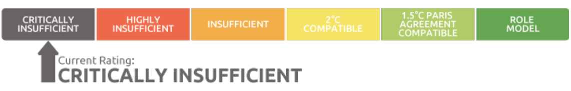
CLIMATE ACTION TRACKER

Ukraine

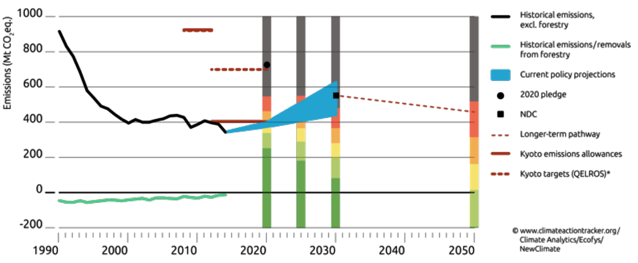
History: 2017 2016 2015 2014 2013 2011

Page last updated: 6th November 2017

Rating



Basic Intermediate Detailed



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Assessment

Ukraine's climate target would see its emissions growing significantly from present levels, at a time – under all approaches consistent with limiting warming below 2?C - they should be steadily decreasing. There is some uncertainty surrounding Ukraine's NDC and its implementation of its climate policies, in part because of its political instability, and the Government has stated that it will revise its NDC after "restoration of its territorial integrity and state sovereignty." Ukraine also needs to be more transparent about its intended accounting methods.

Ukraine's Nationally Determined Contribution (NDC) includes a target of reducing GHG emissions, including land use, land use change and forestry (LULUCF) by at least 40% below 1990 levels by 2030[1] (equivalent to 40% below 1990 levels excl. LULUCF). This target would imply a strong increase from current emission levels, as the most recent historical data from 2014 shows that emissions excl. LULUCF have already declined by 63% below 1990 levels.

Ukraine has not yet defined which LULUCF accounting method it will adopt. Its NDC states that an approach to including LULUCF in its climate change mitigation structure "will be defined as soon as technical opportunities emerge, but no later than 2020." Clarity on which accounting method it plans to adopt would be in the interests of transparency.

We rate Ukraine's NDC "Critically insufficient"—it is not in line with any interpretation of a "fair" approach to the former 2°C goal, let alone the Paris Agreement's 1.5°C limit.

Ukraine's projected emissions in 2030 result in a range of 14% higher to 20% lower than the NDC target of 522 MtCO$_2$e. The range is attributed to the uncertainty that surrounds Ukraine's implementation of climate policies, in part due to political instability. In 2017, Ukraine updated its energy strategy through to 2035 with new targets for renewable energy. However, we have not further quantified the energy strategy in our analysis, as there are no clear supporting policies tabled or discussed, except the feed-in tariff mechanisms.

Ukraine has stated that it will actively participate in current and future international market mechanisms but its current emissions reduction target does not take these market mechanisms into account. When revising its NDC, Ukraine should elaborate on its intended accounting on both LULUCF and international market mechanisms, which would improve the transparency of its target and enable clearer comparisons with other NDCs.

Footnotes

[1] Ukraine's NDC states that "It will not exceed 60% of 1990 GHG emissions level in 2030" (Government of Ukraine, 2016).

Pledges and targets

Paris Agreement targets

Ukraine ratified the Paris Agreement on 19 September, 2016.

Ukraine's Nationally Determined Contribution (NDC) (Government of Ukraine, 2015) includes 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 (-30 MtCO$_2$e), this NDC translates to an emissions level of up to 552 MtCO$_2$e excl. LULUCF in 2030 (equivalent to 40% below 1990 levels excl. LULUCF). However, the most recent historical data from 2014 shows that emissions excl. LULUCF have already declined by 63% below 1990 levels.

The NDC 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 shows the target level excluding LULUCF by subtracting the projected LULUCF sink from the target level incl. LULUCF for 2030. However, it should be noted that if Ukraine was 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 increase the level of allowed GHG emissions excluding LULUCF in 2030 by 28 MtCO$_2$e. The size of Ukraine's removals from the LULUCF sector has declined over the period from 1990–2014. 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% below 1990
Copenhagen pledge	
2020 target	20% below 1990 levels by 2020 incl. LULUCF [21% 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
Paris Agreement target	
Ratified	Yes
2030 unconditional target	At least 40% below 1990 levels incl. LULUCF by 2030 [40% below 1990 levels excl. LULUCF]
Coverage	Economy wide, incl. LULUCF
Long term goal	
Long-term goal	50% below 1990 by 2050

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.

Ukraine has indicated that its NDC 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 emissions and international market mechanisms. This would improve the transparency of its target and enable clearer comparisons with other NDCs.

2020 pledge and Kyoto target

Ukraine submitted a QELRO[1] (Quantified Emission Limitation or Reduction Objective) level of 76% of base year emissions 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 limited targets for the second commitment period to the average historic emissions 2008–2010.[2] Ukraine is the country most affected by this rule, which leads to a Kyoto pathway almost 300 MtCO$_2$e/yr lower than the direct translation of their target for the period 2012–2020. Ukraine has not yet ratified the Doha Amendment.[3]

In addition, under the Copenhagen Accord, Ukraine has pledged to reduce emissions by 20% below 1990 levels incl. LULUCF by 2020 (21% below 1990 levels excl. LULUCF by 2020) (Government of Ukraine, 2010). The pledge emissions level represents an increase of 111% on 2014 levels excl. LULUCF. Under the current policy projection, Ukraine will easily meet this target: the target is 82–94% higher than the projected emissions 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).

Long-term goal

For 2050, Ukraine has proposed an emissions reduction target of 50% below 1990 levels (State Environmental Investment Agency of Ukraine, 2014).

Footnotes

[1] 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

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

[3] List of parties that adopted the Doha Amendment to the Kyoto Protocol as of 28 September, 2017.

Fair share

We rate Ukraine's NDC target "Critically Insufficient". The "Critically Insufficient" rating indicates that Ukraine's climate commitment in 2030 is consistent with a warming of over 4°C: if all countries were to follow Ukraine's approach, warming would exceed 4°C. This means Ukraine's climate commitment is not in line with any interpretation of a "fair" approach to the former 2°C goal, let alone the Paris Agreement's 1.5°C limit.

If the CAT were to rate Ukraine's projected emissions levels in 2030 under current policies, Ukraine would also be rated "Critically Insufficient".

For further information about the risks and impacts associated with the temperature levels of each of the categories **click here**.

Current policy projections

Between 1990 and 2000, emissions in Ukraine dropped by 57% from 916 MtCO$_2$e to 395 MtCO$_2$e excl. LULUCF. From 2001 to 2007, emissions started to increase again moderately to a level of 439 MtCO$_2$e excl. LULUCF or 52% 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 375–400 MtCO$_2$e excl. LULUCF in 2020 and 442–628 MtCO$_2$e excl. LULUCF in 2030.

Energy supply

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 (International Energy Agency, 2017a). The tariffs were updated in 2012 and 2015 and adjusted to 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) (International Energy Agency, 2017a).

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 (International Energy Agency, 2017a). 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 (International Energy Agency, 2017a). 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.

In 2017, Ukraine updated its energy strategy through to 2035 (Government of Ukraine, 2017). The strategy sets new targets for electricity generation from different energy carriers. In 2035, 25% of electricity generation is foreseen to come from renewable energy sources other than hydropower (2014: 1%),[1] 13% from hydropower (2014: 5%), 50% from nuclear power (2014: 48%) and the remaining 12% from thermal power plants (2014: 39%). However, a step-by-step implementation plan has not been developed yet. As there are no clear supporting policies tabled or discussed, except the feed-in tariff mechanisms, we have not further quantified the energy strategy in our analysis.

Footnotes

[1] 2014 energy mix based on IEA statistics (International Energy Agency, 2017b).

Assumptions

Pledge

Target emission levels for 2020, 2030 and 2050 were calculated from the most recent national inventory submissions (CRF, 2016). For Ukraine's Copenhagen Pledge and NDC, we apply net-net accounting and assume that LULUCF emissions in 2020 and 2030 remain at the historical average level over 2003–2012 (-30 MtCO$_2$e).

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

The historical data are based on 2016 national inventory submissions (CRF, 2016). As there are only minor differences compared to the 2017 national inventory submission, we did not update the historical data. The current policy projections are based on the 'without measures' and 'with measures' scenarios from Ukraine's Sixth National Communication (CRF, 2016). The 'with measures' scenario includes the Underlying Principles (Strategy) of the State Environmental Policy of Ukraine, the National Plan on Climate Change Mitigation and Prevention of Human Impact on Climate Change for the Period up to 2030 and the Energy Strategy for Ukraine until 2030. However, due to the current political instability and the lack of clear supporting policies tabled or discussed, except for the feed-in tariff mechanism, it is not certain that the 'with measures' scenario is an adequate reflection of Ukraine's current policy pathway. For this reason, the 'without measures' scenario, which assumes that GHG emission footprints of all sectors of the economy will remain constant, is included as the upper bound to the current policy projection range. However, both scenarios assume an annual GDP growth of 2.9% between 2010 and 2020, whereas actual GDP has decreased by 1.5% annually since 2010 (World Bank Group, 2015). This overestimation of GDP growth suggests that the emission projections in both scenarios may be inflated.

At the moment, there are no alternative sources available to develop other current policy projections for Ukraine.

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