



The regulatory and technical evolution of Social Impact Assessments (SIA) and Environmental Impact Assessments (EIS) in Mexico

Armando García Chiang



US was the first country to develop a system of environmental impact assessment (**EIA**).

The National Environmental Policy Act (1969) of the United States of America (NEPA), introduced a requirement to ensure that major federal actions significantly affecting the quality of the human environment were incorporated into a balanced and publicly available assessment of the likely impact of such actions

SIA is best understood as an umbrella or overarching framework that embodies the evaluation of all impacts on humans and on all the ways in which people and communities interact with their socio-cultural, economic and biophysical surroundings (IAIA,2009).

The starting point in the evolution of environmental and social impact assessments within the energy sector in Mexico was a shift in the state regulations on the production of energy.

This process has been called Energy Reform and has introduced significant changes in two markets that were exclusive monopoly of the Mexican State for more than 70 years



In Mexico, Petróleos Mexicanos (Pemex), a state-owned productive company incorporated as an independent agency of the federal government, can be considered as one of the main actors in the evolution of social and environmental impact studies in Mexico.



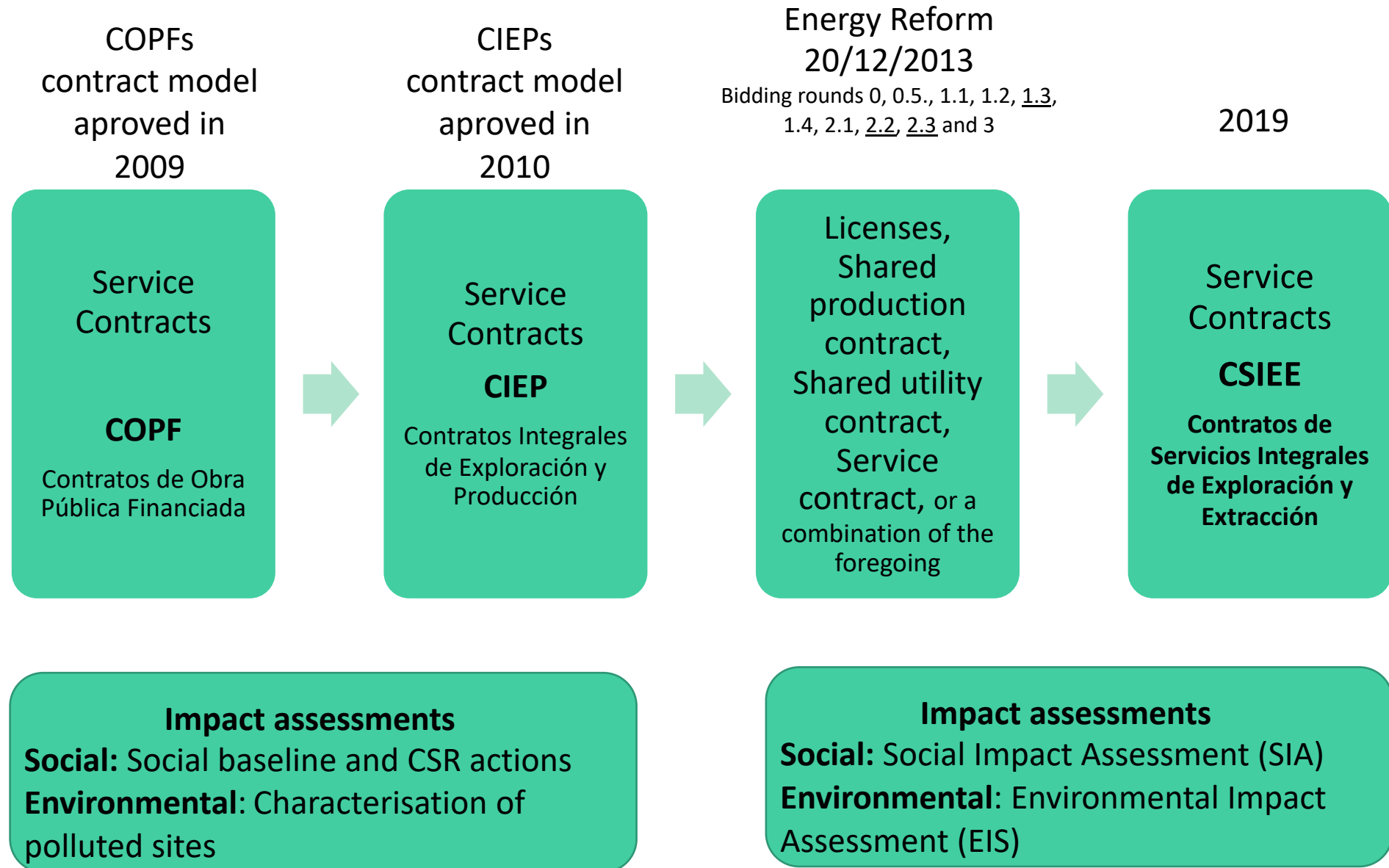
The social impact generated by energy projects on the population that lives in its area of influence is diverse.

Depending on the development stage of the project, the surrounding communities can suffer various types of effects.

The installation of an energy project can directly or indirectly affect different aspects of people's lives, such as the use of space, access to natural resources and the performance of daily activities).

The **SIA** and **EIS** in the *oil industry* are the **only assessments in Mexico** that have **international parameters**

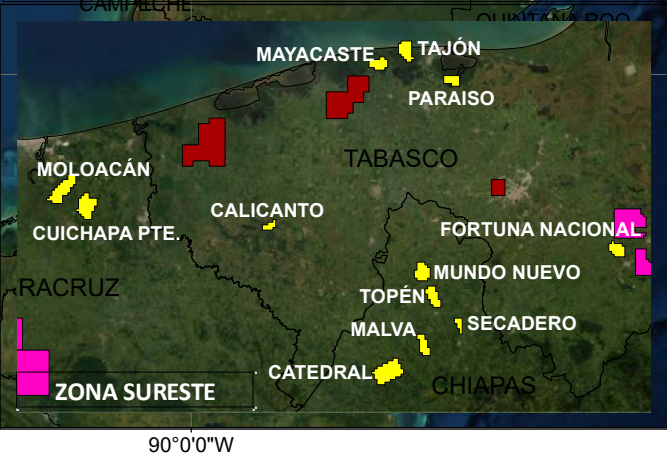
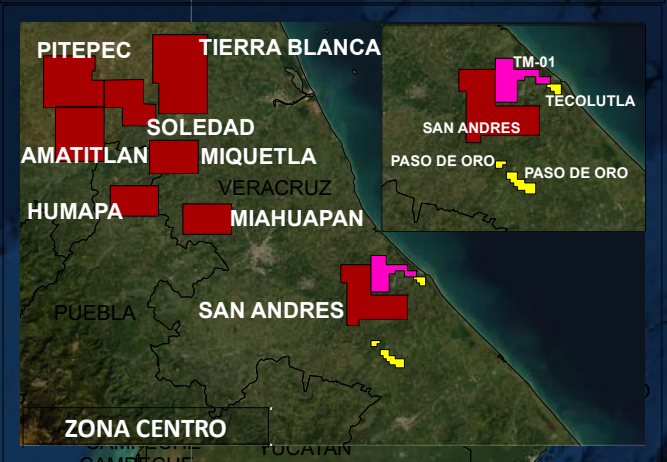
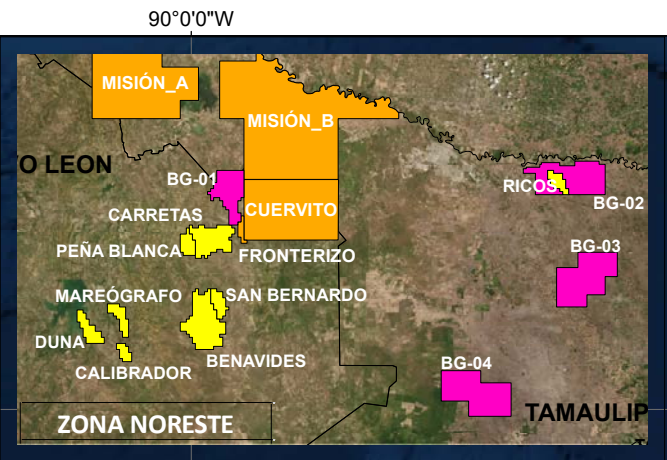
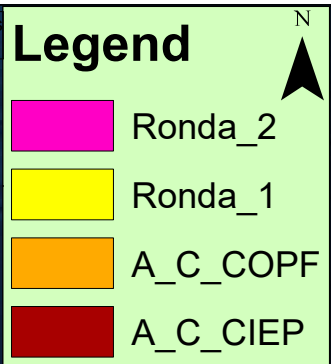
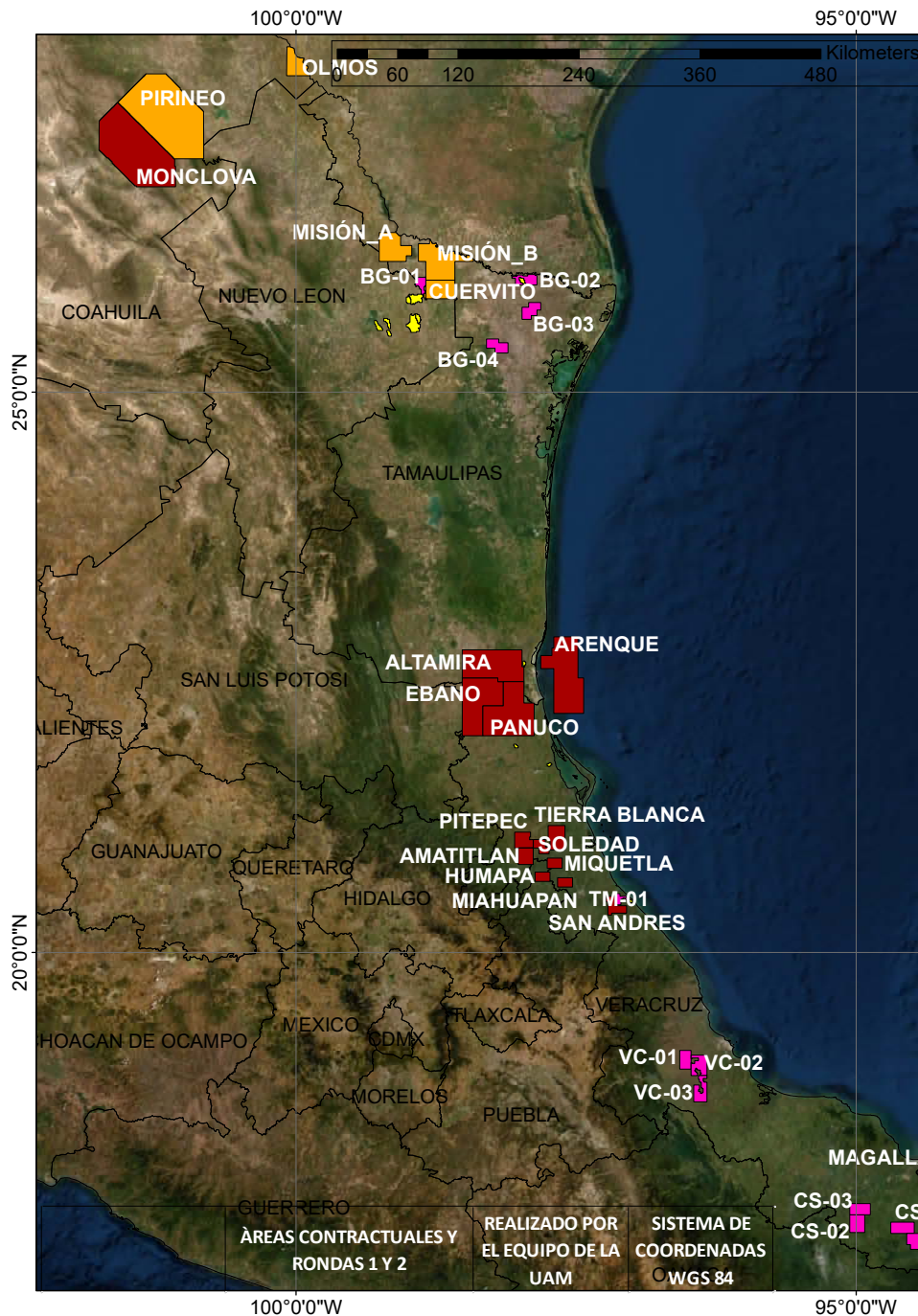
Evolution of the contracts in the oil industry and the relation with the impact assessments



New guidelines: Social Impact Assessment

The new Electric Industry Law and Hydrocarbons Law regulations implied the establishment of a Social Impact Assessment (SIA, named EvIS in Mexico) that was created in accordance with international parameters and developed into four formats, labeled A, B, C and D. (Artículo 4, Ley de Energía 2015)





Social Impact assessment

(SIA /EVIS)

Social Impact Assessment

Elaboration of the Social Impact Assessment document to obtain the permit from the Secretariat of Energy (SENER) with the objective of operating projects in the energy sector in Mexico.

Social Baseline

It consists of a study of the indicators (demographic, socioeconomic and sociocultural) of the communities where a project or intervention is planned.

Social Management Plan

It consists in the identification of areas of opportunity to create a portfolio of social responsibility projects with the aim of consolidating the company-community bond and continuing to guarantee the company's operations.

New guidelines: Social Impact Assessment

a) Project Overview

b) Methodology of social impact assessment

c) Delimitation of the area of influence of the project

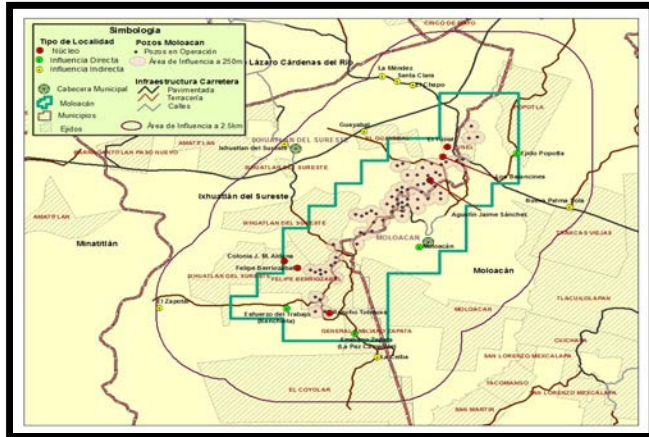
- Nucleus area
- Area of direct influence
- Area of indirect influence

d) Baseline study and stakeholder analysis

e) Characterization of indigenous peoples and communities

f) Identification, characterization, prediction and assessment of social impacts

g) Social Management Plan



ENVIRONMENTAL
IMPACT
ASSESSMENTS

ENVIRONMENTAL IMPACT ASSESSMENTS

ENVIRONMENTAL BASE LINE

- Elaboration of the Environmental Base Line document according to clause 13.4 of the Hydrocarbons Extraction Contract signed with the National Hydrocarbons Commission (CNH). 3 types of Environmental Baseline are made: terrestrial, coastal and marine.

ENVIRONMENTAL IMPACT ASSESSMENT (MIA)

- It consists of a document based on technical studies with which people (physical or moral) who wish to perform any of the works or activities provided in article 28 of the LGEEPA. The two types of MIA are made: regional and particular

ENVIRONMENTAL RISK AND IMPACT ASSESSMENTS

- Article 30 of the LGEEPA states that in the case of activities considered highly risky, the manifestation must include a corresponding risk study.

The Environmental Impact Assessment evolved from a simple characterisation of polluted sites to a Environmental base line.



The first environmental studies that the private oil companies submitted to PEMEX consisted of a brief description of the physical environment of the oil block.

The content of these studies did not adhere to any standards or guidelines establishing minimum requirements and depended on the criteria of the company submitting them and those of the PEMEX personnel in charge of reviewing and authorizing them.



The environmental studies that companies regulated by the ASEA (Energy Reform) must submit, consist of an Environmental Baseline whose content and structure is clearly established in the:

GUIA PARA LA ELABORACIÓN DE LA LÍNEA BASE AMBIENTAL PREVIO AL INICIO DE LAS ACTIVIDADES TERRESTRES DE EXPLORACIÓN Y EXTRACCIÓN DE HIDROCARBUROS (GUIDE FOR THE ELABORATION OF THE ENVIRONMENTAL BASELINE PRIOR TO THE BEGINNING OF HYDROCARBON EXPLORATION AND EXTRACTION LAND ACTIVITIES).



There is also a strictly defined process for the submission, review and authorization of the Environmental Baseline.

Prior to conducting the study, the methodology to be used to obtain information for the description of both the abiotic and biotic environment and the identification of contaminated sites must be presented.

This study requires bibliographic information, as well as field work for the description of each abiotic and biotic attribute.



ENVIRONMENTAL BASELINE

CONTENT OF THE ENVIRONMENTAL BASELINE:

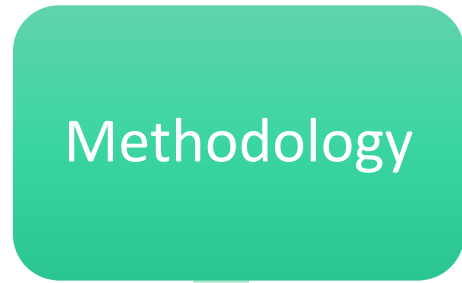
Identification of existing
infrastructure

- Delimitation of the study area
- Regional context
- Local context
- Geology and Geomorphology
- Climate and Meteorology
- Surface and underground hydrology
- Air quality
- Erosion Infiltration
- Terrestrial biota
- Sensitive areas
- Landscape
- Archaeological Heritage

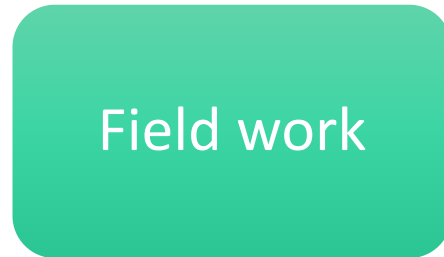
It allows to determine the current environmental situation of the area, before the project be executing. It includes the characterization of environmental factors.



**Environmental
Baseline delivery
procedure**



- Preliminary field work to determine sampling points.
- Delivery to Agencia de Seguridad, Energía y Ambiente (ASEA) for review.
- Corrections requested by ASEA
- Methodology approval



- Flora and Fauna Sampling (UAM-I team)
- Soil, air and water sampling (Authorized Laboratory under UAM-I supervision)



- Preparation of three preliminary reports to ASEA
- Preliminary LBA delivery
- ASEA corrections



The good practice of SIA accepts that *social*, *economic* and *biophysical* impacts are inherently and inextricably interconnected.

The reality is that the environmental questions do not have real importance in the a Social Impact Assessment beyond presenting a brief context.

Regarding the Environmental Impact Assessment, the social question only is approached to fill a formal requirement but it is never considered to be a real factor.



Armando García Chiang

E-mail: agch@xanum.uam



Casa abierta al tiempo

UNIVERSIDAD AUTÓNOMA METROPOLITANA
UNIDAD IZTAPALAPA