

A large-scale photograph of a wind farm at sunset. The sky is a mix of orange, pink, and blue. In the foreground, a large white wind turbine stands prominently on the right, with its three blades extending upwards. To its left, another turbine is partially visible. In the background, a vast field of similar turbines stretches across a flat, arid landscape under the colorful sky. The overall mood is serene and emphasizes renewable energy.

# WHO'S WHO IN MENAT RENEWABLES





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# WHO'S WHO

## IN MENAT RENEWABLES



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# Introduction

By **Ismail Fahmy**, Managing Director, Dii



The global energy transition, from fossil fuel based energy to emissions free renewable energy sources, is underway across the world. Through emerging, accelerating drivers, a 'near 100% renewables power system' can be expected in the coming decades. In particular ever lower costs of solar, wind and hydro and improved system integration on the one hand and various problems and cost drivers for fossil fuel and nuclear on the other hand is leading to a market driven 'pull' of new renewables in most markets. The private sector plays a major role in making the 'previously unimaginable' into economic reality - convincing governments that ambitious goals will soon not only be achieved but exceeded.

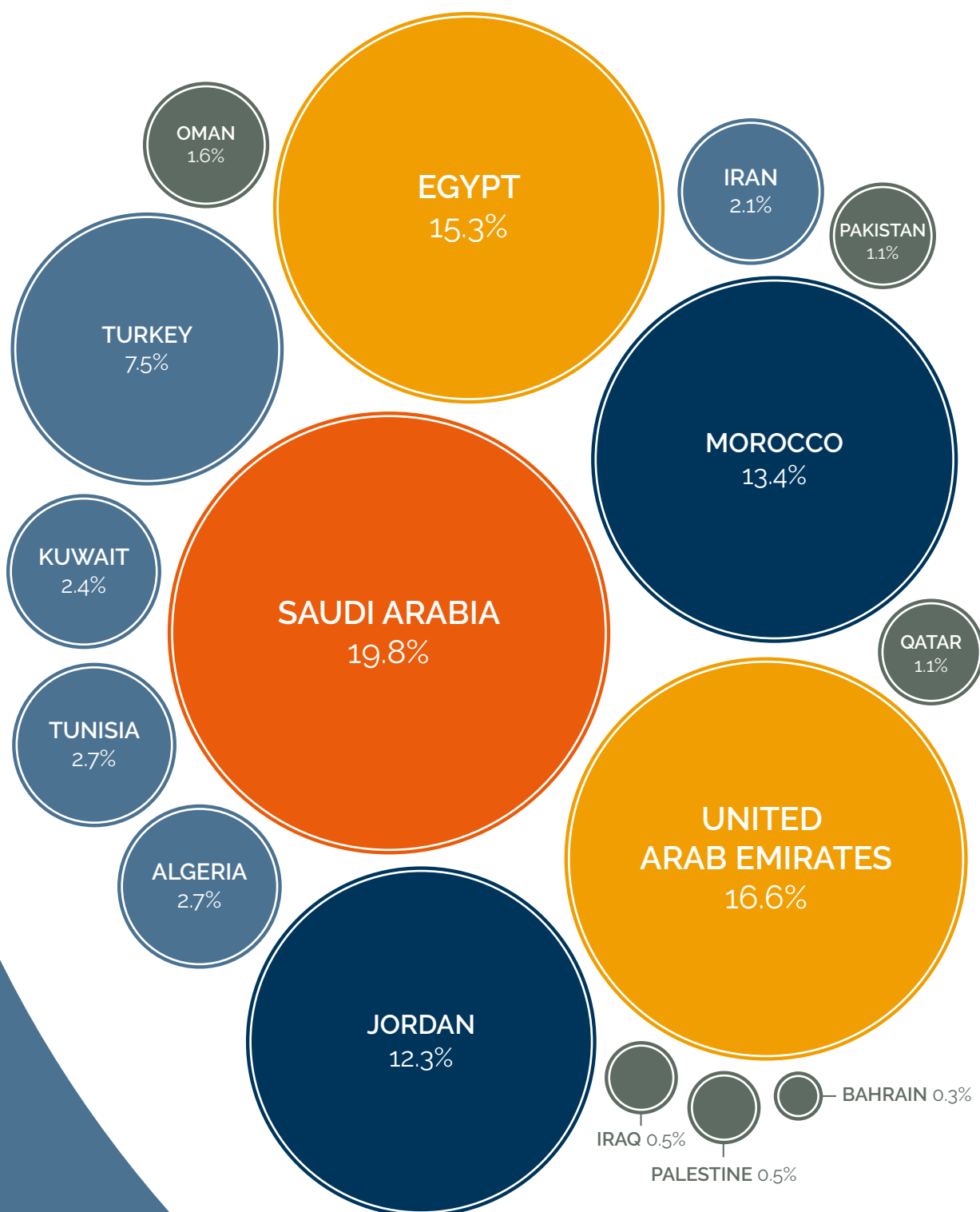
From the earliest days of the energy transition in the MENAT region in 2009, Dii conducted a series of studies and proposed improvement of conditions for renewables and interconnected power grids to local governments and other stakeholders. That paved the way for today's booming industry. Supported by the founding group of leading private companies, such as Siemens, MunichRe, innogy/RWE, Eon, Abengoa and many other big names, Dii worked to transfer the necessary knowledge and experience to local markets, which ultimately contributed to realising the first harvest of renewable energy programmes in countries like Morocco and Jordan. Since those early years, many other countries, such as the UAE, Egypt, Algeria, Tunisia and Saudi Arabia followed suit and began their journey into renewable energy, which has seen thriving ambition, faltering starts, record breaking tenders and promising innovations.

Today's renewable energy industry in the MENA region is, thus, experiencing rapid growth, coupled with the many challenges that any new industry would face. Global economic conditions, shifting priorities and local capacity limitations are impacting the success rate of renewable energy deployment across the region. However, equally evident is the fact that renewable energy is no longer the talk of the future but in fact the business of the present. Governments have understood this shift, helped by COP processes and other programmes, and are abolishing government support for fossil and nuclear in their countries in favour of non-subsidised renewables. The private sector is no longer hesitant to work in 'challenging' MENAT markets, but is in fact fully committed and on the ground, ready to provide the best technologies at the most competitive prices, and with local involvement to meet the requirements of governments and the markets across the region. The **Dii Who's Who** publication for MENAT is a reference guide that profiles the top decision makers and thought leaders who are shaping the sector and the region. It includes public and private sector representatives, from utilities to energy companies, developers, EPCs and associations.

Dii continues its support of its private sector network of companies to advance the story of renewables in the region to the next chapter. This will include uncovering and promoting the synergies and benefits of smooth integration of renewables in the interconnected power systems at local, international and intercontinental level. One important focus area will be localisation, in order to ensure best local involvement and stability. That will include ensuring local technical skills through increased capacity building and local manufacturing. Dii is confident this will not only give another boost to the regional energy transition, but also will make sure that each local society will be a key player itself in energy.

## Which MENAT markets are you most excited about?

Results of survey of profiled leaders.









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# DEVELOPERS





## BASED IN: UNITED ARAB EMIRATES

**ROBERTO DE DIEGO AROZAMENA**CHIEF EXECUTIVE OFFICER,  
ABDUL LATIF JAMEEL ENERGY**Why you need to know him:**

Roberto leads the largest GCC-based solar PV developer in terms of installed MWs. He was previously President of SolFocus Europe, Middle East & Africa and has served on the board of companies across the renewables, telecoms and media sectors.

**Which markets in MENAT excite you most?**

“ Over the next 30 years, governments across the Middle East and North Africa will need to invest over \$30 billion a year, or about 3% of the region's total projected GDP, to keep pace with rising energy demand. The UAE and Saudi Arabia have taken leading roles, with the Kingdom adopting an initial target of 9.5 GW, supported by an increased localisation of the renewable energy value chain. We also see strong potential in conventional energy importing countries such as Egypt, Jordan, and Morocco.

**What is the sector's biggest challenge?**

“ In the GCC, challenging environmental conditions, along with energy storage. We are analysing all battery technologies, and thermal storage is also a good option.

**What are you currently focused on?**

“ Our focus is on building local capacity and establishing a lasting legacy of renewable energy sector expertise by taking a leading role in diversifying national energy production in strategic markets across the world. Our acquisition of FRV in 2015 is tangible evidence of our goal.

## BASED IN: SPAIN

**ARMANDO ZULUAGA ZILBERMANN**CHIEF EXECUTIVE OFFICER,  
ABENGOA SOLAR**Why you need to know him:**

Armando heads up one of Spain's largest developers, which holds a 20% stake in the 100 MW Shams CSP project in Abu Dhabi. He has held various positions at the company since 2007 and became CEO in 2013.

**Which markets in MENAT excite you most?**

“ Saudi Arabia and the Emirates – both of them have the combination of necessary resources and favourable regulatory environments. However, we are responding to RFPs and bidding for projects across the region.

**What is the biggest challenge facing the sector?**

“ The biggest improvement – and not just in MENAT – would be to make sure that the regulations impacting on development and construction of projects are consistent. At the moment it takes a long time to develop a project, and this is due to factors such as often needing to coordinate multiple public sector agencies where the site is government-owned, for example.

**Our focus is on building local capacity and establishing a lasting legacy of renewable energy sector expertise by taking a leading role in diversifying national energy production in strategic markets across the world.**

Roberto de Diego Arozamena

**BASED IN: SPAIN**

**RAMÓN JIMÉNEZ SERRANO**

CHIEF EXECUTIVE OFFICER, ACCIONA INDUSTRIAL &  
CHIEF EXECUTIVE OFFICER, ACCIONA SERVICE



**Why you need to know him:**

Ramón joined ACCIONA in 2014 following a long career in business management in the energy and industrial sectors in Spain. Since then, he has led two major divisions of the company: ACCIONA Service and ACCIONA Industrial, which develops EPC and turnkey projects and is specialised in thermal generation, including: CSP, coal, CCPP, OCGT, biomass, hydro, photovoltaics, oil & gas, electricity transmission networks and substations.

**Which MENAT markets excite you most?**

“ The MENAT market is able to take advantage of its geographical location and environmental conditions conducive to renewable energy generation to render costs per MW attractive to the market. This coupled with a growing understanding of technology, and improvements to local infrastructure, means that expectations are exceeded year on year.

Markets such as Morocco, Kuwait and the United Arab Emirates, through the latest competitive processes, have become world leaders in the development of solar, thermal and photovoltaic energy, contributing to the development of these technologies.

**What are the biggest challenges to renewables in MENAT?**

“ The extreme environmental conditions are challenging, due to the wind, erosion, high temperatures and the lack of water both for construction and operation phases. Also, while there have been breakthroughs in recent years in local infrastructure for renewables, construction costs remain high.

**BASED IN: SPAIN**

**ALBERTO R. ROCHA**

DIRECTOR OF TECHNOLOGY & INNOVATION,  
ACS COBRA



**Why you need to know him:**

Alberto has headed up ACS Cobra's involvement in several world-first solar projects, including Andasol I and Gemasolar in Spain, and Crescent Dunes in the US. Previously he was International Business Development Manager at Abengoa, where he played a leading role in establishing the NOOR II (PT 200 MWe) and NOOR III (Tower 150 MWe) IPP Projects in Morocco. He also has experience in working on projects for GDF Suez, Grupo JG and Ferrostaal.

**What are you currently focused on?**

“ Hybrid projects. Many open cycle gas plants can be combined with either PV or CSP solar energy, and I believe that is a pragmatic choice, a necessary intermediate step in the journey from fossil fuels to renewables. This will change in the future once economical utility-scale battery storage becomes a reality. Retrofitting existing gas plants is a good way to optimise existing infrastructure.

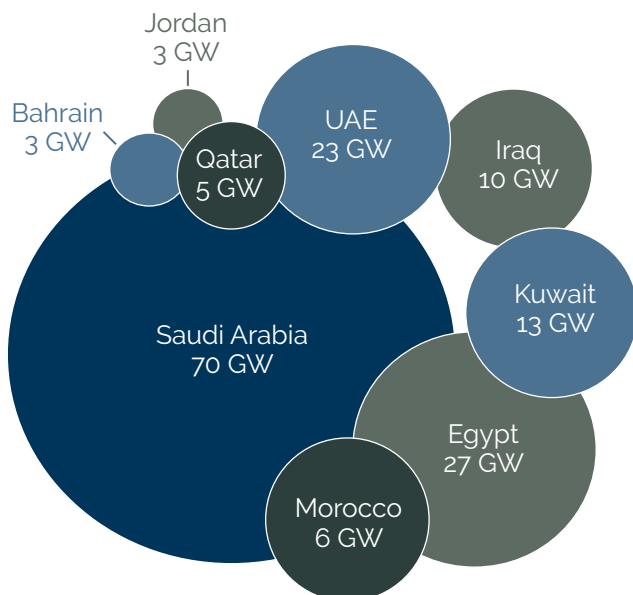
**Which MENAT markets excite you most?**

“ Saudi Arabia has the most potential, but there are regulatory issues. Egypt could also be very strong – they have the resources and need the energy. Countries like Morocco, Algeria and Tunisia are also ones to watch.

BASED IN: SAUDI ARABIA

**PADDY PADMANATHAN**PRESIDENT & CEO,  
ACWA POWER**Why you need to know him:**

Before joining ACWA Power in 2005, Paddy served as a Vice President and Corporate Officer at Black & Veatch, a multinational engineer and constructor. Over the 11 years that he has been at ACWA, the company has transformed from a start-up to a leading private developer and operator of power and desalinated water production plants. Paddy has overseen winning tenders for: Ouarzazate CSP IPP in Morocco and Marafiq IWPP, Qurayyah IPP and Bowarege in Saudi Arabia, all of which were unprecedented in size.

**Which MENAT markets have the most potential?**

“This is what the current power generation market looks like. Demand is growing at approximately 6%. Throughout the region, all have embraced the value proposition of renewables. Taking into account market size, commitment to renewables and track record of getting on with implementation, in our view the biggest potential for renewable energy is going to be in KSA, Morocco and UAE in that order. Jordan, Qatar, Kuwait and possibly Tunisia will be at a different (smaller) order of magnitude. As for Egypt – who knows!

**What is the sector's biggest challenge?**

“The good news is that hardly anyone is wasting time debating if renewable energy is cost competitive. It is now well understood that, to serve peak loads at least, which in the MEA region is in excess of over 30% of the generation capacity, it is fossil fuel energy that needs subsidies and all governments want to move away from subsidies and cost inefficacy. So, deployment is starting but not yet at an organised steady pace in many countries. Morocco is a model all should emulate. Clear strategy and targets. Total commitment from the highest level of leadership in the country that is clearly communicated to all the stakeholders. A well-staffed professional procurement agency, Masen. Procurement rules are very clear and rigorously administered without any interference or influence. They know what they want, they are communicating it clearly and the market is responding.

**What are you most proud of?**

“In two words “cost leadership.” ACWA Power’s approach of rigorously focusing on each element of cost and not pursuing market prices has enabled us to constantly deliver tariff differences of 5% to 31% between ACWA Power’s offer and the second bidders offer on each and every tender the company has won, regardless of fuel, country or capacity of the plant. We have thus helped to make renewable energy an unbeatable value proposition in MENA by setting new tariff benchmarks for CSP and PV in the recent times, and thus contributed to accelerating their deployment.

The good news is that hardly anyone is wasting time debating if renewable energy is cost competitive. It is now well understood that, to serve peak loads at least, which in the MEA region is in excess of over 30% of the generation capacity, it is fossil fuel energy that needs subsidies and all governments want to move away from subsidies and cost inefficacy.

Paddy Padmanathan



BASED IN: UNITED ARAB EMIRATES

**THOMAS ALTMANN**

VICE PRESIDENT, TECHNOLOGY,  
ACWA POWER



**Why you need to know him:**

Thomas is VP Technology at ACWA Power, the Middle East's most dynamic developer and one of the driving forces behind Dii, where he serves as a technical advisor. He was previously Executive Vice President at ILF Consulting Engineers with global responsibility for energy & desalination. Prior to this, he was a VP at Bechtel International in the power generation business unit. He has served as a director of the International Desalination Association (IDA) and the European Desalination Society (EDS), as well as the Research Advisory Council (RAC) of the Middle East Desalination Research Centre (MEDRC) in Oman. He has authored many articles pertaining to renewables technology, and was granted two patents.

**Which markets in MENAT excite you most?**

“ Saudi Arabia. It has the highest demand growth and renewables are at the centre of the Kingdom's Vision 2030.

**What achievements are you most proud of?**

“ Firstly winning projects, but I am also very proud of the team ethic that we have built at ACWA which is the foundation of our success.

**What is the biggest challenge facing the sector?**

“ The problem used to be subsidies but now it is lack of knowledge. Many stakeholders do not understand renewables. Dii is playing a crucial role in working to fill this information gap, and we are extremely supportive.

BASED IN: UNITED ARAB EMIRATES

**WASSEF SAWAF**

CHIEF EXECUTIVE OFFICER,  
ADENIUM ENERGY CAPITAL



**Why you need to know him:**

Wassef leads Adenium, which specialises in the investment and development of the clean energy and alternative energy-related sectors. Its aim is to build a diversified global portfolio of clean energy assets, and is currently active in MENAT, Europe, Africa, the USA and Asia. He is a member of the Young Presidents' Organisation, where he takes an active role in global networking and leadership events.

**Which MENAT markets excite you most?**

“ Regarding both government-tendered projects and private projects for corporate clients, I would list: Morocco, Algeria, Tunisia, Saudi Arabia, Jordan, UAE, Kuwait, Oman, Turkey and Palestine.

**What is the biggest challenge to the sector in the region?**

“ The greatest challenge is not related to financing or technology, but is a question of know-how and governmental support. Unless the governments in the region play ball and facilitate developments, projects are halted. We encountered a lack of cooperation on the part of the Egyptian government in our attempts to become the biggest player in the country.

**Are there any specific challenges regarding financing?**

“ Yes, banks and investors face certain challenges that are not necessarily applicable elsewhere. In the region, investors often seek international arbitration for greater security. There are also questions as to the bankability of PPAs and currency risks when investments are agreed in local tender, with associated convertibility risks.

**What are you most proud of?**

“ We are very proud to have been one of the first, and largest, investors in Jordan and Japan, which has enabled us to work across the full spectrum; with the government, as well as private, commercial and industrial clients.

BASED IN: UNITED ARAB EMIRATES

**LAURENT LONGUET**MANAGING DIRECTOR MIDDLE EAST,  
AKUO ENERGY**Why you need to know him:**

Laurent was Project Director for Shams 1, completed by a JV composed of MASDAR, Total and Abengoa Solar. The 100 MW project in Abu Dhabi was the first of its kind and the largest CSP plant in the region at the time of its construction. He joined Akuo Energy in 2015 after 3 years at SunPower, and 15 years at Total dedicated to the development and construction of international energy projects. He leads Akuo Energy Services (AES), the company's subsidiary focused on EPC activity.

**Which MENAT markets excite you most?**

“ The UAE and Saudi Arabia will be the most promising markets in the years to come but there is some potential in smaller countries as well, including Jordan and Oman. In terms of technology, solar combined with storage is probably the market with the highest potential considering the number of large off-grid sites running on diesel in the region. Net-metering roof-top has significant potential given the opportunities it offers to private developers and investors.

**What is your experience of regional EPCs?**

“ Few have the know-how about solar, although some are progressing fast in this respect, and I expect local companies to gradually displace foreign firms in the region over the next few years.

**What are you most proud of?**

“ Aside from Shams 1, in my new position, I am extremely happy about the ambitious platform we have set up with Corys Environment for the development of roof-top opportunities in Dubai. After only 6 months, the first deals have been signed, construction is underway and the pipeline is growing every day.

BASED IN: UNITED ARAB EMIRATES

**DAVID AURIAU**CHIEF EXECUTIVE OFFICER,  
CORYS ENVIRONMENT**Why you need to know him:**

David previously worked for the Mubadala Development Company in business development and he held positions at Oliver Wyman and Alstom before taking the helm at Corys Environment. The firm was one of the earliest private investors in Jordan's solar market, co-financing three 10 MW PV plants, followed by the development of a 20 MW PV plant in Al-Mafraq.

**What is the future of renewables in the region?**

“ The utility-scale market will keep developing, in Jordan, in Dubai and the rest of the UAE, and in Egypt – and we are seeing Saudi Arabia starting to join the club. I think we will see larger-scale PV. In parallel, we will see the emergence of more distributed generation projects, including solar rooftop, hybrid and off-grid as soon as the regulatory framework is in place.

**What is the biggest challenge facing the sector?**

“ Overall investment returns have dropped dramatically over the last 3 years, in part due to price competition. Every new tender in places like Dubai breaks a new record for tariffs. This maturing of the market has happened far quicker than was the case in the US and Europe. The implications are significant for a wide range of stakeholders, especially for investors, who need to lower their expectations. The result is that the opportunities will appeal to a different class of investors – those satisfied with single-digit returns.

**BASED IN: UNITED ARAB EMIRATES**

**ERIK VOLDNER**

EXECUTIVE DIRECTOR, OPERATIONS,  
ENVIROMENA POWER SYSTEMS



**Why you need to know him:**

Erik was a founding partner at Environema, which built the first grid-connected utility-scale PV plant in the Middle East. He has over 10 years of experience in the solar industry and was Vice President of the Middle East Solar Industry Association (MESIA) from 2012 to 2014.

**How will renewables develop in the region in the next 2-5 years?**

“ Most countries within the region have great potential and renewables will play a big part in all of them – it is just a question of timing. Jordan by the end of next year should have over 1.2 GW online, while the UAE is beginning to realise its potential.

**What are the challenges?**

“ Again, timing – the interval between an announcement, a policy being formulated, then a project being undertaken can be long, but when it moves, it moves quickly.

**BASED IN: UNITED ARAB EMIRATES**

**SAMI KHOREIBI**

CHIEF EXECUTIVE OFFICER,  
ENVIROMENA POWER SYSTEMS



**Why you need to know him:**

Sami is a founding partner of Enviromena, which secured the largest PV solar power plant ever built in the MENA region. He was recognised as a “Solar Pioneer” by MESIA in 2014. Sami regularly presents at local and international industry events including the World Future Energy Summit, the London Renewable Energy Finance Forum, and provides commentary for international and local publications.

**Which markets in MENAT have the most potential in the next five years?**

“ My first thought would be Jordan; it relies on more traditional energy sources with a very high cost compared to solar PV. Next is the UAE; Enviromena built the first 10 MW plant there in 2008 as a proof of concept. Abu Dhabi has been a leader in installing renewable energy technology, whilst Dubai is reaping the benefits from strong private investment and very low tariffs. In North Africa, Morocco is becoming well established in terms of solar PV, with excellent solar resources.

**What is the biggest challenge?**

“ Having enough human capital locally to take on demand. The region is young in terms of renewable energy, so has not yet developed the domestic capability to finance and build plants.

**Which achievements are you most proud of?**

“ At Enviromena we have the region's largest team of solar experts, with 60 people (mostly from the region) who are all highly specialised. Enviromena was very early to move into the solar industry in the region, and we are now achieving our goal of becoming the largest downstream solar company in MENAT.



## BASED IN: JORDAN

**HANNA ZAGHLOUL**CHIEF EXECUTIVE OFFICER,  
KAWAR ENERGY**Why you need to know him:**

Mr Zaghloul has led Kawar Energy's involvement in Shams Ma'an, Jordan's largest solar PV project. He has served on the boards of various organisations including EDAMA, a Jordanian business association focused on sustainable energy, as well as founding and serving as the president of the Jordan Energy Chapter, JEC, representing the Association of Energy Engineers, AEE.

**Which markets in MENAT have the most potential?**

“ Jordan has a lot of potential. I would expect the country to have 1,800-2,000 MW installed utility-scale projects by the end of 2019/2020. However, Saudi Arabia is expected to be the largest market, along with UAE and Morocco.

**What is the biggest challenge facing the sector?**

“ Subsidised energy prices. I believe if there were no subsidies, given the level of technology, and the availability of solar radiation, the sector would flourish.

**What are you most proud of?**

“ The Shams Ma'an project – it is the cornerstone of Solar PV energy in Jordan and really ignited and excited the sector within the country.

## BASED IN: UNITED KINGDOM

**CHRIS ANTONOPOULOS**CHIEF EXECUTIVE OFFICER,  
LEKELA POWER**Why you need to know him:**

Chris leads Lekela Power, a joint venture between Actis and Mainstream Renewable Power, in developing large-scale renewables projects across Africa. With nearly 30 years of experience in the energy industry, including at Bombardier Transport and ABB, he has been involved in the development of \$4 billion worth of power & infrastructure projects across Africa.

**What is your project pipeline like in MENAT?**

“ Lekela Power is a pan-African enterprise for solar PV and wind power projects. We currently have about 1,300 MW of projects secured. In Egypt we have a 250 MW BOO wind project and two 50 MW projects under the feed-in tariff (FIT) scheme.

**What is the biggest challenge renewables face in MENAT?**

“ Finalising financial documents and agreements with utilities and governments in such a way that the projects involved are internationally financeable. The other difficulty is in procuring land for projects, the ownership of land is often complex and the process to secure it tends to be lengthy and complicated.

**Where in MENAT has the most potential?**

“ Most African countries have renewables targets, typically aiming for around 20% or more of the energy mix to come from renewable sources. The region is rich in wind resources and solar irradiation. We see most potential in Egypt, Morocco, Tunisia and potentially Algeria.

BASED IN: UNITED KINGDOM

**DR. KEVIN SARA**

MANAGING DIRECTOR,  
NUR ENERGIE



**Why you need to know him:**

As well as leading Nur Energie, Dr. Sara is CEO of TuNur Limited, Nur's joint venture company for Tunisia. The 2,250 MW TuNur CSP facility is a world-first project which will export electricity from Northern Africa to Europe. Kevin has previously worked at McKinsey & Co, Salomon Brothers (now Citigroup) and Nomura, and co-founded Hazel Capital, a clean-tech investment management company with investments in public and private clean-tech and renewable energy companies. He holds a PhD in Energy Policy from Imperial College in London.

**What is your proudest achievement?**

“ Tunisia recently enacted a renewable energy law which opens up the market and allows for the export of electricity. I have been told by officials that our constant activity in that market, along with our advice, helped it happen, and that is something we are very proud of.

**Which markets are the most promising?**

“ In terms of countries, we see opportunities across the whole region – sunlight is abundant throughout. In particular we see a lot of potential for CSP. If you are looking for baseload power it's still cheaper than PV or electric batteries, and is becoming more and more competitive with fossil fuels and alternatives such as offshore wind. We also think there are a lot of opportunities for local industrial development.

BASED IN: SPAIN

**MIGUEL DOMINGO OSLÉ**

ENVIRONMENT & SOLAR POWER DIRECTOR,  
SENER



**Why you need to know him:**

Miguel leads the renewables team at SENER, which is the EPC contractor for all three solar plants in the Noor Ouarzazte Solar Complex in Morocco.

**Which markets in MENAT excite you most?**

“ Most of the region is striving to balance growing power demand with sustainability. CSP is the most promising market. PV also has potential where there is no need for a 24-hour load demand.

**What is the sector's biggest challenge?**

“ Good intentions need to be backed up by attractive legal and institutional frameworks. It is only possible to reach financial close on projects and attract investors when a judicial framework that will lower the perceived risks of doing business in a particular market is enacted.

Good intentions need to be backed up by attractive legal and institutional frameworks. It is only possible to reach financial close on projects and attract investors when a judicial framework that will lower the perceived risks of doing business in a particular market is enacted.

Miguel Domingo Oslé

## BASED IN: CANADA

**KERRY ADLER**PRESIDENT & CEO,  
SKYPOWER**Why you need to know him:**

With more than 35 years of entrepreneurial experience in the renewables sector, Kerry is a passionate champion of clean energy and a pioneer of solar energy's global growth, founding SkyPower in 2003. Kerry was most recently honoured to be recognised by the United Nations Global Compact as the 2016 Pioneer for Climate Action.

**Which markets within MENAT have the most potential?**

“ In the post-COP22 era, solar energy has taken hold across the MENAT region. Not only does the region have some of the highest levels of solar irradiation in the world, but also the governments in the region have shown strong leadership and remarkable vision for renewable energy development. Whether for the development of new energy or replacement energy, we are participating in the greatest growth curve of any kind of energy in the last century.

**What do you see as the biggest challenge to the sector?**

“ As we approach 2020, the adoption rate of solar energy versus other energy will surpass and create supply constraints as the rest of the world also gravitates to the lowest cost of new energy: solar. Moreover, it is forecasted that by 2020 the levelised cost of energy (LCOE) of solar on a kWh basis will be equal or less than the cost of generating the equivalent kWh from a US\$40 barrel of oil. This paradigm shift will have a material impact on solar energy and its role in the energy mix.

## BASED IN: ITALY

**MICHELE APPENDINO**MANAGING DIRECTOR,  
SOLAR VENTURES**Why you need to know him:**

Michele is well known in the solar sector and is a frequent speaker at key international conferences. He founded A.M.E. Ventures, which has a controlling stake in Solar Ventures, a leading developer and operator of PV power plants primarily active in emerging markets.

**Which markets in the MENAT region have the most potential?**

“ There are a lot of uncertainties and it is not easy to identify which markets will achieve their potential in the short to medium term. Countries like Egypt, Turkey, Saudi Arabia and Iran are those with the highest long-term potential, but they are still in their infancy, and the overall geopolitical situation is not helping their development.

**Which achievements of you or your organisation are you most proud of?**

“ We are proud that one of the two markets we decided to focus on – Jordan – is a country which has been able to deploy plants on the ground, attracting international investments worldwide. In this respect I am also personally proud to have contributed in encouraging the government to shift its focus from CSP to PV.

**What projects are you currently focused on?**

“ We are focusing primarily on Iran, though we are keeping an eye on the rest of the area. The opportunity is not completely mature, mainly because of the long period of sanctions slowing local financing. But we clearly see the potential of the country and we expect the construction and operation of solar utility-scale plants to pick up.



BASED IN: UNITED STATES OF AMERICA

**KEVIN SMITH**

CHIEF EXECUTIVE OFFICER,  
SOLARRESERVE



**Why you need to know him:**

Kevin Smith heads up a company with a stated development portfolio of over 8 GW across 25 countries. He was one of SolarReserve's founding executives, having previously led Invenergy LLC's wind power business and serving as Chief Operating Officer for Rolls-Royce Power Ventures. In 2012, Platts Energy awarded him the Rising Star Award for vision and leadership in the worldwide energy industry.

**Which MENAT markets excite you most?**

“ Morocco seems to be making strides in terms of CSP and PV activities, and we are seeing substantial activity in Saudi Arabia, the UAE and Egypt. Turkey is making progress, albeit mainly on the smaller-scale PV side for now, and has a way to go in terms of regulation.

**What is the sector's biggest challenge?**

“ From our perspective, the price point issue has been tackled – renewables have reached parity even with low oil prices, and now the challenge is energy storage.

**What are you most proud of?**

“ It is early stages for us in the MENAT region, but we feel our molten salt solutions have dramatically advanced energy storage technology worldwide, including at our 110 MW Crescent Dunes CSP project with 1.1 GW-hours of storage in Nevada and the 100 MW Redstone CSP with 1.2 GW-hours of storage in South Africa.

BASED IN: UNITED STATES OF AMERICA

**WILLIAM R GOULD JR**

CHIEF TECHNOLOGY OFFICER,  
SOLARRESERVE



**Why you need to know him:**

William has over 40 years of experience covering the engineering, procurement and construction of power plants, with the last 20 years devoted to solar energy, including a stint as the project manager of the US Department of Energy's Solar Two Project built near Barstow, California, in 1997. Before joining SolarReserve he was Principal Consultant with Sustainable Energy Projects LLC, and also held positions at Bechtel and General Atomic.

**How do you see renewables developing in MENAT?**

“ We are reducing the cost of CSP radically, and I believe it will soon be more than competitive with PV. One of the main challenges is instability of national grids, which makes decentralised storage solutions an attractive option.

**What does your project pipeline look like?**

“ We have bids in for projects in Dubai, Qatar and Egypt, as well as a 650 MW bid in round 4.5 in South Africa, and in China we have signed preliminary agreements for over 3 GW of solar projects utilising our proprietary solar thermal technology with energy storage.

We are reducing the cost of CSP radically, and I believe it will soon be more than competitive with PV. One of the main challenges is instability of national grids, which makes decentralised storage solutions an attractive option.

William R Gould Jr

BASED IN: GERMANY

**BORIS WESTPHAL**CO-FOUNDER & MANAGING DIRECTOR,  
SUNTRACE**Why you need to know him:**

Boris has headed Suntrace since 2009, which has supported Masen/Morocco with their ambitious solar plans following the 580 MW Noor 1 Ouarzazate project, as well as the Kuwait Oil Company in a solar thermal enhanced oil recovery project. He previously directed the CSP division of German stock-listed Conergy AG, and before that was financial director of STEAG, Germany's largest independent power producer. Boris has over 25 years of professional experience, over 16 of which have been in international projects and structured finance.

**How does MENAT compare with other regions?**

“ There is a high resource potential and high demand for energy, but with limited opportunities for the private sector to participate, although this is changing. Customer-consultant relationships are fair in terms of acknowledgement of good value services.

**What challenges do renewables projects face?**

“ The need to get the right regulatory framework in order to allow more private sector investments; offering investment protection against political and economic risks is a must. Also, local developers often choose a trial and error path for their first projects instead of seeking professional advice, which eventually costs more time and money.

**What ventures are you currently focused on?**

“ Our focus is on technical engineering and support for utility-scale solar projects, as well as designing private sector financing and investment deals. So we are interested in people who want to develop large-scale projects and seek advice from an independent consultant.

BASED IN: GERMANY

**MARTIN SCHLECHT**CO-FOUNDER & MANAGING DIRECTOR,  
SUNTRACE**Why you need to know him:**

Martin is MD of Suntrace GmbH, an independent international advisory firm for solar energy. He is acknowledged as an expert in PV and CSP, having supported over 2,500 MW of solar projects in MENA and worldwide. He is a board member of the German CSP Industry Association (Deutsche CSP) and lecturer for solar electricity generation at the Technical University of Hamburg Harburg.

**Which markets in MENAT have the most potential?**

“ There is the greatest pressure, and largest markets, in Saudi Arabia and the United Arab Emirates. Morocco, Tunisia, Algeria and Egypt will be important markets, and once the conflicts are resolved, solar energy will play a large role in rebuilding Libya and Syria. With solar, especially from PV, reaching prices at retail level, it has become the cheapest source of electricity.

**What is the biggest challenge?**

“ The regulatory and centralised structure of the energy market in most MENAT countries is limiting the implementation of government-authorised projects. This contrasts national programmes as run for example by India, South Africa or European Countries, where developers can propose their own projects in national schemes like auctions. This is limiting the business opportunities to IPP companies and/or suppliers/constructors.

**Have you encountered any hurdles while operating in the region?**

“ In the last few years, the implementation of solar programmes has taken longer than anticipated from our perspective. However, recently solar energy has taken off in MENA with Morocco, Dubai and Abu Dhabi successfully completing procurement of their first large-scale projects.

BASED IN: GREECE

**GEORGE SPYROU**

EXECUTIVE DIRECTOR,  
TERNA ENERGY



**Why you need to know him:**

George is an Executive Director and Member of the Board at Terna Energy, which is active in solar, hydroelectric, biogas and wind power projects across Europe. He has been involved in renewable projects since 1990 and has contributed in the construction of many hundreds of MWs of wind projects, in Greece, Poland and Bulgaria.

**Which MENAT markets excite you the most?**

“ We believe that Turkey, Egypt, Saudi Arabia and the UAE present the highest potential for the coming five years.

**What is the sector's biggest challenge?**

“ The reliability of governmental undertakings with respect to renewables projects, along with the fact that many governments have gone from talking about “green megawatts” to “cheap megawatts”.

BASED IN: SWITZERLAND

**DAVID HEIMHOFFER**

CHAIRMAN,  
TERRA SOLA GROUP



**Why you need to know him:**

David has advised institutional investors on direct investments and asset restructuring transactions for different industries in MENA. At Terra Sola, he spearheads and develops hundreds of megawatts worth of projects in the region's booming solar sector. Recently, he met with the Prime Minister of Egypt to discuss the further development and implementation of a 2 GW solar power programme for the country.

**Which MENAT markets excite you most?**

“ We believe that North Africa is a dynamic growing market that will see substantial development in the next 5 years. Countries such as Egypt and Morocco are far ahead of the rest in the region with dedicated government agencies promoting and implementing solar programmes. In the GCC, UAE is currently the most advanced in terms of implementing solar but the others are learning from recent developments.

**What is the biggest challenge to the sector in the region?**

“ When establishing a new industry, some initial problems are to be expected. The MENA governments are dynamic enough to recognise renewables as a necessity but lack the knowledge and experience for their successful implementation. This is the main stumbling block today. We expect the situation to improve in the next few years as they utilise more public private partnership opportunities to establish the industry from the ground up.

**What are you most proud of?**

“ Terra Sola was established to invest and develop photovoltaic projects utilising the MENA region's untapped solar resources. Since 2011, we have been lobbying the governments for solar and given its exponential growth, we are proud to be part of the movement.



## BASED IN: UNITED ARAB EMIRATES

**SASCHA GAEDE**CHIEF OPERATING OFFICER,  
TERRA SOLA**Why you need to know him:**

Sascha serves on the board of trustees of the German-Emirati Joint Council for Industry and Commerce (AHK) in the UAE, and is a strong lobbyist for renewables. Before joining Terra Sola he was formerly Director of Business Development at Solon.

**Which markets will see the most growth?**

“ It is a race as to who will get their act together first, Saudi Arabia or Egypt. I believe it will be Egypt, despite its challenges. It has an urgent need for economic growth and a very large, and growing, population. Saudi Arabia has the resources, but they have been trying to jump-start things for the last five years and not quite getting it right. Morocco will never have the largest potential, but the country is executing projects in an organised way, and it will be interesting to see if Algeria follows their example. Jordan and the UAE have large-scale projects ongoing, so they are realising their potential already.

**What are the main challenges?**

“ It comes down to political will, and the ability to push initiatives through. If some countries are playing hide and seek with investors, it is not because they do not like them – they just struggle to resolve their own institutional bottlenecks. And in the case of countries like Egypt, scarcity of hard currency and onerous foreign lending terms create additional challenges.

**What is your proudest achievement in the region?**

“ Our signature project is an integrated programme for Egypt. It encompasses 2,000 MW of PV plants, two factories which will produce solar panels and inverters, and a 10-year human capital development programme which will train and educate people from blue-collar operators to academics. It will also include an SME programme to encourage the growth of other parts of the renewables value chain, funded by revenue from the plants.

## BASED IN: SPAIN

**JOAQUÍN GARCÍA RICO**CHIEF EXECUTIVE OFFICER,  
TSK GRUPO**Why you need to know him:**

Under Joaquin's leadership TSK has built up an enviable list of projects under construction across the Middle East, including a 260 MW PV plant in Dubai, a 50 MW CSP and 10 MW PV plant in Kuwait, and a 100 MW PV project in Jordan. He has been CEO of TSK since 1999.

**Which markets in MENAT excite you most?**

“ We are seeing fast growth in renewables investment in the whole MENAT region, but when you break it down by country, we believe Saudi Arabia, UAE, Egypt and Kuwait are the countries with the most potential as they have announced a new strategy to diversify the energy mix by boosting renewable energy.

**What is the biggest challenge to the sector?**

“ Legislation. Investors need government commitment for establishing feed-in tariffs and feed-in laws for the long term.

**What are you currently focused on?**

“ We are executing some of the most significant renewables projects in the MENAT region, and our EPC expertise has enabled us to focus on complex challenges, such as integrated solar combined cycle plants, as well as PV and CSP. We continue to seek new opportunities in solar and wind.

BASED IN: DUBAI, UNITED ARAB EMIRATES



**REDA EL CHAAR**

EXECUTIVE CHAIRMAN, ACCESS POWER

**Why you need to know him:**

Reda's focus is on developing renewable energy projects in emerging and frontier markets. He founded Access Power in 2012, and has led the implementation of many landmark renewable power projects.

**What does your project pipeline look like in MENAT?**

“ Access holds one of the largest solar PV portfolios (18g MWp) of licences for Egypt's FIT programme, and 50 MW of wind. We are pre-qualified for the solar and wind BOO round of projects holding a promise of another 450 MW.

**Which achievements are you most proud of in the region?**

“ Our long-term partnerships with stakeholders and host communities, that ensure Access delivers sustainable projects to the highest standards. We are also extremely proud of the philanthropic Access Foundation, which helps provide the basic human needs of education, electrification, and clean water to communities in Access Power's ecosystem.

BASED IN: SPAIN



**MIGUEL ARRARÁS**

EMEA BUSINESS DEVELOPMENT DIRECTOR, ACCIONA ENERGÍA & MANAGING DIRECTOR, ACCIONA SOLAR

**Why you need to know him:**

Over 15 years at Acciona Solar PV, Miguel has amassed a portfolio of 480 MW of solar PV plants and 315 MW of CSP plants. He is chairman of the Spain and Africa Renewable Energy Consortium, a frequent speaker at national and international conferences and has published books and articles on mechanical engineering.

**Which MENAT markets excite you most?**

“ The largest market, the United Arab Emirates, is now extremely competitive in terms of price and there has been tangible progress and movement beyond the drafting of programmes. We have similar expectations for Saudi Arabia and for Morocco, which is progressing in line with announcements. We are particularly interested in Tunisia, too, which is starting to move as projects are being monetarised. We are expecting that the tender conditions for the second round of FIT in Egypt will address some of the challenges encountered in the first round.

**What are the biggest challenges to renewables in MENAT?**

“ Strategically, it is difficult because renewable energy must compete with electricity subsidised by governments. Financially, there are challenges as, although parity with fossil fuels has almost been achieved in some of the large markets, this is not yet the case for small domestic installations.

Strategically, it is difficult because renewable energy must compete with electricity subsidised by governments. Financially, there are challenges as, although parity with fossil fuels has almost been achieved in some of the large markets, this is not yet the case for small domestic installations.

Miguel Arrarás

BASED IN: UNITED ARAB EMIRATES



## JAVIER LOPEZ CARVAJAL

DIRECTOR OF RENEWABLE ENERGY, ACWA POWER

### Why you need to know him:

Javier has co-written numerous articles on solar power and hybridisation, and has taken the lead on a diverse portfolio of renewable energy projects. He has been involved in many of the sector's pioneering projects, including: PS10, the first commercial tower CSP plant in 2004; the Noor CSP 510 MW complex in Morocco and the DEWA 200 MW PV plant, marking the world record tariff in 2014 and 2015 respectively.

### Which markets in MENAT have the most potential?

“ With a 50 GW grid, Saudi Arabia is the largest market thus has the most pressing need to switch to green energy, and the greatest potential to do so. The United Arab Emirates, which has been an innovator in renewable energy, also has enormous potential. The market in Morocco is the most mature, with CSP, PV and wind in their portfolio, and it will continue to grow.

### How does your experience in MENAT compare with other regions?

“ The main difference is that in Europe there is greater clarity in the regulatory and legal frameworks in terms of tariffs and structures. This is the only barrier to renewables in the region, and when these are standardised there will be exponential growth in the sector.



## THE VOICE OF SOLAR THERMAL ELECTRICITY IN EUROPE AND MENA REGION!

ESTELA, the European Solar Thermal Electricity Association, is a non-profit association created in 2007. ESTELA represents members from the industry and research institutions, active along the whole STE value chain. Joining hands with national associations – Protermosolar (Spain), ANEST (Italy), Deutsche CSP (Germany) and the SER-CSP (France), ESTELA is devoted to promoting solar thermal electricity not only in Europe, but also in MENA region and worldwide. To act widely, ESTELA with AUSTELA and SASTELA in 2012 jointly created STELA World. Today, ESTELA is the largest industry association in the world promoting the solar thermal electricity sector.

To join us visit [www.estelasolar.org](http://www.estelasolar.org)

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**BASED IN: UNITED ARAB EMIRATES**



**THIERRY TARDY**

EXECUTIVE DIRECTOR, ACQUISITIONS & PROJECT FINANCE, ACWA POWER

**Why you need to know him:**

At ACWA Power, Thierry is responsible for structuring debt and equity financing packages for power and seawater desalination projects in the company's key markets, in particular in Morocco. Previously, Thierry held senior positions in the banking sector, covering EMEA project finance transactions.

**Where in MENAT has the most potential?**

“ Morocco is clearly a key market considering its renewable energy targets, MASEN's ambitious solar programme, and the successful implementation of the first CSP projects in Ouarzazate. We were awarded the first 3 of the MASEN projects, representing a total of 510 MW installed capacity, and developers and investors will continue to be attracted to the area by the remaining 1,500 MW of the first solar programme.

The GCC will continue to be a key market for us, in particular our home Saudi Arabia, which has recently announced ambitious renewable energy plans, and the United Arab Emirates, where we are already building a 200 MW PV plant. We are also looking closely at Egypt and Turkey.

**What is your proudest achievement in the region?**

“ We are proud to be among the initial developers investing in the first large CSP projects, using both tower and parabolic trough technologies, as we aim to develop the industry and to facilitate the lowering of the tariff to approach, or reach parity with, other technologies. We are also especially proud to be able to develop the economy and the social environment of the communities where we build our projects.

**BASED IN: UNITED ARAB EMIRATES**



**JAMES STEWART**

GENERAL MANAGER, ALEC ENERGY

**Why you need to know him:**

James established the ALEC Energy Business Unit (within ALEC, the multi-award winning UAE-based construction company), focusing on the Dubai commercial and industrial rooftop solar market and other initiatives in the energy savings and efficiency market. As an avid promoter of innovation and clean energy, and regular conference speaker, he continues to actively pursue new strategic business opportunities in the region.

**What financing challenges do renewables projects in MENAT pose?**

“ As this is a new field in the Middle East, apart from utility-scale projects, funders and developers are hesitant to look at projects or groups of projects which require funding of below \$50 million. This means that smaller-scale projects need to be funded through individual investors or self-funded. This potentially slows the rollout of rooftop solar projects across the UAE. Additionally, investors price risk into the various Middle East markets which increases funding costs in the GCC but fortunately, the UAE are considered among the lowest-risk areas.

**Where do you see the most potential in the near future?**

“ The UAE, Saudi Arabia, Jordan and potentially Iran markets are developing robust clean energy strategies that will benefit both the wider industry and communities involved.



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**BASED IN: UNITED KINGDOM**


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**MATHEW BRETT**

SENIOR VICE PRESIDENT, INTERNATIONAL BUSINESS DEVELOPMENT, BRIGHTSOURCE ENERGY

**Why you need to know him:**

Mathew is a founding director of Advanced Power AG, and was at Intergen for 7 years before joining BrightSource, which is currently working on a 121 MW solar power station in the Negev Desert in Israel.

**Which markets in MENAT have the greatest potential?**

“Dubai, Abu Dhabi, and the dark horse Saudi Arabia. Others include Morocco and Egypt, where everyone is expecting rapid growth.

**How does MENAT compare with other regions?**

“So far, BrightSource has mainly been engaged in projects in Morocco, where we have encountered high levels of professionalism and respect for deadlines. We are currently examining opportunities in Egypt and avidly following the progression of CSP in the country.

**What is the sector's biggest challenge?**

“The current cost of oil is so low that the area has seen a cut in revenues and a resulting decline in investment in renewables, with these low prices simultaneously impacting the rationale to convert from fossil fuels. The principal challenge for BrightSource in MENAT has been trying to demonstrate the value of energy storage.

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**BASED IN: SAUDI ARABIA**


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**DR. NABIH CHERRADI**

CHIEF TECHNOLOGY OFFICER, DESERT TECHNOLOGIES

**Why you need to know him:**

Dr. Cherradi was previously CEO of EmpowerSun, a Swiss based photovoltaic energy consultancy firm, and Vice President/CTO of Yingli Green Energy which floated on the NYSE. He has 28 years of experience in equipment production and business development within the semiconductor and PV sectors. He holds a PhD on materials sciences from the Henri Poincaré University, Nancy.

**What is the future of renewables in MENAT?**

“BRIGHT, very bright....The potential is huge, mainly in Jordan, Dubai, Turkey, Algeria, Morocco, Egypt and Saudi Arabia. The capacity expected is over 200 GW over the next two decades. Even if Saudi Arabia is taking time to start, Saudis grappling with surging domestic energy demand and the replacement of the old/inefficient power stations. Moreover, solar power would help to safeguard crude exports; it turns to be not an option to be discussed. It is rather, a necessity to be implemented.

**What is the sector's biggest challenge?**

“Finance and the way project finance is engineered. Based on what we have seen and the prices offered in certain competitive markets, developers, investors and end-customers should look for a more sustainable tariff.

**BASED IN: FRANCE**



**LAURENT BECERRA**

VICE PRESIDENT MIDDLE EAST & AFRICA, EDF ENERGIES NOUVELLES, HEAD OF RENEWABLES, EDF GROUP IN MIDDLE EAST & AFRICA

**Why you need to know him:**

Laurent heads renewables activities for the EDF Group, through EDF Energies Nouvelles, across the Middle East and Africa, having previously focused on business development and operations in MENA. EDF Energies Nouvelles, the renewable energy subsidiary of Électricité de France (EDF), has a 9 GW installed capacity worldwide in wind and solar power. He previously spent 10 years at Veolia developing desalination, water and waste water utilities projects worldwide.

**Which markets in MENAT have the most potential?**

“ The obvious markets are: the GCC countries (including the United Arab Emirates and Saudi Arabia), Egypt and North Africa.

**What is the biggest challenge?**

“ MENAT is driving the world market, so it is challenging for companies to remain present and competitive amidst the many tenders every six months, and the new records constantly being set for low tariffs. The next challenge for renewables is energy storage, which EDF, with our R&D programme, is well-equipped to take on.

**BASED IN: UNITED ARAB EMIRATES**



**WIM ALEN**

SENIOR VICE PRESIDENT, BUSINESS DEVELOPMENT, ENGIE

**Why you need to know him:**

Wim is the General Secretary of the Middle East Solar Industry Association (MESIA), and has over 15 years of experience in the electricity, water and distribution industries, with a strong background in developing and financing renewable projects. He began his career in KPMG and in his current role he is responsible for business development with a focus on solar and geothermal projects across the Middle East, South & Central Asia, and Turkey.

**Which markets in MENAT excite you most?**

“ The GCC and Turkey are our traditional markets. We see huge potential in India, where we have a development office, and are exploring new and promising countries in the Middle East and Central Asia. We see potential across all renewable technologies: wind, solar, hydro and geothermal.

**BASED IN: JORDAN**



**TAREK AL-AMAD**

CHIEF EXECUTIVE OFFICER, EUROPEAN JORDANIAN RENEWABLE ENERGY PROJECTS

**Why you need to know him:**

Tarek's company, part-owned by Black Pearl Capital, has developed a 20 MW CSP power project in the Ma'an Development Area in Jordan, and has a stated further 500 MW of wind and 200 MW of CSP projects in development across the region. Tarek has 14 years of experience in finance and investment banking.

**Which markets in MENAT excite you most?**

“ It is not clear which markets will be the ones to take off. The potential relies on the GCC countries. But without cooperation, renewables cannot progress.

**What is the sector's biggest challenge?**

“ The instability of policy relating to renewable energy, in addition to government decision makers' lack of consistency in their commitment to adopting renewable energy projects. The changes in policy can make operating in MENAT a bumpy ride.

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**BASED IN: UNITED ARAB EMIRATES**


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**ANGELA MELKONIAN**

DEVELOPMENT MANAGER, FOTOWATIO RENEWABLE VENTURES

**Why you need to know her:**

Angela focuses on renewables markets across MENAT, and has had primary roles in regional tenders including for the DEWA 800 MW solar PV plant in Dubai. She is currently supporting the development and construction of a portfolio of 100 MW solar projects in Jordan.

**What does your project pipeline look like in MENAT?**

“ We are very active in Jordan, developing two 50 MW projects under Round II of the 2015 Direct Proposals Scheme launched by NEPCO/MEMR. KSA and UAE represent important markets where we are scouting opportunities as they arise, such as DEWA and SEC tenders.

**What kind of challenges do your projects face?**

“ In some countries where there is no history of solar projects or strong IPP project finance experience, it is more challenging to raise funds among commercial financing institutions and we often need the support of multilateral banks.

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**BASED IN: SPAIN**


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**JOSE IGNACIO BRETON**

CHIEF TECHNICAL OFFICER, GESTAMP WIND

**Why you need to know him:**

Jose Ignacio has built a team responsible for 900 MW of operating wind power assets worldwide, including an 82.5 MW project under construction in Turkey. Previously International Infrastructures Manager for Iberdrola Renewables, he has experience in hydroelectric, nuclear and combined cycle projects.

**What is your strategy in the MENAT region?**

“ We have been operating in Turkey since 2011 and have more than 100 MW of capacity there. I believe Turkey has the most potential in the region at the moment, because there is greater regulatory transparency there. There is a floor tariff priced in dollars, and this is very important to us, as we are investing over a period of 20 years or more. There are some interesting countries in this area in terms of wind energy, such as Iran, Morocco and Egypt.

**What is the biggest challenge to the sector?**

“ The biggest challenge to the sector is reducing the cost of energy. In the past, wind power was far cheaper than solar, and now they are broadly in the same range. Solar energy is not our enemy; the two are complementary in terms of corresponding to the growing need for renewable energy and its storage.

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**BASED IN: SAUDI ARABIA**


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**RAMY YAGHMOUR**

CHIEF EXECUTIVE OFFICER, GREEN GULF HOLDING

**Why you need to know him:**

Ramy is CEO of Green Gulf Holding, which plans to set up the largest PV component assembly plant in Saudi Arabia to assemble wafers and solar modules. He has been President of The Consultants Group since 1998, which focuses on developing commercial and industrial projects in the Saudi Arabian market.

**How does your experience in MENAT compare with other regions?**

“ MENAT is new to the renewables industry, especially compared to Europe. Apart from Morocco and the rest of North Africa, setting up in this region is very slow.

**What is the sector's biggest challenge?**

“ Cooperation with governments is important for working in a country, but it is often difficult to achieve. And without an existing local market, setting up can be very slow.

BASED IN: UNITED KINGDOM



**ANDY KINSELLA**

EXECUTIVE DIRECTOR & GROUP COO, MAINSTREAM RENEWABLE POWER

**Why you need to know him:**

Andy has over 30 years of experience in the international energy sector. He takes the lead at Mainstream Renewable Power, which is paving the way forward in Egypt's developing solar sector, recently signing an MOU for a 50 MW solar plant near Aswan through its joint venture with Actis, Lekela Power.

**Which markets within MENAT do you think have the most potential in the next five years?**

“ Egypt - they have a particularly keen desire for renewable energy and we already have 350 MW installed there.

**What do you see as the biggest challenge renewable energy faces in MENAT?**

“ The political risk and instability cause problems. The contracting environment is not good, which makes the whole industry unhappy.

BASED IN: MOROCCO



**ADIL KHAMIS**

HEAD OF BUSINESS DEVELOPMENT & STRATEGY, NAREVA

**Why you need to know him:**

Adil khamis has successfully contributed to closing large transactions such as the 300 MW Tarfaya wind IPP project. He has been involved in the origination and structuring of over US\$5 billion of investment projects in Morocco and is also chairman of the board of Tarec; the SPV that holds the 300 MW wind asset.

**Where is the greatest potential in MENAT?**

“ Morocco, Egypt, the United Arab Emirates, and Tunisia are the places we see most potential.

**What are your proudest achievements?**

“ We successfully built a portfolio of more than 1,600 MW of wind assets within 8 years, with more than 600 MW already up and running, placing Nareva as the largest African wind producer. Also, being able to beat the grid parity for electricity generated out of wind for the 300 MW plants, and proposing the world's lowest price for the 850 MW wind tender.

BASED IN: UNITED KINGDOM; ALGERIA



**ADEL BABA-AISSA**

DIRECTOR, RENEWABLE ENERGY PARTNER

**Why you need to know him:**

Adel has been involved in the legal support, project finance and development of hundreds of MWs of wind and PV projects worldwide. He is a qualified UK solicitor and admitted to the New York bar. Prior to founding Renewable Energy Partner, he worked at international law firms both in Paris and London.

**What challenges do your projects face?**

“ The quality of the business environment and the clarity of government policy need general improvement, though some countries have a better framework than others. There are issues with local financing as well as currency risk.

**What is the future of renewables in MENAT?**

“ There is no longer a debate: worldwide renewables is the fastest growing energy sector and it is taking off in MENAT. PV especially has reached grid parity, and since the drop in fossil fuel prices, there is no alternative but to diversify and invest in renewable energy.



BASED IN: GERMANY



## DR. FRANK-DETLEF DRAKE

VICE PRESIDENT OF STRATEGY & RESEARCH & DEVELOPMENT, RWE INNOGY &  
FORMER CHAIRMAN OF THE SUPERVISORY BOARD, DII

### Why you need to know him:

Dr. Drake led Dii's initial work in promoting the growth of renewable energy in the MENAT region, and currently heads the R&D efforts of RWE innogy. Dr. Drake majored in machinery and technology at the Hannover University and the University of Wisconsin-Madison (USA) and holds a PhD from the Thermodynamics Institute, Hamburg University.

### What are the main obstacles to the growth of renewables in MENAT?

“ The political situation in many countries presents a great deal of risk, and in many markets there is still a lack of experience with renewables, and how to integrate them. This applies to the structure of internal power markets, as well as to the grid itself.

### Which markets have the most potential?

“ The growth of renewables depends above all on positive experiences. With large-scale projects being successfully built, operated and integrated into the existing system, we will see further growth due to the example being set. Momentum has really picked up in Morocco in particular, but the whole region has a great deal of potential.

### What are your proudest achievements at Dii?

“ With our partners, we have successfully placed renewables at the heart of the region's agenda for the future, where before there was nothing. I also think the conferences have been and continue to be strong, providing a great platform for networking and developing additional initiatives.

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BASED IN: TURKEY



**ADIL TEKIN**

CHIEF EXECUTIVE OFFICER, SANKO ENERGY

**Why you need to know him:**

Adil has over 20 years of experience in the region, working as president for Alstom Turkey, and with Siemens Turkey. He was awarded the 'Chevalier De L'ordre National Du Merite' in 2013 by the French government.

**What is the biggest challenge renewables face in MENAT?**

“ Geopolitical stability and underdeveloped regulatory frameworks are the big problems we see.

**What kind of business ventures or projects are you currently focused on?**

“ Sanko Energy has invested more than \$1.1 billion in renewable energy, with operational hydro and wind power plants generating 2 billion kWh/year. Our strategy is now to focus more on wind, geothermal and solar. We are currently developing and constructing wind and geothermal power plant projects in Turkey, and looking for other opportunities across the MENAT region.

BASED IN: UNITED ARAB EMIRATES



**HADI TAHBOUB**

EXECUTIVE DIRECTOR MIDDLE EAST, SKYPOWER GLOBAL & PRESIDENT,  
MIDDLE EAST SOLAR INDUSTRY ASSOCIATION

**Why you need to know him:**

A staunch supporter of Green Energy, Hadi Tahboub is the current elected President of the Middle East Solar Industry Association (MESIA), a global association with over 150 members. He heads up the Middle Eastern international development operations for SkyPower Global, which has built, developed and acquired a pipeline of over 25,000 MW of utility-scale solar energy projects worldwide.

**What is the sector's biggest challenge?**

“ There is a substantial market for rooftop solar in the region, which is growing exponentially, but for utility-scale projects, there is a fine line between politically-backed developments and the feasibility/sustainability of the projects. There are a lot of places developing utility-scale projects in the cheapest way possible, which is unhelpful for the larger picture of sustainable utility-scale models.

**Which markets in MENAT excite you most?**

“ MENAT is very dynamic, I always call it a 'brave new world', everything is happening for the first time, being adopted for the first time. It will be interesting to see the way it weathers the tides of progress when it comes to renewables.

Many local firms are starting to move into the solar construction market. For large utility-scale projects more experience is necessary, but this will come as the local markets mature. We are seeing some firms partnering with existing more experienced EPCs in other regions. Where industrial integration requirements are needed, having the local EPC or local partner to advise and assist is proving highly valuable.

Philip Hale

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**BASED IN: UNITED ARAB EMIRATES**
**PHILIP HALE**

DEVELOPMENT DIRECTOR, SOLARRESERVE

**Why you need to know him:**

Philip joined SolarReserve in 2009, and now leads development activities in the MENAT region. He has over 20 years of experience in the energy, solar and wind renewables, construction and real estate sectors. He previously worked as a construction lawyer in the UK, before working with Invenenergy Wind prior to joining SolarReserve.

**What do you see ahead for the region?**

“ We are starting to see traction in the solar renewable space, specifically in Morocco, Jordan and the UAE (namely; Dubai and now Abu Dhabi). Dubai has made great strides over the last three years and we see this as stepping stones for the other GCC countries to follow. Saudi Arabia has commenced its revised 9 GW plans, and we may see towards the end of this year more projects start to come through.

**What is your experience of local EPC firms?**

“ Many local firms are starting to move into the solar construction market. For large utility-scale projects more experience is necessary, but this will come as the local markets mature. We are seeing some firms partnering with existing more experienced EPCs in other regions. Where industrial integration requirements are needed, having the local EPC or local partner to advise and assist is proving highly valuable.

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**BASED IN: GERMANY**
**DR. RICHARD MEYER**

CO-FOUNDER &amp; MANAGING DIRECTOR, SUNTRACE

**Why you need to know him:**

Dr. Meyer has 14 years of experience in CSP research, engineering and project development. He has been a visiting scientist for NASA projects relating to power and solar energy, and co-founded the Virtual Institute of Energy Meteorology as well as the International Energy Agency's Solar Resource Knowledge Management task force. He has contributed to the United Nations Environmental Programme, and previously worked at Epuron/Conergy and the DLR (German Aerospace Centre). He holds a PhD in physics from Munich University.

**Which markets in MENAT have the most potential?**

“ Saudi Arabia has the potential to take the largest step forward, starting from a quite low level of solar today, but having excellent solar resources, high demand growth, and the financial power to go big. Until now, Morocco has been leading the process with a clear plan, a good regulatory framework and stringent implementation.

**How does MENAT compare with your experience in other regions?**

“ People in the MENAT region know the value of good quality. To realise sustained long-term benefits, facilities need to withstand demanding local conditions, including: strong temperature variations in the desert and high salt and water vapour concentrations, which can lead to high rates of corrosion. Getting the site characteristics right along with high quality plant specifications is the key to reaching the “golden end” every investor dreams of.

**BASED IN: UNITED ARAB EMIRATES**



**JEREMY CRANE**

CHIEF EXECUTIVE OFFICER, YELLOW DOOR ENERGY

**Why you need to know him:**

Jeremy Crane has helped build Adenium into one of the largest renewable energy developers and investors in the MENAT region, with over \$250 million of solar projects. He founded Yellow Door Energy as a spin-off of Adenium, focused on commercial and industrial solar.

**Which markets in MENAT excite you most?**

“It largely depends on what part of the value chain one operates in, but purely in terms of MWs installed, I believe the leaders will be: Saudi Arabia, Iran, Morocco and, if there is stabilisation, Iraq and Syria.

**How is MENAT different for financiers?**

“Limited grid infrastructure penetration in some regions creates a need for distributed generation with small financing transactions; higher irradiation enables better asset utilisation; and there is increased stability for energy financing. This is due to the long-term viewpoint of the royal leadership, and the growing demands from population growth that requires grid and generation increase without the need to mothball older generation technology.

**BASED IN: UNITED ARAB EMIRATES**



**ABDUL JABBAR GARGASH**

CHAIRMAN, ZOHAL RENEWABLE ENERGY

**Why you need to know him:**

Abdul Jabbar established Zohal Renewable Energy as a joint venture between members of the Gargash family and Greentech Engineering Solutions. The company is approved by DEWA as a DRRG solar PV contractor, providing turnkey solar EPC services.

**What are the main stumbling blocks for the take up of renewables in MENAT?**

“Despite the ever-increasing trend of lower-cost renewables, a combination of attractive oil prices, lack of enforcement mechanisms for emission reductions, and conventional energy subsidies continue to challenge renewable projects. However, conventional energy sources may not be viable for long as an increasing number of governments in the MENAT region have set very ambitious targets for their energy mix and diversification portfolios.

Technical challenges, including limited storage and transmission capabilities, may further hamper the progress of renewable projects. Incompatible infrastructures may require significant investments while serious overhauls of environmental policies may require even more time and resources. Nevertheless, technology is constantly evolving, and as a result, prices are decreasing and such technical limitations may be overcome in the near future.

**Which MENAT markets excite you the most?**

“There are some exciting projects in the GCC and North Africa. For now, Zohal Renewable Energy has been very excited to work on Solar PV projects in Dubai.



## BASED IN: EGYPT

**Wael El Ezabi**

CHIEF EXECUTIVE OFFICER, SUN INFINITE

**Why you need to know him:**

Wael leads Sun Infinite, a Cairo-based EPC and developer. The company was founded in 2011 and is currently working on a 50 MW PV solar project as part of Egypt's feed-in tariff (FIT) programme. Egyptian firm Industrial Engineering Co for Construction and Development (ICON) acquired 25% of the company in December 2016.

**Where do you see the most potential in MENAT?**

“ Saudi Arabia, Egypt, and Jordan. There is lots of talk everywhere, but Jordan has the most activity going on and has had the best performance on the ground so far. Egypt is supposed to be following soon, and Saudi Arabia is starting to look very promising.

**What is the biggest challenge for MENAT renewables?**

“ In the Egyptian market the performance of government agencies is below standard, and this is the most important challenge in the region as a whole. The poor performance of local governments holds developers back and slows projects at all stages.

## BASED IN: SPAIN

**ARANTZA EZPELETA**

CHIEF TECHNOLOGY &amp; INNOVATION OFFICER, ACCIONA

**Why you need to know her:**

Arantza has almost twenty years of experience in business development and driving digital transformation and sustainable innovation. Following a year as a Design Engineer at Telefónica, she joined Acciona Energía in 1998. She managed PV plants before taking charge of company activity across Europe. She moved to Acciona S.A. in 2008 to manage international activity, joining the executive management committee in 2016. She was awarded 'Engineer of the Year' in 2014 by the Official College of Telecoms Engineers and the Association for Telecoms Engineers in Navarra.

## BASED IN: SPAIN

**EMILIO VIGUERA GRACIA**

PROJECT MANAGER, ACCIONA

**Why you need to know him:**

Emilio joined Acciona during the bidding process for the Noor I 160 MW CSP plant, aiding in the successful negotiation for the EPC contract, which was won in a joint venture with TSK and Sener. He led the market research in Morocco to identify suppliers and subcontractors, negotiating and bringing over 100 subcontracts to financial close. He led Acciona's gradual installation in Morocco and served as the company's legal representative within the JV. He was previously a Project Manager at the Thermal Engineering Centre at Electricité de France.

## BASED IN: SPAIN

**MARCOS GALLEGO**

DIRECTOR, BUSINESS DEVELOPMENT MENA, ACCIONA

**Why you need to know him:**

Marcos has over ten years of international experience in the energy sector and utilities, with a focus on renewables. He began his career as an engineer at Union Fenosa, joining Acciona Energía in 2003 as a Project Manager, later serving as Managing Director for Korea. He has 8 years' experience in developing growth opportunities for the company throughout Europe; Africa; North, Central and South America, and his current focus is the MENA region. He was responsible for EPC contracts for windfarms as Business Development Manager in South Africa.

**BASED IN: SPAIN**



**ALFONS JUAN TOMAS**

BUSINESS DEVELOPMENT DIRECTOR, ACCIONA INDUSTRIAL

**Why you need to know him:**

Alfons was Director of Operations for The Noor I CSP project in Morocco. Prior to joining Acciona, where he has served for five years, Alfons was a Project Director at Gas Natural Fenosa, a Spanish gas and electricity company with a commitment to sustainability.

**BASED IN: MOROCCO**



**BADIS DERRADJI**

REGIONAL MANAGING DIRECTOR MOROCCO, ACWA POWER

**Why you need to know him:**

Badis has been involved in some of the most high-profile renewables projects through ACWA Power, including the 160 MW Noor I CSP project at Morocco's Ouarzazate Solar Complex. Before working at ACWA Power he was CEO of New Energy Algeria (NEAL), a public-private commercial enterprise with a mandate to promote and develop renewables in Algeria.

**BASED IN: UNITED ARAB EMIRATES**



**LUCAS HAUTVAST**

CHIEF OPERATING OFFICER INTERNATIONAL, ACWA POWER

**Why you need to know him:**

As well as overseeing ongoing international business operations at ACWA Power, Lucas sits on the board of several power and utilities owned and operated by the company. He began his career with Nedlloyd Lines, a container shipping company, for which he worked in various countries in commercial roles across Europe and Asia. In 2001, he moved into the power industry when he joined ENGIE, where he worked as Chief Commercial Officer in The Netherlands and the Philippines, as Head of Strategy and Sales in Bangkok for the Asia Pacific region and as regional CEO for the Middle East, South Asia and Africa region.

**BASED IN: UNITED ARAB EMIRATES; MOROCCO**



**MOHAMED ATTARI**

BUSINESS DEVELOPMENT MANAGER, ACWA POWER

**Why you need to know him:**

Mohamed is in charge of business and project development for multi-fuel utility-scale projects across the MENAT region, using limited and non-recourse project finance frameworks. He coordinates international bidding for utility-scale government tenders, and develops Greenfield IPP projects and corporate PPAs. He previously supported the development of TAQA's wind portfolio, conducting electricity sector analysis for the company's key markets and playing a key role in renewables IPP development.

**BASED IN: UNITED ARAB EMIRATES**



**YINGHAO WILLIAM LU**

BUSINESS DEVELOPMENT MANAGER, ACWA POWER

**Why you need to know him:**

Yinghao is in charge of project development, management and bidding for ACWA Power. Prior to this, he worked at SGS and Bureau Veritas where his focus was on green building, and the advocacy of environmentally responsible and resource-efficient engineering processes.

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**BASED IN: UNITED ARAB EMIRATES**
**DANIEL CALDERON**

BOARD MEMBER, CO-FOUNDER &amp; CEO, ALCAZAR ENERGY PARTNERS

**Why you need to know him:**

Daniel has developed several GWs of renewable energy projects, including: the first and second utility-scale wind farms in the Middle East; two of the first solar PV plants in the UAE, as well as in Jordan; the first solar CSP plant in the Middle East; the world's first CSP Tower project with salt storage and the world's largest off-shore wind farm as of 2014. He leads Alcazar, an independent developer and power producer with a focus on renewables across META, which has developed or acquired a pipeline of almost 1 GW of renewable energy projects. Prior to this, Daniel spent five years at Masdar as the Head of Origination and Investment Management, acquiring, developing and operating projects in the renewable energy sector.

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**BASED IN: SAUDI ARABIA**
**AHMED ABBAS**

OPERATIONS MANAGER &amp; BUSINESS DEVELOPMENT &amp; SALES MANAGER RENEWABLES, ALFANAR

**Why you need to know him:**

Ahmed takes the lead on operations and maintenance activities at Alfanar. His remit includes business development in power generation projects, desalination and renewable energy. His department oversaw the construction of the 675 MW capacity Hail 2 Power Plant extensions II and III, for which Alfanar was the main EPC contractor.

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**BASED IN: UNITED STATES OF AMERICA**
**THOMAS RILEY**

SENIOR ADVISOR INTERNATIONAL, BRIGHTSOURCE ENERGY, INC.

**Why you need to know him:**

Thomas was the US ambassador to Morocco between 2004 and 2009, for which he was bestowed with the Sue M Cobb Award for Exemplary Diplomatic Service, as well as the Grand Croix du Ouissam al Alaouite by King Mohammed VI of Morocco. He has over forty years of experience in information technology, energy management and international commerce, currently serving as a senior advisor for international development at BrightSource, which designs and installs utility-scale solar thermal plants. He was awarded a patent in the United States for an innovative energy management system, entitled: "Control Method and System for Controlling Temperatures".

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**BASED IN: UNITED ARAB EMIRATES**
**HATEM HAMAM**

BUSINESS DEVELOPMENT MANAGER, MENA CONERGY

**Why you need to know him:**

Hatem leads Conergy's engagement with main stakeholders of photovoltaic solar power plants in the region. Previously the operations manager for National Solar Systems in Saudi Arabia, he has over 14 years of experience in the region.

**BASED IN: GREECE**



**GEORGIOS PERISTERIS**

CEO, EXECUTIVE MEMBER, GEK TERNA SA

**Why you need to know him:**

Georgios leads the GEK TERNA group, which aims to install 1,000 MW of renewable energy projects worldwide within the next few years. During 35 years at GEK, he has held roles in construction management for hydraulic and railway projects, and served as Chairman and Managing Director. Since 2000, he has been Chairman of the Hellenic Association of Renewable Energy Producers, whose purpose is to share technical expertise for projects of common interest.

**BASED IN: SAUDI ARABIA**



**BANDER ALLAF**

CEO, KHALED JUFFALI ENERGY & UTILITIES, VICE CHAIRMAN, UNITED POWER COMPANY & CHAIRMAN OF SAUDI COUNCIL OF ENGINEERS

**Why you need to know him:**

Bander heads KJEU, which develops, constructs and operates renewable energy facilities across the MENA region, with a focus on wind and solar power generation. He received the Outstanding Engineer Award in 2009 from IEE PES and founded the organisation's Western Saudi Arabia division, with the aim of providing a forum to share the latest technological developments in the electric power industry in the region. He was formerly Senior Manager for Business Development at ACWA Power International.

**BASED IN: UNITED ARAB EMIRATES**



**EDUARDO PEREIRA**

DEVELOPMENT DIRECTOR MIDDLE EAST, MARTIFER SOLAR

**Why you need to know him:**

Eduardo is spearheading Martifer's efforts to boost solar PV in the MENAT region. The company is present in over 20 countries, and is responsible for 670 MW of solar energy worldwide, ranging from utility-scale projects to rooftop residential installations.

**BASED IN: UNITED ARAB EMIRATES**



**ALI MOHAMMED BUHAJI**

SENIOR MANAGER, BUSINESS DEVELOPMENT, MASDAR

**Why you need to know him:**

Ali is in charge of business development for the Clean Energy Division of Masdar. The subsidiary of Abu Dhabi government-owned Mubadala Development Company was created to advance the development of renewable energy through education, R&D, investment and commercialisation. He received Menasol's Corporate Responsibility award in 2016 on behalf of the Shams Power Company, of which Masdar is an 80% shareholder, for the 100 MW Shams 1 project, in recognition of the role that it has played in inspiring wider development of clean energy technologies. He was previously responsible for enterprise development for the Abu Dhabi government, within the Technology Development Committee.



## BASED IN: MOROCCO

**KARIM CHRAÏBI**

BUSINESS DEVELOPMENT ADVISOR, MASDAR

**Why you need to know him:**

Karim carries out analysis for Masdar in order to identify potential wind projects in Morocco, and is in charge of market entry for the Abu Dhabi based organisation. He is currently assisting the Clean Energy team with the Midelt 800 MW hybrid PV and CSP project in partner selection and bid preparation. He was previously responsible for wind and solar energy project development at TAQA, where he coordinated bids for IPP projects and initiated a wind developers' working group with the objective of lobbying towards an improved legal framework in Morocco for renewable energy. Between 2003 and 2006, he served as Advisor to the Prime Minister of Morocco, carrying out public policy research and writing reports on water, energy and the environment. In this post, he aided in the development of new laws introducing private investment to the power sector.

## BASED IN: EGYPT

**TAMER SHAFIK**

BUSINESS DEVELOPMENT DIRECTOR, ORASCOM CONSTRUCTION

**Why you need to know him:**

Tamer saw Egyptian construction conglomerate Orascom partner with Solar Millennium to construct and install the country's first parabolic trough solar field, the 20 MW Kuraymat project, which provides power for 2 million people. He has been responsible for new partnerships and opportunities for the company since 2010.

## BASED IN: SAUDI ARABIA

**ABDULLAH TAIBAH**

CHIEF EXECUTIVE OFFICER, QUDRA ENERGY

**Why you need to know him:**

Abdullah takes the lead at Qudra Energy, a business development platform for the energy sector in MENA, which is a subsidiary of ACWA Holding. The company places a focus on CSP and PV installations, plus tonnage hydrogen and EPCM projects for thermal and carbon capture technologies. He was previously the CEO of the Hail Economic City in northern Saudi Arabia, taking charge of the construction of one of the 5 Economic Cities launched by Saudi General Investment Authorities. He is a board member of the Higher Institute of Water and Power Technologies.

## BASED IN: SAUDI ARABIA

**TIM POLEGA**

EXECUTIVE HEAD OF RENEWABLE PROGRAMME, SAUDI ARAMCO

**Why you need to know him:**

Tim Polega has more than 17 years' experience in the sector. He specialises in portfolio analysis and project development at Aramco, which is working on a joint venture to develop, build and operate a portfolio of 300 MW of solar and wind. Before joining Saudi Aramco he was Vice President at Sharpe Electronics where he managed their independent solar division. He was also VP of Engineering and Construction at Inovateus Solar.

**BASED IN: NORWAY**



**DR. TERJE OSMUNDSEN**

SENIOR VICE PRESIDENT, SCATEC SOLAR

**Why you need to know him:**

Since joining the newly established Scatec Solar early 2009, Dr. Osmundsen has been responsible for business development in emerging markets: South Africa, West Africa, Jordan and Egypt. He has a broad professional background including leadership roles in both business and public sector, entrepreneurship, management consulting and thought leadership. He started his career as a young political leader, including as State Secretary to the Prime Minister. His industrial background includes managerial positions in Kvaerner ASA, Saga Petroleum ASA and Alcatel NV.

He served as Chairman of the Board at the Cicero Center for International Climate Research, and now serves as Chairman in Caritas Norway. Terje writes and speaks regularly on issues related to solar energy and sustainable development, and is non-executive Board-member REC Silicon ASA and the Waste-to-Fuel technology start-up Quantafuel AS.

**BASED IN: NORWAY**



**RAYMOND CARLSEN**

CHIEF EXECUTIVE OFFICER, SCATEC SOLAR

**Why you need to know him:**

Raymond leads an ambitious EPC with a stated 322 MW of installed capacity. Before joining Scatec in 2009, he was a partner at Aker ASA, where he previously led Aker Solutions' subsea business with operations in more than 15 countries and more than US\$2 billion in revenue.

**BASED IN: UNITED ARAB EMIRATES**



**MOATAZ EL WARDANI**

FOUNDER & CEO, SHAMS ENERGY SOLUTIONS LLC

**Why you need to know him:**

Moataz leads Shams Energy Solutions, an approved solar PV contractor under the DEWA Shams Dubai initiative, which permits individuals to install photovoltaic rooftop panels and to sell excess energy generated back to the grid. The company specialises in designing, installing and maintaining solar systems across all market segments from utility to commercial and residential solar systems.

**BASED IN: CHINA**



**DR. ZHIHAO YAO**

FOUNDER & CEO, SUNCAN

**Why you need to know him:**

Dr. Yao founded SunCan, a joint venture with Shenzhen-listed SH Resources Saving Co, which manufactures air cooled condensers for power plants. He has a doctorate in CSP plant design and system integration, and has participated in several government research programmes within China. SunCan has two major CSP projects in China, and is actively seeking opportunities in the MENAT region.

## BASED IN: UNITED ARAB EMIRATES

**DR. ADRIÁN LÓPEZ**

MANAGING DIRECTOR MIDDLE EAST, TSK

**Why you need to know him:**

Dr. López is in charge of Middle Eastern activity for TSK, where he identifies, develops, finances and operates large-scale independent EPC projects. The company has a stated international portfolio of over 10,000 MW in CSP, PV wind and hydro. He previously spent 6 years as International Business Developer, and one year as Managing Director for the Middle East, at San José, which constructs and maintains energy plants.

## BASED IN: SPAIN

**MANUEL CORTES APARICIO**

CHIEF EXECUTIVE OFFICER, BOW POWER

**Why you need to know him:**

Manuel became CEO at Bow Power in 2015, and heads up the global investor and developer of concessionary projects, specialised in PV, wind, CSP and hydro. The company is associated with Cobra, which constructs projects developed by Bow Power, and where Manuel occupied diverse roles over a ten-year period. For six years, he was Head of International Business, prior to which he was responsible for directing CSP projects across Spain, following roles in project management and development.

## BASED IN: SAUDI ARABIA

**MARK WILKIE**

HEAD OF RENEWABLE PROJECT DEVELOPMENT, SAUDI ARAMCO

**Why you need to know him:**

Mark has specialised in renewable energy project financing, construction and operation for 15 years, joining Saudi Aramco, the state-owned oil company of KSA, to lead renewables development in 2012. He was previously a Projects Director at Platina Partners LLP, overseeing its renewable portfolio across Europe and Asia. Prior to this, he served as the Business Development Director at Solar Green Ltd, a start-up specialised as an EPC and O&M contractor, which he co-founded in 2004.

## BASED IN: ITALY

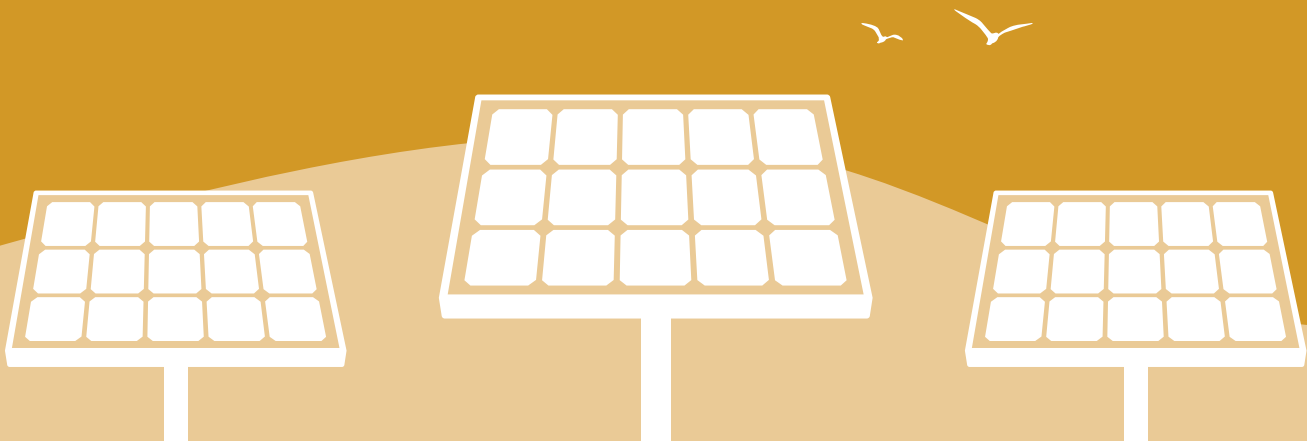
**CARLO CREA**

DIRECTOR OF INTERNATIONAL AFFAIRS, TERNA

**Why you need to know him:**

Carlo is responsible for Terna's bilateral and multilateral relations with international institutions and organisations, and is in charge of seeking new activity abroad. He has held various high level positions in energy companies and the Italian government, including Head of the Office of the Undersecretary of State for the Environment.

# PUBLIC SECTOR





## BASED IN: UNITED ARAB EMIRATES

**HE MOHAMMED AL TAYER**

MANAGING DIRECTOR & CEO,  
DUBAI ELECTRICITY AND WATER AUTHORITY (DEWA)

**Why you need to know him:**

HE Saeed Mohammed Ahmed Al Tayer has been Managing Director and Chief Executive Officer of DEWA since 2004. He has more than 23 years of leadership experience in the fields of Telecoms, Energy and Water in Dubai, is Chairman of the Dubai Global Energy Forum, Founder and Chairman of WETEX, and sits as Vice Chairman on the Supreme Council of Energy. He also has board positions on a number of other major industry and energy companies in Dubai.

He was appointed General Manager of the then Dubai Electricity Co. in 1991 and became General Manager of DEWA in 1992. During his tenure DEWA has significantly expanded its generation capacity and infrastructure and has become a world leader in renewables policy and execution. The Dubai Plan 2021 and the Dubai Clean Energy Strategy lay out two ambitious roadmaps to drive economic growth, energy security and environmental sustainability in the UAE. By 2030 a target of 25% of Dubai's energy mix will be generated from solar.

## BASED IN: GERMANY

**PROF. EICKE WEBER**

DIRECTOR, THE FRAUNHOFER INSTITUTE  
FOR SOLAR ENERGY SYSTEMS

**Why you need to know him:**

Professor Weber leads the largest solar energy research institute in Europe, and is professor of physics and solar energy at the University of Freiburg. In 2013 he was presented with the SolarWorld Einstein Award, then in 2014 he received the Zayed Future Energy Prize, and was endowed with \$1.5 million from the Crown Prince of Abu Dhabi on behalf of Fraunhofer ISE.

**Which MENAT markets are most exciting?**

“ Morocco is well underway, it is safe to say, and Egypt too, followed by Saudi Arabia, Abu Dhabi, Dubai, and Qatar. These areas are where we should focus; they are all similar in potential.

**What is the sector's biggest challenge?**

“ Financing, because there is lots of talk, but the result is a lot of projects on standby because of the lack of financial interest. This problem is made worse by instability in the region. The other problem is that everyone wants to use local production, but it has yet to get going, which slows down the projects.

**What is the future of renewables in MENAT?**

“ Non-renewable energy is slowing down, whilst renewable energy sources continue to grow. I expect to see around 100 GW of PV installed by 2020, and a similar amount of wind power. Furthermore, investment in renewables worldwide is exceeding non-renewables.

BASED IN: ABU DHABI

**BADER AL LAMKI**

DIRECTOR, CLEAN ENERGY,  
MASDAR



**Which markets within the MENAT region do you feel have the most potential in the next 5 years regarding renewables?**

“It is countries with vast desert landscapes, such as Saudi Arabia or Morocco, that have the biggest potential. In addition to the UAE, renewable energy targets announced by governments across the region give a clear indication of the major growth markets. The Kingdom of Saudi Arabia (KSA) has committed to 9.5 GW of renewable energy by 2023; Morocco has also committed to increasing its share of renewables to 52% by 2030; and Jordan is targeting 10% of its energy from renewables by 2020.

In 2015, Algeria has updated its Renewable Energy and Energy Efficiency Development Plan, aiming to install 4,500 MW of new projects by 2020 and overall 22,000 MW by 2030. Masdar sees great potential in the Algerian market and is already working with the authorities to develop renewable projects in the North African country.

The same goes for Egypt, which is seeing a lot of action on the renewable market in the last couple of years. The Egyptian government has set a goal for renewable energy to supply 20% of national electricity by 2022 – double the current share.

**What do you see as the biggest challenge that renewable energy faces in MENAT?**

“A key component of energy transformation in the MENA region is the availability of grid infrastructure that enables electricity transmission from production to consumption areas. In the absence of adequate grid capacity and resiliency, renewable energies may face frequent curtailment due to network and reliability constraints. Grid investment requires a clear regulatory framework to match and absorb the growing renewable energy and only a few countries in the region have policies that specify grid access for the new renewable sources.

**What are you personally most proud of with regards to you and your organisation's achievements in the region?**

“Today Masdar has clean energy assets, either installed or under development worldwide, with a gross capacity of 2.7 GW. Our journey to reaching this point has included many fantastic milestones, from the development of Shams1, the largest concentrated solar power plant (CSP) in operation in the Middle East, to the successful bid to develop the 800 MW Phase 3 of Dubai Electricity and Water Authority's Mohammed bin Rashid Al Maktoum Solar Park in Dubai at a world record low price of 2.99 US cents per kilowatt hour. This was a game-changing moment which clearly underlined the commercial viability and competitiveness of renewables.

**What type of projects are you currently focused on?**

“Our core focus remains the MENA region, which includes our work in Jordan. In 2016 Masdar signed a Power Purchasing Agreement (PPA) for a 200 MW photovoltaic (PV) plant near Amman, which will be the kingdom's largest solar power plant. Masdar is also a partner in the Jordan Wind Project Company, which in 2016 inaugurated the 117 MW Tafila wind farm.

The demand for water is growing rapidly in the region and increasing conventional desalination production is no longer sustainable. Masdar has initiated a Renewable Energy Seawater Desalination programme, which has just completed one year of operation in testing different clean desalination technologies that will reduce significant amounts of energy required in the desalination process.

**The demand for water is growing rapidly in the region and increasing conventional desalination production is no longer sustainable. Masdar has initiated a Renewable Energy Seawater Desalination programme, which has just completed one year of operation in testing different clean desalination technologies that will reduce significant amounts of energy required in the desalination process.**

Bader Al Lamki

BASED IN: SAUDI ARABIA

## DR. SHIHAB ELBORAI

HEAD OF POWER & WATER INVESTMENTS,  
SAUDI ARABIAN INDUSTRIAL INVESTMENT COMPANY (SAIIC)



### Why you need to know him:

Dr. Elborai is part of the leadership team at SAIIC on secondment from management consultants Booz and Company, now part of PwC. He recently worked on the restructuring of a 35+ GW integrated electricity monopoly's business units into subsidiaries in preparation for future introduction of market competition. In 2011 he took one year's unpaid leave to volunteer with the Transitional National Government in Libya during the revolutionary war, where he served as Deputy Director of the Temporary Financing Mechanism of Libya.

### What are the main issues facing renewables in KSA?

“ Aside from issues such as fuel subsidies, there is the question of demand growth. The country needs megaprojects, and utilities do not always have the bandwidth to deal with commissioning tens of smaller-scale projects – a conventional power plant can deliver larger capacity. Another challenge is that existing conventional power infrastructure relies on baseload, which renewables can struggle to match. Since much of the sector is run by private players under IPP agreements with take or pay provisions, it is a legal as well as a technical hurdle. There is also concern that the grid is not ready – some of these concerns are warranted, and some are more a matter of perception.

### What can be done?

“ The government needs to address issues such as the resistance of incumbent players and working on the regulatory framework so that renewables fit within the IPP model the Kingdom's power market is based on. However, the private sector needs to give the government comfort that if tenders are structured in the right way, and what the “right way” is needs to be clearly articulated, then renewables projects will be successful, competitively bid and generate the right tariffs. Launching renewable energy tenders is a risk for the government. Financing plays a much larger role in RE projects, since most of the capital expenditure cost is upfront. Given the current lending environment, a key concern for the government is how much competition will arise for its projects, and the extent to which these will compare favourably with elsewhere. Consequently, much depends on the situation of the banks and the wider financing environment in the region.



BASED IN: UNITED ARAB EMIRATES



**DR. WALEED SALMAN**

EXECUTIVE VICE PRESIDENT, STRATEGY & BUSINESS DEVELOPMENT,  
DUBAI ELECTRICITY & WATER AUTHORITY (DEWA)

**Why you need to know him:**

Dr. Salman has more than 19 years of experience in the electricity and water sectors. He was assigned by the UAE Electricity Interconnection High Committee to handle the Emirates National Grid Project, successfully interconnecting all UAE electrical networks into one single grid.

**What is the biggest challenge facing renewables in MENAT?**

“ The biggest challenge is that the MENA region heavily depends on oil for most of their projects. Especially since the cost of renewable energy is higher than that of the traditional fuel.

**Which of your organisation's achievements are you most proud of?**

“ DEWA has made considerable achievements, ranking it as one of the best utilities in the world. It provides services today to more than 750,000 customers with a satisfaction rate that has reached more than 94.4%.

BASED IN: UNITED ARAB EMIRATES



**TAHER DIAB**

SENIOR DIRECTOR OF STRATEGY & PLANNING, DUBAI SUPREME COUNCIL OF ENERGY

**Why you need to know him:**

Taher is actively involved in the strategic development of diversified energy sources and demand and supply management in Dubai. He advises on and facilitates, with key stakeholders, the delivery of programmes and projects to achieve the Dubai Integrate Energy Strategy 2030. He developed the Emirates Energy Award, and serves as Secretary General of the scheme, to recognise the best practices in sustainability and to encourage the rationalised use of energy and resources.

**How will renewables compare to non-renewables in the future?**

“ I believe renewables, particularly solar energy, will continue to expand due to improvements in technology and pricing, coupled with scarcity of hydrocarbon fuel in some MENAT countries. The global drive towards cleaner energy to balance climate change is influencing pricing and performance of solar technology supported by regulations and capacity building.

**Which achievements are you most proud of?**

“ As a key member of a dynamic organisation, we have set the strategic direction in Dubai for cleaner energy sources and a green economy. Under our visionary leadership, the Dubai Supreme Council of Energy has developed a sustainable energy model with world-class integrated energy strategy driven by public-private partnerships.

**What is the biggest challenge?**

“ Solar has experienced 'teething' issues over the last five years as regulatory frameworks, competitive pricing and government drive have had to mature and the participation of the private sector has materialised. However, the market is expanding rapidly. The installed capacity of solar power (PV and CSP) in the region is around 700 MW currently, with planned additions of estimated 6,800 MW (between 2,800 MW awarded and 4,000 MW to be tendered in 2016). We have seen unprecedented prices for utility-scale solar power in UAE, Morocco and Jordan. The drive towards renewables has varied among MENAT countries according to the presence of regulations and capital to attract the private sector. The reduction of solar capital expenditure has made it easier to adopt this technology and there has been a domino effect in recent years led by Morocco, Jordan and the UAE. While utility-based solar projects will continue to grow, distributed generation (roof top) will require incentives and infrastructure to embrace penetration among the residential and commercial sectors.



## BASED IN: MOROCCO

**KARIM CHOUKRI**

RESEARCH ENGINEER, MATIC LABORATORY

**Why you need to know him:**

Karim is a PhD researcher in the field of renewable energy and energy integration, at the poly-disciplinary faculty in Khouribga, Hassan First University (MATIC Laboratory) in Morocco. He has published articles and reports about renewable energy including REMAP2030 with IRENA and the Arab Future Energy Index RE Report with RCREEE.

**Which markets in MENAT have the most potential?**

“ Morocco and Turkey. The Moroccan government has set the ambitious target of meeting 52% of its energy requirements using renewables by 2030, having reached 33% in 2016 with more than 2,800 MW as installed capacity (wind, solar and hydro). In addition, the government has prepared an important framework, which presents real opportunities for investment, particularly for national and international private companies, evaluated for the next 15 years at over \$40 billion USD.

**What are you most proud of in Morocco?**

“ I consider the liberalisation of the renewable energy market as central to the Moroccan Energy Transition (MET). With the 13-09 law (as amended by the law 58-15), the private sector can now produce and sell green electricity to their customers, which the grid operator is in charge of transmitting. Today this generates over 300 MW, with over 356 MW under construction, and represents a large achievement in MENAT region where most of the other markets are not yet liberalised.

## BASED IN: JORDAN

**MOHAMMED DABBAS**

ADVISOR TO THE MINISTER OF ENERGY, JORDANIAN MINISTRY OF ENERGY &amp; MINERAL RESOURCES (MEMR)

**Why you need to know him:**

Mohammed is the Chairman of Biofuel & Industrial Fuels Ministerial Committees at the Ministry of Energy in Jordan. He is a member of a large number of renewable energy and energy efficiency committees, representing Jordan at the Energy Committee at the ESCWA. He is a regular speaker at conferences and seminars worldwide.

**What are the biggest challenges facing renewable energy?**

“ The difficulty is in including renewable energy in the current energy mix. Competing with current sources is a matter of prices, set up costs, and technologies.

**Where do you see the most potential in MENAT?**

“ Jordan is an excellent market, leading the way for other countries in renewables. Tunisia, Morocco, and Egypt are also increasingly using renewables. The GCC countries are seeing investment in projects such as Masdar City, and investment in Saudi Arabia and Oman.

BASED IN: MOROCCO



## SONIA MEZZOUR

SECRETARY GENERAL, MOROCCAN AGENCY FOR ENERGY EFFICIENCY (AMEE)

### Why you need to know her:

Sonia Mezzour holds a Master's degree in mechanical and process engineering from the Swiss Federal Institute of Technology in Zurich (ETHZ), followed by a master's thesis at Harvard Medical School. She is fluent in Arabic, English, German, French and Spanish. AMEE is one of the 39 strategic agencies of the Kingdom of Morocco leading 150 HC and Vice-Chairmen of the UNECE PPP-Bureau.

### Which markets within the MENAT region do you feel have the most potential?

“ All countries of the MENAT have great technical potential in regards to renewable energy and can act as key players in spreading sustainable development programmes. What is also relevant to investors in a specific country is political stability, good business climate and low phantom costs. The political stability of Morocco, its resilience towards the global economy crisis in 2008, and the strong political and constitutional reforms adopted since almost 20 years make it a unique choice for doing business. Moreover, the ambitious RE projects and sustainable development approach in the territories ensures its leadership position in the region and Africa in the fight against climate change.

### What do you see as the single biggest challenge that the renewable energy faces in MENAT?

“ The subsidies given to coal, gas and oil.

### What are you personally most proud of with regards to you and your organisation's achievements in the region?

“ The contribution of the Moroccan Agency for Energy Efficiency is multifaceted: to name just a few, our unique and premier approach to tackling energy consumption reduction in the territories and in Africa, the training we provide to religious leaders enables the sensitisation of millions of citizens across the country weekly, the cooperation with African countries to contribute to rightly tackling climate change issues, rural and urban electrification and optimised resource allocation.

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Sonia Mezzour





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SHOUHANG 100MWe MOLTEN SALT  
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The Dunhuang Power Plant has been  
selected as a CSP demonstration  
project in China, the construction of  
which has commenced and is expected  
to be accomplished in 2018.

Beijing Shouhang has been constantly committed to the development of energy saving and environmental protection, with National Science & Technology Progress Award honored and National Enterprise Technology Center and Post-Doctoral Working Station approved. Since Shouhang began its involvement in CSP power generating in 2010, it has independently invested Shouhang European Branch Company, merged a share-controlling power design institute, Shouhang SunCan CSP Branch Company, a large manufacturing base in Tianjin, which has formed a complete industry chain layout from R&D, integrated equipment manufacturing, project EPCs and operations and maintenance. The total installation capacity of CSP power generating that Shouhang Professional Team has taken part in has exceeded 1GW.

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**BASED IN: MOROCCO**



**ABDERRAHIM JAMRANI**

TECHNICAL DIRECTOR, MOROCCAN AGENCY FOR SOLAR ENERGY (MASEN)

**Why you need to know him:**

Abderrahim is a solar energy specialist with vast experience in managing electricity generation projects from conception through to implementation. For the past four years, he has been in charge of technical conception for PV and CSP projects at MASEN. Prior to this role, he was responsible for the Energy Department at CMH, directed social housing projects at Addoha and spent 20 years at the Office National de l'Électricité (ONE).

**Which MENAT markets excite you most?**

“ Morocco is very important in the region in terms of renewables and will become more so in the next five years. The United Arab Emirates are very dynamic. Jordan and Egypt have great potential, as will Saudi Arabia, when it takes off.

**What is the biggest challenge to the sector in the region?**

“ The greatest challenge is not specific to MENAT; it is the same throughout the world. Electricians and engineers, including myself, have been trained in relation to an old system and we need time to adapt to new technologies. The new direction that we must take is yet to be defined, but we will get there. Financing projects can also present challenges, but there have been improvements in recent years.

**What are you most proud of?**

“ Introducing photovoltaic technology and large scale wind farms to Morocco in the 1990s. I am also proud to have been in charge of the PERG Programme at ONE, which has taken Morocco's rural electrification rate from 15% to 99%. More recently, developing CSP technology with towers has been an excellent experience.

**BASED IN: SPAIN**



**DR. JULIÁN BLANCO GÁLVEZ**

ASSOCIATED DIRECTOR, PLATAFORMA SOLAR DE ALMERÍA, COORDINATOR OF CSP ENERGY PROGRAMME, EUROPEAN ENERGY RESEARCH ALLIANCE (EERA)

**Why you need to know him:**

Dr. Blanco is a Senior Researcher for the Spanish Ministry of Education and Science, and coordinates research related to the development of solar energy and water related technologies. He is a prolific publisher of books and journal papers, a contributor to international conferences, and has been granted four patents. He was a Visiting Professor at the King Saud University (Riyadh, Saudi Arabia) Department of Electrical Engineering.

**What is the sector's biggest challenge in the region?**

“ Firstly, the development of proper standards with regards component performance and material duration, considering the specific environmental conditions in the region. The second challenge will be the development of combined PV and CSP plants with the corresponding thermal energy storage. The final challenge will be the optimisation and proper development of renewable power and energy generation to drive desalination processes. Given the need for desalination in the region, the development of sustainable methods is a must.

**What projects are you currently focused on?**

“ My principal activity encompasses the integration and consolidation of the research activities in Europe into a single entity properly coordinating national research activities on the field of Solar Thermal Electricity (STE) and, in parallel, pushing for the alignment of national research agendas to optimise the use of existing resources.

**What are you personally most proud of?**

“ Succeeding in raising awareness about the current unsustainability in the region concerning energy and water. After a significant number of conferences, courses and workshops on the region, I have provided arguments to scholars and policymakers to push for local renewable energy deployment.



## BASED IN: UNITED ARAB EMIRATES

**UMRAZ AHMED**

SOLAR SPECIALIST &amp; ADVISOR ON RENEWABLE ENERGY, IPP &amp; ENERGY DIVERSIFICATION, DEWA

**Why you need to know him:**

Umraz has 20 years of experience in the energy sector, during which he has been involved in several renewable energy projects around the world. He has worked closely with the National Renewable Energy Library (NREL) and the US Department of Energy (DOE) on evaluation of technologies for arid regions, and with DEWA he was a pursuant for the successful completion of the first 200 MW phase of the 800 MW Sheikh Mohammed Bin Rashid Al Makhtoum Solar Park.

## BASED IN: OMAN

**DR. MUTHUKUMAR RAMASWAMY**

TECHNICAL EXPERT, ROYAL COURT AFFAIRS, GOVERNMENT OF OMAN

**Why you need to know him:**

Dr. Ramaswamy served as Hospital Chief Engineer for the Omani Ministry of Health for 12 years, before being appointed as Technical Expert to assist His Excellency – Head of Royal Estates, RCA, Oman, with technical matters in 2009. He previously worked for the Government of India for 12 years. In his current capacity Muthukumar is responsible for: strategic planning, facilities and asset management, analysis of contracts and tenders and liaison with statutory bodies. He is the industry representative member on the academic boards of many engineering colleges in Oman, having published 6 books on engineering and over 50 research papers, including: 'Application of Renewable Energy in Health Care Industries in the Sultanate of Oman'.

## BASED IN: MOROCCO

**BADR IKKEN**

DIRECTOR GENERAL, IRESEN

**Why you need to know him:**

Badr was Director of Integrated Development at the Moroccan Agency for Solar Energy (MASEN), where he was in charge of Industrial Integration and R&D. He later co-founded the Moroccan-based National Institute of Research in Solar Energy and New Energies (IRESEN), and has been Director General since 2011. In 2014, he established the largest solar research platform in Africa, the Green Energy Park. He was awarded the Carl-Eduard-Schulte-Prize from the Association of German Engineers (VDI) for his research efforts in Industrial Production in 2005.

Firstly, the development of proper standards with regards component performance and material duration, considering the specific environmental conditions in the region. The second challenge will be the development of combined PV and CSP plants with the corresponding thermal energy storage. The final challenge will be the optimisation and proper development of renewable power and energy generation to drive desalination processes. Given the need for desalination in the region, the development of sustainable methods is a must.

Dr Julián Blanco Gálvez

**BASED IN: MOROCCO**



**ZAKARIA NAIMI**

HEAD OF THE ELECTRICAL & PHOTOVOLTAIC SYSTEMS DEPARTMENT & COORDINATOR OF THE GREEN ENERGY PARK, IRESEN

**Why you need to know him:**

Zakaria managed the implementation of the Green Energy Park, a research platform created in partnership with the Sharifian Phosphate Office, coordinating research activities and industrial projects. He was among the first to join IRESEN in 2011, as an Electrical and Photovoltaic Design Engineer. He has since held various operational and functional positions, currently managing research and demonstration projects in the field of photovoltaics. He is completing a PhD in the modelling and optimisation of renewable energy systems.

**BASED IN: UNITED ARAB EMIRATES**



**BILAL HASSAN**

PROJECT MANAGER, MINISTRY OF ENERGY OF UAE

**Why you need to know him:**

Bilal develops regulations for grid connection as well as net metering for distributed solar systems. He fosters applied research into energy and water in the UAE by structuring "Triple Helix" based collaborative partnerships between government, industry and academia. Before joining the Ministry of Energy, he was a Junior Professional Associate at IRENA where he served as a Policy Advisory Analyst for renewable energy and efficiency deployment in cities, and developed proposals for waste heat to cooling in the UAE. Prior to this position, he conducted research at MASDAR on a chemical looping combustion based power plant.

**BASED IN: SPAIN**



**DR. DIEGO-CÉSAR ALARCÓN-PADILLA**

HEAD OF SOLAR DESALINATION UNIT AT CIEMAT, PLATAFORMA SOLAR DE ALMERÍA

**Why you need to know him:**

Dr. Alarcón-Padilla is in charge of solar desalination at the PSA, which is associated with the Spanish Centre for Research in Energy, Environment and Technology. He was previously a senior researcher at the institute and served as a lecturer within the Department of Computer Languages and Computer Science at the University of Almería. He has published over thirty journal articles on distillation systems and desalination processes and their use in solar power plants. In 2008, he worked alongside Dr. Julián Blanco on the ProDes project for the promotion of renewable energy for water production through desalination.

**BASED IN: UNITED ARAB EMIRATES**



**GRAEME SIMS**

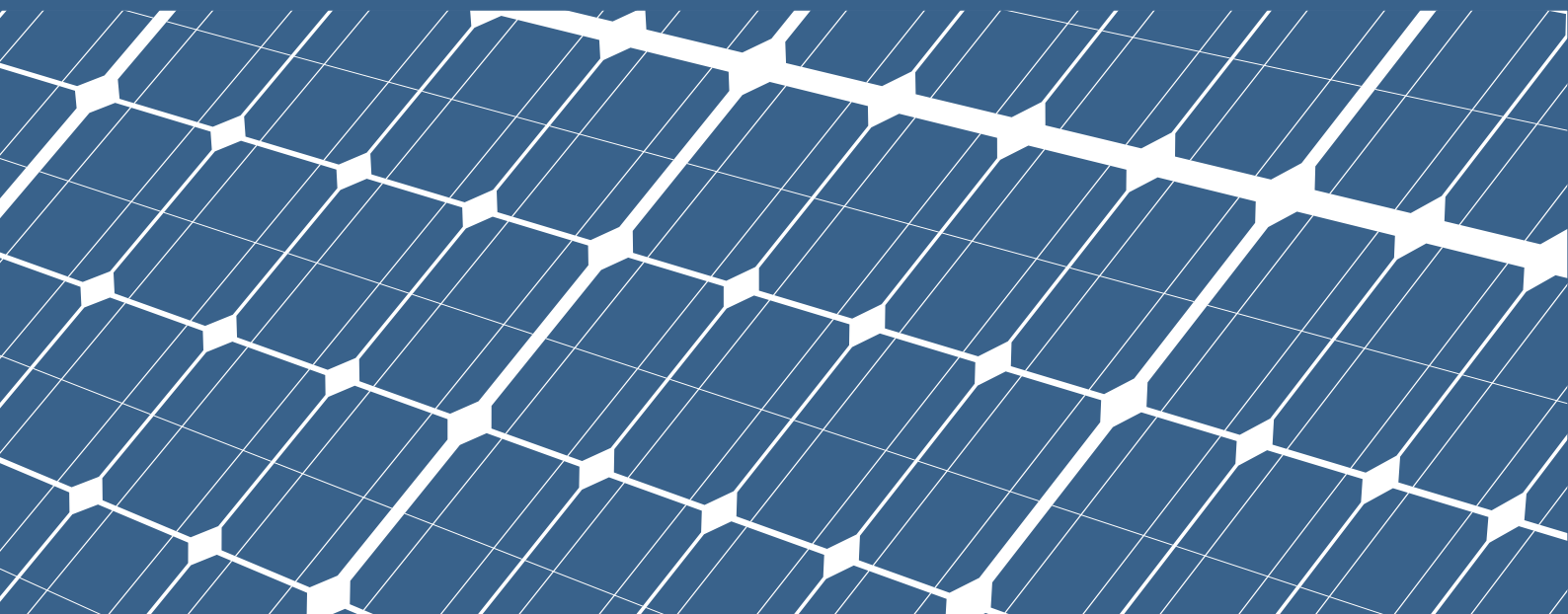
EXECUTIVE DIRECTOR, REGULATORY SERVICES BUREAU FOR ELECTRICITY & WATER

**Why you need to know him:**

An economist by background, Graeme has over twenty years of experience in electricity and water regulation. He served as Deputy Director General at the UK's Office of Electricity Regulation, where he was responsible for the Scottish electricity industry. He subsequently established the Regulation and Supervision Bureau in Abu Dhabi, where he became its first Director General. Prior to joining RSB, he was Director of Regulation and sat on the board at United Utilities, the largest water company listed on the stock exchange in the UK.



# OPERATORS / IPPs





## BASED IN: GERMANY

**DR. HANS BÜNTING**COO, RENEWABLES DIVISION,  
INNOGY**Why you need to know him:**

Dr. Bünting has worked at RWE, the main shareholder of innogy, since 1995, and now leads the company's efforts to bring renewable energy projects to the MENAT region. The firm is also a part-shareholder and partner in Dii. Hans was a participant on the keynote panel at the 2016 Desert Energy Leadership Summit.

**How will renewables develop in the MENAT region?**

“Rising electricity demand and lower costs for renewables will drive development in the next 2 -5 years. Alongside the pure deployment of renewables at a lower cost, system-integrated solutions will become more and more important. A lot of these solutions will become cost-competitive in comparison to conventional technologies (e.g. fossil fuel) and will therefore be implemented even without any significant support schemes in place.

**What do you see as the biggest challenge?**

“In general there should be no major obstacles for the future of renewables in the MENAT region - the path has been paved for renewable growth even without any significant support in the future. The main challenge will be to provide stable market conditions to achieve this growth.

**What are your proudest achievements in the region?**

“innogy and RWE have been – and still are – involved in many discussions in the MENAT region on the development of energy systems. We were a founding member, and remain active shareholders, of the Desertec Industrial Initiative, which fosters the dialogue between stakeholders from around the globe with the local energy community.

**What projects are you currently focused on?**

“We participated in the most recent ADWEC solar PV tender, however without a winning bid. We are in close cooperation with local utility representatives on various topics concerning the further development of an environmentally and economically sustainable energy system in the Gulf region.

## BASED IN: UNITED ARAB EMIRATES

**CORNELIUS MATTHES**CEO, PAWAME, PARTNER, GONOR,  
& PARTNER, GREC**Why you need to know him:**

Cornelius was formerly a Director for Business Alliances at Dii and Managing Director (MENA) for Building Energy Group leading its Dubai regional HQ. He now runs his own renewable energy project development ventures, as well as serving as CEO of PAWAME, a pioneering company in off-grid solar. He previously spent 9 years working at Deutsche Bank, becoming a board member in Italy, and has served on the Renewable Industry Advisory Board for the International Energy Agency. He was named a Solar Pioneer in 2015 by MESIA.

**How do you see renewables developing in MENAT?**

“I think the region has very strong momentum, being driven by government procurement programmes, and renewables will only increase in importance as time goes on. Though development in the region is known for delays, I am optimistic; I believe that this will speed up in the near future. The solar sector will grow and develop as projects with private off-takers begin to catch up to the drive provided by government programmes, and the regulation increasingly improves.

**What is the biggest challenge?**

“A lack of continuity and reliability of the policy makers, and the challenge of continuing to phase out fossil fuels.

**What are you most proud of?**

“I would say having actively been involved with, and awarded sizeable projects in, two of the key countries in the region: Jordan, and two 50 MW PV projects in Egypt. It is extremely rewarding seeing tangible projects taking off after having worked with governments and policy makers to shape national plans for renewable energy.

BASED IN: UNITED ARAB EMIRATES

**PAUL VAN SON**

COUNTRY CHAIRMAN MENAT,  
RWE INNOGY



**Why you need to know him:**

Paul is the CEO of Dii GmbH as well as RWE and innogy Chairman for the MENAT region. At Dii, he is focused on seeking solutions to hurdles for renewable energy projects and power grid integration. Mr. van Son is also the Founder and Honorary President of the European Federation of Energy Traders ([www.efet.org](http://www.efet.org)) and Chairman of the Energy4All Foundation, a non-profit organisation promoting decentralised energy systems in Africa. He has been active for over 35 years in various supervisory board, executive and operations management positions, in particular as a driving force in the international energy transition.

**Which markets in MENAT excite you most?**

“ Egypt probably has the highest physical potential in terms of sunshine, wind, hydro and possibly even biomass and geothermal. The UAE and Morocco show the strongest leadership to get things done, albeit in different ways. Morocco was one of the first movers and has the most developed structures in place to make projects happen, whereas the UAE may offer the best conditions for projects overall.

**What is the biggest challenge to the sector?**

“ I don't think there are any unsurmountable challenges anymore! The main obstacles to renewables within MENAT seem to be in the human brain; hesitant reduction of subsidies for fossil fuels, often little awareness of the reliability and competitiveness of renewables, fear about system integration of renewables, bureaucracy and so on. Market conditions would swiftly improve if these 'obstacles' were removed. Open access to electricity grids, price transparency and increasing interconnectivity will also be pivotal. Several MENAT countries are already interconnected, but power exchanges are still modest, which is leaving untapped synergies.

**What is the future of renewables?**

“ What we have learned from the past is that our energy predictions are always wrong – even those most optimistic about the renewables sector persistently under-estimated the exceptional growth the sector has seen. When we began the Desertec initiative in 2009, renewables was more or less regarded as a ridiculous and irrelevant subject within MENAT. Today, the cheapest energy is from PV and wind, we observe over 150 pipeline projects in the Dii project database and we expect that the cost will further drop to levels that we can hardly imagine today.

When we began the Desertec initiative in 2009, renewables was more or less regarded as a ridiculous and irrelevant subject within MENAT. Today, the cheapest energy is from PV and wind, we observe over 150 pipeline projects in the Dii project database and we expect that the cost will further drop to levels that we can hardly imagine today.

Paul van Son



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BASED IN: SPAIN



## MIGUEL DUVISON

GENERAL MANAGER OF THE SYSTEM OPERATION DIVISION, RED ELÉCTRICA DE ESPAÑA (REE)

### Why you need to know him:

Miguel has played an integral role at REE since its creation 31 years ago, notably overseeing system operations for the national electricity grid in Spain. He helped to establish the undersea electrical interconnection between Spain and Morocco, the only connection of its kind to link two continents.

### Where is the greatest potential in MENAT?

“Smarter control systems are required in order to fully integrate renewable energy resources (RES) into the power system and greater transparency and regulatory reforms are needed to make the area more attractive for investment. Bearing this in mind, the Mediterranean countries present huge potential for growth.

### What is the biggest operating challenge?

“The intermittency and difficult prediction of RES are challenging aspects, which can be mitigated with prediction tools, real-time information and controllability. Finally, RES consumes more grid capacity, so a greater number of networks and more powerful lines are needed, which will require intensive capital investments.

### What is your proudest achievement?

“Setting up the Centre of Renewable Energies (CECRE), a pioneering centre for the smart control and management of electricity, primarily from wind farms. It enables maximum integration of RES into the electricity system, while maintaining consistency of supply to the grid.

BASED IN: SAUDI ARABIA



## JULIO TORRE GUTIERREZ

CHIEF EXECUTIVE OFFICER, NOMAC

### Why you need to know him:

Julio has been CEO of NOMAC since April 2009, which is a 100% owned O&M Subsidiary of ACWA Power. NOMAC is responsible for a portfolio of over 17,000 MW power generation and 2.83 million m<sup>3</sup>/d seawater desalination assets including thermal, solar and wind powered facilities across the Middle East, North and South Africa and Asia.

Smarter control systems are required in order to fully integrate renewable energy resources (RES) into the power system and greater transparency and regulatory reforms are needed to make the area more attractive for investment.

Miguel Duvison





# MANUFACTURERS / TECH SUPPLIERS



## BASED IN: DENMARK

**SVANTE BUNDGAARD**CHIEF EXECUTIVE OFFICER,  
AALBORG CSP**Why you need to know him:**

Svante has led Aalborg CSP's expansion into new markets based on diversified technology concepts and innovation, with 18 operational plants and 4 projects under construction or development in 8 different countries. He was formerly Head of Engineering and VP for Projects and Business Development at Siemens Wind Power, and was placed on the top 100 talent list of Danish executives in 2014 by Berlinske Business.

**Which MENAT markets excite you most?**

“ Morocco has proven to be a good example of making its CSP goals a reality. Similarly, focusing on CSP and planning to add 41 GW solar power by 2032, the Kingdom of Saudi Arabia undoubtedly creates a blossoming market for large-scale solar-thermal power generation. After the launch of the Shams 1 plant, development of further CSP plants in the UAE has been slower – but Dubai's ambitious targets, and low tariffs reached, point to great potential for cost efficient CSP-power generation.

**What are you most proud of?**

“ We are proud to be leaders for low-cost technology and innovation for the region and to be among the few technology companies that have developed and delivered a molten salt tower receiver and steam generation system in MENAT, in 2014. Also, we took part in the system development and engineering for the largest solar power plant in the Middle East region, Shams 1, ensuring its reliable operation by upgrading and maintaining the steam generation system.

## BASED IN: NORWAY

**DR. CHRISTIAN THIEL**CHIEF EXECUTIVE OFFICER,  
ENERGYNEST**Why you need to know him:**

Dr. Thiel's expertise extends across the energy and energy-related technology sectors, ranging from electromobility to energy storage. He joined EnergyNest in 2014, following leadership roles with BMW Group and the UBS Investment Bank, as well as at McKinsey & Co. and SENVION, where he was actively involved in the German "Energiewende" (energy transition).

**Where in MENAT has the most potential?**

“ The region has huge potential to become a global CSP power house. The current DEWA tender in the UAE and Masen activities in Morocco are just two examples, which showcase a bright future for the region. Moving forward, I strongly believe that, alongside increasing power generation and desalination via CSP, we will also see utilisation of waste heat via thermal energy storage throughout MENA's industrial footprint. This will enable more efficient resource management, while simultaneously reducing CO2 emissions.

**What is the biggest challenge renewables face in MENAT?**

“ It is simple; we need clear project commitments. Noor has been finalised and DEWA has launched large tenders. This is a great start but we need more of these signals.

**What are you most proud of?**

“ Demonstrating the potential of EnergyNest's new thermal energy storage solution. We have clearly showcased the standout performance of our novel technology in the technological epicentre of the region, through the successful validation and long-term operation of our pilot facility with the Masdar Institute in Abu Dhabi.



BASED IN: UNITED ARAB EMIRATES

## DANIEL ZYWIETZ

FOUNDER & CEO,  
ENERWHERE



### Why you need to know him:

Daniel founded Enerwhere in 2012 out of frustration over conventional utilities in the Middle East moving too slowly to implement solar. Today, Enerwhere is claimed to be the 6th largest utility company in the UAE, and the 2nd largest private one. Before starting Enerwhere, he held roles in management consultancy & banking with a focus on utilities, renewable energy and energy efficiency across Europe and MENA. Daniel serves on the board of the MENA Clean Energy Business Council, aiming to foster the growth of the clean energy industry in the Middle East.

### Which MENAT markets excite you most?

“ The greatest demand will be where tariffs used to be low but are now rising because of the removal of subsidies. As such, I see off-grid markets growing very quickly, initially in the UAE and Oman but soon also in the other GCC countries.

Apart from our own market, utility-scale solar projects are finally taking off in the United Arab Emirates, based on the IPP model. I would expect that this model will soon be applied in many other countries in the region.

### What is the biggest challenge to the sector in the region?

“ There is a lack of effective regulation of the distributed solar sector, leading to slow growth of a technology that is cost-effective and should otherwise be very attractive. Solar power in MENAT is a dynamic market where rapid technological advances (like storage) are continuously providing new scope for development, and the regulatory bodies need to adapt to keep up the momentum.

### What are you most proud of?

“ Building a viable and successful private utility company in an area dominated by government-controlled monopolies, where regulations can prove difficult for start-ups and new technology.

## BASED IN: UNITED ARAB EMIRATES

**JOHN VAN SCOTER**PRESIDENT & CEO,  
ESOLAR**Why you need to know him:**

John's firm is a pioneer in adapting CSP for multiple applications along with power generation. Before joining eSolar, he had a 25-year career at Texas Instruments where he developed the firm's alternative energy strategies for the smart grid/meter, solar, LED lighting, smart motor and energy harvesting markets. He also serves on the board of directors for Tyco Electronics.

**What challenges do your projects face in MENAT?**

“The need to provide local demonstration facilities to prove new technologies, even if you have multiple working examples in other countries, is a huge barrier. There is a “my desert is more extreme than your desert” mentality. The economics around financing demo plants are a challenge – and this is important as it is innovations that drive down cost points and move the sector forwards.

**What are the most promising markets in MENAT?**

“In the GCC there is a lot of discussion but relatively few projects yet. However, there is a huge amount of potential there with the likes of ACWA Power promoting hybrid PV and CSP plants. It is the storage component that is most important – we offer 12 hours of storage with molten salt towers.

**How are you dealing with localisation?**

“At eSolar we use automotive principles which can adapt to demand changes and supply disruptions, with standard tooling and factory processes. This seems to be more of an issue in MENAT than other regions – but despite the talk, I see little being done yet in practice to put the capability in place to manufacture glass and steel components etc. locally.

**What projects are you currently focused on?**

“We are involved with all the large ongoing utility-scale projects – however we are also interested in non-power applications, in which the full thermal envelope is used, for example for enhanced oil recovery, desalination and to heat greenhouses. Sundrop farms in Australia is a good example of harnessing solar power for sustainable agriculture.

## BASED IN: GERMANY

**MARTIN SELIG**CHIEF EXECUTIVE OFFICER,  
FRENELL**Why you need to know him:**

Martin established Frenell as a result of a management buy-out of Novatec Solar, which he founded in 2006, and is responsible for the business development and overall strategy. The company used its proprietary technology to install the 30 MW PE2 solar power station in Spain in 2012, which continues to be fully operational.

**Which markets within MENAT do you think have the most potential?**

“In theory all of the countries could make themselves energy independent, and all have incentives to transition to renewables, since CSP costs are competitive with traditional power generation when international market prices for fossil fuels are applied. Egypt and Saudi Arabia have the largest resources in terms of available land with sufficient solar radiation in relation to their population, and great potential to become exporters.

**What are the biggest challenges to the sector?**

“The main problem is that, in many MENA countries, the domestic use of fossil fuels is still subsidised and economic and political frameworks to provide room for solar technology are not sufficiently developed. Some countries, like the United Arab Emirates, are moving ahead in terms of legislation showcasing the price competitiveness of renewable energy. I am hoping for more positive experiences, as in the last major PV tender rounds.

**Do you partner with local EPCs?**

“Collaborating with EPCs and exploiting their specific expertise in power block engineering and construction allows us to focus on our core competence, which is turnkey delivery of concentrated solar fields for CSP plants. In our experience, the knowledge base of domestic EPCs in the Middle East is extensive enough to form valuable partnerships for CSP tenders.

BASED IN: TURKEY

**RUHAN TEMELTAS**

GENERAL MANAGER, MENAT ONSHORE WIND,  
GE RENEWABLE ENERGY



**Why you need to know her:**

Ruhan began her career as an electrical engineer at Alarko, one of the leading construction companies in Turkey, before spending 4 years in managerial roles in energy companies in the UK. She is responsible for growth strategies and execution plans for MENAT at GE, which boasts the world's largest clean energy footprint, with over 370 GW of renewables installed across over 40 countries.

**Which markets within MENAT do you think have the most potential?**

“ Countries such as Turkey, Morocco and Pakistan are well advanced with their wind development plans, and Egypt, Saudi Arabia and Algeria have strong potential to build their capacity.

**What are the biggest challenges to the sector?**

“ The greatest challenges for getting wind projects off the ground are securing capital and connecting the grid infrastructure to wind farms. At GE, in close cooperation with fiscal institutions, we offer financial support, and a wide range of solutions for grid connection scheduling and digitalisation.

**How are you tackling localisation?**

“ Developing new wind turbine technologies for efficient use of renewable energy resources, GE encourages local production of wind turbine components. We would like to see energy policy linked to large volume tendering to give the opportunity to companies like GE to develop employment creation plans for a local workforce.

BASED IN: AUSTRIA

**FELIX TIEFENBACHER**

CHIEF EXECUTIVE OFFICER,  
HELIOVIS



**Why you need to know him:**

Felix co-founded Heliovis, which claims its inflatable Heliotube solar power concentrators offer significant cost savings over conventional glass mirror-based parabolic troughs, and have attracted €1.8m in funding from the EU's Horizon 2020 programme. Felix holds a PhD in experimental physics, has published several articles in Nature and other publications, and has worked extensively in quantum cryptography and quantum optics.

**Which markets in MENAT excite you most?**

“ I am very confident about Saudi Arabia, especially in terms of PV – they are going to invest heavily in local production in the next 10 years, and have the right combination of resources and pressure to expand. I am not so sure about the rest of the Gulf – there are humidity issues in places like Dubai which always cause problems.

**What is the biggest challenge to the sector?**

“ The shifting of investment focus onto upfront capital expenditure. With solar projects, the fuel is of course free and there is relatively low operating expenditure, but the upfront costs are higher. The region is used to the economics of fossil fuel plants and looking for profits within the first two or three years, so it is taking time to adjust people's expectations.

**How are you dealing with localisation?**

“ By offering “smart-tech not high-tech” – our technology is easy to assemble on-site, and our production infrastructure is small at this stage, so we are flexible about where we can produce our equipment.



## BASED IN: GERMANY

**KLAUS FRIEDL**

SENIOR VICE PRESIDENT MIDDLE EAST,  
PHOENIX SOLAR AG

**Why you need to know him:**

Klaus and his team were awarded the first lighthouse project in Saudi Arabia at the King Abdullah Petroleum Study and Research Center. Having successfully introduced Phoenix Solar in MENAT, he now concentrates on the growth and development of the company in the region.

**Tell us about your experience of working with developers in the region.**

“ Amongst others, we have worked with Saudi Aramco, for whom we completed two very interesting projects. The first was about learning how projects in MENAT are executed and the clients' needs in this region. Building upon this, we were able to deliver the second project to a very high standard. However, these projects were slow for us; taking 23 months for the first one, where a similar project in Germany would have taken only 4.

**Which are you most proud of?**

“ As well as the successful execution of the Saudi Aramco projects, we are proud of the Marriott & Sheraton PV power plants (11 MWp) in Jordan, and having been awarded the Afken Renewable Energy contract to construct the first ever licensed PV power plant (8 MWp) in Turkey.

**Where in MENAT has the most potential?**

“ Turkey has huge potential; 6-7 MW projects, and larger, are frequently appearing as activity ramps up. Phoenix Solar is active in Jordan too, where we see a lot of interest in the renewables industry. Of course, there is emerging potential all across the region, for instance in the GCC and North Africa.

## BASED IN: QATAR

**DR. KHALID K AL HAJRI**

CHAIRMAN & CEO,  
QATAR SOLAR TECHNOLOGY (QSTEC)

**Why you need to know him:**

Dr. Al Hajri oversees QSTec, which is associated with Qatar Foundation, and whose global investments assure its presence throughout the entire solar value chain, from polysilicon to supply and development. He has over thirty years of experience in the Qatari energy industry, having held executive roles at Qatar Petroleum and Ras Gas, before focusing on establishing solar power in the country.

**What is your proudest achievement?**

“ I am delighted with our award winning solar education programme, Shams Generation, which is changing the mind-set of the community about sustainability. This hands-on solar learning programme has been delivered to over 16,000 students across schools and universities in Qatar. If we are going to build a regional solar industry, we need to develop future leaders and entrepreneurs.

**How do you see the future of renewables in Qatar?**

“ The key challenges for the solar industry are related to cost. We have made great strides in reducing the price of solar energy and I have no doubt the cost for energy storage will also come down significantly over the next few years and it will revolutionise how we produce and use energy. The worldwide energy landscape will transform during our lifetime, and QSTec will be at the forefront through significant investment in R&D. The need for solar energy in Qatar is there and needs to be matched by a willingness to ensure that we can fully diversify to realise this vision.

BASED IN: UNITED ARAB EMIRATES



**FRANK DUGGAN**

PRESIDENT (ASIA, MIDDLE EAST & AFRICA) & MEMBER, GROUP EXECUTIVE COMMITTEE, ABB

**Why you need to know him:**

Frank represents the company's markets and AMEA regional organisation at the top management level. He is also the Managing Director of ABB's UAE & Oversight Countries' operations and serves as Chairman for ABB India Limited.

**How does MENAT compare with other regions?**

“ It was a slow start in the region, but the reward for those engaged from day one is to be present in the most exciting solar market worldwide. We have the advantage that we have been contributing strongly to the renewable development in other regions, which will enable us to oversee renewable growth at a faster rate in MENAT.

**What is renewable energy's biggest challenge?**

“ Though there are usually no feed-in tariffs, we have seen record low market prices achieved in utility-scale projects. The strong price pressure in this competitive scenario could negatively impact choice and the quality of products and services used in projects.

BASED IN: SWITZERLAND



**MAXINE GHAVI**

GROUP SENIOR VICE PRESIDENT & GLOBAL PROGRAMME DIRECTOR FOR MICROGRID, ABB

**Why you need to know her:**

Maxine is focused on microgrid projects, both on and off grid, of varying sizes and energy generation types. She has more than 25 years of experience across multiple industries including solar and semiconductor capital equipment.

**Which markets in MENAT do you think have most potential?**

“ All of them, for one reason or another. There are big challenges in the region to be overcome, but especially in the Sub-Saharan area we see a lot of potential for microgrids.

**What do you see as the biggest challenge renewable energy faces in MENAT?**

“ It would be policy, looking at the number and size of the announcements made in the region, and the lack of activity that follows on from them, it is clear that policy improvements are necessary.

BASED IN: GERMANY



**JOCHEN KREUSEL**

MARKET INNOVATION MANAGER, POWER GRIDS DIVISION, ABB

**Why you need to know him:**

Jochen represented ABB on the board of Dii between 2009 and 2014. He is on the Steering Committee of the European Commission's Smart Grids Task Force and is an honorary professor teaching power economics in liberalised electricity markets at Aachen University.

**What is the biggest issue facing the sector?**

“ Interconnections. Large-scale utilisation of renewable energy requires interconnection between countries and acceptance of mutual dependency. So far, there is no tradition of doing so in the MENAT region; existing interconnections are still built assuming that each country will remain self-sufficient and autonomous.

**What are you most proud of?**

“ ABB has always been present in MENAT, and has been involved in the development of a modern electricity infrastructure in the region. We are committed to contributing to the next step, which will be characterised by the growth of renewable energy.

## BASED IN: UNITED ARAB EMIRATES

**EVANGELOS LIANOS**

PARTNER, CIRCLEMOON PARTNERS

**Why you need to know him:**

Evangelos was formerly the Executive Director for Yingli Solar Green Energy, where he established and expanded the business in the MENA region. He has been active in the Middle East for over 20 years and now runs his own consulting firm for Real Estate and Renewable Energy Project development.

**Which markets in MENAT excite you most?**

“ The United Arab Emirates, Saudi Arabia, and Egypt and some mid-sized Countries in Africa. There are large projects already underway, and we are seeing potential in small to medium rooftop/ground solar installations between 500 KW and 5 MW. Wind is expanding and may have a larger volume than solar in the future. The hidden treasures are biogas and geothermal. A country's renewable energy mix is the next big question, in parallel with enhancing networks and distribution.

**What is the sector's biggest challenge?**

“ Renewable projects need time to be constructed and developed. Focused and professional approaches, together with financial early stage basic cash liquidity for development, are the key factors for success. Investors need to bear this in mind when entering this sector in this region and co-operating with developers. Regulations are maturing and opening the way for serious players to act and seek profitable business opportunities.

## BASED IN: NORWAY

**LUDVIG BELLEHUMEUR**

BUSINESS DEVELOPMENT MANAGER, ENERGYNEST

**Why you need to know him**

Ludvig is developing the market in MENAT for EnergyNest's solid state thermal energy storage modules, which are in operation at a pilot facility with the Masdar Institute in Abu Dhabi. He was previously a director at Rackham, a Canadian CSP technology specialist.

**How will renewables compare with non-renewables in the future?**

“ The world is heading toward an unprecedented energy transition. Governments are starting to realise that climate change is a serious issue that requires strong commitments to renewable energy, and they are getting cheaper by the day.

**Where is the greatest potential in MENAT?**

“ Morocco, along with a number of Gulf States including the United Arab Emirates, Kuwait, Oman and Saudi Arabia.

**What is the biggest challenge renewables face in MENAT?**

“ The low cost of fossil fuel, and limits to integration without storage. Energy storage will be a cornerstone of tomorrow's power grids.

BASED IN: UNITED STATES OF AMERICA



**RICK HUIJBREGTSE**

SENIOR VICE PRESIDENT, ESOLAR

**Why you need to know him:**

Rick is a technical leader with over 25 years of experience in product development and operations in the transportation components and renewable energy conversion industries. He leads eSolar's engineering team.

**What kind of business ventures or projects are you currently focused on?**

“ We have got a number of development programmes, and we are active in generation and water processing. Our challenge is in the thermal energy aspects, spanning multiple applications.

**What challenges does renewable energy face in MENAT?**

“ Globally the market is struggling with fragmentation and lack of uniformity, the inconsistent standards make it harder to work, and the risk profiles need reducing in order to encourage further investments. But I am optimistic. We are set for an inflection point in the growth curve for the renewables industry.

BASED IN: UNITED ARAB EMIRATES



**KORAYEM RAZIK**

MANAGING DIRECTOR, FRONIUS MIDDLE EAST FZE

**Why you need to know him:**

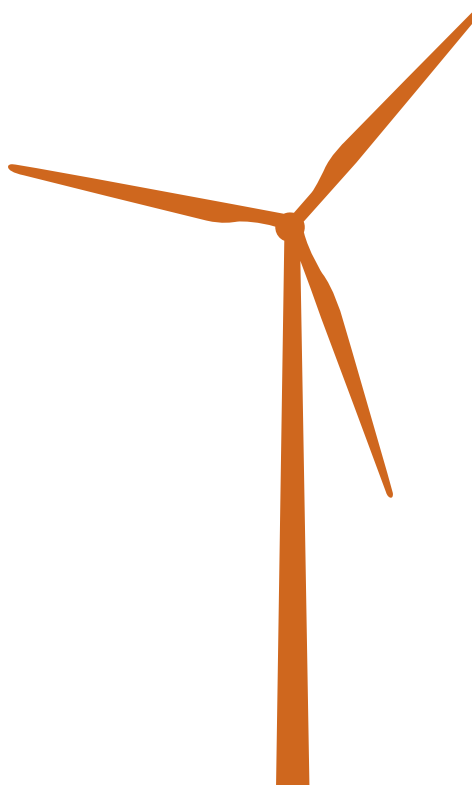
Korayem's current focus is Fronius' 24 Hours of Sun project, a drive to encourage the generation and intelligent storage and distribution of solar energy. He has 15 years of experience in the industrial field, of which the last 7 have been with Fronius.

**What is your experience of MENAT Renewables?**

“ As I have Middle Eastern roots I know quite well how to deal with and respect every country and culture, and I know what we really need in the region. I wake up every day with the dream that we are living the Fronius vision: 24 hours of Sun.

**What do you see as the biggest challenge renewable energy faces in MENAT?**

“ Our biggest challenges are energy pricing politics in the whole region and the fact that every country has its own subsidies and strategy. We need separate strategies and studies for each country if we want to support and realise our visions.



## BASED IN: SPAIN

**JAVIER LANDERO CRUZ**

CHIEF EXECUTIVE OFFICER, GREEN POWER TECH

**Why you need to know him:**

Javier has been working in energy integration for 12 years, with a particular focus on renewables projects, and has accrued an accumulated capacity of almost 3 GW. He has been CEO at GPTech since 2006, where one of his main areas of expertise relates to the adaptation of grid codes and infrastructure in preparation for the installation of renewable energy plants.

**Describe your experience in MENAT?**

“ We have encountered challenges in achieving a stable grid connection. One of the most important factors to be taken into account is the extreme weather and working conditions, which require a customisation of the technology and services. Other differences we have found are 1) Greater importance of local partnerships; 2) Less developed grid codes; 3) Existence of a significant number of potential equity partners; 4) Requirements and opportunities for specific investment architectures (e.g. use of sukuk).

**What is the biggest challenge to the sector?**

“ Being able to provide utility-scale grid integration solutions that are smart and flexible enough to reinforce the regional grids, and changing grid codes in countries with significant renewable energy penetration targets. Bankability of projects across the region can also be a challenge, and it is important to develop local capacity to participate in different stages of the value chain.

## BASED IN: GERMANY

**DR. EDUARD HEINDL**

CHIEF TECHNICAL OFFICER, HEINDL ENERGY GMBH

**Why you need to know him:**

Dr. Heindl founded Heindl Energy around his concept of gravity energy storage, in which a rock piston is hydraulically lifted and the water later released when the energy is required. He was previously awarded the European Commission's ICT prize for his tsunami alarm system, which was the first of its kind.

**What challenges do renewables face in MENAT?**

“ One challenge is the other competing energy sources; there is a long tradition of natural gas and oil that will be difficult to beat out.

**What do you predict for the growth of renewables?**

“ Renewable energy keeps getting cheaper, it is a long-term trend, you just have to keep waiting and renewables will outstrip non-renewables. The trouble is in spotting just the right moment to invest in renewables, which can keep people away.

We have encountered challenges in achieving a stable grid connection. One of the most important factors to be taken into account is the extreme weather and working conditions, which require a customisation of the technology and services.

Javier Landero Cruz



HELLO,  
I AM INNOGY.





NAME: INNOGY SE  
BASED IN: GERMANY  
WEB: INNOGY.COM

**Hey, innogy, so, why should I know who you are?**

“ I’m Germany’s leading energy company. I was formed from the restructuring of the RWE Group, and I focus on the three business segments Renewables, Retail and Grid & Infrastructure. My customers benefit from decades of experience and know-how along the entire energy value chain – all while I am working on future-oriented technologies for the energy world of tomorrow. I strive to be a leader of innovation for a modern, decarbonised, decentralised and digital energy world – not just in Germany and Europe, but worldwide.

**But what is your motivation?**

“ I am convinced our planet will be a better place if we can create a sustainable energy system. I am committed to radical innovation and playing to win in an ever-changing game of business and market development. I want to inspire people by offering solutions that go beyond their current needs and expectations, and make their lives easier.

**What are you most proud of?**

“ Definitely the broad and long-standing experience of my more than 40,000 employees. I supply more than 23 million customers with energy in eleven European countries, and I operate 574,000 kilometres of gas and electricity grids. I already play a role in North Africa, Turkey and the Middle East, and I made my successful debut on the Frankfurt Stock Exchange this past October.

**Finally, innogy, what are your goals for the future?**

“ I will stay true to my name: innogy, which stands for innovation, energy, technology. With renewable energy, smart grids and innovative solutions for my customers, I want to set standards for the energy transition and far beyond. For example, I will expand on my 3.6 gigawatts of renewable energy capacity.

More about me at: [innogy.com](https://innogy.com)

BASED IN: FRANCE



**JALEL HAMILA**

VICE PRESIDENT MIDDLE EAST & AFRICA, JA SOLAR HOLDINGS CO., LTD.

**Why you need to know him:**

Jalel represents one of the world's largest producers of solar cells, with a 5.6 GW production capacity. At JA Solar, he has overseen the supply of PV modules to large projects in MENAT, including 16 MW in Mauritania and 11 MW for North Africa's largest diesel-PV hybrid project, in Egypt. He was previously Vice President EMEA with Lumeta Solar, a developer of innovative BIPV modules.

**What is the future of renewables in MENAT?**

“ The region is blessed with a perfect climate for solar power. There are very conservative forecasts in some areas due to lacking comprehensive regulatory frameworks. But, we expect huge growth in Saudi Arabia, which is the largest market, Turkey, Pakistan, Jordan and Egypt.

**What is the sector's biggest challenge in MENAT?**

“ There are financial barriers for the non-oil-and-gas-rich countries, coupled with grid infrastructure enhancement requirements, so more supportive renewable energy-driven policies and regulations are essential. Within the GCC, there needs to be a change in mind-sets and a shift in priorities towards increased reliance on solar power and a reduction in carbon footprint.

BASED IN: ITALY



**GULNARA ABDULLINA**

GENERAL MANAGER MEA, JINKO SOLAR

**Why you need to know her:**

Gulnara has been selected as one of the young new energy leaders by RECHARGE 4040 Initiative, which brings together 40 clean energy pioneers under 40 years old. For the past 3 years she has been focusing on emerging markets in the Middle East and Africa (MEA) and leads all commercial operations in the region.

**What are you currently focused on?**

“ We are working hard to maintain Jinko's leading position in the Middle East and Africa region, tendering for utility projects with our strategic partners, as well as focusing on the distributed generation market, thanks to our strong local presence across 6 countries in MENAT.

**What challenges do your projects face?**

“ The main challenge is a lack of strong political will: slow implementation of programmes, and governments changing the rules of the game result in projects being postponed. A lack of financing combined with country and currency risks in some of the geographies also dilute investors' appetites.

BASED IN: UNITED ARAB EMIRATES



**NABIL MOUBAYED**

SALES MANAGER MIDDLE EAST, JINKO SOLAR

**Why you need to know him:**

Nabil manages Middle Eastern sales activities for Jinko Solar, where he has been recognised with the Rising Star award. He was previously Business Development Manager for MechoSystems in Dubai.

**How does MENAT compare with other regions?**

“ We have witnessed several bids with a record low levelised cost for large-scale PV power plants in MENAT. I believe PV is the best solution for satisfying rising power demands, and could help to cut unsustainable government subsidy programmes.

**Where is the most potential in MENAT in the next five years?**

“ The UAE is definitely a very promising market in the short term, as is Jordan due to its power wheeling programme, which is opening up the grid to large, off-site PV projects. I also believe that Morocco, Iran, Algeria, Egypt, Saudi Arabia and Kuwait have big potential in the next five years.

## BASED IN: NETHERLANDS; SAUDI ARABIA

**JOS VAN DER HYDEN**

FOUNDER &amp; CEO, NOMADD DESERT SOLAR SOLUTIONS

**Why you need to know him**

NOMADD's automated cleaning device claims to be the lowest-cost solution for large utility-scale solar projects, and is poised to begin mass production following development at the King Abdullah University for Science and Technology in Jeddah. Jos formerly served as CCO for Infinia, active in CSP technology, and has held executive positions at First Solar and hoch.rein GmbH.

**What is the biggest challenge to the sector?**

“ Consistency of government policies towards solar energy. Sometimes big plans are announced, but not executed, so you never know what is real and what is just an announcement.

**Which MENAT markets are the most exciting?**

“ Saudi Arabia and the United Arab Emirates have the best policies to help the sector grow.

## BASED IN: SAUDI ARABIA

**GEORG EITELHUBER**

FOUNDER &amp; CTO, NOMADD DESERT SOLAR SOLUTIONS

**Why you need to know him:**

In 2015, Georg was placed 6th on the Forbes list for 'Entrepreneurs Shaping Saudi Arabia's Future'. He has been based in the MENAT region since 2009, when he took up a teaching position in physics at the King Abdullah University for Science and Technology. He founded NOMADD three years later, which develops dust mitigation robots for solar panels, winning the Solar Technology of the Year Award from MESIA in 2014.

**Which markets have the greatest potential in the next five years?**

“ The UAE is the furthest ahead in terms of structure and vision. In Saudi Arabia, the structure is becoming clearer as the country makes headway towards realising its Vision 2030.

**What is the greatest challenge that renewables face in the MENAT region?**

“ There are challenges with the state of the grid. Difficulties can arise regarding the integration of renewables, and the regulatory framework remains to be developed to the same extent as the technology. In the desert, the build-up of dust on solar panels presents a considerable barrier to a viable solar industry.

**Have you encountered any specific hurdles in Saudi Arabia?**

“ We have found Saudi Arabia to be a hospitable environment in which to grow a new business. The whole area wants to change and the ecosystem ensures adequate support for start-ups.

We have witnessed several bids with a record low levelised cost for large-scale PV power plants in MENAT. I believe PV is the best solution for satisfying rising power demands, and could help to cut unsustainable government subsidy programmes.

Nabil Moubayed

BASED IN: UNITED ARAB EMIRATES



**KSENIA GONCHAROVA**

DIRECTOR MARKET & BUSINESS DEVELOPMENT, REC SOLAR

**Why you need to know her:**

Ksenia has more than 14 years' experience in project management and finance in the Middle East. Today, she is responsible for business development in MENA for REC Solar, focusing on the REC Peak Energy and Twin Peak product range. REC Solar has installed more than 550 commercial solar systems, generating more than 200 MW.

**What are you currently focused on?**

“ In Egypt we've been working on a project with OTMT (Orascom Telecom Media & Technology), but mostly we focus on supplying solar panels.

**What is the biggest challenge to the sector?**

“ The long lead times. From start to finish, projects can take two years or more.

BASED IN: UNITED ARAB EMIRATES



**GERGO VARHEGYI**

HEAD OF SIEMENS PTI MIDDLE EAST, SIEMENS

**Why you need to know him:**

Gergo has 10 years of experience in power system modelling and analysis, in roles pertaining to consultancy and engineering. At Siemens PTI, he is responsible for developing key areas of the business in the Middle East, including power system consultancy and feasibility studies as to grid connections, across a total of 16 countries. His company designed energy management systems for DEWA.

**Which MENAT markets have the most potential?**

“ The greatest potential lies in solar PV and wind power. Many countries have announced ambitious targets; amongst which the Saudi Arabian 15 year plan is very exciting, and I expect large growth in the Egyptian and Pakistani markets.

**What is the biggest challenge to the sector in the region?**

“ Changing the views of local governments, which have had an entirely different focus for the past 60 to 70 years, because once decisions are made all the resources are there to complete projects. However, the weather in MENAT presents a unique challenge, since standard design technology is often not applicable or does not function in the extreme conditions.

Good wind resources and a strong regulatory framework attracting investors and political stability are the main criteria for successful wind development. The region has been suffering from lack of the latter. Political stability is most likely the single biggest challenge over the years to come.

Martin Gerhardt



## BASED IN: GERMANY

**MARTIN GERHARDT**

HEAD OF STRATEGY &amp; BUSINESS DEVELOPMENT, SIEMENS WIND POWER &amp; RENEWABLES

**Why you need to know him:**

Martin is responsible for Siemens Wind Power's global strategy (Onshore & Offshore), M&A and business development, actively developing strategies for the MENAT markets. He was previously Segment Head of Siemens Wind Power Offshore APAC in Shanghai.

**What is the future of renewables in the MENAT region over the next 2-5 years?**

“ The MENA region has among the world's highest concentration of solar and wind resources and around 14 GW of wind power capacity is expected to be installed by 2021. The North African sub-region is in the lead in terms of cumulative installed capacity, while development in the Middle Eastern markets so far has been rather slow. However the decreasing oil price has had significant influence on the drive for renewable energy in the national strategies, for example the Kingdom of Saudi Arabia has put forth its ambitious Vision 2030 and national development programme to lead the country into the post-oil era.

**What is the sector's biggest challenge?**

“ Good wind resources and a strong regulatory framework attracting investors and political stability are the main criteria for successful wind development. The region has been suffering from lack of the latter. Political stability is most likely the single biggest challenge over the years to come.

**What are you most proud of?**

“ Siemens Wind Power was successful in entering and building a strong position in some of the most promising wind markets of the African continent: Morocco and South Africa. We have been quick to respond to Egyptian energy hunger with a comprehensive framework including a significant wind pipeline.

## BASED IN: EGYPT

**FAISAL EISSA**

CHIEF OPERATING OFFICER, SOLAR SHAMS

**Why you need to know him:**

Faisal is specialised in the field of wind and solar energy generation, with a focus on the Middle East, Africa and Europe. He has 16 years of experience within the energy and electric power business.

**How will renewables compare with traditional energy in the future?**

“ The increasing price of conventional energy (for instance Egypt's recent increase in tariffs) and the reduction of subsidies for fossil fuels are making the future of renewable energy brighter and brighter. The region also has an incredible abundance of the necessary resources for renewable energy.

**What challenges do renewables face in MENAT?**

“ The lack of proper finance. Currently finance in the region is not well suited to growing renewable energy. The other thing the region needs is more connectivity between countries, with grid connections to neighbouring countries and the EU.

**BASED IN: UNITED ARAB EMIRATES**



**NOAMAN AL ADHAMI**

SENIOR DIRECTOR BUSINESS DEVELOPMENT MIDDLE EAST, VESTAS

**Why you need to know him:**

Noaman works with developers and utilities to provide technical and commercial support, and identifies new wind power projects in the early stages of development. He was previously a sales manager in the Middle East at both Alstom and Areva, where his responsibilities included bidding for and securing large projects, such as the Ras Abu Fontas IWPP in Qatar.

**What are the sector's biggest challenges?**

“ Political stability; laws and regulations pertaining to renewables; electricity and fuel subsidies; currency convertibility; technical competency and knowledge of renewables.

**What are your proudest achievements?**

“ Vestas is the most active wind energy company in the Middle East and Africa, with more than 1 GW of projects complete or under construction. We built and commissioned the Tafila 117 MW wind farm in Jordan, which was the first privately-developed wind farm in the MENA region.

**BASED IN: FRANCE**



**SÉBASTIEN ROBERT**

BUSINESS DEVELOPMENT DIRECTOR NORTH & WEST AFRICA, VESTAS

**Why you need to know him:**

Sébastien has extensive experience in the African market, serving as CEO for EDF Energies Nouvelles in Morocco, before recently joining Vestas to oversee business development in some of the company's key markets in the continent. Throughout 16 years at EDF, he exercised various roles within the French Development Department, focusing on onshore wind activity and photovoltaics. Prior to this, he was a public policy analyst in the Conseil Régional Ile de France.

**What are you most proud of?**

“ Being selected by Morocco's National Electricity Office to complete the Taza 150 MW wind farm in the first phase of The Moroccan Integrated Wind Energy Project.

**How does your experience in MENAT compare with other regions?**

“ The development of the sector is organised around big international tenders for large capacities with significant industrial integration targets. The competition is very tough.

**What is the biggest challenge?**

“ Mobilising international investments, which will amount to billions of dollars in the MENAT region in coming years.

## BASED IN: ITALY

**FRANCESCO COLELLI**

BUSINESS DEVELOPMENT SPECIALIST, ARCHIMEDE SOLAR ENERGY

**Why you need to know him:**

Francesco works for Archimede Solar in MENAT, a market leader in the production of solar receiver tubes for CSP plants.

**Where do you see the most potential in MENAT?**

“ Saudi Arabia is showing a lot of potential as projects start to get off the ground, whilst all across North Africa we are seeing countries investing in renewable energy.

**What is your current focus?**

“ We supply solar receiver tubes for CSP plants in the region, for oil, molten salt, and direct steam plants. Most of these are in the 5-10 MW range, although we also supply other larger projects. We are proud of our supply network and relationship with our customers, allowing us to sell directly without a convoluted set-up.

## BASED IN: UNITED ARAB EMIRATES

**IMAD MESELMANI**

REGIONAL SALES &amp; MARKETING MANAGER MIDDLE EAST, ABB

**Why you need to know him:**

Imad is ABB's Solar Ambassador and Area Sales Manager for MENAT. He moved from Power-One, at the time one of the largest solar inverter manufacturers, following its acquisition by ABB in 2013.

**What is the sector's biggest challenge?**

“ There are different challenges in each country in the region, it is not a uniform set of problems – however, the most common is the lack of a strong regulatory framework to allow solar and other renewables projects to be connected to the grid.

## BASED IN: UNITED ARAB EMIRATES

**KAREL DE WINTER**

GENERAL MANAGER, ALSA SOLAR SYSTEMS

**Why you need to know him:**

Karel has over 8 years of hands-on field experience in “making solar happen” in the UAE. He speaks 5 languages, and takes a keen interest in building bridges through connecting people. He has built up an extensive expertise in what it takes to initiate & run business start-ups, and create performing teams.

## BASED IN: GERMANY

**OLIVER JUST**

MANAGING DIRECTOR &amp; CFO, AVANCIS

**Why you need to know him:**

Oliver joined the management team of Advancis, which manufactures solar modules, in 2007. He previously held various management roles in the Beiersdorf Group, and worked as commercial manager in charge of Florena Cosmetic GmbH.

**BASED IN: UNITED ARAB EMIRATES**



**AHMED NADA**

VICE PRESIDENT & REGION EXECUTIVE MIDDLE EAST, FIRST SOLAR

**Why you need to know him:**

Ahmed has 20 years of experience throughout the Middle East, concentrated in the energy and power industries. He joined First Solar after 14 years with General Electric Company where he has held different positions in the Middle East and North Africa.

**BASED IN: EUROPE**



**JOHN ECCLES**

DIRECTOR BUSINESS DEVELOPMENT AFRICA, FIRST SOLAR

**Why you need to know him:**

John joined First Solar as Director of Fuel Replacement Solutions in May 2013. As of July 2016, he also took on board the role of Director, Business Development Africa. John has applied his Mechanical Engineering qualification for over 15 years within the power generation industry across the Americas, Europe, Middle East, Asia and Oceania. He has experience working with leading Original Equipment Manufacturers including GE and Alstom, Independent Power Producers and multinational EPC Contractors within the power industry.

**BASED IN: UNITED ARAB EMIRATES**



**DR. RAED BKAYRAT**

VICE PRESIDENT, BUSINESS DEVELOPMENT, MIDDLE EAST & SAUDI ARABIA, FIRST SOLAR

**Why you need to know him:**

Dr. Bkayrat has over 15 years of experience in the energy industry. He joined First Solar from the King Abdullah University of Science and Technology (KAUST), where he was responsible for creating the institution's successful Industry Collaboration Programme. Raed also spent 9 years at Siemens AG in the US and Germany working in Power conversion, mining and rail applications.

**BASED IN: GERMANY**



**STEFAN DEGENER**

HEAD OF BUSINESS DEVELOPMENT EUROPE, TURKEY & AFRICA, FIRST SOLAR

**Why you need to know him:**

Stefan has over six years of experience in the PV industry and has held various key positions at First Solar in Project Finance, Operations & Maintenance and Business Development. Prior to joining First Solar, he worked for renowned German banks and brings more than 20 years of experience in the Corporate & International Project Finance and Financial Markets.

**BASED IN: SPAIN**



**RICARDO CHOCARRO**

CHIEF EXECUTIVE OFFICER FOR EUROPE, MIDDLE EAST & AFRICA, GAMESA

**Why you need to know him:**

Under Ricardo's leadership, wind turbine specialist Gamesa says it has hit a total of 35,000 MW of turbines installed worldwide, of which 7,450 MW are wind farms the company has developed itself. The firm is also involved in PV cell manufacture and hydroelectric plant generators. Before joining Gamesa in 2005, Ricardo was a consultant at Accenture.

## BASED IN: UNITED ARAB EMIRATES

**DR. DALYA AL MUTHANNA**

PRESIDENT &amp; CEO, GE GULF

**Why you need to know her:**

Dr. Al Muthanna is responsible for developing business strategy for the Gulf region, following leadership roles as a Director and Global Growth Strategist for the Middle East, North Africa and Turkey. She joined GE in 2008 and was the first UAE national to graduate from the company's Experienced Commercial Leadership Programme, during which she received multiple awards and undertook global rotations in the US. Prior to joining GE, she founded and managed a multi-million dollar international franchise, Haya Enterprises LLC. Dalya holds a PhD from Imperial College London in business model innovation to promote a low-carbon economy in Dubai.

## BASED IN: OMAN

**MARWAN CHAAR**

DIRECTOR OF PROJECT DEVELOPMENT, GLASSPOINT SOLAR

**Why you need to know him:**

Marwan has extensive experience in the global energy sector, having held diverse finance, project management and business development roles. He is responsible for developing new solar steam generator projects for the oil and gas industry.

## BASED IN: ITALY

**DANA ALBELLA**

MARKETING MANAGER EMERGING MARKETS &amp; ITALY, JINKO SOLAR

**Why you need to know her:**

Dana is responsible for strategy and planning market activities in Latin America, MENA, and Italy, where the company is a leader in solar technology. She has been involved in renewable energy since 2008, joining Jinko in 2014.

## BASED IN: MOROCCO

**MOHAMED AADI**

BUSINESS DEVELOPMENT MANAGER NORTH AFRICA, JINKO SOLAR

**Why you need to know him:**

At Jinko, which was ranked in the top 3 PV module manufacturers in the world by Renewable Energy World in 2015, Mohamed is responsible for proposing and executing market entry strategies; establishing strategic alliances with global and local partners; building company credentials with financial institutions and investors, and engaging governments and regulatory bodies to provide adequate support to solar industry development. Mohamed previously worked for over 8 years in sales and project management positions for international EPCs and OEMs, managing key accounts for mining and utilities.

## BASED IN: EGYPT

**EMAD GHALY**

EGYPT CHIEF EXECUTIVE OFFICER, SIEMENS TECHNOLOGIES S.A.E

**Why you need to know him:**

Over a 21-year career at Siemens, Emad has held several senior managerial positions across different sectors, including: telecommunications, information technology, strategic planning and government affairs. Prior to being appointed CEO for Egypt in 2016, he was Senior Executive Vice President for Wind Power and Renewables in the Middle East, and for Power and Gas in Egypt. Emad is overseeing the Megaproject, under which, Siemens Egypt plans to install three 4.8 GW turnkey combined cycle power plants and 12 wind parks containing approximately 600 wind turbines.



**BASED IN: GERMANY**



**DR. MARKUS TACKE**

CHIEF EXECUTIVE OFFICER, SIEMENS WIND POWER & RENEWABLES DIVISION

**Why you need to know him:**

Dr. Tacke is CEO of Siemens Wind Power, which has a stated total capacity of over 27 GW through the installation of over 16,000 wind turbines. He previously served as CEO of Siemens' Industrial Power Business Unit and has been Chairman of the German Mechanical Engineering Industry Association since 2016.

**BASED IN: GERMANY**



**PIERRE-PASCAL URBON**

CHIEF EXECUTIVE OFFICER, SMA SOLAR TECHNOLOGY

**Why you need to know him:**

Pierre-Pascal was a mergers and acquisitions consultant before joining SMA, which produces and manufactures solar inverters for photovoltaic systems with grid connection, off-grid power supply and backup operations, in 2005. In 2006, he was appointed to the Managing Board. He is responsible for the company's strategic direction, finance and sales, and was presented with the 2015 CEO Award from Finance Monthly. Pierre-Pascal is member of the Board of Directors of Tigo Energy, a Silicon Valley-based Smart-Module-Technology Company.

**BASED IN: GERMANY**



**JOACHIM MAASS**

CHIEF EXECUTIVE OFFICER, SOLAR TOWER SYSTEMS GMBH

**Why you need to know him:**

Joachim co-founded Solar Tower Systems, which commissioned the first heliostat field in Saudi Arabia in 2015. The company, founded in 2009, offers patented technologies and solutions for CSP plants, in particular heliostat fields and their control systems. He has previously run his own consultancy business and worked for Heusch-Boesefeld as well as Siemens, where he took over Siemens Venture Capital GmbH (SVC) when it was founded in 1999.

**BASED IN: SPAIN**



**IÑIGO SABATER EIZAGUIRRE**

VICE PRESIDENT GLOBAL BUSINESS DEVELOPMENT, VESTAS

**Why you need to know him:**

Iñigo expands company activity into new markets for Vestas. He develops industrial and commercial strategies, aligning these with national energy policies and wind power development plans. He also serves as Vice President of the European Wind Energy Association (EWEA) and of the Spanish Wind Industrial Association (AEE) and has managed European programmes for research and technical development, including the Recovery Plan for CCS and Off-Shore Wind. He has held positions in international institutions such as the European Commission, where he was Deputy Head of the Unit for Energy Technologies and Innovation, and the International Energy Agency.



# FINANCE



BASED IN: LONDON; LAGOS; NAIROBI

**TOPE LAWANI**CO-FOUNDER & MANAGING PARTNER,  
HELIOS INVESTMENT PARTNERS**Why you need to know him:**

Tope co-founded Helios, one of the largest Africa-focused investment firms, managing funds totalling approximately \$3 billion. The firm's investments include Vivo Energy, a joint venture with Shell and the Vitol Group which serves 16 African countries including Morocco and Tunisia.

**Which markets have the most potential?**

“ In our view, distributed power is an actionable solution to the challenge of electrifying Africa and has applicability across the continent. At the moment, we are particularly excited about our solar initiatives that address the residential market in East Africa and corporate customers in West Africa.

**What is your proudest achievement in the region?**

“ Our firm is one of the few independent pan-African private investment firms founded and led by Africans. Helios introduced the telecoms tower sharing model to Africa by starting the first independent tower company, HTN Towers, and subsequently launching Helios Towers Africa (HTA), both of which have introduced market-leading energy storage and remote monitoring systems that significantly reduce diesel consumption, and increasingly rely on solar and long-life battery power. HTA has now deployed solar technology at over 300 sites across its tower portfolio.

**What are the challenges facing the sector?**

“ At the moment, many of the renewables opportunities we see are not a good fit for private equity investment. Scale is a priority for us: we care less about where we start out, and more where we can end up – so our focus is on the capacity to grow and develop a company within the requisite timeframe of a private equity fund.

BASED IN: MOROCCO

**ABDELLATIF NASSERDINE**CO-FOUNDER & MANAGING PARTNER, INFRA INVEST  
(INVESTMENT ADVISOR, ARGAN INFRASTRUCTURE FUND)**Why you need to know him:**

Abdellatif was a Project Finance Director at BMCE Bank before he co-founded Infra Invest, an affiliate company of the Moroccan insurer RMA, which is the fund manager for Argan Infrastructure Fund. Today he spearheads one of the most seasoned investment teams in energy and infrastructure equity investments in North Africa. He took the lead in securing a portfolio of strategic investments including the 120 MW Khalladi Wind Farm in Tangiers.

**Which MENAT markets excite you most?**

“ We operate principally in the Moroccan and Egyptian markets, which are both very promising. In Morocco, MASEN and ONEE, the leading public players, have given the renewable energy sector a huge boost, particularly in solar and wind. With the new target of reaching a mix of more than 50% of renewables in 2030, the Moroccan market will continue to offer one of the best investment opportunities in the region. The Egyptian market is very large with an abundance of resources, and an established feed-in tariff (FIT) programme. This enables the country to attract large investments, but political stability and currency volatility imply higher risk for investors and developers. The Tunisian market should be more attractive once the legal and regulatory framework is completed and implemented with more flexibility.

**What is the biggest challenge to the sector in the region?**

“ In Morocco, the greatest challenge will be ensuring continued large-scale investment in the grid including inter-connection with neighbouring countries. The tariffs for the second round of FIT in Egypt are not as attractive as for the first and the expected returns are not lucrative enough given the lack of visibility on the currency side.

**What are you most proud of?**

“ We are proud to have established a leading investment team in energy and infrastructure with a strong understanding of the markets in both North and Sub-Saharan Africa. We are particularly proud to have significantly contributed to the negotiation and execution of long-term bankable PPAs in accordance with the innovative 13-09 law in Morocco enabling the resale of clean megawatts generated to private end-users. We are

also hoping to announce our first scaled renewable energy project in Sub-Saharan Africa before the end of the year.

### BASED IN: UNITED ARAB EMIRATES

#### NATHAN WEATHERSTONE

HEAD OF SUSTAINABLE BUSINESS,  
NATIONAL BANK OF ABU DHABI



#### Why you need to know him:

Nathan is taking the lead on the creation of a new banking platform, with responsibility for developing and delivering the bank's flagship US\$10 billion commitment to sustainable business. He is also the Chair of the Middle East Branch of the International Project Finance Association, a non-profit association designed to encourage networking and dialogue between the public and private sectors.

#### How do you see renewables developing in the region?

“ We will see a transitional shift towards low-carbon energy, particularly PV solar at all scales. Utility-scale development will be driven by incremental energy demand allied to the economic competitiveness of solar, which will accelerate over time. An entrepreneurial approach to the off-grid and smaller-scale solar industry will emerge, catalysed by the removal of utility subsidies and a maturing and more commercial approach by regulators.

#### Are there any unique financing challenges in MENAT?

“ Headlines of record low tariffs bear little relation to what represents good value elsewhere across MENA. Governments (and their advisors) need to desist from copying IPP models in 'AA' rated jurisdictions and become more pragmatic in their approaches to unlocking the finance that underpins successful renewables procurement. More flexible approaches to exchange rate risk, interest rate risk and loan maturities will be needed to mobilise private sector capital in a significant way. Morocco has shown the way, other governments would do well to heed some of the lessons learned.

#### What is your proudest achievement?

“ 2016 was the year in which NBAD developed the architecture that forms a cohesive institutional response to the opportunities and challenges of the world's response to climate change. Global best practices in environmental risk management - like the Equator Principles - have been adopted and implemented. Public targets were set to promote sustainable business: US\$10 billion across the

next decade which provides both a direction of travel for the bank as well as a statement of strategic intent.

### BASED IN: UNITED KINGDOM

#### DIMA RIFAI

CHIEF EXECUTIVE OFFICER,  
PARADIGM CHANGE CAPITAL PARTNERS



#### Why you need to know her:

Dima has over 20 years of experience across technology, finance and sustainability, having worked at Deutsche Bank, JP Morgan, Greenwich Capital, RBS and ABN AMRO. She is on the advisory board of SolarAid, and was on the board establishing the UK's Green Investment Bank. Dima is a regular contributor at conferences on renewables, including chairing the CEO discussion panel at the Desert Energy Leadership Summit.

#### How do you see the sector developing in MENAT?

“ The advance of renewables is not just about adding new capacity – the entire power and grid infrastructure ecosystem is in the process of transformation. Much of this will be driven by new technology: dropping hardware prices and a plethora of software development for running and managing the new webbed system optimally. This is leading to the emergence of new business models and critical insights into patterns of energy consumption. I would argue that the increased role of off-grid solutions, the inevitable decline of subsidies and increased storage ability will, in many cases, make building large-scale, centralised power stations economically unviable within 5 years. The MENAT region is in a good position to lead the world in these changes.

#### What is the sector's biggest challenge?

“ Its biggest strength is its weakness: the distributed nature of renewables means that there is, for the large part, no central strategic vision for its development. This leads to a lack of visibility as to where any one component sits within the overall vision, leading to short-term viability decisions. Yet there is a dynamic structural shift underway in the generation of power, distribution and consumption which will require active collaboration and leadership to ensure that we do not invest resources and capital into what could later become stranded assets.



BASED IN: UNITED ARAB EMIRATES

**FREDERIC BOEUF**

REGIONAL DIRECTOR MENA, E.ON THIRD PARTY SERVICES

**Why you need to know him:**

Frederic Boeuf is the Regional Director MENA for E.ON's Third Party Services. He led the joint venture E.ON-Masdar Integrated Carbon to develop energy efficiency projects across the Middle East, Africa, Central and SE-Asia. Prior to joining E.ON, Frederic occupied various roles at Siemens for over 11 years, including specialisation in power plant engineering and design.

**Which markets in MENAT excite you most?**

“ Solar hybrid solutions for industrial clients will pick up, as will solar energy with storage, such as battery energy storage. Or else solar-diesel hybrids.

**What is the sector's biggest challenge?**

“ Low energy prices and subsidies make beating fossil fuels a big problem. That, and putting down a regulatory framework, but that is more manageable.

BASED IN: UNITED ARAB EMIRATES

**EDWINA KELLY**

VICE-PRESIDENT PRIVATE EQUITY, EFG HERMES

**Why you need to know her:**

Edwina specialises in wind and solar investments for EFG, which currently manages c. 500 MW of operating renewable assets in Europe. Prior to joining EFG, Edwina was responsible for the sale of over 900 MW of solar PV projects and raised project finance debt in excess of £1.6 billion.

**What unique financing challenges do renewables projects in MENAT pose?**

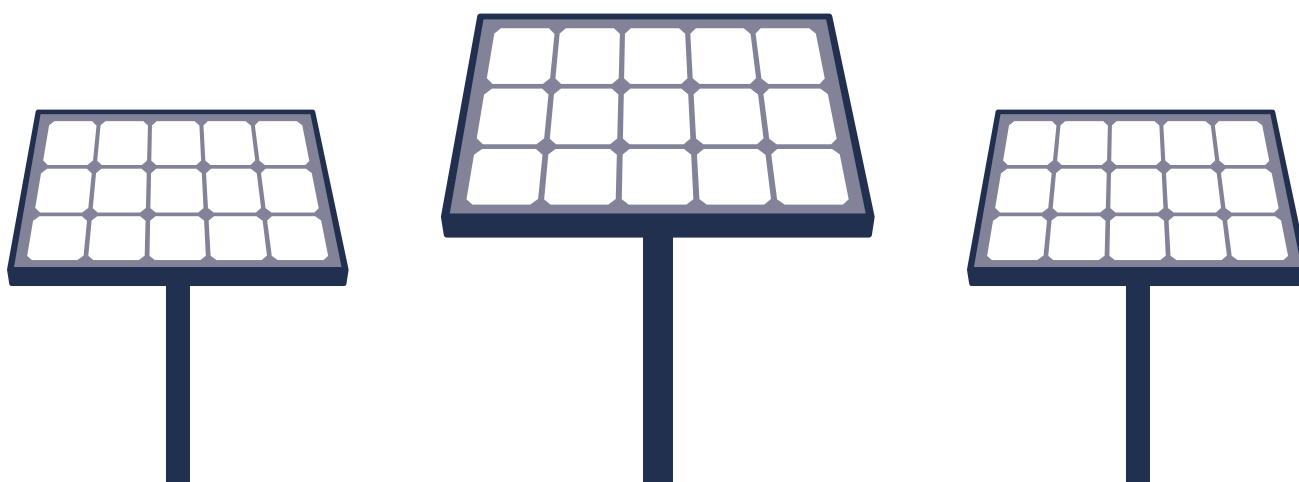
“ It really depends on the country, as these differences vary greatly across the region. As a result, I wouldn't point to any specific 'unique' challenges and instead believe that the region holds a lot of promise, although each country requires specific focus to resolve local challenges.

**What kind of projects are you currently focused on?**

“ Renewable energy, namely investing in operational projects across Europe.

Solar hybrid solutions for industrial clients will pick up, as will solar energy with storage, such as battery energy storage. Or else solar-diesel hybrids.

Frederic Boeuf



**BASED IN: MOROCCO**



**HAMZA EL KABBAJ**

INVESTMENT DIRECTOR, INFRA INVEST

**Why you need to know him:**

Hamza was a senior M&A specialist within Deloitte covering European markets before joining Infra Invest, which is the fund manager for ARIF, a generalist and Pan-African infrastructure fund. He has been extensively involved in the development and equity investment in several renewables and infrastructure projects, including the groundbreaking 120 MW Khalladi wind farm, now under construction in Morocco.

**How does your experience in MENAT compare with other regions?**

“ In comparison with Europe where legal frameworks are well established, feed-in tariffs fixed per period, permitting processes clear, and competitive financing available, it is much more complicated to develop projects in the MENAT region, with very limited visibility on the tariffs.

In Morocco, in order to sign private PPAs with industrial clients, the cost of electricity from renewables has to be cheaper than the tariff proposed by the grid operator, bearing in mind the official tariff is partially subsidised. In addition, given the complex structure of land status, securing land for a wind farm can be a very long process. Besides, in the tendering scheme, the national programmes attract significant international competition, making these processes attractive for international utility companies only.

In Egypt, an ambitious FIT programme was launched in 2014 with limited success in its first round, mainly related to EGP to USD conversion risk in a difficult macro-economic situation.

In Tunisia, the legal framework allows only for auto-consumption from power projects by the grid, and does not yet allow private producers for third-party consumers. A feed-in tariff is currently being put in place and is likely to attract multiple investors.

**What do you see as the sector's biggest challenge?**

“ The same as it is worldwide: intermittency of production. Building a regionally integrated grid, with additional interconnections between MENAT and Europe, is also a challenge to address in order to be able to inject more renewables into the grid.

**BASED IN: UNITED ARAB EMIRATES**



**CHRISTOPHER CANTELM**

PRINCIPAL INVESTMENT OFFICER, INFRASTRUCTURE & NATURAL RESOURCES,  
INTERNATIONAL FINANCE CORPORATION

**Why you need to know him:**

Christopher is responsible for origination and execution of IFC's debt and equity investments in the power, water and infra sectors across the MENA region, notably creating innovative financing solutions for Jordan's Round 1 and Round 2 Solar PV renewables programme. Prior to IFC, he served in the leadership teams as Director at Mubadala GE Capital and Vice President at Marubeni, heading project finance for both companies, operating across the Middle East, Africa and Europe. During the 1990s, he served as a project finance banker at Citibank, SMBC and OPIC, as well as the UN's Head Engineer in Northern Iraq during the Kurdish relief efforts immediately following the First Gulf War in 1991.

**Which markets in MENAT excite you most?**

“ Pakistan, Dubai and Abu Dhabi, Oman, Kuwait, and Saudi Arabia have potential. In North Africa, Egypt has huge potential, but there are issues. Iraq and Iran are massive markets too. We are focusing on Pakistan, and the more developed markets, such as Jordan, where renewables are a big market. We are trying to work in Egypt, but it is challenging.

**What is the biggest challenge to the sector?**

“ It depends on the country; Jordan, UAE, and Morocco are new to renewables success. Other markets which could have potential are still waiting for appropriate programmes for bankable structures to be put in place, requiring drive and commitment from government.

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**BASED IN: UNITED ARAB EMIRATES**


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**ERIK BECKER**

MANAGER FOR INFRASTRUCTURE & NATURAL RESOURCES MENA,  
INTERNATIONAL FINANCE CORPORATION

**Why you need to know him:**

Erik has much experience in infrastructure finance, mostly working on the Middle East, with extended stints in Washington, Nairobi, Dubai, and, most recently, Hong Kong where he led IFC's efforts in the power sector in East Asia and the Pacific.

**What financing challenges do renewables projects in MENAT pose?**

“ The abundance of low-cost, often subsidised, fossil fuel creates an artificially low and challenging pricing benchmark for renewable energy sources to reach. At the same time political instability is limiting the availability of project financing.

**What are your proudest achievements in the region?**

“ Financing most of the Jordanian renewable energy projects, including the standard-setting Tafila wind project as well as the Seven Sisters solar plants.

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**BASED IN: SPAIN**


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**GRANT GREATREX**

CO-FOUNDER & SENIOR PARTNER, MAC GROUP

**Why you need to know him:**

Grant heads up MaC Group's renewable energy advisory division, specialising in clean technology markets worldwide. He has significant experience in inward investment in MENAT.

**Which markets in MENAT excite you most?**

“ The countries with greatest potential, where I see at least 5 GW being installed in the next five years would be Iran, Egypt, Saudi Arabia, and Turkey.

**What is the biggest challenge to the sector?**

“ The biggest challenges are moving up the learning curve for local and regional banks in terms of know-how and resources, as well as building up the local pool of human resources with the requisite skills across the full renewable energy value chain. The key focus should be on leveraging multilateral lenders and export credit agencies to build up confidence in the financing markets, as well as investing in training, skills and know-how transfer for local resources.

The biggest challenges are moving up the learning curve for local and regional banks in terms of know-how and resources, as well as building up the local pool of human resources with the requisite skills across the full renewable energy value chain. The key focus should be on leveraging multilateral lenders and export credit agencies to build up confidence in the financing markets, as well as investing in training, skills and know-how transfer for local resources.

Grant Greatrex

BASED IN: GERMANY



## TOBIAS GRIMM

DEPUTY HEAD OF THE CORPORATE CLIMATE CENTRE, MUNICH RE

### Why you need to know him:

Tobias is a geographer and meteorologist. In his current capacity, he is in charge of developing Munich Re's strategic approach to climate change and its impact on the insurance industry. He joined the company as a consultant for storm, weather and climate risks. He became involved in the newly founded Corporate Climate Centre in 2008, before being appointed its Deputy Head the following year. In 2009, he co-initiated the foundation of the Desertec Industrial Initiative (Dii) and contributed significantly to its progress. Today, he is engaged in finding new business models in the changing climate and energy landscape.

### Are there any unique challenges posed by renewables projects in MENAT from a financing perspective?

“ Political stability is key for attracting investments in the renewables sector. Also, in markets that are more familiar with the fossil fuel industry, a professional and comprehensive analysis of risks is essential to establish new technologies. From a purely economic perspective, however, wind and solar are in many cases already more than competitive than non-renewables.

### What are you most proud of?

“ Supporting primary insurance companies and national/ international corporations to enhance their natural catastrophe risk management and know-how and thus their financial capacity.

BASED IN: GERMANY



## STEPHAN LÄMMLE

CHIEF UNDERWRITING OFFICER, MUNICH RE CORPORATE INSURANCE PARTNER

### Why you need to know him:

Stephan trained as a mechanical engineer, specialising in large power plants, and worked in the power industry before joining Munich RE in 1995. Today he is Chief Underwriting Officer and head of the engineering department at Munich RE's Corporate Insurance Partner. His division provides risk transfer solutions along the whole value chain for renewable energy projects, and tailor-made insurance products for sustainable power plant development and operations worldwide.

### Which markets in MENAT have the most potential?

“ Countries which have support schemes and tenders in order to make renewable energy investment more attractive, including Algeria, Morocco, Turkey, Egypt, Saudi Arabia and the United Arab Emirates.

### What are the biggest challenges facing the sector?

“ Since fossil fuels rely on more established technologies, one of the main barriers for investment in renewables is a lack of know-how. There is also a large disparity in the initial assets investment, favouring primary fuels over renewable energy investments. In order to reach grid stability with higher renewables penetration, more robust grid infrastructure, energy management and grid resilience is required. Installation can be problematic since renewable power systems are often constructed in less solicited areas, such as deserts, with little to no existing infrastructure, accompanied with concealed risk exposures requiring specialist expertise.

BASED IN: UNITED ARAB EMIRATES



## FRANK BECKERS

MANAGING DIRECTOR, HEAD OF PROJECT FINANCE ADVISORY, NATIONAL BANK OF ABU DHABI

### Why you need to know him:

Frank joined the National Bank of Abu Dhabi (NBAD) from McKinsey & Company where he worked in infrastructure, energy finance and public-private partnerships. Prior to this he worked for Deutsche Bank and DEG (KfW-Group).

### How does your experience in MENAT compare with other regions?

“ The region is in abundance of renewable energy resources (solar radiation in particular) and space, two important prerequisites for the successful development of utility-scale facilities. While Europe is lacking sites for the development of large-scale projects, it has demonstrated how a well-structured regulatory framework can support individual investments in renewable energy, for example via rooftop instalments. The huge potential of the MENAT region will certainly be unlocked with the further development of an enabling policy environment.

### What are the biggest challenges to renewables in MENAT?

“ To develop and implement renewable energy as well as energy efficiency strategies and policy frameworks that not only focus on production but also set incentives for R&D and, even more importantly, for saving electricity and scarce resources like fresh water.



The EU- GCC Clean Energy Network was created in 2010 as a response to the interest in the EU and in the GCC for clean energy cooperation.

The network is an informal platform with an inclusive membership approach, ensuring a broad participation of stakeholders from the public and private sector both in the EU and GCC Countries.

An important aspect of the network is to bring parties and organizations together to exchange experiences and best practices.

### Focus Areas

- Renewable Energy Sources;
- Energy Efficiency & Demand Side Management;
- Clean Natural Gas & related Clean Technologies;
- Electricity Interconnections & Market Integration;
- Carbon Capture & Storage.

### Cooperation Opportunities

- Exchange of experiences and know-how as well as sharing of best practices;
- Experts' meetings and information exchange;
- Development of relevant studies and targeted publications;
- Coordination and promotion of joint actions between the EU and GCC stakeholders;
- Facilitation of joint research, demonstration and development initiatives.



BASED IN: INDIA



**ANAND KRISHNA ROHATGI**

SENIOR VICE PRESIDENT & DIRECTOR, SYNERGY CONSULTING INC.

**Why you need to know him:**

Anand has over 12 years of experience in project financing, financial analysis and restructuring across MENA, India and South East Asia. He is a senior member of Synergy, which provides financial and transaction advisory services to international clients, notably having provided financial modelling & audit, contract design and analysis for the Shams 1 CSP project.

**What is the future of renewables growth in MENAT?**

“ We have heard people saying renewables are unreliable, but projects are continually being completed successfully. There will be sustained optimisation due to falling prices, especially in solar PV. Consolidation will occur, leaving the companies with the best financial backing still standing.

**What is the sector's biggest challenge?**

“ The biggest challenge I see is in taking projects to utility scale, but we believe that solar PV with energy storage will make the leap with the appropriate technical advances.

BASED IN: UNITED ARAB EMIRATES

**MOHAMED WEFATI**

MANAGING PARTNER, ARBAH CAPITAL

**Why you need to know him:**

Mohamed leads a firm with extensive experience in financing infrastructure projects and which specialises in IPOs, brokerage and financial products focused on Saudi Arabia. He was previously a partner at management consulting firm Horizons DSC working with institutions such as the World Bank and the African Development Bank.

**Which markets in MENAT do you believe have the most potential in the next five years?**

“ Dubai, clearly, with Jordan and Egypt after that. Dubai is democratised, and the most sophisticated market in terms of infrastructure. There is significant interest in renewable energy here. The trouble with Egypt is that investors are wary of committing there.

**What do you see as the biggest challenge renewable energy faces in MENAT?**

“ Misconceptions on the part of commercial banks about the risks, and the misplaced belief that renewables technology is new and untested.

We have heard people saying renewables are unreliable, but projects are continually being completed successfully. There will be sustained optimisation due to falling prices, especially in solar PV. Consolidation will occur, leaving the companies with the best financial backing still standing.

Anand Krishna Rohatgi

## BASED IN: UNITED ARAB EMIRATES

**WALID CHAMMAH**

PORTFOLIO MANAGEMENT, ABU DHABI GROUP

**Why you need to know him:**

Walid manages portfolios at the Abu Dhabi Group, which provides services in the field of geophysical exploration, including environmental studies. He was Chairman and Co-President of Morgan Stanley International and served as a member of the Management and Operating Committees, becoming a senior advisor to the firm upon his retirement in 2012.

## BASED IN: JORDAN

**ENNIS RIMAWI**

FOUNDER &amp; MANAGING DIRECTOR, CATALYST MENA CLEAN ENERGY FUND

**Why you need to know him:**

Ennis founded Catalyst Private Equity (Catalyst Investment Management), the lead developer of the 23 MW PV IPP Falcon Ma'an project in Jordan, as well as a co-developer of a 34 MW PV project for Orange Jordan and a 14 MW PV project for the Hospitality sector. The company recently launched their second fund, the Catalyst MENA Clean Energy Fund, backed by several European government related investors. He is the Chairman of Millennium Energy Industries, which successfully engineered and installed a 25 MW plant in Saudi Arabia. It was the world's largest solar district heating system at the time of its construction, and won the Global District Energy Association award.

## BASED IN: UNITED STATES OF AMERICA

**MIKE ECKHART**

MANAGING DIRECTOR ENVIRONMENTAL FINANCE &amp; SUSTAINABILITY, CITIBANK

**Why you need to know him:**

Mike supports Citi's goal to be the leading financial services firm in renewable energy, energy efficiency, and clean water. He is a member of the Steering Committee at REN 21, which is a global policy network in renewable energy, is on the Renewable Industry Advisory Board of the International Energy Agency, and is an Observer to the International Renewable Energy Agency (IRENA). He was founding President of the American Council on Renewable Energy (ACORE), and developed financing for solar energy under the SolarBank Initiative in South Africa and India.

## BASED IN: UNITED ARAB EMIRATES

**BRYANNE TAIT**

SENIOR OPERATIONS OFFICER, REGIONAL LEAD CLEAN ENERGY &amp; RESOURCE EFFICIENCY, INTERNATIONAL FINANCE CORPORATION (IFC)

**Why you need to know her:**

Bryanne is in charge of IFC's Energy & Resource Efficiency Advisory Services for the MENA Region. With nearly 20 years of energy and infrastructure experience, she spent the bulk of her career working for Shell International Group of Companies on various international assignments, including developing and implementing over 2,400 MW of wind power projects. She took leave from IFC from 2011- 2013 serving as the Senior Project Development Manager for a start-up joint venture between E.ON and Masdar focusing on developing waste heat recovery and flare gas conversion projects in the power generation, oil & gas, cement, and steel sectors.

**BASED IN: UNITED STATES OF AMERICA**

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**MOËZ CHERIF**

SENIOR ENERGY ECONOMIST, WORLD BANK

**Why you need to know him:**

Based in Washington and focusing on the Maghreb region, Moëz has 20 years' experience in the energy sector, starting out as an energy market analyst before joining the World Bank Group in 2005. He worked for over seven years in West and Central Africa on the development of hydropower and gas-to-power projects, and on rehabilitation and reform of power utilities. His current work in the Maghreb is focused on promoting and financing renewable energy, the Tunisia-Italy interconnector project and on energy subsidy reform.

**BASED IN: JORDAN**

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**FADI KHALIL**

HEAD OF PROJECT FINANCE & SYNDICATIONS, JORDAN KUWAIT BANK

**Why you need to know him:**

Fadi is in charge of the Finance and Syndications department, which offers large-sum loans comprised of the bank's funds and those it mobilises from third party investors. The establishment of a syndicate of banks facilitates larger loans and the sharing of commercial credit risk between lenders.

**BASED IN: SOUTH AFRICA**

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**EMILE MALAN**

PRINCIPAL, ENERGY, NEDBANK CAPITAL

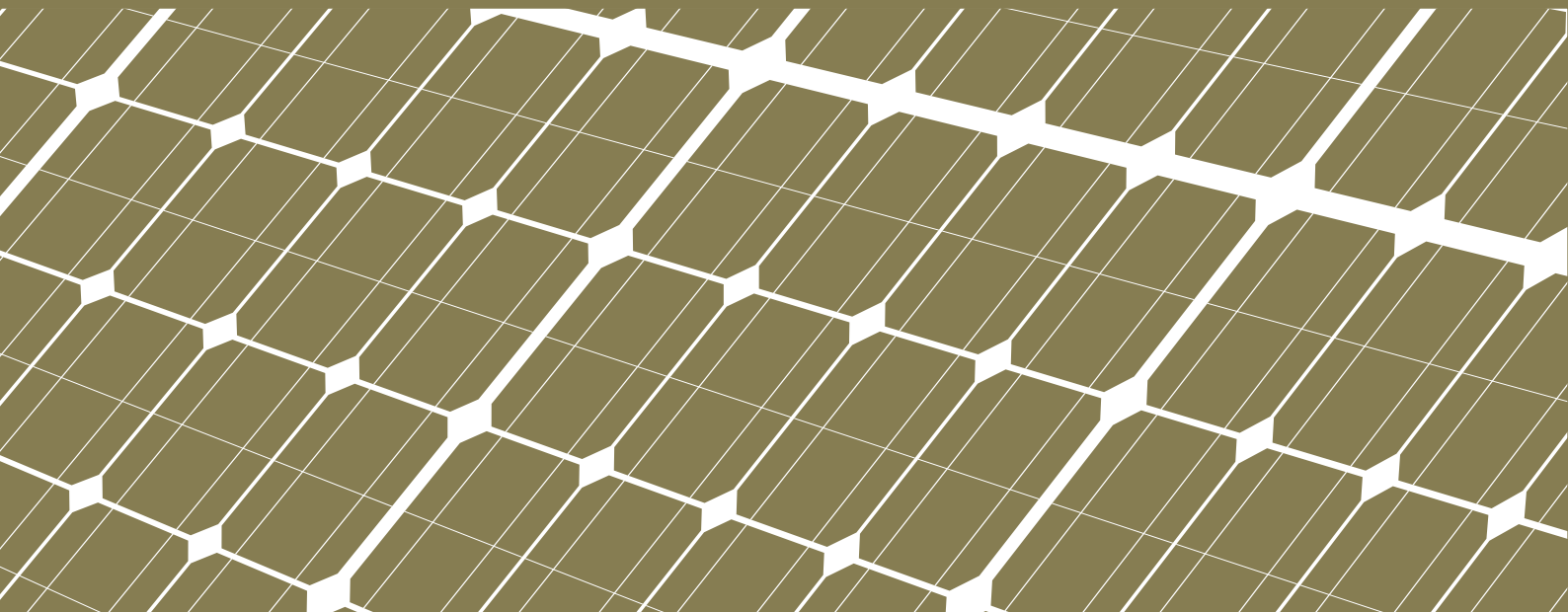
**Why you need to know him:**

Emile leads the Energy Team within the Infrastructure, Energy and Telecommunications department at Nedbank, serving as an intermediary between financial services and the energy industry. The company, last year named as Bank of the Year for Africa by the Financial Times, prides itself on its support for sustainability and environmental responsibility. It was one of the lenders for the Ilanga 1 100 MW parabolic trough CSP plant in South Africa and the 310 MW Lake Turkana Wind Power Project in Kenya, which is set to be the largest wind farm in Sub-Saharan Africa.





# PROFESSIONAL SERVICES





## BASED IN: UNITED ARAB EMIRATES

**DEREK KIRTON**INTERNATIONAL PARTNER,  
CHADBOURNE & PARKE LLP**Why you need to know him:**

Derek's advisory practice covers solar, wind, geothermal, coal-fired, gas-fired, water, wastewater, oil and gas and infrastructure projects across MENAT. He is currently advising the Kuwaiti government on procuring IPPs and sits on the board of directors for the Middle East Solar Industry Association (MESIA) as its legal director.

**What are the most critical legal issues facing renewables?**

“ Establishing clear regulatory frameworks, which present a fair allocation of risks among stakeholders, continues to be a critical factor in maintaining investor confidence and ensuring lenders' credit risk assessments are satisfied.

The region has historically adopted the independent power producer (IPP) model for large-scale power projects with established contractual frameworks; however, new market structures need to be facilitated, such as distributed solar generation, through regulatory reform.

**Which markets within MENAT do you think have the most potential?**

“ In no particular order, the Kingdom of Saudi Arabia, Jordan and Egypt continue to have the most potential. Each of these countries has had delays and set-backs, however, solar power will continue to have the most potential in countries with high demand growth and where high subsidies mask the true cost of power from non-renewable sources. For Saudi Arabia, the high cost of burning fossil fuels against low consumer electricity prices and nearly double-digit demand growth year-on-year, it is not a question of if Saudi Arabia reaches its solar potential, but when.

## BASED: GLOBALLY; HOME IS UNITED KINGDOM

**MICHELLE DAVIES**HEAD OF CLEAN ENERGY & RENEWABLES,  
EVERSHEDS**Why you need to know her:**

Michelle has advised on some of the world's largest renewables transactions and regularly advises companies, funds and governments on their clean energy strategy. She was awarded MENA Solar Woman of the Year two years running, and her team has won MESIA Solar Team of the Year and MENASOL Advisory Team of the Year. Michelle writes regularly on the opportunities and challenges facing the sector and is a regular speaker at conferences including the World Future Energy Summit in Abu Dhabi. She is active in policy and regulation, sitting on a number of boards including the Middle East Solar Industry Association (MESIA), BPVA, Climate Bond Initiative and REA Finance Group. Michelle is also qualified in New York and is a Fulbright Scholar.

**What is the sector's biggest challenge?**

“ The challenges tend to fall into two categories depending on the country. The first is the need for the programme to be bankable to an international standard. In less developed renewables markets this can require the input of the finance and/or investment ministries as well as the energy ministry.

The second challenge applies in more mature markets – price competition. In these instances our role is to help reduce bid and project costs including financing, EPC and O&M costs, which requires us to standardise as much as possible and to properly profile the different risks to help our clients win bids while retaining the required return on investment.

**How does MENAT compare with other regions?**

“ We have found MENAT to be a region which adapts quickly to sector development; IPP programmes are not entirely new and this has undoubtedly helped. In addition the region is used to securing international investment. There are, however, a small number of countries which have been surprisingly slow to adapt, but it is clear that they have the potential to deliver successful programmes and opportunities for the sector as a whole.

BASED IN: UNITED ARAB EMIRATES

**TIM ARMSBY**

PARTNER MIDDLE EAST,  
EVERSHEDS



**Why you need to know him:**

Tim has been advising on transactions in the Middle East for more than fifteen years. He has advised on many significant energy projects in the region including the first IPP (Manah power plant in Oman) and more recent renewable energy projects such as the record breaking DEWA PV project in Dubai.

**Which markets in MENAT have most potential?**

“ Despite the current challenges with its feed-in tariff (FIT) programme, Egypt still needs a huge amount of energy for its large population. Its solar and wind resources are as good as anywhere, giving it the potential it needs. Saudi Arabia is the other significant one - though the pace is slow, it needs renewables to diversify its energy mix away from liquid fuels.

**What is the sector's biggest challenge?**

“ Lack of regulation. Morocco, Jordan and Egypt made the effort to establish a regulatory framework to encourage renewable energy projects and have benefited from this. The key is to use regulation to simplify the process for all parties to reduce the investment of time and cost.

BASED IN: UNITED ARAB EMIRATES

**SIMON BANGS**

MANAGING DIRECTOR,  
SUSTAINABLE RECRUITMENT SOLUTIONS



**Why you need to know him:**

Simon is the Middle East's leading recruiter for the renewables sector, and has been hiring staff across the global sustainability & renewable Energy industry for the last decade. Before founding Sustainable Recruitment Solutions, he led UK-based recruiter Allen & York's business in the region. He presented on the subject of localising and building staffing capacity at Dii's Desert Energy Leadership Summit in 2015.

**What is the sector's biggest challenge?**

“ Certainty. With ever-changing national policies, targets and commitments, the ability for companies to understand their growth potential and plan their HR strategies is limited. A number of companies have previously invested in staff in the region only to pull them out when they did not get the expected returns. The previous 41 GW target from K.A.CARE hit confidence in investing in the region significantly.

**Which are the most promising markets?**

“ From a job stimulation perspective Dubai is the obvious short-term answer – reflecting its status as a corporate hub and example for the region. In contrast, the capacity to employ local engineers improves dramatically when you look at operations in Saudi Arabia, Morocco, Jordan and Egypt - particularly when employers are happy to invest in training staff in return for longevity of employment.

**How soon will renewables begin to overtake fossil fuels in MENAT?**

“ It is starting to happen now. I think in another two years we will be reaching the “no-brainer” stage as we see more utility-scale projects coming online and generating viable, cost-effective energy. At the current point in time the belief in LCOE competitive renewable energy is growing but this will skyrocket if the likes of ACWA, ALJ and Masdar can disprove the naysayers and evidence the financial returns they are making from their record low prices.

## BASED IN: UNITED ARAB EMIRATES

**MHAIRI MAIN GARCIA**

VICE CHAIR, CLEAN ENERGY BUSINESS COUNCIL, ASHURST

**Why you need to know her:**

Mhairi has a particular interest in renewable energy, advising on solar (PV and CSP), wind and waste-to-energy projects. She has extensive experience in MENA projects and is recognised as one of six leading UAE-based international lawyers by MEED.

**How does your experience in MENAT compare with other regions?**

“Renewable energy is relatively new in the region; it is a nascent market, especially compared to Europe and North America. There is a steep learning curve for the governments which are starting to encourage and invest in renewable energy.

**What do you see as the biggest challenge renewable energy faces in MENAT?**

“The challenge is twofold; regulation is the biggest, while subsidies tie into this, as they make it difficult for renewables to compete. The lack of fiscal incentives in MENAT has traditionally made it very difficult to develop large-scale renewables projects; however, the rapid growth in projects and setting of ambitious targets demonstrates that these challenges can be overcome.

## BASED IN: UNITED KINGDOM

**MARC FÈVRE**

PARTNER, ENERGY &amp; INFRASTRUCTURE, BAKER &amp; MCKENZIE

**Why you need to know him:**

Marc has advised the Office National de l'Electricite et de l'Eau Potable (ONEE) of Morocco on the country's 850 MW wind energy programme. He specialises in advising clients on "first-in-kind" projects in the energy and infrastructure sector, with a particular focus on renewable energy. This includes helping structure projects so that they meet both local development objectives and the requirements of international investors and lenders. He has over 16 years of experience working in the Middle East and Africa as well as Asia and Europe.

**What is the sector's biggest challenge?**

“The renewables sector is in transition, moving from a subsidy-based industry to one that needs to stand on its own two feet against conventional sources of energy. From a legal perspective, the challenge is to ensure sufficiently certain legal and regulatory frameworks and contractual arrangements that attract long-term investors. One of the current commercial challenges for investors in MENAT is competitive bid processes with high bid costs for all participants and returns driven down for the winner to the point that some in the sector are querying whether the projects will be sustainable in the long run.

**What is the future of renewables growth?**

“Renewable energy is one of the leading sources of new energy projects in MENAT, particularly for countries with few oil and gas reserves, as well as oil-rich countries looking to diversify their options, keeping oil revenues for exports. Renewables is therefore no longer an alternative, but a key part of the energy mix, particularly as costs continue to fall.

BASED IN: UNITED ARAB EMIRATES



**CLINT STEYN**

PARTNER, BRACEWELL LLP

**Why you need to know him:**

Clint has advised on many of the leading renewable energy projects in the MENAT region. He has advised clients on the acquisition, development and project financing of renewables projects in all the key regional markets including Jordan, Dubai, Abu Dhabi, Kuwait and Egypt.

**Where do you see the most potential in MENAT?**

“Dubai and Abu Dhabi will continue to be active with large-scale competitively-tendered projects. Jordan has been successful with their renewables programme with a number of new wind projects nearing financial close. Though there have been false starts, Saudi Arabia has big potential. Egypt needs to deliver on its very ambitious plans after a number of hiccups. Pakistan has potential and a track record of implementing IPPs.

**What is your proudest achievement?**

“We have done some great work supporting clients on renewables bids and developments in the region. We also played a material role supporting the recent establishment of a major new renewables developer based in the region.

BASED IN: UNITED ARAB EMIRATES



**MARC NORMAN**

ASSOCIATE, CHADBOURNE & PARKE

**Why you need to know him:**

Marc is a lawyer who focuses on project finance and acquisitions in the energy, mining and infrastructure sectors. Marc served two terms as a board member of the Middle East Solar Industry Association (MESIA) promoting the development of solar power in the MENAT region.

**Which markets in MENAT have the most potential in the next five years?**

“Focusing on renewable energy, Morocco, Saudi Arabia, Egypt and Turkey would top my list. Morocco will likely continue to be a driving regional force, particularly given MASEN's recently increased mandate. Nobody doubts Saudi Arabia, however, given sluggish progress, market observers will want clarity on which body will lead the programme.

**What is your proudest achievement?**

“Mainly, advising some of the sector's leading players on some of the most important projects in the MENAT region. The calibre of our clients and our track record of successfully closing complex, and often first-of-a-kind, transactions are a source of pride.

Dubai and Abu Dhabi will continue to be active with large-scale competitively-tendered projects. Jordan has been successful with their renewables programme with a number of new wind projects nearing financial close. Though there have been false starts, Saudi Arabia has big potential.

Clint Steyn

## BASED IN: UNITED ARAB EMIRATES

**GUS SCHELLEKENS**

PARTNER, EY CLEAN ENERGY &amp; SUSTAINABILITY SERVICES, ERNST &amp; YOUNG

**Why you need to know him:**

Gus has been working across MENA since 2010 on a range of sustainability projects, with a particular interest in supporting green growth and renewable energy initiatives by government and private sector organisations.

**What is the biggest challenge facing MENAT renewables?**

“Getting the business, and in particular the financial, community to understand that renewable energy is a viable and cost-effective alternative in the region that is worth investing in. Also, getting governments to provide stable and credible long-term signals that they are serious about promoting renewable energy as a core part of future economic development plans.

**How does MENAT compare with other regions?**

“MENAT is a unique region with many characteristics that cannot easily be compared to other regions. It is however keen to learn from experiences in other parts of the world and hopefully this trait will allow it to make faster progress on this agenda in the coming years.

## BASED IN: UNITED ARAB EMIRATES

**GURMEET KAUR**

PARTNER, EVERSHEDES

**Why you need to know her:**

Gurmeet is responsible for advising on projects in the Middle East for Eversheds, which last year supported bidders on the 200 MW solar IPP in Dubai, numerous developers on the FIT tariff programme in Egypt and Rounds 1 and 2 of the renewable programme in Jordan. She is currently a board member of the Middle East Solar Industry Association (MESIA), having been present in the region since 2007.

**What are the critical legal issues in the area?**

“The region's challenges are centred on bankability and regulatory issues. When governmental support for financing is insufficient and the regulatory framework is not robust it makes closing projects very difficult.

**What are you most proud of?**

“Winning MESIA Law Firm of the Year and Project Finance Advisor of the Year from MENASOL, for helping to structure and close many projects in the Middle East, which have enabled the creation of a bankable model in the region.

## BASED IN: UNITED KINGDOM

**INDRAJ MANGRAT**

PARTNER, EVERSHEDES

**Why you need to know him:**

Indraj is the Head of Eversheds' Clean Energy Project Finance Team. He helped advise over 60% of the sponsors in the Egyptian wind and solar programme as well as solar and wind projects in Tunisia, and has experience in all renewable technologies including wind (on shore and offshore), solar, biomass and wave.

**What are you most proud of?**

“Our position on the Egyptian programme - we were integral in getting it off the ground, but it is still warming up.

**What is the future of MENAT renewables?**

“Saudi Arabia's interest in renewables is back on the agenda and it is clearly a market to watch.



BASED IN: UNITED KINGDOM



**ROBERT PITCHER**

PARTNER & HEAD OF ENERGY SECTOR, EVERSHEDES

**Why you need to know him:**

Robert specialises in corporate finance, and leads one of the largest clean energy teams in the country. He has advised on multi-billion dollar acquisitions and is experienced in working across multiple jurisdictions. His sector focuses on financial institutions and energy.

**Which markets within MENAT do you think have the most potential in the next five years?**

“ There are many opportunities in Egypt, Jordan is growing, and there is a 200 MW project we are involved in in Saudi Arabia. In North Africa, we are seeing burgeoning interest in Algeria and Tunisia.

**What do you see as the biggest challenge renewable energy faces in MENAT?**

“ Storage needs, due to the intermittency of energy sources. But there is a strong focus on the development of technical solutions for these problems.

BASED IN: UNITED ARAB EMIRATES



**PAUL MANSOURI**

PARTNER, NORTON ROSE FULBRIGHT

**Why you need to know him:**

Paul has extensive experience in public-private partnerships (PPP) and project finance transactions with a focus on the energy, renewables and infrastructure sectors. His recent experience includes advising the Dubai Electricity and Water Authority (DEWA) in relation to the 200 MW Phase II and 800 MW Phase III power projects, part of the Sheikh Mohammed Bin Rashid Al Maktoum Solar Park in Dubai. Paul has also recently advised sponsors on one of the first renewable projects to achieve financial close under the Egyptian Feed-in-Tariff programme with limited recourse finance, and is currently advising developers and lenders on a number of wind and solar projects in Jordan and Saudi Arabia.

**How do you see renewables developing in the MENAT region?**

“ The UAE, Morocco and Jordan in particular have led the way in implementing ambitious renewables programmes. Egypt and Saudi Arabia are also now delivering projects. With the falling cost of renewable energy, the trend for increased capacity in the Middle East will continue.

**What do you see as the single biggest challenge?**

“ There are technical challenges linked to the climate and required enhancement to grid infrastructure, but it will be important to maintain both the political and economic support for delivering renewable projects when a subsidised fossil fuel economy continues throughout parts of the region.

## BASED IN: AUSTRALIA

**SIMON CURRIE**

GLOBAL HEAD OF ENERGY, NORTON ROSE FULBRIGHT

**Why you need to know him:**

Simon has helped advise the Moroccan Agency for Solar Energy (MASEN) on developing its \$9 billion solar plan, part of the country's aim to source 42% of energy consumption from renewables by 2020.

**Which markets within MENAT excite you most?**

“ Morocco continues to be the number one market in terms of stability and ongoing potential. Leaps and bounds are being made in Dubai and Abu Dhabi, and we are waiting on Saudi Arabia and Egypt with bated breath. Jordan has done a great job recently and will reap the benefits.

**What is the biggest issue facing the sector?**

“ Stability, it is all about stability. Where it is found in the Middle East, tariffs are driven down to the lowest they have been. It does not need to be perfect, just stable, and people will come.

## BASED IN: UNITED KINGDOM

**JAMIE TAYLOR**

MANAGING CONSULTANT, TAYLOR HOPKINSON ASSOCIATES

**Why you need to know him:**

Jamie leads THA's solar activity across international markets with a particular focus on the Europe, Middle East and Africa Region (EMEA). Current efforts are focused around the ever-growing solar market in MENA, where he is working closely with the leading local and international companies.

**Where do you see most potential in MENAT in the near future?**

“ There are so many interesting markets within this region, but we are currently seeing a lot of activity in Egypt, and a number of key players interested in this market. Saudi Arabia will undoubtedly be a key market due to significant renewable energy targets, and the UAE is the epicentre of this region where the bulk of our MENA clients are based, with the majority of our recruitment efforts being carried out here.

**What is the biggest challenge for renewables in MENAT?**

“ Whilst there are many challenges for the industry within this region, one which is particularly important to address is the skills gap that exists locally, i.e. although there are transferable skills, there is not the level of experience and knowledge that exists in more mature markets such as Europe and North America. Therefore, companies like THA are necessary to facilitate the sourcing and onboarding of required talent to address these shortages.

Whilst there are many challenges for the industry within this region, one which is particularly important to address is the skills gap that exists locally, i.e. although there are transferable skills, there is not the level of experience and knowledge that exists in more mature markets such as Europe and North America.

Jamie Taylor

**BASED IN: UNITED ARAB EMIRATES**

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**ROBERT HARKER**

PARTNER, BRACEWELL LLP

**Why you need to know him:**

Robert Harker is a project finance lawyer who is based in Bracewell's Dubai office. He has extensive experience in advising lenders, financial institutions, ECAs / DFIs and sponsors on project finance structures, including for some of the landmark renewable energy deals in the region. Before joining Bracewell he was a managing associate at Linklaters.

**BASED IN: UNITED ARAB EMIRATES**

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**LUCY KAMAU**

PROJECT MANAGER, DMG EVENTS MIDDLE EAST, ASIA & AFRICA

**Why you need to know her:**

Lucy is involved in 'powering the future' projects through renewable energy at dmg events. Her portfolio includes Intersolar Middle East, the Global Solar Leaders' Summit in Dubai and the Africa Renewable Energy Leaders' Summit in Kenya. Dmg events Middle East has operated since 1995 delivering events and publications across several industries.

**BASED IN: FRANCE**

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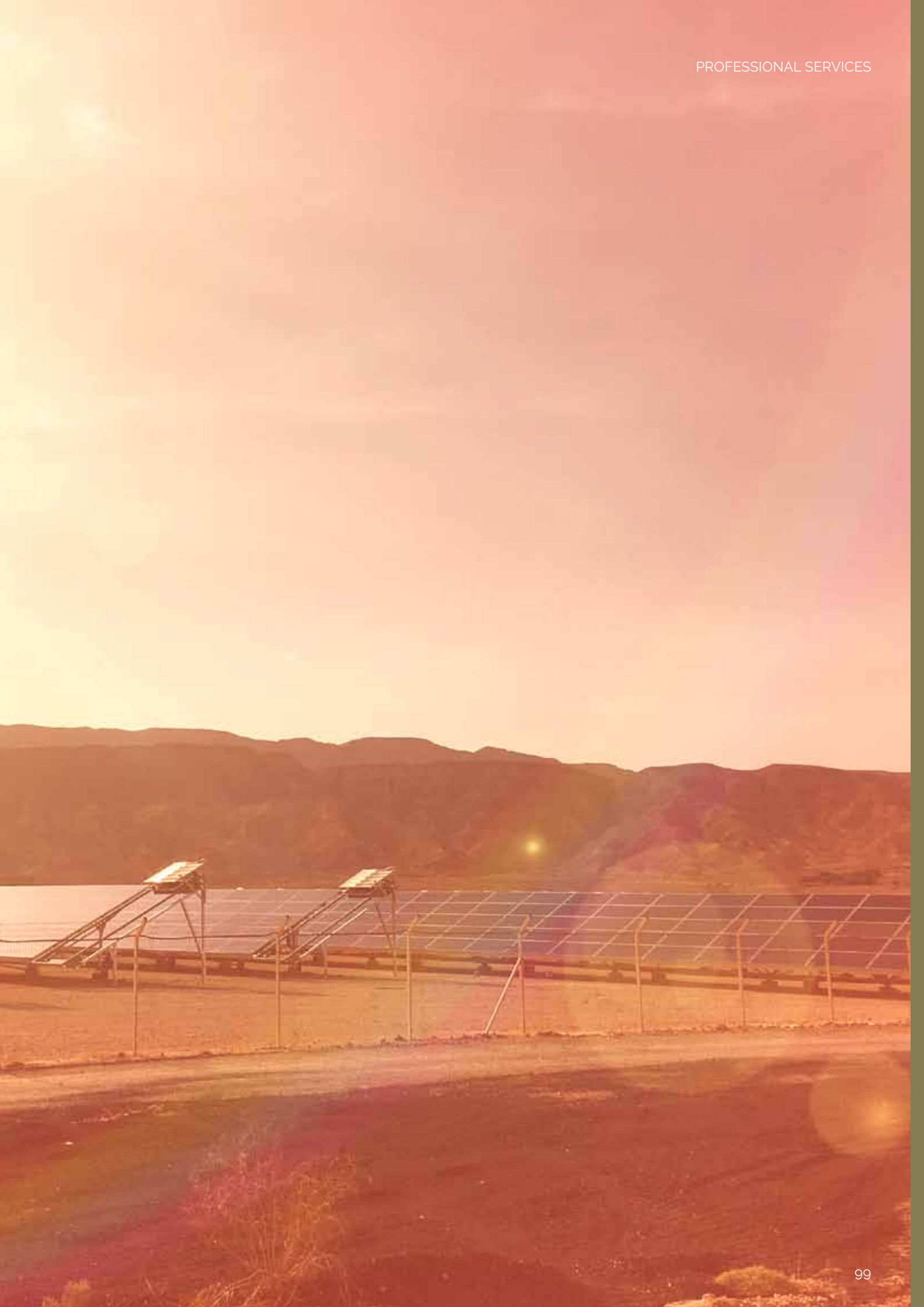


**ANNE LAPIERRE**

HEAD OF ENERGY EMEA, NORTON ROSE FULBRIGHT

**Why you need to know her:**

Anne is Head of Energy for Europe, Middle-East and Africa as well as co-manager of the firm's Moroccan headquarters and has extensive experience of energy transactions related to renewable and conventional power generation as well as oil & gas and infrastructure. She has advised on numerous innovative deals in Morocco and first-in-country projects in Sub-Saharan Africa. Anne is dual qualified in both French and English law.



# CONSULTANTS





## BASED IN: UNITED ARAB EMIRATES

**KEN WADE**

DIRECTOR,  
5 CAPITALS

**Why you need to know him:**

Ken leads a team throughout the Middle East, Africa and in the ASEAN Region, which has taken over 50,000 MW of power, and 2 million m<sup>3</sup>/d of potable water, projects to financial close. He has developed environmental strategy and standards for national regulators and new economic cities in Saudi Arabia, serving in technical advisory roles for ministries and municipalities.

**Which MENAT markets excite you most?**

“ There is great potential in North Africa, where Morocco has taken the lead with major wind projects and the largest CSP plants in the region. After lagging slightly behind, the Turkish renewable sector is starting to grow in prominence, with huge potential for wind power generation. The lowest tariffs are in the Middle East and the first GW of PV has been installed in Dubai, with plans to grow to 5 GW. In Saudi Arabia the privatisation of the electricity sector next year should provide new scope in the region.

**What is the biggest challenge to the sector in the region?**

“ The key challenges are political, since multilateral banks closely examine how much they will invest in areas where there are security issues and unrest, which can have an impact on project development. Another large hurdle that can delay projects, but which is paramount, relates to emerging social and environmental concerns. For example: wind farms and solar plants across MENAT can disturb major bird migration routes if they are not designed appropriately.

**What are you most proud of?**

“ Writing bankable reports for renewable energy with full assessments of social and environmental factors. We have also been very fortunate in our involvement in some of the most exciting and innovative projects in the region, including the four phases of the Noor Power Station in Morocco, as well as phases II and III of the Mohammed bin Rashid Al Maktoum solar Park for DEWA.

## BASED IN: GERMANY

**NIKOLAI DOBROTT**

MANAGING PARTNER,  
APRICUM GMBH

**Why you need to know him:**

Nikolai founded Apricum, which advised the leading consortium in the DEWA 800 MW tender. He also advised Swedish startup Sol Voltaics in securing \$17 million in series C funding led by Riyadh Valley Company (RVC), the venture capital investment arm of King Saud University in Saudi Arabia. Nikolai is a regular contributor at renewable energy and cleantech conferences. He previously spent 15 years at Arthur D. Little and was Director of Renewable Energies and Resources at Germany Trade & Invest.

**Which markets in MENAT excite you most?**

“ In terms of market potential, Saudi Arabia, followed by Egypt. They both have considerable power consumption needs and a large market, and I am convinced that in both countries we will soon see very significant investments in solar and wind power. Already in KSA they are doing the first tenders for wind and solar, and in Egypt there is a 4 GW solar and wind package in the works – but financing is more of an issue there.

**What hurdles do your projects face?**

“ High levels of subsidies on power prices persist in Saudi Arabia and in many countries in North Africa, and even in the Emirates. However, we are optimistic this will change, and we have already seen reforms on water tariffs for example.

BASED IN: SPAIN

**PABLO VALERA**

OWNER, CEO & BOARD MEMBER,  
ATA RENEWABLES



**Why you need to know him:**

Pablo is the founder and CEO of ATA Renewables, an independent advisory, engineering and certification firm. At ATA, he has been involved in over 21 GW of renewable projects, specialising in PV and CSP. Pablo was selected by the European Union as an expert evaluator of the research agenda for the Sixth and Seventh Framework programmes, regularly participates in international conferences and teaches on master's modules pertaining to renewable energy.

**Which MENAT markets excite you most?**

“ Due to its ambitious plans and successful collaboration with international financial institutions, Morocco is one of the most exciting markets in the short and medium term, for both PV and CSP. Other countries throughout the MENAT region also have great potential and we are looking forward to seeing them blossom.

**What is the biggest challenge to the sector in the region?**

“ The need to repower grids and political stability.

**What are you most proud of?**

“ Our independence, our team of highly-skilled engineers and the strong presence that we have established in Morocco, UAE, Jordan and Egypt. We are looking forward to continuing our work with the best players in the region.

BASED IN: SPAIN

**BELÉN GALLEGO**

CSO & GENERAL MANAGER OF ATA INSIGHTS DIVISION,  
ATA RENEWABLES



**Why you need to know her:**

Prior to becoming General Manager at ATA Insights, the market intelligence division of ATA Renewables, Belén founded CSP Today and PV Insider and served as CEO. Belén is considered an industry leader in the solar and renewable energy sectors, regularly featuring in global industry events as a speaker, moderator and chair. She is a Board Advisory Committee member of the Clean Energy Business Council.

**Which markets in MENAT excite you most?**

“ There is a lot of potential across the whole region, so it is hard to select one country, but Saudi Arabia looks good, the UAE is moving forwards, and Egypt and Jordan both have the resources. Most of all I would like to see the programme in Morocco replicated elsewhere, especially across North Africa. The key question is one of political stability.

**What is the biggest challenge to the sector?**

“ In some countries, the challenge is a lack of understanding of the sector. It is hard to change mind-sets when the system has grown around an entirely different industry. We are still not quite at the point where renewables are price competitive with fossils, but it will happen.

It is hard to change mind-sets when the system has grown around an entirely different industry. We are still not quite at the point where renewables are price competitive with fossils, but it will happen.

Belén Gallego

## BASED IN: ITALY

**MATTEO CODAZZI**CHIEF EXECUTIVE OFFICER,  
CESI**Why you need to know him:**

Matteo is CEO of CESI, which is a technical consulting company operating in transmission and interconnections, smart grids, renewable and solar, testing, certification and quality assurance. CESI also develops and manufactures advanced multi junction photovoltaic solar cells for both space and terrestrial (HCPV) applications. Prior to this, he served as CEO and Country Manager of Enel in Romania.

**Which are the most exciting MENAT markets?**

“ Middle Eastern energy consumption is expected to increase by 60% by 2035, with around 90% of demand still met by fossil fuels, combined with a substantial increase in renewable energy driven by solar power. Recent reforms in Saudi Arabia's energy sector are expected to support and stimulate commercial and industrial solar applications and developments. Being one of the largest players in the oil and gas sector, with significant potential for solar PV and strategically situated between North Africa, GCC, Europe and Asia, the Kingdom could become one of the most important countries for energy trading and a regional powerhouse thanks to a strong interconnection network. Recently, the UAE has established itself as one of the key players in the Middle East RES markets and is expected to keep up with this prominent role in the forthcoming years.

**What is the biggest challenge renewable energy faces in MENAT?**

“ The complex and unstable political landscape in the Middle East and North Africa combined with low oil prices. In order to develop a sustainable RES policy and to provide the necessary coordination between national power systems, the region needs strong political, financial and regulatory cooperation.

**What are your proudest achievements in MENAT?**

“ Being selected as the consultant for Shams Dubai, supporting The Kingdom of Saudi Arabia in the very first steps for connecting PV plants and Wind farms to the KSA Network, supporting the Sultanate of Oman in the technical integration of rooftop solar PV and being involved in major studies for interconnecting countries within the MENAT region.

## BASED IN: UNITED ARAB EMIRATES

**FLORIS SCHULZE**MANAGING DIRECTOR,  
CESI FZE**Why you need to know him:**

Floris successfully set up the Middle Eastern division of CESI, an international technical consultancy with a 60-year history. He plays a significant role in advising the Arab Fund for Social and Economic Development (AFESD) in its project to connect national power grids across the Maghreb, Levant and GCC regions to allow energy trading and grid continuity throughout the Arab League.

**How do you see renewables developing in the region over the next 2-5 years?**

“ The slowdown in oil price has impacted the thinking and mind-set of a number of the most significant countries in terms of renewables, such as Saudi Arabia. At the moment the business case for renewables is not as clear as it could be, but this will change. We are involved in many interconnection and energy trading projects, as well as in renewables, and so I see a lot of developments in the coming months – not only in large headline projects as with Dubai, but in many other countries too.

**What is the biggest challenge renewable energy faces in MENAT?**

“ It is politics of course. It will be necessary to align legal frameworks and business, operation and maintenance models in order to successfully coordinate the links between grid systems that will enable renewables to flourish.

**What are your proudest achievements in the field?**

“ We are regarded as one of the top consultancies in the Middle East, where we only began operating four and a half years ago. I am proud to say we are involved in the most complex and attractive utility projects in the region, including smart grids in Saudi Arabia, UAE and Oman and almost all of the regional interconnection projects.

BASED IN: GERMANY

**DR. ANDREAS WIESE**

MANAGING DIRECTOR,  
GOPA INTERNATIONAL ENERGY CONSULTANTS



**Why you need to know him:**

Dr. Wiese advised on one of the first IPP renewable energy projects in the Maghreb region, the Tetouan Wind Park Project in Morocco, and his company is now working on the country's largest CSP/PV hybridised solar project. At Gopa Intec, he is Managing Director and Head of the Renewable Energies and Sustainable Energies Departments. He is also a Senior Lecturer at the Technical University of Hamburg Harburg.

**Which markets in MENAT excite you most?**

“ With regard to countries: Morocco, Egypt, Saudi Arabia, UAE and Turkey. In terms of technologies: PV, followed by wind and CSP.

**What is the sector's biggest challenge?**

“ The regulatory framework for private sector-driven renewable energy project development and implementation is a key issue in most of the MENAT countries. Only if this is developed in a way that allows private developers and investors to calculate project risks and depend on a solid and favorable regulatory framework will these markets grow in a significant way.

BASED IN: MAURITANIA

**MOHAMED LEMRABOTT EL MOCTAR**

CEO, MAURISOLAIRE &  
DIRECTOR GENERAL, TAFOLI



**Why you need to know him:**

Mohamed is CEO at Maurisolaire, which is developing renewable energy systems in preparation for greater integration of the private sector in the Mauritanian energy mix.

**Which markets within the MENAT region do you feel have the most potential?**

“ All of the countries across the Maghreb, from Libya to Mauritania have extremely favourable conditions for renewable energy generation, with vast quantities of land, an abundance of sunshine and high wind speeds.

**What is the sector's biggest challenge?**

“ Investment costs and the overall price of renewables. To remedy this, materials such as solar panels should be produced locally, where there is a cheaper workforce. This would also serve to reduce unemployment and create more opportunities for young people in the region.

All of the countries across the Maghreb, from Libya to Mauritania have extremely favourable conditions for renewable energy generation, with vast quantities of land, an abundance of sunshine and high wind speeds.

Mohamed Lemrabott El Moctar

## BASED IN: UNITED ARAB EMIRATES

**EDUARDO VAN-ZELLER NETO**

HEAD OF ENERGY & UTILITIES/OIL & CHEMICALS  
MIDDLE EAST, ROLAND BERGER

**Why you need to know him:**

Eduardo van-Zeller Neto leads the energy & utilities and oil & chemicals practices at strategy consultants Roland Berger. His expertise lies in business unit/corporate strategy, portfolio management and large transformation projects.

**Which markets in MENAT excite you most?**

“ There are three main clusters. North Africa, where some projects have been getting off the ground but there remains some progress to be made on policy settings; the GCC countries, where the sector has been slower to evolve, but where the current prices of solar make the economic benefits clear; and a cluster of emerging countries, where not too much has happened yet but solar energy prices are also economical and there is real potential. These include such countries as Sudan, Iraq and Iran, as well as elsewhere in Africa such as Mozambique, so a real mixed bag.

**What is the biggest challenge facing the sector?**

“ The fundamentals are all in place, and the business case for solar energy is clearly there. The main hurdles are decision-making at the political level, and lining up the right sponsors for projects. The challenges vary across the three clusters I mentioned; in the GCC the question is how to accelerate the take-up of renewables, whereas in the emerging markets the challenge is in bringing about the basic conditions for the sector to flourish.

## BASED IN: SPAIN

**FERNANDO RUEDA**

MANAGING PARTNER,  
SOLIDA ENERGIAS RENOVABLES

**Why you need to know him:**

Previously Chief Executive for Energy at Aries Ingeniera y Sistemas and Head of Solar Energy for Ibderola, Fernando has led Madrid-based consulting firm Solida Renewable Energies in its expansion into renewables and electrical infrastructure.

**Which markets excite you most, looking at the next 5 years?**

“ Five years is a short time in renewables! However, North Africa has huge potential due to its current pipeline of projects and natural resources – I would say this region could be number one, especially in a context of political stability. The latest auctions for projects in Abu Dhabi, Dubai and Saudi Arabia have also been very promising and no doubt the Middle East could dispute first place if these projects finally see the light. We have been closely examining opportunities in Turkey for a few years, but the main problem is regulation; a few concerns need to be resolved for international players.

**What is the biggest challenge to the sector?**

“ For the PV sector, the major challenge will be to maintain prices. The latest auction by DEWA in Dubai was a great surprise to the PV sector because of the record low bid – the first bid below US\$30/MWh. If that sets an expectation for the wider region, then those prices will be a major challenge to keep up with.

**What are you most proud of?**

“ As a firm we have a great track record of connecting with developers, financial institutions and EPC contractors, especially in PV, CSP and wind power in the Middle East and Africa.



BASED IN: UNITED KINGDOM



## CHRIS DAVIES

FORMER MEMBER OF THE EUROPEAN PARLIAMENT & CONSULTANT ON EU CLIMATE & ENERGY POLICY

### Why you need to know him:

Chris served on the European Parliament's Environment Committee for 15 years, for most of that time as team leader of the ALDE (Liberal Democrat) group of MEPs. For his work he was named 'MEP of the year' by Eurelectric in 2009, and by the Parliament Magazine in 2014. Today he advises on EU energy and climate policy, and has particular expertise in carbon capture and storage (CCS) technology. He was CCS rapporteur in the European Parliament and a member of the UK's parliamentary advisory group on CCS in 2016. He moderated the technologists' talk strategy panel at the Desert Energy Leadership Summit.

### How do policies and legislation in MENA compare with the EU?

“ In the EU the focus is on decarbonisation and energy security, albeit balanced by fears of losing competitiveness. The EU regulatory environment is relatively consistent and, while sometimes over complex, is generally regarded as business-friendly, reliable and secure. Priorities in MENA are different, political interference can be greater, and business investors need to be very confident that they understand the national rules. But undoubtedly there are opportunities for the development of renewable energy in MENA which are denied to many EU countries both by geographic factors and by population and regulatory pressures.

### How do you think renewables will compare with non-renewables in the future?

“ Assuming the Paris agreement holds, governments have no option but to transition towards a more sustainable future. As the cost of solar decreases the economics of the renewables sector are changing dramatically and, with EU governments anxious to curb subsidies, it is likely that opportunities in MENA will become more and more attractive to investors. Ironically, it may only be the presence of large oil and gas reserves that distracts attention and slows a headlong race to develop the renewable potential to the full.

### What is your proudest achievement?

“ Playing a key role in introducing the principal EU funding mechanism used to support innovative renewable energy projects and (in theory at least) the development of CCS demonstration schemes. What has been known as the 'NER 300' will shortly take on a new lease of life and an expanded role as the EU's 'Innovation Fund'.

Assuming the Paris agreement holds, governments have no option but to transition towards a more sustainable future. As the cost of solar decreases the economics of the renewables sector are changing dramatically and, with EU governments anxious to curb subsidies, it is likely that opportunities in MENA will become more and more attractive to investors.

Chris Davies

## BASED IN: SPAIN

**DR. GILEIN STEENSMA**

REGIONAL DIRECTOR EMEA, NEW ENERGY, HEAD OF THE ADVISIAN RENEWABLE ENERGY HUB & MANAGING DIRECTOR, WORLEYPARSONS ESPAÑA

**Why you need to know him:**

Dr. Steensma began his career as a geophysicist and researcher, before focusing on renewable energy projects. At WorleyParsons, he is responsible for driving renewables growth in the EMEA region, notably having advised MASEN in the run up to the signing of the Noor 1 project. He is currently on the Steering Committee for projects in Chile, South Africa and Kuwait, where his team is working with KISR on Phase 1 and 2 of the 70 MW Shagaya project.

**Which MENAT markets have the most potential?**

“ Morocco is a renewable energy market that serves as a benchmark for the region, particularly for CSP and hybrid technologies. The United Arab Emirates are moving ahead with their different and well-thought-out renewable project, through introduction of low-cost PV, followed by a CSP programme, necessary as renewable penetration increases. Other markets that are starting to take off include Saudi Arabia and Kuwait, where it no longer makes financial sense to continue generating electricity with resources that could be exported for greater profit.

**What is the biggest challenge to the sector in the region?**

“ Regulations and standardisation. Effective regulations in preparation for the next wave of enabling technology, which is energy storage, will bring down the cost, ensure grid stability and enable new market models. It will be interesting to see if the region takes the lead in driving down these costs or waits for other markets to pave the way.

## BASED IN: SPAIN

**RICHARD ANTOLINE**

PRINCIPAL TECHNICAL SPECIALIST, ADVISIAN WORLEYPARSONS

**Why you need to know him:**

Richard is Global Solar Lead at WorleyParsons, where he specialises primarily in CSP, and is involved in PV and geothermal power applications. He provides technical advisory services for projects involving new solar process applications, including solar enhanced oil recovery (EOR) and solar desalination. Prior to joining Advisian, Richard served as a design engineering specialist for N.A. Water Systems, a division of Veolia Water.

**Which MENAT markets have the most potential?**

“ The markets that excite me the most are those that are pushing a CSP-heavy agenda, including the United Arab Emirates where 1 GW has already been put forward. Developers such as ACWA Power have made huge strides in bringing down the price for PV, and we will see this replicated for CSP technology. I am also particularly excited about markets with a focus on EOR, including Oman, where there is already an operational 7 MW EOR project. Saudi Arabia and Kuwait have the largest oil reserves, and the decision as to whether to progress with this technology will depend on its success in Oman.

**How does your experience in MENAT compare with other regions?**

“ There is greater governmental involvement in projects than in Europe. My experience has almost entirely been based in Kuwait, where the Ministry of Electricity and Water (MEW) and the K Companies run the grid, as opposed to in Spain where anyone can sign a PPA and build privately.

**What is your proudest achievement in the region?**

“ Our involvement in the ground-breaking Shagaya Project, which was the first major solar project in Kuwait, and the work that we did with MASEN in the lead up to the Noor 1 project, which has carried over into other important projects.

BASED IN: UNITED ARAB EMIRATES



**DR. JAAP KALKMAN**

MANAGING PARTNER ENERGY & UTILITIES PRACTICE, ARTHUR D. LITTLE

**Why you need to know him:**

Dr. Kalkman has more than 20 years of Consulting and Private Equity experience in Europe, Asia and the Middle East. He established Paragon Utilities, a Bahrain-based district cooling firm. Jaap focuses on clients in oil & gas, utilities, chemicals, public sector and private equity in the Middle East and Asia.

**Which markets in MENAT have most potential in the near future?**

“ I would say Saudi Arabia is on the map, and Iran is quite actively stimulating the renewable energy market.

**What is your proudest achievement in MENAT?**

“ I am proud that we succeeded in becoming a key player in the National Transformation Programme in Saudi Arabia, which completely changed the country. The reorganisation of the energy ministry and others helped to resolve the renewable energy deadlock that the country had been experiencing.

BASED IN: UNITED ARAB EMIRATES



**ADNAN MERHABA**

PRINCIPAL, ARTHUR D. LITTLE

**Why you need to know him:**

Adnan is Global Head of the Renewable Energy Competence Centre at consultancy Arthur D. Little, where he is also responsible for business development and strategy. In 2015, he co-authored a publication entitled: *GCC Solar Energy: Turning Plans into Reality*.

**What are you most proud of?**

“ I was very pleased to see that many of our recommendations when advising Saudi Arabia on renewable energy strategy were implemented, such as subsidy reform. It is great to see the country moving in such a positive direction.

**What is the biggest challenge facing the sector?**

“ In the Middle East, the challenge is to come up with a business case in the face of low oil and gas prices, since the region is such a huge producer of hydrocarbons. North Africa is a different case (as a net importer of hydrocarbons, it is easier to make the case) – the stumbling blocks there are more related to political stability.

**Which markets in MENAT excite you most?**

“ Saudi Arabia has massive potential and a lot of clarity has emerged in the past few months, after a period in which the country's renewables policy had seemed stuck. The UAE is always a good market, and the recent 800 MW PV bid and interest in the 200 MW CSP plant in Dubai along with Abu Dhabi's interest in developing a 350 MW PV plant are good examples. Looking further ahead, Egypt, and perhaps Jordan, could benefit greatly from renewables if the political landscape in Egypt improves.

## BASED IN: SOUTH AFRICA

**JUSTIN WIMBUSH**

ASSOCIATE DIRECTOR &amp; RENEWABLE ENERGY LEADER, ARUP

**Why you need to know him:**

Justin began his career at Arup working in the gas and biomass-fuelled district heating and cogeneration industries. Today, he leads Arup's renewable energy business which includes building integrated and utility scale projects in the PV, CSP, bioenergy, hydro and wind technologies. Arup states that it has provided technical services on almost 10 GW of renewable energy projects globally.

**What is your current focus?**

“ Pursuing renewable energy projects in most of the MENA countries including Morocco, Jordan, Kuwait, Qatar and UAE. These projects include renewable energy masterplans, building integrated PV systems such as football stadiums, CSP due diligence assessments and utility scale PV systems.

## BASED IN: SAUDI ARABIA

**NICK CARTER**

DIRECTOR FOR THE MIDDLE EAST OFFICE, BARINGA PARTNERS LLP &amp; WORKING GROUP CONVENER, EU-GCC ENERGY NETWORK II

**Why you need to know him:**

Nick leads the Middle East team at Baringa Partners LLP, which is involved in working with the Emirates Wildlife Society on the production of a visionary 2050 document looking at the penetration of RE of up to 75% for the generation of power. He is also responsible for a working group on Electricity Interconnections and Market Integration within the EU-GCC Clean Energy Network II. Nick has previously advised a member of the Abu Dhabi Royal Family on water and electricity market reform and held senior positions at the ADWEA and the Regulation and Supervision Bureau (RSB).

**How will renewables develop in MENAT over the next 2-5 years?**

“ Currently, the focus is on utility-scale RE development sponsored by the power sector in terms of technology selection and commissioning. This provides scalable savings as shown in the recent world-record low bids for PV installations in Dubai and Abu Dhabi. This trend is likely to continue throughout the region because governments can set policy and direction based on national and international requirements [COP22 submissions for example] where they have some control over the outcomes. Secondly, the economies of scale and grid-parity financial costs are such that there is, under certain circumstances, a net benefit for the installation of such utility-scale RE projects. This is not the case for distributed or roof-top PV generation at the moment.

**What is the biggest challenge that renewable energy faces in MENAT?**

“ Utility-scale RE to some extent mirrors the existing set-up of power flows in terms of central production and is more a substitute for oil or gas burning rather than an upending of the existing operating model of large scale production, transmission and then distribution and sale to customers. This established model is now under massive pressure from new and disruptive technologies and this pressure will inevitably spill over into the MENAT Region.

The key drivers will be the invasion of so-called embedded generation both on the distribution and the customer side and in many forms including; roof-top, wrap around PV for lamp columns, car parking areas, PV installations on roads and roof tiles. Add to this heady mix, battery storage and the application of smart grids for small communities and the established model begins to break down.

Therefore, the primary challenge is the promotion and accommodation of PV generation in all its forms and how this lives with [not instead of] the existing utility model. Consequently, power sector companies will need to be more imaginative with tariffs and incentives in the purchasing of such generation and take a more holistic view of how distributed PV can help reduce costs throughout the supply chain rather than just comparing generation prices.

BASED IN: BELGIUM



## PIERRE BERNARD

CO-FOUNDER & MANAGING PARTNER, BERNARD ENERGY (BEA)

### Why you need to know him:

Bernard Energy (BEA) specialises in consultancy, strategic business development and dedicated legal advice on renewables, energy efficiency, power storage and electricity transmission & distribution. Before co-founding BEA, Pierre was General Counsel, Secretary General and Head of Business Development at the Elia Group, the transmission system operator active in Belgium and Germany. He currently serves as CEO for Friends of the Supergrid, which aims to secure the supply of a sustainable energy mix for Europe through its transmission network. He is author and coordinating editor of "EU Electricity Laws", a 4-volume reference book providing an overview of key regulations, directives and guidelines.

### Which MENAT markets have the most potential?

“ In the short term, the UAE, Bahrain and Oman, with others such as Kuwait and Saudi Arabia following closely behind. In terms of technology, a great potential lies in electric cars and solar: large-scale PV with storage, CSP and the gradual roll out of rooftop systems.

### What is the biggest challenge to the sector in the region?

“ Convincing all policy makers that renewables are the way to go, and of the necessity to reduce and eventually suppress subsidies for fossil fuels. There is a need for an appropriate and uniform regulatory framework, which would ideally be a coordinated effort across the GCC.

### How does MENAT compare with other regions?

“ It is not really comparable: MENAT is in an embryonic phase while Europe has been on the path for many years. However, MENAT has a significant asset: the sun! The region can look to Europe and the USA to provide support for asset financing, but should avoid subsidising the price of renewables; focusing instead on project development.

BASED IN: UNITED STATES OF AMERICA



## JONATHAN WALTERS

SENIOR ADVISOR, CASTALIA STRATEGIC ADVISORS

### Why you need to know him:

Jonathan is a recognised global authority on the economics and financing of CSP, having created and managed the US\$6 billion multi-donor MENA CSP Investment Plan, whose most notable achievement was the funding of the Noor 500 MW CSP plant in Morocco. He was previously Regional Director in MENA for the World Bank, and has also worked for BP and the Government of Swaziland.

Since leaving the World Bank in 2014, he has advised on electricity sector restructuring in Jordan, rethinking the World Bank's global approach to power sector reform, energy security options for Palestine, financing of private sector CSP development in Tunisia, knowledge transfer strategy for MASEN, and is now leading the MENA CSP Knowledge and Innovation Programme.

### Which markets within MENAT have the most potential in the next 2 – 5 years?

“ One thing is for sure: technology is far more disruptive in the power sector now than it has been for decades, and the future will not look like the past. Storage now matters a lot, and that is where the money is to be made. The other interesting market related to renewables will be for cross-border transmission infrastructure, and for advice about how to manage regionally integrated systems. That will be a great enabler of renewable energy penetration.

### What are the greatest financing challenges?

“ For the high-income countries there are not major financing challenges. For the middle-income countries – including Jordan, Tunisia, Algeria, Egypt, and Morocco – it will be about successfully accessing such sources as the Green Climate Fund, Clean Technology Fund etc. for technologies that need such support. In general, governments understand that better than the private sector does, so the challenge is for the private sector to actually see the huge opportunity.



## BASED IN: UNITED ARAB EMIRATES

**CLAUDIO PALMIERI**

CHIEF EXECUTIVE OFFICER, CLS ENERGY CONSULTANTS

**Why you need to know him:**

Claudio is head of an experienced consultancy firm, which has operated in the region for more than 20 years, focusing on renewables, energy efficiency and storage. He has worked for companies such as ABB, MTU, and Kharafi National.

**Which markets in MENAT are most exciting?**

“ The usual suspects: UAE, Egypt, Jordan and Morocco. Iraq and Iran are also growing, with a very lively renewable energy scene, but there's not much recognition for these yet. On the outskirts lie Qatar Bahrain and Oman, but these need more time.

**What kind of business ventures are you currently focused on?**

“ We focus on renewable energy, energy efficiency, energy storage, and a bit of waste to energy. In terms of solar energy we work with PV and CSP on a large scale.

## BASED IN: SPAIN

**JUAN MARÍA CASTILLO JIMÉNEZ**

HEAD OF RENEWABLE ENERGY DEPARTMENT, DISEPROSA

**Why you need to know him:**

Juan Maria Castillo Jiménez has over 30 years of experience in the field of industrial and power plant automation and engineering. He spent fifteen years at Siemens before moving to Alatec followed by Diseprosa, where his focus has been on renewable energy projects.

**What do the next 2-5 years hold?**

“ There are small countries such as Qatar, Kuwait and UAE that could bear witness to rapid development because decisions can be made comparatively quickly and financing resources may be more easily available. In contrast, larger countries and markets with a higher volume potential, such as Turkey, Egypt, Saudi Arabia or Iran have announced wide deployment of renewables, which has not been observed.

**What do you see as the single biggest challenge?**

“ In my opinion one renewable energy mix that could become the base load in the area must be established. To foster this, interconnections and renewable energy integration into the grid must be developed.

**What is your proudest achievement in MENAT?**

“ I am personally very proud to have contributed to the CSP Moroccan Solar Plan involved in the three CSP NOOR Ouarzazate plants.

Technology is far more disruptive in the power sector now than it has been for decades, and the future will not look like the past. Storage now matters a lot, and that is where the money is to be made. The other interesting market related to renewables will be for cross-border transmission infrastructure, and for advice about how to manage regionally integrated systems.

Jonathan Walters

BASED IN: SPAIN



## SILVIO VENTURA

GENERAL MANAGER, DISEPROSA

### Why you need to know him:

Silvio has been active in the renewable energy market for over 15 years, holding positions at Alatec and Siemens Spain. Diseprosa is an engineering and consulting company with an accumulated installed power capacity of more than 16 GW in solar CSP, PV, wind, mini-HPP, biomass and CHP plants.

### Which markets in MENAT have the most potential?

“ Small countries, like the UAE, Qatar, Kuwait, Jordan and Oman, may become mature in the short term, because decision-making processes are faster and financing is more easily available. The large countries and markets with a higher volume potential, such as Egypt, Saudi Arabia and Iran are really starting now, after making announcements several years ago, but I expect a much slower progress. In a framework of five years, Turkey should take the lead in the region, because so far its political situation has remained stable without international commercial restrictions.

### What are the biggest challenges?

“ The grid capacity and distribution network, together with financing, are the key hurdles to converting the manifested political intention into tangible project developments. Private investors and banks are reluctant to provide funding without real guarantees, and the project developing companies cannot absorb the cost for improving the grids. Also the currency risk has to be covered, by stable currency PPAs or equivalent government warranties.

BASED IN: UNITED ARAB EMIRATES



## MOHAMMED ATIF

AREA MANAGER MIDDLE EAST, DNV GL

### Why you need to know him:

Mohammed Atif advises on utility-scale solar PV and wind projects, and led the economic assessment of the Masdar PV project and the Sir Bani Yas Island wind power plant in Abu Dhabi.

### What is the sector's biggest challenge?

“ The planning and operational paradigm needs to be re-configured across the region. The recent reduction in costs has been great. With the onset of energy storage and lower cost PV we are embarking on a second phase of technological disruption.

### How does MENAT compare with other regions?

“ MENAT has been the slowest mover but it has the largest potential. We are now seeing great ambition, an increasing number of projects but still a lack of maturity in dealing with the new environment. Regulatory frameworks, finance and network access all need improving.

## BASED IN: GERMANY

**RAMÍ MIGALLY**

ASSOCIATE DIRECTOR, CORPORATE STRATEGY &amp; BUSINESS DEVELOPMENT, DORSCH HOLDING

**Why you need to know him:**

Ramí has advised many governments in Europe and the Middle East regarding sustainable energy systems.

**How does your experience in MENAT compare with other regions?**

“ My experience worldwide includes North America and Europe, where markets are definitely more mature, and largely deregulated. Additionally, there is much higher private sector participation. However, people in the MENAT region are quickly catching up and there have been some very interesting and innovative developments.

**What kind of projects are you currently focused on?**

“ We operate across the spectrum of renewable energy technologies, but there is definitely a prevalence of solar and wind projects in the region. Some of our work involves providing consultancy services for both governments and private sector companies regarding technical, commercial and regulatory matters.

## BASED IN: MOROCCO

**SAMIR BELHRANDORIA**

CONSULTANT, ENERGY FINANCE

**Why you need to know him:**

In his current capacity, Samir provides financial advisory services for energy projects, having previously served as the Director of the Moroccan Infrastructure Fund. He spent 9 years at Société Générale in the Investment Banking division, before becoming Senior Vice President Emerging Markets at Theolia.

**Which MENAT markets excite you most?**

“ Morocco, Egypt, Saudi Arabia and Turkey, mainly due to their market size and ability to secure finance for projects. Morocco is well ahead of other countries in terms of large renewables projects, but needs to develop smaller projects with the potential to add value to SMEs and local communities. The 13-09 law relating to renewable energy reinforces the country's ambitious targets and provides a framework for further growth of the sector.

**What is the biggest challenge to the sector in the region?**

“ In general, across the region there are timing issues with regards the completion of projects and transactions. Regulations can also create barriers, and governments often take too long to react.

Morocco is well ahead of other countries in terms of large renewables projects, but needs to develop smaller projects with the potential to add value to SMEs and local communities. The 13-09 law relating to renewable energy reinforces the country's ambitious targets and provides a framework for further growth of the sector.

Samir Belhrandoria

BASED IN: GERMANY



**DR. ANDREAS PREUSS**

DIRECTOR, FUTURE ENERGY CONSULTING COMPANY

**Why you need to know him:**

Dr. Preuß is founding partner and director of the firm, which provides management consulting, executive search, board services, talent migration, public affairs and financial funding to the clean energy sector. He was previously a client partner at Korn/Ferry International and holds a PhD in solid state chemistry.

**Which markets in MENAT excite you most?**

“ We are very positive about Saudi Arabia, where we have an office, especially since the new King has come to power. We have also done a lot of work in Morocco where the sector is moving forwards, and Jordan is a hot spot.

**What is the biggest challenge to the sector?**

“ Political instability. In my opinion Dii did a great job in preparing the ground for a more investor-friendly legal framework in places like Tunisia and Libya, but the current situation in those countries makes any progress on projects difficult.

**What is your proudest achievement?**

“ Placing the Head of the MENA Region for one of our clients. It showed that the professional selection and subsequent later performance of a single individual can have a tremendous effect on the business in such a complex region.

BASED IN: SAUDI ARABIA



**HAIDER SHAI F**

FOUNDING PARTNER, DIRECTOR & HEAD OF MENA REGION,  
FUTURE ENERGY CONSULTING COMPANY

**Why you need to know him:**

Haider founded The Future Energy Consulting Company, which provides advisory services that are entirely focused on renewable and alternative energy, the environment and green technology. He was previously Managing Director for MENA at Egon Zehnder International, following experience in the automobile industry. He began his career at Dar Al-Handasah Consultants in London, later joining the National Commercial Bank (NCB), one of the largest banking institutions in the Middle East.

**Which markets within the MENAT have the most potential?**

“ Saudi Arabia, the United Arab Emirates, Jordan, Egypt and Morocco are the largest markets with the greatest need to transition to renewables and potential to make it happen.

**What is the sector's biggest challenge?**

“ The biggest challenges are changing mind-sets and ensuring commitment to implementing ambitious programmes. Much of MENAT has been relying on oil for decades and the infrastructure is adapted to this resource. The region requires new structures, not only in a literal sense for construction, but also as a framework for decision-making processes. When there are dips in oil revenue, there is talk about finding new resources, but this subsides with the recovery of the market. There needs to be commitment to go ahead with announced programmes regardless of external factors, and education to bring about a greater understanding and awareness of the new technology.

## BASED IN: SPAIN

**JESÚS CUADRADO**

FOUNDER &amp; CEO, GRUPO DESARROLLA &amp; EFFERGY ENERGÍA

**Why you need to know him:**

At Grupo Desarrolla, Jesús focuses on renewable energy for developing smart cities and smart agro projects. He is a founding partner and serves as CEO of Effergy Energía, which is associated with the University of Almería and many other RE research institutes across Europe. He is Chairman of the Water and Renewable Energy Association of Almería and a member of the board for IrSOLaV, a solar research institute and consultancy.

**Which MENAT markets have the most potential in the next 5 years?**

“ Based on the requests we receive from our clients, the most active countries appear to be: Jordan, Morocco and Egypt.

**What do you see as the sector's main challenge?**

“ Electric grids and grid management. It is a complicated problem requiring an improvement in hardware and control strategies.

**What are your proudest achievements in the region?**

“ We collaborate actively with our clients in direct normal irradiance (DNI) forecasting and nowcasting. We focus particularly on aerosol events, which are a very complex problem for CSP in most of the MENA countries.

## BASED IN: GERMANY

**FRED WENDT**

HEAD OF BUSINESS DEVELOPMENT, ILF CONSULTING ENGINEERS

**Why you need to know him:**

Fred takes the lead on developing and implementing growth opportunities at ILF, which has been active in the renewable energy sector for over 25 years. Previously, he spent 6 years working for NATO as an IT Officer and in the Airfield Communication Centre.

**Which markets in MENAT have the most potential?**

“ The United Arab Emirates are definitely on track, with fast-moving ongoing programmes in Dubai and Abu Dhabi. Morocco and Tunisia show great potential too. Egypt and Saudi Arabia are the largest markets and could be huge depending on whether regulatory barriers are removed. Inversely, Jordan is quite advanced but has been slowing down.

**What are the biggest challenges?**

“ Regulations, especially for IPP developers, who require favourable market conditions with the space to be creative and to develop projects independently from the national utility companies. Encouragingly, from a technical perspective we have found that our projects have run smoothly without challenges in this respect.

**What are you most proud of?**

“ Working with DEWA on the master plan for the 13 MV photovoltaic power plant, which was the first phase of the 1,000 MW Mohammed Bin Rashid Al Maktoum Solar Park.



BASED IN: GERMANY



**DR. KLAUS SCHUSTER**

DIRECTOR BUSINESS DEVELOPMENT, LEONI KERPEN

**Why you need to know him:**

Dr. Schuster is responsible for overall CSP business and sits on the BU IP Board at Leonie Kerpen. He previously spent 15 years at Siemens, where he was a Global Account Manager.

**Which MENAT markets have the most potential?**

“ Morocco, of course, which is a very important market for us, due to our large footprint there. We intend to further invest in the country to build a renewable energy hub and R&D centre. Saudi Arabia and Tunisia are exciting markets. Not long ago, I would have included Turkey in the list, but now I would be less inclined to due to concerns regarding political stability.

**What is the biggest challenge to the sector in the region?**

“ Currently, the biggest challenge is investment security. While Morocco and Saudi Arabia may be relatively stable, we see a big country risk for Egypt and some others, making it hard to attract investments.

In comparison to oil and gas, the renewables market is not as mature. We have a wealth of experience in both industries, enabling us to play a role in improving the market conditions for CSP, which will bring down the LCOE.

BASED IN: FINLAND



**BRENDAN CRONIN**

HEAD OF MANAGEMENT CONSULTING, PÖYRY

**Why you need to know him:**

Brendan has consulted on over 40 GW of generation capacity across a wide range of technologies including CCGT, OCGT, coal, CCS, nuclear, wind and solar. He focuses on market analysis and providing strategic advice to organisations engaged in the Middle Eastern energy sector.

**Which markets have the most potential in MENAT?**

“ In terms of pure size, there are four countries with growing renewable ambitions - Turkey, Egypt, Saudi Arabia and Iran - that have 60% of the electricity demand in the region.

**What do you see as the biggest challenge?**

“ The biggest challenge is to get countries with low-cost oil & gas reserves to think commercially. Historically, the low cost has led to electricity being generated in inefficient thermal power stations. Renewable energy represents a way of reducing oil & gas consumption, so that it can either be sold on the international market at a higher price, or kept in the ground for use by future generations.

**What are your proudest achievements in the region?**

“ We have had a long history in the Omani market, where we are currently preparing the rules for the new spot market being developed by Oman Power and Water Procurement, which will be the first of its kind in the GCC.

## BASED IN: UNITED ARAB EMIRATES

**HANNES REINISCH**

PARTNER, RENEWABLE ENERGY &amp; SUSTAINABILITY, PWC MIDDLE EAST

**Why you need to know him:**

Hannes has advised the UAE's Directorate for Energy and Climate Change within the Ministry of Foreign Affairs. He previously worked at Deloitte, and holds an MSc from the London School of Economics in Environmental Policy & Regulation, having examined the Masdar initiative for his thesis.

**Which markets in MENAT excite you most?**

“ I would say Morocco, Egypt, Jordan, United Arab Emirates, and Saudi Arabia have plenty of potential.

**What are you most proud of?**

“ Being part of a team that is helping to make strategic transformations that move the entire renewable energy sector forwards.

## BASED IN: TURKEY

**SELAHATTIN HAKMAN**

FORMER PRESIDENT OF SABANCI ENERGY GROUP &amp; CHAIRMAN OF ENERJISA

**Why you need to know him:**

Selahattin led Enerjisa, a 50-50 joint venture with E.ON and the Sabanci Group, Turkey's leading industrial and financial conglomerate. Enerjisa is Turkey's largest privately owned power producer, and more than half of its installed generating capacity is renewable.

**How do you see renewables developing in the Turkey over the next 5 years?**

“ There is a lot of interest in wind and solar projects from investors, and Turkey has a well-structured tariff scheme in place. Two factors are slowing the process slightly: firstly, the government needs to clear tenders for new sites for extra grid capacity, and secondly there needs to be a drive to make local investment in manufacturing a requirement.

For example, a tender for 1,000 MW of solar will be issued in December, and the winning bidder will be expected to set up a manufacturing facility capable of producing 500 MW of equipment per year. There are certain associated commitments as the aim is to deepen the value chain within Turkey. I see this as an entirely positive development; only non-serious bidders, or those who wish to merely obtain a licence and sell it on will be deterred.

**What about wind and other forms of renewables?**

“ The same requirements will apply to wind power projects, although there may be a little more difficulty since manufacturing turbines is more challenging. There is also still potential for hydro power, but many of the remaining suitable locations are in geographically or politically challenging areas.

There is a lot of interest in wind and solar projects from investors, and Turkey has a well-structured tariff scheme in place. Two factors are slowing the process slightly: firstly, the government needs to clear tenders for new sites for extra grid capacity, and secondly there needs to be a drive to make local investment in manufacturing a requirement.

Selahattin Hakman

BASED IN: GERMANY



**DR. GERHARD WEINREBE**

SENIOR ASSOCIATE & HEAD OF RESEARCH & DEVELOPMENT, SCHLAICH BERGERMANN PARTNER  
SBP SONNE GMBH

**Why you need to know him:**

Dr. Weinrebe is in charge of development, design and project management for CSP systems at sbp sonne gmbh, specialising in techno-economic engineering for renewable energy. He began his career in research institutes, serving as Area Head for Solar Thermal Central Receiver Systems, the subject of his PhD thesis, at the European Solar Research Centre, and a project engineer at the Institute of Energy Economics and the Rational Use of Energy within the University of Stuttgart.

**Which MENAT markets have the most potential?**

“ Morocco will be the most important market in the next few years, followed perhaps by Saudi Arabia, although that is purely speculative. The United Arab Emirates have potential, and in Kuwait there is already one plant under construction and another in the tendering phase, although I expect growth to slow down following their completion.

**What is the biggest challenge to the sector in the region?**

“ The well-established fossil fuel industry and the companies that wish to continue with their business models and technology. Many of those in charge of the energy industry have been trained in, and are accustomed to implementing, traditional power plants and it will take some time for the new generations to take over and bring about a change in the way of thinking.

**What is your proudest achievement in MENAT?**

“ Providing high quality and cost-efficient parabolic trough collector technology, including EuroTrough for Kuraymat in Egypt and Shagaya in Kuwait, and UltimateTrough for Duba in Saudi Arabia.

BASED IN: UNITED ARAB EMIRATES



**DIMITRIS TITOPOULOS**

EXECUTIVE DIRECTOR MIDDLE EAST & NORTH AFRICA, SUNTECH DUBAI

**Why you need to know him:**

Dimitrios has over 20 years' experience working with various energy firms, most recently at Suntech, which has shipped more than 10 GW of PV panels worldwide. He is on the board of directors for the Hellenic Chinese Chamber of Commerce.

**How MENAT compare with other regions?**

“ Europe is more certain about renewable energy technology, and aware that it fits their need for cheaper energy. Whereas in MENAT there is doubt due to the abundance of oil resources, but as the prices change, people's minds change too.

**What is the biggest challenge renewables face in MENAT?**

“ To convince the governments and people that they need renewable energy; that it makes sense for their lives, the environment, and everything. There is also the need to adapt existing technologies to survive the harsh desert environment.

A woman in a blue long-sleeved shirt and white pants is running through a field of tall green grass with yellow wildflowers. The landscape is rolling and green, with a hazy blue sky in the background. The sun is shining brightly from the top right, creating a lens flare effect.

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A new day has dawned,  
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BASED IN: FRANCE



**DOMINIQUE CERUTTI**

CHAIRMAN & CEO, ALTRAN

**Why you need to know him:**

Dominique joined Altran, which designs renewable energy systems, in 2015. The company operated the mission control centre for the Solar Impulse project, which saw the first successful circumnavigation of the globe in a solar-powered aircraft, between 2015 and 2016. He previously served as CEO of IBM Global Services for the Europe, Middle East and Africa division, and later for IBM Europe, before becoming Chairman of the Management Board and CEO of Euronext.

BASED IN: UNITED ARAB EMIRATES



**FABIEN CLAEYS**

BUSINESS DEVELOPMENT MANAGER, ALTRAN MIDDLE EAST

**Why you need to know him:**

Fabien is currently in charge of Altran's international business expansion in energy (renewables, conventional energy and nuclear) and business intelligence in the Middle East. He drives business development of consulting services within life sciences and energy.

BASED IN: SPAIN



**ÁLVARO PAYÁN RODRÍGUEZ**

CHIEF TECHNOLOGY OFFICER, ASTROM TECHNICAL ADVISORS

**Why you need to know him:**

Álvaro has provided technical consultancy services for over 1 GW of PV installations, most recently the Noor IV and Tafilalt projects in Morocco. He previously worked at Abengoa Solar, and is listed as co-inventor for two patents, including a dehumidifier for photovoltaic modules.

BASED IN: GERMANY



**STEFANO BISCEGLIA**

BUSINESS DEVELOPER, FICHTNER CONSULTING ENGINEERS

**Why you need to know him:**

Stefano is responsible for development strategy in Africa for Fichtner. He is a technical advisor in the field of renewable energy and energy-saving projects. He was previously based at Protos, as a consultant and Team Leader of Photovoltaics, Energy and Power. Prior to this, he was a Project Manager at SHAP SpA, in charge of R&D projects related to CSP systems, biomass, vegetable oil fuel engines and fluidised bed combustion.

BASED IN: HUNGARY



**PETER KISS**

PARTNER, ENERGY & NATURAL RESOURCES NORDICS, HEAD OF ENERGY & NATURAL RESOURCES CENTRAL & EASTERN EUROPE, KPMG IN HUNGARY

**Why you need to know him:**

Peter is a consulting partner at KPMG with a combined 22 years of experience across nuclear, renewables, coal, gas, hydro, upstream, and downstream sub-sectors. Since October 2014, he has held a leading role in the Energy and Natural Resources sector in the Nordic European region. A published expert on energy markets in BRIC and Central and Eastern Europe (CEE), he has advised governments and industry participants on national gas and electricity market structures, company transformations and business strategy.



## BASED IN: UNITED STATES OF AMERICA

**DR. BRUCE BAILEY**

VICE PRESIDENT RENEWABLES, UL, FORMER CEO, AWS TRUEPOWER

**Why you need to know him:**

Dr. Bailey founded AWS Truepower, a provider of renewable energy consulting and data services active in four continents, in 1983. He served as CEO until the company was acquired by UL in 2016, at which point he became VP for Renewables. Bruce is widely published and frequently gives presentations at domestic and international conferences. He was a US Department of Energy Wind Programme Reviewer, and has been a thesis mentor and guest instructor for several universities.

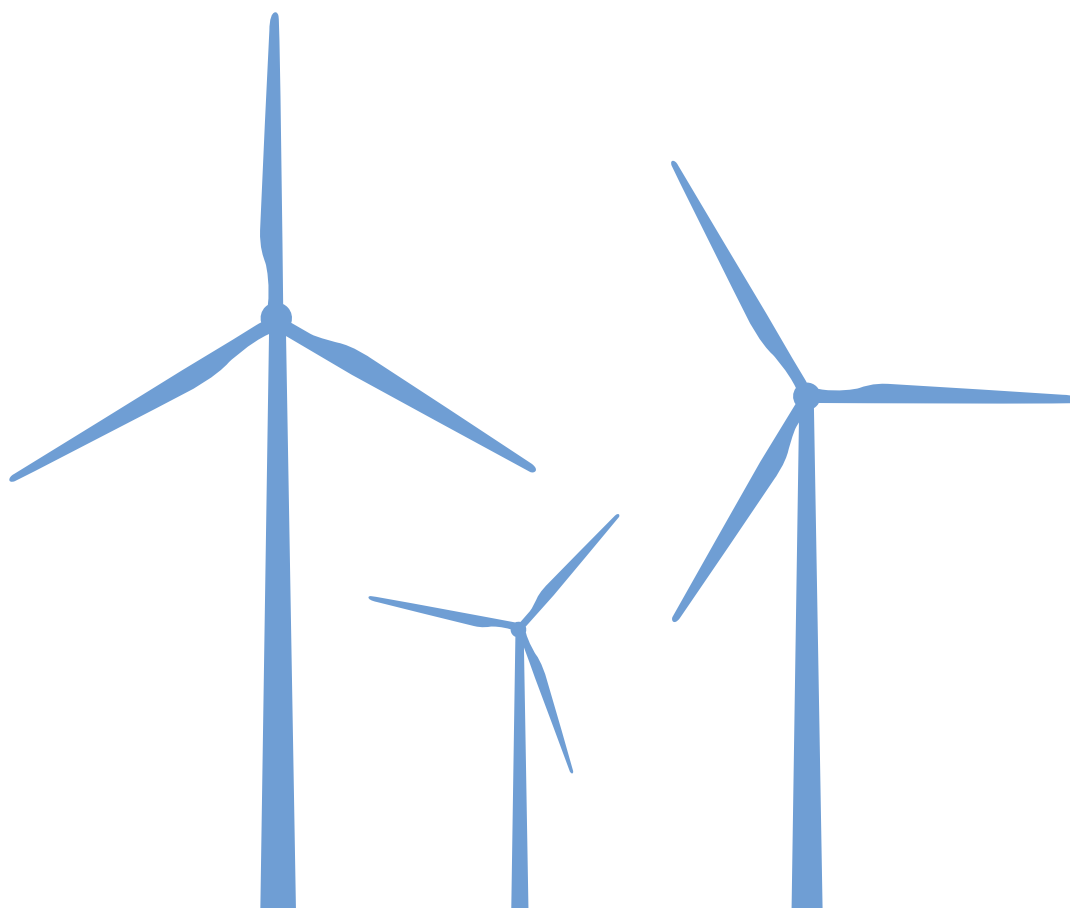
## BASED IN: MOROCCO

**HASSAN NADIR**

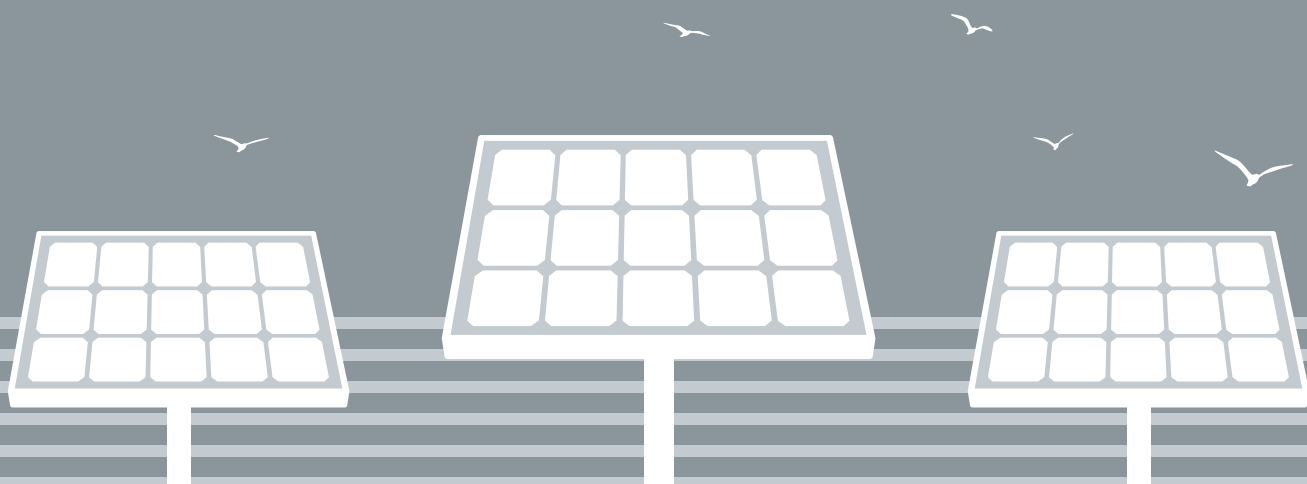
DIRECTOR GENERAL, COMPAGNIE MAROCAINE DES ENERGIES

**Why you need to know him:**

Hassan leads Compagnie Marocaine des Energies (CME), a subsidiary of Belgian-Dutch developer WindVision, which has wind, biomass and solar projects across MENAT and Europe. CME has undertaken numerous feasibility studies across Morocco for wind projects, and is developing a 250 MW project at Tetouan.



# NGOs / ASSOCIATIONS



BASED IN: UNITED ARAB EMIRATES

**FRANK WOUTERS**DIRECTOR, EU GCC CLEAN ENERGY NETWORK &  
CEO, WOUTERS LTD.**Why you need to know him:**

Frank currently leads the EU GCC Clean Energy Network, which catalyses partnerships between EU and GCC energy stakeholders. With his own firm he advises on investment and procurement for high-profile renewables projects. Frank previously served as the Director of Masdar Clean Energy, where he was responsible for projects representing enterprise value of more than \$3 billion in Asia, Africa and Europe.

**Which markets in MENAT have the most potential?**

“ Looking at the key countries, Morocco, Egypt, Jordan, and Algeria are popular at the moment, I would add the UAE and Saudi Arabia to that list.

**What is the biggest challenge renewable energy faces in MENAT?**

“ The lack of appropriate regulatory framework. The absence of open markets and the lack of structural clarity are the main stumbling blocks within individual markets. The targets that have been set, and who is setting and meeting them can be obscured by unclear structuring, and poor institutional frameworks.

**What are you currently focused on?**

“ The EU GCC clean energy network is currently helping to bridge the gap between Europe and the GCC, applying knowledge and experience from Europe in the GCC. Doing this, we can improve efficiency of renewable energy development, whilst integrating energy grids to help the renewables markets connect.

BASED IN: GERMANY

**ABDULAZIZ AL MIKHLAFI**SECRETARY GENERAL, GHORFA ARAB-GERMAN  
CHAMBER OF COMMERCE & INDUSTRY**Why you need to know him:**

Abdulaziz has held various public offices, including 1st Secretary at the Minister Office of the Ministry of Foreign Affairs of the Republic of Yemen. He has been with Ghorfa for over 15 years and is Ambassador at the Ministry of Foreign Affairs of the Republic of Yemen. In 2016 he was awarded the Order of Merit of the Federal Republic of Germany, and was appointed as Economic Advisor for the president of the Republic of Yemen.

**Where is the most potential for renewables?**

“ North Africa has the advantage of its short distance to Europe; Tunisia and Morocco for example, are planning to connect their network with Europe. Many countries have ample oil reserves, and yet want to become more independent from hydrocarbons. Saudi Arabia is aiming to install an additional 9,500 MW capacity from renewable energy by 2030. Overall, we see a wide range of opportunities for German companies.

**Which achievements are you most proud of?**

“ Our biggest achievement is the broad and trustworthy network in the Arab and German markets. This is the basis of services that we provide to our members. We see ourselves as a bridge between the German and the Arab business world. Arab-German business relations, especially in the energy sector, are well established and yet there is still potential left to be exploited.

**What projects are you currently focused on?**

“ Arab investments in Germany are estimated at about EUR 100 billion. But we know that the trade volume favours German businesses. With our service, we are working to promote a balanced and beneficial trade volume.

BASED IN: UNITED ARAB EMIRATES

**ADNAN Z AMIN**

DIRECTOR GENERAL,  
INTERNATIONAL RENEWABLE ENERGY AGENCY (IRENA)



**Why you need to know him:**

Currently serving his second term, Mr Amin has over twenty five years of experience and recognised accomplishments in the fields of sustainable development, international energy and environment policy.

Mr. Amin joined IRENA in 2010 as Interim Director-General of the Preparatory Commission for IRENA. He was elected as the agency's first Director-General in April 2011. During his tenure, IRENA has become a global authority on renewable energy and a vibrant international organisation. The agency today provides the world community with a strong international cooperation framework to accelerate sustainable energy transformation, as a major pathway to driving sustainable development and combating climate change.

A key priority of Mr. Amin's tenure at IRENA has been to create an inclusive and agile agency, responsive to the needs of its Members. IRENA membership has almost tripled since he took office, growing to over 170 countries. His close cooperation with the United Nations (UN) and its entities resulted in IRENA being the acknowledged lead agency for climate action in renewable energy with concrete initiatives profiled in key events such as the UN Secretary-General's Climate Summit and at COP21 in Paris, France. Under Mr. Amin's leadership, IRENA was also selected as the Hub for Renewable Energy within the Sustainable Energy for All initiative, bringing together countries, private sector and civil society to advance the objectives of the initiative.

BASED IN: UNITED ARAB EMIRATES

**SAKARI OKSANEN**

DEPUTY DIRECTOR-GENERAL,  
INTERNATIONAL RENEWABLE ENERGY AGENCY (IRENA)



**Why you need to know him:**

Sakari is the Deputy Director General of the International Renewable Energy Agency (IRENA). He has 25 years of international management experience in the field of technical advisory services and engineering design for the energy, infrastructure and industry sectors, and was Managing Director for two Nordic consulting groups in their operations in Finland, China, Singapore and Thailand.

**Which MENAT markets have the most potential?**

“ The countries which have already moved forward are in the best position to continue that path; Jordan, Egypt, Morocco, Turkey and UAE. Not on the basis of their substantive potential of solar resources, but due to capability and enthusiasm.

**What about the challenges?**

“ Ultimately, it is all about political will. This translates into regulations and the necessary legal frameworks needed to make projects a reality. There is a big challenge to change the mind-sets of those who have spent many years working in conventional power and fuel industries, and also at government level it is very important for someone to be “waving the flag” for renewables.

**What are IRENA's proudest achievements in the region?**

“ We have a number of important projects in progress, including: market studies for GCC countries, and renewables readiness assessments for Oman and Mauritania, with two similar projects for Egypt and Tunisia which are starting up. We are also heavily promoting manufacturing capabilities for renewables in the region.

BASED IN: EGYPT

**DR. AHMED BADR**EXECUTIVE DIRECTOR, REGIONAL CENTER FOR  
RENEWABLE ENERGY & ENERGY EFFICIENCY (RCREEE)**Why you need to know him:**

Dr. Badr leads an intergovernmental organisation promoting renewable energy at the highest levels in 17 countries of the League of Arab states. He has held senior positions at several multinational institutions including the World Bank, the European Bank for Reconstruction and Development, the European Commission, and the Japan Bank for International Cooperation.

**How do you see renewables developing in your country?**

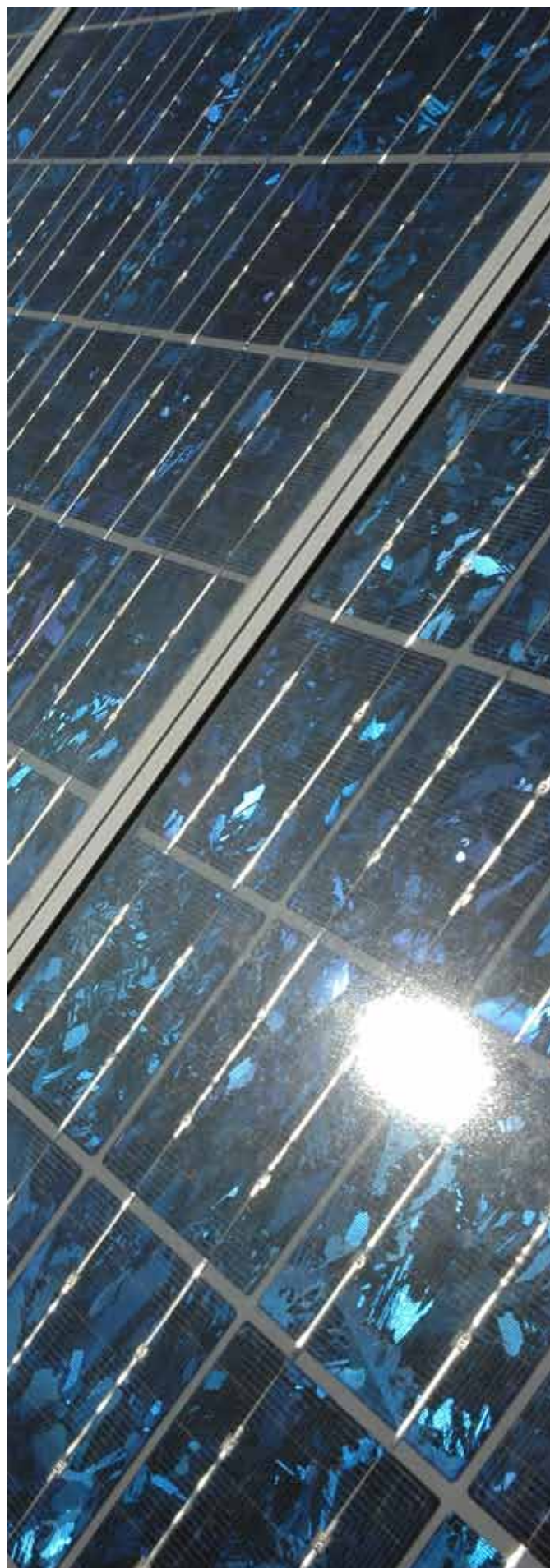
“Over the last two years a combination of soft loans and new laws to encourage investors, such as the feed-in tariff (FIT) legislation, have helped seed the renewables industry, encouraging new investment in wind power. Egypt has also successfully signed contracts with investors for its entire target of 3,000 MW in PV projects in the Aswan region. I believe Egypt will be leading the MENAT region in terms of its renewable market within 2-5 years.

**What is the sector's biggest challenge?**

“The first problem is financing. Whenever you have financing facilities and laws, you can easily promote renewables projects. The second problem we face is the harsh desert environment which affects the endurance of the solar panels.

**What achievements are you most proud of?**

“We are currently focusing on promoting renewable energy projects for the region by helping countries to formulate National Energy Action Plans and preparing indices for an energy market in the MENA region: the Arab Future Energy Index (AFEX).





BASED IN: TUNISIA



**ABDELAZIZ RASSAA**

CONSULTANT, ARAB RENEWABLE ENERGY COMMISSION

**Why you need to know him:**

Formerly Tunisia's Minister of Industry and Technology, Abdelaziz has been active in his country's energy sector for more than 30 years, working internationally as consultant as well as developing the renewables sector at home. He is currently working on Tunisia's TuNur project which is aimed at exporting energy to Italy, with the first stage being a 250 MW CSP tower, and high voltage links across the Mediterranean. He is also a founding member of the think tank "Cercle Kheireddine".

**What your proudest achievements?**

“ During my time at the ministry, we increased the usage of solar heaters tenfold by implementing an innovative financing procedure. The success of this project led us to develop photovoltaic panels for residential roofs, and 30 MW have been installed since 2011.

**What is the biggest challenge facing renewables?**

“ The development and improvement of the electrical grid, which is why it will take time to develop Tunisia's vast renewable energy potential.

BASED IN: UNITED ARAB EMIRATES



**ISMAIL FAHMY**

MANAGING DIRECTOR, DII

**Why you need to know him:**

Ismail has over ten years of experience in the energy and management consultancy sectors, with a focus on the clean technology and alternative energy industries. He oversees Dii's strategy for adding value to the renewable energy sector in the MENAT region as it enters a more established phase. In his previous role as Programme Officer at the International Renewable Agency (IRENA), in collaboration with the UAE government, he supported the development of various renewables projects in developing countries.

**Which markets have the most potential?**

“ There are two very promising markets: Saudi Arabia and Egypt. Saudi Arabia has a lot of catching up to do, but all of the elements for success are there, with favourable political, economic and technical conditions. As for the Egyptian market, several hurdles have been removed and there are many business-to-business opportunities on the ground.

**What is the biggest challenge to the sector?**

“ The most prevalent challenge is creating a sustainable industry with quality local stakeholders that are comfortable with renewables. When programmes and countries open up for renewables projects it is important that the first wave of projects are of high quality to ensure market acceptance. Lack of experience and awareness combined with opportunistic suppliers can lead to poor quality systems installations. There needs to be greater awareness of this, and a larger number of quality projects ensured to avoid a "gold rush effect."

**What are you most proud of regarding Dii's achievements in MENAT?**

“ We were among the first movers, and have worked to lay the foundations for much of the success that we now see in the region. For instance, Dii spearheaded the push for the development of renewables in Morocco, Egypt and Jordan. We are now looking to the future as to how best to ensure greater renewables integration in the power grid and facilitate the creation of dynamic cross border power markets.

BASED IN: UNITED ARAB EMIRATES



## HABIBA AL MARASHI

PRESIDENT, ARABIA CSR NETWORK & CO-FOUNDER & CHAIRPERSON,  
EMIRATES ENVIRONMENTAL GROUP

### Why you need to know her:

A visionary for a safer environment and a sustainable future, Habiba has been central to the growth of the Emirates Environmental Group (EEG). The EEG is a member of the UN Global Compact (UNGC) and hosted the Local Network of Gulf States from 2008-2014. Habiba was the first Arab woman to become a board member of the UNGC, serving between 2006-2012. In 2004, she launched the Arabia CSR Network (ACSRN) the first Corporate Social Responsibility Network in the Arab Region. ACSRN is the only multi-stakeholder platform with local and multinational entities. She is one of the founding members of the Emirates Green Building Council, which aims at advancing green building principles for protecting the environment and ensuring sustainability in the United Arab Emirates. She sits on numerous boards and committees around the world.

### Which markets within the MENAT region have the most potential?

“ The most obvious answer is the oil-importing countries in the region where the impact on energy security will be very high. Morocco, Jordan, Egypt and Palestine have a lot of potential as RE markets. However in the GCC Region, particularly in the UAE, KSA and Kuwait markets I see a great potential and greater opportunities for RE.

### What do you see as the biggest challenge that the renewable energy faces in MENAT?

“ The challenge lies in deploying RE to meet the energy needs of the growing population and needs driven by fast economic growth. Energy storage technology, well-defined regulatory frameworks and fossil fuel subsidies are very significant challenges that need to be addressed. Finally, the political instability and uncertainty in the region is the most critical and constant source of challenges and hurdles.

### What is your proudest achievement in MENAT?

“ Under the slogan 'Together for a Better Environment' we have pioneered partnerships and cross-sector collaboration for the past two and a half decades. Our work has cut across nationalities, ethnicities, languages and professions, turning environment and sustainable development into shared objectives. We have managed to develop numerous programmes and projects that have mobilised institutions and individuals alike, and created many sustainability champions along the way.

Under the slogan 'Together for a Better Environment' we have pioneered partnerships and cross-sector collaboration for the past two and a half decades. Our work has cut across nationalities, ethnicities, languages and professions, turning environment and sustainable development into shared objectives. We have managed to develop numerous programmes and projects that have mobilised institutions and individuals alike, and created many sustainability champions along the way.

Habiba Al Marashi

BASED IN: UNITED ARAB EMIRATES



**RABIA FERROUKHI**

DEPUTY DIRECTOR, INTERNATIONAL RENEWABLE ENERGY AGENCY (IRENA)

**Why you need to know her:**

Rabia focuses on knowledge, policy and finance for IRENA. This includes exploration of renewable energy policy, advising on investment and policies for development, and producing up-to-date accurate information and analysis on renewable energy.

**Where do you see the most potential in MENAT?**

“ We will see growth in the United Arab Emirates, Saudi Arabia, Egypt, Jordan and Morocco. The United Arab Emirates, in particular, is a leading market, home to world-lowest bids for PV. Saudi Arabia's revised targets for the next five years and aim for 9.5 GW by 2023 may result in considerable deployment.

**What is your proudest achievement in MENAT?**

“ In 2016, IRENA launched the Renewable Energy Market Analysis: The GCC Region report highlighting best practices in deployment and providing recommendations for accelerated uptake of renewables. The report contributed to the ongoing discourse as to the role of renewable energy in the GCC energy sector, finding that achieving the national renewable energy plans could cut water use in the power sector by 16%, reduce carbon footprint by 8%, create 210,000 jobs and save 400 million barrels of oil by 2030.

BASED IN: AUSTRALIA



**DR. SVEN TESKE**

RESEARCH PRINCIPAL, INSTITUTE FOR SUSTAINABLE FUTURES (ISF),  
UNIVERSITY OF TECHNOLOGY, SYDNEY (UTS), AUSTRALIA

**Why you need to know him:**

Dr. Teske has 20 years of experience in technical analysis of renewable energy systems and market integration concepts. He has published over 50 special reports on renewable energies such as “Global Wind Energy Outlook” and “Solar Generation” and was a lead author for the IPCC Special Report Renewables (SRREN). Sven developed the Energy IR!evolution scenario series, including scenarios for over 50 countries. He was the Renewable Energy Director from Greenpeace International between 2004 and 2015.

BASED IN: QATAR



**DR. MARWAN KHRAISHEH**

ACTING EXECUTIVE DIRECTOR, QATAR ENVIRONMENT & ENERGY RESEARCH INSTITUTE (QEERI)

**Why you need to know him:**

Dr. Khraisheh joined QEERI in 2013 as a senior research director. He was the founding Dean of Engineering at the Masdar Institute of Science and Technology between 2008 and 2013, serving as the Acting Provost until June 2009. Masdar Institute of Science and Technology, located in Abu Dhabi, is a research-driven university focused on clean energy and sustainable technologies developed with the support and cooperation of the Massachusetts Institute of Technology (MIT).

BASED IN: EGYPT



**DR. MAGED MAHMOUD**

TECHNICAL DIRECTOR, REGIONAL CENTER FOR RENEWABLE ENERGY & ENERGY EFFICIENCY (RCREEE)

**Why you need to know him:**

Dr. Mahmoud is responsible for recommending, planning and overseeing the management of diverse RCREEE projects and technical affairs responding to the needs of its member states. He is an active member of the League of Arab States RE&EE Committee, where he is currently assisting several Arab countries to prepare and execute their national renewable energy action plans.



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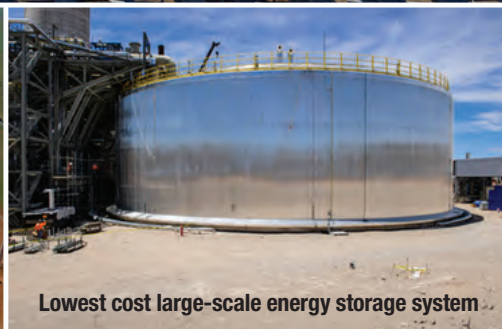
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