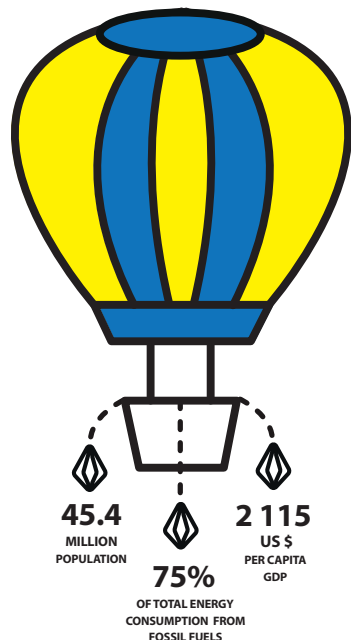


UKRAINE

CLIMATE FACTS AND POLICY

POLICIES AND PROCESSES

353 MILLION tCO₂e¹
7.8 TONNES PER CAPITA



Sources: National GHG inventory data and absorption (1990-2014) and estimates based on the country's INDC (2014-2015), demographic, energy and economic data from the databases World development indicators of the World Bank: <http://data.worldbank.org/indicator/> and the State Statistics Service of Ukraine: <http://www.ukrstat.gov.ua/>

¹ These events resulted in drops in GDP of 6.8 per cent and industrial output of 10.7 per cent, as well as the destruction of infrastructure in the territories which are temporarily outside of the government's control, the depletion of financial resources and the disruption of established industrial relations and crucial supplies of raw materials.

Ukraine – 2020 Sustainable development strategy

An energy independence programme and transition to effective use of energy resources with a goal of reducing GDP energy intensity by 20 per cent by the end of 2020

Association Agreement between Ukraine and the European Union

Assistance in energy efficiency, renewable energy use and climate policy development, including a greenhouse gas (GHG) emissions trading scheme

Energy plans and goals

Renewable Energy Action Plan to 2020: Renewables contribute 11 per cent to the energy mix
Energy Efficiency Action Plan to 2020: Energy saving of 9 per cent of average final domestic energy consumption

Taxes and tariffs

Fees for emissions of carbon dioxide and other pollutants (including methane and nitrogen oxide)
Feed-In Tariff introduced in 2008 to support power generation from solar, wind, small hydro and biomass sources

2020 Climate Policy Goals

Reduction of economy-wide greenhouse gas emissions by 20 per cent as compared to the 1990 level

2030 Goals and Intended Nationally Determined Contribution (INDC)

Mitigation: Emissions not to exceed 60 per cent of 1990 GHG emission levels accounting for production and use of energy, industry, agriculture, land use, forestry and waste
Adaptation priorities: Climate adaptation supported in the context of international obligations
Adaptation and mitigation of equal importance

GHG emissions inventory and reporting

National system for the estimation of anthropogenic emissions of GHGs
Annual Report on inventory of anthropogenic emissions by sources and removals by sinks of GHGs prepared by the National Center for GHG inventory and subject to annual review by international experts
National electronic register of carbon units in operation
Regular preparation of National Communications on climate change and biennial reports on anthropogenic GHG emissions and removals
System of GHG emissions monitoring, reporting and verification (MRV) in preparation stages

CLIMATE ACTIONS

Paris Agreement on Climate Change

Ukraine ratified the Paris Agreement on Climate Change in September 2016

Fulfilment of obligations under the Kyoto Protocol

1990 GHG emissions level not exceeded during the first stage of the Protocol (2008-2012)
Total emissions in 2012: 43 per cent of 1990 level
Ukraine the leader of the joint implementation mechanism based on number of approved projects and emission reduction units
Implementation of emission trading mechanism on the basis of green investment scheme

Energy Efficiency

Approval of laws on metering and energy efficiency in buildings
Establishment of an energy efficiency fund for the residential sector

Development of legal and scientific grounds for climate adaptation

Preparation of scientific basis for the climate adaptation strategy
Implementation of priority adaptation actions, 2012-2013
Draft adaptation strategies for the Dniester and Danube transboundary river basins

Local authority initiatives

98 cities joined Covenant of Mayors for Climate & Energy on EU climate change mitigation initiative for urban areas

CLIMATE FINANCE

State budget

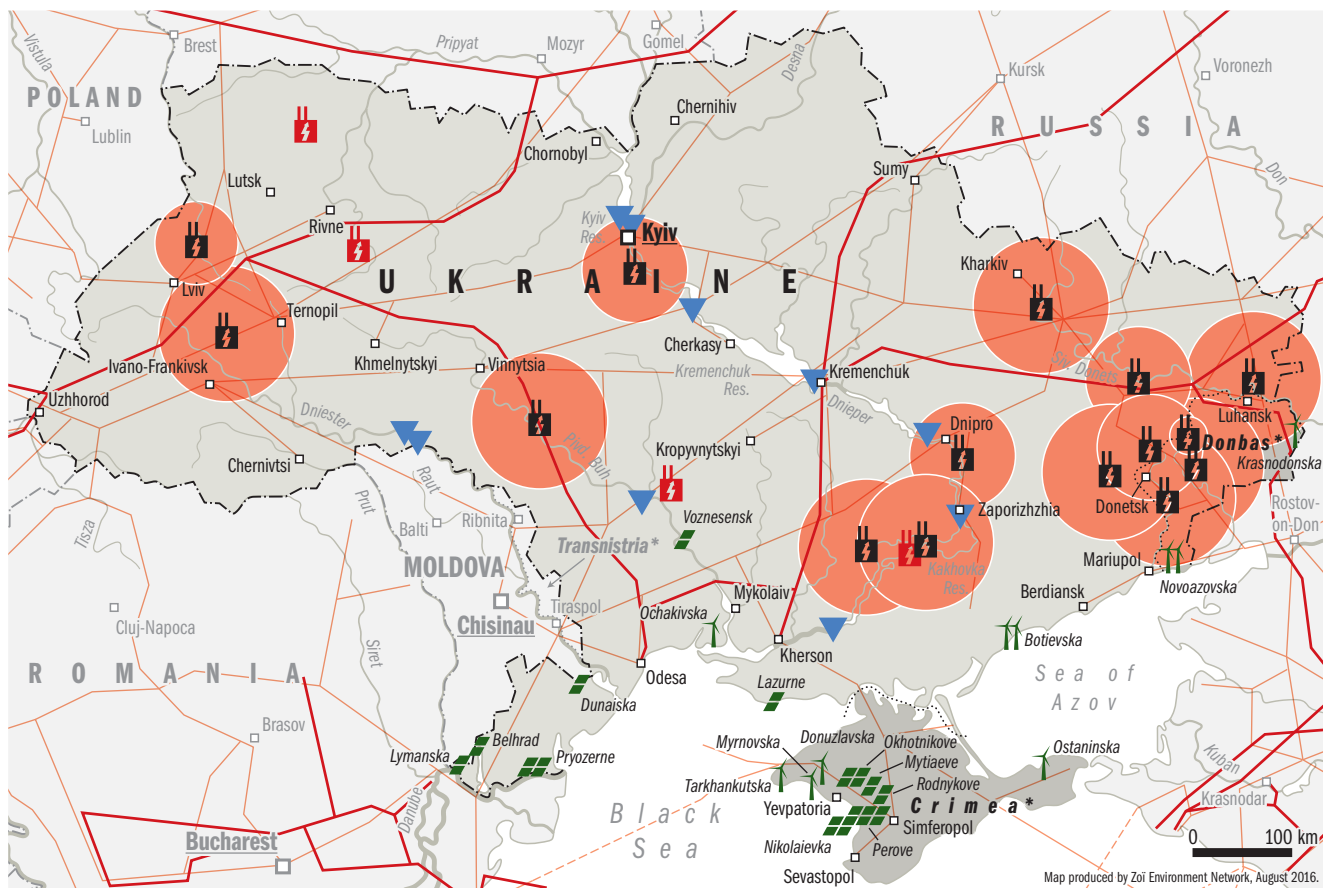
Public institutions and programmes, international reporting and research

External sources

International technical assistance in the framework of bilateral cooperation, in particular with Austria, Germany, Denmark, Norway, the USA, Finland, Switzerland and Sweden

International programmes and organizations that provide climate grants and lending

The European Union, the Global Environment Facility (GEF), the World Bank, the Nordic Environment Finance Corporation, the European Bank for Reconstruction and Development (EBRD), the European Investment Bank, the German state development bank, the International Finance Corporation and the Climate Technology Fund

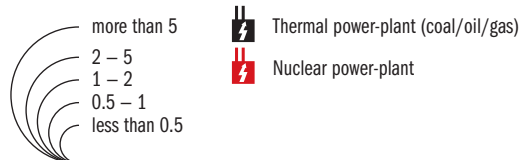


* Areas outside of the government's control: limited ability to address climate change

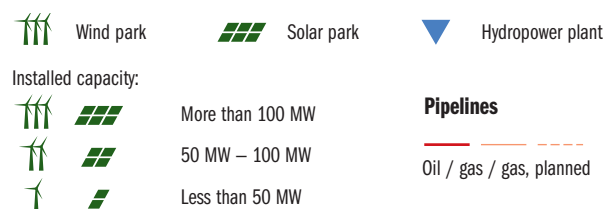
Energy and emissions

Fossil fuel energy installations and carbon emissions

● CO₂ emissions from thermal power plants, million tonnes per year:



Renewable energy installations and plans



Policies and institutions

The main authority responsible for the formation and implementation of policy on climate change is the Ministry of Ecology and Natural Resources. The ministry develops legislation and regulations; prepares reports to international bodies; conducts negotiations; and presides over the Interdepartmental Commission for compliance with the United Nations Framework Convention on Climate Change (UNFCCC). The commission includes representatives of key ministries, government agencies, MPs, the Presidential Secretariat, the National Security and Defense Council, the Secretariat of the Parliament, the National Academy of Sciences and NGOs. A number of interdepartmental working groups provide expert support and assistance.

Other governmental institutions with responsibilities for mitigation and adaptation include the Ministry of Energy and Coal Industry; the Ministry of Economic Development and Trade; the Ministry of Regional Development, Construction and Housing and Communal Services; the Ministry of Agriculture and Food; and the State Agency for Energy Efficiency and Energy Saving.

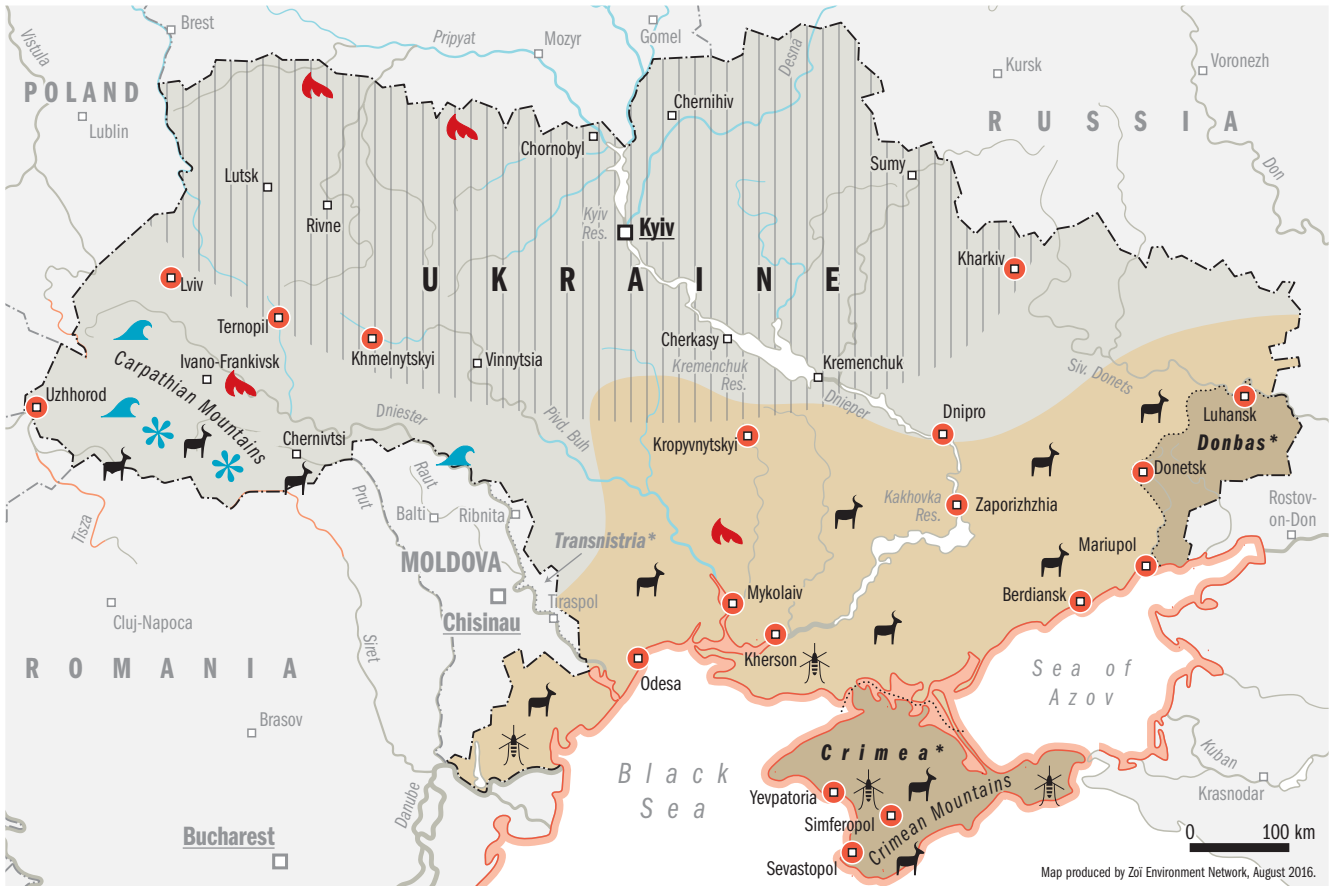
Since 2011, the National Center for GHG inventory has been preparing an annual report on inventory of anthropogenic emissions by sources and removals by sinks of GHG and improving the GHG Inventory System.

In 2016 the National Academy of Sciences established the Co-ordination Council for UNFCCC issues. The Council prepares scientifically based recommendations.

The Ministry of Ecology and Natural Resources is active in the development of a low-carbon development strategy, and in the implementation of the EU Association Agreement, in particular, concerning the introduction of an emissions trading scheme. Other activities include upgrading the carbon tax; development of adaptation strategies to 2030; adoption of a new law on waste treatment; and initiation of new climate research.

In response to the fact that energy production and use exceeds 65 per cent of total greenhouse gas emissions, Ukraine has adopted a law on the natural gas market, and has developed draft laws on coal and electricity markets and on energy-efficient lighting. The country is also implementing action plans on renewables and energy efficiency for the period until 2020. In addition, a new energy security policy provides for the modernization of infrastructure and for construction in the housing sector to adopt new energy efficiency standards.

The Ministry of Energy and Coal Industry revised its energy strategy in response to challenges related to modernization, market deregulation and investment, and aims to improve the efficiency of the industry through the use of state-of-the-art methods and technologies. In the long term, the strategy provides for drafting energy development plans on the basis of renewables and the creation of an energy labelling system.



Map produced by Zoi Environment Network, August 2016.

* Areas outside of the government's control: limited ability to address climate change

Impacts of climate change

- Forest fires
- Risk of floods
- Losses of biodiversity
- Shorter winters with less snow cover and higher temperatures
- Invasion of Asian tiger mosquito

Predicted change in annual river flow

Increasing / no change / decreasing

- Sea and coastal areas: increase of sea level, salinization of coastal areas, deficit of safe drinking water, reduction of quality and diversity of fisheries
- Urban areas and cities facing heatwaves, infection outbreaks, air and water pollution, fresh water scarcity
- Desertification, soil erosion and degradation, water deficit
- Favoured conditions for cultivation crops, though losses due to intensive droughts and extreme events could reach 40-60%

Ukraine scorecard

- Country's share of global emissions
- Country's emissions per capita
- General climate action ambition

Mitigation commitment:

- Emissions reductions
- Decoupling from population growth
- Decoupling from economic growth
- Renewable energy prospects

Adaptation action

National climate policy actors

Policy leadership – Ministry of Ecology and Natural Resources

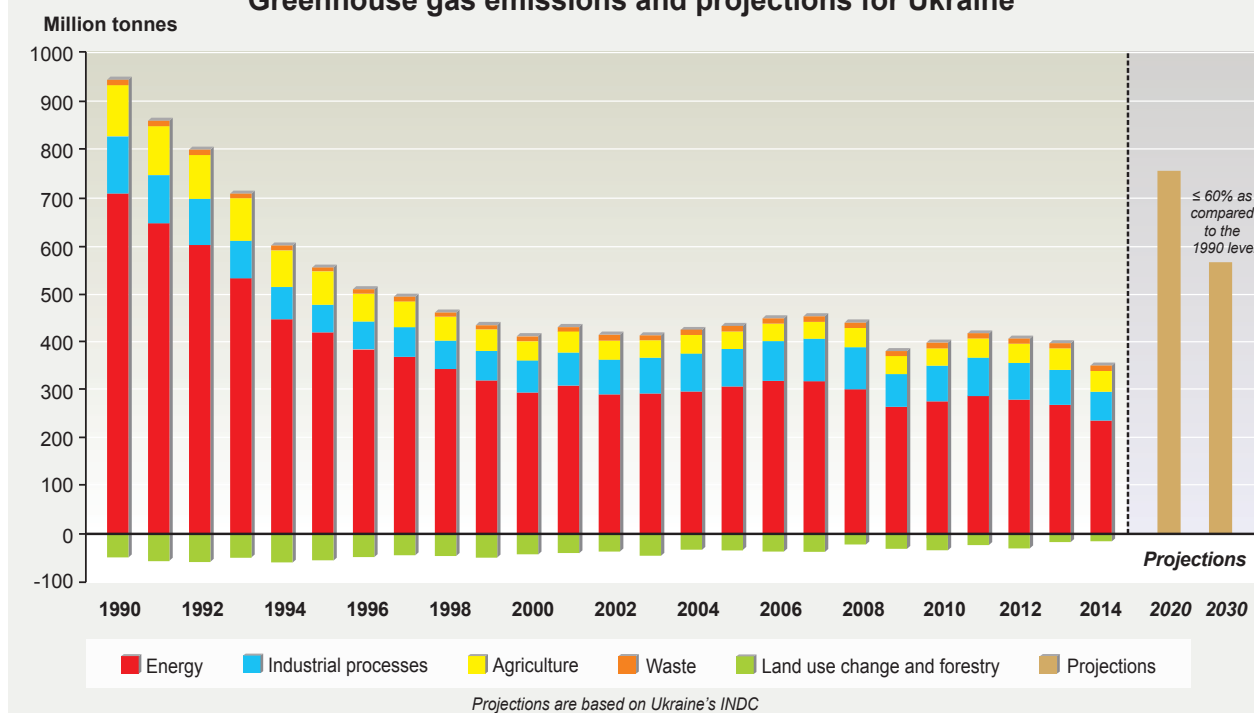
Coordinating advisory body – Interdepartmental Commission for compliance with the UNFCCC

Key authorities – Ministry of Energy and Coal Industry; Ministry of Economic Development and Trade; Ministry of Regional Development, Construction and Housing and Communal Services; State Agency for Energy Efficiency and Energy Saving

GHG Inventory – State-owned National Center for GHG inventory

Scientific coordination – National Academy of Sciences Coordination Council for UNFCCC issues

Greenhouse gas emissions and projections for Ukraine



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Climate actions

As an Annex 1 party to the UNFCCC and a party to the Kyoto Protocol, Ukraine meets its obligations on curbing GHG emissions, and submits reports on emissions, GHG absorption and regular National Communications. It maintains a system for evaluating anthropogenic emissions and absorption of greenhouse gases and an electronic register of carbon units.

Ukraine fulfilled its commitments for the first period of the Kyoto Protocol (2008-2012) by holding emissions to 43 per cent of the 1990 level. Furthermore, mainly due to the political crises and economic recession, the country has recently seen drastic reduction in gas consumption from 50 bcm in 2013 to 34 bcm in 2015.

Adaptation activities in the 2012-2013 period included the implementation of priority adaptation measures, a series of regional workshops and the drafting of strategic policies for adaptation to climate change in the Dniester River Basin. Local authorities played an active role in the preparation of a transboundary strategy of adaptation to climate change in the Danube Delta. NGOs are managing small, local adaptation projects that raise awareness and engage the public in decision-making on climate change solutions.

In September 2016 Ukraine ratified the Paris Agreement on Climate Change. Ukraine's INDCs establish a 2030 target of 60 per cent of the country's 1990 GHG emissions. By 2020, this target will have been revised with the view of strengthening the obligations, depending on national circumstances.

Climate finance

Public funding covers the preparation of international climate reports; the development of related legislation; draft regulations of the Cabinet of Ministers, ministries and institutions; and coordination of the development and implementation of sectoral policies, plans and programmes. The budget also funds the National Center for GHG inventory and the national electronic registry of carbon units.

Limited public funds, together with bilateral and multilateral technical assistance programmes and lending from international financial institutions are supporting the development of an emissions trading system, climate change adaptation strategies and related plans and programmes.

Sponsored projects include:

- Establishment of institutional and technical capacities for an emissions trading scheme
- Support for MRV
- Development and implementation of climate change mitigation and adaptation policies and strategies
- Assessment of climate change and security in Eastern Europe, Central Asia and the South Caucasus
- Municipal energy reform (assistance in elaborating and implementing low-carbon development strategies)

Estimates suggest that Ukraine needs €75-100 billion to transition to low-carbon development and to meet its 2030 obligations under the Paris Agreement, much of which must be directed to the modernization of the housing sector. The country foresees the creation of an energy efficiency fund partially financed by savings on utility subsidies after the introduction of market prices for energy.

Sources of information for the scorecard

Laws and bills of Ukraine, draft regulations of the Cabinet of Ministers, ministries and institutions, drafts of sectoral strategies, plans and programmes

Electronic resources of ministries and institutions of Ukraine, the UNFCCC, the World Bank, UNDP, EBRD, GEF, USAID, analytical organizations and centres, international projects and programmes, NGOs and world development indicators

The National Cadastre of anthropogenic emissions and GHG absorption in Ukraine, the 6th National Communication of Ukraine on Climate Change, the 1st biennial report on anthropogenic emissions and GHG absorption, and INDC

Cartographic materials from international sources, the State Service for Geodesy and Cartography of Ukraine, the Ukraine Hydrometeorological Center, Ukrainian Hydrometeorological Institute, the Ukrainian Research Institute of Forestry and Agroforestry

Analytical materials and expertise of Zoï Environment Network, as well as Ukrainian organizations and experts



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