

AQRP Monthly Technical Report

PROJECT TITLE	Emission Inventory Development and Projections for the Transforming Mexican Energy Sector	PROJECT #	19-023
PROJECT PARTICIPANTS	The University of Texas at Austin (UT Austin) Ramboll	DATE SUBMITTED	4/8/2019
REPORTING PERIOD	From: 3/1/2019 To: 3/31/2019	REPORT #	6

A Financial Status Report (FSR) and Invoice will be submitted separately from each of the Project Participants reflecting charges for this Reporting Period. I understand that the FSR and Invoice are due to the AQRP by the 15th of the month following the reporting period shown above.

Detailed Accomplishments by Task

Task 1. Base Year Emission Inventory Estimates

On-Shore Well Sites (Upstream Sector)

Development of emissions factors for on-shore oil and gas drilling and producing well sites in Mexico has been completed. Emission factors for the Western Gulf Basin were used as the basis for the Burgos and Sabinas basins in northern Mexico, which primarily produce natural gas. Emission factors for the Palo Duro Basin were used for all other basins that typically have both oil and natural gas production (e.g. Tampico-Misantla, Veracruz, etc.). Data from the TCEQ were used to remove U.S. control factors in the determination of the emission factors for Mexico. Emission factors are expressed at the SCC-level per surrogate, such as oil or gas well counts, total water production, spud count, and oil or gas production by well type.

Off-Shore Platforms (Upstream Sector)

Development of production-based emissions factors for off-shore oil and gas well sites is ongoing.

Natural Gas Compressor Stations (Midstream Sector)

Development of emission factors for natural gas compressor stations in Mexico has been completed. The IHS data capture compressor stations located along natural gas trunklines and compressor stations located within or in close proximity to oil and gas production fields and along distribution lines. The level of information available for the different compressor stations is often limited to geographic location; some compressors have information on total installed horsepower. Approaches for the development of emission factors have been established that account for compressor station locations as well as available information about their characteristics. Emissions will not be estimated for equipment in addition to turbines and engines located at compressor stations.

Natural Gas Processing Plants (Midstream Sector)

Initial facility-wide annual emissions estimates of NO_x, CO, SO₂, VOC, PM_{2.5}, PM₁₀, and NH₃ have been developed for natural gas processing gas processing plants that were active during 2016. A draft of a report section describing the methodology and results has been developed.

Electric Generating Units

An emissions inventory for Mexico's electric power sector has been completed. Development of a draft of a report section describing the methodology and results is on-going.

Task 2. Mexico Bid Rounds and Future Projection Scenarios

No new activities to report.

Preliminary Analysis

As above.

Data Collected

As above.

Identify Problems or Issues Encountered and Proposed Solutions or Adjustments

None.

Goals and Anticipated Issues for the Succeeding Reporting Period

The team will continue the development of emissions estimates and documentation of the methodology and results.

Detailed Analysis of the Progress of the Task Order to Date

The project is proceeding as planned.

Do you have any publications related to this project currently under development? If so, please provide a working title, and the journals you plan to submit to.

Yes No

Do you have any publications related to this project currently under review by a journal? If so, what is the working title and the journal name? Have you sent a copy of the article to your AQRP Project Manager and your TCEQ Liaison?

Yes No

Do you have any bibliographic publications related to this project that have been published? If so, please list the reference information. List all items for the lifetime of the project.

Yes No

Do you have any presentations related to this project currently under development? If so, please provide working title, and the conference you plan to present it (this does not include presentations for the AQRP Workshop).

Yes No

Do you have any presentations related to this project that have been published? If so, please list reference information. List all items for the lifetime of the project.

Yes **No**

Submitted to AQRP by

Elena McDonald-Buller