Communicating carbon pricing

Sharing the experience of Royal Dutch Shell plc

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WARNING: Uncertainties ahead

The companies in which Royal Dutch Shell plc directly and indirectly owns investments are separate legal entities. In this presentation “Shell”, “Shell group” and “Royal Dutch Shell” are sometimes used for convenience where references are made to Royal Dutch Shell plc and its subsidiaries in general. Likewise, the words “we”, “us” and “our” are also used to refer to subsidiaries in general or to those who work for them. These expressions are also used where no useful purpose is served by identifying the particular company or companies. ‘‘Subsidiaries’’, “Shell subsidiaries” and “Shell companies” as used in this presentation refer to companies over which Royal Dutch Shell plc either directly or indirectly has control. Entities and unincorporated arrangements over which Shell has joint control are generally referred to as “joint ventures” and “joint operations” respectively. Entities over which Shell has significant influence but neither control nor joint control are referred to as “associates”. The term “Shell interest” is used for convenience to indicate the direct and/or indirect ownership interest held by Shell in a venture, partnership or company, after exclusion of all third-party interest.

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Shell has a long history in this space

Shell Oil Company
Marvin E. Odum
President
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June 24, 2009

The Honorable Nancy Pelosi
Speaker of the House
U.S. House of Representatives
Washington, DC 20515

Dear Madam Speaker,

Shell Oil Company has long supported a market-based approach to addressing the critical issue of climate change. We are encouraged that The American Clean Energy and Security Act of 2009 (ACESA) is based on such an approach and we support the continued momentum of this legislation in the House of Representatives.

Shell is pleased that this le
Partnership (USCAP), of w
offset program and the com

In our view, the bill was
Waxman and the efforts of
Notable improvements wer
and the removal of an over
recommendations in USCA

We appreciate the collabor
progress, but not enough,
equal protection of energy
do not cover our process
allocated to protect the tra
support addressing this pro
Finally, we need transpare
and-trade program and the

Marvin Odum Letter to The Honorable Nancy Pelosi
June 24, 2009
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Shell is committed to helping the 111th Congress enact a fair and effective cap and trade p
lowest possible cost to consumers and the economy. We recognize the value of such
spurring investment and positioning the United States as a leader in the coming interna
negotiations.

ACESA is a step in the right direction. We will continue our efforts to improve this l
moves to the Senate.

Sincerely,

Marvin E. Odum
President
Shell Oil Company

CLOUD THE ISSUE OR CLEAR THE AIR?

The Role of Emissions Trading within Europe

The climate change debate has moved from the international stage of frameworks and protocols to the reality of finding practical solutions that work. Business wants to see systems that deliver environmental improvements in an efficient and economic way.

A Solution at Hand

Investment prospers in a stable regulatory environment and conversely, is threatened by uncertainty and constant change. Investment decisions on the table now are dependent on such a stable environment in the lead up to and throughout the period governed by the Kyoto Protocol. So, the Kyoto Protocol and the constraints it imposes are real issues for business right now.

The need to reduce greenhouse gas emissions has introduced a degree of uncertainty into Europe's future. How will it be achieved? What is required? Will it be very expensive? Will today's policies deliver the results in years to come?

One solution to these issues is for governments to allocate a fixed number of emission allowances to industry covering the period 2005 to 2012, together with the right to trade these allowances. Such a move would have far-reaching consequences. With mandatory participation, it would give governments the confidence that the sector would deliver its share of the Kyoto burden and put Europe well on track for the environmental result it needs. From an industry viewpoint, a clear and understandable business environment would exist for many years into the future. Concerns about constant policy change as governments struggle to meet targets could be put to one side, allowing business to focus on investment and growth.

Investment and Trading

The right to trade allowances is not just a mechanism to ensure targets are met at the end of each year. Since commodity trading began, producers have sold their goods at fixed prices far into the future to ensure a return on their capital investment. Similarly, a future market in emission allowances could spur investment in new technologies to reduce emissions, which in turn would support business growth. Such a market cannot exist though, without allocation now for the years to come. Allocation on a piecemeal basis would be self-defeating, undermining the very reason for having a traded market.

Limiting participation in the market to emitters only would have a similar self-defeating effect. Commodity markets depend on traded volume or liquidity to succeed, particularly in the further out years. This could be achieved by encouraging non-emitting parties to enter such as banks or investment funds.

Allocation is the Issue

Setting the emissions start and end points for a facility establishes the number of allowances that will be allocated to it. Measuring historical emissions for the facility normally sets the start point. The end point is mainly set by the total reduction required by the sector. For a given facility either could be adjusted to account for any early action. For example, a facility that is already in an emissions reduction scheme could have a higher end point than one that isn't. The end point would not include a business growth allowance as this undermines the overall environmental integrity. Growth is made way for by investing in emission reductions or purchasing additional allowances.

Allowances should be granted free of charge. A charge will reduce the funds available for investment to reduce emissions. Even a scheme that "recycles" any charges back to industry, will impact medium term cash flow, and hence investment, because of the considerable lag between collection and redistribution.

Governments should maintain an allowance reserve for allocation to new entrants and special circumstances, such as allocation to cover emission increases in the industrial sector which result in larger emission decreases for the wider economy.

The Cost of Kyoto?

The cost of meeting the Kyoto obligations is a prime consideration. There is the transparent cost of emission reduction through, for example, energy efficiency measures and there is the hidden cost of the process chosen to achieve the result. Ongoing policy change and continuous one-on-one negotiation with governments will be a high cost route to Europe's goal. Utilising the market and allowing trade to flourish is a low or even zero cost undertaking.

Active markets are typically self-funding with a natural tendency to drive any direct costs downwards over time.

An established market will allow participants to seek the lowest cost emission reduction opportunities and make the important decision of "invest directly or buy allowances". Today, the array of taxes, negotiated agreements and early policy implementation burdens some parts of Europe with effective carbon costs of well over $20 per tonne of carbon dioxide. Such levels are not necessary to achieve widespread reductions. Shell's experience in meeting our voluntary target to reduce emissions by 10% below 1990 levels by 2002, suggests that costs can be kept considerably lower when companies are given the flexibility to widely seek the lowest cost sources of reductions. The trading approach under discussion in Europe today is well suited to this task.

An emissions trading system, if based on the principles of absolute caps, mandatory participation and free and fair allocation, will give rise to an investment environment which will deliver, at minimum cost, the greenhouse gas reductions that industry needs to play its role in finding solutions to climate change.

We welcome your input. Contact us on the internet at www.shell.com/climate

Our climate change team in London is on +44-20-7934 6012 and at
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London, SE1 7NA, UK.

Waves of change

FINANCIAL TIMES

WORLD BUSINESS NEWSPAPER

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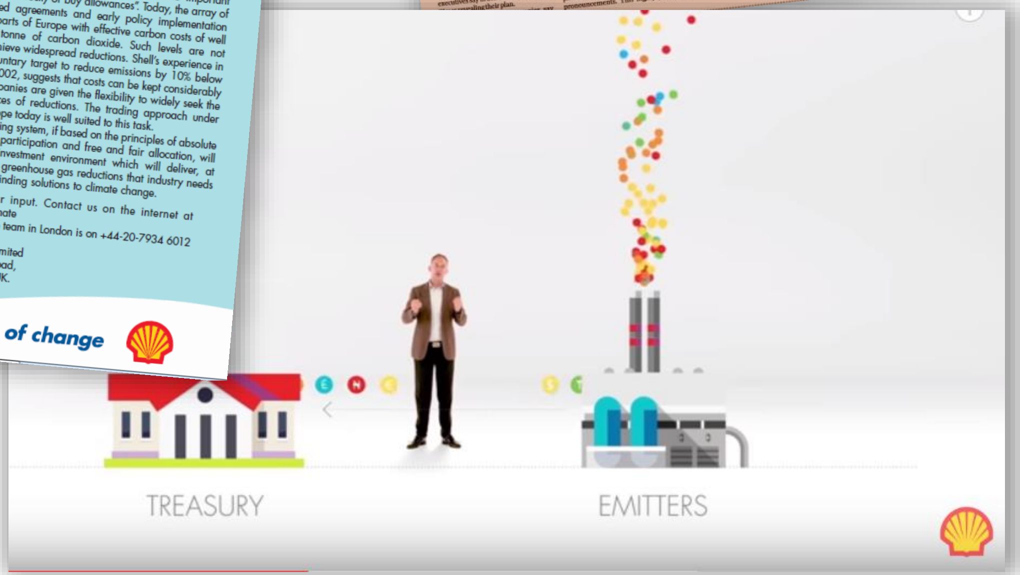
Briefing

Datawatch

European energy groups seek UN backing for carbon pricing system

• Six companies include Shell and BP • US oil majors shun push for global mechanism

'We owe it to future generations to seek realistic, workable solutions'



Always walk the talk

1999 – Shell helps found IETA

2000 – Shell develops and implements an internal carbon value risk assessment

2000-2002, Shell demonstrates cap-and-trade with an internal pilot system

2001 – Shell creates an Environmental Products trading Business

Shell executes the first ever trade in the EU ETS

Shell demonstrates linkage between systems with trades in the UK and Danish systems

2009 – Shell offers clear support for the US Congress to enact cap-and-trade

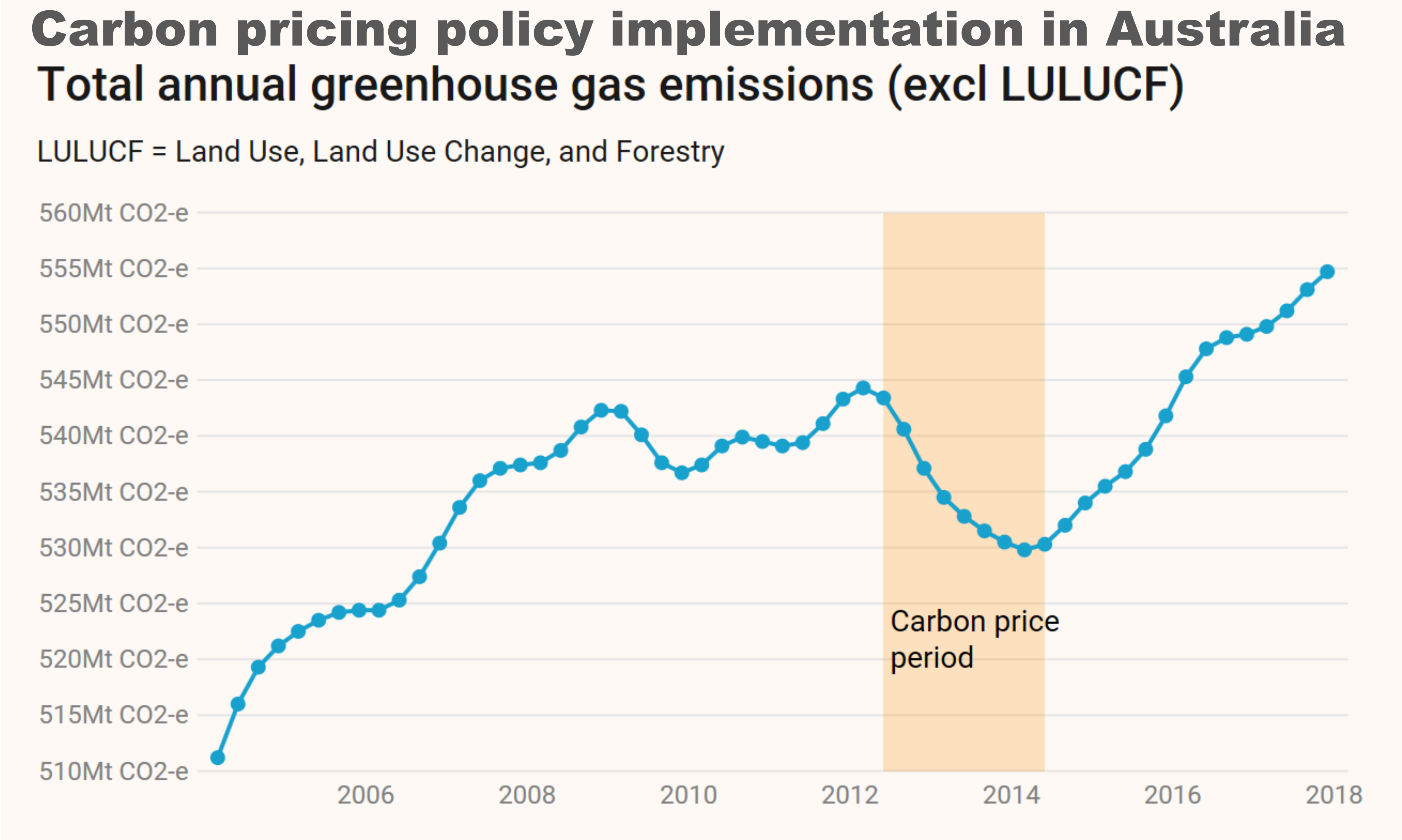
2015 – Shell becomes an early member of the World Bank CPLC

2017 – Shell becomes a founding member of the US based Climate Leadership Council

2018, Shell publishes the global cost of carbon profile used in the Sky Scenario

2000 2005 2010 2015 2020

Use powerful examples to demonstrate impact



Don’t confuse external policy with internal risk management

The term ‘carbon pricing’ is used interchangeably to describe both;

- The prevailing price in a government implemented system, such as a carbon tax;
- The carbon value used internally by a company to assess risk on projects operating under existing or anticipated government implemented systems.

These are not the same thing. It can lead to confusion, for example;

- That companies have an internal ‘carbon tax system’.
- That companies drive change on the basis of risk assessment (only partly true in some circumstances).

Better to differentiate;

- Government led / Government implemented carbon pricing systems.
- Internal carbon value (for risk assessment)

Always follow anti-trust guidelines (1)

Whilst you should obtain your own legal advice, it is generally legitimate to discuss with other industry participants and share genuinely public domain information to support the adoption and effective operation of government regulated carbon pricing programs and systems, including;

- The use, or not, of a government led carbon price and costs/benefits of same.
- Impact of carbon pricing at a very high level on the industry's ability to innovate and offer new products.
- Impact of government led carbon pricing on the industry's transition to clean energy.
- Experience and views on mechanisms to reduce carbon emissions.
- Efforts to influence governments to adopt carbon pricing mechanisms.

A broader and more in-depth discussion can be held with government representatives.

Always follow anti-trust guidelines (2)

Whilst you should obtain your own legal advice, participants must not discuss or agree on any competitively sensitive matters relating to carbon pricing in any industry in which they compete.

- Profits, margins, premiums, prices, surcharges, discounts on specific products or services, including the impact of carbon pricing and / or the use of internal carbon screening.
- Unit/variable costs (but not carbon costs) associated with specific products or services.
- Whether and at what level (percentage or absolute value) to incorporate the cost of carbon in setting prices for products they sell.
- Specific investment decisions (e.g., to build a new plant) and competitive strategies and the impact of carbon pricing on such decisions.

A broader and more in-depth discussion can be held with government representatives.