

# Turning natural gas production into profit

In economic terms, commodities are goods of commerce that are standardized and, therefore, easy to trade for products of the same kind, have a reasonably consistent price around the world (excepting logistics costs and taxes), and are used to manufacture other products.

In the past years, we have seen a change in the natural gas (NG) market, thanks to the introduction of shale-gas (lower costs), and an increase in shipments of liquefied natural gas (LNG). In turn, NG has become a worldwide commodity, and particularly in Mexico, a scarce one.

In that sense, NG producing companies must capitalize on their production and turn it into profit.

## WHAT'S THE CURRENT STATUS OF THE NATURAL GAS PRODUCTION?

Mexico has been importing more than its domestic production since 2015, in part because of the declining domestic production—from Pemex—and the rising production – and cheap prices – from US shale plays.

In the current energy model, though most production is and will be from Pemex, some private companies are starting to produce NG. This production could represent from 8% in 2021 to 20% in 2027 of the natural gas production.

Although it may not seem much, many industries, such as the petrochemical industry, or regions, such as the Yucatan or Baja California Peninsulas, have been dealing with NG shortage for years. While other states, such as Oaxaca, or Chiapas, are not frequent NG consumers.

So, what can firms do with their natural gas production?

## ALTERNATIVES

There are many alternatives for allocating natural gas production; each has regulatory complexity and restrains, in terms of availability—for example, pipelines—or costs. Additionally, since many of the producing fields were Pemex's fields, they maintain—for now—the same agreements, ergo, they have contracts with Pemex E&P, Pemex Logistics, and Pemex Industrial Transformation. Yet, many of these firms and others are starting to analyze other possibilities. Below, some of them:

	Pros	Cons
NG Processing (Pemex)	<ul style="list-style-type: none"> <li>Immediate start</li> <li>Connection with other infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Facilities with low maintenance procurement</li> </ul>
NG Processing (New)	<ul style="list-style-type: none"> <li>Use of new technology</li> <li>More efficient processes</li> </ul>	<ul style="list-style-type: none"> <li>Need of more infrastructure to connect supply &amp; demand</li> </ul>
Pipeline + interconnection (Sistrangas or other)	<ul style="list-style-type: none"> <li>Connection with demand centers</li> </ul>	<ul style="list-style-type: none"> <li>Economic regulation (tariffs)</li> </ul>
Other means of transportation	<ul style="list-style-type: none"> <li>No Economic regulation (tariffs)</li> <li>Faster implementation</li> <li>Scalability</li> </ul>	<ul style="list-style-type: none"> <li>Need for complementary infrastructure (for CNG or LNG)</li> </ul>
LNG or CNG	<ul style="list-style-type: none"> <li>No Economic regulation (tariffs)</li> <li>Scalability</li> </ul>	<ul style="list-style-type: none"> <li>Need for complementary infrastructure, such as regasification</li> </ul>

Additionally, most alternatives have a regulatory process of their own that involves interactions with at least the following authorities: the Energy Regulatory Commission (CRE), the Ministry of Energy (SENER), Agency for Safety, Energy and the Environment (ASEA). Or the alternatives involve negotiations with key players such as Pemex (for the NG processing), CENAGAS (for interconnections with SISTRANGAS) and CFenergia (for capacity in other pipelines). For this reason, a tailor-made advocacy strategy is key for success as most of these public players are unfamiliar with new technologies and their implementation.

Sources: National Hydrocarbons Commission (CNH), Natural Gas Production by field | Natural Gas Production Prospective 2020-2027 | CNH, Natural Gas Sector: Some proposals for the development of the national industry, available at [https://www.gob.mx/cms/uploads/attachment/file/391881/Documento\\_Tecnico\\_GasNatural\\_CNH2018\\_1.pdf](https://www.gob.mx/cms/uploads/attachment/file/391881/Documento_Tecnico_GasNatural_CNH2018_1.pdf)

## ANALYSTS



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## WHO ARE YOU COMPETING WITH?

The NG market in Mexico should be analyzed from a regional point of view. As we mentioned before, we can have several markets in Mexico regarding NG:

- Regions in proximity to the border which have sufficient pipeline infrastructure to take advantage of Texas' prices (the Northern States).
- Regions that have NG shortage and some infrastructure (Yucatan Peninsula).
- Regions that do not have NG infrastructure, or a minimal or zero consumption (Guerrero, Oaxaca, and Chiapas).

For the first case, as an NG producer, near competition with Texas makes cost comparison between domestic production and imports necessary.

But, for the second and third cases, the competition is broader. There is still competition with imports to some extent, depending on the availability of infrastructure. For example, since the Yucatan Peninsula is not connected -yet- to the central system (SISTRANGAS), it can't receive imports. And even with the interconnection, the Mayakan pipeline has a capacity of 250 million cubic feet (the estimated demand of the Peninsula, is of about 600-700 mmcf, maybe more). In that sense, while the capacity is restricted and/or there is no infrastructure available, competition happens with other fuels. These fuels – LPG, diesel, even gasoline – can be from 5x to 20x more expensive than NG. The latter shows enough margin for investments in the much-needed infrastructure.

In that sense, we must think outside the box and remember that Mexico has many NG markets.

*Talanza Energy is a consulting firm specialized in regulatory compliance in the Mexican energy sector. We guide our clients into achieving a fast and seamless execution of their projects as we align their operation objectives with the compliance of all regulatory requirements.*

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