

Capital Goods

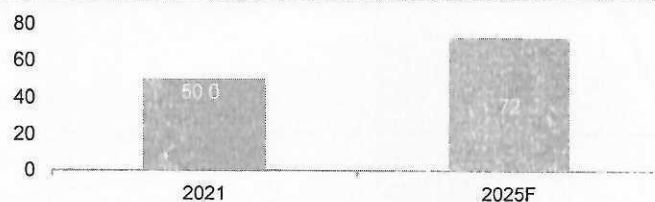
Executive summary ... (1/2)

- India's Capital Goods manufacturing industry serves as a strong base for its engagement across sectors such as Engineering, Construction, Infrastructure and Consumer goods, amongst others.
- It accounts for 27% of the total factories in the industrial sector and represents 63% of the overall foreign collaborations.
- Capital Goods sector contributes to 12% of India's manufacturing output and 1.8% to GDP.
- Market valuation of the capital goods industry was US\$ 43.2 billion in FY22.
- Indian Electrical equipment is the largest sub-sector followed by Plant equipment & Earth moving/ mining machinery
- The electrical equipment market share in India is expected to increase by US\$ 33.74 billion from 2021 to 2025, and the market's growth momentum will accelerate at a CAGR of 9%.
- Investment in engineering R&D sector is expected to reach US\$ 63 billion by 2025.
- The Index of Industrial Production (IIP), in absolute terms, increased to 146.5 in January 2023 from 145.3 in December 2022.

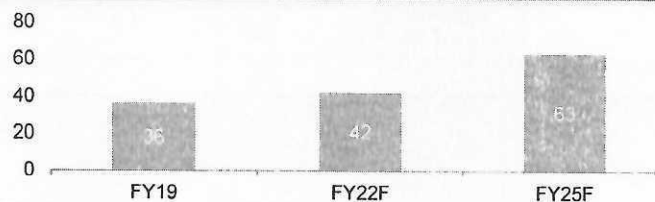
Capital goods turnover (US\$ billion)



Electrical equipment market (US\$ billion)



Engineering R&D Revenue (US\$ billion)



Note: F-Forecast

Source: Dept. of Heavy Industries, India Electrical and Electronics Manufacturer Association, Business Today, Ministry of External Affairs

Snapshot Industry Scenario Investible Projec... Major Investors Infrastructure M... Gallery/Latest N... Late

100% FDI is allowed under the automatic route.

For further details, please refer FDI Policy

[- Less]

12% Share in manufacturing
5 Mn Direct employment
40% T&D equipment demand



Direct and indirect employment expected to reach 5 Mn and 25 Mn, respectively by 2025.



India was the world's 8th largest consumer of machine tools globally, as of 2021



Indian Electrical equipment is the largest sub-sector followed by Plant equipment & Earth moving/ mining machinery.

INDUSTRY SCENARIO

FOREIGN INVESTMENT

INDUSTRY TRENDS

POLICIES & SCHEMES

Industry Scenario

The Capital Goods in India has a market size of \$ 43.2 Bn.

The capital goods industry is divided into 10 sub-sectors where Electrical equipment is the largest sub-sector followed by Plant equipment, and Earthmoving/ Mining machinery. These sub-sectors are as follows:

- Heavy electrical equipment
- Process plant equipment
- Earth-moving and mining machinery
- Printing machinery
- Food processing machinery
- Dies, Moulds and press tools
- Textile machinery
- Machine tools

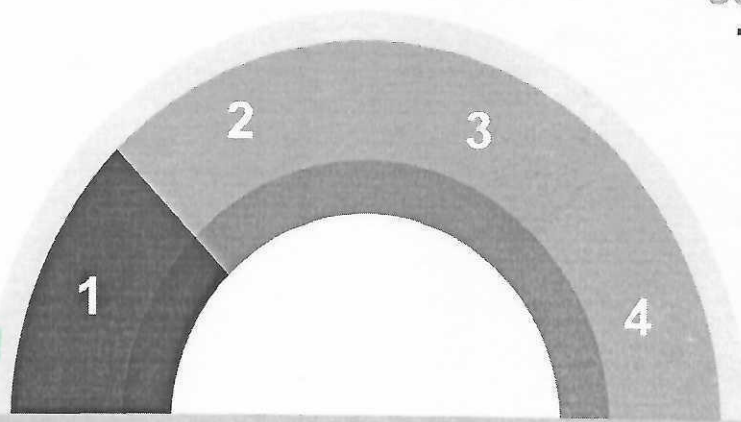
Heavy electrical - key segments

2. TURBINES AND GENERATOR SETS

- The India generator sets market is expected to grow at a CAGR of more than 5% over the period of 2020-25.
- The India diesel gensets (generator sets) market is expected to reach US\$ 2.78 billion by 2030 compared to US\$ 1.48 billion by 2022 at a CAGR of 8.20%.
- The current annual production capacity of domestic wind turbines is about 12,000 MW.
- In 2022, GE Steam Power signed a US\$ 165 million contract with Bharat Heavy Electricals Ltd to supply three nuclear steam turbines for India's domestic nuclear power programme
- In FY21, production of turbines (steam, hydro) stood at Rs. 2,949.32 crore (US\$ 369.24 million).

1. BOILERS

- India steam boiler systems market size is expected to reach nearly US\$ 22.56 billion by 2027 with the CAGR of 4.63% during the forecast period.
- Indian boiler manufacturer industry is worth for a sum of US\$146 million contributing 40% to the Indian economy.
- The Indian boiler industry is expected to grow at a rate of 6% to surpass US\$ 194 million.



3. TRANSFORMERS

- The India power transformer market is expected to rise at a CAGR of more than 3% during the forecast period of 2020-25.
- Factors such as increasing power generation capacity to meet energy demand and expansion of transmission and distribution systems are likely to drive the India power transformer market.
- A whole range of power and distribution transformers, including a special type of transformer required for furnaces, electric tracts and rectifiers, are manufactured in India.

4. SWITCHGEAR AND CONTROL GEAR

- Indian switchgear market is projected to grow at a CAGR of over 15% through 2023, on account of rising development across residential, commercial and industrial end use sectors.

Notes: MW - Mega Watt, KVA - KiloVolt - Ampere

Source: Ministry of Heavy Industries and Public Enterprise Annual Report, Ministry of New and Renewable Energy, News Articles

4

Material handling equipment

- India material handling equipment market share is anticipated to grow significantly from 2017-2024 due to an attractive economic landscape, and significant demand for goods movement.
- Material handling equipment have four categories: storage and handling equipment, engineered systems, industrial trucks and bulk material handling.
- The Indian material handling equipment sector has grown at a CAGR of 10% between 2016-2020.

5

Plastic processing machinery

- The market size of Plastic machinery sector stood at US\$ 500 million.
- Demand for plastic processing machinery is expected to increase from 12,760 in FY20E to 13,740 in FY21P and 14,770 in FY22P.
- Out of the total machinery demand in 2020-21P, injection molding machinery is expected to comprise 10,000 units, extrusion machines 2,770 units, and blow molding machines 970 units.

6

Process plant equipment

- The market size of process plant equipment sector stood at US\$ 3.7 billion.
- Nearly 65% of the total manufacturers are small and medium enterprises.

7

Earth moving, construction and mining equipment

- In 2021, the production data of Earthmoving and Mining Machinery stood at US\$ 3.5 billion
- India construction equipment market is projected to cross US\$ 4.7 billion by 2025, on account of anticipated growth in construction industry, increasing foreign investments, and rising number of smart city projects in the country.

Note: Information is as per latest available data, E - Estimated, P-Projected

Source: Ministry of Heavy Industries and Public Enterprise Annual Report 2020-21, PLEX Council, Plastindia Foundation, Invest India

3

Civil nuclear sector

India's installed nuclear power capacity of 6,780 MW will increase to 22,480 MW by 2031 on progressive completion of projects under construction and accorded sanction. India will triple its present installed nuclear power generation capacity in the next 10 years.

4

Power transmission and distribution (T&D)

T&D expenditure is set to increase on growth in power generation and privatisation of distribution. By 2030, India has plans to invest US\$ 34.2 billion to set up an interstate transmission network (ISTS) in order to evacuate renewable energy.

5

Machine tools

The Indian machine tools market size reached US\$ 1.4 billion in 2022 and is expected to reach US\$ 2.5 billion by 2028, exhibiting a growth rate (CAGR) of 9.4% during 2023-28. The growing prominence of automation across numerous manufacturing processes, to enhance their productivity and meet quality standards, is currently driving the India machine tools market.

6

Material handling equipment

The Indian automated material handling (AMH) market was valued at US\$ 1,353.8 million in 2020 and is expected to go up to US\$ 2,739.34 million by 2026 at a CAGR of 12.7%. The Indian material handling sector has observed a momentous growth in recent years due to rising investment in infrastructure development, increased demand for higher automation, and safe working practices in the manufacturing area.

Note: CKM- Circuit Kilometres

Source: Sutherland Research

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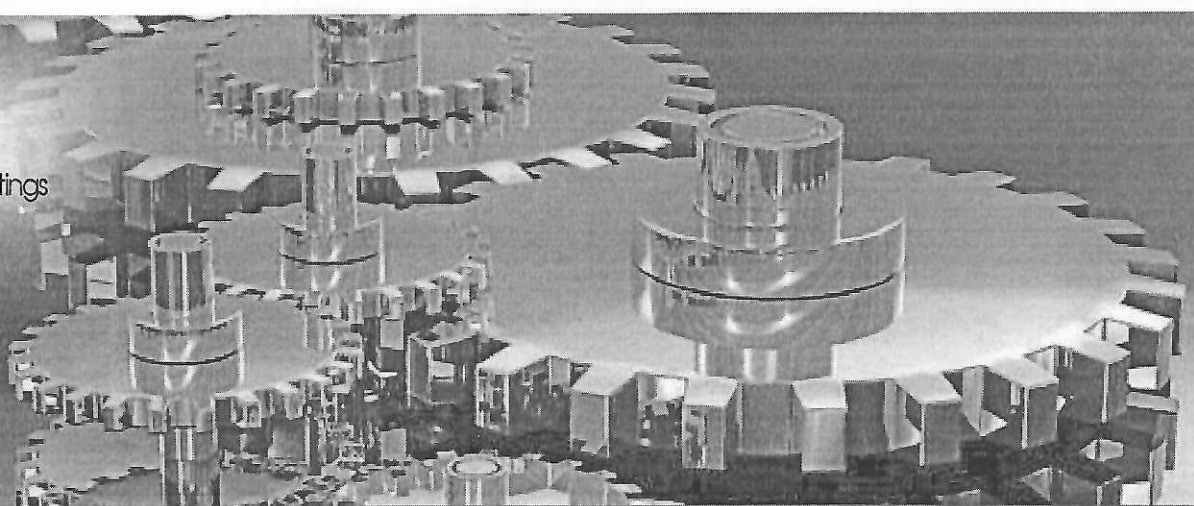
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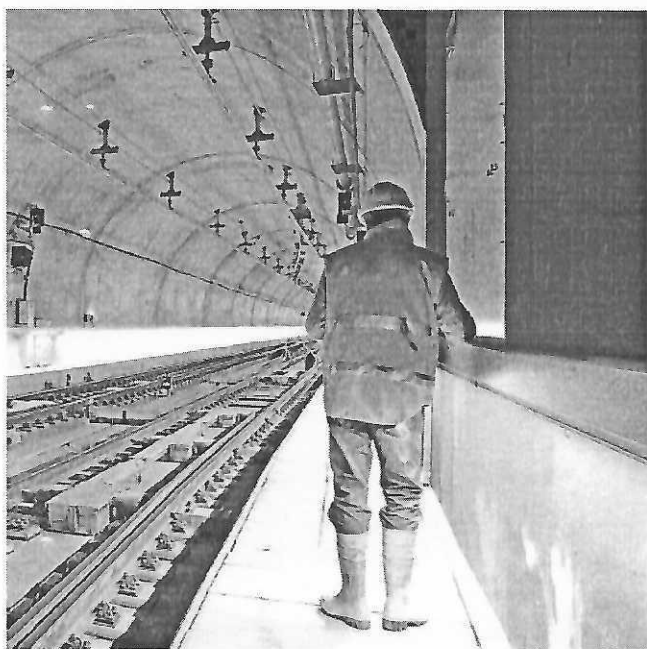


HEAVY ENGINEERING INDUSTRY

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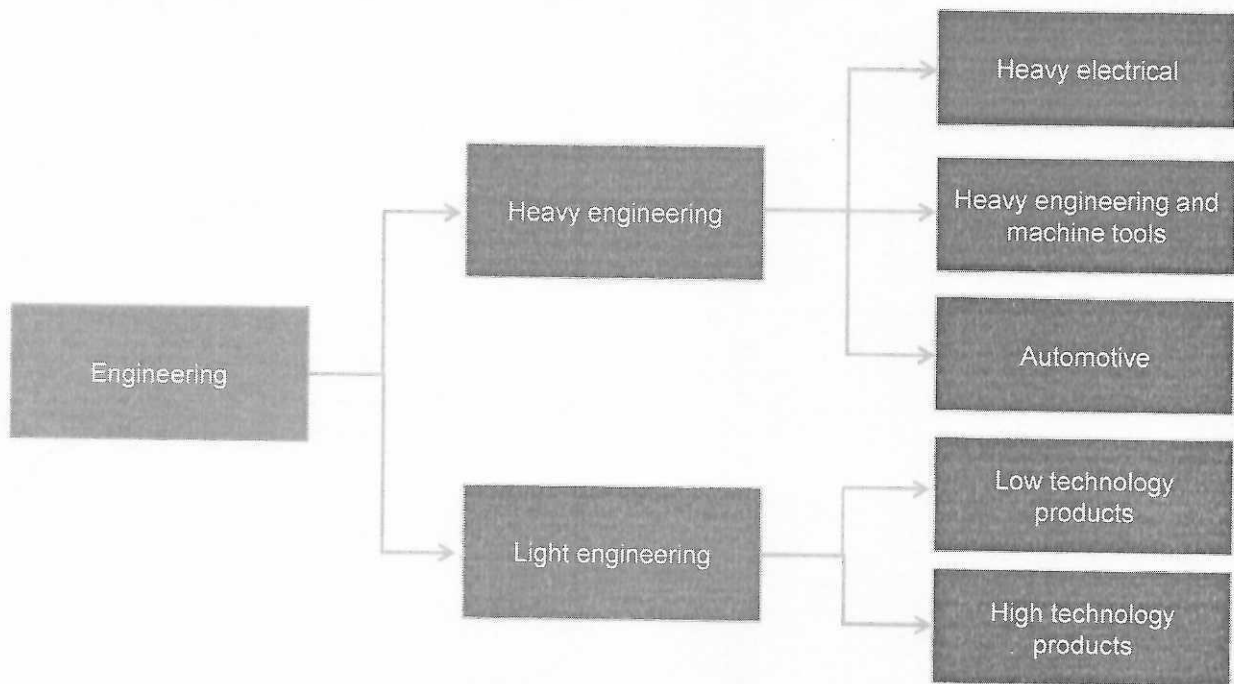
INDUSTRY - OVERVIEW

Engineering industry can be considered as the mother of all industries. No sector of the economy develops in isolation. The engineering sector is characterized by linkages with other economic sectors, since this sector is the supplier of their capital equipment's. The engineering sector is the largest sector amongst other industrial segments. It is a diverse industry with a number of segments, and can be broadly categorized into two parts, namely, Heavy Engineering and Light Engineering. There are however a number of sub sectors within the engineering industry namely iron and steel; other base metals and their products; mechanical machinery; electrical machinery; transport equipment (including auto motives); instruments and appliances; time



measuring instruments; musical instruments; arms and ammunition; and furniture and related articles etc. Heavy engineering industry involves one or more perspective such as big and heavy products and facilities like heavy equipment, large machine tools, and huge industrial structures, or huge complex with the number of process under one roof.

Two major segments



India's Capital Goods manufacturing industry serves as a strong base for its engagement across sectors such as Engineering, Construction, Infrastructure and Consumer goods, amongst others.

The engineering sector is the largest of the industrial sectors in India. It accounts for 27% of the total factories in the industrial sector and represents 63% of the overall foreign collaborations. Demand for engineering sector services is being driven by capacity expansion in industries like infrastructure, electricity, mining, oil and gas, refinery, steel, automobiles, and consumer durables. India has a competitive advantage in terms of manufacturing costs, market knowledge, technology, and innovation in various engineering sub-sectors. India's engineering sector has witnessed a remarkable growth over the last few years, driven by increased investment in infrastructure and industrial production. The engineering sector, being closely associated with the manufacturing and infrastructure sectors, is of huge strategic importance to India's economy.

The development of the engineering sector of the economy is also significantly aided by the policies and initiatives of the Indian government. The engineering industry has been de-licensed and allows 100% foreign direct investment (FDI). Additionally, it has grown to be the biggest contributor to the nation's overall merchandise exports.

India became a permanent member of the Washington Accord (WA) in June 2014. It is now a part of an exclusive group of 17 countries who are permanent signatories of the WA, an elite international agreement on engineering studies and mobility of engineers.



1

Machine tools

- The Indian machine tool market size reached US\$ 1.4 billion in 2022.
- The market is expected to reach US\$ 2.5 billion by 2028, exhibiting a growth rate (CAGR) of 9.4% during 2023-28.
- The manufacturers of machine tools are mostly SMEs, few of them are mid-sized manufacturers which have an annual turnover varying between US\$ 36-60 million (Rs. 300-500 crore).
- The types of machine tools currently manufactured are general/special purpose machines, standard Computer Numerical Control (CNC) machines, gear cutting, grinding, medium size machines, electrical discharge machining (EDM), presses, press brakes, pipe bending, rolling, bending machines, etc.

2

Textile machinery

- Major textile machineries include weaving machines, spinning machines, winding machines, processing machines, synthetic fiber machines, etc.
- The Indian textile machinery industry was expected to touch US\$ 6 billion mark by 2022.
- India's textile machinery exports registered a growth of 21.4% to US\$ 762.15 million in the first nine months of 2022.
- In 2020, creation of National Technical Textiles Mission for a period of 4 years (2020-21 to 2023-24) was approved with an outlay of US\$ 179 million for developing usage of technical textiles in various flagship missions, programmes of the country including strategic sectors.

3

Cement machinery

- Cement manufacturing machines include raw mill, cement crusher, cement mill, cement kiln, cement cooler, cement dryer, cement silo, cement packer, etc.
- Currently, 100% FDI is allowed under the automatic route.

Source: Indian Machine Tool Manufacturers' Association, Textile Machinery Manufacturing Association, Cabinet Committee on Infrastructure report, Ministry of Heavy Industries Annual Report, News Articles

9

The plastic machines being manufactured are injection moulding machines, blow moulding machines and extrusion moulding machines etc. Product technologies are at par with the leading brands of the developed world. The global leading manufacturers/technologies have manufacturing presence in India through their wholly owned subsidiaries or through technology license arrangements.

Dies, Moulds & Tools Industry

The Indian tool room industry consists of commercial tool makers engaged in design, development and manufacturing of tooling in the country. In addition to commercial tool makers, several Government toolrooms -cum-training centers are also operating. The key tool room locations are Mumbai, Bengaluru, Chennai, Pune, Hyderabad and Delhi NCR.

Earthmoving, Construction and Mining Equipment

The Indian Earthmoving, Construction and Mining Machinery produces backhoe loaders, compactors, mobile cranes, pavers, batching plants, crawler crane, transit mixer, concrete pump, tower cranes, hydraulic excavators, dumpers, mining shovel, walking draglines, dozers, wheel loaders, graders, drilling equipment, tunneling machine, etc.

Printing Machinery

A majority of the units engaged in the manufacturer of Printing machinery are small and medium manufacturers. Major printing machine manufactured locally are web offset printing machines, UV coating curing machine, flexographic printing machine, screen printing machines, wire stitching machine, lamination machine, etc.

Food Processing Machinery

A majority of the units engaged in the manufacture of food processing machinery are small and medium manufacturers. Major food processing machinery manufactured in India are peelers, sorters, graders, pulpers, grinders, mixers, cookers, fryers, dryers, pulverizers, soya milk machines, food grain and coffee millers, bakery machinery, forming-filling- sealing machine, milking and dairy machines, juicing line, etc

Sub Menu

[Highlights \(/UserView/index?mid=1337\)](/UserView/index?mid=1337)

[Brief Overview \(/UserView/index?mid=1359\)](/UserView/index?mid=1359)

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Source: Ministry of Heavy Industries and Public Enterprise Annual Report 2020-21, PLEX Council, PlastIndia Foundation, Invest India

a) **Production data**

(₹ in crore)

S. No.	Sub sector of Capital Goods	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1.	Machine Tools	5,803	7,294	9,612	6,152	6,602	9,307
2.	Dies, Moulds and Press Tools	14,750	16,068	13,600	13,682	12,294	13,128
3.	Textile Machinery	6,650	6,900	6,865	5,355	5,093	11,700
4.	Printing Machinery	13,986	12,968	12,390	12,678	10,058	13,215
5.	Earthmoving and Mining Machinery	25,000	31,800	38,900	31,020	29,021	28,674
6.	Plastic Machinery	3,000	3,375	3,100	2,350	3,710	3,850
7.	Food Processing Machinery	15,246	15,600	8,750	7,547	10,250	12,210
8.	Process Plant Equipment	19,500	18,400	27,400	29,250	21,938	24,000

b) **Import data**

(₹ in crore)

S. No.	Sub sector of Capital Goods	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1.	Machine Tools	6,173	7,752	12,390	10,288	5,965	7,397
2.	Dies, Moulds and Press Tools	1,200	1,350	5,500	6,356	6,000	6,382
3.	Textile Machinery	10,098	10,687	10,834	9,273	8,096	12,635
4.	Printing Machinery	7,734	8,322	8,922	8,969	6,814	7,724
5.	Earthmoving and Mining Machinery	4,200	5,500	5,600	4,812	1,166	1,347
6.	Plastic Machinery	2,300	2,600	1,304	914	1,860	3,024
7.	Food Processing Machinery	3,686	3,900	4,742	4,487	1,965	5,610
8.	Process Plant Equipment	11,925	10,600	4,200	4,650	3,024	3,500

c) **Export data**

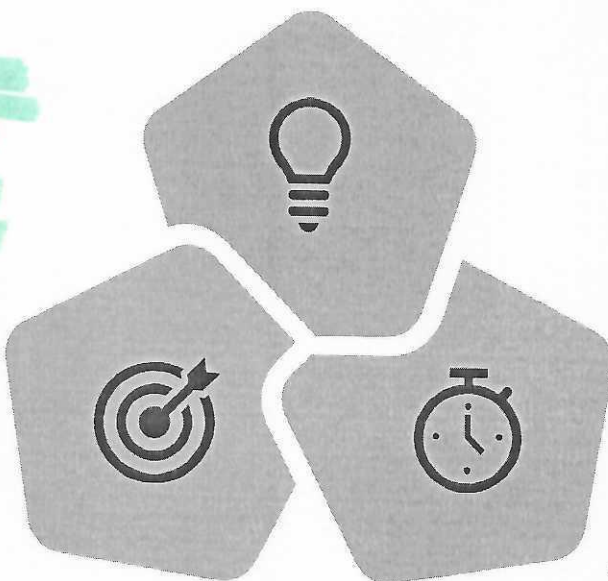
(₹ in crore)

S. No.	Sub sector of Capital Goods	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1.	Machine Tools	361	354	673	768	531	912
2.	Dies, Moulds and Press Tools	1,700	1,600	1,100	1,138	973	1,150
3.	Textile Machinery	2,438	2,939	3,665	2,556	3,307	4,291
4.	Printing Machinery	1,332	1,235	1,180	1,230	1,012	1,312

Notable trends in the industry

1. Diversification

- Creation of a significant number of special economic zones (SEZs) across the country has been approved.
- The development of Delhi Mumbai Industrial Corridor (DMIC) across seven states will further bolster the engineering sector.
- Reliance Defense and Engineering Ltd has signed an agreement with the US Navy for undertaking service, maintenance and repair of Seventh Fleet of US Navy at the Reliance Shipyard at Pipavav in Gujarat.



2. Entry of international companies

- With 100% FDI allowed through the automatic route, major international players such as Cummins, GE, ABB and Alfa Laval have entered the Indian engineering sector due to growth opportunities.
- American plane maker Boeing Corporation has launched the Boeing India Engineering & Technology Centre in Bengaluru.

3. Partnership

- Companies across this sector are partnering with technology providers to enhance their capabilities and sustain the market uncertainties.
- In November 2022, L&T Infotech and Mindtree merged to make India's 5th-largest IT company, LTIMindtree, that will help businesses proactively take on and shape the future by harnessing the full power of digital technologies.
- In February 2023, Reliance Industries Limited (RIL) and its vehicle partner Ashok Leyland unveiled India's first Hydrogen Internal Combustion Engine (H2-ICE) technology solution for heavy duty trucks at the India Energy Week in Bengaluru.
- State-run PSUs Nuclear Power Corporation of India Ltd (NPCIL) and Bharat Heavy Electricals Ltd (BHEL) have signed a memorandum of understanding (MoU) in April, 2023 to jointly pursue business opportunities in the area of Nuclear Power Plants based on Pressurized Heavy Water Reactor (PHWR) technology.

Source: Sutherland Research, News Sources

Growth drivers for the Indian engineering sector



POLICIES

- **New export policy in Uttar Pradesh:** The policy is aimed at promoting export growth and competitiveness, providing export subsidiaries with the required export-related assistance and services, and creating and improving the technical and physical infrastructure to improve exports from state industries.
- **Voluntary Vehicle-Fleet Modernisation Programme (VVMP):** In August 2021, Prime Minister Mr. Narendra Modi launched the Voluntary Vehicle-Fleet Modernisation Programme (VVMP), also known as the Vehicle Scrapping Policy, during the 'Investors Summit for Setting Up Vehicle Scrapping Infrastructure' in Gujarat.



DEMAND-SIDE DRIVERS

- Capacity addition for power generation
- Increase in infrastructure spending
- Rise in exports, which touched US\$ 111.63 billion in FY22.
- Demand in the engineering industry segment is driven by investments and capacity creation in core sectors like power, infrastructure developments, mining, oil and other sectors like the general manufacturing sector, automotive and process industries, and consumer goods industry.



INVESTMENT

- With 100% FDI allowed through the automatic route, major international players such as Cummins, GE, ABB and Alfa Laval have entered the Indian engineering sector due to growth opportunities.
- To enhance opportunities for private investment in infrastructure - Infrastructure Finance Secretariat is being established who will assist all stakeholders for more private investment in infrastructure, including railways, roads, urban infrastructure, and power.

The Survey highlighted that adoption of Industry 4.0 technologies such as cloud computing, IoT, machine learning, and artificial intelligence (AI) in the Indian manufacturing sector is underway, however, large-scale adoption is yet to happen and an enabling environment is rapidly developing.



The Survey mentioned that various Government Initiatives such as SAMARTH (Smart Advanced Manufacturing and Rapid Transformation Hubs) Udyog Bharat 4.0, establishment of the Centre for Fourth Industrial Revolution is the way forward in achieving the goals of Aatmanirbharta and its ambitions of becoming a key player in global value chains.



MAKE IN INDIA 2.0



The Survey mentioned that 'Make in India 2.0' is now focusing on 27 sectors, which include 15 manufacturing sectors and 12 service sectors. Amongst these, 24 sub-sectors have been chosen while keeping in mind the Indian industries' strengths and competitive edge, the need for import substitution, the potential for export and increased employability.

PERFORMANCE LINKED INCENTIVE (PLI) SCHEME

PLI scheme is expected to attract a capex of approximately ₹4 lakh crore over the next five years having a potential of generate employment for over 60 lakh in India stated the Economic Survey. It added that Sectors under which the PLI scheme has been announced currently constitute around 40 per cent of the total imports. The scheme, spread across 14 sectors, can enhance India's annual manufacturing capex by 15 to 20 per cent from FY23.

The Survey mentioned that around ₹47,500 crore (US\$ 6 billion) of actual investment has been made (As per recent reporting from implementing Ministries/ Departments); production/ sales of ₹3.85 lakh crore (US\$ 47 billion) of eligible products and employment generation of around 3 lakh has been reported and 106 per cent achievement of actual investment reported versus the corresponding projections of FY22.

The Survey stated that more than 100 MSMEs are among the PLI beneficiaries in sectors such as Bulk Drugs, Medical Devices, Telecom, White Goods and Food Processing. Key sectors such as Large-Scale Electronics Manufacturing, Pharmaceuticals, Telecom & Networking Products, Food Processing and White Goods have contributed considerably to investment, production, sales and employment.

* (NSP)

Ministry of Steel

STEEL



National Steel Policy

Posted On: 13 MAR 2023 5:33PM by PIB Delhi

The crude steel capacity of the country has increased from 137.97 million tonnes (MT) in 2017-18 to 154.06 MT in 2021-22 and is envisaged to reach 300 MT by 2030-31. The production capacity of 300 MT shall be achieved by the private and public sectors expanding their production capacities. National Steel Policy, 2017 aims to provide the conducive environment for attaining this objective by providing policy support and guidance to steel producers.

No specific fund has been allocated for Mission Purvodaya in last three years.

In the public sector, one greenfield plant has been set up at Nagarnar, Chhattisgarh.

This information was given by the Union Minister of State for Steel and Rural Development, Shri Faggan Singh Kulaste, in a written reply in the Rajya Sabha today.

AL/AKN

(Release ID: 1906442) Visitor Counter : 1016

Read this release in: Urdu , Telugu

AN OVERVIEW OF STEEL SECTOR

Global Scenario

- In CY 2021, the world crude steel production reached 1911.9 million tonnes (mt) and showed a growth of 3.6% over CY 2020.
- China remained world's largest crude steel producer in 2021 (1032.8 mt) followed by India (118.1 mt), Japan (96.3 mt) and the USA (86.0 mt), based on rankings released by the World Steel Association.
- Per capita finished steel consumption in 2020 was 228 kg for world and 691 kg for China. The same for India was 70 kg (Source: JPC) in 2020-21.

Note: World Steel Association report, Data Provisional.

Domestic Scenario

- The Indian steel industry has entered into a new development stage, post de-regulation, riding high on the resurgent economy and rising demand for steel.

Rapid rise in production has resulted in India becoming the 2nd largest producer of crude steel during last four years (2018-2021), from its 3rd largest status in 2017. The country was also the largest producer of Sponge Iron or DRI in the world and the 2nd largest finished steel consumer in the world after China in 2021 (provisional), based on rankings released by the World Steel Association.

- In a de-regulated, liberalized economic/market scenario like India the Government's role is that of a facilitator which lays down the policy guidelines and establishes the institutional mechanism/structure for creating conducive environment for improving efficiency and performance of the steel sector.
- In this role, the Government has released the National Steel Policy 2017, which has laid down the broad roadmap for encouraging long term growth for the Indian steel industry, both on demand and supply sides, by 2030-31. The Government has also announced a policy for providing preference to domestically manufactured Iron & Steel products in Government procurement.
- The government has also approved a Production-linked Incentive (PLI) Scheme for Specialty Steel. It is expected that the specialty steel production will become 42 million tonnes by the end of 2026-27. This will ensure that approximately 2.5 lakh crores worth of specialty steel will be produced and consumed in the country which would otherwise have been imported. Similarly, the export of specialty steel will become around 5.5 million tonnes as against the current 1.7 million tonnes of specialty steel getting FOREX of Rs 33,000 crore.

Production

- Steel industry was de-licensed and de-controlled in 1991 & 1992 respectively.
- India was the 2nd largest producer of crude steel in the world in 2021.
- In 2021-22 (provisional), production of total finished steel (alloy/stainless + non alloy) was 113.60 mt, a growth of 18.1% over last year.
- Production of Pig Iron in 2021-22 (provisional) was 5.76 mt, a growth of 18.1% over last year.

INDIA STEEL MARKET SIZE & SHARE ANALYSIS - GROWTH TRENDS & FORECASTS (2023 - 2028)

India Steel Market is Segmented by Form (Liquid Steel, Crude Steel, and Finished Steel), Technology (Blast Furnace-Basic Oxygen Furnace (BF-BOF), Electric Arc Furnace, and Other Technologies), and End-User Industry (Automotive and Transportation, Building and Construction, Tools and Machinery, Energy, Consumer Goods, and Other End-user Industry). The report offers the market sizes and forecasts based on volume in million tons.

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India Steel Market Size



Need a report that reflects how COVID-19 has impacted this market and its growth?

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India Steel Market Analysis

The Indian steel market is anticipated to register a CAGR of greater than 7% during the forecast period. Steel consumption across industries, including automotive and transportation, building and construction, and others, was restricted owing to the pandemic. However, the steel market witnessed a strong recovery with the smooth functioning of the end-user industries in curbing the spread of the virus. Currently, the steel market is recovered from the pandemic and is expanding significantly.

- Over the short term, expanding population, urbanization, automobile industry, increased spending on construction and infrastructure projects, and increased steel demand have been projected to drive the market during the forecast period.
- However, due to instability in raw material prices and high production costs, the profit margin has significantly decreased for steel manufacturers in India. The price fluctuation caused huge losses to importers, which hampered the growth of the Indian steel market.

over the forecast period.

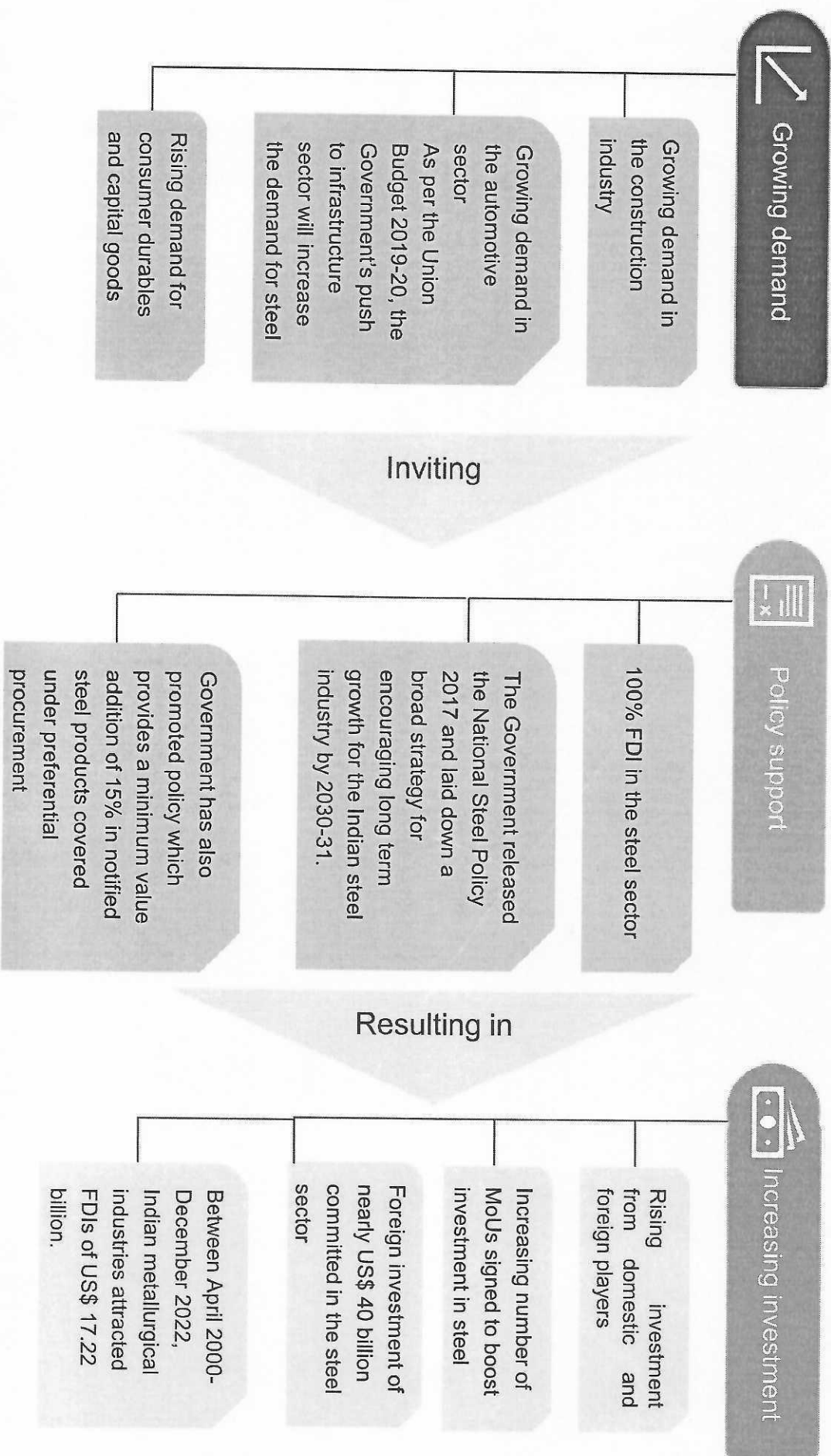
India Steel Market Trends

This section covers the major market trends shaping the India Steel Market according to our research experts:

Building and Construction Sector Promotes the Demand for Steel

- Steel is a man-made alloy that falls within the ferrous metal classification. It contains iron (a naturally occurring metal element on earth), carbon, and other components. Construction is a sector where steel is widely used since structures are created using it due to its high durability and strength.
- According to the Joint Plant Committee (JPC), the building and construction sector contributed to about 40% of India's steel demand as of the financial year 2021.
- According to the India Brand Equity Foundation (IBEF), India was the world's second-largest producer of crude steel in September 2021, and total crude steel production in FY22 was 120.0 million tons, as compared to FY2021, i.e., 102.5 million tons. Regardless of the simple availability of low-cost labor and the presence of vast iron ore reserves, India is globally competitive. India has the fifth-largest iron ore resource in the world.
- The government allotted INR 47 crores (USD 6.2 million) to the Ministry of Steel in the Union Budget 2022-23. The overall steel consumption in India is expected to rise to 230 million tons by 2030-31, up from 133.596 million tons in FY22.
- Steel is commonly used in construction because of its high durability and strength. Steel structures can also withstand natural calamities and be tailored to the needs of a specific project.
- Government social sector programs such as the Pradhan Mantri Awas Yojna, which promotes housing for all, the Sardar Patel Urban Housing Project, the 100 Smart Cities Mission, and the construction of infrastructure in medium and small towns are promoting the growth of the Indian steel industry.
- According to the Ministry of Steel, India (MOS) and Joint Plant Committee, India (JPC), in 2021, India's steel consumption volume was anticipated to be around 106 million metric tons. This was a considerable gain over the previous year.
- The National Bank for Financing Infrastructure and Development (NaBFID) is a USD 2.5 billion development finance organization to fund infrastructure projects in India. It was established by legislation passed by the Parliament in March 2021.
- Infrastructure activities accounted for 13% of overall FDI inflows in the financial year (FY) 2021. FDI in the construction development sector (townships, housing, built-up infrastructure, and construction development projects) and construction (infrastructure) activities reached USD 28.64 billion and USD 26.22 billion, respectively, between April 2020 and June 2022.
- All the aforementioned factors are expected to drive the construction and building industry, which is further likely to boost the demand for steel in India during the forecast period.

Strong demand and policy support driving investments



Notes: FDI - Foreign Direct Investment, MOU - Memorandum of Understanding

INDIA NUCLEAR POWER PLANT EQUIPMENT MARKET SIZE & SHARE ANALYSIS - GROWTH TRENDS & FORECASTS (2023 - 2028)

NUCLEAR

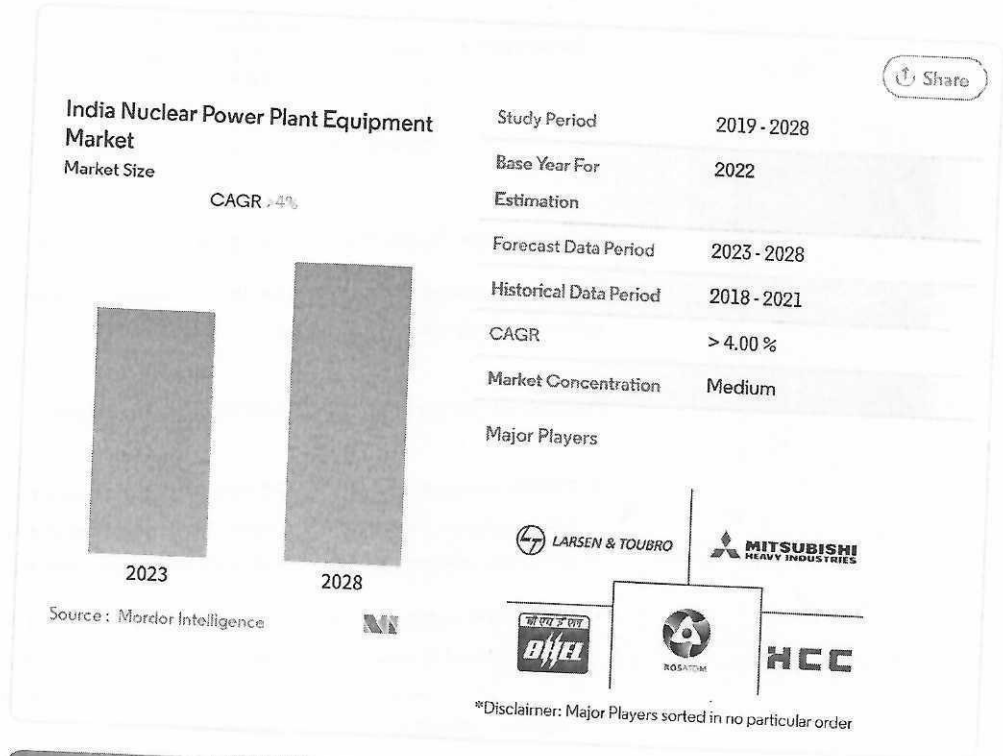
The India nuclear power plant equipment market is segmented by Reactor Type (Pressurized Water Reactor, Pressurized Heavy Water Reactor, Other Reactor Types) and Carrier Type (Island Equipment, Auxiliary Equipment, and Research Reactor). The report offers the market size and forecasts for India nuclear power plant equipment (value in USD billion) for all the above segments.

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India Nuclear Power Plant Equipment Market Size



ABOUT THIS REPORT

Market Snapshot

Market Overview

Scope of the Report

Key Market Trends

Competitive Landscape

Major Players

Recent Developments

TABLE OF CONTENTS



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India Nuclear Power Plant Equipment Market Analysis

The India nuclear power plant equipment market is expected to grow at a CAGR of more than 4% in the forecast period.

COVID-19 negatively impacted the market in 2020. Presently the market is likely to reach pre-pandemic levels.

- Over the medium term, the significant contribution of nuclear energy in reducing GHG emissions while fulfilling the increasing energy demands of a growing population and supporting sustainable development is driving the market.

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- Nevertheless, the research and development into commercializing new nuclear reactor designs, such as Fast Breeder Reactor, is expected to be a significant opportunity for the market beyond the forecast period.

India Nuclear Power Plant Equipment Industry Segmentation

A nuclear power plant is a facility that converts atomic energy into usable power. In a nuclear electric power plant, the heat produced by a reactor is generally used to drive a turbine, which drives an electric generator. Nuclear Power plant equipment is any equipment used in a nuclear power plant for the safe and consistent generation of nuclear energy. The India nuclear power plant equipment market is segmented by Reactor Type and Carrier Type. By Reactor Type, the market is segmented into Pressurized Water Reactors, Pressurized Heavy Water reactors, and Other Reactor Types. By Carrier Type, the market is segmented into Island Equipment, Auxiliary Equipment, and Research Reactor. For each segment, the market sizing and forecasts have been done based on revenue (USD Billion)

Reactor Type	Pressurized Water Reactor Pressurized Heavy Water Reactor Other Reactor Types
Carrier Type	Island Equipment Auxiliary Equipment Research Reactor

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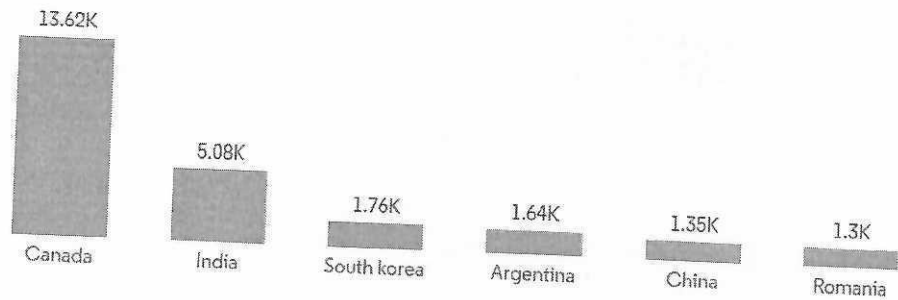
India Nuclear Power Plant Equipment Market Trends

This section covers the major market trends shaping the India Nuclear Power Plant Equipment Market according to our research experts:

Pressurized Heavy Water Reactors to Dominate the Market

- PHWRs generally use unenriched natural uranium oxide as fuel and, therefore, need more efficient heavy water as the coolant. The heavy water enhances the neutron economy and allows the reactor to operate without fuel enrichment facilities, enabling the reactor to use alternate fuel cycles.
- The PHWR design requires thin-walled pressure tubes, unlike PWR nuclear plants. This allows the distribution of pressure boundaries in many small-diameter pressure tubes. As a result, this design has a lesser chance of accidental rupture of a pressure boundary compared to PWR designs. Therefore, PHWR is considered safer than PWR plants.
- India is the second-largest market for PHWR technology globally, trailing behind only Canada, and as of February 2021, India operates 18 PHWR units with a total capacity of 5080 MW, of which consists of 15 of 220 MW, two units of 540 MWe, and 1 unit of 700 MWe.
- In January 2021, Kakrapar-3, the first indigenously developed IPHWR-700 reactor model, was synchronized with the grid for the first time. As of May 2022, 5 indigenously-designed PHWR units, each of 700 MWe, are in various stages of construction.
- Additionally, ten other PHWR reactors are planned in the country. Globally, there are four under-construction PHWRs. All these PHWRs are being constructed by the National Power Corporation of India, with 2 in Kakrapar and 2 in Rajasthan. The estimated capacity of these reactors will be around 2.8 GWe.
- Thus, such developments in the country are expected to support the India nuclear power plant equipment market during the forecast period.

Country, 2021



Source: IAEA PRIS



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Island Equipment to Dominate the Market

- The major equipment under the island equipment category is the nuclear steam supply system (NSSS) and safety system. The nuclear steam supply system includes reactors that contain the reactor core, control system, reactor coolant pumps (RCP), primary piping, pressurizer for controlling the pressure of primary coolant (only used in PWR). It also consists of steam generators for heat exchange between the primary circuit and the secondary circuit.
- As per Central Electricity Authority statistics, by March 2022, India's nuclear energy installed capacity accounts for about 6,780 MW. Nuclear energy is one of the significant energy sources in India's electricity mix.
- India had nearly 6.8 GW of installed nuclear capacity as of 2021, and as of December 2022, around 8.7 GW net capacity under construction and over 80 GW planned or proposed. Despite the fact that nuclear energy makes up a small share of the country's installed capacity mix, with rising demand for clean energy, the government is expected to invest significantly in the development of new nuclear power plant facilities. With upcoming projects, the demand for island equipment is likely to grow significantly.
- Those nuclear projects already under construction are expected to come online over the next ten years, albeit delayed. The government plans to source 25% of the country's electricity from nuclear energy by 2050, up from the current level of 2.5% - and the project pipeline strengthened in line with these targets, driving the market considerably in the forecast period.
- In March 2022, the Indian government announced that it planned to start the construction of PHWRs in fleet mode from 2023. The first concrete for Kaiga units 5 and 6 is expected in 2023, followed by Gorakhpur Haryana Anu Vidyut Praiyonjan units 3 and 4 and Mahi Banswara Rajasthan Atomic Power Projects units 1-4 in 2024 and Chutka Madhya Pradesh units 1 and 2 in 2025.
- In September 2021, BHEL received orders worth INR 108 billion for turbine islands for six nuclear power pressurized heavy water reactor (PHWR) units, 4 at Gorakhpur and 2 at Kaiga, which is the largest order in BHEL's history.
- Additionally, in July 2021, Bharat Heavy Electricals Ltd (BHEL) received an INR 14 billion contract to supply twelve 700MWe Indian-designed PHWR steam generators to be built at four sites including Gorakhpur and Kaiga. Such large investments in PHWR reactors by India is expected to push the demand for PHWR power plant equipment during the forecast period.
- Therefore considering the above-mentioned points, island equipment is likely to dominate the market during the forecast period.

DRIVER – RISING INVESTMENTS IN NUCLEAR POWER PLANT IN THE COUNTRY

BACKGROUND

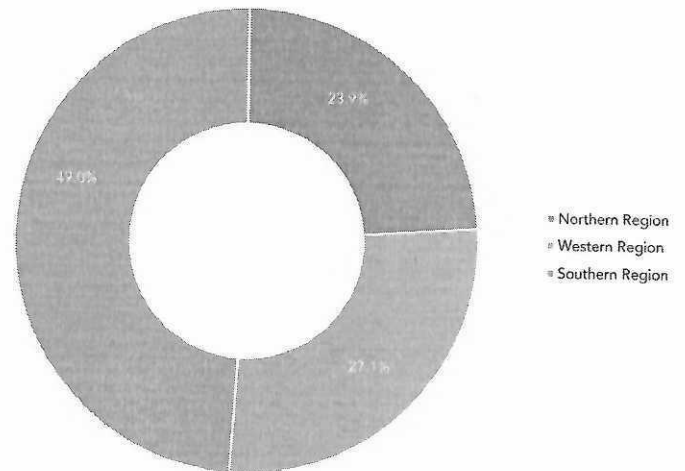
- Nuclear power is derived from nuclear fission, nuclear decay, and nuclear fusion reactions. Most electricity produced by nuclear power is currently produced by nuclear fission in nuclear power plants using uranium and plutonium. Electricity derived from nuclear reactors, which generate heat by fission, is nuclear power. A nuclear power plant resembles a large coal-fired power plant in that it has pumps, valves, steam generators, turbines, electric generators, condensers, and other equipment similar to the reactor, which functions as a boiler in a fossil-fuel power plant.
- Nuclear power is an environmentally friendly and clean source of power generation. It can offer the nation sustainable long-term energy security. The country's energy transition toward achieving the objective of a net zero economy will be assisted by the expansion of nuclear generating capacity.

GOVERNMENT INITIATIVES TO INCREASE NUCLEAR POWER PLANTS

- India intends to build new nuclear power plants in order to enhance the production of clean energy. India has reported seven nuclear power plants by 2022, producing a combined 6.78 gigawatts of atomic energy.
- Moreover, the Indian Government announced its plan to increase its nuclear power capacity three times to 22.48 gigawatts by 2031, from just over 3% to 6% of the nation's electricity production.
- As of December 2022, the country had 22 operable nuclear reactors with a combined capacity of 6.79 GWe and eight reactors with a combined capacity of 6.02

DETAILED ANALYSIS WILL BE PROVIDED IN THE FULL REPORT

NUCLEAR INSTALLED CAPACITY, SHARE IN %, BY REGION, INDIA, 2022*



Source: Ministry of New and Renewable Energy

*Note: Data available till November 2022

Nuclear
New
Additions

- Nevertheless, the research and development into commercializing new nuclear reactor designs, such as Fast Breeder Reactor, is expected to be a significant opportunity for the market beyond the forecast period.

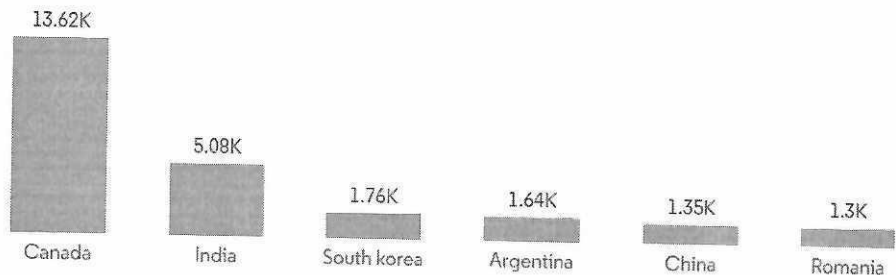
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India Nuclear Power Plant Equipment Market: Gross Installed PHWR Capacity, in MW, by Country, 2021



Source: IAEA PRIS



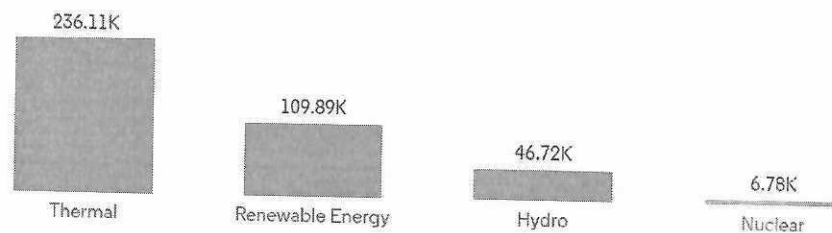
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Island Equipment to Dominate the Market

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India Nuclear Power Plant Equipment Market: Installed Electricity Capacity, By Type, in MW, India, March 2022



Source: Central Electricity Authority



India Nuclear Power Plant Equipment Industry Overview

The India nuclear power plant equipment market is moderately consolidated in nature. Some of the major players in the market (in no particular order) include Larsen & Toubro Ltd, Rosatom State Atomic Energy Corporation, Hindustan Construction Company, Bharat Heavy Electricals Limited, and Mitsubishi Heavy Industries.

India Nuclear Power Plant Equipment

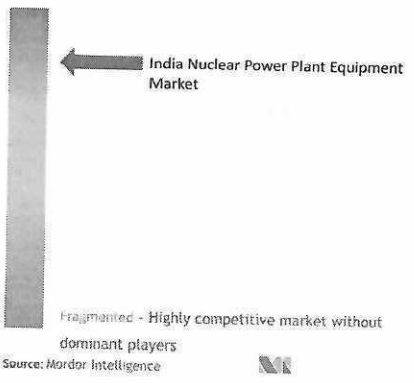
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SCOPE OF THE REPORT

FREQUENTLY ASKED QUESTIONS

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- 1 Larsen & Toubro Ltd
- 2 Hindustan Construction Company
- 3 Mitsubishi Heavy Industries
- 4 Rosatom State Atomic Energy Corporation
- 5 Bharat Heavy Electricals Limited



*Disclaimer: Major Players sorted in no particular order

India Nuclear Power Plant Equipment Market News

- In December 2022, the Indian government announced that it, in principle, approved five new locations for building nuclear power plants in the future.
- In March 2022, the Indian government announced that the country would import 100 tonnes of natural uranium and 133 units of fuel assemblies during 2022-2023. This is expected to lower the costs of nuclear energy generation, driving the demand and development of new power plants and equipment during the forecast period.

India Nuclear Power Plant Equipment Market Report - Table of Contents

- 1. INTRODUCTION
 - 1.1 Scope of Study
 - 1.2 Market Definition
 - 1.3 Study Assumptions
- 2. RESEARCH METHODOLOGY
- 3. EXECUTIVE SUMMARY
- 4. MARKET OVERVIEW
 - 4.1 Introduction
 - 4.2 Market Size and Demand Forecast in USD billion, till 2028
 - 4.3 Recent Trends and Developments
 - 4.4 Government Policies and Regulations
 - 4.5 Market Dynamics
 - 4.5.1 Drivers
 - 4.5.2 Restraints
 - 4.6 Supply Chain Analysis
 - 4.7 PESTLE Analysis
- 5. MARKET SEGMENTATION
 - 5.1 Reactor Type
 - 5.1.1 Pressurized Water Reactor
 - 5.1.2 Pressurized Heavy Water Reactor


Addition in nuclear instal of
 "The Indian nuclear power plant equip"
 "Over the medium term"

oil & gas


 Pradeep Eapen
 Mathew

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— Snapshot

World's fastest-growing energy market

India is the 3rd largest energy and oil consumer in the World

India is the 4th largest importer of liquefied natural gas (LNG).

India consumed 204.23 MMT petroleum products and 63.9 BCM natural gas in FY 2021-22, making a growth of 5.1% and 5% over the FY 2020-21.

- India's oil demand is expected to increase by 40% to 6.7 mb/day by 2030 and further to 8.3 mb/day in 2050 from 4.7 mb/day in 2021.
- India's gas demand is expected to almost double to reach 115 BCM by 2030 and 170 BCM by 2050.
- As on April 2022, estimated reserves of crude oil in India stood at 651.77 mn tonnes, and natural gas stood at 1138.67 bn cubic meters.
- India has set a target to raise the share of natural gas in the energy mix to 15% by 2030 from about 6.7% now.
- The total number of fuel retail outlets increased from 45,104 (2012) to 83,027 (2022). This number has increased to 86,216 as of 01.03.2023.
- A total of 88% of the nation's geographical area covering 98% of the population has been authorized for the development of City Gas Distribution network.
- India increased the ethanol blending in petrol from 1.53% in 2013-14 to 10.17% in 2022 and advanced its target of 20% ethanol blending in petrol from 2030 to 2025-26. Further, Ethanol blending with Petrol was 12.0% during February 2023 and cumulative ethanol blending during December 2022- February 2023 was

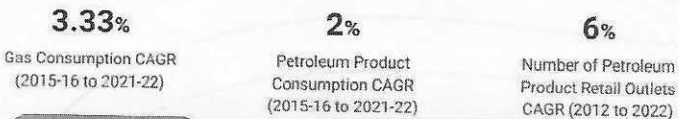


150 Cr per project under the Pradhan Mantri Ji-VAN

ordable Transportation (SATAT) Scheme. In this
cial assistance to bio-gas plants.

For further details, please refer FDI Policy

[- Less]



Largest exporter of petroleum products in Asia since 2009 (FY 20-21)



Fourth largest global refiner



Third Largest LPG Consumer

INDUSTRY SCENARIO

FOREIGN INVESTMENT

INDUSTRIES

POLICIES & SCHEMES

Industry Scenario

Exploration & Production:

- There are 26 sedimentary basins, covering a total area of 3.4 mn square km. The area is spread across the land, shallow water up to 400-meter water depth, and Deepwater further up to Exclusive Economic Zone (EEZ).
- Cumulative crude oil production during FY 21-22 was 29.7 MMT. Natural Gas production for FY 21-22 was 34.024 BCM.
- In the FY 2021 – 22, for 21 & 8 Blocks were awarded under OALP VI & VII respectively.
- It is intended to increase the nation's exploration acreage by 0.5 mn sq. km. till 2025 and by 1.0 mn sq. km. till 2030.

Refinery:

- India's refining capacity stands at ~251 MMTPA as of October 2022, comprising 23 refineries. Refinery capacity utilization is about 96% for the year 2021-22. Indian Oil Corporation (IOC) is the largest domestic refiner with a capacity of 70.1 MMTPA.
- Crude oil processing increased by 9% from 221.77 MMT in 2020-21 to 241.7 MMT in 2021-22.

MORDOR



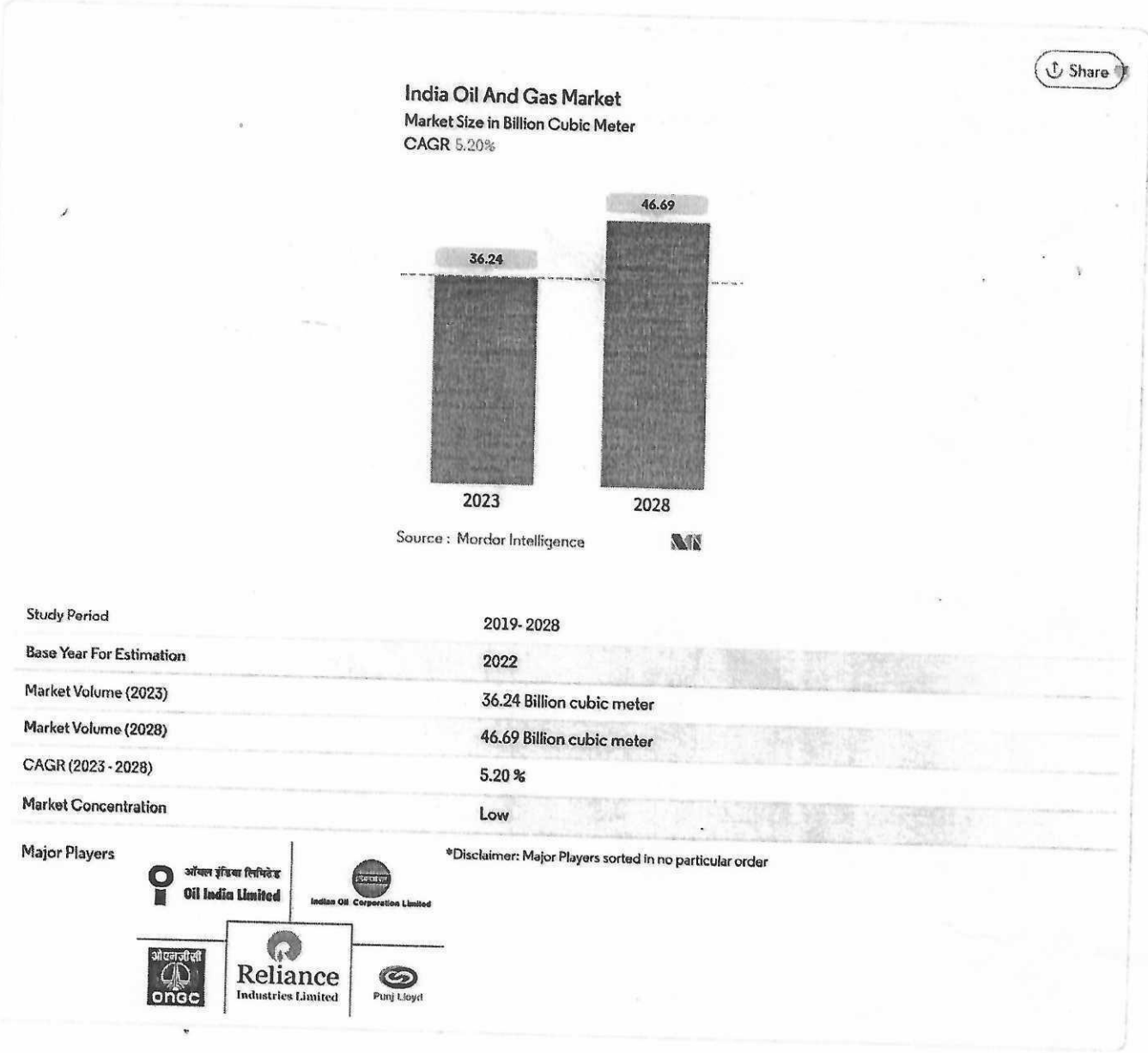
OIL AND GAS INDUSTRY IN INDIA SIZE & SHARE ANALYSIS - GROWTH TRENDS & FORECASTS (2023 - 2028)

The report covers Oil and Gas Companies in India and the market is segmented by sector (upstream, midstream, and downstream). The report offers the size and forecasts for the oil and gas markets in volume (thousands of barrels per day, billions of cubic feet per day, and MTPA).

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India Oil and Gas Market Size



India Oil and Gas Market Analysis

The India Oil And Gas Market size is expected to grow from 36.24 billion cubic meter in 2023 to 46.69 billion Cubic Meter by 2028, at a CAGR of 5.20% during the forecast period (2023-2028).

The market was negatively impacted by the outbreak of COVID-19 due to regional lockdowns and a decline in demand for refined petroleum products. Currently, the market has rebounded to pre-pandemic levels.



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Business News > News > Economy > Indicators > India to overtake EU as world's third largest energy consumer by 2030: IEA

India to overtake EU as world's third largest energy consumer by 2030: IEA

Synopsis

In its India Energy Outlook 2021, IEA saw primary energy consumption almost doubling to 1,123 million tonnes of oil equivalent as the Gross Domestic Product (GDP) expands to USD 8.6 trillion by 2040.

Agencies

India will overtake the European

SECTIONS India to overtake EU as world's third largest energy consumer by 2030: IEA



To meet its energy needs, India will be more reliant on fossil fuel imports as its domestic oil and gas production stagnates

International Energy Agency (IEA) said on Tuesday as it forecast India accounting for the biggest share of energy demand growth over the next two decades.

In its India Energy Outlook 2021, IEA saw primary energy consumption almost doubling to 1,123 million tonnes of oil equivalent as the Gross Domestic Product (GDP) expands to USD 8.6 trillion by 2040.

India at present is the fourth-largest global energy consumer behind China, the United States and the European Union.

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2. GROWING DEMAND

- India is the world's third-largest energy consumer globally.
- Diesel demand in India is expected to double to 163 MT by 2029-30, with diesel and petrol covering 58% of India's oil demand by 2045.
- Oil demand in India is projected to register a 2x growth to reach 11 million barrels by 2045.
- Consumption of natural gas in India is expected to grow by 25 billion cubic metres (BCM), registering an average annual growth of 9% until 2024.

1. SUPPORTIVE FDI GUIDELINES

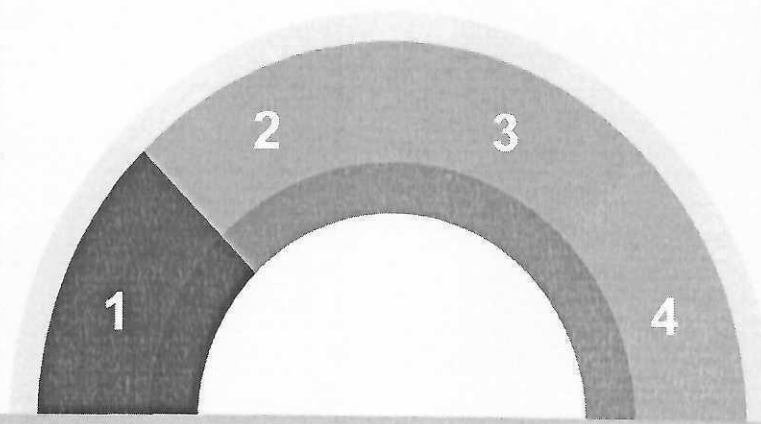
- In July 2021, the Department for Promotion of Industry and Internal Trade (DPIIT) approved an order allowing 100% foreign direct investments (FDIs) under automatic route for oil and gas PSUs.
- The FDI limit for public sector refining projects has been raised to 49% without any disinvestment or dilution of domestic equity in existing PSUs.

3. RAPID EXPANSION

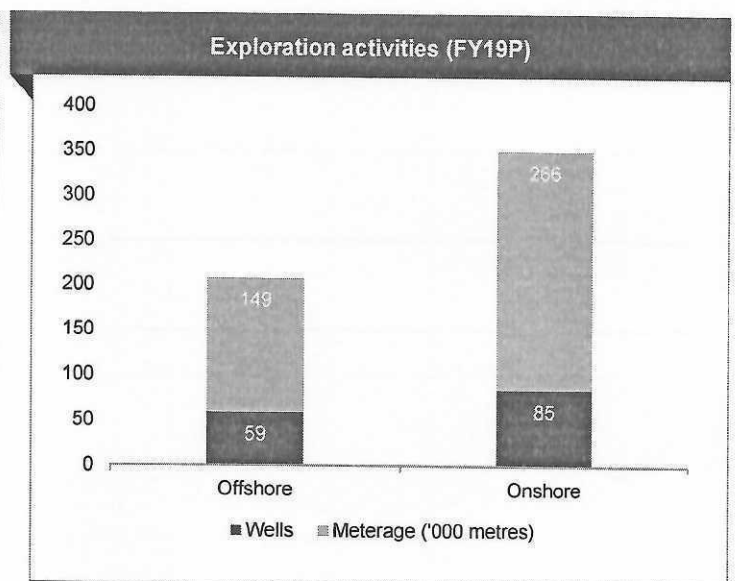
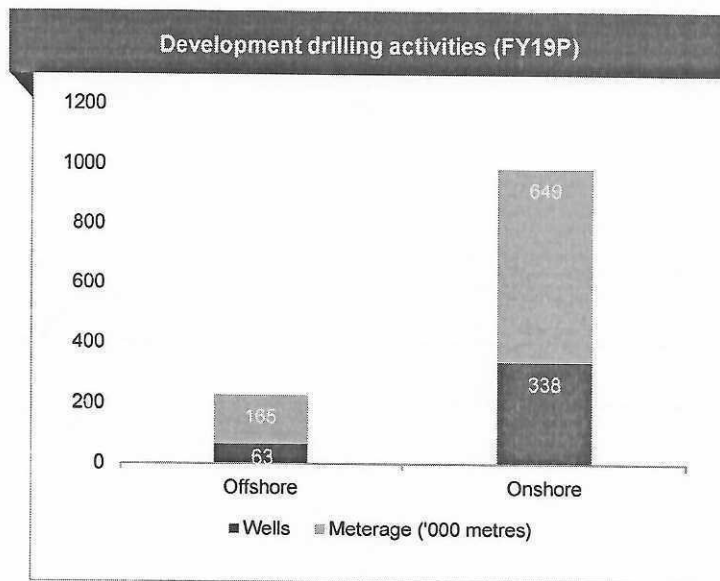
- India aims to commercialise 50% of its SPR (strategic petroleum reserves) to raise funds and build additional storage tanks to offset high oil prices.
- In September 2021, the Indian government approved oil and gas projects worth Rs. 1 lakh crore (US\$ 13.46 billion) in Northeast India. These projects are expected to be completed by 2025.
- In February 2021, Prime Minister Mr. Narendra Modi announced that the Government of India plans to invest Rs. 7.5 trillion (US\$ 102.49 billion) on oil and gas infrastructure in the next five years.
- The industry is expected to attract US\$ 25 billion investment in exploration and production by 2022. Refining capacity in the country is expected to increase to 667 MTPA by 2040.

4. POLICY SUPPORT

- In the Union Budget 2022-23, the customs duty on certain critical chemicals such as methanol, acetic acid and heavy feed stocks for petroleum refining were reduced.
- In May 2022, the government approved changes in the Biofuel Policy to bring forward the target for 20% ethanol blending with petroleum to 2025-26 from 2030.



Upstream segment: exploration and development activities

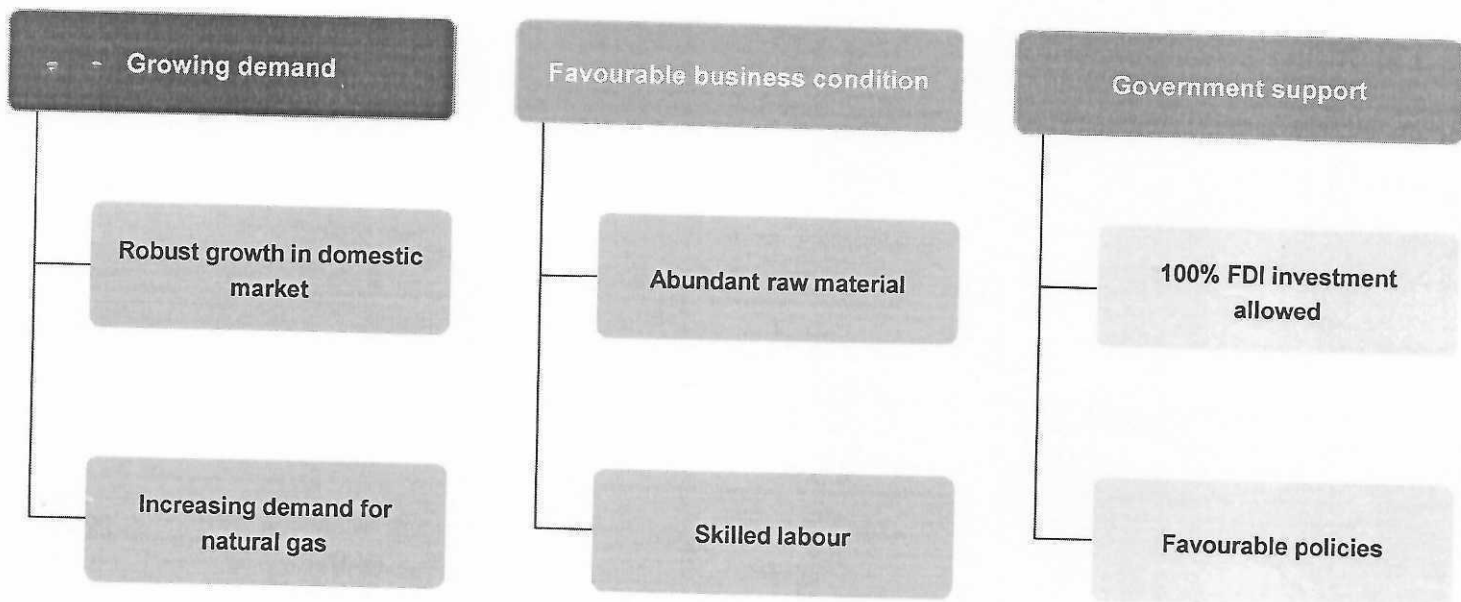


- In FY19P, 1,228,000 metres of wells were explored and developed and 545 wells were drilled in the country.
- State-owned oil companies undertake most of the upstream drilling and exploration work.
- The Government is planning to invest US\$ 2.86 billion in upstream oil and gas production to double the natural gas production to 60 BCM and drill more than 120 exploration wells by 2022.

Notes: P- Provisional

Source: Ministry of Petroleum and Natural Gas, BMI

Growth drivers



Notes: TCM - Trillion Cubic Metres, EandP - Exploration and Production

Source: Ministry of Petroleum and Natural Gas, US Energy Information Administration, BP Statistical Review of World 2015 Energy, June 2012; BMI



Sector Expert
Manan Jaisinghani



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Investors are coming to India for R&D*, for manufacturing, to enjoy the benefits of India's talent pool.

Shri Piyush Goyal
 Minister of Commerce & Industry and
 Textiles and Consumer Affairs, Food and Public Distribution
 Government of India

Research and Development

— Snapshot

Defending the World

"The Indian Defence sector, the second largest armed force is at the cusp of revolution. The Government has identified the Defence and Aerospace sector as a focus area for the 'Aatmanirbhar Bharat' or Self-Reliant India initiative, with a formidable push on the establishment of indigenous manufacturing infrastructure supported by a requisite research and development ecosystem.

India is positioned as the 3rd largest military spender in the world, with its defence budget accounting for 2.15% of the country's total GDP. Over the next 5-7 years, the Government of India plans to spend \$ 130 Bn for fleet modernisation across all armed services. The industry gets INR 5.94 lakh crore in Budget 2023-24, a jump of 13% over previous year.

Ministry of Defence has set a target of achieving a turnover of INR 1.75 lakh crore in aerospace and defence Manufacturing by 2025, which includes exports of INR 35,000 crore. Till April 2023, a total of 606 Industrial Licences have been issued to 369 companies operating in Defence Sector.

To support the domestic defence industry the government aims to ensure transparency, predictability, and ease of doing business by creating a robust ecosystem and supportive government policies. Towards this end the government has taken steps to bring about de-licensing, de-regulation, export promotion and foreign investment liberalization. Ministry of Defence has also notified three 'Positive Indigenization lists' comprising of 310 defence equipment to

while also reducing its dependence on imports, thus, supporting the market growth.

The geopolitical conflicts between India and its neighboring nations and the threat of terrorism have forced the country further to reinforce its perimeter security and naval and airborne capabilities. The country has constantly been increasing its defense expenditure over the years. The military budget for 2022, valued at USD 70.6 billion (INR 5.25 trillion), represented an increase of 10% compared to the previous year's allocation and the sharpest increase in the defense budget in recent years. The increasing defense budget is expected to drive market growth during the forecast period.

Furthermore, India strives for self-sufficiency across various sectors, including defense, by promoting the 'Make in India' initiative through focused, sustained, and evolved indigenization programs. This may provide new growth opportunities for market players.

Indian Defense Industry Segmentation

The Indian defense market covers all aspects of the military vehicle, armament, other equipment procurements, and upgrade and modernization plans. The report also provides insights into the budget allocation and spending of the country in the past, present, and forecast periods.

The Indian defense market is segmented by armed forces and type. By armed forces, the market is segmented into the army, navy, and air force. By type, the market is classified into fixed-wing aircraft, rotorcraft, ground vehicles, naval vessels, C4ISR, weapons and ammunition, protection and training equipment, and unmanned systems. For each segment, the market sizing and forecasts have been provided by value (USD billion).

[Report scope can be customized per your requirements. Click here.](#)

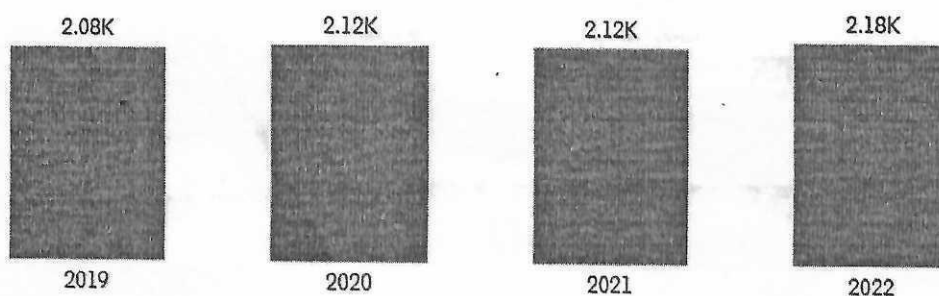
Indian Defense Market Trends

Air Force Segment to Dominate Market Growth During the Forecast Period

The increased focus on the modernization of aircraft capabilities with the projected deliveries of various aircraft, including the Dassault Rafale, Ilyushin Il-76 (A50E) (AEW), HAL Tejas LCA Mk 1, Dornier 228, HAL Dhruv ALH/Rudra, and HAL Light Combat Helicopter within the forecast period, are expected to drive the growth of the segment. The increasing efforts of India toward achieving self-reliance in terms of manufacturing and operations will create significant opportunities for regional vendors. India is currently working on its AMCA project. The aircraft's first flight is expected during 2025-26, while full production may occur by 2030. HAL is developing a new 13-ton-class helicopter, the Indian Multi-role Helicopter for the Indian Armed Forces. The indigenous medium-lift helicopter may replace all imports in the class for the armed forces. Considering the scale of investments needed, this program may be the largest helicopter design attempted by India so far.

On the other hand, the Tejas Mk 2, a further development of the HAL Tejas, is expected to be in 2023, with series production to begin by 2026. The IAF is working on plans to continue the long-deferred requirement for 114 Medium Multi-role Combat Aircraft (MMRCA) 2.0 deal, worth an estimated USD 18-20 billion. The IAF is also focusing on developing its air defense capabilities and has invested in the development of related capabilities by procuring both indigenous and foreign-made systems. Some of the notable ongoing programs include Akash SAM, S-400, and IAI MRSAM. Such programs are expected to drive the segment's growth during the forecast period.

Active Military Aircraft Fleet (Units), India, 2019-2022



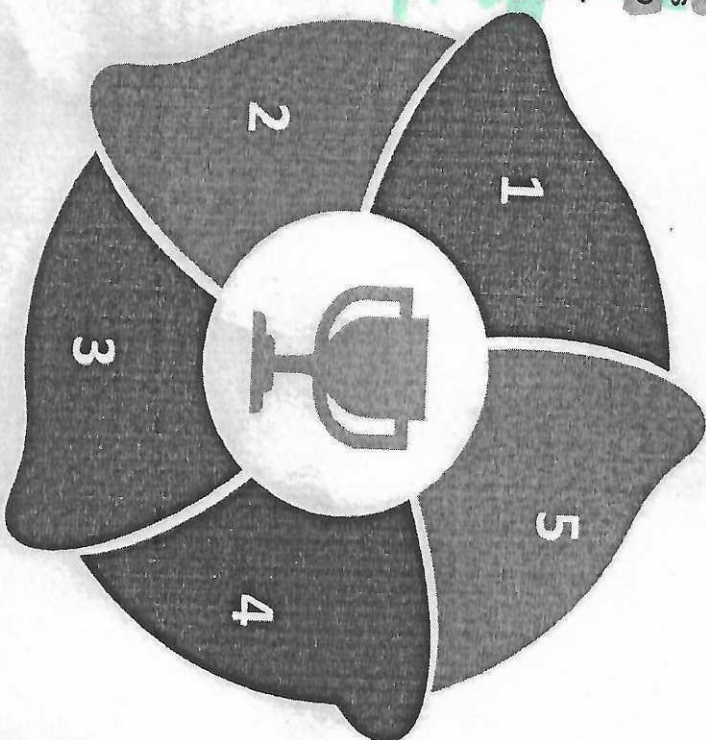
Opportunities in the defence manufacturing

5. Self-reliance

- The present 'Defence Production & Export Promotion Policy (DPEPP) 2020' is positioned as Ministry of Defence's overarching guiding document to provide a focused, structured and significant thrust to defence production capabilities of the country for self-reliance and exports.

4. Start-up India

- As per the Union Budget 2022-23, 25% of defence R&D budget has been earmarked for private industry and start-ups which will pave the way for innovation of new defence technologies in India.



1. Make in India Initiative

- Government's emphasis on 'Make in India' initiative in the Defence sector, provides huge opportunities for domestic players to enhance their indigenisation efforts.
- Under the Atmanirbhar Bharat Initiative, four positive indigenization lists of 411 products have been promulgated by Department of Military Affairs and Ministry of Defence to be manufactured domestically for the defence sector, instead of being sourced via imports.
- Government of India has planned replacement of aircraft fleet of the defence forces including Cheetah and Chetak helicopters with Naval Utility Helicopter, indigenous Light Utility Helicopter (LUH) manufactured by HAL under "Buy (Indian-IDDm)" project and Russian built Ka-226T as "Buy & Make (Indian)".
- The Defence Minister, Mr. Rajnath Singh handed over two 'Made in India' platforms, a Fast Patrol Vessel and a Landing Craft Assault ship, to the Maldives National Defence Forces, during a visit to the country in May, 2023.

2. Government Policy Support

- FDI in the defence sector is allowed up to 74% through automatic route (from earlier 49%) for companies seeking new industrial licenses. FDI beyond 74% and up to 100% will be permitted under the Government route.

3. Technological Modernisation via Public Private Partnership

- 75 newly-developed Artificial Intelligence (AI) products/technologies are inaugurated. These products are expected to open up new business avenues for the Defence PSUs.
- DRDO's Technology Development Fund (TDF) for MSMEs & Startups to indigenize cutting-edge defence technologies. 163 Technologies being indigenized, US\$ 30 million funds sanctioned, 1,703 experts and 5,020 companies engaged.



INVEST INDIA

INITIATIVES

OPPORTUNITIES

COUNTRY DESKS

RESOURCES

INTELLIGENCE

CONTACT US



For further details, please refer FDI Policy

[- Less]

2.1%

Share of GDP spent on defence (2021-22)

15%

Share in global arms import

\$11.3 bn

Defence Sector Market Size

19%

Increase in Defence Capital Expenditure (FY21-22)



DRDO's Technology Development Fund (TDF) for MSMEs & Startups to indigenize cutting-edge defence technologies. 164 Technologies being indigenized, \$30.8 Mn funds sanctioned, 1886 experts and 5270 companies engaged.



Under the Atmanirbhar Bharat Initiative, four positive indigenization lists of 411 products have been promulgated by Department of Military Affairs and Ministry of Defence to be manufactured domestically for the defence sector, instead of being sourced via imports.



SRIJAN portal launched to promote indigenization. 27130 defence items 19509 defence items, have been displayed on the portal for indigenisation.

INDUSTRY SCENARIO

FOREIGN INVESTMENT

INDUSTRY TRENDS

POLICIES & SCHEMES

Industry Scenario

To provide impetus to self-reliance in defence manufacturing it is necessary to develop a robust eco-system and supportive government policies.

Ministry of Defence has set a target of achieving a turnover of \$25 Bn in aerospace and defence Manufacturing by 2025, which includes \$5 Bn exports. Till October 2022, a total of 595 Industrial Licences have been issued to 366 companies operating in Defence Sector.

Defence Production and Export Promotion Policy 2020 (DPEPP)

Ministry of Defence (MoD) has formulated a draft DPEPP 2020 as guiding document of MoD to provide a focused, structured, and significant thrust to defence production capabilities of the country for self-reliance and exports.

Defence Acquisition Procedure (DAP 2020)

DAP 2020 aims to empower Indian domestic industry through Make in India initiative and it has Laid down a strict order of preference for procurements and has adequately included provisions to encourage FDI to establish manufacturing hubs both for import substitution and exports while protecting interests of Indian domestic industry.

Salient features of DAP 2020

- Reservation in Categories for Indian Vendors.
- Enhancement of Indigenous Content.
- Rationalisation of Trial and Testing Procedures.





Ministry of Defence


Azadi Ka
Amrit Mahotsav



Self Reliance in Defence Sector

Posted On: 19 DEC 2022 4:33PM by PIB Delhi

The Government has taken several policy initiatives in the past few years and brought in reforms to encourage indigenous design, development and manufacture of defence equipment, thereby promoting self-reliance in defence manufacturing & technology in the country. These initiatives, inter-alia, include according priority to procurement of capital items of Buy Indian (IDDM) category from domestic sources under Defence Acquisition Procedure (DAP)-2020; Notification of four 'Positive Indigenisation Lists' of total 411 items of Services and three 'Positive Indigenisation Lists' of total 3,738 items of Defence Public Sector Undertakings (DPSUs), for which there would be an embargo on the import beyond the timelines indicated against them; Simplification of Industrial licensing process with longer validity period; Liberalization of Foreign Direct Investment (FDI) policy allowing 74% FDI under automatic route; Simplification of Make Procedure; Launch of Mission DefSpace; Launch of Innovations for Defence Excellence (iDEX) scheme by involving Start-ups & Micro, Small and Medium Enterprises (MSMEs); Implementation of Public Procurement (Preference to Make in India) Order 2017; Launch of an indigenization portal namely SRIJAN to facilitate indigenisation by Indian Industry including MSMEs; Reforms in Offset policy with thrust on attracting investment and Transfer of Technology for Defence manufacturing by assigning higher multipliers; and Establishment of two Defence Industrial Corridors, one each in Uttar Pradesh and Tamil Nadu; Earmarking of 25% of R&D Budget for Industry led R&D; Progressive increase in allocation of Defence Budget of military modernization for procurement from domestic sources, etc.