

CAPABILITY STATEMENT

WORLD CLASS EXPERTISE IN EMERGING MARKETS

Modern Energy Management delivers project lifecycle certainty to renewable energy financiers, developers, operators and investors working in rapidly expanding emerging markets. Our outlook is global, our thinking uncompromised and our focus absolute.

Every day our team of project managers, consultants and engineers enable financiers and investors to successfully develop, construct and deliver complex, profitable projects in remote, rapidly expanding international markets.

We support our clients through our experience and sincere desire and passion to deliver investors the best, most cost effective project possible. MEM established its corporate offices in Thailand in 2013, and has since registered in Singapore to accommodate its growing international project pipeline. Our project professionals are currently managing wind and solar projects in the developing markets of South East and Central Asia, Latin America and Africa.

“Modern Energy Management delivers investment certainty in rapidly expanding, emerging markets.”



COMPANY PROFILE

WORLD CLASS EXPERTISE IN EMERGING MARKETS

3,900MW

DEVELOPMENT EXPERIENCE

4,650MW

CONTRACTING EXPERIENCE

6,020MW

CONSTRUCTION EXPERIENCE

1,136MW

ASSET MANAGEMENT EXPERIENCE

KEY MARKETS INCLUDING

- VIETNAM
- PHILIPPINES
- THAILAND
- PAKISTAN
- MYANMAR



OUR UNIQUE DEVELOPMENT AND OPERATIONAL UNDERSTANDING HAS ENABLED US TO CONSISTENTLY ACHIEVE A SERIES OF MAJOR MARKET FIRSTS, INCLUDING:

1ST

UTILITY-SCALE WIND FARM IN THAILAND

1ST

TO ADOPT AND USE IEC CLASS 3 WIND TURBINES IN EMERGING MARKETS

1ST

TO UNDERTAKE WIND PROSPECTING ACTIVITY IN MYANMAR

1ST

TO DELIVER A UTILITY-SCALE SOLAR FARMS IN NIGERIA AND MALAWI

We Deliver Enhanced Financial Performance And Absolute Business Certainty

Experienced project management professionals are essential for the successful delivery of renewable energy projects in challenging emerging markets. MEM provides experienced project leadership as the driving force to achieve investor requirements efficiently and effectively in every phase of the project lifecycle. Working as Owner's Representative, MEM bridges the typical Owner's Engineer scope of services into contracting and contract management, insurance interfaces and overall project management in order to de-risk projects, delivering enhanced financial performance to investors. We have a proven track record of reducing project cost, improving project financial returns and enhancing project credit. MEM is unique in its focus on the financial success of our client's renewable energy project investments.

CAPABILITIES

**“Our unique approach minimizes risk,
maximizes margins and increases investor
returns”**

PROJECT MANAGEMENT

From project development through construction, strong project management is critical to the success of every project. Early engagement of an experienced project manager can incorporate lessons learned from previous renewable energy projects to minimize risk, reduce costs and increase investor returns. MEM has a proven track record of efficiently managing projects from development and financial close, through construction and into commercial operations, even in new, first of kind markets.

RENEWABLE ENERGY ENGINEERING

Matching plant technology to project renewable energy resources is at the core of optimizing energy production. MEM has a strong track record of successful site hunting, performing resource assessments and analysis of energy production in emerging markets.

BANKABILITY

Modern Energy Management's experience in bringing projects from concept to financial close is a distinct asset to our clients. The fact that we work with lenders as well as investors, and have real world experience in bringing projects to financial close means that we are uniquely suited to advise on and meet project Lender and Investor's requirements for "bankable", non-recourse project finance. Our expertise in this area means faster time to financial close and, in many cases, more competitive cost of capital due to reduced risk and project credit enhancement.



VALUE ENGINEERING

Every project is unique in both design and risk profile. “Standard” design specifications typically lead to overbuild in areas where it is not required, and do not adequately address areas that present risk to construction and operations. MEM has a track record of balancing the reduction of project cost and risk effectively.

PROJECT DUE DILIGENCE

Any major acquisition of a renewable energy asset should be accompanied by thorough risk analysis from the best minds in the industry. Modern Energy Management goes beyond a mere “academic” assessment of a project. Our team is uniquely qualified with real world experience designing, building and operating renewable energy plants globally, specialising in emerging markets. This give us an advantage in assessing the true status of an asset: potential deferred maintenance issues, opportunities to optimise energy yield, and assessment of operational lifetime expectancy.

RISK & INTERFACE MANAGEMENT

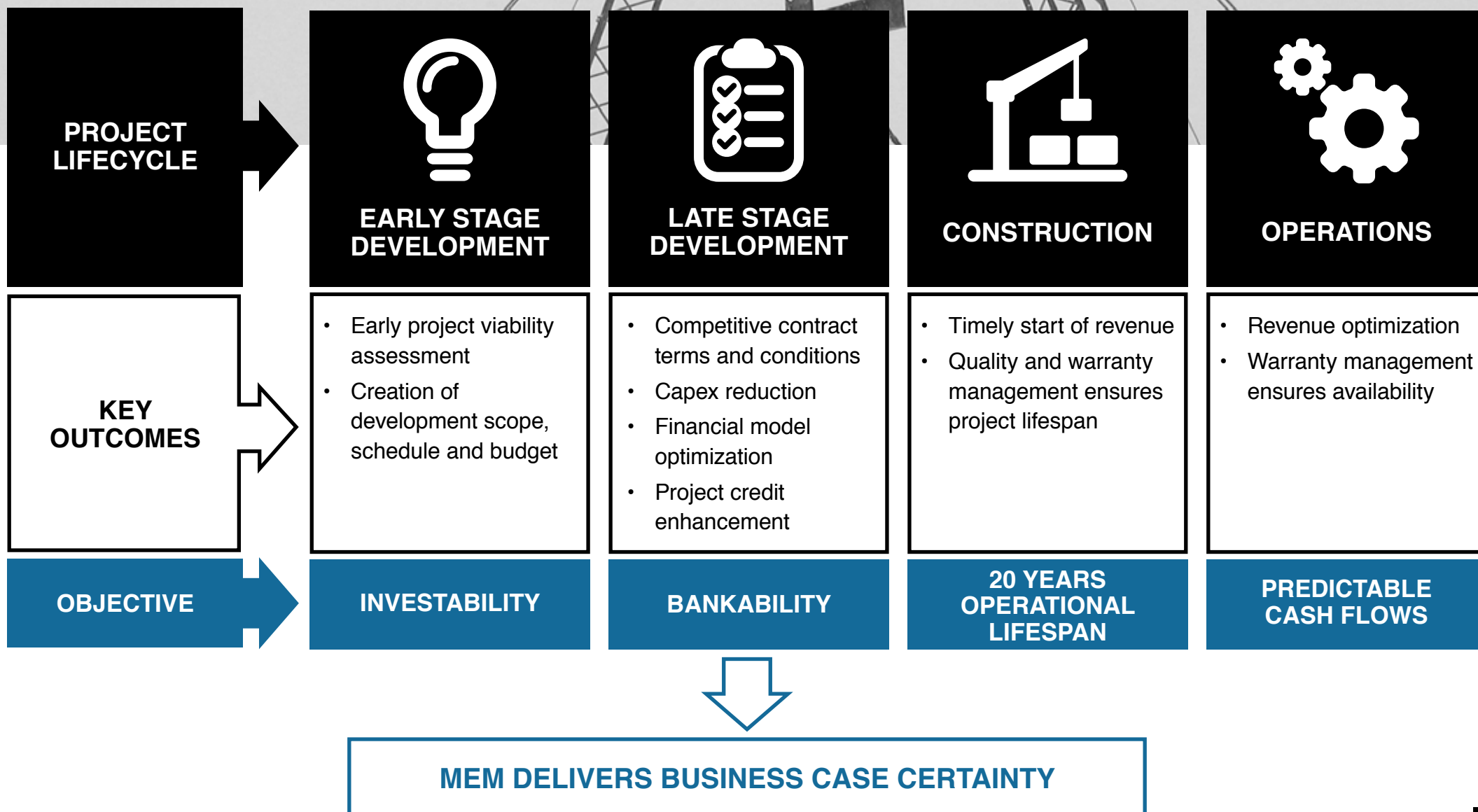
The success of every phase of renewable energy projects is determined by effective risk management. With numerous commercial and technical interfaces, the risk profile of renewable energy projects is more dynamic than conventional power. MEM has a proven track record of successful risk management, bringing projects in on time and on budget in emerging markets.

ASSET MANAGEMENT

Renewable energy projects are unique in their commercial complexity. Due to the variability of production, owners typically don’t know how much revenue has been lost until production and yield analysis has been performed by skilled, experienced experts, typically after a year or more of operations data has been collected. Due to MEM’s experience, we are uniquely suited to increase project cash flows.

“Standard project design specifications no longer fit the bill. Instead, we focus exclusively on mitigating project specific risks. This eliminates project over build.”

“Our experience unlocks significant cash flow and superior investor returns throughout the project lifecycle”



EXAMPLE OF MEM'S UNIQUE VALUE PROPOSITION

- Wind project finance enhancement
- Optimised financial return through integrated risk management approach

FINANCE KPI	BASE	IMPROVEMENT	CHANGE
Construction	142.46mUSD	138.66mUSD	-3.8mUSD
IDC	3.8mUSD	2.56mUSD	-1.24mUSD
Total CAPEX	146.26mUSD	141.22mUSD	-5.04mUSD
IRR	15.73%	17.12%	1.39%

EXAMPLE:

60MW wind farm - MEM project team in contracting phase to improve project plan, commercial contracting and payment milestones

SUCCESS CRITERIA:

MEM team improved levered IRR to above 16% requirement

DRIVERS:

Optimised crane sequencing, negotiate EPC cash flows from front end to back end loading

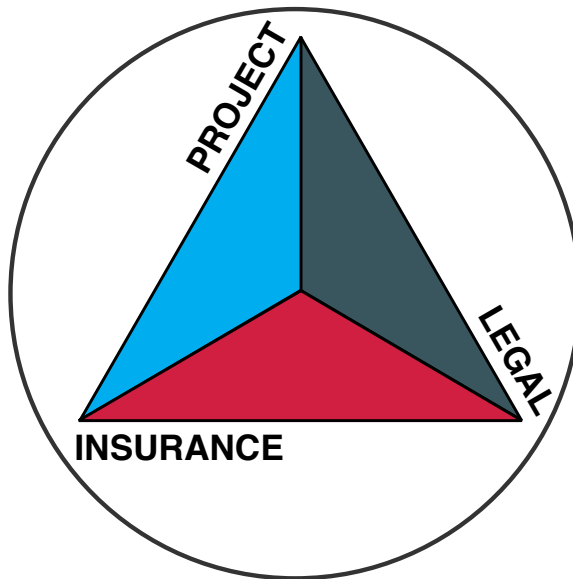
Investment Grade Verification (IGV)

MEM has collaborated with the most recognizable names in the renewable energy industry to establish a first of a kind risk management service for renewable energy investors. MEM's project experience and expertise is so unique that JLT (the world's largest insurer of renewable energy projects) and global law firm Watson Farley & Williams (a specialist in renewable energy) have teamed up with us to deliver a unique certification; the Investment Grade Verification (IGV).

IGV is an integrated approach between project management, insurance and legal that de-risks renewable energy projects while improving project financial performance. The IGV team of MEM, JLT and WFW have had great success in protecting and enhancing investor returns in emerging markets, even in the most challenging countries where renewable projects are a "first of a kind".

INTEGRATED PROJECT AND RISK MANAGEMENT

PetrOllind



EXCLUSIVE SERVICE OFFERING



“For the first time, our Investment Grade Verification service significantly de-risks renewable energy projects while improving project financial performance.”

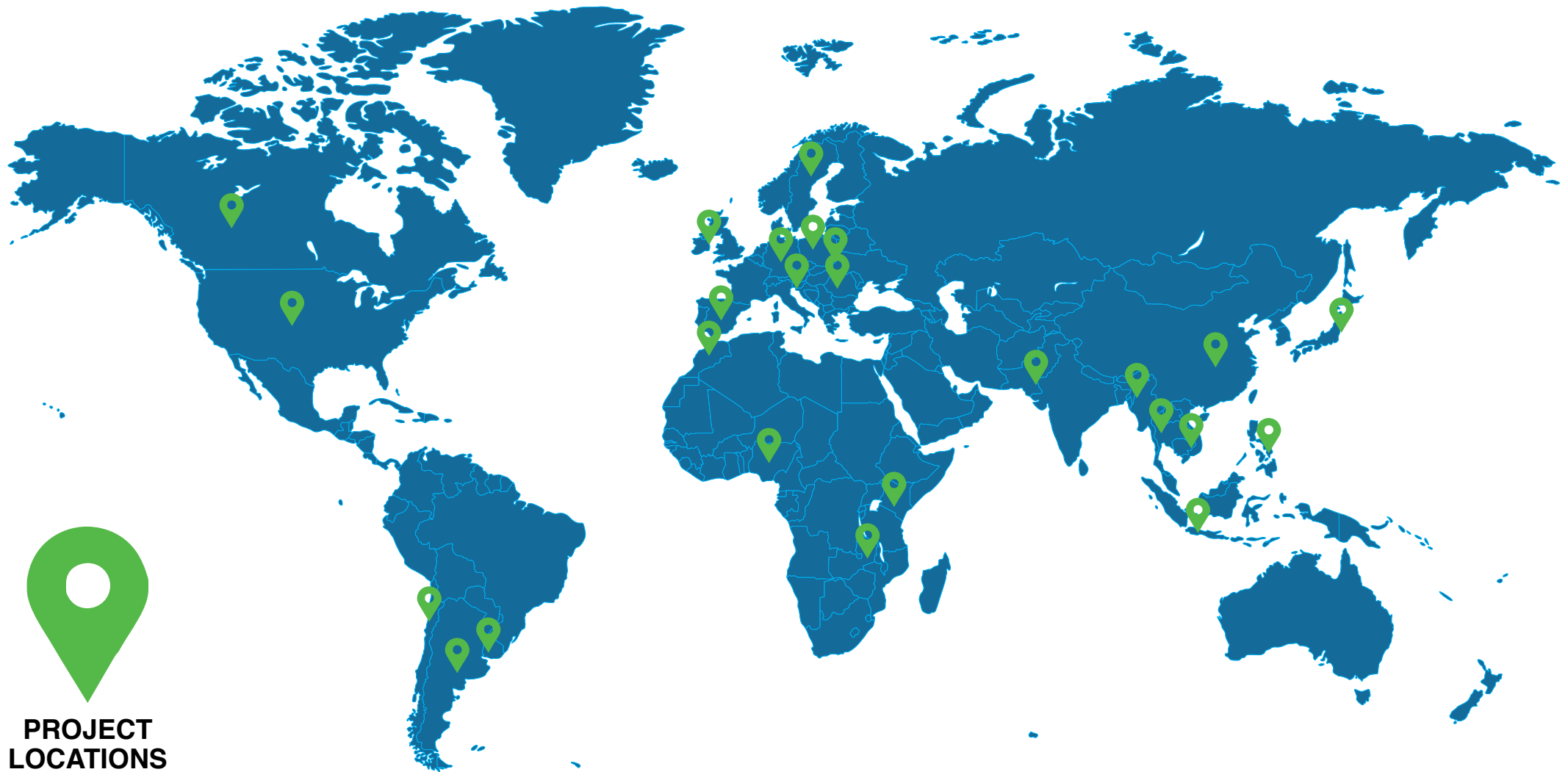
MEM has diverse experience managing projects in South East and Central Asia, Latin America and Africa. Managing clients' interests, MEM have a proven track record of delivering wind and solar farm development, construction and operations through Owner's Representative, Owner's Engineer and EPCM (Engineer, Procure, Construction Management) roles.

Our team represents experience from both tier 1 technology suppliers, balance of plant contractors and lenders to ensure a comprehensive risk and project management approach to our projects.

We have worked with project stakeholders such as:



TO DATE, OUR TEAM HAS SUCCESSFULLY COMPLETED FINANCE,
CONSTRUCTION AND OPERATIONAL PROJECT WORK IN OVER 25 COUNTRIES AROUND THE WORLD 📍



PROJECT
LOCATIONS

MEM's management team combines world-class expertise with strong emerging market experience. Our project teams are designed to bring together the best and most experienced personnel to represent project investors and establish business case certainty.

**EXAMPLE: 60MW WIND FARM CONSTRUCTION PROJECT IN THAILAND
MEM PROVIDED A SITE-BASED, 4 PERSON OWNER'S REPRESENTATIVE PROJECT MANAGEMENT TEAM WITH**

**6,100MW
35 YEARS**

WIND FARM CONSTRUCTION EXPERIENCE



AARON PAUL DANIELS

Managing Director, Founding Partner



Aaron has 12 years of experience in Renewable Energy. In that time, he has managed the development and construction of 3.5GW (approximately \$6bUSD) of wind projects globally. Aaron's wind project experience is almost exclusively in emerging markets. Specific experience includes establishing Vestas' first PMO (Project Management Office) in China where Vestas China received its first ever 100% customer satisfaction rating, installation of numerous first of a kind wind turbine technologies, development of a 1GW wind project pipeline in SE Asia, and construction of the first utility-scale wind farm in Thailand (207MW of installed capacity) which was the largest ever in the ASEAN region. Aaron has managed single projects with budgets up to \$450mUSD and project portfolios valued at up to \$730mUSD.

Professional Qualifications

- MBA (Chinese Business)
- PMP (Project Management Professional)

Contact Details

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LARS LUND

Director, Founding Partner



Lars has over 18 years of experience in the wind industry, leading construction of over 3,400MW of wind projects and managing operations of an additional 800MW. Specific accomplishments include construction of the first wind projects in numerous countries in Africa and Asia, as well as construction management of the largest wind project in ASEAN, valued at over \$450mUSD. Lars' expertise in construction of wind projects has been recognized by Vestas where he managed training of Vestas construction management teams and where he developed the installation manual for the V80 wind turbine.

Lars co-founded Modern Energy Management in 2013. Modern Energy Management currently has over 500MW of wind and solar projects under management in emerging markets globally (SE Asia, Africa and Latin America). Lars heads construction and asset management of the MEM project portfolio.

Professional Qualifications

- MSc Electrical Eng.
- PMP (Project Management Professional)

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LINGLING ZHAI
Senior Commercial Manager



Lingling has been in the renewable energy industry for over 13 years. In that time she has represented the supplier (Vestas), contractors (Abengoa and China Construction), and owners, contracting, negotiating and closing over 2,800MW of wind turbine contracts throughout Asia.

Over the course of her career, Lingling has negotiated contracts for onshore as well as offshore wind projects, and has negotiated a number of “first of a kind” projects. Achievements include negotiation of the first EPCF (Engineer, Procure, Construct, Finance) wind farm project in China, and one of the first utility-scale wind farms in Thailand.

Professional Qualifications

- MSc in International Economics & Trade
- Mandarin Speaker

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lingling@modernenergy.management



DANIEL BOIE
Senior Project Manager



Dan has over 30 years of project management experience, primarily managing EPC scope of work. During that time, Dan has managed construction of 1,400MW of wind farm projects.

Dan’s wind farm construction experience spans very large projects in complex locations.

Professional Qualifications

- BS in Industrial Technology
- PMP (Project Management Professional)

Contact Details

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MARC WRIGHT

Lead Engineer



Marc is a renewable energy specialist with over 11 years of experience. He has both development and advisory background, specifically with a focus on wind and solar in emerging markets. Some of his activities at MEM include performing technical advisory, development support, acquisition due diligence and owners representative.

Marc has worked on over 150 Renewables Energy Projects, cumulating in excess of 10GW globally. He has comprehensive experience in project identification, planning, permitting, grid, legal, lender and procurement to name but a few. He is assisting clients to develop high quality, bankable renewable energy projects, which can then be taken through Financial Close, Construction and Operations.

Professional Qualifications

- MSc Environmental Science
- BSc Hons. Energy Studies
- Cert. Nat. Science

Contact Details

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MEM was registered and established its corporate offices in Thailand in 2013. In 2015 MEM registered in Singapore to accommodate its growing international project pipeline. We currently have project professionals managing over 4GW of wind and solar projects exclusively in emerging markets of SE Asia, central Asia, Latin America and west Africa.

Our offices are located at:

SINGAPORE

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THAILAND

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