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FEATURED Q&A

How Can the Americas Curb Methane Emissions?



Methane accounts for 25 percent of current global warming, Drew Nelson writes below. // File Photo: Signa Club

Facing criticism that it has become one of the top per-capita fossil fuel emitters in the world, Trinidad & Tobago is looking to develop methods to curb the venting of methane and other greenhouse gas emissions into the atmosphere, with the help of U.S. oil companies and others in so-called offset trades, according to a report by ClimateWire. How big of a problem have methane emissions become for natural gas-producing nations in the Western Hemisphere? Is Trinidad and Tobago taking the right approach toward lowering emissions? What have other countries and energy companies been doing to lower methane emissions?

Ingo Puhl, co-founder of the South Pole Group: "The whole world—not only the countries in the Western Hemisphere—is now serious about the transition to a low-carbon economy. At present, there is a broad consensus on the fact that climate change is real and will have disastrous consequences if not mitigated, and that the transition to a low-carbon economy is good business. Instead of seeing methane emissions as a problem, the world now agrees that avoiding methane emissions is an opportunity. The right approach toward lowering emissions is to reach out to other companies and countries with existing experience and the necessary resources to realize emission reduction projects. It is also essential to link any such initiatives to the international climate policy under the Paris Agreement. Going forward, Trinidad and Tobago should not limit itself to cooperating only with the United States, but also explore opportunities with other countries—especially the ones that participate in the Global Methane Initiative. The initiative was

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TOP NEWS

OIL & GAS

OPEC Agrees to Modest Cuts in Production

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POWER SECTOR

Mexico Awards Renewable Energy Contracts

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POWER SECTOR

Petrobras Eyes New Strategy in Selling Power Assets

Brazil's Petrobras is trying a new strategy in order to sell its power-generation assets. The change comes under the company's new CFO. Pedro Parente

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Parente // File Photo: Brazilian Government.

OIL & GAS SECTOR NEWS

OPEC Agrees to Modest Cuts in Production

OPEC agreed on Wednesday to reduce oil output for the first time since 2008, Reuters reported. The decision came as Saudi Arabia softened its stance on Iran amid growing pressures due to low prices for oil. The oil cartel plans to lower output to between 32.5 million and 33 million barrels per day from the current level of about 33.24 million barrels per day. OPEC member Venezuela has long pushed for a production cut in order to boost oil prices.

PDVSA Sweetens Bond Swap Offer

Prices for bonds issued by Venezuelan staterun oil company PDVSA rose on Tuesday after the firm sweetened the terms of its debt swap proposal, Reuters reported. PDVSA announced on Monday that it would offer \$1,170 worth of 2020 bonds for those who swap \$1,000 in bonds due to mature in April 2017, and \$1,220 for \$1,000 in bonds maturing in November 2017. "These conditions are very favorable for the swap," said Carmelo Haddad, director of Knossos Asset Management, which specializes in Venezuelan assets. The deal is seen as an improvement over a one-to-one exchange proposed earlier this month, which failed to encourage investors and which Standard & Poor's on Sept. 19 called "distressed" and "tantamount to default." PDVSA hopes the updated exchange will relieve it of 75 percent of its \$7.1 billion amortization budget for next year, freeing up much-needed cash for investment and payments. The firm, which is a major source of funding for the Venezuelan government, has seen revenues plummet due to production shortfalls and low oil prices. Representatives from the company came to a production limitation agreement with other oil-producing nations this week in Algeria, as Venezuela suffers from its worst economic crisis in decades.

PDVSA has guaranteed that it will honor all bond payments regardless of whether investors participate in the swap, which is scheduled to end on Oct. 14.

POWER SECTOR NEWS

Mexico Awards Renewable Energy Contracts

The Mexican government on Wednesday awarded power purchase contracts for 8.9 million megawatt hours per year of electricity from mostly solar and wind generating plants as part of a renewable energy auction, The Wall Street Journal reported. At the auction, companies made bids to sell renewable energy under long-term contracts with state-owned electric utility Comisión Federal de Electricidad,



- Gabriel Salinas

or CFE, starting in 2018. The average price for the contracts awarded is \$33.47 per megawatt hour, much less than the maximum price of \$60 per megawatt hour the CFE would allow. The average price is also lower than the average from the first auction in March of \$41.80 per megawatt hour. "This is good for Mexico. Two of the main goals of the electricity reform are to bring electricity prices down and enhance Mexico's clean fuel generation, and by those standards I think the auctions have been a success," said Gabriel Salinas, a partner at international law firm Orrick, Herrington & Sutcliffe, which represents companies in the auctions and other aspects of Mexico's electricity sector. CFE was the only buyer for the first two auctions, but it is expected that large electricity consumers will participate as buyers in future auctions beginning next year. Mexico currently generates 20 percent of its electricity through clean energy sources, and plans to raise that to 35 percent by 2024.

NEWS BRIEFS

Aruba Allowing Citgo to Reactivate Oil Refinery

Aruba's parliament on Tuesday approved a deal that will allow Citgo to reactivate an oil refinery on the island, Reuters reported. The Houston-based company will renovate and operate the refinery, which has a capacity of 235,000 barrels per day. Earlier reports revealed that Citgo had asked its parent company, Venezuela's PDVSA, to provide \$100 million of the \$685 million required to renovate the refinery. PDVSA has shown growing interest in the Aruba facility as the company faces an increasing risk of losing its refinery and storage facility in nearby Curaçao.

Peruvian Regulator Probing Two Oil Spills

Peruvian officials on Sunday reported two oil spills that happened over the weekend in the Amazon rain forest in the country's north, Reuters reported. Peru's Agency for Environmental Appraisal and Audits (OEFA) confirmed that one incident had occurred near Andoas and another near Monterrico, raising the total to seven spills in the rain forest this year. The regulator is investigating the effects on the local environment and communities, as well as whether the companies followed contingency plans following the spills.

Firefighters Extinguish Blaze on Pemex Tanker

Firefighters extinguished a fire on a fuel tanker belonging to Mexican state-owned oil company Pemex on Sunday, about 30 hours after an explosion aboard the ship ignited the fire off the Gulf Coast port of Veracruz, The New York Times reported. Pemex said all 31 crew members aboard the ship were safely evacuated. The tanker had been carrying 80,000 barrels of diesel fuel and 70,000 barrels of gasoline, but the 558-foot Burgos' double hull helped prevent a spill following the incident.

Petrobras Eyes New Strategy in Selling Power Assets

Brazil's Petrobras is trying a new strategy in order to sell its power-generation assets, Folha de S.Paulo reported Tuesday. The state-run company failed in its attempt to sell its thermal power stations, so it now plans to package its power assets into one company and then sell a larger stake of that company, the newspaper reported. "The idea is to group all the shares 'in the same basket,' " said Petrobras' director of refined gas, Jorge Celestino. He added that the company will reorganize its business plan before trying to sell the stake. Petrobras currently has 20 thermal power stations with 6,239 megawatts of total installed capacity, according to the National Agency of Electrical Energy, or Aneel. Petrobras had attempted to sell power stations and liquefied natural gas import terminals, but attracted little interest. The change of course comes under the company's new chief executive officer, Pedro Parente, who was named head of Petrobras in May. The company intends to continue using the facilities to produce power, but plans to do so in partnership with an investor. Petrobras also is paring down its activity in the petrochemical, fertilizer and biocombustibles sectors and is instead seeking investors for those parts of its business.

Enel Subsidiary Approves South American Merger

Shareholders of multinational electric power corporation Enersis Americas, a unit of Italy's Enel Green Power, on Wednesday approved a merger of all of its subsidiaries in South America except Chile as part of a larger restructuring process, Reuters reported. Enersis Americas will absorb subsidiaries Endesa Americas and Chilectra Americas, provided that shareholders from the two subsidiaries also approve the

move. Endesa and Chilectra have generation, transmission and distribution assets in Peru, Argentina, Brazil and Colombia. The new con-

> The merger is part of Enel's plan to consolidate its Latin America operations.

glomerate will be called Enel Americas. Enel first proposed consolidating its Latin America operations under two subsidiaries, one for its Chilean assets and the other for all other assets in the region. The next step in the restructuring process will be for Enersis Chile, Endesa Chile and Chilectra shareholders to approve the merger of Enel's Chilean assets next week. In related news, Enel on Sept. 23 inaugurated its

1.7-megawatt photovoltaic plant at the La Silla observatory in Chile, SeeNews reported. Enel invested \$3.4 million in the construction of the facility, and said the use of innovative panels at the facility means generation at La Silla is expected to be between 5 percent and 10 percent higher as compared to a conventional PV plant of the same size. The plant will deliver its output to Chile's Central Region Interconnected System and is expected to generate 4.75 gigawatt-hours per year.

Ontario Government Suspends Renewable Energy Purchase Plan

The government of Canada's Ontario province on Tuesday announced it will "immediately suspend" a clean energy purchase initiative

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formed by a group of pioneering countries and energy companies. The research and development of methods to curb methane emissions is thus already available. There is no reason why Trinidad and Tobago should not join and benefit from the experience and funding available through this network to level and avoid its national methane emissions. Engaging with this community and taking action would also produce a net commercial benefit for Trinidad and Tobago."

Drew Nelson, senior manager for natural gas at the Environmental Defense Fund: "The International Energy Agency has noted that 'the potential for natural gas to play a credible role in the transition to a decarbonized energy system fundamentally depends on minimizing [methane] emissions.' Thirty billion dollars of natural gas was estimated to leak into the atmosphere in 2012, representing a significant risk for producers, investors, governments and the climate. Why? Because beyond these lost revenues and energy sources, methane is 84 times more potent than carbon dioxide

over the short term. Methane accounts for 25 percent of current warming, and reducing methane emissions today will create climate benefits tomorrow, while longer-term carbon dioxide reductions are implemented. The



Methane is 84 times more potent than carbon dioxide over the short term."

- Drew Nelson

oil and gas sector is the largest industrial source of methane emissions globally. Canada, Mexico and the United States recently announced their intention to reduce their oil and gas methane emissions by between 40 percent and 45 percent, at a cost of only \$1.52 per ton of CO2e reduced. However, no other country in the Western Hemisphere has shown similar leadership. A 45 percent reduction globally would have the same short-term climate impact as closing

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in order to cut costs, CNBC News reported. The decision will halt the acquisition of 1,000 megawatts of energy from several sources, including wind, hydroelectric, bio energy, solar and energy derived from waste. The province said that it expects to save about \$2.87 billion by stopping the second round of the Large Renewable Procurement (LRP II) process, and that residents can expect their monthly electric bills to be 2.45 Canadian dollars cheaper than projected, all while not adding any greenhouse gases to the grid, according to the government. The move is widely seen as a response to rising electricity costs in the province, which boasts electricity production that is 90 percent emissions-free. Still, clean energy proponents blasted the move, accusing the government of targeting the wrong program. "The cancellation of the Large Renewable Procurement (LRP II) program makes it a scapegoat for pricing when the real culprit for oversupply is the aging Pickering nuclear plant," former Energy Minister George Smitherman, of the ruling Liberal Party, told the Toronto Star. The province says it still has 18,000 MW of online or contracted clean energy.

POLITICAL NEWS

Colombia's ELN Rebels Ready to Enter Peace Talks

Colombia's National Liberation Army, or ELN, rebels said Wednesday that they are ready to enter peace talks with Colombia's government, Reuters reported. The announcement came two days after the government signed a peace accord with the Revolutionary Armed Forces of Colombia, or FARC, rebels. The government and the ELN, which is smaller than the FARC and includes about 2,000 rebels, had announced in March that they would begin talks. However, the negotiations have been stalled since then due to the ELN's kidnappings and attacks on infrastructure. "We're ready for the public phase to continue what was decided on March 30 and find solutions to difficulties," the ELN said in a posting on Twitter. Colombia's government



has said that the ELN is holding at least four hostages. On Tuesday, Colombian President Juan Manuel Santos urged the ELN to free its hostages and enter formal peace negotiations.

Panama Seeking Martinelli's Extradition From U.S.

Panama's government has sent the U.S. State Department a formal request to extradite former President Ricardo Martinelli, who stands accused of using public funds to spy illegally on more than 150 people, Reuters reported Tuesday. Martinelli left Panama early last year and is believed to be living in Miami. Martinelli denies wrongdoing and blasted the Central American country's current government in a posting on Twitter. "Diverting attention with a political persecution from the dullest, most inept and corrupt government doesn't achieve anything for the people," Martinelli said in the tweet. A Panamanian government spokesman said there was no timetable for Martinelli's extradition, as U.S. authorities must consider the request. During his time as president from

2009 to 2014, Martinelli presided over strong economic growth and an infrastructure boom, but his government was marred by corruption allegations. Last December, a federal judge in the United States named Martinelli as one of several people accused in connection with a separate bribery scheme that helped software company SAP sell millions of dollars worth of software in Panama.

Former Peruvian Spy Chief Montesinos Sentenced to 22 Years

Peruvian ex-spy chief Vladimiro Montesinos has been sentenced to 22 years in prison for the forced disappearances of a professor and two students in 1993, BBC News reported Wednesday. The three were killed while in detention, and their bodies were burned in an oven in the basement of the intelligence agency. The trial confirmed the existence of a secret detention center located at the army headquarters in Lima, the prosecution said. "These crimes, which occurred in the basement of the army intelligence service, can't but prove

NEWS BRIEFS

Top U.S. Diplomat Heading to Caracas: Maduro

Venezuelan President Nicolás Maduro announced late Tuesday that a top U.S. diplomat would travel to Caracas in an attempt to ease tensions between the two countries, the Associated Press reported. The announcement followed Maduro's meeting with U.S. Secretary of State John Kerry on the sidelines of the signing of the Colombian government's peace accord with the FARC rebels. The visit would be Undersecretary of State for Political Affairs Thomas Shannon's second visit to the South American country this year.

Cisco Systems to Invest as Much as \$4 Bn in Mexico

California-based information technology company Cisco Systems is planning on spending as much as \$4 billion in Mexico through 2018 in a move to expand production and create new jobs, Bloomberg News reported Tuesday. The move comes as Cisco has cut its overall global workforce by 7 percent. The \$4 billion in spending will lead to 270 new direct jobs and 77 related positions, according to a statement from the Mexican government. The decision helps to bolster Mexican President Enrique Peña Nieto as he looks to show that his economic reforms are attracting foreign investment.

Brazil's Economy Has Begun Rebound: Analyst

Brazil's economy has likely started to rebound from its worst recession since at least the 1930s, Moody's Investors Service analyst Samar Maziad said Tuesday, The Wall Street Journal reported. The now-completed impeachment process against former President Dilma Rousseff has lifted some of the uncertainty surrounding the country's political and economic situation, Maziad said.

the existence of a systematic policy of violating people's human rights," prosecutor Carlos Rivera said. He added that it was likely many more individuals were killed in the basement at the hands of Montesinos. The former spy chief is already serving a sentence for crimes against humanity, and he is largely seen as the force behind the government of former President Alberto Fujimori, who was in power from 1990 to 2000. Fujimori is also in prison for human rights abuses, including authorizing killings by death squads. A court in Peru found former Army Chief of Staff Nicolás Hermoza Ríos quilty of the same crime as Montesinos.

Nicaragua Freezes Funding Level to Opposition Mayors

Nicaragua froze the level of public funding to six cities that have mayors from the opposition PLI party while substantially increasing funding for five cities controlled by the ruling Sandinista party, La Prensa reported Tuesday. Opponents say there is no legitimate reason for the funding disparity, accusing the government of punishing political dissidents through last week's budgetary reform. Sandinista lawmaker Wálmaro Gutiérrez refuted the claims, saying "these decisions are not made based on political patronage," El Nuevo Diario reported.

ECONOMIC NEWS

Chile to Propose Tighter Budget

Chile's government is expected to propose a public spending increase of 3 percent or less for 2017, an amount that would be the lowest annual increase since the 1990s, Reuters reported Tuesday, citing legislators and economic analysts. Finance Minister Rodrigo Valdés is set to make the announcement later this week. The belt-tightening comes amid a weak economy and lower prices for copper, the country's main export. "The discussion is already

closed. The minister told us it won't be above 3 percent," said Pablo Lorenzini, a member of the Chamber of Deputies' finance committee. The expected increase in the current year's budget is 4.2 percent, Reuters reported. The 2017 budget will likely focus on core demands of Chileans, which include spending on education, health care and policing. However, many of President Michelle Bachelet's supporters are likely to be disappointed, as they have pushed for higher levels of spending in those areas. Earlier this month, Chile's central bank forecast next year's economic growth to be between 1.75 percent and 2.75 percent.

U.S. to Expedite Sharing of Tax Data With Argentina: Lew

U.S. Treasury Secretary Jacob Lew announced on Monday that the United States will immediately move to expedite the process of sharing tax information with Argentina, Reuters reported. During a visit to Buenos Aires, Lew said the initiative will help identify Argentines with assets in the United States, which the Argentine government views as crucial to its tax amnesty program. The program guarantees a maximum 15 percent tax rate for assets repatriated to Argentina, aiming to encourage Argentines to disclose some of the \$400 billion in undeclared assets they hold abroad. The government of Argentine President Mauricio Macri hopes that the funds will bring in large amounts of tax revenue while giving a much-needed boost to investment in the country. Lew, who is also visiting Brazil, Colombia and Mexico this week, added that he has invited Argentine officials to Washington to discuss a bilateral tax treaty. Since Macri's election in late 2015, the Obama administration has praised the Argentine government and its efforts to reopen the country's economy to investment. "It is important for the government to stay the course," Lew added after meeting with Macri and Argentine Finance Minister Alfonso Prat-Gay. The U.S. Treasury Department will also support Argentina's efforts to combat illicit financing and money laundering, Lew said.

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one third of the world's coal-fired power plants. Oil and gas methane reductions are an untapped opportunity to prevent climate change, coming with the benefit of not requiring structural changes to the oil and gas industry. If Trinidad and Tobago wants its gas to be part of a lower carbon future, it must quantify and, if necessary, reduce its methane emissions. Smart, targeted regulations have worked in the United States—and soon in Canada—and can be a model for how Trinidad and Tobago takes advantage of this opportunity."

Thackwray "Dax" Driver, president and CEO of the Energy Chamber of Trinidad & Tobago in Point Lisas, Trinidad:

"Discussions on global warming tend to concentrate on carbon dioxide emissions, but other greenhouse gases, or GHG, including methane, play a major role in climate change. The Energy Chamber of Trinidad and Tobago has been examining the issue of methane emissions from mature oilfields. In the mature onshore oilfields in Trinidad. there are many oil wells that only produce very small volumes. They also produce natural gas, or methane, which is vented into the atmosphere. Each well may only produce small volumes, but collectively this can add up to a significant GHG impact. Gathering this natural gas, compressing it and connecting it to the national gas pipeline network is an uneconomic process at current gas prices. However, if companies were able

to gain 'carbon credits' for preventing this methane from entering the atmosphere, this could change the economics and make the installation of the gas-gathering systems economic. We have been working with many stakeholders to connect with existing carbon markets in order to find a market for these potential carbon credits. The methodology for assessing and verifying the volumes of GHGs offset by a project such as this has been carefully developed and subject to considerable peer review. In addition to the gas gathering project, there are many other opportunities to significantly reduce our GHG emissions, especially from the power-generation and industrial sectors. Almost all of Trinidad and Tobago's power generation currently comes from gas-fired power stations. While natural gas is the cleanest and lowest GHG-emitting fossil fuel, there is a significant opportunity to reduce GHG emissions by increasing the efficiency of power generation and reducing demand through energy efficiency programs. Again, linking with existing carbon markets could help to make the investments needed in energy efficiency projects economic and lead to reductions in our GHG emissions. Trinidad and Tobago made clear commitments to the international community in its Intended National Defined Contribution (INDC) submission to the Paris climate talks. The country's INDC included a commitment to actively pursue further reductions through the development of a Caribbean Carbon Market linked to an international market."



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