

CACCI Country Profile

ECUADOR

COUNTRY OVERVIEW

Ecuador has great climatic variability, due to its geological diversity and variety in altitude and terrain. The country has two seasons: rainy and dry. Ecuador faces a variety of climatic risks such as floods and landslides caused by the increase in annual rainfall during phenomena such as El Niño, as well as droughts that weaken soils and affect agricultural processes. Likewise, there are effects caused by rising sea levels, melting glaciers, and vulnerability of water sources. The sectors that generate the greatest emissions in the country are energy, land use, and agriculture, which are vital for social and economic development. It is important to highlight the efforts made by the country through public policies and

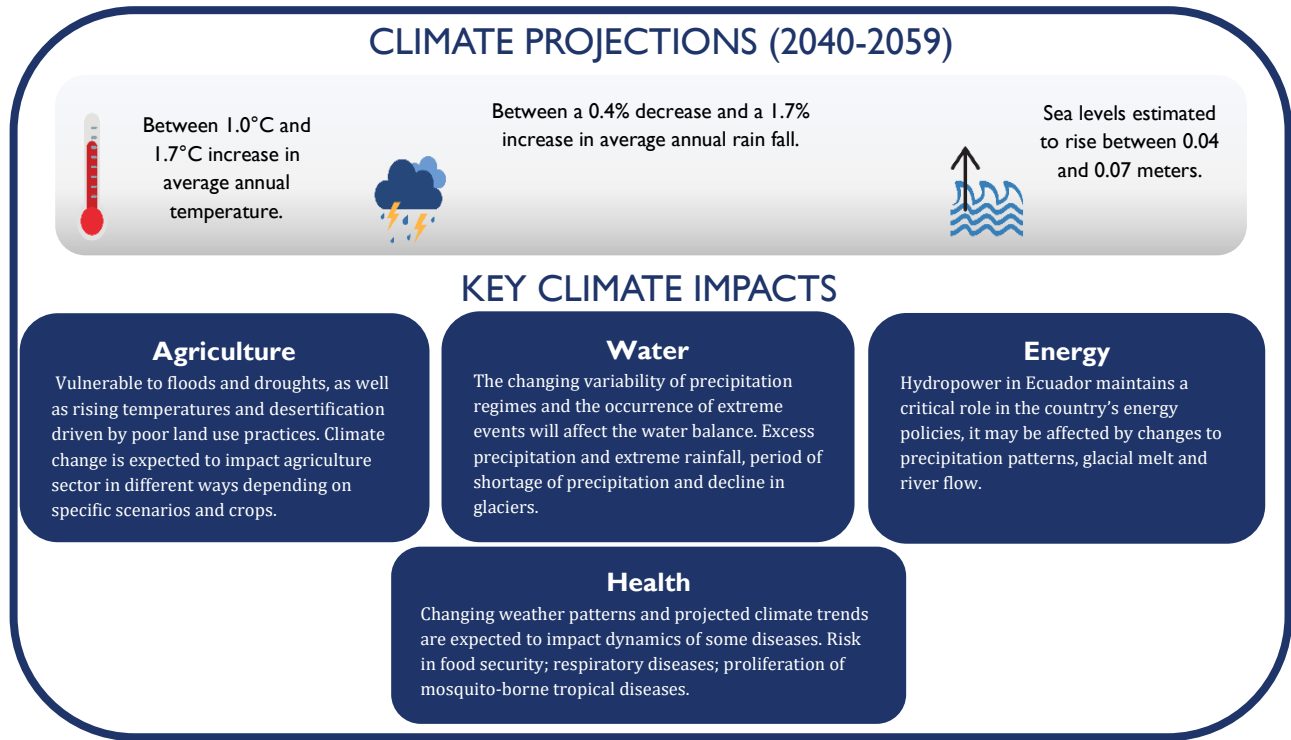
other instruments focused on the fight against climate change, which are aligned with its constitution and international agreements. In this way, Ecuador has a bases and guidelines for the development of strategies with an interdisciplinary approach and considering all the actors.

NDC Snapshot	Not available	Draft	Finalized
Frameworks			
Results Framework	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M&E framework	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MRV System	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Implementation and Coordination			
Implementation Strategy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climate Change Action Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Multi-Stakeholder CC working group (MSWG)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MSWG Lead			
NAP	Not submitted to UNCCC		
NDC	Submitted to UNCCC in 2019		

CLIMATE RISK

Ecuador is a country highly vulnerable to climatic impacts due to geographic and human factors. Among the problems faced by this country are the effects of phenomena such as El Niño. In addition, the risk posed by climate variability generates disasters such as floods, landslides - due to melting snow and excessive rainfall - and droughts, in addition to soil and forest degradation. For this reason, in its NDC Ecuador highlights the following as priority sectors for mitigation: agriculture, energy, waste, industrial processes, and Land Use, Land Use Change and Forestry (USCUSS). In the case of adaptation, the following sectors are included: Human Settlements; Water Heritage; Natural Heritage; Productive and Strategic Sectors; Health; and Food Sovereignty, Agriculture, Livestock, Aquaculture and Fisheries.

Figure 1. Climate Projections and Vulnerabilities by Key Sectors



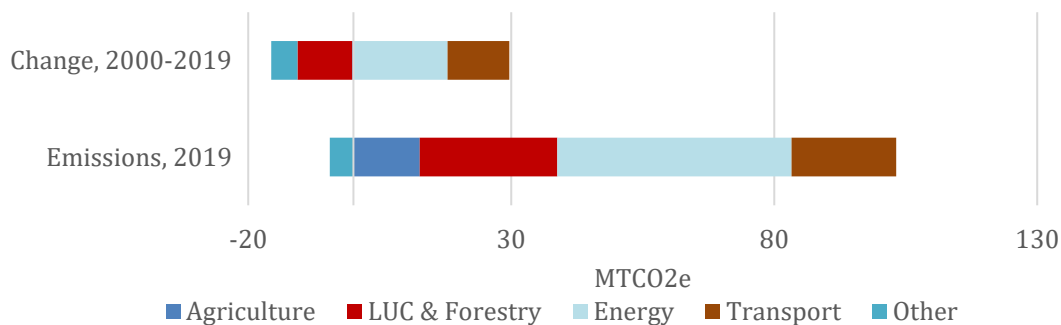
Source: World Bank climate knowledge portal country pages: <https://climateknowledgeportal.worldbank.org/>

NOTE: PROJECTIONS FOR TEMPERATURE AND PRECIPITATION BASED ON SSP1-2.6 AND SSP5-8.5 MODEL ESTIMATES. PROJECTIONS FOR CHANGE IN SEA LEVEL BASED ON RCP-2.6 AND RCP-8.5 MODEL ESTIMATES.

Emissions By Sector

In the case of Ecuador, the energy sector is the largest source of greenhouse gas emissions with 45% of total emissions; land-use change and forestry generate a total of 26.52%; and agriculture 12.77%. The challenges of reducing these emissions lie in the fact that they are tied to central economic activities for national development.

Figure 2. Climate Emissions by Standardized Sectors (2019)



Source: Historical data emissions file downloaded from https://www.climatewatchdata.org/ghg-emissions?end_year=2019&start_year=1990.

INSTITUTIONAL FRAMEWORK FOR IMPLEMENTATION

As established in law and the Ecuadorian Constitution, citizens have the right to a clean, ecological, and appropriate living environment. In this way, the Government of Ecuador has a mandate to implement the NDC, as well as lead efforts to generate inter-institutional and intersectoral coordination, considering civil society, public and private bodies, decentralized actors, academia, and research. To this effect, the country has a multi-stakeholder group to analyze data, collaborate with decision makers, and share key industry information in an accessible format for further analysis.

KEY SECTORS AND PRIORITY ACTIONS

Ecuador’s NDC and NAP identify the following sectors and actions as high priority for climate change in the country.

PRIORITY SECTORS AND ACTIONS	
Sector	Actions
Energy	<ul style="list-style-type: none"> Promote the use of renewable energy. Strengthen energy efficiency and consumption behavior change. Promote and implement sustainable mobility. Incorporate, reformulate and update regulations that promote the use of sustainable energy and energy efficiency in an inclusive manner in each of the subsectors. Develop and implement safe and sustainable transportation. Promote the use and development of renewable energy, guaranteeing full accessibility. Promote the use and development of energy efficiency and change of consumption behavior. Promote research for the implementation of energy solutions, reducing the gender gap.
Agriculture	<ul style="list-style-type: none"> Develop research and generate information systems to strengthen climate change management in the agricultural sector. Promote sustainable livestock development at the national level. Develop research and generate information systems to strengthen climate change management in the agricultural sector. Promote sustainable livestock development at the national level. Develop and implement sustainable agricultural production systems (agriculture, livestock and forestry) at the national level.
Industrial Processes	<ul style="list-style-type: none"> Reduce GHG emissions through additions in cement production. Reduce CO2 emissions through additions in cement production. Promote research on mitigation measures for the Industrial Processes sector. Support the generation, exchange and dissemination of information to promote mitigation actions in the Industrial Processes sector.
Waste	<ul style="list-style-type: none"> Promote active methane capture in landfills. Generate public-private partnerships for the reduction of greenhouse gases in waste management (solid and liquid), through the implementation of mitigation measures. Promote inclusive campaigns to raise awareness among the population and industry on solid and liquid waste management, towards a circular economy.

Land Use, Land Use Change and Forestry (USCUSS)	<p>To conserve the natural heritage.</p> <p>Strengthen sustainable forest management.</p> <p>Strengthen the restoration of the natural heritage.</p> <p>Strengthen and increase the establishment and management of sustainable commercial forest plantations.</p> <p>Strengthen forest control.</p> <p>Strengthen the National System of Protected Areas.</p> <p>Strengthen and increase the area of areas under conservation mechanisms.</p> <p>Strengthen sustainable forest management.</p> <p>Promote actions for the restoration of natural heritage.</p> <p>Strengthen and increase the establishment and management of sustainable commercial forest plantations.</p> <p>Strengthen forest control.</p> <p>Strengthen forest fire prevention.</p> <p>Strengthen and increase the surface area of the National System of Protected Areas.</p> <p>Conserve areas of water importance.</p>
Natural Heritage	Improvement of public policy instruments for natural heritage that incorporate climate change adaptation.
Water Heritage	Strengthening of the National Strategic Water System as a mechanism for sectoral coordination and interaction to increase the adaptive capacity of the water sector in the territory.
Health	Emission of public policies, based on the best available information, to address the impacts of climate change on health.
Human Settlements	<p>Development and implementation of public policy on habitat, land use, territorial planning and land management, with criteria for adaptation to climate risks.</p> <p>Development of policies and strategies to address temporary or permanent migration of the population due to conditions related to climate change.</p>
Productive and Strategic	<p>Inclusion of the climate variable in public policies and risk management instruments and sectoral planning (Hydrocarbons, Mining, Electricity and Renewable Energy Sectors).</p> <p>Integration of climate projections in the development of new road infrastructure studies.</p> <p>Climate risk reduction in the value chains of the oil and mining industry, and in the electricity generation, transmission, distribution and commercialization infrastructure, through the development of sector-specific climate risk and vulnerability studies that allow identifying, proposing and implementing adaptation measures to the effects of climate variability and climate change.</p>
Food sovereignty, agriculture, livestock, aquaculture, and fisheries	<p>Design and implementation of public policy to strengthen the climate resilience of agrifood systems.</p> <p>Promotion of responsible governance on land use and management to ensure sustainable agricultural production that is resilient to the effects of climate change.</p>

CLIMATE POLICIES, PROGRAMS, AND INVESTMENTS

The development of the NDC is based on the provisions of Ecuador’s Political Constitution, which highlights the right of citizens to an optimal environment. For this reason, its legal tools include the National Environmental Policy, the Executive Decree that declares climate change adaptation and mitigation as state policy, the National Climate Change Strategy, the Organic Environmental Code, the National Development Plan 2017-2021 -aligned with the 2030 Agenda and its 17 Sustainable Development

Goals- the National Territorial Strategy (ETN), and the National Climate Change Strategy (ENCC) 2012-2025 -document that establishes the prioritized sectors for climate change adaptation and mitigation. In addition, international frameworks have been established, such as the Paris Agreement and the 2030 Agenda for Sustainable Development. Dialogues, workshops, and technical meetings have been held to identify those aspects that require additional financial resources for implementation but also those that are within the national capacity to be implemented without additional resources.

Policies

[Organic Law on energy efficiency](#)

[Organic Code on the Environment](#)

[Organic Law on the Public Service of Electricity](#)

[Constitution of Ecuador](#)

[National Climate Change Strategy \(ENCC\) 2012-2025](#)

[National Development Plan 2017-2021](#)

Programs

[Programa de Eficiencia Energética - Optimización de Generación Eléctrica y Eficiencia Energética \(OGE&EE\)](#)

[Programa de Cocción Eficiente](#)

[Programa Integral Amazónico de Conservación de Bosques y Producción Sostenible \(PROAmazonía\)](#)

Gaps can be addressed in several areas to improve climate policy in Ecuador. Research and analysis could be better utilized to prioritize actions and investments for greater efficiency. There can be greater integration of activities across different sectors in the development of climate adaptation and mitigation interventions. Efforts should be taken to mobilize greater public and private climate finance and make these funds more easily available to food systems actors. Monitoring Reporting and Evaluation systems should be further developed to provide a better understanding of progress and effectiveness of the implementation of mitigation and adaptation measures.

Climate Risk

Climate Risk Profile: Ecuador (2021) The World Bank Group.
https://climateknowledgeportal.worldbank.org/sites/default/files/country-profiles/15988-WB_Ecuador%20Country%20Profile-WEB.pdf

Climate Watch (s.f) Ecuador
https://www.climatewatchdata.org/countries/ECU?end_year=2019&start_year=1990

MAATE. (2023). Plan Nacional de Adaptación al Cambio Climático del Ecuador (2022-2027). Ministerio del Ambiente, Agua y Transición Ecológica (MAATE). Quito, Ecuador.
<https://unfccc.int/sites/default/files/resource/PLAN-NACIONAL-DE-ADAPTACION-2.pdf>

Primera Contribución Determinada a Nivel Nacional para el Acuerdo de París bajo la Convención Marco de Naciones Unidas sobre Cambio Climático. (2019) República de Ecuador
<https://unfccc.int/sites/default/files/NDC/2022-06/Primera%20NDC%20Ecuador.pdf>