



U-Gas News Report

Unconventional Gas Activities in the World

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Main News

SHALE GAS

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South African Mines Minister Susan Shabangu said that a technical report on shale gas will be submitted to the Cabinet in July 2012.

AUSTRALIA: Resources estimates. — UG68-8

According to a report published by Geosciences Australia, the country has identified gas resources of about 390 trillion cubic feet.

POLAND: Resources estimates. — UG68-10

Saponis Investments Sp. z o.o estimated that there is 376 billion cubic meters of shale gas under its three concessions in Poland.

UNITED KINGDOM: Resources estimates. — UG68-12

UK offshore reserves of shale gas could exceed one thousand trillion cubic feet.

COALBED METHANE

EXPLORATION - DISCOVERIES

NEW ZEALAND: Discovery. — UG68-1

L&M Energy intersected recently less than 4 metres of coal seams at its Washpool-1 coal seam gas well in New Zealand. The previous Taratu-1 well intersected about 23 metres of the **Kai Main coal seam** and 12 metres of the Carson seam. Washpool-1 is the third of 5 wells the company is drilling to provide sufficient data to determine the CSG potential of the **Kaitangata area**.

Testing by L&M has shown excellent permeability characteristics, with the Kai Main and Carson seams showing permeability in excess of 100 and up to 900 milliDarcies while methane adsorption isotherm data has indicated the coals could hold more than **3 cubic metres of gas per tonne of coal**. (April 30, 2012)

PRODUCTION

CANADA: Acquisition. — UG68-2

Toyota Tsusho Corp. invested recently \$602 million to acquire a share of **Encana Corp.**'s extensive coalbed methane reserves in southern Alberta. Encana announced that the Japanese company will acquire a 32.5 per cent royalty interest in about **5,500 existing and future Encana coalbed methane wells**. (April 20, 2012)

SHALE GAS

EXPLORATION - DISCOVERIES

CZECH REPUBLIC: Regulation. — UG68-3

In Prague, the country's **environment ministry** said recently that it planned a **moratorium of up to two years on granting licenses for shale gas exploration** until new mining legislation was passed. "Existing Czech legislation is not prepared for such technically complicated research like there

is in the case of shale gas," the ministry said. The ministry cancelled a provisional shale gas exploration license for Australian-based **BasGas** in April, claiming that a government commission made legal and procedural errors during the application process. (May 07, 2012)

SOUTH AFRICA: Regulation. — UG68-4

South African Mines Minister Susan Shabangu said recently a **technical report on shale gas** will be submitted to the Cabinet in July 2012. A moratorium on shale-gas licensing was due to expire in February. The government in 2011 **halted plans for hydraulic fracturing** as it studied the environmental repercussions of allowing companies including Royal Dutch Shell Plc (RDSA), Falcon Oil & Gas Ltd. and Bundu Oil & Gas (Pty) Ltd. to employ the practice. (May 8, 2012)

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UNITED STATES: Regulation. — UG68-5

US President Barack Obama issued recently an executive order establishing an **interagency working group** to coordinate federal policies to support safe and responsible US unconventional natural gas resource development. Obama's order established the working group and named his domestic policy advisor, **Cecilia Munoz**, or a designated representative as its chair. Its members will include deputy-level representatives or the equivalent from the US Departments of the Interior, Energy, Defence, Agriculture, Commerce, Health and Human Services, Transportation, and Homeland Security; the US Environmental Protection Agency; and the White House Council on Environmental Quality, Office of Management and Budget, National Economic Council, and Office of Science and Technology Policy. The order said the working group will coordinate agency activities to ensure they are efficient and effective, and share scientific, environmental, and related information

among the agencies where appropriate. **It will make long-term plans and ensure coordination among federal entities on research, natural resource assessment, and infrastructure development; promote interagency communication with stakeholders; and consult with other agencies and offices where appropriate.** DOI, DOE, and EPA announced a memorandum of agreement to coordinate their present and future scientific research and scientific studies on unconventional oil and gas resource development. They said a primary goal of this effort will be to identify research topics where collaboration among the three agencies can be most effectively and efficiently conducted to provide results and technologies that support sound policy decisions by the agencies responsible for ensuring the prudent development of energy sources while promoting safe practices and human health. (April 13, 2012)

PRODUCTION

CHINA: Production cost. — UG68-6

Chief Financial Officer Simon Henry said recently that **Shell** had not yet determined the **cost of producing** shale gas in China but that it **would probably be within the \$2 to \$6 per million British thermal units** seen in North America. "We completed 11 wells last year; we hope to effectively double that this year ... We are seeing a mixed range of outcomes, everything from pretty poor reaction to excellent," he said.

Henry, who also has executive responsibility for overseeing Shell's China operations, said it was **more difficult to extract gas from Chinese reservoirs**, on average, than what Shell had seen in the United States. (April 26, 2012)

CHINA: Production forecast. — UG68-7

Vice-Minister Wang Min, **Ministry of Land and Resources**, said recently "At present China's investment in shale gas exploration and development is very small as a proportion of total oil and gas exploration and development, which was over yuan 60 billion last year. Further measures and investment are needed [for shale gas]," he said. China needs to significantly accelerate evaluation and exploration work to get more information and accurately assess reserves, Wang said. **The country's shale resource potential, excluding the Qinghai and Tibet areas, could reach 25 trillion cubic meters,**

the report said. Wang pointed out that since shale gas had been designated as an independent resource by the State Council, the authorities will soon introduce guidelines on exploration and exploitation. The Ministry of Land and Resources will issue permits and mining licenses, he added. In March 2012, the ministry and other government agencies released China's official shale gas development program under the current five-year economic plan running from 2011-2015, targeting **commercial output of 6.5 Bcm/year by the end of 2015.** (April 30, 2012)

RESERVES

AUSTRALIA: Resources estimates. — UG68-8

According to a recent report published by **Geosciences Australia**, the country has identified **gas resources of about 390 trillion cubic feet**. This could double if exploration for shale gas is successful, Energy and Resources Minister Martin Ferguson said. "While exploration for shale gas in Australia has only recently commenced and resources are poorly understood, shale gas could potentially double Australia's gas resources," he said. (May 14, 2012)

https://www.ga.gov.au/products/servlet/controller?event=GEOCAT_DETAILS&catno=74032

EUROPE: Resources estimates. — UG68-9

Dart Energy International announced recently that it may have access to up to **143 trillion cubic feet of shale gas over its European licences**. An independent assessment conducted on behalf of the company by **Netherland Sewell & Associates, Inc (NSAI)** has identified massive potential for shale in Europe for the Dart. These resources are held over 17 licences, with lowest estimates placing **gas-in-place of 28.1 trillion cubic feet at the lowest case and 143 trillion cubic feet at the highest case**. The best estimate of gas is 76

trillion cubic feet. These potential shale resources are held in a number of countries and areas, including 14 licences in the UK, in the Midland Valley Graben, Chester Basin and Middlesborough Trough. The company also holds two shale licences in Germany, the Saxony 1 and 2 licences in the Lower Saxony Basin and another in Poland, the Milejow licence in the Lublin Basin. In addition to the Milejow licence, Dart also has an option to participate in the Polish Szczawano licence, which is also prospective for shale. (May 10, 2012)

POLAND: Resources estimates. — UG68-10

Saponis Investments Sp. z o.o company estimated recently that there is **376 billion cubic meters of shale gas under three concessions** the company has been given licences for. A study by the Polish Geological Institute estimated that there was around just 128 billion cubic meters at the sites in Slawno, Slupsk and Starogard in northern Poland. The geological institute said in March 2012 that Poland was sitting on between 346 and 768 billion cubic meters of shale gas in total. (April 30, 2012)

UKRAINE: Resources estimates. — UG68-11

Shell and Chevron are likely to win tenders to explore and develop two potentially large shale gas fields in Ukraine, a government source announced recently. One contract area, **Yuzivska**, is in the eastern Donetsk and Kharkiv regions with the other, **Olesska**, in the western Lviv region. Ukraine's State Geological Service estimates the reserves of the Yuzivska area at **2 trillion cubic metres and those of Olesska at 0.8 to 1.5 trillion**. The geological

service has also said the Yuzivska area would require \$250-\$300 million in exploration investment, while Olesska would need \$150-\$200 million. The winners will enter production sharing agreements with state firm Nadra Ukrainy and SPK-GeoService, a privately-owned Ukrainian company picked by the government as its partner in a separate tender. (May 10, 2012)

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UNITED KINGDOM: Resources estimates. — UG68-12

UK offshore reserves of shale gas could exceed one thousand trillion cubic feet or five times the latest estimate of onshore shale gas of 200 trillion cubic feet. Although there are still no reliable figures available for the UK, and only around 10-20 percent of total reserves are currently deemed recoverable, experts say that whatever the final recoverable reserve figure is, it is likely to be big enough to make Britain energy self-sufficient. "There will be a lot more offshore shale gas and oil resources than onshore," Nigel Smith, subsurface geologist and geophysicist at the **British Geological Survey (BGS)** said. **UK offshore reserves could be five to 10 times as high as onshore.**

UK authorities recently gave **approval to drill for shale gas onshore** after a temporary ban on the controversial extraction technique known as hydraulic fracturing. "We have potentially huge volumes present in the subsurface - the volumes are mind-blowingly big," Melvyn Giles, global head of unconventional gas and light tight oil at Shell said of Europe's unconventional gas resources. "The figures appear to suggest the shale resources are so large that the question is not how much is out there, but how much can be retrieved - how much can be economically accessed in an environmentally acceptable way," he added.

Energy services company Schlumberger said in a research report that there are large shale gas and oil reserves in the North Sea - along the German, Dutch and Danish coasts - as well as in the Baltic Basin. (April 17, 2012)

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