



NGI's Mexico Gas Price Index®

METHODOLOGY & USER GUIDE

JANUARY 2022

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Natural Gas Intelligence's Mexico Natural Gas Price Index

Natural Gas Intelligence has expanded its more than 40-year commitment to covering the North American market by delivering the first daily news and pricing service dedicated to the newly opened Mexican natural gas industry. With the July 2017 launch of *NGI's Mexico Gas Price Index*, we have been working alongside active participants to provide transparency in the Mexican market since its historic opening.

In our daily *Mexico Gas Price Index* publication, we provide regional price related data for the Mexican natural gas market, as well as news and insight into the evolving open market. Our daily product, developed in collaboration with the market players in Mexico, assesses natural gas as a cost-plus transportation equation, as we work with both sides of the trades to incorporate market data and establish fundamental-driven benchmarks for the Mexican natural gas market as it matures.

Our subscription services include daily updates to pricing, fundamentals and midstream movements, as well as forward-looking pricing and market insights. The following is a more in-depth explanation of how NGI is working to add transparency to the maturing natural gas market in Mexico – and why it matters to you.

Summary of Improvements to Our Service

We have implemented several changes to our *Mexico Gas Price Index* service since we last updated this methodology and user guide in November 2018. Most of these changes, which we will describe in more detail in the “How to Read NGI’s Mexico Gas Price Index” section below, came in January 2022, when we also updated the look and feel of our publication.

What Is New?

- Mexico Natural Gas Price Table
 - Now includes 43 locations, up from 26;
 - We added Bidweek and next month forward prices to our existing day-ahead Mexico gas price table;
 - For Mexico pricing locations with multiple pipeline routes, we provide a comparison of prices along those systems in an effort to show the “cheapest-to-deliver” option.
- NGI’s Mexico Forward Curves, which provide monthly forward prices for each of our 43 price locations for the next ten years. We include the next 12-month curve for eight of those locations in our daily pdf file, and full 10-year curves for all 43 locations in our new data suite, which we describe immediately below.
- A new data suite that includes our Mexico daily, bidweek, and forward price data. This will replace our old datafeeds, which are set to retire on June 30, 2022.
- Wahalajara Prices.



What Has Changed?

- The U.S./Mexico border price locations in our Mexico Gas Prices table now refer to their Mexico border location name, instead of that on the U.S. side.
- More concise U.S. natural gas pipeline export to Mexico data via our Mexico NatGas Flow Snapshot and U.S. NatGas Pipeline Exports to Mexico images.
- Our Mexico Natural Gas Flow Tracker now incorporates domestic production data, will be updated weekly instead of daily, and is being done in conjunction with the consulting firm Gadex. We believe this change, which we describe in more detail later in this guide, will greatly increase the functionality of this table.
- IPGN, the price that the regulatory agency CRE publishes monthly, will only run monthly, instead of daily.

What Is Staying the Same?

- NGI's Mexico NatGas Price Tracker
- NGI's Spot Prices at U.S. Locations Key to Mexico
- Average Mexico Day-Ahead Power Prices at Selected Distributed Nodes

What Has Been Discontinued?

- SISTRANGAS Summary Flow Table has been removed from the daily .pdf and is only available on the website.
- Estimated PEMEX VPM (First-Hand Sales) Prices, since we no longer believe that chart is relevant.

We describe each of these changes, along with a general how to use and interpret the recurring content of MGPI, beginning on page 3.

How to Read NGI's Mexico Gas Price Index

NGI's Mexico Natural Gas Prices (Published Daily)

What Does the Chart Represent?

For a detailed description of each of the 43 locations listed in our Mexico Natural Gas Price table, please refer to the Appendix at the back of this document.

We believe the best method to determine spot market prices at any trading point is to conduct a volumetric weighted average calculation of actual trades done at each site, which is the method we use to calculate spot market prices in the United States and Canada. Such an approach automatically captures the supply and demand factors that prevail at each individual location. However, because the Mexico market is still in its initial stages, liquidity is not yet strong enough for us to employ this methodology.

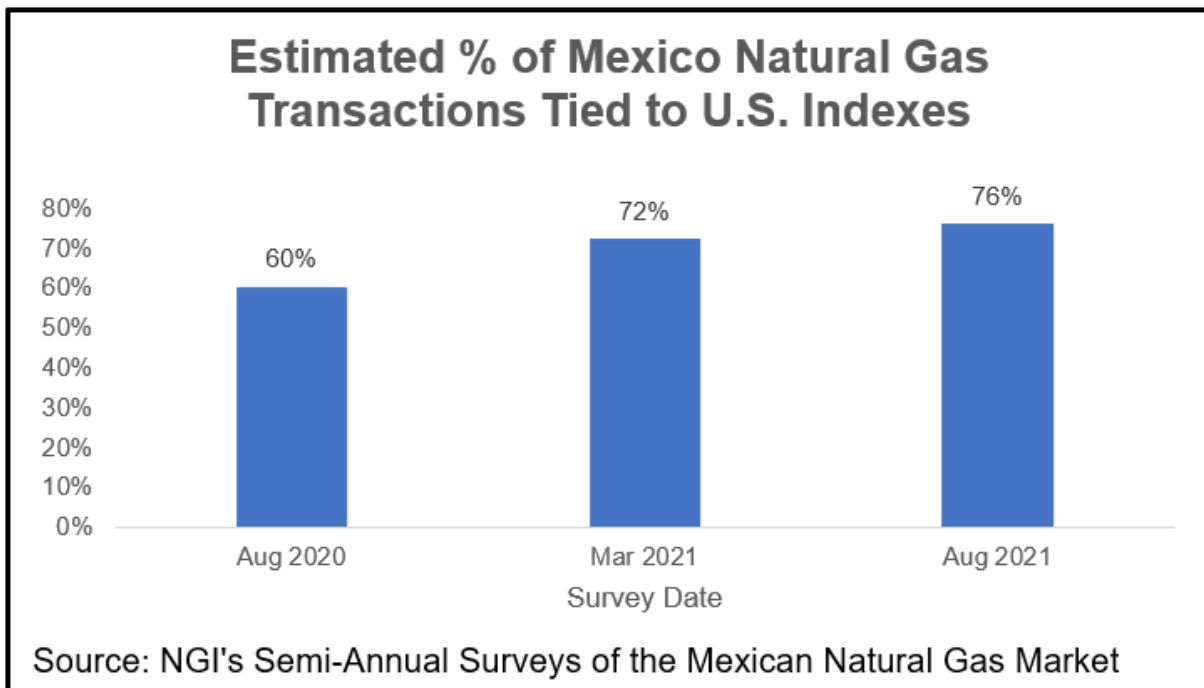
MEXICO NATURAL GAS PRICES								
MEXICO BORDER LOCATIONS	BIDWEEK PRICES JANUARY 2022		DAILY PRICES JAN. 19 - JAN. 19				DAILY PRICES FEBRUARY 2022	
	\$US/MMBTU	MXP/GJ	\$US/MMBTU	D/D CHG	MXP/GJ	D/D CHG	\$US/MMBTU	MXP/GJ
Camargo	4.992	97.491	4.546	0.116	87.904	2.612	4.765	92.709
Colombia	4.900	95.701	4.455	0.115	86.152	2.598	4.674	90.937
El Hueco	4.519	88.252	4.258	0.209	82.345	4.398	4.584	89.185
Los Algodones	9.049	176.729	5.166	0.298	99.897	6.174	5.873	114.260
Matamoros	5.004	97.737	4.552	0.117	88.020	2.645	4.774	92.890
Mier	4.905	95.790	4.455	0.116	86.154	2.621	4.676	90.981
Ojinaga	4.631	90.443	4.376	0.205	84.621	4.325	4.695	91.341
Reynosa	4.880	95.319	4.433	0.115	85.729	2.608	4.653	90.533
San Isidro	4.888	95.456	4.633	0.205	89.585	4.347	4.952	96.336
Sásabe	4.705	91.889	4.434	0.218	85.744	4.577	4.773	92.860
LOCATIONS IN MEXICO								
Aguascalientes	5.614	109.641	5.266	0.159	101.829	3.499	5.533	107.647
Aguascalientes via Cenagas	5.847	114.200	5.401	0.114	104.447	2.652	5.620	109.333
Aguascalientes via Fermaca	5.380	105.082	5.130	0.203	99.210	4.346	5.446	105.961
Bájo	5.847	114.200	5.401	0.114	104.447	2.652	5.620	109.333
Cactus	5.967	116.536	5.522	0.113	106.784	2.653	5.740	111.669
El Encino	5.060	98.827	4.741	0.175	91.678	3.774	5.027	97.797
El Encino via Cenagas	5.413	105.729	4.963	0.115	95.977	2.653	5.184	100.862
El Encino via Ojinaga-El Encino	4.666	91.135	4.412	0.205	85.313	4.324	4.730	92.033
El Encino via Tarahumara	5.100	99.616	4.848	0.204	93.744	4.346	5.165	100.495
Guadalajara	5.684	111.022	5.337	0.158	103.210	3.499	5.604	109.029
Guadalajara via Cenagas	5.847	114.200	5.401	0.114	104.447	2.652	5.620	109.333
Guadalajara via Fermaca	5.522	107.845	5.273	0.202	101.973	4.346	5.588	108.724
La Laguna	5.234	102.214	4.982	0.203	96.343	4.347	5.299	103.093
Los Ramones	5.153	100.644	4.700	0.117	90.892	2.652	4.923	95.778
Mérida	6.364	124.290	5.923	0.111	114.538	2.653	6.138	119.423
Monterrey	5.062	98.872	4.614	0.116	89.226	2.624	4.834	94.059
Monterrey via Cenagas	5.153	100.644	4.700	0.117	90.892	2.652	4.923	95.778
Monterrey via Mier-Monterrey	4.951	96.706	4.502	0.115	87.070	2.621	4.723	91.897
Monterrey via Nueva Era	5.082	99.265	4.639	0.114	89.716	2.598	4.857	94.501
Puebla	5.783	112.947	5.336	0.114	103.195	2.653	5.555	108.080
Salina Cruz	6.680	130.471	6.242	0.109	120.719	2.653	6.456	125.604
Saltillo	5.200	101.552	4.747	0.116	91.800	2.652	4.969	96.685
Tampico	5.334	104.182	4.883	0.116	94.430	2.653	5.105	99.315
Topolobampo	5.398	105.419	5.150	0.201	99.596	4.324	5.465	106.317
Torreón	5.413	105.729	4.963	0.115	95.977	2.653	5.184	100.862
Tula	5.673	110.792	5.225	0.115	101.039	2.652	5.444	105.925
Tuxpan	5.573	108.849	5.125	0.114	99.114	2.649	5.345	103.991
Tuxpan via Cenagas	5.673	110.792	5.225	0.115	101.039	2.652	5.444	105.925
Tuxpan via Sur de Texas - Tuxpan	5.474	106.905	5.026	0.115	97.188	2.645	5.246	102.058
Villa de Reyes	5.743	112.160	5.298	0.113	102.461	2.638	5.516	107.320
Villa de Reyes via Cenagas	5.673	110.792	5.225	0.115	101.039	2.652	5.444	105.925
Villa de Reyes via Los Ramones	5.472	106.865	5.030	0.113	97.270	2.609	5.247	102.077
Villa de Reyes via Tula - Villa de Reyes	6.084	118.824	5.640	0.112	109.072	2.652	5.857	113.958

Note: Prices are calculated from transportation rates added to U.S. natural gas prices. See NGI's Mexico Gas Price Index Methodology for location-by-location specifics. US\$/MXP exchange rate from Banco de México and Bloomberg. Bidweek Prices do not change once established each month. Daily and Forward Prompt prices are updated daily. All prices within Mexico assume transport on Cenagas unless otherwise noted.

Source: Natural Gas Intelligence

NGI certainly plans to publish volumetric weighted averages of actual spot market trades when the Mexico natural gas market is sufficiently liquid, and those prices will appear in our **U.S./Mexico Spot Market Prices** chart, which we detail in the next section. In the meantime, we offer this **Mexico Natural Gas Prices** table showing estimated U.S.-to-Mexico natural gas cost plus transport prices. It displays what the cost of gas would be at the U.S./Mexico border, and at various points within Mexico, by simply adding relevant pipeline transportation charges to U.S. spot market indexes that are located close to the U.S./Mexico border. We do this for three different and distinct time periods: 1.) bidweek for the current calendar month, 2.) day-ahead prices, and 3.) forward prices for the next calendar month. We have been producing day-ahead prices since we debuted this chart in July 2017, and we began adding bidweek and forward month prices in December 2021.

While this approach does not capture all fundamental drivers specific to Mexico, it does provide what we believe to be the best available proxy. Furthermore, as noted by our most recent survey of the Mexico market conducted in August 2021, we estimate that 76% of all natural gas transactions in Mexico are tied directly to a U.S. index, up from 60% the prior August. Therefore, we believe our current approach of estimating Mexico gas prices by adding transportation to U.S. indexes is reflective of how gas in Mexico is being bought and sold by the market.



How Did NGI Select the Various Border Points & Feeder Pipelines that Appear in the Table?

The border locations in our table represent some of the highest volume export locations from the United States into Mexico, according to data from the U.S. Energy Information Administration (EIA). Each individual border point tends to be served primarily by only one U.S. pipeline, hence our decision to use North Baja for Los Algodones, BN (Ogilby, CA); El Paso Natural Gas (EPNG) for El Huevo, CH (Clint,

TX); Sierrita Pipeline for Sasabe, SO (also Sasabe, AZ); Trans-Pecos Pipeline for San Isidro, CH (San Elizario, TX); NET Mexico for Camargo, TM (Rio Grande, TX); Kinder Morgan Texas for Mier, TM (Roma, TX); Impulsora for Colombia, NL (Laredo, TX); and Valley Crossing for Matamoros, TM (Brownsville, TX).

Reynosa/Arguelles, TM is served by Energy Transfer, Kinder Morgan Border, and Tennessee Gas Pipeline, and we factor all three into our price calculation at that location.

NGI Used to List U.S./Mexico Points by the U.S. City. Why Did it Switch to Showing the Mexican Location?

We made this change in December 2021, and we did so not only because we believe it gives a more Mexico centric feel to the chart, but also because we believe more pipeline gas being imported from the United States is being referred to by the Mexican side of the border. This is a trend we expect will continue in the years ahead, especially as energy reform continues to take hold and develop in Mexico.

Why Does NGI Use Ehrenberg, Houston Ship Channel, and Waha as Its Starting Point Indexes?

Our goal is to use spot market indexes that are as close to the actual U.S./Mexico border points we list in our table as possible. The farther away from these border points we go, the more likely we would introduce regional pricing factors that may not be reflective of those at the border. In addition, starting farther away from the border means we must add more transportation charges, which increases the chances that the calculated border price may not be as representative of actual trades conducted at or near the border. Finally, our selected starting point indexes must be liquid and highly likely to be published each trading day.

Ehrenberg, AZ, is the actual point of reference along North Baja pipeline to Los Algodones, BN, and the Waha Hub serves as the main supply conduit for our listed border locations at El Hueco, CH, Ojinaga, CH, San Isidro, CH, and Sasabe, SO. When we first published *NGI's Mexico Gas Price Index* on July 1, 2017, we used our regional South Texas average as the starting point for our Reynosa/Arguelles, Camargo and Mier indexes because this represents the average price for several different interstate pipelines that are relatively close to the U.S./Mexico border. We also believe this is more reflective of the price of production in South Texas. However, many natural gas buyers and sellers in Mexico are using the Houston Ship Channel (HSC) as the starting point to deliver gas into Mexico, particularly since that was a key component of Pemex's First-Hand Sales (VPM) pricing mechanism. As a result, we have been using the HSC as the reference point for our various South Texas border price listings since Oct. 20, 2017.

Does NGI Include Both Commodity & Demand Charges in Its Calculations?

The short answer is it depends on the location.

Border Locations

The main goal of our border price calculations is to replicate average long-term historical prices at the U.S./Mexico border as reported by the U.S. Department of Energy. We believe those prices also yield excellent clues about what pipeline charges are included in deals at those various locations. As shown from the table below, we include total fixed reservation and variable/commodity/fuel charges for all

U.S. intrastate pipelines and Tennessee Gas Pipeline, and only variable/commodity/fuel charges for El Paso Natural Gas, North Baja, and Sierrita Pipeline.

Border Location	Connecting Pipeline(s)	Does NGI Include Firm Demand/Reservation Charges?	Does NGI Include Variable/Commodity/Fuel Charges?
Camargo	NET Mexico	Yes	Yes
Colombia	Impulsora	Yes	Yes
El Hueco	El Paso Natural Gas	No	Yes
Los Algodones	North Baja	No	Yes
Matamoros	Valley Crossing	Yes	Yes
Mier	Kinder Morgan Texas	Yes	Yes
Ojinaga	Trans-Pecos Pipeline	Yes	Yes
Reynosa/Arguelles	Energy Transfer, Kinder Morgan Border, Tennessee	Yes	Yes
San Isidro	Roadrunner	Yes	Yes
Sasabe	Sierrita Pipeline via El Paso Natural Gas	No	Yes

Note: Prior to December 8, 2021, we did not include firm reservation charges along Tennessee into our Reynosa/Arguelles calculation. We have since changed our methodology to include those firm charges, along with transportation along the Energy Transfer and Kinder Morgan Border intrastate systems. For more on this change, please refer to Reynosa/Arguelles in the Point-by-Point Descriptions at the back of this document.

Within Mexico

Our calculated prices within Mexico include all fixed capacity and variable user and gas combustible (fuel) charges, per the latest effective tariff for each pipeline.

What is Meant by “Cheapest-to-Deliver?”

Several key locations in Mexico are served by multiple pipelines, and the cheapest-to-deliver simply refers to the least expensive option to move gas to a particular delivery location from those various supply routes. For example, Monterrey is served by Cenagas, Kinder Morgan Mexico (Mier-to-Monterrey), and Nueva Era Pipeline. In the sample calculation below, Monterrey via Mier-Monterrey would be the cheapest-to-deliver gas to Monterrey:

MEXICO BORDER LOCATIONS	BIDWEEK PRICES DECEMBER 2021	
	\$US/MMBTU	MXP/GJ
Monterrey	5.939	118.722
Monterrey via Cenagas	6.049	120.924
Monterrey via Mier-Monterrey	5.814	116.225
Monterrey via Nueva Era	5.954	119.019

In December 2021, we began offering cheapest-to-deliver comparisons for the following locations in Mexico: Aguascalientes, El Encino, Guadalajara, Monterrey, Tuxpan and Villa de Reyes.

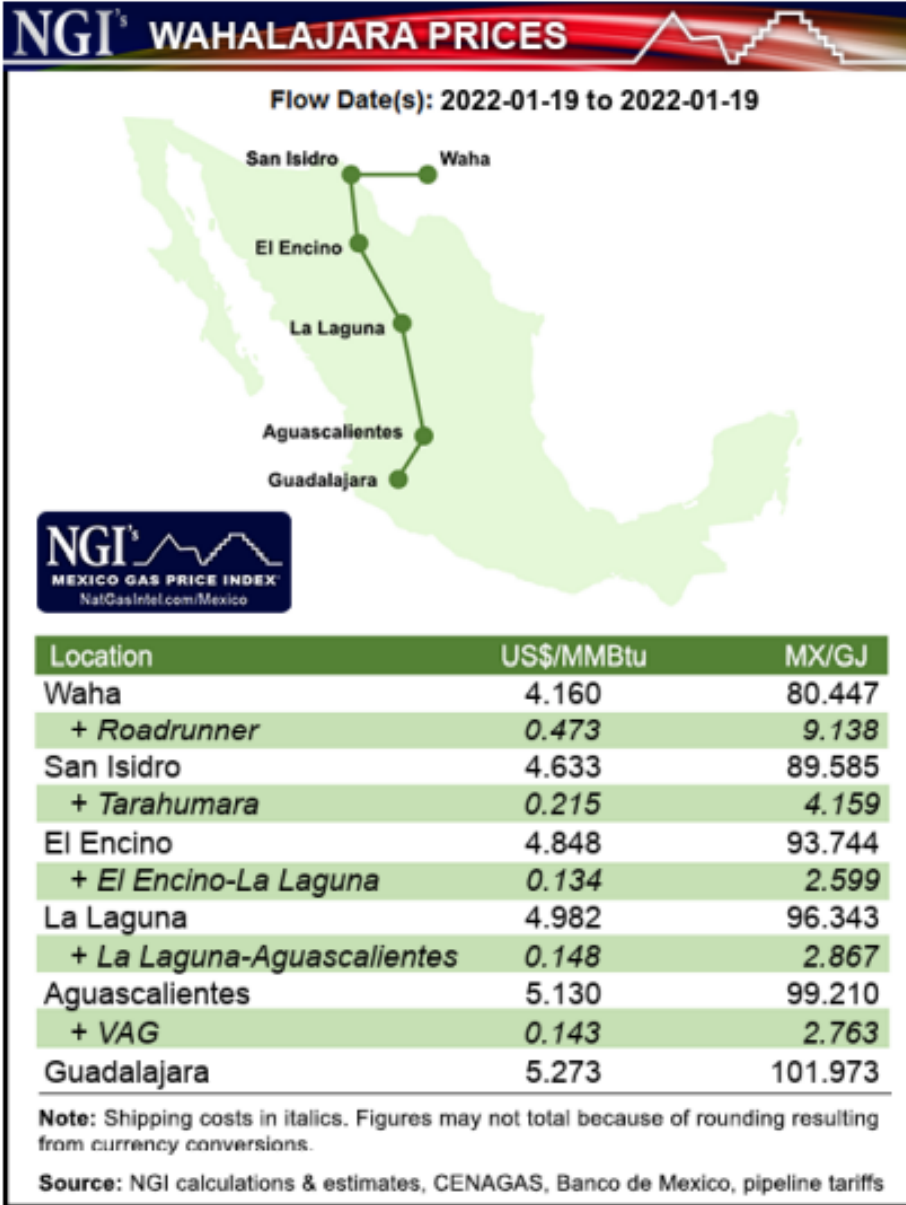
Daily News Coverage

Additionally, NGI has a network of experienced energy reporters focused on the Mexico natural gas market, delivering insightful and unique content daily. From fundamental-driving market movements that help explain why prices are where they are, and where they may be headed, to insights into the evolving reform, NGI is committed to providing a more transparent market perspective to our clients.

Wahalajara Prices (Published Daily)

Our Wahalajara Price table shows the costs of shipping gas from the Waha Hub in West Texas to Guadalajara via the Roadrunner (U.S.) and Fermaca (Mexico) pipeline systems. We start with the Waha Hub price we publish each day in our *Daily Gas Price Index* service, and add to that transportation along each of the various segments that comprise the Wahalajara system. Although these same prices are available in our main Mexico Spot Gas Prices table, this table allows readers to isolate price changes specifically along the Wahalajara system that has been underwritten by CFE.

Prices in this table reflect the day-ahead market only. For more information on how we calculate our Waha index, please refer to our U.S. pricing methodology, which you can find [here](#). For more detail behind the other prices in this table, please see our descriptions for San Isidro, El Encino via Tarahumara, La Laguna via Fermaca, Aguascalientes via Fermaca, and Guadalajara via Fermaca in the Appendix to this document.





US/Mexico Spot Market Prices (Published Daily)

As noted, eventually we hope to calculate natural gas spot market prices at the U.S./Mexico border and within Mexico based on actual transactions at those various locations. The main advantage of this approach is that instead of being an estimate of what a price may be at a given location, based on adding transport to a U.S. index, these prices will automatically include supply and demand factors that

Trade Date: 18-Jan-2022 Flow Date(s): 2022-01-19 to 2022-01-19

	RANGE	AVG	CHG	VOL	DEALS
CALIFORNIA					
Ehrenberg	5.000-5.165	5.120	0.295	203	48
EAST TEXAS / SOUTH LOUISIANA					
Henry Hub	4.450-4.550	4.480	0.120	483	76
Houston Ship Channel	4.200-4.220	4.215	0.115	105	8
ROCKIES					
El Paso San Juan	4.650-4.750	4.725	0.495	160	40
SOUTH TEXAS					
Tennessee S. Tx	4.210-4.290	4.255	0.135	181	32
TETCO S. Tx	4.310-4.330	4.320	0.140	107	18
South Texas Avg ¹	4.210-4.330	4.287	0.138	288	50
WEST TEXAS					
El Paso Permian	4.010-4.400	4.145	0.215	457	93
Waha	4.010-4.220	4.160	0.205	366	67

All prices are in \$U.S./MMBtu. Data are excerpted directly from NGI's Daily Gas Price Index except for the (1) South Texas Avg, which is a simple average of Tennessee S. Tx, and TETCO S. Tx. For more information on how we calculate our next-day and next-month price indexes, please refer to our Price Index Methodology, which is located [here](#).

Note: NGI's Mexico Gas Price Index plans to calculate our own Mexico spot prices in the same manner as we do for locations in the United States & Canada as soon as possible. For more information, or if you wish to participate in NGI's Mexico natural gas price survey, please contact Christopher Lenton at +1-703-348-9807, or e-mail us at prices@naturalgasintel.com.

prevail at each individual pricing location. For now, however, we publish Spot Prices at U.S. Locations Key to Mexico, including the Ehrenberg, Houston Ship Channel and Waha prices we use as the starting points in our Mexico Natural Gas Prices table, as well as El Paso Permian, El Paso San Juan, Tennessee S. Tx, Texas Eastern S Tx., and the Henry Hub. In addition, we provide a mathematical average of the two South Texas points.

For each individual pipeline index, we show the daily traded range, the volumetric weighted average, the change from the prior day, the total number of

transactions we used to calculate the daily average, and the total volume those transactions represent.

For more information on how we calculate these prices, please refer to our *NGI Price Methodology*, which you can find [here](#).

When Will NGI Publish Spot Market Prices in Mexico Based on Actual Transactions?

In order to assess the natural gas market based on actual transactions, daily spot market trading in Mexico must become liquid enough to support nodal indexes, and active companies must report transactional data for us to incorporate into our calculations.

Although the deregulated wholesale natural gas market in Mexico began operating on July 1, 2017, the market is still evolving, and it remains a work in progress. It may take some time for all the pieces to be in place to promote a liquid daily marketplace, such as the evolution of daily electronic bulletin boards (EBBs); the ability to release unused pipeline capacity to the marketplace; access to storage in Mexico, and the presence of many third party (non-Pemex) producers in the country, to name a few.

Even still, we believe certain trading points at the U.S./Mexico border, and within Mexico, will develop faster than others. Our plan is to roll out indexes individually, as soon as they meet the above criteria.



Not Ready to Contribute Price Data to Our Survey? Get to Know Us First!

We fully encourage all natural gas buyers and sellers in Mexico to contribute transactional data to NGI, which will enable us to aggregate spot market prices at key locations in Mexico as soon as possible for publication in *NGI's Mexico Gas Price Index*. Establishing transparency will benefit all who trade in the market.

Marketing companies in Mexico are already required to submit natural gas transactional data to the CRE, so reporting data to Price Reporting Agencies such as NGI is a logical next step. However, we realize that at this early stage of the deregulated market reform, many Mexico focused market participants may not yet be ready to do so until the market becomes more liquid, or until some companies become more familiar with the price reporting process.

That makes now a great time to expedite things by learning more about us, and about the price submission process, so you'll be prepared to price report when you are ready to do so. As has been our practice in collecting and publishing spot prices in the U.S. and Canada for more than 40 years, we follow a strict code of confidentiality which we detail in full in our price methodology, found [here](#).

We would be happy to speak with any member of your organization to walk you through the process, and to answer any questions you may have. If you would like to do so, please contact Christopher Lenton at christopher.lenton@naturalgasintel.com.

How Do NGI's Mexico Spot Market Prices Compare to the IPGN Published by CRE?

In August 2017, The Comisión Reguladora de Energía (CRE) began publishing its Índice de Referencia Nacional de Precios de Gas Natural al Mayoreo (IPGN) to help provide initial wholesale market pricing liquidity to the emerging deregulated Mexico natural gas marketplace.

Our understanding is that while CRE eliminates transactions that are more than three standard deviations from the calculated weighted average, the IPGN represents the amount and volume of gas that is billed to customers for the month in question, and therefore includes transactions that may have been conducted at any point in the past. It also may include deals with special charges, such as premiums for counterparty credit risk. NGI's U.S. and Canada wholesale indexes only include

trades that were transacted within a specific time period just before the gas is scheduled to flow and exclude charges that we consider to be over and above the intrinsic value of the gas. As a result, we would expect IPGN prices to be somewhat higher than our calculated cost-plus prices over time, everything else being equal.


NGI publishes the current IPGN table each month. For more information on how we calculate our U.S. and Canada spot market prices, please refer to our methodology [here](#).

The Sooner Spot Market Trade Data Are Submitted to NGI, the Sooner Nodal Spot Market Prices Can be Published

Of course, it is our intention to begin publishing nodal spot market prices in Mexico as soon as possible, and we encourage companies that participate in the Mexico natural gas spot market to contribute their trade data to NGI as well, especially since they are already required to furnish this information to CRE. This process is as simple as sending us a spreadsheet of completed transactions each day. NGI pledges to keep all trade data submitted to us confidential. We will not reveal any sensitive trade information to other market participants.

MEXICO IPGN PRICES					
Month	MXN/GJ	US/MM	COs	VOL	DEALS
Dec-20	68.8600	3.6358	30	6183	311
Jan-21	63.9199	3.3908	27	5683	217
Feb-21	410.0189	21.3717	26	5540	232
Mar-21	71.1911	3.6129	30	6602	278
Apr-21	64.1778	3.3766	28	6745	277
May-21	70.8951	3.7431	33	7128	357
Jun-21	66.9064	3.5231	30	7796	341
Jul-21	75.3741	3.9819	32	5696	333
Aug-21	80.1100	4.2149	31	7381	335
Sep-21	89.0365	4.6951	32	10173	352
Oct-21	100.6073	5.1849	31	9539	331
Nov-21	111.8416	5.6773	28	9504	359

Regional Breakout of November 2021 IPGN					
Region 1	103.8968	5.274	-	723	24
Region 2	114.7443	5.8247	-	857	44
Region 3	113.8481	5.7792	-	1946	75
Region 4	120.2815	6.1058	-	517	38
Region 5	118.5505	6.0179	-	1834	132
Region 6	120.1752	6.1004	-	3626	35



Our plan is to apply the same procedures and standards on how we calculate spot market prices in the United States and Canada to Mexico as well. Once again, for more on the type of trading information companies report to us, how to submit volume and price data to us, how we calculate prices, and to see our Pledge of Confidentiality, please refer to our *NGI Price Methodology* found [here](#). You may also contact Christopher Lenton at christopher.lenton@naturalgasintel.com.

NGI's Mexico Border Flow Data (Published Daily)

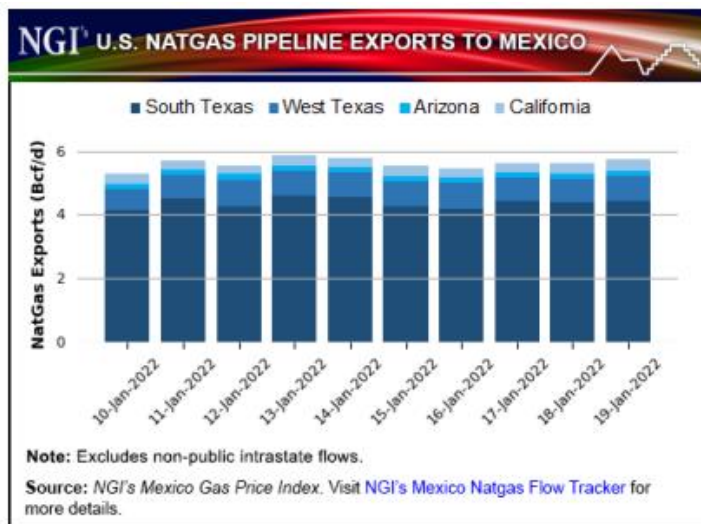
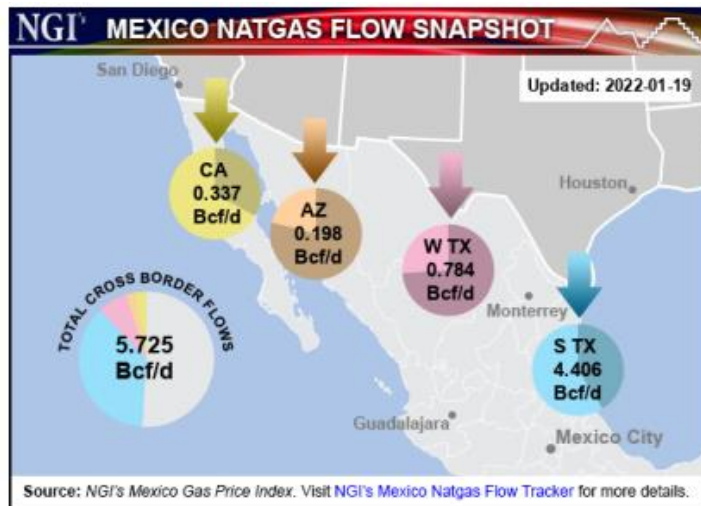
Each business day, NGI measures the amount of gas that is exported via pipeline from the U.S. to Mexico, and we display these data in two forms. The first is our **Mexico NatGas Flow Snapshot**, which shows pipeline exports into Mexico via South Texas, West Texas, Arizona and California, as well as the combined total of these four regions, for the current gas day.

The more each of the five circles in the snapshot are shaded, the more the total available operational pipeline export capacity is being used for each region.

We also display these data for the previous ten calendar days in our **U.S. NatGas Pipeline Exports to Mexico** chart, as seen at the immediate right.

NGI obtains these data from the electronic bulletin boards (EBBs) of U.S. interstate pipelines, as well as from the emerging EBBs in Mexico. U.S. intrastate pipelines in Texas are the major source of export capacity into Mexico, and unfortunately, they are not required to have standardized EBBs, and therefore typically do not make their daily flow data available to the public. In these cases, we get flow data from the connecting Mexico pipeline, which we are able to do for the majority of the intrastate systems.

U.S. pipelines report flow data in dekatherms, whereas pipelines on the Mexico side of the border tend to report in some combination of MMBtus and gigajoules. We convert data from both sides of the border to Bcf/d, using a conversion factor of 1.037, in order to standardize them and make them easier to compare to supply and demand data, which are typically also reported in cubic feet per day.



On average, we estimate our flow tracker captures approximately 97% of flow data that are ultimately reported by the U.S. Energy Information Administration. The main advantage of our data is they are daily and real time, whereas the EIA data are monthly and lagged by two months.

NGI & Gadex Weekly Mexico NatGas Flow Tracker (Published Weekly)

Each Monday, we publish our **NGI & Gadex Weekly Mexico NatGas Flow Tracker**, which is designed to capture flows along various key pipeline systems within Mexico. Although this is a weekly table, please note the data depict flows for the specific date designated in the chart. Said differently, the data are not an average of the previous week, they are flows for one particular date from the previous week.

We debuted this iteration of the table in January 2022, and we believe it offers several notable improvements over the daily version we had been running:

- 1) **Mexico flow data that are delayed by several days are more reliable than same day figures** – Some pipelines in Mexico provide data on a lagged basis, some revise posted volumes several times after the fact, and others publish data of lesser quality. Using data that are several days old allows us to not only reconcile and “make sense” of these disparate data sets, but also include flows for more pipelines than we otherwise would have.
- 2) **The data are provided by Gadex, one of the leading consulting firms in Mexico** – The main analysts at Gadex were heavily involved in helping to establish energy reform in Mexico, and we believe they are among the foremost experts at understanding flow patterns and tariff structures within the country.
- 3) **Flow volumes are expressed in Bcf/d, and take into account localized btu values** – This helps facilitate comparisons with our border flow data, which are also in Bcf/d.
- 4) **Improved capacity utilization data** – This should help our users to better handicap how much interruptible transportation along a particular system may become available at any point in time.
- 5) **Arrows that show directional flow** – These will allow readers to monitor changes in flow patterns throughout the grid over time.
- 6) **Flows from key production areas within Mexico** – Natural gas production within Mexico has been declining in recent years. Will that continue?

For more information on Gadex, please e-mail them at contacto@gadex.mx, or visit their website at www.gadex.mx



Summary of SISTRANGAS Receipts & Deliveries (Daily, Website Only)

Our Summary SISTRANGAS NatGas Pipeline Flow chart represents the daily summation of all natural gas that is nominated at the various receipt and delivery points along the SISTRANGAS pipeline system, as reported on its electronic bulletin board. These flows reflect nominations made as of the evening cycle for each gas flow day.

We delineate total deliveries by both the type of end-user, and by the nine current SISTRANGAS zones. We also break down total system receipts by source (imports vs. nationally sourced flows), by type (LNG, U.S. pipelines, Mexico pipelines, and domestic production), and by the various SISTRANGAS zones.

Please note that the flow data represent activity on the SISTRANGAS system only, and do not incorporate the entire Mexico natural gas pipeline grid. As a result, this table is not a one-for-one representation of total activity within the country. For example, LNG flow into SISTRANGAS likely understates total LNG deliveries into all of Mexico, because some LNG that is re-gasified at Manzanillo is typically consumed before it enters the SISTRANGAS system. Furthermore, some domestic production may serve the various refineries in Mexico directly, so simply looking at the SISTRANGAS total Mexico production figure will likely understate total national production. However, given that SISTRANGAS is easily the largest pipeline system in Mexico, we believe tracking our SISTRANGAS Receipts & Deliveries Table over time provides a good representative picture of activity and emerging trends within the country.

NGI Summary SISTRANGAS NatGas Pipeline Flows 19-Jan-2022					
Deliveries By Sector			Receipts By Sector		
	Sched Qty	Chg		Sched Qty	Chg
Distribution	561,073	4,578	Import	2,515,852	54,317
Electric	1,524,246	132,163	National	2,154,072	107,089
Industrial	905,835	-4,325	Other	105,386	82,278
Petroleum	233,438	-2,110	TOTAL	4,775,310	243,684
Other	1,589,533	73,456	Receipts By Type		
TOTAL	4,814,125	203,762		Sched Qty	Chg
Electric Deliveries Breakout			Import Receipts	2,515,852	54,317
	Sched Qty	Chg	LNG Receipts	375,209	115,304
CFE Points ²	1,048,360	16,201	Production Receipts	1,587,484	-25,531
Other	475,886	115,962	Other Receipts	296,765	99,594
TOTAL ELECTRIC	1,524,246	132,163	TOTAL	4,775,310	243,684
Deliveries By Zone			Receipts By Zone		
	Sched Qty	Chg		Sched Qty	Chg
Zone 1	304,454	6,787	Zone 1	73,271	10,551
Zone 2	85,626	5,495	Zone 2	0	0
Zone 3	551,157	7,317	Zone 3	2,643,766	43,323
Zone 4	658,603	137,197	Zone 4	292,944	115,090
Zone 5	1,413,982	105,453	Zone 5	325,737	17,266
Zone 6	530,895	395	Zone 6	114,971	214
Zone 7	327,558	-7,759	Zone 7	353,047	1,186
Zone 8	689,237	-41,105	Zone 8	0	0
Zone 9	42,301	0	Zone 9	0	0
Other ¹	210,312	-10,018	Other ¹	105,386	82,278
TOTAL	4,814,125	203,762	TOTAL	4,775,310	243,684

¹ Denotes deliveries & receipts where CENAGAS has no zone designations as yet. ² Includes those locations with a CFE prefix per SISTRANGAS' list of location codes.
Source: CENAGAS, NGI's Mexico Gas Price Index calculations

Mexico Forward Curves (Published Daily)

NGI now offers 10-year monthly **Mexico Forward Curves** for each of the 43 locations in our Mexico Spot Market Prices table. We provide the prompt month forward price for each of those locations in our Spot Market Table, along with one-year curves for eight of those 43 locations in our Mexico Forward Curves image as seen to the right.

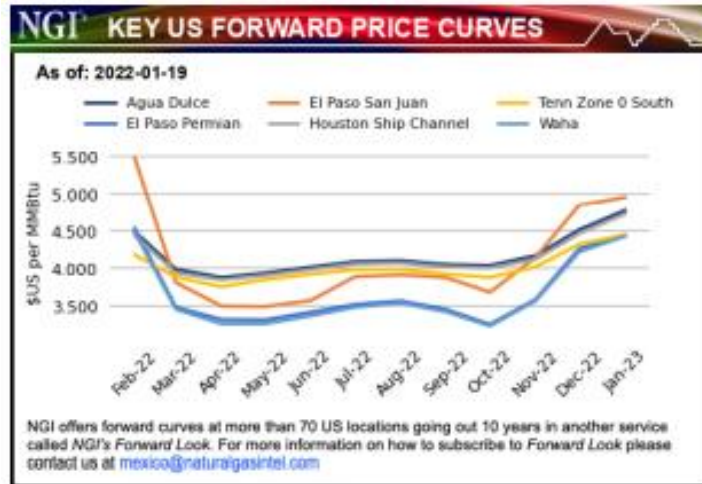
We calculate these forward curves using the same process and formulas described for each individual location in the Appendix to this document. Furthermore, we convert our forward Mexico prices to GJ/MX based on a 10-year USD/MX forward curve derived by NGI.

All 43 of our 10-year curves are available via our new Mexico Data Suite service. For more information, please click [here](#).



Key U.S. Forward Curves (Published Daily)

Similar to our Mexico Forward Curves image, our **Key U.S. Forward Curves** chart gives a snapshot of forward curves for the next 12 months at six important U.S. pricing points to Mexico: Agua Dulce, El Paso Permian, El Paso San Juan, Houston Ship Channel, Tennessee Zone 0 South and Waha. These prices are from our *Forward Look* service, and are available for the next 120 months via a separate access. For more information about our more than 70 U.S. and Canadian forward curves, please visit our website at natgasintel.com/forwardlook_locations.



Note: These Mexico border and within Mexico price curve replaces the Forward Curves at U.S. Locations Key to Mexico Exports table we had been running prior to January 2022.

Average Mexico Day-Ahead Power Prices at Selected Distributed Nodes (Published Daily)

The electricity prices that appear in our **Average Mexico Day-Ahead Power Prices** chart represent the high, low and simple average of the 24 hourly prices published by the Centro Nacional de Control de Energia (CENACE) for distributed nodes in the table, and are listed in Mexican pesos/megawatt hour (MWh). All prices include energy, congestion, and line-loss components. We convert prices to U.S. dollar/MWh, based on the exchange rate stated atop the table.

This provides a representative distribution of power prices within the various regions in Mexico. Many are served (or will be served) by gas-fired generation.

Average Mexico Day-Ahead Power Prices at Selected Distributed Nodes 19-Jan-2022
US/MX Exchange Rate: 20.40

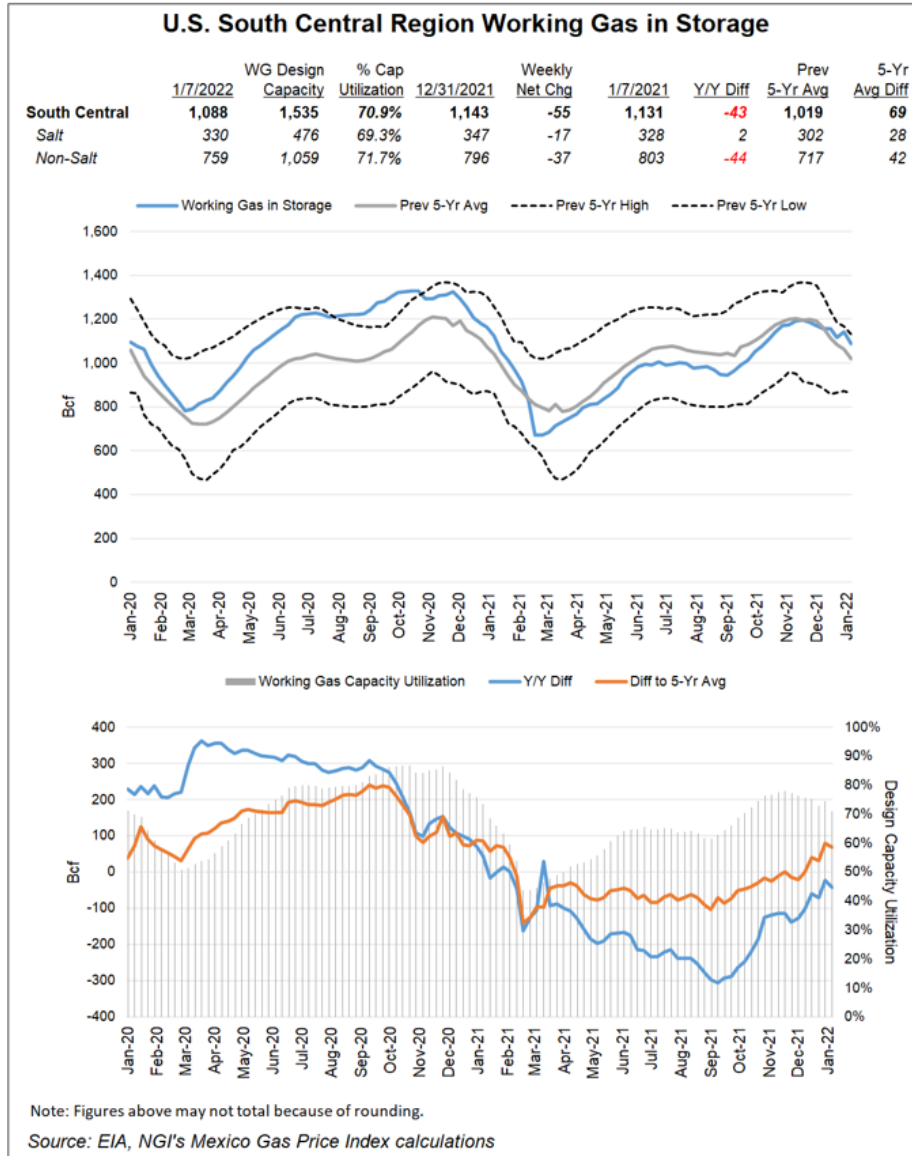
Location	Power Prices (MX\$/MWH)				Power Prices (USD/MWH)			
	24 Hr. Low	24 Hr. High	24 Hr. Avg.	D/D Chg.	24 Hr. Low	24 Hr. High	24 Hr. Avg.	D/D Chg.
A Acapulco	809.40	2802.88	1818.19	615.82	\$39.68	\$137.40	\$89.13	\$29.90
B Aguascalientes	745.45	2372.75	1397.51	536.74	\$36.54	\$116.31	\$68.51	\$16.25
C Chihuahua	638.17	1305.14	797.15	70.16	\$31.29	\$63.98	\$39.08	\$3.26
D Durango	723.83	1783.31	1092.50	232.87	\$35.48	\$87.42	\$53.55	\$11.21
E Guadalajara	743.99	2262.43	1419.41	367.58	\$36.47	\$110.90	\$69.58	\$17.76
F Guaymas	567.70	1142.07	710.14	58.41	\$27.83	\$55.98	\$34.81	\$2.71
G Huasteca	312.34	2394.31	1125.31	168.35	\$15.31	\$117.37	\$55.16	\$8.02
H Hermosillo	574.50	1140.80	716.29	54.38	\$28.16	\$55.92	\$35.11	\$2.51
I Juarez	582.44	1217.16	758.70	57.01	\$28.55	\$59.68	\$37.19	\$2.63
J La Paz	2047.81	3427.75	2824.39	175.44	\$100.38	\$168.03	\$138.45	\$7.96
K Laguna	717.88	1591.30	960.21	156.47	\$35.19	\$78.00	\$47.07	\$7.48
L Los Mochis	642.62	1353.12	831.87	106.80	\$31.50	\$66.33	\$40.78	\$5.21
M Manzanillo	734.68	2216.95	1401.82	356.25	\$36.01	\$108.67	\$68.72	\$17.21
N Matamoros	601.43	1288.04	715.92	67.09	\$29.48	\$63.14	\$35.09	\$3.13
O Mazatlan	704.24	1907.84	1119.43	233.34	\$34.52	\$89.82	\$54.87	\$11.22
P Merida	793.49	3027.20	1889.74	692.41	\$38.90	\$148.39	\$92.63	\$33.65
Q Mexicali	701.27	2052.77	1127.23	142.89	\$34.38	\$100.63	\$55.26	\$6.77
R Monterrey	639.47	1351.17	765.96	77.04	\$31.35	\$66.23	\$37.55	\$3.61
S Nogales	533.74	1147.69	720.18	41.12	\$26.16	\$56.26	\$35.30	\$1.85
T Oaxaca	768.25	3021.38	1891.26	702.82	\$38.64	\$148.11	\$92.71	\$34.16
U Piedras Negras	628.91	1294.95	744.60	60.48	\$30.83	\$63.48	\$36.50	\$2.80
V Poza Rica	733.92	3024.64	1802.27	658.15	\$35.98	\$148.27	\$88.35	\$31.99
W Puebla	766.14	2922.20	1813.49	658.28	\$37.56	\$143.25	\$88.90	\$31.99
X Queretaro	752.83	2428.93	1533.95	447.16	\$36.90	\$119.07	\$75.19	\$21.66
Y Reynosa	606.37	1298.48	722.03	70.88	\$29.72	\$63.65	\$35.39	\$3.32
Z San Luis Potosi	740.59	2369.36	1358.39	321.68	\$36.30	\$116.15	\$66.59	\$15.52
AA Sahuila	671.95	1363.81	804.71	100.36	\$32.94	\$67.83	\$39.45	\$4.76
BB Tampico	207.37	2252.52	1041.97	142.91	\$10.17	\$110.42	\$51.08	\$6.79
CC Tuxtla	783.09	2944.55	1845.45	695.53	\$38.39	\$144.34	\$90.46	\$33.82
DD Villahermosa	769.92	2908.30	1819.73	680.81	\$37.74	\$142.56	\$89.20	\$33.08
EE Zacatecas	751.68	2340.97	1389.51	318.83	\$36.85	\$114.75	\$68.11	\$15.37

Note: Power prices are the average of hourly day-ahead (MDA) prices for each listing, as published by CENACE, and include energy, congestion, and line loss components. \$US/MWH to MX/G exchange rate listed above.
Source: CENACE, Banco de México, NGI calculations

South Central Storage Chart (Published Weekly)

The U.S. EIA updates weekly storage data each Thursday at 10:30 a.m. Eastern time, and we publish our **U.S. South Central Storage** chart soon after. In 2021, roughly 90% of all natural gas exported to Mexico from the United States came via pipeline from Texas, which is part of the U.S. South Central region.

All the figures in our South Central Storage chart are updated weekly, except total working gas capacity, which is updated annually.



NGI's Mexico Data Suite

All MGPI price data are available in a new collection referred to as NGI's Mexico Data Suite. This collection contains daily, monthly (bidweek) and forward pricing at all 43 locations in Mexico. More information on this service can be found [here](#).

Contact Natural Gas Intelligence

NGI is committed to working within the market to provide transparency in pricing natural gas throughout Mexico. To contribute your perspective or trade data, with questions or to connect with our pricing analysts, contact us at mexico@naturalgasintel.com

[Start a free trial](#) of the Natural Gas Intelligence Mexico Gas Price Index today.

APPENDIX: POINT-BY-POINT NGI'S MEXICO GAS PRICE INDEX DESCRIPTIONS & NGI POINTCODES

Note: Point names shaded in green represent material changes we made either to our price table or to how we calculate any of our individual price listings as of December 8, 2021. The previous version of this methodology was dated November 2018. NGI's data pointcodes are listed in parentheses under each index name.

U.S./Mexico Border

Index	Start Dates	Description
Camargo (MXCPRIOTX)	Daily (7/1/17) Monthly (8/1/21) Forward (12/8/21)	Camargo, TM is the second largest natural gas import point into Mexico from South Texas, as it is the interconnect between the 2.3 Bcf/d NET Mexico system in the U.S. (Rio Grande, TX) and the 2.1 Bcf/d Los Ramones I Pipeline. Our Camargo index adds estimated firm reservation and variable transportation charges on the NET Mexico system to our Houston Ship Channel index. NOTE: This index was called Rio Grande until January 2022, but our methodology has been the same since we debuted this location in July 2017.
Colombia (MXPCOLOMBIA)	Daily (12/8/21) Monthly (8/1/21) Forward (12/8/21)	This index represents the price of gas at the Houston Ship Channel, plus the estimated cost of reservation and variable transportation fees on the Impulsora system to deliver gas to Nueva Era Pipeline at the Laredo, TX / Colombia, NL border.
El Hueco (MXCPCLINT)	Daily (7/1/17) Monthly (8/1/21) Forward (12/8/21)	The price of gas at El Hueco, CH, which is the feeder location into the Gasoducto de Chihuahua system, represents the cost of gas at the Waha Hub in West Texas, plus variable transportation charges on El Paso Natural Gas. We do not include any EPNG reservation fees in our calculation. NOTE: Before January 2022, we called this index Clint, TX, which is the U.S. side of the border with El Hueco. Our formula for calculating this index has been the same since we debuted <i>Mexico Gas Price Index</i> in July 2017.

U.S./Mexico Border

Index	Start Dates	Description
Los Algodones (MXCPOGILBY)	<i>Daily (12/8/21) Monthly (8/1/21) Forward (12/8/21)</i>	We derive our daily and monthly Los Algodones prices by adding variable only transportation costs along the North Baja Pipeline system to our Ehrenberg, CA index. We do not include reservation fees from North Baja, because we believe excluding those charges makes the total transportation fee more reflective of historical prices transacted at the Ogilby, CA / Los Algodones, BN border as reported by the U.S. Department of Energy. For our forward (next month) Los Algodones price, we add commodity only transport on North Baja to our prompt month Southern California Border <i>Forward Look</i> price. NOTE: This location was called Ogilby until January 2022, but our methodology for our daily and now monthly price calculation has not changed since we first listed this location in July 2017. However, as noted above, we use our Southern California Border forward price to calculate our next month Los Algodones posting.
Matamoros (MXCPBROWNSVILLE)	<i>Daily (11/6/19) Monthly (8/1/21) Forward (12/8/21)</i>	Our Matamoros listing begins with the price of gas at the Houston Ship Channel, and includes estimated firm reservation and variable transportation charges on the Valley Crossing Pipeline to ship gas to TC Energy's Sur de Texas-Tuxpan Pipelines at Brownsville, TX/Matamoros, TM.
Mier (MXCPROMATX)	<i>Daily (7/1/17) Monthly (8/1/21) Forward (12/8/21)</i>	Mier is the Mexican side of the border where the Kinder Morgan Texas pipeline that serves South Texas meets the Kinder Morgan Mexico (Mier-Monterrey) system. We calculate this index by adding estimated firm reservation and commodity charges along Kinder Morgan Texas to our Houston Ship Channel index.
Ojinaga (MXCPPRESIDIOTX)	<i>Daily (7/1/17) Monthly (8/1/21) Forward (12/8/21)</i>	To calculate our Ojinaga, CH border price, we first start with the price of gas at Waha in West Texas, and add to that estimated reservation and commodity charges along Energy Transfer's Trans-Pecos Pipeline. NOTE: We referred to this index as Presidio, TX before January 2022, but our formula for calculating this price has been the same since we debuted our <i>Mexico Gas Price Index</i> service in July 2017.
Reynosa/Arguelles (MXCPALAMO)	<i>Daily (7/1/17) Monthly (8/1/21) Forward (12/8/21)</i>	Reynosa & Arguelles are two adjacent locations in Tamaulipas, Mexico that combined form one of the major natural gas pipeline import locations from the United States. Reynosa is served by Tennessee Gas Pipeline, while Arguelles is fed by both Energy Transfer and the Kinder Morgan Border systems. Our Reynosa/Arguelles index is a weighted average of the delivered price from the Houston Ship Channel to Reynosa/Arguelles across each of these three pipelines, with those weights determined by the operating capacity of each pipeline to the border. We include all reservation and variable charges for each of these pipelines. NOTE: Our new listing represents two very important changes. Prior to January 2022, this index was 1.) called Alamo, TX and 2.) based only on variable transportation costs along Tennessee Gas Pipeline. By including full freight on Energy Transfer and Kinder Morgan Border, along with adding reservation fees on Tennessee Gas

U.S./Mexico Border

Index	Start Dates	Description
		Pipeline, we believe our new formula will result in calculations that are much closer to the actual historical markup between the Houston Ship Channel and transactions located at the Alamo/Reynosa/Arguelles border as reported by the U.S. Department of Energy.
San Isidro (MXCPSANELIZARIO)	<i>Daily (7/1/17)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	Our San Isidro, CH listing starts with the price of natural gas at the Waha Hub in West Texas, and adds to that estimated reservation and commodity fees on Oneok's Roadrunner Pipeline. NOTE: Prior to January 2022, this was our San Elizario, TX location, but the formula we use for calculating that listing remains the same.
Sásabe (MXCPSASABEAZ)	<i>Daily (7/1/17)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	Sásabe, SO is the interconnection of Sierrita Pipeline in the United States, and Sonora Pipeline in Mexico. Our index for this location starts with the price of gas at the Waha Hub in West Texas, and adds variable transportation charges on both El Paso Natural Gas and Sierrita Pipelines. We do not include any reservation fees in our calculations, since we believe that provides a more accurate estimate of what historical prices have been at the Sásabe border as reported by the U.S. Department of Energy. NOTE: Sásabe is the name of the border point on both the Mexico and U.S. side of the Sierrita Pipeline/Sonora Pipeline interconnect, and as a result, we left the name of this price listing the same when we began listing our various border locations by their Mexican locations in January 2022, instead of our prior convention of using the U.S. border names.

Within Mexico

Index	Start Dates	Description
Aguascalientes (MXCPAGUASCAL)	<i>Daily (12/8/21)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	Represents the simple numeric average of our Aguascalientes via Cenagas and Aguascalientes via Fermaca indexes. NOTE: Prior to January 2022, our Aguascalientes price represented the cost of gas along the Fermaca system. We now list that price separately as Aguascalientes via Fermaca.
Aguascalientes via Cenagas (MXCPAGUASCALVCEN)	<i>Daily (12/8/21)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	We calculate our Aguascalientes via Cenagas price by adding capacity, user and gas combustible charges to move gas from Cenagas Zone 3 to Cenagas Zone 6 to our Reynosa/Arguelles border posting.
Aguascalientes via Fermaca (MXCPAGUASCALVFERM)	<i>Daily (7/1/17)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	Our Aguascalientes via Fermaca posting begins with the cost of gas at San Isidro U.S./Mexico border point, and adds to that capacity and user charges along Fermaca's Tarahumara, El Encino-La Laguna, and La Laguna-Aguascalientes systems. As of the publication date of this methodology, Fermaca did not impose any gas combustible fees. NOTE: This was the definition of our overall Aguascalientes index prior to January 2022. As a result, you can derive a complete history of this location by combining pointcode MXCPAGUASCAL before January 2022 to MXCPAGUASCALVFERM thereafter.

Within Mexico

Index	Start Dates	Description
Bajío (MXCPBAJIO)	<i>Daily (7/1/17)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	For our Bajío index, we start with the price of gas at the Reynosa/Arguelles border point, and add to that capacity, user and gas combustible charges to ship gas from Cenagas Zone 3 to Cenagas Zone 6. NOTE: Our formula for Bajío has been the same since we debuted our Mexico spot market price table in July 2017, but we did include some additional charges in our Reynosa/Arguelles index beginning January 2022. For more information on those changes, please refer to our point description for Reynosa/Arguelles.
Cactus (MXCPCACTUS)	<i>Daily (7/1/17)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	Estimating the price of gas at Cactus is something of a challenge. Our formula for doing so is to begin with the Reynosa/Arguelles border point, and adding to that capacity, user and gas combustible charges to move gas along the Cenagas system. More specifically, we add total transport charges to move gas from Cenagas Zone 3 to Zone 7, in order to derive a Puebla price, and from there, we add additional total charges to ship supply from Cenagas Zone 7 to Cenagas Zone 8. Cactus is a major PEMEX natural gas processing plant, and as such, this index ideally should reflect the price of local gas production in the Southeast portion of the country, rather than adding transport to a South Texas price. This is something we hope to rectify in the future when spot market trading becomes more liquid in that part of the country. NOTE: Our formula for calculating our Cactus price has been consistent since we first published our Mexican spot market prices in July 2017, but we added more transportation charges to our Reynosa/Arguelles index starting in January 2022. For more information, please refer to our Reynosa/Arguelles pointcode description.
EI Encino (MXCPENCINO)	<i>Daily (12/8/21)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	Our EI Encino price is the simple mathematical average of our EI Encino via Cenagas, EI Encino via Ojinaga-EI Encino, and EI Encino via Tarahumara locations. NOTE: Prior to January 2022, this index was calculated using the same formula that now comprises our separate EI Encino via Tarahumara index.
EI Encino via Cenagas (MXCPENCINOVZEN)	<i>Daily (12/8/21)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	NGI's EI Encino via Cenagas index is the combination of our border price at Reynosa/Arguelles, and capacity, user and gas combustible charges to ship gas on Cenagas from Zone 3 to Zone 1.
EI Encino via Ojinaga-EI Encino (MXCPENCINOVOJ)	<i>Daily (12/8/21)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	To derive our EI Encino via Ojinaga-EI Encino listing, we start with our Ojinaga price, and add to that capacity and user charges (but not gas combustible) along IEnova's Ojinaga-EI Encino pipeline.
EI Encino via Tarahumara (MXCPENCINOVTARA)	<i>Daily (7/1/17)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	We calculate our EI Encino via Tarahumara index by adding capacity and user charges along the Fermaca's Tarahumara Pipeline to our San Isidro border price. NOTE: This is the same formula we used to calculate our overall EI Encino price prior to January 2022. For a complete history of EI Encino via Tarahumara, please use EI Encino (pointcode MXCPENCINO) from July 2017 through January 2022, and this MXCPENCINOVTARA pointcode thereafter.

Within Mexico

Index	Start Dates	Description
Guadalajara (MXCPGUADALAJARA)	Daily (12/8/21) Monthly (8/1/21) Forward (12/8/21)	Guadalajara represents the simple arithmetic average of our separate Guadalajara via Cenegas and Guadalajara via Fermaca postings. NOTE: Prior to January 2022, we calculated our Guadalajara price using the same methodology we now use to compute our Guadalajara via Fermaca listing.
Guadalajara via Cenagas (MXCPGUADVCEN)	Daily (12/8/21) Monthly (8/1/21) Forward (12/8/21)	Guadalajara via Cenagas is the price of gas at Reynosa/Arguelles plus capacity, user and gas combustible charges to move gas from Cenagas Zone 3 to Cenagas Zone 6.
Guadalajara via Fermaca (MXCPGUADVFERM)	Daily (7/1/17) Monthly (8/1/21) Forward (12/8/21)	Our Guadalajara via Fermaca price is essentially the cost of gas at Waha plus transport along Fermaca's Wahalajara pipeline system. Waha plus estimated reservation and variable transport fees along Oneok's Roadrunner Pipeline equals our San Isidro border price (see our description for San Isidro above). From there, we add capacity and user charges (but not gas combustible) along the Tarahumara, El Encino-La Laguna, La Laguna-Aguascalientes, and VAG (Pipeline de Occidente) system to derive our Guadalajara via Fermaca price. NOTE: Prior to January 2022, this was our definition of our overall Guadalajara price. As such, to get a complete data history of Guadalajara via Fermaca, please use the pointcode MXCPGUADALAJARA before January 2022, and MXCPGUADVFERM thereafter.
La Laguna (MXCPLALAGUNA)	Daily (7/1/17) Monthly (8/1/21) Forward (12/8/21)	Our La Laguna index starts with the price of gas at El Encino via Tarahumara, and adds to that capacity and user charges (no gas combustible) along the El Encino-La Laguna pipeline. By using Tarahumara and El Encino-La Laguna, we ensure this index reflects transportation along the Fermaca system.
Los Ramones (MXCPRAMONES)	Daily (7/1/17) Monthly (8/1/21) Forward (12/8/21)	Los Ramones is the price of natural gas at the Reynosa/Arguelles border point, plus capacity, user and gas combustible charges to deliver gas that was injected into Cenagas Zone 3 within Cenagas Zone 3. NOTE: Our formula for calculating Los Ramones has not changed since our Mexican spot market price table debuted in July 2017, but we did begin to include additional charges in our Reynosa/Arguelles location in January 2022. Please see our description for Reynosa/Arguelles for more details.
Mérida (MXCPMERIDA)	Daily (7/1/17) Monthly (8/1/21) Forward (12/8/21)	We calculate our Mérida index by adding the cost of shipping gas on the Mayakan system, which includes capacity and user charges, to our Cactus index. As of the published date of this methodology, Mayakan did not impose a gas combustible charge. NOTE: We have not changed this formula since we debuted <i>Mexico Gas Price Index</i> in July 2017, but imbedded in this formula is the price of gas at the Reynosa/Arguelles border, and that did change in January 2022. For more information, please see the description for our Reynosa/Arguelles price location.

Within Mexico

Index	Start Dates	Description
Monterrey (MXCPMONTERREY)	<i>Daily (12/8/21) Monthly (8/1/21) Forward (12/8/21)</i>	NGI's Monterrey listing represents a simple non-weighted average of our three Monterrey sub-locations: Monterrey via Cenagas, Monterrey via Mier-Monterrey, and Monterrey via Nueva Era. NOTE: Prior to January 2022, our Monterrey index was the same formula as our current Monterrey via Mier-Monterrey index, and only included gas that was shipped on that system.
Monterrey via Cenagas (MXCPMONTERREYVCEN)	<i>Daily (12/8/21) Monthly (8/1/21) Forward (12/8/21)</i>	Our Monterrey via Cenagas calculation begins with the price of gas at the Reynosa/Arguelles border, and adds to that capacity, user and gas combustible charges to move gas that has been injected into and delivered within Cenagas Zone 3.
Monterrey via Mier-Monterrey (MXCPMONTERREYVMIER)	<i>Daily (7/1/17) Monthly (8/1/21) Forward (12/8/21)</i>	NGI's index at Monterrey via Mier-Monterrey is the combination of gas priced at the Ciudad Mier, TM/Roma, TX border and capacity and user charges along Kinder Morgan's Mexico (Mier-Monterrey) Pipeline. As of the time of this writing, Kinder Morgan did not levy any gas combustible charges. NOTE: Prior to January 2022, this was the formula we used for our overall Monterrey price. As such, one can get a complete price history of this location by combining our MCPMONTERREY point code between July 2017 – January 2022, and this MXCPMONTERREYVMIER point code thereafter.
Monterrey via Nueva Era (MXCPMONTERREYVNE)	<i>Daily (12/8/21) Monthly (8/1/21) Forward (12/8/21)</i>	Monterrey via Nueva Era represents the price of gas at the Colombia, NL/Laredo, TX border, combined with capacity, user and gas combustible charges along the Nueva Era Pipeline.
Puebla (MXCPPUEBLA)	<i>Daily (7/1/17) Monthly (8/1/21) Forward (12/8/21)</i>	Puebla represents the price of natural gas at the Reynosa/Arguelles border point, combined with capacity, user and gas combustible charges to move gas from Cenagas Zone 3 to Cenagas Zone 7. NOTE: Our formula for calculating this index has been the same since we debuted <i>Mexico Gas Price Index</i> in July 2017, but we begin including additional charges in our Reynosa/Arguelles border listing in January 2022. For more information, please see our description for Reynosa/Arguelles.

Within Mexico

Index	Start Dates	Description
Salina Cruz (MXCPSALINACRZ)	<i>Daily (7/1/17)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	For our Salina Cruz price, we begin with the cost of gas at the Reynosa/Arguelles border, and add transportation along the Cenagas system. More specifically, we first add the total cost (capacity, user and gas combustible charges) of shipping gas from Cenagas Zone 3 to Zone 7 to derive our Puebla price, and from there, we add Cenagas transport from Zone 7 to Zone 8 to get our Cactus listing. We finish the calculation by then adding total Cenagas shipping charges from Zone 8 to Zone 9 to that Cactus price. Given that Salina Cruz is about the farthest possible distance from the U.S./Mexico border, we recognize that adding transportation costs to a South Texas border location is not the ideal way to estimate gas prices in the Isthmus region of Mexico. We hope to rectify this when trading liquidity within Mexico improves. NOTE: Our methodology for assessing our Salina Cruz price has not changed since we debuted our <i>Mexico Gas Price Index</i> service in July 2017, but we did begin including additional transportation charges in our Reynosa/Arguelles border location in January 2022. For more information on that change, please see our Reynosa/Arguelles description.
Saltillo (MXCPSALTILLO)	<i>Daily (7/1/17)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	Our Saltillo index represents the price of natural gas at the Reynosa/Arguelles border point, plus capacity, user and gas combustible (fuel) charges to ship gas from Cenagas Zone 3 to Cenagas Zone 2. NOTE: Our formula for calculating our Saltillo price has not changed since we debuted <i>Mexico Gas Price Index</i> in July 2017, but the method by which we determine the price at Reynosa/Arguelles began including additional charges in January 2022. Please see the description for Reynosa/Arguelles for more details.
Tampico (MXCPTAMPICO)	<i>Daily (7/1/17)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	Our Tampico listing starts with the price of gas at Reynosa/Arguelles at the South Texas/Mexico border, and adds to that capacity, user and gas combustible (fuel) fees for gas injected into Cenagas Zone 3 and shipped to Cenagas Zone 4. NOTE: Our formula for Tampico has been the same since we debuted this pricing listing in July 2017, but we began including additional charges in our Reynosa/Arguelles border location in January 2022. For more information, please refer to our Reynosa/Arguelles point description.

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Index	Start Dates	Description
Topolobampo (MXCPTOPO)	<i>Daily (7/1/17)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	To compute our Topolobampo index, we start with the price of gas at our El Encino via Ojinaga-El Encino index, and add to that capacity, user and gas combustible charges on the El Encino-Topolobampo segment (Segmento 1) of TC Energy's El Encino-Matzatlan Pipeline. Another way of stating this is our Topolobampo index begins with the price of gas at the Ojinaga border point, and adds to that transportation on both IEnova's Ojinaga-El Encino Pipeline and the Segmento 1 of the El Encino-Matzatlan Pipeline. NOTE: The reason we broke out the calculation using both descriptions is that we wanted to help isolate the change we made to this calculation. Prior to January 2022, we calculated this index by starting with the price of gas at San Isidro, CH / San Elizario, TX, and including transport down to El Encino via Fermaca's Tarahumara Pipeline, before flowing through the El Encino-Matzatlan Pipeline. We believe this new methodology better aligns with actual pipeline flows through that portion of the country.
Torreón (MXCPTORREON)	<i>Daily (7/1/17)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	Since January 2022, we have been calculating our Torreón index by adding all capacity, user and gas combustible charges for gas injected in Cenagas Zone 3 and shipped to Cenagas Zone 1 to our Reynosa/Arguelles index. NOTE: Prior to January 2022, we assumed gas into Torreón was sourced from Waha, and therefore used a formula of our Clint, TX / El Hueco, CH border price plus transport for gas injected and delivered within Cenagas Zone 1. We believe our new formula better reflects actual flows along the Cenagas system.
Tula (MXCPTULA)	<i>Daily (7/1/17)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	Our Tula index represents price of gas at the Reynosa/Arguelles border, plus all capacity, user and gas combustible charges to ship gas injected into Cenagas Zone 3 to Cenagas Zone 5. NOTE: Our formula for Tula has been the same since we first published our <i>Mexico Gas Price Index</i> table in July 2017, but we did change our formula for our Reynosa/Arguelles location in January 2022. Please see our description of Reynosa/Arguelles for more information.
Tuxpan (MXCPTUXPAN)	<i>Daily (12/8/21)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	Tuxpan is the simple average of our individual Tuxpan via Cenagas and Tuxpan via Sur de Texas – Tuxpan locations. NOTE: Before January 2022, our Tuxpan index was calculated the same way as our new separate Tuxpan via Sur de Texas – Tuxpan price listing.
Tuxpan via Cenagas (MXCPTUXPANVCEN)	<i>Daily (7/1/17)</i> <i>Monthly (8/1/21)</i> <i>Forward (12/8/21)</i>	Gas delivered to Tuxpan via the Cenagas system. Our calculation begins with the Reynosa/Arguelles border point price, and adds to that capacity, user and gas combustible charges to ship gas that was injected in Cenagas Zone 3 to Cenagas Zone 5. NOTE: Prior to January 2022, this index was called Tuxpan. For a complete history of Tuxpan via Cenagas prices, please use pointcode MXCPTUXPAN from July 2017 through January 2022, and this MXCPTUXPANVCEN pointcode thereafter.

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Index	Start Dates	Description
Tuxpan via Sur de Texas – Tuxpan (MXCPTUXPANVSDT)	Daily (11/6/19) Monthly (8/1/21) Forward (12/8/21)	Our calculation for this index adds capacity and user fees (but not gas combustible) to ship gas along TC Energy's Sur de Texas – Tuxpan system to the cost of natural gas at the Matamoros, TM / Brownsville, TX border.
Villa de Reyes (MXCPVILLADEREY)	Daily (12/8/21) Monthly (8/1/21) Forward (12/8/21)	Villa de Reyes represents is the mathematical average of our individual Villa de Reyes via Cenagas, Villa de Reyes via Los Ramones, and Villa de Reyes via Tula-Villa de Reyes price locations. NOTE (1): Before January 2022, our Villa de Reyes index was calculated the same way as our new separate Villa de Reyes via Tula-Villa de Reyes index. NOTE (2): TC Energy's Tula-Villa de Reyes Pipeline is not yet in full service, so this calculation is more of a pro-forma calculation for when that line is fully operational.
Villa de Reyes via Cenagas (MXCPVILLADEREYCEN)	Daily (12/8/21) Monthly (8/1/21) Forward (12/8/21)	To calculate our Villa de Reyes via Cenagas index, we first start with our Reynosa/Arguelles border price, and add to that capacity, user and gas combustible (fuel) charges to ship gas from Cenagas Zone 3 to Cenagas Zone 5.
Villa de Reyes via Los Ramones (MXCPVILLADEREYLR)	Daily (12/8/21) Monthly (8/1/21) Forward (12/8/21)	The price of gas delivered into Villa de Reyes via Los Ramones is the combined total of the price of gas at the Reynosa/Arguelles border, along with total transportation charges (capacity, user and gas combustible fees) along IEnova's Gasoductos del Noreste and TAG Pipeline's Los Ramones II Norte systems.
Villa de Reyes via Tula – Villa de Reyes (MXCPVILLADEREYT)	Daily (7/1/17) Monthly (8/1/21) Forward (12/8/21)	To derive our Villa de Reyes via Tula – Villa de Reyes index, we add capacity and user fees (but no gas combustible charges) from TC Energy's Tula – Villa de Reyes Pipeline to our Tula index (see our Tula description for more detail on that listing). NOTE (1): Before January 2022, our overall Villa de Reyes index was calculated using this very same Villa de Reyes via Tula-Villa de Reyes formula. As such, one can get a complete history of Villa de Reyes via Tula – Villa de Reyes by using point code MXCPVILLADEREY before January 2022 and MXCPVILLADEREYT afterward. NOTE (2): TC Energy's Tula-Villa de Reyes Pipeline is not yet in full service, so this calculation is more of a pro-forma calculation for when that line is fully operational. NOTE (3): This index relies on the price we derive at Tula, which in turn is based on the price of gas at the Reynosa/Arguelles border. Although our formula for calculating Tula has been the same since we first published <i>Mexico Gas Price Index</i> in July 2017, we began including additional charges in our Reynosa/Arguelles listing in January 2022. Please see our description for Reynosa/Arguelles for more information on that change.