UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

Ad Hoc Working Group on Long-term Cooperative Action under the Convention

Fifteenth session Bonn, 15–24 May 2012

Item 3(b)(i) of the provisional agenda

Measurable, reportable and verifiable nationally appropriate mitigation commitments or actions, including quantified emission limitation and reduction objectives, by all developed country Parties, while ensuring the comparability of efforts among them, taking into account differences in their national circumstances

Additional information relating to the quantified economywide emission reduction targets contained in document FCCC/SB/2011/INF.1/Rev.1

Submissions from Parties

Addendum

- 1. In addition to the nine submissions contained in document FCCC/AWGLCA/2012/MISC.1 and the submission contained in document FCCC/AWGLCA/2012/MISC.1/Add.1, two further submissions and one resubmission* have been received.¹
- 2. In accordance with the procedure for miscellaneous documents, these submissions are attached and reproduced** in the language in which they were received and without formal editing.



Also available at http://unfccc.int/4578.php.

^{*} The submission from Nauru on behalf of the Alliance of Small Island States included here replaces the submission dated 21 March 2012 contained in document FCCC/AWGLCA/2012/MISC.1.

^{**} These submissions have been electronically imported in order to make them available on electronic systems, including the World Wide Web. The secretariat has made every effort to ensure the correct reproduction of the texts as submitted.

Contents

		Page
1.	Canada (Submission received 8 May 2012)	3
2.	Iceland (Submission received 13 May 2012)	4
3.	Nauru on behalf of the Alliance of Small Island States (Submission received 8 May 2012)	10

Paper no. 1: Canada

Submission of Canada Date of Submission: May 7, 2012

Paragraph 5a of the Durban Outcome of the AWG-LCA (Decision 2/CP.17)

The following information is relevant for clarification of the quantified economy-wide emission reduction target submitted by Canada under the Copenhagen Accord in 2009 and contained in document FCCC/SB/2011/INF.1/Rev.1., following the parameters indicated in paragraph 5(a) of the Durban outcome of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention.

Target and Base Year	17% emission reduction by 2020 compared with 2005 levels, to be aligned with the final economy-			
	wide emission reduction target of the United States			
	of America in enacted legislation.			
Coverage of Greenhouse	CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆ and NF ₃			
Gases				
Global warming potential	As contained in Decision 15/CP.17			
values				
Coverage of Sectors	All IPCC sources and sectors			
Anticipated use of	Canada intends to include the LULUCF sector in its			
emissions/removals from	accounting of greenhouse gas emissions. Emissions			
land-use, land-use change	and removals from the LULUCF sector will be			
and forestry	accounted for using either the 2005 base-year or a			
	reference level. Non-anthropogenic emissions and			
	related removals resulting from natural disturbances			
	will be excluded, and accounting for harvested			
	wood products would follow a production approach			
Carbon Credits from				
Market-Based Mechanisms	m . 1			
Assumptions and conditions	To take into account Canada's national			
related to ambition of the	circumstances and actions of major trading partners.			
pledge	En man information and it is an important			
	For more information on policies and measures,			
	national circumstances and other relevant			
	information related to Canada's target, see Canada's			
	Emissions Trends report			
	(http://www.ec.gc.ca/doc/publications/cc/COM1374			
	/ec-com1374-en-toc.htm).			

Paper no. 2: Iceland

Ad Hoc Working Group on Long-term Cooperative Action under the Convention

Clarification of Quantified Economy-Wide Emission Reduction Targets

Submission by Iceland 10 May 2012

Iceland welcomes the chance to submit views on economy-wide emissions reduction targets, and to use a common template for this purpose. The information presented in suggested common template below is seen as a step towards presenting and clarifying Iceland's pledges and policies, but without prejudice to Iceland's post-2012 commitments.

Iceland bases its climate mitigation policy on a 2010 Action Plan, on relevant legislation, and on its pledges and commitments in the context of the UNFCCC and relevant EU legislation, applicable in the case of Iceland. In Decision x/CMP.7, Iceland's intended commitments in the second commitment period of the Kyoto Protocol is reflected in the following way: "Iceland's QELRO for a second commitment period under the Kyoto Protocol is based on the understanding that it will fulfil this QELRO jointly with the European Union and its member States, in accordance with Article 4 of the Kyoto Protocol. As a consequence, future accession by Iceland to the European Union shall not affect its participation in such joint fulfilment agreement pursuant to Article 4 or its QELRO."

Part of Iceland's emissions – over 40% - will fall under the EU Emissions Trading Scheme and will be part of a common European system to reduce emissions in selected sectors by 21% by 2020, compared to 1990. Net emissions in other sectors are projected to be reduced by 38% by 2020, compared to 1990 levels, taking mitigation actions into account. Carbon sequestration in the LULUCF sector is included in that goal. Iceland welcomes the steps taken at CMP-7 to clarify rules guiding LULUCF et al.

The numbers on Iceland's past and projected emissions presented below do not reflect the inclusion of NF3 and changes in Global Warming Potential Values as contained in Decision xx/CP.17.

Common Template

Iceland									
Party	Totalia								
	10.14 2012								
Date of Submission	10 May 2012								
Assumptions and Conditions Related to Target									
Base Year	Base Year x 1990 other (specify):								
% Reduction from Base Year <u>20/30</u> %* *in a joint effort with the European Union and its Member States, in line with Art. 4 of the KP									
	% Reduction from 1990% (if base year other than 1990)								
Period for Reaching Ta	Period for Reaching Target x by 2020 by Other (specify):								
Inventory Methodology	Inventory Methodology Used XIPCC 2006 Guidelines								
Other (specify):									
Coverage of Greenhou	ise Gases								
Gases Covered	Base Year	for Each Gas (if Different)							
X CO ₂	x1990 x1990 x1990 x1990 x1990 x1990	other (specify):							
x NF3	<u>x</u> 1990	other (specify):							
Other (specify):									

Global Warming Potential Values (GWP	Global	Warming	Potential	Values ((GWP
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x As Contained in Decision xx/CP.17 ² ☐ other (specify):							
Coverage of Sectors							
X Energy X Land use, land-use change and forestry X Industrial Processes and Product use X Waste X Other (specify): Aviation							
Emission values and anticipated use of emissions/removals from Land use, land-use change and forestry and carbon credits from market-based mechanisms to clarify the target (in kt CO ₂ equivalent)							
A Emissions excluding LULUCF in base year	3.451						
B Emissions/removals from LULUCF included in base year ³							
C Emissions in base year used for calculation of target							
Emissions in base year used for calculation of target							
Emissions excluding LULUCF in target year							
E Anticipated emissions/removals from LULUCF included in target year ³							
F Anticipated use of carbon credits from market-based mechanisms ⁴	-						
G Anticipated carry-over of carbon credits ⁴ 0							
Expected Emission Reductions in kt CO ₂ equivalent							
Relative to Base Year :							
should be estimated as $= -[C - (D + E - F - G)]$							
=							
Relative to 1990 (if different to base year):							
=							

² Revision of the UNFCCC reporting guidelines on annual inventories for Parties included in Annex I to the Convention

³ Include emissions as positive values and removals as negative values

⁴ Include as positive values

Role of Land Use, Land-Use Change and Forestry						
Comprehensive land-based						
XActivity based XAfforestation/Reforestation XDeforestation X Forest management [to be confirmed] Cropland management Grazing land management XWetland drainage and rewetting [to be confirmed] XRevegetation Other (specify):						
Carbon Credits from Market-Based Mechanisms						
Mechanism Used						

Mechanism Used						
Clean Development Mechanism	Carry-over					
Joint Implementation	□ REDD					
International Emission Trading (ie under Article 17 of the Kyoto Protocol)	Other, (specify):					
% of Overall Target						
Total Contribution from Mechanisms Used%						
Available information on the estimated contribution of individual mechanisms to the achievement of the target						
Iceland anticipates zero carry-over of credits from the first commitment period of the Kyoto Protocol. In Iceland's Climate Mitigation Action Plan to 2020, no acquiring of carbon credits through mechanisms is expected. Iceland will, however, retain an option to use market-based mechanisms to acquire carbon credits during the second commitment period, in line with the rules of relevant EU climate legislation applicable for Iceland.						

Assumptions and Conditions Related to Ambition of the Pledge

Assumed change in emissions per capita, including change in population over the period

The population of Iceland was 253.785 on 1 January 1990 and 319.575 on 1 January 2012. It is assumed to be around 341.000 in 2020 (mid-level estimation). Emissions per capita were 13.6 tons CO₂-Eq in 1990 and 14.2 tons in 2010. Projection of emissions (in total and per capita) are somewhat difficult for Iceland, as they largely depend on whether new heavy industry facilities (falling under the EU-ETS, and hence part of a joint European target) are built or not. Due to Iceland's small population, the commissioning and decommissioning of single industrial projects can affect total emissions significantly. Assuming no expansion in heavy industry net emissions per capita are projected to be around 9.9 tons CO₂ Eq per capita in 2020. One scenario assuming expansion in heavy industry would result in approximately 13.4 tons of net emission per capita in 2020. These figures are based on projections with measures.

Assumed change in emissions per gross domestic product (GDP), including change in GDP over the period

Iceland has not made projections of emissions per GDP to 2020.

Estimated emission reductions from BAU or another baseline in kt CO₂ eq

GHG emissions are projected to be around 1.100-1.500 kt CO₂ eq less than it would have been under a BAU scenario in 2020, as a result of actions undertaken under the Climate Mitigation Action Plan.

Description of any mitigation policies, legislation and institutional arrangements

The basis for Iceland's mitigation efforts is a 2010 Action Plan, outlining key actions aimed at limiting emissions and increasing carbon sequestration by afforestation and revegetation. A carbon tax has been introduced, and taxes and fees on cars and vehicles have been recently revised to increase the carbon emissions factor. Iceland participates in the EU Emissions Trading Scheme, which is mainly applicable to aviation and heavy industry in Iceland, and will cover over 40% of emissions from Iceland by 2013. In addition to these economy-wide actions, several actions target sectoral emissions, mainly from transport and fisheries. The LULUCF sector is of major importance in Iceland's mitigation efforts, and increase in afforestation and revegetation efforts is seen to increase carbon uptake from the atmosphere. An effort to restore drained or damaged wetlands is planned, as drained wetlands are a significant source of carbon dioxide emissions. Iceland is currently updating its climate legislation, inter alia to accommodate revisions of the EU-ETS, and a bill is currently being discussed in the Parliament.

Other relevant information, including on the potential to increase the level of ambition, e.g. through enhanced implementation of domestic PaMs and full access to broad and efficient carbon markets

Iceland will retain the option to engage in carbon markets in addition to its participation in the EU-ETS, even if it intends to reach its 2020 target mainly through domestic action in curbing emissions and increasing carbon sequestration.

Assumptions on actions by other Parties domestically and at international level

Iceland is part of a European carbon market through its participation in the EU-ETS and other relevant EU legislation. Iceland intends to achieve its target in the second commitment period in a joint effort with the EU and its Member States.

Paper no. 3: Nauru on behalf of the Alliance of Small Island States

Ad Hoc Working Group on Long-term Cooperative Action to enhance implementation of the Convention (AWG-LCA)

Submission by the Republic of Nauru on behalf of the Alliance of Small Island States (AOSIS)

Submission of information by developed country Parties, as part of the process of clarifying the developed country Parties' quantified economy-wide emission reduction targets contained in document FCCC/SB/2011/INF.1/Rev.1, using a common template

15 March 2012

The Alliance of Small Island developing States (AOSIS) presents its views on specific information it would be useful to receive from developed country Parties in connection with the clarification of the initial pledged quantified economy-wide emission reduction targets set out in FCCC/SB/2011/INF.1/Rev.1, in response to the common template prepared by the AWG-LCA Chair in consultation with the secretariat.

AOSIS requests that these views be compiled into the Miscellaneous Document that will be prepared by the secretariat compiling inputs from developed country Parties in response to the common template.

1. Purpose of the Clarification Exercise – assessment of the scale of the gap in mitigation ambition to enable closure of this gap

The goal of the clarification exercise must be to enable the establishment of ambitious, transparent, single number, economy-wide emission reduction commitments for all Annex I Parties. This is needed to enable all Parties to track progress toward global goals, and to assess the individual contributions of Annex I Parties to these goals.

Document FCCC/SB/2011/INF.1/Rev.1 contains a series of pledged targets and commitments brought forward by all Annex I Parties for quantified economy-wide emission reductions under the Kyoto Protocol and under the Convention. These pledges were captured in a single document to enable an assessment of what Kyoto Party and non-Kyoto Party targets and commitments can deliver in terms of concrete emission reductions relative to 1990 emission levels, and to facilitate an assessment of the comparability of individual targets and commitments.

All Parties have recognized that deep cuts in global greenhouse gas emissions are required to hold the increase in global average temperature below 2°C above pre-industrial levels, and that Parties should take urgent action to meet this long-term goal. The Parties also recognized the need to consider strengthening the long-term global goal in relation to a global average temperature rise of 1.5°C.

Over 100 Parties to the UNFCCC have expressed their support for a temperature limitation to well below 1.5 degrees Celsius above pre-industrial levels, and long-term stabilization of greenhouse gas concentrations in the atmosphere at well **below 350 parts** per million of carbon dioxide equivalent. To achieve these goals, **more than an 85% reduction** in global emissions is needed below 1990 levels by 2050. According to the IPCC's Fourth Assessment Report, a **25-40%** reduction in emissions is needed from Annex I Parties by 2020, together with a

substantial reduction below business as usual emissions (estimated at 15-30% below BAU) in developing country Parties even to limit temperature increases to 2.0 to 2.4 degrees above preindustrial levels, together with a peaking of global emissions by 2015.

Current pledges made before and after COP 15 and 16 are in line with 3.5 degrees of warming by 2100 with temperatures continuing to rise thereafter – <u>a level of warming that will devastate small island developing states</u>, <u>LDCs and vulnerable countries in Africa</u>. To keep warming below the 1.5 degree limit, it has been said that annual global emissions need to drop to **44 billion tonnes** of CO₂-equivalent emissions by 2020.

¹ If the pledges that have now been presented are aggregated, with accounting provisions taken into consideration, expected global emissions leave approximately an *11 billion tonne gap* of emission reductions needed per year by 2020.²

The issue of mitigation ambition is the single most important issue to be discussed during 2012. Annex I Parties cannot rest on the pledges currently on the table for the post-2012 period. An enormous gap in mitigation ambition needs to be urgently addressed to achieve a global goal of limiting temperature increase to below 1.5°C above pre-industrial levels.

The clarification exercise should confirm the scale of the developed country mitigation gap, using the Kyoto Protocol's common accounting rules. Clarification of the scale of the gap will facilitate the identification of ways to close this gap through greater mitigation ambition by all Annex I Parties.

(1)

2. Role of common accounting rules in delivering an assessment of mitigation ambition

(2)

Transparent commitments are essential to enable the climate regime to measure progress toward global goals and against what the best available science indicates is needed in terms of emissions reductions from Annex I Parties. For these purposes to be met, targets and commitments must be understood using *common base years, common methodologies and common accounting rules.*

The fact that certain Annex I Parties have used different base years and accounting assumptions in connection with their proposed targets continues to frustrate efforts to assess what the environment will see from these proposed targets and commitments, in terms of actual tonnes of emissions reduced relative to 1990 emission levels. Additional clarity is needed on what these proposed targets will deliver in terms of tonnes of emissions reductions by each individual Party, by all Parties in aggregate, and by individual Parties in comparison to other Parties.

Decision _/CP.17, para 5 requested the secretariat to prepare a common template to facilitate developed country Parties' clarification of their initial, proposed individual emission reduction targets, including in relation to the base year, global warming potential values, coverage of gases, coverage of sectors, expected emission reductions, and the role of land use, land-use

¹ See "Bridging the Emissions Gap: A UNEP Synthesis Report" (UNEP, November 2011) available online at: www.unep.org/publications/ebooks/bridgingemissionsgap/. See also Climate Action Tracker Briefing Paper, 10 January 2011, "Cancun Climate Talks - Keeping Options Open", C. Chen, B. Hare, M. Hagemann, N. Höhne, S. Moltmann, M. Schaeffer (Climate Analytics, PIK, Ecofys), available at http://www.climateactiontracker.org/briefing-paper-cancun.pdf (44-40 billion tonnes).

² Id. According to "Bridging the Emissions Gap", even if all higher "conditional" pledges were implemented and all loopholes available to Annex I Parties were eliminated (such as use of surplus AAUs and lenient LULUCF accounting rules), in the most optimistic scenario a mitigation gap of 6 billion tonnes of CO2-equivalent emission reductions would still remain.

change and forestry, and carbon credits from market-based mechanisms, and associated assumptions and conditions related to the ambition of the pledges.

Much of this information is already contained in the technical paper prepared by the secretariat, FCCC/TP/2011/1 and document FCCC/KP/AWG/2010/INF.2/Rev.1, which reflect inputs from all Annex I Parties. This information is also contained in the rule set that applies to all Kyoto Protocol Parties under the Marrakech Accords and the decisions adopted in Durban.

It only remains to clarify and update all initial proposed targets and commitments in the context of this common accounting rules that are now in place for all Annex I Parties under the Kyoto Protocol.

The clarification exercise should not be perceived as an opportunity for Parties to move away from the current Kyoto Protocol rules for Kyoto Parties, or be used by non-Kyoto Parties to undermine comparability. Instead, it must be seen as the opportunity to bring all Annex I Parties into the same, common accounting system that has been developed by all Kyoto Parties over the last twenty years, regardless of the form in which these pledges were initially presented and regardless of original assumptions about the possible development of new accounting rules. The application of common accounting rules to all Parties is needed to:

- 1. Facilitate the adoption of comparable and transparent economy-wide emission reduction commitments between (a) developed country Parties that are Parties to the Kyoto Protocol, and (b) developed country Parties that are not Parties to the Kyoto Protocol;
- 2. Facilitate the transformation of pledged targets to legally-binding commitments for the second commitment period of the Kyoto Protocol;
- 3. Enable the establishment of assigned amounts for all Annex I Parties, or proxies for assigned amounts for non-Kyoto Protocol Annex I Parties using emissions trajectories, to enable access to market-mechanisms established at the international level, access to units recognized at the international level, and enable the tracking of progress toward commitments:
- 4. Enable an assessment of the scale of GHG emission reductions that the environment will actually see from individual developed country mitigation efforts relative to 1990 emission levels, free of conditionalities:
- 5. Enable an assessment of the scale of the gap between developed country targets and commitments in aggregate, and what is needed to meet the 25-40% reduction relative to 1990 levels identified by the IPCC's Fourth Assessment Report and pathways consistent with the 2 degree and 1.5 degree limits;
- 6. Enable a robust, international carbon market that builds confidence among all Parties and all stakeholders and that is capable of monitoring trade in internationally-recognized units under the Kyoto Protocol as well any new units agreed under the Convention.

Accordingly, *all Annex I Party* economy-wide targets and commitments will have to be accounted for using *1990* as their legally-binding base year (regardless of any reference year used to express reductions for domestic purposes), unless otherwise agreed under Article 4.6 of the Convention or Article 3.5 of the Protocol. See *Appendix 1* to this document, reflecting base years for all Annex B Parties for all gases covered in the first commitment period. Where Parties have presented a pledged target relative to a different reference (Australia, Canada, Kazakhstan, United States, see FCCC/TP/2011/1 at Table 1), these targets need to be understood relative to 1990 emission levels for accounting purposes. See FCCC/TP/2011/1.

All Kyoto Protocol Parties are to account for their quantified economy wide emission reduction commitments consistent with the *rules for LULUCF* activity-based accounting in the second commitment period, adopted in Durban in the annex to decision X/CMP.7. For non-Kyoto Parties, their quantified economy wide emission reduction commitments should be presented both including LULUCF and excluding LULUCF, or accounted for based solely on emissions excluding LULUCF (see FCCC/TP/2011/1,Table 3), regardless of how they have been presented in the pledging process, due to the great uncertainties inherent in LULUCF accounting, and to protect the environmental integrity of the climate regime.

The eligibility rules for access to the Kyoto mechanisms must remain in place, and only those Parties that have ratified the Kyoto Protocol <u>and</u> that have established assigned amounts under the Protocol for the second commitment period in compliance with the Kyoto Protocol rule set should benefit from the opportunity to generate and transfer Kyoto units that can be used toward the achievement of their economy-wide quantified targets and commitments. Eligibility rules are needed to maintain the environmental integrity of the commitments taken under the Kyoto Protocol as a whole. Similarly stringent eligibility rules must be adopted and satisfied prior to access to units from any new mechanism agreed under the Convention.

3. Unconditional commitments for all developed country Parties are needed in the form of single number, quantified economy wide emission reduction commitments

Clear and unambiguous commitments from all developed country Parties must be adopted in 2012, prior to the start of the second commitment period. Annex I Parties cannot rest on conditional pledges, or pledges presented in ranges, that were initially made years back and that are known to be inconsistent with the achievement of globally agreed goals.

Each developed country Party's economy-wide emission reduction commitment must ultimately be accounted for in the form of a *single number*, representing a percentage reduction in absolute emissions from 1990 emission levels or from base years previously agreed under Article 4.6 of the Convention or Article 3.5 of the Protocol to be reached over the course of the commitment period, regardless of how initial pledges were presented.

In Durban, all Parties to the UNFCCC that are also Parties to the Kyoto Protocol agreed that there would be a second commitment period of the Kyoto Protocol, to commence in 2013. Accordingly, *all Annex B Parties to the Kyoto Protocol* are expected to express their emission reduction commitments for the post-2012 period using the multilaterally-agreed set of common accounting rules established under the Kyoto Protocol. Progress has been made in transforming Annex I Party pledges into quantified economy-wide emission limitation and reduction objectives (*QELROs*) to facilitate the adoption in 2012 of commitments for the second commitment period. See attached *Appendix 2*.

Equally, *Annex I Parties that are not Parties to the Kyoto Protocol* are expected to present internationally-legally binding commitments in the form of a single number, unconditional, economy-wide emission reduction commitment for the post-2012 period.

For accounting purposes, each Annex I Party's target or commitment must be converted into an **assigned amount** for the length of the commitment period. This is needed to enable use of the Kyoto units and/or any new units that may be established under the Convention for application toward Party targets and commitments. An assessment of progress toward global goals, in terms of the tonnes of emission reductions the environment will see over the course of a commitment period cannot be based on targets presented relative to a single year's emissions.

Assigned amounts may be calculated from Kyoto Party QELROs, and for non-Kyoto Parties a proxy for an assigned amount can readily be established to facilitate accounting and compliance

assessments based on the data presented in Tables 3 and 4 of *FCCC/TP/2011/1* (See AOSIS Proposed Protocol text, FCCC/CP/2010/3 (2 June 2010), using the term "inscribed amount" for this proxy).

4. Role of commitment period length in enabling enhanced mitigation ambition

Many Parties initially brought forward pledges for 2020 in response to the findings of the IPCC's Fourth Assessment Report in 2007, that *a 25-40 percent reduction in emissions below 1990 levels* was needed in aggregate, as well as a 15-30 percent reduction below business as usual from developing country Parties in aggregate, to limit global average surface temperature increases to 2.0 to 2.4 degrees Celsius.

2020 pledges are not determinative of the length of the Kyoto Protocol's second commitment period however, and do not prejudge the length of the second commitment period. The length of the Kyoto Protocol's first commitment period was five years. The length of the second commitment period under the Protocol has not yet been decided.

Many Annex I Parties have stated that they could work with either a 5 year or 8 year second commitment period. It is readily possible to calculate quantified economy wide emission reduction commitments for a 5-year commitment period from Annex I pledges for 2020. See *Appendix B*, containing 5-year QELROs calculated based on Kyoto Protocol Party pledges for 2020.

AOSIS supports adoption of a 5-year second commitment period under the Kyoto Protocol. Currently pledged emission reductions for 2020 are insufficient to achieve an emissions pathway consistent with a limitation of temperature increases to below 2 degrees or below 1.5 degrees above pre-industrial levels. Pledges with this low level of ambition cannot be locked in for an 8-year period through 2020 without jeopardizing achievement of the agreed 2 degree and 1.5 degree goals. A 5-year commitment period will enable the Parties to reflect the findings of the IPCC's Fifth Assessment Report, to be issued in 2013 and 2014, in deeper commitments under the Kyoto Protocol as early as 2018. It will also enable the Parties to respond to the results of the 2013-2015 review process with more ambitious emission reduction commitments, in the context of a strengthening of the global goal from 2 degrees to 1.5 degrees.

A 5-year commitment period creates necessary flexibility for ramping up ambition. The flexibility of the international system should not be sacrificed for the convenience of lawmakers in countries preferring an 8-year period, where this may jeopardize achievement of agreed global goals, or negatively impact the international community's ability to respond in a timely manner to the findings of the Fifth Assessment Report.

For these reasons, consistent with decision X/CMP.7, by 1 May 2012, Annex I Parties should submit information on QELROs to the Kyoto Protocol for a 5-year commitment period. See *Appendix 2.*

5. Role of Common Accounting Rules in supporting a global carbon market

Many Annex I Parties have indicated the need to move toward a global carbon market, to ensure cost-effective emission reductions and facilitate engagement by a broader grouping of countries in emission reduction efforts. A common accounting system at the international level for Annex I Party targets and commitments is an essential component of a broad and effectively-functioning international carbon market.

The common accounting rules agreed under the Kyoto Protocol have been designed to give confidence to all market players. They enable the establishment of the emissions budgets

needed for international emissions trading; they define eligibility criteria for access to the mechanisms; they enable the tracking of all holdings of internationally-agreed Kyoto accounting units; they provide rules for the generation, acquisition and transfer of these units, and prevent the double counting of units; they contain rules for adjustments; they provide rules for compliance assessments and additionally enable many other functions needed to protect the environmental integrity of Parties' emission reduction commitments.

These rules are equally relevant to Annex I Party Convention commitments, to ensure proper accounting of emission reductions, enable the use of any internationally-agreed units against legally-binding targets, and ensure environmental integrity.

The common accounting rules now in place under the Kyoto Protocol were negotiated by **all Convention Parties** before they were adopted under the CMP as part of the Marrakech Accords. See, e.g., decisions 11/CMP.1 through 27/CMP.1, each of which is drawn from a referenced decision of the COP adopted at COP 7.

These agreed rules now need to be explicitly extended to all Annex I Convention Parties. They include:

- Guidelines for national systems;
- Technical guidance on methodologies for adjustments;
- Guidelines for the submission of supplementary information:
- Guidelines for the review by expert review teams of national systems, inventories, information on assigned amounts, emission reduction units, CERs, AAUs and RMUs; review of commitments, review for reinstatement of eligibility to use the mechanisms;
- Guidelines for the accounting of assigned amounts (registry requirements, international transaction log to track Party holdings of units and transactions in units);
- Modalities and procedures for the mechanisms building on those under the Kyoto Protocol (definitions, role of COP, Executive Board, participation requirements etc., monitoring, verification, issuance, documentation, baselines and monitoring methodologies registry requirement) and related guidance;
- Procedures and mechanisms on compliance, including facilitative and enforcement features to ensure accounting; and
- Other necessary elements to facilitate transparent, consistent, comparable, complete and accurate accounting for emissions and removals.

In Durban, AOSIS proposed draft decision text on common accounting rules for consideration in the AWG-LCA spin-off group on mitigation, which was submitted to the co-facilitators of the AWG-LCA on mitigation. This text is included in *Appendix 3*.

These rules should be formally adopted for broader application at COP 18. Because the above rules were originally agreed as COP decisions, rather than decisions of the CMP, it should be possible to easily adapt these rules for purposes of all Annex I Party quantified economy-wide emission reduction targets and commitments, with only a few contextual adjustments and updates.

This is also an important step in agreeing a new global treaty under the Convention. Many years have been spent negotiating and improving the rules of the Kyoto Protocol, and these rules now set both the framework and benchmark for international action on climate change, upon which future action should be built.

6. Purpose of clarification in the context of carbon market units

Heavy reliance on offsetting mechanisms to achieve Annex I Party targets and commitments will only increase the global mitigation gap, compared to a situation in which developing countries and developed country Parties each achieve their pledged emission reductions outside an offsetting context.

For this reason it is essential that all internationally-approved carbon market units that are available for use toward Annex I Party economy-wide emission reduction commitments be approved, tracked, monitored and verified at the international level to ensure additionality, permanence, and avoid double counting. It is also essential that these units be traded through UNFCCC institutions, to enable an ongoing assessment of how reliance on these units impacts global emission reductions and progress toward global goals.

International units that are recognized only under a Party's own domestic emission trading scheme, generated for example on the basis of bilateral agreements, should not be accounted toward a Party's international economy-wide emission reduction targets.

Units created under the three Kyoto flexible mechanisms are now the only carbon credits approved at the international level for application toward Kyoto Protocol Annex I Party quantified economy-wide commitments. These mechanisms are available only to Parties that establish assigned amounts under the Protocol for the second commitment period. Annex I Kyoto Parties that initially presented their targets assuming full access to the Kyoto mechanisms in the second commitment period, but which have since declared their intention *not* to bring forward a second commitment period target under the Protocol, should (1) exclude carbon credits from the Kyoto market-based mechanisms from their targets; and (2) exclude the carry-over of carbon credits from the first commitment period to the post-2012 period.

Although a new market mechanism has been established under the UNFCCC, it has yet to be decided whether such a mechanism will provide for the issuance of internationally-recognized credits that are fungible with Kyoto accounting units, how or on what basis any new units might be available to offset Annex I Party emissions (for example, e.g., if at a substantial discount rate to ensure net global emission reductions) or what eligibility criteria might require satisfaction. Hence Parties should exclude reliance on new market units from their quantified pledges until these issues have advanced.

7. Clarification in the context of LULUCF credits

Activity-based accounting has developed as a way to incentivize measurable, human-induced, emission reductions in the LULUCF sector under the Kyoto Protocol. Kyoto units generated by certain activities have been available to offset Kyoto Parties' industrial emissions up to multilaterally agreed limits.

Under Kyoto accounting rules, access to units from these activities is available only to Parties that have taken legally-binding quantified emission reduction commitments under the Kyoto Protocol, and that have established second commitment period assigned amounts.

Accordingly, Annex I Kyoto Parties that initially presented their targets assuming full access to the Kyoto mechanisms in the second commitment period, including offsets available through LULUCF activity-based accounting, but which have since declared their intention *not* to bring forward a second commitment period target under the Protocol, should: (1) not include possible credits for LULUCF activities in the calculation of their targets, as these Parties will not be eligible to receive credits for LULUCF activities; and (2) assume no carry-over of LULUCF units

from the first commitment period to the post-2012 period, consistent with existing Kyoto Protocol rules which permit no carry-over of such units.

Further clarification is needed on the quantitative implications of Parties' selection of forest management accounting rules for the effective emission reductions the environment will see from Annex I Party commitments under the Protocol.

Under the Convention, non-Kyoto Parties are expected to continue to report emissions both excluding LULUCF and including LULUCF, regardless of how pledges have been presented.

The LULUCF rules agreed under the Kyoto Protocol should not be assumed to be automatically transferable to the Convention context, given serious concerns that exist with their environmental integrity.

8. Potential to increase mitigation ambition – developments since initial pledges were first announced

Some of the unconditional targets in FCCC/SB/2011/INF.1/Rev.1 were first proposed as long ago as 2007, in the context of the negotiation of future commitments for Annex I Parties under Article 3.9 of the Kyoto Protocol. See FCCC/KP/AWG/2010/INF.2/Rev.1.

Other targets have been only been proposed as ranges of possible emission reduction targets and refer to an array of conditionalities for moving up these ranges to more ambitious emission reduction commitments.

Many of the *technical conditionalities* Parties have previously highlighted as preventing firm commitments were addressed and resolved in Durban. It is now clear that Annex I Parties targets and commitments are to be accounted for using:

- the methodologies set out in the 2006 IPCC Guidelines and relevant Convention and Kyoto Protocol decisions
- the most recently reported GWP values contained in the IPCC's Fourth Assessment Report, using the figures for 100-year time horizons
- emissions of CO₂, CH₄, N₂O, HFCs, PFCs and SF₆, as well as nitrogen trifluoride (NF₃)
 (3) with families of gases to include those new HFCs and PFCs listed in the IPCC's Fourth Assessment Report (2007)³ and a 1990 base year or base years previously agreed under the Kyoto Protocol as set out in Appendix I to this submission
- agreed LULUCF accounting rules for commitments taken under the Protocol
- the principle of supplementarity

Accordingly, the conditionalities that remain are now largely *political*, rather than technical. *But* many developments have taken place since these pledges and commitments were first announced that should allow at this time for the release of these political conditionalities:

- The United States has brought forward a quantified emission reduction target.
- Many advanced developing country Parties and major-emitting developing country Parties have announced nationally-appropriate mitigation actions, including some quantified economy-wide mitigation commitments and/or actions.
- All Parties to the UNFCCC have agreed to the establishment of a new market mechanism.

³ See IPCC Table 2.14 (Errata) http://www.ipcc.ch/publications_and_data/ar4/wg1/en/errataserrata-errata.html

- All Kyoto Protocol Parties have agreed to the establishment of a second commitment period under the Kyoto Protocol, to run from 2013.
- All Convention Parties have agreed to limit global average surface temperature increases to below 2 degrees above pre-industrial levels, and to consider enhancing the ambition of this goal to 1.5 degrees.
- The Fourth Assessment Report (2007) has indicated that emissions from developed country Parties in aggregate at 25-40 percent below 1990 levels by 2020 are consistent with a limitation of temperature increases to 2.0 to 2.4 degrees Celsius.
- All Convention Parties have acknowledged that the current pledges are insufficient to achieve a mitigation pathway that is consistent with a limitation of temperature increases to below 2 degrees or below 1.5 degrees.
- All Convention Parties have further agreed Parties should take urgent action to address
 this gap in mitigation ambition, to be consistent with the 2 degree limit and the range put
 forward by the IPCC's Fourth Assessment Report, and in view of consideration of a 1.5
 degree limit.
- All Convention Parties have agreed that an agreement applicable to all will be negotiated beginning in 2012 and be agreed by 2015.
- Accelerating climate change impacts are being experienced around the world, with particularly vulnerable developing country Parties being hardest hit.
- It has become increasingly clear that each Party to the Convention must do more, that the cost of achieving the necessary reductions is technically and economically feasible, and that acting with delay will increase costs.
- The cost of energy generated from renewable sources has fallen dramatically over the last five years and is competitive with the cost of energy from fossil fuels in many cases.

Given these developments, and the increasing urgency of the climate challenge, all Annex I Parties should now be able to *move to the top of their pledged emission reduction ranges*.

In addition, Annex I Parties should be willing to consider *ways to increase ambition still further*. The Annex I Party targets contained in FCCC/SBI/2011/Inf.1/Rev.1 and FCCC/TP/2011/1 are insufficient to achieve agreed global goals and therefore cannot stand until 2020. See AOSIS Submission "Workplan on enhancing mitigation ambition" dated 28 February 2012.

9. Questions for clarification regarding mitigation ambition conditionalities

Thus far, only one Party (Monaco) has presented a single unconditional target and only five Parties have presented their lower targets as unconditional (Australia, European Union, Liechtenstein, Norway and Switzerland). See FCCC/TP/2011/1, paras. 11-12. Other Annex I Parties still have not yet brought forward unconditional commitments to emission reductions or have expressed ranges of possible commitments that are based on various conditionalities. See FCCC/TP/2011/1, Table 1 and Appendix 2 to this submission.

AOSIS asks each Annex I Party with a conditional target to answer each of the following questions:

- 1. Of the initial pledge brought forward, what is now your *unconditional emission reduction commitment* by 2017 or 2020 relative to 1990 emission levels, in tonnes of CO₂ equivalent emissions?
- 2. Of the conditionalities associated with your pledge in FCCC/SBI/INF.1/Rev.1 and FCCC/KP/AWG/2010/INF.2/Rev.1:

- a. Which of these conditionalities has now been satisfied?(4)
- b. Which of these conditionalities have not been satisfied?
- 3. What is needed to satisfy each of your remaining conditionalities by the end of 2012?
- 4. Is your own domestic pledge consistent with a global emission reduction pathway of 2 degrees or 1.5 degrees? If not, how can it be increased to be consistent with such a pathway?

Answers to these questions should be provided for discussion at the workshop on increasing mitigation ambition by developed country Parties' and at the workshop on the clarification of pledges at the next sessional meeting. The goal of these workshops will be to assess the true scale of the mitigation gap and to identify ways for Annex I Parties to increase their mitigation targets and commitments in 2012 and over the 2013-2017 period.

Appendix I: Excerpt from Annual compliance and accounting report for Annex B Parties to the Kyoto Protocol, FCCC/KP/CMP/2009/15, p.6.

FCCC/KP/CMP/2009/15 Page 6

Table 2. Base year emissions and assigned amounts for the first commitment period under the Kyoto Protocol

	Base year defined under the Kyoto Protocol ^a		Base year emissions ^b (t CO ₂ eq)	Emission reduction/limitation target, % of base year level		Assigned amount (t CO ₂ eq)	
Party	CO₂, CH₄, N₂O	F-gases		Annex B	Article 4 ^c		
Australia	1990	1990	547 699 841	108	-	2 957 579 143	
Austria	1990	1990	79 049 657	92	87	343 866 009	
Belgium	1990	1995	145 728 763	92	92.5	673 995 528	
Bulgaria	1988	1995	132 618 658	92	-	610 045 827	
Canada	1990	1990	593 998 462	94	-	2 791 792 771	
Czech Republic	1990	1995	194 248 218	92	-	893 541 801	
Denmark	1990	1995	69 978 070	92	79	276 838 955	
Estonia	1990	1995	42 622 312	92	-	196 062 637	
European Community	1990	1990 or 1995	4 265 517 719	92	92	19 621 381 509	
Finland	1990	1995	71 003 509	92	100	355 017 545	
France	1990	1990	563 925 328	92	100	2 819 626 640	
Germany	1990	1995	1 232 429 543	92	79	4 868 096 694	
Greece	1990	1995	106 987 169	92	125	668 669 806	
Hungary	1985-87	1995	115 397 149	94	-	542 366 600	
Iceland	1990	1990	3 367 972	110	-	18 523 847	
Ireland	1990	1995	55 607 836	92	113	314 184 272	
Italy	1990	1990	516 850 887	92	93.5	2 416 277 898	
Japan	1990	1995	1 261 331 418	94	-	5 928 257 666	
Latvia	1990	1995	25 909 159	92	-	119 182 130	
Liechtenstein	1990	1990	229 483	92	-	1 055 623	
Lithuania	1990	1995	49 414 386	92	-	227 306 177	
Luxembourg	1990	1995	13 167 499	92	72	47 402 996	
Monaco	1990	1995	107 658	92	_	495 221	
Netherlands	1990	1995	213 034 498	92	94	1 001 262 141	
New Zealand	1990	1990	61 912 947	100	_	309 564 733	
Norway	1990	1990	49 619 168	101	-	250 576 797	
Poland	1988	1995	563 442 774	94	-	2 648 181 038	
Portugal	1990	1995	60 147 642	92	127	381 937 527	
Romania	1989	1989	278 225 022	92	_	1 279 835 099	
Russian Federation	1990	1995	3 323 419 064	100	_	16 617 095 319	
Slovakia	1990	1990	72 050 764	92	-	331 433 516	
Slovenia	1986	1995	20 354 042	92	-	93 628 593	
Spain	1990	1995	289 773 205	92	115	1 666 195 929	
Sweden	1990	1995	72 151 646	92	104	375 188 561	
Switzerland	1990	1990	52 790 957	92	-	242 838 402	
Ukraine	1990	1990	920 836 933	100	-	4 604 184 663	
United Kingdom	1990	1995	779 904 144	92	87.5	3 412 080 630	
Total ^d	-		12 575 114 106	-	-	60 284 929 112	

Abbreviation: F-gases = fluorinated gases.

^a Parties included in Annex I to the Convention may choose to use 1995 as the base year for total emissions of F-gases (hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride), in accordance with Article 3, paragraph 8, of the Kvoto Protocol.

b Refers to the total base year greenhouse gas emissions used for calculation of assigned amount pursuant to Article 3, paragraphs 7 and 8.

^c Fifteen member States of the European Community agreed to meet their targets jointly in accordance with Article 4, paragraph 1.

d The total includes the assigned amount of the European Community but does not include the assigned amounts of the individual member States in order to avoid double counting.

Appendix 2: calculations compiled by the secretariat, at the request of the co-facilitators of the AWG-KP spin-off group on numbers, to facilitate the translation of pledges to quantified emission limitation and reduction commitments

Version of 2 December 2011

Quantified emission limitation and reduction objectives expressed as percentage of base year and absolute emission levels[#]

The tables on the following page attempt to capture the state of technical work by the AWG-KP spin-off group on Chapter I (amendments/numbers) on the transformation of emission reduction targets to quantified economy-wide limitation or reduction commitments (the transformation of pledges to QELROs). They have been prepared by the secretariat at the request of the co-facilitators of the spin-off group on the basis of discussions of the group at the third part of the sixteenth session of the AWG-KP using the information contained in the updated version of the technical paper on issues relating to the transformation of pledges for emission reductions into quantified emission limitation and reduction objectives (FCCC/TP/2010/3).

The tables are intended to assist the spin-off group in further discussions on the technical issues of the transformation of pledges to QELROs. They have been prepared with full acknowledgment that the final inscription of QELROs in Annex B to the Kyoto Protocol is a Party-driven and political process.

The values contained in the tables are based on the economy-wide emission reduction targets to be implemented by Parties included in Annex I to the Convention contained in document FCCC/SBI/2011/INF.1/Rev.1 and in the annual submissions submitted in 2009 and 2010 by Parties included in Annex I in accordance with Article 7, paragraph 1, of the Kyoto Protocol.

The tables do not take into account the quantitative impacts of the rules to be agreed upon by Parties to the Kyoto Protocol in relation to land use, land-use change activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol and the mechanisms established under Articles 6, 12 and 17 of the Kyoto Protocol and any other mechanisms agreed to by Parties as well as the options for addressing the surplus and carry-over of Kyoto units for the second and subsequent commitment periods of the Kyoto Protocol.

Party	GHGs emissions			QELRO (percentage of base year or period)					
	excluding	QELRO (2008-		Commitment period (2013–2017)			Commitment period (2013–2020)		
	LULUCF in 2008, in percentage of reference year emissions	2012) (percentage of base year or period)	Pledges in percentage of reference year emissions	QELRO estimated from QELRO for the first commitment period	QELRO estimated from current (2007) level of emissions	QELRO estimated from current (2008) level of emissions	QELRO estimated from QELRO for the first commitment period	QELRO estimated from current (2007) level of emissions	QELRO estimated from current (2008) level of emissions
Australia	100	108	NA	103 - 93	98 - 85	99 - 87	101 - 88	98 - 83	98 - 84
(2000)	97	NA	-5% to -25%	100 - 90	95 - 83	96 - 84	99 - 86	95 - 81	96 - 82
Belarus	65	92	-5% to -10%	94 - 91	83 - 80	83 - 80	94 - 91	86 - 83	86 - 83
Croatia	98	95	6%	100	104	103	102	105	104
(7/CP12)	89	95	-5%	95	94	92	95	94	93
European Union (EU-27)	87	92	-20% to -30%	86 - 81	83 - 77	83 - 77	84 - 78	82 - 75	82 - 75
Iceland	143	110	-15% to -30%	98 - 90	103 - 94	109 - 100	94 - 84	98 - 87	102 - 91
Kazakhstan	76	100	-15%	93	81	81	90	82	82
Liechtenstein	115	92	-20% to -30%	86 - 81	90 - 84	94 - 89	84 - 78	87 - 80	90 - 83
Monaco	89	92	-30%	81	78	78	78	76	75
New Zealand	123	100	-10% to -20%	95 - 90	103 - 97	104 - 98	94 - 87	99 - 92	100 - 93
Norway	108	101	-30% to -40%	86 - 81	86 - 80	86 - 80	81 - 74	81 - 74	81 - 74
Switzerland	101	92	-20% to -30%	86 - 81	87 - 81	89 - 83	84 - 78	85 - 77	86 - 79
Ukraine	46	100	-20%	90	67	66	87	71	70

Average emissions in the commitment period associated to QELROs (in Mega							(in Mega ton CO ₂ eq	uivalent)	
		Average emissions		Comm	itment period (2013	-2017)	Commitment period (2013–2020)		
Party	GHGs emissions excluding LULUCF in 2008, in Mega ton CO ₂ equivalent	in the period (2008–2012) associated with the QELRO for the first commitment period	Emissions associated with the pledge (2020), in Mega ton CO ₂ equivalent	Average emissions in the commitment period estimated from QELRO for the first commitment period	Average emissions in the commitment period estimated from current (2007) level of emissions	Average emissions in the commitment period estimated from current (2008) level of emissions	Average emissions in the commitment period estimated from QELRO for the first commitment period	Average emissions in the commitment period estimated from current (2007) level of emissions	Average emissions in the commitment period estimated from current (2008) level of emissions
Australia	550.8	594.0	537.4 - 424.2	565.7 - 509.1	539.2 - 469.6	543.0 - 477.0	557.2 - 483.6	538.6 - 456.0	541.3 - 461.2
(2000)	550.8	NA	537.4 - 424.2	565.7 - 509.1	539.2 - 469.6	543.0 - 477.0	557.2 - 483.6	538.6 - 456.0	541.3 - 461.2
Belarus	90.6	128.0	132.2 - 125.3	130.1 - 126.7	115.0 - 110.7	114.9 - 110.8	130.8 - 126.2	120.1 - 115.0	120.1 - 115.2
Croatia	31.0	29.9	33.2	31.5	32.8	32.3	32.0	32.9	32.5
(7/CP12)	31.0	33.2	33.2	33.2	33.2	32.8	33.2	33.2	32.9
European Union (EU-27)	4 969.1	5 292.6	4 590.5 - 4 016.7	4 941.6 - 4 654.7	4 775.5 - 4 422.3	4 748.2 - 4 413.5	4 836.3 - 4 463.3	4 720.0 - 4 300.6	4 700.9 - 4 294.5
Iceland	4.9	3.8	2.9 - 2.4	3.3 - 3.1	3.5 - 3.2	3.7 - 3.4	3.2 - 2.9	3.3 - 3.0	3.5 - 3.1
Kazakhstan	245.9	321.7	273.4	297.6	260.3	261.9	290.3	264.2	265.4
Liechtenstein	0.3	0.2	0.2 - 0.2	0.2 - 0.2	0.2 - 0.2	0.2 - 0.2	0.2 - 0.2	0.2 - 0.2	0.2 - 0.2
Monaco	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
New Zealand	72.8	59.1	53.2 - 47.3	56.2 - 53.2	60.9 - 57.3	61.4 - 57.9	55.3 - 51.4	58.6 - 54.3	58.9 - 54.7
Norway	53.7	50.3	34.8 - 29.9	42.6 - 40.1	42.7 - 39.6	42.7 - 39.8	40.2 - 37.0	40.3 - 36.7	40.4 - 36.8
Switzerland	53.4	48.9	42.5 - 37.2	45.7 - 43.0	46.1 - 42.8	47.1 - 44.0	44.7 - 41.3	45.0 - 41.1	45.7 - 41.9
Ukraine	426.4	931.4	745.1	838.3	627.3	612.3	810.3	662.7	652.2
Total	6 499.0	7 463.3	6 445.6 - 5 734.9	6 954.4 - 6 599.1	6 503.5 - 6 066.1	6 467.8 - 6 053.3	6 801.8 - 6 339.9	6 486.1 - 5 966.8	6 461.2 - 5 957.8

A = not applicable, QELRO = Quantified emission limitation and reduction objectives

[#] In presenting their pledges for emission reduction Parties provided a number and conditions and assumptions which are summarized below.

Australia

Australia's emission reduction target range for 2020 is pledged on a 2000 base year. Australia has committed to reduce its GHG emissions by 25 per cent from 2000 levels by 2020 if the world agrees on an ambitious global deal capable of stabilizing levels of GHGs in the atmosphere at 450 ppm CO_2 eq or lower. Australia will unconditionally reduce its emissions by five per cent from 2000 levels by 2020, and to reduce emissions by up to 15 per cent by 2020, if there is a global agreement which falls short of securing atmospheric stabilization at 450 ppm CO_2 eq, and under which major developing economies commit to substantially restraining emissions and advanced economies take on commitments comparable to those of Australia. Australia's emissions reduction targets are based on net national emissions; that is, any imported units will be counted as contributing to meeting the national target, and any exported units will not be counted. The 2020 targets refer to Australia's net emissions from the sector/source categories included in Annex A of the Kyoto Protocol as well as from afforestation, reforestation and deforestation (AR&D). The same sectoral coverage applies to both the base year (the year 2000) and 2020 emissions.

Belarus

Belarus has stated that if the amendment adopted under decision 10/CMP.2 comes into effect before the end of the first commitment period, for the period after 2012 (Annex B to the Kyoto Protocol was amended to include Belarus with a quantified emission reduction commitment of 92 per cent. This amendment has not yet entered into force.), Belarus will consider the option of assuming the commitment to meet the target of 90–95 per cent of 1990 emission levels. If this amendment does not come into effect, Belarus will refrain from voluntary commitments for the post-Kyoto period that would establish the target lower than 100 per cent of 1990 emission levels.

Croatia

The Croatian medium-term target for the period 2013-2020 is 33.2 Mt CO_2 eq, which is a decrease by five per cent according to the base year established by decision 7/CP.12, or an increase by six per cent according to Croatia's 1990 level of 31.3 Mt CO_2 eq. Croatia's target has been established according to the Croatian obligation in respect of its implementation of the European Union (EU) energy-climate package, including emission trading scheme ETS, and fulfillment of the GHG emission limit in 2020 as compared to 2005 GHG levels in non-ETS sectors. Upon the accession of Croatia to the EU, the Croatian target will be replaced by a relevant arrangement in line with and as part of the EU mitigation effort.

The European Union and its Member States

The European Union agreed in 2008 on its "Climate and energy package", which includes a unilateral commitment to jointly reducing GHG emissions of the European Union and its 27 Member States (EU-27) by at least 20 per cent by 2020 relative to 1990 levels and by 30 per cent relative to 1990 levels provided that other developed countries commit themselves to comparable emission reductions and that economically more advanced developing countries contribute adequately according to their responsibilities and respective capabilities consistent with staying below 2°C.

Iceland

Iceland has pledged 30 per cent reduction of GHG emissions, in a joint effort with the European Union, as part of a global and comprehensive agreement for the period beyond 2012, provided that other developed countries commit themselves to comparable emissions reductions and that developing countries contribute adequately according to their responsibilities and respective capabilities. Previously, Iceland had pledged to reduce its net GHG emissions by 15 per cent from 1990 levels by 2020. This target is dependent upon the continued application of the decisions included in the Marrakesh Accords, in particular the continuation of land use, land-use change and forestry (LULUCF) and of decision 14/CP.7. Iceland previously adopted the long-term goal of reducing emissions by 50 to 75 per cent by 2050.

Kazakhstan

Kazakhstan has submitted a proposal to amend the Kyoto Protocol to include its name in annex B with a quantitative emission limitation or reduction commitment of 100 per cent for the first commitment period (FCCC/KP/CMP/2010/4). Kazakhstan informed the secretariat in a letter by the Prime Minister dated 9 November 2009, of its decision to reduce GHG emissions by 15 per cent by 2020 and by 25 per cent by 2050 compared to 1992 levels.

Liechtenstein

In the context of an ambitious global agreement, Liechtenstein intends to achieve a 20 per cent reduction in GHG emissions from 1990 levels by 2020. If other developed countries commit themselves to comparable emission reduction efforts and if economically more advanced developing countries take appropriate mitigation actions, Liechtenstein is prepared to consider a reduction target of up to 30 per cent within the framework of a comprehensive global agreement. The emission reduction goals mentioned above do not take into account activities from LULUCF. Liechtenstein will achieve the emission reduction targets through the implementation of domestic actions and the use of the Kyoto Protocol mechanisms such as the Clean Development Mechanism (CDM).

Monaco

The Government of Monaco decided to reduce its GHG emissions by 30 per cent from 1990 levels by 2020 and to achieve carbon neutrality by 2050 at the latest. these targets do not take into account activities from LULUCF. It is expected that Monaco will achieve these emission reduction targets through the implementation of domestic actions, and eventually, the use of carbon credits.

New Zealand

New Zealand is prepared to take on a responsibility target for GHG emission reductions of between 10 per cent and 20 per cent below 1990 levels by 2020, if there is a comprehensive global agreement. This means that: (a) the global agreement sets the world on a pathway to limiting temperature rise to no more than 2°C; (b) developed countries make comparable efforts to those of New Zealand; (c) advanced and major emitting developing countries take action fully commensurate with their respective capabilities; (d) there is an effective set of rules for LULUCF; and (e) there is full recourse to a broad and efficient international carbon market. It is expected that New Zealand will meet its target through a mixture of domestic emission reductions, the storage of carbon in forests and the purchase of emission reduction units from other countries.

Norway

In the context of an ambitious global agreement, Norway intends to cut global emissions equivalent to 100 per cent of its own GHG emissions, becoming a carbon neutral nation by 2030. Norway will undertake to reduce total GHG emissions by 30 per cent relative to 1990 levels by 2020. The aim is to reduce about two-thirds of emissions domestically in relation to the reference scenario, setting Norway on the pathway to becoming a low carbon society. Norway is prepared to reduce total GHG emissions by 40 per cent of its 1990 emissions by 2020, provided that major emitting Parties agree on adequate emission reductions in line with the 2°C goal.

Switzerland

On 26 August 2009, Switzerland's Federal Council adopted a draft legal text concerning the national climate policy after 2012. It has been passed on to Parliament for consideration and the final adoption by Parliament is expected in 2011. The proposed legal text includes an objective to reduce GHG emissions by at least 20 per cent by 2020 compared to 1990 levels. In the context of a binding international agreement for the period 2013–2020, Switzerland would consider a higher reduction target of 30 per cent by 2020 compared to 1990 levels, under the condition that other developed countries commit themselves to comparable emissions reductions and that economically more advanced developing countries contribute adequately according to their responsibilities and respective capabilities.

Ukraine

Ukraine is ready to commit to reducing GHG emissions by 20 per cent by 2020 and by 50 per cent by 2050. Imposing stricter obligations on Ukraine will not only restrict economic growth in a significant way, but will also prevent social and economic recovery of that country (FCCC/KP/AWG/2009/MISC.15, page 5).

Appendix 3: Common Accounting Rules (from AOSIS submission to co-facilitators at Durban)

- 1. Decides that each Party included in Annex I shall maintain in place, throughout each commitment period, a national system for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol. Guidelines for such national systems, shall be those set out in **decision 20/CP.7**, which shall incorporate the methodologies specified in paragraph 2 below.
- 2. Decides that methodologies for estimating anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol for the greenhouse gases and sectors/source categories [listed in Annex X to the legally binding instrument] shall be consistent with the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and the revised UNFCCC Annex I reporting guidelines (part 1). Where such methodologies are not used, appropriate adjustments shall be applied according to methodologies agreed upon by the COP consistent with **decisions 21/CP.7 and 20/CP.9 (technical guidance on methodologies for adjustments).** Based on the work of, inter alia, the IPCC and advice provided by the SBSTA, the COP shall regularly review and, as appropriate, revise such methodologies and adjustments, taking fully into account any relevant decisions by the COP. Any revision to methodologies or adjustments shall be used only for the purposes of ascertaining compliance with commitments in respect of any commitment period adopted subsequent to that revision.
- 3. Decides that for each Party included in Annex I, the global warming potentials used to calculate the carbon dioxide equivalence of anthropogenic emissions by sources and removals by sinks of greenhouse gases listed in Annex A shall be those listed in the column entitled "Global Warming Potential for Given Time Horizon" in table 2.14 of the Errata to the contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, based on the effects of greenhouse gases over a 100-year time horizon. Based on the work of, inter alia, the IPCC and advice provided by the SBSTA, the COP shall regularly review and, as appropriate, revise the global warming potential of each such greenhouse gas, taking fully into account any relevant decisions by the COP. Any revision to a global warming potential shall apply only to commitments in respect of any commitment period adopted subsequent to that revision.
- 4. Decides that each Party included in Annex I shall incorporate in its annual inventory of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol, submitted in accordance with the relevant decisions of the COP, the necessary supplementary information for the purposes of ensuring compliance with quantified economy-wide emission reduction targets, consistent with decision 22/CP.7 (guidance for the preparation of supplementary information) and 22/CP.8 (Issues relating to review).
- 5. Decides that each Party included in Annex I shall incorporate in its national communication, submitted under Article 12 of the Convention, the supplementary information necessary to demonstrate compliance with its quantified economy wide emission reduction targets, consistent with decision 22/CP.7 (guidance for the preparation of supplementary information) and 22/CP.8 (Issues relating to review).
- 6. Decides that each Party included in Annex I shall submit the supplementary information necessary to ensure compliance with its quantified economy-wide emission reduction target annually beginning with its annual inventory due in 2013.

- 7. Decides that the COP shall apply modalities for the accounting of assigned amounts according to decisions 19/CP.7, 20/CP.7, 22/CP.7, 24/CP.7 and 17/CP.10 and related provisions.
- 8. Decides that the annual inventories, national communications and biennial reports submitted by each Party included in Annex I shall be reviewed by expert review teams pursuant to the relevant decisions of the COP and in accordance with the review guidelines adopted for this purpose by the COP in decision 23/CP.7 (Guidelines for review) and further biennial review guidelines to be adopted by the COP. The supplementary information submitted by Parties necessary to ensure compliance with quantified economy-wide emission reduction targets by each Party included in Annex I shall also be reviewed in accordance with review guidelines adopted by the COP in decision 23/CP.7 and as part of the annual compilation and accounting of emissions inventories and assigned amounts.
- 9. Decides that expert review teams shall be coordinated by the secretariat and shall be composed of experts selected from those nominated by Parties to the Convention and, as appropriate, by intergovernmental organizations, and shall apply the provisions of decisions 21/CP.7, 23/CP.8, 23/CP.8, 21/CP.9, 18/CP.10 and further review guidelines.
- 10. Decides that the review process to be undertaken in accordance with **decision 23/CP.7** shall provide a thorough and comprehensive technical assessment of all aspects of implementation by a Party. The expert review teams shall prepare a report to the COP, assessing the implementation of the commitments of the Party and identifying any potential problems in, and factors influencing, the fulfilment of commitments. Such reports shall be circulated by the secretariat to all Parties to the Convention. The secretariat shall list those questions of implementation indicated in such reports for further consideration by the COP.
- 11. Decides that the COP shall, with the assistance of the SBI and, as appropriate, the SBSTA, consider: (a) the information from annual national greenhouse gas inventories, national communications and biennial reports submitted by Parties and the reports of the expert reviews conducted; and (b) those questions of implementation listed by the secretariat as well as any questions of implementation raised by Parties, and pursuant to its consideration of this information, the COP shall take decisions on any matter required for implementation.
- 12. Decides that the Parties shall apply those appropriate and effective procedures and mechanisms to determine and address cases of non-compliance with the quantified emission reduction targets for Parties included in Annex I set out in **decision 24/CP.7** (**Procedures and mechanisms on compliance**).