

# SIMPLIFIED PARIS AGREEMENT

Popular Version for Guatemala



**"AN AMBITIOUS AGREEMENT WITH  
OUR UNDIVIDED COMMITMENT"**

Let's all play a part, act today,  
tomorrow will be too late...



PARIS2015  
ON CLIMATE CHANGE CONFERENCE  
COP21-CMP11

Fomentado por el:



Ministerio Federal  
de Medio Ambiente, Protección de la Naturaleza  
y Seguridad Nuclear

en virtud de una resolución del Parlamento  
de la República Federal de Alemania.



25  
AÑOS



Al servicio  
de las personas  
y las naciones

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## Acknowledgments

This publication contributes to the awareness and socialization of the Paris Agreement (PA) in a simplified manner, with the desire that Guatemalan society be informed of the meaning of the unanimous commitment to fight against climate change in order to defend the survival of the planet; actions on which the destiny of future generations depends.

It includes the commitments established by the Government of Guatemala in its “Nationally Determined Commitment” in parallel to the pillars of the PA, accompanied by projects description which are being implemented in the national territory, interviews with their project managers, and with few additional simple examples of what each of us can do, as responsible citizens of our Mother Earth, our home.

The “Simplified Paris Agreement, Popular Version for Guatemala” is a personal initiative with the unrestricted support of the Sotz’il Association, through its Executive Director, Ramiro Batzin.

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This publication was made possible thanks to the financial support of the Small Grants Program (SGP) of the Global Environment Facility (GEF) in Guatemala, implemented by the United Nations Development Program (UNDP) as of 1992.

The work of the SGP in 125 countries promotes innovation at the community level, capacity building and empowerment through sustainable development projects of civil society organizations, with special consideration for indigenous peoples, women and youth. To date, the PPD has supported more than 20,000 community projects in biodiversity conservation, mitigation and adaptation to climate change, prevention of land degradation, protection of international waters and reduction of the impact of chemicals, while generating sustainable livelihoods.

The Global Support Initiative for Territories and Conservation Areas by Indigenous Peoples and Local Communities (TICCA), is funded by the Government of Germany, through the Federal Ministry of Environment, Nature Protection and Nuclear Safety, implemented by the United Nations Development Program (UNDP) and managed by the Small Grants Program of the Global Environment Facility (GEF). Other key partners include the Convention on Biological Diversity (CBD), the ICCA Consortium, the International Union for Conservation of Nature (IUCN) and the World Conservation Monitoring Center of the United Nations Environment Program (UNEP-WCMC).

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# THE PARIS AGREEMENT

## A GLOBAL BET



### A Global Challenge

Holding the increase in global average temperature to well below 2°C and pursuing efforts to limit the temperature increase to 1.5°C.



### How to comply?

All countries carry out adaptation and mitigation actions through the National Determined Commitments at the national level.



### To increase ambition

Countries present new contributions every five years and a global stocktake will be celebrated in order to account on the achievement of goals.



### Adaptation Global Goal

Enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change



### Loss and Damages

Reviewed under the Warsaw International Mechanism, it does not include financial support.



### Measurement, Reporting and Verification

A flexible transparency framework is established, rules will be approved by 2018. The information shared by each party biennially will be subject to examination by technical experts (flexibility for developing countries is provided).



### Forests

Acknowledges its role in meeting the global mitigation goal. Encourages parties to implement under REDD+ Decision Framework, including payments for results to protect forests in developing countries.



### Market Mechanisms

Parties may transfer their mitigation results to comply with their NDC. This is a voluntary cooperative approach and requires clear rules to avoid double counting of emissions.



### Compliance

Facilitation committee composed of experts to promote compliance is established. It will work transparently, not contentiously and not punitively.



### Financing

Developed countries must contribute a minimum of USD 100 billion per year until 2025, when a new goal will be established. Developing countries are encouraged to contribute financially.



### Principle

Common but differentiated responsibilities and respective capabilities, in light of different national circumstances.



### Scope

It is a universal and binding agreement.







## RITA MISHAN

**Ambassador**  
**Co-Chair to the Paris Committee**  
**for Capacity Building**

Although the negative effects of climate change are global, all forecasts indicate that Central America, which is one of the most vulnerable regions, will suffer most intensely for geographical-meteorological reasons and with devastating effects in the economic and development sectors, which has a direct impact on poverty and food insecurity.

The Paris Agreement -PA- was born under the United Nations Framework Convention on Climate Change, entered into force on November 4, 2016. It aims to increase the response of the planet to the threat of climate change. To achieve this, the PA poses significant challenges and commitments for countries that are Parties, mainly in mitigation, adaptation, and financial and technological resource transfer, as well as the creation of capacities in developing countries.

The PA recognizes that climate change is a problem for all humanity and that, in order to take measures to deal with it, the Parties should respect, promote and take into account their respective obligations regarding people in vulnerable situations; human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, people with disabilities and the right to development, as well as gender equality, the empowerment of women and intergenerational equity.

The PA is an agreement of a universal and legally binding nature, approved “by consensus” ratified by Guatemala, for which the country is committed to comply with the requirements established in it. This implies an additional and integrated effort that requires the involvement of the entire Guatemalan society, through the adoption of more environmentally friendly lifestyles and new consumption habits and sustainable production.

In this **“Popular Version for Guatemala”** we try to socialize and simplify the Agreement for the general public, with the desire to make its vital content and its implications known to Guatemalans, through the inclusion of actions that we can do every day, to reach a transformation that allows us to be protagonists of a generational change towards the sustainability of our own natural wealth, patrimony of all.

This document will address international and national commitments, presented in a summarized manner through a brief explanation of each article, in order to give the reader elements to understand in a simple way, with greater clarity the responsibilities acquired.

Finally, the Paris Agreement attached in its original version to serve as reference for the simplified version. It is our best intention that this document serves as



an instrument in your daily activities  
as a professional, academic, student,  
countryman or anyone curious about  
*"how we can make a difference".*

Sincerely,

**Rita Mishaan**  
Ambassador  
Co-Chair to the Paris Committee  
for Capacity Building



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# HISTORICAL MOMENTS

## COP21, COP22 Y COP23



© Paris COP21

*Laurent Tubiana, Special Envoy Ambassador, Christiana Figueres, Executive Secretary of the United Nations Framework Convention on Climate Change, Ban Ki-moon, Secretary General of the United Nations, Laurent Fabius, Minister of Foreign Relations of France and President of COP21, Francois Hollande, President of France, celebrate the adoption of The Paris Agreement.*



### **Laurent Fabius, Minister of Foreign Relations of France, President of COP21**

<http://www.excelsior.com.mx/global/2015/12/13/1062981>

The President of COP21, “Looked at the room” and said quickly, “-I do not hear any objections: The Paris Agreement on climate is approved,” he added nervously, before hitting the gavel, as is accustomed.



### **Christiana Figueres, Executive Secretary, -UNFCCC- 2011-2016**

<https://www.efeverde.com/noticias/figueres-paris-es-una-llama-de-esperanza-para-la-diplomacia-internacional/>

“After so many failed negotiations on climate change and other issues, this agreement has opened the door for hope and it confirms that it is possible to reach global agreements,” stated Cristiana Figueres to EFE, during her participation in the World Energy Congress in Abu Dhabi. January 19, 2016.





**Salaheddine Mezouar,  
Minister of Foreign Relations and Cooperation from Morocco  
President COP22**

[m/article/us-climatechange-accord/morocco-sees-no-turning-back-for-climate-pact-despite-trump-idUSKBN1310XE](https://www.uscibn.com/article/us-climatechange-accord/morocco-sees-no-turning-back-for-climate-pact-despite-trump-idUSKBN1310XE)

There is no “turning back” from global agreement to combat climate change, said the Moroccan Foreign Minister on the eve of the UN talks in Marrakech, amid fears that Donald Trump would try to withdraw from the agreement.



**Patricia Espinoza  
Executive Secretary, -UNFCCC- 2017- to date**

<https://www.efeverde.com/noticias/urgencia-accion-inmediata-apertura-cumbre-clima-bonn/>

**THERE IS NO TIME**

“We no longer have the luxury of time. We must act now. This is where we start”, said Patricia Espinoza at the opening session of the summit of the Executive Secretary of the UN Framework Convention on Climate Change (UNFCCC).



**Message from Emmanuel Macron, President of the Republic of France after the US withdrawal announcement:**

“Let’s not fool ourselves about climate, there is NO PLAN B, since there is NO PLANET B ... If we do not do anything, our children will know a world made of; migrations, wars, hardships, disappearances of archipelagos and coastal cities due to these consequences. This has already started (...). We will not renegotiate a less ambitious agreement. No way”.

<https://www.dailysabah.com/environment/2017/06/02/there-is-no-plan-b-because-there-is-no-planet-b-macron-says-after-us-quits-paris-climate-pact>

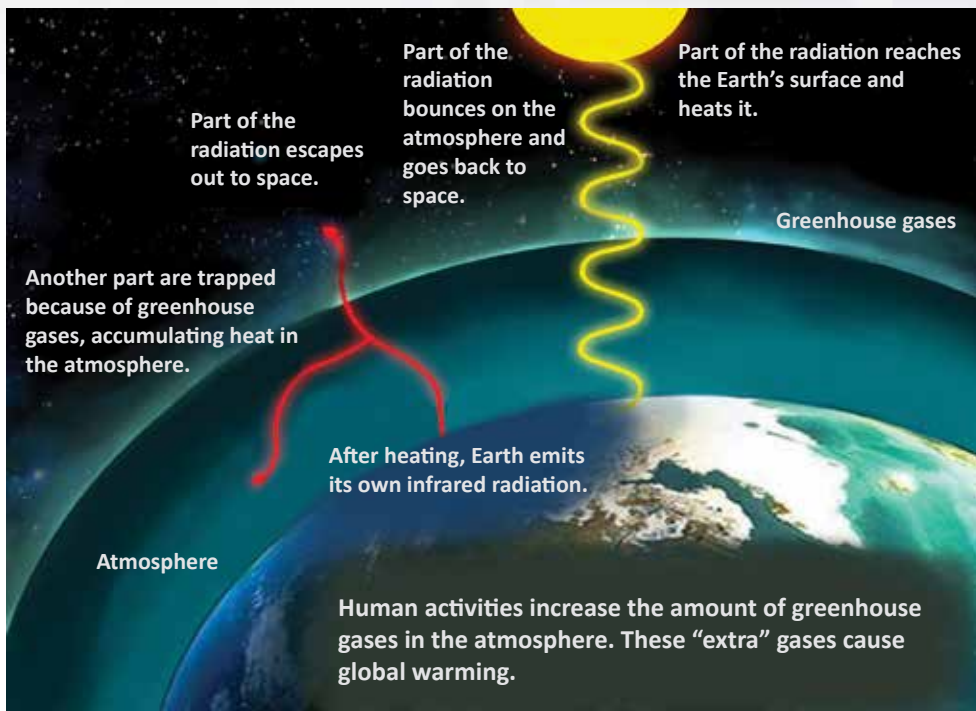


## What do greenhouse effect and global warming mean?

The greenhouse effect is what creates the temperature necessary to support life on earth. energy comes from the sun in the form of light (radiation) reaches the Earth and makes our planet heat up. Then the Earth returns this energy back into space in the form of heat. However, part of this heat is trapped by greenhouse gases (GHG), such as water vapor, carbon dioxide (CO<sub>2</sub>), and methane that are in the atmosphere, this keeps the heat from going out to space and helps maintain an adequate temperature on Earth.

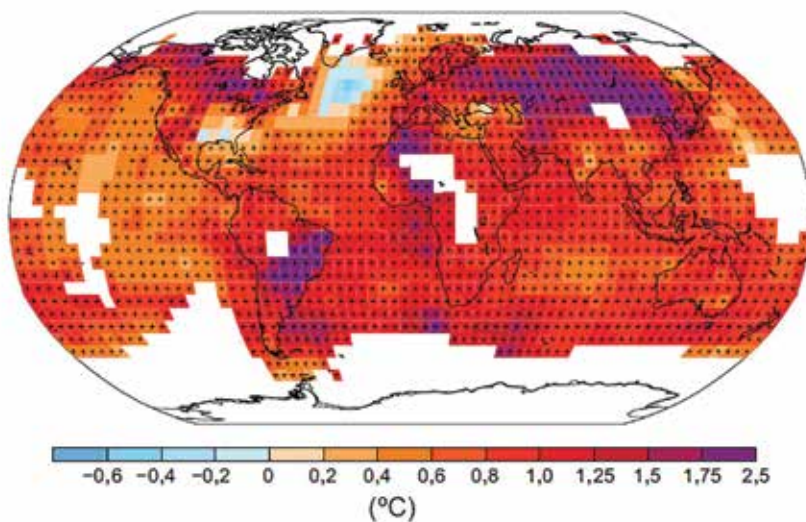
An increase in the planet's temperature has been observed since the middle of the 20th century. This increase in the Earth's temperature is known as Global Warming. The Intergovernmental Panel on Climate Change (IPCC) states with 95% certainty that global warming is caused by the increase in greenhouse gases emitted by human activities.<sup>1</sup>

1 IPCC 2014



Source: Ortiz, L. (2016)





Source: IPCC. (2014)

Figure 2 – Global warming during the period from 1901 to 2012.

The main human activities that have contributed to increase greenhouse gases in the atmosphere are: transportation, industry, energy production, construction, agriculture, land-use change, desertification and wildfires.<sup>2</sup>

Figure 2 shows how temperature of Earth has increased since 1901 (before the Industrial Age) up to 2012.

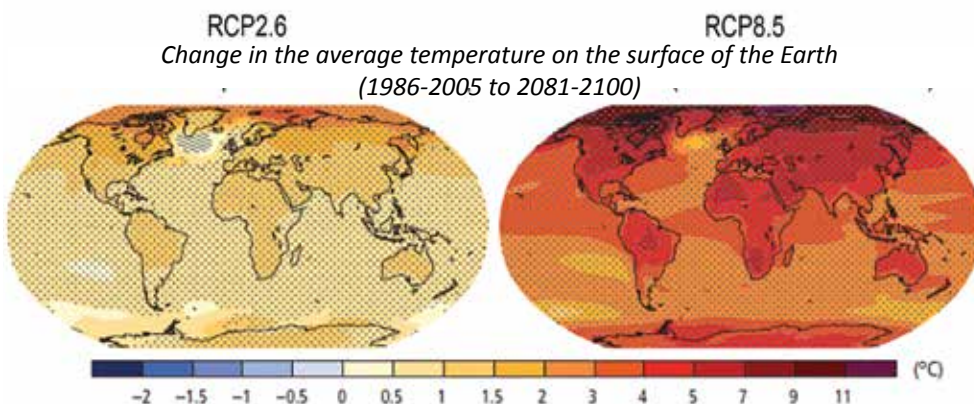
## What will happen to the planet's temperature in the future?

After many years of studies and analysis, the IPCC has published two assessments comparing Earth's average temperature from 1986 to 2005 (20 years) with the average temperature we will have from 2081 to 2100 (20 years), in two different scenarios. In the first scenario, they compare the baseline temperature (1986-2005) with the temperature we would have if the Paris Agreement

goals are met. Moreover, in the second scenario, they compare the baseline temperature with the temperature we would have if no actions to combat climate change are taken and we continue to emit greenhouse gases in a business as usual manner.

<sup>2</sup> PNUMA (2012)





*As can be seen in the figure, temperature may increase between 4 – 5°C if no mitigation actions are taken.*

## What is climate change?

Climate change is the variation in climate over long periods of time. The idea of climate change, alludes to a variation in the climate of Earth caused by human action. This change in climate is created by what is known as the greenhouse effect that causes global warming which affects mainly the oceans' temperature and the melting of ice on the Earth's poles.

Climate change brings a series of negative effects, mainly the increase of heatwaves, droughts and the intensity of severe weather phenomena like hurricanes, storms, etc. These effects have had a negative impact in the population's health and quality of life, in ecosystems, in the economy and in infrastructure.

Although the effects of climate change happen at a global scale, everything points to areas in the tropics being the most fragile and exposed, and thus suffer with greater intensity. Among the list of the most critical regions are South and Southeast Asia, both African tropical bands and a broad area of America, which includes Central America. The tropics are more vulnerable due to geographic-meteorological reasons, but also due to economic and development issues, such as poverty and food insecurity.<sup>3</sup>

<sup>3</sup>IARNA (2010)



## TIMELINE

To combat climate change, the United Nations Framework Convention on Climate Change (UNFCCC) was created in 1992, with the objective of achieving the stabilization of greenhouse gas emissions at a level that prevents dangerous human interference in the climate system, level that should be achieved in due time to allow ecosystems to adapt naturally to climate change, ensure food production and allow economic development continue in a sustainable manner.<sup>4</sup>

The UNFCCC came into force on March 21, 1994, establishing the Conference of the Parties (COP) as a meeting to be

held annually among all the parties that have ratified it, for decision making, the preparation of treaties and agreements of a global nature.

On December 12, 2015, during the 21st Conference of the Parties (COP21) of the UNFCCC, in Paris, France, the Paris Agreement was adopted, and entered into force on November 4, 2016.

Guatemala signed the Paris Agreement on April 22, 2016 and ratified it on the 25th of January 2017.



### EARTH SUMMIT

#### 1992

The Second Earth Summit takes place in Rio di Janeiro, Brazil and the UNFCCC is adopted.



### United Nations Climate Change Carbon Mechanisms

#### 1994

The CMNUCCC entered into force on March 21, 1994. Guatemala ratified it in August 1995.

<sup>4</sup>CMNUCC, 1992







## 1997

The Kyoto Protocol (KP) was adopted at COP3 in Kyoto, Japan. Its objective was that developed countries would reduce their GHG emissions by 5% based on their 1990 emissions. This protocol came into force in 2005.



## 2011

The second PK period was agreed to at COP17 in Durban, South Africa, for an additional 8 years and a new working group was created in an attempt to develop a new agreement.



## 2012

The Doha Amendment was adopted, at COP18 in Doha, Qatar, extending the period of action to the PK for 8 more years and increasing the ambition of reducing emissions by 18% with respect to 1990 levels and adding Nitrogen Trifluoride to the list of GHGs.



## 2013

It is determined at COP19 in Warsaw, Poland, that all parties will develop their Intended Nationally Determined Contributions (INDC) and the Warsaw Loss and Damage mechanism is introduced.



## 2015

The Paris Agreement is adopted by universal consensus at COP21 in Paris, France.

*The Paris Agreement entered into force on  
November 4, 2016,*



# I. THE PARIS AGREEMENT IN A NUTSHELL

## Preamble

[https://unfccc.int/files/meetings/paris\\_nov\\_2015/application/pdf/paris\\_agreement\\_spanish\\_.pdf](https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_spanish_.pdf)

The preamble establishes the spirit and guiding principles of the Paris Agreement.

In the preamble it is acknowledged that climate change is a common concern of all humankind and that - when taking action to address it - obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity, must be respected, promoted and considered.

This section highlights with serious concern the urgent need to reach the greenhouse gas emissions trajectories necessary to keep the global average temperature well below 2°C from pre-industrial levels, and to pursue efforts to limit the temperature increase to 1.5°.

The need for an effective and progressive response to the urgent threat of climate change taking into consideration the specific needs and special circumstances of developing countries, especially those that are particularly vulnerable to the adverse effects of climate change is recognized.

The need to strengthen knowledge, technology, practices and efforts of local communities and indigenous peoples on climate change and the adoption of response measures is recognized.

## Objective of the Paris Agreement

The objective of the Paris Agreement states:

***To strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty.***



## Pillars to reach this objective are:

[https://unfccc.int/files/meetings/paris\\_nov\\_2015/application/pdf/paris\\_agreement\\_spanish\\_.pdf](https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_spanish_.pdf)



### MITIGATION

Reduce GHG emissions in view to hold the increase in the global average temperature to well ***below 2°C above pre-industrial levels*** and pursuing efforts to limit the temperature increase to ***1.5°C above pre-industrial levels***.



### ADAPTATION

***Increase the capacity of the planet to adapt*** to climate change and its adverse impacts, strengthening resilience and ***low greenhouse gas emissions development***, in a manner that does not threaten food production.



### FINANCE

The commitment made by developed countries is to reach ***the goal of USD 100 billion to combat climate change by 2020***.

***“The Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.”***



# MITIGATION (AP, Art. 4)

[https://unfccc.int/files/meetings/paris\\_nov\\_2015/application/pdf/paris\\_agreement\\_spanish\\_.pdf](https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_spanish_.pdf)

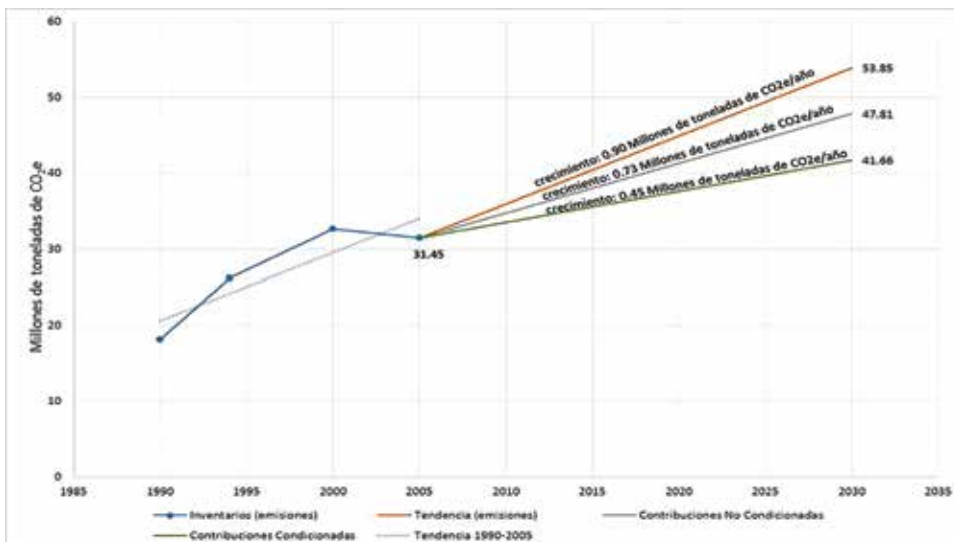
In order to mitigate (reduce/decrease) the greenhouse gas (GHG) emissions, each party/country that signed the Agreement, presented its nationally determined contributions (NDC). DL (NDC) in which it defines each country's obligation to reduce GHG emissions; and states how and in which economy sector emissions may be reduced. The NDC's are the backbone of the Paris Agreement, as they reflect the level of commitment and the will of each country in regards to which actions they will undertake in both mitigation as well as adaptation. These should be revised and updated every 5 years, increasing the ambition of emissions reductions in each revision in order to contribute to achieving the collective goal that was set.

## NDC – GUATEMALA

Guatemala presented its NDC's to the UNFCCC in 2015, approved by the National Climate Change Council.

## COMMITMENTS OF GUATEMALA

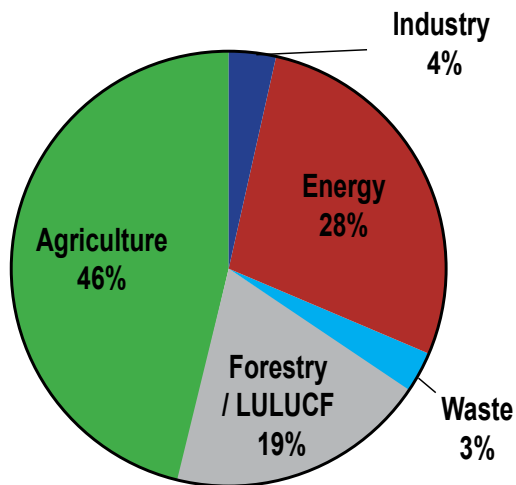
- **Unconditional – Reducing GHG emissions by 11.2%** by 2030 compared to 2005 levels, (Baseline Year).
- **Conditional - Reducing GHG emissions by 22.6%** by 2030 compared to 2005 levels (Baseline Year); conditioned to receiving technical and financial support from public and private international resources.



The orange line represents GHG emissions of Guatemala by 2030 year in a Business as Usual (BAU) scenario; the grey line, represents GHG emissions if the unconditional target of 11.2% reduction is achieved; and lastly, the green line represents GHG emissions if the unconditional target of 22.6% is achieved.



## CO2 Equivalent – 43,590 Gg



Source: Guatemala GHG Inventory, 2015

In order to achieve the goals established in Guatemala's NDC's, the country

identified the following 5 priority sectors to reduce GHG emissions:



(Note: this diagram does not represent the order of importance.)





## ENERGY

The energy sector of Guatemala is responsible for 28% of the total national emissions; it includes all emissions due to the burning of fossil fuels. The two main activities that contribute to the emissions of this sector are 23% from electricity generation and 49% from transportation; the remaining 28% originate from commercial establishments, households,

institutions and industries<sup>5</sup> that burn fossil fuels.

In Guatemala, from 2010 to 2016, on average 66% of all electricity was generated using renewable resources, mostly from water, wind, geothermal, solar and biomass sources. The remaining 34% of electricity was generated with coal, fuel oil, diesel and gas.<sup>6</sup>

According to Guatemala's NDC it is expected that by 2030, **80% of all electricity comes from renewable sources.**

There are already mechanisms, policies, institutions and projects in the country that will be helpful in the country's aspiration of achieving effective GHG emissions reductions in this sector, some of these are:

- Energy Policy 2013-2027 of the Ministry of Energy and Mines of Guatemala.
- Incentives Law for the Development of Renewable Energy Projects (Decree 52-2003).

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<sup>5</sup> MARN (2015)

<sup>6</sup> CNEE (2017)



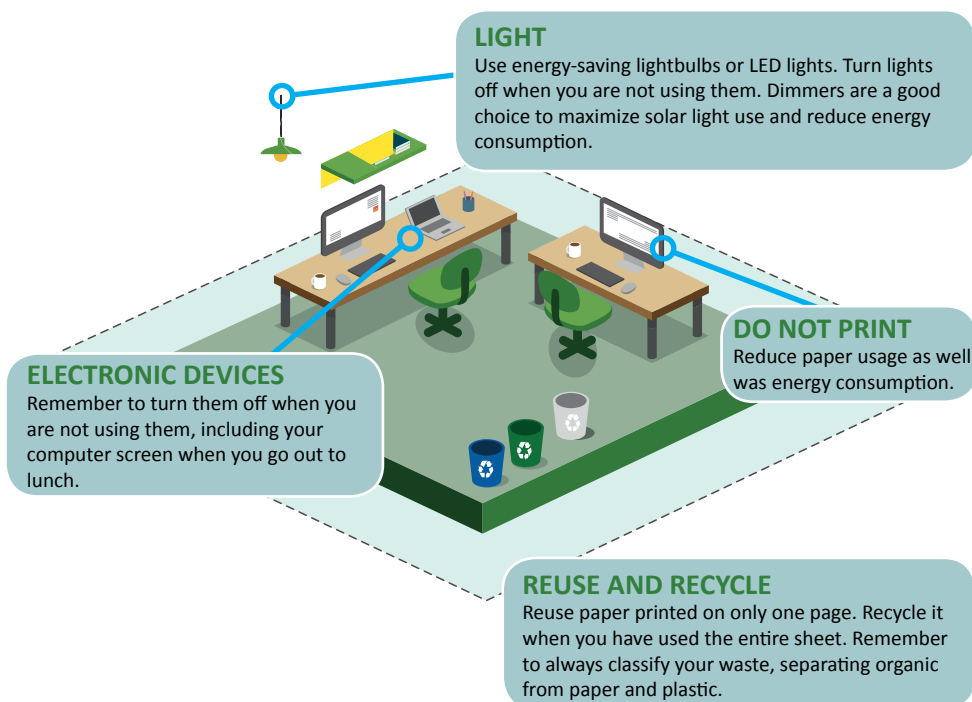
- Technical Standard for the Connection, Operation, Control and Commercialization of the Renewable Distributed Generation.
- National Energy Plan established in Article 18 of the Climate Change Framework Law of Guatemala (Decree 7-2013).

The transportation subsector, is working on the implementation and improvement of the Transmetro (public energy transportation system of Guatemala City). In addition, a program to establish tax incentives and subsidies focused on the use of clean energy for public and private transport, including regulations to control GHG emissions in personal and public collective transport.



*The biggest solar farm in Central America called Horus, is located in Santa Rosa, Guatemala.*

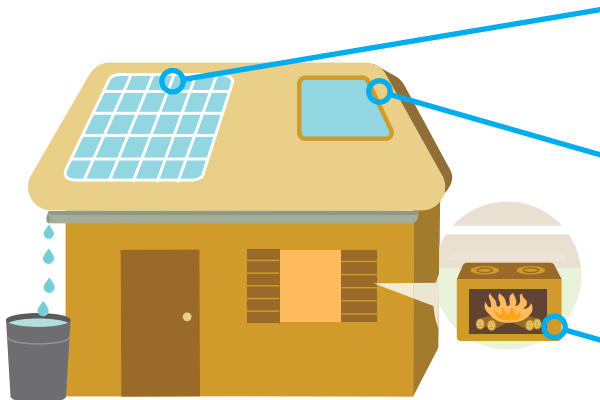
## Here are some actions you can take to reduce energy consumption:





### MOBILITY

Promote alternative means of transportation; Identify parking spaces and service stations for bicycles and electric cars. Promote carpooling; it reduces traffic, money spent on gas and CO2 emissions.



### SOLAR ENERGY

You can generate the energy needed to power your home with energy from the sun.

### NATURAL LIGHT

You can take advantage of natural light if you place windows or clear tiles on the roofs and walls.

### EFFICIENT WOOD STOVES

Use stoves designed to reduce wood consumption and gas emissions, this will also reduce respiratory illnesses in the family.



### CARPOOLING

Sharing car journeys with friends and co-workers can help reduce traffic; plus, you'll save money on gas and parking fees.

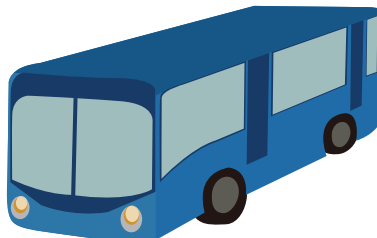


### BICYCLE

Riding your bike can help reduce traffic, avoid generating CO2 emissions and it helps improve your health.

### WALKING

Walking is a good option when you need to move short distances. This way you can promote an attitude of responsibility towards the environment.



### USE PUBLIC TRANSPORTATION!

This way you can reduce your GHG emissions and help reduce traffic.

**Interview: Diego Donis**  
Energy Director Division – Grupo ONYX





Emissions from the Land Use, Land-use Change and Forestry (LULUCF) refers to the GHG emissions generated as a result of human influence on forest systems through activities such as deforestation, degradation and fires. Land-use and forestry are closely linked to the place where people live, their way of life and their livelihood; a large percentage of deforestation is caused in order to get firewood or land for cattle breeding or agriculture.

At a global scale LULUCF accounts for approximately 20% of all GHG emissions; however, in Latin America this is the highest contributing sector, responsible for about 46% of all emissions. In Guatemala, LULUCF represents 19% of national emissions.

The Paris Agreement in Article 5, asks countries to take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases that are not controlled by the Montreal Protocol, including biomass, forests and oceans, as well as other land, coastal and marine ecosystems.

Guatemala already has a Guatemalan



System for Protected Areas (SIGAP by its initials in Spanish), that covers 33% of the national territory.

Some mechanisms and projects that will be helpful in the country's aspiration of achieving effective GHG emissions reductions in this sector are:

- Implementation of a Reducing Emissions from Deforestation and Forest Degradation – REDD+ - strategy: it is currently under development and adapting to a vision of improvement and integration to the public policy mechanisms of the forestry sector.
- Implementation of REDD+ projects.
- Implementation of the Agendas of Climate Change of public institutions related to the compliance of Article 20 of the Climate Change Framework Law mainly with the implementation of the Biodiversity and Climate Change Strategy.
- Strengthening of the National System for Prevention and Control of Forest Fires (SIPECIF by its initials in Spanish).

7 CEPAL (2012)





- Continuity in the implementation and compliance of policy instruments on forestry management; among which the following can be highlighted: Law to Promote the Establishment, Recovery, Restoration, Management, Production and Protection of Forests in Guatemala (PROBOSQUE by its name in Spanish) – Decree 02-2015 -, the Program of Forestry Incentives (PINFOR by its name in Spanish), and the Program of Forestry Incentives for Small Landowners with Forestal or

Agroforestral Vocation (PINPEP by its name in Spanish), National Forest Landscape Restoration Strategy with the goal of 1.2 million hectares, Strategy for Linking Forest-Industry-Market, and the Strategy to Combat Illegal Forest Activities in Guatemala.

Here are some actions you can take to preserve and care for the forests:

#### Protect the forests!

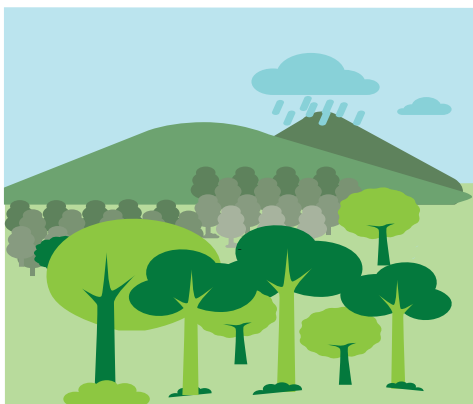
Deforestation is one of the leading sources of emissions in the country.

#### Trees

Take care of them! They help regulate temperature, weather, water and capture CO2 emissions.

#### Wildfires

Do not cause forest fires.



Interview: **Karen Aguilar**  
Planification Executive director  
and REDD+ FUNDAECO  
Manager



Interview:  
**Gabriel Valle Tercero**  
FUNDAECO Coordinator







## AGRICULTURE

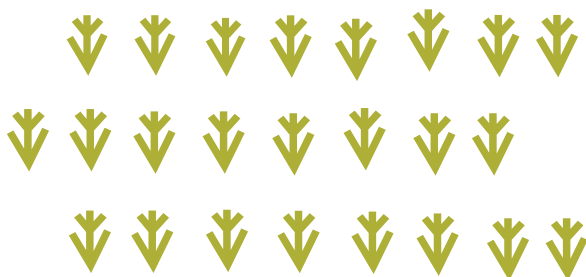
The agriculture sector contributes to 46% of the total national GHG emissions of Guatemala. In this sector, emissions come from different agricultural and livestock activities, such as enteric fermentation, animal waste management, use of nitrogen fertilizers, rice cultivation and burning of agricultural waste.

Some mechanisms that will be helpful in the country's aspiration of achieving effective GHG emissions reductions in this sector are:

- An Agriculture and Livestock Policy to strengthen the National Rural Extension Program (SNER by its initials in Spanish), among other programs linked to the Action Plan for the implementation of the National Integral Rural Development Policy.
- The proposal of annual operating plans linked to the agriculture sector and programmed based on micro-basins.
- The implementation of an Irrigation Policy with an integral approach to water resources.



Here are some actions you can take on agriculture:



### Energy crops

These enable having enough firewood for cooking and energy without deforestation.

### Fertilizers

You can reduce your emissions and lower your costs if you use them efficiently. Using organic fertilizers is better.

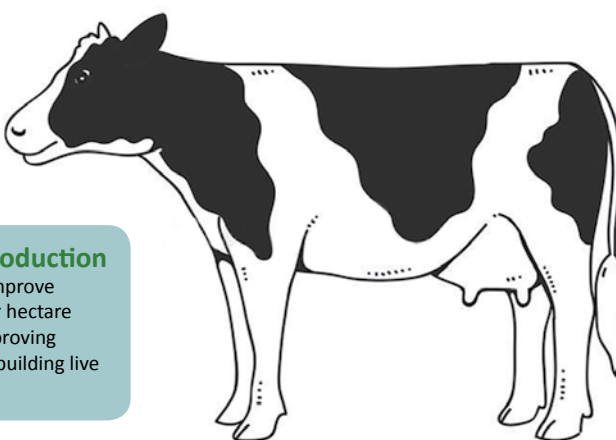


### Water

Use it consciously and efficiently for your crops and animals.

### Sustainable Livestock Production

You can reduce your emissions, improve the animals' diet and increase per hectare production by: planting trees, improving pastures, rotating paddocks, and building live fences and forage banks.





In the waste sector, GHG emissions reported come from waste handling and wastewater treatment and removal. The category that contributes to the most emissions from this sector is the final disposal of waste on land, generating 92% of all waste emissions; the remaining emissions are generated due to wastewater treatment and removal. This situation can be explained by the widespread absence of proper waste management in the main inhabited areas of the country, where approximately 75% of all waste goes to unauthorized and ill-handled municipal dumps.



Some mechanisms that will be helpful in the country's aspiration of achieving effective GHG emissions reductions in this sector are:

- Implementation of the Residual Discharges Regulation – Government Agreement 236-2006.
- Solid Waste Policy, currently being created by the Ministry of Environment and Natural Resources (MARN).



#### WASTE

Don't throw waste on the streets nor in the rivers, dispose of waste properly.







## INDUSTRIAL PROCESSES

In the Industrial Processes sector emissions generated from the production and use of minerals, the chemical industry and the production of metals, paper, food and drinks are reported.

Some mechanisms that will be helpful in the country's aspiration of achieving effective GHG emissions reductions in this sector are:

- Development and coordination for the private sector involvement through actions stated in the

Cleaner Production Policy, which is to be implemented as a tool for competitiveness and environmental management.

- An Incentives Program developed by MARN, which can boost voluntary GHG emission reductions or absorption activities, in accordance with Article 19 of the Climate Change Framework Law.



Interview: Luis Muñoz  
Guatemalan Center of Cleaner Production



# ADAPTATION (AP, Art. 7)

[https://unfccc.int/files/meetings/paris\\_nov\\_2015/application/pdf/paris\\_agreement\\_spanish\\_.pdf](https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_spanish_.pdf)

The Paris Agreement seeks ***to strengthen resilience, reduce vulnerability and enhance the planet's capacity to adapt to the adverse effects of climate change such as droughts, heatwaves, storms and hurricanes.***

Climate change adaptation activities should be carried out with a gender, participatory and transparent approach, considering vulnerable groups, communities and ecosystems, based on available scientific information and traditional, indigenous peoples' and local knowledge systems.

## NDC – GUATEMALA

In its NDC, Guatemala promotes and proposes the transversal reduction of vulnerability and improvement of adaptation processes in key sectors. Prioritizing adaptation processes in:

- Human health.
- Marine and coastal areas.
- Agriculture, livestock farming and food security.
- Forest resources and protected areas.
- Preservation and management of strategic ecosystems.
- Infrastructure.
- Integral management of water resources.
- Land protection.
- Integral Management of Disaster Risk Reduction





Guatemala already has a National Adaptation for Climate Change Action Plan. From said plan, each government institution will create their own institutional strategic plans to address climate change according to their legal mandate, which implies a strong incidence in the national planning process and its link to the general budget of the Nation.

Regarding Disaster Risk Reduction to extreme weather events linked to climate change, the country is undergoing **a process of unification of climatic information and the development of early alarm systems**. Nonetheless, there are still technological, financial and cultural barriers that require greater support in order to accelerate the response capacity of institutions and of the population.

Therefore, Guatemala should **reinforce its cooperation** in order to enhance adaptation efforts, with respect to:

- a) Exchange of information, good practices, experiences and lessons learned,
- b) Strengthening of institutional arrangements,

c) Strengthening of scientific knowledge about weather and climate,

d) Increasing efficacy and durability of adaptation measures.

## LOSS AND DAMAGES (AP, Art. 8)

The Agreement acknowledges the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events, and the role of sustainable development in reducing the risk of loss and damage.

It is necessary to advance in the implementation of the Warsaw International Mechanism for Loss and Damage and link it to the report required by the Paris Agreement on the needs for capacity-building.



Minister, Arias Cañete, during his intervention at COP19.



# NATIONAL ADAPTATION ACTION

In Guatemala, climate change causes an increase in the average temperature, which in turn causes a decrease in the amount of rain in most of the country causing water stress (drought). In addition the likelihood of extreme weather events like tropical storms, flooding or wildfires is increased. This affects the main productive sectors of the country, especially the agriculture sector, causing economic loss as well as social and economic impact, mainly in rural communities.

The poor rural population is the most vulnerable to climate change, as it is composed mainly of farming families for whom agriculture is their only livelihood. Their lands have an average area of 0.5 hectares, however these secure 75-80% of the basic food supply of the country,

planning accordingly to climate risks and implementing climate change adaptation measures in 8 micro-basins of the Dry Corridor of Guatemala.

Working with the communities of a micro-basin, vulnerability studies were undertaken in order to understand the local contexts and the main needs of the population.

Climate change adaptation measures were defined and implemented based on the vulnerability studies.

## Micro-basin Cachil, Municipality of Salamá, Department of Baja Verapaz



therefore climate change threatens national food security.

The program “Rural Development and Adaptation to Climate Change” (ADAPTATE by its name in Spanish) of the German cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit – GIZ GmbH) seeks to strengthen institutional capacity for

## Control and prevention of wildfires

The goal of this measure is the protection, conservation and recovery of forest cover. The implementation was executed and coordinated by the Environmental Management Unit (UGAM by its initials in Spanish) of the Municipality of Salamá, MARN, INAB, MINEDUC, CONRED, INDE





and local NGO's.

This measure seeks to protect the remaining forests in the upper part of the micro-basin, the management of small energy forests, the creation of plantation forests and the establishment of fire brigades.

The actions implemented included the provision of equipment for the control of forest fires and the establishment of a forest fire brigade. The brigade was composed of 32 people from the community who were trained by CONRED on the prevention and control of forest fires.

As an additional measure, UGAM and the INDE began the production of forest plants in a forest nursery located in the San Nicolás estate which will provide trees for 96 communities.

Furthermore, the development of a reforestation campaign with the motto "One Million Trees for Salmá" has been promoted.



## CLIMATE FINANCE (AP, Art. 9)

Developed countries pledged *provide financial resources to developing countries* in order to assist them in *both mitigation and adaptation*.

Decision COP21:

*Goal is USD 100 billion for 2020, a commitment that is to be reviewed biennially.*

Guatemala should promote *accreditation of national, public and private, entities* with climate cooperation funds, such as *the Green Climate Fund, (GEF), and other international funds*.

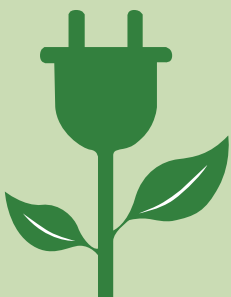
*The National Fund for Climate Change (FONCC)* should be set up and its accreditation promoted, as well as, other national funds that could be accredited.

Increasing cooperation, motivates commitment to *greater ambition* of GHG reductions.

## MEANS OF IMPLEMENTATION

To help achieve the goal of the Agreement two priority areas were identified to

support developing countries:



### Technology Development and Transfer (AP, Art. 10)

*Support shall be provided for developing countries promoting development and technology transfer.*



### Capacity Building (AP, Art. 11)

*Enhance support for capacity building actions for developing countries, to support Implementation of measures against Climate Change. The PA establishes the creation of the Paris Committee on Capacity Building (PCCB).*



## TECHNOLOGY DEVELOPMENT AND TRANSFER (AP, Art. 10)

Support shall be provided to developing countries for technology development and transfer. The PA establishes the Technology Framework to provide overarching guidance to the work of the Technology Mechanism under the UNFCCC in order to support the Implementation of the PA. It shall also provide financial support for this issue.

Guatemala intends to *enable, encourage and accelerate innovative ways to achieve economic growth and sustainable development.*

including mitigation, adaptation, technology development and transfer, and financial support.

The PA establishes the creation of the Paris Committee on Capacity Building (PCCB), which aims to address existing gaps and needs identified in the implementation of capacity-building actions in developing countries and to continue improving the work of capacity-building in general.

Guatemala must ensure *that capacity building is an effective and iterative, participatory, transparent and transversal process that responds to the principles of the Agreement.*

## CAPACITY BUILDING (AP, Art. 11)

The PA emphasizes on the need to support capacity building in developing countries, for the adoption of effective measures against climate change;



**Interview: Rita Mishaan**  
**Ambassador**  
**Co-Chair of the Paris Committee for Capacity Building**





# PROJECT

## LOW EMISSIONS DEVELOPMENT STRATEGIES -LEDS-

**Summary of the Article written by Rita Mishaan in collaboration with LEDS Project for the virtual magazine of the World Resource Institute, January 2018**

Under the Paris Agreement, countries are invited to communicate long-term low greenhouse gas emission development strategies (LEDS), taking into account their common but differentiated responsibilities and respective capabilities, in the light of different national circumstances (Art. 4.19). These strategies will play an important role in guiding countries toward the global temperature goals of limiting warming to 1.5-2°C above pre-industrial levels, and provide the necessary direction to inform the enhancement of nationally determined contributions (NDCs).

The cornerstone of the LEDS process is sufficient ambition, rooted in the agreement's temperature goal. Countries must therefore understand and plan how they will achieve carbon-neutral economies by the middle of the century. In the developing world, the limitations of our current structures, our capacity constraints, must not hold us back, since it is precisely these structures that we seek to transform. Each country must start by envisioning its own carbon-neutral future and then chart a transformational pathway to get there from its present conditions. LEDS provide us with a vision and understanding of the overall range and depth of the change needed, and of the challenges we may encounter on the road to a carbon-neutral economy. Therefore, "capacity building" becomes an assertive tool of great value to achieve the Ambition set in the PA.

In launching Guatemala's LEDS project, part of an international effort funded by the U.S. Agency for International Development (USAID), began by assessing the institutional framework and arrangements, within the central government and among other stakeholders, in order to determine the current state of climate action and policy. This process helped establish a baseline for greenhouse gas (GHG) emissions, resource use, and economic growth in order to identify the key drivers of climate change and other development issues to be addressed.

During the consultations with government officials that were part of this assessment, it became clear that they did not always see the importance of actions to mitigate climate change. Many saw such measures as obstacles to development rather than as means to strengthen the country's economic competitiveness and social development. The initial identification of gaps and capacity-building needs thus sought to frame the project's response in a systemic and programmatic manner embedded within existing Guatemalan institutions.

The LEDS formulation process is currently led by the Ministry of Environment and Natural Resources, the Ministry of Economy and Commerce, and the National Secretariat of Planning and Programming of the Presidency, as well as by the leading public institutions in each



of the country highly emitting sectors. Sectoral working groups have been established for the sectors of agriculture, energy, industry, transport, waste, forest and land use, and urban planning (all included in Guatemala's NDC). Each of these groups include broad participation from all sectors: government, the private sector, nongovernmental and other organizations representing indigenous people and other groups, as well as regional working groups on climate change.

This type of participation of key actors increases the likelihood of success of LEDS implementation by providing a comprehensive domestic policy framework, as well as periodic monitoring and review of progress in

capacity building.

Guatemala has included institutional capacity building in its efforts in order to increase understanding and empowerment of the LEDS process and objectives. The project included support from specialists in the different ministries in formulating strategy and strengthening capacities in the area of climate change. We believe that such national efforts need to accompany the work of international development agencies. The institutionalized collaboration of national actors in training, consultation, and awareness-raising efforts will enhance the effectiveness of projects seeking to mitigate climate change and its effects.



*Mesa Energía*



*Mesa Transporte*



*Mesa Agricultura*





[https://unfccc.int/files/meetings/paris\\_nov\\_2015/application/pdf/paris\\_agreement\\_spanish\\_.pdf](https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_spanish_.pdf)

## EDUCATION, TRAINING AND PUBLIC AWARENESS (AP, Art. 12)

The Paris Agreement encourages countries to adopt measures to improve education, training, public awareness, public participation and public access to information on climate change.

Guatemala should take advantage of the opportunity to ***exchange knowledge, training and capacity at the highest professional and academic level*** in all matters related to climate change.



Interview: Karen Dubois  
Director of the Program - Empowerment of Women and Girls  
FUNDAECO



# INDIGENOUS PEOPLES PLATFORM AND LOCAL COMMUNITIES

The Paris Agreement in Chapter V, paragraph 136 “Recognizes the need to strengthen the knowledge, technologies, practices and efforts of local communities and indigenous peoples to address and respond to climate change, and establishes a platform for the exchange of experiences and best practices on mitigation and adaptation in a holistic and integrated manner; “

The Subsidiary Body for Scientific and Technological Advice SBSTA at its 47th session held in Bonn on November 6-15, 2017, recommended COP23 to review and approve the Platform of Local Communities and Indigenous Peoples.

Draft decision - / CP.23 recognizes that Parties, in taking measures to address climate change, should respect, promote and take into account their respective obligations with respect to the rights of indigenous peoples and local communities,

Reaffirming the need to strengthen the knowledge, technologies, practices and efforts of local communities and indigenous peoples to address and respond to climate change, and the importance of the platform established for the exchange of experiences and the dissemination of information best practices on mitigation and adaptation in a holistic and integrated manner.

**It also decides that the platform will fulfill the following functions:**

- a. Decides that the overall objective of the platform will be to strengthen the knowledge, technologies, practices and efforts of local communities and indigenous peoples to address and respond to climate change, facilitate the exchange of experiences and the dissemination of best practices and lessons learned on mitigation and adaptation in a holistic and integrated manner and encourage the participation of local communities and indigenous peoples in the Convention process;
- b. Participation capacity: the platform should strengthen the capacity of indigenous peoples and local communities to enable their participation in the Convention process.
- c. Policies and measures related to climate change: the platform should facilitate the integration of various systems of knowledge, practices and innovations in the formulation and implementation of national and international measures, programs and policies in a manner that respects and promotes human rights and interests of local communities and indigenous peoples.

**Interview: Ramiro Batzin**  
Executive Director Sotz'il





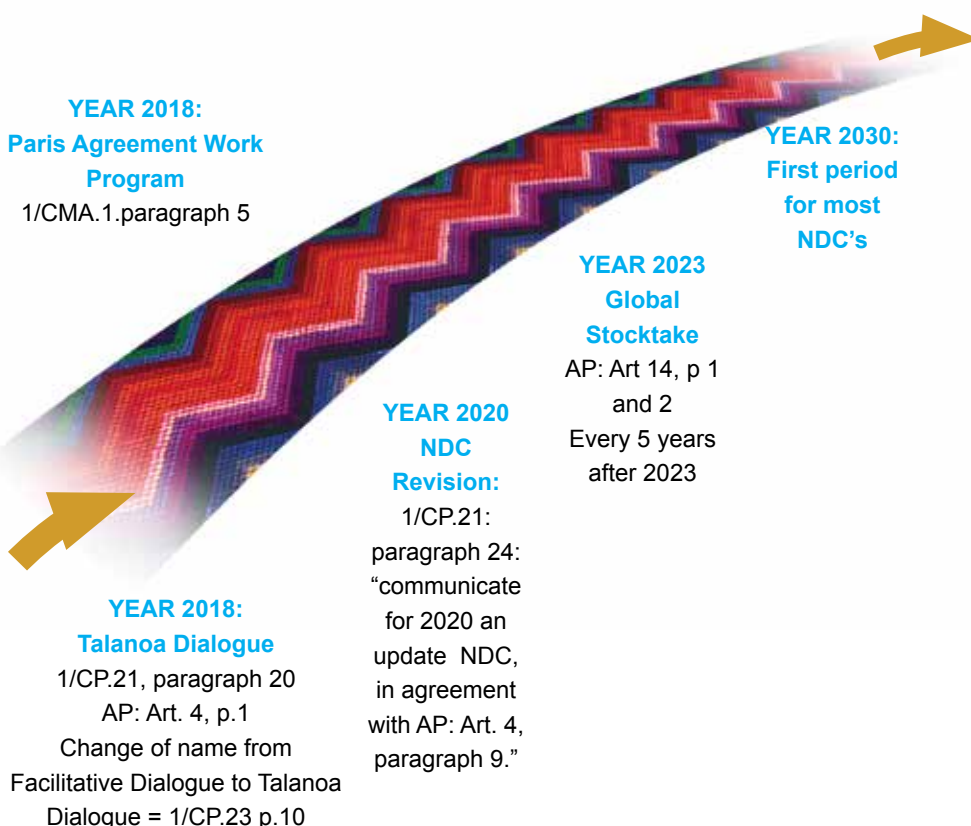
# ROADMAP

The Roadmap was approved at COP22 in Marrakesh, and establishes that the Work Program of the PA (WPPA) must be approved during COP 24 in Katowice, Poland, December 2018. This will define the essential guidelines and regulations to promote the necessary aspects for action that will achieve the ambition. Throughout the same year, the discussions of the Talanoa Dialogue will be developed simultaneously, with the aim to have an open and participative discussion to share stories for the common good.

Towards 2020, climate action is established, with the aim to re-define the action plan of countries' NDC's. As well as achieving the goal of USD100 billion for the Green Climate Fund.

The Global Stock-take in 2023 will serve to make a stop on the road and review the compliance of countries' NDC's that guarantee the progress of the ambition in their actions.

The year 2030 is the date established in most countries' NDC's first period, as is the case of Guatemala.





INITIALS	FULL NAME
CO <sub>2</sub>	Carbon dioxide
CONRED	National Commission for Disaster Reduction
COP	Conference of the Parties
GHG	Greenhouse gas
SIGAP	Guatemalan System for Protected Areas
IARNA	Institute of Agriculture, Natural Resources and Environment
INAB	Forestry National Institute
INDE	Electrification National Institute
INDC	Intended Nationally Determined Contributions
IPCC	Intergovernmental Panel on Climate Change
LULUCF	Land Use, Land-use Change and Forestry
MARN	Ministry of Environment and Natural Resources of Guatemala
MINEDUC	Ministry of Education
FONCC	National Climate Change Fund of Guatemala
CNEE	National Electric Energy Commission
SNER	National Rural Extension Program
SIPECIF	National System for Prevention and Control of Forest Fires, Guatemala
NDC	Nationally Determined Contributions
PA	Paris Agreement
PCCB	Paris Committee on Capacity Building
PINPEP	Program of Forestry Incentives for Small Landowners with Forestal or Agroforestral Vocation, Guatemala
PINFOR	Program of Forestry Incentives, Guatemala
REDD+	Reducing Emissions from Deforestation and Forest Degradation
SBSTA	Subsidiary Body for Scientific and Technological Advice
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change



## ANNEX I – DEFINITIONS:

**Climate Change:** Climate change attributed directly or indirectly to human activity that alters the composition of the atmosphere.

**Convention:** United Nations Framework Convention on Climate Change (UNFCCC), adopted in New York on May 9, 1992

**Deposit:** Environmental component in which a greenhouse gas is stored.

**Adverse effects of climate change:** Changes in climate that have harmful effects on natural ecosystems, socioeconomic system, or on human health and well-being.

**Emissions:** Release of greenhouse gases into the atmosphere.

**The Source:** Process or activity that releases a greenhouse gas.

**Greenhouse gas emissions:** Gaseous components that absorb and re-emit infrared radiation.

**Party:** Country or group of countries part of the Agreement.

**Climate system:** Atmosphere, Hydrosphere, Biosphere, Geosphere and their interactions.

**Sink:** Activity or mechanism that absorbs a greenhouse gas.



## ANNEX II. BIBLIOGRAPHY

Economic Commission for Latin America and the Caribbean–ECLAC- (2012) América Latina y Cambio Climático. Pp 61-70. Recuperado de: [http://www.cepal.org/ilpes/noticias/paginas/8/40548/ALyC\\_y\\_CC\\_CursoAlatorre.pdf](http://www.cepal.org/ilpes/noticias/paginas/8/40548/ALyC_y_CC_CursoAlatorre.pdf)

National Commission for Electric Energy –CNEE- (2017) Informe Estadístico. Recuperado de: <http://www.cnee.gob.gt/xhtml/memo/Informe%20estadistico%202016.pdf>

Intergovernmental Panel on Climate Change–IPPC- (2014) Fifth Assessment Report – The Physical Science Basis. Recuperado de: <https://www.ipcc.ch/report/ar5/>

IARNA-URL (2010) Perfil Ambiental de Guatemala 2010-2012. Recuperado de: [http://www.mineduc.gob.gt/portal/contenido/menu\\_lateral/programas/seminario/docs13/PERFIL%20AMBIENTAL%20GUATEMALA%202010%202012.pdf](http://www.mineduc.gob.gt/portal/contenido/menu_lateral/programas/seminario/docs13/PERFIL%20AMBIENTAL%20GUATEMALA%202010%202012.pdf)

Ministry of Environment and Natural Resources –MARN- (2015) Contribución Prevista y Determinada a Nivel Nacional (INDC). Recuperado de: <http://www4.unfccc.int/submissions/INDC/Published%20Documents/Guatemala/1/Gobierno%20de%20Guatemala%20INDC-UNFCCC%20Sept%202015.pdf>

Ministry of Environment and Natural Resources –MARN- (2015) Segunda Comunicación Nacional sobre Cambio Climático de Guatemala. Recuperado de: <http://www.marn.gob.gt/Multimedios/2562.pdf>

United Nations Development Programme –UNDP- (2012) Uso de la tierra, Cambio del uso de la tierra y Silvicultura (UTCUTS). Recuperado de: <http://www.undpcc.org/es/negociaciones-sobre-el-clima/la-hoja-de-ruta-de-bali/uso-de-la-tierra>

United Nations Environmental Programme –UNEP- (2012) The Emissions Gap Report 2012. Recuperado de: <http://www.unep.org/pdf/2012gapreport.pdf>



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