee travel	km	134,000	37.52	10.53%
- Board and SAC meetings	km	61,804	24.09	6.76%
- Conferences and Seminars				
- Air travel	km	936,488	218.00	61.16%
- Car travel	litres	15,278	37.26	10.45%
- Accommodation	kWh	1,205	0.53	0.15%
<b>TOTAL CO2-e (tonnes)</b>			<b>356.46</b>	

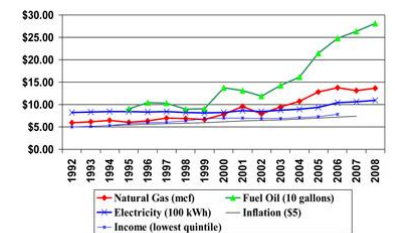


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# CARBON ACCOUNT

Emissions source	Consumption units	Consumption	CO <sub>2</sub> -e (tonnes)	Proportion of total inventory (%)
<b>Direct emissions (Scope 1)</b>				
- Vehicles used for work	litres	3,339	7.64	2.14%
- Refrigerant leakage (vehicles)	grams	2,490	0.49	0.14%
<b>Total Scope 1</b>			<b>8.13</b>	<b>2.27%</b>
<b>Indirect emissions (Scope 2)</b>				
- Purchased electricity				
- Office equipment	kWh	19,554	17.40	4.86%
- Tenancy lighting	kWh	4,500	4.01	1.12%
<b>Total Scope 2</b>			<b>21.41</b>	<b>5.98%</b>
<b>Indirect emissions (Scope 3)</b>				
- Conferences/Seminars - air travel	km	936,488	218.00	60.93%
- Flights - Employee	km	134,000	37.52	10.49%
- Conferences/Seminars - car travel	litres	16,278	37.25	10.41%
- Flights - Board meetings	km	91,804	24.09	6.73%
- Employee travel to work	litres	2,426	5.66	1.58%
- Office electricity	kWh	24,180	4.35	1.22%
- Conferences/Seminars - accom	kWh	1,248	0.55	0.15%
- Office supplies	kg	240	0.45	0.13%
- Office waste	kg	240	0.27	0.08%
- Base building lighting	kWh	126	0.11	0.03%
<b>Total Scope 3</b>			<b>328.25</b>	<b>91.75%</b>
<b>Total Scope 1+2</b>			<b>29.53</b>	<b>8.25%</b>
<b>Total CO<sub>2</sub>-e (tonnes)</b>			<b>357.78</b>	
<b>Offsets</b>			<b>0.00</b>	
<b>Net CO<sub>2</sub>-e (tonnes)</b>			<b>357.78</b>	

# CONTACT DETAILS AND FURTHER INFORMATION

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## References:

- KPMG and Qld Govt small business review: **Carbon Outlook**  
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- Chartered Accountants: **Business Briefing Series: 20 issues on the business implications of a carbon cost**  
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- EPA Victoria **Carbon Management** <http://www.epa.vic.gov.au/climate-change/carbon-management/default.asp>
- **Integrated Reporting:** <http://www.theiirc.org/>