



सत्यमेव जयते

Ministry of Coal & Ministry of Mines

2nd North-East Mining Ministers' Conclave

Guwahati, Assam

27th-28th June, 2025

Sustainable Coal Mining

and

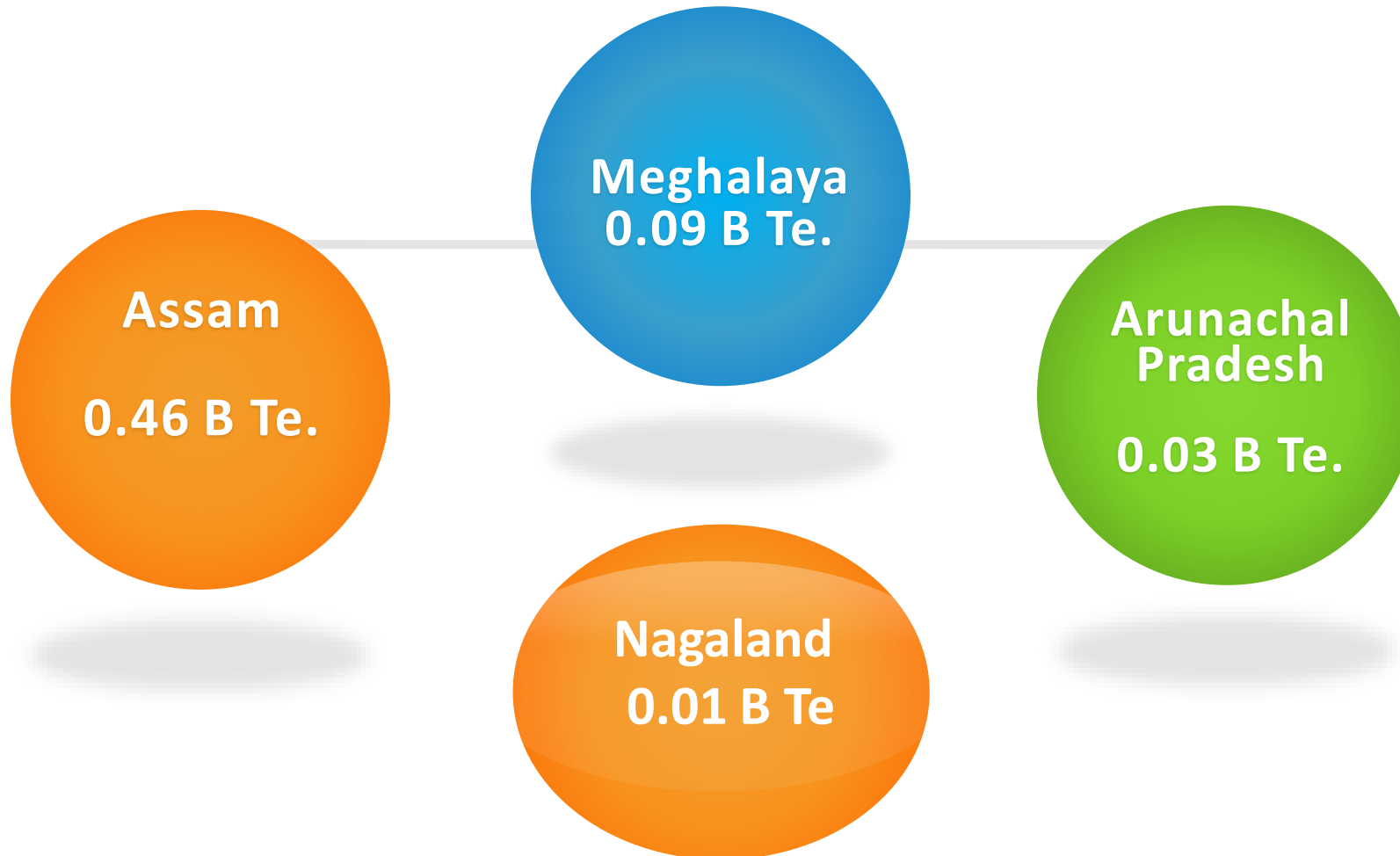
Role of CIL in NER

NORTH EASTERN COALFIELDS – A BRIEF HISTORY

- Coal was **discovered** in the NE region **250 years ago**.
- Mining of coal was **first started in 1882** by the erstwhile Assam Railways & Trading Company (**AR&T Co.**) at **Makum Coalfields near Margherita**.
- Mines opened by AR&T company are –
 - Ledo: 1882
 - Tikak: 1884
 - Namdang:1896
 - Baragolai:1909
 - Tipong: 1924
 - Tirap: 1940

COAL RESERVE POSITION

Proved/Measured Coal Reserves (01-04-2024)



Source: INVENTORY OF COAL RESOURCES OF INDIA (As on 1st April 2024)

COAL MINING IN THE NORTH EAST REGION

- ✓ Most coal production in Northeast India originates from Meghalaya and Assam and some from Arunachal Pradesh.
- ✓ Coal production in Meghalaya fluctuated between 5.7 and 7.2 million tonnes between 2011-12 and 2013-14, but then significantly declined due to a 2013 environmental ban imposed by the NGT. By 2019-20, production had dwindled to a mere 0.5 million tonnes.
- ✓ In April 2025 first coal mining block at Saryngkham-A in the Byndihati area of the East Jaintia Hills district was allocated.
- ✓ Two other blocks cleared by the Ministry of Coal are Lumiakhi Wahsarang in East Jaintia Hills district and Pyndengshalang in the West Khasi Hills district.

COAL MINING IN THE NE REGION

- ✓ Dima Hasao District, Assam, contains three coal seams ranging from 0.2 to 3.8 meters thick. Assam Mineral Development Corporation (AMDC) has operated mines around Garampani and Khota Arda.
- ✓ Coal mining operations in Arunachal Pradesh are limited to the Namchik-Namphuk coalfield located in the Changlang District. One of the coal block has been recently allocated to M/s Coal Pulz Pvt. Ltd.
- ✓ Coal is also mined in Nagaland but largely been private and unscientific.
- ✓ Therefore, Major coal production entity is NEC operated mainly in Assam and it helps in sustaining the local economy and also contributes substantial amount in State as well as Central Government exchequer.

PRESENCE OF CIL IN NORTH EASTERN REGION

SL No.	Name of Project	Capacity (MTY)	Status
1	Tikak Extension OCP (Operational)	0.20 (To be enhanced to 0.30)	•Operational with 0.2 MTY EC. •Applied for enhancement of EC Capacity from 0.2 to 0.3 MTY
2	Tirap OCP	0.60	Statutory Clearances like EC, FC, it is under process. EC process has been halted due to Hon'ble Supreme Court Order dt:16-05-2025
3	Tikak West Expansion OCP	0.60	RPR under finalisation.
	Total	1.40 (1.50 with enhancement)	

- The 1.4 MT is the Breakeven for NEC
- Enhancement shall generate more employment and opportunities in North Easter Region

PRODUCTION, FINANCIAL AND MANPOWER STATUS OF NEC

S. No.	Particulars	FY 2022-23 (Target)	FY 2022-23 (Achievement)	FY 2023-24 (Target)	FY 2023-24 (Achievement)	FY 2024-25 (Target)	FY 2024-25 (Achievement)
1.	Production of Coal (MT)	0.20	0.20	0.20	0.20	0.24	0.20
2.	Despatch (MT)	0.22	0.18	0.20	0.16	0.31	0.26
3.	Coal Stock (MT)		0.04		0.07		0.01
4.	Profit/Loss (Rs Cr)		Rs. 50.45 (Loss)		Rs. 124.07 (Loss)		Rs. 134.00 (Loss)

Manpower Details:

- Manpower as on Start of this FY i.e. 01.04.2025 : 585
- Manpower as on 01.06.2025 : 535
 - Executive : 62 (Male: 55, Female: 07)
 - Non-Executive : 473 (Male: 427, Female: 46)
- Retirement in Next 3 months : 12
- Anticipated Manpower as on 01.09.2025 : 523

SUSTAINABLE MINING IN NEC

Coal India Limited (CIL), through **North Eastern Coalfields (NEC)**, plays a crucial role in sustainable mining in the **North East Region of India**. The region holds significant coal reserves, particularly in **Assam and Meghalaya**.

Key Aspects of Sustainable Mining by Coal India:

- **Environmental Management:** NEC focuses on minimizing the environmental impact of coal mining by implementing measures for pollution control.
- **Innovative Clean Technologies:** [Research & Development](#) is being conducted for extraction of critical minerals including Rare earth elements, methods to reduce Sulphur content in coal and characterization of Acid Mine Drainage and its pollution control.
- **Community Engagement:** Engagement of local communities to ensure responsible mining practices and social development initiatives like skill development.

BEST ENVIRONMENTAL PRACTICES IN NEC

- **About 60 ha plantation** on OB dumps and other areas of NEC.
- **30 nos. of Fixed Sprinkler** have been installed at the coal siding of Tikak Colliery.
- **4 nos. of 9 KL water tankers** has been deployed for dust control in Tikak Colliery.
- **5 Nos piezometer with Digital Water Level Recorder (DWLR)** as per CGWA guideline.
- **Effluent Treatment Plant (ETP)** of capacity 125 KLD operational at Tikak Colliery
- An orchidarium has been establish at Tikak Colliery by ICFRE- Rain Forest Research Institute, Jorhat, under R&D for restoration of Orchid flora

BEST ENVIRONMENTAL PRACTICES IN NEC

- **25 Ha Plantation in next 5 years** including 4 Ha Miyawaki and 5 Ha Bamboo plantation.
- **Plan to develop 2 Eco-parks** in addition to existing 2 parks.
 - Amrit Sarovar including Eco-park and ground mounted solar at Ledo OCP
 - Eco-park at Dilli Jeypore colliery.
- Promoting Renewable Energy – **Plan to setup 5 MW Solar power projects** by FY 2027-28.
- These activities are expected to generate 300 livelihood opportunities by FY 2029-30.

ENVIRONMENTAL PRACTICES IN NEC



Plantation on OB Dump in NEC



Orchidarium in Tikak Colliery NEC



Water Sprinklers for Dust Suppression



Piezometer in NEC mine

COAL MUSEUM & PARK IN NEC



Coal Heritage Park & Museum in NEC



Sudhakanta Dr. Bhupen Hazarika Children's Park, Margherita

CORPORATE SOCIAL RESPONSIBILITY (EXPENDITURE FROM FY 2016-17)

Sl. No.	Financial Year	Expenditure (in Rs. Lakh)
1	2016-17	61.446
2	2017-18	43.05
3	2018-19	151.80
4	2019-20	95.995
5	2020-21	724.00
6	2021-22	536.00
7	2022-23	205.38
8	2023-24	181.80
9	2024-25	61.55

WASTE DISPOSAL PROJECT AT KAMAKHYA, GUWAHATI



SKILL DEVELOPMENT – PLASTIC TECHNOLOGY TRAINING AT CENTRAL INSTITUTE OF PETROCHEMICALS & ENGINEERING TECHNOLOGY, GUWAHATI, ASSAM



DISTRIBUTION OF JAIPUR FOOT(ARTIFICIAL LIMBS) AND WHEEL CHAIR



SNAPSHOT OF MINE CLOSURE AT NEC



Ledo OCP during Operation



Ledo OCP at present

- **FMCP approved for three mines of NEC (Baragolai UG, Ledo OC and Jeypore-Dilli Colliery)**

R&D ACTIVITIES IN NORTH EASTERN REGION

**COMPLETED & ONGOING
PROJECTS DURING LAST
5 YEARS**

COMPLETED PROJECTS FROM 2020-21 TO 2024-25 (FIVE YEARS)

Title	Implementing Agencies	Year of completion	Approved Outlay (Rs. In Lakhs)
Restoration of Orchid flora of Makum Coalfield areas of Digboi Forest Division.	• Rain Forest Research Institute (RFRI), Jorhat	2021-22	45.14
Reclamation of coal mined land of North Eastern Coalfields, Assam through soil amendment and revegetation with native plant species using integrated biological approach	• Rain Forest Research Institute (RFRI), Jorhat	2021-22	83.18
Assessment of Rare Earth Elements (REE) and other economic resources in Coal & Non-Coal Strata and characterization of Acid Mine Drainage and its pollution control from the North Eastern Region (NER) Coalfield	• Punjab University, Chandigarh • CMPDI, Ranchi • Duke University, USA	2023-24	361.38
Ultrasonic Washing for Desulphurization of Coal	• Indian Institute of Technology Guwahati (IITG), Guwahati	2024-25	197.35

ONGOING R&D PROJECTS

Title	Implementing Agencies	Start Date	Approved Outlay (Rs. In Lakhs)
Development of Indigenous technology for extraction of critical minerals including Rare earth elements from overlying strata of North-eastern coalfields	- Indian Institute of Technology, Guwahati - Punjab University, Chandigarh - NEC, Margherita	15.01.2024	581.05

EXPENDITURE FOR R&D UNDER CENTRAL SECTOR

State	Year	RE in NER (Rs. In Cr.)	Expenditure (Rs. In Cr.)
Assam	2024-25	2.00	2.10
	2023-24	1.80	1.80
	2022-23	0.835	0.835
	2021-22	1.15	1.10
	2020-21	1.20	1.20

THANK YOU

Tikak Extension OCP

Production	0.2 MTPA
Area of Project	175.94 ha
Mineable Reserves	4.25 MT
Grade of coal	G-1
Method of mining	Shovel Dumper –
Stripping Ratio	5.42
Life of mine	23 years
Mode of operation	Outsourcing
Project cost	INR 177.71 Crores

Mining operations have been started from 10.02.2022.

Project is in non-forest land (175.94 ha)

Consent to Operate: Available, valid till 31.03.2027.

Environmental Clearance for 0.2 MTPA is available.

Applied for 0.3 MTPA [EC](#). NEC is required to Obtain extended lease of 100 Ha to include the outside lease project area from Government of Assam to be used by NEC for OB dumping. **Help is Required from State Govt. on this matter.**

Land requirement		
S. No	Land Type	Area in Ha
1	CIL vested land	87.65
2	Govt. Land	88.29
	Total	175.94

NEC is facing issues on regular basis for [dumping of OB in the designated OB dump area](#) of the project due to illegal encroachment by local people (Jharna Basti) including a sizable tribal population belonging to Tangsa Naga tribe (Malugaon).

Help Required from State Govt. on this matter.



Tirap OCP

Production	0.6 MTPA
Area of Project	571.85 ha
Mineable Reserves	9.92 MT
Grade of coal	G-1
Method of mining	Shovel – Dumper
Stripping Ratio	16.03
Life of mine	17 years
Mode of operation	Outsourcing
Project cost	INR 310.86 Crores

RCE of the Project Report approved in November, 2022

Forest Clearance: Application submitted on 16.12.2022. Reply to EDS raised by MoEFCC submitted by NEC/CIL. Reply to EDS concerning State Govt. needs to be sent by State Forest Department. Proposal is presently at Nodal Office.

Environmental Clearance: ToR obtained. Application for EC Submitted. 15 ADS Raised by MoEFCC.

To comply with one of the ADS, NEC is required to obtain extended lease to include the outside lease project area from Government of Assam to be used by NEC for OB dumping.

Land requirement

S. No	Land Type	Area in Ha
1	Tenancy Land	47.58
2	Forest land	40.28
3	Govt. Land	483.99
	Total	571.85



Tikak West Expansion OCP

Production	0.6 MTPA
Area of Project	677.70 ha
Mineable Reserves	9.92 MT
Grade of coal	G-1
Method of mining	Shovel Dumper –
Stripping Ratio	15.87
Life of mine	19 years
Mode of operation	Outsourcing
Project cost	*INR 470.41 Crores

RPR of the project will be approved once the State Government facilitate the acquisition of Govt. land @50% of Govt. Land Rate.

Forest Clearance and Environmental Clearance will be submitted after approval of RPR.

Land requirement		
S. No	Land Type	Area in Ha
1	CIL Vested land	116.36
2	Tenancy Land	19.19
3	Forest land	121.62
4	Govt. Land	420.53
	Total	677.70

***The project cost considering the Government Land Acquisition at 50% cost of land value, only then the project will be economically viable.**

S. No.	Particulars	Scenario @ 100% cost of Govt. land	*Scenario @ 50% cost of Govt. land
1	Cost of Government Land	Rs. 205.57 Cr.	Rs. 112.62 Cr.
2	Total Project Cost	Rs. 554.08 Cr.	Rs. 470.42 Cr.
3	IRR at 100% Production	9.34 %	17.05 %
4	IRR at 85% Production	5.98 %	12.63 %
5.	Viability of Project	Economically Not Viable	Economically Viable

***Sale of 20% Coal through e-auction, obtaining atleast 35% premium over notified price**