



Enhancing Vietnam - India Energy Cooperation: Status and Prospects



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Introduction

India and Vietnam have established diplomatic relations since 1972. In 2007, the two countries entered into a “Strategic Partnership” agreement which was upgraded to “Comprehensive Strategic Partnership” pact during the official visit of Prime Minister Narendra Modi to Hanoi in September 2016. Over time, the bilateral ties between the two countries have grown robust in several areas ranging from defence to economic as well as culture, education, training, and energy. In particular, the energy cooperation was viewed as one of the three main pillars of the Vietnam-India Comprehensive Strategic Partnership. Contrary to the potential and expectations of each country, however, the energy cooperation has remained limited. This paper analyses the status of energy cooperation between the two countries in the fields of oil and gas, electrical energy, nuclear energy, and renewable energy, thereby assessing the prospects of energy cooperation in the future.

Status of Vietnam - India Energy Cooperation

Oil and Gas

Vietnam and India have developed oil and gas cooperation since 1988. Vietnam permitted India to exploit natural gas fields in Block 6.1 including two sub-fields LanTay and Lan Do off Vung Tau Sea. The discovery of these two gas fields laid the foundation for the first foreign-invested project on gas exploitation in Vietnam. The ONGC Videsh Limited (OVL), an Indian state company has invested about 360 million USD in 3 Blocks namely, block 6.1, 127 and 128 respectively. India’s natural gas exploitation activities has resulted in mining two billion cubic meters of gas in 2011-2012 as part of India’s

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45 percent participating interest (Ghosh, 2013). Since 2011 however, China has objected to India's exploration activities in block 127 and 128. Also, during mid-2012 and till the end of 2013, several oil projects of India in Vietnam suffered due to the lack of economic capacity and China's illegal activities in the South China Sea.

During the official visit of President Tran Dai Quang to India in March 2018, the two countries adopted a joint statement on strengthening energy cooperation. Vietnam Government has strongly encouraged Indian businesses to expand their oil and gas exploration and exploitation activities on the land, on the continental shelf, as well as in Vietnam's exclusive economic zone (EEZ) (EVNPECC1, 2018). This is an important motivation for future development in energy cooperation between Vietnam and India.

Electrical energy

India has invested in the Long Phu-II Thermal Power Station project in Soc-Trang province with a capacity of 1,320 MW. The two units of the project are sponsored by Tata Power Group with an estimated cost of about 2.2 billion USD. Accordingly, the Ministry of Industry and Trade of Vietnam and India's Tata Power Group signed a Memorandum of Understanding on Project Implementation (MoU) to put Unit 1 into commercial operation in 2022 and Unit 2 in 2023 (EVNPECC1, 2018). In 2007, India announced a preferential credit worth 45 million USD for Vietnam's Nam Chien Hydropower Project. This credit loan agreement was signed in January 2008 (Cổng thông tin điện tử Chính phủ nước Cộng hòa xã hội chủ nghĩa Việt Nam, 2009). In addition, the Government of India also lent Vietnam another preferential credit worth 19.5 million USD in 2009 to build 3 Hydropower Projects including Nam Trai 4 Hydropower Plant with a capacity of 9.6 MW in Son La province; Yan Tann Sien Hydropower Plant with a total capacity of 19.5 MW in Lam Dong province and the Nam He Plant with a capacity 14.4 MW in Dien Bien province (VNExpress, 2009).

Nuclear energy

In 2016, Vietnam and India signed a Memorandum of Understanding (MoU) for cooperation in peaceful uses of atomic energy. In accordance with the

MoU, the Indian government intends to support and cooperate with the Ministry of Science and Technology and Vietnam Atomic Energy Institute to build a Center for Nuclear Science and Technology. The centre will pursue research in nuclear sciences and technologies relevant to Vietnam's national needs. The two sides also agreed to pursue cooperation in the field of nuclear medicine. These include specific areas such as the production of radioisotopes and developing cures for cancer patients; application of nuclear techniques and radiation technology in industry and agriculture, serving export and training of nuclear human resources (LA, 2018). In March 2018, during the visit to President Tran Dai Quang to India, the two countries signed a memorandum of understanding (MoU) to further strengthen cooperation in the field of nuclear energy. The Memorandum of Understanding was signed by India's Department of Atomic Energy Ministry (DAE) and the Vietnam's Deputy Minister of Foreign Affairs. Lauding the agreement, the Indian Prime Minister Narendra Modi exhorted that, "The purpose of the MoU is to strengthen technical cooperation in the field of atomic energy for peaceful purposes". Among other, the MoU also calls for cooperation between India's Global Center for Nuclear Energy Partnership (GCNEP) and Vietnam's Atomic Energy Institute (Vinatom) (LA, 2018).

Renewable energy

Over the past decade, Vietnam has strongly promoted the development of national renewable energy grid. In this context, the Vietnamese government has invited Indian energy companies to explore opportunities in Vietnam's renewable energy sector. Furthermore, during the official visit of Vietnam's President to India in March 2018, the Joint Statement called for businesses of the two sides to explore new investment opportunities in the integrated field of renewable energy (Dinh Lien, 2018).

Prospects for Energy Cooperation

Oil and Gas

Oil and gas is an important area of cooperation between India and Vietnam, Indian companies

invest significantly in this field. With the signing of the Memorandum of Understanding (MoU), the two countries agreed to enhance cooperation between ONGC Group of India and PVN Group of Vietnam in the field of oil and gas, as well as to promote search and exploration work in newer blocks. The two sides also agreed to expeditiously implement oil and gas exploration MoUs, explore projects in third countries, and at the same time, consider the possibility of cooperation with a third country to expand oil and gas exploration and exploitation (Duc Tuan, 2018). Oil and gas exploration in the South China Sea is a sensitive issue in Vietnam-China relations. China has been opposed to India's Oil and Natural Gas Corporation (ONGC) to exploit oil in areas in South China Sea, in which Vietnam claims its sovereignty. India has asserted that ONGC's exploration activities are purely commercial in nature and that New Delhi does not intend to aggravate disputes (NDTV, 2018). This outlook is in line with India's Act East Policy, which puts Vietnam at its centre stage. In 2017, Vietnam extended the contract with India's ONGC group for another two years to explore oil and gas in Block 128 (Pandey, 2018).

Electrical Energy

According to the data of Vietnam Electricity, the current total capacity of Vietnam electricity industry is 40,000 MW with consumption of about 162 billion Kwh. Energy consumption in Vietnam is expected to increase at 10 percent per year. To meet the growing demand, Vietnam's electricity industry is required to reach 87,000 MW of generation capacity by 2025 and 130,000 MW by 2030 (Trang tin điện tử ngành điện, 2016). Electricity experts however are skeptical about achieving these generation capacities. Therefore, the efficient use of electrical energy is a key issue. In this connection, Vietnam has also pursued cooperation with India's Energy Efficiency Services Limited (EESL), a state-owned enterprise under the India's Ministry of Power. With the support of the Government of India, EESL has provided Vietnam with 177 million LED light bulbs, which will contribute to saving over 62.72 million units of electricity every day thereby reducing 3.5 million USD on the total electricity bill of consumers. It will also reduce 4,584 MW in total peak electricity demand, as well as reduce 50,810 tons of CO₂

emissions. EESL has also replaced over 1.3 million streetlights. EESL's efforts have benefited many consumers, municipalities, domestic distribution companies and governments (H.T, 2016). This cooperation will help Vietnam regulate energy needs without affecting output quality in the future. In the field of electricity, TATA Group of India is implementing a BOT (build-operate-transfer) project to set-up Long-Phu 2 thermal power plant in Soc-Trang at the projected cost 2 billion USD, and is expected to become operational in 2022 (Tài nguyên & Môi trường, 2015).

Nuclear energy

In November 2018, Prime Minister Nguyen Xuan Phuc decided to set up a Vietnam Sub-Committee in the Vietnam-India Joint Committee on Atomic Energy Cooperation. The Sub-committee will strengthen the partnership and enforce agreements between Vietnam and India in using atomic energy for peaceful purposes. It will become a juncture point for ministries, sectors and agencies to implement the agreement, ensuring the effective operation of the Vietnam-India Joint Committee on Atomic Energy Cooperation. At the same time, it will host or work with the Indian side to hold meetings of the Joint Committee (VNA, 2018). In addition, because the Ninh Thuan nuclear power plant project - in cooperation with Russia - recently has been halted for many reasons, India's openness and goodwill have opened up new prospects.

Renewable energy

Renewable energy is a potential area of cooperation between the two countries. Because coal is a finite source of energy, with electricity demand expected to increase over 10 percent annually until 2030; The Government of Vietnam is looking forward to developing renewable energy sources to ensure energy security. In 2016, the Vietnamese government revised the 7th Energy Development Plan from now to 2030 and placed a stronger emphasis on developing renewable energy and market liberalisation (Mike Vinkenburg, 2016).

With such high capital requirements, the Government of Vietnam is implementing many preferential policies on investment capital which allow foreign companies to invest 100 percent of

capital in the energy sector. Renewable energy projects benefit from the exemption of import duties on imported goods to establish fixed assets, materials and semi-finished products. Tax incentives include preferential corporate income tax (CIT) rate of 10 percent for 15 years; CIT exemption for four years and a reduction of 50 percent for the following nine years (Koushan Das, 2019). Indian companies' investment projects in the fields of renewable energy such as solar and wind power are welcome in Vietnam.

Solar Power

This is a potential area of cooperation between the two countries. Vietnam's long coastline and long hours of sunshine provide Vietnam with lots of potential for solar resources. Solar energy is comparable to countries like Italy, Spain, China and Thailand. However, the current market of solar PV in Vietnam is estimated at only 5 MWp (Energypedia). India's Tata Power Group has invested in a solar power project with a total investment of 54 million USD. This solar power project has a capacity of about 49 MW with a land lease area of about 55 ha in Loc Tan commune, Loc Ninh district, Binh Phuoc province. In addition, Tata Group has also made a proposal to the People's Committee of Binh Phuoc Province on creating conditions for the project to be completed before June 2019 so that investors can take advantage of the preferential price of electricity sold by the Government of Vietnam (EVNGENCO2, 2018).

Wind energy

Besides solar power, wind energy is also expected to help Vietnam catch up with the rapid growth in electricity demand in both short and long term. With the advantage of a long coastline and favorable terrain, the construction of wind power stations is a solution that can help improve Vietnam's electricity output in the coming years. Vietnam has the potential to develop wind power with more than 3,000 square km of the coastline. Under the roadmap, Vietnam will develop 800 MW of wind power by 2020, accounting for about 0.8% of total electricity demand. The goal is to develop 2,000 MW of wind power by 2025 and 6,000 MW by 2030 (AEEC, 2019).

Conclusion

It can be seen that strengthening energy cooperation will benefit both Vietnam and India. The energy cooperation entails extensive cooperation relating to science diplomacy and through such cooperation, India can support Vietnam in transferring energy technologies, especially the renewable energy technologies. India regards Vietnam as a strategic energy partner with two countries achieving important achievements. However, the cooperation is still not commensurate with the desired potential. With diverse energy sources from oil and gas to hydro electricity, nuclear and renewable energy as well as well-irradiated terrain, well connected with national transport and grid infrastructure, Vietnam has great potential to develop these industries. With such great potential, several Indian companies are willing to invest in Vietnam's energy industry. So far, India has invested in 176 projects in Vietnam with a total investment of 814 million USD, ranking 28th among the countries and territories investing in Vietnam. Among Indian investors, Tata Group, Adani Green Energy Ltd., M+ Energy, Avaada, Sprng Energy and Suzlon Energy Ltd and many other giant companies pave the way for Indian businesses in the energy sector.

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