LNG

PROCESSING

INDIA:

TOYO awarded LNG regasification plant project in India

Toyo Engineering Corporation announced the company has been awarded a regasification plant project by Petronet LNG Ltd, India. The plant is to be constructed at Dahej, located in the State of Gujarat on the west coast of India, **to expand the LNG receiving capacity from 10 million tons to 15 million tons per year**. Toyo-India will lead EPC work on a turnkey basis, from engineering to construction and commissioning. The plant is scheduled to be completed at the beginning of 2017.

Construction of Dahej Terminal (original capacity: 5 million tons per year), the first LNG receiving terminal in India, was awarded in 2000 to a consortium consisting of current IHI Corporation, TOYO, ITOCHU Corporation, and Mitsui & Co., Ltd. In 2006, a consortium of IHI and TOYO received an order again to expand the receiving capacity. (March 11, 2014)

03/12/2014

SUPPLIES - IMPORTS - EXPORTS

CANADA:

BG Group may delay final decision on Prince Rupert LNG project in B.C.

BG Group is likely to put off by a year a decision to build a natural gas-export terminal on British Columbia's northern coast as energy companies weigh the implications of a proposed **tax on plant income**. BG giant is assessing whether to move forward with a $16-billion export plant at Ridley Island capable of processing up to **2.9 billion cubic feet of gas a day**.

It has teamed up with Spectra Energy Corp. on a pipeline to the coast, where major energy companies are jockeying to build refrigeration complexes that chill gas into a liquid fuel for export to higher-priced markets in Asia. BG had targeted 2016 to begin construction on the plant, with exports starting in 2020. "Realistically we're looking at about 2017" for a final investment decision, he said, pushing first cargoes back two years to "about 2022" Roger Ayton, director of investment appraisals at BG's North American unit, said.

The delay is the latest sign a drilling boom touted by the westernmost province as key to eliminating debt and creating thousands of jobs may evolve at a slower clip than advertised. B.C. Premier Christy Clark aims to have three of the dozen or so liquefied natural gas plants proposed for the Pacific coast up and running by 2020. But several export players have issued stark profit warnings in recent weeks, underscoring how global concerns about rising costs and flat oil prices could slow developments on the West Coast. BG last month took a US$2.4-billion charge after it wrote down the value of assets in Egypt and the United States, blaming lower production volumes and commodity prices.

Industry experts say B.C.'s proposed **LNG tax may jeopardize investment decisions** by companies already under pressure to cut spending on mega-projects. Royal Dutch Shell, whose new CEO has abandoned spending targets and cancelled plans to drill in Alaska's Arctic, warned the levy — starting at 1.5% on plant profits and climbing to 7% over time — risks squeezing margins and killing development long before drill bits hit the ground. "That's not just a shallow threat. It's a real issue," Mr. Ayton said. (February 27, 2014)

03/03/2014

AUSTRALIA:

Chevron looks for new LNG Gorgon demand

Chevron has commenced the marketing of new gas sales contracts that would support an expansion of its huge Gorgon LNG plant in the Pilbara region of WA, according to a report in the Australian Financial Review. Senior vice president for the US energy major's upstream business, Jay Johnson, told investors the **expansion had more than 11 trillion cubic feet of gas resources available**.

The company says that initial stage of Gorgon is now 78% complete.

Chevron is forecasting substantial growth in LNG demand with **consumption expected to double by 2025**. They believe this would require more than 100 million tons of new LNG supply on top of the projects already under construction in Australia, the US and other parts of the globe. (March 13, 2014)

03/13/2014

ESTONIA:

Estonia and Finland reach agreement on LNG terminal

Ending the spat over location of a liquefied natural gas terminal (LNGT), officials in Finland and Estonia have OK'd a USD$690.6 million plan to build two separate LNG terminals - one in Finland and the other in Estonia. The two countries also signed a letter of intent concerning construction of the Balticconnector, a USD$130 million natural gas pipeline that will connect the two states. The decision was announced recently and came amidst concerns that the Baltic nations of Estonia, Latvia, Lithuania and Finland do not have direct access to the European Union's LNG market.

In accordance to the agreement, the technical specifications and peculiarities as well as the economic plan of the strategic project must be submitted to the European Commission by the end of May. Meeting the deadline will secure the countries' participation in the Connecting Europe Facility, an EU project aimed at creating trans-European networks for energy, telecommunications and transport, in which up to 50% of the project costs are expected to come from the EU structural funds.

According to the agreement, the Estonian and Finnish LNGT developers will cooperate while constructing the terminals on both coasts of the Gulf of Finland. According to the original plans, there was supposed to be one large regional terminal, but Estonia and Finland could not agree on its location. To satisfy the row, the European Commission hired Booz&Company, a consulting firm, to assess what location is the best for construction of the Baltic region's LNG terminal after the Baltic States were not able to decide themselves.

Meanwhile, Lithuania had earlier secured EU support in building its LNG terminal. The christening of the floating vessel took place a couple weeks ago in South Korea. Notably, Latvia has also not given up intention to pursue building of its own liquefied natural gas terminal. Evita Urpena, spokeswoman of the Ministry of Economy, emphasized that the November 2012 Booz&Company study indicated all the countries - Estonia, Finland and Latvia - are potentially suitable as a LNGT location. "Latvian terminal was equally evaluated as a good option, but it had several lower indicators...The study also evaluated several LNG terminal options in Latvia's Ventspils and Riga. Those projects are currently at the different stages of development...The ministry is positive about LNG terminal in Latvia," Urpena said. (March 10, 2014)

03/10/2014

KUWAIT:

Foster Wheeler contract Kuwait LNG import and regasification terminal

Foster Wheeler announced recently that a subsidiary of its engineering and construction group has been awarded the **pre-front-end engineering design and the front-end engineering design contract** by Kuwait National Petroleum Company for a new onshore LNG import and regasification terminal to be built in Kuwait.

Foster Wheeler noted the company previously completed conceptual and detailed feasibility studies for the terminal, to assist in the selection of the most suitable technology and location for the new terminal. The new terminal will have a design send-out capacity of approximately **1,500 million standard cubic feet per day** (MMscf/d) of gas, with four full-containment LNG storage tanks, each of 180,000 cubic meters. The design will also allow for **future expansion of up to 3,000 MMscf/d and the installation of a an additional four LNG storage tanks** of the same capacity as the initial four tanks. Foster Wheeler will work with a local partner in executing this work, which is scheduled to be completed in October 2014. (March 4, 2014)

03/05/2014

INDONESIA:

Petronas signs LNG supply contracts with Taiwan's CPC

Petronas' subsidiaries Malaysia LNG Sdn Bhd (MLNG) and Petronas LNG Limited (PLL) have signed two contracts to supply CPC Corporation of Taiwan with a total of up **to 2.6 mtpa of LNG, for a period of six years**. Delivery is scheduled from the second quarter of 2014 and 2015 respectively, Petronas said in a statement.

"Petronas began its LNG supply to CPC in 1995 through a 20-year contract for an annual supply of 2.25 million tonnes of LNG. The signing of the new contracts today is expected to further strengthen the ties between the two companies," the company said.

MLNG operates the Petronas LNG Complex in Bintulu, one of the world's largest LNG complexes operating on a single site. PLL is a global LNG trading arm for Petronas. (March 5, 2014)

03/06/2014

WORLDWIDE:

Ship glut burdens LNG tanker market, slashes profits

Deliveries of new gas tankers have created a glut that is threatening to tip some operators into losses, just as other shipping markets emerge from their worst downturn in decades.

The LNG tanker market was until recently the only bright spot in an otherwise depressed freight industry. A global surge in the demand for gas, led by Japan in 2011, boosted trade, tied vessels to longer routes and drove rental rates to record highs. But the 119 new carriers ordered from 2011 will have **expanded the fleet by over 30% by end-2017**. As tankers leave the shipyards, **delays in construction of new LNG export plants and erratic global gas output have curtailed demand for them**.

Earnings have halved to around $70,000 per day over the past year, leaving only a thin profit margin. Owners that relied on financing to buy new vessels may be barely covering their debt payments.

Industry analysts warn of a still deeper slump ahead as attempts by owners to delay deliveries of new vessels could result in a surge of additional capacity by year-end. Thirty-two vessels were delivered to the global fleet this year, and another 63 are expected over the next two years. "It is generally accepted that day-rates are not going back to 2011-2012 levels this year as there are just too many vessels available in the market," said Jon Skule Storheill, chief executive of Norwegian ship owner Awilco LNG. "We need to see more LNG volumes on the water as well as some older vessels disappear first," he added.

The lower returns are putting pressure on ageing vessels, known as Old Ladies, to retire, given their higher costs for maintenance, upkeep and fuel. Data from maritime analysis firm VesselsValue.com showed that 13 LNG tankers have been scrapped since 2010. Another 42, which are 30 years or older, are candidates for scrapping, Stavseth said. (March 11, 2014)

03/12/2014

SPAIN:

Spanish liquefied natural gas for ships studies receive EU support

The European Union will co-finance with a little over €1 million from the TEN-T Programme a series of studies to help make the LNG supply for ships a reality on the Spanish Mediterranean coast, EU said in its press release.

The studies, which were selected for funding under the 2012 TEN-T Annual Programme's priority on new technologies for transport infrastructure, aim to overcome the existing barriers for developing a LNG bunkering supply chain in the region. LNG is rapidly emerging as a more environmentally friendly fuel for the shipping sector and its uptake is encouraged by the European Union.

The studies will address the transition of **both maritime fleets as well as port facilities**, reducing the time-to-market of the LNG bunkering service in the Spanish Mediterranean ports. The technical, operative, economic and legal aspects of LNG bunkering vessel operations will be analyzed and there will be an evaluation and design of an optimized LNG supply chain in key Spanish ports of the Mediterranean. (February 28, 2014)

03/04/2014

UKRAINE:

Ukraine crisis new rallying point for U.S. energy export backers

House Speaker John Boehner and other supporters of U.S. energy exports pounced on the crisis in Ukraine to pressure the Obama administration to **speed approval of LNG exports**, saying doing so could help keep Russia in check. **LNG supplies from the United States could help some Western European countries react to any Russian aggression in coming years**, but the added transportation costs could make the fuel too expensive for others in Central Europe who are likely to remain dependent on their neighbors, energy experts said.

As Russian President Vladimir Putin's forces tightened their grip on the Crimea peninsula in the Ukraine, the moves heightened concerns that the crisis could worsen and that Russia could slash its shipments of natural gas to Europe, nearly half of which are sent through Ukraine via pipeline.

The view that President Barack Obama could brandish energy exports as a tool to deflate Russian power over Europe is one espoused by many in U.S. foreign policy circles. "The U.S. energy transformation of recent years gives us options we didn't have several years ago. So we ought to explore using those options," said Richard Haass, the president of the Council on Foreign Relations think tank.

U.S. LNG exports are not expected to begin in earnest until at least 2017 as many proposals require more approval and billion-dollar projects need to be built or expanded. In the meantime, supplies from other global exporters, including Australia, Canada, and Qatar, could rush in to help fill European demand.

Since 2011, the U.S. Department of Energy has conditionally approved six proposals to export LNG to countries with which the United States does not have free-trade agreements. Bush, and other supporters of unfettered exports have classified the DOE's approval rate as a "go-slow" approach, especially given the lead time between approval and actual exports.

The approvals total some 8.5 billion cubic feet per day of LNG, or more than the 6 bcf per day Russia exports through pipelines through the Ukraine to Europe. More than 20 U.S. projects await full federal approvals. But it is uncertain how much of that would be available to Europe as countries in Asia have entered contracts to buy much of it.

The Ukraine conflict has breathed new life into bills introduced in the Senate and House of Representatives in early 2013 that would force the DOE to speed its approvals for LNG exports to Japan and to NATO allies. The legislation, called the Expedited LNG for American Allies Act, would also allow the State Department to intervene, expediting approvals if it was determined to be in the national interest.

U.S. Representative Fred Upton, the chairman of the House Energy and Commerce Committee, recently met with officials from Lithuania, Hungary and Poland who asked when U.S. LNG would be available. Upton said that he would work to advance legislation. The DOE's approval process is "unnecessarily putting our allies at the mercy of Vladimir Putin." Countries such as Germany and Austria might benefit from using U.S. LNG shipments as stop-gap measures in times of crisis or supply dislocation. But others in central and southern Europe, such as Bulgaria, Hungary and Greece, may remain mostly dependent on Russia, an expert said.

"It's not enough to just get the gas there, it's got to be at a price that governments can afford," said Brenda Shaffer, an energy security expert. She said U.S. LNG, after liquefaction, regasification and shipping, may be too expensive for countries farther from the United States. Many of those countries could do well to increase their storage capacity of gas to shield against supply disruptions, she said. "I see **storage as important, if not more important than diversification**," of supply for European countries, Shaffer said. (March 4, 2014)

03/05/2014

PRICE

ASIA:

Will LNG prices in Asia continue to be oil-linked?

The simple answer to that question is that there is no simple answer. Historically, LNG prices were linked to oil because LNG was displacing oil and that practice continued until US LNG export projects were proposed. Buyers from the US export projects will get **LNG based on Henry Hub gas prices** because in most cases they will be responsible for buying US gas and transporting it by pipeline to their contracted export projects to be liquefied.

That access to those Henry Hub-priced supplies has spurred buyers to seek gas-indexed prices in their new purchase contracts, displacing traditional oil-indexed prices. A number of buyers, especially in Japan, are pushing proposed British Columbia export projects to use the US benchmark Henry Hub gas price as the index for LNG. “The aim is to link 100% to Henry Hub prices, rather than JCC [Japan Customs Cleared] as has been the custom globally,”… “but there will be some options offered to Canadian and US producers of linking 20% of that price to crude oil and the remaining 80% being still linked to gas.” ,” Hiroshi Hashimoto, a senior gas analyst with the Institute of Energy Economics of Japan said.

Buyers want prices indexed to the Henry Hub because they think they’re paying too much for LNG. Japan, for example, was already the largest LNG market in the world before shutting all its nuclear power plants after the Fukushima nuclear plant disaster in 2011. Japan then needed to boost its LNG purchases to make up for the lost nuclear generating capacity and incurred its first trade deficit in more than 30 years, which has continued to grow since.

But **linking LNG prices to Henry Hub prices won’t guarantee prices lower than oil-indexed prices**. It depends on the oil price, the percentage of the oil price used as an index, and the Henry Hub gas price. If LNG is indexed to gas at 12.5% to 13.5%, the delivered price can compete with the delivered LNG price of US Gulf Coast LNG indexed to the Henry Hub price, depending on the oil and Henry Hub prices, said Wolfgang Moehler, IHS Director of Global LNG. Others have pointed out that LNG indexed to Henry Hub prices of $6/MMBtu would be equal to LNG indexed to oil at $80/barrel.

Volatility is also an issue when choosing a price index. Henry Hub gas prices can be more volatile than oil prices. Last month, Henry Hub prices went from less than $4.80/MMBtu to more than $6/MMBtu and then dropped lower than $4.60/MMBtu again in about two weeks.

Buyers must also remember that an export project will not be built unless the developers have already sold most of the capacity under long-term deals with prices high enough to pay for the multi-billion-dollar projects, whether those prices are indexed to oil or gas. So the bottom line is: buyers have to pay if they want to play. (March 7, 2014)

03/10/2014

CONSUMPTION

WORLDWIDE:

Total executive betting on slight growth in demand

Europe is only part of a global market, something that, in fact, does not really exist, according to Philippe Sauquet, President, Total Gas & Power, who explained there were several different regional gas markets with very different parameters and features to delegates at the European Gas Conference in Vienna, Austria.

Mr. Sauquet showed the supply-demand compound annual growth rate until 2030 for North America (1.8%), Europe (1.3%) and Asia (4%). While regions like Asia and North America had growing gas demand, he was still betting on the slight growth of gas demand in Europe, with LNG the fastest growing segment. The connection between these markets was important. His slide depicted the fact that most of LNG demand came from “traditional Asia” - Japan, South Korea and Taiwan; “other Asia” made up most of the growth in the future.

A huge triangle remained in a graph of LNG supply, showing that breakeven of potential projects to fill that area required prices of $12-14Mbtu. He showed a range of LNG project breakeven levels, from Papua New Guinea ($9/Mmbtu) to Australia CBM ($16/Mmbtu), commenting, “US LNG might be a real game changer and will maybe contribute. Other projects like East Africa and Northern Australia (FLNG) need to have higher prices than are on the market to justify them.”

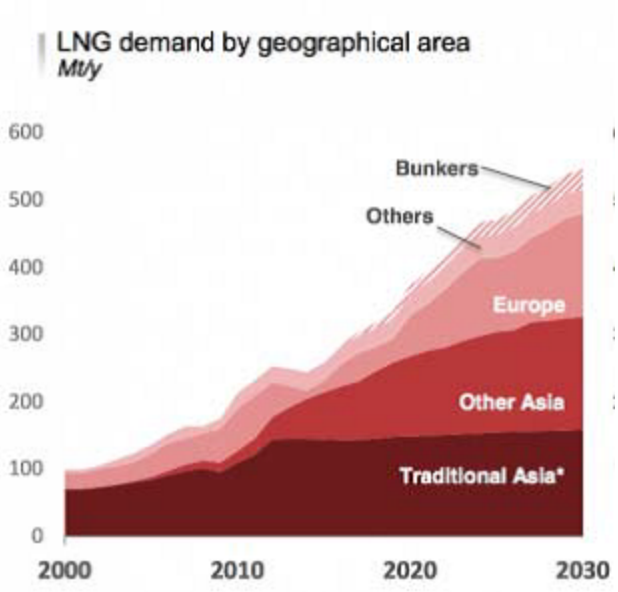
Regarding the situation of gas today, he remarked, “You could think that we are in a tricky world where gas was insured and we can relax and just wait for the customers to ask us for supply. Surely the situation today is critical: we have discussed the possibility of flat economic development in Europe, and are seeing the decrease of gas market share in the power mix.”

“Is gas competitive?” His answer was "no." According to Mr. Sauquet, when one compared a variety of energy sources – gas, nuclear, coal, offshore wind, solar PV, onshore wind – nuclear might be cheaper.

“How can we compete on a full cost basis?” Among those, his presentation showed that the fossil fuel options had CO2 costs (gas' much lower than coal's), while the renewables required similar back-up generation costs. Onshore wind was the only renewable power generation source in the same low range as nuclear, CCGT and coal, while solar PV and offshore wind cost nearly twice as much. He noted that coal was still “clearly competitive, a cheap fuel,” but said he still remained optimistic.

One real constraint, according to him, was climate change. The Emissions Trading System was designed to achieve EU climate goals via either replacing coal via gas or building new capacity; the latter option was no longer necessary, he said. However, countering any thought that TOTAL might be anti renewables, he said the company had invested in them, but subsidies could not be justified.

By stopping all measures other than the ETS, suggested Mr. Sauquet, the 2020 CO2 goals could be reached, raising gas demand and resulting in savings to the tune of USD 40-90 billion in Europe. (March 3, 2014)


LNG demand by geographical area
Mt/y
600
500
400
300
200
100
0
2000
2010
2020
2030
Bunkers
Others
Europe
Other Asia
Traditional Asia*

03/05/2014

GTL

PROCESSING

UZBEKISTAN:

Uzbekistan intends to attract JOGMEC in construction of GTL-plant

Uzbekistan plans to attract Japanese national corporation of oil, gas and metals (JOGMEC) in construction of a plant for production of synthetic fuel in Kashkadarya. JOGMEC corporation will decide by summer whether it will participate in the construction of the plant through technological assistance or investments.

Uzbekneftegaz, South African Sasol and Malaysia's Petronas signed in November 2009 founding documents to establish a joint venture Uzbekistan GTL for construction of GTL-plant to produce synthetic fuel on the base of Shurtan Gas Chemical Complex. Feasibility study was prepared by French Technip.

The plant will **process 3.5 billion cubic meters of gas and produce 863,000 tons of diesel fuel, 304,000 tons of jet fuel, 395,000 tons of naphtha and 11,200 tons of liquefied gas**. A joint venture OLTIN YO'L GTL was established for implementation of the project. Reportedly, the project will be completed in 2017. (March 4, 2014)

03/06/2014

NATURAL GAS

EXPLORATION

CHINA:

China discovered 616.4 Bcm of gas reserves in 2013

China discovered around 616.4 bcm of natural gas reserves in 2013, a report by the Ministry of Land and Resources said. According to the ministry, 381.9 bcm of natural gas can be exploited with the current technologies.

Country’s natural gas production last year stood at 117.6 bcm, rising 9.1% year-on-year. Hydrocarbon discoveries maintained a strong momentum in 2013 with steady production increase as China strengthened its exploration efforts and made breakthroughs, said the ministry. (March 2, 2014)

03/03/2014

PAKISTAN:

Jura Energy announces gas discovery in Giddy Block

Jura Energy Corporation announced a commercial gas discovery at the Maru East-1 exploration well in the Guddu block. The Maru East-1 well was completed in the Pirkoh Limestone Formation of Eocene age. During short duration post-stimulation test on 32/64 inch choke size, the well flowed gas at a rate of 3 MMcf/d with wellhead flowing pressure of 450 psi and a heating value of approximately 700 Btu/Scf.

The Maru East-1 well is located approximately 1.5 Km from existing Guddu pipeline infrastructure. Anticipated future production from the Maru East-1 discovery is expected to be entitled to a gas price of US$6 per MMBtu under Pakistan's Petroleum Policy, 2012. (March 6, 2014)

03/06/2014

TANZANIA:

Statoil's Zafarani reservoir in Tanzania Block 2 successfully tested

Statoil and co-venturer ExxonMobil announce the results from their first drill stem test in the Tanzania Block 2 offshore discoveries. The data acquired is important to reduce technical uncertainties in a possible future Tanzania offshore and LNG development.

The Zafarani-2 operation tested two separate intervals and flowed at a maximum of 66 million standard cubic feet of gas per day, constrained by equipment, and confirmed **good reservoir quality and connectivity**. The drill stem test operation was performed through a re-entry in the Zafarani-2 well, in 2,400 metres water depth and approximately 80 kilometers off the coast of southern Tanzania.

'We are now working constructively with our co-venturer ExxonMobil, Blocks 1, 3 & 4 and the Tanzanian authorities to progress the plans for a joint LNG plant development.'

The production well rate potentials are estimated to be higher than the equipment constrained rates obtained during the test. The Zafarani-2 operation will be followed by the appraisal well Zafarani-3, which concludes the planned appraisal in the Zafarani reservoir, the cornerstone for a field development in Tanzania Block 2.

The Zafarani-2 well test announcement follows the Mronge-1 discovery made in December 2013, which was the fifth discovery in Block 2 and brought the natural gas in place volumes up to 17-20 Tcf. (March 3, 2014)

03/03/2014

TRANSPORT - DISTRIBUTION

BRAZIL:

Brazil's Copergas to open bids for grassroot natural gas pipeline

Researched by Industrial Info Resources (Cordoba, Argentina)--Companhia Pernambucana de Gas (Copergas) (Pernambuco, Brazil), the state-owned natural gas distribution company, will open the bidding process by mid-March 2014 for the installation of a natural gas pipeline that will run from the city of Caruaru to the city of Arcoverde. The project is divided into two phases and has a total investment value of $120 million.

The first phase of the pipeline will run 50 kilometers from Caruaru to the city of Belo Jardim. The first 35 kilometers will have a 12-inch diameter, and the last 15 kilometers will have a 6-inch diameter. The installation will begin in October 2014, and it is expected to be completed in December 2015.

The second phase of the pipeline will run 75 kilometers from Belo Jardim to the city of Arcoverde, although the diameter is not defined yet. The installation is scheduled to begin in January 2016 and will be completed in June 2017.

This pipeline will be able to transport up to **400,000 cubic meters per day** and will provide natural gas to the cities located in the center region of the state of Pernambuco. When the pipeline is installed, Copergas will evaluate the possibility of extending the pipeline to the city of Arapirina. (March 12, 2014)

03/13/2014

BULGARIA:

Bulgaria PM says work on South Stream gas pipeline not stopped

Bulgaria hasn't stopped preliminary work on the Russian-led South Stream gas pipeline project, its prime minister said recently, but Sofia was "closely monitoring" relations between Brussels and Moscow over the turmoil in Ukraine.

The comments at a press conference came after Bulgaria's foreign minister over the weekend said work on the pipeline should probably be suspended for a few days or weeks in view of the political upheaval in nearby Ukraine. "Preliminary work on South Stream is being carried out, it has not stopped. But in the next weeks we will monitor closely the relations between (the) European Union and Russia," Bulgarian Prime Minister Plamen Oresharski said.

Russia has started building the 2,400 km (1,490 mile) South Stream gas pipeline, intended to transport up to 63 billion cubic metres of gas through the Black Sea to southeastern Europe, bypassing Ukraine, by 2018. The aim is to bring up to 15% of Europe's annual gas demand via the Black Sea.

The huge South Stream project is a vital to Russian aspirations to cement its position as Europe's dominant gas supplier. While the project will not solve problems relating to supply diversity, it will increase security of supply by avoiding transit through Ukraine. Disputes between Moscow and Kiev have led to fears for the security of gas transit through Ukraine.

EU member Bulgaria has started preliminary works on the pipeline on its territory, but has repeatedly said its operation should be in line with EU rules. Oresharski said Bulgaria was among the countries most vulnerable to the escalating tensions between the West and Moscow, and did not want to aggravate the situation.

The Balkan country is largely dependent on Russian gas resources, as it meets over 85% of its gas supplies from Russia's Gazprom, its only oil refinery is controlled by Russia's LUKOIL and its only nuclear plant operates two Soviet-build reactors that run on Russian fuel.

Bulgaria has started to build up its gas stocks to prepare for a potential disruption of supplies. The government is reviewing also its existing gas and oil reserves and seeking alternatives to cope with any worsening of the Ukraine crisis, it said last week. (March 10, 2014)

03/11/2014

CHINA:

CNPC to construct gas pipeline in cooperation with Tajiktransgaz

Recently, CNPC through its subsidiary Trans-Asia Gas Pipeline Company Limited, signed an agreement with Tajiktransgaz on jointly establishing a natural gas pipeline company to manage the construction of **Line D of the Central Asia-China Gas Pipeline**.

In November 2011, construction of Line D began after the signing of a 25 bcm/a gas supply increasing agreement between China and Turkmenistan. In September 2013, the Chinese Government signed inter-governmental agreements with Uzbekistan, Tajikistan, and Kyrghyzstan respectively on Line D project.

Currently, the feasibility studies of the project have been completed by Trans-Asia Gas Pipeline Company, CNPC said in a statement recently. According to the company, construction of the Tajikistan section of Line D is expected to **start within year 2014**. By the end of China's 13th Five-Year Plan period (2016-2020) when construction of Line

A/B/C/D and the auxiliary facilities in China are completed, 80 billion cubic meters of natural gas will be transported from Central Asia to China on an annual basis, taking over 40% of China’s gas imports of the year. (March 10, 2014)

03/11/2014

EUROPEAN UNION:

EC to delay Russian South Stream gas pipeline talks-paper

EU Energy Commissioner Guenther Oettinger is to delay talks with Russia on the South Stream gas pipeline project aimed at bringing Russian gas via the Black Sea, in response to the crisis in Crimea.

Oettinger said that Europe was not facing a gas supply problem as a diplomatic solution is sought to Russian troops taking control of Crimea following the collapse of Ukraine's government. Energy stocks are ample and the winter is ending, taking urgency out of heating requirements.

Russia has started building South Stream, which would bypass Ukraine, to bring up to 15% of Europe's annual gas demand to the European Union via the Black Sea by 2018. But the plan of Gazprom has been frequently put into doubt over legal conflicts with the EU, which is seeking to wean itself off over-reliance on Russia for gas supplies. The EC has demanded that Russia aligns pipeline charges and access to its pipelines with the EU's internal unbundling laws and is also investigating Gazprom over allegations that it has priced its gas unfairly.

Russia, in order to secure its customer base in Europe, has already bypassed Ukraine through the North Stream pipeline under the Baltic Sea, which has been operating since 2011. (March 10, 2014)

03/10/2014

IRAK:

Jordan, Egypt, Iraq ink agreements in the field of natural gas transport

Jordan, Egypt and Iraq sealed **two cooperation agreements** in the field natural gas, Jordan's Petra New Agency reported.

The first agreement deals with transferring natural gas through the Arab Gas Pipeline. The second agreement requires connecting the import of LNG project to the gas tube with a link up with the Jordanian Ministry of Energy and Mineral Resources and the National Electricity Company on the one hand and the Jordanian Egyptian FAJR company for Natural Gas Transmission and Supply on the other, added Petra News Agency. (March 6, 2014)

03/07/2014

OMAN - IRAN:

Oman, Iran agree to build submarine gas pipeline

Oman signed an initial agreement with Iran to build a $1 billion submarine pipeline to import gas from the Islamic republic, Oman's oil and gas minister said. The agreement was reached on the first day of a visit by Iranian President Hassan Rouhani, aimed at boosting ties between Tehran and its Gulf ally, and easing tension with other Gulf states. The project should be completed by the end of 2017 and will cost around $1 billion, he said.

It follows a memorandum of understanding signed in 2009 to build a 200-kilometer undersea pipeline. Ramahi said the two sides will begin technical and feasibility studies of the project, including deciding on the path of the pipeline, indicating that it might connect to Sohar industrial port in northern Oman.

Oman and Iran are seeking to expand trade, which reached $1 billion last year, as well as bilateral investments which they expect will top $10 billion by the end of this year, Iranian Ambassador Ali Akbar Sibeveih said recently. (March 12, 2014)

03/13/2014

INDONESIA:

PGN, Bakrie to build 200-km undersea gas pipeline

PT Perusahaan Gas Negara (PGN) and PT Bakrie and Brothers, will begin this month the construction of a 200-kilometer submarine gas pipeline to transmit gas from the Kepodang field in the Muria gas block in Jepara to the Tambak Lorok combined-cycle power plant (PLTGU) in Semarang, Central Java.

The construction of the undersea pipeline would cost about US$240 million, PT Bakrie Indo Infrastructure chief operating officer Erlangga said. The pipeline is the first stage of the national pipeline project, which will be built to transmit gas from Kalimantan to Java. The next stage is to build a pipeline from Cirebon (West Java) to Tambak Lorok (Central Java), and Tambak Lorok to Gresik (East Java) in a bid to connect the network between East Java and West Java Erlangga expect the pipeline will be ready to deliver gas to the power plant beginning in August 2015, with a **capacity of between 116 mmscfd and 120 mmscfd**.

The Kepodang gas-transmission pipeline would be installed at a depth of 50-70 meters in the Java Sea, said Erlangga. The construction of the undersea gas pipeline, however, had been hampered by licensing, Erlangga told, adding that the pipeline construction required 37 permits. Of those permits 80% have been issued.

The head of the Kepodang Project with Petronas Carigali Indonesia, Hendrayana, said that the company had built two gas rigs in the field which would be linked to the undersea gas pipeline.

“We have been constructing the rigs since December last year and they are 60% completed. The offshore gas drilling activities began four days ago. We expect that gas production can be started by the end of 2014, and the gas can be distributed to Tambak Lorok in August 2015,” said Hendrayana.

Governor Ganjar has given his full support for the construction of the undersea gas pipeline because it is in line with the Central Java administration’s plan to achieve self-sufficiency in energy and food. (March 10, 2014)

03/10/2014

SUPPLIES - IMPORTS - EXPORTS

EUROPE:

Central Europe looks to US to diversify gas supply

The Czech Republic, Poland , Hungary and Slovakia have called on the US to make it easier for them to import US gas as the central European nations look to reduce their dependency on Russia, according to Reuters. The group is looking to **diversify supplies** to eliminate the danger that Russia could use its control of gas and oil flows to exert political pressure on the former Soviet satellite states.

Supplies were briefly disrupted in 2009 during a dispute between Russia and Ukraine, through which much of the Russian gas is piped, and central Europeans fear they could be under threat again due to an escalation of tensions between Russia and the West over Russia's seizure of Crimea.

Last year, Russia's Gazprom supplied the European Union and Turkey with a record **162 billion cubic meters of gas, of which 87 bcm went via Ukraine**. Gazprom issued a thinly veiled warning recently that it could stop shipping gas to Ukraine over unpaid bills.

The V4 ambassadors to Washington asked House Speaker John Boehner in a letter to remove bureaucratic hurdles and make it possible to start exporting U.S. shale gas to the region, the Czech Foreign Ministry said. “The existing bureaucratic hurdles for the approval of the export licenses to non-FTA (free-trade agreement) countries like the Visegrad countries are a major hurdle," the letter said. (March 10, 2014)

03/10/2014

ITALY:

Italy's Eni agrees to revise gas agreement with Norway's Statoil

Researched by Industrial Info Resources (Sugar Land, Texas)--Oil company Eni SpA announced that it has signed a "heads of agreement" (HoA) with Statoil ASA on the **revision of the terms (price and volume) of an important long-term gas supply contract**. Eni said this large contract was its most expensive in terms of oil-linked gas prices.

The Italian newspaper Il Sole disclosed that the contract size had been 6 billion to 8 billion cubic meters per annum, but should be **30% less under the new deal**. The company had been **paying 40% more than European spot gas prices**, but will now pay a spot price of $10 per million British thermal units, according to the report.

"We expect the economic benefit will be included in Eni's results, either in the first quarter of 2014 or in the second quarter, assuming this HoA results in a firm contract; otherwise, it will revert to arbitration," said Irene Himona, an analyst at Societe Generale in London. "We expect that Eni will benefit from a retroactive payment from Statoil covering nine quarters (from first-quarter 2012 to fourth-quarter 2014)--which could amount to $1.43 billion. We also estimate this renegotiation would permanently lower Eni's gas costs by $700 million."

In the past two years, Eni has renegotiated new contracts with Libya's Sonatrach, Statoil, Russia's Gazprom and Dutch operator GasTerra. In 2012, these companies supplied Eni with 58 billion cubic meters of gas, or 80% of Italy's gas consumption.

Eni Chief Executive Paolo Scaroni said that the gas Eni buys from Statoil under long-term contracts is among its most expensive. The **company saved $2.6 billion at current prices with this agreement**. The company is renegotiating its gas supply contracts to achieve a competitive portfolio by January 2016. Eni's gas and power unit lost $905 million last year. (March 4, 2014)

03/05/2014

RUSSIA:

Rosneft wants to break Gazprom monopoly

Rosneft wants to break the monopoly of Gazprom **to export gas via pipelines**, signaling a flare-up between powerful clans, sources said.

In a sign of Sechin's rising clout, Rosneft and Russia's largest nonstate gas producer Novatek have already secured rights to export seaborne LNG, reversing a 2006 law that gave Gazprom a monopoly on gas exports. Gazprom still holds the exclusive rights to ship Russian gas abroad via pipelines, which connect vast Siberian gas fields with European clients. It meets 30% of gas demand in the European Union. **Rosneft in particular wants access to Gazprom's "Sila Sibiri," or Power of Siberia, pipeline**, designed to carry gas to China at a rate of **38 billion cubic meters a year**, sources familiar with the matter said. Gazprom has yet to sign a final deal with China on the pipeline and has delayed its launch to 2020 from 2018 expected earlier.

"We believe there are some factors restricting the gas potential of Russia, which, due to increasing competition from international majors, requires that laws be modernized," Rosneft's spokesman said, without elaborating.

Rosneft has staked a lot on developing its gas business. Thanks to new acquisitions, the company has seen its gas output trebling over the past year to 42 billion cubic meters — enough to meet gas demand in a country the size of France.

The Rosneft source said the company is eying natural gas supplies to China and that around 1 trillion cubic meters of gas is available for the company in East Siberia. A government source confirmed Rosneft has been actively lobbying for permission to export pipeline gas to China. (March 10, 2014)

03/11/2014

RUSSIA:

Russia needs to sell gas more than EU needs to buy it

The Russian occupation of Crimea has raised concerns about the European Union's dependence on its eastern neighbor for natural gas. The EU gets about 34% of its natural gas imports from Russia, a large portion of which transits Ukraine through a web of pipelines. For Eastern Europe, that dependence is much greater.

Russia has a track record of **using its natural gas supplies as a political weapon**. The latest incursion into Ukraine has no doubt revived worries among European policymakers. Thankfully, Vladimir Putin eased tensions on March 4, indicating that he wasn't seeking a military conflict. This allowed natural gas prices to fall back a bit after spiking by 10% the day before.

But how vulnerable is Europe to the political machinations of the Kremlin? It appears that this time around the EU is in better shape. A mild winter and stagnant demand have left Europe with higher levels of inventory than in past years. According to a spokeswoman at the European Commission, the EU has 40 billion cubic meters of natural gas on hand in storage, which accounts for 10% of annual demand for the entire European Union. Those figures vary by country (Czech Republic and Slovakia have 90 days of supplies; Hungary two months; Austria six months), but as a bloc, the EU has 20% greater supplies at its disposal than it did last year. And it's not just seasonal patterns that have put the EU in a better spot. Europe has been reducing its reliance on Russian gas for a while now – in 2003 the EU imported 45% of its natural gas from Russia. It's now down to around one-third.

Europe has been the beneficiary of the shale gas boom in the United States, even though the U.S. hasn't even really begun to export LNG. The surge in domestic production allowed LNG from other parts of the world – Qatar, for example – to be rerouted to Europe. Several U.S. members of Congress have tried to exploit the Ukrainian crisis, arguing for the Obama administration to issue a blanket approval for LNG exports in order to isolate Russia. Over the short-term, that is nonsense – it will take years to build the terminals, so issuing licenses for exports won't do anything to help out Europe. Over the longer-term, that may be a different story.

Europe has also undergone a big effort at implementing greater energy efficiency and renewable energy. Moreover, the U.S. has exported more coal to the EU in recent years, which competes with high priced natural gas there. Thus Europe is more secure than many believe.

The EU and Russia are so interdependent that it is unlikely Russia will proactively cut off gas supplies to Europe. Russia is arguably more dependent on the EU than the other way around, Europe has other options. Russia is heavily dependent on oil and gas, which account for half of the country's total budget revenues. Russia is not exactly in a strong position in terms of using energy as a political weapon. Whether or not the Ukraine crisis deepens, it is unlikely that Moscow would intentionally turn off the taps for any prolonged period of time. (March 5, 2014)

03/06/2014

ISRAEL:

Tamar partners sign gas deal with Israel's Delek

The partners in Israel's Tamar gas field announced recently they signed a deal to provide 750 million U.S. dollars' worth of gas to IPP Delek Soreq, which is constructing a power plant in Israel. Independent Power Production Delek (IPP Delek) will buy a total of 3.3 billion cubic meters of natural gas over 15 years, the Israeli partners of Tamar said in a statement to the Tel Aviv Stock Exchange.

IPP is controlled by Delek Group, which has a 31.25% stake in the Tamar gas field through its subsidiaries Delek Drillings and Avner. Texas-based Noble Energy holds a 36% share, and operates the field.

Discovered in 2009 off Israel's northern city of Haifa, Tamar is believed to contain about 223 billion cubic meters of gas. Gas production of Tamar gas field began in March 2013. Last month Israel became a gas exporter for the first time, when Tamar's partners signed a deal to supply 500 million U.S. dollars' worth of gas to two Jordanian companies. (March 10, 2014)

03/10/2014

BRUNEI:

Technip awarded contract in Brunei

Technip announced recently the company has been awarded a contract by Total E&P Borneo B.V., covering **engineering, procurement, supply, construction and commissioning**. The contract is for a **project modification of the onshore facilities as well as the construction of a new onshore pipeline**, in order to transport Maharaja Lela & Jamalulalam South gas to the Brunei LNG plant.

Technip said in a statement the onshore modification work will include de-bottlenecking of the processing plant to enable handling up to **5 million cubic meters per day** (annual average) from the greater MLJ field and associated assistance in start-up and performance test.

Technip's operating center in Kuala Lumpur, Malaysia will execute the contract with support from the office of the Group based in Brunei. The project is scheduled for completion in the second half of 2015. (February 28, 2014)

03/04/2014

PRICE

UKRAINE:

Gazprom to discontinue natural gas price discount for Ukraine

Gazprom plans to discontinue its natural gas price discount for Ukraine in April. Dmitry Medvedev, Russia's prime minister, discussed gas pricing with Alexey Miller, chairman of Gazprom's management committee, in a Mar. 4 meeting. Miller said Ukraine has total gas indebtedness of $1.529 billion, adding that the discount price had been agreed upon late in 2013, "provided that Ukraine would ultimately clear the debts accumulated over the last year and would pay in full for current supplies."

Gazprom hasn't received any payments for gas supplied Ukraine in January "and they would not be able to pay in full for the gas supplied in February," Miller said. "**Given that Ukraine is not fulfilling its obligations or complying with the agreements reached when signing the contractual addendum providing a gas discount, Gazprom resolved to remove the discount starting from this April**," Miller said.

According to Gazprom's chairman Ukraine has repaid $1.3 billion of 2013 debt. Medvedev adding, "It's no secret that those 50% they paid came from the sovereign loan we had given them." The "easiest" way to settle indebtedness and payments for current gas supplies would be for Gazprom to provide Ukraine with a loan of $2 billion or $3 billion, according to Miller.

Medvedev told Miller that "your decision to terminate the beneficial terms of supplies looks completely justified." He said he will entrust the Ministry of Finance to consider all "possibilities and obstacles." (March 5, 2014)

03/07/2014

UNITED STATES – EU:

U.S. natural gas rises a second day on storm, Ukraine escalation

Natural gas rose for a second day in New York as another winter storm in the U.S. may boost demand for heating. U.K. prices surged on speculation that Russia's threat to invade the Ukraine will disrupt supplies.

Futures for April delivery climbed as much as 2.8% to $4.736 per million Btu on the NYMEX and were at $4.724 at 3:39 p.m. Singapore time. The contract gained 2.2% to settle at $4.609 on Feb. 28, snapping a four-day losing streak and reducing its loss for February to 6.8%. The volume of all futures traded was about 3% above the 100-day average.

A weather system bringing ice and snow across the Tennessee and Ohio valleys will shift toward the East Coast, the National Weather Service said. In Europe, the **standoff in Ukraine** intensified this weekend as the former Soviet state put its forces on combat readiness after Russian President Vladimir Putin threatened to invade. Ukraine is the main conduit for Russia's gas supplies to Europe.

"The Euro zone obtains 25% of its gas from Russia, mostly via Ukraine. This could be threatened by a broader civil war in the Ukraine and/or if Russia decides to punish Europe for supporting Ukraine. Shane Oliver chief economist at AMP Capital Investors" said.

U.K. next-month gas jumped as much as 6.9%, the **biggest intraday gain since October 2011**, to trade as high as 60 pence a therm in London trading. (March 3, 2014)

03/03/2014

UKRAINE:

Ukraine sees Gazprom charging 37% more for gas in Q2

Ukraine faces a 37% percent increase in the price it pays for Russian natural gas after Gazprom canceled a discount and threatened to cut supplies, Ukrainian Energy Minister Yuri Prodan told reporters. Ukraine will pay about $368.50 per 1,000 cubic meters of the fuel in the second quarter. Russia agreed last year to cut the price it charges Ukraine to $268.50. Gazprom rescinded the discount last week and said Ukraine risks a repeat of 2009, when the Moscow-based company reduced shipments during a pricing dispute.

Gazprom, which supplied more than half of Ukraine's gas last year, agreed to the discount when the nation was governed by President Viktor Yanukovych, who fled to Russia in February after three months of street protests. Russian President Vladimir Putin has refused to acknowledge Kiev's successor government.

"I will have talks on March 19 in Brussels with the EU commissioner and companies," Prodan said, referring to a planned meeting with European Union Energy Commissioner Gunther Oettinger on possible substitutions for Russian gas. Slovakia is likely to help with gas transit, Prodan said, citing a conversation with Oettinger. Ukraine needs to import about 30 billion cubic meters of gas this year, of which a third may come from Slovakia.

Gazprom said March 7 in a statement it's owed $1.89 billion by Ukrainian state gas company NAK Naftogaz Ukrainy for supplies already received. (March 9, 2014)

03/12/2014

STORAGE

UAE:

Tebodin highlights underground gas storage

Besides their economic benefits, these installations -UGS- can assure industrial consumers a disruption-free supply of natural gas. "This technology is popular in Europe, especially among gas suppliers who want to avoid heavy penalties in case of disruptions to industries that need its continuous supply," said Daan Van der Hoeven, senior project manager for Tebodin in the Netherlands, told a seminar in Abu Dhabi.

The UAE, which has been on the forefront of embracing new technologies and ideas, can benefit from UGS since **they can be used for storing oil, gas and water in caverns, located several hundred meters under the ground**. "Tebodin has done such projects in Europe, and can design these futuristic projects in the UAE, which can be used to offset the peak demand of oil and gas," said M. Srinivasan, director for the Abu Dhabi market unit for chemicals, oil and gas.

"Besides from been a strategic gas buffer, UGS can give more flexibility to gas companies during seasonal peak/off-peak demand management." Van der Hoeven added: "The surge of UGS projects in Europe was due to the fact that those markets were highly-developed, liberalized and highly-competitive, and there were a large number of industries that needed a constant supply. Also, it was hard to predict the energy production from the wind and solar energy. There was also a need for own gas storage volume to deal with hourly, daily or seasonal imbalance between long-term contractual commitments and supply disruptions." (March 9, 2014)

03/12/2014

UKRAINE:

Ukraine's gas stocks can meet four months of demand

Ukraine's natural gas stocks can meet four months of demand should Russia cut supplies **and most of reserves are in its west** and far away from any potential Russian intervention, industry sources said.

Ukraine meets around half of its gas demand through imports from Russia, and it is also an important transit route for Russian gas to the European Union. Moscow has in the past cut supplies to Ukraine when negotiating prices with Kiev, causing shortages in Ukraine and central Europe.

Russia's Gazprom said recently that gas transit to Europe via Ukraine was normal, but **it warned that it might increase prices for Kiev after the first quarter, raising concerns that gas could be used for political leverage in the crisis**.

To prepare for a potential disruption, Ukraine's gas transit monopoly Ukrtransgas has been increasing its gas imports from Russia in recent days, increasing its stocks which now stand at four month worth of supplies, several industry sources said. Of Ukraine's 33 bcm storage capacity, Gas Infrastructure Europe (GiE) data shows that around 80% is in its far west, so even in the case of a Russian intervention in Ukraine's predominantly Russian east, most storage assets would likely remain safe from seizure.

Analysts also say that a **continuation of gas supplies was in the interest of all parties**. "Until a real war, I think that all sides (Russia, Europe and all parties in Ukraine) have a vested interest in flowing gas from Russia to Europe,...Russia needs the money from gas sales, Europe is 26% dependent on Russia for its gas consumption, and Ukraine need the money from the transit fees," said Thierry Bros, senior gas analyst at French bank Societe General.

In 2013 Russia exported 161.5 bcm of gas to Europe (European Union and Turkey), 86.1 bcm of it via Ukraine, although this volume has been declining as Russia seeks alternative routes to Europe, such as the Nord Stream pipeline through the Baltic Sea into Germany, or the Yamal pipeline that goes through Belarus and Poland, also into Germany. Ukraine itself imported 28 bcm of gas for its own use from Russia in 2013, accounting for about half of its annual consumption of about 55 bcm.

In western Europe, a mild winter and improved infrastructure mean Europe is less reliant on Russian natural gas pumped through Ukraine than in past years, easing worries that the escalating crisis in Ukraine could hurt supplies. Despite the improved situation, analysts warned that a renewed disruption would hit Europe hard. "**Risks for Europe exist always, that is why it should pursue even more diversification projects further and develop LNG markets and new connectors in central and southeastern European regions**," said Anna Bulakh of the International Centre for Defence Studies. "While Ukrainian gas is less important to Europe than it was half-a-decade ago, European gas markets still stand to strengthen considerably if Ukraine's transit is interrupted," Bernstein Research said recently.

Benchmark European gas prices already rose to a monthly high by the tension in Ukraine, although the mild winter means that overall price levels remain much lower than this time last year, when extreme cold pushed up demand across Europe and cause a supply shortage. (March 3, 2014)

03/04/2014

USE AS AUTOMOTIVE FUEL

UNITED STATES:

White House: boost EV, alternative vehicle tax credits to $10,000

The White House is proposing cutting taxes on LNG to spur the use of the fuel by alternative vehicles, while again calling for hiking the maximum tax break for electric vehicles and other advanced vehicles to $10,000, over the current $7,500.

In the U.S. Treasury's nearly 300-page analysis of the Obama administration's tax proposals as part of its budget, it lays out a series of proposals to **boost alternative vehicles**. The sweeter tax breaks for EVs and other advanced vehicles would cost $4.8 billion through 2024.

The Treasury Department said the budget would make the credit available to a wider range of technologies and remove the cap placed on the number of vehicles per manufacturer that can receive the credit. But the bigger tax cut would not apply to luxury vehicles with a sales price of more than $45,000. The tax credit for those vehicles would be capped at $7,500.

The Obama administration said it wants to reduce the federal excise tax on LNG to 14.l cents per gallon from the current 24.3 cents to make it "at parity with diesel fuel on an energy-content adjusted basis." Given the low volumes, the administration estimates it would cost the Treasury just $20 million through 2024.

The United States has large reserves of natural gas, but few cars have been sold that run on it. In October, GM said it would start selling a small number of cars that can run on compressed natural gas. GM said it plans to produce less than 1,000 bi-fuel Chevrolet Impalas that can run on CNG and gasoline. Chrysler Group LLC is offering heavy-duty Ram pickup trucks that run on CNG. Only Honda Motor Co. sells a car that runs on CNG — a version of the Honda Civic — but several automakers sell medium and heavy trucks and vans that run on the fuel. GM sells a bi-fuel version of its heavy trucks and CNG-powered Chevrolet Express vans.

The White House wants to lift the 200,000 vehicle cap per manufacturer after which the credit phases out over a year. Instead, the White House would begin to phase out the credit starting in 2019 for all manufacturers. The credit would be completely phased out by 2022, and fall to 75% of the current credit starting in 2019.

The White House also wants to boost a fuel-cell credit. The current credit is $20,000 for vehicles weighing more than 14,000 pounds and $40,000 for vehicles weighing more than 26,000 pounds. It expires in 2015.

There is no tax incentive for other types of alternative-fuel vehicles (vehicles operating on CNG, LNG, LPG, hydrogen, or any liquid at least 85% of the volume of which consists of methanol) weighing more than 14,000 pounds. The White House's proposal would allow a tax credit of $25,000 for dedicated alternative-fuel vehicles weighing between 14,000 pounds and 26,000 pounds, and $40,000 for dedicated alternative-fuel vehicles weighing more than 26,000 pounds that would last until 2019 — and then be phased out in 2020.

The White House last year explained the reason for the higher tax credit by referencing Obama's goal in 2008 "of putting 1 million advanced technology vehicles on the road by 2015." This year, the Treasury Department dropped that language. In January, Energy Secretary Ernest Moniz acknowledged that meeting that goal would be a "stretch," because sales haven't met the government's prior expectations. (March 4, 2014)

03/07/2014

USE AS MARINE FUEL

NORWAY:

Skangass is bunkering ferries with passengers onboard

Already from mid-March Skangass can be able to bunker Fjord Line's cruise ferries in Risavika harbour, close to Stavanger. The DSB (Norwegian Directorate for Civil Protection) has **approved bunkering ferries with passenger onboard**. Compared to current solution this is more advantageous as concerns the environment, the safety aspects and it is far more efficient. Current solution is driving numerous truck loads with LNG abroad for bunkering the ferries in Denmark.

From 17 March both "Stavangerfjord" and "Bergensfjord" will sail from the ports in Norway and Hirtshals in Denmark. Autumn 2013 Skangass applied for permission to bunker the ferries by trucks in Risavika in order to be able to effectively deliver LNG. Consequently the bunkering will take place by truck until the establishment of the new permanent bunkering solution in Risavika.

"We will now fulfil the conditions included in the DSB permission. Already mid-March we are planning to perform the first bunkering with passengers on board in Risavika", Morten Osmundsen, the Managing Director of Skangass said.

January 2014 Skangass obtained permission to establish a permanent bunkering station for Fjord Line's ferries in Risavika. The planning of this bunker facility is ongoing and Skangass expects a finalization of the project during Summer 2014. (March 6, 2014)

03/07/2014