

DuaneMorris

INVESTING IN VIETNAM SOLAR POWER MARKET

Latest updates

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DUANE MORRIS VIETNAM LLC

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AGENDA

- **BACKGROUND OF SOLAR ENERGY INDUSTRY IN VIETNAM**
- **REGULATORY FRAMEWORK ON SOLAR ENERGY**
- **LATEST DEVELOPMENTS IN VIETNAM'S SOLAR MARKET**

Energy Sector Background

- Electricity demand is expected to increase by up to 11.4 pct. for the 2016-2020 period and 7 times to 800 billion Kwh in 2030
- Electricity consumption is projected to increase from 85,932 gigawatt hours (GWh) in 2010 to 251,763 GWh in 2020



POTENTIAL OF SOLAR ENERGY INDUSTRY IN VIETNAM

- Total number of sunshine hours up to 1400 – 3000 hours/year
- Potential: 4-6 kWh/m²
- Current use: 5 MW



REGULATORY FRAMEWORK ON SOLAR ENERGY



- Electricity Law 2004 and 2012
- The Revised Power Development Plan 2011-2020 (revised PDP VII) approved by Prime Minister in Decision 428/QD-TTg dated 18 March 2016
- Decision 2068/QD-TTg dated 25 November 2015 on development strategy and vision of RE to 2050.
- Decision 11/2017/QD-TTg dated 11 April 2017 by the PM on support mechanism for development of solar power projects in Vietnam
- Circular 16/2017/TT-BCT dated 12 September 2017 setting out requirements on protect development and template PPA for solar power projects

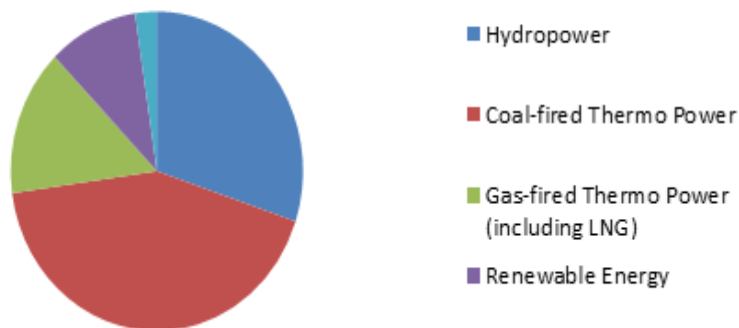
Amended Power Master Plan VII

- State to keep monopoly on transmission
- Prioritize development of renewable energy
- Renewable energy target rate at 7 pct. of total energy output by 2020 and more than 10 pct. by 2030.
- Increase the solar power output to 850 MW by 2020, 4,000 MW in 2025 and 12,000 MW in 2030.

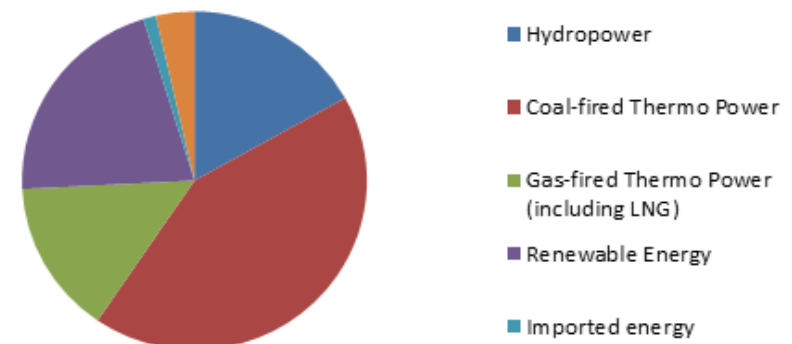
Vietnam's electrical energy mix

- Vietnam policy emphasises the need to diversify the country's energy mix whilst maximising the use of local energy reserves
- Currently Vietnam is developing an energy mix sector with the mainstay of coal fired power

By 2020 - Total Capacity to be 60,000 MW



By 2030 - Total Capacity to be 129,500 MW



Coal production – World Bank no longer supports???



Latest developments in Vietnam's solar market

- 93 out of 260 solar projects approved by the MOIT with total capacity of over 7,740 MWp (May 2018)
- 6 PPAs signed with the total capacity of approximately 219 MW in An Giang, Ninh Thuan, Binh Thuan, Dak Nong
- The MOIT will finalize the national solar power master plan by 15 July 2018
- Vietnam would increase its electricity production from renewable sources from about 58 billion kWh in 2015 to 101 billion kWh by 2020 and 186 billion kWh by 2030.
- Vietnam now plans to increase solar power consumption in households by 26% by 2030.

Solar Decision



- FIT:
 - On-grid projects: 9.35 US cents/kWh.
 - No FIT for off-grid rooftop projects
 - Only one off-taker (EVN) and No direct PPA (B2B)
 - The FIT applies for projects which come into operation before 30 June 2019 and within 20 years from the commercially operational date (“COD”) (*i.e.*, the date when the solar plant is ready to sell electricity to the buyer – EVN)
 - The FIT COD will likely be extended **for another half a year or another year** for solar projects across Vietnam, except for projects in Ninh Thuan
 - For solar projects in Ninh Thuan, the COD deadline extension will be longer (*i.e.* **for another one and a half year** from 30 June 2019).
- **Net metering:** applicable for rooftop projects. Oversupply amount will be credited to the following month. At the end of the year or expiry of the PPA, exceeded amount will be sold to EVN at 9.35 US cents/ kWh.

Solar power financial incentives

- Preferential CIT:
 - Preferential corporate income tax (“CIT”) rate of 10% for fifteen (15) years, applied from the first year in which the project company has revenue from the new solar power project
 - CIT exemption for four (4) years and 50% tax reduction for the next nine (9) years applied from the first year in which the project company has taxable income from the solar power project.
- Duty Exemption:
 - Import duty exemption for imported goods used as fixed assets
 - Import duty exemption for imported machinery, equipment, supplies that cannot be domestically produced serving production of renewable energy

Solar power financial incentive (Cont.)

- Land and Water Surface:
 - For solar power projects, transmission lines and transformer stations for connecting to electricity grids
 - Land and water surface rent shall be exempted during the fundamental (capital) construction period. This exemption does not exceed three (3) years from the effective date of competent state authorities' decisions for land lease / allocation
 - After the above fundamental construction period, the land rents and water surface rents shall be exempted for three (3) years

Solar PPA

- **Non-negotiable PPA** and compulsory application for grid connected solar projects
- EVN has the obligation to buy all electricity generated from solar power projects. However, in the draft PPA, EVN may stop buying electricity in certain circumstances beyond the reasonable control of the seller, without any compensation or payments to the seller/project developer.
- The purchaser must pay the seller only for the electricity that is received by the purchaser. The Solar PPA does not include any provision where the purchaser is unable to take the electricity produced.
- Dispute resolution: by litigation before Vietnamese courts or mediation/resolution at authorized energy state authorities of Vietnam. **No international arbitration is mentioned!**

Back up from the Government re. the PPA

- In the recent concluded wind PPAs, the Government subsidizes EVN 1 US cent/ kWh with regards to the whole power output sold to EVN
- This subsidy no longer exists in the recent Solar Decision.
- Solar PPA: no provision on any form of government guarantee to enhance the creditability of EVN
- No hint to make the solar PPA bankable.

The EVN

- PPA is required to follow a specific template, which is not bankable.
- The PPA template is unclear whether it is a “take or pay” agreement.
- No amendment of the PPA template is possible, except the supplementation to clarify the rights and obligations of the parties, **PROVIDED** that it does not change the basic contents of the PPA template.

WTO ANALYSIS OF LIBERALIZATION OF MARKET ACCESS

Vietnam ties in first place with Singapore

Country	Limitation of market access*	Country	Limitation of market access*
Malaysia	medium	Myanmar	high
Indonesia	medium	Cambodia	medium
Philippines	medium	Laos	medium
Singapore	low	India	high
Thailand	medium	China	medium
Brunei	high	Vietnam	low

- ***Typical restrictions: number of opened sectors, JV requirement, limits on foreign-owned shares, permission requirement**

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Jim Elliot

DUANE MORRIS VIETNAM LLC

Thank you very much!

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References (1)



International Consulting & Trading Services Ltd.,

Hanoi, 15th October 2015

To Whom It May Concern

Recommendation of Excellent Services of Mr. Oliver Massmann

I am Managing Director of International Consulting and Trading Services Ltd, a company registered in British Virgin Islands with operations based from our Hanoi Representative office. Over 15 years we have assisted many international overseas suppliers, from a wide range of industries, to identify markets and thereafter representing their interests to secure ongoing business here in Vietnam. The majority of our clients are based in Asia, Eastern and Western Europe.

While we endeavour to enforce our contractual rights, this is – unfortunately – not always possible. In this regard, we would like to highlight our satisfaction with the highly professional services rendered by Mr. Oliver Massmann of Duane Morris LLC, Hanoi, who successfully represented us and settled a defaulted payment, due to us for services provided to an international German company.

We would further note that Mr. Massmann's successful handling of the case exceeded our expectations since he achieved a settlement without the need for costly arbitration in the courts of Vienna.

Mr. Massmann's capability in legal analysis and his commercial aptitude combined with his exceptional negotiation skills, led to a timely and efficient resolution of the dispute at hand. Of course being German himself was also a significant contributing factor, since he was able to tease out information from the opposing German lawyer, giving him a winning hand.

Mr. Massmann has demonstrated to us his capability as a real problem solver. We regard him and his team at Duane Morris LLC as an excellent choice for dispute resolution services and would not hesitate to entrust them with further work.



Michael Anthony Langrish-Smith
Managing Director

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References (2)



I am Andrew Meyer, CEO of Nine Dragons Group LLC. We have been actively involved in Vietnam Real Estate since 1999. We have gone through many lawyers and law firms, and were disappointed by all of them. Lack of knowledge of the laws, the differences between buying and selling in specific cities, very slow response time and poor client service.

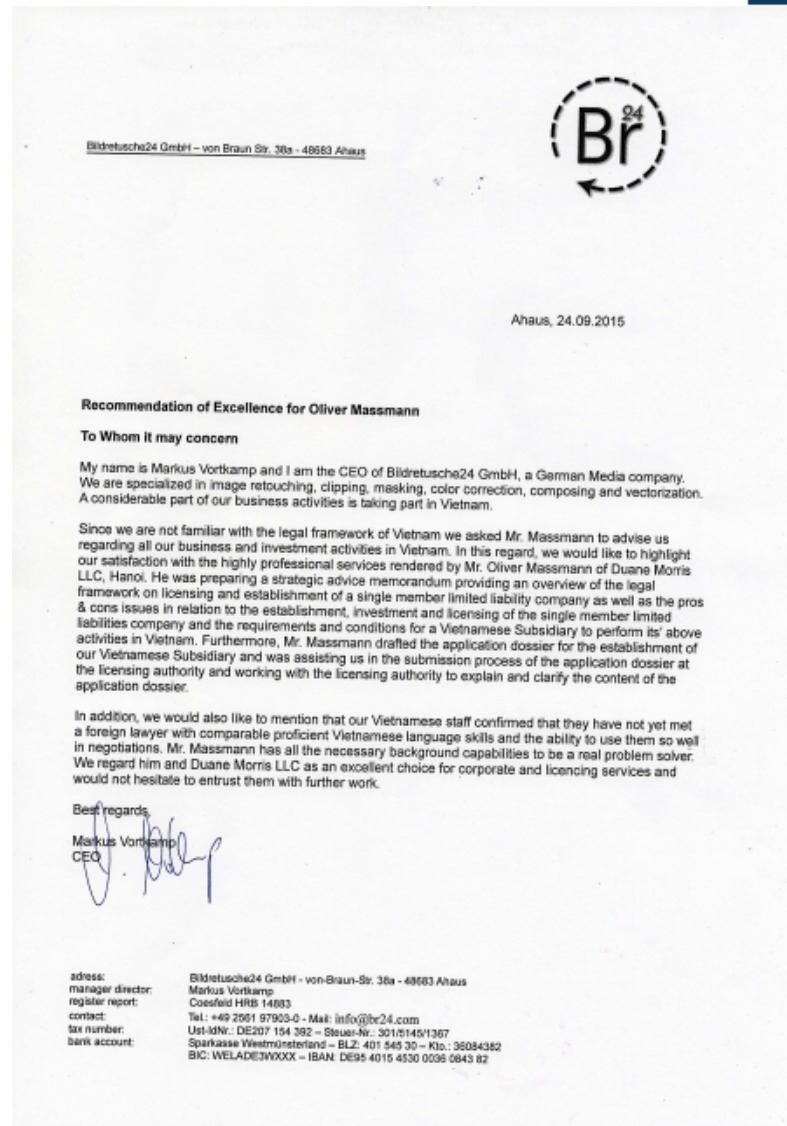
Finally, we met Mr. Oliver Massmann. The first project we did with him was the same as working with our attorneys in NYC. He has a very strong knowledge of the laws, procedures and intricacies of Vietnam. Speaks the language fluently (a rarity) and is a consummate professional who responds to my requests very quickly.

We continue to work with Mr. Oliver Massmann and are thrilled to have an attorney who brings so much to the table working on our team.

I highly recommend Mr. Oliver Massmann and his firm, Duane Morris Vietnam LLC. Should you have any questions, please feel free to contract me at any time.

Andrew Meyer
 CEO

References (3)



References (4)



Hong Kong, 01 Jan 2015

To Whom It May Concern

My name is Thomas Domanski and I am Managing Director of Bauer Hong Kong Ltd shareholder of Bauer Vietnam Ltd). Bauer Hong Kong Ltd is a member of the German based Bauer Group of Companies and a subsidiary of the Bauer Spezialtiefbau GmbH which belongs to the MDax listed ultimate holding company Bauer AG. The Bauer Group is specialized in foundation engineering, machinery, and Resources related services. A considerable part of Bauer Group's corporate activities takes place in Asian countries, among them Vietnam.

While we try our utmost to avoid entering into legal proceedings to enforce contractual rights, this is – unfortunately – not always possible. In this regard, we would like to highlight our satisfaction with the highly professional services rendered by Mr. Oliver Massmann of Duane Morris LLC, Hanoi, who successfully represented Bauer in Singapore (SIAC) based arbitration proceeding concerning a dispute about payment for construction works provided by Bauer in Vietnam.

We would like to note that Mr. Massmann's handling of the case significantly contributed to the successful conclusion of the case out of court/Arbitration. Mr. Massmann's services combined thorough legal analysis with a strong commercial approach, lead to a timely and efficient resolution of the dispute at hand. In addition, we would also like to mention that our Vietnamese staff confirmed that they have not yet met a foreign lawyer with comparably proficient Vietnamese language skills and the ability to use them professionally in negotiations. Mr. Massmann has proven himself to be capable to use local knowledge paired with legal competence to resolve disputes in an efficient manner. We regard him and Duane Morris LLC as an excellent choice for dispute resolution services and would not hesitate to entrust him with further work.

Best regards

Thomas Domanski
Managing Director

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