## Methane Emissions under the Magnifying Glass



Exercise 1

### Vocabulary

#### hydrocarbon

VERB

a compound of hydrogen and carbon The president said illegal drugs are hurting the entire world and anyone who trafficked them should be brought to justice.

#### emission

the production and discharge of something, The higher court upheld the lower court's decision. The prisoner was brought to He was wanted for the murder of a magistrate. for trial.

#### implement

**put something into effect** The program is easy to **implement** in most types of businesses.

#### vent

verb **provide with an outlet for air, gas, or liquid** You can get UV protection, an air **venting** system, and an anti-fog coating.

# Exercise 2

#### Methane Emissions under the Magnifying Glass

Civil organizations launched the *Observatorio Mexicano de Emisiones de Metano* (OBMEM) for the hydrocarbon sector in Mexico, which will focus on monitoring and demanding compliance with regulations and international commitments to reduce greenhouse gasses (GHG).

In this tool, it can be observed that from the regulated oil and gas companies operating in Mexico, only 7% comply with the presentation of their *programa para la prevención y el control integral de emisiones de metano* (PPCIEM).

The OBEMEM is an initiative of the *Centro Mexicano de Derecho Ambiental* (CEMDA), the *Iniciativa Climática de México* (ICM) and *Nuestro Futuro* (Our Future), A.C., with which they seek that the *Agencia de Seguridad, Energía y Ambiente* (ASEA) and the *Comisión Nacional de Hidrocarburos* (CNH) effectively implement the regulations for the reduction of methane emissions.

According to what was presented by these organizations, the hydrocarbons sector in Mexico generated 39.5 million tons of CO2e, this with data as of 2019.

Methane emissions amounted to 16.9 million tons of CO2e, which is equivalent to 43% of the sector's GHG emissions.

67% of the hydrocarbon sector's emissions are due to the burning and venting of gas, mainly from *Petróleos Mexicanos* (Pemex), as it does not comply with 98% of the use of this hydrocarbon.

The 3 main fields (Ku, Maloob and Zaap) producing Pemex gas, are those that register the lowest level of gas utilization, with 66%, 69% and 74%, respectively.

A central point of the OBMEM is the follow-up to international commitments, at COP27, Mexico proposed the reduction of 35% of its GHG emissions in an unconditional way.

In this sense, civil organizations pointed out that the oil and gas sector is key to achieving this goal, because according to an analysis by the BWI, 23 million tons of CO2e can be reduced, of which 73% correspond to methane.

This is important, because methane is the second largest contributor to global warming and Mexico is positioned as the tenth country in the world that emits the most methane with 6.3 million tons, but according to civil organizations this reported figure the National Inventory of Emissions is lower, as it is estimated that these are 45% higher.

In this context, the OBMEM seeks that transparency and accountability mechanisms are also implemented, since there is not enough public information to monitor due compliance with international commitments and national regulations in force on reducing methane emissions.

As well as promoting the discussion and putting more ambitious public policies and regulations on the table to reduce methane emissions from the hydrocarbon sector.

#### Exercise 3

### Discussion

- 1. What are the main uses of hydrocarbons? Where do we use them?
- 2. What are the common sources of gasses people usually consume?
- 3. Can a magnifying glass really be a good substitute aside from natural resources?

#### Exercise 4

## **Further Discussion**

- 1. How much gas (liters) do you think you spend in a week? Or how many cans do usually you use, if applicable?
- 2. What would happen if natural resources were lacking? Which industries will be affected?
- 3. What is the most popular gas station in your country? Do you often go there?

## Abbreviations

OBMEM	Observatorio Mexicano de Emisiones de Metano	Mexican Observatory of Methane Emissions
PPCIEM	Programa para la Prevención y el Control Integral de Emisiones de Metano	Program for the Prevention and Comprehensive Control of Methane Emissions
CEMDA	Centro Mexicano de Derecho Ambiental	Mexican Center for Environmental Law

ICM	Iniciativa Climática de México	Mexico's Climate Initiative
ASEA	Agencia de Seguridad, Energía y Ambiente	Agency for Safety, Energy and Environment
CNH	Comisión Nacional de Hidrocarburos	Comisión Nacional de Hidrocarburos
Pemex	Petróleos Mexicanos	Mexican Petroleums