

Government of Montenegro

Intended Nationally Determined Contribution (INDC) of Montenegro following decision 1/CP.19 and decision 1/CP.20

Podgorica, September 2015

This document presents Montenegro's Intended Nationally Determined Contribution following decision 1/CP.19 and decision 1/CP.20 of the United Nations Framework Convention on Climate Change (UNFCCC), which invited Parties to communicate the UNFCCC Secretariat their INDCs, with the aim to achieve the ultimate objective of the UNFCCC as set out in Article 2 of the Convention.

The region of South East Europe, including Montenegro, is highly vulnerable to the impacts of climate change thus avoiding dangerous climate change is of paramount importance for the country.

Montenegro is a non-Annex I country with a population of 621 200. According to 2013 data GDP per capita is 5 356 EUR. Size of country causes reduced flexibility in the application of policies in some emitting sectors where single source of emissions can be dominant, distorting the emission profile of the country. Also, it should be noted that tourism is one of the main drivers of the economy, having the number of tourists visiting the country annually more than twice of the number of local population.

Montenegro's contribution to the international effort to avoid dangerous climate change is expressed in 30 % emission reduction by 2030 compared to the 1990 base year. The emission level of greenhouse gases for Montenegro from sectors covered by INDC was 5239 kilotons in 1990 and Montenegro pledges to reduce it at least by 1572 kilotons, to the level below or at 3667 kilotons. The reduction is to be achieved by general increase of energy efficiency, improvement of industrial technologies, increase of the share of renewables and modernization in the power sector.

In the following Annex additional information is provided regarding the INDC in order to ensure clarity, transparency and understanding.

ANNEX



Type Gases covered All greenhouse gases not controlled by the Montreal Protocol: Carbon Dioxide (CO2), Methane (CH4) Nitrous Oxide (N ₂ O) Hydrofluorocarbons (HFCs) Perfluorocarbons (PFCs) Solapur hexafluoride (SF ₆) Nitrogen trifluoride (NF ₃) Base year Target year Reduction level Sectors covered Sectors included are: Energy Fuel Combustion Fugitive emissions from fuels CO2 transport and storage Industrial processes Mineral industry Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use Other
Carbon Dioxide (CO2), Methane (CH4) Nitrous Oxide (N2O) Hydrofluorocarbons (HFCs) Perfluorocarbons (PFCs) Solapur hexafluoride (SF6) Nitrogen trifluoride (NF3) Base year Target year Reduction level Sectors covered Sectors included are: Energy Fuel Combustion Fugitive emissions from fuels CO2 transport and storage Industrial processes Mineral industry Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Methane (CH ₄) Nitrous Oxide (N ₂ O) Hydrofluorocarbons (HFCs) Perfluorocarbons (PFCs) Solapur hexafluoride (SF ₆) Nitrogen trifluoride (NF ₃) Base year 1990 Target year 2030 Reduction level 30% emission reduction by 2030 compared to the 1990 Sectors covered Sectors included are: Energy Fuel Combustion Fugitive emissions from fuels CO2 transport and storage Industrial processes Mineral industry Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Nitrous Oxide (N₂O) (Hydrofluorocarbons (HFCs)) (Perfluorocarbons (PFCs)) (Solapur hexafluoride (SF6)) (Nitrogen trifluoride (NF3)) Base year Target year Reduction level Sectors covered Sectors included are: (Energy) Fuel Combustion (Fugitive emissions from fuels) (CO2 transport and storage) (Industrial processes) (Mineral industry) (Chemical industry) (Metal industry) (Metal industry) (Non-energy products from fuels and solvent use) (Electronic industry) (Product uses as substitutes for ODS) (Other Product Manufacture and Use)
Nitrous Oxide (N₂O) (Hydrofluorocarbons (HFCs)) (Perfluorocarbons (PFCs)) (Solapur hexafluoride (SF6)) (Nitrogen trifluoride (NF3)) Base year Target year Reduction level Sectors covered Sectors included are: (Energy) Fuel Combustion (Fugitive emissions from fuels) (CO2 transport and storage) (Industrial processes) (Mineral industry) (Chemical industry) (Metal industry) (Metal industry) (Non-energy products from fuels and solvent use) (Electronic industry) (Product uses as substitutes for ODS) (Other Product Manufacture and Use)
Hydrofluorocarbons (HFCs) Perfluorocarbons (PFCs) Solapur hexafluoride (SF ₆) Nitrogen trifluoride (NF ₃) Base year Target year 2030 Reduction level Sectors covered Sectors included are: Energy Fuel Combustion Fugitive emissions from fuels CO2 transport and storage Industrial processes Mineral industry Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Perfluorocarbons (PFCs)
Solapur hexafluoride (SF ₆) (Nitrogen trifluoride (NF ₃)) Base year Target year Reduction level Sectors covered Sectors included are: Energy Fuel Combustion Fugitive emissions from fuels CO2 transport and storage (Industrial processes) Mineral industry Chemical industry Metal industry Mon-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Nitrogen trifluoride (NF ₃) Base year Target year Reduction level Sectors covered Sectors included are: Energy Fuel Combustion Fugitive emissions from fuels CO2 transport and storage Industrial processes Mineral industry Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Base year Target year Reduction level Sectors covered Sectors included are: Energy Fuel Combustion Fugitive emissions from fuels CO2 transport and storage Industrial processes Mineral industry Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Target year Reduction level Sectors covered Sectors included are: Energy Fuel Combustion Fugitive emissions from fuels CO2 transport and storage Industrial processes Mineral industry Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Reduction level Sectors covered Sectors included are: Energy Fuel Combustion Fugitive emissions from fuels CO2 transport and storage Industrial processes Mineral industry Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Sectors covered Sectors included are: (Energy) Fuel Combustion Fugitive emissions from fuels (CO2 transport and storage) Industrial processes Mineral industry Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Energy Fuel Combustion Fugitive emissions from fuels CO2 transport and storage Industrial processes Mineral industry Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Fugitive emissions from fuels CO2 transport and storage Industrial processes Mineral industry Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Fugitive emissions from fuels CO2 transport and storage Industrial processes Mineral industry Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
CO2 transport and storage (Industrial processes) Mineral industry Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Industrial processes Mineral industry Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Mineral industry Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Chemical industry Metal industry Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Metal industry (Non-energy products from fuels and solvent use) (Electronic industry) (Product uses as substitutes for ODS) (Other Product Manufacture and Use)
Non-energy products from fuels and solvent use Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Electronic industry Product uses as substitutes for ODS Other Product Manufacture and Use
Product uses as substitutes for ODS Other Product Manufacture and Use
Other Product Manufacture and Use
Other Control of the
Agriculture
(Livestock)
Aggregate sources and non-CO ₂ emissions sources on
land
Waste
Planning process Planning process of the INDC included the review of available
data and modelling work applicable to greenhouse gas reduction
pathway as well as consultations with government stakeholders
operators of key installations as well as with the public.
The scenarios for the INDC were developed in consultation with
the authors of the National Climate Change Strategy
Montenegro.
Within the preparation process of the INDC it became clear the
significant data uncertainty exist regarding the emissions and
removal in the land use, land use change and forestry sectors.
Participation in Montenegro intends to sell carbon credits during the period to
international market contribute towards achieving its emission reduction objectives a
mechanism assistance to cost-effective implementation of the low emission
development pathway. Montenegro foresees that for the utilization
of international market mechanism is conditional on havin
effective accounting rules developed under the UNFCCC t
ensure the environmental integrity of the mechanisms.

Fairness, equity, ambition and Means of Implementation	
Fairness, equity and	Montenegro is a non-Annex I country, highly vulnerable to the
ambition	effects of the climate change. National emissions of the
	greenhouse gases represent only 0,009 % of global emissions
	and the net per capita GHG emissions in Montenegro was 7.25
	(tCO ₂ eq in 2010.)
	Montenegro will take into account the ultimate objective of the UNFCCC in its future development and will be committed to
	decouple greenhouse gas emissions from its economic growth
	and embarks on a low emission development pathway.
	The INDC submitted by Montenegro is fair and ambitious because
	it aims to secure significant reduction of its greenhouse gas
	emissions while satisfies the country's need for economic
	development, allowing a feasible pathway for long-term decarbonisation.
Means of implementation	The National Climate Change Strategy will be the main planning
	tool along with its action plans for the implementation of
	Montenegro's intended nationally determined contribution until
	2030. The Energy Development Strategy of Montenegro by 2030
	also takes into consideration climate change as one of its six
	objectives and the INDC is developed in line with the trends
	foreseen for the energy sector development of Montenegro.
	Montenegro is in the process of accession to the European Union
	which involves the gradual transposition and implementation of the
	European Union's climate and energy legislation.
Key Assumptions	
Metric Applied	The metric used for the GHG emissions is the Global Warming
	Potential on a 100 year timescale in accordance with the IPCC's
	2nd Assessment Report
Inventory methodology	IPCC 2006 Guidelines are used for the inventory. Improved
	inventory data was used to the INDC and also for the Biennial
	Update Report of Montenegro compared to the 2 nd National
	Communication.
Approach to accounting	Greenhouse gas emissions and removals from agriculture,
for agriculture, forestry	forestry and other land uses are currently not included in the
and other land uses	accounting. Emissions and removals from these sectors can be
	included in the INDC at a later stage when technical conditions
	allow for that.

Having relatively high uncertainty regarding emissions in the LULUCF sector Montenegro reserves its right to review its INDC until 2020 upon the availably of more accurate data and improved technical conditions regarding land use, land use change and forestry and include it in its nationally determined contribution.

If the agreement or related COP decisions are amended before their entry into force in such a way that they include rules or provisions that significantly affect the assumptions under which this INDC has been developed, Montenegro reserves the right to revisit the INDC.

Montenegro requests the UNFCCC Secretariat that this submission is published on the UNFCCC webpage and that our INDC is included in the synthesis report to be prepared by the Secretariat.