

既に提出された約束草案  
(EU、スイス、ノルウェー)



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

Riga, 6 March 2015

**Subject: Intended Nationally Determined Contribution of the EU and its Member States**

### Introduction

1. The EU and its 28 Member States are fully committed to the UNFCCC negotiating process with a view to adopting a global legally binding agreement applicable to all Parties at the Paris Conference in December 2015 in line with the below 2°C objective.

### Intended nationally determined contribution (INDC) of the EU and its Member States

2. The Lima Conference confirmed the Warsaw decision that all Parties ready to do so should communicate their INDC in the first quarter of 2015 in a manner that facilitates the clarity, transparency and understanding of the INDC.
3. The EU and its Member States wish to communicate the following INDC. The EU and its Member States are committed to a **binding target of an at least 40% domestic reduction in greenhouse gas emissions by 2030 compared to 1990**, to be fulfilled jointly, as set out in the conclusions by the European Council of October 2014. In line with the Lima Call for Climate Action, in particular its paragraph 14, the following quantifiable information is hereby submitted:

ANNEX

<b>Intended Nationally Determined Contribution of the EU and its Member States</b>	
<b>Parties</b>	EU and its Member States (Belgium, Bulgaria, Croatia, 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 jointly
<b>Type</b>	Absolute reduction from base year emissions.
<b>Coverage</b>	Economy-wide absolute reduction from base year emissions.
<b>Scope</b>	All greenhouse gases not controlled by the Montreal Protocol: Carbon Dioxide (CO <sub>2</sub> ) <ul style="list-style-type: none"><li>• Methane (CH<sub>4</sub>)</li><li>• Nitrous Oxide (N<sub>2</sub>O)</li><li>• Hydrofluorocarbons (HFCs)</li><li>• Perfluorocarbons (PFCs)</li><li>• Sulphur hexafluoride (SF<sub>6</sub>)</li><li>• Nitrogen trifluoride (NF<sub>3</sub>)</li></ul>
<b>Base Year</b>	1990.
<b>Period</b>	1 January 2021- 31 December 2030.
<b>Reduction Level</b>	At least 40% domestic reduction in greenhouse gas emissions by 2030.
<b>% of Emissions Covered</b>	100%.
<b>Agriculture, forestry and other land uses</b>	Policy on how to include Land Use, Land Use Change and Forestry into the 2030 greenhouse gas mitigation framework will be established as soon as technical conditions allow and in any case before 2020.
<b>Net Contribution of International Market Based Mechanisms</b>	No contribution from international credits.

<b>Planning Process</b>	Domestic legally-binding legislation already in place for the 2020 climate and energy package. The existing legislation for land use, land-use change and forestry (EU Decision 529/2013) is based on the existing accounting rules under the second commitment period of the Kyoto Protocol. Legislative proposals to implement the 2030 climate and energy framework, both in the emissions trading sector and in the non-traded sector, to be submitted by the European Commission to the Council and European Parliament in 2015-2016 on the basis of the general political directions by the European Council, taking into account environmental integrity.
<b>Fair and ambitious</b>	The target represents a significant progression beyond its current undertaking of a 20% emission reduction commitment by 2020 compared to 1990 (which includes the use of offsets). It is in line with the EU objective, in the context of necessary reductions according to the IPCC by developed countries as a group, to reduce its emissions by 80-95% by 2050 compared to 1990. Furthermore, it is consistent with the need for at least halving global emissions by 2050 compared to 1990. The EU and its Member States have already reduced their emissions by around 19% on 1990 levels while GDP has grown by more than 44% over the same period. As a result, average per capita emissions across the EU and its Member States have fallen from 12 tonnes CO <sub>2</sub> -eq. in 1990 to 9 tonnes CO <sub>2</sub> -eq. in 2012 and are projected to fall to around 6 tonnes CO <sub>2</sub> -eq. in 2030. The emissions in the EU and its Member States peaked in 1979.
<b>Key Assumptions</b>	
<b>Metric Applied</b>	Global Warming Potential on a 100 year timescale in accordance with the IPCC's 4th Assessment Report.
<b>Methodologies for Estimating Emissions</b>	IPCC Guidelines 2006 and IPCC 2013 KP Supplement.
<b>Approach to accounting for agriculture, forestry and other land uses</b>	Comprehensive accounting framework, activity or land-based approach, for emissions and removals from land use, land-use change and forestry.
<b>Coverage</b>	
<b>Sectors/Source Categories</b>	<ul style="list-style-type: none"> <li>• Energy <ul style="list-style-type: none"> <li>○ Fuel Combustion <ul style="list-style-type: none"> <li>▪ Energy industries</li> <li>▪ Manufacturing industries and construction</li> <li>▪ Transport</li> <li>▪ Other sectors</li> <li>▪ Other</li> </ul> </li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ Fugitive emissions from fuels <ul style="list-style-type: none"> <li>▪ Solid fuels</li> <li>▪ Oil and natural gas and other emissions from energy production</li> </ul> </li> <li>○ CO<sub>2</sub> transport and storage</li> <li>● Industrial processes and product use <ul style="list-style-type: none"> <li>○ Mineral industry</li> <li>○ Chemical industry</li> <li>○ Metal industry</li> <li>○ Non-energy products from fuels and solvent use</li> <li>○ Electronic industry</li> <li>○ Product uses as substitutes for ODS</li> <li>○ Other product manufacture and use</li> <li>○ Other</li> </ul> </li> <li>● Agriculture <ul style="list-style-type: none"> <li>○ Enteric fermentation</li> <li>○ Manure management</li> <li>○ Rice cultivation</li> <li>○ Agricultural soils</li> <li>○ Prescribed burning of savannas</li> <li>○ Field burning of agricultural residues</li> <li>○ Liming</li> <li>○ Urea application</li> <li>○ Other carbon-containing fertilisers</li> <li>○ Other</li> </ul> </li> <li>● Waste <ul style="list-style-type: none"> <li>○ Solid waste disposal</li> <li>○ Biological treatment of solid waste</li> <li>○ Incineration and open burning of waste</li> <li>○ Wastewater treatment and discharge</li> <li>○ Other</li> </ul> </li> <li>● Land Use, Land-Use Change and Forestry set out in Decision 529/2013/EU <ul style="list-style-type: none"> <li>○ Afforestation, reforestation</li> <li>○ Deforestation</li> <li>○ Forest management</li> <li>○ Cropland management</li> <li>○ Grazing land management</li> <li>○ Or equivalent land-based accounting using UNFCCC reporting categories</li> <li>○ Other categories/activities elected by the EU and its Member States as Parties to the Kyoto Protocol and its Doha Amendment.</li> </ul> </li> </ul>
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## Follow up

4. The EU and its Member States urge all other Parties, in particular major economies, to communicate their INDCs by the end of March 2015 in a manner that facilitates their clarity, transparency and understanding.
  5. The EU and its Member States request the UNFCCC Secretariat to publish the INDC of the EU and its Member States on its website and to take it into account when preparing the synthesis report on the aggregate effect of the INDCs communicated by Parties.
  6. The EU and its Member States look forward to discussing with other Parties the fairness and ambition of INDCs in the context of the below 2°C objective, their aggregate contribution to that objective and on ways to collectively increase ambition further.
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## Switzerland's intended nationally determined contribution (INDC) and clarifying information

Switzerland is pleased to communicate its intended nationally determined contribution (INDC) and clarifying information as per decisions 1/CP.19 and 1/CP.20.

### Switzerland's INDC

Switzerland commits to reduce its greenhouse gas emissions by 50 percent by 2030 compared to 1990 levels, corresponding to an average reduction of greenhouse gas emissions by 35 percent over the period 2021-2030. By 2025, a reduction of greenhouse gases by 35 percent compared to 1990 levels is anticipated. Carbon credits from international mechanisms will partly be used. The INDC is subject to approval by Parliament. The methodological approaches underlying the Swiss INDC are included in this communication.

### A.) Up-front Information

#### 1. Quantifiable information on the reference point (including, as appropriate, a base year):

Base year: 1990

Emissions in base year: 53.3 Mt per year (provisional, will be defined through the inventory submissions). Base year emissions from non-forest land (cropland, grassland, wetlands, settlements, other land) will be included, as necessary, after completion of a current study on these emissions<sup>1</sup>.

Emissions/removals from forest land are not included in the base year, since only the net change in emissions is accounted for this sector.

#### 2. Time frames and/or periods for implementation:

Time frame of the commitment is until end 2030.

This quantified commitment by 2030 is translated into an average commitment over the period from beginning 2021 to end 2030. Its achievement will be tracked through the information in Switzerland's national inventories (accounting methodology for land sector explained below) and the addition/subtraction of emission reductions transferred internationally (carbon credits) in light of a budget approach.

Information on the anticipated level of emissions for 2025 is given for international comparability.

#### 3. Scope and coverage:

**Gases covered:** CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>

**Base year for gases covered:** all 1990 (not relevant where reference level is applied)

**Sectors covered:** energy; industrial processes and product use; agriculture; land-use, land-use change and forestry; waste

Switzerland supports the inclusion of international aviation and shipping on the basis of future internationally agreed rules applicable to all Parties (currently not included in Switzerland's INDC).

#### 4. Planning processes:

**National implementation:** Until mid-2016, Switzerland will elaborate a draft for consultation at national level of its national climate policy for the period 2021-2030. It will include measures that allow emission reductions of its target of minus 50 percent by 2030 to be achieved mainly domestically. The proposed measures to achieve the commitments will build on existing measures and strategies. The existing legal frameworks will have to be revised accordingly. These revisions are subject to approval by Parliament.

<sup>1</sup> Emissions from non-forest land use and land use change are estimated to be in the order of 2 per cent of base year emissions.

**Long term:** Switzerland plans its climate policy in 10-year-steps, continuously strengthening its reduction targets. The Government of Switzerland has formulated an indicative goal to reduce emissions by 2050 by 70 to 85 percent compared to 1990 including use of international credits as well as the vision to reduce per capita emissions in Switzerland to 1 – 1.5 t CO<sub>2</sub>eq in the longer term. These unavoidable emissions will have to be eventually compensated through sinks or removals.

#### 5. Assumptions and methodological approaches:

Switzerland supports internationally agreed rules for accounting and reporting of greenhouse gas emissions. As they are yet to be agreed, Switzerland's INDC is based on the following assumptions and methodological approaches:

**Credits from market mechanisms:** Switzerland will realize its INDC mainly domestically and will partly use carbon credits from international mechanisms.

- **Use of carbon credits with high environmental standards:** Switzerland will use carbon credits from international mechanisms that deliver real, permanent, additional and verified mitigation outcomes and meet high environmental standards. Quality criteria which are at least in line with those of Switzerland's current national legislation will be applied. Switzerland intends to use the CDM. In this context, Switzerland supports the revision of its modalities and procedures to fit in the new climate regime. Switzerland also intends to use, as appropriate, the new market mechanisms under the Convention (NMM, activities under the FVA).
- **Avoidance of double counting:** Switzerland intends to include the above-mentioned carbon credits in accounting for its emission reduction commitment. For the CDM under its current use and operation, it is assumed that only the acquiring Party will account for the emission reductions covered by the credits acquired from the host Party. Beyond this, Switzerland supports the reform of the CDM in the context of host country Parties having also emission reduction commitments/contributions. For new market mechanisms, Switzerland supports the elaboration of UNFCCC rules for avoiding double counting of emission reductions, or otherwise appropriate arrangements will be necessary.

#### **Forest land:**

- **Land based approach with reference level:** The same IPCC methodology as used to account for forest management in the second commitment period under the Kyoto Protocol will be applied. The reference level for forest land will include living and dead biomass and harvested wood products (HWP). Anticipated accountable emissions/removals from forest land in target year: 0 Switzerland supports that reference levels, when based on a projection, are subject to a technical assessment or review process.
- **Natural disturbances:** Extraordinary events in forest land will be excluded from the accounting.

**Non-forest land (cropland, grassland, wetland, settlements, other land)<sup>1</sup>:** Switzerland plans to include non-forest land from 2020 and anticipates to switch to a comprehensive land based approach. However, for the period 2021-2030, accounting is yet to be defined (currently a study on non-forest land reporting is on-going). The submitted INDC assumes 0 emissions from the non-forest lands.

#### **Inventory methodology used:**

IPCC 2006 guidelines, as per UNFCCC decision 24/CP.19

IPCC 2013 Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol, as per UNFCCC decisions 2/CMP.6 and 2/CMP.7

**Global Warming Potential Values used:** as per UNFCCC decision 24/CP.19

Given the assumed approaches in methodologies and assumptions outlined above, Switzerland intends to account for all significant anthropogenic emissions by sources and removals by sinks and does not regress regarding the comprehensiveness in accounting. Switzerland further will continue to follow existing guidance under the Convention and IPCC methodologies in accounting and reporting.

## 6. Consideration on fairness & ambition:

It is important to Switzerland that the global community shares the required efforts to combat global climate change in a fair and equitable manner. The same legal form and rules must apply to all Parties, while the effort to reduce greenhouse gas emissions must be differentiated according to a Party's responsibility and capability.

It is to note that Switzerland's commitment to reduce greenhouse gas emissions by 50 percent by 2030 relative to 1990 levels puts Switzerland on an emission development pathway in line with the recommendations by science.

It is further to note that Switzerland's emission reductions by 2030 will mainly be achieved domestically, thereby further strengthening Switzerland's transition to a low carbon economy. Given the low greenhouse gas intensity of Switzerland today, a high level of ambition is underlying Switzerland's INDC for 2030.

Switzerland's understanding of a fair share includes consideration of the aspects below. It is to note that fairness considerations include various aspects and that no single indicator on its own can accurately reflect fairness or a globally equitable distribution of countries' efforts. It is further to note that the evolving nature of a country's circumstances is to be reflected in fairness considerations.

- Responsibility is reflected in a country's past, current and future greenhouse gas emissions. Total emissions as well as per capita emissions are to be considered.

Switzerland's responsibility in terms of greenhouse gas emissions is low: Today, Switzerland emits around 0.1% of world's emissions and per capita emissions are at world's average.

Through climate policies implemented domestically, Switzerland's total share in global emissions as well as per capita emissions are further decreasing despite a substantial growth in industrial production (1990 – today: +54%) and population (1990 – today: +18%). Also, Switzerland has a low level of historic emissions of around 0.2% since 1990.<sup>2</sup>

- Capacity to contribute to solving the climate problem is closely related to the ability to invest in appropriate mitigation measures, such as carbon-efficient technologies. Hence, one aspect of capacity is to take into account GDP per capita in fairness considerations.
- Cost-efficient mitigation potential and abatement costs are a core aspect in considering a fair contribution of a country. Abatement costs vary strongly across countries. It is also to note, that marginal abatement costs increase if a country has undertaken ambitious mitigation actions in the past. In fairness considerations, it is important to merit past efforts and reward early movers.

In Switzerland, abatement costs are high due to the limited availability of short term cost-efficient mitigation potential: Switzerland's energy production is nearly carbon free and there is little heavy industry. Emission reduction potential mostly remains in the housing and transport sectors. This remaining potential has long transformation periods.

Switzerland is committed to continue to contribute its fair share in reducing greenhouse gas emissions in view of holding the increase in global average temperature below 2 degrees Celsius and to continue to act on the forefront of climate change.

## 7. How the INDC contributes to achieving the ultimate objective of the Convention (Article 2):

Switzerland's commitment to reduce emissions by 50 percent by 2030 relative to 1990 levels puts Switzerland on an emission development pathway that corresponds with the recommendations of the IPCC AR5 to reduce global emissions by minus 40 to 70 percent by 2050 below 2010 levels. The formulated commitment by 2030 is further consistent with the longer term vision of the Government of Switzerland to reduce per capita emissions to 1 – 1.5 t CO<sub>2</sub>eq in Switzerland. These unavoidable emissions will have to be eventually compensated through sinks or removals. It is to note that Switzerland's per capita emissions were already at world average levels in 2010.

<sup>2</sup> CAIT 2.0 WIR's climate data explorer (<http://cait2.wri.org>); Carbon Dioxide Information Analysis Center ([http://cdiac.ornl.gov/ftp/ndp030/nation.1751\\_2010.ems](http://cdiac.ornl.gov/ftp/ndp030/nation.1751_2010.ems)).

## B.) Information on Switzerland

Switzerland's share in global greenhouse gas emissions is around 0.1 percent. In 2012, total greenhouse gas emissions of Switzerland equaled 51.4 million tCO<sub>2</sub>eq and per capita emissions were at world's average (6.4 tCO<sub>2</sub>eq). The biggest share of greenhouse gas emissions arises from the transport and building sectors, followed by the industry, agriculture and waste sectors (see figure 1).

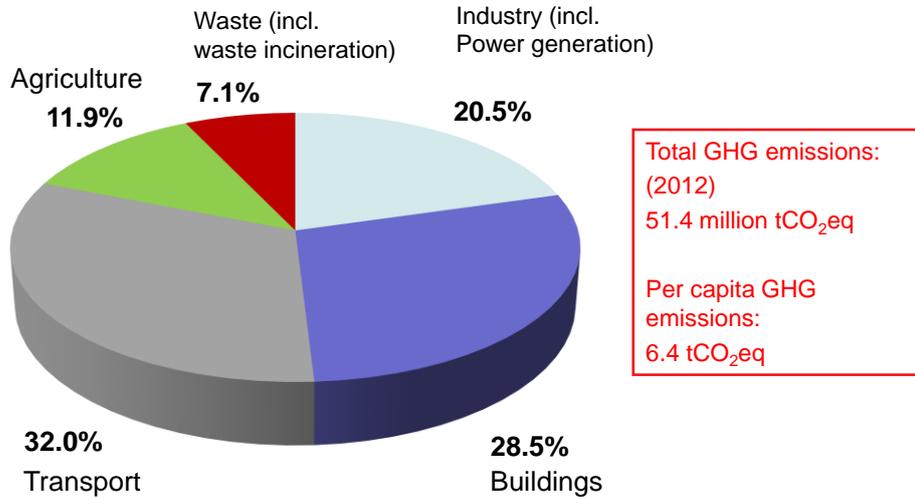


Figure 1. Switzerland's greenhouse gas emissions by sectors in 2012.

Over the last 25 years, Switzerland has experienced substantial economic and population growth. These two parameters influence the consumption and production of energy, traffic volumes and the number and volumes of heated buildings, which strongly impact greenhouse gas emissions in almost all sectors. Compared to 1990, in 2012, Switzerland's real gross domestic product (GDP) as a measure of economic output had risen by 36 percent, the building space that had to be heated increased by 31 percent, over 36 percent more passenger cars were in circulation on Swiss roads and 19 percent more people lived in Switzerland. Greenhouse gas emissions in this period nevertheless decreased slightly: new buildings are better insulated than in the past, cars have become more fuel efficient, heating oil is increasingly replaced by natural gas and electricity (e.g. for heat pumps) and the trend away from petrol- to diesel-powered passenger cars also contributed to a reduction in CO<sub>2</sub> emissions. Figures 2 and 3 show the respective reduction over the period 1990 to 2012 in per capita emissions by approximately 20%, in emissions per GDP by close to 30% as well as the decoupling of economic growth from the rise in greenhouse gas emissions.

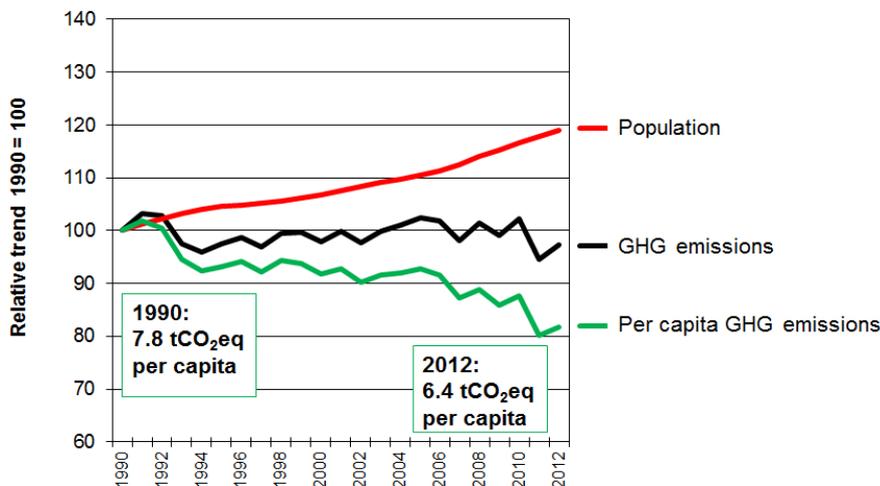


Figure 2. Per capita greenhouse gas emissions 1990 - 2012

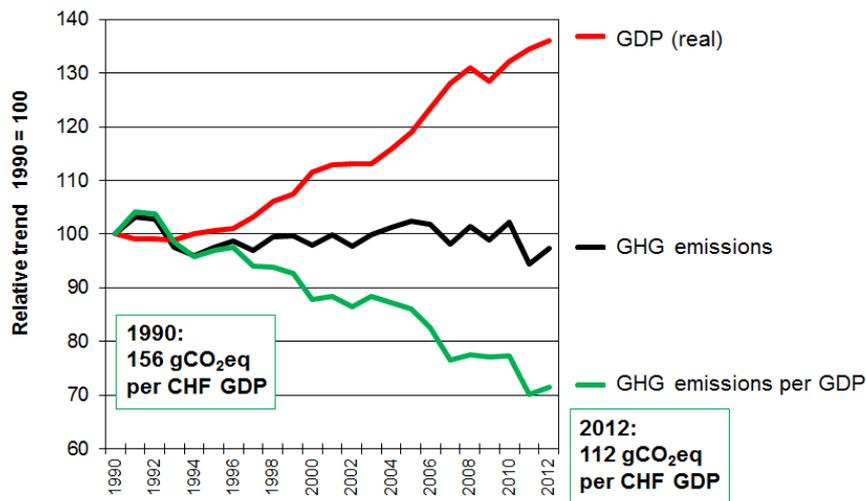


Figure 3. Per GDP greenhouse gas emissions 1990 - 2012

Switzerland has long standing climate policies and since 2000 a specific CO<sub>2</sub> Act has been established. Switzerland has committed itself under the first commitment period of the Kyoto Protocol (2008-2012) and reached its target to reduce greenhouse gas emissions by 8 percent compared to 1990, including through the use of carbon credits. At the beginning of 2013, the CO<sub>2</sub> Act and the CO<sub>2</sub> Ordinance entered into force in revised form. They form the framework of the current Swiss climate policy for the period from 2013 to 2020. The desired reduction of emissions by 2020 of 20 % below 1990 levels requires decisive action. Ratification of Switzerland's commitment from 2013 till 2020 under the second commitment period of the Kyoto Protocol is currently under consideration by the Parliament. For the period from 2021 to 2030, the existing legal frameworks will have to be revised. These revisions are envisaged in the next few years and subject to approval by Parliament.

Climate change has already left many marks in Switzerland. Both, the economy and society are affected. Since the beginning of temperature measurements in Switzerland in 1864, the average annual temperature has risen by 1.75 °C. In the Alps, the glaciers have been retreating at an accelerating pace since 1980. Since 1999 alone, glaciers have lost over 12 percent of their volume. If the warming continues, only a fraction of the current glacier cover will be left by the end of the 21<sup>st</sup> century with large impacts on the seasonal availability of water for drinking water, agriculture and power generation. Parallel to the retreat of glaciers, the permanently frozen subsoil in the high mountains also continues to thaw. More frequent mountain and rock falls as well as debris slides that can endanger transport links and infrastructure in the high mountains are a result of this. Already today, large investments are necessary to secure infrastructures at higher elevations. People are also directly affected. Only recently has it also been recognized that even the slow but steady increase in daily temperatures has a demonstrable impact on the well-being of people. Daily maximum temperatures in Switzerland have risen steadily since 1960. Hotter than usual summers have already led to higher mortalities.

Switzerland remains committed to and striving for an ambitious international agreement on climate change in line with recommendations by science to hold average global temperature increase below two degrees Celsius.



## **Submission by Norway to the ADP**

### **Norway's Intended Nationally Determined Contribution**

#### **1. Introduction**

Norway is fully committed to the UNFCCC negotiation process towards adopting at COP21 a protocol, another legal instrument or an agreed outcome with legal force under the Convention, applicable to all Parties, in line with keeping global warming below 2°C.

Norway hereby communicates its intended nationally determined contribution and the accompanying information to facilitate clarity, transparency and understanding, with reference to decisions 1/CP.19 and 1/CP.20.

Regarding the invitation to consider communicating undertakings in adaptation planning, Norway refers to the information contained in its recent Sixth National Communication.

#### **2. Norway's Intended Nationally Determined Contribution**

Norway is committed to a target of an at least 40% reduction of greenhouse gas emissions by 2030 compared to 1990 levels. The emission reduction target will be developed into an emissions budget covering the period 2021-2030.

Norway intends to fulfil this commitment through a collective delivery with the EU and its Member States.

In the event that there is no agreement on a collective delivery with the EU, Norway will fulfil the commitment individually. The ambition level will remain the same in this event.

## 2.1. Information to facilitate clarity, transparency and understanding

### 2.1.1. Quantification of the INDC

Type of commitment	Absolute emission reduction from base year emissions
Coverage	Economy wide; 100% of emissions covered
Base year	1990
Base year emissions	About 52.0 Mt CO <sub>2</sub> -equivalents. <sup>1</sup> The base year emissions estimated in line with decision 24/CP.19 will be reported in Norway's next national GHG inventory submission.
Time frame	2021-2030
Reduction level	At least 40% reduction in 2030 compared to 1990. To be developed into an emissions budget for the period 2021 to 2030.
Scope: inclusion of gases	All greenhouse gases not controlled by the Montreal Protocol  CO <sub>2</sub> - Carbon dioxide CH <sub>4</sub> - Methane N <sub>2</sub> O - Nitrous oxide PFCs - Perfluorocarbons HFCs - Hydrofluorocarbons SF <sub>6</sub> - Sulphur hexafluoride NF <sub>3</sub> – Nitrogen trifluoride
Scope: Sector/source	Energy; industrial processes and product use; agriculture; land-use, land-use change and forestry; waste.

<sup>1</sup> The land sector (land-use, land-use change and forestry) is not included in this figure. If the sector was included the 1990 figure would be about 41.8 Mt CO<sub>2</sub>-equivalents.

categories	
Metric (GWP values)	Global Warming Potential on a 100 year timescale in accordance with the IPCCs 4 <sup>th</sup> Assessment Report.
<b>Assumptions and methodological approaches:</b>	
Inventory methodology	IPCC 2006 guidelines
Accounting for the land sector (scope, accounting basis)	<ul style="list-style-type: none"> <li>• In the case of a collective delivery with the EU and its member states, the final approach to accounting for emissions and removals in the land sector will be decided upon later, based on the dialogue with the EU.</li> <li>• Norway will work towards a common framework for land sector accounting, for all Parties. Norway does not currently have a final position on the content and structure of such a framework.</li> <li>• In the event that Norway will implement the commitment individually, the final approach to accounting in the land sector will be decided upon later, based on the principles described below and the progress made internationally towards a common framework for land sector accounting: <ul style="list-style-type: none"> <li>• Norway's commitment will include emissions and removals in the land sector, ensuring incentives to implement new measures in the sector as well as sustaining existing measures.</li> <li>• The final choice of land sector accounting shall not affect the ambition level for 2030 compared to when the land sector is not included. The commitment to reduce emissions by at least 40% by 2030 compared to 1990 includes additional measures in the land sector.<sup>2</sup></li> <li>• Norway will apply a comprehensive land-based approach to accounting for emissions and removals in the land sector.</li> <li>• Methodological changes in calculating emissions and removals from the land sector shall not</li> </ul> </li> </ul>

<sup>2</sup> Before further guidance on land sector accounting is established and the accounting basis for Norway's commitment is finalised, net removals in the land sector compared to 1990 as the base year will be accounted for. In the base year, net removals in the sector was 10.1 Mt CO<sub>2</sub>-equivalents, while the projected net removals in 2030 constitute 21.2 Mt CO<sub>2</sub>-equivalents. Removals beyond the level in the base year and the projected level will count towards the 40% commitment. This will constitute additional action in the land sector. When the difference of 11.1 Mt between the base year level and the projected level is included, the commitment would need to be recalculated to ensure that the ambition level stays unchanged. Net removals in the base year and the projection may be adjusted as a consequence of improved emission inventory data in future national GHG inventory submissions.

	<p>affect Norway's ambition.</p> <ul style="list-style-type: none"> <li>Norway will consider the possibility of applying the Kyoto Protocol rules for natural disturbances and carbon stock changes in harvested wood products.</li> </ul>
<p><b>Expected use of international market based mechanisms, including how double counting will be avoided</b></p>	
<ul style="list-style-type: none"> <li>Through collective delivery with the EU</li> </ul>	<ul style="list-style-type: none"> <li>Norwegian emissions are covered by the EU ETS, and Norway will through our participation in the ETS contribute to the necessary emission reductions. The EU ETS ensures that no double counting occurs.</li> <li>In meeting the emission reduction target in the non-ETS sectors, Norway assumes access to flexibility in implementation in line with what EU member states have. This includes flexibility among EU member states. Regarding the non-ETS sectors, Norway's assumption is that an agreement between Norway and the EU on collective delivery will ensure that no double counting occurs.</li> <li>In this situation, there will be no use of international market credits towards the target. Norway does, however, support inclusion of market based mechanisms in the 2015 agreement, and the opportunity to continue using units accruing from the CDM and JI.</li> </ul>
<ul style="list-style-type: none"> <li>In the case of an individual commitment</li> </ul>	<ul style="list-style-type: none"> <li>If the commitment should be implemented by Norway individually, the ambition level of at least 40% emission reduction by 2030 compared to 1990 still stands.</li> <li>In this situation, Norway assumes that we will have access to flexible mechanisms as in the case with collective delivery with the EU. Norway will continue to use market based mechanisms under the UNFCCC. Strict criteria will be applied to ensure that such credits represent real and verifiable emission reductions and that double counting is avoided.</li> <li>Norway will seek an agreement of accounting for Norway's participation in the EU ETS.</li> </ul>

### **2.1.2. Planning processes and national circumstances**

The government presented a White Paper to the Parliament in February, with the proposed emission reduction target and implementation through collective delivery with the EU. Final decisions in the Norwegian parliament were made on 24 March 2015.

Norway will enter into a dialogue with the EU to develop the terms for a collective delivery of the commitment of at least 40% emission reduction by 2030 compared to 1990. The intention is to provide more information on this solution before the UN Climate Conference in Paris.

According to the broad political agreement in 2012 on climate change, the aim is that Norway will be carbon-neutral in 2050. As part of an ambitious global climate agreement where other developed nations also undertake ambitious commitments, Norway will adopt a binding goal of carbon neutrality no later than in 2030. This means that Norway will commit to achieving emission reductions abroad equivalent to Norwegian emissions in 2030.

Norway's long term goal is to become a low emission society by 2050. Towards 2030, Norwegian domestic emissions will be reduced as part of the effort to meet our 2030 commitment.

Norway's emissions profile, emissions development and current policies and measures are described in our sixth National Communication, submitted in 2014. Norway will continue to implement ambitious national climate policies. These policies will be under continuous development. With reference to the White Paper, the priority areas for enhanced national climate policy efforts are:

- Reduced emissions in the transport sector
- Low emissions technology in industry
- CO<sub>2</sub> capture and storage
- Renewable energy
- Environmentally friendly shipping

### **2.1.3. Fairness and ambition of the INDC of Norway**

Norway's approach to considering fairness and ambition is to assess how our INDC contributes to meeting the ultimate objective of the Convention, of achieving stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.

The scientific basis for such assessment is the most recent assessment report by the IPCC. The 5<sup>th</sup> Assessment Report shows that scenarios that are likely to limit global warming below 2°C require that global emissions must be reduced by 40 to 70% by 2050 compared to 2010 levels. Norway's commitment to reduce greenhouse gas emissions of at least 40% by 2030 compared to 1990 is well in line with the emissions pathways towards 2050 that correspond to keeping global warming below 2°C. Thus, Norway is doing its fair share for the global goal of keeping global warming below 2°C compared to pre-industrial levels. This is consistent with industrialised countries taking the lead.

An emission reduction target of 40% by 2030 compared to 1990 is at the high end of emission reductions that should be implemented by OECD-countries, given a global cost-effective, regional distribution of emission reduction targets (IPCC WGIII, table 6.4).

Under the second commitment period of the Kyoto Protocol, Norway is committed to an emission reduction corresponding to average annual emissions over the period 2013-2020 at 84 per cent of the 1990 emission level. The commitment under KP 2 is consistent with the Norwegian target of 30 per cent reduction of emissions by 2020, compared to 1990. Norway's INDC represents a significant progression beyond current undertaking. Given a successful outcome where the commitment is implemented through a collective delivery with the EU, the overall emission reduction will take place within Europe.

## **2.2. General observations and assumptions**

If the agreement or related COP decisions are amended before their entry into force in such a way that they include rules or provisions that in effect alters the assumptions under which this INDC has been developed, Norway reserves the right to revisit the INDC.

If it can contribute to a global and ambitious climate agreement in Paris, Norway will consider taking a commitment beyond an emission reduction of 40% compared to 1990 levels, through the use of flexible mechanisms under the UN framework convention beyond a collective delivery with the EU.

## **3. Follow up**

Norway requests that this submission is published on the UNFCCC webpage and that our INDC is included in the synthesis report to be prepared by the secretariat. Norway encourages other countries to submit their INDC well before Paris and is prepared to provide further information towards Paris.

# EUの約束草案に関する情報

項目	内容
タイプ	基準年からの総排出量削減
基準年	1990年
期間	2021年1月1日-2030年12月31日
削減目標	2030年までに少なくとも40%を域内で削減。
対象範囲	経済全体(排出の100%)
対象ガス	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub> , NF <sub>3</sub>
計画プロセス	2015年-16年に、欧州委員会が「2030年気候とエネルギーに関する政策枠組み」実施のための法制化に向けた提案を欧州理事会及び議会に提出予定。
土地セクターの活用有無	技術的条件が整い次第、遅くとも2020年までに、土地セクターの含め方に関する方針を策定。
国際的な市場メカニズムによる貢献	国際的なクレジットによる貢献分なし。
公平性・野心	<ul style="list-style-type: none"><li>・2020年までに1990年比で20%削減(海外でのオフセット分含む)とする現在の目標よりも相当程度進んだ目標。</li><li>・EUが目的とする2050年までの1990年比80-95%削減(IPCCが必要とする先進国全体の削減が背景)の達成に向けた道筋及び世界全体で50%削減する必要性に沿ったもの。</li><li>・EUはGDPを44%超成長させながら、排出量を1990年に比べて既に約19%削減。</li><li>・EUの一人当たり排出量は、12トン CO<sub>2</sub>eq(1990年)から9トンCO<sub>2</sub>eq(2012年)に減少、2030年には6トンCO<sub>2</sub>eqまで下がると予測。</li><li>・EUは1979年に排出量のピークに到達。</li></ul>

# スイスの約束草案に関する情報

※本約束草案は、今後議会による承認が必要。

項目	内容
タイプ	基準年からの総排出量削減
基準値	基準年: 1990年、排出量: 5330万トン
期間	2021年初め-2030年末
削減目標	2030年までに50%を削減、2021-30年の10年間平均で35%削減。2025年には35%削減を想定。
対象範囲	エネルギー、産業、農業、土地利用・土地利用変化及び林業 (LULUCF)、廃棄物
対象ガス	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub> , NF <sub>3</sub>
計画プロセス	<ul style="list-style-type: none"><li>・2016年半ばまでに、2021-2030年の気候変動政策に関する検討のためのドラフトを示す。</li><li>・10年ごとに気候変動政策を計画し、削減目標を継続的に強化。2050年に1990年比70-85%削減(国際的なクレジットの活用含む)を参照目標とすると共に、より長期的には一人当たり排出量を1-1.5トンCO<sub>2</sub>eqまで減らすビジョンを設定(これを最終的には吸収源で相殺)。</li></ul>
土地セクターの活用有無	土地ベース(全森林吸収量)アプローチで、京都議定書第二約束期間に使用されているIPCCの方法論を適用。参照レベルはゼロと設定。非森林(農地、草地、湿地、開発地、その他)は現在含めていないが、2020年から含める予定。
国際的な市場メカニズムによる貢献	部分的に国際的な市場メカニズムによるクレジットを活用する予定だが、削減目標は、主として国内措置によって達成する。環境十全性の確保と二重計上の回避が前提。
公平性・野心	<ul style="list-style-type: none"><li>・スイスの炭素強度が既に低いことを踏まえると、野心は高い。</li><li>・公平性は以下の事情の検討を含むと考えるが、公平性及び衡平な分配は一つの指標で測ることはできず、各国の進化する国内事情が考慮されるべきことに留意が必要。</li><li>-過去、現在及び未来の排出量: 世界の排出量に占めるスイスのシェアは0.1%、一人当たりの排出量は世界平均レベル、1990年からの歴史的排出量のシェアも0.2%と低いレベル。</li><li>-能力: 公平性の観点から一人あたりGDPを解決能力を測る指標の一つとして用いるべき。</li><li>-コスト: スイスの削減費用は高い。エネルギー生産はほぼCO<sub>2</sub>排出がなく、重工業もほとんどないので、短期におけるコスト効率的な削減ポテンシャルは限定的。</li></ul>
条約第2条の目的達成への貢献	・IPCC第5次評価報告書にある、2050年に2010年比40-70%削減に向けた排出経路に沿ったもの。