



# Fossil fuel exploration subsidies: Republic of Mexico

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This country study is a background paper to the report **The fossil fuel bailout: G20 subsidies for oil, gas and coal** by Oil Change International (OCI) and the Overseas Development Institute (ODI).

For the purpose of this report, exploration subsidies include: national subsidies (direct spending and tax expenditures), investment by state-owned enterprises and public finance. The full report provides a detailed discussion of technical and transparency issues in identifying exploration subsidies, and outlines the methodology used in this desk-based study.

The authors would welcome feedback on the full report and on this country study, to improve the accuracy and transparency of information on G20 government support to fossil-fuel exploration.

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## Background

Mexico is a major oil and gas producer, ranking 10<sup>th</sup> in the world in oil and gas production in 2013 (Rystad Energy, 2014). Oil and gas exploration expenditure within Mexico has grown significantly over recent years, increasing by 28% from \$2.1 billion in 2008 to \$2.7 billion in 2013 (Figure 1).

At the same time, oil and gas reserves are steadily decreasing, having fallen by 23% from 2008 to the start of 2014. In 2013, in an effort to further increase exploration activities, reverse the decline in reserves and increase production, the Government reformed the oil sector by allowing foreign companies to participate in exploration and production activities in Mexico for the first time through profit-sharing agreements with *Petróleos Mexicanos* (Pemex), the state-owned oil company (Iiff, 2014).

Pemex is the world's eighth largest oil and gas producer, producing 1.36 billion barrels of oil equivalent (BOE) of oil and gas in 2013 (Rystad Energy, 2014). Mexico's coal reserves are relatively small and play a minor role in the country's fossil-fuel exploration and extraction activities compared to oil and gas.

## National subsidies

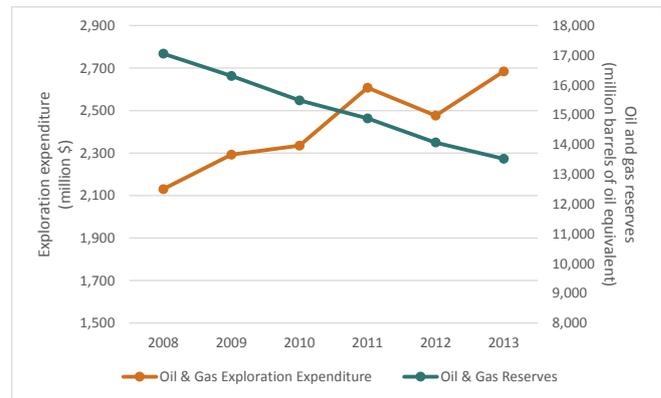
Until the 2013 energy reform, Pemex had exclusive rights over the entire oil and gas sector, from exploration and extraction to refining. As a result of this restriction, private companies have not, until now, participated in or received national subsidies for oil and gas exploration through the Mexican Government.

The new oil and gas fiscal regime in Mexico will be regulated by the *Ley de Ingresos sobre Hidrocarburos* (law on hydrocarbon revenues), which was approved by the Mexican Congress in August 2014. Under Article 32 of the law, companies will be able to deduct 100% of exploration expenditures from their income tax payments (Diario Oficial de la Federación, 2014).

In addition, under Article 23, companies will also pay fees to the Mexican Government to explore a given area until production begins. These fees are set at 1,150 pesos (\$85) per km<sup>2</sup> for the first 60 months of exploration, increasing to 2,750 pesos (over \$200) pesos per km<sup>2</sup> thereafter as long as exploration activities continue (Diario Oficial de la Federación, 2014). These exploration fees are significantly lower than the rates originally proposed in the December 2013 draft law, which were 2,650 pesos (\$200) per km<sup>2</sup> for the first 60 month and 4,250 pesos (\$325) per km<sup>2</sup> per month thereafter (Presidencia de la República, 2013).

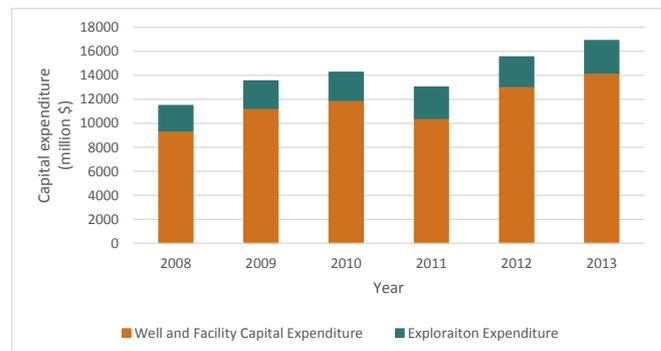
Because these measures had only been in place for a few months at the time of the writing of this report, the overall cost of the deduction and exploration fee subsidies to Mexican government is not yet known.

**Figure 1. Oil and gas exploration expenditure and reserves in Mexico**



Source: Rystad Energy, 2014

**Figure 2. Pemex capital expenditure**



Source: Rystad Energy, 2014

## Investment by state-owned enterprises

Pemex's exploration expenditure in Mexico has grown by 28% since 2008 to reach \$2.7 billion in 2013. Over this period, exploration spending accounted for between 16% and 20% of total Pemex capital expenditure (Figure 2) (Rystad Energy, 2014).

Table 2 displays examples of Pemex's exploration-specific expenditures in 2012 and 2013; the company has onshore and offshore exploratory projects throughout Mexico, but the largest recent expenditures have been for offshore and deep water offshore exploratory drilling in the Gulf of Mexico (Pemex, 2013).

## Public finance

Through an annual \$100 million disbursement to *Nacional Financiera* (Nafin), Mexico's national development bank, as well as an annual average of \$300 million from the National Bank of Public Works and Services to Pemex contractor *Oceanografía*, the Mexican Government provided at least \$400 million per year in public finance

for oil and gas exploration, or \$1.6 billion, over the 2010 to 2013 period. The actual amount of public finance for fossil-fuel exploration is likely to be much higher, but total estimates are not publicly available.

### Domestic

Given Mexico's vast domestic oil and gas resources, the focus of exploration investments by Pemex and state financing institutions appears to be on activities within Mexico rather than overseas. Nafin has dedicated financing and training programmes to assist Mexican companies obtain service contracts with Pemex (Nafin, 2013b). Starting in 2010, the Inter-American Development Bank (IDB) has provided an annual \$100 million loan to

Nafin for support to small and medium enterprise (SME) contractors to Pemex (Table 3) (Nafin, 2013a).

Mexico's National Bank of Public Works and Services (Banobras) also provides regular support to Pemex, including an undisclosed amount of financing in 2010 for exploration and production in the Batería Luna region off the coast of Tabasco in the southern Gulf of Mexico (Banobras, 2011).

Pemex contracts with private companies, including those supported with financing from state-owned banks, have raised corruption issues in recent years. From 2003 to 2013, Oceanografía signed over 100 contracts that were worth a total of almost \$3 billion to provide engineering and maintenance services to Pemex's offshore operations

**Table 1. Mexico's national subsidies**

Subsidy	Subsidy type	Targeted fossil-fuels	Estimated annual amount (million \$)	Timeframe for subsidy-value estimate	Stage
<b>Tax expenditure</b>					
100% deduction of exploration expenditure from income tax payments	Tax deduction	Oil and gas	N/A*	N/A*	Exploration
Low lease rates for exploration areas	Tax deduction (cheap access to land)	Oil and gas	N/A*	N/A*	Exploration
<b>Total annual national subsidies</b>			<b>N/A*</b>		<b>Exploration</b>

\*Information not available.

**Table 2. Sample Pemex exploration-specific investments in 2012-13**

Project	Year	Amount (million \$)
Exploratory well drilling in the Gulf of Mexico	2013	\$96
Deep-water exploration activities in the northern region	2013	\$1
Exploration equipment maintenance in the onshore southeast basin	2013	\$1
Equipment maintenance and acquisition for exploration activities in the southeast marine basin	2013	\$0.5
Exploration equipment in the southeast marine basin	2013	\$0.05
Exploration activities in the Tampico-Misantla basin	2013	\$0.04
Equipment for deep-water exploration well drilling	2012	\$69.3
Rehabilitation and services for exploration and development drilling platforms in the Veracruz region	2012	\$25.7
Exploratory well drilling in the southern region	2012	\$18.2
Technical support for exploratory processes and projects	2012	\$12.3
Exploration and development well drilling activities in the southern region	2012	\$9.5
Exploratory well drilling services in the Burgos region	2012	\$3.3
Analysis of samples from exploratory wells in the northern region	2012	\$1.6
Deep water exploration equipment for the northern offshore region	2012	\$0.2
'Adquisición de consumibles de computo para subdirección de exploración'	2012	\$0.04

**Table 3. Mexico Fossil-fuel Exploration Project Financing, 2010 to 2013**

Project	Country	Financier	Years	Annual Amount (million US\$)	Stage
Oceanografía (Pemex contractor)	Mexico	National Bank of Public Works and Services	2010 to 2013	300	Extraction (including exploration)
Support to small and medium enterprise (SME) contractors to Pemex	Mexico	Nafin	2003 to 2013	100	Extraction (including exploration)
<b>Total Annual Financing, 2010-2013:</b>				<b>400</b>	<b>Extraction (including exploration)</b>

Source: Nafin, 2013

(Table 3). Allegations have arisen that Oceanografía received favourable treatment from Pemex, and audits revealed numerous irregularities in its contracts with Pemex, including falsified invoices. Over the period in question, Oceanografía had received loans from Banobras as well as Mexico's National Foreign Trade Bank (Bancomext) in support of its services to Pemex (Rosenberg et al., 2014; Becerril, 2014).

### International

Mexico contributed \$4.8 million to fossil-fuel exploration projects in 2013 through its shares in the World Bank Group, which ranged from 0.2% to 1.1%, depending on the World Bank institution (Oil Change International, 2014).<sup>1</sup>

## Major companies

### Oil and gas

As discussed above, to date Mexico's oil and gas industry is almost completely dominated by Pemex. Pemex produced 3.6 million BOE of oil and gas per day in 2013, generating revenue of \$111 billion. The company retained \$10.4 billion in profits, while the Mexican Government received \$72.5 billion in income taxes. Pemex's oil and gas reserves were estimated at 13.2 billion BOE at the start of 2014. Pemex is likely to give up some of its current complete dominance of the upstream oil and gas industry as Mexico's energy reform takes effect and more private companies enter the exploration and production sector.

### Coal

Mexico has 17 operational coal mines operated by three companies: Grupo Autrey, Grupo Mexico SAB de CV and Carbonifera de San Patricio SA de CV.

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1 Data are based partly on shares of multilateral development banks (MDBs) held by each G20 country sourced from the respective MDB annual reports and replenishment agreements.

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