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Iraqi Hydrocarbon Tensions Ratchet Up

Oil and gas issues were firmly at the top of the political agenda as Iraqi politicians returned from their Eid holiday break on 6 September. Tensions are mounting over passage of the long-stalled Hydrocarbon Law, with the Kurds making their most strident public criticism of government oil policy since the formation of the latest government by Prime Minister Nuri al-Maliki in January.

Progress remains painfully slow on the country's ambitious upstream capacity program. There is also growing dissatisfaction over the government's inability to provide adequate electricity supply. And the critical Shell-led joint venture Basra gas project, which will fuel planned power generation expansion, still has not been ratified.

The Kurdistan Regional Government (KRG) on 5 September denounced Baghdad cabinet approval late last month of a draft "contrary to all that has been agreed with respect to the hydrocarbons law." A KRG statement accused the government of trying to "fool" cabinet by presenting the law "in only a few minutes," and misleading those present "that it was a draft that had already been agreed upon." The approval constituted "a breach of trust conducted in an authoritarian manner," the statement continued.

True or not, the tone of the KRG outburst marked a return to the days of public acrimony, not seen for a couple of years. It comes amid, and is no doubt both influencing and being affected by, a dispute over non-payment for KRG region exports. The Kurds restarted exports in February, ramping up to 180,000 b/d in June, before cutting back sharply in July and August. All payments for Iraqi oil, be it sourced from the KRG or federal areas, go to Baghdad, which is then supposed to give the KRG its share, including compensation for investment costs.

There has been a lack of any public comment on the export curtailment – KRG operator DNO says its August output is expected to be 53,000 b/d, down from 71,000 b/d in June, citing the need for "reservoir monitoring." Turkey's Genel Enerji, which on 7 September announced a plan to merge with oil investment vehicle Vallares, which boasts former BP boss Tony Hayward as its CEO, in a \$2.1bn deal, said its current production was 41,000 b/d. In June KRG oil sources had told MEES that output at Genel's Taq Taq field was 80,000-90,000 b/d and even if this was over-optimistic, Genel sources in February said output had gone as high as 67,000 b/d and would go higher still, indicating the 41,000 b/d level is not due to operational necessity. And KRG oil minister Ashti

Hawrami recently requested output at the Khurmala Dome halved (*MEES*, 5 September). "It is political, because of what is happening with Baghdad. That much is clear," notes another KRG oil executive.

Consequently, Iraqi exports from the north to the Turkish export terminal of Ceyhan have dropped from 547,000 b/d in June to around 460,000 b/d in July and August. Baghdad has woken up to the threat to its revenue stream, pumping as much as it can from Basra in the south, where loadings hit a post-2003 high in August (see page 13). Unusually, the oil ministry July export announcement carried the additional statement that high oil prices had enabled exports in the first seven months of the year to cover the entire 2011 budget needs, "which indicates that Iraq can achieve a high surplus."

Nevertheless any fall in oil price or let-up in the current intense rates of southern loadings could well bring forth criticism of the government for apparently spurning such a readily available source of oil. And at any rate, a continuation of the dispute is certain to exacerbate political tensions with the Kurds. They too cannot afford for the dispute to be prolonged. The February export restart has catalyzed investor interest in the region, as witnessed by the Genel/Vallares merger and a string of other recent upstream agreements (*MEES*, 22 August). In addition to its impact on wider investment sentiment, any deterioration in Baghdad/Irbil relations and serious export slowdown would affect existing investments. Several operators, including Gulf Keystone, OMV, Hillwood International, ShaMaran Petroleum and Western Zagros are working to put into place early production facilities (EPFs) of 10,000-15,000 b/d capacity by the second quarter of next year. But expect delays to these and the schedules of other drillers, if the dispute worsens.

Tough Neighborhood

The Hydrocarbon Law row (by no means confined to Kurdish opposition – parliament's own Oil and Gas Committee has put forward its own rival draft law – *MEES*, 5 September) and the KRG export dispute come amid rising tensions with Iraq's neighbors. Both Turkey and Iran have repeatedly bombed Iraqi Kurdish areas over the summer, ostensibly in operations against insurgents. And parliament has been in uproar at Kuwaiti plans to build a large port complex on the border island of Bubiyan, which they claim will suffocate Iraq's own ambitions for port and export terminal expansion.

Domestically, the continued presence of US troops remains controversial but the biggest threat to the government comes from widespread public anger at the lack of jobs and services, mainly electricity. Shi'ite cleric Muqtada al-Sadr has threatened mass street protests unless the government radically improves its performance. And allegations of fraudulence in power generator deals prompted the sacking of electricity minister Ra'd Shallal in early August. Deputy Prime Minister for Energy Affairs Husain al-Shahristani has taken over as acting electricity minister, just as he did last summer after minister Karim Wahid resigned following demonstrations over widespread electricity outages.

Baghdad's flagship initiative to provide the fuel needed for electricity generation has been its proposed joint venture for associated gas development in Basra. The venture brings together state-owned South Gas Company (SGC, 51%), Shell (44%) and Mitsubishi (5%) to form Basra Gas Company (BGC). Raw gas from the Rumaila, Zubair and West Qurna-1 projects will be handed over to South Oil Company (SOC), which will then sell it to the joint venture, which in turn will treat it and sell it on to SGC for supply to Iraqi utilities and industry or state oil marketer SOMO for export in the form of LNG and LPG.

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Lightning Rod For Protest

On 12 July, the contract was initialed. This followed almost three years of protests, arguments and counter arguments that led to substantial contract revisions. Final cabinet approval and ratification was hoped for within a month or so after initialing (*MEES*, 18 July). Not only has this not been forthcoming, but also opposition, if anything, has grown more vocal. It has always been a controversial project. A leaked copy of the 2008 Heads Of Agreement revealed a project scope far more widespread than the Basra province remit originally touted (*MEES*, 3 November 2008). This scope was scaled down to just the three Round 1 fields – Rumaila, Zubair and West Qurna 1 – with SOMO made responsible for marketing.

In 2008 and 2009 opponents of the HOA could accuse the deal's architects of a lack of transparency. And such was the potential scale of the then HOA that fears of a Shell hegemony over Iraqi gas development had a ring of truth. But current attacks have misrepresented the project and in some case have just been factually wrong, say the project's supporters. Furthermore, it represents Iraq's best hope of fast-track gas development, they argue.

Leaked Draft And Price Confusion

A draft contract has been leaked to *Reuters*, as have details of correspondence between the parliamentary committee and its advisors over the deal, but confusion over critical points still remains. The price at which BGC sells processed gas back to SGC has been a sore point since the beginning of the project, with opponents of the deal protesting the lack of transparency and the fact that this would be "at international prices" and as such damaging to Iraqi economic development.

The price will be fuel oil linked. *Reuters* calculations, based on the average *Platts* Heavy Sulfur fuel oil price of \$647.77/ton for 180 centistokes FOB Middle East Gulf for the second quarter, give a gas price to SGC of \$5.78/mn BTU, the news agency reported on 29 August. This is somewhat higher than current domestic US prices of around \$4.40/mn BTU. But figures given to parliament's Oil and Gas Committee in advice that was generally unfavorable to the proposed gas deal said SGC would pay \$3.22/mn BTU when crude oil was at \$75/B and \$3.86/mn BTU when crude was at \$90/B (fuel oil pricing is crude-related).

Both calculations are simply wrong, asserts a source close to the project. "It took a lot of discussion on this gas price to set it at the right level and what we settled for is that you fix it at one-third of the fuel oil price at \$50/B Brent," the source said. "Then a discount is applied when Brent goes up and this discount gets higher with higher oil prices," he continued. "And as a result it [the gas price to SGC] is \$2/mn BTU at \$50/B Brent and at \$100/B Brent it is \$2.60/mn BTU." The arrangement was done to ensure "the gas price does not go to high levels where we end up with the ridiculous situation where the Iraqi market will pay a higher price than people in the US." The mistaken calculations could well not be malicious, the source adds: "This is a very complex agreement. There are 400 pages...maybe people looked at only the fuel oil formula and they did not look at the discount arrangement."

Much has been made of potential losses the Iraq state faces as a result of paying more for the gas than it will receive from Iraqi customers – *Reuters* reported domestic industry will pay SGC \$1.04/mn BTU. This would leave the state firm up to \$1.56/mn BTU short. But this is simply not the case, the source says. The 700mn cfd of gas currently being flared – BGC will also take over SGC facilities processing 350-400mn cfd – contains an estimated 4,000 tons/day of LPG. "In the meantime the country is importing, depending on the season and the performance of the refineries, something like 500-1,000 t/d of LPG. So there is an immediate opportunity for 3,000 t/d for export," he says. "Definitely, as far as volumes from this joint venture are concerned, South Gas will have a cash flow surplus from the LPG sales to easily cover the subsidies it has to absorb as a company." Also, 600t/d of condensate is expected in the first phase of the project.

Critics of the deal have also been shocked by what they interpret as a backdoor attempt to expand the scope of the project beyond the three Round 1 fields – Rumaila, Zubair and West Qurna 1. An accompanying letter of confirmation with the leaked draft in the *Reuters* report contained a commitment on the part of SGC to fulfill its "obligation to supply and make available to BGC all committed volumes and planned volumes of raw gas, including by making available deficit volumes as needed." This is simply normal business practice to ensure the joint venture investments are protected and "it is not liable for delivering gas to the domestic market if it is not receiving that gas on the production side," argues the source. Furthermore, it has benefits for the Iraqi side in that they now have "the flexibility that in case of a shortfall, they don't have to correct it necessarily from that particular entry point... It could come from elsewhere."

Volumes And Export Controversies

The volumes of gas to be handled by the joint venture and the issue of export are two other areas of dispute, with opponents of the deal warning that its LNG component could potentially leave Iraq short of gas. If ratified, the partners will first deal with the 700mn cfd of flared gas and 350-400mn cfd of currently processed gas. The flared gas currently constitutes a significant environmental threat. Following a recent site visit by Dr Shahrstani, BP has been requested to upgrade processing facilities to ensure the flaring process at least gets cleaner, *MEES* understands. The joint venture will then work towards processing of 2bn cfd. A recent report prepared by the Iraq Energy Institute for the parliamentary Oil and Gas Committee suggests this 2bn cfd figure is incorrect and contractual crude production volumes from the three fields should give associated gas output of 3.3bn cfd, thus giving more profit to BGC (*MEES*, 22 August). But this assumes all three fields go to their full plateau, which is by no means a certainty.

Project supporters are adamant Iraq has enough gas to support an export project. "Iraq has at least 112, if not 150 trillion cu ft of known, proven reserves and that is without additional exploration," says the source. "With positive growth scenarios, with both power generation and with industrialization, we cannot see Iraq consuming more than 1 tcf [2.74bn cfd] a year. So that is a minimum of 100 years of cover," he said. "If we talk about petrochemicals, an ethane cracker which costs around \$10bn at current prices will only take 150mn cfd. How many of these will Iraq build in the next decade? One? Two?" argued Shell regional commercial vice-president Mounir Bouaziz in a panel in London in July (*MEES*, 18 July). This 2.75bn cfd figure is somewhat lower than Iraqi official projections, which last year estimated 2018 Iraqi gas demand at 5bn cfd, and supply at 5.2bn cfd (*MEES*, 23 August 2010). BGC's envisaged 4mn tons/year LNG project will need around 600mn cfd.

However, the project has flexibility on volumes and LNG demand is seasonal. "Iraq will need most of the gas in the summer, while the LNG market is a winter market," notes the source. But there is no unanimity as far as supply projections are concerned. Former ministry gas expert Asri Mousa at the July London conference gave a 2017 production figure of 7.5bn cfd. And the source estimates by that time there will be 6bn cfd "just in the Basra area." For the government demand projections to be proved correct a huge and perhaps unrealistic rate of development will have to take place. Given that current Iraqi gas utilization in both north and south is around 775mn cfd, this would mean over a six-fold growth in the gas industry in almost six years. Longer term balances may be uncertain, but in the short to medium term there does seem to be room for an export venture.

Investment figures for the project are unknown, given uncertainties of timing and project scope. But a rough figure for \$2bn scope, believed to have been provided by consultants for the ministry in documentation seen by *MEES*, gives \$12.8bn for the rehabilitation of gas facilities and \$4.4bn for the LNG project. In addition to consultant Gaffney Kline, two international law firms have been involved with assisting the oil ministry.

Mellitah Leads The Way As Camps Emerge As Oil Industry Priority In Libya

While Libyan oil fields have emerged from the country's six month civil war largely unscathed and only two out of seven oil loading terminals have sustained any significant damage, much remains to be done before oil output can be restarted on a large scale.

Confirming earlier reports, an AGOCO official told *MEES* on 8 September that the Benghazi-based state oil firm is still on track to begin test output from its Sarir and Mesla fields by mid-month (*MEES*, 5 September). Hopes of an early restart at Zawiya refinery, undamaged by fighting, have been dashed as a result of greater than expected disruption to camps at the Murzuq Basin fields feeding the refinery. "I think the Murzuq fields will take a few weeks to come back on," he said. However, a restart of Eni's Elephant field was imminent. "I think Mellitah [the terminal fed by Elephant] will come on today or in the next few days," he said. Eni, which plans to restart operations at the 11 bcm/year Green Stream pipeline by 15 October, would not comment on Elephant.

Establishing security around oil fields and getting camps back into a habitable shape is going to take some time. Looting at the desert locations has been widespread and even the Eni-operated Bouri offshore platform has been plundered, a Tripoli-based oil source said. "It is a mess. First they have to assess what needs to be done. Then they have to refurbish these camps and that is going to take a lot of effort. You know they have stolen everything in some...fridges, beds, communications equipment, generators, everything," he said.

"In [Repsol-operated Murzuq basin] Akakus fields, the field facilities are not really damaged, but the camps are and they need to replace the automation equipment," the source said. Management is also an issue. Nouri Bourrien, new head of state-owned National Oil Corporation (NOC), held his first management committee meeting on 7 September, *MEES* understands. But it remains unclear how many, if any, of the former Libyan heads of the various joint venture companies will remain. "Some of these guys were too closely associated with Qadhafi and because of their stance during the war, people are saying they should go," he added. Eni, Vitol and OMV have all signed deals with the National Transitional (NTC) rebels to supply products, and trading firm Glencore is in talks for a similar deal, the AGOCO source said.

EU Lifts Sanctions On 28 Entities, Including Oil Companies And Ports

Oil companies and ports were amongst the 28 entities on which the EU on 2 September lifted sanctions (see table). The move came a day after world powers agreed in Paris to free up \$15bn in frozen assets to help the National Transitional Council (NTC) start rebuilding the country after Colonel Mu'ammar al-Qadhafi lost his grip on power (*MEES*, 5 September). Col Qadhafi's comments last week to a Syrian TV station suggest he remains defiant, and while he insisted he was still in Libya, his whereabouts were unknown as *MEES* went to press.

As EU sanctions were lifted and some of Libya's funding had been unblocked, efforts by some of the 15 members of the Security Council are ongoing to secure a UN resolution to unfreeze more of the assets, which could amount to over \$150bn. In addition to helping meet humanitarian needs and restart essential services, it would help pay for the rehabilitation of Libya's beleaguered oil industry. A wider UN resolution on Libyan asset unfreezing could be achieved as soon as the next 'Friends of Libya' meeting, which is planned for New York on 20 September, diplomatic sources say. "The measure needs to be agreed by all 15 Security Council members and there has to be a mechanism in place to make sure the money gets to the right people," said one diplomat. "There are a lot of complexities to work through before the money can be returned."

A number of investigations into how the money was used have already started, with the NTC warning that it will bring legal action against those who practiced corruption in collusion with the Qadhafi regime. The *Wall Street Journal* reported on 6 September that the NTC was looking into the dealings of the Libyan Investment Authority (LIA) with French bank Société Générale. It also said the US stock market watchdog, the Securities and Exchange Commission, was scrutinizing a \$50mn payment allegedly offered by Goldman Sachs to the sovereign wealth fund (SWF), although the US investment bank denies wrongdoing and apparently the payment did not go ahead.

The NTC has also appointed a former Qadhafi regime technocrat, Mahmud al-Badi, to investigate allegations of corruption at the LIA. A damning assessment of the performance of six funds in which the LIA invested \$1.7bn raises questions over how money supposedly belonging to the Libyan people wound up in such high risk investment vehicles (*MEES*, 11 July). The matter came to light in an LIA internal document leaked to campaign group Global Witness. It suggested assets of the usually opaque LIA totaled \$64bn.

Lifted Libyan Sanctions – List of Entities

| Oil Companies | Oil Companies | Port Authorities of: | Financial | Other |
|--------------------------------|--|----------------------|--------------------------------------|----------------------------|
| Azzawia Refining | North African Geophysical Exploration Co. | Tripoli | Economic And Social Development Fund | Jawaby Property Investment |
| Ras Lanuf Oil & Gas | National Oil Fields & Terminals Catering | Al Khoms | National Commercial Bank | Tekxel Ltd |
| Brega | Mabruk Oil Operations | Brega | Gumhouria Bank | Libyan Arab Airlines |
| Sirte Oil Company | Harouge Oil Operations | Ras Lanuf | Sahara Bank | |
| Waha Oil Company | Al-Sharara Oil Services | Zawia | First Gulf Libyan Bank | |
| Tamoi Africa Holdings | National Oil Wells & Drilling Workover Co. | Zuwara | | |
| Mediterranean Oil Services Co. | Mediterranean Oil Services Co. | | | |

Source: Official Journal of the European Union.

Kuwait Increases LNG Imports And Fuel Oil Exports

Kuwait looks set to import more LNG, and for more months this year than it did last year, as it considers building a permanent import terminal. Oil field development may deepen the gas deficit instead of providing more associated gas to the sales gas pool. Next year power generation capacity is scheduled to increase by 600mw when Sabiyah power plant completes its expansion. But Kuwait has boosted its fuel oil exports.

Kuwait has imported almost one-third more LNG in the first eight months of 2011 compared to the same period last year, and looks set to continue imports into November – a month beyond its contracts with Shell and Vitol to provide cargoes until October.

A KPC source says Kuwait's Committee to study building permanent LNG import facilities has not made a recommendation yet. "LNG injection will continue until the end of October and might be extended for one more month," he tells *MEES*.

Imports up to the end of August are 30 cargoes, amounting to 1.98mn tons. For the first eight months of 2010 the figures were 24 cargoes, totaling 1.5mn tons. State-owned Kuwait National Petroleum Corporation (KNPC) has contracts for four cargoes per month – three from Shell and one from energy trader Vitol, which run through to October this year and cover summers in 2012 and 2013.

UK-based independent LNG analyst and former head of BP's global LNG division Andy Flower tells *MEES*: "It looks as though the total for 2011 will be well up on last year, especially if they continue through to November. Interestingly, after not receiving any cargoes directly from Qatar in the first two years of operation of the al-Ahmadi facility, some 40% of deliveries have been from Qatar this year."

In 2010, Kuwait produced about 1.2bn cfd of well-head gas, of which 0.9-1.0bn cfd is associated gas. Some is used for reinjection and burned in oil field power stations. It imported 2.07mn tons of LNG – an average of 276mn cfd. Its import terminal has a capacity of 500mn cfd to allow for peak summer demand caused by air conditioning needs.

In addition to a shortage of domestically produced gas, Kuwait faces an infrastructure restriction – state-owned upstream firm Kuwait Oil Company (KOC)'s gas pipeline network has a maximum capacity of 900mn cfd, excluding transport facilities in the Neutral Zone (NZ), which it shares with Saudi Arabia. NZ onshore heavy oil produces relatively small amounts of associated gas.

Oil Development Conundrum

Development of oil fields may worsen the gas crisis instead of providing more associated gas to the sales gas pool. Kuwait is turning increasingly to enhanced oil recovery, which is energy intensive. Chevron expects to take its final investment decision in 2014 on going ahead with its high energy use heavy oil steam injection project in the NZ. A green light may trigger more LNG imports – an option that Chevron is considering – its gas exploration program has yet to find any major reservoirs. Furthermore, an oil service firm executive tells *MEES* of mature fields such as Kuwait's: "Associated gas declines as more wells are drilled and depletion increases, rather than increases in line with oil production."

Kuwait says it is boosting both oil production capacity and output. Minister of Oil Muhammad al-Busairi said on 4 September that Kuwait produced an average of 2.8mn b/d of oil in August – up from the figure he gave in June of between 2.5mn b/d and 2.7mn b/d. Shipping reports, however, do not support the 2.8mn b/d figure, unless it includes LPG.

One of Kuwait's main non-associated gas sources is the Jurassic northern fields gas project, which produces about 140mn cfd. The project which has Shell as a consultant looks increasingly unlikely to hit the target of 1bn cfd by 2016 (*MEES* 18 July).

In addition to LNG covering part of the gas gap, Kuwait's power stations can burn up to 650,000 b/d of fuel oil, and average an annual consumption of above 300,000 b/d. But this year KPC has boosted fuel oil exports, as the LNG imports have reduced the quantity of fuel oil required by power stations, UK-based independent refined products analyst John Young tells *MEES*.

In addition to its long-term fuel oil commitments to Singapore and Australia, KPC has now exported: one cargo per month (180 centistokes, about 70,000 tons) on term basis to Pakistan (total 558,122 tons over January to August 2011); and seven spot cargoes (380 cst, about 80,000 tons) May to September. The spot cargoes total average about 25,000 b/d. "The market is showing keen interest in KPC's spot fuel oil sales (by tender) and although Bakri has been awarded most of them, recently Shell was successful," Mr Young tells MEES. Bakri International Energy Company is a Saudi Arabia based products distributor.

Mr Young, who has worked for KPC, says previously up to 93% of fuel oil used to go to power stations and KPC even had problems providing its own bunkering operators with supplies. "Now we are seeing a complete change since the LNG imports started (limited in 2009, more in 2010 and now a large quantity in 2011) and I was so pleased when KPC agreed and concluded at the start of 2011 a term contract to supply one cargo (each 70,000 metric tons) per month to PSO, Pakistan. On top of this new term commitment, KPC are now selling spot cargoes each month."

Kuwait's need for power station fuel is growing. Total power capacity is about 12.5gw, which will increase by 600mw next year when the Sabiyah power plant second phase starts up. Kuwait expects to boost power generation capacity to 16gw by 2014-15 and 17-18gw by 2016, further pressuring demand and boosting the need for a permanent LNG import terminal – especially if it boosts fuel oil exports.

Other factors stressing the power supply system are a weak transmission system – this may repress power and therefore gas demand as it is currently unable to transmit the power generated from the country's total capacity. When atmospheric temperatures hit 50-55°C, a power plant's gas turbine efficiency can drop by about 20 percentage points. So even though Sabiyah is installing General Electric's heavy duty gas turbines, as their efficiency drops less than other turbines, it will still produce less gigawatt-hours for the same amount of gas during the summer.

Kuwait's monthly LNG imports in 2010 and 2011 ('000 Tons/Month)

| Month | 2011 | 2010 |
|-----------|------|------|
| March | 138 | - |
| April | 368 | 124 |
| May | 318 | 323 |
| June | 426 | 303 |
| July | 395 | 328 |
| August | 304 | 377 |
| September | - | 318 |
| October | - | 239 |

Source: Andy Flower.

EHC Makes Progress On \$5Bn 'Ain Sukhna Petrochemical Hub

Egypt Hydrocarbon Corporation (EHC) is making progress on the privately owned \$5bn petrochemicals hub it is setting up in the 'Ain Sukhna industrial zone, after seeing delays as a result of the Egyptian revolution. The \$454mn ammonium nitrate facility is the furthest along of the three projects initially planned for the site, which also include olefins and methanol operations. EHC, an affiliate of Carbon Holdings, had signed an agreement to receive a loan from banks to finance the ammonium nitrate project in November last year and was in the midst of recruiting investors to provide equity, but then suffered setbacks when riots broke out culminating in the ousting of former president Hosni Mubarak on 11 February.

As the situation in Egypt stabilized, the company was able to press ahead and equity investors signed an agreement to participate at the end of July. They comprise Egypt Kuwait Holdings, Yemen's Hayel Saeed Anam Group, the Saudi Economic Development Company and Cairo-headquartered Tri Ocean Energy. Although the ownership percentages have not been disclosed, Carbon Holdings is thought to have retained a large stake in the venture. EHC issued engineering procurement and construction (EPC) contractor Uhde a notice to proceed with the project on 23 August and start-up is planned for 2013. It will have the capacity to produce 850 tons/day of nitric acid, and this will provide the feedstock to produce 1,060 t/d of mining grade ammonium nitrate. Anhydrous ammonia feedstock is also needed, and this is being provided via a long term supply contract with Transammonia.

The company hopes to reach financial close on the \$298mn debt that is being supplied to the project by the end of this month, *MEES* learns. This loan, which takes the form of a project financing, has a 10-year maturity and is being provided by Egyptian banks which comprise Commercial International Bank, Banque Misr and Ahli United Bank (*MEES*, 20 December 2010). The loan will be syndicated to a wider group of domestic banks over the coming months.

For the olefins complex, which will include Egypt's first naphtha cracker in addition to petrochemicals units producing polypropylene, EHC intends to make a formal approach in October to export credit agencies (ECAs) to secure funding and/or cover. Shaw is the lead EPC contractor, and has been joined by South Korea's SK Engineering. The project will have three 450,000 tons/year polyethylene lines, with a combined design capacity of 1.35mn t/y. One line will be dedicated to high density polyethylene (HDPE) with the other two swing lines manufacturing linear low density polyethylene (LLDPE) and/or HDPE. The methanol project is also progressing and EPC services are being provided by Mitsubishi. "EHC is moving ahead with the ammonium nitrate project and will close the other two deals in the next 18 months or so," said a source close to the project. Startup for the olefins and methanol plants is planned for 2015/16.

"All the projects have had a delay, there's no denying that," he said, but noted that after Egypt stabilized following the revolution, EHC's projects were able to add participants – as well as SK Engineering coming in on the petrochemical project, the ammonium nitrate project was able to add an extra shareholder. While projects that need major government decisions are likely to be held up until after the elections, once conditions in Egypt had steadied, EHC was able to proceed with its plans, the source explained. "We've met with ECAs very recently and they're keen to move ahead and support Egypt and we haven't lost any partners as a result of the revolution," he added. EHC has not ruled out future government involvement in its projects, although any discussions on the matter will need to wait until after presidential and parliamentary elections.

While the projects will initially focus on export markets, the sponsor hopes that their production will eventually be used as the feedstock for further downstream industrial development at the 'Ain Sukhna port on the Gulf of Suez. The projects' driving force is Basil al-Baz, who is Chairman and CEO of both EHC and Carbon Holdings. Mr Baz set up the operations of nearby Egypt Basic Industries Corporation (EBIC) and remains chairman of the company (*MEES*, 7 May 2007). US Export-Import Bank (Exim) provided \$225mn to the EBIC project, which achieved financial close on 30 March 2006, and finance experts in Egypt suggested that Exim is likely to participate in the olefins complex. Establishing the ammonium nitrate project will bring 3,000 job opportunities during construction and about 500 during operations. Mr Baz said: "My company is determined to invest in the Egyptian market because we have confidence that the Egyptian economy will be able to overcome the current circumstances and show significant growth over time."

Iran Starts Up Region's First Nuclear Power Plant At Bushehr

Almost 20 years after Russia and Iran signed an intergovernmental agreement on the construction of a nuclear power plant at Bushehr, the Iranian Atomic Energy Organization (IAEO) announced on 3 September that the first nuclear power plant to become operational in the Middle East had started delivering electricity into the national grid "at a capacity of 60mw." Iran planned to inaugurate the plant officially on 12 September, and is keen to celebrate the completion of a controversial project in the face of increasingly draconian economic sanctions, imposed by an international community that is concerned that Tehran has used the program as a cover for the development of nuclear weapons. With Iran's power demand currently rising at about 10% a year, Iran is keen to diversify its power generation mix away from conventional plants to free up further volumes of oil and gas for export. Iran claims that its total power generation capacity recently surpassed 60gw, and it plans to raise its nuclear power capacity to 20gw. The Bushehr plant has a design capacity of 1gw. Output is expected to be raised to 400mw by 12 September and is expected to reach around 915mw over a period of three months.

Iran consumed in 2009 around 160 terawatt-hours of electric power. Iran now plans to install a second and third V-320 VVER-1000 pressurized water reactor at Bushehr, and is looking to begin work on the two units in 2012 and 2013. These would take Iran's nuclear generation capacity to 3gw, but even if over a period of 10 years Iran succeeded in fully implementing its nuclear development program, it would be unlikely to be able to cover 10% of its 2009 power consumption by 2030. For Iran to reach this 20gw target over a period of 20

years it would have to build another 10-20 Bushehr-type power plants, IAEA head Fereidoun Abbasi-Davani told a recent cabinet meeting in Tehran (*MEES*, 29 August).

Construction History

The origins of Iran's Bushehr nuclear plant date back to a 1975 agreement between the former Shah of Iran and a German consortium headed by Siemens and AEG. After an impasse of several decades, during which Tehran's nuclear plans were overshadowed by events including the 1979 revolution and the 1980-88 Iran-Iraq war, the project was resuscitated in 1995 by the replacement of the German consortium with Russia's state-owned Atomstroyexport. The deal, which was partly revised in 2007 so as to keep Bushehr under joint Russian-Iranian operational control in an attempt to help Atomstroyexport to recover its investment, called for the completion of the project by 2001. This was partly due to increasing economic sanctions and partly due to rising costs, which almost tripled over less than 15 years to surpass €3bn compared with an original budget estimate of around \$1bn in 1998.

The interrupted construction history of Bushehr has meant that 24% of the plant's parts were made in Germany, 36% were built in Russia and the remaining 40% were manufactured inside Iran. This 40% is at the center of Iran's problems with the international community. Until 2003 the developed world and its nuclear watchdog, the International Atomic Energy Agency (IAEA), were unaware of the extent of the Iranian nuclear program outside Bushehr. By 2005 it became evident that Iran had purchased its first centrifuges for the enrichment of uranium from an illegal network run by Abdul Qadeer Khan, Pakistan's chief nuclear scientist and the father of the country's nuclear weapons program. These antiquated centrifuges, which Pakistan has not used since the 1990s and which are known in Iran as IR-1 units, constituted the bulk of the country's centrifuges that accounted for the initial uranium enrichment process.

The IR-1 centrifuge was also vulnerable to sabotage. In October 2010 Bushehr's computers were infected by the Stuxnet computer virus, which altered the rotational speed of the IR-1 centrifuges and damaged the units. This helped delay Bushehr's inauguration by six-eight months and destroyed around 20% of Iran's centrifuges. Despite this setback, Iran managed to replace some of its lost units with a new type of centrifuge, designated IR-2, which the Iranians claimed to have manufactured internally. Iran claims to have installed at least 54 IR-2s and to have developed yet another more advanced centrifuge prototype, which it calls IR-4. It is still unclear how much damage the Stuxnet virus attack did to Iran's nuclear program although US officials, in the build-up to the fourth round of UN Security Council sanctions in June 2010, indicated to the other permanent members that several components of an Iranian nuclear military program had been reactivated since 2007. Yet in December 2007 a US National Intelligence Council (NIC) report claimed that Iran had abandoned all military parameters of its nuclear program in 2003.

Reignited Apprehensions

A more recent move by Iran's nuclear planners seems to have reignited US/EU apprehensions. On 22 August Mr Abbasi-Davani announced that Iran has started to transport several centrifuges from the Natanz Primary Fuel Enrichment Plant to the fortified facility of Fordo near Qom, in an effort to protect them from new Stuxnet-type attacks. Mr Abbasi-Davani said that the transfer was being completed with the supervision of the IAEA, in an evident attempt to assuage any fears that this was an aggressive act. The following day Ali Asghar Soltanieh, Iran's ambassador to the IAEA, noted that Iran had allowed a visit by Herman Nackaerts, IAEA's Deputy Director General of Safeguards, to several nuclear facilities including Natanz and the Arak heavy water production plant. Tehran had heretofore denied any access by IAEA inspectors to the Arak facility.

On 1 September a report by the IAEA inspectors circulated among the agency's members in Vienna indicated, according to the *New York Times*, that "Iran had finally begun operating a new generation of equipment that over time should give it the capability to produce nuclear fuel much faster... Because the machines spin much faster than the models they are intended to replace, they could speed Iran's ability to enrich large quantities of nuclear fuel." While it is unlikely that Iran will stop its cat and mouse tactics with regard to its nuclear progress, the view among observers is that the most likely scenario is that Tehran wants to develop a 'trigger capability' – the ability to be able to produce a nuclear weapon within a matter of months, without actually being able to deploy one immediately.

BP Eyes Expansion Of 1Bn CFD Oman Gas Project

BP will complete its gas sales agreement with Muscat on the \$15bn Khazzan-Makaram gas project by the end of 2012 and take the final investment decision by February 2013. The project – which could produce 15,000-20,000 b/d of condensate – will produce first commercial gas by the third quarter of 2016, and after plateauing at 1bn cfd in the first phase, may be expanded under future phases.

BP is drilling its ninth well at the Khazzan-Makaram gas fields in Oman and expects to connect two more wells to the extended well test (EWT) facility – which hooks the appraisal wells to the country's gas network – by January, taking the EWT's capacity to 70mn cfd.

Pre-front end engineering design (pre-FEED) completion has slipped slightly to February 2012 from the planned third quarter 2011, due to a delay in starting up the EWT and the need to await results from a second horizontal well.

BP will submit the field development plan to the government by the end of the first quarter 2012. It will then go to tender for engineering procurement and construction (EPC) contracts to finalize the costs – aiming for bids to be in by the third quarter of 2012. BP currently estimates the project capital expenditure at \$15bn, of which \$10bn is for wells. The cost has risen from its originally expected \$10bn since BP did more work on the scope and costs and moved to horizontal wells, which are more expensive.

Since UK firm BG's sudden pull-out from the Abu Butabul project in 2010 – due to what it considered to be a low price offered by Muscat – the government has become much more flexible on price negotiations (*MEES* 7 February). Both the price paid for gas to BP and its share of natural gas liquids are on the table, a government official tells *MEES*.

Jonathan Evans, General Manager of BP Oman, tells *MEES*: "We are aiming for end-2012 to conclude the full suite of commercial agreements. The gas sales agreement is the most important." Full field development could see the production of 15,000-20,000 b/d of condensate b/d from 1.2mn cfd of well-head gas – the three wells that are connected to the EWT produce about 400 b/d of condensate from 32.5mn cfd of gas.

The FEED will finish in January 2013 and the final investment decision (FID) taken in February 2013 – back from the originally planned fourth quarter of 2012, due to the slippage. The 30-year concession starts from the final investment decision (FID) date.

First commercial gas production will probably start in the third quarter of 2016, ramping up to 1bn cfd sales gas, from 1.2bn cfd well-head gas, some of which will be used for power generation at the site, over one-two years. It will remain on plateau at 1bn cfd for a minimum of 10 years.

The project will probably start with around 40 wells in 2016, increasing to 60 during 2017, and add 20-25 additional wells each year for 10 years when it plateaus from 2017-18 onwards. The project may total 300-400 wells depending on how the early wells perform – BP will probably continue a drilling program over at least 20 years.

The first phase of development – to produce 1bn cfd – will recover 8-10 trillion cu ft of gas from 100 tcf of gas in place. "We anticipate further phases to develop further reserves from the same gas in place through adding additional wells in other parts of the block," Mr Evans says.

MEES Agenda

Cyprus Energy Department Urges Gas Search, Turkey Threatens Intervention

The head of the Cyprus Energy Department on 6 September urged the government to make the political decisions necessary to move forward with exploration and development of the island's offshore hydrocarbon potential. Solon Kassinis, whose department functions under the Ministry of Commerce, Industry and Tourism, told the members of the House of Representative's Commerce Committee that political decisions are the only obstacle the island has to overcome regarding current plans to drill for offshore gas for delivery to the island for domestic use and eventual export.

Regarding plans by US independent Noble Energy to start drilling in Block 12 on or before 1 October, Mr Kassinis told the committee: "Everything is going according to plan without any delays, so we're hoping to start drilling before the end of the month," according to the *Cyprus Mail*. He went on to say that three gas scenarios are being considered: development of an anticipated discovery in a potential gas-bearing structure that has been identified in Cyprus's Block 12, with gas being transported to the island by pipeline; transporting gas to Cyprus from Israel's offshore Leviathan field by pipeline; and transporting gas to the island from both sources (MEES, 22 August, 4 July). "The Americans want to bring us natural gas by 2014 and are asking for cooperation on the pipeline," Mr Kassinis said.

Noble Energy, which is operator in Block 12 as well as in Israel's Leviathan and Tamar gas fields, has informed Cypriot officials that it will be possible to deliver natural gas by pipeline to the island's power generation facilities at Vassilikos by mid-2014. Mr Kassinis said under the pipeline option, gas would become available by 2014-15 and that a floating storage and regasification unit (FSRU) could be set up to service the island's natural gas needs by 2013 if required. Cyprus has yet to switch to natural gas for power generation. The island's main power station at Vassilikos was demolished by an accidental explosion at an adjacent military base on 11 July that destroyed 793mw of capacity at the facility. The Electricity Authority of Cyprus (EAC) has since been struggling to bring back on-line whatever power generation capacity it can and will continue to use heavy fuel oil for fuel until natural gas in some form becomes available and its gas-fired generators can be replaced or new plants built (MEES, 5 September, 1 August).

MEES understands that Houston-based Noble is keen to proceed with negotiating a heads of agreement with Nicosia that would outline several proposals the company put forward last April, including piping Israeli and Cypriot gas to a 15mn tons/year LNG facility that would be built at Vassilikos (MEES, 9 May). Noble's main partner in its offshore Israeli operations, the Delek Group, proposed a joint LNG facility in Cyprus last January (MEES, 17 January). Currently the plan calls for such a facility to come on stream in 2020 after a \$10bn investment. Since the start of the year energy cooperation relations between Cyprus and Israel have been on a steadily upward track, especially since Turkey has begun to issue warnings to Cyprus not to start drilling and Ankara's relationship with Israel has deteriorated in the wake of the Mavi Marmara affair of May 2010 in which nine Turks were killed when Israeli commandoes boarded a ship bound for the blockaded Gaza Strip.

Turkey Threatens Naval Intervention

Turkey has gone so far as to threaten military intervention if Noble Energy should proceed with drilling in Block 12. In an interview with the Turkish daily *Today's Zaman* on 2 September, Turkey's Minister of European Affairs Egemen Bagis said Turkey's navy might move to prevent drilling from going ahead. "The kind of things that have happened in the past whenever the Greek-Cypriots have made such attempts may well happen again," Mr Bagis said, referring to previous times when Turkish vessels have moved into waters off the southern coast of Cyprus when seismic surveys were under way. "That is how serious Turkey is. Doing this in waters where they have no jurisdiction is illegal. Turkey will rely on international law to pursue its rights to the fullest extent," Mr Bagis said. "This is what we have the navy for. We have trained our marines for this; we have equipped the navy for this. All options are on the table; anything can be done."

Ankara does not recognize the Republic of Cyprus as a sovereign entity despite the fact that it is a member of the EU, recognized by and represented at the UN, and is a signatory to the International Law of the Sea (Turkey has not signed that treaty). Turkey is the sole country to recognize the Turkish Republic of Northern Cyprus (TRNC), which declared its independence in 1983 in the 40% area of Cyprus that the Turkish army has occupied since 1974.

During a gathering of EU foreign ministers in Poland during 3-4 September that was also attended by Turkish Foreign Minister Ahmet Davutoglu, the Foreign Minister of Cyprus, Erato Kazakou-Marcoullis, requested a meeting with Mr Davutoglu to discuss the situation. According to the *Cyprus Mail*, the Turkish minister said he would meet Ms Kazakou-Marcoullis if the meeting included Greece and the TRNC.

Turkey's position is that no exploration of Cypriot waters should take place until a political settlement between the Greek-Cypriot and Turkish-Cypriot communities is reached. Turkey claims that any hydrocarbons found anywhere offshore Cyprus should be the property of both communities. In mid-August, Mr Kassinis told the Cypriot media that any future discovery of hydrocarbons off the southern coast of Cyprus would be used for the benefit of all the legal residents of the island (MEES, 22 August).

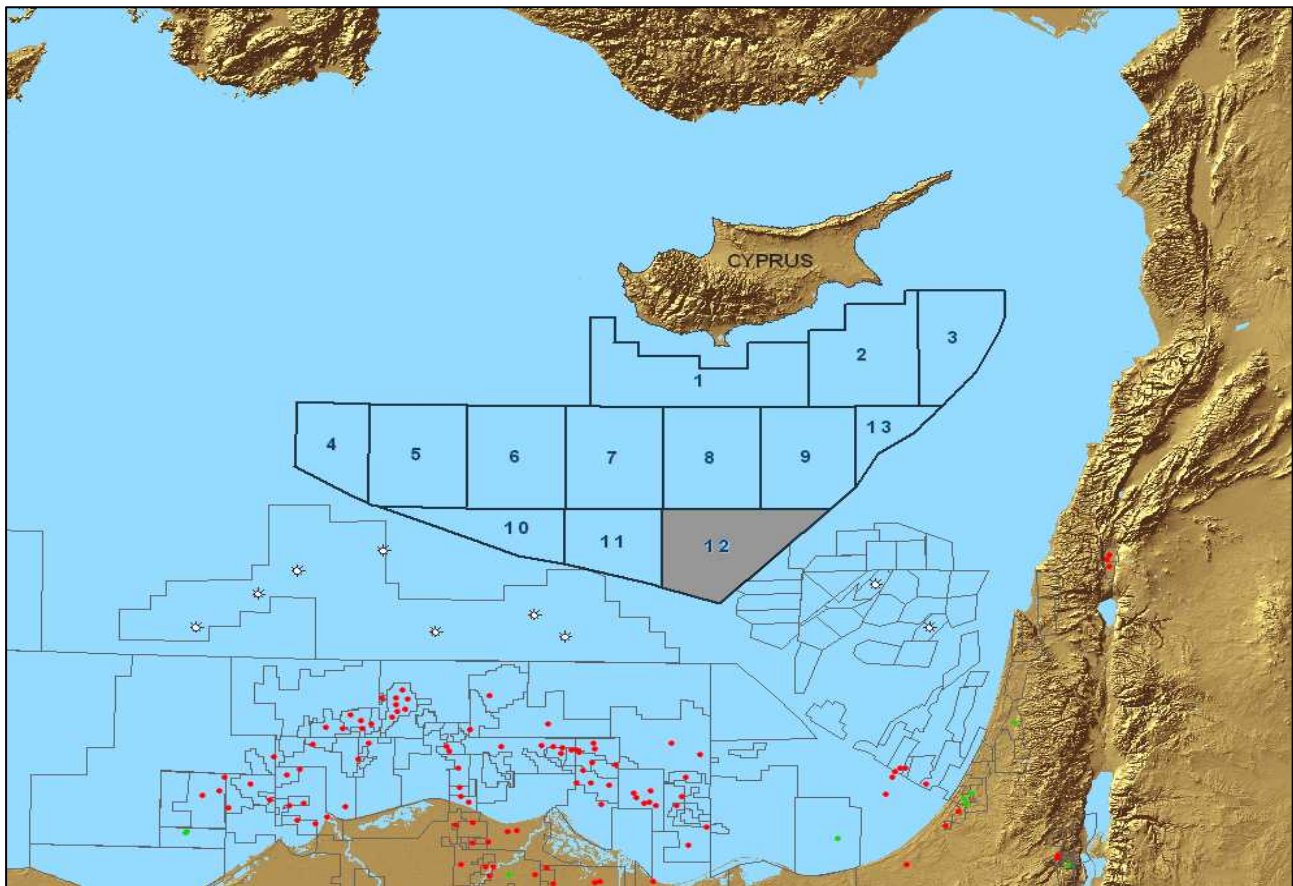
For its part, Noble Energy said it would continue with its exploration schedule in Block 12. The company will use the rig Homer Ferrington, which is currently at work in Israel's Noa North field. Noble Energy expressed its intention to proceed with drilling in Block 12 during a recent closed meeting in Nicosia at the Cyprus Chamber of Commerce, organized by the Cyprus-American Business Association, the Greek-Cypriot daily *Phileleftheros* reported on 8 September. Also in attendance was the *charge d'affaires* of the US Embassy. The daily said the emphasis of the meeting was on the construction of pipelines to the island and the proposed construction of an LNG facility.

EU Tells Turkey To Stop Threats

Meanwhile, the EU has told Turkey to stop threatening Cyprus. Enlargement Commissioner Stefan Fule on 7 September called for Turkey to stop issuing threats against Cyprus regarding its energy exploration program in the eastern Mediterranean, *Europolitics* reported. "He made it clear at the same time that Cyprus has the sovereign right to enter into bilateral agreements," the daily said. It quoted European Commission spokesperson, Maja Kocijancic, speaking on behalf of Mr Fule, as saying: "The EU urges Turkey to refrain from any kind of threat, sources of friction or action, which could negatively affect good neighborly relations and the peaceful settlement of border disputes." Furthermore, *Europolitics* said that criticism is "mounting in the EU against Turkey's stance on the issue." It reported that Wilfried Martens, head of the European People's Party (EPP) said Turkey, as an EU candidate, "must refrain from issuing threats against an EU member state. This also undermines the EU's energy security."

Should an LNG facility eventually be constructed in Cyprus, its expected target market would be the EU, which is looking to diversify its sources of gas supply. Among other projects under consideration that would supply new gas to Europe are the Nabucco Gas Pipeline project, the Interconnector-Turkey-Greece-Italy (ITGI) and the Trans Adriatic Pipeline (TAP), all of which would rely on gas supplies moving through the Southern Corridor – the name given to the transportation route that would carry gas from the Caspian Sea region and the Middle East through Turkey to Europe.

Cyprus Offshore Blocks



Source: Energy Department, Cyprus Ministry of Commerce, Industry and Tourism.

ENERGY FUNDAMENTALS

Crude Prices Hold Steady As Market Gauges Direction Of Economy

The price of WTI remained in the upper \$80s/B range last week, settling at \$89.05/B on 8 September as the global economy continues in its lackadaisical state with little sign of improvement anytime soon. Weekly petroleum data from the US Energy Information Administration (EIA) showed that crude oil inventories were drawn down by 4mn barrels during the previous week. However, the market judged comments made by US Federal Reserve Chairman Ben Bernanke as having failed to identify any course of action to keep the country from entering a second recession.

In its *Weekly Petroleum Status Report*, released on 7 September, the EIA said US commercial crude oil inventories decreased by 4.0mn barrels during the week ending 2 September. At 353.1mn barrels, US crude oil inventories are above the upper limit of the average range for this time of year. Total motor gasoline inventories increased by 0.2mn barrels and are in the upper limit of the average range. Distillate fuel inventories increased by 0.7mn barrels and are in the upper limit of the average range for this time of year. Total commercial petroleum inventories decreased by 4.3mn barrels.

US crude oil imports averaged nearly 8.6mn b/d, down by about 1.0mn b/d from the previous week. Over the last four weeks, crude oil imports have averaged close to 9.1mn b/d, 443,000 b/d below the same four week period last year. US crude oil refinery inputs averaged just under 15.5mn b/d during the week, 6,000 b/d above the previous week's average. Total products supplied over the last four-week period have averaged 19.4mn b/d, down by 0.2% compared to the similar period last year.

Settlement Prices For Benchmark Crudes (\$/B)

| Date | Nymex WTI | ICE Brent | DME Oman | ICE Dubai | OPEC Basket |
|-------|-----------|-----------|----------|-----------|-------------|
| 2 Sep | 86.45 | 112.33 | 109.54 | 108.14 | 110.37 |
| 5 Sep | 86.45 | 110.08 | 109.54 | 104.77 | 108.42 |
| 6 Sep | 86.02 | 112.89 | 106.76 | 107.65 | 108.32 |
| 7 Sep | 89.34 | 115.80 | 109.55 | 110.53 | 111.33 |
| 8 Sep | 89.05 | 114.55 | 110.89 | 109.02 | 112.15 |

OPEC Output Nudges Up

OPEC output rose slightly in August, but production levels still have not compensated for the loss of Libyan production and remain below the 31.1mn b/d levels seen before fighting broke out in Benghazi in late February. And with the usual summer spike in Gulf oil demand absorbing much of the extra production, Middle East Gulf sailings are a good 600,000 b/d below their 18mn b/d-plus peak in early February, according to tanker tracker *Oil Movements*.

OPEC Basket prices rose again in late August, moving over the \$110/B mark, despite increasingly gloomy economic signals and the threat they pose to oil demand. "We are walking on egg shells," notes Paul Tossetti of consultants PFC Energy. "There are all the debt worries, and European banking worries. So anything positive is all from non-OECD," he adds. While the macro-economy all points to if not a double-dip recession, then negligible growth, fundamentals remain tight, argues Leo Drollas, Deputy Executive Director and Chief Economist at the Centre for Global Energy Studies (CGES). "There is maintenance coming up in the North Sea, ongoing problems in Libya, the Saudis don't seem to be doing much and shipping rates are falling [indicating less oil is on the way]," he tells *MEES*.

Basra Output Record

Certainly Nigerian output, which has managed to post two successive monthly rises, was hit by a series of disruptions late August, indicating probable lower September levels. And shipping data also points to lower September exports. Iraqi southern exports from Basra hit a post-2003 record of 1.789mn b/d, according to data obtained by *MEES*. A *Reuters* report sourcing state-oil marketer SOMO gave a significantly lower figure of 1.728mn b/d. But this came out on 1 September, and could well be a provisional figure, not taking into account a massive 4.7mn barrels that completed loading on 31 August. And the August monthly figure, impressive though it is, obscures a massive second half of the month loading effort by Basra Oil Terminal personnel, which saw loadings go over 1.83mn b/d, smashing previous records. Iraqi oil sources tell *MEES* it is clear Baghdad must have ordered the mobilization to counteract the effects of a cut in output by the autonomous Kurdistan Regional Government (KRG).

OPEC Crude Oil Production August 2010 – August 2011 (MEES Estimates – '000 B/D)

| | Target # | 2011 | | | | | | | | 2010 | | | | |
|------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Aug | Jul | Jun | May | Apr | Mar | Feb | Jan | Dec | Nov | Oct | Sep | Aug |
| Algeria | 1,203 | 1,290 | 1,290 | 1,280 | 1,280 | 1,280 | 1,280 | 1,260 | 1,250 | 1,270 | 1,270 | 1,270 | 1,270 | 1,260 |
| Angola | 1,517 | 1,620 | 1,650 | 1,520 | 1,580 | 1,500 | 1,700 | 1,650 | 1,640 | 1,600 | 1,620 | 1,650 | 1,650 | 1,790 |
| Iran | 3,336 | 3,580 | 3,580 | 3,610 | 3,630 | 3,600 | 3,610 | 3,630 | 3,640 | 3,650 | 3,650 | 3,680 | 3,650 | 3,700 |
| Iraq | NA | 2,769 | 2,673 | 2,796 | 2,731 | 2,672 | 2,549 | 2,717 | 2,707 | 2,501 | 2,430 | 2,484 | 2,518 | 2,361 |
| Kuwait† | 2,222 | 2,550 | 2,500 | 2,500 | 2,490 | 2,480 | 2,480 | 2,350 | 2,300 | 2,320 | 2,300 | 2,300 | 2,300 | 2,300 |
| Libya | 1,469 | 10 | 30 | 40 | 60 | 150 | 300 | 1,380 | 1,540 | 1,560 | 1,560 | 1,560 | 1,550 | 1,550 |
| Nigeria | 1,673 | 2,380 | 2,350 | 2,250 | 2,300 | 2,200 | 2,100 | 2,220 | 2,280 | 2,320 | 2,240 | 2,320 | 2,300 | 2,250 |
| Qatar | 731 | 810 | 810 | 810 | 810 | 790 | 810 | 800 | 790 | 784 | 784 | 772 | 797 | 707 |
| S Arabia† | 8,051 | 9,700 | 9,700 | 9,350 | 9,050 | 8,770 | 8,600 | 9,125 | 8,900 | 9,100 | 8,740 | 8,530 | 8,380 | 8,430 |
| UAE | 2,223 | 2,530 | 2,510 | 2,490 | 2,450 | 2,500 | 2,510 | 2,470 | 2,400 | 2,450 | 2,330 | 2,320 | 2,350 | 2,300 |
| Venezuela* | 1,986 | 2,350 | 2,350 | 2,300 | 2,280 | 2,210 | 2,210 | 2,210 | 2,210 | 2,200 | 2,180 | 2,210 | 2,220 | 2,220 |
| Ecuador | 434 | 480 | 480 | 480 | 480 | 490 | 500 | 480 | 500 | 490 | 480 | 470 | 470 | 480 |
| Total | | 30,069 | 29,923 | 29,426 | 29,141 | 28,642 | 28,649 | 30,292 | 30,157 | 30,245 | 29,584 | 29,566 | 29,455 | 29,348 |
| OPEC 11 | 24,845 | 27,300 | 27,250 | 26,630 | 26,410 | 25,970 | 26,100 | 27,575 | 27,450 | 27,744 | 27,154 | 27,082 | 26,937 | 26,987 |

* Revised.

† Includes 50% share of Neutral Zone output.

December 2008 Oran Meeting output ceiling of 24.845mn b/d no longer in force as of June 2011 OPEC meeting.

Japan Plans To Increase Product Stocks

The Japanese government on 6 September said it plans to increase its strategic stocks of refined petroleum products in order to guard against shortages in the event of any future natural disaster, such as the earthquake and tsunami that struck the island last March. A plan is being devised that would ensure stable supplies and speed their delivery in an emergency, a government official was reported as saying by *Reuters*. "We have not crafted details of the plan yet, but are working towards improving the national reserve system in light of the disaster," he said. The government has yet to decide whether it would reduce the amount of crude stocks it holds in the national strategic petroleum reserve (SPR) or if it would increase the overall volume of product inventories, the official added. The additional product stocks would also prove useful in the event of a disruption in supply from suppliers, particularly those in the Middle East and North Africa. In the aftermath of the March disaster, crude refineries in northern Japan were closed for a month and unable to provide products for many weeks. At the end of August, Japan held stocks equivalent to 114 days of demand in the national SPR. Of these, 320mn barrels were crude and only 800,000 barrels were products. Stocks held by the private sector at the end of August would cover 86 days of demand.

Saudi Crude Prices Cut To US, Boosted To Europe And Asia

Saudi Aramco announced its October crude pricing formulas to customers on 5 September, raising prices to the US, but cutting prices to Europe and Asia. Saudi Aramco normally bases its pricing formula primarily on recent spot price movements for competing crudes in the regional markets. In recent weeks US Gulf coast sour crude differentials to benchmark crudes have increased, although Saudi Arabia appears to have moved to keep its pricing competitive after East Coast refinery outages, due to the recent hurricane, undermined demand. However, in Europe spot prices for Russian Urals crude have been boosted by tight supplies in the Mediterranean, while in Asia firm regional demand and limited supplies boosted refining margins.

To The US

For October deliveries to the US, where Saudi Aramco uses the Argus Sour Crude Index (ASCI) as a pricing reference, Arab Light was reduced by \$0.30/B, Arab Medium by \$0.15/B, Arab Heavy by \$0.45/B and Arab Extra Light by \$0.25/B. On the US Gulf Coast spot market, the Gulf of Mexico crude Mars was selling at WTI plus \$23.55-23.60/B in late August, while Poseidon was selling at WTI plus \$23.10/B and Southern Green Canyon was selling at WTI plus \$22.00/B. By comparison, those crudes were selling in early August at WTI plus \$19.80-20.55/B for Mars, WTI plus \$20.40/B for Poseidon and WTI plus \$19.00/B for Southern Green Canyon.

To Northwest Europe And The Mediterranean

For October deliveries to Northwest Europe, where Saudi Aramco uses ICE's Brent Weighted Average (BWAVE) quoted value as its pricing reference, the price of Arab Light was raised by \$1.35/B, Arab Medium by \$1.30/B, Arab Heavy by \$1.05/B, and Arab Extra Light by \$2.25/B. For the Mediterranean, where BWAVE is also the pricing reference, Arab Light was increased by \$2.15/B, Arab Medium by \$2.20/B, Arab Heavy by \$2.40/B and Arab Extra Light by \$2.15/B. On the European spot market, Urals for Northwest Europe held steady at around Dated Brent minus \$0.50/B during August. However, Urals for the Mediterranean traded at Dated Brent minus \$0.40/B in early September, compared with Dated Brent minus \$2.15/B in mid-August.

To Asia

For October deliveries to Asia, where Saudi Aramco uses the Oman/Dubai average for its pricing formula, the price of Arab Light was increased by \$0.90/B, Arab Medium by \$1.05/B, Arab Heavy by \$1.15/B, Arab Extra Light by \$0.80/B and Arab Super Light by \$0.70/B. On the spot market, Qatar Marine sold at QP plus \$0.13/B in early September compared to QP minus \$0.10/B in mid-August.

The formulas for October 2011 and the previous 12 months for deliveries to the US, Europe and the Far East – on an FOB Saudi Arabia basis, 50 days after B/L for the US, 40 days after B/L for NW Europe, and B/L date to the Far East – are as follows (\$/B):

| US (Price Reference ASCI) | | | | | | | | | | | | | |
|--|-------|-------|-------|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|
| | 2011 | | | | | | | | | | 2010 | | |
| | Oct | Sep | Aug | Jul | Jun | May | Apr | Mar | Feb | Jan | Dec | Nov | Oct |
| Arab Light (32-36°) | +0.20 | +0.50 | +0.10 | +0.25 | +0.45 | +0.20 | 0.00 | +0.30 | +0.05 | +0.25 | -0.25 | -0.20 | -0.35 |
| Arab Medium (29-32°) | -2.15 | -2.00 | -2.00 | -2.15 | -2.25 | -2.20 | -2.20 | -1.85 | -2.10 | -1.90 | -1.90 | -1.85 | -1.90 |
| Arab Heavy (<29°) | -4.45 | -4.00 | -3.70 | -3.90 | -4.80 | -4.20 | -3.90 | -3.65 | -4.05 | -3.75 | -3.35 | -3.35 | -3.30 |
| Arab Extra Light (36-40°) | +2.75 | +3.00 | +2.25 | +2.90 | +3.45 | +3.00 | +2.60 | +2.70 | +2.45 | +2.50 | +1.40 | +1.40 | +1.20 |
| North West Europe (Price Reference Brent Weighted Average) | | | | | | | | | | | | | |
| | Oct | Sep | Aug | Jul | Jun | May | Apr | Mar | Feb | Jan | Dec | Nov | Oct |
| Arab Light (32-36°) | -0.70 | -2.05 | -3.10 | -2.45 | -4.15 | -4.50 | -3.40 | -4.20 | -3.05 | -2.25 | -2.50 | -2.20 | -1.65 |
| Arab Medium (29-32°) | -2.70 | -4.00 | -5.00 | -4.65 | -6.90 | -7.15 | -5.90 | -6.10 | -5.05 | -4.05 | -4.20 | -3.90 | -3.15 |
| Arab Heavy (<29°) | -5.00 | -6.05 | -7.25 | -6.80 | -9.60 | -9.75 | -8.45 | -8.55 | -7.30 | -6.00 | -5.65 | -5.25 | -4.15 |
| Arab Extra Light (36-40°) | +2.30 | +0.05 | -1.05 | -0.10 | -1.00 | -1.75 | -1.10 | -1.75 | -0.65 | +0.05 | -0.85 | -0.85 | -0.50 |
| Mediterranean (Price Reference Brent Weighted Average) | | | | | | | | | | | | | |
| | Oct | Sep | Aug | Jul | Jun | May | Apr | Mar | Feb | Jan | Dec | Nov | Oct |
| Arab Light (32-36°) | -0.70 | -2.85 | -3.10 | -3.20 | -4.40 | -4.40 | -3.75 | -4.75 | -2.95 | -1.70 | -2.65 | -2.30 | -1.50 |
| Arab Medium (29-32°) | -2.65 | -4.85 | -5.25 | -6.25 | -8.55 | -8.50 | -7.70 | -7.30 | -5.45 | -3.90 | -4.55 | -4.10 | -3.00 |
| Arab Heavy (<29°) | -4.95 | -7.35 | -7.40 | -8.45 | -11.25 | -11.05 | -10.05 | -9.70 | -7.90 | -5.90 | -6.35 | -5.70 | -4.20 |
| Arab Extra Light (36-40°) | +2.15 | 0.00 | -0.95 | -1.05 | -1.55 | -2.10 | -1.60 | -3.15 | -0.85 | +0.25 | -1.35 | -1.25 | -0.40 |
| Far East (Price Reference Oman/Dubai) | | | | | | | | | | | | | |
| | Oct | Sep | Aug | Jul | Jun | May | Apr | Mar | Feb | Jan | Dec | Nov | Oct |
| Arab Light (32-36°) | +1.65 | +0.75 | +1.35 | +1.45 | +2.15 | +1.65 | +1.95 | +1.30 | +1.60 | +1.60 | +0.35 | -0.05 | -0.50 |
| Arab Medium (29-32°) | -0.30 | -1.35 | -0.35 | -0.65 | -0.75 | -1.00 | -0.45 | -1.10 | -0.95 | -0.55 | -1.60 | -1.80 | -2.05 |
| Arab Heavy (<29°) | -2.15 | -3.30 | -1.90 | -2.65 | -3.50 | -3.45 | -2.55 | -3.05 | -2.90 | -2.15 | -3.10 | -3.20 | -3.35 |
| Arab Extra Light (36-40°) | +3.85 | +3.05 | +2.95 | +3.45 | +4.85 | +3.85 | +3.95 | +3.30 | +3.50 | +3.10 | +1.80 | +0.85 | +0.30 |
| Arab Super Light (>40°) | +5.35 | +4.65 | +3.85 | +4.85 | +7.75 | +6.05 | +6.05 | +5.80 | +6.40 | +5.25 | +3.35 | +1.90 | +1.00 |

Crude Oil Formulas/Posted Prices (\$/B)

Abu Dhabi (\$/B)

| | 2011 | | | | | | | | | 2010 | | | | |
|-------------------|--------|--------|--------|--------|--------|--------|--------|-------|--|-------|-------|-------|-------|-------|
| | Aug | Jul | Jun | May | Apr | Mar | Feb | Jan | | Dec | Nov | Oct | Sep | Aug |
| Murban (39°) | 109.05 | 113.95 | 112.15 | 113.60 | 120.70 | 112.55 | 103.60 | 95.55 | | 91.85 | 85.65 | 81.50 | 75.90 | 74.60 |
| Lower Zakum (40°) | 108.75 | 113.65 | 111.95 | 113.60 | 120.70 | 112.55 | 103.60 | 95.60 | | 91.90 | 85.65 | 81.35 | 75.65 | 74.35 |
| Umm Shaif (37°) | 108.25 | 113.15 | 111.55 | 113.10 | 120.20 | 112.05 | 103.15 | 95.15 | | 91.50 | 85.30 | 81.15 | 75.50 | 74.15 |
| Upper Zakum (34°) | 105.05 | 109.95 | 107.95 | 109.05 | 116.50 | 108.90 | 100.50 | 92.70 | | 89.30 | 83.35 | 79.35 | 74.00 | 72.80 |

Iraq (+/- Adjustment Factor; \$/B)

| | 2011 | | | | | | | | | | 2010 | | |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Oct | Sep | Aug | Jul | Jun | May | Apr | Mar | Feb | Jan | Dec | Nov | Oct |
| Basrah Light Crude | | | | | | | | | | | | | |
| US | | | | | | | | | | | | | |
| Basrah Light (ASCI*) | -1.70 | -1.85 | -1.75 | -2.00 | -2.10 | -1.95 | -1.65 | -1.35 | -1.35 | -1.15 | -1.15 | -1.10 | -1.15 |
| Europe | | | | | | | | | | | | | |
| Basrah Light (Dated Brent) | -3.00 | -4.05 | -4.55 | -5.25 | -7.05 | -6.50 | -4.60 | -4.60 | -3.40 | -1.90 | -2.55 | -2.30 | -1.45 |
| Far East | | | | | | | | | | | | | |
| Basrah Light (Oman/Dubai) | +0.05 | -1.00 | 0.00 | 0.00 | -0.05 | -0.15 | +0.30 | -0.35 | -0.10 | +0.20 | -0.90 | -1.05 | -1.35 |
| Kirkuk Crude ex-Ceyhan | | | | | | | | | | | | | |
| US | | | | | | | | | | | | | |
| Kirkuk (ASCI*) | +0.10 | +0.20 | 0.00 | 0.00 | +0.25 | +0.40 | +0.20 | +0.40 | +0.30 | +0.50 | +0.35 | +0.40 | +0.35 |
| Europe | | | | | | | | | | | | | |
| Kirkuk (Dated Brent) | -1.45 | -2.75 | -2.75 | -3.55 | -4.75 | -4.00 | -2.85 | -3.25 | -2.05 | -0.85 | -0.95 | -1.10 | +0.15 |

* Iraq's State Oil Marketing Organization (SOMO) began as of 1 April 2010 pricing its crude oil destined to the US at differentials to the Argus Sour Crude Index (ASCI). Prior to that, crude exports to the US had been priced at Platts WTI 2nd month for Basrah Light, and Platts WTI 1st month for Kirkuk.

Kuwait (+ / - Adjustment Factor; \$/B)

| | 2011 | | | | | | | | | | 2010 | | |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Oct | Sep | Aug | Jul | Jun | May | Apr | Mar | Feb | Jan | Dec | Nov | Oct |
| Kuwait Export Crude | | | | | | | | | | | | | |
| Far East (31°) | | | | | | | | | | | | | |
| Oman/Dubai | -0.55 | -1.55 | -0.60 | -0.85 | -1.00 | -1.25 | -0.70 | -1.35 | -1.25 | -0.85 | -1.90 | -2.10 | -2.30 |
| Europe | | | | | | | | | | | | | |
| KEC (BWAVE) to Arab Medium | NA | -3.70 | -4.70 | -4.35 | -6.60 | -6.85 | -5.60 | -5.70 | -4.65 | -3.65 | -3.85 | -3.55 | -2.80 |
| US | | | | | | | | | | | | | |
| KEC (WTI) to Arab Medium | NA | -2.00 | -2.00 | -2.15 | -2.25 | -2.20 | -2.20 | -1.85 | -2.10 | -1.90 | -1.90 | -1.85 | -1.90 |

Qatar (\$/B)

| | 2011 | | | | | | | | 2010 | | | | |
|--------------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|
| | Aug | Jul | Jun | May | Apr | Mar | Feb | Jan | Dec | Nov | Oct | Sep | Aug |
| Land (40°) | 108.15 | 113.05 | 111.20 | 112.65 | 119.80 | 111.75 | 102.80 | 94.80 | 91.15 | 84.77 | 80.80 | 75.20 | 73.95 |
| Marine (36°) | 105.60 | 110.45 | 108.45 | 109.60 | 117.00 | 109.35 | 100.80 | 93.05 | 89.50 | 83.40 | 79.55 | 74.15 | 72.90 |

Syria (Dated Brent + / - Adjustment Factor; \$/B)

| | 2011 | | | | | | | | | | 2010 | | | |
|--------------------|-------|-------|--------|--------|--------|--------|-------|-------|-------|--|-------|-------|-------|-------|
| | Sep | Aug | Jul | Jun | May | Apr | Mar | Feb | Jan | | Dec | Nov | Oct | Sep |
| Syrian Heavy (24°) | -9.75 | -9.75 | -10.60 | -13.25 | -13.00 | -10.60 | -9.25 | -9.25 | -8.00 | | -5.50 | -5.15 | -3.40 | -4.90 |

NEWS BY COUNTRY**BAHRAIN****Bahrain's Economy Sluggish In 2Q11 As Political Turmoil Weighs**

Bahrain's economy saw its real GDP fall by 1.4% in the first three months of 2011 relative to the previous quarter, representing the Gulf state's first quarterly contraction since the start of the global financial crisis back in 2008. Official data released on 4 September also showed the economy to have grown by only 1% quarter-on-quarter from April to June – after shrinking in the previous three months – while annual growth decelerated to its slowest rate since 2008 as the impact of the Arab Spring continued to restrain economic activity in the kingdom. On an annual basis meanwhile, the data from the Central Informatics Organization showed that GDP growth in Bahrain had decelerated to 0.8% in 2Q11 from 1.8% in 1Q11.

"The quarter-on-quarter rebound seems reasonable," Head of Research at Jadwa Investment Paul Gamble told *Reuters*. "In terms of year-on-year it could have been worse, but it still shows that 2011 is going to be a pretty tough year for the economy," he continued. Regarding the current state of the Bahraini private sector, Mr Gamble suggested it is the legacy of the unresolved political tensions seen in Bahrain earlier in the year that is likely making the private sector overly cautious (*MEES*, 21 February). Bahrain's financial sector, which is believed to account for around one-quarter of its GDP, has only recently been slowly picking up from the global financial crisis and regional property crash, posting growth of 1.7% year-on-year in real terms in 2Q11, up from the 1.3% growth posted in the previous quarter.

CASPIAN

TAP Consortium Submits Third Party Access Exemption Requests

The Trans Adriatic Pipeline (TAP) consortium, which is promoting one of the three principal competitors for gas supply from Azerbaijan's Shah Deniz Phase 2 field development, announced on 7 September that it had submitted a request for third party access exemption (TPA-E) permits to the regulatory energy authorities of the project's three transit states, namely Albania, Greece and Italy. The transit governments are expected to oblige the TAP partners – Statoil (42.5%), EGL (42.5%) and E.ON (15%) – to reserve a specific volume of the 10 bcm/year capacity for access by third parties. The TAP consortium, as expected, has applied for a 100% exemption permit, although it would be highly unlikely for the authorities to grant such a request. The rival Nabucco pipeline project was in 2009 granted TPA-E of 50%, effectively leaving – on a first come, first served basis – 50% of the pipeline's 31 bcm/y capacity open to the bidding by non-consortium members. The third rival, the 10 bcm/y capacity Interconnector-Turkey-Greece-Italy (ITGI) pipeline, was granted a TPA-E permit in June 2007 and has secured an exemption for up to 9 bcm/y of its planned capacity.

TAP Managing Director Kjetil Tungland said in a press release: "The fact that TAP has applied for its TPA exemptions in all three host countries further demonstrates its continued progress and strong commitment to construct major new gas infrastructure in Europe. TAP's realization will be a major step forward in opening the Southern Gas Corridor, thereby diversifying supply and enhancing energy security for Europe."

Transneft Freezes Development Of Bosphorus Bypass Pipelines

Transneft Vice-President Mikhail Barkov was quoted by *RBC* newspaper on 5 September as saying that the Russian state company has decided to freeze the development of the Burgas-Alexandroupolis oil pipeline and to halt talks with the Turkish government over the competing Samsun-Ceyhan pipeline. The latter was said to be one and a half times more expensive than the Balkan option and three times more expensive than oil tanker transport through the Bosphorus straits. Mr Barkov said that the company will put the project "on hold" in October-November, while it awaits a change in Bulgaria's position or a new Bulgarian government.

Mr Barkov said that the volume of Russian oil exports from the Black Sea will be significantly reduced through the launching in November of the second phase of the Baltic Pipeline System, which is expected to reach its full capacity of 700,000 b/d by the end of 2012. The proposed Burgas-Alexandroupolis pipeline capacity was 700,000 b/d. Mr Barkov also said the cost of the 1.5mn b/d Samsun-Ceyhan pipeline was too high to make it attractive. He noted that it would cost \$19-20/ton (\$2.59-\$2.73/B) to ship crude oil via the pipeline compared with \$6-8/ton via the Bosphorus. Russian project partners are thought to have asked the Turkish government for tax exemptions, which Ankara has so far declined.

Ukraine Softens Stance On Russian Gas As Nord Stream Pipeline Inaugurated

Ukraine's Prime Minister Mykola Azarov moved on 7 September to take the heat out of a "war or words" with Moscow that followed Kiev's announcement that it planned to decrease annual gas imports from Russia by 13 bcm in 2012 to 27 bcm compared with 2010 imports of 40 bcm (*MEES* 5 September). Kiev has been unsuccessfully trying to revise a January 2009 take-or-pay agreement to pay Gazprom for at least 33 bcm/year of gas until 2020. Mr Azarov said that the "catastrophic" 2009 agreement was already costing Ukraine over \$6bn/year in penalties. However, he did issue a statement saying that Ukraine "will continue to fulfill the agreement until we come to terms."

Mr Azarov's less combative tone may be linked to the inauguration on 7 September of the 1,220km Nord Stream gas pipeline that connects Russia to Germany via the Baltic Sea. Gazprom began filling Nord Stream 1, the first of two 27.5 bcm/y capacity pipelines, with 'technical' gas in readiness for the start of commercial

operation by 15 October. At an inauguration ceremony in the Russian Baltic city of Vyborg, Russia's Prime Minister Vladimir Putin said: "Ukraine is our old and traditional partner. As with any transit country it has the temptation to benefit from its transit position. Now this exclusive right is disappearing, our relations will become more civilized."

South Stream Shareholder Agreement Expected On 16 September

Gazprom's CEO Alexei Miller told a press conference on 7 September that the final shareholders agreement for the 63 bcm/year South Stream gas pipeline project would be signed in less than 10 days. Mr Miller noted, according to *RIA Novosti*, that "Electricite de France (EDF) and Germany's Wintershall will each get 15% and Italy's Eni will obtain 20% in Russia's \$21.5bn South Stream project." The agreement is scheduled to be signed on 16 September and will cover the 923km offshore component of the project, which will cross the Black Sea at depths of up to 2,000 ms. The offshore section will comprise four parallel pipelines of 15.75 bcm/y capacity. South Stream aims to source up to one-third of its gas supply from Central Asian exporters.

KMG Starts Building Gas Pipeline to China

Kazakh state firm KazMunaiGaz (KMG) has begun construction of the first component of the 1,475km Beineu-Bozoy-Shymkent gas pipeline, which will feed into the CNPC-built Central Asia-China pipeline that delivers gas from Turkmenistan to China's Xinjiang province. The pipeline, according to KMG Chairman Kaigeldy Kabyldin, will be developed in two separate phases with Phase 1 supplying gas to over 1.5mn people in Kazakhstan's remote southeastern provinces. Phase 1 will allow for the transfer of up to 6 bcm/year and should be finalized by 2012. Phase 2 will be export-oriented and will be completed by 2015-2016, when the pipeline is expected to reach 10 bcm/y capacity. Mr Kabyldin said: "This pipeline will allow for the diversification of export routes for Central Asian gas and the increase of Kazakhstan's revenues at the expense of taxes and revenues from of gas transit."

Turkmengaz And Navum Sign MOU For GTL/GTE Investment

The Turkmen Cabinet on 2 September approved a memorandum of understanding (MOU) between state firm Turkmengaz and London-based Navum Energy for joint gas-to-liquids (GTL) and gas-to-ethylene (GTE) projects. A Navum press release said the two companies "are aiming to establish a joint venture with an anticipated 20-year operating life and two stages of development: first to establish a GTL plant producing high quality environmentally friendly gasoline and later a number of additional plants also producing diesel, jet fuel and ethylene-based derivative products." The MOU also calls for cooperation in the reduction of gas-flaring. Navum said that it will act as central coordinator for the project until a joint venture company is established, and that it will coordinate the selection of technology, investors, bank financing, as well as engineering and construction companies.

EGYPT

Egypt Focuses On Local Market Funding, Will Sell \$20Bn Of Treasury Bills, Bonds

In order to finance its budget deficit Egypt plans to focus on local market funding and will sell E£120bn (\$20bn) in domestic treasury bills and bonds, announced Minister of Finance and Deputy Prime Minister Hazem El-Beblawi on 7 September. Egypt planned to auction E£12bn (\$2.01bn) of treasury bills on 8 and 11 of September, according to the Egyptian Central Bank. Dr Beblawi said that Egypt has no plans to issue an international bond. Dr Beblawi's recent statements contrast with those of former finance minister Samir Radwan, who had suggested that Egypt could return to the international markets and raise money from a Eurobond sale (*MEES*, 4 July). Funding questions were raised after Egypt's ruling military council had turned down a \$3bn funding package that Dr Radwan had agreed with the IMF.

Dr Beblawi noted at a meeting of Arab finance ministers in Abu Dhabi that inflation in Egypt is "relatively under control." Egypt's central bank kept its benchmark interest rates on hold last month reflecting continued concern about inflation and analysts expect rates to remain unchanged. "Inflation is relatively under control but we have to be vigilant and follow vigilant policies to avoid uncontrolled financial situations," he warned. "The main problem is for stability to return, which will reassure investors from the inside and outside, basically a return to normality, which we are getting close to rapidly," Dr Beblawi said.

Maximum Salaries Proposed For Government Officials

Egypt's Cabinet will discuss new caps on top salaries to narrow the gap between rich and poor and Dr Beblawi proposed that the government set a wage ratio of 36:1 between all top managerial positions in the public sector. Since it took office last March, the cabinet of Prime Minister Essam Sharaf has promised to cap salaries for top government officials in order to fend off public criticism that managers are over-compensated. The cabinet confirmed that it has started implementing a E£700 minimum wage for all government workers, and it plans to cover all employees by the end of 2011.

IRAN

CBI Governor Plays Down Threat Of Further US Sanctions

Central Bank of Iran (CBI) Governor Mahmoud Bahmani played down the possibility of a further round of US Sanctions against the bank at a press conference in Tehran on 5 September. Mr Bahmani has been orchestrating Iranian measures to handle a potential fourth round of US, UN and European Union sanctions. He dismissed reports that several US senators were pressuring President Barack Obama to target the CBI as "a political bluff," observing that Tehran has already found ways of bypassing punitive and restrictive financial measures taken in June 2010 through the UN Security Council. Further sanctions would increase the risk of issuing letters of guarantee to any Iranian company or financial entity. However, diplomatic sources tell *MEES* that the EU would view such an act as the "financial equivalent of an oil export embargo."

Mr Bahmani said that the CBI would participate in an IMF general meeting scheduled for later this month in order to "defend Iran's banking legitimacy and dismiss US accusations." He noted the "agility" of Iran's banking counter-measures to international financial pressure, which had enabled Iran to withdraw nearly all of its reserves deposited outside Iran over the last two to three years in order to prevent an assets freeze. He added that Iran had used \$13bn from these deposits to buy gold at a price of \$656/ounce, and that this has tripled in value over a period of 30-36 months.

Mr Bahmani also said that the total value of the country's currency reserves has expanded by \$6.5bn thanks to CBI's conversion of part of its bonds from US dollars to other currencies, including the euro. The euro is now understood to be the preferred currency choice for the payment for Iranian oil exports to China, while the yen is favored by Tehran for its oil trade with Japan. What is not clear is whether the Chinese and Japanese payments are wired back to Tehran or used by the CBI to buy local financial assets, such as Japanese government bonds, or to purchase industrial goods and services for Iranian state companies, as is thought to be the case with China and South Korea.

Meanwhile, Mr Bahmani told reporters that the eight-month long problem over Indian payments for oil imports had been resolved, after Indian refiners on 4 September paid the remainder of the near \$5bn in overdue payments. Iran and India put a new payment mechanism in place after normal channels were closed by international sanctions against Tehran (*MEES*, 22 August).

Iran's Inflation Rises Further In August

Iran's year-on-year inflation continued to rise in the year ending with the Iranian month of Mordad on 22 August, the Governor of the Central Bank of Iran (CBI) Mahmoud Bahmani revealed on 5 September. "The year-on-year inflation rate in the Iranian month of Mordad is 17.3%," Iran's *Fars News Agency* quoted Mr Bahmani as saying. This represents an increase of 1% from the year-on-year inflation rate of 16.3% recorded at the end of the Iranian month of Tir on 22 June (*MEES*, 22 August).

Last month, the CBI Governor expressed his hope that the inflation rate would fall in the coming months to reach a single digit in the coming year. However, inflation has risen steadily since hitting a 25-year low of 8.8% in August 2010 (*MEES*, 13 September 2010), with some analysts suggesting it could accelerate further following the move by Iranian authorities to cut subsidies on a range of essential goods. "The jump in inflation brought about by the implementation of our subsidy reform plan will be seen to ease in the near future," Mr Bahmani told *Fars News Agency*. Tehran began implementing the first phase of its reform law to remove subsidies on basic foodstuffs and utilities in December (*MEES*, 27 December 2010).

Ahmadinejad Inaugurates Tajik Hydropower Plant

Iran's President Mahmoud Ahmadinejad on 5 September inaugurated, in the presence of Tajikistan's President Emomali Rahmon, a 220mw capacity hydropower plant in Tajikistan's Khatlon province. The Sangtuda-2 plant had been under construction by Iran's Sangab Company since 2006, with an investment of \$180mn from Tehran. The Tajik government has invested a further \$40mn in the project. Sangab will operate the plant for a period of 12 years, during which time Tehran will recover its investment. Iran and Tajikistan recently signed an intergovernmental agreement for the construction of hydropower plants on the Zeravshan and Iskandarya rivers with a combined output of 172mw (*MEES*, 29 August).

IRAQ

Trading Firms Among Pre-Qualifiers For Iraq's Fourth Bidding Round

Baghdad has added six new companies to the list of firms pre-qualified to take part in Iraq's fourth upstream licensing round. The new firms include the upstream arms of trading companies Vitol and Glencore, as well as UK independent Gulf Sands, UAE independent Dragon Oil, Chinese firm ZhenHua Oil and Romanian state firm Romgaz.

The additions come ahead of an 11-12 September road show in 'Amman, Jordan, where the first draft contracts for the 12 exploration blocks on offer will be presented. US independent Hess, on an initial August list of pre-qualified companies, has been removed as a result of its recent involvement in the upstream of the autonomous Kurdistan Regional Government (KRG) area of northern Iraq. Baghdad, which is in dispute with the KRG over the latter's independent oil policy, has blacklisted foreign oil firms investing in the region's oil sector. Vitol, in common with Glencore, has a long trading history with Iraq. And in 2008 Vitol, in alliance with US independent Anadarko and the UAE's Dome, was in negotiations for a development agreement covering the Subba and Luhais fields. Gulf Sands has gas ambitions in Misan province, while ZhenHua has picked up subcontractor work.

Baghdad hopes the exploration round will eventually add 29 trillion cu ft to proven gas reserves and 10bn barrels to oil reserves. Block 9 in Basra province is viewed as the pick of the blocks on offer (*MEES*, 2 May). This is the first post-2003 bidding round aimed at exploration and will require a special contract. Coming up with a formula that will incentivize investors is likely to be challenging, given Iraq will not accept either production sharing contracts or concessions. The round is scheduled for award in January. For reasons that are unclear, the official list of pre-qualified companies (see below) names CNPC and PetroChina separately, even though the latter is simply the listed arm of CNPC.

Pre-Qualified Companies For Iraq's Fourth Upstream Licensing Round

The full list of pre-qualified companies is: 1. ATPECO (Japan); 2. Bashneft (Russia); 3. BP (UK); 4. Chevron (US); 5. CNOOC (China); 6. CNPC (China); 7. Dragon Oil (UAE); 8. Edison (Italy); 9. Egyptian General Petroleum Corporation (Egypt); 10. Eni (Italy); 11. ExxonMobil (US); 12. Gazprom (Russia); 13. Glencore International (Switzerland); 14. Gulfsands Petroleum (UK); 15. INA (Croatia); 16. Inpex (Japan); 17. Itochu (Japan); 18. Japex (Japan); 19. JOGMEC (Japan); 20. JX Nippon Oil and Gas Exploration Corporation (Japan); 21. Kogas (Korea); 22. Kuwait Energy (Kuwait); 23. Lukoil (Russia); 24. Mitsubishi (Japan); 25. Mitsui Oil (Japan); 26. Mubadala Oil (UAE); 27. Occidental (US); 28. ONGC (India); 29. Pakistan Petroleum (Pakistan); 30. Petro Vietnam E&P (Vietnam); 31. PetroChina (China); 32. Petronas (Malaysia); 33. Premier Oil (UK); 34. Pertamina (Indonesia); 35. PTTEP International Holding Company Ltd (Thailand); 36. Rosneft (Russia); 37. Romgaz (Romania); 38. Shell (Netherlands); 39. Sonangol (Angola); 40. Statoil (Norway); 41. Sumitomo (Japan); 42. TNK-BP (Russia); 43. Total (France); 44. TPAO (Turkey); 45. Vitol (Switzerland); and 46. ZhenHua Oil (China).

Alstom Awarded €66Mn Power Contract In Mosul

France's Alstom was awarded a €66mn contract by Iraq's Ministry of Electricity for a gas-insulated switchgear substation at the Mosul East power plant, the company announced on 5 September. Commissioning of the project is due in 2013. According to the deal, Iraq will pay 10% of the cost to Alstom in advance and 40% a year after the start of construction. Alstom recently won contracts from Turkey's Calik Enerji to supply switchgear for the new al-Khairat and Nainawa power plants (*MEES*, 16 May).

KUWAIT

No Evidence Of Money Laundering In Kuwait, Says IMF

There is currently no evidence of significant money laundering in Kuwait, according to a 1 September International Monetary Fund (IMF) report. The IMF's *Kuwait: Report on Observance of Standards and Codes – FATF Recommendations for Anti-Money Laundering and Combating the Financing of Terrorism* was compiled in response to a request by the State of Kuwait, the Central Bank of Kuwait (CBK) announced on 6 September. The report observed that, while no evidence of money laundering was found, Kuwait's financial sector is growing rapidly in terms of banking sector assets. "This development has the potential of creating a suitable environment for money launderers and terrorist financiers to exploit," said the IMF. This conclusion was difficult to verify, CBK reportedly said.

The assessment of the anti-money laundering (AML) and combating the financing of terrorism (CFT) regime of Kuwait is based on recommendations of the Financial Action Task Force (FATF), said the IMF. The AML Law, introduced in 2002, imposes obligations on a range of financial institutions. However, it does not criminalize the financing of terrorism and does not put in place a mechanism to implement United Nations Security Council Resolutions. "A new draft AML/CFT law was sent before the National Assembly in 2007, but has not yet been adopted," said the report.

According to the IMF, Kuwait's AML/CFT framework has many shortcomings. First of all, the predicate offenses for money laundering do not cover all the designated categories of offenses required by the FATF recommendations. The weaknesses in the preventive measures for financial institutions and for designated non-financial businesses and professions are also a problem. The lack of adequate powers of some supervisors to monitor and ensure AML/CFT compliance and the failure to establish the Kuwait Financial Intelligence Unit as an independent national center responsible for the receipt, analysis, and dissemination of suspicious transactions reports and other information regarding potential money laundering or financing terrorism are also significant shortcomings of the current framework.

Kuwait is committed to implementing 40 recommendations on money laundering and nine on the financing of terrorism, *KUNA* quoted CBK as saying. Kuwait was assessed by IMF experts in October of last year. CBK said some of the recommendations needed new legislation. "The report should be followed as a roadmap to develop monitoring methods," concluded CBK.

Kuwait MPs Face Allegations Of Corruption

In the meantime, Kuwait is reportedly fearing a major political crisis over allegations of corruption involving several members of parliament and former ministers. According to the local press on 8 September, a number of banks plan to refer as many as 15 MPs, and possibly former ministers, to the public prosecutor to investigate "suspicious" cases of money transfers. Youth activists campaigning to oust Prime Minister Shaikh Nasser Mohammad al-Ahmad Al-Sabah, were reportedly planning to stage a new rally on 16 September and the corruption claims could energize them, according to the press.

Kuwait's Real GDP Will Grow By 5.6% In 2011-12, Says QNB Capital

Kuwait's real GDP is forecast to grow by 5.6% in 2011-12, as work gets underway on the new development plan and oil production rises, said QNB Capital in its August *Economic Insight*. The bank forecasts that the non-oil sector will lead an overall 5.5% increase in real GDP 2011, as work gets underway on the government's medium term development plan. "This will be the strongest annual growth rate since 2005," it pointed out. The oil sector comprised 53% of GDP on average over the last five years. Growth will pick up marginally to 5.7% in 2012, mainly a result of increases in oil production as it rises in line with the rest of OPEC to meet growing global demand, the report said.

Kuwait's nominal GDP grew by 21.5% in 2010 to reach KD38bn (\$138.68bn), according to a preliminary figure from the IMF. In US dollar terms, 2010 GDP was 11% below the peak of \$149bn in 2008. QNB Capital forecasts that the average price of Kuwaiti crude oil exports will rise to \$105/B in 2011. This is a 37% increase on 2010 and \$13/B higher than the 2008 average. This price boost, combined with higher oil production and steady non-oil expansion, will lift nominal GDP by 24% in 2011 to a new record of \$165bn, according to the bank. "Each dollar difference in the oil price has the effect of increasing or decreasing Kuwait's GDP by about \$0.8bn, such that a \$10/B difference from our forecast would change nominal growth in 2011 by 6%," it said. QNB Capital forecasts that prices will ease slightly to \$98/B in 2012, as global oil supply increases to

meet demand. The economic impact of this will be more than offset by rising Kuwaiti oil production and further non-oil expansion, resulting in 1% GDP growth to \$167bn, it added.

A new development plan is attempting to push ahead with \$110bn of projects until 2014; half of it is intended to be financed by the private sector. The state has pledged to guarantee KD10bn (\$36.49bn) of bank loans to privately funded projects under the plan. Government spending will also pick up to pay for higher subsidies and wage costs. Nonetheless, the state will still post surpluses equivalent to 15% of GDP. According to the study, the banking system is stable, but concerns remain about sizable non-performing loans. The equity market declined by 10% in 1H11 but a new regulator may boost confidence.

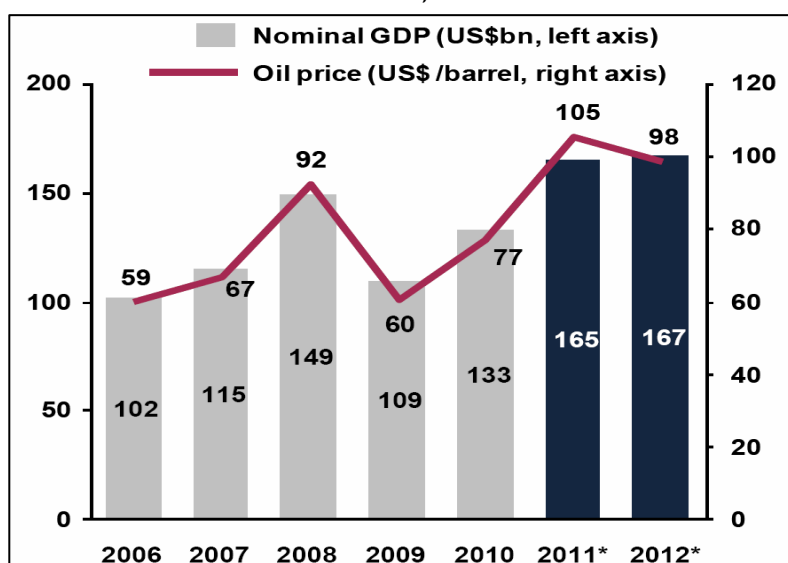
The current account surplus is expected to increase further to 34% of GDP in 2011-12 owing to high oil prices and investment income. The Kuwaiti dinar is forecast to weaken to \$3.53 in 2012, on account of a declining euro, believed to be part of the currency basket to which the dinar is pegged. Inflation will rise to 5.1% in 2011, driven by food prices, before easing to 3.4% in 2012. High oil prices will lead to record fiscal revenue, averaging \$92.9bn in 2011-12. "This is even excluding sizable income from the Kuwait Investment Authority's holdings," noted QNB Capital.

The bank forecasts that ongoing surpluses will raise foreign reserves to \$29bn by end-2012. The overall balance of payments recorded an average surplus equal to 2.2% of GDP in 2006-10. This surplus is a consequence of the extremely large current account surplus, which averaged 35% of GDP over this period. "It is mostly offset by net capital outflows, mainly for portfolio investments abroad," commented the report. The overall surplus represents the increase in Central Bank of Kuwait (CBK) foreign exchange reserves. These have grown from \$14.2bn (14% of GDP) at end-2006 to \$24.3bn (18% of GDP) at end-2010.

Kuwait consistently records net foreign direct investment (FDI) outflows, averaging 7% of GDP in 2006-09. "Kuwaiti companies are active in investing abroad, making Kuwait the region's largest source of outwards FDI," noted the report. However, FDI in Kuwait is likely to increase substantially in the next few years following recent developments – new laws to facilitate public-private partnerships (PPPs) and build-operate transfer (BOT) contracts, and emphasis in the 2010-14 development plan on attracting private financing for many of its projects.

Kuwait's total external debt in 2009 was \$45bn, equivalent to 42% of GDP. The largest component (\$27.9bn) was short term debt, much of which will be trade-related finance. Medium and long term private sector debt is also substantial, at \$12.6bn. Public sector external debt was low, at \$5.0bn. "Looking ahead, part of the private sector involvement in development projects is likely to be funded with foreign borrowing," said QNB Capital. This should offset further debt repayments by investment companies and result in a gradual growth in the external debt stock, it added. However, as a percentage of GDP, external debt will probably decline in 2010-11, owing to rapid growth in nominal GDP.

Kuwait Nominal GDP And Oil Prices, 2006-12



Source: CSO, IMF, QNB Capital forecasts.

OMAN

Circle Oil Granted Extension To Oman Exploration Period, Seeks Drilling Partners

Irish upstream independent Circle Oil has been granted an extension to the exploration period for its onshore Oman Block 49 license. The company announced on 5 September that under the revised time frame – which has now been extended to 26 December 2012 – the company would now be required to complete an additional 2,500 line km of closely spaced 2D seismic survey, and drill one exploration well. “The seismic program is to be acquired in the southeastern part of the permit, northeast of and adjacent to the 3D survey which was completed in 2010,” Circle Oil said.

“The granting of the extension for Block 49 will allow Circle to further evaluate drilling opportunities within the southern area of the permit,” Circle CEO Chris Green said. The survey is expected to complement the existing dataset, and detail an area with sparse existing 2D data. Block 49 – covering an area of 15,438 sq km – is situated in an underdeveloped region about 700km southwest of Muscat. Circle holds the license outright.

Circle also disclosed that it has begun to seek partners for its Block 52 license offshore Oman. “A farm-out process has recently been initiated using both internal data rooms and an external agency...[and] is aimed at seeking a partner(s) to drill a commitment well in Block 52 within the next 18 months,” the company said. This follows the completion of processing of 5,026 line km of 2D seismic data recorded from December last year to February this year.

“In Block 52, the new seismic is of excellent quality and multiple closures, including some leads we mapped previously, have been firmed up as prospects,” Prof Green said. Circle’s interpretations detailed in the farm-out package for Block 52 are said to have identified a number of promising play types in stratigraphy ranging in age from Pre-Cambrian to Tertiary. However, the offshore Outer Sawqirah Area of Late Cretaceous to Paleocene structural closures is still considered to be the most prospective.

QATAR

RasGas Planning January Shutdown Of LNG Train

Qatari LNG producer RasGas is planning to shut down one of the world’s largest liquefied natural gas (LNG) production units for maintenance work in January 2012, the company announced on 6 September. “The planned routine maintenance on Train 7 will take place in January 2012,” a company spokesperson said. With an LNG production capacity of 7.8mn tons/year, Train 7, located in Ras Laffan city, was started up in February 2010 and was built to supply customers in North America, Europe and Asia (*MEES*, 1 March 2010). LNG producers typically carry out maintenance work on their facilities during the summer months – for the northern hemisphere – when demand for natural gas normally falls among leading importers such as Japan and South Korea.

Analysts were not surprised by the timing of the move. Siamak Adibi, Head of FACTS Global Energy’s Middle East Team, tells *MEES*: “The shutdown schedules for mega-trains were not really sudden. They usually announce and agree the schedule with buyers in advance.” This announcement comes less than two weeks after news broke that sister company Qatargas is to shut down three of its 7.8mn t/y LNG trains at different times this autumn for planned maintenance work. This initially triggered a 6% rise in UK benchmark gas prices on fears the maintenance would reduce supplies to Europe (*MEES*, 5 September).

REGIONAL

Oman And Lebanon Announce Plans To Boost Government Spending

Both Oman and Lebanon have set out plans to boost government budget spending in 2012, their finance ministers said on 6 September ahead of a meeting of Arab finance ministers in Abu Dhabi. According to Omani Minister of Financial Affairs Darwish bin Isma’il al-Balushi, the Gulf state’s budget spending should rise to OR9.2bn (\$24.09bn) this year, representing a slight increase on the amount forecast back in June, and well above the OR8.1bn (\$20.98bn) plan drafted originally. “Now, it’s OR9.2bn,” he told *Reuters*. “We are looking at the oil price and we hope it will stay at a decent level. We have seen a decline in the oil price but as long as it stays above \$80/B, we will be alright.”

Protests breaking out across the sultanate over demands for jobs and end of graft prompted Sultan Qabus bin Sa'id to promise a social spending package of around OR1bn (\$2.6bn) in April (*MEES*, 25 April) and to announce, among other measures, plans to create around 50,000 jobs in the sultanate. Though Mr Balushi did not give details of Oman's 2012 budget, he hinted there may be another spending rise on the horizon. "We will have requirements here and there, but maybe another 10% [will be added] on the spending side," he said.

Following months of political in-fighting, Lebanon is also expecting to see a rise of about 15% in its 2012 government budget, its Finance Minister Mohammed Safadi revealed. "The budget will increase by 15% roughly. Our deficit will not be more than \$3bn at best. So we will be borrowing," he said. Lebanon's 2011 draft budget, submitted in September, put government spending on infrastructure at around \$13.1bn – representing a \$68.4mn increase on the corresponding 2010 figure – and forecast a total deficit of \$3.6bn, compared to \$4.37bn in 2010. "Our expectation is that it [inflation] will not be less than 3% next year. But we are expecting growth of not less than 4% real GDP growth in 2012," Mr Safadi said.

BCG Estimates Middle East Assets Growth At 10% In 2010

Combined assets under management in the Middle East and South Africa increased by 10% in 2010, above the global average and retaining the momentum of 2009 when growth was 13%, according to a report released on 5 September by the Boston Consulting Group (BCG). Professionally managed assets in the Middle East amount to roughly \$1 trillion, or a quarter of assets in the region. However, building on the recovery and achieving a stable growth trajectory will remain a tall challenge, according to BCG. The global value of professionally managed assets rose by 8% to \$56.4 trillion in 2010. The increase followed a gain of 13% in 2009 and a decline of 17% in 2008.

"Despite the favorable conditions for local asset managers, their success may be constrained by a number of factors," said BCG. Therefore, it is expected that the majority of professionally managed funds will be with international asset managers, due to their proven track records. While BCG expects total assets (both direct and indirect) in the Middle East to grow by around 8% in the coming years, professionally managed assets are estimated to grow at 9-10%. Regional investments will continue to be mostly direct.

Some product trends observed before the crisis have continued through 2009 and 2010 and into 2011. One key ongoing trend is the faster growth of more risk-averse, passively managed and alternative products, compared with actively managed products, said BCG. In the Middle East, money market products or capital guaranteed products play a larger role compared to other markets.

"To pursue growth across borders in the Middle East, asset managers must first develop a clear view about which markets they would like to enter given their current capabilities and resources," commented Markus Massi, Partner and Managing Director at BCG Middle East. They must accurately assess the level of competition in the new market as local distribution power and connections are key and investor preferences and institutional set-up vary by GCC market, he said. "Finally, they must decide where they do not want to be in terms of regions, products, and client segments," Mr Massi added.

SYRIA

EU Bans Imports Of Syrian Crude

The European Union on 2 September banned the import of Syrian crude oil into EU member states in a move designed to apply further pressure on Damascus to ease its crackdown on demonstrators seeking reforms. A decision taken by the Council of the EU, published in the group's *Official Journal* on 3 September, stated that added to existing "restrictive measures against the Syrian regime," is a prohibition on the purchase, import or transport from Syria of crude oil and petroleum products. Furthermore, the decision forbids European entities from providing – directly or indirectly – the financing of or financial assistance for, Syrian crude sales or shipment. An EU statement said this ban includes financial instruments such as financial derivatives as well as insurance and reinsurance. A time allowance of 15 November was provided to some European companies with existing contracts to lift Syria crude or products.

The EU measure follows a similar step taken by US President Barack Obama in August that froze Syrian government assets and banned the import of Syrian products into the US (*MEES*, 22 August). But the EU ban on Syrian crude and products is seen as potentially having a much greater impact on Damascus, since Europe purchases the bulk of Syrian exports. Yet on 7 September Syrian Finance Minister Muhammad al-

Jleilati said the government was not concerned about sanctions and that they would have no direct impact on the country's economy, *Reuters* reported. Mr Jleilati said that Syria would look to sell its crude and products to Russia and China "or any other country that accepts to buy our extra oil," adding that the alternative would be to hold it in reserve.

Following the announcement of the EU ban, Russian Foreign Minister Sergei Lavrov denounced the move, saying that Moscow was against unilateral sanctions. "Sanctions rarely solve anything in general," he said.

Removing Syria as a crude supplier to western countries is not expected to have an adverse effect on oil markets. Official figures put Syrian crude oil production at 387,250 b/d during the first half of 2011, equivalent to about 0.4% of global oil supply, according to data issued by Bank of America Merrill Lynch. Most of Syria's crude production is refined for local use and some petroleum products are imported. Syria exported an average of around 154,000 b/d of the heavy Souedie crude during the first half of the year, most of which was sold to Germany, Italy, Spain, France, the Netherlands and the UK. Crude exports account for about one-third of Syrian government revenues. Furthermore, Syria spent about \$2.5bn during the first half of this year on petroleum subsidies, which puts further strain on the economy (*MEES*, 29 August).

UAE

RAK Petroleum MENA Subsidiaries To Be Merged Into DNO

UAE exploration and production company RAK Petroleum announced on 5 September that the boards of directors of both Oslo-based DNO International and RAK had agreed to a merger between the two companies. Following the completion of due diligence procedures and an agreement on relative valuations, the boards signed documents on 3 September to merge RAK's oil and gas operating companies into DNO International, in exchange for shares in DNO. Once complete, RAK will own 40% of DNO's share capital – up from the 30% it currently holds. The transaction values DNO at \$1.64bn, corresponding to approximately \$1.75 per share, and RAK Petroleum's subsidiaries at \$250mn – and is contingent upon affirmative votes by shareholders of both companies, and government approvals.

"For RAK Petroleum shareholders, this is an important first step towards building more transparency in the share value," Chairman and CEO of RAK Petroleum Bijan Mossavar-Rahmani said. "The merger will also provide exposure to a more diversified portfolio of MENA oil and gas assets, including world class reserves in the Kurdistan region of Iraq, through the ownership of the 40% stake in the enlarged DNO International entity," he continued.

According to a RAK statement, the number of shares to be issued was determined through a "relative valuation process," which was based on an independent assessment of both company's oil and gas assets by US-based petroleum consultants DeGolyer and MacNaughton. As of 30 June, DNO International's net remaining proven and probable reserves were estimated to be 355mn barrels of oil equivalent in Iraq and Yemen; while RAK's net remaining proven and probable reserves were estimated at 52mn barrels of oil equivalent in Oman and the UAE. RAK Petroleum recently announced plans to drill three more wells in its producing Bukha and West Bukha fields located in Block 8 offshore Oman (*MEES*, 5 September).

DNO International Eyes Growth Of Its MENA Portfolio

Meanwhile, in an interview with *Reuters* on 7 September, Mr Mossavar-Rahmani – who is also Chairman of DNO International – said the company was currently looking at the possibility of buying more oil and gas assets in a number of countries in the MENA region once it completes the \$250mn acquisition of RAK Petroleum's oil and gas assets. "We are looking opportunistically at other assets that may be priced well," he said. "Following the merger, DNO will be in Iraq, Yemen, Oman, the UAE and Tunisia... It can use each of these platforms to grow more in those countries," he continued.

Commenting on oil and gas opportunities in the region, Mr Mossavar-Rahmani said that northern Iraq was, in his view, by far the most attractive area. "Obviously, the most interesting part in the Middle East is Kurdistan," he said. He acknowledged, however, that although there are numerous other opportunities for investment in the Middle East, most would come with a considerable degree of risk. "Given the upheavals in the Middle East and the upheaval in global equity markets, there are a lot of distressed oil and gas assets in the Middle East, for which someone with the appetite for political risk and a presence in the region could create opportunities," he said. "There are opportunities in Egypt and Yemen. Clearly Libya is going to be a major focus for majors and for mid-sized oil companies. South Sudan could provide opportunities too."

YEMEN

Yemen LNG Imports LPG To Cover Domestic Shortage

Yemen LNG has imported emergency supplies of liquefied petroleum gas (LPG) as the country's domestic supply has dropped to the alarming level of 500 tons/day, the *Yemen Post* reported on 4 September. Since Yemen requires about 2,200 t/d to meet demand, it could very soon be facing another "cooking gas" crisis, the daily added. "In May, June, July and August Yemen LNG delivered altogether 50,000 tons by sea to Aden, which were imported from the Middle East," Francois Rafin, General Manager of Yemen LNG, told MEES. International oil companies (IOCs) have resumed operations in Yemen since the Marib pipeline was repaired. Yet the country has not been able to significantly boost output (MEES, 5 September).

In the meantime, Canadian oil company Nexen's operations were threatened with closure for the second time this year by a strike of oil and gas workers, according to local reports. The union called on the government to end its 20-year partnership with Nexen's contract on its Masila Block as it expires in December. Nexen is discussing with the Yemeni government the possibility of renewing its operating licenses in the country (MEES, 8 August). Nexen consortia produce about 70,000 b/d of oil equivalent from Blocks 14 and 51 (Masila) in Hadhramout province in eastern Yemen. The company's production has not been impacted by the civil unrest, although Nexen has updated its security measures in the country.

POLITICAL COMMENT

Following the delivery to the UN of the Palmer report on last year's Mavi Marmara incident, there has been a dramatic deterioration in relations between Turkey and Israel, with the Turks downgrading diplomatic relations to the lowest level short of a break, suspending all trade, military and defense ties and threatening to "protect" ships carrying aid to Gaza. The Israelis appear to be nonplussed by the ferocity of the Turkish reaction. Elsewhere in the region, Iraqi Kurdish president Mas'ud Barzani has become the first Iraqi politician to call openly for American forces to stay on after the end of the year.

Turkey Threatens To Protect Aid Ships To Gaza

The UN inquiry into last year's assault on the Mavi Marmara – in which nine Turkish citizens were killed when Israeli commandos stormed an aid ship attempting to break the blockade of Gaza – by a four-man panel headed by former New Zealand PM Geoffrey Palmer was originally intended to narrow the differences between Turkey and Israel over the incident. However, the delivery of the Palmer report – which found that the Israeli blockade of Gaza was "a legitimate security measure in order to prevent weapons entering Gaza by sea," but that in the case of the Mavi Marmara, Israeli commandos had used "excessive and unreasonable force" – to UN Secretary General Ban Ki-moon on 2 September appears to have had the opposite effect. On the same day, Turkish Foreign Minister Ahmet Davutoglu announced a severe downgrading of diplomatic relations, saying that "Turkey-Israel diplomatic relations have been reduced to a second secretary level. All personnel above the second secretary level will return to their countries by Wednesday at the latest." Moreover, Turkey will "take all measures which it sees as necessary for freedom of navigation in the eastern Mediterranean." Also on 2 September, the Turkish embassy in Washington issued a statement warning that "Turkey challenges certain conclusions of the Palmer report" and "will take legal actions against the Israeli soldiers and all other officials responsible for the crimes committed."

On 3 September Mr Davutoglu announced that Turkey would also challenge the Palmer report's conclusions by applying for an investigation by the International Court of Justice (ICJ) into the legality of Israel's naval blockade of Gaza, saying "we will start the application process to the ICJ within the next week, for an investigation into what the Gaza blockade really is." Three days later, Turkish Prime Minister Tayyip Erdogan ratcheted up the pressure further by telling reporters that "trade ties, military ties, regarding defense industry ties, we are completely suspending them," adding that "this process will be followed by different measures...the eastern Mediterranean is not a strange place to us. Aksar and Iskenderun, these places have the power and opportunity to provide escorts. Of course our ships will be seen much more

frequently in those waters." And lest there be any doubt about what that means, Mr Erdogan was more specific in an interview with *al-Jazira TV* on 8 September: "Turkish warships, in the first place, are authorized to protect our ships that carry humanitarian aid to Gaza. From now on, we will not let these ships to be attacked by Israel, as what happened with the Freedom Flotilla." Nor are Turkey's grievances with Israel confined exclusively to the blockade of Gaza. "You know that Israel has begun to declare that it has the right to act in exclusive economic areas in the Mediterranean. You will see that it will not be the owner of this right, because Turkey, as a guarantor of the Turkish republic of north Cyprus, has taken steps in the area, and it will be decisive and holding fast to the right to monitor international waters in the east Mediterranean." As far as the *Mavi Marmara* is concerned, however, the bottom line remains, as Mr Erdogan underlined yet again, that "a normalization or improvement in Turkey-Israel relationships shouldn't be expected unless they apologize, pay compensation and lift an embargo on Gaza."

Israel Bemused

So far, the Israeli response to the rapid and escalating deterioration of relations with Turkey has been almost one of bemusement. An official statement on 2 September said that "Israel recognizes the importance of the historical ties in the past and present between the Jewish and Turkish peoples. The state of Israel hopes a way will be found to resolve the dispute and will continue to act toward that end," adding that "Israel assumes that Turkey will respect international law with regard to sailing in the Mediterranean." On 4 September Israel Prime Minister Benjamin Netanyahu claimed that "we do not need to apologize that the naval commandos defended themselves against the violent activists," but said that "I hope a way can be found to overcome the dispute with Turkey. Israel never wanted its relations with Turkey to deteriorate and now too Israel is not interested in a deterioration in relations." Defense Minister Ehud Barak was marginally more conciliatory on 6 September, saying "we have our differences, but in differences too it is important that both sides act using their heads and not their gut - that will be best for us all and best for regional stability." And on 8 September he expressed confidence that "ultimately this wave will pass," since "we recognize reality. They recognize reality. We are the two countries that are most important to the west in the region...I am certain that we can overcome" these disagreements. That was before Mr Erdogan's pledge to protect ships sailing to Gaza. Afterwards, the only comment at *MEES* press time on 9 September came from Foreign Ministry spokesman Yigal Palmor, who said on 8 September that "this is a statement well worth not commenting on."

Barzani Says US Should Stay On

It is now more than a month since US Defense Secretary Leon Panetta urged the Iraqi authorities to "dammit, make a decision" as to whether American forces should stay on in one capacity or another after the end of the year deadline for their departure in the two sides' 2008 Status of Forces Agreement, and there is no visible sign that any such decision is imminent. The Americans, too, have fallen strangely silent on the subject. Not so Iraqi Kurdistan President Mas'ud Barzani, who made it clear in no uncertain terms on 6 September that he believes the Iraqis are not yet ready to take responsibility for the internal and international security of their country. Speaking to Kurdish diplomats in Irbil, Mr Barzani said that "in our opinion the need for US forces in Iraq is still on...the absence of US forces in Iraq means the possibility of civil war will prevail." He added that "a US presence in Iraq under whatever title is important for Iraq. Iraqi security forces have not reached a level that can provide security inside Iraq. Neither can the Iraqi military forces protect Iraqi borders. In a country that has no qualified military to defend its soil, air space and shores, its security forces cannot protect its citizens." Mr Barzani also accused Iraqi politicians of refusing to say publicly what they say privately – that they want US forces to stay. "All the political parties say one thing when they speak directly," he claimed. "But they say something else before the cameras." That may be true of Prime Minister Nuri al-Maliki. But it seems improbable that it applies to a leading member of his ruling coalition, radical cleric Muqtada al-Sadr, who said a month ago that "whoever stays in Iraq will be treated as an unjust invader and should be opposed with military resistance."

Charles Snow

OP-ED/DOCUMENTS

What Happens In Europe May Not Stay In Europe: Fear Of A US Recession

By Shawkat Hammoudeh

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Fears of a developing sovereign debt crisis in Europe started in late 2009, but the situation became particularly tense in early 2011. 'Crisis Europe' included Eurozone members Greece, Ireland and Portugal and also some European Union (EU) countries from outside the Eurozone. In the EU, particularly in countries where sovereign debts have increased strongly due to bank bailouts, a crisis of confidence has emerged. The sovereign debt has become a perceived problem for the area as a whole. The crisis resurfaced in May 2011 and focused on the refinancing of Greek sovereign debts.

The fears have been extended to concerns about rising government deficits and debts across the globe, accompanied with downgrades of European government debts. This worsened situation has created alarms in world financial markets and expectations of recession in developed countries including the United States. This essay analyzes briefly the impact of European crisis on the American economy. The analysis will focus on the impacts on American banks, exports and wealth, and the contagion effect.

Impacts On US Banks

The US's gross direct exposure to European banks through loans and bond amounts to \$678bn. This does not include less direct exposure through financial derivatives, loan guarantees and other financial connections such as credit default swaps (CDS).

While a collapse of a Europe bank, if as major as Société Générale or BNP Paribas say, would not have much impact on the US economy, a financial contagion in Europe would have a palpable impact on the US and the global financial system through the loss of confidence in banks.

Debt Contagion

The financial markets across in Europe are highly integrated with each other and are highly susceptible to contagion. If the Greek debt crisis spills over into larger European economies such as Italy and Spain, this will reverberate into the European core countries – Germany and France. The US banking sector has the largest exposure to the core European countries. Recently the US Federal Reserve underscored the fact that big US banks remain vulnerable to Europe's financial contagion. The US banks that are likely to be exposed to this contagion are: J P Morgan Chase, Bank of America, Citigroup, Goldman Sachs and Morgan Stanley.

Exposure of these big five banks to France and Germany, along with smaller Eurozone countries, is equal to about 81% of these banks' combined Tier 1 common capital. In particular, exposure of these big five to Ireland, Italy and Spain is equal to about 25% of the banks' combined Tier 1 common capital.

Euro Devaluation

The European sovereign debt crisis will trigger a devaluation of the euro against the US dollar, which would impact US exports. Europe is the largest export market for the United States. Depreciation in the euro will make American exports to Europe more expensive, which would significantly weaken the only current engine of growth for the US economic recovery after the US government ended its stimulus package.

The weakening of the euro versus other global currencies and the spread of contagion from small European countries such as Greece and Portugal to the larger countries such as Germany and France may threaten the viability of the euro, potentially paralyzing global credit markets in a way similar to what happened after the collapse of Lehman Brothers.

Loss Of Wealth

The European crisis has affected US capital markets other than the banking sector. It has unraveled stocks and increased fears of a new crash in the stock market. The crisis has jolted hopes of a strong recovery in the United States. There could be a global loss of wealth, one way or the other, and the loss could be huge.

In conclusion, contrary to the old saying “what happens in Vegas stays in Vegas,” what will happen in Europe may not stay in Europe. The new recession in the US economy may come this time from Europe. If and when it happens it may be called “Great Recession II”.

The Dawn Of A New Energy Era

By Vahid Fotuhi

Mr Fotuhi is Chairman of the Emirates Solar Industry Association (ESIA).

The year 2011 has been memorable for the Middle East. But while all the media attention has been focused on the unfolding political changes, a more subtle shift is taking place in the region’s energy sector.

Historically, the Middle East has been focused on the extraction and exportation of fossil fuels. But as oil and gas reservoirs start to show their age and as new fields become harder and more expensive to develop, the Middle East is starting to look for alternative forms of energy to satisfy its growing energy needs. The obvious choice so far has been nuclear power.

Nuclear is branded as the most secure form of energy, requiring minimal fuel and operating at a very low cost for 40-60 years. From an environmental point of view, nuclear is also the best choice, generating far less CO₂ emissions than conventional fossil fuels. While renewable energy such as solar and wind are equally environmentally friendly, they have not been as reliable.

As a result, governments across the Arab world have been tripping over each other to adopt nuclear power programs. Even Saudi Arabia, the custodian of the world’s largest oil reserves, recently made headlines when it declared that nuclear power is “a must.” The revolving doors at hotels in Riyadh have been busy welcoming senior executives from foreign nuclear companies armed with shiny shoes and glossy sales pitches.

Earlier this year, those revolving doors came to an abrupt stop. The explosions at Japan’s Fukushima nuclear plant and the ongoing uncertainty surrounding its safe shutdown have led many people in this region to ask: is nuclear power worth the risk?

It is true that historically nuclear power has been the least expensive and most reliable form of clean energy. But things are changing.

In the past 10 years, there has been a dramatic shift in the cost of solar power, with prices dropping by some 50%. Industry experts expect solar costs to continue dropping in the coming decade as the industry continues to come of age.

On the other hand, the cost of nuclear power is set to rise. After the 1979 Three Mile Island accident in the US, construction costs for nuclear reactors rose 95%. After the 1986 Chernobyl disaster in Ukraine, construction costs rose another 89%. The construction costs soared because of design changes required to address safety concerns. The same price hike is likely to take place following the Fukushima incident. As the former head of the International Atomic Energy Agency (IAEA), Muhammad al-Baradi'i, recently said: “In the past we had to plan for the unexpected. Now, we have to plan for the impossible.” Planning for the impossible will not be cheap. Nor will the clean-up costs should something go wrong. Compensation claims from the Fukushima explosions are expected to exceed \$100bn. With liabilities like this, investors will think twice before committing to nuclear projects.

In terms of the potential for solar power, no other region is as endowed as the Middle East. In fact, if we were to sprinkle Saudi Arabia's Rub' al-Khali desert (Empty Quarters) with solar panels, we would produce enough energy to power two earths.

And of course there is the safety issue. No matter how small the risk of another Fukushima accident may be, it can never be excluded. Even if nothing goes wrong, there remain questions about the sustainability of the radioactive waste that gets buried underground. In comparison, solar power is completely recyclable and does not produce any by-products that could harm us or our planet.

This new energy equation has shifted the spotlight to solar power. A recent survey by the Swiss bank Sarasin predicts that one-third of new and old nuclear capacity will be replaced globally by renewables plants with an overall capacity of 500gw. Moreover, the oil giant Total's recent majority stake acquisition of SunPower at a cost of a \$1.4bn is further evidence that the smart money is now on solar.

In parliaments across the region there is now more and more talk about solar power. The UAE has led the way with the creation of Masdar and its official plan to deploy some 1.5gw of solar power by 2020. Saudi Arabia, never to be outdone, recently came out and announced plans to install some 18.0gw of solar power over the next 20 years. The momentum is rising. All that is missing now is an over-arching regulatory framework and an incentive structure to give life to the region's nascent solar industry. The events in Japan will no doubt serve as a catalyst and help lay the foundation for policies that will allow this region to make far better use of its most abundant form of energy: the sun.

As such, 2011 will be remembered not only as the dawn of a new political era in the Middle East but also the dawn of a new energy era.