

Business Strategy Briefing

Toyo-India's Challenges and Growth Strategy : Outlook of Indian Market and Execution of Global Projects

December 10, 2024

Toyo Engineering India Private Limited

Managing Director

Takashi Kawahara





Agenda

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Summary of Toyo-India's Growth Potential



01 Introduction to Toyo-India

Company Information / Role within the TOYO Group / Toyo-India's Major Domestic Projects

Company Profile

Toyo Engineering India Private Limited

(Toyo-India)

Established in 1976

Office Locations

- Head Office and Engineering Office in Mumbai, Maharashtra
- Liaison Office in New Delhi

Managing Director

Takashi Kawahara

Capital

1 billion Indian Rupees
(FY2023, equivalent to 12 million USD)

Revenue

27.4 billion Indian Rupees
(FY2023, equivalent to 330 million USD)

Certifications

- ISO 9001:2015 (QMS)
- ISO 29001:2020 (Sector-specific QMS)
- ISO 27001:2013 (ISMS)
- ISO 14001:2015
- ISO 45001:2018 (OH&S and EMS)
- EcoVadis Sustainability Assessment 2023



History of Toyo-India

A nearly 50-year history of growth and expansion in engineering business, rooted locally and catering to local needs

Employees
and net Sales

History of Toyo-India's Growth

In 1963, awarded TOYO's first overseas project to construct a fertilizer plant in India

1970s

Founded in 1976

- Executed projects in India
- Expanded construction projects from India to Gulf countries

30 employees
0.5 million USD

1980s–1990s

Evolved into comprehensive engineering company

- Independently developed domestic plant business in India
- Evolved into comprehensive engineering company

2000s

Transitioned from Low Cost Center to Profit Center

- Increased orders for domestic projects in India
- Expanded independent plant business to countries surrounding India
- Executed engineering, procurement, and construction management for TOYO's global plant projects

800 employees
45 million USD

- Since the 2000s, Toyo-India has accumulated extensive EPC experience through global projects, further refining Toyo-India's operations with TOYO-quality standards.

2010s

Expanded the scale of the business

- Executed domestic large-scale EPC projects in India

2,000 employees
255 million USD

2020s

Transformed into core of TOYO's overall EPC operations

- Acquired function to serve as Engineering and Construction Planning Center for TOYO's global plant projects
- Worked to enter carbon neutrality field

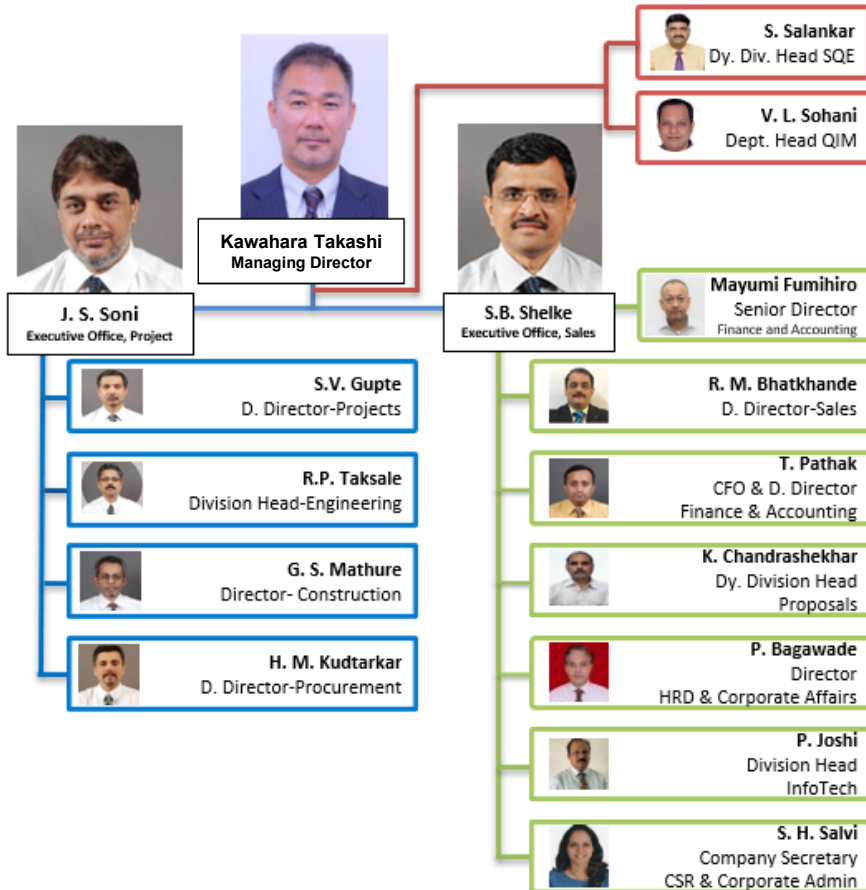
- In 2021, established DXoT Support Team to collaborate with Toyo-Japan in driving digitalization and operational efficiency
- In 2024, jointly established TOYO MODEC OFS India Pvt. Ltd. with Offshore Frontier Solutions Pte. Ltd., focused on FPSO engineering

2024

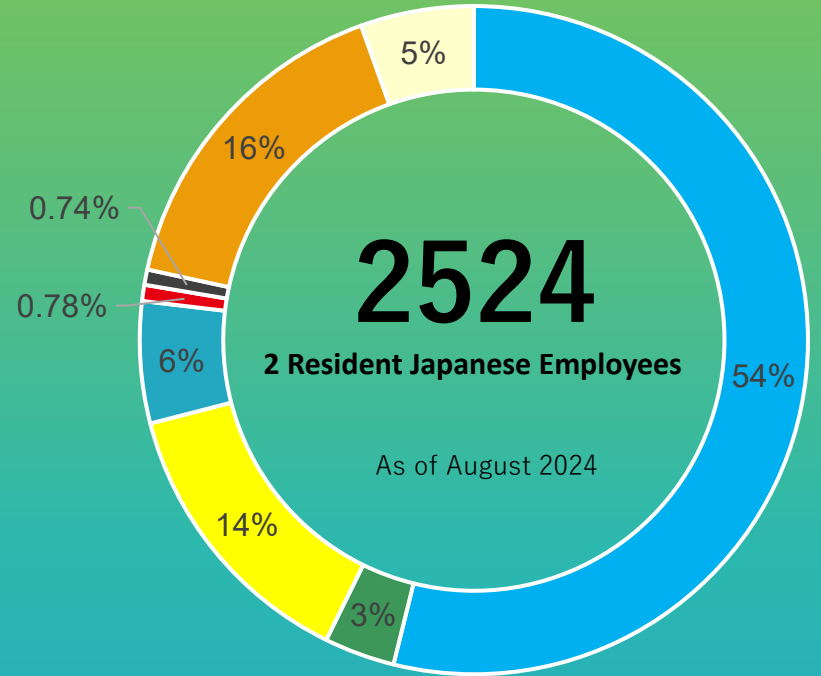
Over 600
completed
projects

2,524 employees
372 million USD

Company Organization Chart



Number of Employees



- Engineering
- Procurement
- Construction
- Project
- Sales
- Proposal
- Others
- Affiliated Companies

Financial Highlights

As of December 2024

Building Trust and Creating Value Through Steady Growth

- ✓ With combination of “global projects in collaboration with Toyo-Japan” and “Indian domestic independent projects”, revenue has shown a steady growth trend.
- ✓ Moving forward, Toyo-India will continue to serve as an engineering hub for TOYO, driving contributions toward enhancing shareholder value.

Million USD

Net Sales



**Order Backlog:
484 million USD**

**CARE Ratings
Credit Rating
A1+
Stable**

Role within TOYO Group

Toyo-India: Supporting global projects and shining on the Indian domestic stage!

A central hub for global operations

- ✓ A central engineering hub for global projects based on TOYO's global standards.
- ✓ Capable of handling diverse business domains, including oil and gas, ethylene, ammonia, urea, FPSO, and carbon neutral related solutions.

Addressing local needs

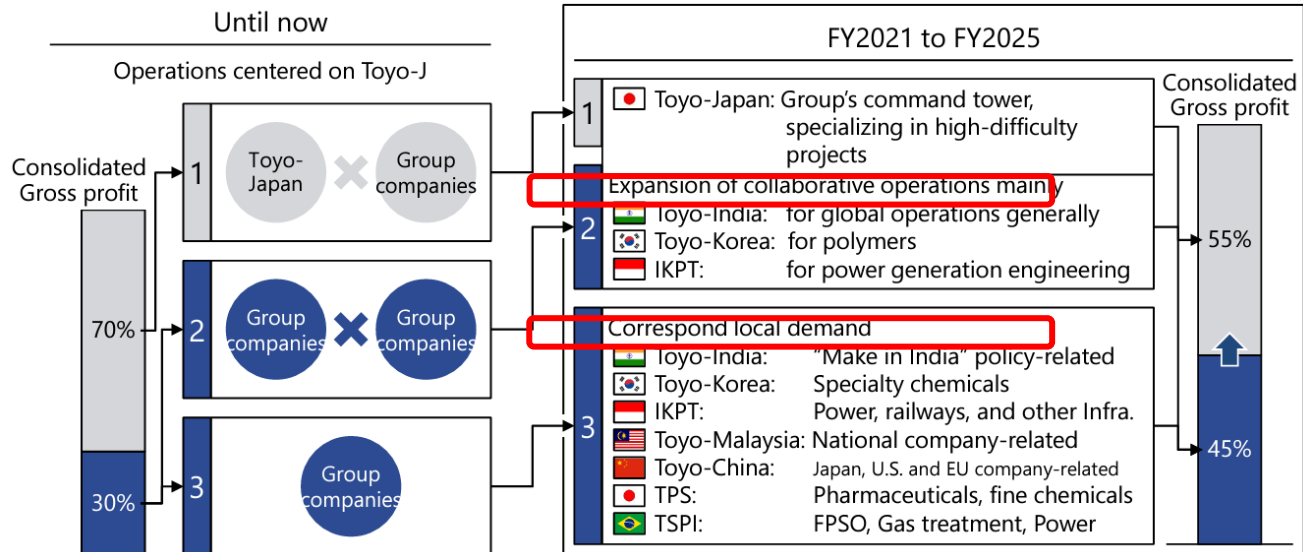
- ✓ Leveraging advanced engineering and project management capabilities developed through global projects in the Indian domestic market.
- ✓ Delivering high-value-added services through regional expertise gained from years of project experience.

Contributing to a stable revenue structure

- ✓ Providing high-quality, cost-competitive services by leveraging a strong foundation in India and a pool of talented professionals.
- ✓ Contributing to the TOYO Group's profit growth and operational stability.

Mid-Term Management Plan

EPC Enhancing Strategy



Contributing to India's growth across diverse industrial sectors

Developing business across a wide range of sectors

Executing projects across diverse sectors, including oil and gas, petrochemicals, and fertilizers.

Nationwide project deployment

Implementing major projects across India to meet regional demands effectively.

Technical expertise and reliability

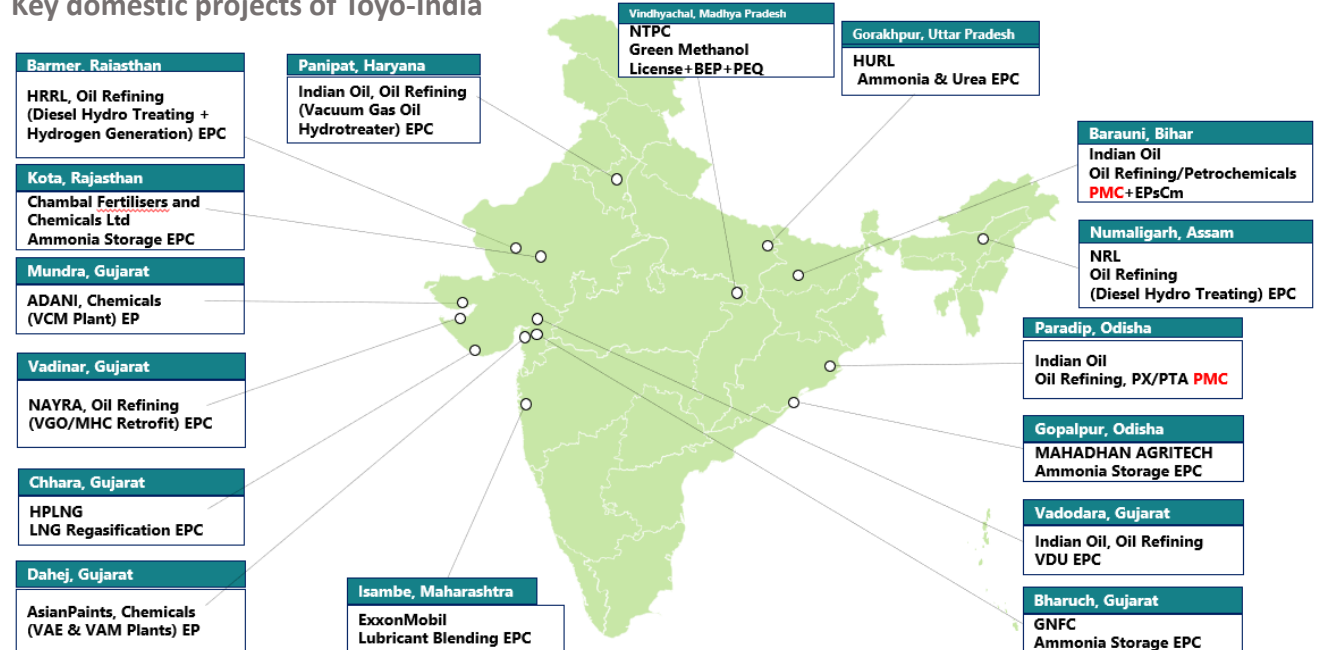
Strength in having over 600 cumulative EPC and PMC* projects and repeat orders from major state-owned and private companies.

Contribution to India's growth strategy

Supporting "Make in India" and sustainable development, contributing to building a strong foundation for India's growth.

Toyo-India is driving business expansion and profit generation in both the Indian market and the global market as the growth engine of the TOYO Group

Key domestic projects of Toyo-India



* Project Management Consultancy



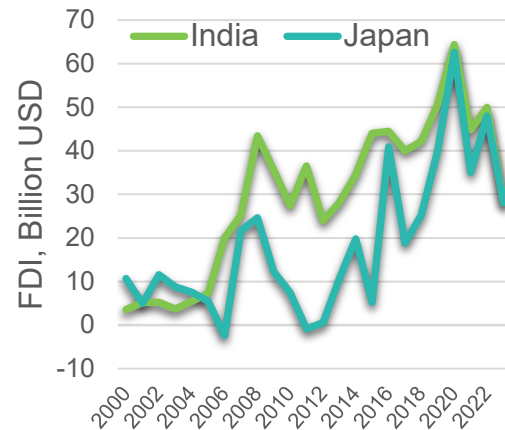
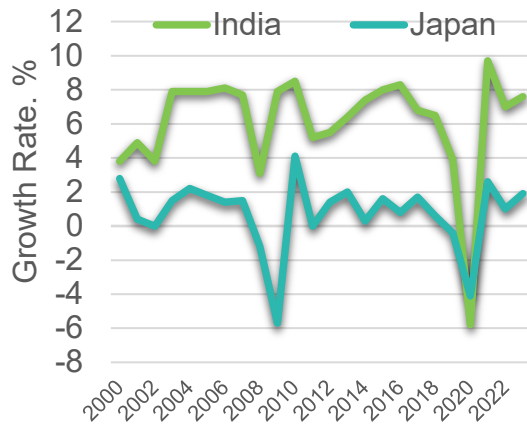
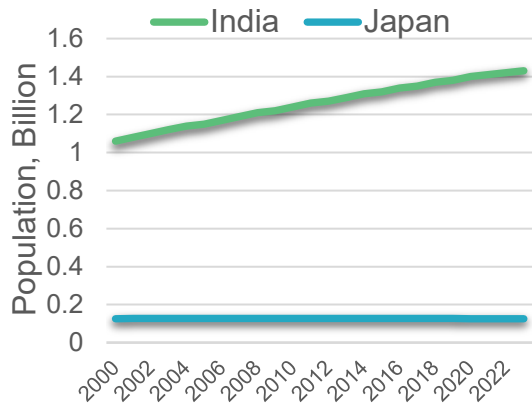
02 Market Environment Driving Toyo-India's Growth

Potential of the Indian Market Growth

Business Environment by Sector: Oil Refining and Gas / Petrochemicals and Fertilizers / Carbon Neutral

Growth potential of the Indian market

India, with the world's largest population, high GDP growth rate, and increasing foreign direct investment (FDI), is a promising market expected to sustain growth in the coming years.



Population

- World's largest population at 1.43 billion (2023)
- Expected to increase until the early 2060s
- Working-age population at 970 million (2023), currently in a "demographic bonus" period

GDP

- Nominal GDP surpassed the UK in 2021, ranking fifth globally
- Expected to surpass Japan and Germany in 2027, potentially rising to the third position globally
- GDP per capita ranks 172nd (2023) with significant growth potential

FDI

- Massive inward direct investment from tax havens such as Mauritius, alongside Singapore, the United States, and EU countries
- Highly attractive as an investment destination owing to active economic, demographic reforms, and foreign investment incentives

Potential of the Indian Market Growth: Make in India

The "Make in India" initiative accelerates the promotion of India's manufacturing sector and the improvement of its investment climate.

In its third phase from 2024 onwards, the initiative is expected to expand its target industries further, fostering sustainable growth and increasing investment opportunities.

First Term of Modi Administration (May 2014 -)

Second Term of Modi Administration (May 2019 -)

Third Term of Modi Administration (May 2024 -)

Promoting manufacturing-focused initiatives laid under the slogan of "Make in India," including infrastructure development, regulatory reforms, and tax reforms

- Aim to position India as a global hub for engineering and manufacturing.
- Increasing the manufacturing sector's share of GDP to 25% by 2022 and creating 100 million new jobs within five years.
- Identifying 25 target industries for focused development
- Implementing a series of reforms for necessary infrastructure development
 - ✓ Introducing the Phased Manufacturing Program (PMP) to promote a shift towards domestic manufacturing.
 - ✓ In July 2017, introduced a unified Goods and Services Tax (GST) nationwide
 - ✓ Improvement in the Ease of Doing Business Ranking (2014: 142nd → 2019: 63rd)

Under the slogan "Self-Reliant India," the country is advancing various initiatives, including economic security measures, reducing dependence on imports, promoting manufacturing, and undertaking large-scale infrastructure development.

- Building on reforms from the first administration, the government has implemented key policies, including
 - ✓ Easing foreign investment regulations
 - ✓ Lowering corporate tax (effective rate reduced to 25.17%)
- Introducing the Production-Linked Incentive (PLI) scheme to encourage domestic manufacturing activities.

Dubbed "Make in India 2.0," the initiative has identified 27 target industries for focused development.

- A decade has passed since the launch of "Make in India"
- Further advancements and tangible achievements are anticipated.



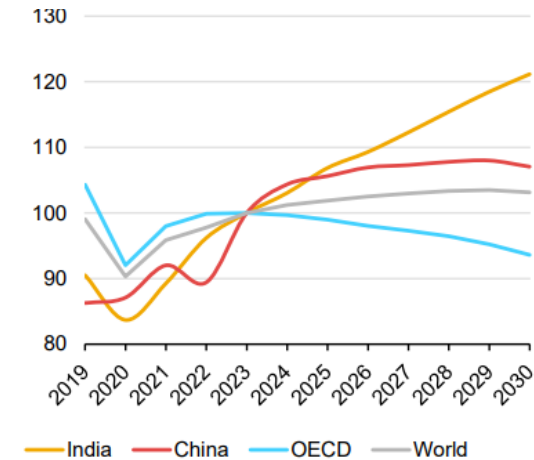
Business Environment in India: Oil Refining

Increase in both Demand and Refining Capacity expected

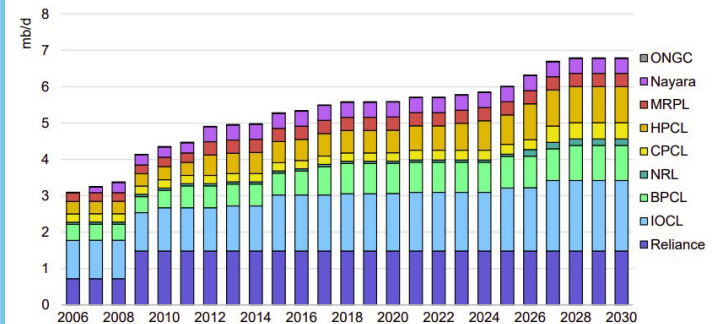
- **Major Crude Oil Importer and Refining Capacity:** India stands as the world's second-largest crude oil importer and holds the fourth-largest oil refining capacity in the world.
- **Operational Refineries:** As of 2023, the country operates 23 refineries with a combined capacity of approximately 5.8 million barrels per day (BPD)
- **Government Investment:** The Indian government has allocated \$14 billion for investments in the oil sector for the fiscal year 2024.
- **Projected Refining Capacity Increase:** Projections indicate that by 2030, India's oil refining capacity will reach 6.8 million BPD, reflecting a substantial increase to meet growing energy demands.
- **Integration with Petrochemical Plants:** The state-owned oil refining companies aim to integrate 25% of their operations with petrochemical plants by 2030, a significant rise from the current 7%.
- **Ethanol Blending Targets:** India plans to achieve a 20% ethanol blend in gasoline by 2025, promoting cleaner energy.
- **Biojet Fuel Blending in Aviation:** The country has set targets for blending biojet fuel into aviation fuel for international flights departing from India, aiming for 1% by 2027 and 2% by 2028, aligning with global sustainability trends.

Reference: IEA Report, Indian Oil Market Outlook to 2030, BP Energy Outlook - 2024, RystadEnergy

Trends in Domestic Oil Demand in India 2019 - 2030



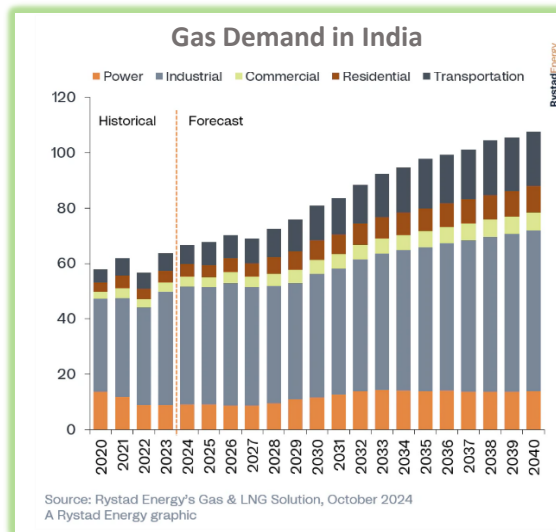
Trends in Domestic Oil Refining Capacity in India 2006 - 2030



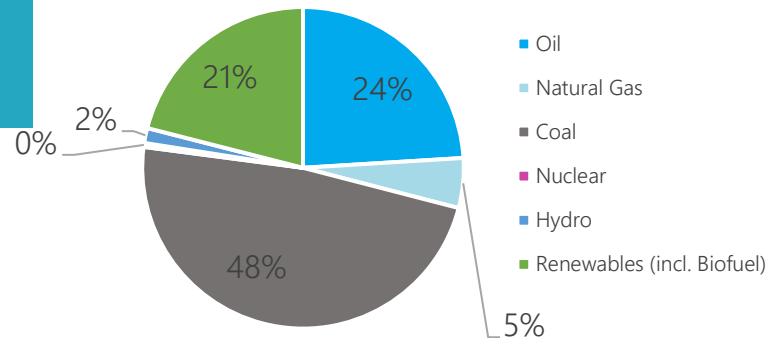
Business Environment in India: Gas

Further Demand Increase expected in the future

- **Growth Drivers:** India and China, along with the broader Asian region, are expected to lead the increase in gas demand.
- **Natural Gas Demand Growth:** By 2024, an 8.5% increase in natural gas demand is forecasted, driven by power generation and industrial applications.
- **Target for Natural Gas Utilization:** The aim is to raise the share of natural gas in the energy mix to 15% by 2030.
- **LNG Terminals:** There are 7 operational LNG terminals with a re-gasification capacity reaching 65 bcm/year.
- **Chhara LNG Terminal:** The deployment of the 8th Chhara LNG terminal will add an annual capacity of 7 bcm.
- **Pipeline Infrastructure:** Efforts to enhance pipeline networks are underway to support growing demand.



Primary Energy Mix in India (2022)

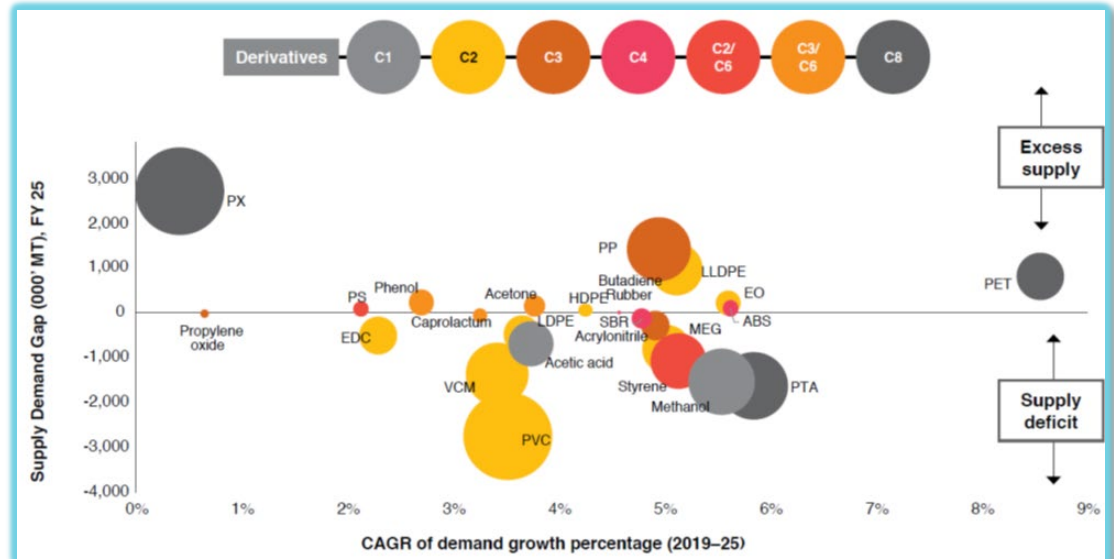


Business Environment in India: Petrochemicals

High Demand Across a Wide Range of Products

- Major Consumer of Petrochemical Products: India ranks among the world's largest consumers of petrochemical products.
- Export-Oriented Products: Petrochemical products like paraxylene, polypropylene, and PET are in an export position.
- High Import Dependence: By 2030, India is expected to remain heavily reliant on imports for basic chemicals and other petrochemical products.
- Per Capita Polymer Consumption: India's per capita polymer consumption is 13 kg, only one-fifth that of Japan, highlighting significant potential for demand growth.
- Future Demand: The Indian Ministry of Petroleum forecasts demand for petrochemical products to reach USD 1 trillion by 2040.
- Investment Outlook: Over the next decade, the petrochemical sector is expected to attract investments of USD 87 billion.
- Integration of Refining and Petrochemical Plants: Growing trend towards the integration of oil refining and petrochemical plants to enhance efficiency and output.

Supply and demand forecast for petrochemical products in India 2019 - 2025



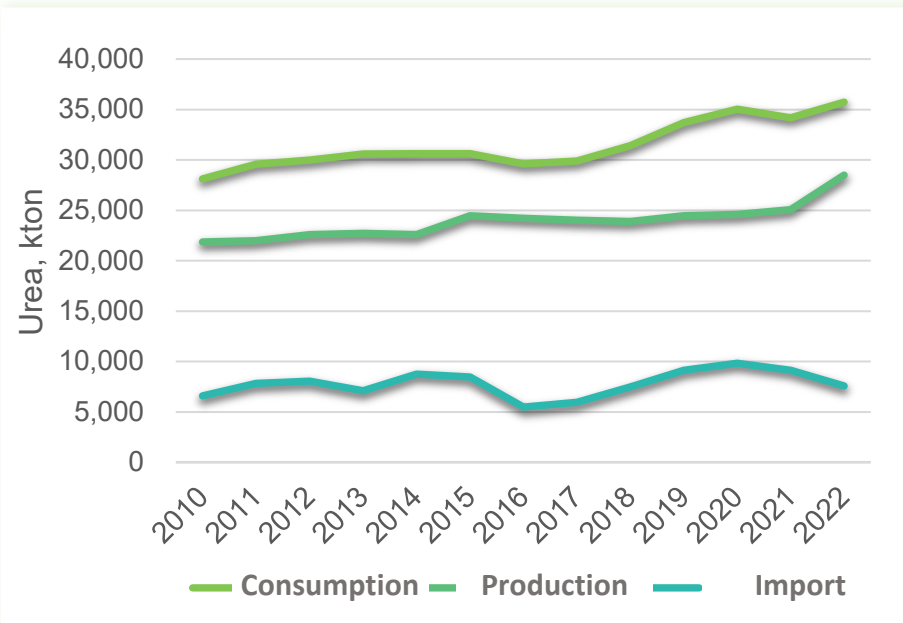
Sources: PwC India: A global manufacturing hub for chemicals and petrochemicals

Business Environment in India: Fertilizers

Rising Domestic Production and Consumption Government's Focus on Fertilizer Self-Sufficiency

- **India's Total Fertilizer Production:** Fertilizer production in India is expected to reach 45 million tons in FY2024, with the following breakdown:
 - ✓ Urea: 21 million tons
 - ✓ NPK Fertilizers (Nitrogen, Phosphorous, Potassium): 6.5 million tons
 - ✓ DAP Fertilizer (Diammonium Phosphate): 3.1 million tons
- **Government Push for Self-Sufficiency:** The Indian government is promoting self-reliance in fertilizer production, leading to a declining trend in imports of urea, NPK fertilizers, and DAP fertilizers.
- **Urea Self-Sufficiency Target:** The government aims to achieve self-sufficiency in urea production by FY2025 through increased domestic production.

Urea production, consumption, and import
in India 2010 - 2022



Sources: Created based on Indian Journal of Fertilizers

Business Environment in India: Carbon Neutral

Carbon Neutrality: Accelerating Decarbonization Efforts

- At COP26 in 2021, declared "achieving net zero by 2070"
- Declared "achieving energy self-sufficiency by 2047" (the 100th anniversary of India's independence)
- Declared a 45% reduction in GHG emissions by 2030 and set a target to install a total of 500 GW of renewable energy capacity
- In January 2023, the Ministry of New and Renewable Energy of India formulated the National Green Hydrogen Mission
- The Ministry of New and Renewable Energy plans to spend USD 50 million on setting up green hydrogen hubs by 2025-26
- Targeting to achieve 1% usage of SAF in domestic aviation fuel by 2025

Sector	Status
Mobility	<ul style="list-style-type: none"> • Exploring the application of hydrogen fuel for heavy commercial vehicles
Power Generation	<ul style="list-style-type: none"> • Low priority for the use of green hydrogen and ammonia • Co-firing hydrogen in coal-fired power plants
Fertilizers	<ul style="list-style-type: none"> • Applicable for externally sourced DAP and other ammonia-based fertilizers. • Limited adoption for domestic urea production due to low cost-effectiveness
Maritime	<ul style="list-style-type: none"> • Introduction of green ammonia bunkering facilities

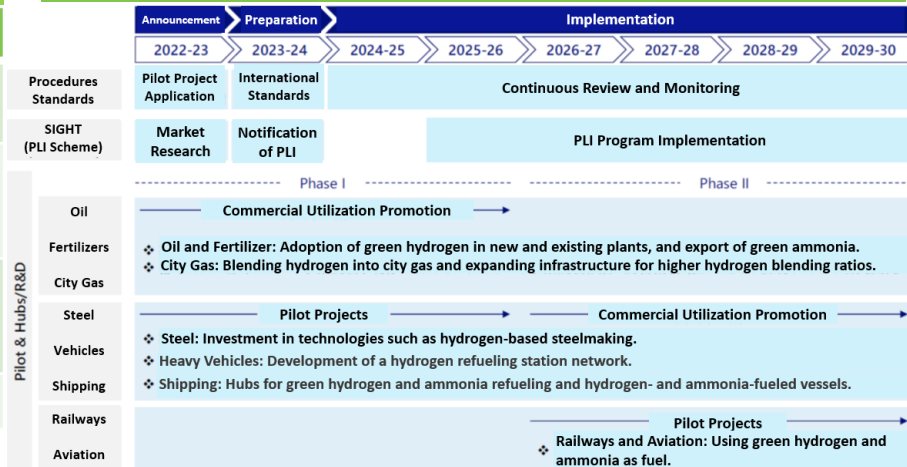
National Green Hydrogen Strategy: Major Promotion of Hydrogen

Goals

- ✓ Annual production of over 5 million tons of green hydrogen by 2030
- ✓ Capture 10% of the global demand, estimated at 100 million tons

Key Initiatives

- ✓ Creating demand (Rule of green hydrogen purchase, fertilizers derived from green hydrogen, etc.)
- ✓ Incentive scheme: Production-Linked Incentives (PLI)
- ✓ Business environment development (R&D support, regulatory and standards development, etc.)
- ✓ Total budget: INR 197 billion (2023), equivalent to US\$2.37 billion





03 Toyo-India's Competitiveness and Advantages

Strengths and Characteristics of Toyo-India

FPSO Business Initiatives/ The Core Driver of DX Initiatives Driving Competitiveness / Growth Strategy

Strengths and Characteristics of Toyo-India

Building global trust and competitiveness with TOYO quality

1. TOYO's Technology, Quality, History, and Experience

- ✓ **EPC and PMC Execution with TOYO Quality:** Leveraging the methodologies and expertise in engineering, procurement, construction, and project management transferred from Toyo-Japan to deliver TOYO-quality EPC and PMC execution.
- ✓ **Local Expertise with Decades of Development:** Achieving project execution led by an Indian management team with expertise developed over 50 years.

2. TOYO's global network

- ✓ **Leveraging TOYO Group's Global Network:** Ability to leverage TOYO Group's extensive global network to deliver high quality services.
- ✓ **Comprehensive Technical Support and Services:** Providing clients with technical support and procurement services leveraging the worldwide operating network of TOYO Group companies

3. Cost-Effective, Skilled, and Abundant Resources

- ✓ **Abundant Pool of Skilled Engineering Talent:** Possesses a rich pool of highly talented engineers.
- ✓ **Competitive and Timely Solutions:** Offers services at competitive prices and in a timely manner as required by the clients.

4. EPC Execution Capabilities in India

- ✓ **EPC Execution Capabilities Rooted in Indian Expertise:** Possesses strong capabilities to execute EPC projects based on deep local knowledge of India.
- ✓ **Management of Complex Construction and Plant Commissioning:** Maintains an organization skilled in managing highly-complex construction and plant start-up operations.

Toyo-India's FPSO Business Initiatives

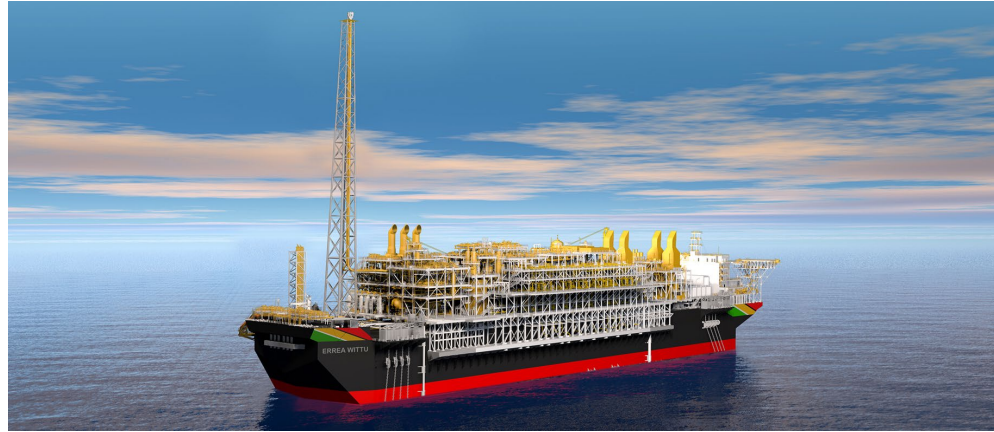
Strategic Initiatives for Expanding FPSO Business

✓ Strengthening Global Capabilities:

Building on the establishment of OFS Singapore in partnership with MODEC, Inc. in 2022, we are further strengthening our global presence by setting up additional bases in Malaysia and India.

✓ Enhancing and Expanding the FPSO Business:

Focused on expanding the FPSO business, we aim to provide excellent services that meet diverse customer needs while enhancing technical capabilities and competitiveness.



New Office in Kuala Lumpur, Malaysia

✓ Regional Hub for EPCI Projects:

A strategic base in Southeast Asia to support the management and execution of EPCI projects.

✓ Over 200 Personnel:

In addition to relocating employees from Singapore, we plan to hire more than 200 new personnel by 2025.

New Office in Bangalore, India

✓ **High-Quality and Efficient Global Capability Center:**
Providing Front-End Engineering Design (FEED), detailed engineering, and procurement support services for FPSO projects.

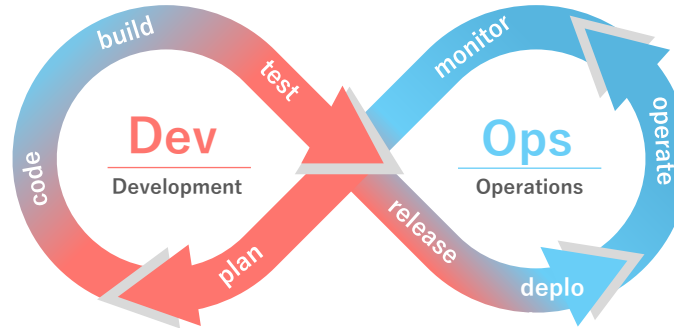
✓ **Team of Over 450 Personnel:**
Aiming to reach a team size of over 450 by 2025.

The Core Driver of DX Initiatives Driving Competitiveness

Toyo-India, through its integrated efforts in the development, practical application, and operational support of AWP (Advanced Work Packaging) and DX for TOYO Group, not only enhances on-site effectiveness but also maximizes synergies across the Group by sharing best practices.

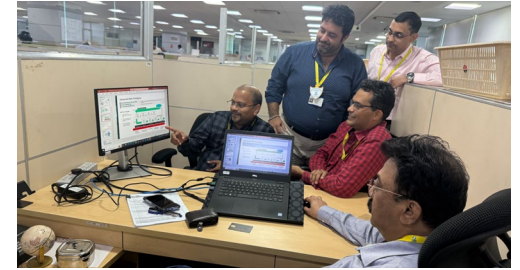
DX Development

Driving impactful development leveraging extensive experience gained from detailed EPC operations.



AWP/DX Practical Application

Implementing AWP/DX seamlessly across the entire EPC workflow and sharing feedback and best practices to lead and support global TOYO.

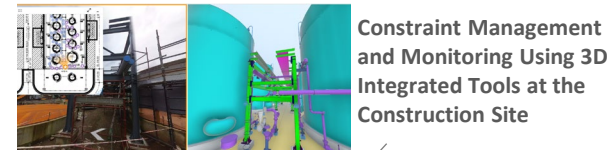


IT CoE (Center of Excellence)

As a global IT leader, providing operational support and training to each group company.

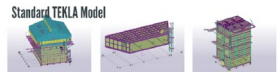
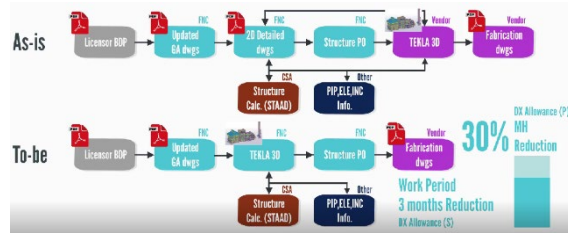


Best Practices of AWP Application



Constraint Management and Monitoring Using 3D Integrated Tools at the Construction Site

Automated Generation of Detailed Construction Work Instructions and Work Execution



Enhancing Efficiency and Reducing Lead Time Through Business Process Reforms

Toyo-India's Growth Strategy

Basic Policy

- Expanding Execution Capabilities and Leveraging Digital Tools to Enhance Competitive Advantage**
- ✓ **Productivity:** Continuously improving operational efficiency through digitalization and streamlining processes to boost productivity.
 - ✓ **Quality:** Maintaining TOYO's high standards of quality while adapting to evolving market demands.
 - ✓ **Price:** Offering competitive pricing by optimizing costs through advanced digital solutions and efficient resource management.

Global Market

- Advancing Toyo Group's Engineering Center Capabilities**
- ✓ **Adaptability to Cutting-Edge Technical Specifications:** Enhancing the ability to respond to the latest technical requirements.
 - ✓ **Expansion of Advanced Analytical Expertise:** Strengthening capabilities in high-level analytical technologies to support complex engineering challenges.
 - ✓ **Deepening Relationships with Licensors and Equipment Manufacturers:** Building and bolstering partnerships to improve project execution and integration.
 - ✓ **Pursuit of Design Automation:** Leveraging automation technologies to achieve higher productivity and superior quality in engineering deliverables.

Local Indian Market

- Becoming the Most Trusted Tier-1 Engineering and EPC Company for Our Clients**
- ✓ **Expanding Product Portfolio in Existing Sectors:** Broadening capabilities in established sectors such as oil & gas, petrochemicals, and fertilizers to offer more solutions.
 - ✓ **Enhancing Technical Capabilities in Green and Carbon Neutral Sectors:** Expanding expertise to meet the growing demand for technologies supporting green energy and carbon-neutral initiatives.
 - ✓ **Leveraging DX Technologies:** Applying digital transformation (DX) technologies to enhance the efficiency and value of EPC and PMC services, ensuring higher productivity and greater client satisfaction.



04 Conclusion

Summary of Toyo-India's Growth Potential

Summary

Toyo-India will continue to grow

1

The Enormous Potential of India's Growing and Demanding Market

- ✓ As a key driver of growth for the Toyo Group, Toyo-India leverages India's rapidly expanding market with immense growth potential and increasing needs.
- ✓ It solidifies its position as a vital contributor to the Group's overall growth and momentum.

2

Toyo-India's Competitiveness in the Global Market

- ✓ With nearly 50 years of experience and a commitment to TOYO-quality project execution,
- ✓ Toyo-India strengthens its competitiveness not only in the Indian market but also on the global stage.

3

Expansion into Green and Carbon-Neutral Fields

- ✓ Backed by a large pool of skilled engineers, Toyo-India handles a diverse range of projects.
- ✓ Beyond traditional EPC services, Toyo-India actively expands into green energy and carbon-neutral (CN) fields, aiming for sustainable growth.





Toyto Engineering Corporation

URL <https://www.toyo-eng.com/jp/en/>

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The forecasts given above are based on information available at the time of compilation and are inherently subject to a variety of risks and uncertainties. Actual results may vary significantly from forecasts due to factors including, but not limited to, changes in the economic or business environment and exchange rate fluctuations.