

Chapter 43

Standards and Legislation for the Carbon Economy

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ABSTRACT

The implementation of a Carbon Pollution Reduction Scheme (CPRS) at the wide scale expected by the Australian government within the next 5 years would require adjustments of practices from practically all industries. The political influence in the establishment of the Australian CPRS has skewed the focus on actually lowering the national emission levels. However, honest organizations need to adopt and implement practices in line with the ISO 14001 standard to achieve this goal. Furthermore, actual monitoring of emissions and trading challenges can be managed with technology such as emissions monitoring systems, known as Predictive Emissions Monitoring Systems (PEMS) and Continuous Emissions Monitoring Systems (CEMS) and online trading applications. Recently, the Copenhagen International Summit was held to combat the impacts of climate change; however the results were ineffective in comparison to the Kyoto Summit in 1997. However, if an ethical view on the Kyoto Protocol is taken, then its results are also seen to be ineffective of achieving the goal of lowering greenhouse gas emissions on an international scale, as organisations with profits as large as some national GDP's and greenhouse gas emissions even larger have no such restrictions or imposed targets from an international standard.

INTRODUCTION

The Australian Labor proposed a Carbon Pollution Reduction Scheme (CPRS) to lower greenhouse gases produced from industrial activities, and to abide with the targets imposed by the Kyoto Pro-

ocol. At first, the Kyoto Protocol was established to minimise the of greenhouse gas emissions from anthropogenic activities.. There is now the impression that creating international protocols and implementable schemes such as the CPRS go a long way in minimising the impacts that human activities have on the environment, and and also protecting humans from the counter effects of

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the environment. This chapter discusses the role played by various legislations and social attitudes in achieving reduction in carbon emissions.

The Carbon Pollution Reduction Scheme (CPRS) is an option presented by the Kyoto Protocol to achieve national set targets, for countries affiliated with the protocol. Australia ratified the Kyoto Protocol on the 3rd of December 2007, and came into effect on the 11th of March 2008. The Kyoto Protocol is an international agreement in which the countries involved settle to reduce greenhouse gas emissions (United Nations Framework Convention on Climate Change (UNFCCC) 2008). The protocol sets commitment periods, which last for 4 years, where one emission target is set on an international scale, and distributed amongst the countries involved with the Protocol. The first commitment period is between 2008 and 2012, where the target is to reduce emissions by 5.2% of that they were in 1990 (UNFCCC 2008). Australia's target for this period is to reach 108% of what emissions concentration were in 1990. Although this is an increase in emissions by 8% from 1990, it is a 30% reduction from its average emissions since then. A target to reduce emissions by 20% by 2020 and 60% by 2050 has also been set (Roarty 2002).

Australia currently contributes to only 1.43% of total carbon emissions in the world. However, with Australia only having 0.32% of the world's population, the country's emissions per capita is one of the largest in the world (Raupach 2007). In 2002, Australia was the third highest carbon emitting nation in the world per capita behind China and U.S.A. Australia has since moved up to the second highest emitter per capita behind U.S.A (Roarty 2002).

The CPRS consists of an emissions cap set by the government, which determines the maximum amount of CO₂ emissions in tonnes that is permitted to be emitted by industries in Australia (Department of Environment, Climate Change and Water (DECCW), 2008). The cap is split into permits, where one permit signifies one tonne of

greenhouse gas emissions. The permits are then allocated to those companies participating in the scheme. Any extra permits may be bought at auction, or a second market, or can be administratively allocated (Grubel 2009).

Companies are essentially allowed to emit as much greenhouse gases as they want, as long as they have a permit for each tonne they emit (Department of Climate Change (DECC) CPRS White Paper, 2008). The permits can be bought and sold between companies, fundamentally creating a market. The price of permits will be determined by the market. If a company holds spare permits where it is emitting less greenhouse gases than the amount of permits it holds, it can sell those extra permits to a company which requires them (those that are emitting higher than their allocated permits) (DECCW 2008).

The CPRS was proposed to be introduced to Australia in mid 2010, (Grubel 2009), however was postponed until 2011 by the Labor government led by Kevin Rudd on the 27th of April 2010 due to a lack of support from most stakeholders (Department of Climate Change and Energy Efficiency (DCCEE), 2010). The scheme has now been further postponed to 2013 since Rudd was dismissed by his party, and replaced by Julia Gillard as Prime Minister.

When the scheme was first proposed, there was an estimated 1000 companies around Australia that would have fallen under the mandatory carbon reporting scheme. (RepuTex 2008). Out of the 576 million tonnes of CO₂ equivalent emissions released per year in Australia, 169 million tonnes come from the 200 biggest companies in Australia- or the S&P ASX200 (RepuTex 2008). This is about 29% of the total amount of emissions. In this amount, 91% are solely from the materials, industrials, utilities and waste sectors.

There is evidence suggesting these companies were not prepared for the implementation of the CPRS, only 6 months prior to its first scheduled commencement (RepuTex 2008; Hasan & Funston 2008; Kelly 2007). The results of a survey run

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