

Review of the Australia- Vietnam Climate Change Delivery Strategy 2011–2016, and Suggestions for the Period to 2020

Koos Neefjes, 26 August 2016

TABLE OF CONTENTS

Acronyms	ii
Key messages	iv
Executive Summary	v
S1. Review of the Australia-Vietnam Climate Change Delivery Strategy 2011-2016	v
S2. Analysis of climate change policies and responses in Vietnam	vii
S3. Options for climate change engagement in the period to 2020	ix
1 Introduction	1
2 Review of the Climate Change Delivery Strategy 2011-2016.....	3
2.1 Delivery Strategy 2011-2016: Outcomes and Theory of Change.....	3
2.2 Modifications of the DS during implementation	4
2.3 Achievements, strengths and lessons re climate change adaptation.....	4
2.4 Achievements, strengths and lessons re green growth	7
2.5 Achievements, strengths and lessons re planning and investment.....	9
3 Analysis of the Climate Change Policy and Aid Investment Landscape in Vietnam	11
3.1 Vietnam’s climate change policies and expectations for international support	11
3.2 Public expenditure and climate change ODA: adaptation focus	11
3.3 Encouraging private sector investment in GHG emissions mitigation.....	14
4 Options for Climate Change Engagement in Vietnam in the Period 2016-2020.....	17
4.1 Australia’s Economic Diplomacy Strategy and Aid Investment Plan.....	17
4.2 Aim of Australia’s Climate Change Engagement and Prioritisation Principles	18
4.3 Climate Change Adaptation: Mekong Delta	18
4.4 GHG Emissions Mitigation: Energy.....	20
4.5 Mainstreaming Climate Change into AIP Investments.....	20
4.6 Australia, joint DP-GoV partnerships and climate policy engagement.....	23
4.7 Australia and climate change in Vietnam: communication highlights.....	24
Annex 1 Summary of Climate Change Portfolio (DS 2011-2016)	25
Annex 2 Summary of Australia’s main climate change related investments in Vietnam (update November 2015)	26
Annex 3 Climate change leaders in the Government of Vietnam	28
Endnotes	29

ACRONYMS

ACIAR	Australian Centre for International Agricultural Research
ADB	Asian Development Bank
AIP	(Vietnam) Aid Investment Plan
AFD	Agence Française du Développement (French Development Agency)
AusTrade	The Australian Trade and Investment Commission
CCFSC	Central Committee for Flood and Storm Control
CFSC	Committee for Flood and Storm Control (province level)
CDM	Clean Development Mechanism
CIFs	Climate Investment Funds
COP21	21 st Conference of Parties (to the UNFCCC)
CPEIR	Climate Public Expenditure and Investment Review
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CTF	Clean Technology Fund (one of the CIFs)
DHMCC	Department of Hydro-Meteorology and Climate Change (MONRE)
DMC	Disaster Management Centre (based in MARD)
DPs	Development Partners
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DS	Australia-Vietnam Climate Change Delivery Strategy 2011-2016
EVN	Electricity Vietnam
EU	European Union
FAO	Food & Agriculture Organisation of the United Nations
FDI	Foreign Direct Investment
FIT	Feed-in-Tariff
GEF	Global Environment Facility
GCF	Green Climate Fund
GGGI	Global Green Growth Institute
GHG	greenhouse gas
GIZ	Gesellschaft Fur Internationale Zusammenarbeit (German International Development Agency)
GoV	Government of Vietnam
GW	giga Watt (installed power generation capacity)
ICMP	Integrated Coastal Management Programme
IDA	International Development Association (under the World Bank)
IoE	Institute of Energy
INDC	Intended Nationally Determined Contribution
iNGOs	international Non-Governmental Organisations
JICA	Japan International Cooperation Agency
KfW	German banking group, including KfW Development Bank
KOICA	Korea International Cooperation Agency
MARD	Ministry of Agriculture and Rural Development
MDP	Mekong Delta Plan
MIC	Middle Income Country
MONRE	Ministry of Natural resources and Environment
MOST	Ministry of Science and Technology

NAMAs	Nationally Appropriate Mitigation Actions
NATEC	National Agency for Technology Entrepreneurship and Commercialization (under MOST)
NCCC	National Climate Change Committee
NTP-RCC	National Target Programme to Respond to Climate Change
ODA	Overseas development Assistance
REDD+	Reducing Emissions from Deforestation and forest Degradation in developing countries; and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries
SDG	Sustainable Development Goal
SEDPs	Social Economic Development Plans
SoE	State-owned Enterprise
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development
VNRC	Vietnam Red Cross
VPCC	Vietnam Panel on Climate Change
VSEA	Vietnam Sustainable Energy Alliance
VWU	Vietnam Women’s Union
WB	World Bank

KEY MESSAGES

The Australia-Vietnam Climate Change Delivery Strategy 2011-2016 (DS) achieved good impacts:

- + resilience of many women and men increased, especially in the Mekong delta
- + capacities and knowledge base improved, especially re climate change adaptation
- + disaster management and adaptation policy was influenced and a network was developed
- + climate modelling capacities improved and climate projections were used
- + energy efficiency capacities improved, limiting the increase of greenhouse gas emissions
- + the SPRCC (a climate finance scheme), adopted a mechanism for adaptation investment
- + a review of climate public expenditure and investment (CPEIR) is often quoted

Lessons from DS implementation are the following:

- there could have been more (strategic) use of Australian technical and policy expertise
- the DS is multi-faceted and better links between programs could have added more value
- more policy influence might have been possible, on climate change adaptation and energy / emissions mitigation, some of which would have enabled the private sector better, but that depends strongly on human resources and aid modalities

Climate change policies in Vietnam are well developed. Vietnam has accessed significant international climate finance, and developed capacities and governance structures. Vietnam's Intended Nationally Determined Contribution (INDC) includes a GHG mitigation and an adaptation component. The INDC's mitigation target is seen as unambitious, but will be reviewed in 2018.

Overall, Australia should aim *to support Vietnam with the implementation of its INDC.*

Climate change adaptation in the Mekong delta is Australia's primary strength. Building on this would help achieve a safe, prosperous and sustainable Mekong delta. Even with no or little new climate aid, Australia should try to maintain and possibly expand its role in the delta as follows:

- Mobilize Australian expertise (CSIRO; ACIAR), and "out-post" Australian experts
- Continue to support the DP-GoV partnership on Mekong delta, and policy dialogues;
- Build a partnership on climate proofing of small scale infrastructure;
- Add value to Mekong delta products, and promote Australian export and investment
- Support knowledge centres and insurance industry re losses and damages (L&D).

Australia could also engage with greenhouse gas (GHG) emissions mitigation, by enabling FDI and equipment export from Australia in support of Vietnam's energy security. This could be supported by policy analysis on barriers to renewable energy and energy efficiency, and policy dialogues.

Mainstreaming climate action in the Aid Investment Plan is possible, in the Partnerships on:

- Women's Economic Empowerment (resilience in agriculture, livestock or aquaculture)
- Enterprise Development (PPPs on water supply; enhance agro-industrial value chains)
- Restructuring for a more Competitive Vietnam (energy market reform; insurance of L&D)
- Transport (climate proofing of small scale infrastructure)
- World Bank (advise other partnerships; knowledge products; renewable energy)

EXECUTIVE SUMMARY

This paper (1) presents a brief review of the Australia-Vietnam Climate Change Delivery Strategy 2011-2016; (2) analyses the climate change policies and responses in Vietnam, including public and private sector investments; and (3) provides options for Australia to consider in climate change engagement through aid, investment and trade in the period to 2020, including priority themes, sectors, modalities, partners and policy forums.

S1. REVIEW OF THE AUSTRALIA-VIETNAM CLIMATE CHANGE DELIVERY STRATEGY 2011-2016

The Delivery Strategy (DS) had two strategic outcomes, formulated based on a thorough context analysis and a valid theory of change:

- 1. Building community resilience - Vulnerable communities demonstrate higher resilience and sustainable livelihoods to respond to climate change and climate-related disasters.*
- 2. Promoting low carbon growth - Vietnam harnesses opportunities for productive green growth through increased capacity in the application of clean technologies and low carbon measures in the energy sector.*

The DS was modified during implementation, but the planned programs were largely implemented, despite deprioritising climate change as a result of political changes in Australia during the planned period. The DS programs were organised in three clusters, and reviewed as follows.

A. Achievements, strengths and lessons re climate change adaptation

The programs in this cluster included the Integrated Coastal Management Programme (ICMP, implemented by GIZ); six community-based climate change action grants to international NGOs and their local partners; the “Strengthening institutional capacity for disaster risk management in Vietnam, including climate change related disasters - Phase II (SCDM II)” project of UNDP with Oxfam, the Vietnam Red Cross (VNRC) and the Vietnam Women’s Union (VWU); an independent study of the expected impacts on the delta of hydropower projects in the mainstream of the Mekong river; technical assistance through the World Bank; and technical assistance to climate-proofing of the Cao Lanh bridge with e.g. gender sensitive relocation of households from the construction area.

This cluster of programs focused on the Mekong delta in particular. It amounts to Australia’s primary strength on climate change responses in Vietnam. This cluster had impacts “on the ground” and on policy, accumulated considerable knowledge and experience, and a strong network was built up:

- Resilience and livelihoods of nearly a quarter million women and men in different parts of Vietnam improved, especially in the Mekong delta, e.g. as a result of coastal protection and climate smart agricultural model development and testing by the ICMP and the NGOs. Capacities of many women and men farmers were built, and of e.g. 25,000 teachers on climate change adaptation and disaster risk management. National and local public institutions working on Disaster Risk Management (DRM) improved their capacities as a result of the project of UNDP & partners.
- There was policy influence through the UNDP & partners project, e.g. on the Law on Disaster Management, and on governance in the Mekong delta through processes initiated by the Mekong Forum.
- ICMP, the NGOs, UNDP and the WB programs accumulated and documented a large amount of research and experience; and the study on impacts of hydropower is of good quality.

- A strong network was built up in different Vietnamese ministries and provinces, with NGOs, scientists and development partners (DPs) through those programs, and in several cases Australian volunteers were somehow engaged too.

There is evidence that there were useful exchanges between programs, e.g. the WB design of a substantial new loan was supported by Australia and made use of experience accumulated in the ICMP. However, the weaker points are (a) the large majority of these efforts do not include or make optimal use of Australian technical and policy expertise; (b) links between programs have not always been made and could have added value; and (c) more policy influence might have been possible.

B. Achievements, strengths and lessons re green growth

The green growth cluster included the following programs: the Climate Innovation Centre (CIC), which was developed by the World Bank and is a partnership with the National Agency for Technology Entrepreneurship and Commercialization (NATEC) of the Ministry of Science and Technology (MOST); the Vietnam Energy Efficiency Standards and Labelling (VEESL) program, a partnership between the Australian Department of Industry and Science (DIS), the Vietnamese Ministry of Industry and Trade (MOIT) and others; and the (power) Distribution Efficiency Project (DEP) through the bilateral strategic partnership with the World Bank.

These programs focused on energy efficiency and had some impact:

- The start of the CIC was delayed but in a first round in 2016 it awarded prizes to 19 entrepreneurs (including 7 women entrepreneurs) with promising initiatives on e.g. energy efficiency, renewable energy and sustainable agriculture.
- The VEESL worked with other projects in Vietnam and contributed to implementation of energy performance standards and labelling policy including design and operation of an online registration system for energy labelling and building local test capacity.
- The DEP provided technical assistance and built capacity in MOIT and Power Companies to help apply smart grid technology and develop appropriate tariff regimes in order to facilitate reform in the power sector.

But the impact of this green growth cluster in the DS was limited. It failed to engage with the issue that matters most for increasing energy efficiency (as well as encouraging renewable energy), which is that (fossil fuel based) energy is artificially cheap in Vietnam. Notably, the technical assistance on power tariffs could have put this on its agenda, which is a lesson for design of future partnerships.

C. Achievements, strengths and lessons re planning and investment

The cluster of programs on planning and investment included: financing and policy dialogue as part of the Support Program to Respond to Climate Change (SPRCC), which is a joint DP-GoV mechanism that has mobilized over USD1billion finance based on agreed policy actions in different sectors; joint DP efforts to help Vietnam coordinate development investments in the Mekong Delta; support to the Ministry of Planning and Investment (MPI) through the World Bank to develop a resource mobilization framework and track public spending on climate change; the Commonwealth Scientific and Industrial Research Organisation (CSIRO) worked with Vietnamese scientists on downscaling of climate change projections, to inform Vietnam's official climate projections and to support planning of climate change responses; and Australia provided scholarships to study in Australia, fellowship programs, training of natural resource managers in vulnerable coastal zones, teachers and

community trainers, as well as the placement of Australian volunteers in e.g. NGOs and multilateral organisations in Vietnam.

These programs also had impact re adaptation and mitigation of climate change in Vietnam:

- Australia induced the formulation of an SPRCC mechanism for investment in adaptation projects, instead of only providing general budget support, and was an active participant in SPRCC policy dialogues. It was also an articulate participant in policy dialogues about Mekong delta development, with at least some impact on the Vietnamese policy agenda.
- The “Climate Public Expenditure and Investment Review” (CPEIR) is a product of MPI, UNDP and the World Bank that Australia supported through the latter, which is often quoted.
- CSIRO work built capacities of researchers and informed Vietnam’s official climate projections; findings are accessible and have been used; and links with the ICMP had been established.
- Scholarships, training programs and volunteer exchanges are undoubtedly helping the country’s capacity improvements.

Lessons are also mainly about leveraging the Australian aid for policy influencing. There were limitations in making optimal use of Australian expertise; weak links between programs that limit added value of Australian cooperation; and policy influence could have been more. Australian experts did not actively engage with the CPEIR; SPRCC funds allocated to adaptation-relevant projects but not to the most “low regret” “Program 1002” on Community Based Disaster Risk Management (CBDRM).

S2. ANALYSIS OF CLIMATE CHANGE POLICIES AND RESPONSES IN VIETNAM

Vietnam has adopted many climate change policies, accessed significant international climate finance, and has developed related capacities and governance structures. Vietnam’s Intended Nationally Determined Contribution (INDC) submitted to the UN Framework Convention on Climate Change (UNFCCC) includes a GHG mitigation and a climate change adaptation component. Vietnam’s targets are partly to be achieved with domestic resources and partly conditional on international support. It is currently formulating an action plan to ensure that the country is fully prepared for comprehensive implementation of the INDC in the period 2021-2030. The mitigation targets of the INDC are internationally seen as unambitious and will be reviewed; research on climate change effects; formulation of adaptation and mitigation plans; assessment of specific technologies and approaches; developing structures for managing climate finance; and various capacity building efforts. The key authors of this action plan are included in the list of climate leaders in the GoV (Annex 3).

However, (mainly public) investment in adaptation is not happening in a strategic manner yet, and (mainly private) investment in GHG emissions mitigation is not yet unleashed:

A. Public expenditure and climate change ODA: adaptation focus

Climate-related public expenditure (including ODA) in Vietnam is strongly focused on adaptation-relevant infrastructure. ODA is reducing as Vietnam has attained Middle Income Country (MIC) status but it can expect some finance from the Green Climate Fund (GCF) as well as other (multilateral, bilateral) climate financing windows for implementation of the INDC. Some DPs remain active, such as the World Bank, ADB and UN organisations; bilateral lending agencies (JICA, AFD, KfW,

KOICA); and DPs providing grants and technical assistance such as the EU, USA, Germany and Australia. Others focus their bilateral relations on knowledge exchange, policy advice, trade and investment. E.g. spending from the SPRCC remains adaptation focused, and e.g. the World Bank recently approved an adaptation loan concerning the Mekong delta, which also gets a national public finance contribution (and Australia supported its design). International NGOs are also reducing their funding but some continue to find funds for remote area development, disaster risk reduction and e.g. climate smart agriculture, as needs persist in the poorest and most vulnerable communities.

Addressing Vietnam's weaknesses of a lack of strategic investment in adaptation such as through "Program 1002" means that DPs should make sure that ODA reaches where it is needed, including in priority regions such as the Mekong delta. Further improvement of the science underlying adaptation plans and designs is needed too, and Australian funding of CSIRO was a good start. There are several forums in which adaptation challenges can be addressed, and where policy and programme knowledge is shared and sometimes policy dialogues take place, including the donor group on Mekong Delta development whose members (including Australia) have organised successive Mekong Delta Forums, and which hopes to become a joint DP-GoV partnership group.

B. Encouraging private sector investment in GHG emissions mitigation

Some DPs will continue to fund green growth, especially renewable energy and also energy efficiency, but expenditure on GHG emissions mitigation remains a small part of total public expenditure (including ODA). The INDC's mitigation targets would be achieved especially with private domestic and foreign investment, but this is not yet happening. Electricity prices are very low in Vietnam, which is a primary barrier to improved energy efficiency and to a switch from fossil fuel based power production to renewable energy. In fact, emissions mitigation ambition could increase substantially by phasing out indirect fossil fuel subsidies and putting a price on carbon, in particular in the electricity sector.

Energy State-owned Enterprises (SoEs) such as Electricity Vietnam (EVN) have built up debts, making it unavoidable that energy prices will go up, but this is still seen as politically undesirable. A modest increase of the average retail price of power could "unleash" FDI in wind and solar power, as well as energy efficiency improvements. Nevertheless, there are indications that countries such as South Korea are starting to provide export guarantees in support of renewable energy in Vietnam, and e.g. the World Bank is planning some financing, but this has not yet materialised into major investments. Australia also has strengths in solar and wind energy, including major investment in Australia, research & development (R&D), and its industrial base with "technology holders" that could help transform Vietnam's electricity future from GHG emissions intensive towards low-carbon. But Australia's renewable energy and energy efficient equipment industries and financiers will only become interested in the Vietnamese markets if these barriers would be tackled.

Forums in Vietnam in which policy and programme knowledge on GHG emission mitigation is shared and policy dialogues will take place include the SPRCC and the forthcoming Vietnam Energy Partnership Group of MOIT and DPs, in the context of Sustainable Development Goal (SDG) nr. 7 to "ensure access to affordable, reliable, sustainable and modern energy for all" as well as GHG mitigation targets in Vietnam's INDC.

S3. OPTIONS FOR CLIMATE CHANGE ENGAGEMENT IN THE PERIOD TO 2020

Australia has the opportunity to engage strategically with Vietnam on climate change policies and programmes in the period from 2016 onwards. Australia's climate change engagement can be mainstreamed in or added to its Aid Investment Plan Vietnam (2015-16 to 2019-20) (AIP) and the Economic Diplomacy Strategy for 2015-2017. This may mean additional bilateral climate change aid or not; but Vietnam *will* access multilateral climate change funds towards which Australia is making contributions. Trade and private investment are also important for delivering on green and climate resilient growth.

It is suggested that the overall aim of engagement on climate change is *to support Vietnam with the implementation of its INDC*.

A. Climate Change Adaptation: Mekong Delta

Australia should concentrate on maintaining, possibly expanding its role in Mekong Delta climate change adaptation, and consider e.g. the following:

- Document, draw lessons on practical and policy aspects from the programs under the DS;
- Mobilize technical resources on adaptation, including climate science (re the effects of climate change; CSIRO) and agricultural research and development (ACIAR);
- Assist Vietnam in development of adaptation monitoring and reporting systems and practices;
- Continue to support the joint DP-GoV partnership on Mekong delta development, aiming to strengthen and actively participate in policy dialogues;
- Continue funding the ICMP, NGOs, or alternatively "out-post" Australian expertise there and in UNDP's new GCF funded project and the World Bank's ICRSL project, to expand the knowledge base and inform policy dialogue;
- Build on experience in climate proofing of infrastructure and related network, and jointly with other DPs develop a project (partnership) on climate proofing of small scale infrastructure;
- In the context of the "Agro-Business Industrialisation scenario" in the Mekong Delta Plan (MDP), add value to (climate smart) products from the Mekong delta, and promote export of and investment in e.g. agriculture/aquaculture equipment and processing facilities;
- Support Australian and Vietnamese knowledge centres and insurance industry to assess risks of future unavoidable losses and damages, and help develop related insurance products.

B. GHG Emissions Mitigation: Energy

Building on the results of the energy efficiency efforts under the DS, Australia could consider joining other DPs in addressing fiscal (energy price) barriers to increased energy efficiency and renewable energy deployment in Vietnam. This would enable the Australian and Vietnamese private sector to invest and make major contributions to GHG emissions mitigation.

This could be supported by policy analysis in which Australian knowledge centres and e.g. GGGI seek partnerships with Vietnamese knowledge centres. Partnerships could also be sought with Vietnamese and international business representatives, including the Vietnam Business Forum.

C. Mainstreaming Climate Change into AIP Investments

Mainstreaming of climate change in planned partnerships under the AIP could happen as follows:

- The Australia-Vietnam Women’s Economic Empowerment Partnership could include a resilience aspect, as many economic opportunities relate to agriculture, livestock or aquaculture, as well as processing and trade. Many techniques / models have been developed, and ACIAR and other knowledge centres should be able to provide backstopping in association with national knowledge centres in the roll-out of for the benefit of women.
- Within the Australia-Vietnam Enterprise Development Partnership there may be scope for support to public private partnerships on water supply, especially in the Mekong delta. Water supply is the responsibility of local town/city-owned water supply companies and water prices are regulated and very low. Reforms are needed because public finance is limited and private investment must be mobilised. Australia could support research on water pricing and private investment potential, in partnership with the agencies having experience in this sector.
- The Australia-Vietnam Enterprise Development Partnership could also help to enhance value chains that focus on sustainable agriculture and aquaculture products for which there are growing domestic and international markets, in the context of the “Agro-Business Industrialisation scenario” in the Mekong Delta Plan (see also under A. above). Equipment supply may offer opportunities and there are also certification needs. Research (ACIAR) and experience with certain production models could support this too.
- The Australia-Vietnam restructuring for a more Competitive Vietnam Partnership could take on energy market reform aspects (see B. above). Competitiveness, trade and investment also have adaptation aspects, as production units and trade (logistics) facilities need to be resilient in the face of climate change effects. Australian investors’ production facilities and supplies should not be disrupted by weather-related events. QBE, one of the world’s largest insurance companies could be engaged in addressing losses and damages (see A. above).
- The Australia-Vietnam Transport Partnership could drive in improved design and construction standards for different types of infrastructure in the context of climate change and strengthened planning, financial and enforcement capacities, and have major impact on long-term resilience of Vietnam, including the Mekong delta in particular (see also A. above).
- The Australia-Vietnam World Bank Partnership could strengthen the proposed ‘climate resilience in the Mekong Delta’ pillar, and include support to mainstreaming adaptation in other partnerships/projects, adaptation knowledge products and additional climate proofing investments. It could also address energy challenges (GHG emissions), as the Mekong delta is slated to host coal-fired power plants with related transport and pollution challenges, while it has major potential for renewable energy generation (solar, wind).

D. Australia, joint DP-GoV partnerships and climate policy engagement

There are some additional needs and opportunities that could be considered, in particular if Australia wants to remain active in policy dialogues and support innovations:

- Some DPs will focus on adaptation (in particular the Mekong delta), including the ICMP/GIZ and the World Bank, but few will include DRR and loss and damage from climate change in their portfolios. Australia would be able to build on its long held strengths in DRR by partnering with UNDP (GCF project) and/or NGOs, and provide support to learning on loss & damage mechanisms. These partnerships would include MARD as well as MONRE, and possibly the insurance industry. It could be concretised through “out-posting” of experts.
- Inputs into policy dialogues in Vietnam, visibility in Vietnam through media and other communications, and thus a degree of influence should build on Australia’s strengths and would be achievable through mainstreaming of climate in the planned investments under

the AIP and potentially a relatively small financial envelope for additional activities in AIP Partnerships. To make full use of accumulated experience, an active role should be maintained and support could be provided by Australia to the emerging joint DP-GoV partnership on the Mekong delta. But this would require substantial climate change personnel/expertise at the Australia Embassy and possibly “out-posted” Australian experts in projects or partnerships.

- Should Australia decide to address GHG emissions reduction also in future, it should consider taking an active role in the joint DP-GoV Vietnam Energy Partnership Group. Draft priorities of this group include renewable energy production and power sector reform.

1 INTRODUCTION

Implementation of the Australia-Vietnam Climate Change Delivery Strategy 2011-2016 is nearing completion. After this Delivery Strategy (DS) had been approved and implementation had started, political developments in Australia meant that climate change ceased to be a priority in its international development cooperation. In many countries climate change programming halted but the demand for climate change programming in Vietnam was strong and most of the DS was implemented, though with some modifications (compare Annex 1 and Annex 2).

In the context of updates to aid policy, Australia could consider reinforcing its climate change relations with Vietnam beyond 2016. Australia's Economic Diplomacy Strategy for 2015-2017 and the Aid Investment Plan Vietnam (2015-16 to 2019-20) (AIP) are still being refined and could mainstream climate change actions. The AIP has considerable climate-relevance even though it was not conceived as climate change support, and climate change responses could be made more explicit and/or added with minor adjustments (the partnerships under the AIP are discussed in section 4.5). There are also trade relations and (potential) Foreign Direct Investment (FDI) from Australia into Vietnam in areas where climate proofing is key or where opportunities exist for GHG emissions mitigation.

The *"Declaration on Enhancing the Australia-Vietnam Comprehensive Partnership"* signed in the presence of the two Prime Ministers on 18 March 2015 included the statement that *"Australia and Vietnam recognise the importance of environmental protection and responding to climate change, and will continue to look for opportunities to cooperate in these areas"*. The Paris Agreement that was reached at the 21st Conference of Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC) in Paris in December 2015 also signalled a turning point for Australia. It played an active role in the negotiations as chair of the Umbrella Group of Parties and committed to allocate AUD1billion climate finance over the 5 years to 2020, or AUD200m per year, as Parties recommitted to jointly mobilizing USD100b/year by 2020.

Australia has the opportunity to engage strategically with Vietnam on climate change policies and programmes as both countries share interest in the success of the Paris Agreement, including increasing ambition on greenhouse gas (GHG) emissions mitigation and adaptation to the effects of climate change through five-yearly stocktaking exercises, reviews and modifications of their Intended Nationally Determined Contributions (INDCs, which were submitted to the UNFCCC in 2015).

The above mentioned Australian climate finance commitment means an increase of the share of climate change within Australia's aid programme. This will be channelled through the Green Climate Fund (GCF) and other multilateral mechanisms, and some will be allocated to bilateral programmes. Although it is not certain that Vietnam would be included in new bilateral climate finance, expectations are that climate change will stay on Australia's agenda and backtracking on commitments is unlikely, whatever the exact political outcome of recent elections.

Section 2 of this paper presents a basic desk review of the achievements, strengths and lessons of the Australia-Vietnam Climate Change Delivery Strategy 2011-2016, as per its strategic outcomes.

The review of the DS includes some lessons and highlights of links between Australia's climate change work and gender inclusiveness as well as private sector development.

This is followed by section 3 with an analysis of the present situation of climate change policies and responses in Vietnam, funded domestically and internationally, and including public efforts as well as relevant investments and interests of the private sector.

Section 4 provides suggestions on how Australia could strategically position itself in supporting Vietnam to address climate change in the period 2016-2020. In doing so it is considering the possibility that there will be some new bilateral Australian ODA to address climate change in Vietnam over this period, or alternatively, that climate ODA would remain limited and the focus of the climate change relations will be on knowledge, business and private investment focused partnership.

A number of strategic options are provided in section 4, for priority themes, sectors, modalities, partners and policy forums related to climate change, based on the achievements, strengths and lessons of the Climate Change Delivery Strategy 2011-2016 (section 2) and the analysis of the climate change situation in Vietnam (section 3).

Drawing on past experience and achievements as well as the potential future engagement by Australia on climate change, some key messages for diplomatic engagement, reporting and public communications are also formulated. This is done in the context of Vietnam's policy priorities and development needs and Australia's climate change support and overall political and economic diplomacy goals.

2 REVIEW OF THE CLIMATE CHANGE DELIVERY STRATEGY 2011-2016

2.1 DELIVERY STRATEGY 2011-2016: OUTCOMES AND THEORY OF CHANGE

The strategic outcomes of the Australia-Vietnam Climate Change Delivery Strategy 2011-2016¹ (DS) were as follows:

1. *Building community resilience - Vulnerable communities demonstrate higher resilience and sustainable livelihoods to respond to climate change and climate-related disasters.* (With a focus on the Mekong delta.)
2. *Promoting low carbon growth - Vietnam harnesses opportunities for productive green growth through increased capacity in the application of clean technologies and low carbon measures in the energy sector.* (With a focus on energy efficiency and promotion of clean technologies.)

The DS includes a context analysis and a Theory of Change (ToC), and outlines the required management capacity and structure. It provides the planned climate change portfolio (see Annex 1), which has been implemented with some modifications (Annex 2 gives the November 2015 update).

The ToC in the DS was developed by staff at the Embassy with advice from contracted experts, a network of national and international partners in Vietnam, and climate change experts in Canberra. This is an excellent effort and many elements of the ToC still apply today, even though the context has evolved in Vietnam and internationally. The primary reason for this is that the work in Vietnam is unfinished, despite support by Australia and other Development Partners (DPs).

For example², considerable scientific analysis has been undertaken and the Vietnam Panel on Climate Change was created officially, but e.g. analysis of the effects of climate change on agro-ecosystems, suitability for crops and varieties has not been undertaken nationally, so the effects of climate change cannot yet be included in agricultural extension messages on adaptation of varieties, crops and cropping systems. Similarly, vulnerability assessment has been undertaken in many communities and in e.g. the Mekong delta specific actions in different zones have been tested and recommended. But comprehensive roll-out is yet to start in all parts of the country. Thirdly, adaptation lessons and recommendations are not yet translated into national adaptation policy. A fourth example is that although low-carbon growth analysis has been done and practical options have been identified, the evidence of mainstreaming of low carbon actions in sector plans is limited, and the private sector and state-owned enterprises have not yet comprehensively started to apply low carbon measures. Critical policy breakthroughs regarding energy prices and related fiscal policies are needed for a change in current trends and a reduction of greenhouse gas (GHG) emissions intensity of the economy.

The fact that Vietnam's transition to climate resilient communities and a low-carbon economy is not completed is obviously unsurprising and is not criticism on the implementation and effectiveness of Australia's programme under the DS. Several components appear to have had clear and lasting impacts although that is less obvious for some others, as shown in section 2.3 and further.

2.2 MODIFICATIONS OF THE DS DURING IMPLEMENTATION

The planned programs under the DS are given in Annex 1, and Annex 2 gives the summary of the actual climate change related investments in Vietnam as of November 2015. All planned programs of the DS were implemented except a drought and flood mitigation project with ADB. Some financial allocations were different from the plan, notably a reduction from AUD23m to AUD16.5 to the Integrated Coastal Management Programme (ICMP) in the Mekong delta and an increase from AUD8m to AUD14m to the Support Program to Respond to Climate Change (SPRCC).

Additional activities in Annex 2 (compared with Annex 1) are as follows (some come from non-DS resources but are climate relevant): (a) a study on the impact of mainstream hydropower on the Mekong delta; (b) technical assistance through the World Bank to identify and prioritize climate resilient infrastructure and non-structural measures for the Mekong Delta, and to build regional and provincial-level planning capacity for resilient investment decisions; (c) formulation of a resource mobilization framework to enable and track support for Vietnam to realize the goals in its climate change and green growth strategies; (d) technical assistance to incorporate climate-proofing and environmental safeguards into the Cao Lanh bridge project; (e) support to development of a planning framework to help Vietnam coordinate development investments in the Mekong Delta; and (f) targeted fellowship programs for Vietnamese students on natural resource managers in vulnerable coastal zones, and training for teachers and community trainers on managing environment, climate and disaster challenges.

Annex 2 presents the programs in three clusters, on Adaptation and Disaster Risk Reduction, Green Growth and Planning & Investment, which are discussed in sections 2.3, 2.4 and 2.5 respectively.

2.3 ACHIEVEMENTS, STRENGTHS AND LESSONS RE CLIMATE CHANGE ADAPTATION

The bulk of Australia's support focused on climate change adaptation, and most pertinently in the Mekong delta. The primary rationale (see Annex 2) is that without protection from disasters, climate change and (other) environmental risks economic development could be undermined. The impacts of this portfolio of programs on resilience of women, men and communities and on policy, as well as the accumulated experience and network amount to Australia's primary strength on climate change in Vietnam, but some qualifications can also be made and lessons can be learned.

The ICMP, with co-financing from the Government of Germany and implemented by GIZ in partnership with the Ministry of Agriculture and Rural Development and 5 provinces, is responding to prioritised climate change adaptation needs and has demonstrated very imported results³. It has, for example, developed successful models and guidance for coastal protection that will be replicated and scaled up under a World Bank loan; it has developed models re (coastal) sustainable livelihoods; it has developed a gender tool to increase the participation of women in climate change adaptation and disaster risk management⁴; schoolbooks were developed and 25,000 teachers were engaged on environmental issues. The program has helped reduce vulnerability of tens of thousands of people for extreme weather and storm surges of sea water, leveraged funding by the national and local authorities as well as international agencies, and helped improve coastal governance. In cooperation with other DPs, it also played a key role in the development of a regional coordination mechanism in order to guide social-economic development of the Mekong delta, which is unique amongst Vietnam's regions.

Six community-based climate change action grants to international NGOs and their local partners have directly benefited nearly a quarter of million vulnerable people in 13 provinces, including the Mekong delta. Livelihood models were developed and rolled out, reducing the impacts of disasters and climate change on women and men, and in some cases reducing GHG emissions. The program funded for example CARE's "Integrated Community-based Adaptation in the Mekong" (ICAM) project in villages in An Giang and Soc Trang province the Mekong Delta in partnership with the Women's Union, which improved capacity on gender-sensitive analysis and planning for community-based adaptation (CBA) and disaster risk reduction (DRR), tested climate resilient agricultural livelihood options, improved access to credit; and enabled integration of gender-sensitive community based approaches and climate resilient livelihood support into commune level Socio-Economic Development Plans (SEDPs). Some of the experiences funded by Australia were included in a collection of lessons on Community-Based Climate Change Initiatives in Vietnam that was launched before the 21st Conference of Parties to the UNFCCC in 2015 and shared widely, including Oxfam's support to mangroves for coastal erosion and storm protection on Con Chim Island in Tra Vinh province, and the SNV project "Sowing the Seeds of Change - Community-based Climate Change Mitigation through Sustainable Rice Production", which increases crop and farm resilience and reduces GHG emissions from rice cultivation⁵.

The project "Strengthening institutional capacity for disaster risk management in Vietnam, including climate change related disasters - Phase II (SCDM II)" of UNDP with Oxfam, the Vietnam Red Cross (VNRC) and the Vietnam Women's Union (VWU) supported national and local public institutions working on Disaster Risk Management (DRM). It had three expected outputs: (1) Enhanced national and sub-national institutional capacities of the Central and Provincial Committee for Flood and Storm Control (CCFSC, CFSC) members and main stakeholders to consolidate the disaster risk reduction (DRR) legislative, policy and strategic framework; (2) Improved capacity of the Disaster Management Centre (DMC) and CCFSC members to effectively and efficiently plan, implement, monitor and evaluate the CBDRM program, ensuring gender sensitivity and participation of vulnerable groups (e.g. migrants, particular ethnic minorities etc.) in both urban and rural areas; (3) Evidence based action research on DRR and CCA utilized to improve policy and strategy and plans developed and implemented at national, regional and international level. The project delivered considerable training, developed guidelines and built capacities at different levels; it supported formulation of the Law on Disaster Risk Management and Early Recovery policy; it assessed the most vulnerable communities nationally (6,000 are being targeted by "Program 1002" on community based disaster risk management, CBDRM⁶); and intervened in 54 communes⁷. The project did not fully achieve targets related to research and re linking "Program 1002" with early warning systems. It faced insufficient gender-disaggregated baseline data, but it achieved targets of men and women participating in project activities. DRM is being mainstreamed in local Social Economic Development Plans (SEDPs) of many localities as a result of the project, and it induced provincial authorities to make financial allocations and develop partnerships with the private sector. The collaboration between the Government, UNDP, Oxfam, WU and the VNRC is seen as a partnership model as it draws on complementary strengths and encourages cooperation and mutual learning.

Australia also supported an independent study of the expected impacts on the delta of hydropower projects in the mainstream of the Mekong river, responding to a need expressed by the Government of Vietnam (GoV)⁸. This study is scientifically sound, and draws conclusions that are consistent with other studies. For example, it concludes that a cascade of dams in the Mekong mainstream will result in low to moderate changes in the hydrological regime in normal years, but strong river flow

fluctuations and reductions can occur as a result of drawdown of hydro-reservoirs for maximum power generation in dry years and seasons. The sediment and nutrient deposition in the delta (Cambodia and Vietnam) could reduce by as much as 65%; salinity intrusion in the delta (the Vietnam part) will worsen; and fish catch in Vietnam and Cambodia could reduce by 50% in a worse-case scenario. However, anecdotal evidence suggests that by June 2016 many of the leading Vietnamese scientists dealing with climate change adaptation and water management in the Mekong delta had not yet been exposed to the study and it was not referenced in two leading national studies advising on the Government of Vietnam's forthcoming Mekong delta flood control policy⁹, rendering the impact of the study on this critical policy nil.

Australia provided technical assistance through the World Bank to prioritize climate resilient infrastructure and non-structural measures for the Mekong Delta. It enhanced understanding of social, economic and environmental trade-offs through stakeholder consultation, e.g. by supporting the Mekong Delta Forum (2015, 2016). It supported the formulation of the *Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods (ICRSL)* Project¹⁰ of the World Bank. This project (a USD310m IDA loan with USD77m co-financing by the GoV) links to the Netherlands-supported Mekong Delta Plan (MDP)¹¹. The planned sub-projects include lessons (roll-out of successful models) developed under the ICMP (discussed above). This funding has ensured that Australia achieved synergies from good cooperation with other DPs and the GoV.

In the context of large scale financing of the Cao Lanh bridge project in the Mekong delta, Australia has provided technical assistance to climate-proofing of this project, to maintain connectivity also in times of weather extremes and flooding, and for example gender sensitive relocation of households from the construction area.

The above portfolio has provided Australia with a strong network in different Vietnamese ministries and provinces, DPs and (international) NGOs. Australia has received a high profile and can claim impacts of its support on communities, policies and investments, as briefly outlined above. But some weaknesses also offer lessons. Notably, (a) the large majority of these efforts do not include or make optimal use of Australian technical and policy expertise; (b) links between programs have not always been made but could have added value; and (c) more policy influence might have been possible.

GIZ, UNDP, WB and international NGOs are implementing agencies of a large part of the above program portfolio but they include very limited Australian expertise. Their use of for example analytical efforts on climate change in Vietnam by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) (see below) and agricultural development support by the Australian Centre for International Agricultural Research (ACIAR) are not evident, while the latter has had a long-standing presence and network in Vietnam. Furthermore, an important gap in Vietnam's knowledge of climate change is mapping of expected changes in cropping seasons and crop suitability as a result of climate change, which limits formulation of adaptation plans in agriculture. This arguably is within the shared expertise of CSIRO and ACIAR, and agricultural adaptation is (was) a core element in the programs funded by Australia and led by GIZ, UNDP, WB and international NGOs.

Regarding a lack of links, there is no clear evidence that lessons from the six NGOs and their local partners receiving community-based climate change action grants were considered by the ICMP or in the formulation of the World Bank's *Mekong Delta Integrated Climate Resilience and Sustainable*

Livelihoods (ICRSL) Project. NGO lessons relate to (agricultural) livelihood models as well as to ways of working, i.e. participatory approaches and inclusion of both women and men in analysis, decision making and action, and could have added important value to those other programs. Partnership between different stakeholders was built into the program led by UNDP, and in one “aid quality check” this was suggested to be used as a model for other programs.

The various strengths of Australia’s climate change adaptation programme position it well for engagement with policy makers at the national and also the province level, and to some extent that has happened (for example in Mekong Delta Forums). There was/ is however considerably more scope for direct engagement than what appears to have taken place, on issues such as the formulation of the Disaster Risk Management Law, adaptation planning in the Mekong delta, or the new cooperation mechanism in the Mekong delta. This would however require Australia to have more expertise based in the Embassy and/or more technical/ policy experts out-posted in projects, even if projects are implemented by multilateral agencies or NGOs. For example, Germany (with GIZ) and Belgium (with BTC) use technical experts to inform policy dialogues that are led by Embassy staff. By comparison, Australia has a very substantial number of “volunteer assignments on climate change/environmental sector” out-posted in NGOs and e.g. multilateral agencies, but these tend to have short term assignments only and most are relatively junior, making them less powerful sources of networks, information and advice when compared to senior advisors in GIZ or BTC projects.

2.4 ACHIEVEMENTS, STRENGTHS AND LESSONS RE GREEN GROWTH

Support to clean energy and efficient production was provided for the primary reason that innovative clean technologies and reducing barriers to private investment could deliver an efficient, competitive economy (see Annex 2). The green growth cluster included three programs:

The Climate Innovation Centre (CIC) in Vietnam was developed by the World Bank with Australian and UK (DFID) financial support¹². It aims to support Vietnam to exploit opportunities for productive green growth in priority sectors including energy, agribusiness and clean water. It provides small and medium enterprises with seed capital, skills and networks to develop and bring to the market innovative and commercially viable climate-smart technologies. Following significant delays, the CIC was launched in December 2015¹³. It is a partnership with the National Agency for Technology Entrepreneurship and Commercialization (NATEC) of the Ministry of Science and Technology (MOST). Australia insisted on activities in the project design to encourage women’s participation but does not have full confidence that women-entrepreneurs’ involvement will be achieved during actual implementation. The 19 winners in the first round of awarded prizes in June 2016 included 7 women-entrepreneurs. The innovative investments that these 19 winners are pursuing include very interesting and promising green technologies: on (a) energy efficiency (e.g. adobe brick making machine; seawater-cooled LED lights for fishing; solar cooker improvements; rice husk ovens replacing coal); (b) sustainable agriculture (e.g. a production model and consumption of closed organic food without waste; production of fresh, delicious, safe vegetables, produced according to internationally standardized processes); (c) renewable energy (e.g. a generator using solar energy, wind; solar mini grids; solar water heaters); and other issues.

The Vietnam Energy Efficiency Standards and Labelling (VEESL) programme was implemented in a partnership between the Australian Department of Industry and Science (DIS) and the GoV. It aimed to build capacity in the Vietnamese Ministry of Industry and Trade (MOIT), the Vietnam Standards

and Quality Institute (VSQI) and test laboratories, and help develop lighting and appliance energy efficiency standards, registration, labelling, testing, compliance and monitoring mechanisms.¹⁴ VEESL contributed to implementation of energy performance standards and labelling policy that is expected to achieve savings of 70,000GWh by 2030 and cut household electricity bills by 10%. The exact VEESL contribution to this cannot be quantified but, for example, it designed an online registration system for energy labelling; helped process a backlog of registration applications; increased local test capacity; and conducted market research. On e.g. the registration system VEESL worked with other projects in Vietnam on the same subject (which were also mentioned in the project design document), and VEESL is seen to have made a useful contribution on this technical subject.

Australia supported the Distribution Efficiency Project (DEP) through the bilateral strategic partnership with the World Bank in Vietnam. In the context of a large scale IDA loan as well as CTF¹⁵ financing for electricity grid hardware, Component C. of the DEP provided technical assistance and built capacity in the Ministry of Industry and Trade (MOIT) and Power Companies to help Vietnam apply smart grid technology and develop appropriate tariff regimes in order to facilitate reform in the power sector. This included tariff advice to ERAV (the electricity regulator) “for improvement of efficiency in electricity tariffs”, and e.g. customer surveys and measures to improve customer satisfaction; implementation of advanced metering systems; and promoting efficient electricity use through a customer awareness campaign as well as demand response programs¹⁶. Since before the implementation of the DEP, UNDP as well as another part of the World Bank based in Washington DC have studied Vietnam’s fossil fuel subsidies¹⁷, which take place in particular through the electricity sector, as well as low-carbon development options¹⁸ which have been developed with Government partners and shared widely. Vietnam’s energy prices and especially electricity retail prices are unusually low by comparison with other countries, energy efficiencies are low throughout the economy while carbon intensity is still rising, and non-hydro renewable energy deployment is almost negligible. Vietnam’s electricity tariffs should increase by phasing out indirect support to fossil fuel use in the electricity sector and putting a price on carbon, in order to encourage energy efficiency and renewable energy deployment, but the DEP (Component C) has not included that in its agenda and no Aide Mémoire of the DEP refers to this work by UNDP, World Bank / ESMAP, or related work by others.

This last point is in fact about the main weakness of the green growth cluster in the DS and the implementation and the limited impact of it. The context analysis in the DS rightly gives the energy sector as the focus of GHG emissions mitigation actions, and energy efficiency is one part of that (with renewable energy, but that is not a core element of the cluster of programs). The ToC rightly points out that “increased knowledge and capacity in the application of clean technologies and low carbon measures in the energy sector” are central and the private sector is seen as a key actor. However, as long as (fossil fuel based) energy is artificially cheap, energy inefficiency is incentivized, not efficiency. Innovations promoted under the CIC will have a harder time succeeding compared to a context without fossil fuel subsidies and with a price on carbon (through taxes, fees or “cap-and-trade” of GHG emissions). Labelling of household equipment will also have less effect on consumers if electricity remains as cheap as it is. In addition, the present situation is not conducive to energy efficiency or renewable energy investment by foreign investors.

Increased policy influence, based on networks and accumulated knowledge would also require considerable capacity in the Embassy or out-posted in projects (as is the case on adaptation; see

section 2.3). In the past this could have meant, for example, more active engagement by Embassy staff in DP and DP-Government meetings on green growth and fossil fuel subsidies. And if Australia maintains aid investments in green growth or wants to enhance green-trade and investment in Vietnam, Australia could become an active participant in the forthcoming Vietnam Energy Partnership Group, which will focus on policy dialogues.

2.5 ACHIEVEMENTS, STRENGTHS AND LESSONS RE PLANNING AND INVESTMENT

A third cluster of programs supported by Australia covers broad planning, knowledge generation and mobilising finance related to both climate change adaptation and mitigation, while it is important to integrate climate change and environment into Vietnam's broader development goals (see Annex 2).

Australia financed the Support Program to Respond to Climate Change (SPRCC) in the period to 2014, which is a joint DP-GoV mechanism that has mobilized over USD1billion finance based on agreed policy actions in different sectors that are relevant to climate change adaptation as well as mitigation¹⁹. Australia provided grant funds (JICA, the World Bank and some other DPs provide loans) and insisted that the SPRCC develop a mechanism for investment in adaptation projects that have been prioritised by Vietnam, instead of only providing general budget support – which happened and is an important impact of Australia. The SPRCC is a partnership of some DPs with the GoV in which policy dialogue happens at different levels, depending on the stage of formulation and approval of policy actions, including (annual) joint meetings of SPRCC partners and the NCCC, the National Climate Change Committee chaired by the Prime Minister (in practice a deputy PM) and attended by leaders of several ministries and provinces. In the period concerned Australia was a vocal, active participant in SPRCC dialogues. However, time investment in “technical” discussions was large (several times per year for periods of weeks with multiple meetings with individual ministries) and effective participation requires in-depth knowledge of climate change aspects in many sectors, and considerable human resource inputs. The SPRCC is supported by leaders of Vietnam but does not attract strong interest of officials because dialogues and formulation of policy actions are seen as conditionalities for budget support whereas SPRCC funds are not (directly) allocated to their ministries, departments and/or projects. Indeed, SPRCC finance is used for implementation of national policies such as the National Target Programme to Respond to Climate Change (NTP-RCC), with small allocations to ministries for e.g. sector plan formulation. Much is allocated to specific projects that are almost exclusively dyke and dam reinforcements in the coastal areas, under the supervision of MARD and local authorities, whereas the subjects covered in the SPRCC policy matrix are within the mandate of six ministries. Furthermore, the (dyke, dam) projects funded by the SPRCC are climate-relevant, but many were designed before discussions on climate change and sea level rise started and questions have been raised about strategic prioritisation of SPRCC fund allocation. In particular, SPRCC finance has not been allocated to “Program 1002” on CBDRM which remains underfunded (by public Vietnamese finance) but could be seen as the single most effective “low regret” investment to reduce vulnerabilities of people and communities to the effects of climate change (see section 2.3)²⁰.

Australia is no longer active in the SPRCC, but engages with other climate-relevant partnerships between DPs and the GoV. In particular, it is still active in joint DP efforts to help Vietnam coordinate development investments in the Mekong Delta, which is important and could be enhanced further if related Embassy capacity is maintained or enlarged (see section 2.3).

Australia, through the World Bank, has supported Vietnam's Ministry of Planning and Investment (MPI) to develop a resource mobilization framework and track public spending, improve reporting, and encourage private sector engagement (see Annex 2). This effort has had limited effect on private sector engagement, but the World Bank and UNDP with MPI implemented an often quoted study on climate public expenditure and related institutions and policies²¹. This study demonstrates that there is significant domestic climate change adaptation-relevant public expenditure as well as climate ODA (see also section 3.2). It also shows that there is scope for improving the link between (national) policies and actual budget allocations.

Australia commissioned the Commonwealth Scientific and Industrial Research Organisation (CSIRO) to work with Vietnamese scientists on downscaling of climate change projections, to inform Vietnam's official climate projections and to support planning of climate change responses²². This has succeeded in building capacities of some leading scientific organisations and their researchers and informing Vietnam's official projections. The findings are still available and easy to access²³, and have been used for example in a large scale national publication on climate extremes²⁴ that led to the creation of the Vietnam Panel on Climate Change (VPCC). Claims in the Completion Report that this program caused "changes in policy and planning methods and approaches" in Vietnam may be exaggerated, partly because a proposed follow up phase did not take place. But, also as per the Completion Report, links with the ICMP had been established, with results informing the design of project activities in Ca Mau province, and the potential for further work on e.g. agricultural cropping strategies and agricultural adaptation plans with for example ACIAR was highlighted²⁵.

Australia provides numerous Vietnamese students with scholarships to study in Australia, including environmental science and engineering, water management and other climate change related fields (see Annex 2). Targeted fellowship programs have been implemented and natural resource managers in vulnerable coastal zones, teachers and community trainers have received training on managing environment, climate and disaster challenges under different programs. This, as well as the (already mentioned) placement of numerous Australian volunteers in for example NGOs and multilateral organisations in Vietnam demonstrates important capacity building efforts as well as strengthening of people-to-people relations, which is an obvious strength of Australia.

However, despite Australia's strength on for example knowledge generation (CSIRO) and policy influencing (SPRCC), and attempts such as those of CSIRO at making links between different programs and institutions, also on the cluster on planning and investment there was no optimal use made of Australian technical and policy expertise; weak links between programs that limit added value of Australian cooperation with Vietnam; and less policy influence than what might have been possible (compare section 2.3 and 2.4). For example, Australia or Australian experts did not actively engage with the CPEIR²⁶ and Australia does not appear to have used that extensively in its policy dialogues with the GoV; and SPRCC funds continue to be allocated to a series of adaptation projects but not necessarily to strategic priorities such as the "low regret" national CBDRM "Program 1002". In order to do better on "connecting the dots" between different programs, provide conditions for long term impacts of supported programs, and engage actively in joint DP-GoV partnerships and in policy dialogues, Australia would need to minimally maintain current related Embassy capacity, and would be more effective through expansion with senior experts in the Embassy and/or out-posted in projects/ programs.

3 ANALYSIS OF THE CLIMATE CHANGE POLICY AND AID INVESTMENT LANDSCAPE IN VIETNAM

3.1 VIETNAM'S CLIMATE CHANGE POLICIES AND EXPECTATIONS FOR INTERNATIONAL SUPPORT

Vietnam has adopted a comprehensive set of national climate change policies, has accessed significant international climate finance in comparison with other developing countries, and has developed substantial climate policy capacities and governance structures. This is a very good basis for (continued) international support, for real action, and for results. However, weaknesses are that (mainly public) investment in adaptation is not happening in a strategic manner yet, and (mainly private) investment in GHG emissions mitigation is not yet unleashed (see section 2). These weaknesses relate to policy, institutional capacity, as well as resource limitations.

Vietnam's INDC includes a GHG mitigation and a climate change adaptation component. It lists the main policies as well as ongoing and planned climate change response activities for the period to 2020, and sets targets for the period from 2021, when the Paris Agreement will come into force. Vietnam's actions are partly to be implemented with domestic resources and partly conditional on international support (finance, technology, capacity building). The actions for which international support is expected are a guide for bilateral and multilateral climate change support programming (ODA) and also for international emissions mitigation off-setting and leveraging private sector investment in green, low emissions and climate resilient initiatives.

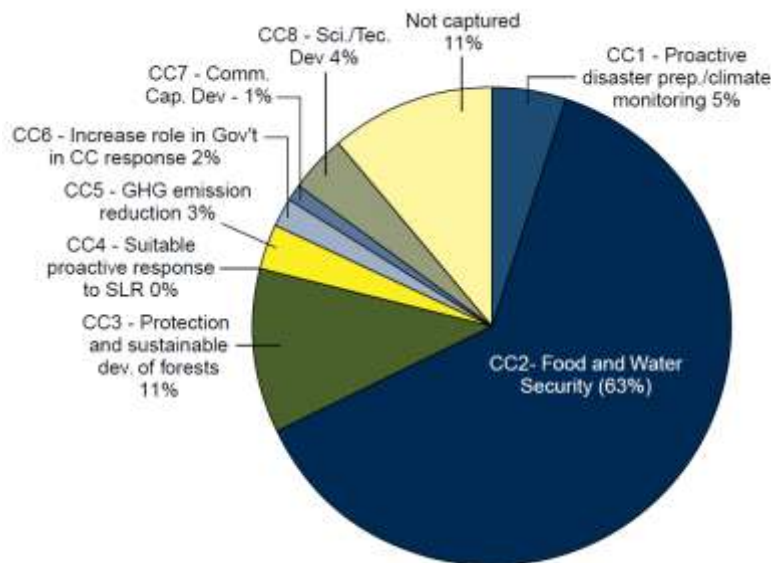
Vietnam is currently formulating an action plan to ensure that the country is fully prepared for comprehensive implementation of the Paris Agreement including Vietnam's INDC in the period 2021-2030 and beyond. This (draft) action plan is a guide for international climate change support over the coming 4-5 years, and subsequently for the actual implementation of the INDC (to 2030). The draft action plan includes a review of Vietnam's INDC (in 2017-2018) (note that currently Vietnam's GHG emissions mitigation target is internationally seen as unambitious); research on climate change effects; formulation of adaptation and mitigation (green growth) strategies and plans (because most of Vietnam's existing policies apply to the period until 2020); assessment of specific technologies and approaches (mitigation, adaptation and loss & damage); developing structures and processes for receiving, allocating and managing climate finance; and various capacity building efforts, including on measuring and reporting GHG emissions and effects of mitigation measures as well as climate vulnerabilities and impacts of adaptation actions (to improve "transparency", which was a priority of Australia in UNFCCC negotiations). The key authors of this action plan are included in the list of some climate leaders in the GoV as given in Annex 3.

3.2 PUBLIC EXPENDITURE AND CLIMATE CHANGE ODA: ADAPTATION FOCUS

The figure below shows public expenditure in the period 2010-2012 in relation to the objectives in the National Climate Change Strategy (NCCS)²⁷, including ODA. This shows that climate-related public expenditure in Vietnam is strongly focused on adaptation-relevant infrastructure. The small part on mitigation-relevant expenditure does not appear to be leveraging much private sector investment (see sections 2.4 and 3.3).

The landscape of Development Partners (DPs) is narrowing as Vietnam has attained Middle Income Country (MIC) status. Climate change financing is to some extent an exception to the trend of reducing ODA, and Vietnam can expect to receive some grants and/or loans from the GCF as well as the GEF CIFs and other (multilateral, bilateral) climate financing windows in the near future and during implementation of the Paris Agreement from 2021 onwards.

Total Climate Change Public Expenditure (investment and recurrent) by NCCS Strategic Objectives (2010–2012 implemented, 2013 budgeted by constant price 2010 VND billion)²⁸



The remaining DPs providing support to climate change responses include multilateral organisations (World Bank, ADB and UN organisations, including UNDP, IFAD, UNEP, FAO and UNIDO); bilateral lending agencies (notably JICA, AFD, KfW, KOICA); and DPs providing grants and technical assistance such as the EU, USA, Germany, France, Australia, Belgium, Denmark, Finland and Norway²⁹. Some of those countries are phasing-out their ODA and will not provide bilateral funding beyond 2020. They are expected to follow countries such as Sweden, the Netherlands, the UK, Spain and Italy in pursuing partnerships that are occasionally supported by small (ODA-type) grants, but focus on knowledge exchange, policy advice, trade and investment. The Netherlands is among the countries particularly interested in climate change adaptation (Mekong delta, and more) as well as agricultural development. The “Agro-industrial Business” scenario in the MDP was prioritised, which was agreed by DPs and the GoV. This offers future cooperation in agriculture, fisheries, including related processing and trade³⁰. Australia has been a key partner in this and it must decide whether it wants to keep its voice.

A large part of international climate change finance for Vietnam over the past few years and as expected in the coming few years is channelled through the SPRCC, which currently consists of loans from JICA, the World Bank, AFD and KOICA. Most of these funds are allocated to adaptation-relevant infrastructure such as dykes, but because this is budget support, the identification of the actual use of the funds is not fully possible. As explained in section 2, the strategic significance of the projects is

questionable as many were designed before discussions on climate change and sea level rise started. Notably, the SPRCC funds are *not* used to finance the national scheme on Community-Based Disaster Risk Management (2009-2020), targeting the 6,000 communes most vulnerable to disasters (see section 2)³¹. This national scheme is based on lessons from NGO-supported work in many communities throughout the country, and is possibly the most significant “no-regret” adaptation-relevant scheme in Vietnam that could increase resilience of the majority of vulnerable people and communities, but it is underfunded. Non-SPRCC DPs (including Australia) can have a voice in the SPRCC through intense meeting schedules and participating in the high level meetings, including annually a meeting jointly with the NCCC, or make the same point in other high level joint DP-GoV forums (see below).

ODA funded schemes other than the SPRCC that are implemented with or by the GoV and that may include domestic public finance are also adaptation focused. In particular ODA schemes that include major technical assistance components appear to be making a real difference in resilience of communities and regions. This includes Australia-supported projects which get good reviews (see section 2) and for example the recently approved *Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods (ICRSL) Project*³² of the World Bank (a USD310m IDA loan with about USD77m national contribution), which was informed by Australia-funded program results (see section 2.3).

Some international NGOs (iNGOs), including charitable foundations and research organisations with a base in Vietnam are also scaling back or phasing out, though this change process is slower than that of DPs, because needs persist in the poorest and most vulnerable communities. NGOs receive funds from their home-governments as well as from regional funding windows of grant-donors such as the EU and private foundations. Many continue to find funds for remote area development, disaster risk reduction and e.g. climate smart agriculture. The total financial allocation in Vietnam of iNGOs put together continues to be significant. An important part of this supports climate change / disaster resilience and a much smaller part focuses on reducing GHG emissions. Often the core elements of iNGO programs include improving (local) governance, pursuing social (gender) equality, with environmental sustainability and/or climate resilience mainstreamed or secondary objectives.

Addressing Vietnam’s weaknesses of a lack of strategic investment in adaptation such as through “Program 1002” (see section 3.1) and delivery of adaptation targets in the INDC, means that DPs should make sure that their loans, grants and technical assistance reach where it is needed, including in vulnerable communities. Adaptation support is needed on formulation of concrete adaptation policies and investment programmes that can be expected to have real impacts, including for regions such as the Mekong delta. For example, further improvement of the science underlying adaptation plans and designs is also needed and Australian funding of CSIRO was a good start (see section 2.5).

Forums in Vietnam in which adaptation challenges have been or can be addressed, to enhance coordination and cooperation, where policy and programme knowledge is shared and sometimes policy dialogues take place include the following:

- 1) The National Committee on Climate Change, chaired by the Prime Minister which occasionally includes DPs in special meetings, notably SPRCC partners;
- 2) The SPRCC, with dialogues mainly with lower level officials and currently limited mainly to the four funding agencies;

- 3) The Climate Change Working Group and the Disaster Management Working Group of NGOs, with occasional participation of (lower level) officials, Mass Organisations and Vietnamese NGOs (these groups fall under the VUFO-NGO Resource Centre);
- 4) UN Disaster management meetings and thematic coordination groups, which include lower or higher level officials (e.g. the Minister of MARD in recent meetings on drought);
- 5) The donor group on Mekong Delta development whose members have organised successive Mekong Delta Forums, and that hopes to become a joint DP-GoV partnership group.

Joint DP-GoV partnership group have come and gone, including the Natural Disaster Management Group (MARD, DPs and NGOs) and the Disaster Management Forum (MARD, MONRE, the UN and other DPs and NGOs), which in the past have received support from Australia among others. If the joint DP-GoV partnership group on Mekong Delta development materialises the partners need to learn from the successes and failures of older and earlier joint partnerships.

3.3 ENCOURAGING PRIVATE SECTOR INVESTMENT IN GHG EMISSIONS MITIGATION

The EU, Germany, the US as well as bilateral and multilateral development banks are not only financing adaptation but also support green growth, especially renewable energy and also energy efficiency. Nevertheless, expenditure on GHG emissions mitigation (including ODA) is a small part of total public expenditure, as shown in section 3.2. Vietnam's INDC provides mitigation targets that are widely seen as important but also unambitious, in particular regarding what would be achieved without external (public finance, technology) support. The INDC and (draft) action plan for implementation of the Paris Agreement show that private investment is expected for GHG emissions mitigation, but this is not yet happening (ref. the second major weakness mentioned in section 3.1; see also section 2).

Emissions mitigation (-ambition) could increase substantially without much public finance (including ODA) and with economic and environmental co-benefits through fiscal policy measures including phasing out of indirect fossil fuel subsidies and putting a price on carbon, but for this a number of policy barriers need to be tackled³³. The indirect subsidies on fossil fuels are "forced" as the GoV controls energy prices, and happen in particular in the electricity sector. Electricity prices and also prices of petroleum products are low in Vietnam compared to other countries, which is a primary barrier to improved energy efficiency and a switch from fossil fuel based power production to renewable energy. Feed-in-Tariffs (FITs) issued for wind and biomass-based electricity production are too low for attracting private investment including FDI, as is the case with the draft FIT for solar PV-based power. Regulatory insecurity makes equity expensive and is a key barrier to large scale FDI in renewable energy (electricity).

Export guarantees and other support by host governments of foreign investors has been applied to investments in coal-fired power generation, but most countries and multilateral development banks no longer do this, as the G8, the G20 and APEC have (repeatedly) committed to phasing out fossil fuel subsidies. There are indications that countries such as South Korea and e.g. the World Bank are starting to provide such support to renewable energy in Vietnam as solar PV and wind power have very significant potential, but this has not yet materialised into major investments.

The GoV is facing growing public debt, and large energy State-owned Enterprises (SoEs) such as Electricity Vietnam (EVN) have also built up enormous debts, making it virtually unavoidable that

energy prices will go up, but this is still seen as politically undesirable. It has been estimated that an increase of the average retail price of power by 15-30% could make renewable energy profitable and could “unleash” large scale FDI in wind and solar power, as well as energy efficiency improvements across the economy. Depending on policy choices, a carbon fee or tax could help achieve this and at the same time help address the public debt situation. However, this would not just require (modest) energy price increases, but also reform of the SoEs and energy markets, as well as measures that help low-income households and certain businesses in coping with higher energy costs³⁴.

Germany, Italy, South Korea, Spain, the UK and USA are examples of countries with a strong interest in the (renewable) energy sector which has high significance for GHG emissions in Vietnam. Russia and China have a less pronounced history of providing aid but both are heavily involved in the energy sector and have significant trade and investment relations that are partly supported through for example loan or export guarantees, currently related to e.g. construction of coal-fired and nuclear power plants. Australian coal imports into Vietnam are modest but growing, notably because of (new) power plants. At the same time Australia has important strengths in solar and wind energy, with major investments in Australia itself. Australia is very strong on e.g. solar power related research & development (R&D), and it has a strong industrial base with “technology holders” that could help transform Vietnam’s electricity future from GHG emissions intensive towards low-carbon³⁵. Delivery of the mitigation targets requires large scale investment of the private sector. Technical assistance and research can help leverage private sector investment and scale up GHG emissions mitigation actions but appropriate policies must be in place, including policies on carbon and energy prices, and reform of (energy) state-owned enterprises (SoEs) and energy (electricity) markets³⁶. Australia’s renewable energy and energy efficient equipment industries and financiers will only become interested in the Vietnamese markets if these barriers would be tackled (see also section 2.4).

Nevertheless, there are a number of policies and initiatives that do contribute to emissions mitigation, despite the energy price barrier:

- Vietnam is receiving international assistance from different agencies for the formulation of Nationally Appropriate Mitigation Actions (NAMAs) that are in most cases frameworks for public private partnerships that encourage private investment in low emission technologies for industrial production and e.g. transport or public lighting.
- Vietnam is a major host to Clean Development Mechanism (CDM) projects and participates in a similar Japanese bi-lateral programme. Both about off-setting GHG emissions in developed countries in return for low emission investments in Vietnam, partly in the private sector, but (international) carbon prices are low and the scale is still modest.
- The FAO, some NGOs and resident international (agricultural) research organisations are working on low emissions, resilient and climate smart agriculture, but at a small scale. Adoption of such techniques by farmers (the private sector) depends on co-benefits, notably increased crop yields, profits and security.
- Vietnam is a leading country on REDD+, reducing emissions from deforestation and forest degradation, a mechanism under UNFCCC agreements. This is focused on technical assistance, but in the so called “full REDD+” stage is expected to benefit from international transfers to maintain forests – a kind of off-set programme likely to involve mostly public and limited private funds. REDD+ or similar measures that stabilise upland soils or coastal zones also have adaptation benefits, which is evident from Australian support through GIZ and NGOs in e.g. the Mekong delta (section 2.3). Norway is the leading DP in funding REDD+

technical assistance, with UNDP, FAO, UNEP, the World Bank and JICA delivering technical assistance, as do a number of international NGOs. These initiatives also relate to the private sector (e.g. timber processes and users; plantation owners) as well as state-owned forestry enterprises.

Forums in Vietnam in which policy and programme knowledge on GHG emission mitigation is shared and sometimes policy dialogues take place or will take place are as follows:

- 1) The National Committee on Climate Change, chaired by the Prime Minister which occasionally includes DPs in special meetings, notably SPRCC partners
- 2) The SPRCC, with dialogues mainly with lower level officials (see section 2.5 and 3.2)
- 3) Various groups related to REDD+, partly with support from the UN-REDD programme
- 4) The forthcoming Vietnam Energy Partnership Group that is being prepared by the EU Delegation with the Ministry of Trade and Industry (MOIT) and leading DPs (see section 2).

Some partnership groups have been more successful than others. Lessons about successful knowledge exchange, programmatic coordination and policy dialogue include for example the need for “ownership” by a ministry, active DPs, financial support to a secretariat, and clear links to national policies or policy processes. Such lessons are currently being used for the design of the above mentioned joint DP-GoV Vietnam Energy Partnership Group, in the context of Sustainable Development Goal (SDG) nr. 7 to “ensure access to affordable, reliable, sustainable and modern energy for all” as well as GHG mitigation targets in Vietnam’s INDC.

DPs that are particularly active in green growth, including NAMA formulation, energy efficiency and renewable energy and who are remaining active in Vietnam for the foreseeable future include the main development banks (World Bank, ADB, JICA, KfW, AFD, and KOICA), the EU with significant budget support grants, and technical assistance agencies such as GIZ, UNDP, USAID and GGGI (the Global Green Growth Institute based in South Korea, which is receiving Australian support). SNV, WWF and some national NGO-members of the Vietnam Sustainable Energy Alliance (VSEA) work on energy efficiency and/or renewable energy in Vietnam – but only SNV has reached a national scale in their focal area (biogas digesters at household and farm level).

Delivery of mitigation targets in Vietnam’s INDC requires DP support to the action plan for Paris Agreement implementation over the coming years (see 3.1), and active involvement in policy dialogues on energy efficiency and renewable energy. The modest mitigation targets in Vietnam’s INDC could be achieved or overachieved with additional economic gains for the country (instead of costs) through energy policy reforms that would boost FDI, particularly in renewable energy and create business and FDI opportunities for Australian technology-holding companies and financiers.

4 OPTIONS FOR CLIMATE CHANGE ENGAGEMENT IN VIETNAM IN THE PERIOD 2016-2020

4.1 AUSTRALIA'S ECONOMIC DIPLOMACY STRATEGY AND AID INVESTMENT PLAN

Australia has opportunities to engage strategically with Vietnam on climate change policies and programmes in the period from 2016 onwards.

Additional bilateral climate change aid may become available in Vietnam though that is not certain. But whether additional bilateral climate finance becomes available or not, Vietnam will access multilateral climate change funds towards which Australia is making significant contributions. For example, Vietnam has recently been awarded a USD30m GCF project through UNDP on coastal climate change adaptation with a major component on mangrove rehabilitation in the Mekong delta. Vietnam continues to receive Global Environment Facility (GEF) projects, including projects on GHG emissions mitigation. Furthermore, as Australia is an important World Bank member / shareholder³⁷, the World Bank is managing several climate funds and is e.g. financing the Support Programme to Respond to Climate Change (SPRCC), a policy support operation providing low-interest loans from several donors (see section 2 and 3)³⁸.

Australia's Economic Diplomacy Strategy for 2015-2017 focuses on the following:

- Support domestic **economic reform** in Vietnam for a stronger and more competitive economy, including support to public private partnerships on water supply and sanitation.
- Support **regional economic growth** and **resilience**, including disaster risk management integrated in the Cau Lanh bridge and other infrastructure projects in the Mekong Delta and in the Northern Mountains, and strengthened political, planning and financial capacities.
- Assist Vietnam to develop its **human resource capacity** to improve education outcomes for Vietnam, through scholarships, the aid program and bilateral cooperation and capacity building in the education sector including leadership training and research capacity building.
- Support **trade** liberalization, promote Australian export (including education export) and grow bilateral trade and **investment**, through support for Australian businesses and trade negotiations.
- Promote growth of the **private sector** in Vietnam through relevant aid programs.

Australia's Aid Investment Plan Vietnam (2015-16 to 2019-20) (AIP) has three objectives:

1. Enabling and engaging the **private sector** for development
2. Assisting the development and employment of a highly **skilled workforce**
3. Promoting **women's economic empowerment**, including ethnic minorities

There are five partnerships agreed under the AIP, which are currently being designed:

- 1) Australia-Vietnam Women's Economic Empowerment Partnership
- 2) Australia-Vietnam Enterprise Development partnership
- 3) Australia -Vietnam Restructuring for a more Competitive Vietnam Partnership (Phase 2)
- 4) Australia-Vietnam Transport Partnership
- 5) Australia-Vietnam World Bank Partnership

Australia should decide whether it wants to mainstream climate change in the Economic Diplomacy Strategy and AIP, or whether it would a stand-alone program. The mainstreaming option is possible with or without new climate aid resources but the latter needs new funds. Both also have implications for human resources at the Embassy, for (Embassy) engagement in policy dialogues, and for the possibility of out-posting experts in various projects and partnerships.

Mainstreaming climate change responses in the AIP partnerships is the focus of section 4.5. This is preceded by options for engagement on adaptation (section 4.3) and GHG emissions mitigation (section 4.4), based on some basic principles for making strategic choices (section 4.2).

4.2 AIM OF AUSTRALIA'S CLIMATE CHANGE ENGAGEMENT AND PRIORITISATION PRINCIPLES

Australia has the opportunity to support Vietnam to address climate change in a strategic manner, serving the mutual interests of Vietnam and Australia. It is suggested that Australia's overall aim of engagement on climate change is *to support Vietnam with the implementation of its INDC*.

Some guiding principles for determining options for concrete actions are as follows:

- a) Australian (climate) aid is just one aspect of the bilateral relations between Australia and Vietnam, and human resource development and knowledge exchange, as well as trade and private investment are also important.
- b) Climate change actions can be "stand alone" and specific, and they can be mainstreamed in other aid efforts, as well as human resource development and knowledge exchange, trade and private investment.
- c) A focus on Vietnam's priorities as expressed in the INDC is central, but Australia should prioritise areas that do not yet receive sufficient support or attention from other DPs.
- d) Australia should prioritise issues about which it has something special to offer, has knowledge, experience and other strengths, with the example of climate change adaptation in the Mekong delta standing tall, while the energy sector also offers engagement opportunities.
- e) Australia should learn from past and current weaknesses, and make full use of opportunities for policy dialogues and the knowledge and lessons arising from its multilateral and NGO partnerships as well as support volunteers network.
- f) Adaptation is an area where ODA is important (technical assistance and financial aid), because most adaptation actions are supported by the public sector.
- g) Private sector operators must be particularly enabled by favourable Vietnamese policies for mitigation of GHG emissions, upon which "green" Australian FDI and trade could grow.

4.3 CLIMATE CHANGE ADAPTATION: MEKONG DELTA

Australia's climate change adaptation engagement with Vietnam should be guided by the Paris Agreement, especially Article 7 (adaptation), 8 (Loss & Damage) and 13 (transparency framework, i.e. monitoring, reporting and verification).

Climate change adaption engagement would build on the main successes and strengths of Australia in Vietnam in the period 2011-2016 (see section 2.3 and 2.5). Australia should concentrate on maintaining, possibly expanding its role in Mekong Delta climate change adaptation. This will give it "the right to speak" and enable it to be an authoritative voice on political, economic, social and climate change issues that matter to Vietnam, Australia and the wider world. In partnership with

some of the main DPs remaining active in Vietnam and with limited ODA, Australia could make a major difference in climate-resilience of the Mekong delta, communities, households, women, men and children.

Adaptation is an area in which Australia has very substantial technical resources on offer, including climate science (re the effects of climate change; CSIRO) and agricultural research and development (ACIAR), although the main technical assistance so far was delivered by GIZ, UNDP, World Bank and international NGOs. Elements of this are already within the five investment programmes being prepared under the AIP and could be made more explicit and boosted with limited (additional) climate change ODA (see section 4.5).

A first and relatively small effort could be to draw lessons from the various programs under the DS as reviewed in section 2.3 and 2.5, on practical and policy aspects. There is a very substantial body of knowledge generated by the DS programs, including some excellent materials, but not all is equally accessible in both Vietnamese and English. Accessible documentation of lessons learned should inform future climate change programming, as well as roll-out of successful climate smart (livelihood, enterprise) models and approaches by the GoV, provinces and enterprises.

Related to that, Australia could assist Vietnam in development of adaptation monitoring and reporting systems and practices, which are weak in Vietnam (as witnessed by e.g. Vietnam's national Communications to the UNFCCC), and are expected to be reinforced under the agreements reached in Paris in 2015. MONRE and MARD would be leading national partners and UNDP and some iNGOs could be primary international partners.

Australia could continue to support coordination, joint DP-GoV partnership and effective governance of the Mekong Delta as an active member of the emerging joint DP-GoV partnership. This will maintain and enhance policy dialogues with active Australian participation.

It could support agriculture/aquaculture research on climate smart solutions and value chains with important inputs from ACIAR and other Australian research organisations. Support could include development and roll-out of additional climate smart agriculture/aquaculture-based livelihood adaptation models in different zones of the delta, including explicit support to women's livelihoods.

Australia can also build on experience in climate proofing of infrastructure in the Mekong delta (though not necessarily large-scale infrastructure), as experience has been gained and partnership with the Ministry of Transport (MOT) has already been established. Australia could seek (additional) partnership on this with MARD, ADB and UNDP who are jointly implementing a project on climate proofing of small scale infrastructure in the Northern Mountains region, and apply that in particular in the Mekong delta (see also section 4.5).

Australia could consider continuing its partnership with Germany as a Mekong delta "post-ICMP" project is being prepared (from 2018), e.g. by funding specific or additional components of that, or for example "out-post" Australian experts in this programme. The latter could also happen in NGOs, the World Bank's ICRSL Project³⁹ or the new UNDP/GCF coastal project (drawing lessons from weaknesses in DS implementation as presented in section 2.3).

Private sector leveraging will not be central on climate change adaptation. However, in the context of the “Agro-Business Industrialisation scenario” that is recommended in the MDP⁴⁰, Australia could enhance connections between the private sector in Australia and Vietnam. Australia could add value to (climate smart) products from the Mekong delta through research into value chains in for example the fruit sector. Australian export promotion of and investment in e.g. agriculture/aquaculture equipment and processing facilities (e.g. the dairy sector) could also support the realisation of the Agro-Business Industrialisation scenario in the Mekong delta.

Building on its history, expertise and partnerships on disaster risk management in Vietnam, Australian knowledge centres could be supported to partner with Vietnamese knowledge centres and possibly the Australian and Vietnamese insurance industry to assess risks of future unavoidable losses and damage, and help develop related insurance products. This could build on experience gained in the past by SNV, the World Bank and UNDP in various partnerships with MARD, the Ministry of Finance, the Bao Viet insurance company and others⁴¹.

The above suggestions (as well as suggestions on GHG mitigation – see section 4.4) will require that the Australian Embassy maintains and possibly expands staff and/or accesses “out-posted” expertise on climate change, to help expand the collective knowledge base and inform policy dialogues. This should be based on relevant research as well as experience gained in different engagements.

4.4 GHG EMISSIONS MITIGATION: ENERGY

Australia’s DS included some energy efficiency initiatives, and through multilateral funds such as the CTF and GEF as well as support to the GGGI, Australia is also financing (indirectly and partially) other GHG emissions and green growth initiatives in Vietnam. There have been some important positive effects of this program. However, persistent fiscal (energy price) barriers to increased energy efficiency and renewable energy deployment in Vietnam mean that the role of the private sector in GHG emissions mitigation has so far remained limited, and there is a need to learn from weaknesses re past engagement (section 2.4).

At the end of 2015 Australia had about 4 GW solar and 4 GW wind power installed power generation capacity, which is substantial by international comparison and signals that Australian investors and technology companies have major expertise and could have interest in the emerging Vietnamese renewable power market. To enhance future GHG emissions reduction in Vietnam through (domestic, foreign) private sector investments and trade, Australia could engage in policy dialogue re deployment of energy efficient and renewable energy equipment - with wind and solar Photovoltaic (PV) electricity showing particular potential. This could be supported by policy analysis in which Australian knowledge centres and for example GGGI seek partnerships with Vietnamese knowledge centres such as the Institute of Energy (IoE) and the Central Institute for Economic Management (CIEM) which already have a history of such collaboration with for example the World Bank and UNDP. Partnerships for both research and dialogue could also be sought with Vietnamese and international business representatives including the Vietnam Business Forum⁴².

4.5 MAINSTREAMING CLIMATE CHANGE INTO AIP INVESTMENTS

The economic diplomacy strategy and Aid Investment Plan (AIP) for the period 2015 to 2020 are reflected briefly in section 4.1. While delivering on the goals, climate change considerations could be mainstreamed in the five new investments under the AIP that were agreed in 2015, as follows:

The Australia-Vietnam Women's Economic Empowerment Partnership could include a strong (climate) resilience aspect, also without additional climate change funding. Many economic opportunities for women relate directly or indirectly to agriculture, livestock or aquaculture and must build on sustainable rural livelihood models and research and pilots on climate smart agriculture. Many such techniques have been developed, also under Australia funded agricultural research and community based development projects, in different eco-regions of Vietnam. ACIAR and other Australian knowledge centres should be able to provide technical backstopping in association with other specialised international agencies such as ICRAF on agro-forestry along with national research institutes and universities, such as Thai Nguyen University in the Northern Mountains region. Within this partnership climate resilient models could be refined and rolled-out for the benefit of women, as well as related economic activities such agricultural processing and trade. Positive experiences should inform provincial and national policies and programmes such as the New Rural Areas programme, where funds can often be made available to scale-up initiatives that have proven themselves⁴³.

Climate change effects such as sea level rise, saline water intrusion and increased drought risks put pressure on water resources, and groundwater use in large parts of the Mekong delta has resulted in rapid decline of groundwater levels and land subsidence at a rate of around 2 cm/year according to some sources, which is much higher than sea level rise. The combination of climate change and development effects poses a major threat to water supply in the delta, including the coastal zone and the peninsula. Within the Australia-Vietnam Enterprise Development Partnership there may be scope for support to public private partnerships on water supply. Water supply to urban and industrial zones is largely the responsibility of local state-owned water supply companies, operating in an environment with very low, regulated water prices and limited interest of foreign or domestic private investors. However, reforms are needed as public finance is limited (with Vietnam's increasing public deficit and debt) whereas demand in cities and industrial zones is increasing, so private investment must be mobilised. Australia could support policy relevant research on water pricing and private investment potential and technical opportunities for water storage and sustainable water supply in specific locations in the Mekong delta, large parts of which faced an historical drought in the first half of 2016. Doing this in partnership with (specific) city authorities; local water supply companies; local research organisations; and potential investors could lead to a commercial deal between different parties. Partnership or exchanges could also be sought with the few agencies having experience in this sector, including Belgium Technical Cooperation (BTC) and Vitens Evides International (Dutch), which operates in some cities in the Mekong Delta and Ho Chi Minh City⁴⁴. Success would inform national policies on water supply and initiatives in other localities.

The Australia-Vietnam Enterprise Development Partnership could also help to enhance value chains that focus on green, sustainable agriculture and aquaculture products for which there are growing domestic and international markets. The MDP recommends the "Agro-Business Industrialisation" scenario and makes suggestions for spatial planning and a development path that enables specialisation in adapted livelihoods and businesses in different zones of the delta (certain products, processing industry). This requires quality improvements and innovation in products, processing and marketing, as well as external investment and research concerning different elements in value chains. Private companies are investing and some research organisations are supporting this development, but there is as yet limited coordinated international support. Opportunities for equipment suppliers from Australia may exist or be developed in e.g. the dairy industry and fruit

cultivation and processing (see section 4.3). Vietnamese producers and processors also have certification needs, to better access international markets. ACIAR and other Australian agricultural research organisations in partnership with national knowledge centres should research climate smart crops, varieties, farming systems, and livelihood models. This has already happened but the links between programs under the Delivery Strategy (2011-2016) were not as strong as would have been possible. Research organisations should work closely with extension services and NGOs who have piloted models and sometimes started to scale-up. Evidence that climate-smart agricultural techniques and approaches work is available and evidence of demand in different markets is needed too. Adding value through processing and marketing quality niche products requires certification, for example organic certification, and Australia has certification expertise as well as a sizeable market for high quality niche products.

The Australia-Vietnam restructuring for a more Competitive Vietnam Partnership (Phase 2) could take on energy market reform aspects as outlined in section 3.3 and 4.4, with very high significance for Vietnam's future GHG emissions from increased energy efficiency and renewable energy investments – suggestions for possible actions are made in section 4.3. Competitiveness, trade and investment also have adaptation aspects, as production units and trade (logistics) facilities need to be resilient in the face of climate change effects. For example, Australia's major imports from Vietnam include furniture and footwear, which are industries that can be vulnerable to climate change effects. One of the bigger Australian investors in Vietnam is BlueScope Steel which is a sector with high energy consumption and emissions, and a strong interest that energy and other supplies as well as production facilities are not disrupted by weather-related events. Other big investors are ANZ Bank and QBE, with the latter one of the world's largest insurance companies whereas insurance is becoming increasingly important in addressing losses and damages associated with climate change (see section 4.3 for suggested actions).

Within the Australia-Vietnam Transport Partnership climate change is also an important aspect that could be made explicit and potentially enhanced. Disaster risk management was integrated in the design and implementation of the Cau Lanh bridge and such climate proofing is also relevant to smaller scale and other types of infrastructure. Lessons learned within the partnership (with the Ministry of Transport) may be applied elsewhere and the partnership could also apply lessons in the Mekong delta from other initiatives such as a nearly completed UNDP-ADB project on climate proofing of rural infrastructure in the Northern Mountains region (which is a partnership with MARD who are responsible for a range of infrastructure). That project and the Australia-Vietnam Transport Partnership could jointly address / or be used in a new initiative for improving national design and construction standards for different types of infrastructure in the context of climate change as well as strengthened planning, financial and enforcement capacities, a potentially major impact on long-term resilience of Vietnam, including the Mekong delta in particular.

The preliminary design of the Australia-Vietnam World Bank Partnership mentions climate change effects as a threat in the contextual analysis and also mentions rising energy consumption, but there is limited analysis of this whereas more words are spent on environmental quality and pollution. The proposed 'climate resilience in the Mekong Delta' pillar of Phase 2 of this partnership, suggests work on: 'low regret climate resilient investments' and 'strengthen climate-resilient land, water and cropping practices', without making this specific or linking this to existing and closed programs supported by Australia or others. Many adaptation suggestions including mainstreaming of adaptation in other partnerships / projects, knowledge products and additional climate proofing

investments in this review paper could be considered to be included and thus make the design more specific and relevant (see section 2.3, 3.2, and 4.3). The Mekong delta pillar is also not linked to the energy (GHG emissions) challenges, whereas the Mekong delta is slated to host coal-fired power plants with related transport and pollution challenges, while it has major potential for renewable energy generation (solar and wind energy, also power production and industrial heating with agricultural residues). This could build on experience with that in the Mekong delta (including with World Bank/ Swiss support to energy from agricultural residues).

4.6 AUSTRALIA, JOINT DP-GOV PARTNERSHIPS AND CLIMATE POLICY ENGAGEMENT

There are some additional needs and opportunities that should be considered, in particular if Australia wants to remain active in policy dialogues and support innovations:

UNDP will be initiating a USD30m project funded by the GCF, with a focus on coastal communities / housing and mangrove restoration /coastal protection in some provinces (including the Mekong delta), as well as a learning and policy component concerning all coastal provinces on loss and damage. The latter will be a continuation of UNDP's engagement with disaster risk management in Vietnam, apart from funds towards emergency responses and recovery, such as recovery from the drought and saline water intrusion in 2016. Some NGOs will also continue to work in this space. However, the few multilateral and bilateral donors remaining will focus on adaptation (in particular the Mekong delta), including the ICMP/GIZ and the World Bank and not on disaster risk reduction and loss and damage from climate change. Australia would be able to maintain its long held strengths in DRR (upon which climate change adaptation interventions were built in the Delivery Strategy 2011-2016) by for example partnering with UNDP and NGOs through a component related to learning and sharing international lessons and potential mechanisms on loss & damage which is consistent with Article 8 of the Paris Agreement. This partnership would be with MARD as well as MONRE, building on existing links and strengths, and could include players in the insurance industry (see section 4.5). It could be concretised in a "small" way through "out-posting" of experts in this UNDP/GCF project or linking to Australian knowledge organisations. Lessons from this could be shared and related policy dialogue could be generated in existing forums (see section 3.2) and the emerging joint DP-GoV partnership on the Mekong delta (see below).

Australia built a strong network with policy makers, officials, NGOs and DPs on climate change adaptation in the period 2011-2016, which was on the back of a successful history of engagement on disaster risk reduction (DRR) in the Mekong delta and the central coastal region. It is now expanding its regional engagement in particular through the partnership on women's economic empowerment (including ethnic minority women) in the Northern Mountains region, and this work is likely to have a resilience focus, meaning it will be highly relevant in the face of climatic stresses and shocks and build on earlier work on DRR and climate change adaptation (livelihood strengthening). Inputs into policy dialogues in Vietnam, visibility in Vietnam through media and other communications, and thus a degree of influence should build on those strengths and would be achievable through mainstreaming of climate in the planned investments under the AIP and potentially a relatively small financial envelope for additional activities. Mainstreaming adaptation is also suggested in some of the other AIP Partnerships (section 4.5), including the Australia-Vietnam World Bank Partnership. In addition, several suggestions are made for adaptation engagement with a focus on the Mekong delta in section 4.3. To make full use of accumulated experience an active role should be maintained and support could be provided by Australia to the emerging joint DP-GoV partnership on the

Mekong delta, certainly given the comparative success of successive Mekong Delta Forums. As explained in several sections, this would require substantial climate change personnel/expertise at the Australia Embassy and possibly “out-posted” Australian experts in projects or partnerships.

Should Australia decide to mainstream GHG emissions reduction in some of the AIP partnerships (section 4.5) and take up other suggestions on this (section 4.4), it would need to consider taking an active role in the joint DP-GoV Vietnam Energy Partnership Group, which is currently being designed with support from the EU Delegation in Vietnam and which is expected to be focused on policy dialogues. Draft priorities of this new group include enabling policies for renewable energy production (including FDI) and power sector reform.

4.7 AUSTRALIA AND CLIMATE CHANGE IN VIETNAM: COMMUNICATION HIGHLIGHTS

If some or many of the above suggestions would be implemented, then various communication by the Embassy could include the following:

- Australia supports the implementation of the Paris Agreement under the UNFCCC, specifically Vietnam’s INDC, including review and implementation of targets on adaptation and GHG emissions mitigation in the INDC that was submitted in 2015. This signifies close alignment of Australia’s support with Vietnamese policies.
- Vietnam will / has increase(d) its ambition on increasing resilience in the face of climate change / GHG emissions mitigation. It is doing so within its own means and with international support, including Australian support to [...]
- The Australia-Vietnam Climate Change Delivery Strategy 2011-2016 was successfully implemented. It impacted particularly on the Mekong delta which is highly vulnerable to the effects of climate change. In partnership with Germany, the World Bank, UNDP and NGOs Australia helped develop coastal protection and climate smart livelihood models; built capacities of thousands of officials, teachers, women and men; and improved climate resilient transport.
- The Mekong delta is one of the most exposed regions to sea level rise, river floods as well as droughts and saline water intrusion that are all getting worse as a result of climate change, and it is affected by development challenges at the same time. It continues to require priority support from the Government of Vietnam and the international community as one of the most vulnerable regions to the effects of climate change in the world. Good adaptation will prevent major economic losses in the short and long term, and a prosperous, safe and sustainable delta is possible with the right policies, plans and investments. Further Australian support to the people, communities, businesses and infrastructure in the Mekong delta and coastal regions of Vietnam will include [...] which is expected to lead to [...].
- Climate change adaptation is a central aspect in the Australia-Vietnam Women’s Economic Empowerment Partnership, leading to the co-benefits of greater gender equality, increased resilience of livelihoods and greater food security in the Northern Mountains region of Vietnam.
- Vietnam will / has increase(d) its ambitions on GHG emissions mitigation [compared to the INDC that it submitted to the UNFCCC in 2015] in particular through reinforced efforts to increase energy efficiency in industry and expansion of renewable energy generation as per its Renewable Energy Development Strategy. It has created enabling policies for private sector investment in energy efficiency and renewable energy, with international support, including Australian support to [...]. Australian FDI in [energy efficient industrial production, renewable energy] includes [...].

ANNEX 1 SUMMARY OF CLIMATE CHANGE PORTFOLIO (DS 2011-2016)

Program	Description	Amount
Climate Change and Coastal Ecosystems Management Program	Through an innovative partnership with Germany, Australia is helping Vietnam manage and protect its coastal ecosystems and respond to the impacts of climate change. The five-year program is working with communities in five provinces in the Mekong Delta to develop climate change adaptation plans and to find practical solutions to address the range of environmental hazards being faced in coastal ecosystems. The program is also supporting national level policy development on climate change adaptation that is informed by provincial experience.	AUD23 million 2012 - 2016
Community-based Climate Change Action Grants	Australia is working with Australian and international NGOs to deliver six projects that will build the resilience of communities to the impacts of climate change, help communities reduce or avoid GHG emissions, and address key development priorities. Around 270,000 vulnerable people will directly benefit from these partnerships.	AUD15 million 2012 - 2014
Community Based Disaster Risk Management (CBDRM)	To reduce economic losses and fatalities resulting from flood or drought events, AusAID is co-financing a drought and flood mitigation project with ADB focusing on the implementation of community-based disaster risk management (CBDRM) activities across 63 communes in two flood-prone provinces in Vietnam's Mekong Delta region (community preparedness; small-scale community infrastructure; two studies for Vietnam on cross-border flood management and water control infrastructure). This is complemented by an institutional strengthening partnership with UNDP to help build the capacity of MARD's Disaster Management Centre in the implementation of its national CBDRM program and the coordination of DRM and Climate Change Adaptation more broadly.	AUD5.85 million 2013 - 2016 AUD2.8 million 2012 - 2015
Energy Efficiency Standards and Labelling	Implemented through a partnership between DRET and Vietnam's Ministry of Industry and Trade, this project will assist Vietnam to develop and implement lighting and appliance energy efficiency standards, registration, labelling, testing, compliance and monitoring mechanisms. This will help consumers to make informed purchasing decisions that reduce the country's energy intensity and emissions.	AUD2.8 million 2012 - 2014
Energy Efficiency Partnership with the World Bank	AusAID has identified energy efficiency as an area of focus under our bilateral strategic partnership with the World Bank in Vietnam. Together we have identified the Distribution Efficiency Project as an initiative that would benefit from additional support with a focus on building the capacity within the Ministry of Industry and Trade (MOIT) and Vietnam's Power Companies in the area of power sector reform and tariff regulation for improved energy efficiency.	AUD7.6 million 2012 - 2016
Climate Innovation Centre	AusAID is contributing to the establishment of a Climate Innovation Centre (CIC) in Vietnam that will support business development of clean technologies. Initiated by the World Bank a CIC in Vietnam has been welcomed by the GOV and is also attracting interest from the UK aid agency DFID to co-fund its establishment.	AUD6 million 2013 - 2017
Downscaled climate change projections	Australia is partnering with CSIRO to work with the Government of Vietnam to complete high-resolution downscaling of climate change projections for Vietnam. The projections will help Vietnam prioritise and plan their climate change responses.	AUD2 million 2012 -2013
Support Program to Respond to Climate Change	In 2011, AusAID joined other donors (Japan, France, the World Bank, Canada and South Korea) in a structured process of policy dialogue under the Support Program to Respond to Climate Change (SP-RCC) to promote a comprehensive/multisectoral climate change response. Successful achievement of policy actions for 2011 resulted in Australia's release of AUD8 million in 2012 to support the Government of Vietnam in climate change planning, research and investment. Future contributions are anticipated in 2013 and 2014.	AUD8 million 2012

ANNEX 2 SUMMARY OF AUSTRALIA’S MAIN CLIMATE CHANGE RELATED INVESTMENTS IN VIETNAM (UPDATE NOVEMBER 2015)

Focus	Current and recent activities supported by DFAT
<p>ADAPTATION AND DISASTER RISK REDUCTION with a focus on the Mekong Delta Total: \$36.15 million</p> <p><i>Rationale: Economic development will be undermined if critical infrastructure and vulnerable communities are not protected from disasters, climate change and environment risks</i></p>	<ul style="list-style-type: none"> ▪ Integrated Coastal Management Program (ICMP) (Up to \$16.5 million 2011-2017) Australia, in partnership with Germany, is helping Vietnam manage and protect its coastal ecosystems to respond to the impacts of climate change. The program is working with vulnerable communities in five provinces of the Mekong Delta to develop climate change adaptation plans and find practical solutions to improve coastal protection and flood management, and identify alternative income-generating opportunities. The program generates lessons on the ground to inform provincial socio-economic development plans and national level policy. ▪ Community-based climate change action grants (\$15 million 2012-2015). Australian, international NGOs and local partners are delivering six projects across ten provinces of Vietnam, that help communities to improve their livelihoods by reducing the impacts of disasters and climate change, and reducing GHG emissions. The program focuses on community-based disaster risk reduction, improved food and water security and innovative farming practices, including in the Mekong Delta. Around 247,000 vulnerable people have directly benefited from these partnerships. ▪ Studying the Impact of Mainstream Hydropower on the Mekong Delta (\$1.5 million 2012-2015) Australia is supporting Vietnam to conduct the Mekong Delta Study on the impacts of upstream hydropower projects on the Delta and floodplains of Vietnam and Cambodia. A strategic assessment on mainstream dam construction in 2010 predicted serious impacts to water and land security. Hence, the Vietnam government decided to undertake this independent study in order to quantify expected impacts. ▪ Building Resilience in the Mekong Delta (\$350,000 2014-2015). This technical assistance provided through the World Bank is helping identify and prioritize climate resilient infrastructure and non-structural measures for the Mekong Delta, and to build regional and provincial-level planning capacity for resilient investment decisions. It will enhance understanding of potential social, economic and environmental trade-offs through stakeholder consultation (including the Mekong Delta Forum in Feb 2015). ▪ Institutional strengthening for disaster risk management (\$2.8 million 2012–2015). In partnership with UNDP, Oxfam, the Women’s Union and others, Australia is building the capacity of Vietnam’s disaster risk management institutions focusing on the Central Committee for Flood and Storm Control, to improve coordination, lesson sharing and the legal framework for managing disasters and adapting to climate change, with strong participation of women in decision-making and action. ▪ Climate-proofing the Central Mekong Delta Region Connectivity project. Australia has provided technical assistance to incorporate climate-proofing and environmental safeguards into the Cao Lanh bridge project (Australia’s contribution to this is up to \$160 million 2011-2018), to ensure the ongoing resilience of this major development investment connecting HCMC to goods and services from the Southern Coastal Region and GMS Southern Coastal Corridor.

Focus	Current and recent activities supported by DFAT
<p>GREEN GROWTH Clean energy, efficient production and a thriving private sector Total: \$13.1 million <u>Rationale</u> <i>By adopting innovative clean technologies and reducing barriers to private investment, Vietnam can foster an efficient, competitive economy</i></p>	<ul style="list-style-type: none"> ▪ Vietnam Climate Innovation Centre (VCIC) (\$3 million 2013-2016). Australia is supporting establishment of the VCIC, through the World Bank and with co-funding from the UK. Being launched on 7 December 2015, it will provide small and medium enterprises with the seed capital, skills and networks they need to develop and bring to the market innovative yet commercially viable climate-smart technologies, thus promoting private sector engagement in green growth and supporting Vietnam’s aims as a middle-income country to reshape the economy and increase competitiveness. ▪ Energy Efficiency Standards and Labelling (\$2.5 million 2012-2015). Australia’s Department of Industry is assisting Vietnam’s Ministry of Industry and Trade (MOIT) to ensure household appliances sold in Vietnam are more energy efficient. The project builds the Ministry’s capacity to develop, manage and evaluate new standards, including implementing mandatory labelling of household appliances and setting up a website to allow manufacturers and suppliers to register their products online to comply with the new regulations. ▪ Distribution Efficiency (up to \$7.6 million 2012-2016). Through this project, in partnership with the World Bank, Australia is providing technical assistance and capacity building to help Vietnam apply smart grid technology and develop appropriate tariff regimes to facilitate reform in the power sector.
<p>PLANNING & INVESTMENT Integration of climate change and environment into Vietnam’s broader development goals Total: \$ 16.3 million <u>Rationale</u> <i>Climate change and disasters impact all sectors of the economy and require coordinated responses.</i></p>	<p>Policy and planning</p> <ul style="list-style-type: none"> ▪ Mekong Delta development planning. Australia is actively engaged in joint donor efforts to develop a planning framework to help Vietnam coordinate development investments in the Mekong Delta, a region critical to the nation’s economic growth yet highly susceptible to climate change impacts. ▪ The Support Program to Respond to Climate Change (SP-RCC) (\$14 million contribution from Australia 2012-2014) is a joint trust fund that has mobilized over \$200 million of donor finance through a performance-based funding mechanism to support Vietnam’s key ministries including MOF, MOIT, MOT, MONRE and MARD to take policy actions that incorporate consideration of climate change in affected sectors of the economy. It also supports investment in adaptation projects that have been prioritised by the Prime Minister of Vietnam. <p>Building capacity and knowledge</p> <ul style="list-style-type: none"> ▪ High resolution climate change projections (\$2 million 2011-2013) Australia’s science agency, CSIRO has partnered with the Government of Vietnam to build capacity in key technical institutes to analyse current and predict future climate impacts. The data that has been produced will inform Vietnam’s official climate projections and be used to guide national policy and action to increase the resilience of development in critical sectors including infrastructure and urban planning. ▪ Human Resources Development. Australia and Vietnam have jointly identified environmental science and engineering, water management and related themes as priority fields of study for Vietnamese students who win scholarships to study in Australia. Targeted fellowship programs have been implemented to train natural resource managers in vulnerable coastal zones, and teachers and community trainers have received training on managing environment, climate and disaster challenges. <p>Mobilising finance and resources</p> <ul style="list-style-type: none"> ▪ Australia, with the World Bank, is supporting Vietnam’s Ministry of Planning and Investment (MPI) to develop a resource mobilization framework (\$300,000 2014-2016) to enable and track support for Vietnam to realize the goals in its climate change and green growth strategies. The assistance will increase effectiveness of public spending, improve reporting, and encourage private sector engagement.
<p>Total: \$ 65.55 million</p>	

ANNEX 3 CLIMATE CHANGE LEADERS IN THE GOVERNMENT OF VIETNAM

MONRE

- HE Tran Hong Ha, MONRE minister, vice-Chair of the NCCC, Chair VPCC
- Nguyen Van Tue, DG Department of Hydro-Meteorology and Climate Change (DHMCC)
- Pham Van Tan, deputy DG DHMCC, key-negotiator UNFCCC, secretary NCCC and VPCC, and key player SPRCC
- Nguyen Khach Hieu, deputy DG DHMCC, key-negotiator UNFCCC, focal point CDM and national communications
- Nguyen Van Thang, DG Institute of Meteorology, Hydrology and Climate Change (IMHEN)
- Pham Phu Binh, DG International Relations Department
- Le Ngoc Tuan, deputy DG International Relations Department
- Do Nam Thang, deputy DG International Relations Department
- Tran Thuc, vice-Chair VPCC, former DG IMHEN
- Mai Trong Nhuan, vice-Chair VPCC, former President Vietnam National University

MARD

- HE Nguyen Xuan Cuong, MARD minister, vice-Chair of the CCFSC
- Hoang Van Thang, Vice Minister (Water resources)
- Chu Van Chuong, Deputy DG International Relations Department
- Dinh Vu Thanh, Head Climate Change Coordination Office

MPI

- Nguyen The Phuong, Vice Minister (Green growth)
- Pham Hoang Mai, DG Department of Science, Natural Resources, Environment and Education
- Nguyen Tuan Anh, deputy DG Department of Science, Natural Resources, Environment and Education

MOIT

- Hoang Quoc Vuong, Vice Minister (Energy)
- Hoang Van Tam, Deputy Head Climate Change, Industrial Safety techniques and Environment Agency (ISEA)
- Pham Trong Thuc, Director Department of New and Renewable Energy under the General Department of Energy
- Trinh Quoc Vu, Director Department of Science, Technology and Energy Saving Energy under the General Department of Energy

ENDNOTES

¹ AusAID (2011). *Australia-Vietnam Climate Change Delivery Strategy 2011-2016*

² These examples link to key elements of the ToC as represented in Figure 2 in AusAid (2011)

³ This is based on many ICMP reports and internal assessment such as relevant “aid quality checks” by DFAT. See <http://daln.gov.vn/en/icmp.html> for a very large amount of information generated by the program. One key report is: GIZ (2014) *ICMP / CCCEP PHASE I: FINAL REPORT (Integrated Coastal and Mangrove Protection in the Mekong Provinces for the Adaptation to Climate Change / Climate Change and Coastal Ecosystems Programme)*. GIZ on behalf of the Australian Department of Foreign Affairs and Trade (DFAT) and the German Federal Ministry for Economic Cooperation and Development (BMZ).

⁴ CARE, GIZ, ICMP and UN Women (June 2015) *Making it Count - Integrating Gender into Climate Change and Disaster Risk Reduction: A Practical How-To Guide*

⁵ CCWG (2015) *Community-Based Climate Change Initiatives in Vietnam - Experiences of the members of the Climate Change Working Group (CCWG)*. Hanoi: CARE, Malteser International, Oxfam, SNV.

⁶ Prime Minister Decision 1002/QĐ-TTĐ on “Awareness raising and Community-based Disaster Risk Management”, of 13/07/2009. This targets the 6,000 most disaster prone communities in Vietnam.

⁷ This is based on relevant “aid quality checks” by DFAT and e.g.: Margaretta Ayoung and Hoang Van Duong (2015) *Strengthening institutional capacity for disaster risk management in Vietnam, including climate change related disasters-Phase II (SCDM II). Mid-term Review – Final Report*

⁸ DHI & HDR (2015) *Study on the impacts of mainstream hydropower on the Mekong river – Final Report*. Prepared for the Ministry of Natural Resources and Environment of the Government of Vietnam.

⁹ Authors and other leading scientists met on 14 June 2016 to discuss the following studies:

WRU, SIWRR, SIWRP (2015). *Research on Integrated Water Resources Management in the context of climate change, sea level rise, and rapid socio-economic development in the Mekong Delta in Viet Nam*. Water Resources University (WRU), Southern Institute of Water Resources Research (SIWRR) and Southern Institute for Water Resources Planning (SIWRP). [updated February 2016]

SIWRP (2016a). *The Project on Flood Control Planning in the Mekong Delta by 2020, Vision to 2030. Summary Report*. Ho Chi Minh City: Southern Institute for Water Resources Planning (SIWRP); and updated: SIWRP (2016b). *Additional Research on Proactive Flood Control Measures in Integrated Water Resources Management and integration into flood control planning in the context of climate change in the Mekong Delta in Viet Nam. Summary Report*. Ho Chi Minh City: Southern Institute for Water Resources Planning (SIWRP).

¹⁰ World Bank (2016). *Project Appraisal Document on a Proposed Credit in the Amount of SDR 218.8 Million (US\$310 Million Equivalent) to the Socialist Republic of Vietnam for a Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods Project*. International Development Association. Report No.: Pad1610. May 19, 2016. World Bank - Environment and Natural Resources Global Practice, East Asia and Pacific Region.

¹¹ Strategic Partnership (2013) *Mekong Delta Plan: Long-term vision and strategy for a safe, prosperous and sustainable delta*. (Partners: Viet Nam’s Ministry of Natural Resources and Environment and Ministry of Agriculture and Rural Development; the Netherlands Ministry of Infrastructure and Environment, Partners for Water programme, Embassy of the Netherlands in Hanoi, Royal HaskoningDHV, Wageningen University and Research Centre, Deltares, Rebel, Water.NL).

¹² This is based on Australia’s Aid Quality checks; World Bank (2014) *Vietnam Climate Innovation Center: VCIC. A Business Plan for the financing and implementation of a CIC in Vietnam*. Information for Development Program (infoDev); <http://www.vietnamcic.org/> and personal observation by the author.

¹³ As is the case with the cancelled ADB program on CBDRM (see section 2.3), this delay was partly due to remote management (Washington DC; in the ADB case it was Manila), as well as complex Government of Vietnam procedures that needed to be navigated. Future Australian support to multilateral organisations need to consider carefully if there would again be an example where the resident mission does not have the management capacity and / or authority.

¹⁴ This is based on e.g. Charles Michaelis (2015) *Vietnam Energy Efficiency Standards and Labelling Programme. Evaluation. Final Report*. Prepared for the Australian Government, Department of Industry and Science by: Strategy Development Solutions Ltd

¹⁵ The Clean Technology Fund (CTF) is one of the multi-donor Climate Investment Funds (CIFs). It finances transfer of low-carbon technologies, and is channelled through multilateral development banks. Australia is one of the financiers. See: <https://www-cif.climateinvestmentfunds.org/fund/clean-technology-fund>

¹⁶ See several “Aide Mémoire” of visits by World Bank project managers from 2013-2015

-
- ¹⁷ UNDP Viet Nam (2012). *Fossil Fuel Fiscal Policies and Greenhouse Gas Emissions in Viet Nam: Subsidies and Taxes in Viet Nam's Energy Sector, and Their Effects on Economic Development and Income Distribution in The Context of Responding to Climate Change*. Hanoi: United Nations Development Programme.
- UNDP Viet Nam (2014). *Green Growth and Fossil Fuel Fiscal Policies in Viet Nam - Recommendations on a Roadmap for Policy Reform*. Ha Noi, Viet Nam;
- UNDP Viet Nam (2016). *Greening the Power mix: Policies for Expanding Solar Photovoltaic Electricity in Viet Nam*. Ha Noi, Viet Nam
- ¹⁸ World Bank (2014) *Exploring a Low-Carbon Development Path for Vietnam - January 6, 2014. Pre-publication version*. ESMAP
- ¹⁹ AusAid (2012) *Vietnam: Support Program to Respond to Climate Change (SP-RCC). A Strategy for AusAID's Engagement: Design Summary and Implementation Document (DSID)*. March 2012
- ²⁰ Personal observations of the author, from participation as observer in a wide range of SPRCC meetings since its inception in 2008
- ²¹ This is known as the CPEIR: Climate Public Expenditure and Investment Review
- MPI, WB, UNDP (2015) *Laying the foundation for resilient low-carbon development through the Climate Public Expenditure and Investment Review*. By experts of the Ministry of Planning and Investment (MPI), the World Bank (WB) and the United Nations Development Programme (UNDP)
- ²² Jack Katzfey and Hoang Cat (2014) *Activity Completion Report: High-resolution Climate Projections for Vietnam*. Hanoi, Vietnam. CSIRO- DFAT R4D Alliance.
- ²³ <http://vnclimate.vn/> and <http://climatetool.vnclimate.vn/>
- ²⁴ Trần Thực, Koos Neefjes, Tạ Thị Thanh Hương, Nguyễn Văn Thắng, Mai Trọng Nhuận, Lê Quang Trí, Lê Đình Thành, Huỳnh Thị Lan Hương, Võ Thanh Sơn, Nguyễn Thị Hiền Thuận, Lê Nguyễn Tường (2015) *Viet Nam Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*, Hanoi, Viet Nam: Viet Nam Natural Resources, Environment and Cartographic Publishing House. http://www.vn.undp.org/content/vietnam/en/home/library/environment_climate/viet_nam_special_report_on_managing_the_risks_of_extreme_events_and_disasters/
- ²⁵ Jack Katzfey and Hoang Cat (2014)
- ²⁶ MPI, WB, UNDP (2015)
- ²⁷ Prime Minister Decision No. 2139/QĐ-TTg of 5 December 2011
- ²⁸ This is figure 3.16 in: MPI (2015). *Financing Vietnam's Response to Climate Change: Smart Investment for a Sustainable Future. Laying the foundation for resilient low-carbon development through the Climate Public Expenditure and Investment Review*. Vietnam Ministry of Planning and Investment (MPI). This publication is nearly identical to: MPI, WB, UNDP (2015)
- ²⁹ Some countries have not yet phased-out their ODA relationship but do not provide climate finance, such as Ireland and Canada. But the latter may phase-in climate financing following the recent change of Government.
- ³⁰ Strategic Partnership (2013)
- ³¹ Decision no. 1002/QĐ-TTG approved by the Prime Minister on 13.07.2009, "Awareness raising and Community based Disaster Risk Management"
- ³² World Bank (2016)
- ³³ UNDP Viet Nam (2014) & UNDP Viet Nam (2016).
- ³⁴ UNDP-Viet Nam (2014).
- ³⁵ AusTrade (2016) *Renewable Energy*. The Australian Trade and Investment Commission
- ³⁶ See: UNDP Viet Nam (2014); UNDP Viet Nam (2016).
- ³⁷ Australia holds 1.40% of voting power in the International Bank for Reconstruction & Development (IBRD): <http://siteresources.worldbank.org/BODINT/Resources/278027-1215524804501/IBRDCountryVotingTable.pdf>
- ³⁸ Australia contributed a grant towards the SPRCC under the Climate Change Delivery Strategy 2011-2016.
- ³⁹ World Bank (2016)
- ⁴⁰ Strategic Partnership (2013)
- ⁴¹ See e.g. a case study in: CCWG (2015) *Community-Based Climate Change Initiatives in Vietnam - Experiences of the members of the Climate Change Working Group (CCWG)*. Hanoi: CARE, Malteser International, Oxfam, SNV. <http://www.ngocentre.org.vn/pub/community-based-climate-change-initiatives-documentation-ccwg>
- ⁴² See: <http://www.vbf.org.vn/> The VBF organises bi-annual forums co-chaired by the Minister of Planning and Investment, the World Bank, IFC and leading business members of the VBF. They have an energy working group.

⁴³ Many NGOs level have attempted to scale-up successes by building links with district and provincial authorities and thus aiming for scaling up, some successfully as has been documented in for example: CCWG (2015)

⁴⁴ See e.g. www.vitensevidesinternational.com