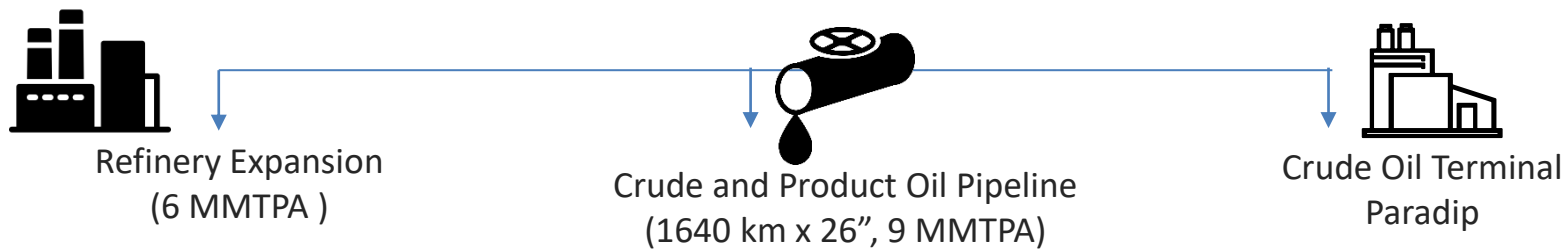
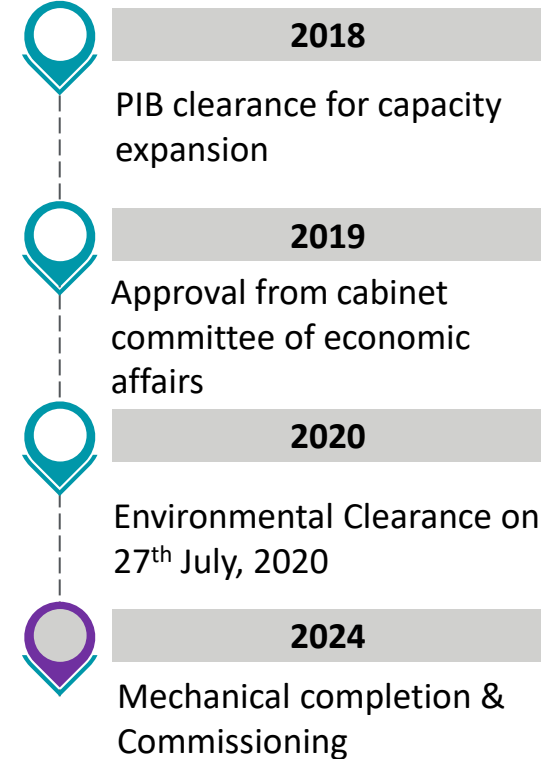


NRL is executing a major expansion project of capacity augmentation from present 3.0 MMTPA to 9.0 MMTPA by installing a **6 MMTPA capacity refinery** and associated **crude oil terminals & pipeline** considering processing of Arab Light(AL) and Arab Heavy (AH) crude oil (AL:AH=30:70). The required additional quantity of crude oil is planned to be imported through Paradip Port in Odisha. A cross country pipeline of around 1640 Km shall be laid from Paradip Port to Numaligarh for transporting 9 MMTPA of imported crude.



Part of the Government of India's Hydrocarbon Vision 2030 initiative to help meet growing demand of petroleum products in northeastern India, NRL's refinery expansion will increase overall crude oil processing capacity and it is scheduled to be completed by 2024. Environmental Clearance was obtained for the project on 27th July'2020. Approved budget for the project is Rs. 28,026 Cr.

Roadmap for the expansion project



Numaligarh Refinery Expansion Project

The project implementation activity was started after obtaining Environmental Clearance on 27th July 2020. **Contract for all major Project Management Consultancy has been awarded.** M/s Technip Chennai was appointed as Managing PMC for the Refinery Project. Additionally, M/s ThyssenKrupp Industrial Solutions and M/s Technip Delhi are appointed as EPCM consultants. **Licensors for the main units have been appointed and work for BEDP progressing as per schedule.**

Summary of key units and award status of consultants

Name of Unit	Capacity (MMTPA/TPD/KTPA)	Licensor	Mode of Execution	Consultants
CDU/VDU	6.0	Technip	EPC	PMC - Technip
Diesel Hydrotreater (DHT)	3.55	UOP		
Sulphur Recovery Block	2x240 TPD	EIL		
Utility & Offsites	--	--	EPCM	Technip
Resid. Proc. & Treat. Unit (RPTU)	2.0	CLG		
MSP (NHT/CCR/ISOM)	1.16/0.789 / 0.465	Axens	EPCM	Thyssenkrupp
Gasoline Desulfurization (GDS)	0.66	Axens		
Petro FCC (PFCC)	1.95	Lummus		
H2 Generation Unit (HGU)	95 KTPA	--	BOO	TBD

Subsequently, all studies, clearances, scrap removal & pre-project activities had been taken up and are currently under progress. The award of main plant EPC contracts are lined up for awarding. Procurement of other long lead items commenced in FY'21.

With the support of stakeholders and project implementation partners NRL is taking forward the project as per the set time-lines by the Government of India. Project is progressing as per set timelines. The project Mechanical completion and COD are scheduled in 2024.

Roadmap for the Refinery Project


2020

- Start of project enabling activities


2021

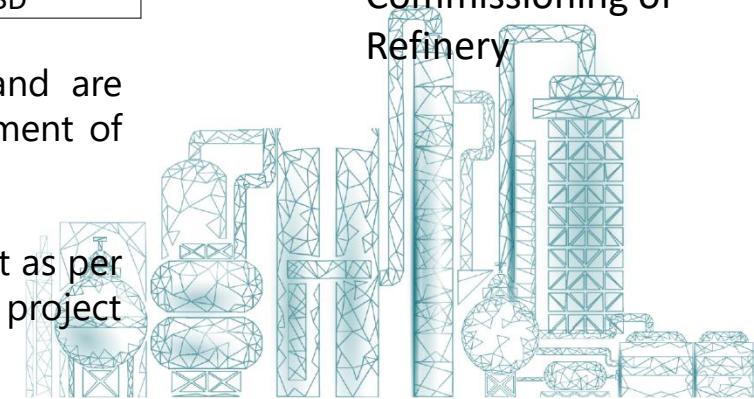
- Start of Construction activities


2023

- Major Erection complete for Refinery


2024

- Commissioning of Refinery



The crude pipeline is planned to be routed through five states; Odisha, Jharkhand, Bihar, West Bengal and Assam. CTE approval for COIT has been received on 27 Jan 2021. EAC recommendation (MoEF) for CRZ approval has been obtained on 19 May 2021. M/s Engineers India Ltd. has been appointed as PMC for the Pipeline project and Crude Oil Terminal is being constructed based on BOOT basis.

To leverage synergy with existing pipeline projects within the region, the RoU sharing agreement has been firmed up with GAIL (Purnia to Baihata); similar agreement is being explored with IGGL (Baihata to Numaligarh). With respect to the product pipeline MoU has been reached with OIL to augment their existing Numaligarh Siliguri Pipeline.

Summary of key units and award status of consultants

Name of Unit	Capacity (MMTPA/TPD/KTPA)	Licensor	Mode of Execution	Consultants
Pipelines (PNPL)	9	--	EPCM	EIL
COIT & Tank Farms	10 x 60,000 m3	--	EPCM / BOOT	EIL/TBD
Numaligarh Siliguri Product Pipeline	24" dia. x 610 km		OIL	

Subsequently, route study, land acquisition, crossing permission and other pre-project activities had been taken up and is currently under progress.

Tender for 1155 Km (out of 1640 Km) for line Pipe supply has been floated and awarded on 9-April-2021. Laying works is planned to start within FY'22. BOOT tender for COIT works has been floated, and commissioning is planned by 2024.

Roadmap for the Pipeline Project

