

What price water?

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Water to the arabs ? the most obvious buy-sell in the world and yet very little has been done to make it happen.

What inherent fresh water resources the Middle East has are under immense strain. Around 90% of the fertile crescent of marshlands between the Euphrates and Tigris rivers, for example, has disappeared due to damming and drainage. Now, however, with improvements in desalination technologies the salty waters of the region's surrounding seas can be converted into potable water at ever reducing costs.

Were it that simple. So far, there have been few privately financed independent water and power projects (IWPP) in the region and fewer still dedicated water schemes. ?Water financing in the Middle East is a much more bespoke business than the power sector,? says Doug Strong, director, head of infrastructure and mining, at ANZ Investment Bank in London. ?There is no standard template to follow and a transaction can take a very long time from invitations to bid through to financial close. As a result the number of water projects financed in the region has been relatively small.?

Tariffs and subsidies

More fundamental, however, than the lack of concession templates are the thorny issues of pricing and payment for water supply. Central to the question of private sector involvement in the region's water provision are subsidies and tariffs.

Unlike the development of a petrochemical plant for example, there are powerful political and social dimensions to water supply. And unfortunately, so far, these aspects of water supply cannot be removed from the financing of these projects in the region.

Put bluntly, the costs of developing and operating a water facility cannot be met by the prices set for end users in the region. ?The governments in the region are not prepared to set water tariffs to reflect the true cost of production and supply,? says one banker. ?And frankly, sponsors and the international markets will not be able to deliver sufficient capacity until the mental resistance that water is a free commodity has been overcome and that means in the minds of the relevant governments.?

With governments unwilling to increase end user tariffs too dramatically, the solution so far has been to rely on public subsidies to offset the mismatch between cost and market price.

Yet there are serious obstacles for the private sector, and, in particular, the financial markets presented by subsidies, the biggest of which is the credit risk taken on the public sector agency which pays the subsidy to the project developer. ? Water tariffs are often a very long way away from even the variable costs of a project let alone the fixed costs,? says Strong at ANZ. ?Water projects therefore typically require significant tariff increases or public sector subsidies to make a project economically viable and this involves taking the credit risk of the municipality or other agency which is paying the subsidy. Often, this is a credit step too far.?

While some markets in the region have investment grade ratings, other that need big investment in their water sectors', such as Jordan, are below investment grade making the issue of subsidies much harder, or at least more expensive, to overcome. 'The credit quality of the public sector entity is clearly crucial for those financings where public sector tariff subsidies are involved,' says Monica Merli, analyst, at Moody's Investor Services in London. 'If a project is financed in the international markets then it will be constrained by the foreign currency rating ceiling for that particular country.'

Too expensive for whom?

But are governments right to be so concerned about tariff increases? Clearly any government-led increases in the costs of living are always loaded with political repercussions. The traditional position has been that increases in water tariffs will hurt the poorest and most vulnerable members of a country's population. However, experience does not necessarily bear this out. 'It is a spurious argument that the poor sections of these countries' societies cannot pay for their water,' says one banker. 'When these populations are not served by pipes they are forced to buy potable water from trucks and small independent sellers. The prices charged by these sellers are significantly higher per litre than the prices paid by the wealthier sections of these societies which are served by the main water infrastructure system.' The health risks to the population associated with water bought from trucks are also significantly higher and add to the overall cost to the government.

Nevertheless, tariff increases will always be unpopular among the general population despite the realities informing these increases. Unfortunately, governments have to make these tough decisions and they require determination. 'There has to be the will in these governments for private sector participation in the water sector, this is still the biggest problem at the moment,' says Strong at ANZ. 'Without sufficient government determination to bring in the private sector water projects will just not get done.'

Following the IPP model

Some countries in the region have recognised this to a far greater extent than others. 'Some projects in the region have demonstrated that there is political will behind them,' says Sikander Zaman, managing director, global project finance, at Citibank in London. 'Abu Dhabi is a case in point. The government could simply have chosen to finance its various IWPPs itself. However, it chose to set up a programme which would attract the best international management and expertise as well as achieving very competitive financing.'

Given the lack of concession standards for water projects the IWPP route has been the preferred method of achieving privately financed water capacity. 'Almost all of the water financings in the region have been done in the context of combined power and water projects,' says one project financier in London. 'And the structures used are very similar to those used in typical independent power project financings.'

The leader in the region in terms of attracting the private market into its water sector is Abu Dhabi. The Abu Dhabi government hired some of the best international advisors and consultants and as a result has managed to create a highly efficient and well managed IWPPs programme.

The government intends over the next five years or so to privatize its own shareholdings in these projects. With a view to this, the government stipulated in the concession terms that its projects should have a minimum internal rate of return of 13% or more throughout their lives. This rate should ensure that the private local market gets sufficient returns following privatization.

The first of its IWPPs ' and the first in the world ' was the Taweelah A2 project.

The project was developed by Emirates CMS Power Company Ltd ' sponsored by CMS Energy (40%) and the Abu Dhabi

Water and Electricity Authority (ADWEA) (60%). Barclays Capital arranged the \$596 million project financing for the deal which was priced at a margin of 105bp over Libor pre-completion, this drops to 80bp for the first eight years following completion before the margin starts to ratchet up to a high of 150bp through to its maximum security.

Following that deal, was the Taweelah A1 IWPP sponsored 60% by ADWEA and 40% by a consortium of TotalFinaElf and Tractebel. The project involves the rehabilitation and upgrade of the existing Taweelah A1 plant and extension under a BOO concession. Once, complete the project will have a 1,350MW generating capacity and an 84m g/d water capacity.

The \$1.015 billion project financing for the project was mandated to BNP-Paribas and Citibank/SSSB.

The next IWPP for the emirate is the \$2 billion Shuweihat project, which was recently awarded to International Power and CMS. The 1,500MW and 100m g/d project will require a large amount of debt ? around \$1.3 billion. The sponsors have appointed a seven strong bank group to arrange the financing ? Abu Dhabi Investment Company, BoT-Mitsubishi, Barclays Capital, Citibank/SSSB, KfW, National Bank of Abu Dhabi and RBS.

Beyond Abu Dhabi, both Oman and Qatar are seeing greater activity in the IWPP sector.

In Oman, ANZ and ABC recently closed the syndication of the \$348.6 million project financing for the Barka IWPP.

The 427MW and 20 million g/d capacity project is sponsored by AES and the Bahwan group. The 16 year deal was priced at margin ranging from 115bp pre-completion to a high of 155bp for years 15 and 16. This is the longest dated project financing to be done in Oman.

While in Qatar, ABC, ANZ, BoT-Mitsubishi, Barclays, BNP Paribas, GIB, HSBC, IJB, Qatar National Bank and SG were recently mandated as lead arrangers for the \$598.5 million Ras Laffan IWPP. The project involves the development of a 750MW natural gas fired power plant and a 40m g/d desalination plant under a build-own-operate-transfer concession structure. The project's financial close is scheduled for mid September

Much work to be done

Yet beyond these states, and possibly Kuwait, the picture is far less vibrant. ?Really you can only talk about three states in the region which have made significant progress in reducing subsidies in the water sector ? Abu Dhabi, Oman and Qatar,? says a banker. ?Most of the other states have much greater subsidy levels which is why there has been little IWPP development in these countries. But these others will eventually have to close the subsidy gap or else the governments will have to directly guarantee the financings.?

Nowhere is this truer than in Saudi Arabia. The kingdom has the biggest subsidy levels in the region which is why there has been no real private sector financing or activity in the water sector. The kingdom's existing water tariffs are very low, typical domestic rates are set at \$0.04 a cubic metre. According to project financiers, this level does not even meet the cost of water distribution let alone production.

But Saudi is already facing water shortages and these are projected to grow significantly over the next 20 years. The kingdom's Saline Water Conversion Corporation (SWCC) estimates that, based on average daily consumption of 300 litres a person, the kingdom has a desalination shortage of almost 450,000 cubic metres a day (cm/d). By 2020, that figure will rise to 4.37 million cm/d if no new capacity is added. SWCC estimates that the cost of increasing capacity to meet this forecast demand is around \$2.7 billion of investment a year if no rehabilitation of existing plants takes place. The figures are huge and bankers and developers regard Saudi as by far the most important potential market for water finance in the region. ?Saudi Arabia is the big market waiting to happen,? says one banker.

But to meet this demand developers will need to feel comfortable that they will get a sufficient return of their

investments. The efficiencies of the private sector for water delivery are now recognised by the government. Water & Agriculture minister Abdullah bin Muammar is reported as saying that his government spends an average of \$1.3 billion to build a desalination plant while the private sector can deliver the same project for \$933 million.

Furthermore, there are encouraging signs that the government is beginning to formulate the structures and framework to encourage private sector participation. A new water ministry is to be set up to centralise decision-making in the water sector. Before this move, decision making responsibilities for water issues rested with seven autonomous water boards as well as SWCC and the Water and Agriculture Ministry. "The Kingdom of Saudi Arabia's decision to create one ministry with overall responsibility for water is a sensible approach," says Doug Strong, director, head of infrastructure and mining, at ANZ Investment Bank in London. "By centralising the process and decision making, progress will be improved."

The newly created ministry will develop an overall plan to address the issues relating to water supply. These include an increase in water tariffs, the supervision of water and wastewater facilities, making an estimate of existing water resources and the introduction of private water utilities.

There is still along way to go in Saudi before the private sector will feel fully comfortable developing water projects there. But the signs are encouraging and may give a lead to other states in the region. The appetite is there from international developers and financiers, it is up to the region as a whole to develop the structures required to tap this.

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