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VIETNAM - ONSHORE AND OFFSHORE WIND ENERGY PROJECTS -GETTING DEALS DONE!

DR. OLIVER MASSMANN - Partner, General Director DUANE MORRIS VIETNAM LLC

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AGENDA

- VIETNAM'S LATEST ECONOMIC DEVELOPMENTS
- ENERGY SECTOR OVERVIEW AND POTENTIAL OF RENEWABLE ENERGY IN VIETNAM
- CURRENT GOVERNMENT'S POLICIES ON WIND ENERGY
- **RE POWER CONGESTION ISSUE**
- INVESTMENT GUIDELINES FOR FOREIGN INVESTORS
- **RECOMMENDATIONS**



VIETNAM'S LATEST ECONOMIC DEVELOPMENTS

Vietnam 2019 Economy at a glance



- GDP: US\$244.95 billion
- GDP per capita: **US\$1,964.50**
- GDP Growth: 7.02% (record breaking since 2010)
- Inflation: **3.52%**
- Population: About 96.4 million
- Labor force aged 15 and above: **59.1%**
- Total export and import turnover of the first 6 months: US\$ 245.48 billion (the highest-ever level)
- Regional Minimum wage (Region I): VND 4.180 million (US\$ 180) per month (Jan 2019)
- Vietnam's average age: 30.9 years old

Welcome to the most dynamic country on this planet : Vietnam!



JLL City Momentum Index

The World's Top 20 Most Dynamic Cities

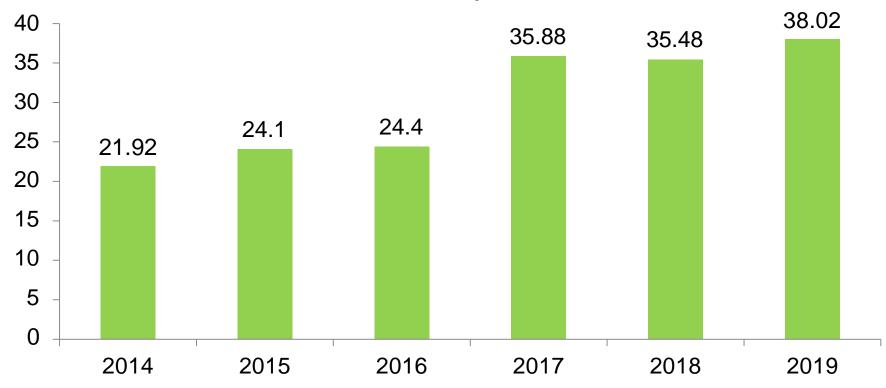
Growing middle-class (doubled by 2020 to 33 million people according to Boston Consulting Group)

96.4 million people

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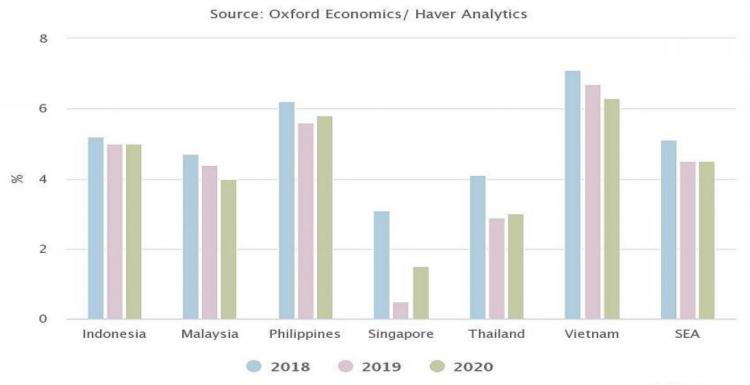
Increasing Foreign Direct Investment

Foreign Direct Investment Value (2014-2019) (billion USD)



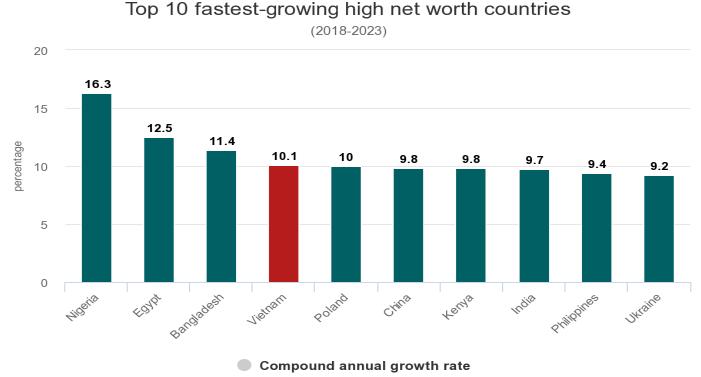
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SOUTHEAST ASIA GDPGROWTH



Highcharts.com

The 4th fastest-growing high net worth country



Wealth-X (2019)

Source: High Net Worth Handbook 2019, Wealth-X

Energy Sector Background

- Electricity demand is expected to increase up to 245 billion kWh in 2020 and increase double to 632 billion kWh in 2030.
- Electricity providing in the period 2016-2030 is expected to be reach 80,500 MW, which is 15,200 MW short for the projected demand.
- Electricity of Vietnam (EVN) holds a monopoly on electricity transmission and distribution.
- PetroVietnam under the control of the Ministry of Industry and Trade, has administrative authority over oil and gas activity in Viet Nam.
- Vinacomin is to assure the supply of coal from domestic sources and import for electricity production





POTENTIAL OF RENEWABLE ENERGY IN VIETNAM

DuaneMorris POTENTIAL OF RENEWABLE ENERGY IN VIETNAM TO 2030

Small hydro power	
Biomass	
Wind	
Solar	









Potential: > 27,800 MW Current use:1,700 MW

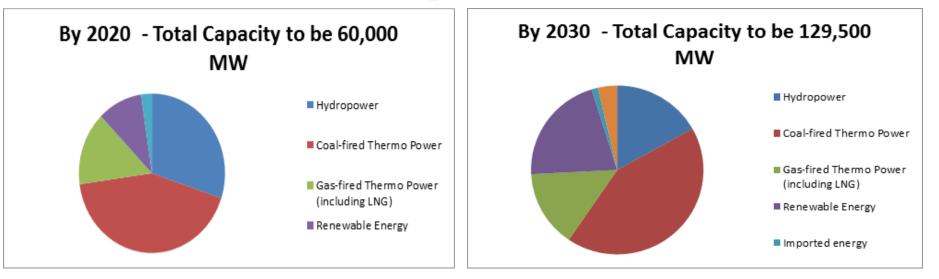
Potential: 2.1% total electricity production in 2030

Potential: 6,000MW Approved capacity: 2,000 MW

Potential:12,000 MW Approved capacity: 8,500 MW

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

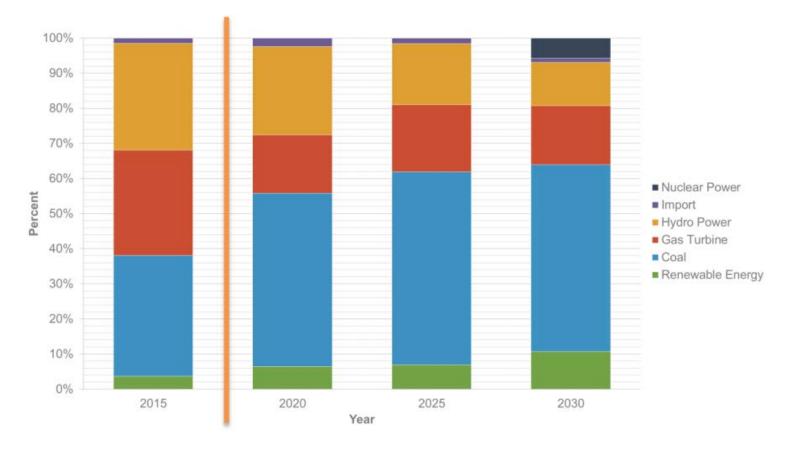


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Coal production – World Bank no longer supports???



The structure of power sources of total electricity production (PDP 7 rev)



100% 90% 80% 70% 60% Nuclear Power Percent Import 50% Hydro Power Gas Turbine 40% Coal Renewable Energy 30% 20% 10% 0% 2015 2020 2025 2030 Year

The structure of power sources of total installed capacity (PDP7 rev)

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CURRENT GOVERNMENT'S POLICIES ON WIND ENERGY



Current Government's policies on renewable energy – General documents

- 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 renewable energy to 2050.
- Document No. **795/TTg-CN** dated 25 June 2020, lists all wind power projects to be included in PDP 7 rev, as proposed by the MOIT in Document No. 1931/BCT-DL dated 19 March 2020 of the MOIT.
- Resolution **No.55/NQ-TW** dated 11 February 2020 of the Politburo of Vietnam on Strategy for National Energy Development up to 2030, with a vision to 2045. In brief, Resolution 55 addresses the current status, achievements and drawbacks existing within the energy sector as well as set out the goals for 2030 and 2045. Resolution 55 encourages renewable energy development and directs to create remarkable policies and plans for development of offshore wind power projects together with the national sea strategy of Vietnam.

Current Government's regulations on wind-toelectricity projects

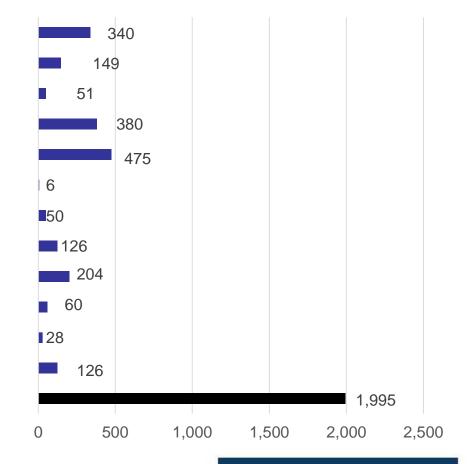
- Decision No. **37/2011/QD-TTg** dated 29 June 2011 on support mechanism for wind power projects (as amended by Decision **No. 39/2018/QD-TTg**)
- Circular No. 02/2019/TT-BCT dated 15 January 2019 on development of wind power projects and power purchase agreement for wind power projects
- As a result of the COVID-19 situation and pleas from investors, on 9 April 2020, the MOIT submitted **Official Letter 2491/BCT-ĐL** dated 9 April 2020 ("**OL2491**") to the Prime Minister suggesting a FiT COD extension for wind projects until 31 December 2023 (a substantial 2+ years extension on the current deadline of 1 November 2021). The MOIT proposed also that a new wind FiT, which would be determined by MOIT, shall apply to eligible wind projects having COD from 1 November 2021 to 31 December 2023 (thereafter wind power prices would be determined through auction scheme).



Current wind projects have signed PPA

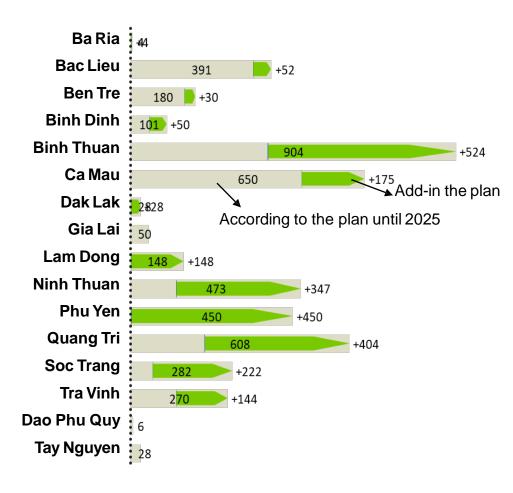


Wattage (MW)



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Current wind projects have signed PPA



Ba Ria	Signed PPA	Plan to 2025
	0	4
Bac Lieu Ben Tre	339,6	391,2
	149,4	179,7
Binh Dinh	51	101
Binh Thuan	380,25	904
Ca Mau Dak Lak	475	650
	0	28
Gia Lai	50	50
Lam Dong	0	148
Ninh Thuan	125,6	473,1
Phu Yen	0	450
Quang Tri	204	608
Soc Trang	60	282,4
Tra Vinh	126	270
Dao Phu	6	6
Quy	28	28
Tay Nguyen		

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Wind-to-electricity projects overviews

- **On-shore projects**: any wind power project which (i) has been grid-connected; (ii) wind turbine(s) constructed and operated in mainland and coastal areas of which the outer boundary is the average lowest sea edge for many 18.6 years.
- Off-shore projects: any wind power project which (i) has been grid-connected; (ii)wind turbine(s) constructed and operated offshore outside the average lowest sea edge for many 18.6 years.
- FIT: 8.5 UScents/kWh (on-shore projects) and 9.8 UScents/kWh (off-shore projects).
- FIT only applies to part(s) of or entire wind project COD before
 01/11/2021. The period for the enjoyment of FIT is 20 years from COD.
- Smallest part for COD is a turbine.

Wind-to-electricity projects overviews

- For projects COD after 01/11/2021: **new FIT price** (for the period from 1 November 2021 to 31 December 2023) **and auction scheme** (after 31 December 2023) under OL2491 of the MOIT are currently under consideration of the Prime Minister.
- **COD date** is either those two, which ever comes later, provided experiments for COD is completed: (i) The date of **closing meter readings** (after the completion of reliable experiments); or (ii) The date of **obtaining operating license**;
- PPA: Based on **PPA template**.

Wind PPA template – some improvements

- In terms of the current FiT, the revised model PPA has adjusted the foreign exchange rate to be the central exchange rates of the Vietnamese dong against the US dollar announced by the State Bank of Vietnam on the payment date.
- The PPA does exclude the due payment obligations of EVN / power companies from force majeure exemption and it could ensure EVN and power companies to make payments regardless force majeure events occurring.
- EVN's compensation liability now comprises (i) the value of actual and direct losses incurred by the aggrieved party as caused by the defaulting party and (ii) the value of direct benefits which the aggrieved party would have been entitled to if there was no such default.

Wind PPA template – but still not bankable

- The PPA relieves EVN from payment obligations in cases it is unable to take power due to a breakdown of the transmission or distribution grid. This is still a risk to power producer although EVN is required to give at least 10-day advance notice to the seller.
- The PPA is governed by Vietnamese law and does not itself exclude the possibility for the parties to agree on international arbitration to resolve disputes.
- The PPA enables the developers to transfer the PPA or provide step-in rights to lenders but subject to always written approval from EVN, provided that also it notifies EVN immediately in writing. This is a disappointment as the old template allows lender's step-in right without approval from EVN.

The wind PPA

- PPA is required to follow a specific template
- The PPA template is unclear whether it is a "take or pay" agreement.
- Amendment of the PPA template is possible upon a written agreement with EVN, provided that it does not change the FUNDAMENTAL contents of the PPA template. Note: It is not clear what is "fundamental" => the amendment of the PPA subjects to the negotiation with EVN (legal counsels' involvement is essential).

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But don't worry! We have the EU – Vietnam FTA and CPTPP

- EU Vietnam FTA ("EVFTA") and the Investment Protection Agreement ("IPA"):
 - Vietnam will have more legal certainty than even Germany.
 - IPA implements investor-to-state dispute settlement (ISDS) mechanisms
 investors can claim in case that an investor protection obligation has been breached
 - Domestic courts cannot question the legal validity of the decisions
- Comprehensive and Progressive Agreement for the Trans-Pacific Partnership (CPTPP):
 - TPP continues without the US, effective from 30 December 2018.
 - New TPP accounts for 12.9% of global GDP and 14.9% of global trade.

Non-recourse financing

- What is it? The Project can be financed with a loan secured by a charge on specific assets or on the revenues generated from a specific project or assets.
- How to obtain?
- ✓ Option 1: To develop the project by way of entering into a BOT (Build-Operate-Transfer) contract with the Government. As it is the Government who will own the project at the end upon the expiration of the BOT contract, the BOT contract will be more bankable → the non-recourse/limited recourse financing arrangement can be achievable.
- ✓ Option 2: To seek guarantee from the Multilateral Investment Guarantee Agency ("MIGA").
- ✓ Option 3: To cooperate with a State-owned commercial bank for its guarantee of the project and then, negotiate with lenders to eliminate all recourses that lenders may ask from the sponsors and/or the borrowers.

EVN – Bankable now?

- EVN is assigned an Issuer Default Rating (IDR) of 'BB' with a 'Stable Outlook' for long-term foreign currency from Fitch Ratings – EVN's First and Positive Credit Rating
- This is based on EVN's strong linkages to the state, its market position, strong demand for electricity and solid collection rates.
- \rightarrow More assurance to the private sector and commercial lenders about the financial and technical capacity of EVN

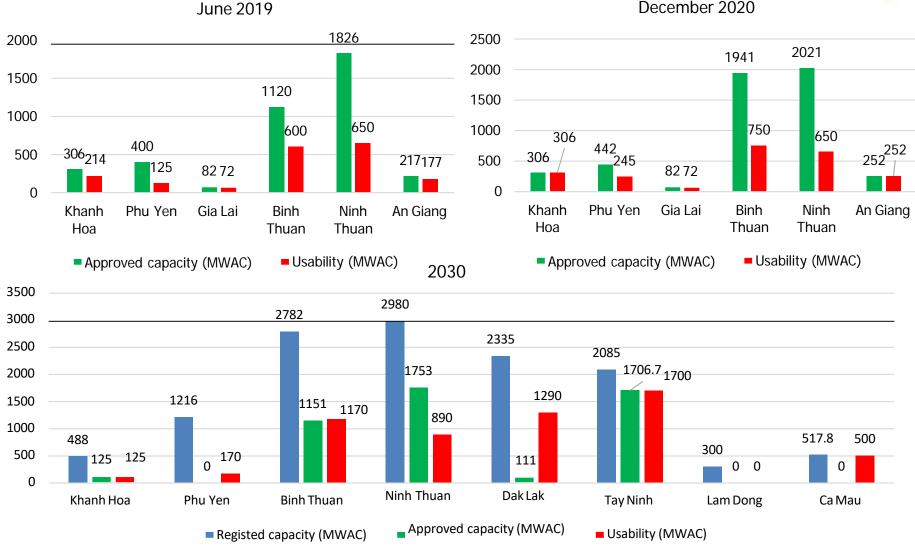




RE POWER CONGESTION ISSUES

RE POWER CONGESTION ISSUES

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NATIONAL LOAD DISPATCH CENTRE

December 2020



INVESTMENT GUIDELINE FOR FOREIGN INVESTORS



Market access and Forms of investment

- No foreign ownership restriction
- Investment forms:
- \checkmark A wholly-owned foreign enterprise



- ✓ A joint venture company between a foreign investor and domestic investor
- ✓ Investment pursuant to the BOT legal framework
- ✓ Through the purchase of shares in either an EVN subsidiary being or having been equitized or a private IPP holding power assets.

Duane Morris WTO ANALYSIS OF LIBERALIZATION OF MARKET ACCESS

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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Financing options for power projects

- Government investment funding and preferential policies
- Official Development Assistance (ODA)
- Loan from commercial banks or financial institutions
- Clean Development Mechanism (CDM)
- Public Private Partnership (PPP)

BOT – BEST INVESTMENT FORM

- Government's Decree No. 63/2018/ND-CP on Public- Private Partnership: making projects more bankable [New PPP Law has been approved by the National Assembly of Vietnam on 18 June 2020 and will become effective 1 January 2021 (its final contents will be published soon). Dr. Oliver Massmann and Duane Morris team were invited to speak on the draft to the National Assembly's Economic Committee for and did so on 13 May 2020. Duane Morris was the only foreign law firm would be invited to this event.]
- Easier to negotiate more favorable electricity rates.
- Easier to obtain more government guarantees, especially in terms of EVN's obligations to purchase all electricity from the project.
- More fiscal and financial incentives.
- Precedent large-scaled BOT power projects in Vietnam: Phu My, Vung Ang, Mong Duong 2, Dung Quat 2, Song Hau 2, and many others

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INVESTMENT INCENTIVES

- *
- Subject to the decision of the local People's Committee where the project is located
- Land: land use fee exemption
- **CIT 10%**
 - 15 years for new enterprises investing in power plant projects
 - tax exemptions within 4 years and tax reduction by 50% in the next 9 years.
- Import duty exemption
 - on goods imported to create fixed assets of the projects; components, materials and semi-finished products which cannot be produced inland for the project's operation.

Project planning



- Investors have to obtain prior agreement of EVN on power purchase prior to licensing procedure.
- Commitment of banks or credit institutions on financing the project must be obtained prior to issuance of Investment Registration Certificate .
- In-principle approval of the local People's Committee (or other competent authority subject to the project scale) is required prior to issuance of Investment Registration Certificate
- Obtain a power generation permit from the competent State authorities in order to conduct power generation operations in Vietnam
- Term of the permit: maximum 20 years for large power plants with particularly important meaning on economy, society, national defense and security as per the list approved by the Prime Minister; and 10 years for other power plants projects.
- The permit cannot be renewed but the investor may apply for a new one within 60 days prior to the expiry date of the current permit.

Project licensing

- **Step 1**: The investor obtains approval from the competent authority [e.g., Prime Minister] approving the power plant as part of the power development plan (if required).
- Step 2: The investor obtains in-principle approval from the competent People's Committee (or other competent authority subject to project scale)
- Step 3: Application for issuance of the Investment Registration Certificate and the Enterprise Registration Certificate
- Step 4: Preparation of construction / operations of the power plant (for example, acquiring land area, site clearance, preparation, land investigation, conducting environmental assessment)
- Step 5: The project company to obtain necessary permits (*e.g.* electricity generating permit) and relevant agreements (*e.g.* PPA) for its and the power plant's operation.
- Step 6: Construction of the power plant and operation

RECOMMENDATIONS FOR INVESTORS

- Public private partnerships (e.g. BOT) should be the first option.
- Due care on negotiations of the PPA and grid connection agreement with EVN
- Electricity selling in off-grid areas can be a good choice
- Sound financing structure, good business model and great legal assistance are keys to success.
- Accurate prediction of where the market is heading to, in the context of Vietnam's critical power shortage, should be considered.
- More pressure on the government to adequately address key issues on tariff increase, demonopolization of the power market and government guarantee.
- Vietnam's market is extremely in need of financing and EPC capability. There are rooms for cost-effective and high quality EPC contractors and resourceful lenders.
- In many cases, you can "test the water" with a small power plant project.



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WHEREVER YOU ARE - BE ALL THERE

Jim Elliot

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DUANE MORRIS VIETNAM LLC

Thank you very much!

HANOI OFFICE

Pacific Place, Unit V1307/08, 13th Floor, 83B Ly Thuong Kiet, Hoan Kiem District Hanoi, Vietnam Tel.: +84 4 39462200 Fax: +84 4 3946 1311

HO CHI MINH CITY OFFICE

Suite 1503/04, Saigon Tower 29 Le Duan Street, District 1 Ho Chi Minh City, Vietnam Tel.: +84 8 3824 0240 Fax: +84 8 3824 0241

Contact email:

omassmann@duanemorris.com