ROADMAP TO SUCCESSFUL ENERGY VENTURES IN INDIA: - FOREIGN DIRECT INVESTMENT (FDI)

INDVI - INDIA VENTURES INITIATIVE
In collaboration with Mukund Puranik

Metwand Chambers, Advocates, Thane (West),
Mumbai Metropolitan Region, India

HUGH FRASER INTERNATIONAL LINES UP NEW ALLIANCE FOR INDIA ENERGY VENTURES

HFI has announced a major push to support clients on energy ventures in the burgeoning India market. A new legal network alliance partnership has been announced with **Mukund Puranik**, ex counsel with Reliance Industries, who is based in Mumbai.

The International Energy Agency's India Energy Outlook 2021 special report highlights the wide range of energy-related opportunities emerging right across the energy spectrum from the pressures to increase domestic gas production to offset energy export costs and the net zero investments needed in solar, wind, carbon capture, battery storage, electrification of transport, energy efficiency and hydrogen.

India is clearly recognised as a net zero battleground with major increases in projected emissions potentially offsetting emissions reductions in western Europe unless net zero plans are implemented without delay.

HUGH FRASER INTERNATIONAL (HFI)

HFI is a specialist professional services firm led by Hugh Fraser, a Scottish corporate/energy lawyer and member of the Scottish Development International GlobalScot international trade ambassador network.

We support clients to establish, expand and divest their businesses through strategic, value-added consulting and legal services, combining specialist know-how, connections, local partners and execution expertise.

Our focus is on ventures which combine advanced energy technology and know-how with opportunities in the Middle East, East Mediterranean/North Africa, Caspian/Central Asia, East Africa and India regional zones including new in-country businesses, joint ventures and acquisitions.

Our clients are principally private equity-backed companies driving the energy transition and we are recognised as a trusted, market-leading boutique practice with a proven track record of over 20 years of driving international ventures.

Our **INDIA VENTURES INITIATIVE (INDVI)** targets the key global energy transition "battleground" – recognised in the International Energy Agency's India Energy Outlook 2021 - as we look towards the world in 2050. India's population, energy demand and CO2 emissions are set to increase dramatically over the next generation and with that scenario brings huge challenges.

It also brings huge net zero opportunities in solar, wind, carbon capture linked to power generation and industrial facilities, battery storage, electrification of vehicles and trains, robust electricity distribution grids, domestic natural gas production, energy efficiency, green hydrogen and electrolysers, and blue hydrogen.

Our INDVI supports all aspects in the planning, funding, implementation, acquisition and divestment of energy ventures for India including energy and environmental laws and policies, foreign investment laws, business licensing and registration, joint ventures, taxation, employment laws, intellectual property licensing and protection, investment and financing agreements, land acquisition and development for energy projects, procurement and vendor registration policies and legal compliance.

Mukund Puranik is a corporate, commercial and projects lawyer with 24 years of experience in advising on varied corporate, commercial and project transactional and dispute resolution matters.

He is a science graduate with a major in chemistry, botany, and agricultural microbiology and plant pathology from Marathwada University, Aurangabad, Maharashtra, India as well as a law graduate from Pune University. Later he did his Masters in Law in corporate and commercial laws from Pune University.

Initially, he worked in the chambers of leading senior advocate and designated senior advocates Mr S.K Jain in Pune District Court for a year and Mr Shekhar Naphade in Bombay High Court for about three years. During the foregoing periods, he had assisted on various commercial and civil litigation matters. Later, he worked in leading law firms of India which among others include Singhania & Co, Khaitan & Co and Amarchand Mangaldas Suresh A Shroff & Co. He had advised Reliance Industries in connection with its Hydrocarbon and Real estate Projects. He is proprietor of Metwand Chambers, Advocates having his offices in Thane (West), Mumbai Metropolitan Region.

Transactions he had advised include foreign direct investment into India, cross-border and domestic acquisitions, post-acquisition mergers, joint ventures and joint venture exits, corporate, project and structured finance, technology licensing, software licensing and maintenance, design and engineering, plant and plant and equipment purchase, catalyst supply, Engineering, Procurement & Construction (EPC), Engineering, Procurement & Construction Management (EPCM), Project Management and commercial contracts such as outsourcing, agency, licensing, distribution and franchising.

He had represented project proponents and strategic businesses, investors, lenders and other project participants in a broad range of sectors including Refinery and Petrochemicals, Chemicals, Steel and Mining, Energy (Thermal, Nuclear, and Renewable) and Infrastructure and PPP Projects such as Roads and Highway and Mixed-Use Real Estate Development. He has also represented clients in dispute resolutions, including international commercial arbitrations.

He has drafted, advised and negotiated a wide array of procurement contracts with who’s who of the world in hydrocarbon industry from Asia, Europe and the Americas for major and minor capex projects, revamp projects and operations and maintenance in the last decade. He thus has substantial experience in advising, structuring and negotiating private procurement contracts for downstream hydrocarbon projects as well as operation and maintenance contracts for refinery and petrochemical plants.

Overall, he has transactional as well as dispute resolution experience and both these experiences help him provide clients with optimal solutions in representing transactional and dispute resolution matters.

FDI REGIME IN INDIA

1. INTRODUCTION

In the last article, we had mentioned that there are primarily three routes of foreign investment in India and what business models are available for the foreign investors to establish a business presence in India. The three investment routes we discussed were the Foreign Direct Investment, the Foreign Portfolio Investment ("**FPI**") and Foreign Venture Capital Investment ("**FVCI**"). We will not deal with FPI and FVCI routes in this article and will deal with these dispensations under a separate dedicated article. FPI is a foreign investment route where investment is made by Foreign Investors, including NRIs in securities of public listed companies and specified debt instruments approved by RBI, the debt market and foreign exchange control regulator, and FVCI is a venture capital fund set up outside India but registered with Securities and Exchange Board of India (SEBI), the securities market regulator. Suffice it to say for now that FPI and FVCI are separate dispensations of foreign investment in India that have some concessions that the FDI route do not have. In this article, we will generally discuss, the Government of India's Foreign Direct Investment ("**FDI"**) policy.

2. INDIAN ECONOMIC GROWTH AND FOREIGN INVESTMENTS

2.1 The Government of India's vision as presented in Union Budget - 2019-2020 was to achieve a US$ 3 trillion economy within a year — that is in the financial year 2020-2021 and US$ 5 trillion economy by the financial year 2024-2025. Despite the slowdown of economic growth around the world due to the Novel Coronavirus Virus Disease 2019 ("**COVID-19"**) pandemic caused by the novel coronavirus — Severe Acute Respiratory Syndrome Coronavirus Two ("**SARS COV-2**"), India has fared better than world economies and nearly missed the US$3 trillion target.

2.2 India's real GDP stands at US$ 2.71 trillion in the financial year 2020-2021 at current prices. The FDI inflows in India stood at US$ 81.72 billion in the financial year 2021 which is an increase of 10% year-on-year.

2.3 India's foreign exchange reserves stood at US$ 584.11 billion as of April 23, 2021.

2.4 India's overall exports in April 2021 were estimated at US$ 51.79, a 93.21% year-on-year increase.

2.5 Overall imports in April 2021 were estimated at US dollars 58.72 billion, a 122.24% year-on-year increase.

2.6 As against FDI inflows of US$ 81.72, the Foreign Portfolio Investment inflows in India stood at US$ 1.19 billion in the financial year 2020-2021.

3. FDI REGIME IN INDIA

3.1 The Department for Promotion of Industry and International Trade ("**DPIIT**") under the Ministry of Commerce and Industry of the Government of India is the nodal agency for policy formulation and pronounces the Government of India's changes to Consolidated FDI Policy document by way of Press Notes published by DPIIT. Consolidated FDI Policy document is a document that consolidates and contains previous FDI Policy pronouncements made by DPIIT since economic liberalisation in 1991.

3.2 DPIIT is also a nodal agency that receives applications for FDI under Approval Route unless otherwise specified. In certain cases, the FDI Policy application for the establishment of business in India and thereby making FDI is made directly to the sectoral ministry or the related department under the sectoral ministry.

3.3 One hundred per cent (100%) FDI by a person resident outside India ("**Foreign Investor**") is permitted in Indian companies in most industrial sectors except in Prohibited Sectors and Restricted Sectors as defined and outlined in the latter part of this newsletter. No FDI or for that matter foreign investment at all is permitted in Prohibited Sectors.

4. INDUSTRIAL SECTORS WHERE 100% FDI IS PERMITTED

4.1 One hundred per cent (100%) FDI by a Foreign Investor is permitted in Indian companies operating in those industrial sectors except the Prohibited Sectors and Restricted Sectors as defined and outlined in the latter part of this newsletter. Notably, Non-Resident Indians ("NRIs") are treated favourably vis-à-vis other Foreign Investors because NRIs are citizens of India and are domestic investors but resident outside India for a certain period in a financial year to carry out business, profession, or employment.

4.2 FDI in India is permitted without approval of the Government of India ("Automatic Route") in almost all industrial sectors except those sectors where the FDI Policy of Government of India as a precondition for the Foreign Investor to make FDI requires it to take prior approval ("Approval Route") of Government of India

5. PROHIBITED SECTORS (FDI IS NOT PERMITTED AT ALL)

5.1 The Prohibited Sectors in which FDI is not allowed at all are:

5.1.1 Agriculture and Plantation other than expressly permitted activities in Agriculture and Plantation (see 5.1.6 below).

5.1.2 Real Estate Business, including Transferable Development Rights.

5.1.3 Retails trading (expect single-brand product retailing).

5.1.4 Gambling and Betting; Lottery business (including government/ private lottery, online lotteries etc.

5.1.5 Activities or sectors not open to private sector investment for domestic investors (e.g., atomic (nuclear) energy generation; operations of Railways).

5.1.6 As regards Agriculture, 100% FDI in (a) Floriculture; (b) Horticulture; (c) Cultivation of Vegetables and Mushrooms under controlled conditions; (d) Development and Production of seeds and planting material; (e) Animal Husbandry (including breeding of dogs), (f) Pisciculture; (g) Aquaculture, Apiculture; and (h) Services related to agro and allied sectors are only permitted.

Further as regards plantation, 100% FDI is permitted in (a) the Tea sector including Tea plantations; (b) Coffee plantations; (c) Rubber plantations; (d) Cardamom plantations; (e) Palm oil tree plantations; and (f) Olive oil tree plantations.

6. RESTRICTED SECTORS (FDI IS PERMITTED BUT NOT 100%)

6.1 FDI is permitted in the following sectors but 100% FDI is not permitted in these sectors. In other words, it means that FDI is restricted to a foreign investment limit of less than 100% ("Restricted Sectors"). In Restricted Sectors, the FDI percentage is limited (capped) as outlined below:

6.1.1 74% FDI is permitted in private banks and 20% FDI is permitted in government banks (called public sector banks). The application for prior approval of the Government of India is required to be made to the Department of Financial Services.

6.1.2 74% FDI is permitted in Insurance Sector under the Automatic Route.

6.1.3 74% FDI is permitted in Up linking of News and Current Affairs News Channels under Approval Route. The application for prior approval of the Government of India is required to be made to the Ministry of Information & Broadcasting.

6.1.4 74% FDI is permitted in private security agencies. Up to 49% FDI in private security agencies is permitted under Automatic Route and FDI above 49% and up to 74% is permitted under Approval Route. The application for prior approval of the Government of India is required to be made to the Ministry of Home Affairs.

6.1.5 51% FDI is permitted in Multi-Brand Retail Trading under Approval Route. The application for prior approval of the Government of India is required to be made to DPIIT.

6.1.6 49% FDI is permitted in Securities Market Infrastructure Companies under the Automatic Route.

6.1.7 49% FDI is permitted in Pension Funds under the Automatic Route.

6.1.8 49% FDI is permitted in Power (Electricity) Exchanges under the Automatic Route.

6.1.9 49% FDI is permitted in Terrestrial Broadcasting FM under Approval Route. The application for prior approval of the Government of India is required to be made to the Ministry of Information & Broadcasting.

6.1.10 26% FDI is permitted in Print Media under Approval Route. The application for prior approval of the Government of India is required to be made to the Ministry of Information & Broadcasting.

6.1.11 26% FDI is permitted in Publishing and Printing in Scientific and Technical Magazines under Approval Route. The application for prior approval of the Government of India is required to be made to the Ministry of Information & Broadcasting.

6.1.12 26% FDI is permitted in Publishing Facsimile Edition of Foreign News Paper under Approval Route. The application for prior approval of the Government of India is required to be made to the Ministry of Information & Broadcasting.

6.1.13 26% FDI is permitted in Uploading or Streaming of News and Current Affairs through Digital Media under Approval Route. The application for prior approval of the Government of India is required to be made to the Ministry of Information & Broadcasting.

6.2 Apart from the foregoing, 100%, FDI is permitted but under the Approval Route in the following sectors:

6.2.1 100% FDI is permitted in Defence Sector under Approval Route. However, 74% of FDI is permitted under the Automatic Route. The application for prior approval of the Government of India is required to be made to the Department of Defence Product, Ministry of Defence.

6.2.2 100% FDI is permitted in Scheduled Air Transport Service, Domestic Air Transport Service and Regional Transport Service by Foreign Investors other than NRIs can make FDI as well as FPI above 49% under Approval Route. The application for prior approval of the Government of India is required to be made to the Ministry of Civil Aviation.

6.2.3 100% FDI is permitted in Satellite establishment and operations. The application for prior approval of the Government of India is required to be made to the Department of Space.

6.2.4 100% FDI is permitted in the Mining of Titanium bearing Minerals and its Ores, its mineral separation, value addition, and integrated activities. The application for prior approval of the Government of India is required to be made to the Ministry of Mines.

6.2.5 100% FDI is permitted in companies setting up greenfield pharmaceutical manufacturing facilities and up to 74% FDI in companies having existing pharmaceutical manufacturing facilities. However, FDI above 74% in companies having existing pharmaceutical companies is permitted under Approval Route. The application for prior approval of the Government of India is required to be made to the Department of Pharmaceuticals.

6.2.6 100% FDI is permitted in telecom but up to 49 under Automatic Route. FDI above 49% in telecom is permitted under the Approval Route. The application for prior approval of the Government of India is required to be made to the Department of Telecommunications.

7. CAPITAL INSTRUMENTS FOR FDI

7.1 An Indian company receiving FDI can issue permitted financial instruments subject to pricing guidelines or valuation norms prescribed under the relevant regulations under the Foreign Exchange Management Act, 1999 (“**FEMA**”).

7.2 It is important to keep in mind the FDI Policy and relevant regulations under FEMA while deciding the capital structure of an Indian Company apart from securities laws and company law provisions.

7.3 The capital structure of a company is the mix of equity and debt to finance the operating assets that are utilised to earn revenue for a company. The capital structure of a company determines its cost of capital employed for carrying on the business. Designing an optimal capital structure achieves maximising the value of the business and minimising the cost of capital.

7.4 Under the FDI Policy investment through following instruments are regarded as FDI:

7.4.1 Equity Shares (called Ordinary Shares in the UK or Common Shares in the US).

7.4.2 Fully, Compulsorily and Mandatorily Convertible Debentures ("**CCD**"). Debentures are debt instruments under the Indian Companies Act, 2013 but for FDI in India, the CCDs are regarded as FDI. At this stage, it must be noted that there is a separate regulatory regime under FEMA for a person resident in India to borrow from a person resident outside India.

7.4.3 Fully, Compulsorily and Mandatorily Convertible Preference Shares ("**CCPS**"). Preference Shares are hybrid instruments that have features of equity and debt instruments. Preference shares carry the preferential right of dividend at a fixed rate and priority over equity shares of payment of capital in case of winding up of a company and distribution of proceeds from the sale of such company. Preference shares generally do not carry a right to vote on corporate actions to be taken by the shareholders of a company. A corporate action is taken by passing a resolution on a given matter by circulating agenda and notice of shareholders meeting and in certain cases along with explanatory notes. However, the preference shares carry a right to vote on matters that affect the rights of the holders of preference shares. In addition, the preference shares carry a right to vote on par with equity shares in the event of non-payment of dividends for two consecutive years. For FDI in India preference shares of all kinds other than CCPS are regarded as debt.

8. FDI IN ENERGY AND NATURAL RESOURCES

8.1 According to IEA (India Energy Outlook 2021), India's primary energy demand is expected to nearly double to 1123 MT of oil equivalent, as the GDP is expected to increase to 8.6 trillion by 2040. Fossil fuel, both Crude Oil and Coal dominate the energy mix. Natural gas is regarded as the cleanest fossil fuel.

8.2 Administration and Regulations. In India the Energy and Natural Resources are administered and regulated by different ministries.

8.2.1 The Oil & Gas industrial sector is administered and regulated by the Ministry of Petroleum & Natural Gas, Government of India.

8.2.2 The power (i.e., electricity) (other than from Renewable Energy and Nuclear Energy) industrial sector is administered and regulated by the Ministry of Power, Government of India.

8.2.3 Renewable Energy is administered and regulated by the Ministry of New and Renewable Energy.

8.2.4 Nuclear (Atomic)) Energy is administered and regulated by the Ministry of Science & Technology, Government of India. Atomic Energy Commission formulates the policy of the Department of Atomic Energy in all matters concerning nuclear energy Government of India.

8.2.5 Ministry of Mines, Government of India administers and regulates the survey and exploration of all minerals (other than natural gases, petroleum and atomic minerals, and coal and lignite), and

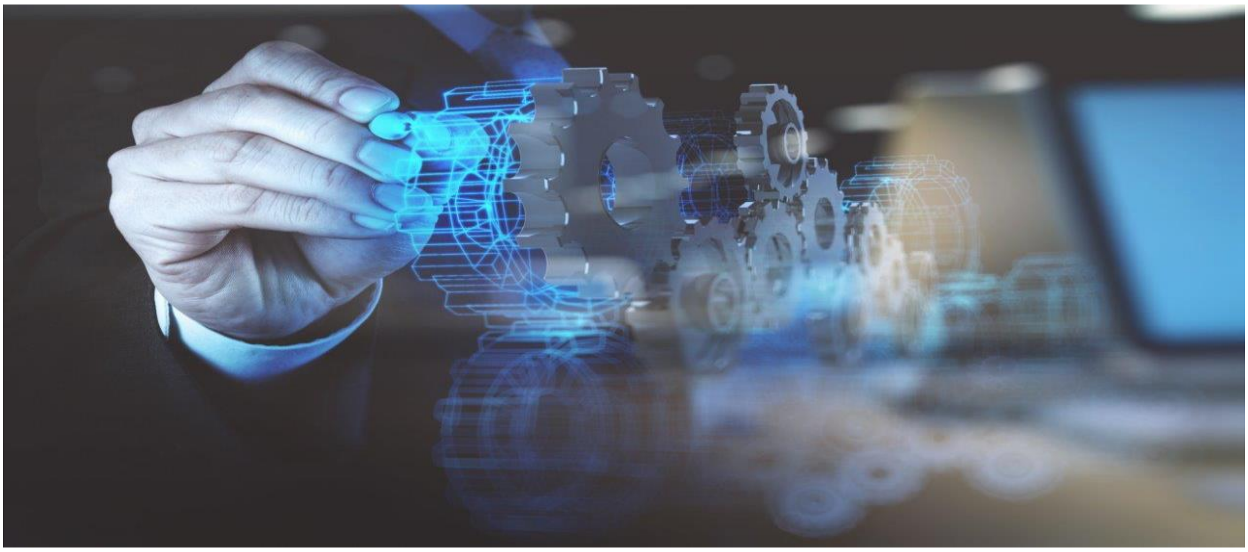
8.2.6 Ministry of Coal Government of India administers and regulates the survey, exploration and development of coal and lignite reserves.

Thus, as seen above the Energy and Natural Resources industry in India is administered and regulated by different ministries of the Government of India.

9. FDI IN POWER (ELECTRICITY)

9.1 India is the third-largest producer and second-largest consumer of electricity in the world. However, the per capita electricity consumption in India is 1149 kWh, the lowest in the world as against global per capita consumption of 3600 KWh as per January 2021 reports. Reportedly, the per capita consumption of electricity has surged to an all-time high of 1208 kWh as per March 2021 reports.

9.2 47.4% of power (electricity) is produced by the private sector and the balance by Government of India Companies (Public Sector), out of which the share of Union Government Companies is 25.2% and the State Government Companies is 27%. The balance of 52.6% is produced by the Private Companies.



9.3 India's installed power production capacity was 379.13 GW as of February 2021 and 384.11 GW as of May 30, 2021, an addition of 4.81 GW in 3 months. Out of 384.11 GW as of May 30, 2021, the contribution of Thermal Power (comprising of Coal 52.6%, Lignite 1.7%, Gas 6.5%, and Diesel (0.1%)) is - 60.9%, Hydro (considered renewable power) is 12.1%, Nuclear 1.8% and Renewable Sources (such as Wind, Solar, Small Hydro, Biomass, Urban and Industrial Waste and other renewable sources) is 25.2%. Thus, 37.3 % of electricity is produced is from Renewable Energy Sources.

9.4 Up to 100%, FDI is permitted in Power Sector under the Automatic (except Nuclear Energy Generation). Nuclear Energy Generation is reserved solely for Union Government Companies and is not open even for the Indian State (Provincial) Government Companies let alone companies in the private sector. The total FDI inflow in the Indian Power Sector reached US$ 15.36 billion between April 2000 to December 2020, accounting for 4% of the total FDI inflow in India.

9.5 As mentioned, up to 100% FDI is permitted in Power Sector, including Renewable Energy, sources such as Wind, Solar, Small Hydro, Biomass, Urban and Industrial Waste.

10. FDI IN OFF-SHORE WIND

10.1 Offshore Wind Energy is an untapped Renewable Energy Source in India. We discuss here opportunities in the Offshore Wind Energy sector in India. India has a coastline of 7600 kilometres with relatively shallow waters within 12 nautical miles of the coast. This shows a huge prospect for harnessing wind energy within the exclusive economic zone ("**EEZ"**) of India.

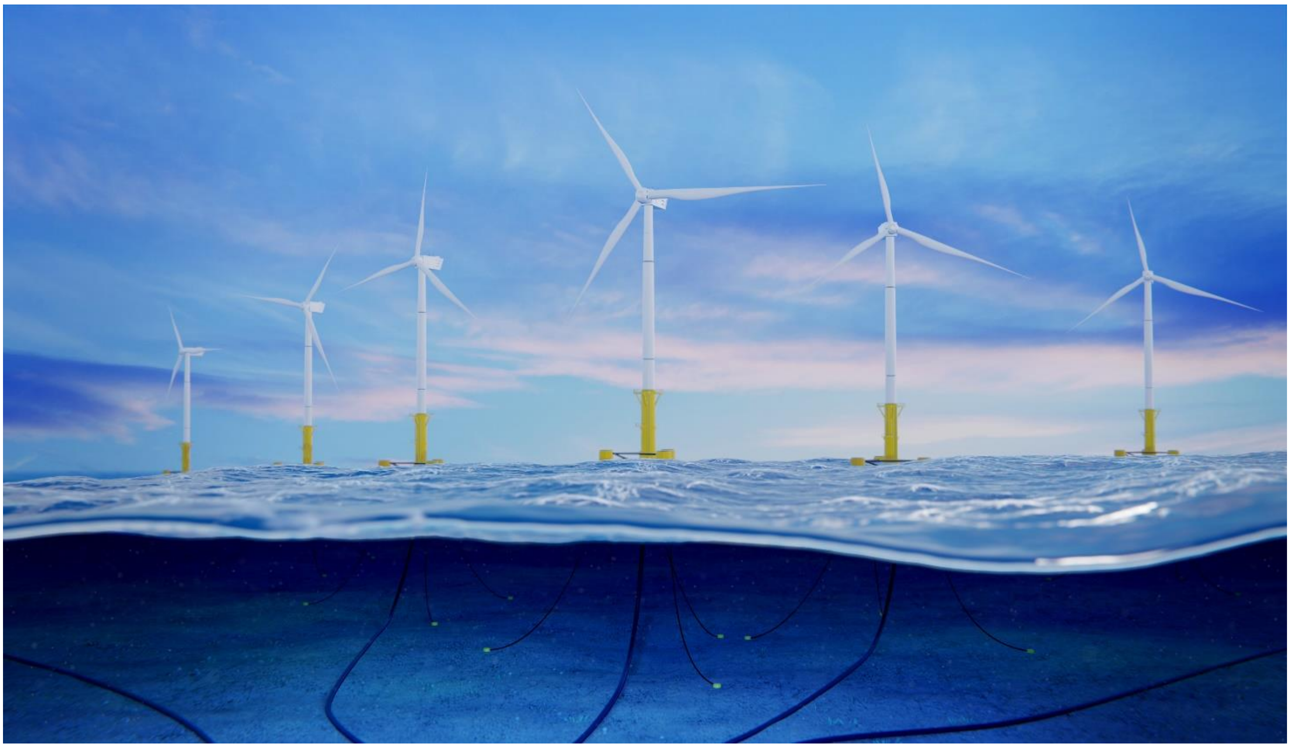
10.2 The National Institute of Wind Energy ("**NIWE**") located in Chennai is the nodal agency to carry out resource assessment surveys and studies in EEZs of India demarcate blocks and facilitate developers one setting up offshore wind energy farms.

10.3 NIWE has carried out wind resources assessment. According to the assessment India has estimated potential to harness about 302 GW of Offshore Wind Energy at 100 meter hub height. Out of this total estimated potential, more than 95% of commercially exploitable wind resources are concentrated in 7 states of Andhra Paresh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Tamil Nadu.

10.4 Global Wind Energy Council ("**GWEC**") supported by European Union implemented a project name Facilitating Offshore Wind Energy In India (" **FOWPI"**) from December 2013 to March 2018 to assist India on its offshore wind energy development. The project focused on the States of Gujarat and Tamil Nadu for identification of potential zones for development through techno-commercial analysis and preliminary resource assessment and provided a pre-feasibility report for offshore wind power development in Gujarat and Tamil Nadu, report on supply chain ports and logistics, grid integration study for offshore wind power development in Gujarat and Tamil Nadu, and feasibility report for offshore wind power development in Gujarat and Tamil Nadu.

10.5 A consortium led by COWI and supported by European Union had undertaken a project First Offshore Wind Power project in India ("**FOWPI**") and provided Metocean, Metocean Weather Windows For Installation, Procedures for Offshore Wind, FOWPI Wind Turbine Layout and AEP, Advisory Electrical Concept Design reports with an objective provide assistance up to the stage of Pre-Financial-Investment-Decision (Pre-FIT) and also provide general assistance for capacity building of Indian stakeholders within offshore wind sector.

10.6 As a preliminary estimate, the coasts of the states of Gujarat and Tamil Nadu have been earmarked as having potential for setting up initial Offshore Wind farms in India.



10.7 The Government of India had notified National Off-Shore Wind Policy in October 2015 to realize the Offshore Wind Energy potential. MNRE's had invited Expressions of Interest ("**EoI**") for the first 1 GW Offshore Wind Energy project in India.

10.8 34 companies, including some of the largest global and domestic Offshore Wind Energy players, had expressed interest.

10.9 Given such a keen industry response, MNRE had revised the target and declared a medium as well as long term target for setting up Offshore Wind Energy of capacity up to 5 GW by 2022 and 30 GW by 2030.

10.10 In our future article, we will discuss National Off-Shore Wind Policy of India in greater detail.

11. FDI IN OIL & GAS

11.1 Indian Oil & Gas. Indian Oil & Gas is among the eight core industrial sectors in India and plays a major role in influencing decision making for all other important industrial sectors of the Indian economy. India's eight-core industrial sectors are coal, crude oil, natural gas, petroleum refined products, fertilisers, steel, cement, and electricity. India is the third-largest consumer of energy and oil after the USA and China.

11.2 Energy consumption in India is projected to grow exponentially. During the 15 years between 2016 to 2030, the energy consumption in India is projected to grow at a CAGR of 4% against the world's average of 1%.

11.3 Crude oil imports rose sharply to U.S. dollar 101.40 billion in financial year (FY) 2019 20 from youth dollar 70.72 billion in FY 2016-17. Crude oil production in India stood at 3.50 MMT in FY 2021 and 32.20 in FY 2020. India is Asia's second-largest refiner of crude oil. As of April 2021, the total installed provisional refinery capacity stood at 250.20 MMT. Private companies own about 35.39% of the total refining capacity in FY 2019-2020.

11.4 India looks to cut crude oil imports by 10% by the year 2022.

11.5 Foreign Investors have opportunities to invest in projects worth US$ 300 billion in energy projects in India by 2022. The Government of India's plans to invest US$2.86 billion in the Upstream O&G to produce double the natural gas to 60 bcm and drill more than 120 wells by 2022. The Government of India also has announced a plan to invest US$102.49 billion in Oil & Gas Infrastructure in the next five years.

11.6 The Government of India has a target to increase the share of natural gas in the energy mix from 6% to 15% by 2030 to transform India into a gas-based economy. Natural gas consumption is forecasted to reach 143.08 MT.

11.7 As of December 2020, the Gas Authority of India Ltd (GAIL) has the largest share of 11884 kms of the country's 17126 kms of natural gas pipeline network, which is 69.39%. India is also set to expand India's natural gas grid to 34,500 kms by adding another 17,000 km gas pipeline.

11.8 India is the world's 4th largest importer of Liquified Natural Gas ("LNG"). The regasification capacity of the existing 42 MMT per annum is set to be expanded to 61 MMT per year by the year 2022.

11.9 100% FDI is permitted under Automatic Route in:

11.9.1 Exploration of Oil and Natural Gas Fields.

11.9.2 Infrastructure relating to Marketing of Petroleum Products and Natural Gas.

11.9.3 Marketing of Petroleum Products and Natural Gas, Marketing of Natural Gas and Petroleum Products

11.9.4 Petroleum Products Pipelines and Natural Gas Pipelines

11.9.5 LNG regasification infrastructure.

11.9.6 Market Study and Formulation.

11.9.7 Petroleum refining in the private sector.

11.9.8 49% FDI is permitted in petroleum refining in the public sector undertakings (PSUs) without any disinvestment or dilution of domestic equity in the existing PSUs.

12. FDI IN NATURAL RESOURCES

12.1 India produces over 95 minerals, which include 4 fuel, 10 metallic, 23 non-metallic, 3 atomic, and 55 minor minerals. It has significant reserves of coal, lignite, iron ore, bauxite, titanium ore, chromite, and magnesium.

12.2 100% FDI is permitted under Automatic Route in:

12.2.1 Mining and Exploration of Metal and Non-Metal Ores, including Diamond, Gold, Silver, and Precious Ores (but excluding Titanium bearing Minerals and its Ores).

12.2.2 Mining of Coal and Lignite for captive consumption by Power Plants, Iron & Steel Plants, Cement Units, and other Eligible Activities permitted under statutes relating to Coal Mines and Mines and Mineral Development & Regulation.

12.2.3 Coal Processing Plants, like Washeries subject to investee companies not engaging in selling Coal, mining, and selling of washed or sized Coal from its Coal Processing Plants in the open market or to suppliers of raw Coal for processing.

12.2.4 Coal Mining activities, including the sale of Coal, and Associated Processing Infrastructure.

12.2.5 However, as mentioned above, 100% FDI is permitted in Mining and Mineral separation of Titanium bearing Minerals and its ores under the Approval Route.

13. FDI IN NUCLEAR ENERGY

13.1 Nuclear Energy is a source of clean energy. As mentioned above, FDI is prohibited in Automatic Energy. However, foreign companies that are part of the Nuclear Suppliers Group supply to Nuclear Power Corporation of India Limited (“**NPCIL**”) way of exportation into India goods or services. Also, there is no restriction on FDI in the nuclear industry for manufacturing equipment and providing other supplies for nuclear power plants and related other facilities.

13.2 NPCIL is the only Indian company, controlled by the Government of India that is engaged in the generation of power (electricity from atomic energy). The government of India has amended the Atomic Energy Act, 1962 in 2015 to enable the licensing of NPCIL's Joint Ventures for setting up nuclear power projects. To boost domestic investment, Joint Ventures have been formed by NPCIL with public sector majors National Thermal Power Corporation Limited (“**NTPC**”), Indian Oil Corporation Limited (“**IOCL**”) and National Aluminium Company Limited (“**NALCO”**).

13.3 As of January 2021, 22 reactors with a total capacity of 6780 MW are in operation and one reactor of 700 MW has been connected to the grid on January 10, 2021. In addition, there are 8 reactors of aggregate capacity of 6000 MW under construction at various stages. In addition, twelve (12) more nuclear power reactors have been accorded administrative approval and financial sanction by the Government of India in June 2017. Thus, twenty-one (21) nuclear power reactors, with an installed capacity of 15700 MW are under implementation, envisaged for progressive completion by the year 2031. Thus, India targets to increase its capacity of nuclear power plants to 22480 MW by 2031.

13.4 The Government of India has entered into Agreements for Cooperation for Peaceful Use of Nuclear Energy with France (September 30, 2008), United States of America (October 10, 2008), Russia (March 12, 2010), Canada (June 27, 2010), Argentina (September 23, 2010), Kazakhstan (April 15, 2011), Korea (July 25, 2011), Australia (September 05, 2014), Sri Lanka (November 13, 2015), United Kingdom (November 13, 2015), Japan (November 11, 2016), Vietnam (December 09, 2016) and Bangladesh (April 08, 2017). Additionally, India has signed International Atomic Energy Agency ("**IAEA**") Safeguards Agreement on February 02, 2009). India is a founding member of the Board of Governors ("**BoG**") of the IAEA.

13.5 On 12th June 2015, the Government of India has created an Indian Nuclear Insurance Pool ("**INIP**"). General Insurance Corporation of India along with several other Indian Insurance Companies had created an INIP Rs 1500 crore to provide insurance to cover the liability as prescribed under Civil Liability for Nuclear Damage Act, 2010 ("**Nuclear Liability Act**") to address issues related to Nuclear Liability Act and had facilitated the commencement of work in setting up new nuclear power projects.