



# Mexico Energy Report Methodology

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## Introduction to the Mexico Energy Report (MER)

The Mexico Energy Report (MER) focuses on Mexico's emerging gas and power markets. The report contains news, authoritative commentary and analysis and is published fortnightly from 6 May 2015 onwards.

The report contains pricing information relevant to Mexico's natural gas market. ICIS continuously monitors market developments, and further pricing information will be incorporated as relevant energy markets in Mexico develop.

International natural gas and crude oil prices represent NYMEX futures settlements and ICIS assessments from the day prior to publication of MER.

## General methodology

ICIS continuously develops, reviews and revises its methodologies in consultation with industry participants. Product specifications and trading terms and conditions used are intended to reflect typical working practices prevalent in the industry.

ICIS publishes market assessments based on information continuously gathered from market participants about: spot transactions, spot bid and offer levels, contract and tender price negotiations, prices of related commodities, and relevant transmission costs.

ICIS does not make retrospective adjustments or changes to price assessments based on information received after publication time in all cases or after any cut-off point specified in individual methodology documents.

ICIS regards all arm's length transactions which meet its specification criteria as carrying equal weight.

ICIS uses proprietary models where necessary to normalise data to the typical specifications for cargo size and date ranges given for each commodity.

Some ICIS assessments are the product of calculation alone, for example in markets where insufficient market activity takes place to permit price assessment, or where a market habitually itself sets prices according to a formula. Such calculated assessments are noted as such in their detailed methodology specifications.

ICIS endeavours to cross-check all the transaction information it gathers. ICIS will not use information for assessment purposes where such checks call into doubt the accuracy of the original information, or where a transaction appears to have occurred under circumstances that render it non-repeatable or otherwise markedly unusual.

## Mexico Energy Report prices

All ICIS energy prices contained in MER are intended to provide a reliable and accurate measure of physical market value on the over-the-counter traded markets.

To do this, ICIS has adopted two methodological approaches, which can be applied as reliable measures but at different stages in the development of trade at a particular location: assessment and index.

### CRE VPM price

The Venta de Primer Mano (VPM) is the maximum price that Mexico's state-owned oil and gas company Pemex can charge consumers on Mexico's natural gas network, priced in US\$/MMBtu. The figure is calculated by Mexico's Energy Regulatory Commission (CRE) on a monthly basis at the end of the preceding calendar month.

The CRE produces two separate VPM prices, one for the north and south of the country taking into account different supply sources. The Reynosa price is used for the sale of natural gas imported from the US in the north of the country; the Ciudad Pemex price is applied for the sale of natural gas produced in Mexico. ICIS cites the higher of the two prices published by CRE in MER, as this represents the maximum price Pemex can charge for the sale of a molecule of natural gas in Mexico.

Further information can be found in Spanish on the CRE website: <http://www.cre.gob.mx/resolucion.aspx?id=9682>

### VPM forward curve

The three-month forward curve consists of numbers derived using the exact formula CRE employs in calculating the Reynosa VPM price, outlined in CRE resolution 998/2015.

The resolution is available in Spanish on the CRE website: <http://www.cre.gob.mx/resolucion.aspx?id=9682>

The forward curve extrapolates the VPM Reynosa price for the three forward months, using a calculation incorporating NYMEX natural gas futures settlements, as well as futures prices for the Texas Eastern Transmission Corp. - South Texas Zone (TETCO STX), Tennessee Zone 0, and Houston Ship Channel pipeline hubs also settled on the NYMEX. Under present market conditions with Mexico as a net importer of natural gas, the average of the TETCO STX, Tennessee and Houston Ship Channel NYMEX monthly prices is deducted from the relevant months' NYMEX natural gas futures settlement

Unlike the official VPM price, which is based on an average NYMEX natural gas futures price calculated using the last five days' settlements of the front-month contract before expiry, the ICIS forward curve is based on the settlement for each monthly contract on the day prior to publication, in an attempt to best represent actual market conditions.

The VPM forward curve extrapolation also incorporates an additional transport charge included in the CRE formula based on the cost of shipping natural gas to the Mexican border from natural gas hubs in the southern US.

### Spot LNG Assessment

The Mexico East spot LNG assessment is taken from ICIS LNG Markets Daily publication, representing the price at which a spot delivered ex ship (DES) cargo delivered into the port of Altamira would most likely transact.

As with other ICIS DES LNG assessments, the ICIS Mexico East spot price does not take into account the cost of regasification, blending or transport into the domestic network from the LNG import terminal.

Lean and rich quality cargoes are taken into account in the assessments. No premiums or discounts are applied for varying quality as there are no consistent patterns determining relative value attributed to different specifications. Two calendar months are assessed. The assessments roll on the 16th of the calendar month. For example, on 16 January, the two front months roll from February and March, to March and April. Where 16 January falls on Saturday or Sunday, the assessments roll on the following Monday.

### DES LNG calculations

The two front-month values are calculated using settlements on the NYMEX natural gas futures market and fixed premium or discount constants which are understood by ICIS to constitute the pricing formulas used for the supply contracts at both the Altamira and Manzanillo terminals.

The numbers are calculated on a monthly basis in US\$/MMBtu. Adjustments to these calculated values are made based on any additional contract information obtained by ICIS. The assessments roll on the 16th of the calendar month.

## Publication

The calculated numbers are revised on a monthly basis, on the first working day of every month, but may remain unchanged for quarterly periods depending on the formula used in each calculation.

Prices in formulae which are revised on a quarterly basis will be updated with changes in exchange rate calculations. The forward-curve values will also be updated each month on changes in forward fuel markets prices and exchange rates.

ICIS continually develops, reviews and revises its methodologies in consultation with industry participants. Product specifications and trading terms and conditions are intended to reflect typical working practices prevalent in the industry.

### Changes to methodology

All markets evolve, and ICIS has a duty to ensure its methodologies for market reporting evolve in step with markets.

ICIS therefore regularly conducts internal reviews of the appropriateness of its methodologies.

Draft changes are then made public and comment requested from industry participants, with a minimum one-month notice period, except where, exceptionally, a force majeure event (natural disaster, war, bankruptcy of a trading exchange, etc) makes necessary a shorter notice period.

ICIS is committed to reviewing all comments on proposed methodology changes, but in some cases may find it necessary to alter its methodologies against the wishes of some market participants.

In addition, ICIS has a formal methodology consultation process. The company commits to holding this consultation one year after launch for MER, and every two years thereafter. The date of the last consultation launched and the expiry date by which the company commits to conducting the next consultation can be seen at the top of the methodology document.

Please also refer to the Methodology Consultation Process section of the company's Compliance Manual. This contains detailed flow charts documenting the internal and external review and consultation process.

## ICIS Contact Details

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