NATIONALLY APPROPIATE MITIGATION ACTIONS (NAMAs)

SECTOR	SUBSECTOR	MAIN OBJECTIVE	FINANCING SOURCE *
SOLID WASTE	MUNICIPAL SOLID WASTE	Focus on designing legal and technical tools which are necessary to capture, destroy or reuse methane for energy purposes. **Responsible entity:** Ministry of Environment.	NOAK - NEFCO
TRANSPORT	URBAN TRANSPORT	Consist on a series of measures on the transport sector transformation, both nationally and locally, in the Lima and Callao Metropolitan areas and intermediate cities. **Responsible entities:** Ministry of Transport and Communications, with the support of the Ministry of Environment, Ministry of Energy and Mines, Ministry of Housing, Construction and Sanitation, among others.	The German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)
INDUSTRY	CONSTRUCTION MATERIALS	Promote energy efficiency and best practices in the industry of cement, brick and steel. **Responsible entities:** Ministry of Environment, Ministry of Production.	The European Union - The Australian Agency for Development
ENERGY	ENERGY MATRIX AND ENERGY EFFICIENCY	Diversify the energy matrix which involves generation of conventional and no-conventional renewable energies, as well as energy efficiency. **Responsible entities:** Ministry of Energy and Mines, Ministry of Environment.	Global Environment Fund (GEF)
	BIOENERGY	Energy generation from agricultural waste. **Responsible entities:** Ministry of Energy and Mines, Ministry of Agriculture and Irrigation.	The German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)
HOUSING	SUSTAINABLE HOUSING	Focus on new buildings construction design that allows using water and energy more efficiently. **Responsible entity:** Ministry of Housing, Construction and Sanitation.	IFC
AGRICULTURE	COCOA	Promote the management of GHG emissions from cocoa farming, contributing to improve cocoa farmer's livelihood. **Responsible entity:** Ministry of Agriculture and Irrigation.	ICRAF, GIZ, Rainforest Alliance, CiRAD, ECOFYS
	COFFEE	Promote the management of GHG emissions from coffee farming, contributing to improve coffee farmer's livelihood. **Responsible entity:** Ministry of Agriculture and Irrigation.	
	OIL PALM	Promote the management of GHG emissions from oil palm. **Responsible entity:** Ministry of Agriculture and Irrigation.	
	LIVESTOCK	Promote the management of GHG emissions from livestock. **Responsible entity:** Ministry of Agriculture and Irrigation.	

*These funding sources contribute with their resources to the Nationally Appropriate Mitigation Actions (NAMAs) conceptual design.

CHALLENGES, OPPORTUNITIES AND GUIDANCES FOR MITIGATION

TOPIC	CHALLENGES	OPPORTUNITIES
ABILITIES	• Develop abilities for the implementation of the National GHG Inventory System - INFOCARBONO. • Overcome ability gaps and poor definition of responsibilities and functions in sub-national governments. • Overcome poor governance in the forest sector development.	• Establish a multi-institutional platform optimizing resources available for climate change.
INSTITUTIONAL ROLES	• Develop institutional arrangements for operating INFOCARBONO, NAMAs and other management tools for a low-carbon development.	• Focus on economic sectors or activities that produce more GHG and promote their development along with emission reduction.
FINANCIAL RESOURCES	• Build a trustworthy environment on investments for a low-carbon development. • Reduce commercial bank's perceived risk on Climate Finance. • Identify existing financial mechanisms that could be used in each sector to implement mitigation measures.	• Integrate a low-carbon development actions with other critical topics on the national agenda. • Notice that the development bank is an agent of change in a low-carbon development process. Likewise, the Green Climate Fund's mission is to support low-carbon development strategies and provide facilities for catalyzing private sector funds.
INFORMATION	• Implement information systems for both GHG management and climate finance monitoring. • Implement INFOCARBONO in order to have reliable and timely information on GHG, nationwide.	• Make the most of knowledge and lessons learned from the National GHG Inventory Systems from countries of the region to introduce INFOCARBONO in Peru.
TECHNOLOGY	• Incorporate the low-carbon development approach on projects since it's conception.	• Make the most of the United Nations Industrial Development Organization (UNIDO) platform thus the industry moves towards more efficient practices, lower natural resources consumption and lower levels of carbon.

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Fuente: AATE

PERU: TOWARDS A LOW-CARBON DEVELOPMENT

PERÚ Ministerio del Ambiente

Lima **COP20 I CMP10** is willing to lay the foundations for a new global climate agreement regarding greenhouse gas emissions reduction, which will enter into force in 2020.

As member of the United Nations Framework Convention on Climate Change (UNFCCC), Peru's position is proactive and conciliatory in order to bring positions closer and ensure compliance with the provisions of the UNFCCC.

PROGRESS ON CLIMATE CHANGE MITIGATION IN PERU

Although Peru is not a big GHG emitter in absolute numbers, in terms of it's level and development projections it has the same level of emission as developed countries with greater GDP per capita. Thus, it is necessary that development precautions include measures to reduce the current emissions.

• FIRST BIENNIAL UPDATE REPORT

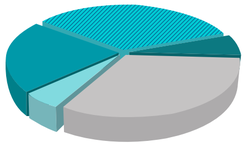
At COP 17 held in Durban, it was agreed that developing countries submitted updated biennial reports (every two years) or BUR.

The first report was submitted to the UNFCCC in December 2014, which includes the National GHG Inventory up to 2010 and progresses on the design of Nationally Appropriate Mitigation Actions (NAMAs), actions that are being implemented or that are part of the national plan leading to GHG reduction or carbon capture.

• NATIONAL GHG EMISSIONS INVENTORY – 2010

The 2010 National GHG Inventory is an important tool for decision making. It was designed considering the 1996 Intergovernmental Panel on Climate Change Guidelines (GL1996), the IPCC report on Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories (GPG2000) and on Good Practice Guidance for Land Use, Land Use Change and Forestry (LULUCF 2003).

Inventory data shows that GHG total emissions is 124,109 $GgCO_2eq$. The following categories are the main sources of emissions: LULUCF (35.1%) and Energy (32.7%).



- **35.1%** LULUCF (Land Use, Land Use Change and Forestry).
- **32.7%** Energy
- **21.0%** Agriculture
- **6.2%** Waste
- **5.1%** Industrial Processes

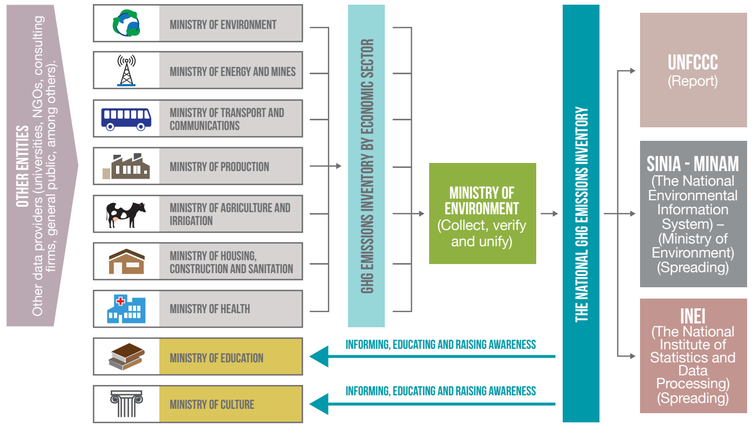
SHARE OF GHG EMISSIONS – 2010

• INFOCARBONO

Peru is promoting the creation of a National Greenhouse Gas (GHG) Inventory System called INFOCARBONO, whose operation will enable to develop institutional arrangements for data collection and institutional coordination for producing regular inventories. Infocarbono will enable to:

- Optimize methodologies for quantifying GHG emissions / removals, it's uncertainty as well as the quality control and assurance of results.
- Update regularly the national GHG emissions inventories.
- Formulate policies, strategies and development plans which reduce GHG emissions and promote carbon capture.
- Fulfill commitments assumed by Peru under the United Nations Framework Convention on Climate Change and the Kyoto Protocol.

INFOCARBONO PROCESS



- Collect activity data.
- Estimate GHG emissions for each sector.
- Perform quality control.
- Analyze the uncertainty of results.
- Document and store information.
- Report to the Ministry of Environment.

- Inform, educate and make people aware, including indigenous organizations, about the importance of their participation on the climate change management.

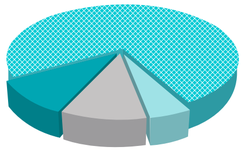
- Manage the inventory process.
- Compile GHG inventories by economic sector.
- Ensure the quality of results.
- Develop the National GHG Inventory.
- Document and store information.
- Report to the UNFCCC.

• CARBON MARKETS

To date there are 75 Clean Development Mechanism (CDM) registered projects[1] which represents a potential reduction of 11 million tCO_2eq per year. 75% of the projects correspond to renewable energy category, 5% to methane capture, 10% to energy efficiency and 10% to reforestation and chemical industry.

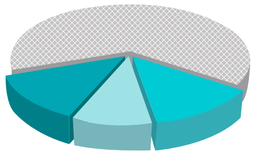
On the other hand, there are 23 projects[2] in the Voluntary Market with a potential reduction of roughly 7 million tCO_2eq per year. 65% of the projects correspond to the USCUSS category (especially Reduced Emissions derived from Deforestation and Forest Degradation, REDD), 13 % to Renewable Energy, 9% to Transport and 13% to Fuel Change and Energy Efficiency.

CDM PROJECTS



- **75%** Renewable energies
- **10%** Energy Efficiency
- **10%** Reforestation and Chemical Industry
- **5%** Methane capture

VOLUNTARY MARKET PROJECTS



- **65%** LULUCF (especially reduced emissions derived from Deforestation and Forest Degradation, REDD)
- **13%** Renewable energies
- **13%** Energy Efficiency
- **9%** Transport

• NATIONALLY APPROPRIATE MITIGATION ACTIONS (NAMAs)

They are National actions to reduce GHG emissions and maintain carbon sinks that contribute to global mitigation efforts and include a component for measurement, reporting and verification (MRV). Today, Peru is designing 10 NAMAs in the following areas: Solid Waste (1) Transport (1) Industry (1) Energy (2) Housing (1) and Agriculture (4).

(See chart on next page).

[1] Source: Website of the United Nations Framework Convention on Climate Change
[2] Source: Markit Registry and Net Inform-Blue Registry

TIMELINE

1992
Peru signed the United Nations Framework Convention on Climate Change.

COP7
2001
Peru presented it's First National Communication to the UNFCCC.

COP8
2002
Peru ratified the Kyoto Protocol.

COP15
2009
COP15 Copenhagen. Peru proposes voluntary commitments objectives for reducing GHG emissions.

COP16
2010
Peru presents it's Second National Communication to the UNFCCC.

COP19
2013
Peru begins it's Third National Communication to the UNFCCC.

COP20
2014
Peru presents it's first Biennial Update Report (BUR) to the UNFCCC. Simultaneously, Peru prepares it's Intended Nationally Determined Contribution.