

#### **Australian Climate Law in Global Context**

*Australian Climate Law in Global Context* is a comprehensive guide to the nature and scope of current climate change law in Australia and internationally. It includes discussion of:

- emissions trading schemes and carbon pricing laws
- laws on renewable energy, biosequestration, carbon capture and storage, and energy efficiency
- the trading of emission offsets between developed and developing countries
- the new international scheme for the protection of forests (REDD) and the transfer of green finance and technology from developed to developing countries
- the facilitation of adaptation to climate change through legal frameworks. The book assesses the international climate change regime from a legal perspective, focusing on Australia's unique circumstances and measures, and its domestic implementation of climate-related treaties. It also considers how the challenge of climate change should be integrated into broader environmental law and management.

Australian Climate Law in Global Context is an engaging text that provides a clear, well-structured and up-to-date analysis of climate change law. It is a valuable resource for students in law and environmental science, for current and future legal practitioners working in climate law and related fields, and for policy-makers and those in the commercial sector seeking information on the expanding range of climate change measures. It is accompanied by a companion website at www. cambridge.edu.au/academic/climate, which contains updates to the law.

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### X ACKNOWLEDGMENTS

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### Abbreviations and definitions

2°C limit The upper limit of politically acceptable global

mean temperature rise according to the 2009

Copenhagen Accord.

1.5°C limit A safer limit than the 2°C limit. It is referred to

in the Copenhagen Accord as a possible alternative to the 2°C limit, if the evolving science were to find that the higher limit is more dangerous than previously thought.

stabilisation of CO<sub>2</sub> concentration in the atmosphere at an upper limit of 350, 450, etc. parts per million (ppm) by 2100. The concentrations are associated with different

degrees of warming.

AAU Assigned Amount Unit. An emission allowance

issued pursuant to the provisions of Kyoto Protocol *Decision 13/CMP.1*. It is equal to one

metric tonne of CO<sub>2</sub> eq.

ACCU Australian Carbon Credit Unit. The tradable

offset credit under the Carbon Farming

Initiative (Australia).

adaptation Measures taken to manage the consequences of

climate change by reducing the vulnerability of

Adaptation Committee Established by the UNFCCC COP as part of the

Cancun Adaptation Framework. The Adaptation Committee's task is to

human communities and ecosystems.

promote the implementation of adaptation

measures.

afforestation (under the The conversion of land that has not been

Kyoto Protocol) forested for a period of at least 50 years to forested land, by direct human intervention in

the form of planting, seeding, or promotion of natural seed sources. Cf. reforestation.

AGO Australian Greenhouse Office (now

superseded)

Annex B List of emission reduction obligations by Annex

I parties for the first commitment period under

the Kyoto Protocol (2008-12).

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Annex I parties The parties listed in Annex I to the UNFCCC,

consisting of industrialised countries and countries in transition to a market economy. All Annex I parties except the United States are also parties to the Kyoto Protocol, and in this context they are referred to as *Annex I parties to* 

the Kyoto Protocol.

APP or AP6 Asia–Pacific Partnership on Clean

Development and Climate, established

in 2006.

ARENA Australian Renewable Energy Association. A

body set up under the Clean Energy Future Package to administer Australian government funding for renewable energy technologies.

atmospheric lifetime (of a GHG) The average lifetime of a GHG in the

atmosphere before it is broken down or removed through natural processes. For example, the atmospheric lifetime of methane is 12.2 years, that of nitrous oxide is 120 years, and that of  $CO_2$  is variable, which is to say

uncertain overall.1

Australia Clause Article 3.7 of the Kyoto Protocol, included

(primarily for Australia's benefit) to allow parties 'for whom land-use change and forestry constituted a net source of greenhouse gas emissions in 1990' to include those emissions when calculating their 1990 emission levels, which form the baseline for emission cuts over

the first commitment period.

Australian Carbon Unit The main trading unit (emission allowance)

under the Australian CPM.

AWG-KP Ad Hoc Working Group on Further

Commitments for Annex I Parties under the Kyoto Protocol. It was established in 2005 at CMP 1 on the basis of Protocol Article 3.9, which mandates consideration of the further commitments (emission reductions, etc.) by Annex I parties at least seven years prior to the end of the first commitment period

(i.e. 2012).

AWG-LCA Ad Hoc Working Group on Long-term

Cooperative Action under the Convention. At COP 13 in 2007, the UNFCCC parties established the AWG-LCA with a mandate to focus on key elements of long-term action

<sup>1</sup> Intergovernmental Panel on Climate Change, Climate Change 1995: The Science of Climate Change: Contribution of Working Group I to the Second Assessment Report of the IPCC (Cambridge University Press, 1996), p. 22, Table 4; and D. Archer and V. Brovkin, 'The Millennial Atmospheric Lifetime of Anthropogenic CO<sub>2</sub>', 90 Climatic Change 283 (2008).



Bali Action Plan

biosequestration

Cancun Adaptation Framework

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### ABBREVIATIONS AND DEFINITIONS

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(mitigation, adaptation, finance, technology, and a 'shared vision') in order to improve and strengthen the UNFCCC.

Adopted at COP 13 in 2007. The Plan has

guided the work of the AWG-LCA.

baseline, or business as usual That which would have been observed – for

example in terms of GHG emissions or another variable – in the absence of some form of intervention, such as a government policy or a CDM project; a historical trend that is to continue into the future if left undisturbed.

baseline-and-credit A type of emissions trading scheme in which

regulated entities earn tradable credits for reducing their emissions below a certain

baseline.

BCA Building Code of Australia

bilateral finance The term applies to grant-based assistance

provided directly through multi-regional, regional and bilateral programs rather than as contributions to multilateral funds or

organisations. Cf. multilateral finance.
The removal of carbon from the atmosphere

and its subsequent storage in carbon sinks, such as vegetation, soils or oceans.

The UNFCCC COP adopted the Cancun Adaptation Framework in 2010. In this

instrument, the UNFCCC parties affirmed that adaptation must be addressed with the same

level of priority as mitigation.

cap-and-trade A type of emissions trading scheme in which

regulated entities must hold and surrender sufficient emission permits to cover the volume

of GHG emissions they produce. The

government sets a cap on the total number of emission permits made available in any period

under the scheme.

capacity-building A process that seeks to build legal, scientific

and technical skills and institutions in developing countries to enable them to pursue

environmentally sustainable pathways.

Carbon pricing The range of economic instruments for GHG

emission reduction through pricing of

emissions, including carbon taxes and emission

trading.

CCA Climate Change Authority (Australia). An

independent expert body tasked with the conduct of reviews and the recommendation of

scheme caps under the CPM.

CCS Carbon capture and storage, an emerging

technology for capturing CO2 through an



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CMP (or COP/MOP)

 $CO_2$ 

industrial separation process. The gas is then liquefied and sealed in underground reservoirs.

CDM Clean Development Mechanism. One of the

three market (flexibility) mechanisms of the

Kyoto Protocol.

CEFC Clean Energy Finance Corporation (Australia).

An entity established under the Clean Energy Future package to stimulate private investment

in clean energy.

CER Certified Emission Reduction. An emission allowance issued pursuant to Article 12 of the

Kyoto Protocol (Clean Development Mechanism) and the provisions of Kyoto

Protocol Decision 3/CMP.1. It is equal to one

metric tonne of CO<sub>2</sub> eq.

CFI Carbon Farming Initiative (Australia). The

policy behind the Carbon Credits (Carbon

Farming Initiative) Act 2011 (Cth).

CH<sub>4</sub> Methane, a greenhouse gas controlled by the

Kyoto Protocol.

Clean Energy Future Package The Australian government's package of

climate change policies released in July 2011. The *Conference* of the Parties Serving as the *Meeting* of the *Parties* to the Kyoto Protocol. Occasionally referred to as 'MOP' (Meeting of

Occasionally referred to as 'MOP' (Meeting of the Parties to the Protocol). The CMP is held in November–December each year and runs in parallel with the Conference of the Parties (COP) to the UNFCCC. Decisions made at CMP

meetings are referred to as CMP decisions. Carbon dioxide, a greenhouse gas controlled by

the Kyoto Protocol.

CO<sub>2</sub> equivalent (CO<sub>2</sub> eq.) A unit normally following a quantity in tons,

indicating that the global warming potential of a non-CO<sub>2</sub> greenhouse gas, or a mix of them, is being expressed in terms of the quantity of CO<sub>2</sub> that would have the same warming impact. See

also 'global warming potential'.

COAG Council of Australian Governments

COP Conference of the Parties to the UNFCCC. The

COP is held in November–December each year and runs in parallel with the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol (CMP). Decisions made at the annual COP meetings are referred to as

COP decisions.

commitment period Under the Kyoto Protocol, Annex I parties to the

UNFCCC that are also parties to the Kyoto Protocol agreed to reduce their overall emissions of scheduled (Annex B) greenhouse



### ABBREVIATIONS AND DEFINITIONS

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gases by an average of 5.2 per cent below 1990 levels over a five-year commitment period, 2008–12. A second commitment period (2013–17 or possibly 2013–20) was agreed to

at the Durban CMP in 2011.

Compliance Committee Created by the Kyoto Protocol, it makes

determinations about state-party compliance with mandatory obligations on reporting and accounting for emissions and for meeting emission targets. It is divided into a Facilitative

Branch and an Enforcement Branch.

Copenhagen Accord At COP 15 in 2009, informal negotiations in a

group consisting of major economies and representatives of regional and other negotiating groups resulted in a political agreement known as the Copenhagen Accord. Over objections from a minority of states, the COP 'took note' of the

Accord without adopting it.

CPM Carbon Pricing Mechanism (Australia)
CPRS Carbon Pollution Reduction Scheme

(Australia) (never implemented)

CTCN Climate Technology Centre and Network

(UNFCCC)

DNA Designated National Authority (CDM)
DOE Designated Operational Entity (CDM)
EEO Program Energy Efficiency Opportunities Program

(Australia).

EIA Environmental Impact Assessment

EITE activities Emission-Intensive Trade-Exposed activities EPBC Act Environment Protection and Biodiversity

Conservation Act 1999 (Australian federal

legislation)

ERU Emission Reduction Unit: an emission allowance

issued pursuant to the provisions of Kyoto

Protocol Decision 13/CMP.1 (Joint

Implementation). It is equal to one ton of  $CO_2$  eq. ESD Environmentally Sustainable Development.

ETS Emissions Trading Scheme

EU ETS European Union Emission Trading System FAO Food and Agriculture Organization of the

United Nations

climate finance countries agreed to provide US\$30 billion of

fast-start finance in 2010–12 for adaptation and mitigation in developing countries, as well as to jointly mobilise US\$100 billion per year by

2020 for the same purpose.

financial mechanism The totality of legal, institutional and (of the UNFCCC) procedural arrangements that facilitate and

regulate the flow of financial resources mainly



**GCF** 

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from developed to developing countries (as

mandated by the UNFCCC).

fugitive emissions Emissions that do not come from combustion,

but are released unintentionally during industrial processes such as coal mining and

gas extraction.

Garnaut Review The Garnaut Climate Change Review,

established in 2007 by the then Leader of the Opposition in Australia, Kevin Rudd, to examine the impacts of climate change on the Australian

economy and recommend policies in

response. The Review published its report in 2008, with an updated report published in 2011. Green Climate Fund, an operating entity of the

UNFCCC's financial mechanism, created in

2010 by Decision 1/CP.16.

GEF Global Environment Facility. The first

operating entity of the UNFCCC's financial mechanism, it pre-existed the UNFCCC. Separation of CO<sub>2</sub> from other gases in the

geosequestration Separation of CO<sub>2</sub> from other gases in the

course of an industrial process, capture and transport of the  $CO_2$  to a geological storage site, and injection of the  $CO_2$  into the site,

following which the site is sealed.

GGAS Greenhouse Gas Reduction Scheme (New

South Wales, Australia)

GHG Greenhouse gas. The Kyoto Protocol controls

the GHGs listed in its Annex B. The list was extended in 2011 with the addition of nitrogen trifluoride (NF $_3$ ). The set of known GHGs is larger than that controlled by the Kyoto Protocol. Some GHGs are controlled by the Montreal Protocol (1987) to the Vienna Convention for the Protection of the Ozone

Laver (1985).

global warming potential (GWP) The Kyoto Protocol provides that the GWP for a

time horizon of 100 years is to be used to convert the Annex B gases to the common unit of ' $CO_2$  equivalent'. Under this convention, the  $GWP_{100}$  of  $CO_2$  is set at 1. The  $GWP_{100}$  of methane works out to 21 times that of  $CO_2$ . Nitrous oxide has a

GWP<sub>100</sub> of 310, and so forth.<sup>2</sup>

GNI Gross national income
Gt Gigatonne (also gigaton)

**<sup>2</sup>** Intergovernmental Panel on Climate Change, *Climate Change 1995: The Science of Climate Change* (1996), p. 22, Table 4. The table also presents the values for GWP<sub>20</sub> and GWP<sub>500</sub>. The 1995 figures have been slightly revised (Intergovernmental Panel on Climate Change, *Climate Change 2007: The Physical Science Basis: Contribution of Working Group 1 to the Fourth Assessment Report of the IPCC* (Cambridge University Press, 2007), pp. 212–13, Table 2.14, as corrected at <a href="http://www.ipcc.ch/publications\_and\_data/ar4/wg1/en/ch2s2-10-2.html#table-2-14">http://www.ipcc.ch/publications\_and\_data/ar4/wg1/en/ch2s2-10-2.html#table-2-14</a>), but they continue to apply for the purposes of the Kyoto Protocol.



#### ABBREVIATIONS AND DEFINITIONS

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GtC/y Gigatonnes of carbon per year
IAR International Assessment and Review

(UNFCCC)

ICA International Consultation and Analysis

(UNFCCC)

IEA International Energy Agency

IGAE Intergovernmental Agreement on the

Environment (Australia)

INC Intergovernmental Negotiating Committee

(pre-UNFCCC)

IP (IPR) intellectual property (rights)

IPCC Intergovernmental Panel on Climate Change.
JI Joint Implementation, one of the three market

(flexibility) mechanisms of the Kyoto Protocol.

Kyoto Protocol Kyoto Protocol to the UNFCCC. Opened for signature in 1997, entered into force on 16

February 2005.

leakage (or carbon leakage) Leakage occurs where GHG emission reduction

measures implemented in one jurisdiction result, normally unintentionally, in an increase in such emissions in another jurisdiction. Leakage can occur at any jurisdictional level, including at the project level. For example, it occurs where the implementation of a CDM project causes emissions to rise outside the

project boundary.

leakage, specifically in The situation where the protection of forest forestry projects carbon causes carbon-emitting activities to

shift to a location outside the project boundary. For example, forest protection measures may constrain the supply of agricultural products or timber, causing market prices to rise, thereby encouraging producers outside the boundary to increase their activities, which in turn causes

damage to forests in other areas.

LDC Least Developed Countries

LULUCF Land use, land-use change, and forestry.
MEPS Minimum Energy Performance Standards

(Australia)

mitigation measures Measures taken to decrease emissions of

greenhouse gases, for the purpose of reducing

climate change and its effects.

MPCCC Multi-Party Climate Change Committee

(Australia)

MRET/RET (Mandatory) Renewable Energy Target

(Australia)

MRV Measurement, reporting, verification

Mt Megatonne (or megaton)

multilateral finance Finance that promotes institutional structures

governed jointly by developed and developing



#### xviii ABBREVIATIONS AND DEFINITIONS

countries. These are structures that are needed for a coordinated global response to climate change. Such multilateral assistance works across a wide range of countries. Cf. 'bilateral

finance'.

MWh Megawatt hour

NAMA Nationally Appropriate Mitigation Action

(UNFCCC)

NAPA National Adaptation Programme of Action

(UNFCCC)

NEL National Electricity Law (Australia) NEM National Electricity Market (Australia) NGER Act National Greenhouse and Energy Reporting Act

2007 (Australian federal legislation)

NGO non-governmental organisation

A UNFCCC party not listed in Annex I to the non-Annex I party

convention. Often used as equivalent to

'developing country'.

**NSESD** National Strategy for Ecologically Sustainable

Development (Australia)

**NSWLEC** New South Wales Land and Environment Court

(Australia)

OECD Organization of Economic Cooperation and

Development

offset credit A tradable unit (emission allowance)

> representing an amount in CO<sub>2</sub> eq. of carbon sequestered or GHG emissions avoided.

operating entity (of the UNFCCC's

financial mechanism)

A fund, such as the GEF or GCF, designated by the COP as a component of the UNFCCC's

financial mechanism.

Pacific Islands Forum The key regional political organisation in the

Pacific region, of which Australia and New

Zealand are members.

Parts per million ppm

REDD (UNFCCC) Reducing Emissions from Deforestation and

forest Degradation in developing countries. An extended version of REDD, incorporating forest conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries is known as REDD+.

reforestation (under the

The conversion of non-forested land to forested Kyoto Protocol) land, by direct human intervention in the form

> of planting, seeding, or promotion of natural seed sources on land that once was forested but that has been converted to non-forested land.

Cf. 'afforestation'.

RGGI Regional Greenhouse Gas Initiative (United

> States). It covers the New England states of the north-east, as well as some of those in the mid-

Atlantic region, including New York.



#### ABBREVIATIONS AND DEFINITIONS

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RMU Removal Unit: an emission allowance issued

pursuant to the provisions of Kyoto Protocol Decision 13/CMP.1 (emission reductions attributed to the land sector in Annex I parties). It is equal to one ton of  $\mathrm{CO}_2$  eq. Net emission removals from LULUCF activities carried out by an Annex I party to the Protocol will result in the issue of RMUs, which the party may add to its assigned amount for the commitment

period.

SBI (UNFCCC) Subsidiary Body for Implementation SBSTA (UNFCCC) Subsidiary Body for Scientific and

Technological Advice

Secretariat (UNFCCC and Administrative body of international public Kyoto Protocol) Servants common to the UNFCCC and the

Kyoto Protocol.

sequestration Removal or absorption and subsequent storage

of GHGs (mainly carbon dioxide) from the

atmosphere.

sinks Sites that sequester carbon, such as trees,

biomass and oceans.

Technology Mechanism Consists of the Technology Executive

Committee and the Climate Technology Centre

and Network.

tipping point (tipping element) A critical state of a system component, beyond

which the system enters a qualitatively different mode of operation. Tipping points may be crossed as a result of natural variability or human activity and may imply large-scale effects on human and ecological systems. Components with tipping points are called

tipping elements.

tonne (also ton) A unit measure equal to 1000 kilograms. In

climate science, 'ton' and 'tonne' are used interchangeably to refer to this metric

measurement.

UNFCCC United Nations Framework Convention on

Climate Change. Opened for signature in 1992,

entered into force on 21 March 1994.

VCAT Victorian Civil and Administrative Tribunal

(Australia)

WCI Western Climate Initiative (North America). A

cap-and-trade scheme covering seven western US states and four Canadian provinces.

white certificate scheme A trading scheme designed to achieve energy

efficiency targets.

WMO World Meteorological Organization (United

Nations).



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