SADARA – REDEFINING THE POSSIBLE

IN THIS ARTICLE **MILBANK TWEED HADLEY & MCCLOY LLP** – WHICH ACTED AS COMMON LEGAL COUNSEL TO ALL OF THE CREDITORS IN THE MAIN SADARA INTEGRATED CHEMICALS PROJECT FINANCING IN ADDITION TO THE LEAD MANAGERS AND JOINT BOOKRUNNERS ON THE SUKUK ISSUANCE - PROVIDES INSIGHT THE NOTABLE FEATURES OF THIS COMPLEX PROJECT. BY **PHILLIP FLETCHER**, JOHN DEWAR, ANDREW PENDLETON, **MUNIB HUSSAIN** AND VICKY COX.

> ot on the heels of its hugely successful US\$2bn sukuk issuance in April 2013, Sadara Chemical Company announced three months later the eagerly awaited closing of the roughly US\$10.5bn main project financing for its approximately US\$19bn integrated chemicals project.

As one of the largest project financings ever arranged in the international finance markets and the largest project financing ever in the Middle East, the closing of the Sadara financing was always going to be headline news, but its telephone-number scale was only one of many elements making it a market leader in both the Middle East and global project finance.

Petrochemicals projects are uniquely challenging as the best placed among them are technically complex and can, as does Sadara, produce a diverse slate of specialty products (most of which are hard to even pronounce) into wildly varying markets. Undertaking a petrochemical project of this scale and complexity has few parallels, whether that be in terms of construction activity, integrating highly specialised technology systems into a single complex, attracting and training a stellar workforce to execute a mega-project, ensuring the web of downstream and upstream operations remain functional and integrated or having the ability to adapt to technological advances and dynamic market conditions. A project of this scale required lenders to distill its various components and to analyse its diverse revenue streams, all the while coming to grips with an ambitious finance plan and schedule.

An important project

Sadara has particular strategic importance to the Kingdom of Saudi Arabia, Saudi Aramco and Dow Chemical Company.

The story of the project perhaps begins with Saudi Aramco, the state-owned oil company reputed to manage crude oil and condensate reserves of 260.2bn barrels and natural gas reserves of 284.8tcf. Through its 80-year history, Saudi Aramco has been a world leader in hydrocarbons exploration, production, refining, distribution, shipping and marketing, and arguably the world's top exporter of crude oil and natural gas liquids. It has also been a leading player in the development of project finance, particularly the recent growth of the megaproject, as exemplified by the Petro-Rabigh and Satorp projects. Sadara represents the next step; the next giant step.

At the announcement of the Sadara joint venture on July 25 2011, Khalid Al-Falih, president and CEO of Saudi Aramco, said the project "will play a key role in the Kingdom's industrial and economic diversification while contributing to the creation of thousands of high quality jobs. It will enable significant development in the country's conversion industry, thereby supporting Saudi Arabia's ambition to be a magnet for downstream manufacturing investments that add significant value to the Kingdom's hydrocarbon resources."

The intellectual property in the technology and marketing of petrochemical products, as well as its global product distribution channels and expertise in the construction of complex petrochemical plants, is, of course, brought to the mix by Dow. Its diversified industry-leading portfolio of specialty chemical, advanced materials, agro-sciences and plastics businesses is marketed to customers in approximately 160 countries and in high growth sectors such as electronics, water, energy, coatings, food packaging and agriculture.

In 2012, Dow had annual sales of approximately US\$57bn and employed about 54,000 people worldwide, manufacturing more than 5,000 products at 188 sites in 36 countries. Dow also brought to the table its own considerable international project financing expertise in downstream chemicals production facilities, including recent projects in North America, Thailand, Brazil, and the Middle East.

Explaining Sadara from Dow's perspective, Andrew N Liveris, chairman and chief executive officer, noted at financial close: "Sadara is a cornerstone of Dow's growth strategy. The joint venture will introduce a differentiated product slate from a competitive, low-cost position, which will transform the landscape of our industry and the chemicals and plastics sector in Saudi Arabia."

The project was not formed overnight. Representatives of the two sponsors signed a memorandum of understanding to develop the project on May 12 2007 and negotiations continued through the tumultuous period in 2008 and 2009 that encompassed the worst of the global financial crisis. The navigation of Sadara through these troubled waters likely deepened the strength of the relationship between the two sponsors, which were assisted through both the development and financing stages by their international legal advisers, Shearman & Sterling LLP for Dow and White & Case LLP for Saudi Aramco. Those law firms initially helped each sponsor to define its respective role in the deal, and they then joined forces to negotiate and implement each phase of the financing.

The Sadara chemical complex

The Sadara complex is located in the Royal Commission for Jubail and Yanbu's Jubail Industrial City II, the largest industrial complex of its kind in the world, in the Eastern Province of the Kingdom, approximately 100km northwest of Dammam. When completed, the complex will be one of the world's largest integrated chemical facilities; the largest ever built in a single phase, and will be comprised of 26 fully-integrated manufacturing units.

The construction of Sadara benefits from its proximity to the well-established industrial

infrastructure at Jubail. However, the sponsors have had to bring order to the huge complexity inevitable when developing so many units concurrently on a greenfield site. In naming Sadara as its 2013 Deal of the Year, US Ex-Im was able to cite the involvement of approximately 70 contractors from the US alone.

Two main alternative contract models, LSTK and EPCM/LSPB, were used across a series of construction packages, using the sponsors' experience of project management and planning to reconcile uniquely complicated technical and engineering issues, including IP-sensitive technology licensing issues, together with the rigorous market expectations relating to customary environmental and social requirements, and procurement eligibility considerations applicable to the OECD-compliant tranches of the financing. Construction of the project commenced in the second-half of 2012 and the first production units are expected to begin to come on line in the second half of 2015.

The Sadara complex will use ethane and refinery liquids, such as naphtha, as feedstock and, by using best-in-class technologies to crack refinery liquid feedstock, it will introduce new specialty chemical plants and businesses as well as new value chains to the Kingdom. It is configured with a mixed feed cracker and an aromatics plant as the key feed process units.

These units will produce: (i) ethylene and propylene from ethane feedstock and naphtha feedstock; and (ii) very high-purity benzene and toluene from pygas and purchased benzene and toluene, as the four primary hydrocarbon



FIGURE 1 – THE SADARA CONTRACTUAL STRUCTURE

intermediate product streams for the derivatives process units.

More expressly, performance products will include polyurethanes (isocyanates, polyether polyols), propylene oxide, propylene glycol, elastomers, linear low density polyethylene, low density polyethylene, glycol ethers and amines, and total production will amount to approximately 3m metric tons per year of highvalue added chemical products and performance plastics, which are expected to generate approximately US\$10bn per year in revenues.

Sadara will market products to customers located within the Kingdom and the Middle East area, and, initially, a Dow subsidiary will have the exclusive right and obligation to market the products outside of the region (under separate product marketing and lifting arrangements for each product) using Dow's extensive global distribution channels.

Some of the complex contractual structures resulting from the construction, operations and technical issues described above are illustrated in the simplified overview in Figure 1.

The financing

In nurturing the Sadara concept through the global financial crisis, the sponsors were always likely to have to match the uniquely complex commercial contracting, technical and engineering project challenges described above with an unprecedentedly diverse project financing strategy, devised with the assistance of Royal Bank of Scotland plc and Riyad Bank as financial advisers. The sponsors released their 400-page draft financing term sheet to the ECAs and Public Investment Fund in August 2011. Milbank, as international legal adviser to the creditors, together with Greengate as financial adviser to the ECAs and PIF, and Ernst & Young/AHB as independent chartered auditor to the Federal Republic of Germany, assisted with the due diligence process over the initial review period before term sheet negotiations between the sponsors and the ECAs/PIF were largely concluded in three very constructive all-party meetings between February and April 2012.

To enable the lenders to respond effectively to the sponsors' schedule, the ECAs and PIF agreed to organise themselves into distinct work-streams encompassing technical, environmental, market and modelling issues, in each case co-ordinated by designated agencies or advisers. In the meantime, the sponsors had finalised a bridge financing with PIF, which was signed in May 2012, shortly before the sponsors took the financing term sheet largely agreed with the ECAs and PIF to the commercial bank market on May 28 2012.

The sukuk issuance

At around the same time as the launch to the commercial bank market, the sponsors embarked on an ambitious plan to make a sukuk issuance. The offering was the second-ever project finance sukuk issuance to be launched in the Kingdom, after the U\$1bn Satorp offering in 2011, and is the largest publicly listed sukuk issuance to-date. The sukuk, priced at 95bp over six-month SAIBOR



with a tenor of 15.75 years, was 2.6 times oversubscribed and was sized at SR7.5bn (equivalent to US\$2bn).

• Structure of the sukuk – The structure of the sukuk issuance is shown below and utilises a musharaka arrangement, which is essentially a Shariacompliant partnership arrangement between Sadara and a special-purpose issuer. The issuer contributes the proceeds of the sukuk issuance to the musharaka, which is applied by Sadara to procure certain project assets in accordance with the procurement agreement.

Sadara contributed its rights in the land lease agreement with the Royal Commission for Jubail and Yanbu to the musharaka, which added to the complexity of the transaction from both a Sharia and RCJY perspective. The project assets are then leased to Sadara under a forward lease agreement. Rental payments are paid by Sadara to the musharaka, and then on to the issuer for payment to the sukuk certificate-holders in accordance with the terms of the certificates. The certificates benefit from the completion guarantees during the pre-completion period of the project.

• *The "split-closing" regime* – The project financing had many unprecedented features, with one of the most notable being that the sukuk issuance was closed on April 2 2013, which was after the sponsors had received debt commitments from the commercial banks, but more than two months before the rest of the initial senior debt was signed on June 16 2013 and closed on June 30 2013.

Termed as a "split-closing", the sponsors were keen to ensure that once the other initial senior debt was ready to be signed, the affirmative consent of the sukuk certificate-holders would not be required for the amendment and restatement of the finance documents (now reflecting the terms subsequently agreed between Sadara and the other senior creditors). A mechanism was put in place so as to provide confirmation to the sukuk certificate-holders prior to the second signing date that the proposed amendment to, or restatement of, the relevant finance documents on the second signing date would not affect certain key rights of the certificate-holders.

Aside to structuring and documenting this complex arrangement, adequate safeguards to protect the rights of the certificate-holders had to be negotiated between the joint lead managers and the sponsors, including requiring the redemption of the certificates at par if the rest of the senior debt had not been signed within a specified period from the sukuk being closed, preventing certain key intercreditor rights of the certificate-holders from being amended and restricting any amendments that would adversely impact the commercial deal for the certificateholders. In addition, the "split-closing" regime, together with the associated risks, also needed to be disclosed in the prospectus in order to comply with the applicable disclosure rules.

The "split-closing" regime allowed the sponsors sufficient flexibility to then continue to negotiate the finance documents with the export credit agencies, PIF and commercial banks and also to establish the size of the debt allocations for the ECAs and banks once the final issuance size of the sukuk was known. The regime also meant that the signing of the rest of the initial senior debt would not be delayed by having to wait for a vote of the sukuk certificate-holders. No such vote was necessary and the main project financing closed on schedule.

The main financing

The negotiation of the finance documents for the main financing continued apace even while the sukuk offering was being negotiated. In order to ensure the marketing of the sukuk was not adversely affected, it was necessary to ensure that the rights of the sukuk certificate-holders were aligned with other providers of initial senior debt.

The commercial deal included a number of features of note:

• The initial senior debt – In September 2012, for the purposes of the Sadara project, US Ex-Im agreed to grant its largest ever commitment of approximately US\$4.975bn. ECA direct loans were also subsequently granted by FIEM (of Spain) and K-Exim (of South Korea), in addition to a direct loan being granted by PIF.

COFACE (of France), Euler-Hermes (of Germany), K-Exim and K-Sure (both of South Korea) and UK Export Finance (through the Export Credits Guarantee Department) agreed to provide ECA risk policies to cover commercial bank tranches in US dollars and, in some cases, Saudi Riyals, and the commercial banks provided uncovered loans in the same currencies, including a letter of credit facility in the Saudi Riyal facility.

In addition to the conventional debt facilities, the sponsors arranged both Istisna-ijara and Wakala-ijara facilities with 11 Islamic finance institutions named as mandated Islamic lead arrangers, which facilities were made available as part of the main project financing ultimately signed and closed in June 2013.

• Additional senior debt – Petrochemical facilities often seek the flexibility either to de-bottleneck an existing plant or to adopt new processes or plant to adapt to changing market conditions or opportunities. Sadara has sought similar flexibility and, to allow this to occur, subject to, among other conditions, financial ratio testing, Sadara will have scope to incur additional senior debt for various purposes, including expansions and partial refinancings.

• Pre-completion net revenues – As commercial operations are expected to commence with respect to certain plant units well before the scheduled project completion date of December 31 2017, the treatment of revenues prior to completion was the subject of some focus. Scope was included to permit the use of such revenues to pay project costs, refinance equity

contributions, and to make shareholder distributions, subject to certain conditions. • Creditors' reliability test - In light of its significance as a completion condition, particularly given the magnitude of the project financing, the creditors' reliability test was always likely to be an area of significant negotiation, but the particular complexity of the Sadara complex, with its 26 separate units, made this an area that required careful consideration. To enable the efficient agreement of the concept, particularly in light of the intellectual property relating to the technology being tested, a separate technical and legal working group was established to agree an appropriate and detailed test. The 26 units were grouped into three envelopes and subjected to integrated performance testing and a 60-day completion, operation and reliability test within a 90-day testing period, to be completed within a reasonable period of time. • Sponsor commitments - Saudi Aramco and Dow are required to continue to own Sadara 65:35 prior to the project completion date except that the financing documents envisage an IPO of up to 30% of Sadara. After completion, the sponsors are generally required to maintain a 20% share in Sadara reflecting their deep involvement in the project as, in the case of Saudi Aramco, the feedstock supplier, and, in the case of Dow, the main technology licensor and marketer.

• SIDF facilities – Though not participating in the initial senior debt, the documents envisage that SIDF may join the deal on customary SIDF terms, which include first ranking asset security and restricted tenor, but subject to an assignment of the residual proceeds of security granted to SIDF. • Intercreditor issues – Given the scale and the range of the financing facilities, intercreditor issues were of particular sensitivity and were a matter of detailed negotiation once the finance plan became settled.

In light of its particularly large commitment, it was considered important to recognise the voice of US Ex-Im and, given their role as anchor

creditors in the term sheet negotiations, the other ECAs, which led to the incorporation of a voting concept requiring an ECA majority (ie, a simple majority of the ECAs, which simple majority must generally include US Ex-Im) in favour of a range of qualified majority decisions, which generally incorporate matters that would customarily be super-majority or all lender decisions. This concept was of particular relevance given the scope for additional senior debt described above (generally capped only by reference to ratio testing and capable of therefore substantially diluting the voting rights applicable to the initial senior creditors).

One area of particular additional complexity as an intercreditor matter was the treatment of the original sukuk issuance and the scope for an additional sukuk financing or a conventional bond issuance in the future. As a general matter, consistent with many capital market issuances, the sukuk certificate-holders benefit from a somewhat more limited range of voting rights than do the ECAs and PIF. The rights afforded the certificateholders did, however, have to recognise their interest in participating in important decisions. This interest had to be balanced with the overarching aim of ensuring that the decisionmaking process for the project financing continued to function in an effective and efficient manner.

Big, complicated and flexible

The most notable features of the Sadara financing are its size, it complexity and the flexibility it affords the sponsors to adapt the business to an evolving world. To achieve a successful deal, the sponsors dedicated deep financial and technical resources, mobilised strong advisory teams and invited the participation of many of the world's leading ECAs and other financial institutions. Chemicals projects top the list of challenging assignments in all circumstances, but when combined with huge scale and a broad array of financing tranches and options, Sadara did much to redefine the limits of the possible in project finance.

TABLE 1 – SADARA ADVISORS		
	Role	Advisors
	Financial advisor to the sponsors	The Royal Bank of Scotland plc and Riyadh Bank
	Financial advisor to the ECAs and PIF	Greengate LLC
 	Independent chartered auditor to the Federal Republic of Germany	Ernst & Young/Arends Hofert Bergemann Partnerschaft
	Technical consultant and environmental consultant	Nexant Limited
	Insurance Consultant	JLT Speciality Limited
	Market Consultant	Chemical Markets Associates Inc. (an IHS Company)
	Legal advisors to Saudi Aramco	White & Case LLP
		The Law Offices of Dr. Waleed N. Al-Nuwaiser in association
		with White and Case LLP
	Legal advisors to Dow	Shearman & Sterling (London) LLP
		The Law Office of Hatem Abbas Ghazzawi & Co.
	Legal advisors to the creditors	Milbank, Tweed, Hadley & McCloy LLP (international counsel)
 		The Law Office of Abdulaziz H. Al Fahad (Saudi law in
		relation to the main financing)
		Zeyad S. Khoshaim Law Firm in association with Allen &
		Overy LLP (Saudi law in relation to the Sukuk
