Energy Policy 38 (2010) 902–911

Contents lists available at ScienceDirect

Energy Policy

journal homepage: www.elsevier.com/locate/enpol

Alternative Australian climate change plans: The public's views

Richard T. Carson [a,b,*], Jordan J. Louviere [b], Edward Wei [b]

[a] Department of Economics, University of California, San Diego, La Jolla, CA 92093, USA
[b] Centre for the Study of Choice, University of Technology, Sydney, P.O. Box 123, Broadway, NSW 2007, Australia

ARTICLE INFO

Article history:
Received 27 May 2009
Accepted 19 October 2009
Available online 13 November 2009

Keywords:
Climate policy
Discrete choice modeling
Preference heterogeneity

ABSTRACT

Climate change has come to the forefront of Australian politics and there is now an active on-going policy debate about how to best reach a commonly agreed long term goal. This paper looks at five major dimensions of this debate and constructs policy options based on them. A discrete choice experiment approach was used with a representative sample from a major internet panel provider. Survey respondents made choices between pairs of policy options with different characteristics. They favored policies starting in 2010 rather than 2012, and spending 20% of revenue raised on energy-related R&D. They were almost evenly split on whether the plan should initially exempt the transport sector and two competing approaches that redistribute revenue from the plan, and, they opposed plans giving special treatment to energy-intensive sectors of the economy. A number of other policy relevant questions related to understanding Australian views and knowledge related to climate change also were asked.

1. Introduction

Australia may be the first country where environmental policy and climate policy, in particular, played a dominant role in a national election. The Australian Labour party won the national parliamentary election on November 24 2007 defeating the Liberal/National Coalition which had been in office for 12 years. The three major issues in the election according to opinion surveys were the government's policy toward worker rights, climate policy and water policy, with the latter two linked by a very severe drought. Symbolically, the first official act of Kevin Rudd on becoming Prime Minister was to ratify the Kyoto Protocol.

Since then Rudd opened debate over specific features of the policy and strongly indicated that he wants a bipartisan consensus. As might be expected, political pundits and a wide spectrum of interest groups and experts soon weighed in along with opposition parties. Ministers and shadow ministers discussing climate change are a fixture on TV news shows. There are frequent commentaries in the press by academics, environmentalists, politicians, business leaders and well-known political commentators. As often happens, competing forces have greatly slowed the process by expressing their views of what is in the public interest.

The Australian Government has mounted a non-partisan effort to get the Australian public actively engaged in the debate over climate policy. In this report, we measure the public's views on an Australian climate change plan through a comprehensive opinion survey of Australians using a stated preference framework (Louviere et al., 2000). In reality, there is often not one policy but rather a large number of policies each of which assembles different components in various ways. This paper provides an examination the public preferences toward the key elements that make up such policy options in a framework that forces respondents to make explicit tradeoffs regarding alternative policy packages, with the policy packages designed to represent stylized versions of the ongoing debate. Two key features of our study are that the costs/drawbacks of various options are clearly disclosed to respondents, something often ignored by advocates of particular positions and in most public opinion polls, and an examination of the degree of the heterogeneity in the strength of the public's preferences toward the key policy elements when forced to make tradeoffs. The paper also presents results from a number of other survey questions important to understanding the climate policy in Australia from the public's perspective.

1.1. The Australian climate change political environment

The Liberal Party under Prime Minister John Howard signed and originally indicated a willingness to ratify Kyoto after negotiating major concessions for Australia that involved allowing an 8% increase in emissions from 1990 to 2012, and substantially increasing the baseline by 33% to account for changes in "land clearing". On June 5 (World Environment Day) 2002, the Howard government, in the face of strong and continuing opposition by Australia's powerful coal industry,

* Corresponding author at: Department of Economics, University of California, San Diego, La Jolla, CA 92093, USA. Tel./fax: +1 858 534 3383/7040.
E-mail address: rcarson@ucsd.edu (R.T. Carson).

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doi:10.1016/j.enpol.2009.10.041

announced that it would not ratify Kyoto. By the 2007 election, the battles lines were drawn with the Labour Party and the Green Party, Australia's third largest party, clearly supporting immediate and strong action to reduce greenhouse gas emissions. The Liberal Party, recognizing the unpopularity of its position moderated it somewhat, indicating a willingness to join a second round of Kyoto after 2012 if other major emitters did. It was clear that there was a major split within the party over climate issues. After losing the national 2007 election, Howard retired, and the Liberal Party indicated a willingness to again go forward with a substantive climate policy. Within that party a succession battle ensued between Brendan Nelson, initially named party leader, who largely supported Howard's views on climate change, and Malcolm Turnbull, perhaps the strongest proponent within the Liberal Party for moving forward on climate change. After a leadership vote, Turnbull became party leader.

Labour, while previously out of power at the national level, controlled all eight state and territory-level governments. The party commissioned Garnaut, a senior Australian economist at Australian National University and an advisor to former Labour governments as well as Australian Ambassador to China, to head a large effort to make recommendations on climate policy. This mechanism was transferred to the national government when Labour assumed power, with various government ministries (particularly, Treasury) actively involved in the process. Garnaut issued a series of interim reports on different issues, culminating in a final report (2008) at the end of September 2008; this report had many similarities but also some important differences to the Stern Report in Great Britain (Stern, 2007). This review process gave the new Labour government the ability to act fairly quickly on a major complex policy; and the series of interim reports by Garnaut helped engender an ongoing public discussion of policy options.

One of the most important facets of the current Australian climate policy debate is agreement by all major parties to move forward on a substantive plan. The ruling Labour party, in contrast to its position on employment policies, has clearly signalled that it wants a consensus plan. There is also reasonably broad agreement on achieving at least a 60% reduction in emissions by 2050 through the use of marketable pollution permits. There was much less agreement on what the other key features of Australia's climate policy should look like.

1.2. Policy options

The Australian debate over climate change has been far-ranging. Our objective is to let people choose between potential climate policies, each of which can be seen as a bundle of a relatively small number of attributes. To construct these climate policies we first determine which attributes are of interest, and then how a policy can vary along that attribute. To help determine candidates for the attributes, we consulted the various Garnaut reports and did an extensive review of media coverage.

The most obvious candidate for an attribute was the start date of the climate policy. Here the Labour and Liberal party leaders had staked out clear differences with Labour (and the Green Party) pushing for a 2010 start date and the Liberals (along with the National Party) pushing for a 2012 start date. Both start dates are capable of achieving the same 2050 goal with reasons (particularly symbolic ones) to start earlier and reasons (usually linked to ease of adjustment and the possibility of getting broader agreement, particularly from China) to start later. Unspoken in much of the debate is the fact that a 2010 start date would involve lower annual costs but paying over two more years than a 2012 start date. We are interested in making tradeoffs such as this apparent to people when choosing between alternative policies.

Another obvious candidate for an attribute is what to do with revenues raised from carbon permits. Here one senses that the Labour Party saw the need to adopt a climate policy, and fully embraced this once it realized the potential to use the revenues to further long term goals of redistributing income toward low income households and seniors. In contrast, the Liberal Party saw the cost of reducing greenhouses gases as a major drag on the economy and wanted to see the revenues raised recycled in ways like reducing the GST (Goods and Service Tax, which is a value-added tax) or various business taxes.

Impacts of climate policy are likely to be most obvious to consumers by way of increases in fuel prices in the transportation sector. The ratification of Kyoto came at a time when oil prices were at near record highs, so it is not surprising that the Labour Party proposed that the transportation sector be initially exempted for the first three years, ostensibly for the purpose of allowing households to adjust to the prospect of higher fuel prices. This exemption was strongly opposed by the Green Party and was inconsistent with Garnaut's recommendations. Of course, the cost of initially exempting the transportation sector is that the entire burden of the climate plan would fall on other sectors.

Not surprisingly, the other sectors of the economy likely to bear the brunt of higher carbon prices have pushed for special treatment. Labour and Liberal Party leaders (but not the Greens) have had a sympathetic ear for Australia's big energy-intensive exporters, farmers, and, somewhat surprisingly, electric power generators. Proposals for special treatment are varied, ranging from initial exemptions to free permits.

The Garnaut reports (2008) strongly urged the government to set aside 20% of the revenue from carbon permits for research and development activities. Prior public opinion surveys (e.g., BBC, 2007) showed strong public support to include R&D in any climate plan. Short-run costs occasionally have been mentioned in surveys involving renewable energy and energy efficiency, and many people seem to think that such programs will reduce long-term costs (e.g., WorldPublicOpinion.org, 2008). These survey questions, however, do not make it clear to households that putting money into R&D implies less revenue returned to households to help offset the impacts of higher energy prices.

Thus, the aforementioned five key attributes of climate policy are studied in a discrete choice experiment (DCE). Other potential attributes of Australia's climate policy are studied by separate individual questions. One of these is the basic question of whether someone favors adopting *any* climate policy. (This is an option apparently not "on the table", as all major parties seem committed to some type of action.) However, it is useful to know how widely held this position is, and whether the public favors going forward with a plan irrespective of other countries' actions. The major parties seem committed to moving forward, but the issue of China and the United States also committing to reductions has loomed large in the public debate; and some have argued that Australia's plan should be conditional on actions by these two countries. Another question we examine as a separate issue is the magnitude of the 2050 objective, with both major parties committed to a 60% reduction in greenhouse gases. However, the Garnaut reports (2008) suggests the possibility of an 80% reduction. This position has long been supported by the Green Party and is mentioned as a possibility by some Labour party officials. Lastly, we look at the public's view of marketable carbon permits, a consensus approach to alternative instruments like a carbon tax or technology standards that can achieve the same objectives.