INTRODUCTION

Climate change poses serious risks to Australia's community, economy and environment. Strong and effective global climate action will reduce these risks. The scale and pace of global action also has implications for Australia's own climate efforts, the cost of emission reduction technologies and the demand for emissions-intensive exports.

The international community is negotiating a framework to support greater global emissions reductions beyond 2020, with key elements planned to be agreed in Paris at the end of 2015. This is the next major step but not the end of international negotiations on climate change which will be an ongoing endeavour.

National actions and international cooperation can be mutually supportive and reinforcing. As countries more actively pursue policies domestically, they are likely to become more willing to participate in international agreements. At the same time, advances in global negotiations can provide insights for—and bring pressure to bear on—individual countries to do more domestically.

This paper discusses some of the key elements of the Paris meeting and the broader post-2020 framework and their implications for Australia.

The primary forum for discussing international cooperation on climate change is the United Nations Framework Convention on Climate Change (UNFCCC). Countries have agreed that greater international action is needed and negotiations are continuing to help develop a framework for effective global action. A key staging post in this process will be the Paris meeting in 2015, where countries will be expected to agree on a framework for action beyond 2020. The collection of agreements made in Paris ('the Paris outcome') is likely to identify broad parameters, with some details to be settled through later negotiations.

Any large-scale cooperative effort is a difficult, iterative and evolutionary process. Given the number of countries involved, and their disparate interests, international cooperation on climate change is a particularly challenging task. The measure of success of the Paris meeting and later negotiations will be their ability to build momentum for emissions reductions at both a national and global level.

This paper canvasses key elements of the post-2020 framework that will support global emissions reductions in line with the goal of keeping global average warming below 2 degrees (relative to pre-industrial levels). These elements are:

- collective goals
- emissions reduction targets
- tracking emissions and progress
- international emissions markets
- assessing collective and individual efforts
- the legal form of any agreement and its parts.

In all these areas there are tensions between the degree of prescription necessary to give meaning to any outcome, and the flexibility necessary to reflect the different circumstances (including stages of development) of participating countries.

The focus of this paper is on major emitting countries, whose policies are most critical to keeping warming below 2 degrees. The Authority views major emitting countries as those individually responsible for more than 1 per cent of the world's emissions. The 15 major emitting countries that meet this threshold account for more than three-quarters of current global emissions.¹ All countries, of course, have a real interest in avoiding the adverse impacts of climate change, and supporting and contributing to effective global action.

In 2011, countries agreed that the Paris negotiations would cover a number of topics—mitigation, adaptation, climate finance, technology development and transfer, capacity-building, and transparency of action and support. All of these elements are important, interrelated and central to the conclusion of a successful post-2020 climate agreement. Many are, however, beyond the scope of this paper. The Authority's primary focus here is on how the Paris outcome might support global emissions reductions through national actions.

The paper examines the context for the Paris meeting (Chapter 2), how the key elements of the post-2020 framework might be addressed in Paris and later negotiations (Chapter 3), and presents the Authority's conclusions (Chapter 4).

¹ The 15 countries are China, the United States, the EU bloc of 28 countries, India, Russia, Japan, Brazil, Indonesia, Iran, Canada, Mexico, Republic of Korea, Australia, South Africa and Saudi Arabia. Germany, Italy, France and the United Kingdom would count as major emitting countries in their own right if they were not included in the EU 28 total.

BOX 1.1: THE CLIMATE CHANGE AUTHORITY AND THE TARGETS AND PROGRESS REVIEW

The Climate Change Authority is an independent statutory authority, established to provide expert advice on Australian climate change policy. It has a broad remit to research climate change issues.

The Authority is chaired by Mr Bernie Fraser and comprises members with expertise in climate science, economics, business and public policy. Its work is guided by a set of principles under the *Climate Change Authority Act 2011* (Cth).

The Authority released *Reducing Australia's Greenhouse Gas Emissions—Targets and Progress Review, Final Report* in February 2014. Relevant insights from this report have been incorporated into this paper.

EMISSIONS BUDGETS

In the Targets and Progress Review, the Authority adopted an emissions budget approach to put Australia's emissions reduction goals for the short, medium and long term in a global context. An emissions budget is a cumulative emissions allowance over a period of time.

The Authority began with a global emissions budget that was estimated to provide a likely (67 per cent) chance of keeping warming below 2 degrees—a budget of 1,700 Gt CO_2 -e over 2000-2050.

The Authority recommended Australia adopt a long-term national emissions budget, providing a framework for assessing the extent to which Australia was acting consistently with global goals, and highlighting the trade-offs between short- and long-term action. The Authority recommended that the long-term budget should be reviewed periodically and adjusted as appropriate.

The Authority concluded that an emissions budget of 10.1 Gt CO_2 -e for the period 2013 to 2050 (or about 1 per cent of the remaining estimated global budget) would represent an equitable share for Australia.

Against this background, and having regard to developments in the science of climate change and what many other countries are doing, the Authority recommended that Australia:

- adopt a minimum 2020 target of 15 per cent below 2000 levels
- use Australia's carryover under the Kyoto Protocol to strengthen this minimum 2020 target by 4 percentage points, giving an effective target of 19 per cent reductions
- adopt, for guidance purposes, a trajectory range for emissions reductions of between 40 and 60 per cent below 2000 levels by 2030.