



Climate Funding by Australia

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2010 Report¹

Finance and technology are essential to support actions by all parties to achieve global emissions reductions consistent with stabilisation at or below 450 ppm and to adapt to the impacts of climate change we cannot avoid. Together with mitigation and adaptation, helping to shape a global solution is one of the three pillars of the Australian Government's climate change policy. The Australian Government is committed to helping other countries address climate change through the provision of finance, technology cooperation, capacity building and technical support.

Australia's approach to climate change financing and technology cooperation recognises that early action on both adaptation and mitigation will reduce global costs and the costs to individual countries. It also recognises that targeting support to build capacity in developing countries will enhance their ability to develop and implement domestic policies and measures, and increase access to international finance to support their efforts, including the carbon market.

The Australian Government will play its full and fair part in any contribution to international financing mechanisms agreed under the UNFCCC's post-2012 arrangements. In November 2009, the Australian Government announced its willingness to contribute its fair share to a Copenhagen Launch Fund, with 10% of Australian funding dedicated to small island developing states.

Many of Australia's adaptation, mitigation, capacity building and technology cooperation programs are administered through bilateral partnerships. However, a large proportion of Australia's climate change financing and technology cooperation is distributed through multilateral organisations including the Global Environment Facility and the World Bank.

Since 2005 Australia has provided approximately \$476 million in new and additional funding for climate change-related programs in the areas of adaptation, mitigation, capacity building and technology cooperation to support climate change action in developing countries. Australia is assisting vulnerable communities to build resilience and to adapt to the impacts of climate change. Through its overseas programs, Australia is helping to bridge knowledge and finance gaps to support mitigation and adaptation in developing countries. This chapter provides an overview of Australia's multilateral and bilateral commitments and gives specific examples of adaptation, mitigation, capacity building and technology cooperation programs.

Australian financial transfer and technology cooperation programs with developing countries are managed by a number of government agencies. The Department of Climate Change is working closely with the Australian Agency for International Development, AusAID, which implements and manages a large number of climate change adaptation, mitigation, capacity building and technology cooperation

¹ Australia (2009). Australia's Fifth National Communication on Climate Change, A report under the United Nations Framework Convention on Climate Change 2010, December 2009, 198 pp.

programs, including with countries in the Asia–Pacific region. In addition, climate change programs and research in the fields of technology, transport, forestry, agriculture, waste management, coastal management and capacity building are managed by a number of other Australian government departments and research centres. These include the Department of the Environment, Water, Heritage and the Arts; the Department of Agriculture, Fisheries and Forestry; the Department of Resources, Energy and Tourism; the Commonwealth Scientific and Industrial Research Organisation (CSIRO); Geoscience Australia; the Bureau of Meteorology; and the Australian Centre for International Agricultural Research.

The Australian Government has taken steps to improve the quality and transparency of its reporting on financial and technology actions in the Fifth National Communication. One such step has been to improve the clarity of categories of assistance Australia has provided to developing countries. We look forward to working with other parties to the UNFCCC to further improve the quality and usefulness of National Communications, to reduce potential over-reporting and ensure that all efforts are captured and reported. The Australian Government would welcome further work in this area through the UNFCCC to establish and implement a definitive set of markers to facilitate and improve future National Communications.

There was a sharp increase in Australian financial assistance for climate change support in developing countries in 2007–08, reflecting the implementation of new Australian Government priorities.

1 Multilateral activities

Australia has made significant contributions to the United Nations and other international financial institutions that fund climate change adaptation, mitigation, capacity building and technology cooperation programs in developing countries.

Australia believes that the support of multilateral institutions, such as the Global Environment Facility (GEF), the UNFCCC and the Intergovernmental Panel on Climate Change (IPCC), is critical to ensuring support for climate change action in developing countries. Details of Australia’s contributions to the GEF and multilateral institutions and programs are set out in tables 1 and 2 respectively.

1.1 Global Environment Facility

The GEF is the mechanism for international cooperation dedicated to funding projects that protect the global environment and support sustainable development. Since Australia’s Fourth National Communication on Climate Change, Australia has provided \$91.4 million to the GEF Trust Fund, of which approximately \$30.5 million has been targeted at climate change (see Table 1).

Table 7.1 Australia’s financial contributions to the Global Environment Facility, 2004–09 (USD million)

Global Environment Facility	2004–05	2005–06	2006–07	2007–08	2008–09	Total
GEF replenishments	13.40	11.35	15.00	17.65	14.68	72.09
One-third of which for climate change	4.47	3.78	5.00	5.88	4.89	24.03

Working through the multilateral development banks, United Nations agencies and civil society organisations, the GEF delivers resources in all regions. The interim results of an independent Overall Performance Study (2009) show that the GEF has been instrumental in shaping developing countries' policy responses to environmental challenges and in achieving measurable outcomes such as greenhouse gas emission reductions (GEF Evaluation Office 2009).

1.2 Kyoto Protocol and UNFCCC

On 3 December 2007, Australia signed the instrument of ratification of the Kyoto Protocol, which came into effect on 11 March 2008. Australia is committed to taking strong action on climate change and is playing its part in the global effort to achieve an ambitious international outcome. Australia, in accordance with its UNFCCC obligations, has contributed approximately \$2.6 million to the core budget of the UNFCCC for the period 2004–05 to 2008–09.

Australia has made several voluntary contributions to the UNFCCC. Australia's contribution for the financial years 2004–05 to 2008–09 was approximately \$1.8 million, which represents an increase of approximately \$1.5 million since Australia's Fourth National Communication.

Australia has also provided \$1.3 million to the UNFCCC Trust Fund for Participation since 2004.

The purpose of the fund is to support the participation of poorer developing countries in the UNFCCC negotiations over the two years leading up to the 15th Conference of the Parties in Copenhagen in December 2009.

Other funds which Australia has committed directly for UNFCCC purposes include \$0.28 million in 2008–09 for a UNFCCC technical paper (UNFCCC 2008) entitled *Mechanisms to Manage Financial Risks from Direct Impacts of Climate Change in Developing Countries*, which has been useful in informing post-2012 UNFCCC negotiations.

A complete set of figures for Australia's Kyoto Protocol and UNFCCC contributions can be found at Table 2.

Table 2 Australia's financial contributions to multilateral institutions and programs, 2004–09 (USD million)

Multilateral institution or program	2004–05	2005–06	2006–07	2007–08	2008–09	Total
World Bank Group						
Climate Investment Fund—Clean Technology Fund	–	–	–	–	37.39	37.39
Climate Investment Fund—Pilot Program on Climate Resilience	–	–	–	–	19.39	19.39
Climate Investment Fund—Forest Investment Program	–	–	–	–	7.48	7.48
Energy Sector Management Assistance Program	–	–	–	0.72	–	0.72
World Bank East Asia AusAID Infrastructure for Growth Single Donor Trust Fund—Energy component	–	–	–	0.17	0.26	0.43
World Bank Forest Carbon Partnership Facility	–	–	–	11.70	–	11.70
Asian Development Bank						
Clean Energy Financing Partnership Facility	–	–	–	1.79	3.74	5.53
United Nations						
United Nations Framework Convention on Climate Change—Core	0.26	0.26	0.26	0.26	0.71	1.75
Least Developed Countries Fund	–	–	–	6.73	–	6.73
UNFCCC Trust Fund for Participation	0.02	0.07	0.08	0.94	0.18	1.28
UNFCCC—Technical paper	–	–	–	–	0.21	0.21
United Nations Environment Programme	0.41	0.41	0.47	0.72	0.67	2.69
Kyoto Protocol	–	–	–	–	0.50	0.50
Food and Agriculture Organization	–	–	–	–	0.07	0.07

Asia Pacific Seminar and Regional Workshop	0.03	–	–	–	–	0.03
Other						
Asia–Pacific Partnership on Clean Development and Climate	–	–	1.67	17.94	22.51	42.11
Global Carbon Capture and Storage Institute	–	–	–	–	65.05	65.05
Clean Technology Initiative	-	-	-	0.04	0.03	0.08
Intergovernmental Panel on Climate Change	0.07	0.07	0.07	0.07	0.20	0.49
Earth Negotiations Bulletin	–	–	–	0.03	0.09	0.12
Alliance of Small Island States	–	–	–	–	0.15	0.15
Secretariat of the Pacific Regional Environment Program	1.09	1.05	1.10	1.32	1.08	5.65
Secretariat of the Pacific Community	6.17	7.49	7.62	9.02	8.50	38.80
Secretariat of the Pacific Applied Geoscience Commission	1.05	2.69	1.42	0.36	1.96	7.48
Total	9.11	12.04	12.69	51.81	170.18	255.82

1.3 Intergovernmental Panel on Climate Change

The IPCC is the leading body for the assessment of climate change and provides the world with a clear scientific view on the current state of climate change and its potential environmental and socio-economic consequences. It is acknowledged by governments around the world, including the Australian Government, as the authoritative source of advice on climate change science.

Australia has provided funding to the IPCC for a range of activities, including participation by developing countries at IPCC meetings, workshops and capacity building activities. For the financial years 2004–05 to 2008–09, this assistance totalled approximately \$0.34 million. Australia has provided substantial assistance to lead authors and editors of the IPCC technical and assessment reports.

1.4 World Bank Climate Investment Funds

Australia is also committed to engaging in multilateral financial mechanisms for climate change adaptation and technology cooperation. The multi-donor World Bank Climate Investment Funds are designed to test innovative ways to tackle climate change challenges and inform discussions within the UNFCCC.

Australia will provide \$150 million to the Climate Investment Funds over three years (2008–09 to 2010–11). Of these funds, \$100 million will support the Clean Technology Fund, and \$50 million will support activities on adaptation and deforestation, which are funded through the International Climate Change Adaptation Initiative and the International Forest Carbon Initiative (see Table 2).

1.5 Least Developed Countries Fund

In 2007–08, Australia contributed \$7.5 million to the Least Developed Countries Fund. The fund was established under the UNFCCC as part of a package of decisions to support least developed countries in their efforts to adapt to climate change, in acknowledgment of Article 4.9 of the Convention, which recognises the specific needs and special situations of least developed countries with regard to funding and transfer of technology. The fund is managed by the Global Environment Facility.

Specifically, the fund was designed to support least developed countries in identifying and addressing their 'urgent and immediate' adaptation needs, identified through the development of national adaptation programs of action. It is funded through voluntary donor contributions. As of May 2009, 19 countries (including Australia) had pledged a total of \$236 million to the fund.

2. Bilateral and regional activities

Australia is working with bilateral partners on practical actions that contribute to the global effort to respond to climate change. Formal arrangements for bilateral cooperation are currently in place with

China, the European Union, Indonesia, Japan, New Zealand, Papua New Guinea, South Africa, the United Kingdom and the United States.

The Australian Government provides funding to underpin practical climate change action through the **Bilateral Climate Change Partnerships Program**. The Government allocated \$5.6 million between 2004 and 2008 and a further \$0.8 million in 2009–10 specifically for developing and implementing bilateral partnerships and projects that deliver mutual practical benefit for Australia and partner countries. By connecting policy makers, scientists and researchers, these projects help build the capacity of developing countries to take action on climate change, including countries in the Asia–Pacific region.

3. Adaptation

Australia is committed to supporting adaptation in developing countries that are particularly vulnerable to climate change impacts. Recognising the particular vulnerability of small island developing states, the primary geographic emphasis of Australia’s current adaptation assistance is on Pacific island countries and East Timor through the \$150 million **International Climate Change Adaptation Initiative**.

Australia is also providing targeted policy and technical assistance, through multilateral institutions and bilateral partnerships, to assist developing countries in the region to adapt to the adverse effects of climate change. In addition, many of the disaster risk reduction activities which are supported by the Australian international development assistance program have clear climate change adaptation benefits. In 2008–09 alone, Australia provided over \$40 million to improve disaster risk reduction in developing countries.

Details of Australia’s contributions to bilateral and regional activities between 2004–05 and 2008–09 are set out in Table 3.

Table 7.3 Bilateral and regional financial contributions related to the implementation of the UNFCCC for 2004–05 (USD million)a, b

Recipient country/region	Mitigation							Adaptation				Cross-cutting	Total	
	Energy	Transport	Forestry	Agriculture	Waste management	Industry	Other	Capacity building	Coastal zone management	Other vulnerability assessments	Other			
Cambodia: 2007-8	0.43	–	–	–	–	–	–	–	–	–	–	–	–	0.43
2008-9	0.16	–	–	–	–	–	–	–	–	–	–	–	–	0.16
China 2004-5	0.32	–	–	–	–	–	–	–	–	–	–	–	–	0.32
2005-6	0.32	–	–	–	–	–	–	–	–	–	–	–	–	0.32
2006-7	1.22	–	–	–	–	–	–	–	–	–	–	–	–	1.22
2007-8	1.23	–	–	–	–	–	–	–	–	–	–	–	–	1.23
2008-9	0.72	–	–	–	–	–	–	–	–	–	–	–	–	0.72
East Timor: 2008-9	–	–	–	–	–	–	–	–	–	–	–	0.19	–	0.19
India: 2007-8	–	–	–	–	–	–	–	–	–	0.04	–	–	–	0.04
2008-9	–	–	–	–	–	–	0.04	–	–	–	–	–	–	0.04
Indonesia: 2006-7	–	–	–	–	–	–	–	–	–	–	–	–	0.16	0.16
2007-8	0.09	–	2.66	–	–	–	–	0.35	–	–	–	–	1.20	4.3

													0
2008-9	3.07	-	9.84	-	-	-	-	-	-	-	-	1.77	14.67
Kiribati: 2004-5	-	-	-	-	-	-	-	-	-	-	1.51		1.51
2005-6											0.69		0.69
2006-7	-	-	-	-	-	-	-	-	-	-	0.01	-	0.01
2008-9	-	-	-	-	-	-	-	-	-	-	0.01	-	0.01
Laos: 2007-8	1.36	-	-	-	-	-	-	-	-	-	-	-	1.36
2008-9	1.14	-	-	-	-	-	-	-	-	-	-	-	1.14
Asia-Pacific: 2006-7	-	-	-	-	-	-	-	-	0.20	-	-	-	0.20
2007-8	1.79	-	2.31	-	-	-	-	-	-	-	-	-	4.10
2008-9	-	-	3.44	-	-	-	-	-	-	-	1.50	-	4.94
Pacific-other: 2004-5	-	-	-	-	-	-	-	-	-	1.65	-	-	1.65
2005-6										2.37			2.37
2006-7	-	-	-	-	-	-	-	-	-	2.48	-	-	2.48
2007-8	1.35	-	-	-	-	-	-	-	-	3.55	0.09	-	4.98
2008-9	-	-	-	-	-	-	-	-	-	2.05	0.10	1.53	3.68
Mekong: 2007-8	-	-	-	-	-	-	-	-	-	1.35	-	-	1.35
Papua New Guinea: 2008-9	-	-	0.12	-	-	-	-	-	-	-	-	0.11	0.24
Samoa: 2007-8	1.13	-	-	-	-	-	-	-	-	-	-	-	1.13
2008-9	3.09	-	-	-	-	-	-	-	-	-	-	-	3.09
Solomon Islands: 2005-6	-	-	1.71	-	-	-	-	-	-	-	-	-	1.71
2007-8	0.85	-	-	-	-	-	-	-	-	-	-	-	0.85
South Asia: 2008-9	-	-	-	-	-	-	-	-	-	-	0.37	-	0.37
South Africa: 2006-7	-	-	-	-	-	-	-	-	-	0.07	-	-	0.07
2007-8	-	-	-	-	-	-	0.04	-	-	-	-	-	0.04
2008-9	-	-	-	-	-	-	-	-	-	0.07	-	-	0.07
Global unspecified: 2006-7	-	-	0.02	-	-	-	-	-	-	-	-	1.18	1.20
2007-8	-	-	11.55	-	-	-	-	-	-	-	1.57	6.91	20.03
2008-9	-	-	1.11	-	-	-	-	-	-	-	1.15	4.75	7.02

Tuvalu: 2008-9	-	-	-	-	-	-	-	-	-	-	0.28	-	0.28
Vanuatu: 2007-8	1.16	-	-	-	-	-	-	-	-	-	-	-	1.16
Vanuatu: 2008-9	0.02	-	-	-	-	-	-	-	-	-	-	-	0.02
Vietnam: 2007-8	0.90	-	-	-	-	-	-	-	-	-	0.99	-	1.88
Vietnam: 2008-9	-	-	-	-	-	-	-	-	-	0.43	0.75	-	1.17
Total: 2004-5	0.32	-	-	-	-	-	-	-	-	1.65	1.51	-	3.47
2005-6	0.32	-	1.71	-	-	-	-	-	-	2.37	0.69	-	5.10
2006-7	1.22	-	0.02	-	-	-	-	-	0.20	2.55	0.01	1.33	5.33
2007-8	10.29	-	16.51	-	-	-	0.39	-	-	4.94	2.64	8.11	42.89
2008-9	8.19	-	14.52	-	-	-	0.04	-	-	2.55	4.34	8.16	37.79

a The Australian financial year is from 1 July to 30 June.

b 2004–05—based on an average exchange rate of AUD 1 = USD 0.7524 (Source: Reserve Bank of Australia Statistics for 2003–2006).

2005–06—based on an average exchange rate of AUD 1 = USD 0.7477 (Source: Reserve Bank of Australia Statistics for 2003–2006).

2006–07—based on an average exchange rate of AUD 1 = USD 0.7857 (Source: Reserve Bank of Australia Statistics for 2003–2006).

2007–08—based on an average exchange rate of AUD 1 = USD 0.8968 (Source: Reserve Bank of Australia Statistics for 2007–2009).

2008–09—based on an average exchange rate of AUD 1 = USD 0.7477 (Source: Reserve Bank of Australia Statistics for 2007–2009).

3.1 International Climate Change Adaptation Initiative

The International Climate Change Adaptation Initiative (ICCAI) has four interrelated components, which in combination will deliver a coordinated package of development assistance:

1. improving scientific information on, and understanding of, climate change impacts
2. increasing the level of understanding of key climate vulnerabilities at the regional, national and sector levels
3. financing implementation of priority adaptation measures
4. contributing to multilateral financial mechanisms for climate change adaptation.

Under component one, Australia is investing \$20 million (from 2008–11) to the Pacific Climate Change Science Program. The program will work closely with Pacific island countries and East Timor to provide decision makers with improved information on the likely impacts of climate change. It will help partner countries track climate trends, investigate regional climate drivers, provide regional climate projections, and improve understanding of ocean processes, ocean acidification and sea-level rise. Investment in improved climate change science will enhance the basis for making adaptation decisions and help target future development assistance.

Under component two, the \$12 million Pacific Adaptation Strategy Assistance Program (PASAP), the ICCAI will provide assistance to partner countries in the Pacific and East Timor to assess key

vulnerabilities and risks, formulate adaptation strategies and plans, and integrate adaptation into decision making. The PASAP will provide a framework for targeted training and capacity building for partner countries to develop climate change adaptation assessments and strategies focusing on particularly vulnerable sectors including water resources, food security, and coastal zone management.

Under component three, the ICCAI is providing bilateral and regional assistance to vulnerable countries in the Asia–Pacific region to identify and implement priority adaptation measures. Australia has committed \$25 million (over 2009–11) in bilateral adaptation assistance to Pacific island countries and is providing funds (\$2 million in 2008–09, and \$4 million from 2009 to 2011) to the GEF’s Mekong and Asia–Pacific Community-based Adaptation Small Grants Program. The program is providing small grants for implementation of priority adaptation measures at the local level in 15 Pacific island countries, the Mekong subregion, East Timor and Sri Lanka.

Australia also provided \$0.5 million to the South Asia Water Initiative in 2008–09 (as part of a \$3 million total commitment) to support scientific work to establish climate change scenarios for the river systems emanating from the Himalayan region and to enhance regional cooperation on key climate-affected water issues.

Australia is also providing assistance to the Government of Vietnam to assess key climate vulnerabilities in the Mekong Delta (\$0.57 million in 2008–09 and \$0.57 million in 2009–10).

The fourth component of the ICCAI will contribute \$40 million, including \$25.9 million in 2008–09, to the Pilot Program on Climate Resilience, one of the programs established under the World Bank Climate Investment Funds. The program will demonstrate how to integrate climate risks and resilience into countries’ development planning through pilot projects. These projects are consistent with countries’ own poverty reduction and sustainable development goals.

3.2 Climate change adaptation and preparedness in the Pacific

Work under the International Climate Change Adaptation Initiative builds on Australia’s long-term engagement in climate monitoring and adaptation in the Pacific. Australia has supported the following regional programs with Pacific countries and regional organisations to guide local physical, social and economic planning and decision making:

- the South Pacific Sea Level and Climate Monitoring Project (\$8.4 million from 2004 to 2009), providing data for Pacific island countries to help monitor climate change impacts on sea levels
- the Pacific Islands Climate Prediction Project (\$4.0 million from 2004 to 2009), assisting national meteorological services in the Pacific to provide more accurate climate prediction services tailored to the needs of government and business
- the Pacific Vulnerability and Adaptation Initiative (\$2.8 million from 2005 to 2009), funding community adaptation projects in Fiji, Samoa, Solomon Islands, Tonga and Vanuatu and enhancing water catchment and storage facilities in Tuvalu.

Australia is also co-financing the World Bank–implemented Kiribati Adaptation Project Phase II (the Australian contribution is \$2.9 million from 2006 to 2009). Australia’s contribution is assisting to upgrade water supply infrastructure and improve freshwater resource management.

Australia is also supporting Pacific regional organisations working on climate change issues, including core funding and project support for the Secretariat of the Pacific Regional Environment Programme, the Pacific Islands Applied Geoscience Commission and the Secretariat of the Pacific Community.

Working with universities and researchers to better understand climate change impacts and adaptation options is another priority, with funds allocated through the Australian Development Research Awards (\$2 million, 2007 to 2011) to support research aimed at building the capacity of developing countries to effectively respond to the impacts of climate change.

Recent awards include assisting health and water sectors in the Asia–Pacific respond to increased climate risk (\$0.29 million, 2009 to 2011); assisting the Pacific tourism sector to adapt to climate change (\$0.39 million, 2009 to 2011); and trialling carbon offset schemes to fund mangrove rehabilitation in the Solomon Islands (\$0.46 million, 2009 to 2011).

Australia is also supporting a new program of research which was initiated in 2007–08 to better position Australia and Mekong region partners to respond to climate change. The Mekong River Commission (MRC) and CSIRO, with funding of \$0.48 million in 2007–08, undertook research on climate change vulnerability in the Lower Mekong Basin. The outputs of the research will be used to inform water resource availability scenarios to be formulated under the MRC Basin Development Plan.

This work is supported by a new project, the MRC Climate Change and Adaptation Initiative 2008–2012. By applying improved climate impact modelling and assessment in the lower Mekong Basin, this initiative aims to identify key vulnerabilities of communities to the impacts of climate change and to build appropriate responses. Australia provided \$1.1 million to support development of this initiative in 2007–08, and has allocated \$3 million over the period 2009–11 to fund the first phase of the initiative.

In addition, Australia is partnering with Germany’s Gesellschaft für Technische Zusammenarbeit (GTZ), a federally-owned international development enterprise, to support the Vietnam Conservation and Development of Key Sites of the Man and the Biosphere Reserve of Kien Giang Province program (\$2.75 million from 2007–11). The core aims of the project are to preserve forests and coastlines vulnerable to climate change, conserve important biodiversity of the UNESCO biosphere in Kien Giang, and develop sustainable livelihood opportunities for the rural poor, particularly ethnic minorities, living in the target area.

4. Mitigation and capacity building

Building capacity in developing countries is critical to assist countries in mitigating against and managing the impacts of climate change. The Australian Government has committed resources to create enabling environments for private sector investment, strengthen institutional and regulatory frameworks, and to build capacity for developing countries to access global carbon markets and take on practical mitigation

actions. Australia has established a number of pilot actions in developing countries which address these key mitigation and capacity building objectives.

4.1 Reducing emissions from deforestation and forest degradation in developing countries

Greenhouse gas emissions from deforestation comprise about 18% of global greenhouse gas emissions. Reducing emissions from deforestation and forest degradation in developing countries (REDD) is therefore a critical component of the global mitigation effort to address climate change. Australia believes that REDD can be part of an equitable and effective post-2012 international agreement on climate change.

For this reason, Australia has been actively engaged in the development of a robust and transparent REDD mechanism from an early stage. For example, Australia co-hosted with New Zealand a UNFCCC workshop to discuss policy approaches on REDD in March 2007. The workshop played an important role in driving progress on REDD in the UNFCCC negotiations.

Australia also hosted the High-Level Meeting on Forests and Climate in Sydney in July 2007. The meeting brought together ministers and senior officials from 63 countries. Representatives from international organisations, as well as business, industry and environmental non-government organisations, also participated in the three-day event, which furthered efforts in establishing a robust and effective financial mechanism to assist developing countries on REDD.

International Forest Carbon Initiative

Central to Australia's recent engagement on REDD is the five-year (2007–08 to 2011–12), \$200 million International Forest Carbon Initiative (the Initiative). The Initiative is supporting international REDD efforts through the UNFCCC and through bilateral projects aims to demonstrate that REDD can be part of an equitable and effective post-2012 international agreement on climate change.

Australia's cooperation with Indonesia under the Initiative

Under the Initiative, the Prime Minister of Australia and the President of Indonesia announced the Indonesia–Australia Forest Carbon Partnership on 13 June 2008. Indonesia has the third largest area of tropical forests in the world, but forest loss due to expanding populations, fire and conversion of forests for agriculture or plantations make Indonesia one of the largest greenhouse gas emitters in the world. As measures to address REDD are not included in the Kyoto Protocol, Australia and Indonesia are now working together to demonstrate that REDD can and should be part of the next global climate change agreement.

The partnership is operating in three key areas:

- strategic policy dialogue on climate change;
- increasing Indonesia's carbon accounting capacity;

- and identifying and implementing incentive-based REDD demonstration activities.

Under the partnership, Australia is working with Indonesia to develop large-scale demonstration activities and to build Indonesia's ability to enter into future international forest carbon markets. Australia has committed \$30 million over four years to the Kalimantan Forests and Climate Partnership (KFCP), the first large-scale REDD demonstration activity of its kind in Indonesia. The aim is to trial an innovative, market-oriented approach to financing and implementing measures for REDD on the degraded and forested peatland in Central Kalimantan. Australia and Indonesia have also agreed to develop a second REDD demonstration activity, which will differ from the KFCP in its location and forest type, to test different aspects of REDD.

Australia has also provided \$10 million to support Indonesia's forest and climate policy development. This is being used to help develop the Indonesian National Carbon Accounting System, support the development of national policy frameworks and strategies for REDD, and better monitor, manage and prevent large-scale forest fires in Indonesia.

Australia's cooperation with Papua New Guinea under the Initiative

Australia is also working with Papua New Guinea on REDD. The Prime Minister of Australia and the Prime Minister of Papua New Guinea signed the Papua New Guinea – Australia Forest Carbon Partnership on 6 March 2008. The partnership is focused on cooperation in three key areas: strategic policy dialogue on climate change; carbon accounting capacity building; and REDD demonstration activities. In 2009 Australian assistance was focused on strategic policy dialogue on climate change in support of COP15.

Under the partnership, Australia has committed up to \$3 million in initial funding which aims to build the capacity of institutions in Papua New Guinea to articulate and implement national climate change policies that meet relevant international standards; build the capacity of institutions to develop a robust national carbon monitoring and accounting system; and support Papua New Guinea to engage in international dialogue on REDD.

Australia's global activities under the Initiative

As part of the Initiative, a \$3 million research partnership with the Centre for International Forestry Research, based in Indonesia, is helping meet the need for further global research on policy and technical issues associated with REDD. The research partnership will collect and disseminate lessons learned to inform the design and implementation of REDD activities.

Up to \$1.5 million has been made available to support international non-government organisations (NGOs) to develop REDD demonstration activity ideas to the initial concept stage. This funding will help NGOs and their partners frame ideas in ways that will be relevant and useful to the countries in which the activities are proposed to take place. The funding aims to promote creativity, transparency, methodological rigour and, above all, foster better linkages between local initiatives and the national

governments who must endorse them. International NGOs have practical on-the-ground experience, particularly in providing alternative livelihoods to local communities, which can help build global expertise in implementing demonstration activities.

The \$15.8 million Asia Pacific Forestry Skills and Capacity Building Program, which also falls under the Initiative, is primarily assisting Indonesia and Papua New Guinea to increase their capacity to manage their forests sustainably to reduce emissions from deforestation and forest degradation.

Funding of \$2.3 million under the first phase of the program supported projects in Indonesia and Papua New Guinea, and other regional countries such as Vietnam and Fiji, on reduced impact logging, forest certification, restoration of degraded forests and research. The program's second phase will aim to build capacity for delivering sustainable forest management that supports REDD efforts. This second phase will fund between three and five longer-term, large-scale projects in Indonesia and Papua New Guinea.

Australia has provided \$11.7 million to the World Bank's Forest Carbon Partnership Facility, which assists developing countries in their REDD efforts.

The facility aims to build confidence in REDD investments by establishing early links between key rainforest countries and potential financiers, so that emissions reductions achieved by large-scale demonstration activities may be certified and the associated credits sold. Australia has also provided \$10 million to the Forest Investment Program, which will complement the Forest Carbon Partnership Facility by scaling-up REDD activities. This program is part of the broader Climate Investment Funds managed by the World Bank.

4.2 Capacity building

By connecting policy makers, scientists and researchers, the Australian Government is helping to build the capacity of developing countries to take action on climate change, including countries in the Asia-Pacific region.

Specific objectives include:

- undertaking practical actions that achieve or facilitate emissions reductions
- building capacity to enable implementation of mitigation and adaptation programs
- improving understanding of climate change impacts through improved scientific information
- building support for an effective global response to climate change
- facilitating market opportunities for low emissions technologies, products and expertise
- fostering direct involvement by industry, business, scientists and communities in projects to broaden participation in climate change action.

Capacity building for climate change research

Australia continues to provide significant technical advice and assistance to countries in the neighbouring Asia–Pacific region to improve climate data management and monitoring capabilities, for example through the PCCSP under component one of the ICCAI (discussed in 7.3.1). The PCCSP will work closely with Pacific island countries and East Timor to provide decision makers with improved information on the likely impacts of climate change.

The \$3 million Pacific Future Climate Leaders Program (2008–11), also under the ICCAI, will support the training of future Pacific climate change leaders through scholarships, exchange programs and community education.

Through the Pacific Islands Climate Prediction Project, Australia is enhancing the prudent use of information derived from climate prediction software in the meteorological services of ten Pacific island countries. Participating meteorological services can provide long range weather information, including predictions, to help decision-making processes of climate sensitive clients such as farmers, water resource managers and the tourism industry. The digitising of recovered historical weather records, and a monthly Pacific Islands Climate Outlook Forum coordinated by the Australian Bureau of Meteorology, are enhancing Pacific countries' ability to analyse climate trends. Australia is also providing data for Pacific island countries to help monitor climate change impacts on sea levels, through the South Pacific Sea Level and Climate Monitoring Project.

Other support for Indonesian climate change action

In addition to assistance provided to Indonesia under Australia's International Forest Carbon Initiative, Australia has contributed to the establishment of Indonesia's financing framework for climate change and incorporation of climate change into economic and development planning.

In 2008–09, Australia made an initial \$2 million contribution to the establishment of the Indonesia Climate Change Trust Fund. The government-led, donor-financed trust fund will finance implementation of Indonesia's national roadmap for climate change action.

Australia has helped prepare a draft Climate Change Green Paper with the Indonesian Ministry of Finance to provide economic and fiscal options for encouraging low-carbon development. Australia has also contributed \$0.39 million (2007–08) to a study by the World Bank on low carbon development strategies which is guiding development planning.

Australia has provided \$4 million (2007–08) to the Government of Indonesia's National Program for Community Empowerment to undertake a demonstration program of conditional transfers to communities for natural resource management and renewable energy (micro-hydro) projects in Sulawesi.

Australia has also provided \$1.5 million (2006–07 to 2008–09) to the World Bank and CSIRO for the Analysing Pathways to Sustainability project, which constructed computable general equilibrium and agent-based models for testing the economic, social and environmental—including climate—

consequences of macro and micro policy decisions, such as the impacts of fuel and energy subsidies. This work is contributing to Indonesia's low-carbon development planning.

5. Technology cooperation

Australia is actively participating in a range of international technology-based partnerships and programs. These initiatives are aimed at strengthening information networks, training, research and practical collaboration on climate change actions.

5.1 Technology cooperation under the United Nations Framework Convention on Climate Change

Through the UNFCCC Experts Group on Technology Transfer (EGTT), Australia assists in providing strategic advice to the UNFCCC on technology issues and promotes information exchange on technology between Parties to the UNFCCC. Australia is currently Vice-Chair of EGTT and next year will assume the chair role for a one-year term.

Australia is engaged in a number of additional plurilateral forums on technology and is committed to securing an agreement under the UNFCCC that complements and supports the extensive current range of international and national technology related initiatives, including work undertaken by the International Energy Agency, the Global Carbon Capture and Storage Institute, the Asia Pacific Partnership on Clean Development and Climate, and the World Bank's Clean Investment Framework.

5.2 Global Carbon Capture and Storage Institute

Australia has committed \$100 million per annum to fund the Global Carbon Capture and Storage Institute (GCCSI) and a further \$2.4 billion to build two to four industrial-scale carbon capture and storage projects in Australia under the Government's new Carbon Capture and Storage Flagships Program.

The GCCSI was developed by the Australian Government to provide the conduit for the transfer of knowledge and know-how between governments and other organisations that are looking to further the development and deployment of carbon capture and storage technologies globally. The GCCSI will promote the collaboration of existing efforts and knowledge sharing.

The GCCSI aims to:

- draw together information, knowledge and expertise to build a much-needed central knowledge base
- play a pivotal role in facilitating the development and deployment of safe, economic and environmentally sustainable commercial-scale carbon capture and storage projects
- advise on the technologies that will capture, transport and store emissions, and provide expert insight on the costs and benefits of carbon solutions and the operational and legislative requirements needed to achieve success

- work collaboratively with governments, nongovernment bodies and the private sector to build confidence in carbon capture and storage and help drive international momentum.

The GCCSI will encourage and collaborate on smaller test beds of development and non-industrial-scale projects to nurture the development of second- and third-generation projects. Information from these projects will be disseminated to its members and the international carbon capture and storage community.

5.3 Cleaner development pathways

Australia's bilateral activities to promote less greenhouse intensive development pathways include investment in energy efficiency and renewable energy. Of the total energy program, an estimated \$15.1 million has been allocated to energy efficiency and \$5.2 million to renewable energy in 2007–08 and 2008–09. These activities focus predominantly on the Mekong and Pacific regions.

Examples of Australian support for energy are the Rural Electrification and Transmission programs in Laos and Cambodia, which are implemented by the World Bank. These programs support grid extensions, efficiency improvements in electricity transmission and off-grid energy systems such as solar photovoltaic and small-scale hydropower.

Australia is supporting the Sustainable Energy Financing Project in Solomon Islands, also implemented by the World Bank. This program assists communities and private entrepreneurs to access long-term financing for the purchase of solar panels, small-scale hydropower generators and equipment to allow use of biodiesel.

Asia-Pacific Partnership on Clean Development and Climate

The Asia–Pacific Partnership on Clean Development and Climate brings together Australia, Canada, China, India, Japan, the Republic of South Korea and the United States to address the challenges of climate change, energy security and air pollution in a way that encourages economic development and reduces poverty.

The partnership represents around half of the world's emissions, energy use, GDP and population and engages the key greenhouse gas–emitting countries in the Asia–Pacific. With its focus on the development, deployment and transfer of cleaner, more efficient technologies, the partnership is also unprecedented in the way business, government and researchers have agreed to work together.

In January 2006, the Australian Government announced a funding commitment of \$100 million over five years for the partnership. Currently Australia has allocated over \$84 million to more than 55 projects. These projects are drawn from across the eight partnership task forces on:

- aluminium
- buildings and appliances

- cement
- cleaner fossil energy
- coal mining
- power generation and transmission
- renewable energy and distributed generation
- steel.

International Renewable Energy Agency

Australia became a member of the International Renewable Energy Agency in June 2009. The agency is a treaty-level inter-governmental organisation of more than 130 sovereign member states, and aims to work with member countries and other international organisations to accelerate the development and deployment of renewable energy.

International Energy Agency technology network

Australia is an active participant in the range of technology activities under the International Energy Agency (IEA). These include the Implementing Agreements, which are the IEA's framework for coordinating international research and development on energy technologies; the IEA's Committee on Energy Research and Technology; and the energy technology working groups and experts' groups.

Reducing emissions from energy production and use is a key policy objective of the IEA's current work, advanced through the Energy Technology Perspectives publication and its associated technology roadmaps.

Climate Technology Initiative

Australia is currently a member of the IEA's Climate Technology Initiative. Member countries undertake a broad range of cooperative activities in partnership with developing and transition countries and other international bodies to accelerate development and diffusion of climate-friendly and environmentally sound technologies and practices. Australia supports the initiative's role in creating enabling environments, which includes addressing market barriers to private sector investment and deployment of technology.

Activities are designed to be consistent with the UNFCCC objectives, in particular the framework for technology cooperation incorporated in the Marrakech Accords and adopted at the Seventh Conference of the Parties to the UNFCCC.

5.4 Technology partnerships

The Methane to Markets Partnership is an international initiative that focuses on advancing cost-effective, near-term methane recovery and use as a clean energy source. The partnership is designed to promote collaboration between developed and developing country partners—with strong participation from the private sector—to enhance economic growth, improve energy security and reduce greenhouse gas emissions. It aims to promote the adoption of existing technologies focusing on methane emissions from coalmines, landfills, agriculture and the oil and gas sectors.

Australia joined the partnership at its launch in November 2004. A major focus for Australia under the partnership has been to advance collaboration on the recovery and use of coalmine methane with China—the world’s leading producer of emissions in this sector. The partnership has also provided opportunities for Australian companies specialising in landfill gas to develop export markets in China.

The Asian Development Bank’s Clean Energy Financing Partnership Facility was established in April 2007 to promote clean energy investments in Asia and the Pacific. The facility provides financial resources and technical support to improve energy security in developing countries and promote technologies and practices that reduce greenhouse gas emissions.

Australia joined the facility in September 2007 and has provided \$7 million to its Clean Energy Fund and \$21.5 million, through the Global Carbon Capture and Storage Institute, to its Carbon Capture and Storage Fund.

Australia is a founding member of the International Partnership for the Hydrogen Economy. The partnership, established in 2003, advances the transition to a hydrogen economy and provides a forum for international government cooperation and information sharing in advancing hydrogen and fuel cell technologies. The partnership works to progress policies, develop common technical codes and standards, and educate stakeholders on the benefits and challenges of integrating hydrogen technologies into the marketplace.

Australia is a founding member of the International Partnership for Geothermal Technology (IPGT) with the United States and Iceland. The primary focus of IPGT collaborations are technologies applicable to enhanced geothermal systems and supercritical hydrothermal resources.

Australia is providing \$1.5 million to the Renewable Energy and Energy Efficiency Partnership, an international non-government organisation that aims to increase the use of renewable energy and energy-efficient technologies. Australia’s funding supports projects in the Pacific region as part of the seventh Global Funding Round.

The Carbon Sequestration Leadership Forum is an international climate change initiative that is focused on cooperation to develop and apply technologies for the separation and capture of carbon dioxide for transport and long-term safe storage. The purposes of the forum are to make these technologies broadly available internationally, and to identify and address wider issues relating to carbon capture and

storage. This could include promoting the appropriate technical, political and regulatory environments for the development of these technologies.

6. Other initiatives

6.1 Financing to support impact of response measures

Measures taken to respond to climate change have the potential to impact all UNFCCC parties. As with other major energy exporters, Australia's exports are susceptible to fluctuations in demand based on a wide range of causes. Australia supports other countries to respond to the impact of response measures through national policies and measures, including diversifying economies, and building economic resilience, to place countries in a much better position to adapt to trends in the global economy.

Australia has in place a number of support programs to assist vulnerable countries to build economic resilience. For instance, Australia is providing \$12.5 million for the International Finance Corporation's Pacific Enterprise Development Facility, which is improving the business environment for small and medium-sized enterprises in the Pacific, through targeted programs of technical assistance. The work covers access to finance, tourism, business enabling environments and rural export development.

Australia has also provided more than \$3 million to support Pacific island countries in moving to closer economic integration through negotiation of a regional free trade agreement, the Pacific Agreement on Closer Economic Relations, known as PACER Plus. Australia's support focuses on four components: capacity building, policy analysis and research, stakeholder consultation and engagement, and trade facilitation and promotion. Programs include expert training for trade officers and funding for countries to commission independent trade research.

In total, Australia provided around \$391 million in 2008–09 in Aid for Trade-related activities, which are intended to support high and sustained trade-led growth, and which will, among other things, support developing countries build the economic resilience necessary to adjust to the impacts of climate change response measures.

In addition, Australia recently pledged at least \$25 million over four years from 2009–10 for initiatives in clean and affordable energy in the Pacific region. An important focus of this funding will be to reduce dependence on fuel imports and therefore vulnerability to a carbon price.

6.2 Australian Centre for International Agricultural Research

Through the Australian Centre for International Agricultural Research (ACIAR), the Australian aid program supports collaborative research and development projects between Australian and developing country organisations. This helps solve major agricultural and resource problems and strengthen local research capacity. ACIAR-supported research relevant to climate change includes:

- in forestry, technical and social research to support the development of community-based planted forests in Pacific island countries, including Papua New Guinea, and in Indonesia, and

research to underpin improved governance, policy and institutional arrangements to reduce emissions from deforestation and degradation (REDD) in Indonesia

- following on from pilot work in 2008, ACIAR commenced an R&D program in 2009 on adaptation to climate change in rain-fed agricultural regions in Lao PDR, Cambodia, Bangladesh and parts of India
- support of irrigated rice-based systems in the Mekong Delta of Vietnam, which will support the development of drought- and submergence-tolerant rice germplasma, targeted at improving farm systems and fertiliser management use and reduced greenhouse gas emissions.

2012 report²

Australia's A\$599 (US\$603) million climate finance investment package is new and additional, on track and delivering results. At 30 June 2012, Australia had allocated A\$563 million (94 per cent) of its fast-start finance to adaptation and mitigation initiatives that will deliver real outcomes in developing nations. Some A\$380 million (63 per cent) has already been disbursed.

Australia's fast-start finance is fully grant-based, and is balanced between adaptation (52 per cent) and mitigation (48 per cent). It is new and additional, being drawn from a growing aid budget and, is not displacing funding from existing Australian aid programs.

Acknowledging the importance of adaptation to countries particularly vulnerable to the effects of climate change, Australia has committed A\$309 million of its fast-start finance to adaptation activities. Around one third of Australia's total finance will go to small island developing states, and around one quarter will go to least developed countries.

With Australia's help, significant initiatives are also underway to assist developing countries implement policies to reduce their emissions and prepare for a low carbon future. This includes financial support for the development of low carbon growth plans, renewable energy and energy efficiency projects, and building capacity to participate in carbon markets.

Australia's fast-start finance reporting

Australia believes in transparency and is strongly committed to reporting regularly and openly on its fast-start finance. We provide a progress report at each UNFCCC Conference of the Parties in November, and an updated report at the end of our financial year. This report focuses on the geographical spread of our projects, using case studies from four key regions. It also contains updated financial tables which outline how and where Australia's fast-start finance is being delivered.

² Australia (2012). Australia's Fast-Start Finance Update Report, August 2012, 12 pp.

Highlights:

Disbursed as at 30 June 2012:

- A\$148.5 million through Australia’s International Climate Change Adaptation Initiative (ICCAI)
- A\$24 million to the Least Developed Countries Fund to support capacity building for adaptation
- A\$10 million to the World Bank’s Partnership for Market Readiness to support emerging carbon markets in developing countries
- A\$9.1 million to increase energy access from renewable energy for low income countries through the Climate Investment Funds.

Snapshot of Australia’s fast-start package

High level snapshot	A\$ (millions)	US\$ (millions)*
Adaptation	309 (52%)	311
Mitigation	290 (48%)	292
Allocated (as at 30 June 2012)	563 (94%)	567
Disbursed (as at 30 June 2011)	201.3 (first third)	203
Disbursed (as at 30 June 2012)	381.4 (second third)	384
Projected disbursement as at 30 June 2013	599 (final third)	603
Total package (fully budgeted)	599	603

* Rounded calculation as of June 2012 with a rate of A\$1 = US\$1.00650.

Note: Australia’s financial year runs from 1 July to 30 June.

Source: AusAID

Australia’s approach to fast-start finance: Adaptation

In adaptation, Australia continues to support and undertake cutting edge work. Domestically, Australia has a significant work program focused on ensuring that adaptation actions are effective and evidence-based.

Through this program, Australia has built knowledge and experience in delivering adaptation actions in the areas of coastal management, agriculture, water and infrastructure. This knowledge base is being used to aid the design of our international adaptation program.

Through its fast-start finance investments, Australia is working with partner countries to promote effective, evidence-based adaptation strategies in developing countries. Under the International Climate Change Adaptation Initiative (ICCAI), Australia is working with countries to implement holistic adaptation responses to identify climate risks and build local and national capacity to help address these risks. This includes programs such as the Pacific–Australia Climate Change Science and Adaptation

Planning Program. By integrating a deeper understanding of local and regional impacts of climate change into adaptation planning, these programs enable informed prioritization of adaptation actions.

To further understand these priority areas, Australia has also funded work assessing and identifying adaptation options for the impacts of climate change on food and water security, infrastructure, health, coastal management, and ecosystems. Australia is assisting a broad range of vulnerable developing countries implement such options – from Kiribati in the Pacific, to Saint Vincent and the Grenadines in the Caribbean.

Local and national governments and communities are partners in the delivery of these projects, ensuring that Australia's international adaptation program is building in-country capacity. In addition to biophysical characteristics, the projects take account of social, economic and cultural factors, enhancing effectiveness and sustainability.

Australia's international fast-start adaptation program is focused on our near neighbors in Asia and the Pacific, many of whom are particularly vulnerable to climate change. This focus allows Australia to develop and support a range of effective tools which increase the resilience of communities across this region as they adapt to the unavoidable impacts of climate change. Australia is also making targeted investments in South Asia, Africa and the Caribbean. These bilateral and regional contributions are complemented by our global work, assisting partners in formulating strategies to improve the quality of adaptation planning for communities most vulnerable to climate change.

Australia's approach to fast-start finance: Mitigation

Australia is working with a range of partners to build foundations for increasingly ambitious global mitigation action. It is using fast-start finance to assist developing countries achieve strong mitigation outcomes in the context of sustainable economic development. By promoting the establishment of carbon markets, low-emissions growth, and supporting clean technology, Australia is laying the foundation to achieve low-emissions sustainable development.

Australia recognises that key to achieving a low-emissions future is creating pathways for developing countries to harness financial and technological opportunities. Understanding that each country's pathway will be different, Australia has used its fast-start finance to support a wide range of initiatives, including the United Nations Development Program's Low Emissions Capacity Building Program. Australia is also promoting green growth research and planning initiatives such as the Global Green Growth Institute.

Australia also supports efforts to reduce emissions from deforestation and forest degradation in developing countries (REDD+). We are working bilaterally with countries, such as Indonesia, and through key multilateral mechanisms, such as the World Bank's Forest Investment Program (FIP) to achieve both mitigation outcomes and alternative livelihood options for communities.

These actions are part of the solution to engender increasingly ambitious mitigation action at a global level.

Elevating mitigation ambition at the rate required, however, will not be achievable through public sector effort alone. It will need to be complemented by sustained private sector engagement and the use of carbon markets. That is why Australia is investing in initiatives such as the World Bank Partnership for Market Readiness, which supports the development and piloting of carbon markets in developing countries — allowing each country to undertake mitigation action at least cost.

Region One: The Pacific Community-based Adaptation in Papua New Guinea (Manus and New Ireland) (A\$3.5 million fast-start funding)

Australia is working closely with the Papua New Guinea Government and with non-government organisations to implement community-based climate change adaptation projects in Manus and New Ireland. These projects are being delivered in partnership with two key organisations: the Wildlife Conservation Society and The Nature Conservancy.

Communities in Manus and New Ireland are experiencing a number of shared challenges, including water and food security, and health issues. These issues are arising from a lack of fresh water and crop failure due to increased coastal inundation. Projects have been developed in partnership with these communities, integrating local participation in the planning processes.

Key activities include training and capacity building within communities to undertake the following practical actions:

- construction of dry stone walls to reduce coastal erosion and to protect local land from rising sea levels
- coral farming, using the propagation of coral for lime production to reduce pressures on natural coral reefs
- production of drought resistant crop gardens, including technical training for crop multiplication, crop husbandry and crop and disease management
- establishment of no-take or “tambu” marine areas to protect fish stocks
- propagation of mangroves to reduce coastal erosion.

These programs empower communities to build their own capacity and skills to identify, trouble-shoot and act on the range of challenges that climate change presents.

Region Two: Asia Fast-start scale-up of successful pilot project in the Mekong Delta (A\$9.6 million fast-start funding)

Australia has used its fast-start finance to expand successful small scale programs, like that in Kien Giang province, Vietnam. Kien Giang is situated in the Mekong Delta and is one of Vietnam’s most vulnerable

provinces to the effects of climate change. The province has over 200 kilometres of coastline, 85 per cent of which is less than one metre above sea level. Sea levels have already risen 20 centimetres in Vietnam, and are predicted to rise by one metre by the end of the century. Up to 29 metres of Kien Giang's mangroves and coastline recedes each year due to erosion, sea level rise and deforestation. Without mangroves and coastal forests as natural buffers, people's livelihoods, including their crops, suffer from salt intrusion, storm surges and flooding.

Since 2008, Australia has partnered with the German and Vietnamese governments to work with communities in Kien Giang to adapt to climate change and improve the management of coastal environments. This has included applying new technologies, such as innovative fences to prevent erosion; rehabilitating coastal forests; promoting new mangrove planting techniques; and improving dyke management. It has also included significant community consultation and engagement with the project management board, including civil society, business, government and the community. The new coastal restoration techniques are now being scaled-up with funding from the Government of Vietnam.

The result has been a reversal of erosion, a build-up of silt, and increased growth and survival rates of mangroves.

Based on the success of the Kien Giang pilot project, Australia is investing fast-start finance to support an expanded partnership between Australia and Germany across five provinces in the Mekong Delta. The five year Climate Change and Coastal Ecosystems Program will bring German-funded projects in Bac Lieu and Soc Trang together with the pilot in Kien Giang, and projects in the provinces of An Giang and Ca Mau. This will be supported by a national component that will promote the sharing of lessons and experience across provinces to inform a national response to climate change.

Under the program, communities develop their own course of action to deal with a changing climate and to protect their coastal ecosystems. The program is being implemented under a dedicated arrangement between Australia and Germany and will finish in 2016.

Region Three: Africa Green Building Council of South Africa—Cato Manor (A\$125,000 fast-start funding)

Australia is using its fast-start finance to work with the Green Building Council of South Africa to support the second phase of a 'green upgrade' of low-income homes as part of the Cato Manor Green Street demonstration site in Durban. As South Africa progresses to its goal of building 3 million low-cost homes by 2025, the Cato Manor Project aims to demonstrate a set of affordable and proven energy efficiency measures and other greening elements in low-income homes.

These green interventions are directed at improving the living conditions of occupants, such as keeping homes warm in winter and cool in summer, regulating daily temperature fluctuations, and minimising indoor air pollution from harmful fuels traditionally used for heat and cooking. Each home in the area (approximately 26 homes) will be retrofitted with:

- a solar water heater

- energy efficient lighting
- a heat-insulation cooker
- roof insulation to regulate temperatures
- rainwater harvesting systems
- the planting of indigenous trees for shade and fruit

As well as reduced greenhouse gas emissions and environmental impacts, the Cato Manor Project will achieve savings in energy consumption, reduce illness and safety risks, and provide training and job opportunities within the local community. The retrofit work will be implemented by local teams ensuring that the skills and knowledge acquired through the project are retained by the local community.

The Cato Manor Project will build knowledge and understanding of low-emission interventions in low-cost housing programs which will be valuable to governments and organisations seeking to establish similar projects in developing countries.

Region Four: Caribbean Bequia Sustainable Water Supply (Project overall A\$1.1 million, fast-start component A\$110,000)

Australia is using fast-start funding to support climate change action in the Caribbean. Islands in the Caribbean have traditionally been vulnerable to water shortages, and this situation is becoming increasingly acute due to climate change impacts.

Regional climate modelling suggests rainfall will decrease by more than 11 per cent, particularly in the eastern Caribbean. Higher temperatures, reduced rainfall and sea level rise will put increasing pressure on the limited fresh-water stocks on islands like Bequia, in Saint Vincent and the Grenadines.

Australia, working with a range of partners including the World Bank, the Global Environment Facility, the governments of Greece, Saint Vincent and the Grenadines and the Caribbean Community Climate Change Centre, has implemented a pilot project in Bequia to demonstrate a new way to improve water supply.

Access to fresh water is an ongoing issue for Bequia, and many other Caribbean islands, due to calciferous soil (which quickly absorbs water) and a lack of surface water.

These issues are significant challenges both for the local communities and for the local tourism industry. While Bequia had basic rain-water harvesting systems prior to the pilot project, these systems were only effective during the rainy season and residents had to ship in water from neighbouring islands during the dry season. The partners for the project selected salt-water desalination as the only viable long term solution to Bequia's water problems.

The pilot has involved installing a salt-water reverse osmosis system, which utilises renewable photovoltaic (solar) energy. With the systems now in action, this project has delivered potable water that

exceeds previous water standards, both in cost and water quality. The renewable solar energy that powers the system feeds excess power it produces into the national utility, ensuring the system's sustainability. Currently run by the public sector, there are plans to develop partnerships with the private sector in the long term. Australian fast-start finance has supported pilots like the Bequia water project, focusing on the potential to learn, replicate and scale-up as appropriate.

This example shows the connection between low emissions technologies and the implementation of adaptation outcomes. In this case, the project is making communities more resilient to climate change driven water shortages in sustainable ways.

Table One: General funding breakdown by program

Funding Breakdown		Committed A\$ (millions)	Disbursed by 30 June 2012	Counted As
International Climate Change Adaptation Initiative (ICCAI) (examples of funding earmarked to regions)	Total	248.2	148.5	Adaptation
	Pacific	134	88.2	
	South East Asia	47	15.8	
	South Asia	23	12.2	
	Caribbean*	6.5	5.2	
	Africa	25	10	
International Forest Carbon Initiative		145.9	101.2	Mitigation
Climate Change Partnerships		15	2.7	Mitigation
Multilateral	101.2	42.9	40% Adaptation, 60% Mitigation	
Other*		88.7	86.1	Mixed
Total		599	381.4	

* includes range of additional funding to multilaterals (see table below) and other funding. For example, A\$10 million additional bilateral adaptation funding for the Caribbean (to make complete fast-start funding A\$16.5 million to the region).

Source: AusAID

Table Two: Multilateral funding breakdown by activity*

Multilateral Climate Change Funding	Committed (A\$ million)	Disbursed by 30 June 2012 (A\$ million)
MITIGATION (MULTILATERAL)		
World Bank's Partnership for Market Readiness	10	10
Scaling-Up Renewable Energy Program	10	9.1
Global Green Growth Institute	10	5
Pacific Appliance Labelling Standards Program (PALS)	3	1
Community Level Climate Change fund for countries in the Mekong sub-region (mitigation)	5	2.5
UNDP Low Emissions Capacity Building Program	5	1
Lites.asia (energy efficiency)	0.5	0.5
UNFCCC MRV program	1	1
Green Climate Fund administrative contribution (mitigation)	0.25	0.25
ADAPTATION (MULTILATERAL)		
Support for the secretariat functions of the Alliance of Small Island States (AOSIS)	1.5	1.5
Adaptation Fund	15	0

Least Developed Countries Fund	24	24
Community Level Climate Change fund for countries in the Mekong sub-region (adaptation)	5	2.5
UNFCCC workshops for the Adaptation Fund	0.2	0.2
Green Climate Fund administrative contribution (adaptation)	0.25	0.25
OTHER MULTILATERAL (MIXED)		
Pilot Program for Climate Resilience (ICCAI)	2.4	2.4
Forest Investment Program (IFCI)	25.5	25.5
Clean Technology Fund (other)	25	25
Global Environment Facility (other)	37.8	37.8

* This multilateral table is made up of spending under both the ‘multilateral’ ‘ICCAI’, ‘IFCI’ and ‘other’ headings as identified in Table One.

Source: AusAID

2013 report³

Overview

Australia committed A\$599 million over three Australian financial years (FY2010/11 – FY2012/13) to the collective fast-start climate finance goal as part of its continued commitment to support developing countries in their efforts to respond to climate change.

Australia has met this commitment. A\$599 million has now been allocated and fully programmed to support an array of climate change activities. This investment package has supported a range of actions to reduce carbon emissions, enhance technology development and capacity building and help developing countries adapt to the effects of climate change. Many of these activities continue to deliver results into the future.

Australia’s fast-start finance investment package has also produced lessons for effective and sustainable climate outcomes.

These lessons are:

1. **Focus on results:** through Australia’s fast-start finance package, relatively modest investments were able to achieve significant results — especially where focused on clear, tangible outcomes.
2. **Donor strengths and expertise:** Australia was able to share knowledge and expertise from its own domestic programs in areas such as energy efficiency, science and adaptation, and measurement, reporting and verification (MRV), to inform fast-start activities.

³ Australia (2013). Australia’s Fast-start Climate Finance: Investing in Effective and Sustainable Climate Outcomes, July 2010–June 2013, 24 pp.

3. **The right partner:** finding the right investment partner - either bilateral or multilateral – can improve local engagement, tailor project management, and make more efficient use of resources.
4. **National ownership:** responding to national priorities, and seeking a high level of engagement and decision-making by national governments, can improve the effectiveness and uptake of a program.
5. **In-country capacity:** programs can contribute to broader climate action and help to make results long-lasting by building institutional and technical capacity in developing countries.
6. **Enabling environments and policy levers:** by helping to put in place supportive policy and institutional frameworks, fast-start projects can create environments favourable to long lasting results and catalyse private investment.
7. **Collective knowledge:** through the fast-start experience, Australia found that recording data and sharing knowledge allowed stakeholders to learn from one another, coordinate efforts, and build upon past experience.
8. **Harmonisation:** sharing information and coordinating investments can help to avoid duplication and increase collaboration between donors. Investments that align with developing country priorities can also produce co-benefits to maximise the impact of every dollar spent.
9. **Scaled up and transferable:** investing in projects that can be scaled up or transferred to countries or sectors with similar needs allows results to be achieved beyond the scope of the original investment.

Australia's approach to fast-start

Australia targeted its A\$599 million fast-start investments in order to promote effective, sustainable activities addressing climate change in developing countries. Focusing on the Pacific, Asia, Africa and the Caribbean, efforts were made to maximise climate returns across both mitigation and adaptation interventions.

Adaptation

In allocating its fast-start investment, Australia recognized the importance of adaptation to countries particularly vulnerable to the effects of climate change. Australia's fast-start funding has supported a range of countries from Kiribati in the Pacific to Saint Vincent and the Grenadines in the Caribbean to plan for and respond to the unavoidable impacts of climate change.

Using knowledge gained from its own domestic adaptation work program and expertise in areas like coastal management, agriculture, water and infrastructure, Australia is promoting effective, evidence-based adaptation strategies in developing countries. Under the International Climate Change Adaptation Initiative, Australia is working with countries to implement holistic adaptation responses to identify

climate risks and build local and national capacity to help address these risks. Local and national governments and communities are partners in the delivery of these projects, ensuring that Australia's international adaptation program is building in-country capacity.

Australia's international fast-start adaptation program focused on our near neighbors in Asia and the Pacific, many of whom are particularly vulnerable to climate change. This focus has allowed Australia to identify opportunities for regional harmonization and knowledge sharing. Australia has also made targeted investments in South Asia, Africa and the Caribbean. These bilateral and regional contributions have achieved concrete and effective adaptation outcomes throughout the fast-start period.

- 40,000 people in Vanuatu and more than 29,000 people in Solomon Islands have benefitted from the upgrade of roads and bridges vulnerable to floods and storm surges.
- Communities in Papua New Guinea (Manus and New Ireland) are being supported to combat challenges to water and food security arising from increased coastal inundation- through the construction of dry stone walls, coral farming, drought resistant crops, protecting marine areas, and mangrove rehabilitation.
- Activities including rain water harvesting, improvements to the water reticulation system, building seawalls and planting mangroves have improved water security in Kiribati.
- The Pacific Australia Climate Change Science and Adaptation Planning program has improved understanding of climate change science and boosted the capacity of our partner countries to undertake adaptation planning. For example, Fiji and Solomon Islands are using climate projections in nation planning and climate change policies.
- Vietnam is being supported to reduce its vulnerability to climate change, particularly in the Mekong Delta where rising sea levels, salt water intrusion and flooding are already affecting coastal communities.
- In Bangladesh, which is particularly vulnerable to floods and cyclones, more than 620 community disaster risk assessments have been developed, under a Comprehensive Disaster Management Program.
- Through the multilateral Least Developed Countries Fund (LDCF), Least Developed Countries are receiving support to prepare and implement National Adaptation Programs of Action (NAPAs), which identify urgent and immediate needs to adapt to climate change.

Mitigation

With Australia's help, significant initiatives are also underway to assist developing countries to reduce their emissions and prepare for a low carbon future. This includes financial support for the development of low carbon growth plans, renewable energy and energy efficiency projects, and building capacity to participate in carbon markets.

Australia recognises that the key to achieving a low-emissions future is creating pathways for developing countries to harness financial and technological opportunities. Understanding that each country's pathway will be different, Australia has used its fast-start finance to support a wide range of initiatives, including the United Nations Development Program's Low Emissions Capacity Building Program. Australia is also promoting green growth research and planning initiatives such as the Global Green Growth Institute.

Australia also supports developing countries to reduce emissions from deforestation and forest degradation in (REDD+). Australia is working bilaterally with countries, such as Indonesia, and through key multilateral mechanisms, such as the World Bank's Forest Investment Program (FIP) to achieve both mitigation outcomes and alternative livelihood options for communities. These actions are part of the solution to engender increasingly ambitious mitigation action at a global level.

- Australia has supported Indonesia to reduce its carbon emissions from deforestation and forest degradation including through developing a National Carbon Accounting System; establishing a REDD+ demonstration project in Central Kalimantan; and REDD+ policy dialogue and capacity building.
- The Clean Technology Fund is promoting scaled-up financing for the demonstration, deployment and transfer of low-carbon technologies with significant potential for long-term greenhouse gas emissions savings.
- Under the Pacific Appliance Labelling and Standards Program, twelve Pacific Island countries including Fiji, Tonga, Samoa, Kiribati, Tuvalu and Cook Islands are being supported to enact and implement standards and labelling for appliances such as refrigerators, air conditioners, and lighting—thereby reducing energy use, emissions and energy bills.
- The Green Building Council of South Africa is being supported to carry-out the second phase of a 'green upgrade' of low-income homes— leading to reduced greenhouse gas emissions and environmental impacts, savings in energy consumption, and opportunities for the local community.

Australia's A\$599 million fast-start climate finance package is:

- Fully allocated
- Spanning three Australian financial years (2010 – 11 to 2012 – 13)
- Supporting adaptation—to assist developing countries to plan for and respond to the unavoidable impacts of climate change, focusing on the poorest and most vulnerable
- Supporting mitigation—to help developing countries to reduce their emissions, for example by supporting low emissions development and efforts to reduce deforestation
- Prioritising support for the most vulnerable countries, including Small Island Developing States

(SIDS) and Least Developed Countries (LDCs)

- Using bilateral and multilateral partnerships to deliver these outcomes
- Achieving real and measurable outcomes on the ground, as well as building the capacity of partner countries to undertake future action on climate change

Future climate finance

Australia remains committed to climate finance in support of mitigation and adaptation action and will continue to play its part in global scale-up efforts beyond the fast-start period.

Developed countries have committed to a goal of jointly mobilising US\$100 billion a year by 2020 to address the needs of developing countries and Australia remains committed to this global goal.

Australia recognises the key role that climate finance from all sources will play in scaling-up and supporting mitigation and adaptation action. While Australia will continue to work towards mobilizing financial flows from the private sector, the ongoing provision of finance from public sources remains a priority.

1. Focus on results

Effective climate finance is more than a question of dollars spent. As noted by the Australian Government's aid policy, "effective aid is more than just how much money we are spending. It is about the results we want to achieve and our ability to measure and report on the impact of our aid on the lives of poor people." Similarly, when addressing climate issues, it is the design of the project that counts.

Through the fast-start period, Australia invested in a range of activities that achieved important outcomes and provided excellent value for money. Key to this was a strong focus on achieving climate change and development results.

Case study: Modest investment for significant results - Cato Manor Green Street Phase 2 (A\$125,000)

With A\$125,000, the Cato Manor Green Street Phase 2 project completed a 'green' retrofit of 26 low-income houses in Durban, South Africa, installing solar water heaters, energy efficient lighting, heat-insulation cookers, roof insulation, rainwater tanks, food gardens and fruit trees. In addition to the retrofit itself, the project provided short-term employment and training to nine community members and leveraged an additional A\$25,000 in complementary investment.

In a country aiming to build 3 million low-cost homes by 2025, the project is now being used to demonstrate the health, livelihood and energy saving benefits of incorporating energy efficiency and emissions reduction measures into low-cost housing construction. The project is an example of what can be achieved on a very small budget if carefully designed with clear results in mind.

2. Donor strengths and expertise

In a crowded climate finance space, it is important for donors to ensure that their investments avoid duplication and have maximum impact. Focusing on initiatives that leverage a donor's unique expertise increases the likelihood of the investment making a valued and effective contribution.

Carbon markets, adaptation science, energy efficiency and land sector emissions accounting and abatement methodologies are fields in which Australia has expertise. Australia funded a number of initiatives in the fast-start period which focused on these areas, establishing opportunities for developing countries to learn from Australia's experience. The World Bank Partnership for Market Readiness, for example, is allowing Australia to share its carbon markets experience with developing countries aiming to introduce carbon pricing.

By directly managing some projects, convening high level meetings, or procuring valuable research, donors are able to use their skills to provide value to projects which goes beyond the provision of finance. In this way, Australia has drawn upon its skills and expertise when designing and implementing fast-start projects to help developing country partners.

Case Study: Sharing Australia's success - Savanna Fire Management Initiative (A\$2.25m)

Through a new methodology developed under Australia's Carbon Farming Initiative (CFI), Indigenous communities and pastoralists in tropical north Australia are reducing emissions by reintroducing traditional-style early dry season savanna burning practices. The CFI is allowing these groups to receive payments for the reduction, supplementing other income streams.

Australia is now exploring the applicability of this methodology in developing countries, in collaboration with the United Nations University and the North Australian Indigenous Land and Sea Management Alliance Ltd. The initiative will share Australia's savanna fire management mitigation methodology and project experience with developing countries, while also laying the groundwork for establishing projects by identifying potential pilot sites and in-country partners.

Case study: Australia's policy-making experience - The Pacific Appliance Labeling and Standards program (A\$3 million)

As a global leader in domestic energy efficiency policies, Australia is assisting twelve participating Pacific Island countries including Fiji, Tonga, Samoa, Kiribati, Tuvalu and Cook Islands to enact and implement standards and labeling regulations for appliances such as refrigerators, air conditioners, and lighting, thereby reducing energy use, emissions and energy bills.

It has been estimated that the introduction of appliance energy efficiency standards and labeling in the Pacific region could reduce emissions by approximately 2,230 kt CO₂ equivalent and save between US\$600 and \$900 million dollars over a fifteen year period (2011-2025).

3. The right partner

Donor countries rarely have the resources or in-country capacity to deliver projects themselves, often making finding the right partner key to a project's success.

In a bilateral context, the right partner can improve local engagement and leverage local support, maximising the effectiveness of an investment. Australia's partner for the Cato Manor Green Street Retrofit, the Green Building Council of South Africa, for example, was highly successful in securing local project management expertise for the activity. As a result, the project achieved its desired results on time and on budget, and recorded important data about technologies and methods for 'green' retrofits, which can inform future investments.

Multilateral funds can be valuable project partners, particularly in areas where donor coordination is important, or where implementing an activity will require resources beyond the capacity of a single donor. For example, through the International Forest Carbon Initiative, Australia has made significant investments in the World Bank's Forest Carbon Partnership Facility and Forest Investment Program.

These multilateral bodies are at the forefront of the global effort to coordinate approaches to REDD+ implementation amongst contributors, recipients, and the broader private and non-government sectors.

Case study: Supporting countries that are already acting - The Vietnam Energy Efficiency Standards and Labeling Program (A\$2.75 million)

This program builds upon Vietnam's existing energy efficiency standards and labeling program to help consumers make informed purchasing decisions that improve the country's energy intensity and reduce carbon emissions. It also targets the Government of Vietnam's monitoring and verification capabilities. By fostering a high level of engagement with the Government of Vietnam and enlisting the support of international experts to advise on elements of the scheme, this project is building the capacity of government officials and helping to inform the development of policy and legislation.

Case study: Partnerships for sustainability - Energising Development partnership (A\$20 million)

Australia is supporting the Energising Development partnership (EnDev) to develop sustainable markets for improved cooking technologies in developing countries including in Asia, Africa and Latin America. The unsustainable collection of fuel wood is an important driver of forest degradation. Australia's support will promote sustainable cooking technologies as well as a better understanding of the relationship between fuel wood use and deforestation and forest degradation.

In supporting the EnDev Partnership, Australia is helping to build an existing initiative that has a proven track record in delivering access to sustainable energy. The lead agency for implementing the Partnership is Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) which has a large and well established network in developing countries, ensuring that supported activities are responsive to regional and local as well as national needs.

4. National ownership

Climate finance investments are more sustainable and effective when owned and driven by partner governments. Where investments address national priorities or involve a high level of engagement and decision-making by national governments, the effectiveness and uptake of a program can be increased. Throughout the fast-start period, Australia has looked for opportunities to increase national ownership of projects, by addressing country needs, working with government partners and using partner country processes and systems to deliver climate finance projects.

Case study: Addressing country needs - The World Bank Forest Carbon Partnership Facility (A\$44.6 million)

Australia supports the World Bank's Forest Carbon Partnership Facility (FCPF), a global partnership of governments, businesses, civil society, and indigenous peoples established to provide financial and technical assistance to countries seeking to build their capacity to effectively implement REDD+.

National ownership is well evidenced at the FCPF, where features such as the Readiness Plan Proposal process encourage countries to identify their specific capacity and support needs to implementing REDD+ at the national level. This country-driven process encourages ownership of the process from the national government down to the local community level. In ensuring this shared ownership, REDD+ is given the best chance to flourish throughout a country.

Spotlight on Reducing Emissions from Deforestation and Forest Degradation (REDD+)

Deforestation accounts for a large proportion of global greenhouse gas emissions and developing countries in particular require help to build the necessary capacity to address this challenge. Australia has invested in a number of activities that pursue the goals of reducing emissions from deforestation and forest degradation in developing countries (REDD+).

Through the International Forest Carbon Initiative, Australia is working directly with partners in our region, and collaboratively through multilateral institutions, like the World Bank, to contribute to the shared global effort to address deforestation. Through the International Forest Carbon Initiative, Australia supports in-country capacity to implement REDD+, credible systems for MRV and approaches to REDD+ that provide fair and effective benefits for communities.

The International Forest Carbon Initiative:

- is assisting 25 developing countries to develop national REDD+ strategies that show how they will reduce carbon emissions from forests (funded through the World Bank Forest Carbon Partnership Facility)
- is assisting five developing countries to take practical action to reduce forest emissions, such as through sustainably managing forests and supporting livelihoods for forest communities which do not lead to deforestation (funded through the World Bank Forest Investment Programme)

- is helping to establish global systems to support countries to measure, report and verify forest cover and carbon emissions
- supports REDD+ bilaterally through the Indonesia-Australia Forest Carbon Partnership and Papua New Guinea-Australia Forest Carbon Partnership
- is directly supporting countries such as Indonesia and Kenya to establish and operate MRV systems for the land sector
- is providing support to summarise and disseminate information on forest finance and REDD+
- Is supporting the Centre for International Forestry Research to show how REDD+ can be implemented in a way that is efficient and equitable and bring benefits to local communities.

To encourage shared ownership, Australia's fast-start finance investments through the IFCI have responded to country needs and been informed by common approaches and shared expertise identified through bilateral and multilateral partnerships.

Case study: Understanding and measuring land sector emissions -South Africa Land Sector MRV Capacity Building Project (A\$875,000)

South Africa, like Australia, faces huge challenges when it comes to understanding and measuring emissions from its land sector. Drawing on its specialised experience in this area, Australia is supporting the South African government to build its capacity and expertise in the measurement, reporting and verification (MRV) of emissions from the Agriculture, Forestry and Other Land Use (AFOLU) sector.

Under the project, South Africa's Department of Environmental Affairs has recruited two new land sector MRV experts who will establish a strategic plan for the development of a comprehensive AFOLU sector MRV system for South Africa. The experts are being supported by an administrative assistant and a research assistant, who are also employed under the project.

5. In-country capacity

Countries face a range of challenges in responding to climate change. This often includes a lack of in-country expertise and capacity to implement desired reforms or effectively absorb large climate finance flows. It is important for donors to assist developing countries to establish institutional and technical capacity to enable them to take action and incorporate climate change into long-term development planning. By investing in programs that build in-country capacity, developing countries are empowered to take control of their climate change agendas, while increasing the long-term sustainability of individual projects.

During the fast-start period, there was an expectation that large quantities of funds would be disbursed in a short period of time. This resulted in a strong inclination to rely on specialist third parties to carry out climate finance projects. While this can represent the best solution in certain circumstances it should not be at the expense of building in-country capacity. Wherever possible, resources should be

allocated to enable developing countries to carry out projects themselves. Taking a longer-term view will ultimately improve the effectiveness and sustainability of climate finance investments.

Case study: Building systems for mitigation - Low Emission Capacity Building Programme (A\$5 million)

Robust measurement, reporting and verification (MRV) systems, Nationally Appropriate Mitigation Actions (NAMAs), and Low Emissions Development Strategies (LEDS) are increasingly seen as important preconditions for receiving increased climate finance. However, the capacity for many developing countries to establish and generate these systems and mechanisms remains weak.

Through the United Nations Development Programme's (UNDP) Low Emissions Capacity Building Programme, Australia is supporting 25 countries to strengthen their institutional and technical capacity to plan and undertake mitigation actions, through the formulation of LEDS and NAMAs. The Programme is also assisting participants to establish the national greenhouse gas (GHG) inventory and MRV systems required to underpin their mitigation actions.

Acknowledging that the responsibility for responding to climate change extends beyond national governments, the Programme is also supporting selected industrial sectors within partner countries to identify appropriate mitigation actions.

6. Enabling environments and policy levers

Effective delivery of public climate finance requires supportive policy and institutional frameworks that will help ensure the success of individual projects and catalyse private investment.

Appropriate policies, regulation and governance create conducive enabling environments to support climate-compatible development. Public finance can contribute to strengthening elements of national administration in recipient countries, including the broader institutional architecture and the public financial system. It can also help to remove barriers to investment and improve the risk-reward calculation to make projects more attractive to private investors.

Climate finance is well-placed to continue to support developing countries in improving their enabling environments, including policy frameworks, to drive low carbon and climate-resilient growth. For example:

- supporting regulatory and institutional reforms that cut “red tape” and encourage competition and innovation
- supporting institutional capacity-building
- investing in catalytic infrastructure, including information and communications technology;
- facilitating dialogue between the public and private sectors
- providing private sector financiers with advice to give them a better understanding of the risks in conflict-affected and fragile economies

Case study: Building capacity for carbon markets - World Bank Partnership for Market Readiness (A\$12.5 million)

Australia is working with other governments through the World Bank Partnership for Market Readiness (PMR) to build the capacity of countries to develop domestic carbon market instruments to scale up emission reduction efforts and support low carbon development. Helping to develop the essential “readiness” components for these instruments—such as data management, measurement, reporting and verification (MRV) systems and the creation of policy and regulatory frameworks—is a crucial part of the PMR’s work.

The PMR, a global partnership of 28 developed and developing countries, has achieved a significant amount since it was established in 2011. It has exceeded its target capitalisation of \$US100 million and approved funding for countries to develop detailed carbon market plans and work towards implementation of domestic carbon market instruments. In addition to grant funding and in-country expert support, partner countries build capacity by sharing lessons learned in technical workshops, policy dialogues and virtual knowledge platforms as they look to develop new or improve on existing domestic carbon market instruments.

Through capacity building for the development of market-based instruments, the PMR is supporting countries to create effective enabling environments for private sector action on climate change. Well-designed carbon market instruments can incentivise private sector actors to change investment and production behaviour to drive low emissions development. PMR countries are encouraged to engage early with private sector actors in developing their carbon market instruments, consistent with domestic circumstances. The PMR has also organized a number of successful dialogues between country representatives and the private sector.

Australia co-hosted one such dialogue with the World Bank and the International Emissions Trading Association in 2012. These dialogues will continue to be a key contributor to the PMR’s success by promoting effective engagement with the private sector to support low emissions development.

7. Collective knowledge

Reaching the goal of mobilising US\$100 billion in climate finance per year by 2020 requires collective effort. The global nature and urgency of climate change reinforces the need for open and collaborative efforts to reach this goal. Building a bank of shared climate finance knowledge is vital to enable donors to learn from each other to maximise the effectiveness of future investments and for recipient countries to incorporate climate change into their development actions and strategies.

Australia’s fast-start projects have contributed valuable research, knowledge and data to inform combined efforts in areas such as energy efficiency, monitoring and compliance systems, carbon markets, and low emissions development. Australia’s science and adaptation projects in the Pacific have delivered valuable research and data to vulnerable countries, enabling them to base their adaptation

plans and activities on sound science and knowledge of risk. This not only informs current planning and decision-making, but will also be available for future use.

Case study: Supporting our Pacific neighbors - Pacific Australia Climate Change Science and Adaptation Planning (A\$32 million)

Pacific countries have a strong awareness and support for adaptation activities. Providing technical support, information and capacity can assist these countries to improve their ability to manage future climate risks.

One of three programs delivered under the International Climate Change Adaptation Initiative (ICCAI), the Pacific Australia Climate Change Science and Adaptation Planning program (PACCSAP) is building an adaptation science and research base to assist Pacific countries to better manage future climate risk. Following on from an earlier program, The Pacific Climate Change Science Program (PCCSP), which delivered research and country level climate change projections,⁵ the PACCSAP has continued to build the capacity of National Meteorological Services and the science base as well as delivering communication and awareness activities.

1. Provide a better understanding of climate change science
2. Communicating key climate science and adaptation knowledge to decision makers
3. Building capacity within the region for decision makers to manage future climate change risks

Strengthening the adaptation science base allows partner countries in the Pacific to reliably identify national climate change priorities, integrate climate change considerations into decision-making, and understand the economic implications of future climate change impacts and adaptation measures. For example, developing damage and loss estimates for the Pacific region from future climate change cyclone projections will help national government better quantify economic risk and develop solutions.

Spotlight on Science and Adaption

Climate change will push many countries beyond coping thresholds and has significant implications for food, energy and water security. In the medium term, it has the potential to derail progress towards the Millennium Development Goals. In the longer term, it is likely to influence the growth and development trajectories of communities, regions and nations. Without adequate adaptation countries will face significant economic, social and environmental costs. Australia funded the International Climate Change Adaptation Initiative (ICCAI; 2008-13) to support vulnerable countries, particularly in the Asia-Pacific region, to adapt to the unavoidable impacts of climate change.

The Fourth Assessment Report published by the Intergovernmental Panel on Climate Change revealed a significant gap in our understanding of how the dynamic climate systems in the Pacific might change in the future. The lack of scientific data made it difficult to understand the impacts on the livelihoods of the Pacific Island community. The work undertaken over the past four years through the Pacific Climate

Change Science Program (PCCSP), the Pacific Adaptation Strategy Assistance Program (PASAP), and the Pacific-Australia Climate Change Science and Adaptation Planning (PACCSAP) Program has been vital in closing this gap.

These programs have engaged Pacific Island country scientists, decision-makers and planners to better understand past and future climate, and to formulate adaptation responses. They reinforce the value of a strong evidence base in climate change science, risk assessment and adaptation planning, to inform national planning priorities and guide decision making.

8. Harmonisation

In the context of the scaling up of effective climate finance, it is more important than ever for donors to avoid duplication by regularly sharing information and harmonising their investments. Improved donor coordination also increases opportunities for collaboration and allows new projects to build on, or complement, existing investments, maximising the impact and effectiveness of every dollar spent. Climate finance investments should also be aligned with recipient country priorities. Harmonisation with national-level planning increases the likelihood of complementary domestic action being leveraged. Similarly, climate finance investments that address a broader range of recipient needs – such as simultaneously addressing climate and development objectives – are likely to receive a greater level of in-country support and uptake, increasing effectiveness and sustainability.

Case study: Regional cooperation on lighting - Lighting Information and Technical Exchange for Standards (A\$750,000)

Australia supports Lighting Information and Technical Exchange for Standards (lites.asia) - a regional network of lighting efficiency policy makers and regulators promoting regional cooperation on lighting energy efficiency issues. Lites.asia assists partner countries to undertake regulatory and policy reform to support low-emission development and encourage private sector investment through harmonised lighting standards. The overall goal is to make energy efficient lighting products available to all consumers in the Asia-Pacific region.

Lites.asia arose out of a meeting in October 2009, when representatives from Australia, China, India, Indonesia, Philippines, Sri Lanka, Thailand, USA and Vietnam met to discuss the potential benefits of regional co-operation on the development of lighting standards. Today over 600 participants from 20 economies actively collaborate on projects, participate in IEC meetings, and share knowledge on local standards and labelling via the internet and in regional meetings.

Case study: Integrating national strategies - Vietnam Low Carbon Rice Project (A\$1.3 million)

Australia is assisting rice farmers in the Mekong Delta to change the way they cultivate their rice crops to reduce greenhouse gas emission from rice production, while enhancing yields, creating environmental co-benefits, and providing supplementary income through the international carbon market.

Implemented by the Environmental Defense Fund, the objectives of the project align with a number of national strategies, ensuring harmonisation with national-level planning. For example, Vietnam's National Green Growth Strategy outlines a commitment to join international efforts to reduce GHG emissions, recognising that promoting low-carbon growth also has broader benefits for sustainable development.

The project also supports the Vietnamese Governments' National Strategic Vision to 2030 for rice production and food security, which recognises the Mekong Delta as crucial to food security, both for Vietnam and the world.

Case study: Coordinated systems for reporting - MRV Capacity Building Program (\$3m)

Australia is supporting a range of developing countries in Africa and Asia to build their capacity to understand, quantify and report their greenhouse gas emissions, with a view to establishing robust and transparent national measurement, reporting and verification (MRV) systems.

In designing the program, Australia took account of existing initiatives, such as the UNFCCC Regional MRV program, International Partnership on Mitigation and MRV, and UNDP's Low Emissions Capacity Building Programme. Doing so was important to avoiding duplication, maximising coverage, and focusing Australia's contribution to ensure it has the most impact. As the Program rolls out, Australia will continue to coordinate closely with associated programs and donors to ensure that our investments work in a complementary manner.

Spotlight on Measurement, Reporting and Verification (MRV)

Measurement, Reporting and Verification (MRV) describes the capacity of a country to measure its greenhouse gas (GHG) emissions, removals and climate action; and present and communicates that information both domestically and internationally. Whether sectoral (as for forestry) or national (as GHG inventories), MRV systems enable countries to participate in mitigation action; to meet international reporting obligations; to enhance national capacity in international meetings; access carbon markets; and harmonise donor and aid programs. By increasing transparency in mitigation, MRV is critical for building the trust necessary to make mitigation pledges. Enhanced MRV programs also improve countries understanding of their emissions profile, and therefore the efficiency of mitigation and adaptation initiatives.

Australia has a well-developed national framework and system for the reporting and dissemination of information about greenhouse gas emissions that meet international reporting requirements. This significant experience in MRV can be utilised to assist developing countries to grow their capacities in this area. Australia has supported MRV capacity building with a range of partners, including through:

- The Indonesian Carbon Accounting and Reporting Model developed in conjunction with the Government of Indonesia
- UNFCCC Secretariat expert workshops on Forest Reference Levels and Safeguards for REDD+

- purchasing, initially processing, archiving and making freely available comprehensive satellite data to Indonesia and acquire data for Timor-Leste, Papua New Guinea, Brunei, the Philippines and parts of Myanmar
- developing and administering capacity building programs to enhance MRV in developing countries in Africa and Asia for both REDD+ and non-forest MRV
- establishment funds for start-up support for Global Forests Observations Initiative work streams including in particular the Methods and Guidance Documentation work stream and the coordination of satellite data supply

9. Scaled up and transferable

Where possible, activities should be designed so that they can be scaled up or transferred to other applicable settings. This maximises the effectiveness of investments as it allows for economies of scale, and leveraging from previous experience and existing in-country institutional arrangements.

Scalable and transferable projects also offer opportunities for other donors to contribute to proven projects, improving the efficiency and effectiveness of climate finance investments more broadly.

Case study: Building Upon Success - Vietnam Climate Change and Coastal Ecosystems Program (A\$9.6m)

Since 2008, Australia has partnered with the German and Vietnamese governments to work with communities in Kien Giang, Vietnam to adapt to climate change and improve the management of coastal environments. This has included installing fences to prevent erosion, rehabilitating coastal forests, improving dyke management, and promoting new mangrove planting techniques.

Based on the success of the Kien Giang pilot project, Australia invested A\$9.6 million of its fast-start finance to support an expanded partnership between Australia and Germany across five provinces in the Mekong Delta, under the Climate Change and Coastal Ecosystems Program. The five year program will be supported by a national component that will promote the sharing of lessons and experiences across provinces to inform a national response to climate change.

Conclusion: Capitalising on the fast-start experience

Between July 2010 and June 2013, Australia's A\$599 million fast-start investment package supported an array of climate change activities, delivering important mitigation and adaptation in developing countries. The package also produced lessons that can serve to inform decisions made regarding future climate finance investments.

Australia's fast-start climate finance supported activities in developing countries in areas such as energy efficiency, carbon markets, land sector emissions, and adaptation. Focusing on the most vulnerable countries in key regions like the Pacific, this package of investments has helped strengthen climate resilience and build capacity for low-emissions growth and will continue to deliver results into the future.

Australia's fast-start climate finance also served as a valuable pilot program for longer term climate finance, having produced lessons on how best to achieve effective and sustainable climate outcomes. These lessons- such as national ownership, the importance of building collective knowledge, and the benefits of scaling up programs to maximise returns- suggest ways in which future climate finance might be enhanced.

There are synergies between the lessons learned through fast-start and development principles, and a number of these themes are also under consideration by the Green Climate Fund Board, of which Australia is currently serving as Co-Chair.

While drawn from the Australian experience, these lessons will likely resonate with all stakeholders engaged in climate change investment activities in developing countries. Importantly, Australia's faststart experience will inform the discussions to shape a new global climate change agreement in 2015.

For more information on Australia's fast-start climate finance see www.climatechange.gov.au.