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EEDP Working Paper

Investing in Renewable Energy in the MENA Region: Financier Perspectives

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The information contained in this Working Paper reflects directly the Roundtable discussions, and can be read as an evidence base from financiers and investors at that point in time.

INTRODUCTION

This working paper presents the insights of leading renewable energy financiers on the current opportunities and blockages to potential investment in the Middle East North Africa (MENA) region.

The summary is based on two Roundtables bringing together mainstream financiers, both from London and the region itself. Financiers ranged from international project finance banks, including regional or global heads of renewable energy, investment banks, as well as specialised private equity, and a more limited number of equity and banking institutions based in the Gulf region: all with an active interest in renewable energy (RE).

The MENA 'region' clearly reflects a very broad, non-homogeneous set of countries. However, as it is common for London-based financiers to cover Europe Middle East and Africa, EMEA, the focus was deliberately wide-angled to capture as broad a cross-section of inputs as possible. At neither Roundtable was a specific boundary defined for MENA.

This paper aims to bring forward the views and experience of financiers to assist those involved in policy. It is not an overview or analysis of policy of any individual country, or the region more generally. Policy debates have emerged around scaling renewable energy (RE) in regions such as the Mediterranean (a politically grouped set of countries that intersects with MENA) as well as the RE export potential of the region to Europe.

As the Roundtable in Abu Dhabi had a greater focus on UAE issues, these have been presented as a case study, but do not reflect analysis of the broader policy context in the UAE (which may have evolved since early 2011) - moreover, it simply provides the insight of a set of experienced financiers, at that point in time.

The Roundtable was organised by the Renewable Energy Finance Project, Chatham House, as part of the UK-UAE Policy Research Centre announced by the UK Secretary of State at the World Future Energy Summit in January 2010, coordinated by UKERC in the UK and Masdar/MIST in Abu Dhabi. The Roundtables were held in London to coincide with the European Future Energy Forum, October 2010; and in Abu Dhabi alongside the World Future Energy Summit, in January 2011.

KEY POINTS

- The MENA region is on the radar: the factors contributing to this are the strong renewable energy (RE) resource base; rising energy demand; client interest; potential scale; desire for technology leadership already in evidence; linked sectors such as water. Financiers have been established in the region for some time, financing, inter alia, conventional power projects.
- Financiers seek deeper understanding of, and priority placed on, the underlying drivers for RE strategy by policymakers at a national level, with respect to visibility on market development and growth in near and medium term.
- Policy and regulation are central to investment conditions. However, the majority of governments do not have a national regime in place, despite developments and target setting in some countries. Access to the market, alignment or embedding renewables within utility or energy policy more broadly, government strategies on both technology development and deployment, and importantly medium-term visibility on transmission and interconnection planning, are all core issues raised.
- Subsidies to conventional fuel, together with the proportionately higher up-front cost of renewable energy, are also seen as important issues in the region for policy development and project economics. The opportunity cost of consuming oil domestically at subsidised prices for power production compared with the revenue that would be raised by exporting it is increasingly on the radar and makes the economics of replacing domestic consumption with other energy sources, such as renewables increasingly attractive. However, the proportionately high up-front costs still mean that support is required at present.
- Near term, public finance can play a key role in reducing risks of entering specific markets. Financiers highlight the need for greater understanding of the package of products that are available from public finance entities, as well as much better facilitation of access to these products. Public finance interventions should be considered in the context of broader utility or energy policy developments.
- Greater interaction and exchange between domestic financial institutions in the region and international financial institutions, as well as between public and private finance institutions, would be valuable to increase insight into the region as well as business opportunities.

Box 1: Suggested next steps

- Provision of 'investment grade' or commercially relevant information on individual country policy and regulatory regimes, as well as plans for regional cooperation, would be very useful. Even basic, standardised information through a web-portal would be valuable.
- Establish or facilitate avenues to 'road test' policy developments, at national or region level, with financiers, where external finance is sought, to identify key design features.
- Assess the opportunity for exchange of experience with large-scale RE deployment in EU grid systems (such as Spain or Nordpool) with those involved in interconnection within the region.
- Greater exchange between public-private financiers both on the availability and design of public finance products (multilaterals, Export Credit Agencies) and to streamline access to resources; including a further Roundtables, in the UK, between UK-based financiers and the national ECGD as well as to examine offerings of other ECAs active in the region.

1. STATE OF THE MARKET

A range of countries across the region are on the radar of financial institutions interested in renewable energy (RE). Key factors driving interest include an existing client base, resource base and potential market size.

Financiers note a shift from seeking opportunities in a particular country/region to being more client-driven, particularly noted by international banks. While 'following clients' itself is not new, clients are developing new interests, or those in conventional power in the region may be developing diversification strategies as they see or seek RE opportunities, including particular interest from some clients/financiers in supply chain opportunities.

Resource base: a strong underlying natural resource base in a jurisdiction is a key factor: solar irradiation levels and wind speed. Solar irradiation levels have attracted international attention, and there are commercially interesting wind speeds; although both vary across the large region covered by MENA. Although parts of the region face constraints using existing solar technology due to the dust and poor ground levels of solar radiation, this may create opportunities for technology innovation; R&D on the development of a 'Gulf spec' PV panel was raised during Roundtables.

Potential market size and timing of development: growth potential is linked to a range of factors: emerging constraints in energy and water (cross-over sectors such as energy for water desalination) economic development, and population growth on the demand side and oil export strategies, technology and infrastructure opportunities including energy efficiency, on the supply side (discussed in more detail below). Financiers will want to weigh up the time needed to analyse the market and the scale of the opportunity.

Countries highlighted during the Roundtables (pre-Middle East tensions arising in Q1, 2011) were Egypt, Iran, Israel, Jordan, Lebanon, Morocco, Syria, Tunisia and Turkey.

The MENA conversation is occurring in the context of international financiers seeking out other emerging markets with sizeable opportunities, that have a significant 'low carbon' investment potential, including Brazil, China, India, South Africa and South Korea.

Energy efficiency (EE) is viewed as a key part of an integrated approach to broader infrastructure development, including buildings, heating/cooling and street lighting.

In late 2010, early 2011 policy, the heightened perception of policy risk in the EU market, due to policy revision and review, was seen as contributing to stronger interest in opportunities in MENA. However, tensions across the region in Q1, Q2 2011, although not stopping investors, have created considerably stronger attention internally within institutions to political and market stability, and therefore RE, like any other investment, would have to pass those hurdles. The feeling in the region and anecdotal evidence is that new entrants to the market are reconsidering entering the market and new projects have been postponed, but that the instability is not affecting existing transactions a great deal. There are limited cases of tenders, on the government side, being delayed or scrapped, an impact seen as 'minimal'¹.

Indeed, notwithstanding the tensions, financiers have continued activity in the region, particularly in the more established markets such as Abu Dhabi and Saudi Arabia.

There are also potential opportunities for investment due to the large increases in public spending that are forecast or promised by governments as a way of addressing some of the concerns of the population and heading off further unrest particularly in countries like Saudi Arabia.

¹ Bloomberg New Energy Finance, 'All Renewable Energy, Analyst Reaction: The MENA region takes centre stage', 24 February, 2011.

1.1 Is external capital required?

While oil-producing countries may not need external capital per se, there is, nevertheless, a history of raising private third-party finance.

A primary reason is expertise: the involvement of external finance (debt or equity) provides a 'sanity check' on whether investments make commercial sense in an emerging sector, backed by a strong foundation of risk sharing at a local level. This is particularly relevant as RE, along with other areas requiring finance, is being undertaken commercially for the first time, at scale, in the region.

Engagement with international companies, with experience in RE, is one route for countries to build capacity and activity in the sector. Another route can be seen in moves to partner with international companies to create 'in house' expertise to develop and involve indigenous industries: examples are Masdar in UAE, the King Abdullah University of Science and Technology in Saudi Arabia, and the development of a Science and Technology Park, in Qatar. However, it was also noted that, as yet, there is no equivalent to the National Oil Companies, and RE is not directly in the remit of any of the NOCs. It is noted that the latter are interested to varying degrees in carbon capture and storage in the region as this dovetails with their existing oil and gas exploration activities and can help in enhanced recovery).

In the context of gaining experience in the sector, one fund in the Gulf region is seeking commercial investment experience in the European RE sector, with a view to capitalising on that experience domestically when conditions are right.

Collective investment schemes, such as funds are seen as a means of reducing the risks per investor and diversifying the range of opportunities that can be taken. Sovereign Wealth Funds also play an important role in this regard.

The growing Islamic finance sector is pointed to as an important segment of the financial landscape, with a total size of about \$1 trillion. In order to channel some of this capital to RE it will be important to increase the diversity of projects available for investment across the region.

2. UNDERLYING MARKET DRIVERS AND THE VALUE PROPOSITION

Different countries across the region have different agendas and different underlying interests in the sector.

The policy context is a critical factor in investment decisions, and financiers are looking for visibility on the underlying value proposition, for governments, that will drive long-term, stable, energy policy development at national level: 'is there a growth story, will it be durable and does it make sense to invest in it?'

Key factors:

- Underlying drivers for RE development: these will shape the fundamentals of the growth trajectory and the size of the market opportunity.
- Clear long-term targets/timeframe, which provide more detail on medium term expectations.
- Energy policy and incentives that are project relevant: these establish the investment conditions at a national level, and create actual opportunities for multiple, bankable deals.

An international backdrop is the competition for capital between countries. Although this was not a factor noted for the MENA region specifically, it is already in evidence in Asia, and clearly in the EU where mobile capital already congregates towards markets that provide attractive 'investment grade' policy conditions².

2.1 Drivers for renewable energy across MENA region

A set of drivers are emerging across the region, however, financiers are looking for greater confidence in how and when these factors will translate through into policy.

'The future of global energy is not based on oil but rather on renewable energy, which is expected to triple by 2035. China is shaping this future and is pushing to expand the role of low-carbon energy technologies, which will in turn drive the energy cost down, benefiting all countries. This is exactly why the GCC states need to focus on investments in renewable energy & technology given that they have significant clean energy resources in solar, wind and, carbon capture and storage.'

Dr Nasser Saidi, Chief Economist and Head of External Relations, DIFC.³

2.1.1. Energy demand growth/security of supply

Rising energy and water demand due to population growth and greater urbanisation are leading to concern over future energy constraints. In one estimate, power demand is expected to double over the next 10 years in some countries⁴ and the expectation is that a large build-out of energy alongside other infrastructure will be required, particularly for peak summer demand.

Demand growth is regarded as the fundamental driver underpinning Saudi positioning in the RE technology sector, and in Bahrain, the view is that RE is 'not a nice to have but a must have' as the country needs all sources of energy to meet demand.

² K. Hamilton, 'Unlocking Finance for Clean Energy: the need for 'Investment Grade' Policy', Chatham House Programme paper, Dec 2009. Available from URL:

http://www.chathamhouse.org.uk/research/eedp/current_projects/renewable_energy_finance_policy/

³ DIFC Press Release linked to an economics workshop entitled 'Oil Trade & Finance: Developments & Prospects for MENA', 28 March, 2011, Dubai International Financial Centre (DIFC).

⁴ Bloomberg New Energy Finance briefing indicates a 6 percent per year energy demand growth forecast in the Gulf countries. In 'Solar, Nuclear – Research Note', October 2010.

RE also has a significant role in the diversity of energy supply, backed up by the strong resources in many countries, particularly as several governments can be seen to be increasingly interested in the longer-term sustainability of energy options. There is also the potential for greater regional security of supply in terms of interconnection and utilisation of renewable electricity from strong resource areas, across the region.

2.1.2 Economic development: RE as substitute for domestic oil use

For oil producing countries, the potential is for RE to substitute domestically for subsidised oil-generated electricity, thus freeing oil up for export at higher value. This is starting to be recognised (discussed in section 3.2.1 below) and is reinforcing the interest in new RE technology development and deployment for domestic demand.

Put more generally: the economics of RE can be attractive in the context of the NPV of oil consumption subsidies, and this is starting to be taken seriously by policymakers. One financier highlighted analysis suggesting that more than a quarter of Saudi Arabia's current oil exports will be required for local consumption in the near future as local power demand rises. Domestic demand for oil to generate power locally could account for 10 percent of Saudi Arabia's total production capacity by 2012, thus limiting the Kingdom's ability to generate higher revenues from exporting local production.

'...GCC petroleum consumption continues to remain high, with some states displaying the fastest yearly growth in energy demand in the world. Saudi Arabia actually uses more oil than Germany, despite having over 60 million less people. As a result of maintaining fuel subsidies, the GCC is extremely energy intensive.... This is not sustainable.'

Dr Nasser Saidi, Chief Economist and Head of External Relations, DIFC⁵.

Getting visibility on public policy interventions that impact oil price development in a national as well as international context (including any policy-driven changes to consumption subsidies) across a 10-25 year timeframe is an important backdrop to the relative attractiveness of RE for financiers, as discussed below.

2.1.3 Technology

Countries are already positioning themselves to lead or benefit from opportunities in the technology development field: both for domestic use and potential export.

The development of technologies that fit local conditions, e.g. a 'Gulf-spec' solar technology (designed for the humidity and dust conditions in the region) can bring RE down the cost-curve, with national capacity being developed in areas such as research, development and demonstration, as well as an experience base in project implementation and services.

As well as the UAE and its well-recognised Masdar project, participants noted that Kuwait's sovereign wealth fund has a wholly owned subsidiary focused on technology and is regarded as building capacity and a niche in the GCC in this area (although not specifically RE focused). In Saudi Arabia, the King Abdullah University of Science and Technology has a strong R&D focus which includes water and solar, solar-powered desalination plants driven by a range of factors including potential future water and energy constraints. The government has recently established KA-CARE, the King Abdullah City for Atomic and Renewable Energy to coordinate and direct policy and research in those sectors.

In general, GCC nations are regarded as having a more defined focus on technology development and its export potential of RE, across a range of low carbon technologies.

⁵ See footnote 2. Press Release 28 March, 2011, Dubai International Financial Centre Authority.

2.1.4 Manufacturing and supply chain

For international clients manufacturing and supply chain development opportunities are often a key driver (likely to focus on where there is a strong ECA, or where there is local backing from governments). Local content requirements will clearly be an important part of this equation for international players.

A wide spectrum of opportunities arising across the solar value chain: from capital, through to chemicals, industries, manufacturing, and different consumer market segments. Solar thermal is seen as a strong potential market, not only for electricity generation but also water desalination, industrial development, and opportunities for project developers, EPC and O&M commercial activity.

International banks note that clients may be looking for greater export opportunities and to increase activities in particular regions with this kind of growth potential.

Illustrating the commercial choices faced, one company noted a strong connection between Germany and Turkey in a particular RE market segment: they face the commercial decision whether to expand in Germany with its strong ECA and technology base for export, or strengthen ties with the local government by locating manufacturing in Turkey. This will require a medium term view on market and policy development.

2.1.5 Employment

The need for employment opportunities is also motivating interest in RE, particularly given the range of options through the supply chain from technology to deployment, and in the context of expanding populations seeking jobs. The focus of the Bahrain Economic Development Board on creating jobs, not only in the financial sector, but also through new industrial development was pointed to at the Roundtable in October 2010. The social imperative, quality of life and access to energy were raised by financiers as an important backdrop for considering RE, and medium term policy objectives in the energy sector.

2.1.6 Energy efficiency

The central role of energy efficiency technologies and applications: lighting, heating and cooling, with building infrastructure an obvious focus, is described as: 'important, impactful and investable' with financiers actively looking for opportunities in the region.

Moves for greater interconnectivity between countries will come at a time when the 'smart grid' debate is underway in other countries, highlighting the potential to enable a much greater role for demand management in energy, as well as the systems operation and range of technologies involved.

2.1.7 Sector synergies

There is a set of cross-sectoral issues. The linkage between energy, water and agriculture is emphasised: RE and efficiency in water supply and treatment; food supply; waste management as well as water desalination. Solar for desalination 'ought to be a clear convergence point' according to one financier, particularly as solar costs come down and water constraints emerge.

Local decentralised energy (DE) also has an important role within an investment strategy for the region. Solar roofs were emphasised in both Roundtables with one financier stating that DE should be 'high on the list' of opportunities that also delivers household level direct benefits.

3. POLICY, ECONOMICS AND THE SUBSIDY QUESTION

3.1 Policy

The policy context remains central for attracting external sources of finance to RE in this region, as it is in other markets: 'if it is attractive enough we'll do it'. The policy frameworks are regarded as largely absent, across the region, despite the fact that some countries are adopting goals, or have tendered out individual projects (discussed below).

Where the underlying local drivers, politics and domestic budgets (to back support incentives) are known, national policy is viewed as more durable. In the MENA region, financiers will examine individual national policy conditions reflecting client interest, or as specific market opportunities arise. Financiers are interested in clearer, investment-relevant information about national drivers and the policy and regulatory environment.

The rationality of investing in this sector, compared to alternative investment options, has to be observable, and the economics of actual projects in a national situation must add up. As one financier raised: 'how much investment, for how long, to get where?' International banks need to build confidence with credit committees and have a 'story to tell' on why investment makes sense over a project timeframe both in the context of the detail and stability of policy, and the longer-term sector development in a jurisdiction i.e. the prospect of greater deal flow.

In the past, mechanisms used to encourage investment in the region, more broadly, have had a greater focus on land subsidies or tax subsidies, rather than what might be termed 'policy' per se.

While market drivers are emerging, public policy (and public finance) are needed to respond to a range of market inefficiencies and dislocations, to deliver investable options. Particular areas of focus are: whether there is a level playing field with other energy sources; whether external players can participate, particularly linked to utility policy; and, for supply chain/manufacturing, whether there is a longer-term market.

In common with other markets, the design of policy tools is critical and should focus on real market risks in conjunction with public finance that target very specific gaps in the sector that private finance is unable to fill.

3.1.1 Policy frameworks: not in place

The overriding view is that government policy frameworks needed to provide clarity over investment conditions are absent: 'There are not reliable frameworks to understand what will be in place even in the next five years, tariffs levels and so on.'

Indeed, the perception is that none of the GCC or North African countries have clear regimes in place, 'or even a framework for subsidy or tariff support', although, in practice, the situation is slightly more nuanced.

A range of countries have adopted targets, or are in the process of doing so: UAE has a 7 percent target for renewable electricity generation by 2020, and Bahrain and Kuwait have set 5 percent targets, Saudi Arabia also examining the feasibility of a 10 percent target; Jordan a 10 percent target; Egypt a 20 percent target (with 12 percent from wind power) all for power generation by 2020; and Morocco with legislation including a 20 percent target by 2012, with 2GW from solar sources from five regional plants⁶. At the January 2011 Roundtable, the expectation was that Saudi Arabia will outline its RE regime in 2011, and statements have been made by Saudi Arabian officials to the effect that Saudi Arabia favours putting in place a feed-in

⁶ Sources: Bloomberg New Energy Finance, 'The Gulf States – a new frontier for renewable energy', Solar, Nuclear Research Note, 19 October 2010; Freshfields Bruckhaus Deringer 'The renewables market in MENA - opportunities and challenges', spring/summer 2010. However, as stated in the introduction, this paper sets out how financiers view the market in late 2010/start of 2011, and actual status of policy would require to be checked.

tariff system, but that the details and the timing for implementation remain unclear. Dr Saleh Alawji, the chairman of Saudi Electricity Company (SEC) and deputy minister for electricity, quoted as saying 'The feed-in tariff is the most essential in my opinion'⁷.

However this is not translating directly through into investor interest, as the details of the underlying framework for implementation have not been sufficiently clarified. This leaves a situation summarised by one investor: 'When I look at the region as a whole, the drive to RE [investment] makes no sense at present for private investors'. There is not a compelling overall business case for RE, despite the very significant potential. In this view, when there is market confidence in a 'rational' investment environment, capital will come in at scale (and with it, skills and experience).

Notwithstanding this, in late 2010, the opportunity for the MENA region was seen in the heightened sense of policy risk in US and EU markets in the second half of 2010 and Q1 2011, following retrospective changes to the Spanish solar PV tariff, and reviews, delays or policy rollbacks in other jurisdictions. In this context it was noted, for example, that equity players are seeking opportunities with less exposure to regulatory change: power purchase agreements (PPAs) that do not have high regulatory risk; and confidence that existing arrangements will be grandfathered. Although MENA has captured interest for its potential to implement strong policies, this dynamic is a double-edged sword as it can count against the region where those policies are not forthcoming.

It was also pointed out that clients will ultimately be guided by their banks as to the level of policy stability required, alongside other risk factors/risk mitigation.

Box 2: Key market characteristics for financiers:

- The right risk/return ratio for both debt and equity.
- Simplification of policy rules and regulation where possible,
- Stability over an adequate, project-relevant, time horizon; with visibility on medium- to long-term government strategy.
- An offtake agreement between the government (or other) purchaser of electricity and the generator at a price, or tariff level more broadly, that adequately rewards investors, and with a creditworthy offtaker.
- Long-term affordability is important for stability of the regime. Where countries are heavily backed by Development Banks, this is raising a question over deploying capital in those countries; preference is for targeted tools e.g. government guarantees for specific risks, such as offtaker performance.

In common with any geography, policy risk itself is an issue and the greater confidence governments can provide on durability the better. Financiers will also assess of a range of non-sector specific risks, including sovereign or political risk and foreign exchange risk. The ability to manage the bundle of risks across any prospective transaction, and confidence in securing returns given the overall risk profile, will be necessary to secure finance.

⁷ From news story: 'Saudi mulls exporting power to Europe as electricity spending surges', The National, 28 March, 2011 (URL www.thenational.ae).

3.1.2 Emerging policy approaches: tendering

Underlying policy approaches linked to delivering projects on the ground are already emerging, although models focused on tendering out RE capacity (discussed in 3.1.4. below). In Roundtables, financiers highlighted:

- Morocco: projects are undertaken on a power purchase agreement (PPA) basis (the functional equivalent of a feed-in tariff, FIT) with some done by the national state-owned utility, others by tender (see below).
- Egypt: all of the existing operating projects are undertaken on the basis of 'large quantities' of concessional finance from external sources (including Danish, German and Spanish government money).
- Morocco and Egypt are described as exploring different means (tenders or long-term PPAs) for developing private projects.
- Jordan is 'just starting': one large RE project was referred to (the financing structure was not known in detail); in May 2011 the Ministry of Energy and Mineral Resources posted a general call for expressions of interest from investors in developing renewable energy through a 'build own operate' (BOO) approach.
- Oman was noted also as tendering for pilot proposals at present.

3.1.3 The tendering experience

Turkey

Turkey is attracting interest in the wind sector, and it does have a framework linked to financial credit and access to lower cost capital (and wind is enabled to compete on the electricity spot market). However, development is seen as project by project to date.

At the January 2011 Roundtable, the Turkish auctions were described by one international financier, as a regime that has 'put off a number of investors' who may have been prepared to commit to 'gigawatts of generation' over a long-term horizon. In this case, most of those parties left the market due to the low clearing level of the auction; projects were awarded to family-owned construction companies, for the most part.

This illustrates the 'fits and starts' associated with going the tender approach. While 'mortality' among bidders is expected, financiers in a new system will not know whether 90 percent or 10 percent of bidders will fall out. This means any track record or early experience of tendering is very important.

Morocco

A CSP, tendered in late 2010, pre-qualified only a small number of bidders - reputable companies with existing CSP experience – building confidence that the process is commercially robust.

Morocco is described as building on its own track record and experience. However, this slow deal-by-deal sector development is looked at in the context of the size of the national market, which at around 2GW (of wind) is not particularly substantial, and the medium-term outlook is not yet clear⁸.

⁸ Morocco's overall RE market is larger, with a national target of 42 percent of renewable energy by 2020: including the 2GW of wind, 2GW of solar (CSP) and further hydro.

Egypt

Egypt has strong resources and a greater market size, with a government target of 20 percent by 2020 (including around 7.2 GW of wind) derived from international tenders. The goal is seen as 'easily achievable' by financiers, and competitive with 'anything else they've got going cost-wise'. However, the inability of the private sector to get into that market is an obstacle: 'Without a change to this, it will be very slow, a project at a time'.

Brazil

In Brazil, raised by way of comparison with experience in the region, under ProInfa, the early RE incentive framework, tenders were also 'way underbid' and the industry 'languished' for 5 years. Note was made of the lessons from the Brazil experience, as it continues to use a tender approach, but it has introduced considerably more stringent requirements.

China

Also noted as a useful example: the first round of concession bidding for onshore wind in China produced very low, 'at a loss', bid prices from state-owned enterprises. This undermines the intent to deliver economic efficiency, in common with similar experiences described above, and is not good for industry development, or the quality of the technology in the long run (particularly if there is an emphasis on MW installed, rather than kWh produced). However, financiers raise the issue of the underlying drivers for national RE strategy, which may include a domestic industrial strategy: policy design resulting from multiple objectives needs carefully thought through if external investors are sought.

3.1.4 Project by project tenders: starting points

A key issue for is that tendering projects to private developers and financiers can be a very slow and costly avenue for entering a market.

Firstly, it requires a project-by-project approach, with the involvement of many different parties each time.

Secondly, investors and developers want visibility on a pipeline of opportunities under any tender framework, not only a one-off. A clear pipeline of projects that will be tendered by government means that an investor will not face the same risk of losing a bid and, therefore, all the bid costs and project due diligence effort, with little opportunity to put that to further benefit in that market. The possibility of winning subsequent bids, means that even an initial loss will still produce market experience that is not wasted. 'The pipeline is the very important thing, an investor would rather spend time in a country with a pipeline.'

Thirdly, and linked to the point above, the scale of the potential also matters. As described: in a master plan where 25GW of RE is needed, of which 10 - 15 percent will be PV, then the 10 or 20 global companies that might be interested will consider whether it is worth expending time to bid into a new market for a potential 20 percent market share of a 5GW in a 20 year market: 'Investors will pass over entire countries if it isn't worth the cost or effort'. A longer-term, larger scale potential will be more attractive.

3.1.5 Tenders: making it work

The existing international experience with tender processes provides a track record against which lessons can be learned (as there is with other support mechanisms):

- Great care needs taken with the qualification requirements, to ensure these are rigorous enough to weed out under-bidding 'opportunists'.
- The underlying PPA must be bankable (offtake risk).

- Transparent penalties or consequences for non-construction of projects by those winning in bidding rounds, in a set timeframe, to disincentivise under-bidding.
- Governments (or those issuing tenders) will need to retain technology, financial and legal advisors to ensure there is full confidence and competence to negotiate terms, and build the credibility of the regime.
- Tender systems can fail if either or both sides don't know what they are doing.

For governments, one of the tensions is that national companies may be excluded from bidding - under stringent conditions requiring experience and expertise - as they may not have a track record with the technology. This poses a challenge, particularly where domestic industrial and employment benefits need to be demonstrated for political reasons. To overcome this, one approach is to require a percentage of national company interest in a project. This needs to be done with care, and is not without critics as a form of protectionism.

As an example, it was noted that a 70 percent national content provision in one country meant a project developer had to go to a technology provider that did not have the strongest reputation, which in turn affected access to finance. This is a tension point in other regions globally. Policymakers need to consider content or participation priorities alongside the importance of developing rigorous conditions that build confidence from the outset, if external investment is sought.

3.1.6 FITs, Support mechanisms and embedding RE in broader utility policy

Financiers involved in the Roundtables have considerable experience of investing in RE where policy conditions are favourable. Various support mechanisms and other incentives have been successful in different EU markets and the US; in particular feed-in tariffs (FITs), obligations or portfolio standards and tradable certificates; and tax-based production- or investment-linked incentives in the US.

The general message is that it is, perhaps, less important which form of incentive is used, but that it is stable, long term, that it is designed for the characteristics of renewable energy (and sub-sectors), and that any reviews are done in a fully transparent, predictable manner⁹.

The European and US experience with these support mechanisms has produced a considerable set of valuable lessons as unforeseen issues or unintended consequences (often in broader energy market, or in investment conditions) have had to be ironed out. Calls for policy stability by financiers at the same time acknowledge governments need the flexibility to make revisions where this is necessary to deliver outcomes, in a transparent manner.

In a European context, there has been demonstrable growth under FIT incentives, which provide revenue stability in broadly deregulated markets. However, retrospective changes to solar PV FITs in Spain, in early 2011, has had a serious impact on investor confidence in other policy-driven EU markets and indeed further afield. It has also focused attention on the detail of FIT or other policy design: who are the counterparties, who underwrites tariff payment (government or consumers) is the overall package affordable, and so on. Alongside policy and tariff reviews in other markets, Spain has reinforced the perception of policy risk, particularly under constrained economic conditions and underlines the importance of long-term stable approach to energy policy and RE within that.

A clear message is that delivering RE in the region will be very closely connected to its integration into broader utility policy (both water and energy). Situating RE within the broader approach to energy would enable policy makers also to better plan for and capture synergies with energy efficiency and infrastructure aims.

⁹ Financiers told Ministers back in 2004 that the characteristics of good RE policy as 'loud, long and legal' (makes a difference to the bottom line, reflect project time horizons and set in law to build confidence) – at the first international Ministerial conference on RE in Bonn, Germany; more recently Deutsche Bank's description is that policy design (including for FITs) should have 'TLC': transparency, longevity and certainty.

Some see the liberalised structure for the electricity sector (separation of generation, transmission and distribution) with commercial arrangement of PPAs, or the 'EU model' involving support or incentives such as FITs alongside a conducive framework, as having a successful track record in other countries, notwithstanding detail and national conditions.

Without this, progress is only likely to be made on more of a project by project basis, driven by government, and raising questions over the speed and scale of sector growth; and leaving open a question over the level of commitment to the sector.

The level of access by private financiers to electricity markets is a key point, and there is a perception that 'there is another kind of energy security at issue': where governments do not want to lose control of power supply to overseas investors or utilities. Yet at the same time governments are signalling that investment and expertise is desired. This raises the need for a much clearer understanding of, and communication between, potential sources of finance, projects, utilities and those developing policy.

In the context of this policy framework, financiers regard market development as able to develop in a relatively straightforward manner in many countries, building on or adapting well-established frameworks in the conventional power industry, including tendering processes for independent water and power producers (IWPPs). Fundamentally projects have to be commercially attractive, be able to sell power in a regime where revenues (PPAs) can be relied upon; and where grid or distribution systems (as required) are available.

3.1.7 Medium-term strategy: transmission & interconnection

Early attention to interconnection across national boundaries is an increasingly important factor in the overall potential of RE. Financiers want to understand government intentions in this area.

Morocco is a useful illustration: the national intention to have 2GW of wind generation by 2020 is not particularly substantial for overseas financiers, compared to other countries. However, with EU legislation and the existing interconnector between Spain and Morocco, wind could provide for domestic needs and export electricity north into Europe at some point in the future (at present electricity flows south from Spain). However, it is not yet clear to financiers how governments will approach these medium-term strategic issues in a practical way i.e. embedding into national or regional policy frameworks (rather than one off projects).

Initiatives like 'Desertec' are seen as largely conceptual and not on the near-term radar screen of financiers looking for opportunities, although some have heard of it.

3.1.8 A more regional approach?

There is no pan-MENA governmental approach to RE policy as a whole (equivalent to that of the EU on energy or RE), and financiers do not see a 'one size fits all' approach to policy in the region working, given the differences in energy resources, drivers, technologies and existing market conditions and energy policy development. National government is still seen as the 'champions' for RE development, however at the same time a purely nation-by-nation approach is viewed as slower, producing smaller opportunities and missing some areas of synergy, including intra-region export of renewable electricity across the Mediterranean.

Established country groupings do work on energy, such as the Gulf Cooperation Council countries, and the Energy Council of the Arab League, and these are potential avenues through which common development and standardisation of the legal and policy framework could be facilitated (energy is already discussed to an extent in the former). However, a pitfall is that this is not seen as a primary means for delivering the detail of policy conditions needed at national level, and is seen as likely to be very slow.

That said, countries across the Arab world are starting to enter into electricity power sharing arrangements (peak) on a bi-lateral basis; and the development of a GCC interconnection grid

is already underway, although not directly linked to RE¹⁰. There is an 'extremely important' opportunity to unify this field on pan-Arab basis, across the various emerging trading arrangements. Indeed, at the January 2011 Roundtable the opportunity was raised to bring ADWEA in Abu Dhabi, together with the two most advanced transmission operators in Europe (Energinet in Denmark, with a mandate for both electricity and heating/cooling, and Redelectrica in Spain) to examine conditions for an Arabian Peninsula power pool bringing forward the European experience of large scale RE penetration. This is seen as 'technologically do-able', but would require a strong level of cooperation.

The interest is that the larger the connection, the larger the potential penetration of RE. In terms of power system management, this larger market would maximise returns and economies of scale for technology development. This underlines the benefit of taking a 20-30 year view of RE, and a systems-focused approach.

3.2 Tackling the subsidy question

Renewable energy is regarded by governments in the region as an expensive source of power compared to conventional technologies on a per MW basis.

This is a substantive issue for financiers, as it impacts policy development, and clearly project economics. On the one hand the 'playing field' is not seen as level: there are subsidies to conventional energy production that makes it harder for RE to compete; on the other hand, even with removal of those subsidies, RE still requires support to provide investment conditions, given proportionately higher up-front technology costs, higher risk with less familiar technologies; and technologies that need to continue down the cost curve to maturity.

Conventional power support:

- Several countries subsidise conventional power through cheap feedstock (e.g. domestically produced oil as discussed below) - this is a critical issue¹¹.
- Linked to above, electricity prices are 'another matter again', and often do not reflect costs, with broader externalities also noted.
- Fundamentals such as land access, relevant regulatory support and institutions, transmission infrastructure are already in place and designed for the characteristics of conventional power.

The existence of subsidies to domestic oil consumption is fundamental to the economics of RE. New discussions in quasi-government institutions within the GCC are just starting on whether subsidies, that are currently used for oil consumption, could be shifted towards RE, to support these sources becoming more mainstream. The higher value of exporting oil has the potential to 'net-out' the equation on the cost side, as well as attention to options for ensuring this is manageable for consumers.

On the RE side of the equation, to secure finance internally, credit committees will want to feel confident about the cost and affordability of incentives (both to consumers, national budgets and politically) linked to the perception of policy stability. The Spanish situation has made this factor more acute since the latter half of 2010.

An additional challenge, noted in the UAE and existing in other countries, is that there is notionally no subsidy in existing government-backed RE development. Instead, there are a variety of market actors that are quasi-commercial, but nationally owned, that may be both clients and competitors for outside investors wanting to get into generation business. This reinforces the need for a systematic regime for external investors.

¹⁰ The first stage of the GCC interconnection grid was completed in 2009 (Saudi Arabia, Kuwait, Bahrain, Qatar) with Oman and the UAE due to be connected in 2011: 'The Gulf States – a new frontier in renewable energy', Research Note, 19 October 2010, Bloomberg New Energy Finance.

¹¹ BNEF Research Note, October 2010, gives examples of current electricity costs in some countries in the GCC.

3.2.1 PV-oil displacement and peak solar

The debate over subsidies and a level-playing field often focuses on the higher cost of solar in particular. More detailed analysis is emerging that reinforces the commercial opportunity to generate solar/RE based on the value of displaced oil. Analysis from Bloomberg New Energy Finance demonstrates that solar is already a viable option in the region where it can be used to replace the burning of oil for power generation, as long as the oil is valued at the international selling price¹². For a notional 100MW PV plant, based on 2010 PV lowest costs (outside China) and oil rising to US \$163 per barrel by 2030 (2010 real costs), a real internal rate of return of 9.4 percent would be generated, according to the modelling. Even with oil price flat at \$80/bbl, a PV project at \$3.14 per watt still provides a yield of 4.6 percent (B-NEF expects the cheapest bankable systems in 2011 to be developed and built for \$2.73/W). At a press briefing in January 2011 at the World Future Energy Summit, Saudi Arabia's largest private utility, ACWA Power indicated this lower cost for PV is 'a very sensible, comfortable figure' and they anticipate being able to deliver for less in 2011. This excludes any carbon-related costs (or credits).

The relevance of this analysis will be country dependent: UAE electricity is mostly generated from imported gas and, using the above methodology, PV is not yet commercially viable. However, solar remains a 'highly rational option', even in a gas based power system, in the context of meeting peak electricity demand.

Abu Dhabi has a 50-degree temperature profile at certain times of year, and even short periods without power can leave people, perishable supplies and other aspects of daily life highly vulnerable. This is an acute issue as power shortages, in UAE, are foreseen by 2013-2014. In Saudi Arabia, 65 percent of power demand is for industrial and commercial use, with 60 percent of that for space cooling¹³.

From a cost point of view, peak load (middle of the day for cooling/air-conditioning) also occurs at the same time as the highest irradiation rates. Solar 'cost' should not therefore be assessed on the basis of baseload comparisons of price/KWh, but rather peak load.

Notwithstanding the overall economics, policy will need to take into account the higher up-front costs of solar: 'Either the government is going to have to take the headroom above the current retail price or someone else will.'

The cost and economic efficiency of achieving energy objectives can be dramatically improved by combining policies to secure building efficiency alongside RE.

3.2.2 Coming down the cost curve

With higher returns on solar production possible in the Greater Sahara region and the Arabian Peninsula due to the resource base, those cost reductions are seen as inevitable by financiers and likely to be coincident with costs rising for externalities like carbon alongside other factors. Substantial cost reductions have already occurred with PV panels today at about a quarter of the cost compared to 2004, largely due to scale driven by factors such as the German feed-in tariff, according to a financier panel at World Future Energy Summit, Abu Dhabi, January 2011.

The greatest interest from mainstream private financiers will be when the 'real economics' add up: RE technologies will be commercially compelling, even in the context of conventional power,

¹² 'Sun sets on oil for Gulf Power Generation', Solar – Middle East Research Note, Bloomberg New Energy Finance, (with future oil price modelling from Standard Chartered), 7 Jan 2011.

¹³ Statistics stated at press briefing during World Future Energy Summit, January 2011.

and for those financiers for whom the risks of policy-driven markets would otherwise prevent investment.

One international banker cited India with its large, potentially attractive market and in the process of introducing a new renewable energy policy regime (a quota structure) to secure further development. The question financiers will grapple with is: 'would you take on the debt side the credit risk for 10-12 years that is required to make the equity work? In four years time, it (the solar technology) might be 40 percent cheaper and, with different decision-makers, it might be rational to re-look at the regime. This raises a pretty fundamental set of issues to get your mind around.'

This reinforces the need for a longer, timeframe policy, designed to provide confidence across the next two decades – during which time technologies will continue to come down the cost curve. Assumptions will need built into power off-take agreements, or tariff supports to ensure managed policy stability with the flexibility to respond to lumpiness in the supply chain or other factors. There are clear examples of feed-in tariffs in Europe with 'regression', declining levels of support, and transparent review processes to enable government and investors to more flexibly manage costs during this period of maturation.

3.3 Policy Implementation: focus on the UAE

In the shift from individual project tendering (where local ownership and participation may be a critical issue) to substantive national-scale delivery, the consistent theme is the need for a policy/incentive framework.

It was noted that the SHAMS, 100MW, concentrated solar power (CSP) project in UAE has followed the tried and tested Independent Water and Power Producer (IWPP) approach, used over the last 10 years. This has been used to increase confidence, and the UAE has been able to demonstrate that it has delivered and performed on its obligations under that framework, out to the termination guarantees. The official statement indicates that the US\$600 million closing marks the largest solar project transaction to date in the region, and combines financing from ten regional and international lenders in a non-recourse 22-year 'door-to-door' fully amortizing structure.

UAE: Delivering policy goals

The fact that Shams was over-subscribed illustrates the interest from financiers in the UAE market. With the larger-scale opportunities suggested by the 7 percent RE target, as yet investors still need to see the 'big stable regime' that will attract 'multiple multiple MW' scale finance - different from the finance for a one-off 'showcase plant'.

A central theme of operationalising policy on the ground is enabling the institutions that will be at the helm of delivery.

According to financiers, a central ingredient is the establishment of a position in charge within the Ministry of Energy or Finance, responsible and mandated to take a holistic view of the overall energy and RE system. Analysis and decisions are required in areas such as the GW power requirement, sources of power, transmission upgrade or new requirements of RE sources (e.g. linking future wind or solar resources to demand centres), access to the land, connection and charging regime for the grid, and a sense of the total cost and a payment/incentive options.

In Western Europe, these factors are reasonably well known, whereas it is 'tabula rasa' in the region. Financiers are concerned about the risks facing first movers and the chance of 'taking a hit', absent a national resource plan and a framework in place covering these areas.

In Abu Dhabi, the electricity industry, through ADWEA, Abu Dhabi Water and Energy Agency, has been empowered to raise external finance, which is described as putting 'a lot of credibility' into its IWPP power programme.

The public sector investor role is clear to private financiers: as noted, ADWEA has authority from the Ministry of Finance to put out tenders, raise debt capital and be the 49/51 percent shareholder. This creates transparency and, at the same time, illustrates the UAE commitment to delivering conventional power generation.

Without allocating these powers to ADWEA, project developers would have to go back to the Ministry of Finance or other government organisation for approval, with the risk of non-approval. In Saudi Arabia, it is clear which entity is running power tenders, how the offtake arrangements are made and, as described by one participant, this means there is no risk that 'someone somewhere' steps in to prevent a project going ahead.

To deliver on the RE side in UAE, the approach supported is to set the responsibility with an organisation to achieve the 7 percent target and then 'give them the tools to get on with it'. If the ADWEA IWPP approach works for conventional power projects, just on a structural project finance level, it should work on PV/CSP as these have the same output at a different price point.

On the question of the form of subsidy, the general view is that, as long as it is backed by a government entity, in legislation, operating by transparent rules, the form of incentive is less important, providing it is attractive relative to the risk.

Establishing transparent review conditions for any policy or tariff regime at the outset will build confidence. Higher risks are faced for the first RE project under a new policy regime, both for the investor and for the government: 'Getting it right is important but if you get it wrong then, as government, you need to step in and tackle issues that have arisen, and fix it.' Review conditions also enable greater flexibility as technology costs come down.

More generally, it takes time to empower or educate institutions within countries to take these new approaches, particularly in a 'new' technology area.

Indeed, there remains some perception of 'considerable internal debate' within the Abu Dhabi and UAE government, which is regarded as having an impact on the development of a policy. As one participant indicated: 'Until there is consensus, it is unlikely that any policy will be announced and implemented'.

That said, in Abu Dhabi, the government is establishing a vision for 2030, including an energy strategy, and this is expected to provide the medium-term policy framework for meeting the 2020 7 percent RE target. Institutionally, structures are also in place for setting a comprehensive national strategy on climate change, with a cross-departmental committee established involving Foreign Affairs, Economy, Energy, Executive Affairs Authority of Abu Dhabi, and the Dubai Municipality (chaired by the Minister for the Environment, with the Prime Minister and Cabinet ultimately making decisions).

4. PUBLIC FINANCE

While embedding RE into broader policy development is a core part of creating conditions for financing, public finance institutions, 'multilaterals', (multilateral development banks, such as the World Bank; regional or national public financing institutions, including the European Investment Bank) and export credit agencies (ECAs), are also playing an important role in reducing some of the near-term risks through products or funds specifically designed for RE.

Two general messages are:

- Public finance packages should avoid disincentivising or disintermediating private capital;
- Public policy and public finance instruments should be examined in an integrated way: a bifurcated approach (tackling technology as a 'finance' issue for example) could make the overall equation more costly: policy-related risk is better tackled through good policy design rather than buying down those particular risks through finance interventions.

The World Bank's Climate Technology Fund, US \$750million focused on CSP in five countries in the MENA region¹⁴ and the EIB, KfW and AfD have a cooperative arrangement of €5 billion for the 2010-2015 period, targeting the Southern Mediterranean and Near East for RE and Energy Efficiency¹⁵. However, as stated in a Freshfields briefing, the US\$750 million CTF is 'potentially significant' but relies on governments and private sector participants to develop necessary projects and 'sufficient appetite from commercial lenders and other development banks to provide the additional funds.'¹⁶

There are three primary messages concerning the multilaterals:

- 1) Distribution: access to available funds is described by private financiers as 'navigating hoops' and 'a daunting task' to get public finance products deployed in a way that might be needed by private financiers. It is seen as a real challenge for the multilaterals to create an 'availability policy' that is more user-friendly and in a scalable format for private financiers i.e. subsequent access after the first time.
- 2) Products: at project level, equity will come if the debt is available, and the debt will come on the back of strong policy and credit characteristics. If terms are available that make it easier to overcome risks in that equation, capital will come. Multilaterals and ECAs can help with this, but it is not yet happening in a way which is unlocking large scale capital.
- 3) More effective engagement: there have been several discussions and fora between public and private actors on leveraging private finance – including for this region. As yet, the implications of what private financiers say about experience of doing deals in the region is not seen to be fully understood in the response by multilaterals.

In one view: 'People are trying, IFC and others are doing a good job, thinking hard about how to mobilise all of this, with various good advisors'. However, in this view, it partly comes down to the politics: what are the terms, who is willing to pay for it, who is going to be the beneficiary among national interests, and the agendas of the various multilateral constituencies.

¹⁴ The fund will focus on the CSP programs of five countries in MENA region: Algeria, Egypt, Jordan, Morocco, and Tunisia, supporting the deployment of about 1 Gigawatt of CSP generation capacity: Report Climate Investment Funds: CTF/TF.CS.1/3 'Clean Technology Fund Investment Plan for Concentrated Solar Power in the Middle East and North Africa Region', Inter-session Meeting of the CTF Trust Fund Committee, Washington, D.C., December 1-2, 2009; World Bank feature story, dated December 2009, on website at November 2010.

¹⁵ Presentation: 'European Investment Bank Support Mechanisms in the Euro-Mediterranean', Joaquin Cervino Zubillaga, Senior Operations Officer 16-17 February 2010.

¹⁶ Freshfields Bruckhaus Deringer, 'The renewables market in MENA – opportunities and challenges', Spring/summer 2010.

4.1 Role of multilaterals and the local/international banks

The extent to which ECAs, the local bank market and the international bank regimes can get aligned and complement each other on projects can make a significant difference to bringing forward a broader range of tools to manage risks, and therefore creating a financeable commercial deal.

In terms of the role and objectives of the multilaterals, it is not yet clear to financiers whether these institutions are primarily there to provide subsidised funding to get some specific/large deals over the line, or to have a broader role backing a market-priced mechanism that will enable more participants to enter the market.

One issue is whether projects will be large enough to access international and ECA finance. In a separate discussion¹⁷, the focus of ECA and public finance on larger-sized commercial deals was seen as an issue for smaller developers or deal size that may be at the front end of a particular market segment, yet find accessing finance difficult.

On the mandate, some focus should remain on technology development in the region, not only technology deployment for power generation. This is seen as important vis-a-vis both the interests within the region, and also local conditions in order to increase the viability of a range of region-relevant ('gulf-spec') technologies, in turn, making them less reliant on policy and regulatory support. The World Bank's CTF funds, despite being described as 'clean tech' funds, are seen as focusing on more established technologies, rather than earlier stage, where arguably there is a gap.

4.2 ECAs: focus on the UK-Export Credit Guarantee Department (ECGD)

A key issue is greater awareness of the various pools of publicly backed capital or tools that can help private financiers do deals in the region in the near term. The UK's ECGD was discussed at the London Roundtable, with respect to its operation and role in the region.

ECGD has a remit to help UK exports; with 20 percent of UK content required. This 20 percent can be technology kit or services, UK legal costs or insurance taken out in the UK, with some flexibility to get across that 20 percent threshold. For a large project, 18 years credit can be provided: solar, wind, even water.

Technology/kit/services are accepted from anywhere in the world, providing that construction (of the kit) is done in UK or there is a UK company involved. The principal problem is that there is not a large UK technology supplier (e.g. wind turbines, solar). Some ECAs both fund and guarantee, others just guarantee, with it being seen to be useful to have funding capability. The UK issue is that there is no UK supply or services.

Some involvement in UK offshore wind could be possible for ECGD, as long as there is a foreign borrower involved (vis-a-vis 'export'). If a foreign consortium buys UK manufactured kit this may be considered. The point is that it has to be a foreign buyer (a Round 3 an unincorporated Joint Venture would be examined).

ECAs can work together e.g. to provide insurance, and if Hermes and EKF joined forces with ECGD on the insurance front, then debt provision could potentially be higher. Political risk covered by ECGD is in the area of remittances, expropriation and war. Breach of contract, e.g. failure to honour PPAs, or contract frustration: this is an area that the Multilateral Investment Guarantee Agency (MIGA) would be able to provide for.

The issue in this discussion is less the detail, and more that a majority of the financiers around the table were unaware of ECGD's approach and options and there was a clear interest in further exchange on this.

¹⁷ 'Scaling Up Renewable Energy in Developing Countries: Finance and Investment Perspectives', Chatham House Programme Paper, Kirsty Hamilton, April 2010.

4.3 Other large-scale initiatives

In addition, some larger-scale, well publicised initiatives for RE in the region, such as private-sector led Desertec, were briefly raised but not discussed. In the case of Desertec, while several financiers at the Roundtables have heard of this, it is not on the radar screen of the near-term majority as there have been no commercial opportunities; it is seen as rather conceptual.

The Mediterranean Solar Plan, developed and backed by a range of EU and North African 'Mediterranean' governments, through the Union for the Mediterranean, was not discussed, although the EIB-KfW funds have been developed in that context.

5. MARKET OUTLOOK / NEXT STEPS

In late 2010, the Middle East, and MENA more broadly, were seen as ‘the next big market’, although taking time to mature. The region has the resource, labour is cheaper than Europe, and there is a strong demand for power – particularly peak power (in the context of oil exports).

In addition, R&D, technology development and investment are all still needed, with the potential to grow the market significantly if the framework is right. This ‘immense’ opportunity for international investors is also seen set in the context of several ‘struggling’ or European markets (given policy changes noted above).

The case for the ‘value’: opportunities, efficiencies and benefits can be consolidated by greater interaction with Ministers and Ministerial level officers – roundtable discussions and specialised workshops and meetings. To enhance the efficiency the level required at present is top to bottom: political leadership, and concrete frameworks.

However, the current high cost of capital for bidding in to projects may delay engagement of international financiers: ‘we are looking at a lot of people parking their [finance] teams in other countries where you can get a lot more bang for the buck’.

In the near term – the next couple of years – activity is likely to move forward in ‘fits and starts’, and global players may lose out and move on. ‘At country level, if there are projects awarded at ludicrously low tender rates then teams move on, or keep an option on the region with only a small team – but will not actually put the whole value chain behind this.’

A priority is seen in kick-starting wider-scale conditions for the solar sector: both distributed solar as well as utility scale, CSP and PV. This brings in employment and supply chain business (construction, maintenance, servicing) as well as power production. Although individual roof-top PV is not going to present a strong business case for financiers or investors that are looking for large-scale opportunities, it would make a huge statement from government, as well as delivering clear benefits at household level; integration with energy efficiency would bring further benefits. A FIT for rooftops is a good first step to kick off the development, and it is highly likely that utility-scale development will follow that.

Key to progress in the next five years is setting underlying growth drivers into a longer-term framework to 2020/2030: clarifying whether policy intends to attract international finance and designed accordingly. If governments define who is responsible for delivering the target, and what tools will be at the disposal of those institutions or individuals, this would provide much greater confidence over the longevity and continuity of any given regime.

Attention to, and progress on, transmission and interconnection between countries will also be key to defining the medium-term scale of the opportunity and reinforce potential for more significant market growth.

Lead countries can provide a valuable experience base that will help pull overall regional development of RE at larger scale.

NEXT STEPS

Areas identified for further exchange:

- 'Investment grade' or commercially relevant information on individual country policy and regulatory regimes, as well as plans for regional cooperation, would be very useful to get short and medium term insight into opportunities. Even standardised information through a web-portal would be valuable.
- Current interaction between the leading public finance institutions and private financiers and investors needs improvement in the context of identifying risk mitigation and other tools that are needed to fill gaps, as well as streamlining access routes to those resources. Targeted information or updates and exchange would be useful, including a further Roundtable between UK-based financiers and the national ECGD; and with other ECAs that are active in the region in the area of renewable energy.
- Greater interaction between domestic financial institutions within the region, and international banks and funds interested in investing, would assist in all of the areas above.
- Interconnection exchange: GCC states already have an emerging interconnected power grid, giving rise to the potential for an exchange on policy development, including the import and export of renewable electricity between interconnected countries. A specific suggestion is for an exchange between those involved in the development of the GCC interconnector, and Energienet / RedElectrica / Nordpool.
- Strong willingness from financiers to provide early feedback on policy developments in the region both at national or regional level (e.g. proposals linked to the 7 percent RE policy emerge in UAE). This would enable early 'road-testing' of options from a finance perspective particularly where an objective is to attract private

PARTICIPANTS

The following institutions contributed to the basis for this Working Paper, however the Paper does not reflect the views of any single institution or individual.

Roundtable, October 2010

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Bank of Tokyo-Mitsubishi UFJ, Ltd.
Export Credit Guarantee Department
Global World Energy Council
KfW IPEX Bank GmbH, London Branch
Masdar
Mizuho Corporate Bank
Morgan Stanley
Oasis Capital Bank, Bahrain
ParadigmChange Capital
Riverstone LLC
Sustainable Development Capital Ltd
Standard Chartered

Roundtable, January 2011

Adenium Energy Capital
Atlas International Advisory
Baker & MacKenzie
Bank of America Merrill Lynch
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