Summary of Guatemala’s iNDCC
Guatemala’s iNDC\textsuperscript{1} Profile

I. Country commitment under Paris Agreement

Mitigation commitment

Non-Conditioned Proposal: By the year 2030, the GHG emissions of Guatemala in a trend scenario (BAU)\textsuperscript{2} are 53.85 Million tons of CO2 equivalent. Under its current capacities, Guatemala plans to achieve a reduction of 11.2% (6.04 Million tons CO2 equivalent) of its emissions projected. This implies that the emissions will be reduced to 47.81 million tons of CO2 equivalent in that year.

Conditioned Proposal: If the country receives new and additional international climate finance, the goal of emissions reduction will be more ambitious than the previous one, up to 22.6% (12.19 Million tons CO2 equivalent) of the emissions projected under the trend scenario of 53.85 Million tons of CO2 equivalent by the year 2030.

The application period of Guatemala’s iNDC is 2016-2030, with a national scope establishing as implementation mechanisms the national instruments, institutions, policies, strategies, plans, programs or projects in the following prioritized sectors:

Energy Sector: Increase the electricity generation matrix up to 10.28% by the year of 2030, with a focus on the use of renewable sources. This commitment includes the subsectors of residential, transport and electricity generation.

- Increase the electricity generation matrix from 69.72% to 80% with a focus on increasing the use of renewable sources.
- Implementation and improvement of the transport system currently in operation in Guatemala City (Transmetro system)
- Establishment of a program of tax incentives and subsidies focused on the use of clean energy for public and private transport, including regulations for GHG emissions the transport sub-sector.

Land Use, Land-use Change and Forestry: Emissions reduction through avoided deforestation and forest degradation, as well as the establishment of agroforestry systems, plantations and

\footnotesize{\textsuperscript{1} Guatemala’s signed the Paris Agreement in April, 2016 and the ratification was signed by the Political Congress of the Republic in October 2016. This document is based on the INDC that Guatemala submitted under the Paris Agreement, available in the UNFCCC website: http://www4.unfccc.int/submissions/INDC/Published%20Documents/Guatemala/1/Gobierno%20de%20Guatemala%20INDC-UNFCCC%20Sept%202015.pdf}\textsuperscript{2} According to the Intergovernmental Panel on Climate Change, a “business-as-usual” (BAU) baseline case is one which assumes that future development trends follow those of the past and no changes in policies will take place. A BAU baseline case is often associated with high GHG emissions.}
the protection of natural forests. Implementation of the National REDD+ Strategy which proposes to strengthen:

- Forest Incentive Programs (PINPEP and PROBOSQUE)
- The Guatemalan Protected Areas System (SIGAP)
- The National System for Forest Fires Prevention and Control
- Institutional Strategies for sustainable forest management, enhancing forest cover, amongst others.

**Agriculture:** Actions that have a direct effect on the production of food, mainly for self-consumption and subsistence in priority areas, providing producers with necessary tools, technology and assistance for good agriculture practices.

- Strengthen the National System for Rural Extension
- Action Plans for the implementation of the National Policy for Rural Development
- Implementation of the Irrigation Policy.

**Waste:** Actions that have a direct effect on the waste water management.

- Implementation of the National Policy for Waste Management
- Implementation of the Waste Water Regulation

**Industrial Processes:** Actions that have a direct effect on the development of local capacities in the application of cleaner production contributing to the efficiency, competitiveness and social development of private and public organizations.

- Coordination and engagement of private sector through the Cleaner Production Policy, to be implemented as a tool of competitiveness and environmental management.

- Development of an Incentive Program for voluntary activities for emissions reduction.

**Adaptation commitment**

Strengthen the adaptive capacity through the reduction of vulnerability and improvement of adaptation process in key sectors:

**Human health:** The Ministry of Health and Social Assistance (MSPAS) and the Guatemala’s Institute of Security (IGSS) will establish actions for prevention and decrease the main diseases related to climate change such as: respiratory infections, diarrheal diseases and, particularly, leishmaniosis, malaria, dengue, amongst others.

**Coastal marine areas:** The Ministry of Environment and Natural Resources, the Ministry of Agriculture, Livestock and Food, the Ministry of National Defense and the National Council of Protected Areas, will identify and implement actions to reduce socio-environmental vulnerability in the coastal marine areas.

**Agriculture, livestock and food security:** The Ministry of Agriculture, Livestock and Food, and the Ministry of Food and Nutrition Security will establish plans to adapt the agricultural sector to the variability and effects of climate change, prioritizing those actions that have a direct effect on the production of food for self-consumption and subsistence.
• **Forest resources and protected areas, conservation and management of strategic ecosystems:** The Inter-Agency Coordination Group (GCI) will adjust and design policies, strategies, programs, plans and projects for the sustainable forest management, conservation forest ecosystem and the emissions reduction in this sector. As well, GCI together with the National Fire Prevention and Control System (SIPECIF) will design and implement plans for the prevention and control of forest fires.

• **Infrastructure:** The Ministry of Communications, Infrastructure and Housing, other institutions and Municipalities will adopt standards taking into account the variability and climate change impacts.

Other sectors prioritized for adaptation of climate change are: quality of productive infrastructure, protection of soil and comprehensive management of disaster risk reduction.

**Key plans to achieve the commitments:**

• National Action Plan for Adaptation and Mitigation of Climate Change Plan (PANCC) which includes 153 specific actions for 6 sectors prioritized for adaptation and 93 specific actions for 5 sectors prioritized for mitigation (GHG emissions reduction)
• National Development Plan “Nuestra Guatemala Katún 2032”
• Action Plan for the implementation of the National Policy for Rural Development
• Action Plan for Biological Diversity 2012-2022
• Institutional Strategic Plan of the Ministry of Public Health and Social Assistance

**II. Carbon Emission composition**

• The Energy sector is the main source of emissions, with 39% of share. In second place is the Land use and Forestry (USCUSS) sector, with 27%, followed by the Agriculture sector which represents 25%. The sectors Waste and Industrial Processes had respectively net emissions of 5% and 4%.

![Figure 1 Guatemala's GHG emissions in 2005](http://www.marn.gob.gt/Multimedios/2562.pdf)

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III. Institutional Framework

- **National Climate Change Council (CNCC):** CNCC was created under the Article 8 of the Climate Change Law, is presided by the Presidency of the Republic and brings together key sectors (public, private, indigenous people, local communities, municipalities, academia and NGO) for the regulation, supervision of the implementation of actions and conflict resolution for the privatization of the Climate Change Law.

- **Inter-Agency Coordination Group (GCI):** GCI is a governance platform under Article 20 of the Climate Change Law, which brings together the Ministry of Environment, the Ministry of Agriculture Livestock and Food, the National Forest Institute and the National Council for Protected Areas. GCI is responsible for the formulation and execution of policies, strategies, programs, plans and projects that aim to reduce GHG emissions and the conservation of forest ecosystems.

IV. Key Regulatory Framework for Climate Change

- **Climate Change Policy:** Establishes as a goal to adopt practices of risk prevention, vulnerability and improvement of adaptation to climate change, and contribute to the reduction of GHG emissions.

- **Climate Change Law (2007-2013):** Guatemala is one of the few countries in the region that has a Policy and Law for the adaptation and mitigation of climate change and to reduce the vulnerability of populations.

- **National Action Plan for Adaptation and Mitigation of Climate Change (PANCC):** Guatemala is the second country in the region that has a national action plan on climate change linked to the public policies for planning and rural development.

- **National Plan for Development Katún 2032:** Plan Katún prioritizes specific adaptation goals for food and hydropic security, vulnerable ecosystems, land-use management, etc.; as well as specific actions for emissions reduction (mitigation) in strategic sectors such as: land use, land-sue change and forestry, agriculture, energy, waste management and industrial processes.

- **National Energy Plan:** Establishes guidelines and actions for the production and consumption based on the exploitation of renewable natural resources, the promotion of technologies for efficiency and energy savings and the reduction of greenhouse gases.

V. Example of opportunities for IDBG support in line with the INDC⁴

**Energy**

- Energy Efficient in public and private buildings.
- Nationally Appropriate Mitigation Actions (NAMA) for the Efficient Use of Firewood. Guatemala is elaborating a full investment proposal to access USD12 million grants from

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⁴ The sectors and actions listed in this section are exemplificative not exhaustive and are in line with those aspects emphasized by the Government in its INDC.
NAMA Facility, for the efficient use of firewood in rural and indigenous people’s territories in the main departments with high firewood deficit. This proposal can complement efforts of reducing forest degradation under the National REDD+ Strategy.
- Diversify the power generation matrix of the country by harnessing the renewable energy power potential in wind, solar, geothermal and sustainable biomass (firewood).

**Forestry**
- National REDD+ Strategy being elaborated and which proposes to strengthen the forestry legal framework, Forestry Law through the forest incentive programs, and the Protected Areas Law through the Guatemalan Protected Areas System;
- Forest Investment Program (FIP) of the Climate Investment Funds (CIFs). Guatemala is elaborating it’s Forest Investment Plan to access USD24 million (USD3.15 million can be used as grants and the rest as a loan) for the implementation of REDD+ activities to reduce deforestation and degradation, as well as to enhance forest cover;

**Transport sub-sector**
- This could involve the improvement and expansion of the efficient transport systems currently in operation in Guatemala City (Transmetro and others).

**Agriculture**
- Implementation of Low emission strategy for export crops
- Strategic Crops for Resilience (Coffee, Cardamon, Cocoa).
- Food security in vulnerable areas like the Dry Corridor.

**Smart cities**
- Development of a proposal of Emerging and Sustainable Cities for Guatemala City, focusing on a collaborative planning and citizen participation that would allow a more innovative, competitive, attractive and resilient city (supporting initiative of Urban Development Law).
Linking the commitment with NDC Invest
Aspects that could be supported by the NDC Invest to boost programming opportunities

Institutional Strengthening

- Strengthening the local government’s efforts for the implementation of adaptation and mitigation actions in the territories, especially those with high vulnerability to climate change.
- Supporting the development of financial instruments to mobilize climate investments.

Development of investment plans and project preparation

- Supporting the design of sectorial Plans for Adaptation and Mitigation to Climate Change (requirement in the Climate Change Law).
- Estimation of implementation cost of NDC (there is a requirement from Ministry of Finance)
- Investment plans for energy, transport, and agriculture.

Engaging and leveraging action

- Supporting the engagement of the Ministry of Finance in the leverage and implementation of climate finance operations.
- Supporting the role and participation of local governments (municipalities) in the fulfillment of the iNDC, and strengthening governance practices.
- Supporting the involvement the private sector to contribute to compliance with the iNDC.

Transparency

- Supporting the development of monitoring, reporting and verification (MRV) system for prioritized sectors in the adaptation and mitigation goals (according Climate Change Law).
Annex
Annex- IDBG Portfolio Profile on Climate Change

IDBG Support: Since 2011, the IDBG support to climate finance has totaled US$ 46 million, from which US$ 41 million was towards mitigation, especially energy efficiency and renewable energy. With the exception of 2014, the volume dedicated to climate finance has been limited compared to the overall portfolio.

![IDBG Climate Finance in Guatemala 2011-2016](chart.png)

Note: The IIC data starts in 2016.

![IDBG Mitigation Finance to Guatemala by subsectors 2011-2016](chart2.png)
List of IDB approved projects between 2011 and 2016 that contribute to climate finance

<table>
<thead>
<tr>
<th>Operation</th>
<th>Title</th>
<th>Original Approved Amount (USD)</th>
<th>%CF</th>
<th>Approval Year</th>
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<tr>
<td>GU-M1059</td>
<td>Infraestructura para la competitividad y el bienestar social</td>
<td>1,969,499.00</td>
<td>100%</td>
<td>2016</td>
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<td>GU-T1257</td>
<td>Preparación de Plan de Inversión del Programa de inversión Forestal en Guatemala</td>
<td>250,000.00</td>
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<td>2016</td>
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<td>GU-T1262</td>
<td>Protección del medio ambiente y respuesta al cambio climático</td>
<td>14,268.00</td>
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<td>GU-T1264</td>
<td>Propuesta Técnica para el Uso Eficiente de Leña y Combustibles Alternos en Comunidades Indígenas Rurales de Guatemala</td>
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<td>GU-L1084</td>
<td>Programa Multifase de Electrificación Rural - Fase II</td>
<td>49,100,000.00</td>
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<td>5,900,000.00</td>
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<td>GU-M1044</td>
<td>Recuperación del Capital Natural del Corredor Seco y Adaptación Climática</td>
<td>3,419,757.00</td>
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<td>GU-M1053</td>
<td>Quetzol Energía Solar Preppaga para la Bdp en Guatemala</td>
<td>262,920.00</td>
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<td>GU-T1163</td>
<td>Apoyo a el grupo de trabajo de cambio climático de MINFIN</td>
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<td>GU-T1164</td>
<td>Apoyo al Programa Nacional de Cambio Climático</td>
<td>962,910.00</td>
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<td>GU-T1165</td>
<td>Diseño de proyecto piloto de edificio sostenible para el MINFIN</td>
<td>56,952.65</td>
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<td>GU-T1172</td>
<td>Adaptación al Cambio Climático con un enfoque en los pueblos indígenas.</td>
<td>387,810.20</td>
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<td>GU-T1176</td>
<td>Apoyo al Gobierno de Guatemala en la actualización del PDI Peten</td>
<td>188,886.78</td>
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<td>GU-T1194</td>
<td>Estrategia Nacional Reducción Emisiones Deforestación Evitada y Degradación Bosques</td>
<td>3,800,000.00</td>
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<td>GU-T1203</td>
<td>Fortalecimiento de las Capacidades del Ministerio de Energía y Minas</td>
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<td>GU-T1213</td>
<td>Intercambio de Experiencias en Biocombustibles</td>
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<td>GU-T1217</td>
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<td>GU-T1220</td>
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<td>GU-T1222</td>
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<td>Fortalecimiento de Alerta Temprana Climática para Reducción de Vulnerabilidad en Sectores Estratégicos</td>
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<td>2015</td>
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<td>GU-T1256</td>
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