



Ministry of Industry and Trade



Hợp tác
Đức
DEUTSCHE ZUSAMMENARBEIT

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Gesellschaft für Internationale
Zusammenarbeit (GIZ) GmbH

Directory of Vietnamese and German companies active in the energy sector



Vietnamese-German Business Forum

Organized by Viet Nam Embassy in German, Vietnam Chamber of Commerce and Industry, Asia-Pacific Committee of German Business on the occasion of the visit of H.E. Nguyen Xuan Phuc, Prime Minister of Viet Nam to Germany.

6th of July, 2017

Marriott Hotel, Berlin

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Introduction

Vietnam and Germany have a rich history of economic, cultural and political cooperation, which has intensified during the past years. In the past year, German imports from Vietnam increased by 33% and German exports to Vietnam grew by 15%, with total bilateral trade exceeding USD 10 billion.

With both countries undergoing rapid changes in their energy sectors, in 2013 energy became one of the priority areas of Vietnamese-German development cooperation. Vietnam, with a rapidly developing economy and fast-growing energy demand, is undergoing a boom in power generation and transmission. Germany has established itself as a leader in renewable energy technologies and services, with many companies actively exporting renewable energy products and know-how in Vietnam and around the globe. The two countries are working together to ensure that Vietnam can pursue a green growth path in line with its multilateral agreements.

Within the framework of Prime Minister Nguyễn Xuân Phúc's visit, a German-Vietnamese Business Forum is organized on 6 July 2017 by the Embassy of Vietnam to Germany, the Vietnamese Chamber of Commerce and Industry and the Asian-Pacific Community of German Business. Many companies active in the energy sector participate in this Forum. A business directory of companies active in the field of energy was developed in order to facilitate match-making between potential partners during and after this event. It was developed in the framework of the Renewable Energy and Energy Efficiency (4E) Project which is jointly implemented by the General Directorate of Energy (GDE) under the Ministry of Industry and Trade and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ).

GIZ Activities in the Vietnamese Energy Sector

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), had a continuous presence in the Vietnamese renewable energy sector since 2009.

Working together with our main partner, the Vietnamese Ministry of Industry and Trade (MOIT), we have been supporting the Vietnamese Government in developing renewable energy and energy efficiency markets. Our supports focus on proposing innovative measures to transform and adapt the energy sector and thus to reach the national targets on renewable energy and energy efficiency. A number of projects have been implemented or are currently ongoing:

- Wind Energy: 2009-2012
- Bioenergy: 2012-2015
- Support to the Up-Scaling of Wind Power: 2014-2018
- Renewable Energy and Energy Efficiency: 2015-2022
- RE Project Development Programme: 2015 - 2018
- Smart Grids for RE & EE: 2017-2021

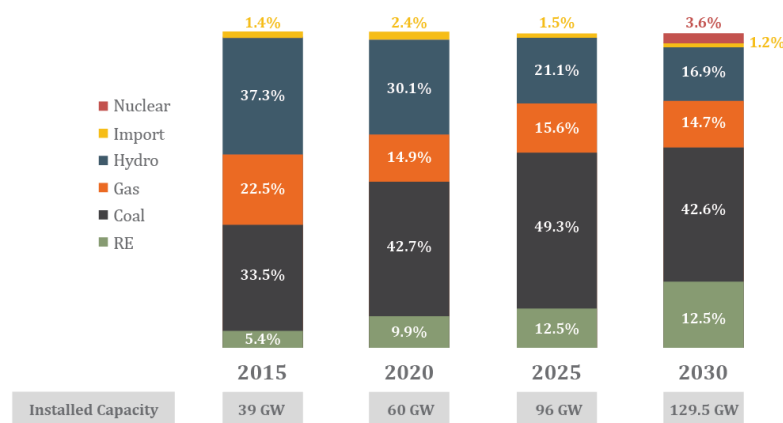
We work – across all projects – in the following three action areas: Legal and Regulatory Framework Conditions, Capacity Development and Technology Cooperation. The simultaneous implementation of these three action areas across projects and technologies is expected to contribute to the comprehensive development of the Vietnamese energy sector.

Exemplary project activities include policy advice (e.g. proposal for the revision of the current FIT, national and provincial planning), project development (investment guidelines) and cash flow modelling training for the public and private sector, supporting regional development plans, assessing potential of various energy sources and facilitating Vietnamese-German partnerships.

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The Vietnamese Energy Sector

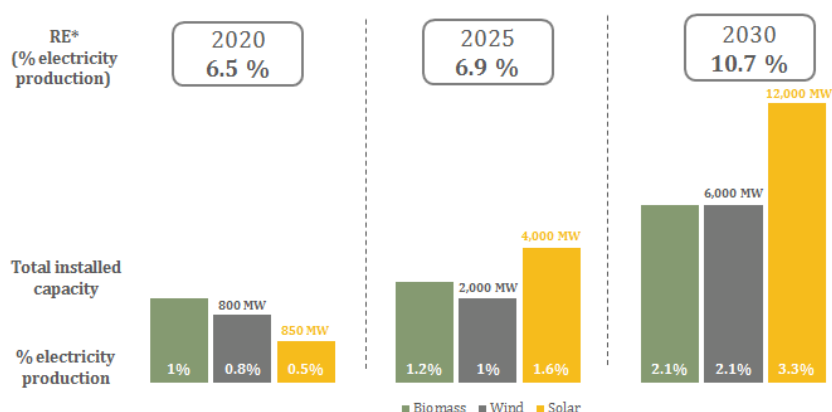
Vietnam's rapid development is reflected clearly in its sharp increase of electricity consumption. During the last ten years, energy consumption has grown by between 11-15% annually, almost twice the growth rate of the GDP. Installed capacity and total power generation has reached over 38.553 MW and 160 billion kWh respectively, mostly through the use of sources such as large hydro power, coal and gas. Renewable energy is still a nascent market in Vietnam, accounting for 5.4% of total installed capacity in 2015. Excluding small-scale hydropower, this figure drops to around 1.26%.



Source: Institute of Energy

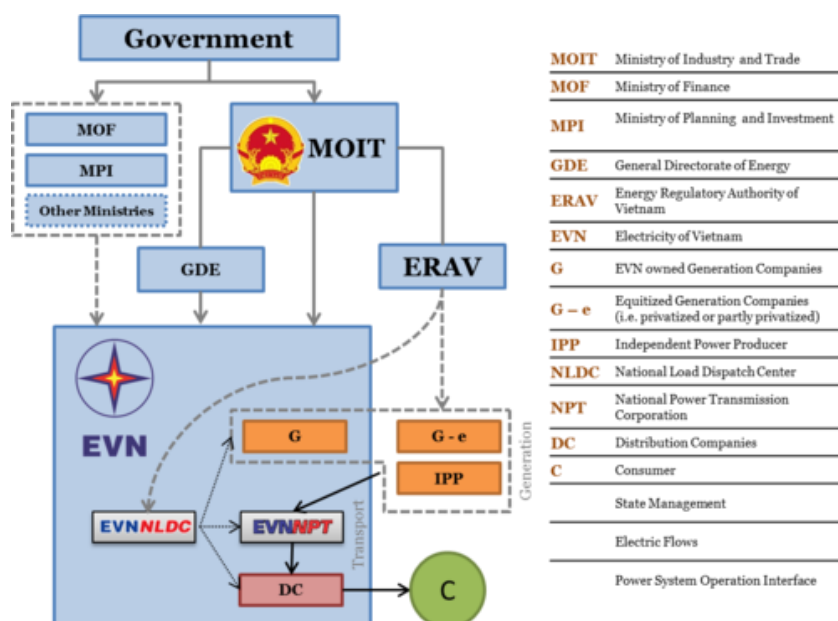
To meet the country's power demand and ensure energy security, the Government of Vietnam prioritizes the development of reliable and clean energy sources for electricity production. With the country's large hydropower potential almost fully exploited, the relative importance of coal and renewable energies increase throughout the next decades.

While coal will remain Vietnam's most important energy source, Vietnam is a signatory of the Paris Agreement and has committed to reducing CO₂ emissions (by at least 8% to the business-as-usual scenario, and 25% with international support) as part of its nationally determined contributions. In addition, energy demand is outpacing domestic coal production, increasing Vietnam's reliance on imported fuels.



Source: Revised Power Development Plan VII

Hence, a priority is given to the development of biomass, wind and solar. By 2030, solar energy, with a total electricity production of more than 3%, is anticipated to start becoming a major contributor to Vietnam's energy mix, followed by wind and biomass each at more than 2%. These goals have recently been complemented with political support mechanisms such as feed-in-tariffs, tax incentives and a reform of the energy sector. The feed-in-tariffs for utility-scale PV and wind energy currently stand at 9.35 ¢/kWh and 7.8 ¢/kWh respectively.



Source: Energypedia

Starting in 2013, the market structure has started to shift from a monopolistic system of the vertically integrated state-owned utility Electricity of Viet Nam (EVN) to a competitive power generation market. So far, most foreign companies have entered the market under “Build-Own-Transfer” models, while others have developed independent renewable energy power plants that sell to EVN under 20-year power purchasing contracts. A fully competitive power wholesale market is to be established by 2021 and a competitive power retail market from 2023 onwards.

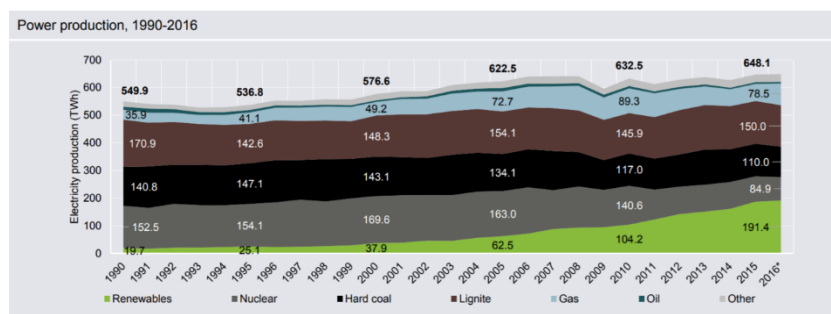
At an electrification rate of more than 97%, almost the full country is connected to the national grid. This network requires significant investment to scale up with increased power generation and consumption, while simultaneously ensuring a safe supply. Smaller renewable energy systems can be a valuable contribution to energy security through inexpensive and relatively fast generation at important locations.

This emphasizes the importance that the following years will carry for Vietnam’s energy sector. Reaching renewable energy targets while at the same time ensuring energy security requires a close cooperation between public institutions, investors, developers and research facilities. The new market dynamic, coupled with limited local experience in the nascent renewable energy sector, allows for business opportunities and partnerships for international cooperation on various stages of the value chain.

As can be demonstrated by the signing of large-scale MoUs for the joint development of an 800 MW wind energy power plant with US company General Electric in May this year, Vietnam has gained increasing interest from global players. Indian developer Tata Solar, the American AES Corporation and South Korean developer Solkiss are among the new international players in solar power plants. In addition, several German companies are in the process of considering market entry.

The German Energy Sector

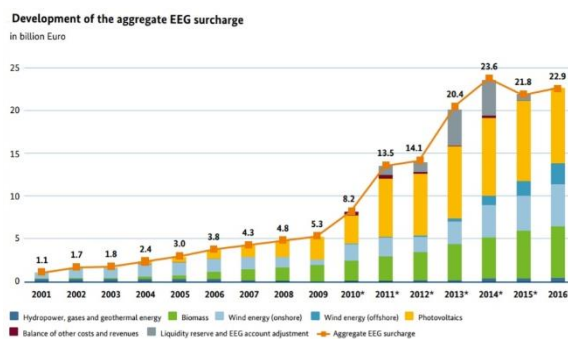
The German energy sector has undergone major changes throughout the last decades. With first feed-in-tariffs established in 1990, the 2000 Renewable Energy Act has paved the way for supporting the development of wind, solar, geothermal and bioenergy. Further strengthened by the announcement to decommission Germany's nuclear power plants by 2022, ambitious goals for the expansion of renewable electricity generation to 80% by 2050 while at the same time reducing energy consumption by 25% (compared to 2008 levels). Traditionally reliant on four regional utilities supplying energy from largely fossilized sources, the sector is now completing an "Energiewende", a transformation into a decentralised, climate-friendly and competitive market.



Source: *Agora Energiewende*, using data from *AG Energiebilanzen*

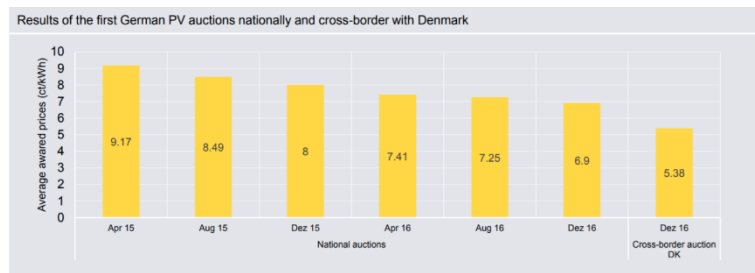
As part of its Energiewende, Germany has become a global front-runner in renewable energy and energy efficiency measures. Being among the top 3 countries of installed generating capacities of photovoltaics, on- and offshore wind and biomass, as of 2015 more than 30% of electricity consumption was generated from renewable energy sources. The two large contributors to the expansion of renewable energy are onshore wind power and photovoltaics, each making up more than 40 GW of the around 97 GW total renewable energy installed capacity respectively. With more than a third of renewable energy capacity owned by individuals and citizen energy cooperatives, the Energiewende has especially mobilized private investment and support.

The energy transition has required significant incentive mechanisms from the government, especially during its first years. As the national market matured and global prices fell significantly, renewable energies have needed less support, even becoming more cost-effective than traditional sources. While the renewable energy market has therefore required large financial investments, the trend line is now stabilising. Incidentally, this expansion has made renewable energy a very important contributor to the job market and with around 330,000 jobs it has quickly outpaced that of conventional energies. Germany's first mover advantage is paying off with more than 100,000 of jobs estimated in the global export of renewable energy solutions.



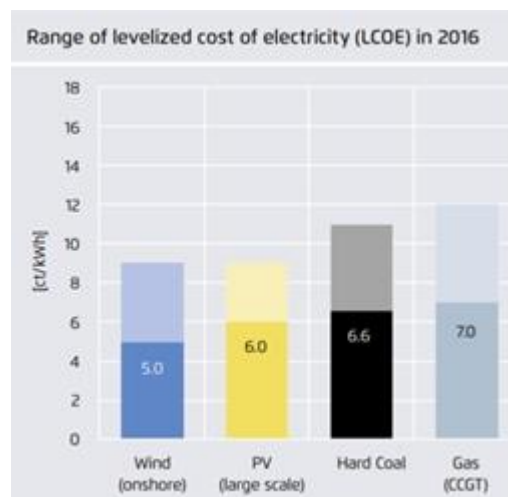
Source: *BMWi*

In a more recent energy law of 2017, the government has shifted away from feed-in-tariffs towards a tendering system with capacity targets. First experiences already show a further fall in prices and levelised costs below that of conventional energy systems.



Source: Agora Energiewende, using data from Bundesnetzagentur

However, the German transmission network has not remained unaffected by the Energiewende. Increased decentralisation of electricity generation and a concentration of volatile power generation in new regions has put a strain on the German electricity grid, and an estimated 8000 km of new transmission lines are needed by 2025. For example, wind energy is most effective in the northern parts of Germany, a region that has previously played a much smaller role in the country's energy supply. Therefore, a grid reserve from otherwise non-operational power plants largely in the south of Germany stood at 5.4 GW for the winter of 2016/2017 and smart power grids are developed to ensure continued more efficient and stable networks.



Source: Agora Energiewende

Germany's Energiewende has demonstrated the difficulty, but also the benefits of undergoing an energy transformation. With initially high investments, the country has become a global frontrunner in solar, wind and biomass energy goods and services. In the wind energy sector, for example, German manufacturing and supply companies represent around 20% of the global market. With this wealth of domestic and international experience, German renewable energy companies can be an important partner in Vietnam's renewable energy development.



Vietnamese Attendants

An Khanh Electronic Joint stock company



Type of Organisation	Joint stock company
Address	Group 22, Quang Trung ward, Thai Nguyen City, Thai Nguyen Province - Viet Nam
Website	www.nhietdienankhanh.com.vn
Contact Person	Phuong Le Dinh
Job Title	Secretary of the Board of Directors
Telephone Nr.	0987.944.955
Fax Nr.	+8402083.542.111
E-Mail	phuongld@nhietdienankhanh.com.vn

Short Company Description

An Khanh Electric Joint Stock Company works in the fields of power production by means of thermal and hydropower, power purchase, industry investments, finance, transport, traffic and real estate. Also works in production, processing and import, export of mineral resources, forest products, seafood, maritime products, consumer goods as well as goods consignment and sales agent.

Products and Services including in the Renewable Energy Sector

Electricity generation by hydro power, thermal power, electrical business.

On-going and planned activities in the renewable energy sector in Vietnam and abroad

An Khanh Electric Joint stock company owns the An Khanh Thermal Power Plant Project I with the capacity of 120MW, Khanh Bac Giang with the capacity of 650MW and the Nui Phao mineral Mining and processing project.

Expectations and Needs from Potential German Partners

We have already established the joint venture company, operated in processing vonfram with modern technologies and Mr. Nguyen Van Thang is the chairman of joint venture company of the Vietnam side.

Vietnam Electricity Corporation (EVN)



Type of Organisation	State-owned company
Address	No. 11 Cua Bac Street, Truc Bach Ward, Ba Dinh district, Hanoi City, Viet Nam
Website	www.evn.com.vn
Contact Person	Mr. Dang Hoang An
Job Title	General Manager
Telephone Nr.	024 66946789
Fax Nr.	024 66946666

Short Company Description

Vietnam Electricity Corporation was established in 1994. It is a leading economic group in the power sector in Vietnam and plays a key role in the task of ensuring national energy security.

Products and Services including in the Renewable Energy Sector

Its core businesses include:

- Production, transmission, distribution and trading of electricity;
- Directing and operating the system of production, transmission, distribution and allocation of power in the national power system;
- Import and export of electric power; investment and capital management in the power projects;
- Management, operation, repair, maintenance, overhaul, rehabilitation and upgrading of the electrical, mechanical equipment, control and automation system of the line of production,
- Transmission and distribution of electricity, power works and electrical testing.

On-going and planned activities in the renewable energy sector in Vietnam and abroad

Photovoltaic Projects which are under development by EVN:

Sesan project (capacity 47MW), Phuoc Thai project (capacity:200MW) Song Binh project (capacity: 200MW), Tri An project (capacity 126MW)

EVN is conducting study for a number of solar projects, which include Phuoc Trung project (Installed capacity: 50MW), Binh Phuoc project (Installed capacity: 250 + / 300 MW), Tay Ninh (Installed capacity: 150 – 200 MW).

Phu Cuong Group Corporation



Type of Organisation	Joint stock company
Address	5 Nguyen Binh Khiem, District 1, Hochiminh City, Vietnam
Website	www.phucuonggroup.com
Contact Person	Pham Quoc Anh
Job Title	Deputy General Manager (Energy & Investment)
Telephone Nr.	028 3911 9933
Fax Nr.	028 3911 9977
E-Mail	quocanh@phucuonggroup.com

Short Company Description

Lines of business include real estate, renewable energy and seafood.

Products and Services including in the Renewable Energy Sector

Energy Sub-sector focus: Wind, Solar, Tidal & Waves

On-going and planned activities in the renewable energy sector in Vietnam and abroad

Feasibility study of Phu Cuong Wind Farm (800MW).

Pidi Vietnam Power Consultancy & Construction Corporation



Type of Organisation	Joint stock company
Address	No. 679 Hoang Hoa Tham Street, Vinh Phuc Ward, Ba Dinh Dist, Hanoi, Vietnam
Website	www.pidi.com.vn
Contact Person	Nguyen Ngoc Vuong
Job Title	Chairman of the Managing Board
Telephone Nr.	04 3773 8118
Fax Nr.	04 3773 8119
E-Mail	pcc.pidi@gmail.com

Short Company Description

PIDI Vietnam Power Consultancy and Construction Corporation is an enterprise operating under the Enterprise Law of the Socialist Republic of Vietnam. It was officially established and operates since March 6, 2001. Its main fields of work include:

- high-voltage power lines, transformer stations up to 220 kV, and internal telecommunication and lighting works
- business and services of water supply and drainage, heat and air condition systems, compressed air supply and environmental sanitation
- industrial equipment systems in construction and civil engineering.

With knowledge and experience gained over the past time decade, PIDI Vietnam Power Consultancy and Construction Corporation is a credible address for national and international customers.

Products and Services including in the Renewable Energy Sector

Investing in the development of viable grid-connected renewable power plants, including delivering support on a competitive basis, ensuring that affordable electricity is mobilized into the system.

Main services include the development and use of biofuels as well as fuels to provide heat. PIDI Viet Nam Investigates, plans and develops pilot biofuel projects. This includes investment support for second generation and third generation biofuel pilot projects.

On-going and planned activities in the renewable energy sector in Vietnam and abroad

Development and use of independent renewable energy sources to meet the rural electrification goal in especially difficult, deep-lying, remote, mountainous and island areas.

Bring about high economic and social benefits through power sourcing, exploitation and the best use of renewable energy in the country through advanced and adapted technologies.

Expectations and Needs from Potential German Partners

Looking for partners to cooperate in producing and trading electrical equipment, industrial and civil electrical equipment. Looking for industrial corporations that need to co-invest in manufacturing in Vietnam.

Tan A Dai Thanh Group



Type of Organisation	Holding company
Address	124 Ton Duc Thang Street, Hanoi, Vietnam
Website	www.tanadaithanhgroup.vn
Contact Person	Mr. Charlie Dao
Job Title	Executive Assistant to CEO
Telephone Nr.	0084 96 100 2338
E-Mail	thanhcongbkhn@gmail.com/congdt@tanadaithanhgroup.vn

Short Company Description

Tan A Dai Thanh Group was established in 1993 with its headquarter in Hanoi. We are now Indochina's biggest and leading manufacturer of water related products, namely: water tanks (plastic and stainless steel, water heater, solar water heater, water purifier, pipelines, interior and exterior paint. A number of our production lines and machinery are imported from the EU, Northern America, Japan and Korea. Raw materials are carefully selected which enables us to deliver and bring to market premium quality and environmentally friendly products. Thanks to our in-depth investment which focus on human resources, A Dai Thanh Group has successfully built the unique corporate culture in which every single staff is respected and regarded as our priceless asset.

Products and Services including in the Renewable Energy Sector

Water tanks (plastic and stainless steel, water heater, solar water heater, water purifier, pipelines, interior and exterior paint., kitchen & bathroom facilities

On-going and planned activities in the renewable energy sector in Vietnam and abroad

Active in the market for solar water heaters.

Expectations and Needs from Potential German Partners

Looking for importers of our products, OEM manufacturing partners.

Trung Nam Construction Investment Corporation



Type of Organisation	Private
Address	7A/68 Thanh Thai, Ward 14, Dist 10, HCM city, Vietnam
Website	www.trungnamgroup.com.vn
Contact Person	Ms Hue Thi Minh Dao
Job Title	Exacutive assistant to BOD
Telephone Nr.	84 862645178
Fax Nr.	84 862645180
E-Mail	huedtm@trungnam.com.vn

Short Company Description

Trung Nam Group was established in 2004, and is a 100% privately owned company. TNG. With over 1000 employees nation-wide, is a professional investor in the fields of: energy, real estate, infrastructure (in the form of BT, BOT includes: roads, bridges, WWTP, ect) and construction & engineering.

Products and Services including in the Renewable Energy Sector

Power plants:

- Hydro power Project: Dongnai 2 (70MW) – Krongno 2&3 (48 MW)
- Wind power Project: Ninh Thuan windfarm (90 MW) - under construction

Real estate projects:

- Golden Hills residential project located in Da Nang city with total area of 340 hectares
- Golf Valley residential project located in Da Lat city with total area of 20 hectares

Infrastructure Projects:

- Bach Dang bridge (in the form of BOT)
- Nga Ba Hue intersection, anti-tidal flooding for HCM city, Nguyen Tat Thanh road (in the form of BT)

On-going and planned activities in the renewable energy sector in Vietnam and abroad

- 2 MW Solar Pilot project in Ninh Thuan province
- 500 MW Solar project is under survey and studied in Ninh Thuan province
- 1200 MW Pumped storage power project in Ninh THuan province
- Plan to acquire other wind projects in the middle region of Vietnam to develop.

Expectations and Needs from Potential German Partners

TNG is looking for equipment suppliers; investors, and funding institutions. Further requirements will be discussed between parties.

Bank for Foreign Trade of Vietnam (Vietcombank)



Type of Organisation	Joint stock company
Address	198 Tran Quang Khai Str., Hoan Kiem, Hanoi, Vietnam
Website	www.vietcombank.com.vn
Contact Person	Mr. Pham Manh Thang
Job Title	Deputy General Manager
Telephone Nr.	024 3 934 3137
Fax Nr.	024 3 826 5548

Short Company Description

After more than 50 years of operation in the market, Vietcombank, one of the biggest commercial banks in Vietnam, currently has more than 14,000 employees and more than 460 branches/ transaction offices/ representative office/ affiliates both in Vietnam and abroad. The Bank's operations are supported by a network of more than 1,856 correspondent banks in 176 countries and territories around the world.

Vietcombank is now providing customers with a wide range of leading financial services in international trade; traditional services such as capital trading, capital mobilization, credit, project financing... etc., and modern banking services such as forex trading and derivatives, card services, and e-banking.

Products and Services including in the Renewable Energy Sector

The main lines of business are finance and banking.

German Attendants



BayWa r.e.



Type of Organisation	Company
Address	Kaiser-Joseph-Str. 263, 79089 Freiburg
Website	www.baywa-re.com
Contact Person	Dr. Benedikt Ortmann
Job Title	Director Solar Projects
Telephone Nr.	+49 (761) 383 686 12
E-Mail	Benedikt.ortmann@baywa-re.com

Short Company Description

BayWa r.e. develops, plans, designs, constructs and operates renewable energy projects worldwide. With over 1,000 employees, the company generates a yearly turnover of €1 billion mainly in Solar and Wind projects, as well as in providing services to IPPs and investors.

Products and Services in the Renewable Energy Sector

Project development, construction and operation of renewable energy projects worldwide. We are on our search to partner up with project developers in Vietnam in particular for joint green field project development activities.

International Experience in the Renewable Energy Sector/ on-going and planned activities in Vietnam

BayWa has built more than 1 Gigawatt renewable projects in Wind and Solar worldwide. For Vietnam, we would like to build a portfolio of photovoltaic projects, ideally summing up to several hundred MW by 2020.

Expectations and Needs from Potential Vietnamese Partners

We are searching for project developers, who are capable to develop green field projects until ready-to-build-status. We are happy to co-develop and share risks and chances of the development.

Bundesverband Solarwirtschaft



Type of Organization	Association
Address	BSW Bundesverband Solarwirtschaft e.V., Lietzenburger Strasse 53, 10719, Berlin, Germany
Website	www.solarwirtschaft.de
Contact Person	Joachim Goldbeck
Job Title	President
Telephone Nr.	+49 6201 8777 5501
E-Mail	Joachim.goldbeck@solarnet.energy

Short Company Description

BSW Solar is the German solar association and represents more than 800 Companies along the solar value chain. The focus lies on facilitating the solar market in Germany as well as assisting international activities by associations and governments to start and develop sustainable clean energy regimes.

Products and Services in the Renewable Energy Sector

Consulting services on a governmental level and for the private sector with the goal of the proliferation of photovoltaic, solar thermal or battery systems.

International Experience in the Renewable Energy Sector/ on-going and planned activities in Vietnam

BSW Solar has a wide range of experience with international partners. It has worked on PV market studies and cooperated with associations in many countries including Brazil, Chile, Mexico, Indonesia, Tunisia and the Philippines.

Conergy Asia & ME Pte Ltd



Type of Organisation	Private sector
Address	80 Anson Road, Fuji Xerox Towers, #09-01, S(079907)
Website	asia.conergy.com
Contact Person	Mr. Marc Lohoff
Job Title	Director
Telephone Nr.	+65 6849 5540
E-Mail	m.lohoff@conergy.com

Short Company Description

Conergy is one of the world's largest downstream solar companies – specializing in the development, design, finance build and long-term asset management of commercial, industrial and utility-scale solar power systems. Founded in 1998, the company has pioneered the expansion of solar globally and has built over 1.5 GW across six continents. Within Asia Pacific, Conergy has closed over 460 MWp of EPC contracts and has provided Operations & Maintenance services for over 400 MWp of solar projects.

Products and Services in the Renewable Energy Sector

Conergy provides turnkey EPC and O&M services.

International Experience in the Renewable Energy Sector/ on-going and planned activities in Vietnam

Global track record of installed solar farms and rooftop systems: 1.5 GWp. In Asia Pacific track record of 460 MWp EPC projects.

Planned activities for Vietnam: Providing EPC and O&M services to local and international solar developers/IPPs

Expectations and Needs from Potential Vietnamese Partners

- Share insights about status of development of solar farms
- Receive corporate profiles
- Construction capabilities

Elia Grid International



Type of Organisation	Private company
Address	Heidestrasse , 10557 Berlin
Website	www.eliagrid-int.com
Contact Person	Dr. Georgios Papaefthymiou
Job Title	Senior Consultant
Telephone Nr.	+49 305150 3985
E-Mail	Georgios.Papaefthymiou@eliagrid-int.com

Short Company Description

Elia Grid International (EGI) is part of the Elia Group, a top 5 European TSO. It is a wholly owned subsidiary of Elia, the TSO in Belgium, and 50Hertz, the TSO in Northern and Eastern Germany. Elia Grid International combines the quality and expertise of two large European electricity transmission system operators, each with a solid track-record and many decades of experience. We offer a range of consultancy and engineering services to a diverse and international client base. With offices in Brussels, Berlin and Dubai, Elia Grid International brings you proven expertise and innovative solutions in all aspects of electricity transmission and distribution.

Products and Services including in the Renewable Energy Sector

Renewable Energy Integration
 Organisational Transformation
 Asset Management Implementation
 System Operations
 Electricity Markets & Regulation

International Experience in the Renewable Energy Sector/ on-going and planned activities in Vietnam

With 50% of RE (16GW of Wind and 8GW of PV) integrated in 50Hertz grid, EGI has part of Elia Group is the ideal partner for EVN and NLDC on the topic of renewable energy. EGI is staffed with experts who not only assist on international activities but also bring their capabilities and expertise at the service of our mother companies.

EGI is very keen to develop first activities on renewable energy in Vietnam and develop further collaboration with EVN and MoIT.

- Expectations and Needs from Potential Vietnamese Partners
- Information on RE roadmap for Vietnam
- List of current status and ongoing initiatives on RE
- Key contacts for EVN, MoIT (ERAV and GDE)

Enercon GmbH



Type of Organisation	Manufacturer (Wind Turbine)
Address	Dreekamp 5, 26605 Aurich, Germany
Website	www.enercon.de/home/
Contact Person	Steffen Brauns
Job Title	Regional Sales Manager
Telephone Nr.	+ 49 4941 927 670
E-Mail	steffen.brauns@enercon.de

Short Company Description

ENERCON has been one of the technology leaders in the wind power sector for more than 30 years. As the first manufacturer of wind turbines, the company used a gearless drive concept that is a characteristic of all ENERCON wind turbines. ENERCON is also at the forefront in other areas, such as rotor blade design, control technology, grid connection technology, and, with its wide range of technological new developments, proves its innovative strength time and again.

Products and Services in the Renewable Energy Sector

ENERCON's continual research and development are guarantees of the ongoing success of the company. The same applies to production and service. All the key components, such as the rotor, annular generators and grid feeding system, are manufactured in-house. This vertical integration, which is unequalled in the wind sector, ensures the high quality and extreme reliability of ENERCON wind turbines. A customer-oriented service offering also plays a part in this, guaranteeing the operator 97 % technical availability of the turbines. This holistic concept sets high new standards in technology, quality and safety and consolidates ENERCON's position as the German market leader.

International Experience in the Renewable Energy Sector/ on-going and planned activities in Vietnam

Together with a local partner in Vietnam ENERCON is working to realize a wind farm of 90 MW. The scheduled delivery of the turbines is aimed to be in 2018. Furthermore, ENERCON is working on a second project. Together with an international partner ENERCON is set to deliver their turbines in 2018 for a 34 MW wind farm. Further developments are under discussion.

Expectations and Needs from Potential Vietnamese Partners

For the realization of wind farms in Vietnam stable framework conditions are essential. Defined statements from the government could help in this. With the current Feed In Tariff it is difficult to find partners to enable a stable financial background for wind energy projects in Vietnam.

First Solar



Type of Organisation	Publicly traded company on the NASDAQ (FSLR)
Address	First Solar GmbH, Rheinstr. 4, 55116 Mainz, Germany Headquarter: First Solar, Inc. 350 West Washington St., Ste 600, Tempe, AZ 85281 USA
Website	www.firstsolar.com
Contact Person	Stefan Degener
Job Title	Managing Director First Solar GmbH, Head of Business Development Europe and Africa
Telephone Nr.	06131 1443-451
Fax Nr.	06131 1443-500
E-Mail	Stefan.Degener@firstsolar.com

Short Company Description

With over 17 gigawatts (GW) of capacity installed worldwide, First Solar is a leading global provider of comprehensive solar energy solutions. Since its foundation in 1999, its advanced thin film modules have been used in a wide range of applications, mainly in multi-megawatt utility scale solar energy plants. Headquartered in Arizona, USA, First Solar currently employs ~4500 employees globally.

Products and Services in the Renewable Energy Sector

First Solar is a leading thin film PV module manufacturer that also provides a range of services from site design and construction, energy prediction tools, engineering support, O&M services, grid integration and module recycling.

International Experience in the Renewable Energy Sector/ on-going and planned activities in Vietnam

First Solar has developed, financed, engineered, constructed and currently operates many of the world's largest grid-connected PV power plants. A new manufacturing facility, employing up to 500 staff, is currently in pre-production development in the Dong Nam Industrial Park in Ho Chi Minh City, Vietnam. This plant will become operational in Q4 - 2018 and add 1,100 MW production capacity of First Solar's new Series 6 PV modules. First Solar is also actively pursuing the delivery of its thin film modules to PV projects developed by local Vietnamese project developers.

Expectations and Needs from Potential Vietnamese Partners

- Contacts / access to PV project developers (utility scale), utilities and IPPs
- Contact/access to local EPC companies and Ecosystem partners, providing mounting structure and electrical (DC) solutions
- Contact/access to the energy market regulatory body
- Support in talent acquisition for the manufacturing plant in Dong Nam Industrial Park (main hiring phase is 2018)

Fraunhofer IWES



Type of Organisation	Research institute
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Short Company Description

IWES in Kassel mainly researches on energy system technology for the integration of renewable energy such as wind, solar and bio energy into supply structures.

Products and Services in the Renewable Energy Sector

Our services are:

- Technical grid studies
- Design of laboratory and test infrastructure
- Advanced training and transfer of knowledge
- Energy system studies

Further topics include grid integration tests, hardware and software development, energy management systems, modeling and simulation, customized measurements, micro grids and island power supplies and services for wind energy and photovoltaic systems.

International Experience in the Renewable Energy Sector/ on-going and planned activities in Vietnam

We at Fraunhofer IWES have several projects worldwide. Listed is only a selection:

- Design of laboratory and test infrastructure (Brazil) - ongoing
- Three Sino-German New Energy Demonstration Cities (China) - performed
- Advanced training and transfer of knowledge (Vietnam) - planned

Expectations and Needs from Potential Vietnamese Partners

Potential partners in industry (in Vietnam): transmission network operators, distribution operators, energy producers and traders, plant and component manufacturers, financial managers, associations and political consultants

IBC Solar



Type of Organisation	Joint-stock company
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Short Company Description

IBC SOLAR AG was founded in 1982, with company headquarters in Bad Staffelstein. Its two main business fields are as a photovoltaic wholesaler and EPC (Engineering Procurement Construction). So far, projects with a capacity of 3,3 GW have been implemented with around 360 employees worldwide. In 2016, turnover was € 274 Mill.

Products and Services in the Renewable Energy Sector

As a manufacturer-independent system service provider, IBC SOLAR sells all components required for photovoltaic electricity generation, such as modules, inverters, charge controllers, mounting systems, cables, plug connections, display and measurement technology. As a project developer, IBC SOLAR develops, implements and markets its own major projects worldwide, as well as arranging the financing. As a general contractor (EPC), IBC SOLAR creates large installations for investors and project developers.

International Experience in the Renewable Energy Sector/ on-going and planned activities in Vietnam

IBC Solar runs multiple projects in Germany, Spain, Austria, Japan, India, etc. as well as island hybrid systems in Malaysia. In Vietnam, several MWp are under negotiation. This is led by IBC office Singapore.

Expectations and Needs from Potential Vietnamese Partners

IBC Solar looks for installers, wholesalers and project developers. It provides PV solutions for commercial PV, roof, systems, ground mounted PV and PV-diesel-hybrid projects. IBC Solar provides quality PV components, technical services (engineering, design, on-site supervision) and EPC.

Innogy SE



Type of Organisation	Stock listed
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Short Company Description

Innogy SE is Germany's leading energy company, with revenue of around €44 billion (2016), more than 40,000 employees and activities in 16 countries across Europe. With its three business segments Grid & Infrastructure, Retail and Renewables, Innogy addresses the requirements of a modern, decarbonised, decentralised and digital energy world. We combine the expertise of our energy technicians and engineers with digital technology partners, from start-ups to major corporates. With planned capital investments of around €6.5- €7.0 billion (2017-2019), we are building the power market of the future and driving forward the transformation of the energy market.

Products and Services including in the Renewable Energy Sector

With an installed capacity of more than 900 megawatts in offshore wind and with over 1900 megawatts in onshore wind, Innogy is one of the major operators in Europe (total capacity of 3.7 gigawatts). We plan, build and operate plants to generate power and extract energy from renewable sources. Our aim is to take the expansion of renewables in Europe and beyond further in the short term, both on our own and working with partners. We believe that working together in this way is the key to making the energy transition a success.

International Experience in the Renewable Energy Sector/ on-going and planned activities in Vietnam

Currently, we are particularly strongly represented in our home market, Germany, followed by the United Kingdom, Spain, the Netherlands, Poland and Italy. At the moment we are focusing on continuing to expand our activities in onshore and offshore wind power. We are also actively entering new markets outside Europe and focus on additional technologies, such as large-scale photovoltaic plants.

Expectations and Needs from Potential Vietnamese Partners

Innogy has a strong track record in partnering with a wide range of coinvestors, suppliers, consulting companies and local project developers. Innogy is interested in working with local business partners along the whole value chain of energy projects. As a very experienced player in the energy business we are glad to provide our network and skills in developing local sustainable energy strategies in addition to our developing and operational excellence.

Juwi AG



Type of Organisation	Company
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Short Company Description

Founded in 1996, juwi is one of the world's leading companies in the area of renewable energy. With around 1000 employees, it has realized around 900 wind turbines with a total capacity of approx. 2,000 megawatts and more than 1,600 solar projects with a total capacity of around 2,200 megawatts. It has subsidiaries in 15 countries, including Thailand, Singapore and the Philippines. Juwi is a strong advocate for the aim to achieve 100 % renewable energies.

Products and Services in the Renewable Energy Sector

Company activities are centered around onshore wind and solar power, including:

- Project Development
- EPC/Realisation
- Operations & Maintenance

International Experience in the Renewable Energy Sector/ on-going and planned activities in Vietnam

Juwi has realized projects in more than 20 countries, including Thailand, the Philippines and Malaysia.

Me-Le Biogas GmbH



Type of Organisation	Private Sector Company
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Short Company Description

The ME-LE Biogas GmbH is a company of the ME-LE Group. In this regard, ME-LE combines more than 25 years of experience in planning and constructing technical plants, especially turnkey biogas plants. Our portfolio of plants includes agricultural biogas plants, purchasing power adapted biogas plants for emerging markets, industrial large-scale plants and plants with gas upgrading systems. Our long term experience as a project developer and general contractor enables us to plan, construct and operate biogas plants in a number of different ways. Thereby, plant engineering, process biology as well as on-site training of plant manager is executed by the standard of local requirements.

Products and Services in the Renewable Energy Sector

- We are offering the following services domestically and abroad:
- Project development of biogas plants (CHP, biomethane)
- Planning & concepts
- Technical on-the-spot training by the state accredited ME-LE Academy
- General Contractor of turnkey constructed biogas plants
- Commissioning, instruction of service technicians and operation management
- Maintenance, biological consultancy and repowering of biogas plants

International Experience in the Renewable Energy Sector/ on-going and planned activities in Vietnam

Me-Le Biogas has international experience including repowering biogas plants in Brazil and China.

Expectations and Needs from Potential Vietnamese Partners

Sub Contractors which are specialized on building and operating biogas plants. We are also looking for Investors, Partners or Customer for developing biogas projects.

Siemens



SIEMENS

Type of Organisation	Stock-listed
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E-Mail	info.vn@siemens.com

Short Company Description

Siemens is one of the global leaders in industrial manufacturing. Employing around 350,000 people, it generates a yearly global revenue of around €79 billion. Siemens has a presence in 190 countries, including Vietnam. During several decades, Siemens has successfully participated in numerous of Vietnam's infrastructure projects. Today, Siemens Vietnam is a market and innovation leader in the fields of Power and Gas, Energy Management, Power Generation Services, Mobility, Building Technologies, Digital Factory, Process and Drives as well as in Healthcare.

Products and Services in the Renewable Energy Sector

Siemens offers solutions for wind, hydro, solar and biomass power, as well as integrated storage systems. Siemens on- and off-shore wind turbines aggregate to 35 GW installed capacity.

International Experience in the Renewable Energy Sector/ on-going and planned activities in Vietnam

In 2015, Siemens accounted for about 10% of the total power generation capacity fleet of Vietnam – it is the leading supplier of combined cycle power plants. It also supplies technologies for several 100-500kV substations.

Siemens also supplied the equipment for 110kV switchyard of Tuy Phong wind farm in Binh Thuan Province (30MW, run by Vietnam Renewable energies JSC).

SOLARNET GmbH



solarnet

Type of Organization	Private Sector
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Short Company Description

SOLARNET is a high quality, high reliability EPC and O&M Company for mid to large size PV Power Plants. With partners active since 2001, many Projects up to 50 MWp per plant have been realized as industrial roof top and ground mounted installations throughout Europe, Turkey, Thailand and Mexico.

Products and Services including in the Renewable Energy Sector

EPC plus services: Turn Key solutions for professional investors with additional consulting regarding economical plant optimization, support for successful project development and assistance for financing. O&M Services: Supervision, Maintenance and Operation to ensure reliable Performance of newly built or existing PV Power Plants.

On-going and planned activities in the renewable energy sector in Vietnam and abroad

Outside of Germany SOLARNET has currently offices in Thailand, Mexico and Chile. Further activities are planned in Vietnam and Philippines. A 1MWp roof-top PV plant is currently being built for an industrial customer in Thailand for self-consumption. We aim to develop, build and operate industrial and utility size PV plants in Vietnam. Setting up a permanent presence and organization in Vietnam is planned, once the Vietnamese solar PV market displays scalable and reliable conditions.

Expectations and Needs from Potential German Partners

In Vietnam, we are looking for partners along the value chain: those are Vietnamese solar project developers, EVN, local construction companies and manufacturers to realize PV projects. Furthermore are International banks and investors (e.g. IPPs) our partners to finance commercial, industrial and utility-scale PV power plants. Eventually, local lawyers, customs brokers and logistics companies will be essential parts of our business in Vietnam. Needs are transparent and stable laws which permit lean administration. More specifically rules to access the grid, transparency on any kind of fees, clear rights of ownership, no duties.

SOWITEC



Type of Organisation	Private sector
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Short Company Description

SOWITEC is one of the leading developers, owners and operators for renewable energy projects across Latin America, Germany, Russia, South-East Asia and Africa. With its head office in Sonnenbühl, Germany and more than 200 employees worldwide, SOWITEC is a truly vertically integrated solution provider covering all areas of wind and solar project realization and operation.

Products and Services including in the Renewable Energy Sector

SOWITEC offers solutions for Wind and Solar farms in all the stages:

- Early stage: Screening, Land securing
- Advanced stage: Resource measurement, detailed design & studies
- Late stage: Permitting & Licensing, PPA
- Construction & O&M: EPC-M, O&M

On-going and planned activities in the renewable energy sector in Vietnam and abroad

SOWITEC has more than 15GW of Wind projects and 14 GW of solar projects under development worldwide. SOWITEC is currently looking to partner with local and international entities in renewable energy value in Vietnam. We are actively seeking opportunities for standalone Project Development and as well for JVs.

Expectations and Needs from Potential German Partners

SOWITEC is looking for local partners and investors in Vietnam. We are looking at:

- Brownfield / Greenfield projects.
- Joint venture opportunities with local developers / turbine manufacturers.
- Investors for > 30 MW projects.
- Investors for < 30 MW projects who act as single off-taker of the RE farm.

Syntegra Solar



Type of Organisation	Limited liability company
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Short Company Description

Syntegra Solar is a specialized consulting and project development firm with a focus on renewable energies. Founded in 2003, the Syntegra partnership is engaged in PV Power Plant projects in the EU, in Southeast Asia, in the GCC region and selected MENA countries, as well as in Eurasia and in South America.

Products and Services in the Renewable Energy Sector

Syntegra Solar works in the fields of:

- Due Diligence Services
- Consulting and Advisory Services
- Transaction Advisory
- RE / PV Power Systems

International Experience in the Renewable Energy Sector/ on-going and planned activities in Vietnam

Following the trend in PV installations, Syntegra has set a focus on Asia and MENA, currently providing Owners Engineer Services for more than 300 MWp in different Asian countries. Syntegra is also engaged in developing large-scale PV projects of more than 2 GWp in the MENA region.

Syntegra Solar has also started a contract on solar power project consultation and management with Trungnam Group in Vietnam.

MOIT/GIZ Energy Support Programme
Renewable energy and energy efficiency project

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