UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

Ad Hoc Working Group on Further Commitments
for Annex I Parties under the Kyoto Protocol
Seventeenth session, part two
Doha, 27 November 2012–*

Agenda item 3
Consideration of further commitments for Annex I Parties under the Kyoto Protocol

Information by Parties included in Annex I listed in annex 1 to decision 1/CMP.7 on their quantified emission limitation or reduction objectives for the second commitment period under the Kyoto Protocol

Submissions from Parties

Addendum

1. In addition to the 10 submissions contained in document FCCC/KP/AWG/2012/MISC.1 and Add.1, four further submissions have been received.

2. In accordance with the procedure for miscellaneous documents, these submissions are attached and reproduced** in the language in which they were received and without formal editing. The secretariat will continue to post on the UNFCCC website1 any submissions received after the issuance of this document.

* The second part of the session will be held in conjunction with the eighth session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol. The closing date will be determined in due course.

** 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.

1 http://unfccc.int/kyoto_protocol/items/4752.php.

FCCC/KP/AWG/2012/MISC.1/Add.2

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Submission under the Kyoto Protocol: Quantified Emission Limitation or Reduction Objective (QELRO) | November 2012

I. Overview

This submission is a response to the invitation in Decision 1/CMP.7 for Annex I Parties to submit information on Quantified Emission Limitation or Reduction Objectives (QELROs) for the second commitment period of the Kyoto Protocol.

Australia is committed to playing its fair part in effective global climate change action, with our efforts grounded in robust domestic implementation arrangements that support Australia’s low-carbon economic transformation. In this context, Australia is preparing to join a second commitment period of the Kyoto Protocol starting 1 January 2013, and will nominate a provisional QELRO of 99.5 per cent of 1990 levels over an eight year commitment period. The QELRO represents a substantial emission reduction effort backed by Australia’s broad package of domestic policies and legislation. Australia’s net cumulative emissions from 2013 to 2020 are now projected to be around 14 per cent or 750 million tonnes of carbon dioxide equivalent (Mt) lower than they would have been without a carbon price and the Carbon Farming Initiative (CFI). In 2020 Australia’s net emissions are projected to be 22 per cent below where they would otherwise be without a carbon price or the CFI. The 22 per cent and 750 Mt reductions are on top of considerable abatement from a wide range of measures put in place before the carbon price in energy efficiency, renewable energy and the land sector.

Australia’s provisional QELRO of 99.5 per cent is consistent with the unconditional commitment to reduce emissions by 5 per cent below 2000 levels in 2020. The option later to move up within the full target range of 5 to 15, or 25 per cent, below 2000 levels in 2020, remains if Australia’s target conditions relating to the extent of global action are met.

II. The basis for joining a second commitment period

Australia’s preparedness to join a second commitment period of the Kyoto Protocol at the UN climate change negotiations in Doha, Qatar (26 November to 7 December) and confirmation of its provisional QELRO will be conditional on:

- Continued progress in international negotiations towards the new 2015 agreement. This will require serious commitments from all countries, developed and developing alike.
- The second commitment period ending in 2020 in line with the start of the new agreement.
- Access to the Kyoto market mechanisms, including the Clean Development Mechanism, from 1 January 2013.
- Continuation of the existing land sector rules including retention of the ability to include land use change emissions in the 1990 base in accordance with current provisions of Article 3.7 of the Kyoto Protocol.
- The rules applying to carryover of units from the first commitment period of the Kyoto Protocol being appropriate for Australia.

III. Australia’s Clean Energy Future

Australia is committed to transitioning to a low carbon economy, and meeting its second commitment period QELRO, through a Clean Energy Future plan which includes an emissions trading scheme which places a cap on about 60 per cent of Australia’s emissions.

This transition represents a significant effort given Australia’s heavy reliance on fossil fuels. Over 70 per cent of Australia’s emissions are from the burning or mining of fossil fuels. And around 90 per cent of Australia’s electricity is generated from fossil fuels. Australia’s QELRO and 2020 emission reduction targets are a commitment to transforming Australia’s economy, by delivering a fundamental change to the nation’s emissions profile and energy generation mix.

Australia’s efforts to reduce emissions also represent a considerable effort given expected strong population and economic growth – both key drivers of emissions growth due to increased demand for a range of goods and services. Australia’s population is expected to increase by 12 per cent between 2012 and 2020, and the economy is projected to expand by about 3 per cent per year on average over the same period.
In this context, Australia’s unconditional 2020 target of 5 per cent below 2000 levels and QELRO of 99.5 per cent represent large declines in Australia’s emissions, per capita emissions and emissions intensity:

- In 2020 Australia’s net emissions are projected to be 22 per cent below where they would otherwise be without a carbon price or the CFI (Figure 1).
- Australia’s net per capita emissions and net emissions intensity are projected to decline by about 19 and 28 per cent respectively between 2012 and 2020.
- Australia’s net cumulative emissions from 2013 to 2020 are now projected to be around 14 per cent or 750 Mt lower than they would have been without a carbon price and the CFI.

The 22 per cent and 750 Mt reductions are on top of considerable abatement from a wide range of measures put in place before the carbon price in energy efficiency, renewable energy and the land sector.

Figure 1: Australia’s QELRO: reducing emissions

Source: Australia’s Emissions Projections 2012 using global warming potential (GWP) values from the Fourth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC). Historical data is used to 2010. Emission projections are indicative only. The latest inventory estimate (Kyoto Protocol accounting basis) has been used as the 1990 base year for the CP2 QELRO (CP2 1990).

IV. Australia’s provisional QELRO: calculation methodology

Australia’s provisional QELRO for a second commitment period of the Kyoto Protocol is 99.5 per cent of 1990 levels covering the period 2013-2020. This provisional QELRO equates to an estimated carbon budget of 4,626 Mt over 8 years, or 578 Mt on average each year. Australia will meet this commitment to serious action through a broad package of domestic policies and legislation, including an emissions trading scheme. In 2020 Australia’s net emissions are expected to be 22 per cent below where they would otherwise be without a carbon price or the CFI.

Australia’s provisional QELRO has been calculated using a transparent methodology that maintains the environmental integrity of the emission reductions. Australia’s QELRO is based on the Kyoto Protocol accounting rules agreed in Durban, including for the land sector. GWP values from the IPCC AR4 have been used to calculate emissions for 1990 and 2000, and the latest inventory estimate (Kyoto Protocol accounting basis) has been used as the 1990 base year for the CP2 QELRO.

A straight line is drawn from the emissions implied at the midpoint (in 2010) of Australia’s first commitment period target – the average Assigned Amount (108 per cent of 1990 levels) adjusted for AR4 GWP values – to 5 per cent
below 2000 levels in 2020 (Figure 2). This approach is based on a methodology put forward in the 2011 UNFCCC Secretariat technical paper (FCCC/TP/2010/3/Rev.1) on issues relating to the transformation of pledges for emission reductions into QELROs. Starting from the emissions implied by the previous commitment period target maintains the incentive to “over-achieve” in a particular period, and provides continuity with the target from the previous commitment period.

**Figure 2: Translating Australia’s 5 per cent 2020 target into a second commitment period QELRO**

Note: Australia’s emissions are presented using AR4 GWP values. The latest inventory estimate (Kyoto Protocol accounting basis) has been used as the 1990 base year for the CP2 QELRO (CP2 1990).

V. **Australia’s provisional QELRO and QELRO reference year**

As agreed in Durban countries can nominate a reference year against which to express their second commitment period QELRO in Annex B of the Kyoto Protocol. Australia’s nominated reference year is 2000 – consistent with the base year used in Australia’s 2020 pledge under the Copenhagen Accord and Cancun Agreements, and consistent with Australia’s 2050 target (Table 1). Australia’s provisional QELRO and draft amendment to Annex B to the Kyoto Protocol is in Table 2.

**Table 1: Australia’s provisional QELRO for the second commitment period expressed against different reference years**

<table>
<thead>
<tr>
<th>Reference year</th>
<th>Provisional QELRO</th>
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<tbody>
<tr>
<td>1990</td>
<td>99.5</td>
</tr>
<tr>
<td>2000</td>
<td>98</td>
</tr>
<tr>
<td>2012</td>
<td>94</td>
</tr>
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Note: All data use AR4 GWP values. The 2012 number is drawn from data in *Australia’s Emissions Projections 2012* and is indicative only.
Table 2: Australia’s provisional amendment to Annex B to the Kyoto Protocol would be:

<table>
<thead>
<tr>
<th>Party</th>
<th>Quantified emission limitation or reduction commitment (2008-12) (percentage of base year or period)</th>
<th>Quantified emission limitation or reduction commitment (2013-20) (percentage of base year or period)</th>
<th>Reference year</th>
<th>Quantified emission limitation or reduction commitment (2013-20) (expressed as percentage of reference year)</th>
<th>Pledges for the reduction of greenhouse gas emissions by 2020 (percentage of reference year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>108*</td>
<td>99.5*</td>
<td>2000</td>
<td>98</td>
<td>5-15 or 25*</td>
</tr>
</tbody>
</table>

*1990

* Australia’s QELRO under the second commitment period of the Kyoto Protocol is consistent with the achievement of Australia’s unconditional 2020 target of 5 per cent below 2000 levels. Australia retains the option later to move up within its 2020 target range of 5 to 15, or 25 per cent below 2000 levels, subject to certain conditions being met. This reference retains the status of these pledges as made under the Cancun Agreements and does not amount to a new legally binding commitment under this Protocol or its associated rules and modalities.

VI. Australia’s 2020 and 2050 targets

Australia’s provisional QELRO is consistent with the unconditional commitment to reduce emissions by 5 per cent below 2000 levels in 2020. The option to move up within the full target range of 5 to 15, or 25 per cent, below 2000 levels in 2020, remains if Australia’s target conditions relating to the extent of global action are met.


Australia is prepared to move beyond 5 per cent and up to 15 per cent below 2000 levels in 2020 under strict conditions that relate to the extent of global action, which include reference to:

- Major developing economies make clear commitments to substantially restrain emissions;
- Advanced economies take on clear commitments to reduce emissions comparable with Australia’s;
- That the restraints and reductions are verifiable;
- That the credibility of the commitments and actions is established by a robust global agreement;
- That there is access to broad, liquid carbon markets, and appropriate land sector rules; and
- That there is clarity on assumptions for emissions accounting and market access.

Australia remains prepared to adopt a 2020 target of 25 per cent below 2000 levels under strict conditions including comprehensive global action capable of stabilising atmospheric greenhouse gas concentrations at 450 parts per million or lower.

Australia’s independent Climate Change Authority will make recommendations to the Government by early 2014 on emission reduction targets and national carbon budgets, taking into account global action to reduce emissions. Australia will work with other countries in Doha on means by which countries can voluntarily increase, but not reduce the stringency of their QELRO.

Australia has also included in domestic legislation a 2050 target of reducing emissions by 80 per cent below 2000 levels. This 2050 target is in line with the IPCC’s advice on the long term mitigation targets required to avoid dangerous climate change.
The Republic of Kazakhstan aims to be a Party with legally binding commitments since 2009 and reassures that this aim is still in the priority of its strategy towards low emissions development and integration of green economy principles into the national policy.

Kazakhstan supports the position of all countries intending to develop and further to adopt a new agreement to be launched in 2020 with quantitative obligations to reduce greenhouse gas emissions.

Kazakhstan is willing to continue negotiations under the agenda items of CMP8 in Doha with the following positions:

**Base year:** Kazakhstan confirms once again that for the base year takes 1990;

**Length of commitment period:** Kazakhstan supports an 8 year term (2013 – 2020) for the second commitment period of the Kyoto Protocol as it correlates with the following national programs and international activities:

- 2020 agrees with plans to determine the second trade period of the national GHG allowances allocation system (2014-2020), Strategic plan of development of the Republic of Kazakhstan till 2020, which synchronizes the correlation between the international and national goals.
- 2020 is indicated for defining targets on emissions reduction in frames of the Copenhagen Accord.
- New global legally binding agreement on climate change will come into force no later than 2020.

**QELRO for the 2nd commitment period:** Kazakhstan for transforming its 15% pledges to reduce GHG emissions into QELRO used the technical paper (FCCC/TP/2010/3/Rev.1) proposed by the UNFCCC Secretariat. So, QELRO equals to 90.00%.

Kazakhstan’s intention to undertake this 90% QELRO is stipulated with the following conditions:

Surplus of AAU of Kazakhstan from the first commitment period is reserved in the full amount for the purposes of national security and domestic emission trading system 2013 – 2020 with its pilot phase in 2013.

Demonstration of the environmental integrity of the Kyoto Protocol and access and implementation of the flexible Kyoto mechanisms within both periods.

Use of a mid-term 2013-2015 review to increase the level of ambition in terms of emission reductions by individual parties in accordance with a workplan of mitigation efforts.

New agreement of 2015 shall include participation of all Parties with adequate mitigation commitments.
LIECHTENSTEIN

AWG-KP 17

Information by Parties listed in Annex I to the decision on their QELROs for the second commitment period under the Kyoto Protocol, Decision 1/CMP.7 paragraph 5

Introduction

1. Liechtenstein’s submission provides information on the country’s QELRO as required by Decision 1/CMP.7 Para 5. The submissions content may, however, be subject to adjustments depending on the applicable rules for the second commitment period which yet have to be decided.

Length of the second commitment period

2. With respect to the second commitment period of the Kyoto Protocol Liechtenstein prefers a period of eight years time (2013-2020).

Carry-over

3. Taking into account the importance of environmental integrity Liechtenstein advocates for a limitation of the carry-over of assigned amount units and of its use.

QELROs of Liechtenstein

4. With regard to the second commitment period of the Kyoto Protocol Liechtenstein has pledged a reduction of greenhouse gas emissions between 2013 and 2020 of at least -20% compared to the level of 1990. In order to transform these pledges into QELROs, Liechtenstein has chosen the QELRO for the first commitment period (QELRO 2010) as starting point of the trajectory of the second commitment period. Liechtenstein’s approach corresponds to Option (a) within paragraph 20 of the Technical Paper FCCC/TP/2010/3/Rev.1, Issues relating to the transformation of pledges for emission reductions into quantified emission limitation and reduction objectives: methodology and examples.

5. In order to raise Liechtenstein’s level of ambition the Government pledged a reduction target of 30% if other developed countries commit themselves to comparable emissions reduction efforts and if economically more advanced developing countries take appropriate mitigation actions.

Use of Carbon Credits

6. Liechtenstein will continue the use of carbon credits generated from the flexible mechanisms of the Kyoto Protocol and from new market based mechanisms under the Convention in order to ensure the achievement of its QELROs. The exact amount of credits which will be used by Liechtenstein has not been estimated yet. However, it is the aim of the Liechtenstein Government to give priority to domestic greenhouse gas reductions. The reduction goal together with the respective priority of domestic mitigation action has therefore been incorporated into Liechtenstein’s Emissions Trading Act, which is scheduled to come into force November 2012. In addition to that the Government currently works on a new energy strategy (Energy Vision 2020) in order to support domestic mitigation action of greenhouse gas emissions.

In case the reduction pledge would be higher than 20% by 2020 Liechtenstein would need to increase its use of carbon credits in order to achieve the respective QELRO. The concrete amount of additional credits has not been estimated yet.

Under the above-mentioned assumptions, the provisional QELRO of Liechtenstein for the pledged reduction target ranging from 20% to 30% by 2020 compared to 1990 would correspond to a QELRO between 84% and 78%.
Information on the quantified emission limitation and reduction objective of Ukraine for the second commitment period of the Kyoto Protocol

Ukraine fully recognizes its responsibility to future generations, and has consistently supported international efforts to reduce greenhouse gas emissions.

Ukraine has officially confirmed the target of greenhouse gas emission reduction by 2020 (referred to hereinafter as pledge) for the second commitment period of the Kyoto Protocol, which is 20% compared to 1990 emissions base year.

In April 2012 the Interdepartmental Commission for Enforcement of the UN Framework Convention on Climate Change in Ukraine considered the approaches to the transformation of pledge for emission reduction into quantified emission limitation and reduction objective (QELRO). The following approaches were considered:

• methodology described in FCCC/TP/2010/3/Rev.1 «Issues relating to the transformation of pledges for emission reductions into quantified emission limitation and reduction objectives: methodology and examples»,

• in accordance with the national circumstances, using the analysis of data on greenhouse gas emissions according to the latest reviewed national inventory for the period 1990-2009.

The national approach fully reflects the dynamics of greenhouse gas emissions in Ukraine, including a decline in emissions in the 90s of the last century due to economic factors, the transition from planned soviet-type to market economy. The choice of trajectory to the endpoint 20% reduction in 2020 and the definition of QELRO for Ukraine need further consideration. Including in relation to such premises:

- There are no amendments made in paragraph 13 of Article 3 of the Kyoto Protocol.
- Recognition of the fact that the modernization of the energy sector is performed gradually. In particular, more advanced coal combustion technologies are now widely developed and gradually introduced. The Government of Ukraine also attaches great importance to the increase in the use of renewable and alternative energy sources. But all these actions can not provide immediate results. A significant reduction in specific emissions of greenhouse gases per unit of GDP should be expected in about five - eight years from the current time, i.e. in 2017-2020. After passing the peak in these years, the growth of greenhouse gas emissions is expected to slow down.

In 2010 the Verkhovna Rada (Parliament) of Ukraine adopted the Law of Ukraine "On Main Principles (Strategy) of the State Environmental Policy of Ukraine till 2020", which aims to solve the problems of "optimizing the structure of the energy sector of the national economy through increased use of energy sources with low carbon dioxide emissions by 10 per cent by 2015 and 20 per cent by 2020, and to ensure reduction of greenhouse gas emissions".

In Ukraine, the world's largest projects on the use of solar and wind energy continue to be developed and implemented.

Ukraine has undertaken the development of the Low Carbon Economy Strategy, and is currently taking active steps to create a domestic emissions trading system of greenhouse gas emissions as one of the most reliable mechanisms to reduce emissions, which has proved its effectiveness.