24 April 2012

English only

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 economy-wide emission reduction targets contained in document FCCC/SB/2011/INF.1/Rev.1

Submissions from Parties

1. The Conference of the Parties (COP), at its seventeenth session, decided that the process of clarifying the developed country Parties' quantified economy-wide emission reduction targets contained in document FCCC/SB/2011/INF.1/Rev.1 shall include submission of relevant information by developed country Parties, using a common template, to the secretariat, by 5 March 2012, to be compiled into a miscellaneous document.[1]

2. The COP requested the secretariat to compile additional information relating to the quantified economy-wide emission reduction targets submitted by developed country Parties in a miscellaneous document.[2]

3. The secretariat has received nine such submissions from Parties.[3] 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.

[1] Decision 2/CP.17, paragraph 5.
[2] Decision 2/CP.17, paragraph 6.
[3] Also available at <http://unfccc.int/4578.php>.
* 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.

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Paper no. 1: Denmark and the European Commission on behalf of the European Union and its member States

SUBMISSION BY DENMARK AND THE EUROPEAN COMMISSION ON BEHALF OF THE EUROPEAN UNION AND ITS MEMBER STATES

Copenhagen, 20 March 2012

Subject: **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**

Introduction and General Comments

1. The EU and its Member States provide this information in response to paragraph 5 of decision X/CP.17 and as part of the AWG LCA process of clarifying developed country Parties' quantified economy wide emission reduction targets contained in document FCCC/SB/2011/INF.1/Rev.1.

2. The information in this submission is provided for the above process, including for use by the UNFCCC Secretariat in preparing the miscellaneous document compiling additional information relating to the quantified economy wide emission reduction target submitted by developed country Parties. The information does not prejudge the information to be submitted independently by the European Union and its Member States on its quantified emission limitation or reduction objectives (QELROs) for the second commitment period under the Kyoto Protocol as requested by paragraph 5 of decision 1/CMP.7.

3. The EU holds firmly to the objective of keeping the global mean temperature increase below 2°C. A coherent approach to mitigation and ambition within the current processes and the ADP will be needed to enable meeting this objective. Implementing the pledges presented by Parties constitutes the cornerstone in achieving the necessary emission reductions in the period up to 2020, which will have a significant impact on the feasibility of staying below the 2°C and on the cost of action beyond 2020.

4. In this context, the EU welcomes the decision taken at COP17 in Durban to continue the process of clarifying the pledges made by developed and developing countries through more structured workshops at the May 2012 intersessional. The additional information provided by Parties and subsequent discussions will form an important part of the work of the UNFCCC this year. The EU also continues to urge those Parties who have not yet submitted information pursuant to decision 1/CP.16 to do so, taking into account flexibilities for SIDS and LDCs.

5. The EU welcomes the opportunity to provide relevant information on its pledged quantified economy wide emission reduction targets, in accordance with paragraph 5 (a) of decision -XX/CP.17 on the outcome of the work of the AWG-LCA, in particular 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 change and forestry, and carbon credits from market-based mechanisms, and associated assumptions and conditions related to the ambition of the pledges as a key to facilitate taking forward the understanding of the assumptions and conditions underlying pledges. It is important to provide this information in a structured manner, to ensure its completeness and comparability. The EU therefore welcomes the proposal for a template for the submission of this information. Where possible and useful, the information included in this submission has been structured accordingly.

6. The EU notes that the Durban decision in addition to the process of clarifying the developed country Parties' pledges also encourages developing country Parties to provide further information on their pledged nationally appropriate mitigation actions, including underlying assumptions and methodologies, sectors and gases covered, global warming potential values used, support needs for implementation of nationally appropriate mitigation actions and estimated mitigation outcomes. Enhanced transparency will allow for international visibility and recognition of developing country action, and is the indispensable basis for learning from good practice.

7. The further information provided by Parties on their pledges and the miscellaneous document to be prepared by the Secretariat compiling this information should be used to support structuring the workshops during the May intersessional in Bonn. To support Parties in their preparation and structuring of presentations for the workshops, enable the framing of discussions and ensure that these are focussed, the EU calls on the Secretariat to circulate a list of questions well in advance of the May intersessional. These questions should address the areas highlighted in paragraph 5 of decision –XX/CP.17 and in paragraph 34 of decision –XX/CP.17 respectively.

8. In addition to the updated document FCCC/TP/2011/1, the new technical paper to be prepared by Secretariat under paragraph 10 of the Durban decision on the outcome of the work of the AWG-LCA, (Part II.A.), should be an input to the workshops in May, drawing on the information submitted by Parties and highlighting the impact of different approaches taken in order to support further discussions.

9. The EU looks forward to participating in the May workshops. It is important to underline that the EU does not see these workshops as one-off events, but as a basis to build a continuous process, beyond 2012, to further understand and address the implementation of 2020 pledges and complementary action. This process is also essential for the credibility of the entire UNFCCC as it is one way of demonstrating to the wider public that the UNFCCC actually delivers tangible results in all countries around the world, and is progressing in the global fight against climate change. The Secretariat should therefore be invited to disseminate the results of this process widely in an easily understandable manner.

10. The EU also notes the relevance of this work to the work on enhancing ambition under the Durban Platform for Enhanced Action.

Clarification of quantified economy-wide emission reduction target contained in document FCCC/SB/2011/INF.1/Rev.1

The EU and its Member States are committed to an independent quantified economy-wide emissions reduction target of 20% by 2020, compared to 1990 levels. In December 2009, the European Council reiterated the conditional offer of the EU to move to a 30% reduction by 2020 compared to 1990 levels as part of a global and comprehensive agreement for the period beyond 2012, provided that other developed countries commit themselves to comparable emission reductions and that developing countries contribute adequately according to their responsibilities and respective capabilities. This submission aims to clarify only the unconditional 20% target, which however does not imply any information on the willingness of the EU to move to a 30% target.

The EU's commitment to meeting the 20% target is underlined by the fact that it is already enshrined in EU legislation, and is being implemented by the EU and its Member States. At the heart of this legislation sits the EU "Climate and Energy package". This includes the EU Greenhouse Gas Emissions Trading System (ETS)[1] and the Effort Sharing Decision (ESD)[2], as well as binding targets for increasing the share of renewable energy sources in the energy mix, strict emission performance standards for new passenger cars and light commercial vehicles, and obligations on fuel suppliers to produce 'cleaner' fuels and rules for introduction of vehicles and machinery that pollute less. In addition, the EU has put in place legislation to address fluorinated greenhouse gases, to regulate the use of carbon capture and storage, to improve energy efficiency (including the energy performance of buildings, eco-design and energy labelling requirements and energy taxation), all bringing key contributions to reduce GHG emissions in the EU. Further legislation is under preparation[3].

[1] Consolidated version of Directive2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community

[2] Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020

[3] Comprehensive information on EU climate related legislation may be found i.a. from the Fifth National Communication of the EU under UNFCCC: http://ec.europa.eu/clima/policies/g-gas/documentation_en.htm#national_communications.

Joint fulfilment of EU target

The target for the European Union and its Member States is based on the understanding that it will be fulfilled jointly with the European Union and its Member States[4]. In addition, it should be noted that Croatia is expected to join the European Union on 1 July 2013 and that Iceland is a candidate country for EU Membership which already applies part of EU legislation in the area of climate change under the European Economic Area. Iceland, Croatia and the EU and its Member States have indicated that they intend to fulfil their commitments under the second commitment period of the Kyoto Protocol jointly.

Assumptions and Conditions Related to Target

	Emission reduction in 2020	*Base year*
EU and its Member States (Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, United Kingdom) acting in common	20%/30%*	1990[5]

*As part of a global and comprehensive agreement for the period beyond 2012, the EU reiterates its conditional offer to move to a 30% reduction by 2020 compared to 1990 levels, provided that other developed countries commit themselves to comparable emission reductions and that developing countries contribute adequately according to their responsibilities and respective capabilities.

Period for Reaching Target	By 2020 Legally binding target trajectories for the period 2013-2020 are enshrined in both the EU-ETS and the ESD. These legally binding trajectories not only result in a 20% GHG reduction in 2020 compared to 1990 but also define the EU's target pathway to reduce EU GHG emissions from 2013 to 2020 (see information on Coverage of sectors below). For the sectors covered under the ETS it also defines a reduction trajectory after 2020.

The inventory methodology used by the EU is based on Council Decision No 280/2004/EC concerning a mechanism for monitoring EU greenhouse gas emissions and for implementing the Kyoto Protocol, which is currently under revision taking into account the decisions taken in Durban. The European Union GHG inventory is based on the annual inventories of the Member States.

[4] The information provided here does not prejudge the terms of joint fulfilment by the EU and its Member States in a second commitment period under Article 3 of the Kyoto Protocol, including notification of the obligations and respective base years of the EU and its Member States.

[5] Whereas the base year of the EU and its Member States is 1990 for the purposes of the target as reflected in FCCC/SB/2011/INF.1/Rev.1, the information on QELROs by the EU and its Member States will reflect the flexibilities to set individual base years provided under the Kyoto Protocol. With respect to the first commitment period under the Kyoto Protocol, for EU-15 the base year for carbon dioxide, methane and nitrous oxide is 1990; for the fluorinated gases 12 Member States have selected 1995 as the base year, whereas Austria, France and Italy have chosen 1990. The base year for carbon dioxide, methane and nitrous oxide for Bulgaria is 1988, for Hungary is the average of 1985-1987, for Slovenia 1986, for Poland 1988, for Romania 1989; for the fluorinated gases Slovakia has chosen 1990 as the base year and Romania 1989 all other central and eastern European Member States have selected 1995.

Inventory Methodology Used	The EU inventory is compiled in accordance with the recommendations for inventories set out in the UNFCCC guidelines for the preparation of national communications by parties included in Annex 1 to the Convention, Part 1: UNFCCC reporting guidelines on annual inventories'(FCCC/SBSTA/2004/8), to the extent possible. In addition, the Revised IPCC 1996 guidelines for national greenhouse gas inventories are applied as well as the IPCC Good practice guidance and uncertainty management in national greenhouse gas inventories, where appropriate and feasible. Within the EU, for the sectors covered by the ETS, specific Monitoring, Reporting and Verification rules exist at the operator level, defined by a number of Commission Decisions[6].

Coverage of Greenhouse Gases

Gases regulated by the Climate and Energy package
CO_2
CH_4
N_2O
HFCs
PFCs
SF_6

Additional sources of emissions (of indirect greenhouse gases) reported in EU inventories to UNFCCC
carbon monoxide (CO)
sulphur dioxide (SO_2)
nitrogen oxides (NO_X)
volatile organic compounds (VOCs)

Global Warming Potential Values (GWP)

The Global Warming Potentials used to aggregate EU GHG emissions up to 2020 under existing EU legislation are those based on the 2nd Assessment Report of the Intergovernmental Panel of Climate Change (IPCC AR2). The EU welcomes decision xx/CP.17[7], taken in Durban, which reflects recent scientific developments (IPCC AR4). The implications of this decision for EU legislation are currently under review.

[6] For more information see http://ec.europa.eu/clima/policies/ets/monitoring/documentation_en.htm

[7] Revision of the UNFCCC reporting guidelines on annual inventories for Parties included in Annex I to the Convention.

Coverage of Sectors

Sectors included in the Climate and Energy package target[8] (see details in next table)	*Additional sectors reported in EU inventories of emissions not covered under EU pledge*
Sectors[9]: - Energy (incl. fuel combustion activities, fugitive emissions from fuels, and CO_2 transport and storage), - Industrial Processes and Product use, - Agriculture, - Waste, - Aviation emissions	Land use, land-use change and forestry

Sectors regulated by the Climate and Energy package		**Targets and Trajectories for the period 2013-2020**
ETS[10]	Emissions from Stationary Installations, such as emissions from energy, industrial processes and product use	Starts in 2013 based on yearly reduction equal to 1.74% of the average allocation in the period 2008-2012, extrapolated starting in 2010 and leading to a -21% GHG reduction compared to 2005 in 2020.
	CO_2 emissions from all flights falling within the aviation activities listed in Annex I[11] which depart from an aerodrome situated in the territory of a Member State and those which arrive[12] in such an aerodrome from a third country, excluding small commercial emitters[13].	Target of - 5% compared to the average 2004-2006 emissions. Target stays constant over the period 2013-2020
ESD	Emissions from sectors not included in the EU ETS such as transport, buildings, services, agriculture and waste	Member State specific targets start in 2013 based on average emissions 2008 to 2010 and leads to a collective reduction of around -10% compared to 2005 in 2020

Emissions in 1990 (in ktCO2e)

Emissions in 1990 within the scope of the Climate and Energy package (i.e. excluding emission/removals from LULUCF, including civil aviation) (excluding Croatia and other possible new EU Member States)	5657 Mt CO_2e

[8] As stated in recital 2 of the ESD and recital 3 of the revision of the EU ETS, if no international agreement (through IMO or UNFCCC) including international maritime emissions in reduction targets by 2011, the Commission will make a proposal to include these emissions in the Community reduction commitment. A proposal is included in the Commission's work programme for 2012.

[9] According to categories of the 2006 IPCC guidelines for national greenhouse gas inventories and revision of the UNFCCC reporting guidelines for Annex I Parties to the Convention

[10] Cf. Categories of activities to which the ETS Directive applies – Annex I of Consolidated version of Directive2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community

[11] The EU ETS directive does not cover flight activities such as search & rescue, state flights transporting third countries' Heads of State, Head of Government and Government ministers, police flights amongst others.

[12] The EU ETS foresees the flexibility to potentially exempt incoming flights to the EU. When estimating the total allowed emissions under the 20% pledge emissions from civil aviation activities are based on figures reported to UNFCCC.

[13] See *de minimis* exemption under subparagraph (j) of Annex I to the EU ETS Directive: a small emitter is a non-commercial air transport operator (i) whose flights in aggregate emit less than 10 000 tCO2 per annum; or (ii) which operates fewer than 243 flights per period for 3 consecutive 4-month periods).

Use of carbon credits from international market-based mechanisms

The Climate and Energy Package allows Certified Emission Reductions (CERs) and Emission Reduction Units (ERUs) to be used for compliance purposes, subject to a number of restrictions in terms of origin and type of project and up to an established limit. In addition, the legislation foresees the possible recognition of units from new market mechanisms. Under the EU ETS the limit does not exceed 50% of the required reduction below 2005 levels. In the sectors not covered by the ETS, annual use shall not exceed to 3 % of each Member States' non-ETS greenhouse gas emissions in 2005. A limited number of Member States[14] may use an additional 1%, from projects in LDCs or SIDS subject to conditions. The exact number of units that can be used during the period 2013-2020 can only be determined following the availability of final data concerning the use of these units during the period 2008-2012 and relevant greenhouse gas emissions data.

Carry-over

Carry-over of Kyoto units is not regulated under EU legislation. EU legislation does not allow for the use of surplus assigned amount units from the first commitment period under the Kyoto Protocol to meet the targets set in EU legislation.

Banking of allowances under the EU ETS

The EU ETS allows for the banking of surplus EU emissions allowances allocated under the EU ETS from the period 2008-2012 into subsequent periods. The total allowed emissions in the ETS over the period 2013-2020 are therefore determined by the sum of the total amount allocated within that period (whether allocated through auctioning or for free), the banking of allowances by companies in the ETS from the previous period, the banking of allowances by companies into the subsequent period as well as the additional emissions allowed through the limited access to international credits described in the previous paragraph. The number of EU ETS allowances that will be banked into the period 2013-2020 can only be determined following the finalisation of the compliance cycle for the year 2012. EU legislation does not allow the use of surplus assigned amount units from the first commitment period under the Kyoto Protocol to meet the targets set in EU legislation.

Estimated Emissions in 2020 (in kt CO_2e)

20% below 1990 levels by 2020, or 4523 Mt CO_2e (emissions within the scope of the Climate and Energy package, excluding emissions/removals from LULUCF, including aviation)(excluding Croatia and other possible new EU Member States)

Role of Land Use, Land-Use Change and Forestry

The EU pledge does not include emissions/removals from Land Use, Land-Use Change and Forestry to deliver its firm independent commitment to reduce greenhouse gas emissions by at least 20 % compared to 1990 by 2020. The EU LULUCF sector is however estimated to be a net sink over that period.

EU inventories do however include information on emissions from Land Use, Land Use Change and Forestry in accordance with relevant reporting commitments under the UNFCCC and the KP.

To prepare a robust basis for addressing emissions/removals taking place in the LULUCF sectors in the future and building on decisions xx/CP.17, a proposal will be discussed soon to account for these emissions in the EU, and for Member States to prepare LULUCF Action Plans that will provide information on actions undertaken to reduce emissions, increase removals and protect carbon stocks in the sector.

Assumptions and Conditions Related to Ambition of the Pledge

The EU's 20% target is unconditional and implemented through binding legislation.

[14] Belgium, Denmark, Ireland, Spain, Italy, Cyprus, Luxembourg, Austria, Portugal, Slovenia, Finland, Sweden

For the purpose of supporting the implementation of its legislative framework, the EU develops and regularly updates its projections of GHG emissions.[15] These projections are based on consistent assumptions across all sectors of the EU economy and taking into account actual trends.[16] Member States also individually report on their policies and their expected outcomes in terms of emission reductions. The EU and its Member States are closely monitoring progress to EU climate and energy goals also as Europe 2020, the EU growth strategy, integrates these objectives at the highest level with a view to foster sustainable growth in the EU.

For a detailed description of the demographic, macro-economic, technological development assumptions, policies assumed and emissions projected see:

- Report from the Commission, Progress towards achieving the Kyoto Objectives, 2011[17]
- EU energy trends to 2030 - Update 2009[18]
- Greenhouse gas emission trends and projections in Europe 2011 - Tracking progress towards Kyoto and 2020 targets[19]

Assumed change in emission per capita, including change in population of the period

With the full implementation of EU targets under the EU ETS and ESD, it is projected that EU GHG emissions (excl. emissions/removals from LULUCF, incl. aviation as defined in EU ETS) would decrease to around 4526 $MtCO_2e$. Assuming an increase in EU population to around 514 million inhabitants by 2020, in line with projections in EU macro-economic policies, this would result in emissions of 8.8 tCO_2e emissions per capita. This is compared to more than 12 tCO_2e emissions per capita in 1990, for an EU population of 470 million inhabitants in 1990 and is equivalent to a reduction of 27 % on a per capita basis between 1990 and 2020.

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

The EU has successfully decoupled its emissions from its economic growth. Between 1990 and 2009, EU-27 GDP grew by 38% while emissions (including aviation, excl. removals from LULUCF) decreased by 16.1% over the same period. The economy-wide trend to decoupling of GHG emissions and GDP growth is also confirmed in the development of the manufacturing sector observed since 1990: the Industry gross value added increased by 24.4% from 1990 to 2008 whilst EU industry decoupled its growth from emissions (e.g. EU manufacturing, industry and construction sector cut its emissions by 14% emissions from 1995 to 2007, before the economic crisis)[20].

For the period 2010-2020, the EU assumes that general macro-economic conditions and trends will lead to further GDP growth (in real terms), estimated at an average rate below 2% per year. EU GDP in 2020 would stand at €14164bn in constant 2005 prices (up from €8143bn in 1990). The full implementation of the EU legislation will enable further improvements of EU GHG intensity on top of those already brought by existing policies. Eventually, it is estimated the EU economy will develop with EU improving its GHG intensity to 0.3kgCO_2-eq per €GDP (2005 prices) in 2020 (i.e. less than half the 1990 levels of: 0.7kgCO_2-eq per € GDP). This would be equivalent to an efficiency improvement of almost 60%.

Estimated emission reductions from BAU or another baseline in kt CO_2e

With the full implementation of EU mitigation efforts to meet its obligations under the 1st commitment period of the Kyoto Protocol, it is estimated in projections elaborated for the 5th National Communication of the EU [21] that EU GHG emissions (excl. LULUCF and aviation) would increase by at least 3% above 1990 levels. BAU trends in the aviation sector would further increase EU BAU emissions. By contrast, emission reductions delivered by the EU will reduce

[15] http://ec.europa.eu/clima/policies/g-gas/docs/sec_2009_1652_1_en.pdf
[16] For instance, the assumptions taken in 2007 to project EU emissions have been updated in 2009 to take into account the effect of the recession on EU macro-economic indicators and on energy demand.
[17] See COM(2011) 624 final, http://ec.europa.eu/clima/policies/g-gas/docs/com_2011_624_en.pdf
[18] http://ec.europa.eu/energy/observatory/trends_2030/doc/trends_to_2030_update_2009.pdf
[19] See: EEA Report No 4/2011, http://www.eea.europa.eu/publications/ghg-trends-and-projections-2011
[20] See European Competitiveness Report 2011
[21] SEC(2009) 1652 final, Accompanying staff working document to the 5th National Communication

GHG emissions to -20% below 1990 levels (including reducing emission in the aviation sector and not accounting for likely removals in the LULUCF sector to deliver this target.

Description of any mitigation policies, legislation and institutional arrangements

Policies and instruments in force in the EU:

- *Core elements:* the EU ETS directive[22] and the Effort Sharing Decision[23] combined define the EU GHG targets up to 2020. A 20% renewables target by 2020 (for total energy, not only electricity) is defined at Member States level[24]. This legal framework is fully implemented.

Furthermore a large number of policies already exist that have directly the aim of reducing GHG emissions or indirectly contribute to this effect. These include:

- *Energy:* Promotion of electricity from RES-E (2001), CCS Directive, NER300 laying down criteria and measures for the financing of commercial demonstration projects for CCS and innovative renewable energy technologies under the revised EU ETS, Directive on promotion of cogeneration, Intelligent Energy for Europe: programme for renewable energy, Internal Energy market regulations
- *Energy demand:* Directive on the energy performance of buildings, Directive on eco-design requirements for energy related products and implementing measures, Directive on labelling of the consumption of energy and other resources by energy-related products and implementing measures, Regulation on the labelling of tyres with respect to fuel efficiency and other essential parameters, Regulation on energy efficiency labelling programme for office equipment (Energy Star), Directive on energy end use efficiency and energy services, Action plan on Energy Efficiency
- *Transport:* "CO_2 and cars" Strategy, Fuel Quality Directive, Directive on mobile air conditioning systems: HFCs
- *Other sources:* waste, non-CO_2 gases: Regulation on fluorinated gases (including Directive on mobile air conditioning systems), Industrial Emissions Directive, Landfill Waste Directive, Waste Framework Directive, Nitrates Directive, etc.

A more comprehensive overview of EU legislation and policies is provided in the European Commission's report on Progress towards achieving the Kyoto Objectives[25]):

The EU continues to develop new policy instruments that will affect the EU's greenhouse gas emissions.

Assumptions on actions by other Parties domestically and at international level

See above

[22] Consolidated version of Directive2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community

[23] Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020

[24]Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC

[25] Cf. Summary of implemented and planned policies and measures in SEC(2011) 1151 final

Paper no. 2: Japan

Submission by Japan

Clarification of Quantified Economy-Wide Emission Reduction Targets

Japan communicated a quantified economy-wide emissions target for 2020 on 26th of January 2010. Following the Great East Japan Earthquake and the accident of nuclear power plants in Fukushima, Japan is now developing the Strategy for Energy and Environment which includes new energy policies from scratch and policies to tackle global warming after 2012 under the Energy and Environment Council established after the Earthquake.

Based on "Basic Principles toward Options regarding the Strategy for Energy and Environment" in December 2011, the Energy and Environment Council will propose options of climate change countermeasures including emission reduction target for 2020 this spring, for public consideration. After the nation-wide discussion, Japan plans to establish the Strategy for Energy and Environment this summer.

Japan will submit relevant information of its quantified economy-wide emission reduction target when Japan concludes its consideration.

Paper no. 3: Kazakhstan

The Ministry of Environment Protection of the Republic of Kazakhstan by this letter is pleased to inform you that the active measures are being undertaken by country to strive for adaptation to climate change and transition to low carbon development. The Government of the Republic of Kazakhstan accepted voluntary commitments to reduce greenhouse gas emissions by 15% in 2020 and by 25% in 2050 as compared to the level of 1992.

To implement the target, the following activities are being undertaken which demonstrate the country's intention to lead to greenhouse gas emissions reduction: establishment of the national cap & trade system, incentives on introduction of innovative technologies, development of the renewable energy recourses, energy efficient and energy saving programs and projects, propsoing Partnership program on Astana Initiative "Green Bridge".

At present the Government of the Republic of Kazakhstan is considering the issue for increasing the level of ambition to reduce greenhouse gases emissions and changing the base year from 1992 to 1990.

Common Template

Party	***Kazakhstan***
Date of Submission	***06/04/2012***

Assumptions and Conditions Related to Target

Base Year	■1990 □ other (specify):
% Reduction from Base Year	**15** %
% Reduction from 1990 (if base year other than 1990)	_____ %
Period for Reaching Target	■ by 2020 □ by Other (specify):
Inventory Methodology Used	□ IPCC 2006 Guidelines □ Other (specify):

Coverage of Greenhouse Gases

■CO2	■ 1990 □ other (specify):
■CH4	■ 1990 □ other (specify):
■N2O	■ 1990 □ other (specify):
□HFCs	□ 1990 □ other (specify):
□PFCs	□ 1990 □ other (specify):
□SF_6	□ 1990 □ other (specify):
□ NF3	□ 1990 □ other (specify):
□ Other (specify):	□ 1990 □ other (specify):

Global Warming Potential Values (GWP)

□ As Contained in Decision xx/CP.17[1]	■ other (specify):100-year GWPs from the IPCC Second Assessment Report

Coverage of Sectors

■Energy	■ Land use, land-use change and forestry
■ Industrial Processes and Product use	■Waste
■Agriculture	□ Other (specify):

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 **376 478,54**	Emissions excluding LULUCF in base year	
B **-6 880,63**	Emissions/removals from LULUCF included in base year[2]	

C **376 478,54**	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	

[1] Revision of the UNFCCC reporting guidelines on annual inventories for Parties included in Annex I to the Convention
[2] Include emissions as positive values and removals as negative values
[3] Include as positive values

	credits from market-based mechanisms[3]	
G	Anticipated carry-over of carbon credits[4]	

Expected Emission Reductions in kt CO2 equivalent

Relative to Base Year :
should be estimated as = - [C - (D + E - F - G)]
Relative to 1990 (if different to base year) :

Role of Land Use, Land-Use Change and Forestry

□ Comprehensive land-based
□ Afforestation/Reforestation
□ Deforestation
□ Forest management
□ Cropland management
□ Grazing land management
□ Wetland drainage and rewetting
□ Revegetation
□ Other (specify):

Carbon Credits from Market-Based Mechanisms

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

Assumptions and Conditions Related to Ambition of the Pledge

Assumed change in emissions per capita, including change in population over the period
Assumed change in emissions per gross domestic product (GDP), including change in GDP over the period
Estimated emission reductions from BAU or another baseline in kt CO_2eq
Description of any mitigation policies, legislation and institutional arrangements
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
Assumptions on actions by other Parties domestically and at international level

Paper no. 4: Monaco

Submission of the Principality of Monaco

Clarification of Quantified Economy-Wide Emission Reduction Targets

March 5, 2012

The Principality of Monaco welcomes the decision of the Conference of Parties, at its seventeenth session, to continue the process of clarifying the developed country Parties' quantified economy-wide emission reduction targets (paragraph 5 of decision -/CP17, on the outcome of the work of the AWG-LCA, Part II.A) contained in document FCCC/SB/2011/INF.1/Rev.1.

In this regard, developed countries are invited to submit to the secretariat by 5 March 2012 relevant information following the elements listed in paragraph 5 of decision -/CP17.

The Principality of Monaco committed itself to reduce its green house gas (GHG) emissions by 30% by 2020 compared to the 1990 level. In addition, Monaco aims at being carbon neutral by 2050 at the latest.

The following information is relevant for Monaco as part of the process of clarifying the developed country Parties' quantified economy-wide emission reduction targets.

Base year	1990
% Reduction from the Base Year	30
Period for Reaching Target	By 2020

Inventory Methodology

Inventory Methodology and Global Warning Potential Values Used	IPCC Guidelines Base year for CO_2, CH_4 and N_2O is 1990 Base year for the F-gases (HFCs, PFCs, and SF_6) is 1995
Coverage sectors	The inventory submitted on an annually basis by Monaco covers all IPCC sectors. But, as the whole area in Monaco is urbanized, there is no agricultural activity. In addition, the only green spaces in Monaco are composed of parks and gardens. There is no forest. Removals from trees in parks and gardens are extremely low. So the sectors responsible of emissions are energy, industry and waste treatment.

Role of LULUCF and Mechanisms

LULUCF	Not applicable as there is no forest in Monaco.
Carbon credits from Market-Based Mechanisms	In addition to the implementation of domestic measures, Monaco will purchase CERs issued by the Clean Development Mechanism (CDM). Monaco doesn't intend to use the carry-over of AAUs or the purchase of foreign AAUs.

Assumptions and Conditions Related to Ambition of the Pledge

Description of any mitigation policies, legislation and institutional arrangements	A Climate Energy Plan has been set up and is piloted by the Department of Public Works, Environment and Urban Development. The Department for External Relations is responsible for purchasing carbon credits issued by the CDM.
Potential to increase the level of ambition	Monaco maintains the possibility of exceeding its emission reduction target for 2020 through the use of mechanisms (CDM).
Assumptions on actions by other Parties	Monaco is committed to an unconditional target.

Paper no. 5: Nauru on behalf of the Alliance of Small Island States

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 pre-industrial 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 – a level of warming that will devastate small island developing states, LDCs and vulnerable countries in Africa. 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 CO_2-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.

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

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 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

[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.

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 **and** 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 accurate 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 CO_2, CH_4, N_2O, HFCs, PFCs and SF_6, as well as nitrogen trifluoride (NF_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 CO_2 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?

   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.

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

Party	Base year defined under the Kyoto Protocol[a] CO_2, CH_4, N_2O	Base year defined under the Kyoto Protocol[a] F-gases	Base year emissions[b] (t CO_2 eq)	Emission reduction/limitation target, % of base year level Annex B	Emission reduction/limitation target, % of base year level Article 4[c]	Assigned amount (t CO_2 eq)
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	270 838 955
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	72 151 040	92	104	375 188 501
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	3 412 080 030
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 Kyoto 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.

Paper no. 6: New Zealand

New Zealand Submission to the Ad Hoc Working Group on Long-term Cooperative Action under the Convention:

Clarifying developed country Parties' quantified economy-wide emission reduction targets

March 2012

1. This submission responds to the invitation contained in Decision -/CP.17 paragraph 5(a) that calls for further information on developed country Parties' quantified economy-wide emission reduction targets contained in document FCCC/SB/2011/INF.1/Rev.1. The purpose of this exercise is to understand assumptions and conditions related to individual targets and associated assumptions and conditions related to the ambition of pledges.

2. We note that developed country Parties are encouraged to use this common template to guide their submission of relevant information for clarification of their economy-wide emission reduction targets. We also note that some countries, like New Zealand will not be in a position to complete the Secretariat's template in its entirety. This submission is made without prejudice to where we will take our post 2012 commitment and discussions on the Durban Platform for a post 2020 agreement. Rather we see the clarification of pledges for all parties as an ongoing process as discussions evolve.

3. New Zealand welcomes the set of Durban decisions and the processes it sets in train for global action on climate change. We view the provision of further information from all Parties, as a necessary ingredient in building mutual understanding and confidence that actions are being undertaken.

4. We have stated previously that:

New Zealand is prepared to take on a responsibility target for greenhouse gas emissions reductions of between 10 and 20 per cent below 1990 levels by 2020, if there is a comprehensive global agreement. This means:

a) That the global agreement sets the world on a pathway to limiting temperature rise to no more than 2 °C;
b) That developed countries make comparable efforts to those of New Zealand;
c) That advanced and major-emitting developing countries take action fully commensurate with their respective capabilities;
d) That there is an effective set of rules for LULUCF;
e) That there is full recourse to a broad and efficient international carbon market.

5. Given these parameters, and decisions still to be taken by the New Zealand Government, we submit the attached template based on the AWG-LCA Chair's "suggested common template". As noted above, this submission is made without prejudice to where we will take our post 2012 commitment and discussions on the Durban Platform for a post 2020 agreement.

Common Template

Party	New Zealand
Date of Submission	March 2012

Assumptions and Conditions Related to Target

Base Year	☑ 1990	☐ Other (specify):
% Reduction from Base Year	10 – 20* % and associated conditions	
% Reduction from 1990 *(if base year other than 1990)*	N/A %	
Period for Reaching Target	☑ by 2020	☐ by Other (specify):
Inventory Methodology Used	☑ IPCC 2006 Guidelines ☐ Other (specify):	

Coverage of Greenhouse Gases

Gases Covered	*Base Year for Each Gas (if different)*	
☑ CO_2	☑ 1990	☐ Other (specify):
☑ CH_4	☑ 1990	☐ Other (specify):
☑ N_2O	☑ 1990	☐ Other (specify):
☑ HFCs	☑ 1990	☐ Other (specify):
☑ PFCs	☑ 1990	☐ Other (specify):
☑ SF_6	☑ 1990	☐ Other (specify):
☑ NF_3	☑ 1990	☐ Other (specify):
☐ Other (specify):	☐ 1990	☐ Other (specify):

***** Refer to New Zealand's target range and conditions as noted on page 1 and 4 of this submission

Global Warming Potential Values (GWP)

☑ As Contained in Decision xx/CP.17	☐ Other (specify):

Coverage of Sectors

☑ Energy	☑ Land use, land-use change and forestry
☑ Industrial Processes and Product use	☑ Waste
☑ Agriculture	☐ Other (specify):

Anticipated Role of Land Use, Land-Use Change and Forestry

☐ Comprehensive land-based

☑ Activity based

- ☑ Afforestation/Reforestation
- ☑ Deforestation
- ☐ Forest management **[TBC]**
- ☐ Cropland management
- ☐ Grazing land management
- ☐ Wetland drainage and rewetting
- ☐ Revegetation
- ☑ Other (specify): As per the conditions of New Zealand's target range, an effective set of rules for land use, land-use change and forestry would include the Flexible Land Use, Afforestation-Reforestation Debit-Credit, and Harvested Wood Product rules

Carbon Credits from Market-Based Mechanisms

Anticipated Use of Mechanisms

☑ Clean Development Mechanism	☑ Carry-over
☑ Joint Implementation	☑ REDD
☑ International Emission Trading *(eg under Article 17 of the Kyoto Protocol)*	☑ Other (specify): It is expected that New Zealand would meet its target through a mixture of domestic emissions reductions, including through afforestation, reforestation, and forest management, and the purchase of emissions reductions in other countries.

Assumptions and Conditions Related to Ambition of the Pledge

Description of any mitigation policies, legislation and institutional arrangements The New Zealand Government's principal policy response to climate change is the New Zealand Emissions Trading Scheme (NZ ETS),[1] which puts a price on greenhouse gas emissions to incentivise emissions reductions through, for example, investments in energy efficiency and afforestation. Further details on New Zealand's major climate change mitigation policies are provided in the Polices and Measures chapter of New Zealand's 5th National Communication to the UNFCCC. [2] A table listing supporting mitigation policies and measures is also provided as an appendix to this submission.
Assumptions on actions by other Parties domestically and at international level New Zealand is prepared to take on a GHG emission reduction target of between 10 and 20 per cent below 1990 levels by 2020, if there is a comprehensive global agreement. This means: a) That the global agreement sets the world on a pathway to limiting temperature rise to no more than 2 °C; b) That developed countries make comparable efforts to those of New Zealand; c) That advanced and major-emitting developing countries take action fully commensurate with their respective capabilities; d) That there is an effective set of rules for LULUCF; e) That there is full recourse to a broad and efficient international carbon market.

[1] http://www.climatechange.govt.nz/emissions-trading-scheme/
[2] http://www.mfe.govt.nz/publications/climate/nz-fifth-national-communication/index.html

Appendix: Supporting mitigation policies and measures

Sector	Legislation/regulations	Policies and measures
Multiple-sector or economy-wide	1. Climate Change Response Act 2002: Establishes the mandatory New Zealand Emissions Trading Scheme (NZ ETS) covering all sectors of the economy by 2015 2. Regulations for implementation of the NZ ETS	1. Climate Change Response (2050 Emissions Target) Notice 2011: The government has set a target for a 50% reduction in New Zealand greenhouse gas emissions from 1990 levels by 2050.
Energy	1. Energy Efficiency (Energy Using Products) Regulations 2002 2. Energy Efficiency (Vehicle Fuel Economy Labelling) Regulations 2007	1. Renewable energy target: 90% of New Zealand's electricity will be generated from renewable sources by 2025[3] 2. New Zealand Energy Strategy 3. New Zealand Energy Efficiency and Conservation Strategy 4. Marine Energy Deployment Fund 5. Distributed Generation Fund 6. Voluntary product labelling (ENERGY STAR®) 7. ENERGYWISE Homes 8. RightLight: Efficient lighting programme for businesses and homes 9. Commercial and industrial sector electricity efficiency programmes 10. New Zealand Transport Strategy 11. Fleet Best Practice Programme 12. Emissions standards for imported vehicles 13. Deploying electric vehicles in New Zealand: A guide to the regulatory and market environment
Sector	**Legislation/regulations**	**Policies and measures**
Industrial processes		1. "No Loss Campaign" for the refrigeration industry
Solvent and other product use		
Agriculture		1. Participation in the Global Research Alliance for Agricultural Greenhouse Gases and leadership of the Livestock Research Group; including funding of specific research activities and funding two fellowship programmes for researchers/scientists (the GRASS

[3] In an average hydrological year.

Sector	Legislation/regulations	Policies and measures
		and LEARN awards). 2. Establishment and funding of the Centre for Agricultural Greenhouse Gas Research and the Pastoral Greenhouse Gas Research Consortium 3. Sustainable Land Management and Climate Change Plan of Action, including: research programmes, New Zealand Greenhouse Gas Footprinting Strategy, biochar professorships, trial of nitrification inhibitors, Livestock Emissions and Abatement Research Network (LEARN), farm monitoring and technology transfer
Waste	1. Waste Minimisation Act 2008 2. National Environmental Standard for Landfill Methane: Resource Management (National Environmental Standards for Air Quality) Regulations 2004	1. New Zealand Waste Strategy
Land use, land-use change and forestry	1. Permanent Forest Sinks Initiative: Forests Act 1949 and Forests (Permanent Forest Sink) Regulations 2007	1. East Coast Forestry Project 2. Afforestation Grant Scheme

Paper no. 7: Norway

Clarification of Quantified Economy-Wide Emission Reduction Targets

Norway is pleased to submit information to provide clarification of our quantified economy-wide emission reduction targets for 2020, as contained in document FCCC/SB/2011/INF.1/Rev.1.

Mitigation actions of all Parties are crucial to achieve the two degree target. Clarifying the mitigation pledges is an important step in order to understand the scope and extent of emission reductions that can be presumed up to 2020. We therefore welcome the opportunity for all Parties to submit information. We hope that all Parties will engage in further discussions in the coming workshops on mitigation. A better understanding of the mitigation pledges can also be used as information to the work programme on enhanced ambition.

Norway's emission reduction target for 2020 is an emission reduction of 30%, as stated in our letter of association with the Copenhagen Accord. As part of a global and comprehensive agreement for the period beyond 2012 where major emitting Parties agree on emission reductions in line with the 2 degrees Celsius target, Norway will move to a level of 40 per cent reduction for 2020 based on 1990 levels. The availability of flexible mechanisms for compliance with emission reduction commitments, as part of a future framework, is an underlying premise for Norway's emissions targets.

This submission contains information that would be applicable for both a 30% target and a 40% target. The conditions for moving to an emission reduction target of 40% are described on page six.

Norway is preparing to take a commitment under the second commitment period under the Kyoto Protocol. The process of establishing a Quantified Emission Limitation and Reduction Objective (QELRO) under the Kyoto Protocol will therefore also provide relevant information about our mitigation commitment up to 2020.

The information in this submission includes basic information about Norway's mitigation pledge for 2020, focusing on the elements listed in paragraph 5 in decision 2/CP.17; base year and target year, GWP values, coverage of gases and sectors, expected emission reductions, the role of land use, land-use change and forestry and carbon credits.
The information in this submission follows largely the common template that has been proposed by the chair of the AWG-LCA.

In our view, a new accounting system under the Convention should be broad and cover all kinds of mitigation targets, for all Parties. We believe the best approach is to first identify which elements need a common accounting system, and on that basis develop necessary rules and approaches.

Decision 2/CP.17 only explicitly mentions a common template for collecting information from developed countries. We see the need for collecting consistent and comparable information about the mitigation pledges from all Parties, in a systematic way. We encourage also developing countries to use a template or table when they submit information about their mitigation actions, as this facilitates information sharing. In that respect, we refer to the submission made by Norway in November 2011, contained in:
http://unfccc.int/files/meetings/ad_hoc_working_groups/lca/application/pdf/submission_norway_321_20111130.pdf

We look forward to the workshop for further discussion and to get a better understanding of the mitigation targets and actions that will be implemented by 2020. In order to have focused discussions, we propose that the workshops are structured after the issues listed in paragraphs 5 and 34 of decision 2/CP.17.

Common Template

Party	*Norway*
Date of Submission	*4 April 2012*

Assumptions and Conditions Related to Target

Base Year	☒ 1990 ☐ other (specify):
% Reduction from Base Year	*30%, 40% on certain conditions. Carbon neutrality by 2030*[1]
% Reduction from 1990 *(if base year other t han 1990)*	%
Period for Reaching Target	x by 2020 by Other (specify):
Inventory Methodology Used	x IPCC 2006 Guidelines from 2015, ☐ IPCC 1996 Guidelines and GPG before that ☐ Other(specify):

Norway will follow the current IPCC guidelines (1996 guideliens and IPCC Good Practice Guidance) until 2015, when we will start to use IPCC 2006 guidelines. 2013 is the first reporting year where IPCC 2006 guidelines will be used.

Coverage of Greenhouse Gases

Gases covered	*Base year for each gas (if different)*	
☒ CO_2	☒ 1990	☐ other (specify):
☒ CH_4	☒ 1990	☐ other (specify):
☒ N_2O	☒ 1990	☐ other (specify):
☒ HFCs	☒ 1990	☐ other (specify):
☒ PFCs	☒ 1990	☐ other (specify):
☒ SF_6	☒ 1990	☐ other (specify):
☒ NF_3	☒ 1990	☐ other (specify):
☐ other (specify):	☐ 1990	☐ other (specify):

[1] *As part of a global and comprehensive agreement for the period beyond 2012 where major emitting Parties agree on emission reductions in line with the 2 degrees Celsius target, Norway will move to a level of 40 per cent reduction for 2020 based on 1990 levels. In the context of an ambitious global agreement, Norway intends to cut global emissions equivalent to 100 percent of its own greenhouse gas emissions, becoming a carbon neutral nation within 2030.*

Global Warming Potential Values (GWP)

☒ As Contained in Decision xx/CP.17[2]	☐ other (specify):

Coverage of Sectors

☒ Energy	x Land use, land-use change and forestry
☒ Industrial Processes and Product use	x Waste
☒ Agriculture	Other (specify):

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 $ktCO_2$ equivalent)*

The emission estimates under A and B below reflect the most recent national GHG emission inventory submitted by Norway to the UNFCCC. The emissions estimates provided under A and B below do not include NF_3, or the effect of revised GWP values, as this has not been calculated yet.

The information called for under C to G below concerns elements where there is no agreement yet on which approach should be taken for targets under the Convention, and are therefore not filled in. Carry-over of carbon credits is an issue under the Kyoto Protocol, but not here.

A	Emissions excluding LULUCF in base year	49,767.43 Gg CO_2-equivalents
B	Emissions/removals from LULUCF included in base year[3]	41,211.09 Gg CO_2-equivalents

C	Emissions in base year used for calculation of target	
D	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]	

Expected Emission Reductions in kt $C0_2$ 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

Under the Convention, Norway reports according to a comprehensive land-based approach. We believe this is a good approach, and that comprehensive land-based reporting should be the basis for developing an accounting framework under the Convention. For information: under the Kyoto Protocol, Norway will follow the established rules for accounting for LULUCF, with an activity based approach.

☒ Comprehensive land-based
☐ Activity based – ☐ Afforestation/Reforestation ☐ Deforestation ☐ Forest management ☐ Cropland management ☐ Grazing land management ☐ Wetland drainage and rewetting ☐ Revegetation ☐ Other (specify):

Carbon Credits from Market-Based Mechanisms

As stated in Norway's letter of association with the Copenhagen Accord, the availability of flexible mechanisms is an underlying premise for Norway's emissions targets.
We will continue to make use of the flexible mechanisms under the Kyoto protocol.

Norway does not see an ex ante quantification of net use of units against a target through flexible mechanisms, as an element in building a new international agreement. We would like to highlight that in order to avoid double counting of the use of flexible mechanisms for targets under the Convention, it is necessary to have a common accounting system including all Parties.

If Norway should move from a 30% reduction target to a 40% reduction, this would entail considerable use of carbon credits.

Mechanisms used	
X Clean Development mechanism X Joint implementation X International Emission trading X any other market-based mechanism that may be established under the UNFCCC	
Total contribution from mechanisms used	% of overall target _____%
Available information on the estimated contribution of individual mechanisms to the achievement of the target	

Assumptions and Conditions Related to Ambition of the Pledge

We focus on information which is relevant to understand Norway's target. This is an economy-wide absolute emission reduction target relative to a historical base year.

We see that information on assumed changes in emissions per gross domestic product and changes in GDP will be relevant for countries having an intensity target (of a reduction in emissions of greenhouse gases relative to unit of GDP). Likewise, we see that information on emission reduction from BAU is relevant for countries with that kind of target.

However, to make comparison with other countries easier we provide information on these figures.

Assumed change in emissions per capita, including change in population over the period *Change in emissions per capita 1990-2020: -9 per cent* *Change in population 1990-2020: 27 per cent*
Assumed change in emissions per gross domestic product (GDP), including change in GDP over the period *Change in emissions per GDP 1990-2020: -44 per cent* *Change in GDP 1990-2020: 107 per cent*
Estimated emission reductions from BAU or another baseline in kt CO_2 eq *BAU=57500 kt CO_2 eq in 2020. 30 per cent reduction compared to 1990-level=35000 kt CO_2 eq in 2020. Estimated emission reduction from BAU in kt: 22500 CO_2 eq.*
Description of any mitigation policies, legislation and institutional arrangements *A main principle of Norwegian climate policy is to put a price on emissions, through economy-wide measures. Norway has had a CO_2 tax since 1991, and introduced an emissions trading system in 2005. From 2008, Norway has participated fully in the European emission trading system (EU-ETS). From 2013, about 80% of Norwegian emissions will be covered by economic instruments (CO_2 taxes or emission trading). Aviation was included in the emission trading system in 2012. Domestic aviation has been subject to a CO_2 tax since 1999. Carbon capture and storage from gas processing is implemented at two sites in Norway. In May 2012 a technology centre for carbon capture technologies will open in Norway. This centre will be the world's largest facility for testing and improving CO_2 capture technologies. .* *Norway also has introduced several sector-specific measures, such as differentiated levies on vehicles and energy efficiency standards in buildings, and has prohibited deposition of organic waste.* *Please see more detailed descriptions of mitigation policies, legislation and relevant institutional arrangements in Norway's 5th National communication and our most recent greenhouse gas inventory:* *http://unfccc.int/resource/docs/natc/nor_nc5.pdf* *http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/5888.php* *A parliamentary agreement on climate policy in 2008 found that a realistic target would be to reduce Norwegian emissions by 15-17 million tones CO_2 equivalent, relative to business-as-usual, when CO_2 uptake by forests is included. The contribution from LULUCF was assumed to be about 3 million tones CO_2 equivalent, which was estimated at six per cent in accordance with the former rules for Article 3, paragraphs 3 and 4, of the Kyoto Protocol. A White Paper on Climate Change Policy will be presented to Stortinget (The Parliament) in 2012.*

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 *In Norway's confirmation of our association with the Copenhagen Accord, we clarified that as part of a global and comprehensive agreement for the period beyond 2012 where major emitting Parties agree on emission reductions in line with the 2 degrees Celsius target, Norway will move to a level of 40 per cent reduction for 2020 based on 1990 levels.* *Furthermore, the availability of flexible mechanism for compliance with emission reduction commitments, as part of a future framework, is an underlying premise for Norway's emissions targets.*
Assumptions on actions by other Parties domestically and at international level *See above with respect to raising the level of ambition*

Paper no. 8: Switzerland

SWITZERLAND

Clarifying the quantified economy-wide emission reduction target of Switzerland contained in document FCCC/SB/2011/INF.1/Rev.1: information using a common template

AWG-LCA 15

General Comments

Switzerland welcomes the continuation 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, with the objective of understanding the assumptions and conditions related to individual targets, as well as the continuation of the process to further the understanding of the diversity of mitigation actions of developing country Parties as communicated and contained in FCCC/AWGLCA/2011/INF.1, the underlying assumptions and any support needed for the implementation of these actions.

Clarification of the information contained in the two referred documents is necessary to understand the efforts that will be undertaken by Parties to mitigate greenhouse gas emissions, to identify the current gap in mitigation ambition, to foster an increase in the level of ambition, as well as to inform about the assumptions and approaches that Parties have taken in their pledges under the Convention.

Switzerland welcomes the structured manner of work in 2012 on these matters and identified *key questions* in paragraphs 5 and 34 of decision 2/CP.17. Switzerland further welcomes the common template prepared by the secretariat to facilitate the submission of information. It has been used as a basis for this submission and has been found helpful. Drawing on this experience and given the diversity of pledges under the Convention, a possible further template facilitating the continuation of the processes to understand the pledges under the Convention may be envisaged, including precise but rather open questions.

In this context, this submission responds to paragraph 5 of decision 2/CP.17. Information underlying the quantified economy-wide emission reduction target of Switzerland contained in document FCCC/SB/2011/INF.1/Rev.1 is provided, using the common template prepared by the secretariat. The information contained in this submission is based on best current assumptions and estimations, and it does not form part of the information contained in document FCCC/SB/2011/INF.1/Rev.1. It does also not prejudge the information on the QELRO of Switzerland for the second commitment period under the Kyoto Protocol as invited in paragraph 5 of decision 1/CMP.7.

Party	Switzerland
Date of Submission	17.04.2012

Assumptions and Conditions Related to Target

Base Year	☒ 1990 ☐ other (specify):
% Reduction from Base Year	-20% to -30%
Period for Reaching Target	☒ by 2020 ☐ by Other (specify):
Inventory Methodology Used	☒ IPCC 2006 Guidelines ☐ Other (specify):

Coverage of Greenhouse Gases

Gases Covered	*Base Year for Each Gas (if Different)*
☒ CO_2	☒ 1990 ☐ other (specify):
☒ CH_4	☒ 1990 ☐ other (specify):
☒ N_2O	☒ 1990 ☐ other (specify):
☒ HFCs	☒ 1990 ☐ other (specify):
☒ PFCs	☒ 1990 ☐ other (specify):
☒ SF_6	☒ 1990 ☐ other (specify):
☒ NF_3	☒ 1990 ☐ other (specify):
☐ Other (specify):	☐ 1990 ☐ other (specify):

Global Warming Potential Values (GWP)

☒ As Contained in Decision xx/CP.17[1] ☐ other (specify):

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

Coverage of Sectors

☒ Energy	☒ Land use, land-use change and forestry
☒ Industrial Processes and Product use	☒ Waste
☒ Agriculture	☐ Other (specify):

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)*

For the -20% target by 2020 compared to 1990:

A	Emissions excluding LULUCF in base year (GHG submission 2012, will be updated yearly)	53,057
B	Emissions/removals from LULUCF included in base year[2]	- *

C	Emissions in base year used for calculation of target (subject to recalculation)	52,710
D	Emissions excluding LULUCF in target year	42,168
E	Anticipated emissions/removals from LULUCF included in target year[3]	- **
F	Anticipated use of carbon credits from market-based mechanisms[3]	- ***
G	Anticipated carry-over of carbon credits[4]	- ****

* Regarding LULUCF, Switzerland uses the same rules as under the Kyoto Protocol for calculating the emissions/removals in the base year. Therefore, "B" is irrelevant for the pledge of Switzerland.
** Not estimated yet for Switzerland's pledge under the Convention. Switzerland has also not decided yet whether it will account for additional activities under Art. 3.4 of the Kyoto Protocol in the second commitment period. Under a calculation of the elected activities under Art. 3.4 of the Kyoto Protocol during the first commitment period and applying the accounting approach of the forest management reference level, then estimated emissions or removals from forest management in Switzerland will be zero.
*** Switzerland will use carbon credits generated from the flexible mechanisms under the Kyoto Protocol (CERs, ERUs) and from the new market-based mechanism under the Convention to reduce its emissions over the period. The exact amount of carbon credits is not estimated yet. The Swiss CO_2 Law for the 2013-20 period defines Switzerland's -20% target as domestic, however carbon credits for emission reductions achieved abroad will play a role in the case of fossil fuel power plants, the emissions trading scheme (ETS), companies exempted from the CO_2 levy that are not involved in the ETS, as well as in the sanction mechanism. Furthermore, Switzerland may use additional carbon credits generated under the Kyoto Protocol in the assumed case of a starting point by QELRO 2010.
**** Switzerland does not support the use of AAUs outside of the Kyoto system. A limited amount of its own carry-over of AAUs may be used by Switzerland under the Kyoto Protocol.

[2] Include emissions as positive values and removals as negative values
[3] Include as positive values

Expected Emission Reductions in kt CO_2 equivalent

Relative to Base Year : *should be estimated as* -10,542 kt CO_2 equivalent

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)*

For a -30% target by 2020 compared to 1990:

A	Emissions excluding LULUCF in base year (GHG submission 2012, will be updated yearly)	53,057
B	Emissions/removals from LULUCF included in base year[4]	- *

C	Emissions in base year used for calculation of target (subject to recalculation)	52,710
D	Emissions excluding LULUCF in target year	40,850
E	Anticipated emissions/removals from LULUCF included in target year[3]	- **
F	Anticipated use of carbon credits from market-based mechanisms[5]	- ***
G	Anticipated carry-over of carbon credits[4]	- ****

* Regarding LULUCF, Switzerland uses the same rules as under the Kyoto Protocol for calculating the emissions/removals in the base year. Therefore, "B" is irrelevant for the pledge of Switzerland.
** Not estimated yet for Switzerland's pledge under the Convention. Switzerland has also not decided yet whether it will account for additional activities under Art. 3.4 of the Kyoto Protocol in the second commitment period. Under a calculation of the elected activities under Art. 3.4 of the Kyoto Protocol during the first commitment period and applying the accounting approach of the forest management reference level, then estimated emissions or removals from forest management in Switzerland will be zero.
*** Switzerland will use carbon credits generated from the flexible mechanisms under the Kyoto Protocol (CERs, ERUs) and from the new market-based mechanism under the Convention to reduce its emissions over the period. The exact amount of carbon credits is not estimated yet. In addition to the carbon credits that will be used for achieving the -20% target and in the assumed case of a starting point by QELRO 2010 (see above), carbon credits will also be used by Switzerland for maximum three fourth of the additional emission reductions beyond the -20% target by 2020 compared to 1990, as planned in the Swiss CO_2 Law for the 2013-20 period.
**** Switzerland does not support the use of AAUs outside of the Kyoto system. A limited amount of its own carry-over of AAUs may be used by Switzerland under the Kyoto Protocol.

[4] Include emissions as positive values and removals as negative values
[5] Include as positive values

Expected Emission Reductions in kt CO_2 equivalent

Relative to Base Year :
should be estimated as -15,813 kt CO2 equivalent (including use of carbon credits)

Role of Land Use, Land-Use Change and Forestry

☒ Comprehensive land-based *
☐ Activity based ☐ Afforestation/Reforestation ☐ Deforestation ☐ Forest management ☐ Cropland management ☐ Grazing land management ☐ Wetland drainage and rewetting ☐ Revegetation ☐ Other (specify):

* Switzerland uses the rules of the Kyoto Protocol for its pledge under the Convention. Reporting of LULUCF under the Convention is made on a comprehensive land-based approach, as mentioned in the Good Practice Guidelines for LULUCF. In the first commitment period of the Kyoto Protocol, Switzerland is accounting for Afforestation and Deforestation under Art. 3.3 of the Kyoto Protocol and Forest Management Art. 3.4 of the Kyoto Protocol. Switzerland has not decided yet whether it will account for additional activities under Art. 3.4 of the Kyoto Protocol in the second commitment period.

Carbon Credits from Market-Based Mechanisms

Mechanism Used	
☒ Clean Development Mechanism	☐ Carry-over *
☒ Joint Implementation	☐ REDD
☐ International Emission Trading ** *(ie under Article 17 of the Kyoto Protocol)*	☒ Other, (specify): The new market-based mechanism under the Convention will be used.

* A limited amount of its own carry-over of AAUs may be used by Switzerland under the Kyoto Protocol.
** Switzerland does not support the use of AAUs outside of the Kyoto system. Under the Kyoto Protocol, Switzerland does not plan to buy AAUs but does not exclude the use of AAUs from other countries through the linking of its emission trading scheme (ETS) with other schemes.

Total Contribution from Mechanisms Used

Switzerland will use carbon credits generated from the flexible mechanisms under the Kyoto Protocol (CERs, ERUs) and from the new market-based mechanism under the Convention to reduce its emissions over the period. The exact amount of carbon credits is not estimated yet.

The Swiss CO_2 Law for the 2013-20 period defines Switzerland's -20% target as domestic, however carbon credits for emission reductions achieved abroad will play a role in the case of fossil fuel power plants, the emissions trading scheme (ETS), companies exempted from the CO_2 levy that are not involved in the ETS, as well as in the sanction mechanism. Furthermore, Switzerland may use additional carbon credits generated under the Kyoto Protocol in the assumed case of a starting point by QELRO 2010. In addition, carbon credits will also be used by Switzerland for maximum three fourth of the additional emission reductions beyond the -20% target by 2020 compared to 1990, as planned in the Swiss CO_2 Law for the 2013-20 period.

Available information on the estimated contribution of individual mechanisms to the achievement of the target

Switzerland will use carbon credits generated from the flexible mechanisms under the Kyoto Protocol (CERs, ERUs) and from the new market-based mechanism under the Convention to reduce its emissions over the period. The exact amount of carbon credits is not estimated yet.

The Swiss CO_2 Law for the 2013-20 period defines Switzerland's -20% target as domestic, however, carbon credits for emission reductions achieved abroad will play a role in the case of fossil fuel power plants, the emissions trading scheme (ETS), companies exempted from the CO_2 levy that are not involved in the ETS, as well as in the sanction mechanism. Furthermore, Switzerland may use additional carbon credits generated under the Kyoto Protocol in the assumed case of a starting point by QELRO 2010. In addition, carbon credits will also be used by Switzerland for maximum three fourth of the additional emission reductions beyond the -20% target by 2020 compared to 1990, as planned in the Swiss CO_2 Law for the 2013-20 period.

Switzerland will apply qualitative restrictions on the use carbon credits as of 2013.

Switzerland does not support the use of AAUs outside of the Kyoto system. Under the Kyoto Protocol, Switzerland does not plan to use AAUs from other countries in order to achieve its target. However, Switzerland does not exclude the use of AAUs through the linking of its emission trading scheme (ETS) with other schemes. Switzerland may use a limited amount of its own carried-over AAUs but does not plan to use AAUs that have been carried-over by other Parties, except in the case of the linking of its ETS.

Switzerland will use carbon credits generated from the new market mechanism under the Convention (may include REDD) if the quality of the mechanism is guaranteed.

Assumptions and Conditions Related to Ambition of the Pledge

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

Change in population over time:
Population in 1990: 6,750,000
Current population (2009): 7,800,000
Assumed population in 2020: 8,400,000
Assumed change in population by 2020 compared to 1990 levels: + 24 %

Assumed change in emissions (excluding LULUCF) per capita:
Emissions per capita in 1990: 7.9 t CO_2eq
Current emissions per capita (2009): 6.7 t CO_2eq

Assumed emissions per capita in 2020 (for -20% target): 5 t CO_2eq
Assumed change in emissions per capita by 2020 compared to 1990 levels (for -20% target): -36 %

Assumed emissions per capita in 2020 (for -30% target, including use of carbon credits): 4.4 t CO_2eq
Assumed change in emissions per capita by 2020 compared to 1990 levels (for -30% target): -44 %

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

GDP:

GDP in 2009 (price reference 2009): 535.3 bn CHF
GDP in 2020 (price reference 2009): 619.1 bn CHF
It is assumed that the GDP of Switzerland will evolve as follows: + 16 % over 2009-2020.

Since the Swiss GDP will increase by approx. 16% over 2009-20 while the greenhouse gas emissions will continue to decrease until 2020, Switzerland is achieving a decoupling of its economic growth from the evolution of its emissions.

Estimated emission reductions from BAU or another baseline in kt CO_2 eq

Switzerland does not use a deviation of its emissions from a BAU for presenting its pledge, but uses an absolute emission reduction compared to a reference year (1990).

Description of any mitigation policies, legislation and institutional arrangements

Switzerland's legislation for the 2013-20 period, which was approved by the Parliament in December 2011 and is subject to an optional referendum, sets the following instruments:

- CO_2 levy on thermal fuels (heating and process fuels)
- Technical prescriptions for buildings
- Building programme for the refurbishment and the use of renewable energy in buildings (by using part of the revenues of the CO_2 levy on thermal fuels)
- Prescription of technical standards for cars
- Emissions trading scheme (ETS) for large industries, with a possibility for linking with other ETSs
- Emission reduction targets for small and medium industries
- Full offsetting (with domestic measures and carbon credits for emission reductions achieved abroad) for emissions resulting from fossil-fuel thermal power plants
- Partial offsetting (with domestic measures and possibly carbon credits for emission reductions achieved abroad) for emissions resulting from motor fuels
- Technology fund to finance loan guarantees for supporting companies that develop or market low-GHG equipment and processes
- Additional information and educational programmes in Switzerland

Other measures that are already in place and therefore outside of the scope of the above-mentioned new legislation include:

- Energy-efficiency programme (including technical prescriptions, energy-efficiency labels)
- Voluntary agreements with some industrial sectors that are not covered by other measures
- Feed-in tariffs for the power production resulting from renewable energies
- Performance-related heavy vehicle fee (tax on heavy vehicles)
- 2050 Energy Strategy for Switzerland, aiming at phasing out nuclear power by increasing energy efficiency and the use of renewable energies

For additional information:
http://www.bafu.admin.ch/klima/00493/06577/index.html?lang=en
http://www.bfe.admin.ch/energie/index.html?lang=en

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

The CO_2 legislation for the 2013-20 period allows flexibility in some of the above-mentioned instruments in order to increase the level of ambition beyond the -20% target, namely:

- an increase of the CO_2 levy on thermal fuels
- an increase in the revenues used in the building programme (resulting from the increased revenues of the CO_2 levy on thermal fuels)
- an increase in the level of partial offsetting for emissions resulting from motor fuels (with domestic measures and carbon credits for emission reductions achieved abroad)

Carbon credits will be used by Switzerland for maximum three fourth of the additional emission reductions beyond the -20% target by 2020 compared to 1990, as planned in the

Swiss CO_2 Law for the 2013-20 period.

As planned in the new Swiss legislation, the Federal Council may increase the reduction target in accordance with international agreements. Switzerland would consider a higher reduction target up to -30% by 2020 compared to 1990 levels, under the condition 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.

Assumptions on actions by other Parties domestically and at international level

As per its new national legislation (expected to enter into force on 01.01.2013), Switzerland will reduce its emissions at least by 20% by 2020 in comparison to the 1990 levels. This emission reduction target is unconditional.

As planned in the new Swiss legislation, the Federal Council may increase the reduction target in accordance with international agreements. Switzerland would consider a higher reduction target up to -30% 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.

Paper no. 9: United States of America

Submission of the United States of America

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

Under paragraph 5 of the Durban outcome of the AWG-LCA (Decision -/CP.17), the COP decided to continue in 2012 the process of clarifying the developed country Parties' quantified economy-wide emission reduction targets contained in document FCCC/SB/2011/INF.1/Rev.1, with the objective of understanding assumptions and conditions related to individual targets.

The following information is relevant for clarification of the quantified economy-wide emission reduction target submitted by the US and contained in FCCC/SB/2011/INF.1/Rev.1, following the parameters indicated in paragraph 5:

Base year	2005
Global warming potential values	100-year GWPs from the IPCC Fourth Assessment Report
Coverage of gases	CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3
Coverage of sectors	All IPCC sources and sectors
Expected emission reductions	In the range of 17% below 2005 levels
Role of land-use, land-use change and forestry	Comprehensive emissions and removals from the LULUCF sector will be accounted using a net-net approach and a 2005 base year, including a production approach to account for harvested wood products. Methodological approaches for excluding emissions resulting from non-anthropogenic natural disturbances are under consideration.
Carbon credits from market-based mechanisms	
Associated assumptions and conditions related to the ambition of the pledge	To be in conformity with U.S. law.