

Overseas Business Insights

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Mexico: Successful Onshore Oil and Gas Auctions

Mexico’s National Hydrocarbons Commission (CNH) auctioned 21 of 24 onshore blocks in two events (Rounds 2.2 and 2.3) July 12, holding a combined potential equivalent of oil and gas reserves of 435 million barrels. Ten companies, grouped into six bidding consortia from North America and Asia, won the contracts in Mexico’s

northern border Burgos Basin and Southeastern Basin blocks, which CNH announced would attract investments of over \$2 billion during the 30-year contract period.

CNH said the government will receive on average 75 percent of



block revenues. These auctions offered blocks with more natural gas and other valuable non-oil hydrocarbons (ethane, propane, and butane), than previous auc-

tions. Mexico’s state oil firm Pemex discovered the blocks but did not develop

them. Energy officials projected the 21 blocks could yield 79,000 barrels of oil per day (bpd), 378 million cubic feet per day of natural gas, and generate 20,500 jobs by 2025.

Winning bidders took seven of 10 blocks in what was the first upstream auction featuring natural gas since Mexico’s

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Panama: Reflecting on the First Year of the Panama Canal Expansion

The expanded Panama Canal’s first year of operations has exceeded expectations, benefiting the Panamanian economy and increasing overall shipping flows in the United States. The \$5.5 billion expansion project included a new set of Atlantic and Pacific locks

and created a wider third lane of traffic, which opened on June 26, 2016. The third lane increased the load bearing capacity of ships from 5,000 to up to 14,000 twenty foot equivalent units (TEUs); doubling the cargo capacity of the new waterway. During its

first year, the Panama Canal Authority (ACP) reports that more than 1,500 Neo-Panamax ships have passed through the expanded Canal, and 15 out of 29 liner services that use the Canal are now taking advantage of the larger locks. This translates to an average of 5.9 transits a

day, surpassing original forecasts of 2 to 3 transits for the first year of operation, albeit still below the final target of 12 daily transits. Container ships made 51.3 percent of the transits during this period, liquefied petroleum gas (LPG) vessels 31.5 percent, and liquefied natural gas



Panama (continued)

(LNG) vessels 9.1 percent. Other traffic included bulk carriers, tankers, car carriers, and passenger vessels.

Overall cargo tonnage passing through the Canal is up 22 percent over the same period last year. The ACP is on track to provide the Panamanian government with more than \$1.6 billion in FY 2017, compared to \$1.01 billion in FY 2016. Authorities attribute gains in revenue this fiscal year directly to the new locks. Transits of Japanese, Mexican, and Colombian vessels have increased, but the United States and China remain the Canal's largest

users.

The Canal expansion has facilitated an increase in U.S. East Coast shipping volumes. Since the expansion, 42 Neo-Panamax ships transiting the Canal have originated in Miami, and the port has received 70 such ships following passage through the Canal. The Port of Savannah has experienced a 12 percent increase in the volume of containers passing through the Canal (and a six percent increase in overall volumes). A record 1.21 million cargo containers moved through the Port of Charleston in FY 2017 so far. The port's best year to date included a port call of the largest ship

ever to call on Charleston.

Transportation of LNG through the Canal has grown substantially, given the capacity of the third lane to accommodate almost 90 percent of the global LNG fleet, and 138 LNG carriers transited the canal this past year. According to an ACP spokesperson, "On average, 5.2 LNG vessels have transited the Canal per week." American producers have moved to capitalize on this route, which takes 20 days from the U.S. Gulf Coast to Japan, with the opening of the first LNG export facility in the Gulf and four more scheduled to be completed by 2021.



Even though the expanded locks hold more water than the original locks, the ACP reports that the recycled water from the new locks' savings basins allows the Canal to save seven percent in overall water usage. This is crucial, as water supplies define the Canal's operating parameters; past shortages have forced the ACP to limit transiting vessels' drafts, restricting their cargo-carrying capacity.

El Salvador: Online Permit Platform Speeds Approvals

Environmental permitting has posed a major investment obstacle in El Salvador, particularly in the construction sector. El Salvador's construction syndicate (CASALCO) has long advocated for permitting progress, and began working with the Salvadoran Ministry of Environment and Natural Resources (MARN) in

November 2014 on a new system. On July 11, MARN kicked-off an automated online environmental permitting system that increases transparency and efficiency for companies submitting environmental impact assessments. MARN's new system represents the first-of-its-kind online platform that could stand as a model for other countries in

the region. USAID and the U.S. Environmental Protection Agency (EPA) provided \$3 million of support for technical assistance and capacity building within the Ministry, including wastewater and solid waste management, and the enforcement and application of environmental laws. This funding included \$750,000 worth

of technical support in training, workshops, and assessments led by EPA technical staff to improve the skills and abilities of Ministry personnel. The new system consolidates 27 previously-existing permit forms into one online form and eliminates unnecessary pre-requisites to shorten response times.



Mexico's 15-Year Electricity Plan Seeks to Boost Energy Security, Clean Power

Mexican Energy Secretariat SENER's annual long-term Electricity Development Plan (PRODESEN) aims to attract \$105 billion in private and public investment as the country deregulates and opens up its power sector to foreign and domestic competition. SENER's latest long-term Electricity Development Plan (available at <http://www.gob.mx/sener/acciones-y-programas/programa-de-desarrollo-del-sistema-electrico-nacional-33462>), released on June 7, seeks to increase national electricity generation by 43 percent, from 319,400 gigawatt hours (GWh) in 2016 to 456,700 GWh by 2031. It calls for increasing the share of clean power generation (solar, wind, geothermal, nuclear, hydro, and efficient combined cycle) from 20.3 percent currently to 46 percent in 15 years, see Chart 1. Progress is underway, with two power auctions in 2016, the first of their kind in Mexico, yielding contracts with commitments of roughly 14,300 GWh in new power generation.

The Plan assumes national electricity demand will grow three percent annually and calls for 487 new privately-funded generation projects, mostly clean ener-

gy projects estimated to cost a total of \$85.3 billion over the 15-year timeframe. Just over half of this investment would be concentrated in the states of Veracruz, Oaxaca, and the U.S.-Mexico border states of Tamaulipas, Coahuila, and Nuevo Leon. Major projects on the list include a 950 MW combined cycle plant under construction in Nuevo Leon to begin operations in 2018; a 300 MW wind power plant in Tamaulipas expected to start operations in 2024; and construction of two nuclear units of 1,360 MW each in Veracruz near the existing Laguna Verde Plant, one of which would be completed in 2030 and the other in 2031.

The SENER Plan proposes adding nearly 15,000 miles of transmission lines, to the almost 65,000 miles currently installed nationwide, through public-private partnerships at a cost of \$11.6 billion. The Plan anticipates upgrading existing electricity infrastructure to reduce system congestion and increase reliability. Significant transmission projects would include: connecting the currently isolated Baja California peninsula to the national mainland grid through underwater lines; increasing interconnection with the United States (via East Mexicali to Imperial Valley, CA); and improving the Yucatan Peninsula's connec-

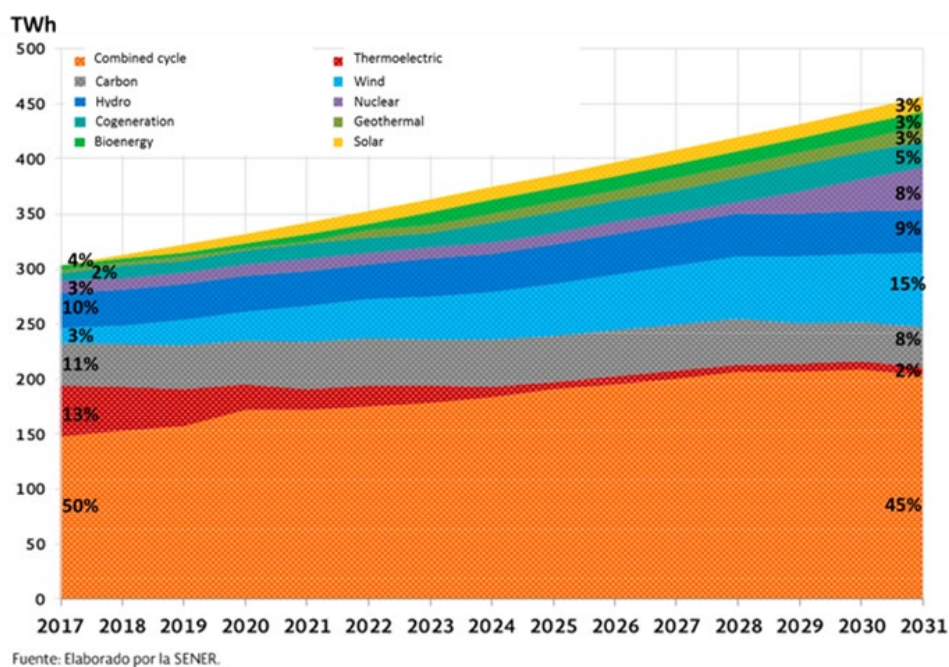


Chart 1. Planned electricity generation matrix development.

Mexico (continued from page 3)

tion to the national grid which will allow wind power in the southeast to meet growing demand in the center of the country.

The Plan's distribution system projects (i.e., bringing the power to residential and commercial consumers) would cost an estimated \$8.4 billion. Through public-private partnerships, SENER

plans to: increase electricity access (to reach 99.8 percent of the population by 2031); improve energy efficiency by reducing losses due to equipment or other technical deficiencies; and implement a smart grid metering and monitoring system to facilitate better accounting (i.e., more revenue) and power management when usage spikes. SENER anticipates these

projects will reduce technical and non-technical losses (theft), which in 2016 amounted to almost 15 percent of energy generated and \$1.9 billion in lost revenue. SENER plans to tackle these problems with new equipment, better maintenance, stronger surveillance, and tougher regulations.

Cacao from Peru - The Win-Win Crop that Feeds the American Confectionary Industry and Helps Fight the War on Drugs

U.S. foreign assistance to Peru not only eliminates coca used to supply billions of dollars of cocaine to the world market each year; it helps seed a flourishing cacao industry that offers licit alternative livelihoods to former coca farmers and boosts American production and jobs. Peru is a top source of fine aromatic cacao that small and medium-sized businesses in the United States use to manufacture artisanal chocolates. USAID works with 34,000 families – 150,000 men, women, and children – to transition from coca to licit crops, principally cacao. Were these households all to return to growing coca at 2011 levels, 80 metric tons of cocaine, valued at \$2.4 billion dollars, would flood into world markets each year. Instead, these farmers



now grow cacao, among other licit crops, which helped Peru increase its cacao production by an average of 17 percent annually between 2009 and 2015. Many U.S. small businesses are reaping the benefits.

Helping Peruvian cacao farmers boosts the U.S. economy, since raw cacao is the key ingredient in chocolate. In 2014, chocolate accounted for \$20 billion of the \$34.5 billion of U.S. confectionery sales. According to the U.S. Department of Agriculture (USDA), the U.S. chocolate in-

dustry is composed of 400 companies employing 70,000 in U.S. manufacturing and confectionary jobs. Latin America provides 28 percent of the raw cacao upon which the U.S. confectionary industry relies. The value of U.S. imports of raw cacao beans from the Latin America and Caribbean region grew by 146 percent from 2010-2015: from \$163 million (13 percent of total U.S. cacao bean imports) to \$401 million (28 percent). In 2016, Peru was the fifth largest supplier of cacao to the United States. Peru exported 80,000 metric tons of cacao worth \$284 million, up from \$146 million in exports just three years prior. U.S. businesses bought 10 percent of total Peruvian cacao exports by volume and 15 percent by value in 2016.

Mexico (continued from page 1)

2014 energy auctions began. All but one of the seven blocks are in the gas rich Burgos Basin across the border from Texas. CNH limited participation to companies with proven oil and gas operator experience on at least three projects since 2012 and investments of at least \$250 million in exploration and extraction. Contracts include local content requirements of 26 percent during the exploratory and evaluation periods and 27 percent in the first year of development, increasing annually to 38 percent by 2025.

Some analysts predicted the natural gas auction might be less attractive due to low global gas market prices, but bidding proved fierce for some of the blocks, with winners paying the government

an extra \$88 million to break bid ties. The blocks, which range in size from 349 square kilometers (km²) to 479 km², are expected to contain both dry and wet natural gas, the latter composed of ethane, propane, and butane, all marketable to the petrochemical industry.

Round 2.3 auctioned another 14 onshore exploration and extraction blocks spanning the Burgos, Tampico-Misantla, Veracruz, and Cuencas del Sureste (Southeastern Basin) areas. Most of the blocks are smaller than those in Rounds 2.1 and 2.2, averaging 185 km², with the smallest block estimated at 72 km². The 14 blocks hold a projected 251 million barrels of oil and gas equivalent. All bidders

(18 operators and 13 financial partners) were prequalified. A Mexican company won the most blocks in round 2.3. Bidding alone, the company took five of 14 blocks.

Several companies that won previous bids are beginning exploration and production on their blocks as other rounds continue. The next auction, Round 2.4, to be held on January 31, 2018, will offer 30 deep-water blocks in the Gulf of Mexico. Rounds 2.2 and 2.3 were the seventh and eighth auctions open to private investors under Mexico's energy reform. CNH has approved a total of 70 contracts from which it expects nearly \$59 billion of investment to flow into the Mexican energy sector in coming years.

Canada: Infrastructure Spending Plan Unveiled

Canada's Ministry of Transportation unveiled a C\$2.1 billion trade and transportation infrastructure plan on July 4. The announced spending plan, named the National Trade Corridors Fund (NTCF), points to the need to address infrastructure related bottlenecks at bridges, tunnels, and ports in order to facilitate trade.

The C\$2.1 billion is part of the C\$10.1 billion Trade and Transportation Corridors Initiative (TTCI) that will fund trade and

transportation projects over 11 years. The TTCI was laid out in the Trudeau government's 2017 budget. Approximately C\$5 billion of the C\$10.1 billion will be allocated to the Canada Infrastructure Bank established to leverage both public and private capital for infrastructure spending.

The initial projects will range in size from C\$5 to C\$25 million and applicants are asked to submit expressions of interest by September 5. In addition to investing in trade

related infrastructure, the NTCF will provide C\$400 million to fund transportation projects in Canada's three Northern territories—Yukon, Northwest Territories and Nunavut—and to National Airport System (NAS) airports with annual passenger volumes below 600,000 (small NAS airports). Calls for proposals for these projects specific to Canada's northern territories will be issued starting in 2018.

Recife: U.S. Commercial Potential in Renewable Energy On An Island Paradise

The U.S. Consulate General in Recife used a State Department Office of Global Partnerships grant to support the state of Pernambuco's initiative to turn Fernando de Noronha, an island paradise off the state's coast, into the first 100 percent renewable energy location in the country, and one of the first in Latin America. The grant aimed to strengthen public-private relationships and showcase innovative U.S. clean technology. As a result of U.S. government engagement, several U.S. companies are working on potentially multi-million dollar deals on the island.

The first phase of the Fernando de Noronha project included a three-day conference in April, organized in collaboration with the U.S. Foreign Commercial Service, California-based non-profit Renewables 100 Policy Institute, and the State of Pernambuco. The event attracted more than 200 participants and highlighted commercial opportuni-

ties in Brazil's renewable energy sector, with a special focus on Fernando de Noronha. As part of the second phase, on July 8-11, eight U.S. specialists from the public and private sector visited the island to assess the energy transformation project and identify U.S. commercial opportunities. The Fernando de Noronha program included visits to existing solar plants, the desalination plant, the waste management plant, as well as briefings on the infrastructure and regulatory framework on the island.

The U.S. delegation identified eight potential areas for commercial opportunities:

Solar energy generation. An innovative U.S. company is working with CELPE (the electrical utility for the island) on a multi-million dollar deal to provide a 3MW clean energy storage solution that will significantly reduce the island's reliance on diesel. The island already has two solar plants that combined account for 1MW or 10 percent of the island's energy demand.

Energy Efficiency. As a UNESCO world heritage site and ecotourist destination, the island has a market for energy efficiency products and services from LED bulbs to green architecture.

Microwind. U.S. and Brazilian experts alike agreed that solar energy would not be sufficient to meet energy demand and CELPE is interested in supplementing solar with microwind.

Electric Vehicles. The State Secretary of Environment and Sustainability negotiated special low-interest financing with a private bank and is looking to partner with an electric vehicle manufacturer to provide affordable alternatives to the nearly 1,300 vehicles on the island.

Biogas. Fernando de Noronha is already experimenting with using organic waste to supplement the energy supply, but this source is underutilized.

Biofuel. Commercial flights to and from

the mainland generate more than fifty percent of the carbon emissions for the island. Consequently, the state government is focused on helping the island's commercial carriers source biofuels. Brazilian airline GOL is in conversations with a U.S. biofuel company starting operations in Northeast Brazil.

Water nexus. The primary source of water on the island is the desalination plant, which also consumes the most energy on the island and is in dire need of an upgrade. The U.S. Consulate is working with UCLA and Compesa (the water agency) to identify specific products and services that U.S. companies could provide to make the plant run more efficiently.

Integrating solutions. Cutting-edge U.S. technology companies are interested in supporting the island's transformation by deploying innovative technologies to integrate new power generation systems.

Montreal: The Next Silicon Valley of Artificial Intelligence?

More than 150 AI researchers work in Montreal, one of the largest concentrations of experts in the world. The field includes academic institutions and startup companies, as well as multinational companies that have opened offices in Montreal to tap into AI talent. Montreal benefits from low energy costs for powering large data centers and a high concentration of academic institutions with AI expertise. The first Montreal AI Forum was held in May, bringing together AI experts from around the world for collaboration during the annual Montreal-based C2 (Commerce + Creativity) conference.

In September 2016, the Canadian government granted \$75 million to the Université de Montréal, HEC Montréal, and Polytechnique Montréal to create IVADO, an institute for data science and artificial intelligence. IVADO has a network of over 1,000 academics, who seek to link academic research with the business needs of organizations and effectively create processes for the utilization of big data. Data scientists are at the forefront of AI projects, given the need for AI to process large data sets in order to “learn.”

Many local AI experts envision AI growing in the healthcare, manufacturing, cybersecurity, financial technology, and transpor-

tation sectors in the next ten years – citing examples from health care, including improved detection of cancer in image scans, to transportation and autonomous vehicles, to cybersecurity and tracking hacker behavior. They underscored the key role of government in creating flexible laws around the use and protection of proprietary data to allow AI companies to access aggregate datasets. In Quebec, the development of AI in the healthcare sector is impeded by the fact that researchers can currently only gain access to data from a limited number of clinical study patients, rather than the patient population as a whole. Some AI companies have largely

avoided the healthcare sector in favor of cybersecurity and other sectors where data is more readily available.

In addition to the \$75 million invested by the federal government to establish IVADO, Quebec will invest \$100 million over five years to create an AI cluster, with the goal of positioning Montreal and Quebec as key players in AI research and innovation. In March 2017, Canada allocated \$93 million to launch the Pan-Canadian Artificial Intelligence Strategy to promote collaboration between AI hubs in Toronto, Kitchener-Waterloo, Montreal, and Edmonton.

Recife (continued from page 6)

Why has Fernando de Noronha, a small island of 5,000 dwellers and 100,000 annual tourists, captured the attention of important U.S. companies? Private sector representatives that participated in the program explained that the island’s

pristine natural beauty and small size along with the state’s political will to support the energy transformation converge to offer an ideal testing laboratory for new clean technology solutions. The island can showcase energy solutions

to be later replicated in other areas and on a larger



Other resources for anyone interested in overseas business news:

For **Caribbean and Latin American Markets**, the Department of Commerce has many resources to assist U.S. firms including market research, trade show calendars, trade delegation calendars, etc. Check out their “Trade Americas” and “Look South” websites:

<http://export.gov/tradeamericas/index.asp>

<http://export.gov/tradeamericas/looksouth/index.asp>



The U.S. Government’s main website to assist U.S. businesses at home and abroad. URL at <http://business.usa.gov/>



The Business Information Database System (BIDS) is a portal built to help U.S. businesses learn about significant international commercial opportunities. The site connects U.S. business to detailed information about each project as well as information to contact U.S. embassies overseas. URL at <http://bids.state.gov/>



The Direct Line program provides a unique opportunity for American businesses, particularly small- and medium-sized enterprises, to engage directly via webcast with U.S. Ambassadors overseas. The program is open to U.S. companies – whether they are already in the country where the Ambassador serves or if they are interested in expanding their businesses there. Webcasts will vary in topic according to the specific needs for business in a given country. URL at <http://www.state.gov/directline/>

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