



Ministerio
del **Ambiente**

FIRST BIENNIAL UPDATE REPORT OF ECUADOR

November 2017



**Primer Informe Bienal de
Actualización del Ecuador**
a la Convención Marco de las
Naciones Unidas sobre el Cambio Climático



Septiembre 2016

¿What was reported in the BUR?

Chapter 1: National Circumstances

Chapter 2: National Greenhouse Gas Inventory
(GHG Inventory) 2010

Chapter 3: Mitigation Actions Developed by
Ecuador

Chapter 4: Progress in Measurement,
Reporting and Verification

Chapter 5: Barriers, Needs, Opportunities and
Support Received for Mitigation of Climate Change



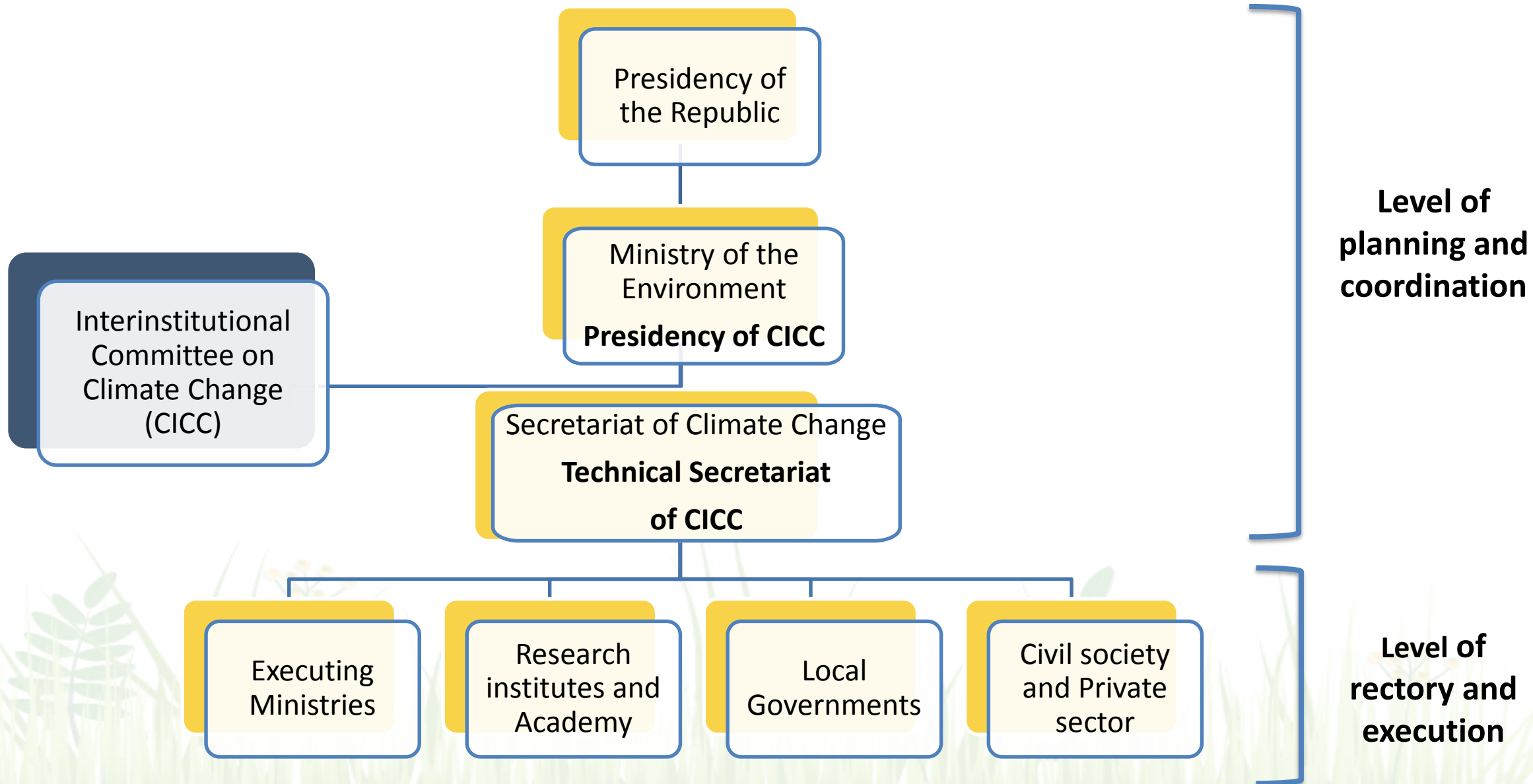
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National Circumstances

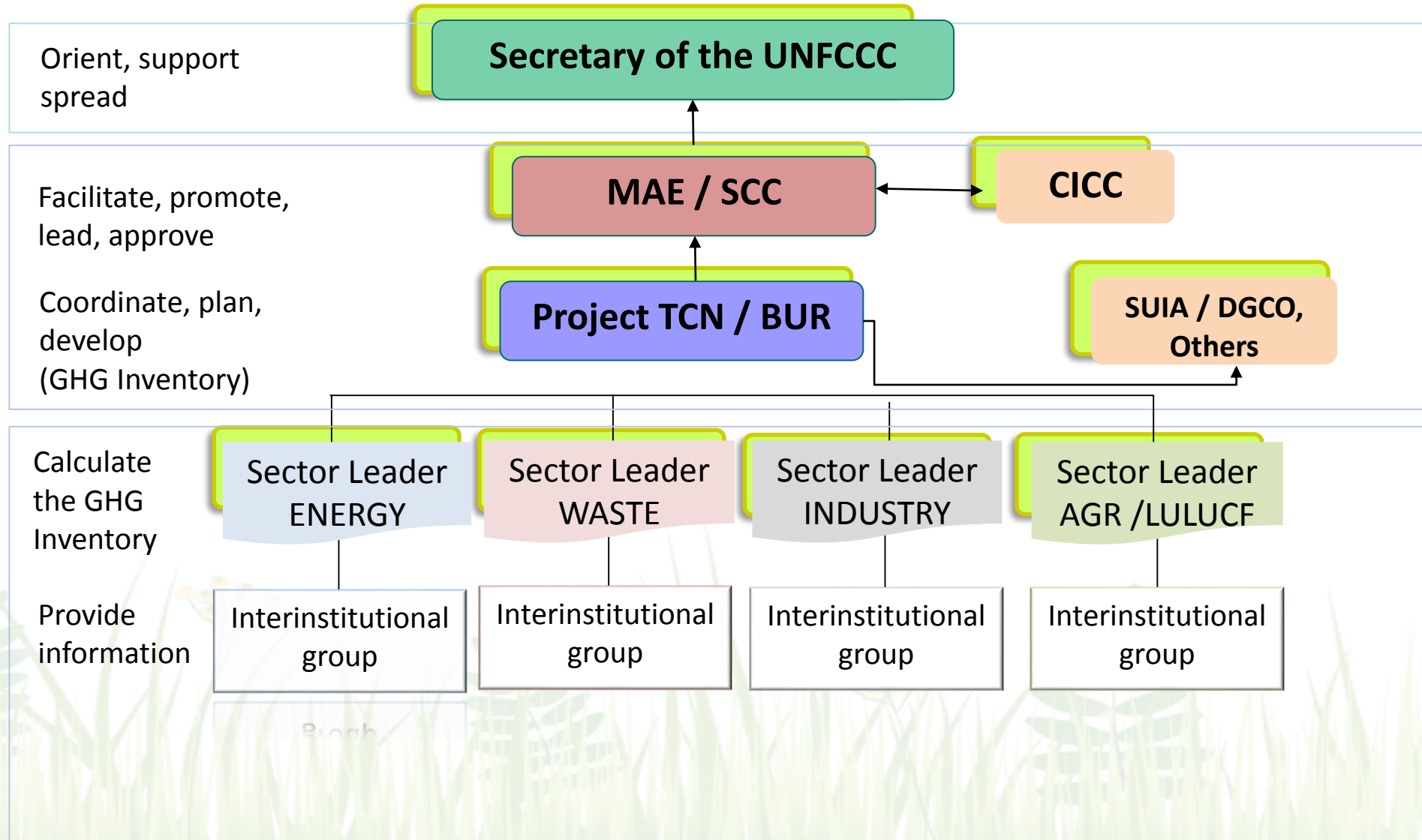
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Institutional Arrangements



Institutional Arrangements for the Preparation of National GHG Inventory



Climate Change Regulatory Framework



Institutions Involved in BUR Development

1. Leading entity of the process



2. Public and private national institutions



3. Cooperation and technical assistance



ECUADOR

256,370 Km²

Surface including the Island region

15.8 million

Ecuadorians until 2013



1 of the **17** mega biodiverse countries on the planet



50 protected Areas in the country = **20%** of the territory.



33% of the national territory under conservation schemes.



49% reduction in annual net deforestation between periods: 1990 – 2000:2008 – 2014



Water availability of **20,700** m³/hab/year.

63%

Urban population

37%

Rural population

56.48 Hab/ Km²

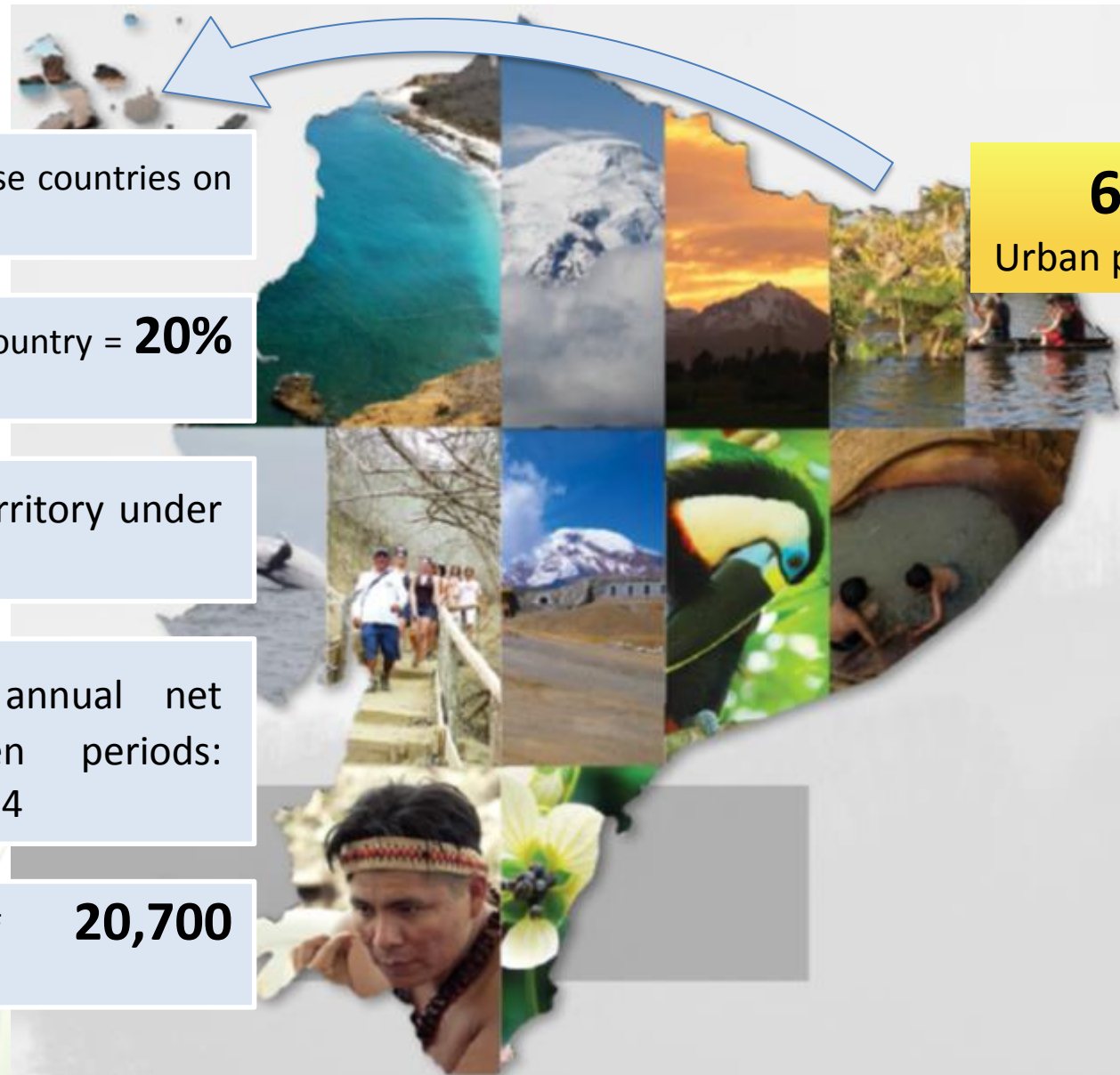
Population density

75.8 años

Life expectancy

25.6 %

Income poverty





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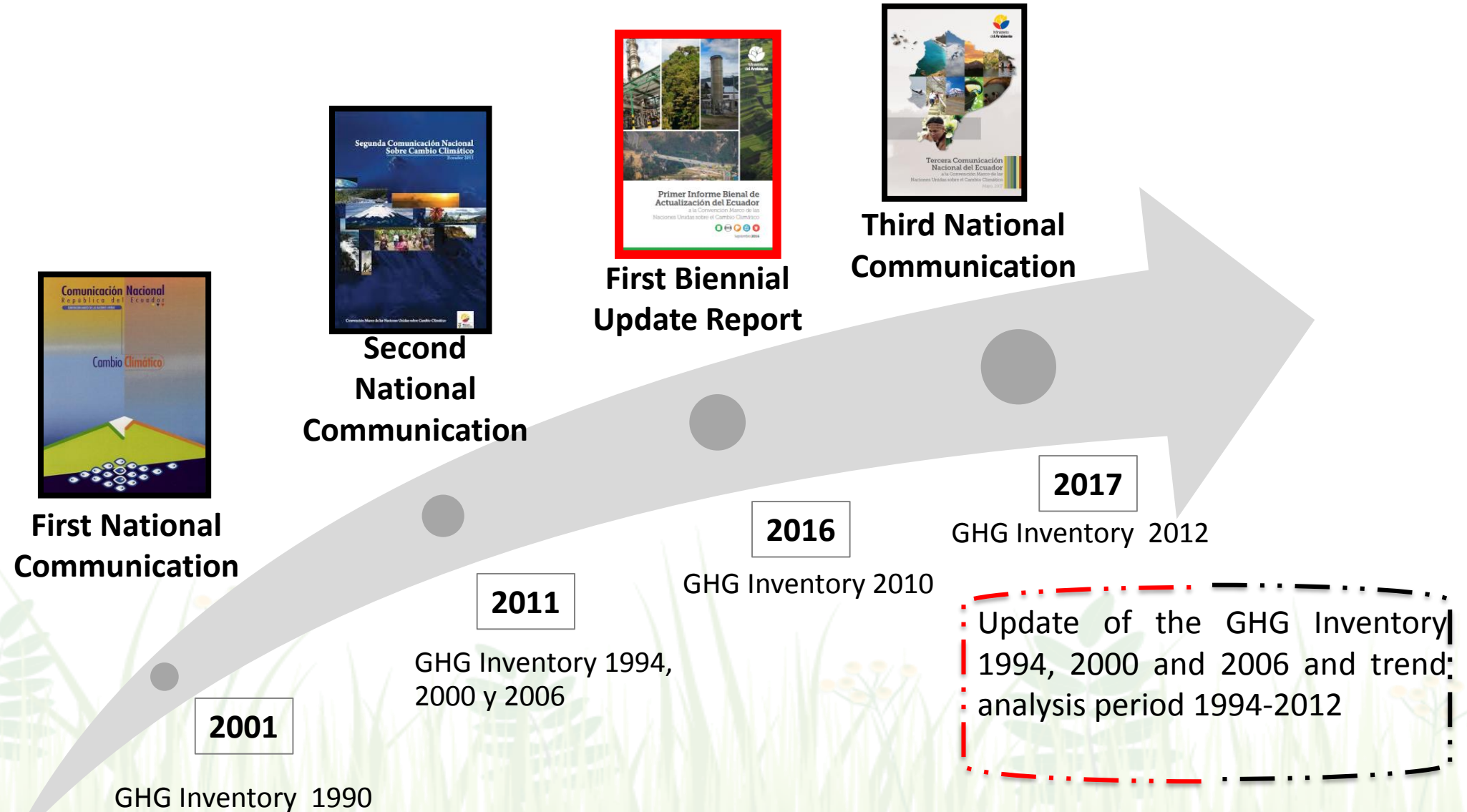
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National GHG Inventory 2010

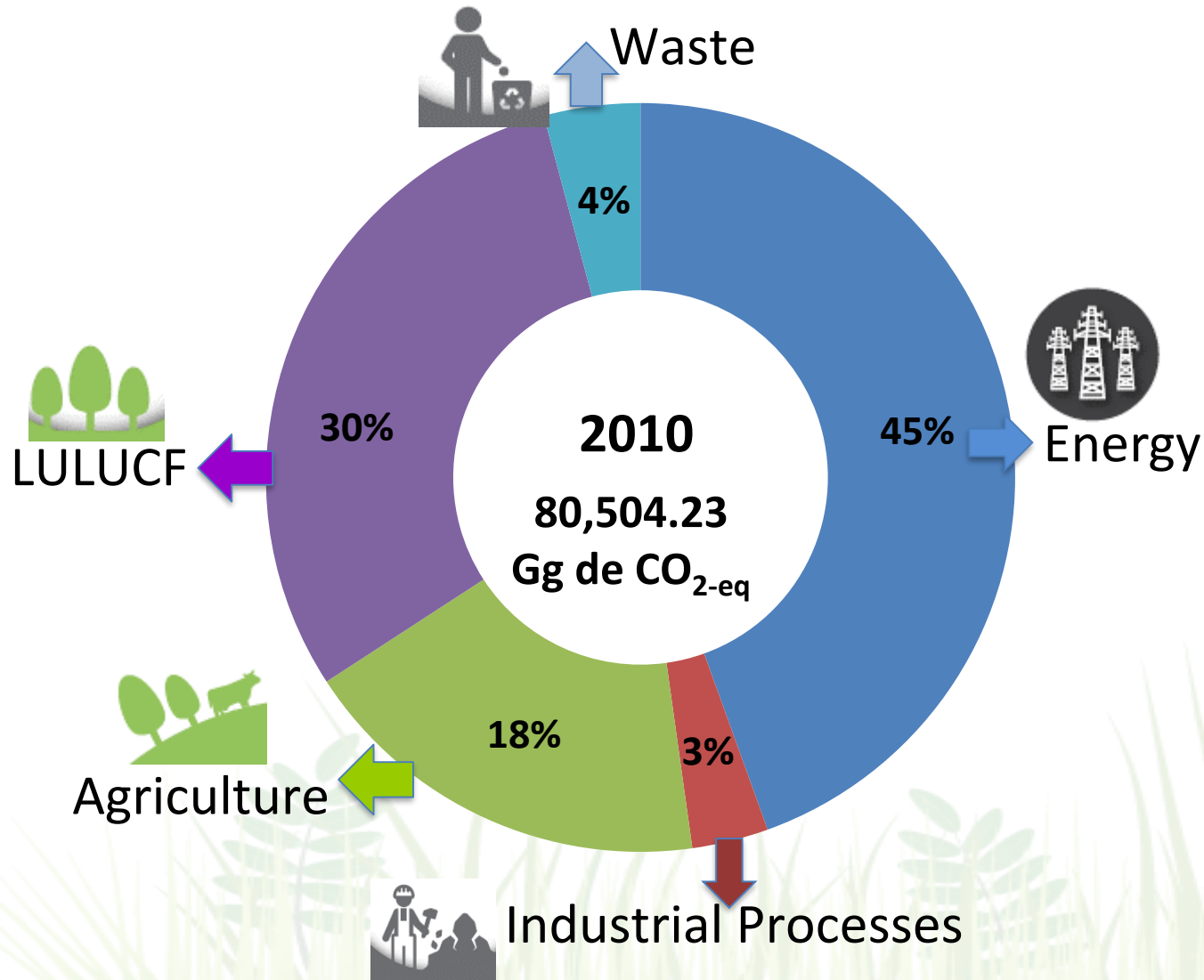
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National GHG Inventory



Results of the National GHG Inventory 2010



GHG Participation by sector

	 CO ₂	 CH ₄	 N ₂ O
Energy	45%	8%	2%
Industrial Processes	3%	-	-
Agriculture	-	65%	95%
LULUCF	52%	-	-
Waste	-	27%	3%



3

Mitigation Actions Developed by Ecuador

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Actions and Voluntary Mitigation Initiatives in Ecuador



Sectors Reported



Energy



Seven projects that are framed in two strategic action lines: energy generation and energy efficiency.

Avoid on average the emission of 1.7 million tCO₂-e/year.



Industry



Two projects aiming at changing the productive and energetic matrix.

- Plan Renova - Technological upgrade for refrigeration
- Shift to efficient cooking stoves driven by induction technology



Agricultural, Land Use Change and Forestry



PSB projects, SNAP, Reforestation Program for Commercial Purposes.

Pillars to implement REDD+:

- REDD+ Action Plan (2016-2025).
- Reference level of forest emissions by deforestation.
- National Forest Monitoring System.
- Summary of Information of Safeguards.



Waste



Sectoral mitigation mechanism

- Potential of 500 000 tCO₂-e emission reduction in five final waste disposal sites.
- Financial incentive to local governments, when they exceed 75% of its emission reduction potential.

Nationally Appropriate Mitigation Action (NAMA)



NAMA DCH

- Subsector: Energy generation
- Proponent: MEER
- Emission reduction potencial: 8,73 million tCO₂e average (2016-2025)
- Status until 2015: Execution phase (construction)



NAMA PEC

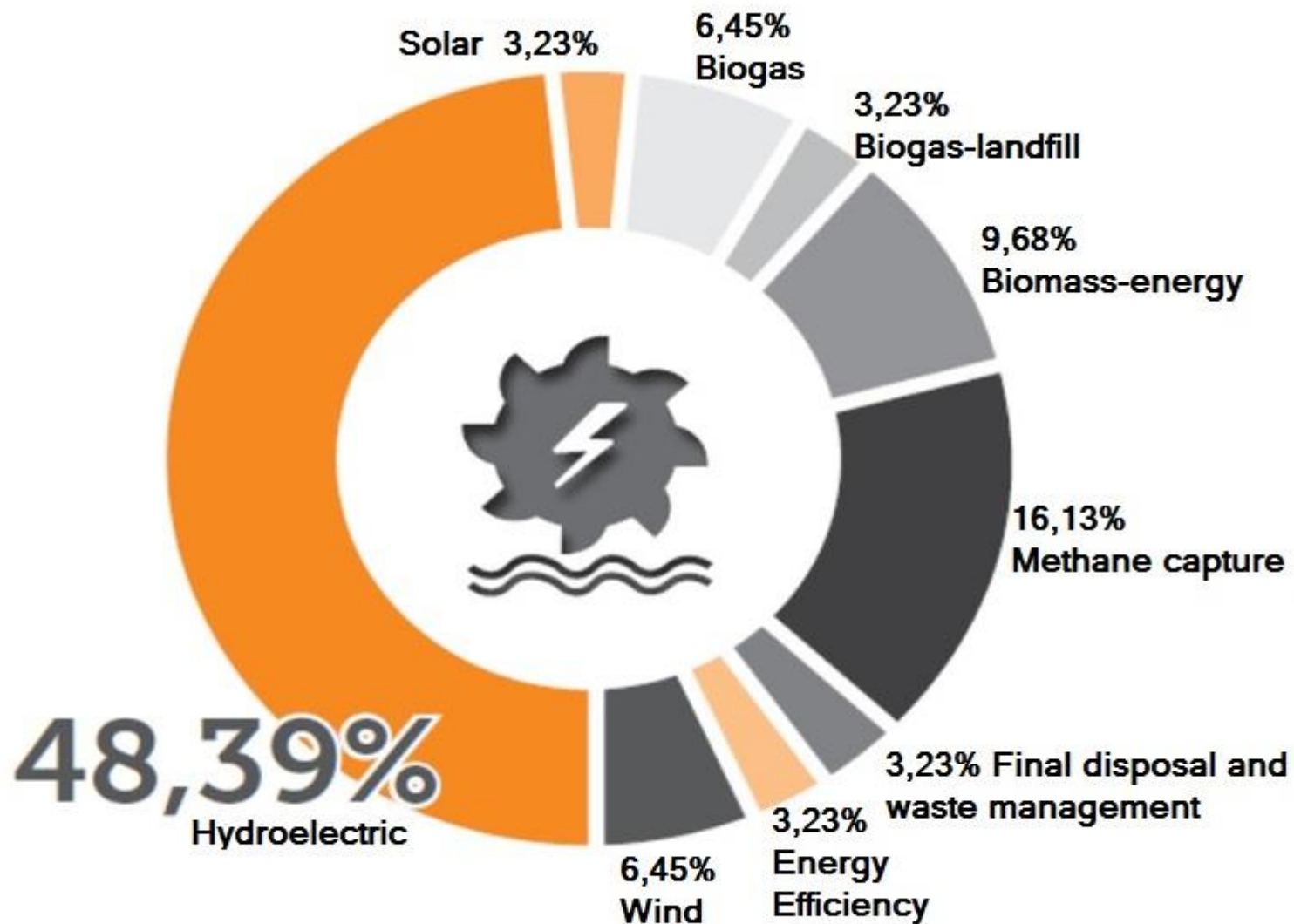
- Subsector: Energy efficiency
- Proponent: MEER
- Emission reduction potencial: 1,04 million tCO₂e average (2016-2025)
- Status until 2015: Execution phase (substitution)



NAMA OGE&EE

- Subsector: Energy efficiency
- Proponent: Petroamazonas
- Emission reduction potencial: 1,69 million tCO₂e (2016-2025)
- Status until 2015: Execution phase (operation)

Clean Development Mechanism in Ecuador (CDM)



Source: MAE/SCC (2015)

- Total number of CDM projects registered until 2015: 31.
- 48.39% of CDM projects are hydroelectric, followed by 16% of methane capture projects, and 9.68% of projects related to energy generation from biomass.
- A total of 10 projects issued CERs during the 2011-2013 (1 063 694 tCO₂-e)



4

**Progress in Measurement,
Reporting and Verification**
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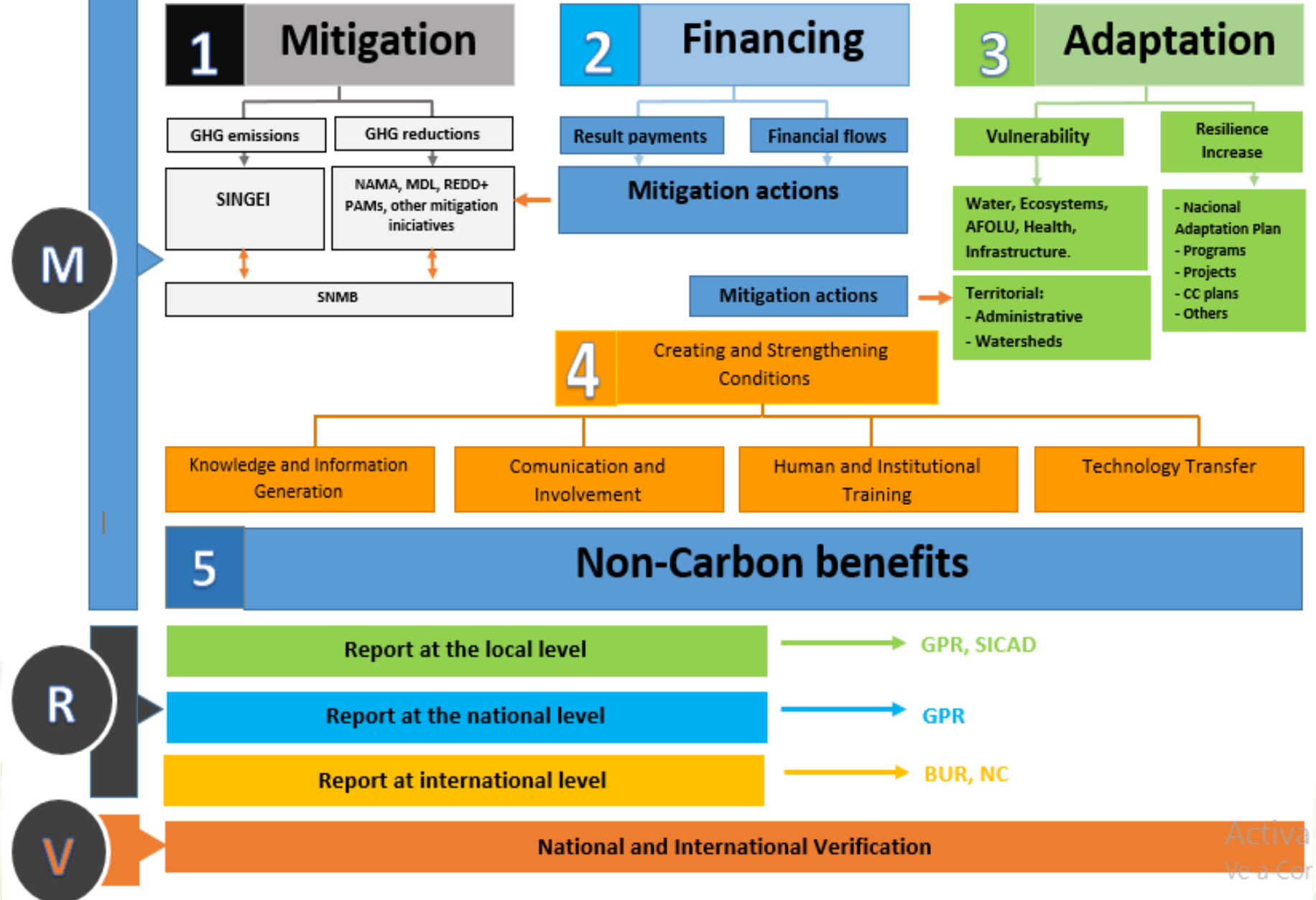




Proposed MRV System

Perspectives on the unified System of Measurement, Reporting and Verification for Ecuador

Environmental Information System





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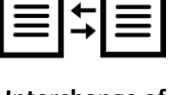















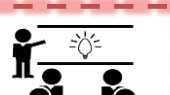




Barriers, Needs, Opportunities and Support Received for Mitigation of Climate Change

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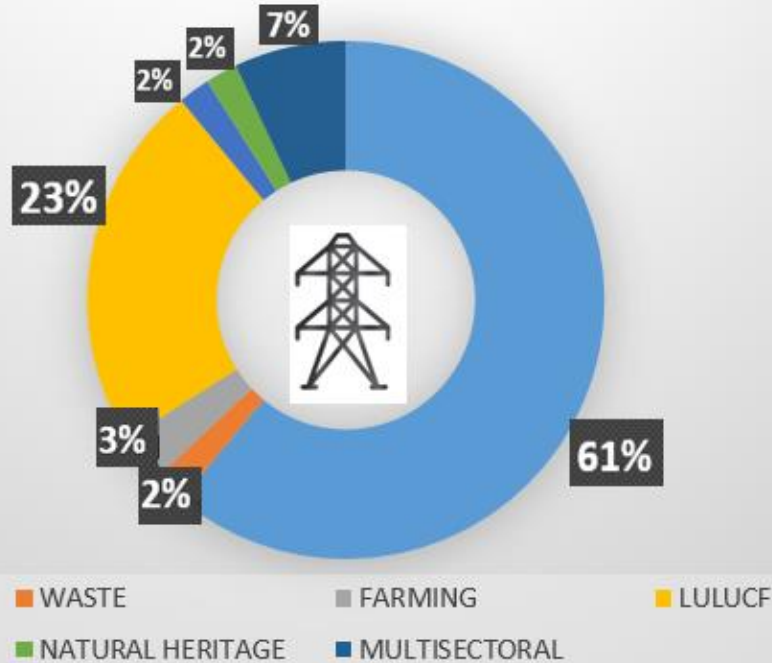


Information System for Managing Climate Change Knowledge

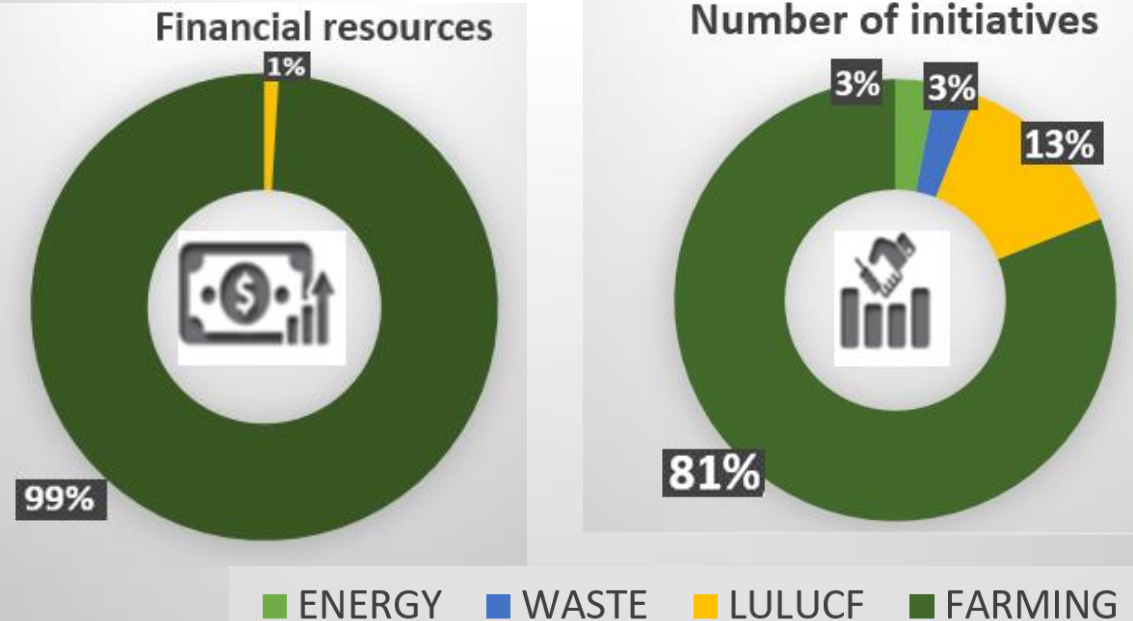
Initiatives	CDM		NAMAs		GHG Inventories		Report elaboration	
	BARRIERS	NEEDS/ OPPORTUNITIES	BARRIERS	NEEDS/ OPPORTUNITIES	BARRIERS	NEEDS/ OPPORTUNITIES	BARRIERS	NEEDS/ OPPORTUNITIES
VARIABLES Categories								
Institutionality/ Governance	 Lack of promotion carbon market	 Generation of agreements	 Lack of official methodology UNFCCC	 Establishment of agreements	 Lack of agreements and information exchange	 Interchange of information under an agreement	 Lack of agreements and information exchange	 Interchange of information under an agreement.
Financial Resources	 Fall of Carbon Markets	 Develop lines of credit for CDM implementation	 Lack of identification / dissemination of international funding for NAMAs	 Generation of NAMAs portfolio	 Scarce funding research lines	 Strategy for financing	 Insufficient financial allocations	 Promotion of private investment and international cooperation
Capacity Building and Technical Assistance	 Lack of trained staff	 Capacity building	 Non-defined base lines and co-benefits	 Training programme	 Shortage of specialists	 Training in GHG inventories	 Shortage of specialists	 Develop an information system to manage knowledge about CC
Technology and Technology Transfer	 Expensive patents	 Promoting research						

Support Received

Distribution of resources according to the sector of intervention



Distribution of financial resources with direct impact on climate change mitigation by intervention sector (2011-2013)



43 actions and initiatives (programs/projects/ activities) related directly or indirectly to the management of climate change mitigation

International cooperation sources:
Germany, China, European Union, Norway, Japan, ONUDI, GEF, BID, CAF, IICA, PNUD, ONUD



Additional Needs

For the different areas of action related to climate change in Ecuador, international financing is required for the implementation of the following measures:



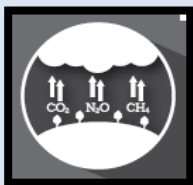
REPORTS

BIENNIAL UPDATE REPORT

Effective transfer of knowledge to ensure the sustainability of the report

NATIONAL COMMUNICATIONS

Strengthening for Vulnerability and Adaptation Analysis



NATIONAL GHG INVENTORY

Implementation of SINGEI



MITIGATION

Assistance for the implementation of NAMAs



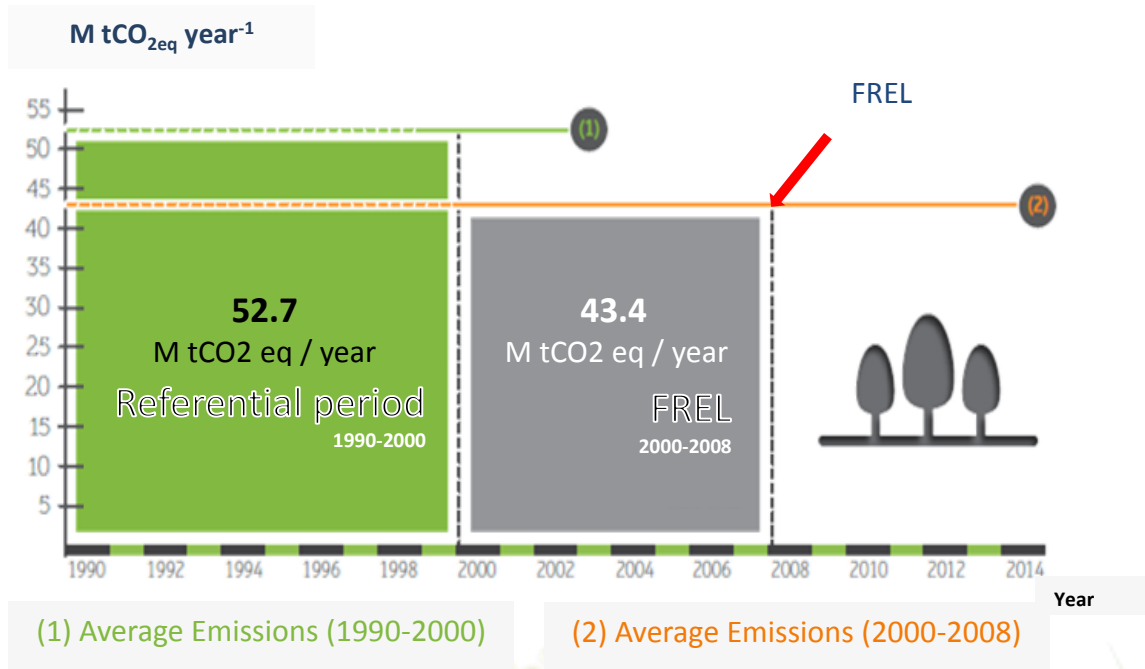
ADAPTATION

Strengthening for Vulnerability and Adaptation Analysis



Forest Reference Emission Level for Deforestation

Proposed FREL 2000 – 2008 = 43.418.127 tCO₂ eq/year



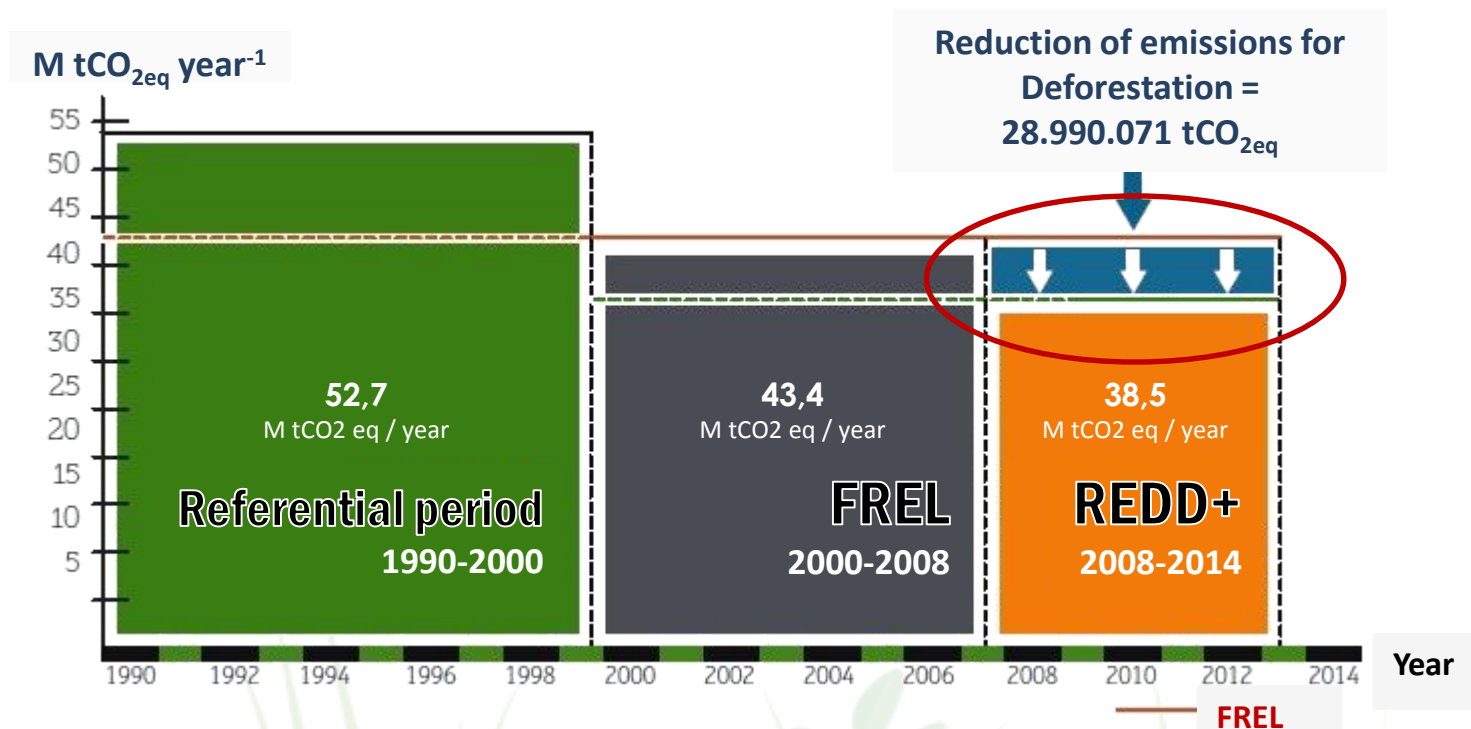
- **Area:** 100% national territory (24.898.060 ha)
- **Activities:** Gross deforestation
- **Activity data:** taken from the Historical Map of Deforestation and the National Forestry Inventory
- **National emission factors:** for each of the 9 forest types
- **Pools:** Aboveground biomass, Belowground biomass, Dead Wood, Litter
- **Gases:** CO₂
- **Forest:** definition of forests consistent with the BUR

Report on the technical assessment of Ecuador's FREL: Transparent, complete, consistent and accurate.

Emission Reduction Results for Deforestation

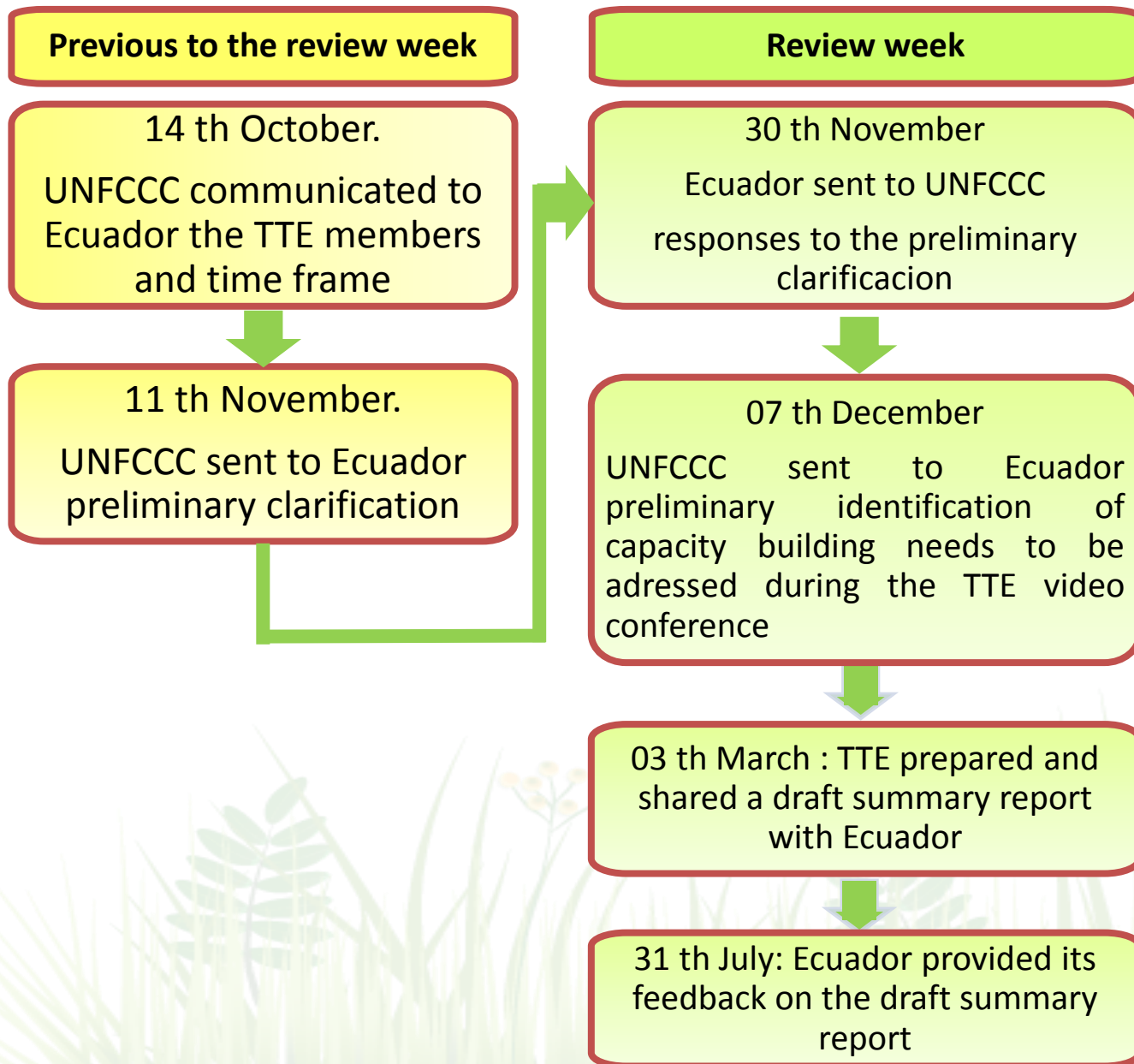
Reduction of emissions 2009 – 2014 = 28.990.071 tCO₂ eq



- **Area:** 100% national territory (24.898.060 ha)
- Technical Annex REDD+ went through an International Consultation and Analysis (ICA) process, in 2016
- **BUR** presented and technically evaluated by experts of the UNFCCC
- Reduction of **4.8 million tCO₂ eq** per year
- **28,9 Millions** of tCO₂eq were not emitted due to avoided deforestation in the period 2008 - 2014



The technical analysis concluded that the data and information provided by Ecuador in the technical annex are **transparent** and **consistent over time** and with the assessed forest reference emission level that was established in accordance with decision 1/CP.16, paragraph 71(b), and decision 12/CP.17, chapter II.

Process of Technical Analysis of the First BUR of Ecuador



	United Nations	FCCC/SBI/CA/2016/TASR.1/ECU
	Framework Convention on Climate Change	Distr.: General 31 August 2017 English only
Technical analysis of the first biennial update report of Ecuador submitted on 21 September 2016		
Summary report by the team of technical experts		
<i>Summary</i>		
<p>According to decision 2/CP.17, paragraph 41(a), Parties not included in Annex I to the Convention (non-Annex I Parties), consistent with their capabilities and the level of support provided for reporting, were to submit their first biennial update report (BUR) by December 2014. The least developed country Parties and small island developing States may submit BURs at their discretion. Further, according to paragraph 58(a) of the same decision, the first round of international consultation and analysis (ICA) will be conducted for non-Annex I Parties commencing within six months of the submission of the Party's first BUR. The process of ICA consists of two steps: the technical analysis of the submitted BUR, followed by a workshop for the facilitative sharing of views under the Subsidiary Body for Implementation. This summary report presents the results of the technical analysis of the first BUR of Ecuador conducted by a team of technical experts in accordance with the modalities and procedures contained in the annex to decision 20/CP.19.</p>		

THANK YOU

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