

### Why an Emissions Trading System?

The amendment to the General Law on Climate Change published on July 13, 2018, mandates the creation of an Emissions Trading System (ETS) that begins with a 36-month Pilot Program.

The ETS is a key instrument for the promotion of low-carbon development and the **fulfillment of Mexico's climate goals**, as it creates a framework that is both reliable (with robust Monitoring, Reporting, and Verification systems) and flexible (allowing companies to choose the most cost-effective way to be in compliance) to reduce Greenhouse Gases (GHG).

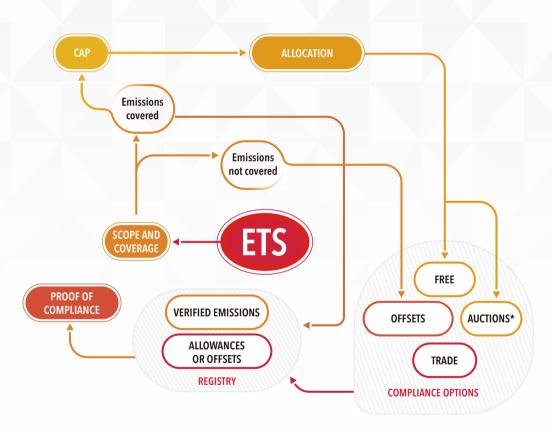
Through this instrument, the Government of Mexico calls for the active participation of the Mexican industry in the **promotion of sustainable development** and **the creation of more high-quality jobs**. By promoting these mitigation measures with the lowest implementation costs, including those that represent net savings, the ETS encourages technological innovation and efficient energy use in companies, strengthening their competitiveness.

On October 1, 2019 the Ministry of Environment and Natural Resources (SEMARNAT) published the Preliminary Guidelines of the Pilot Program of the Emissions Trading System. They establish the design elements that the Mexican ETS has in its Pilot Program. These will be described in more detail in the following sections.

#### How does an Emissions Trading System work?

The main objective of an ETS is the reduction of GHG through the principle of 'Cap and Trade'. For this to happen, first, a cap is placed on the amount of GHG

that companies, as a whole, can generate, creating the equivalent amount of Emissions Allowances - the system's compliance instrument. For each ton of GHG emitted, participants must have an Allowance. At the same time, companies are allowed to trade these Allowances, creating an Allowances market that encourages the search for the most efficient way to comply with the cap.



\*Auctions will not have economic effects during the pilot program.

2.4

# **■** Which sectors, companies and gases does the Emissions Trading System cover?

ETS usually regulate only some sectors of the economy. The intention is to find a balance between 1. covering a greater number of sectors and companies, and 2. maintaining reasonable administrative and transaction costs. Initially, most ETS in the world choose to regulate the industry and the energy sector, as they concentrate a large percentage of their emissions in a limited number of facilities.

**In Mexico...** the sectors covered by the ETS are the **industrial sector** and the **energy sector**, the latter divided into the oil and gas and the electric power generation subsectors. These represent more than 90% of the emissions reported to the National Emissions Registry (RENE).

Besides, only facilities whose direct emissions have been **greater than 100,000\ tCO\_2** in any of the years 2016, 2017, 2018 or 2019 participate. This represents around **300 facilities**.

The Pilot Program only covers direct  $CO_2$  emissions from fixed sources of industrial processes and fuel combustion.

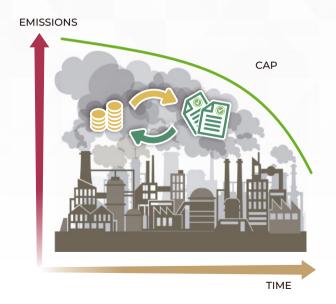
As a whole, the emissions covered by the Pilot Program represent approximately 40% of the National Inventory of Greenhouse Gases and Compounds.

#### ■ What is the cap defined for?

The cap is one of the key elements of an ETS, as it is the limit set for emissions from regulated sectors in the System. This means that **the sum of emissions** from regulated facilities should not exceed this cap.

Generally, the cap is **aligned with the country's climate goals** and should be established well in advance so that regulated companies can develop an appropriate compliance strategy.

**In Mexico...** the cap of the ETS Pilot Program for the three one-year compliance periods must be established based on the historical information reported to the RENE and the country's climate goals, as established in the General Law on Climate Change. This cap must be published 30 days before the start of the Pilot Program.



## How are the Allowances distributed among the different facilities?

The government issues a number of Allowances equivalent to the cap, which subsequently must be **distributed among the different facilities** that form the System. This distribution can be:



Free, either based on historical emissions from the installation or benchmarks, or



Through auctions carried out by the government, which leads to income generation for the government to reinvest in social or low carbon economy projects, enhancing the socioeconomic benefits of the ETS

It is possible to have a hybrid allocation mechanism, in which a part of the Allowances is assigned free of charge and the rest are auctioned.

**In Mexico...** to facilitate the incorporation of the Mexican industry into this new instrument and to fulfil the mandate of the Congress (the Pilot Program must be without economic effects), it has been defined that the allocation during the Pilot Program will be **free of charge, based on historical emissions and the country's climate goals**. The Allowances assigned to each facility must be published 30 days before the start of the Pilot Program.

Additionally, and to gain experience in the use of the auction mechanism, **SEMARNAT can implement an auction scheme** from the second year of the Program onwards. These Allowances come from an auction reserve established for this purpose, which is additional to the cap and contains Allowances equivalent to 5% of the cap.

#### **▼** How do companies use these Allowances?

After receiving its Allowances, a company has different possible routes of action.



First, it can use the Allowances in full, if the number of Allowances received match the number of emissions during the period.



If it cannot limit itself to the number of Allowances received, it can buy the missing ones in the market or at government-held auctions.



If, on the other hand, it can **reduce its emissions** beyond the granted Allowances, it can sell the remaining Allowances. The possibility of selling Allowances creates economic incentives to perform mitigation actions at the facilities, as long as it is more profitable than buying Allowances in the market.

In this way, the ETS provides enough flexibility for each company to choose the most cost-effective compliance strategy.

**In Mexico... the Registry** is defined as an electronic platform in which both the Allowance trading between facilities is carried out and recorded, as well as the surrendering of Allowances to the authority to demonstrate compliance.

### How to encourage mitigation in sectors not regulated by the Emissions Trading System?

The ETS can also be used **to encourage GHG reductions in unregulated sectors**, such as forestry, agriculture or waste management. Mitigation projects in these sectors can go through a robust process that guarantees the quality of their reductions under approved protocols, and thus generate offsets. These offsets can be bought by the regulated facilities and used for compliance.

However, it should not be forgotten that the main objective of the System is to reduce emissions in regulated sectors. For this reason, **most jurisdictions limit** the use of offsets.







**In Mexico...** mitigation projects eligible to generate offsets must be carried out in Mexican territory under protocols developed by SEMARNAT and they must be registered in the RENE.

The facilities can only use offsets for an equivalent of up to 10% of their obligations.

# **▼** How do you ensure that the Emissions Trading System results in real mitigation?

The participants of an ETS have a **compliance obligation**, which implies surrendering to the government Allowances equal to the reported and verified emissions of the period. As a result, regulated facilities as a whole must mitigate enough to stay below the cap. **The level of mitigation is directly linked to the ambition of the climate goals** used in the cap design.

The key steps to ensure compliance involve different actors. On the one hand, facilities must monitor and report their emissions. On the other, an independent third party must verify these emissions to ensure their reliability. Finally, companies must surrender enough Allowances to the government to cover their verified emissions, thus demonstrating compliance. Generally, noncompliance generates economic and/or non-economic sanctions.



**In Mexico...** facilities must monitor the emissions of the current period based on their **Monitoring Plan** (prepared by each installation, based on the guide published by SEMARNAT on its website), and must provide a verified report of these emissions.

On November 1 of each year, the regulated facilities must demonstrate compliance with their obligations for the previous year (see Compliance Calendar). In case of non-compliance, the Pilot Program does not contemplate economic sanctions. However, for each Allowance missing for compliance, two Allowances will be deducted in the first allocation period of the Operational Phase (after the Pilot Program) of the ETS.

# Which ministries are involved in the governance of an Emissions Trading System?

The involvement of government ministries is very diverse among the different jurisdictions with an operating ETS.

In Mexico... SEMARNAT is responsible for the design, management, operation and review of the ETS Pilot Program.

Also, SEMARNAT has the **support of the National Institute of Ecology and Climate Change (INECC) to conduct an evaluation** of the effectiveness and the results of the Pilot Program and may convene representatives of civil society and academic institutions to receive their opinion regarding its effectiveness.

The Preliminary Guidelines of the Pilot Program create the figure of the **Advisory Committee**, composed by representatives of different ministries of the Federal Public Administration and some private sector actors, as well as observers from civil society and academic institutions. This Committee functions as a technical body for consultation, advice, and guidance on the management of the ETS.

Finally, with climate change being a cross-cutting issue and the ETS an instrument that impacts a variety of activities, close coordination with other sectors, such as environmental, energy, financial, among others, is also foreseen.

### **▼** How is an Emissions Trading System managed over time?

The design of an ETS generally involves the definition of the **compliance period**, a length of time during which the Allowances must correspond to the facility's verified emissions. Depending on the jurisdiction, this compliance period can range from one to five years.

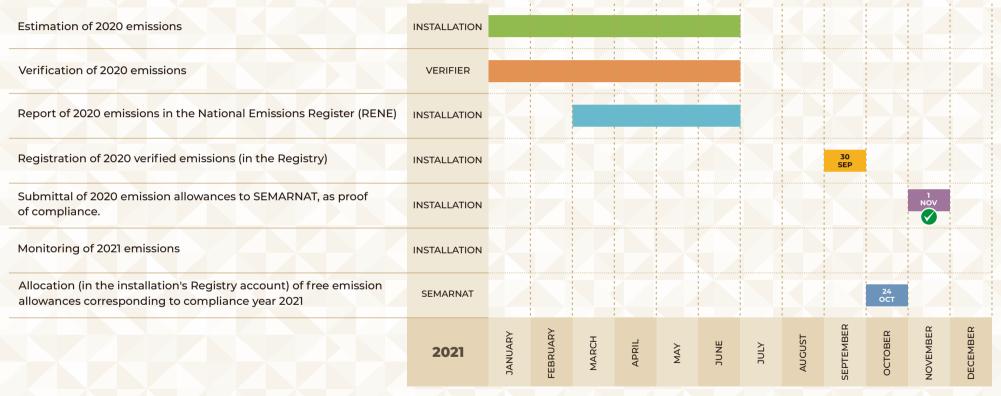
Another temporary mechanism to grant flexibility is the banking of Allowances. Those Allowances that were not used in the current period may be transferred to the following periods. Generally, banking has restrictions.

**In Mexico...** the compliance period is one year long. As a whole, and as indicated by the General Law on Climate Change, the Pilot Program lasts 3 years, divided into two phases: **1.** A 2-year long pilot phase and **2.** A 1-year long transition phase between the pilot phase and the Operational Phase. Allowances not used in these two phases may be banked between years of compliance but may not be transferred to the Operational Phase. On the contrary, offsets not used during the Pilot Program can be accumulated towards the next Operational Phase.



Below is an example of the 2021 calendar distribution, that illustrates the demonstration of compliance and surrendering of Allowances for the 2020 compliance year:

### Compliance calendar



The Pilot Program will begin on January 1, 2020, laying the foundations for the formal establishment of an ETS that promotes the reduction of emissions at the lowest possible cost, that contributes to the fulfilment of the country's climate goals and that fosters Mexico's sustainable development.

# Ministry of Environment and Natural Resources (SEMARNAT) of Mexico

- Avenida Ejército Nacional 223, piso 19 Del. Miguel Hidalgo, Col. Anáhuac 11320 Ciudad de México
- mexico.ets@semarnat.gob.mx
- https://www.gob.mx/semarnat/
- https://cambioclimatico.gob.mx/
- @semarnat\_mx

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, project "Preparation of an Emissions Trading Systemin Mexico" (SiCEM)

- Av. Insurgentes Sur No. 826, PH
  03100 Col. del Valle, CDMX México
- emissions.trading-MX@giz.de
- http://iki-alliance.mx/
- (@iki\_Mexico, #EmissionsTradingMX)





On behalf of:

