CLIMATE ACTION TRACKER

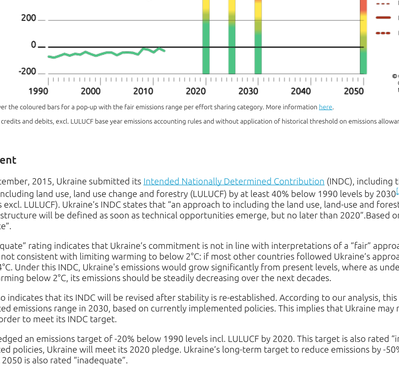
Ukraine

History: 2017 2016 2015 2014 2013 2011

Page last updated: 8th October 2015

Rating





Note: Hover over the coloured bars for a pop-up with the Fair emissions range per effort sharing category. More information here.

* Excl. LULUCF credits and debits, excl. LULUCF base year emissions accounting rules and without application of historical threshold on emissions allowances in 2020 under the Doha decision.

Assessment

On 30 September, 2015, Ukraine submitted its Intended Nationally Determined Contribution (INDC), including the target to reduce GHG emissions including land use, land use change and forestry (LULUCF) by at least 40% below 1990 levels by 2030[1] (equivalent to -41% below 1990 levels excl. LULUCF). Ukraine's INDC states that "an approach to including the land use, land-use and forestry in the climate change mitigation structure will be defined as soon as technical opportunities emerge, but no later than 2020".Based on this target, we rate Ukraine "inadequate".

The "inadequate" rating indicates that Ukraine's commitment is not in line with interpretations of a "fair" approach to reach a 2°C pathway. This means it is not consistent with limiting warming to below 2°C: if most other countries followed Ukraine's approach, global warming would exceed 3–4°C. Under this INDC, Ukraine's emissions would grow significantly from present levels, where as under all approaches consistent with limiting warming below 2°C, its emissions should be steadily decreasing over the next decades.

Ukraine also indicates that its INDC will be revised after stability is re-established. According to our analysis, this target lies at the lower end of the projected emissions range in 2030, based on currently implemented policies. This implies that Ukraine may need to implement additional policies in order to meet its INDC target.

Ukraine pledged an emissions target of -20% below 1990 levels incl. LULUCF by 2020. This target is also rated "inadequate". With currently implemented policies, Ukraine will meet its 2020 pledge. Ukraine's long-term target to reduce emissions by -50% below 1990 levels excl. LULUCF by 2050 is also rated "inadequate".

A further issue with this INDC, reinforced by its inadequacy, is the time period of 2030. As shown in the CAT global aggregation of INDC's, inadequate emission levels in 2030 could lock out achievement of global goal of limiting warming below 2°C. An INDC set for 2025 would provide a much earlier milestone to correct inadequacies in emission ambition.

Pledge

Ukraine's INDC states a target of reducing GHG emissions by at least 40% below 1990 levels incl. LULUCF by 2030. Assuming that Ukraine's LULUCF sink remains at the average level over the period 2003–2012 (-33 $MtCO_2e$), this INDC translates to an emissions level of up to 556 $MtCO_2e$ excl. LULUCF in 2030 (equivalent to -41% below 1990 levels excl. LULUCF). However, the most recent historical data shows that emissions excl. LULUCF have already declined by 57% below 1990 levels. This means that under Ukraine's INDC, emissions will grow by up to 39% of 2012 levels excl. LULUCF. This INDC target lies at the lower end of the projected emissions range in 2030, which is based on currently implemented policies. Ukraine may therefore need to implement additional policies in order to meet its INDC target.

The INDC indicates that "an approach to including the land use, land-use change and forestry in the climate change mitigation structure will be defined as soon as technical opportunities emerge, but no later than 2020." Ukraine has not yet defined which LULUCF accounting method it will adopt. For simplicity, and in the absence of other information, this assessment assumes a net-net approach to accounting for LULUCF activities. However, it should be noted that if Ukraine were to choose an approach based on Kyoto accounting (limited gross-net) similar to that which the EU is indicating it may choose, it could obtain significant credits which would add to the allowed GHG emissions excluding LULUCF in 2030. The size of Ukraine's removals from the LULUCF sector has declined over the period from 1990–2012. From this trend, LULUCF removals are expected to have a minor impact in the future.

Kyoto Protocol (KP)	
Member of KP CP1 (2008–2012)	Yes
Member of KP CP2 (2013–2020)	Yes
KP CP1 target (below base year)	0%
KP CP2 target (below base year)	-14%
CP2 conditions	Full carry over, no cancellation or limitation of use of units
Copenhagen pledge	
2020 target	-20% below 1990 by 2020 incl. LULUCF [-22% below 1990 levels by 2020 excl. LULUCF]
Conditions	Agreed range of emission reductions for Annex I Parties, status as an economy in transition, flexible mechanisms, 1990 as base year, use of to carry over surplus AAUs
INDC	
2030 target	At least -40% of 1990 levels incl. LULUCF by 2030 [-41% below 1990 levels excl. LULUCF]
Coverage	Economy wide, incl. LULUCF
Long term goal(s)	
Long-term goal(s)	-50% below 1990 by 2050 excl. LULUCF

Ukraine has stated that it will actively participate in current and future international market mechanisms and its current emission reduction target does not take these market mechanisms into account.

The INDC submitted by Ukraine will be updated in the future. It has indicated that its INDC will be "revised after the restoration of its territorial integrity and state sovereignty as well as after the approval of post-2020 socio-economic development strategies with account of investment mobilization." In this revision, Ukraine should elaborate on its intended accounting to take into account LULUCF international market mechanism. This would improve the transparency of its target and enable clearer comparisons with other INDCs.

Kyoto target and 2020 pledge

Ukraine submitted a QELRO[2] (Quantified Emission Limitation or Reduction Objective) level of 76 for the second commitment period of the Kyoto Protocol. This represents a 14% reduction of average annual emissions in the period of 2013 to 2020 compared to the 1990 base year. The target is conditional on full carry-over and, to directly quote the Government, no "cancellation or any limitation on use of this legitimately acquired sovereign property."

The Doha amendment limits targets for the second commitment period to the average historic emissions 2008–2010.[3] Ukraine is the country most affected by this rule, which leads to a Kyoto pathway almost 300 $MtCO_2e/yr$ lower than the direct translation of their target for the period 2012–2020.

In addition, under the Copenhagen Accord, Ukraine has pledged to reduce emissions by 20% below 1990 levels incl. LULUCF by 2020 (22% below 1990 levels excl. LULUCF by 2020). The pledge emissions level represents an 82% increase on 2012 levels excl. LULUCF. Under the current policy projection, Ukraine will easily meet this target: the target is 48–62% higher than the projected emissions range in 2020 excl. LULUCF. Ukraine's Copenhagen Pledge is conditional and based on a number of different factors: an agreed range of emissions reductions for Annex I parties, Ukraine's status as an economy in transition, the flexible mechanisms, 1990 as base year, and to be allowed to continue to carry over surplus AAUs (Article 3.13).

For 2050, Ukraine has proposed an emission reduction target of 50% below 1990 levels excl. LULUCF by 2050.

Fair share

We rate Ukraine's INDC target "inadequate". The "inadequate" rating indicates that Ukraine's commitment is not in line with interpretations of a "fair" approach to reach a 2°C pathway. This means it is not consistent with limiting warming to below 2°C: if most other countries followed Ukraine's approach, global warming would exceed 3–4°C. The reduction target could be strengthened to reflect Ukraine's high level of historical emissions, as well as its large historical per capita emission levels. Under this INDC, Ukraine's emissions can increase significantly, whereas for all 2°C consistent pathways, its emissions should be continuously decreasing over the next decades.

We rate both Ukraine's Copenhagen pledge for 2020 and its long term target "inadequate". The 2020 pledge is not in line with any interpretation of a "fair" approach to reach a 2°C pathway. The long-term target is in line with approaches that focus on capability. The lower end of the "sufficient" range for Ukraine is determined by approaches that focus on equal cumulative per capita emissions for 2020, 2025 and 2030. For 2050, approaches focussing on responsibility require the most stringent emission reductions.

Current policy projections

Between 1990 and 2000, emissions in the Ukraine dropped by 56% from 940 $MtCO_2e$ to 412 $MtCO_2e$ excl. LULUCF. From 2001 to 2007, the emissions started to increase again moderately to a level of 445 $MtCO_2e$ excl. LULUCF or 53% below 1990, followed by a steep decline during the financial crisis in 2009.

Currently implemented policies are expected to lead to an emissions level of between 451 and 494 $MtCO_2e$ excl. LULUCF in 2020 and between 533 and 776 $MtCO_2e$ excl. LULUCF in 2030.

In 2008, Ukraine introduced a feed-in-scheme with fixed prices, called the "green" tariff for electricity. The green tariff also guarantees grid connectivity to all renewable power generated from the project. The feed-in tariffs (FiT) were initially established at relatively high rates: 0.42 €/kWh for rooftop solar PV under 100 kW and 0.11 €/kWh for wind projects with capacity greater than 2 MW (IEA, 2015). The tariffs were updated in 2012 and 2015 and adjusted to the market levels. Currently, the FiT rates are 0.18€/kWh for roof-top solar, 0.10€/kWh for large wind projects (greater than 30 kW capacity) (IEA, 2015).

The amendment in 2015 removed the "local content requirement" previously introduced in 2013. This was replaced by a "local content premium", which provides an additional premium to plants using components produced domestically. A 5% premium on top of the regular feed in tariff is provided for 30% local content, while a 10% premium is provided for 50% local content (IEA, 2015). In the case of a wind turbine, the blade and tower are each considered to be 30% of the plant, while the main frame and nacelle are each considered to be 20% of the plant (Dentons, 2015).

In 2013, Ukraine updated its energy strategy through to 2030. The strategy sets new targets for different energy carriers such as electricity generation from renewable energy sources and nuclear power. However, since there are no clear supporting policies discussed, except the feed-in tariff mechanisms, this strategy is not further quantified in this analysis.

Assumptions

Pledge

Targets for 2020, 2030 and 2050 were calculated from the most recent national inventory submissions (CRF, 2014). For Ukraine's Copenhagen Pledge and INDC, we apply net-net accounting and assume that LULUCF emissions in 2020 and 2030 remain at the historical average level over 2003–2012 (-33 $MtCO_2e$).

We calculated Ukraine's LULUCF accounting quantities for the first commitment period (2008–2012) for afforestation, reforestation and deforestation using the current Kyoto rules. The Ukraine has submitted information on their forest reference level, which is equal to their 1990 forest management emissions and removals.

Current policy projections

Historic data are based on most recent national inventory submissions (CRF, 2014). Projections are based on the 'without measures' and 'with measures' scenarios from Ukraine's Sixth National Communication (Government of Ukraine, 2013). The 'with measures' scenario is used as the baseline for GHG emissions projection in Ukraine's draft INDC. However, due to the current political instability, it is uncertain whether Ukraine will implement all the policy measures included in the 'with measures'. Therefore, we also adopt the 'without measures' scenario to produce an emissions projection range.

Sources

CRF (2014). UNFCCC AWG-KP Submissions 2014. Common Reporting Format.

Dentons (2015). Table 2 Lists of locally produced equipment

Government of Ukraine (2011). Submission under the Ad-hoc working group on further commitments for Annex I Parties under Kyoto Protocol: Land Use, Land Use Change and Forestry

Government of Ukraine (2010). Ukraine's pledge to the Copenhagen Accord. Compiled in: Compilation of economy-wide emission reduction targets to be implemented by Parties included in Annex I to the Convention, UNFCCC (2011).

Government of Ukraine (2009a). Submissions by Parties. FCCC/KP/AWG/2009/MISC.1/, contribution of Annex I Parties, individually or jointly, to the scale of emission reductions to be achieved by Annex I Parties in aggregate.

Government of Ukraine (2013). 6th National Communication.

Government of Ukraine (2015). Intended Nationally Determined Contribution of Ukraine to a New Global Climate Agreement

International Energy Agency (2015). Green Tariff (Feed-in Tariff).

NERA Economic Consulting and Bloomberg New Energy Finance (BNEF) (2012). The Demand for Greenhouse Gas Emissions Reduction Investments: An Investors' Marginal Abatement Cost Curve for Ukraine, Prepared for EBRD, January 2012, London.

Footnotes

[1] Ukraine's INDC states that "It will not exceed 60% of 1990 GHG emissions level in 2030" (Government of Ukraine, 2015).

[2] The QELRO, expressed as a percentage in relation to a base year, denotes the average level of emissions that an Annex B Party could emit on an annual basis during a given commitment period.

[3] This is part of the Doha decisions and constitutes part of the amendments to the Kyoto Protocol. Amendments only come into effect once they are ratified by Parties.

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