



SUSTAINABILITY, CLIMATE CHANGE & WATER

Climate change and the CPRS: Impacts on Government and Business

Doing Business the Carbon Literate Way, City of Joondalup

Presenter: Michael Wood

ADVISORY

Disclaimer

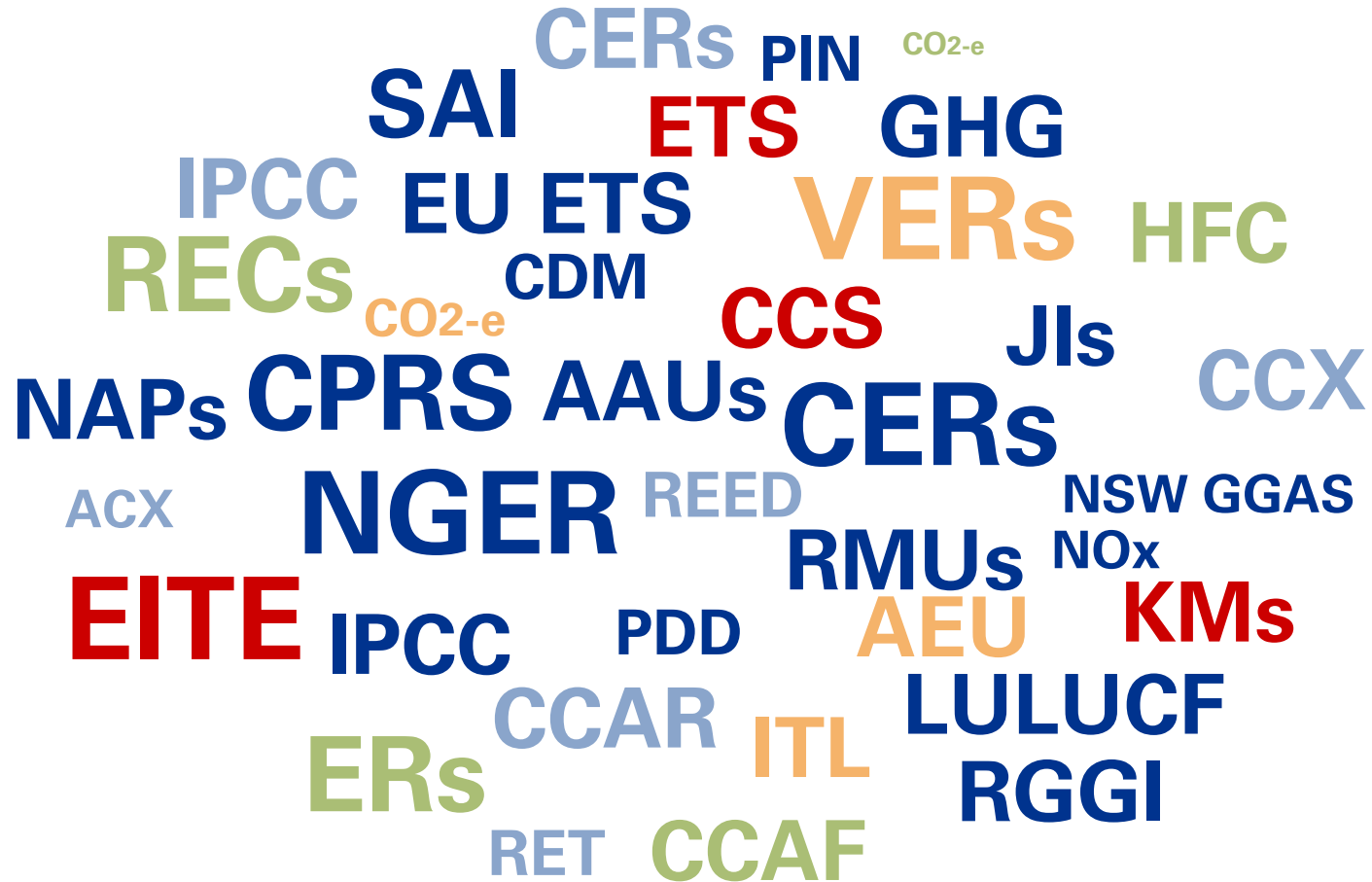
The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation. The views and opinions contained in the presentation / paper are those of the author and do not necessarily represent the views and opinions of KPMG, an Australian partnership, part of the KPMG International network. The author disclaims all liability to any person or entity in respect to any consequences of anything done, or omitted to be done.

Presentation outline

- Context for government and business
- Government policy framework
- What does a carbon constrained economy mean to business and government?
- How to prepare for the carbon constrained economy

Before we start...

The complex issue of climate change...





Context for government and business

AUDIT ■ TAX ■ ADVISORY

Context - what is a greenhouse gas?

GHG's	Potential sources of emissions	GWP*
Carbon dioxide, CO ₂	<ul style="list-style-type: none"> Fuel combustion, coal, oil, gas Industrial processes, cement clinker, iron and steel Combustion of biomass* 	1
Methane, CH ₄	<ul style="list-style-type: none"> Fugitive leaks from gas supply systems, coal mines Biogenic (natural) sources farming and waste disposal 	21
Nitrous oxide, N ₂ O	<ul style="list-style-type: none"> Fuel combustion, chemical production (huge) Biogenic (natural) sources farming and waste disposal 	310
Hydrofluorocarbons (HFC)	<ul style="list-style-type: none"> Refrigerants, fire retardants, inert atmospheres 	140 – 11,700
Perfluorocarbons (PFC)	<ul style="list-style-type: none"> Aluminium production 	6,500 – 9,200
Sulphur hexafluoride, SF ₆	<ul style="list-style-type: none"> Engineering, metal casting and MV electrical switchgear 	23,900

*Global Warming Potential

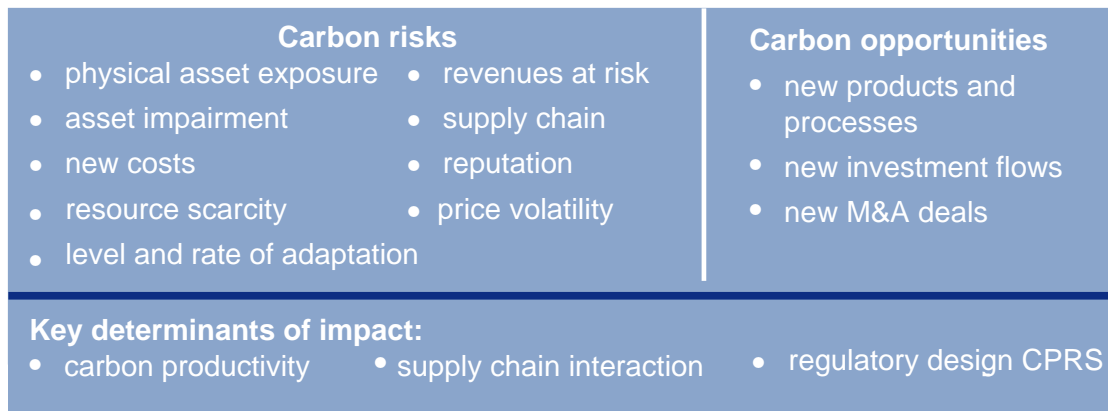
Climate change – why is it already a business issue?

Potential Physical Impacts of Global Warming

- Increasing temperature
- Increasing sea levels
- Increasing weather events
- Habitat changes

Medium to long term

Potential Business Impacts



Short term

- Regulatory
- Economic
- Social
- Security

- Physical impacts on business model e.g. to water and cooling
- Regulatory landscape rapidly evolving, giving rise to business risks and opportunities e.g. compliance, accounting and reporting risks, and developing green products
- Hardening stakeholder expectations, requiring coordinated and coherent corporate responses
- Increasing litigation risks – challenges to new regulations by affected businesses; damages suits targeted at heavy polluters

Potential Reactionary Impacts of Emission Reduction Activity

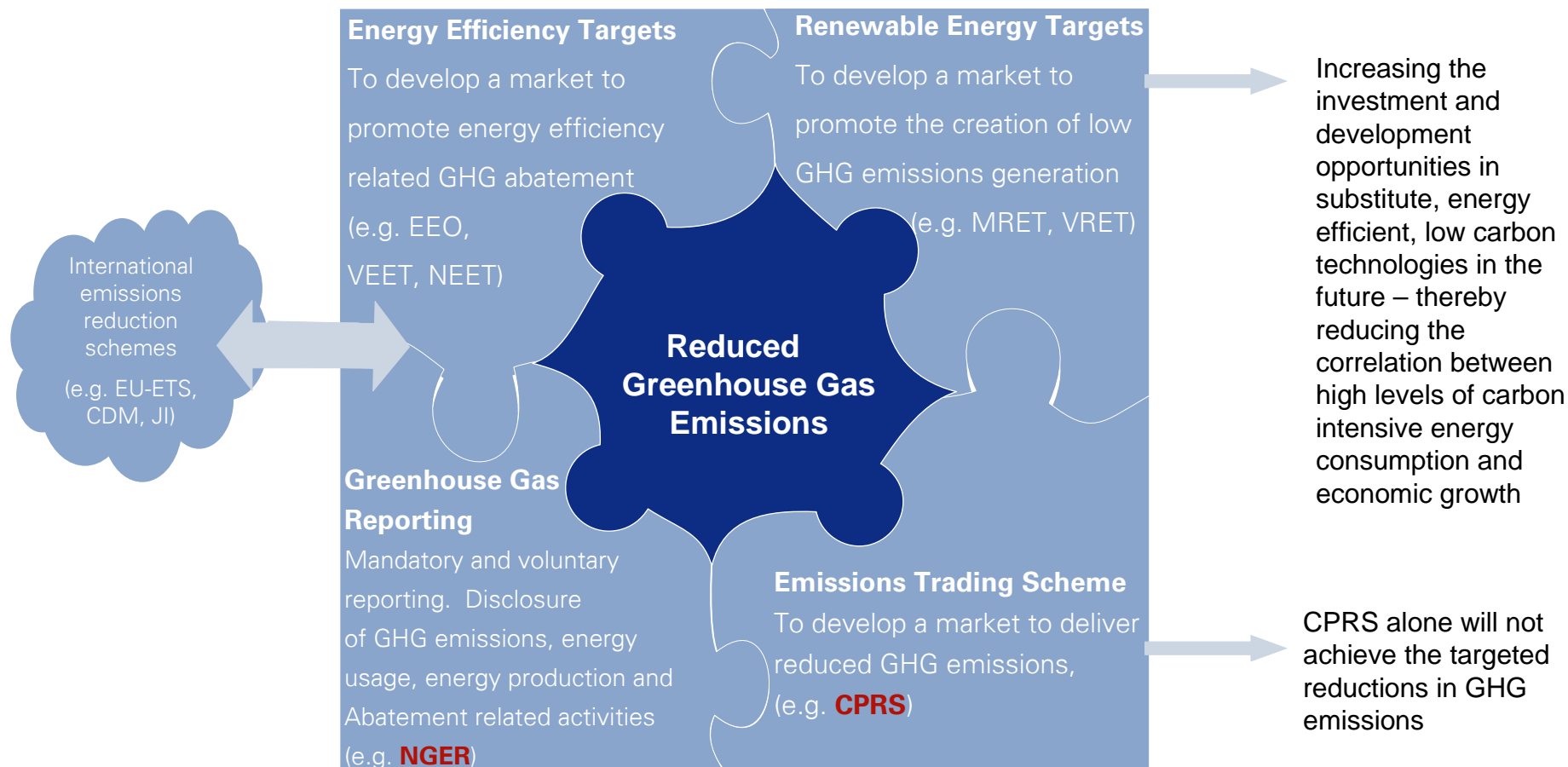


Government policy framework

What are the regulators hearing?



Australian governments policy response



An effective solution requires a combination of inter-related and market-related policy levers

Other complementary related policy levers will be required (e.g. R&D tax concessions, government rebates and grants)

Data reporting issues – lessons learnt from the EITEs process

Completeness and accuracy

- In a minority of cases there were significant gaps / overlaps in the data sets.
- Examples of an inability to actually report an activity value; not ever measured before.
- Lack of understanding and application of uncertainty: particularly where estimation methods were used.
- Lack of systematic approach to allocation across the EITE – non EITE boundary

Controls and quality assurance

- Lack of calibration on base measurement devices: Out of date, lack of evidence, misunderstanding.
- Activity values not subject to QA, in particular with imported materials in mass balance.

Timeliness

- Serious difficulty in getting the information pulled together within the 6 week window.

Emissions trading around the world... we're not alone!



Austria



Bahrain



Belgium



Bulgaria



Czech Republic



United Kingdom



Denmark



Egypt



Estonia



Finland



France



Taiwan



Germany



Greece



Hungary



Ireland



Italy



Japan



Luxembourg



Netherlands



Norway



Poland



Portugal



South Korea



Romania



Russia



Spain



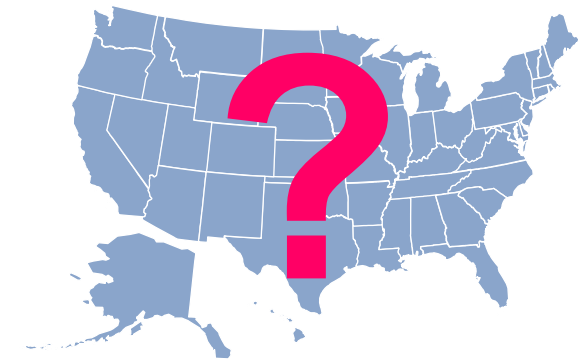
Sweden



Switzerland



New Zealand



How will the CPRS work?

Introduction of the cap and trade mechanism in July 2012

Sets a price on carbon by:

- 1. Setting a cap on the total allowable emissions of emissions (cap)**
- ▼
- 2. That cap goes down gradually (targets and trajectories)**
- ▼
- 3. Certain industries (covered by a threshold) must purchase a permit via an auction**
- ▼
- 4. Permits can be traded**
- ▼
- 5. The market will set the price**

- Assistance will be provided to trade exposed activities and strongly affected industries
- Forestry can opt into the scheme on a voluntary basis (offsets)
- Agriculture out until 2015

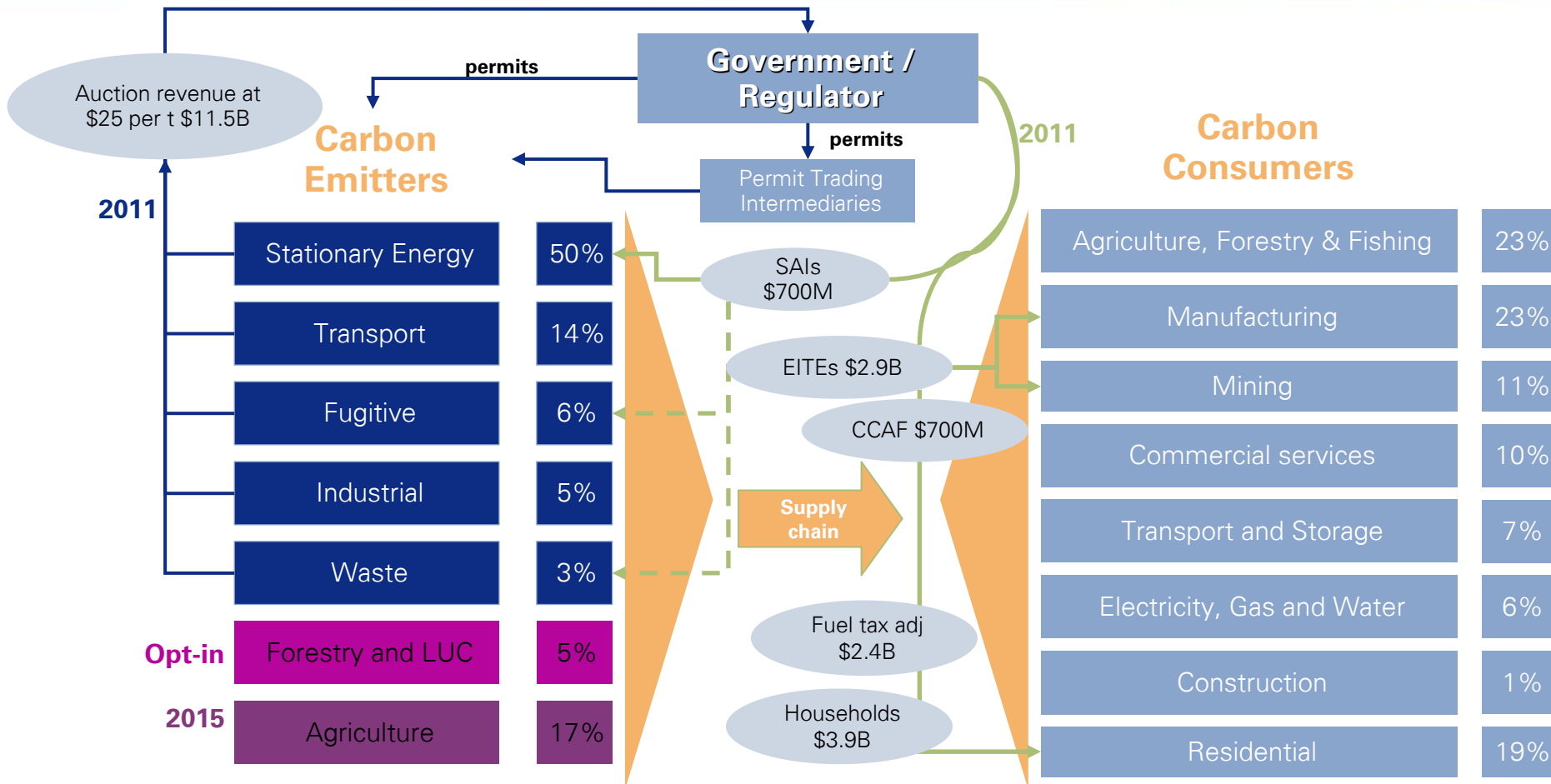
The 'new' CPRS...

- **Increasing the 2020 target**
- **Establishment of Australian Climate Change Regulatory Authority and Australian Carbon Trust**
- **Delayed starting date**
- **Unlimited fixed price permits in year 1**
- **Intragroup liability transfers**
- **OTN mechanism improvements this relates to the method of quoting the OTN for obligation transfers that are:**
 - Mandatory - LPG or natural gas sellers, large (25ktpa) coal or LPG or natural gas users, and
 - Voluntary - large liquid and solid fuel users (25ktpa), feedstock users, exporters and intermediate suppliers
- **Increase in EITE assistance - 94.5% (from 90%) and 66% (from 60%)**
- **Waste - exclusion from CPRS coverage of legacy emissions from landfill sites attributable to pre 1 July 2011 waste.**
- **Alignment of NGER and CPRS – including:**
 - Expanding the reporting requirements under NGER to accommodate the CPRS



What does a carbon constrained economy mean to government and business?

CPRS – the macro picture and cost pass through



- Encourage emitters to reduce emissions
- Find least cost impact on economy

Objectives

- Increase price to encourage efficient use
- Change economics of alternative fuels

Indirect Cost Analysis: Electricity

Main impact will be via the electricity price.

Baseline retail electricity prices are forecast to increase in nominal terms over the period 2008-2020 by:

- 25 % to 50% without the CPRS
- 30 to 70 % with the CPRS

Example: Food Company

Annual Emissions

- Scope 1 = 45,000 t CO₂e (no single facility . 25,000 t CO₂e therefore not in CPRS).
- No direct carbon exposure.

But...

- Electricity bill = \$23 million p.a
- Could increase by \$4 m p.a due to CPRS and \$12 m for other reasons...to \$39m (NPV) by 2020

Carbon management – direct and indirect emitters

Carbon readiness

The Carbon Readiness analysis addresses a business' readiness across all of the areas below.

Regulatory compliance and reporting	Financial and Commercial	Business Readiness	Strategy
<ul style="list-style-type: none"> Does the business need to comply with the NGER Act? Will the business and its facilities be covered by the Carbon Pollution Reduction Scheme? Will the business qualify for transitional assistance? What are the incremental costs of regulatory compliance? What incidental changes to other regulatory schemes will affect the business? 	<p>Costs</p> <p><i>Direct</i></p> <ul style="list-style-type: none"> What are the direct costs of being covered by the proposed CPRS? What are the additional incremental costs of compliance with the regulatory schemes? <p><i>Indirect</i></p> <ul style="list-style-type: none"> What are the indirect/ supply chain costs to the business resulting from the CPRS? <p>Revenues</p> <p><i>Opportunities</i></p> <ul style="list-style-type: none"> What new revenue opportunities will arise from the introduction of the CRPS? <p><i>Threats</i></p> <ul style="list-style-type: none"> What are the threats to existing sources of revenue arising from the CPRS? How will the CPRS affect demand for the business's products and services? 	<ul style="list-style-type: none"> Is the business ready to trade carbon permits? Are greenhouse emissions appropriately classified, measured and tracked? Have appropriate corporate governance and carbon risk management changes been considered? Have appropriate changes been made to business processes and systems to accommodate new reporting requirements? Are changes to IT infrastructure and business models required? Have accounting and tax implications been considered? 	<ul style="list-style-type: none"> How does climate change affect the strategic positioning and future of the business? What impacts will climate change awareness have on brands, investor relations, community affairs and other stakeholders of the business? Are carbon abatement strategies in place?



Presenters detail

Michael Wood
Senior Advisor
+61 8 9263 7426
michaelwood@kpmg.com.au