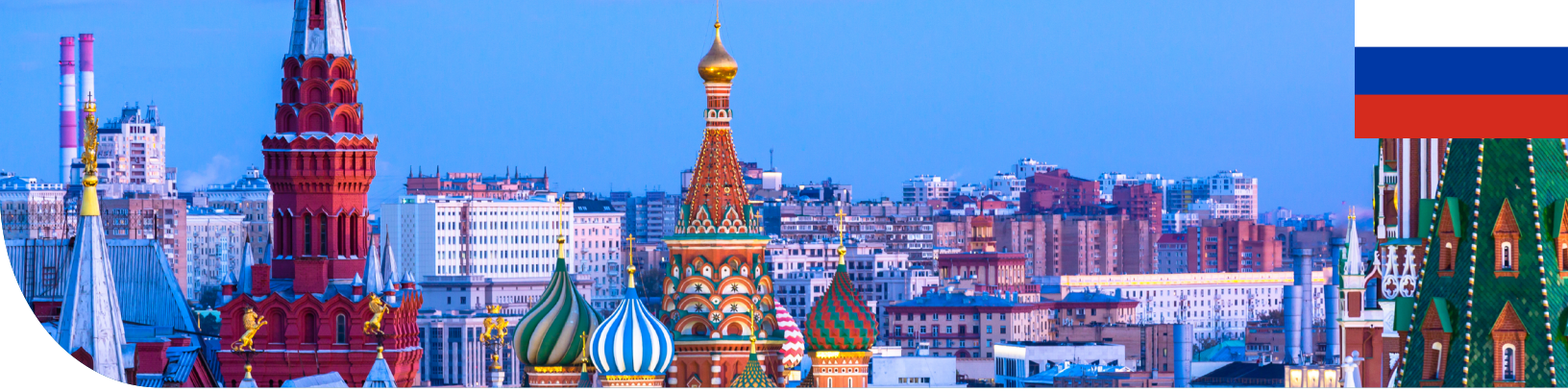


Center for Global Sustainability

2035 NDC Assessment: Russia

JUNE 2026

This analysis is part of the Center for **Global Sustainability (CGS): Country Climate Ambition Project**, which presents a set of detailed, country-specific analyses in a consistent, robust, and integrated approach with the goal of informing individual country ambition and supporting the Paris Agreement's NDC process. With in-depth assessments of key emitting countries, the Country Climate Ambition project provides the latest summary—with regular updates—of analyses on plausible, High Ambition country pathways that are based on CGS's field-leading modeling, data-driven empirical analyses, deep country knowledge, international research collaboration, and strategic policy engagements. For additional analysis and information, please see our website: https://country-ambition.cgs.umd.edu/.

Summary

This assessment shows that Russia's 2035 Nationally Determined Contribution (NDC) reflects a limited level of ambition, as it allows for significant increases in emissions relative to current levels. This level of ambition is consistent with the previous 2030 NDC. Russia's 2035 NDC commits to a 33-35% reduction in greenhouse gas (GHG) emissions from 1990 levels, which corresponds to a 73-78% increase in emissions from 2023 levels by 2035. In comparison, under the CGS *High Ambition* pathway, Russia's total GHG emissions decline by 61-65% from 1990 levels by 2035.

In November 2025, Russia released its 2035 NDC, which commits to reducing GHG emissions (including Land Use, Land Use Change, and Forestry (LULUCF)) by 33-35% from 1990 levels.[1] The country has committed to achieving net-zero emissions by 2060.[2]

While Russia's emissions remain well below 1990 levels, they have been steadily increasing since 2016 (Figure 1).[3] According to Russia's 2025 national inventory,[3] total GHG emissions have decreased by 62% from 1990 to 2023, declining from 2,427 $MtCO_2e$ in 1990 to 911 $MtCO_2e$ in 2023 (including LULUCF, using the IPCC AR5 GWP-100). In 2023, LULUCF was a net sink, while energy accounted for 79% of emissions (excluding LULUCF), followed by Industrial Processes and Product Use (IPPU) (12%), agriculture (5%), and waste (4%).[3] Estimates for Russia's emissions vary, especially for methane and LULUCF emissions, leading to different estimates across collected global inventories (Figure 1).

In 2024, fossil fuels accounted for 64% of electricity generation, with 45% from gas and 18% from coal. Nuclear made up 18% of generation, while renewables represented another 18%, including 17% from hydropower and less than 1% from solar and wind.[4] Russia's power sector emissions declined in 2020, but had increased by 19% as of 2024.[4] Over the past decade, installed capacity of gas increased by 10%, whereas solar and wind capacity has remained very limited.[4]

According to our analysis, **Russia's 2035 NDC target allows for significant increases in emissions from current levels.** Based on the country's national inventory, the target translates into a 73-78% increase in emissions (including LULUCF) by 2035 relative to 2023 levels. Given the country's historical trends, the proposed target would imply a return to emissions levels similar to those observed in the 1990s, reflecting a lack of ambition.

In comparison, **the CGS *High Ambition* pathway for Russia shows declining emissions relative to 1990 levels by 2035.** Total GHG emissions (including LULUCF) decrease by 61-65% from 1990 levels in the PRIMAP-hist dataset, reaching 939-979 $MtCO_2e$ by 2035 (Figure 1), and by 60% according to national inventory data, exceeding the NDC target.

Russia's 2035 NDC target reflects a similarly low level of ambition compared with the previous 2030 NDC, which aimed for a 30% reduction from 1990 levels.[5,6] Between 2030 and 2035, the new NDC envisions only an additional 4-7% reduction, despite the historical average annual reduction of 3% observed between 1990 and 2023.

Higher emissions reductions are achievable in Russia by accelerating the deployment of cost-competitive clean technologies such as solar power, wind power, and electric vehicles. Progress on both fronts remains slow, although imports of Chinese electric vehicles are increasing in the country.[5]

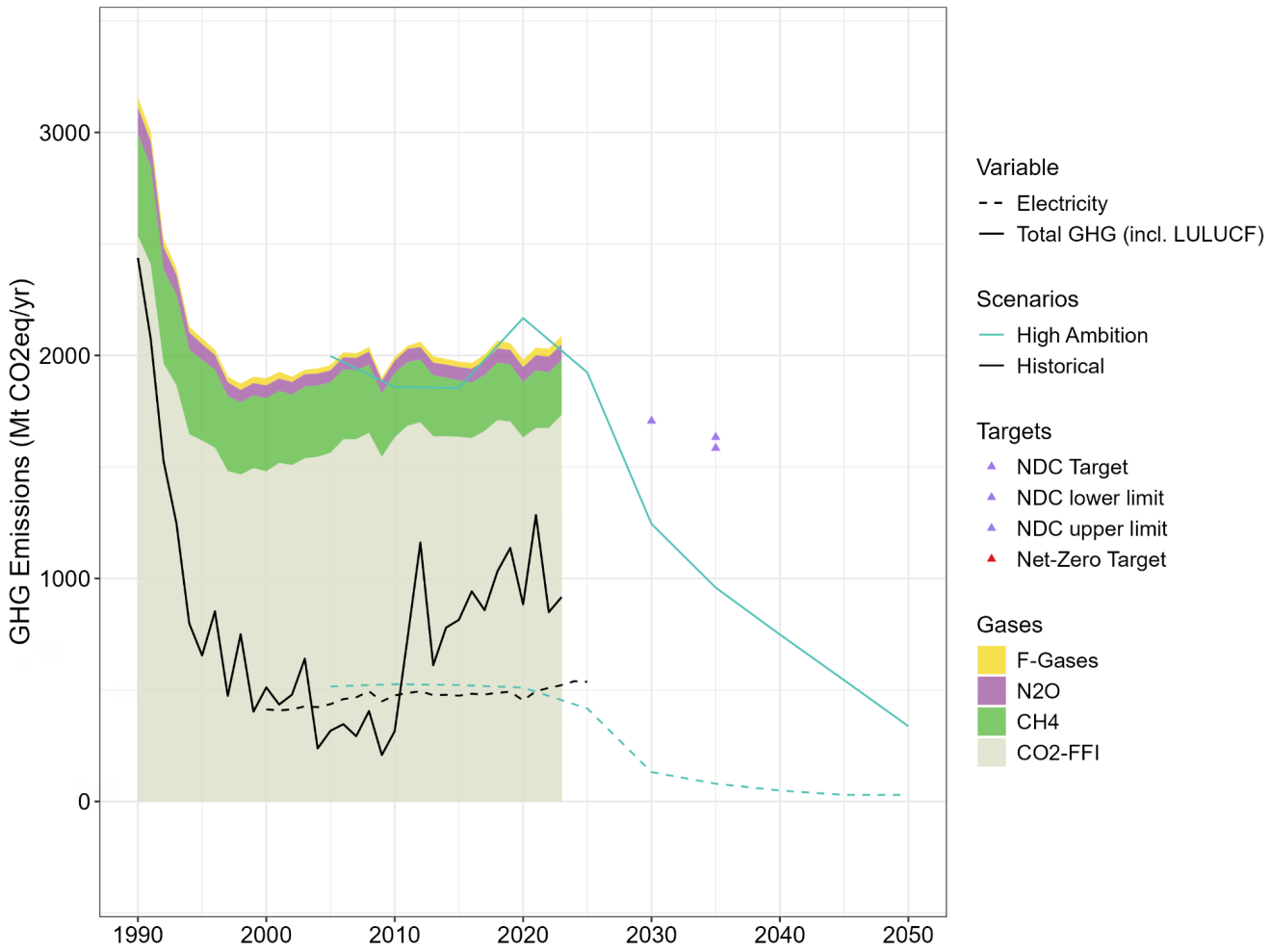


Figure 1. Russia's GHG emission pathway (including LULUCF). Historical data is from PRIMAP-hist[7] (solid black line for total GHG, including LULUCF), Ember[4] (dashed black line for electricity GHG), and CEDS[8] (colored breakdown of historic GHG emissions, with F-Gases from PRIMAP-hist). CO_2 FFI refers to CO_2 from fossil fuel combustion and industrial processes. Purple triangles mark the 2030 official NDC and the lower and upper limits of the 2035 NDC target. Future pathways include LULUCF emissions and are based on the GCAM IAM for the NGFS Phase V.[9] The shaded area represents +/- 2% of NDC base year emissions.

References

1. Russian Federation. Second Nationally Determined Contribution of the Russian Federation. (2025).
2. Russian Federation: Net zero targets. *Climate Action Tracker* https://climateactiontracker.org/countries/russian-federation/net-zero-targets/ (2025).
3. Russian Federation. National Inventory Report on The Anthropogenic GHG Emissions from Sources and Their Removals by Sinks in 1990-2023. (2025).
4. Ember. Electricity Data Explorer - Open Source Global Electricity Data. Ember (2025).
5. IEA. *Global EV Outlook 2025. Expanding Sales in Diverse Markets*. https://iea.blob.core.windows.net/assets/7ea38b60-3033-42a6-9589-71134f4229f4/GlobalEVOutlook2025.pdf (2025).
6. Russian Federation. Nationally Determined Contribution of the Russian Federation. (2022).
7. Gütschow, J., Pflüger, M. & Busch, D. The PRIMAP-hist national historical emissions time series (1750-2023) v2.6.1. Zenodo https://doi.org/https://doi.org/10.5281/zenodo.15016289 (2025).
8. Hoesly, R. *et al.* Community Emissions Data System (CEDS) v_2025_03_18 Aggregate Data. Zenodo https://doi.org/10.5281/zenodo.15059442 (2025).
9. NGFS. NGFS Climate Scenarios for Central Banks and Supervisors - Phase V. The Central Banks and Supervisors Network for Greening the Financial System (NGFS) (2024).