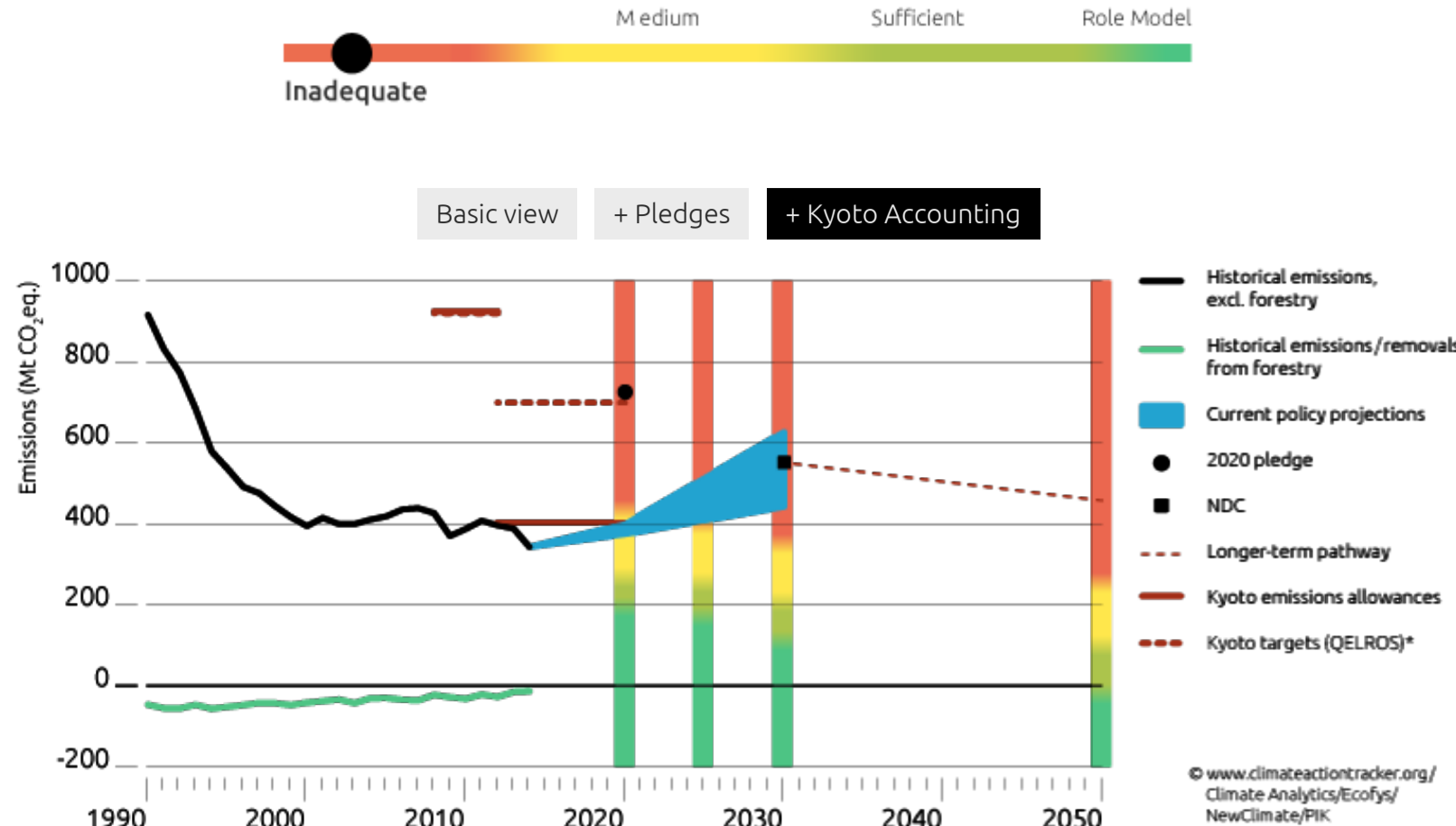


Rating



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

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 excluding LULUCF). 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. This NDC would see Ukraine's emissions growing significantly from present levels, whereas under all approaches consistent with limiting warming below 2°C, its emissions should be steadily decreasing. Under Ukraine's NDC, however, emissions should fall to 40% below 1990 levels excluding LULUCF.

We therefore rate Ukraine's NDC as "inadequate"—it is not in line with interpretations of a "fair" approach in line with holding warming below 2°C, let alone with the [Paris Agreement's stronger 1.5°C limit](#).

Ukraine also indicates that it will revise its NDC after "restoration of its territorial integrity and state sovereignty." Ukraine's projected emissions in 2030 that result from the current policy pathway will be between 14% higher to 20% lower than the NDC target. The range is attributed to the uncertainty that surrounds Ukraine's implementation of climate policies, in part due to political instability. Ukraine has also 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. 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.

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 excluding LULUCF by 2050 is also rated "inadequate".

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, and its Intended Nationally Determined Contribution (INDC), which was submitted on 30 September, 2015, became Ukraine's Nationally Determined Contribution (NDC).

Ukraine's NDC 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 MtCO₂e), this NDC translates to an emissions level of up to 552 MtCO₂e excluding LULUCF in 2030 (equivalent to 40% below 1990 levels excluding LULUCF). However, the most recent historical data from 2014 shows that emissions excluding 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 assumes a net-net approach to accounting for LULUCF activities. 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 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 1990–2014. From this trend, LULUCF removals are expected to have a minor impact in the future.

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 MtCO₂e/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 excluding LULUCF by 2020). The pledge emissions level represents an increase of 111% on 2014 levels excluding LULUCF. Under the current policy projection, Ukraine will easily meet this target: the target is 82–94% higher than the projected emissions in 2020 excluding 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 emission reduction target of 50% below 1990 levels (State Environmental Investment Agency, 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 23 September, 2016.

Fair share

We rate Ukraine's NDC target "inadequate". The "inadequate" rating indicates that Ukraine's commitment is not in line with interpretations of a "fair" approach in line with holding warming below 2°C, let alone with the [Paris Agreement's stronger 1.5°C limit](#). This means that 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 NDC, 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 focusing on responsibility require the most stringent emission reductions.

Current policy projections

Between 1990 and 2000, emissions in Ukraine dropped by 57% from 916 MtCO₂e to 395 MtCO₂e excluding LULUCF. From 2001 to 2007, emissions started to increase again moderately to a level of 439 MtCO₂e excluding 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 MtCO₂e excluding LULUCF in 2020 and 442–628 MtCO₂e excluding 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 2035 (Government of Ukraine, 2014). The strategy sets new targets for different energy carriers such as electricity generation from renewable energy sources and nuclear power. However, as there are no clear supporting policies tabled or discussed, except the feed-in tariff mechanisms, this strategy is not further quantified in this analysis.

Assumptions

Pledge

Target emissions 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 MtCO₂e).

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

Historical data are based on most recent national inventory submissions (CRF, 2016). 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' scenario. Therefore, we also adopt the 'without measures' scenario to produce an emissions projection range.

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