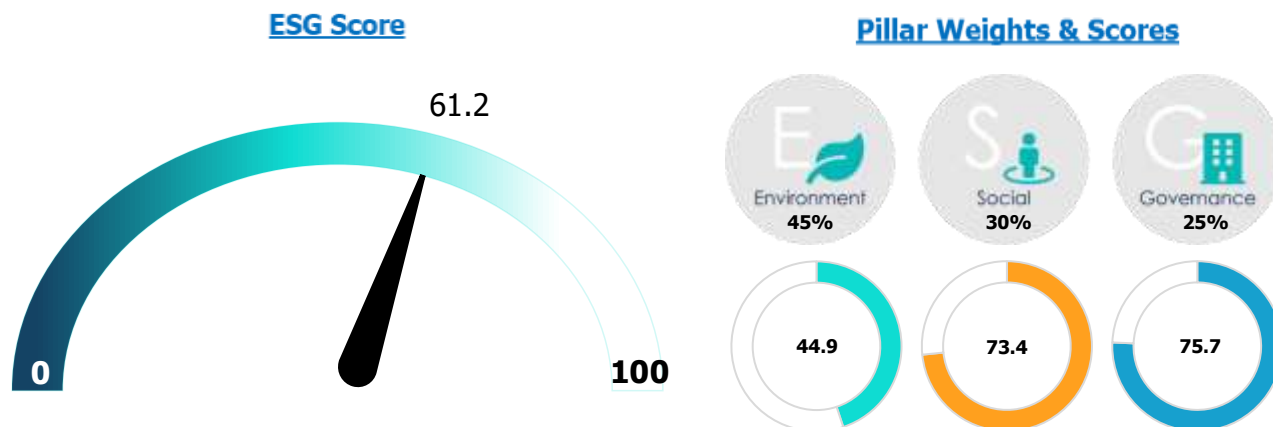


Rating Rationale

NLC	Previous Score	Rating Symbol*	Current Score	Rating Symbol*	Rating Movement
ESG Rating	55.8	CareEdge-ESG 3	61.2	CareEdge-ESG 2	↑

* Please refer www.careedgeesg.com for detailed understanding of CareEdge-ESG's rating symbols and definitions.

Strong position in managing ESG Risk through **superior** disclosures, policies, and performance



Rating Scale



Please note: all scores mention in this document are on the scale of 0 – 100

Rating Rationale

The rating assigned to NLC India Limited (NLC) has been upgraded to 61.2 , reflecting demonstrated strengthening of ESG stewardship over the previous assessment period, supported by improved data credibility and measurable progress across environmental and social parameters, while remaining moderated by the inherently emission-intensive nature of its thermal power operations and certain structural governance constraints.

The rating derives strength from the company's progressive implementation of climate governance and resource management frameworks. Over the reporting period, the company has strengthened institutional oversight of sustainability risks and opportunities by embedding ESG considerations into operational planning, performance monitoring and public disclosures. During the year, NLC enhanced transparency by placing its carbon, energy and water data to independent third-party assurance and

aligning its emissions with science-based targets, strengthening target credibility and oversight. Operational efficiencies contributed to moderation in air emission intensity alongside achievement of targets under the PAT scheme. Water stewardship practices strengthened materially with recycled and reused water increasing to 27.91% of total withdrawn, indicating improved circularity measures. This reflects the company's ongoing efforts to optimize water use across thermal power operations through recycling, reuse and improved water management infrastructure. The company sustained 100% safe waste disposal and complete fly ash utilization, while continuing to advance its renewable transition strategy with a targeted expansion of renewable capacity to 10,110 MW by 2030 from 1,431 MW in FY24. On the social front, improved integration of human rights considerations into business processes, expanded workforce training coverage and continued CSR deployment beyond statutory thresholds contributed to the strengthening of social risk management. Governance oversight on ESG remains embedded through board-level supervision and management level monitoring mechanisms. Dedicated sustainability governance structures and periodic reporting to the Board enable monitoring of ESG-related risks, regulatory developments and performance indicators across the organization.

The rating is moderated by the company's continued reliance on thermal power generation, resulting in structurally elevated emission intensity relative to industry medians. Given the coal and lignite-based nature of a significant portion of its generation portfolio, the company remains exposed to transition risks associated with tightening environmental regulations, evolving decarbonization policies and long-term energy transition dynamics. Absence of scope 3 emissions disclosure and limited emissions segmentation constrain full transition transparency. This limits visibility into value-chain emissions and the company's broader climate impact across upstream fuel supply and downstream electricity consumption. Variability in certain environmental intensity indicators during the year partly reflects the shift from standalone to consolidated reporting of environmental data. On the social front, workforce diversity indicators remain areas for sustained improvement. Governance assessment continues to be tempered by deviations in board and committee independence requirements and limited structured training coverage on certain governance themes. However, this gap is attributable to its status as a government-controlled entity, with director appointments made by the Government of India and the Ministry of Coal.

Overall, the upgraded score of 61.2 reflects a strong position in managing ESG risks and opportunities, underpinned by improved assurance practices, strengthening policy integration and measurable

efficiency gains. While the company demonstrates robust performance in themes such as waste management, climate governance oversight, community development and human capital practices, continued focus on transition transparency, environmental intensity moderation and governance independence will remain critical to sustaining and enhancing its ESG position.

Environment Score

The environmental pillar remains a key consideration for the power sector given the sectors high emissions, significant energy consumption and substantial water dependency across generation processes, particularly in coal- and lignite-based thermal power plants where fuel combustion and cooling operations require considerable resource inputs. Hence, carrying a high weight of 45%. NLC recorded an environmental score of 44.9 in FY25. While this score reflects moderate performance relative to sector peers, it continues to be influenced by the structural characteristics of its generation portfolio, which remains predominantly thermal.

During the year, the company continued to focus on operational optimization and incremental renewable integration. The company achieved its targets under the Perform, Achieve and Trade (PAT) scheme and reported the usage of alternative fuels such as biomass. Initiation of biomass co-firing and other alternative fuel trials represents an incremental step towards reducing dependence on conventional fossil fuels and improving the overall emissions profile over the medium term. Renewable energy remains further guided by its previously set target of 10,110 MW by 2030, and a formal strategy to increase renewable energy usage was reported during the year. The company's renewable energy roadmap includes expansion across solar and other clean energy technologies, supporting long-term portfolio diversification and gradual alignment with national energy transition objectives.

The company's total Scope 1 and 2 emission intensity (per million unit of electricity generated), remained above the industry medians, reflecting the emissions profile typically associated with lignite and coal-based power generation. However, particulate (PM), NOx and SOx emissions remained slightly below the industry median. These improvements indicate the effectiveness of pollution control mechanisms and operational measures implemented to reduce non-greenhouse gas air pollutants across plant operations. A key development in FY25 was the external assurance of its carbon, energy and water data by independent agencies, strengthening data credibility. Third-party verification

enhances the reliability of disclosed environmental metrics and strengthens stakeholder confidence in the company's sustainability reporting practices.

NLC environmental score derives strength from the initiatives implemented by the company to conserve biodiversity, manage waste efficiently, and drive sustainable technology development through collaborations with industry associations and academia. These initiatives demonstrate the company's broader commitment to mitigating environmental impacts beyond emissions and resource consumption. The company has achieved notable successes including 100% safe waste disposal and complete utilization of fly ash by partnering to third-party companies (brick and cement manufacturer, etc). Full utilization of fly ash supports circular economic outcomes while reducing landfill requirements and associated environmental risks. Additionally, the share of renewable energy rose marginally to 2.45% in FY25, with the overall energy mix remaining largely unchanged.

However, the company's environmental score remains moderated by certain operational factors. Its water consumption and discharge intensities continue to be significantly higher than the industry median, indicating scope for improved resource efficiency and water management practices. In FY25, the company's Scope 1 and Scope 2 emissions intensity also remained elevated relative to peers, with a combined emission intensity of 1079.7 tCO₂e/MU compared to the industry average of 785.1 tCO₂e/MU. Both these trends are largely attributable to its business operations and reliance on lignite-based thermal generation, which forms a substantial share of its installed capacity and is inherently associated with lower energy content and higher ash and sulphur levels. While the company has taken initial steps toward sustainability, a more proactive approach toward reducing emissions and accelerating the transition to cleaner energy sources would be beneficial. Setting clear, quantifiable targets to reduce emissions and resource intensities could further support improvements in its environmental performance over time.

Social Score

In the power sector, the social pillar carries a weight of 30%. NLC scored 73.4 in FY25, remaining above the industry median of 69.0, reflecting stronger management of workforce welfare, community engagement and human rights governance compared with sector peers. The score improvement is primarily driven by strengthened human rights integration, enhanced training coverage and improved community

development during the year. These improvements indicate gradual institutionalization of social risk management processes and greater alignment with evolving ESG disclosure expectations.

Health and safety governance remains supported by a dedicated team and structured audit mechanisms. The company maintains formal safety oversight through internal monitoring systems, periodic safety audits and operational risk assessments across its generation and mining operations. However, the LTIFR and Total recordable injury rate are above the industry median in FY25, indicating that while preventive systems are in place, operational safety outcomes remain sensitive to fluctuations in workforce scale, project activity levels and operational complexity across mining and power generation assets. Continued focus on strengthening behavioral safety practices, contractor safety oversight and real-time monitoring of workplace hazards will remain important to improving safety outcomes and reducing operational risk exposure.

From a human capital perspective, the company's representation of women employees—9 females per 100 males—exceeds the industry median. Additionally, the female-to-male median pay ratio is higher than the industry benchmark, suggesting gradual progress toward improved pay equity despite the relatively low overall representation of women in the workforce. Going forward, enhancing diversity outcomes, broadening inclusion initiatives, and increasing gender representation across both operational and managerial roles will be critical to strengthening workforce inclusivity and supporting long-term human capital resilience.

Human rights management demonstrated structural progress, with integration of human rights requirements into business agreements and vendor contracts, alongside expanded assessment coverage across plants and offices. Rehabilitation and resettlement coverage of project-affected families improved to 24.2%, reflecting ongoing efforts to address the social impacts associated with land acquisition and project development activities. CSR expenditure remained above the statutory threshold at ~2% of average net profits.

Value chain oversight showed initial advancement, with 60% of partners trained on BRSR principles, indicating early-stage awareness building around ESG expectations within the company's supplier ecosystem. However, absence of formal environmental and social screening in supplier selection and limited value chain human rights due diligence constrain full supply chain integration. Without

systematic ESG screening and risk-based supplier assessments, visibility into environmental and labor practices across upstream procurement remains limited, which may expose the company to indirect social and reputational risks over time.



In the power sector, the governance pillar carries a weight of 25%. The company has scored 75.7 in FY25, remaining above the industry median of 63.4, indicating relatively strong governance structures and oversight mechanisms compared with sector peers, particularly in the areas of sustainability governance and policy

integration. ESG oversight continues at the Board and management levels, supported by a structured Sustainable Development Cell (SDC) overseeing implementation of sustainability initiatives. The SDC acts as a central coordination unit responsible for translating strategic sustainability objectives into operational programs, monitoring ESG performance indicators and facilitating cross-functional alignment on environmental and social initiatives.

During the year, the company extended its Code of Conduct to suppliers and vendors and undertook independent evaluations of its governance and ESG frameworks. Independent assessments of governance and ESG frameworks further support periodic review of internal control systems and identification of areas for improvement in policy implementation and oversight mechanisms. Audit observations published by the Comptroller and Auditor General (CAG) of India have been factored into the assessment, with the key issues already reflected in the existing scores. Allocation toward R&D initiatives aimed at improving environmental and social impact increased in FY25 (44%; FY24: 24%), with a higher proportion of overall R&D expenditure and related capital allocation directed towards sustainable solutions compared to the previous year.

However, certain governance gaps persist, including deviations in meeting prescribed regulatory requirements relating to board composition and committee independence. The Board of Directors, does not meet the required thresholds for independent directors. Further there are no women directors in the board. Enhancing the diversity and breadth of expertise within the Board, particularly in areas such as energy transition, sustainability and emerging technologies could further strengthen strategic guidance and oversight capabilities.

Further, governance related training coverage across employees also remains limited. Limited training on governance and ethics-related policies may constrain awareness of compliance requirements across the workforce, highlighting the need for broader capacity building to reinforce ethical conduct, regulatory compliance and internal control practices.

Strengths

Advancement of environmental control infrastructure across operations

The company has continued to strengthen its emissions control and environmental compliance systems across its thermal power assets, demonstrating a forward-looking approach to regulatory requirements. Ongoing installation and commissioning of flue gas desulphurization (FGD) units and other pollution control technologies reflect sustained capital investment aimed at lowering sulphur oxide and particulate emissions in line with tightening environmental standards. At the same time, initiatives to improve plant efficiency and systematic performance tracking under the Perform, Achieve and Trade (PAT) scheme show that energy optimization is being embedded into day-to-day operations. Together, these efforts indicate a move beyond basic compliance toward building long-term environmental risk management capabilities supported by tangible infrastructure.

Extensive industry associations and collaborations driving research and development on sustainable solutions

One of the key areas of NLC's research and development strategy is focus on driving sustainable solutions in their mining and power operations. Through the Centre for Applied Research and Development (CARD), which is the company's in house R&D center established in 1958, the company focuses on sustainability, technological innovation, and the commercialization of new technologies. Under the Atal Innovation Mission, NLC has launched an Innovation Incubation Centre in partnership with IISc Bangalore and Anna University, supporting startups and emerging technologies. Key incubation projects include advanced wastewater treatment, hydroponic farming in backfilled mines, eco-friendly geo-polymer bricks, and activated carbon development from lignite sludge. The company is also driving sustainable energy solutions, such as lignite-based semiconductors, a green hydrogen pilot plant, flash graphene for cement, and lignite-to-syngas power generation. These initiatives highlight NLC's commitment to enhancing operational efficiency while simultaneously advancing sustainability.

Strengthened disclosure of credibility through independent assurance

NLC undertook independent third-party assurance of its carbon emissions, energy consumption, and water usage data, marking a clear progression in the maturity of its sustainability reporting framework. Compared to the previous assessment cycle, this step reflects a transition toward more structured and verifiable ESG disclosures. External assurance enhances the reliability and consistency of reported environmental performance indicators, reducing the scope for estimation errors and strengthening stakeholder confidence in disclosed metrics. The process also necessitates improved internal documentation, standardized data collection practices, and stronger monitoring controls, thereby embedding accountability within operational systems.

Continued renewable capacity expansion and institutional structuring

The company has set a target to scale renewable capacity from 1,431 MW in FY24 to 10,110 MW by 2030 and continued project execution during FY25 across solar and wind segments. NLC currently operates solar power plants across Tamil Nadu and the Andaman and Nicobar Islands along with wind assets in Tirunelveli district. The renewable expansion strategy is supported through its wholly owned subsidiaries, NLC India Renewables Limited (NIRL) and NLC India Green Energy Limited (NIGEL), which focus on asset optimization and future renewable development, respectively.

Strengthening of gender pay disparities

The company has demonstrated significant improvement in gender pay equity during the year. The female-to-male employee pay ratio improved from 0.63 in the previous year to 1.06 in FY25, while the corresponding ratio for workers increased from 0.62 to 1.03. The movement above parity levels reflects meaningful correction of historical compensation imbalances and indicates strengthened oversight over equitable remuneration practices. Sustained monitoring of pay equity metrics enhances social governance credibility and aligns with the evolving stakeholder expectations around inclusive workforce management.

Weaknesses**Environmentally intensive operations leading to higher emissions**

In FY25, the company's Scope 1 and 2 emissions intensity continued to remain higher than the industry median. The combined emission intensity stood at 1079.7 tCO₂e/MU, significantly surpassing the industry average of 785.1 tCO₂e/MU. The increasing intensity levels are primarily attributed to the company's continued dependence on lignite based thermal generation, which constitutes a significant portion of its installed capacity—characterized by lower energy content and higher ash and sulphur levels, NLC must adopt more proactive measures to curb air pollution and accelerate its transition to cleaner energy sources.

Elevated water consumption and discharge intensity

The company's water consumption and discharge intensities remain significantly higher than the industry median, reflecting the intensive nature of its thermal power generation and mining operations. Elevated discharge levels, despite improvements in water recycling ratios, indicate a relatively higher operational impact. Given increasing regulatory scrutiny on industrial effluents, sustained high discharge intensity may heighten environmental risk exposure and warrants closer monitoring and corrective measures.

Lack of independence in Board Committee

The company is continues to remain non-compliant with certain regulatory requirements relating to board composition and committee independence. Independent directors make up less than half of the board, and the board currently has no female representation. The company attributes these gaps to its status as a government-controlled entity, with director appointments made by the Government of India and the Ministry of Coal.

Inadequate coverage of essential training on employee health, ethical integrity and safety of employees

The company's coverage of essential training programs on POSH, Code of Conduct, Whistleblower policy and anti-corruption remain inadequate and below the industry median. Lack of comprehensive training exposes the company to regulatory non-compliance, ethical breaches and workplace risks, potentially impacting its reputation and operational integrity.

Key ESG Parameters of NLC

Parameters	Unit	FY2025	Industry Median
Environment			
Scope 1 intensity	tCO2e/GWh	1079.7	847.06
Scope 2 intensity	tCO2e/GWh	1.6	1.4
Scope 3 intensity	tCO2e/GWh	NR	159.2
Energy intensity	GJ/GWh	10793.3	9595.6
Water consumption intensity	KL/GWh	3704.7	1925.5
Waste generation intensity	MT/GWh	126.2	138.7
Achieved Zero Liquid Discharge	Yes/No	No	-
Social			
Employee turnover	%	12%	8%
Female to male employees' ratio	Per 100 male employees	9	5
Female to male employees' median pay	Per INR 100 of male employees' median pay	105.6	72.1
Health & safety complaints	#	0.00	0.00
Health insurance coverage	%	100%	100%
Accident insurance coverage	%	100%	100%
Differently abled workforce	% of total workforce	0.7%	0.2%
Workforce fatality rate	Total Fatalities/Total Workforce	0.00011	0.00001
Governance			
No. of Females in board	#	0	1
% board members trained on BRSR	%	60%	100%
% KMPs trained on BRSR	%	33%	100%
Income gap ratio (CMD pay to median pay of employees)	X:Y	4.6	30.0

Data source: company, public sources, CareEdge-ESG research & analysis

KL = kiloliters | MT = metric tons | GJ = gigajoules | GWh=Gigawatt hour

Rating Sensitivities

Positive factors

- Renewable capacity expansion roadmap
- Adoption of alternative fuels
- 100% fly ash utilization and zero waste-to-landfill
- Implementation of zero liquid discharge practices
- Improvement in female-to-male median pay ratio

- Enhanced coverage of training programs

Negative factors

- Occurrence of health and safety incidents/complaints
- Higher dependence on Lignite/coal-based generation
- Reduction in expenditure on employee wellbeing
- Board independence and committee composition gaps

Analytical approach:

Rating boundary: CareEdge-ESG has considered standalone data of NLC for assessment. The same is in line with their disclosure in BRSR.

Methodology/Criteria: For detailed understanding on the criteria and methodology used by CareEdge-ESG, please refer to the methodology document available on the company's website www.careedgeesg.com

About the Company and industry

NLC India Limited (NLC), incorporated in 1956, is a Navratna Central Public Sector Enterprise under the administrative control of the Ministry of Coal, Government of India, with a 72% shareholding. The company operates an integrated mining and power generation business model, deriving revenue from lignite and coal mining as well as thermal and renewable power generation.

As of FY25, NLC operates eight mines and 15 power plants (including thermal power plants, wind and solar plants) across multiple states, supplying electricity to Tamil Nadu, Andhra Pradesh, Karnataka, Kerala, Telangana, Rajasthan, and parts of the Union Territories of Andaman and Puducherry.

Thermal power and mining constitute the majority of the company's operational portfolio in FY25. The company operates renewable energy capacity of approximately 1,400 MW. NLC has outlined a target of achieving 10,110 MW of renewables capacity by 2030 through its subsidiaries NLC India Renewables Limited (NIRL) and NLC India Green Energy Limited (NIGEL), which are expected to increase the share of non-fossil capacity in the overall generation mix.

Source of information

While assigning the ratings, CareEdge-ESG has considered publicly available information such as annual reports of the company and other policies, sustainability reports, certifications, BRSR reports, additional information and comments provided by the company.

Status of non-cooperation with previous ERP: Not applicable

Rating history for the last three years:

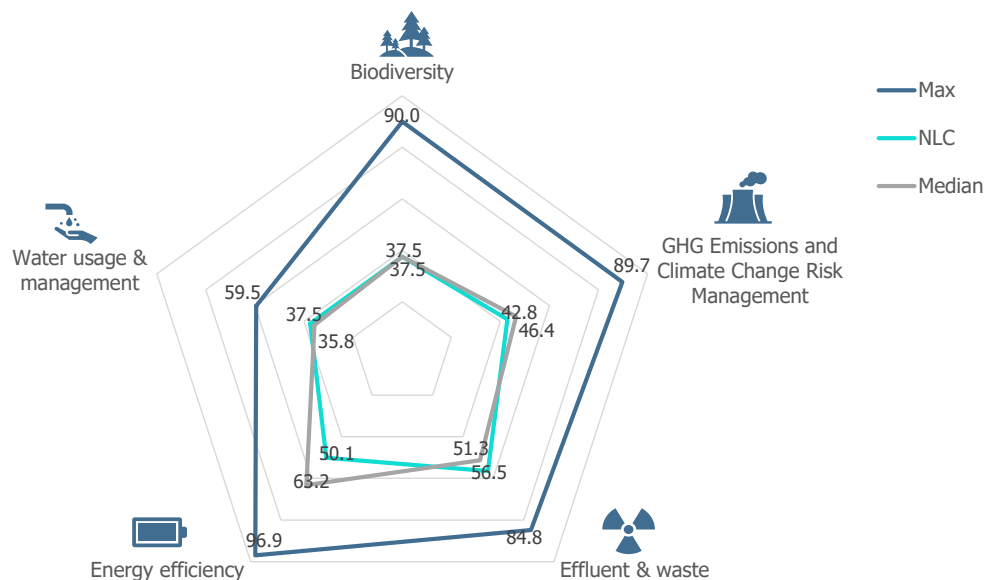
Sr. No.	Name of Product	Current Rating		Rating history		
		Rating	Score	Date(s) & Rating(s) assigned in 2024-25	Date(s) & Rating(s) assigned in 2023-24	Date(s) & Rating(s) assigned in 2022-23
1	ESG Rating	CareEdge-ESG 2	61.2	April 11, 2025 CareEdge-ESG 3- 55.8	-	-

Annexure: Graphical summary of key rating drivers¹

Hierarchy: While arriving at pillar level scores for NLC, CareEdge-ESG has assigned theme weights based on relative importance and sectoral hierarchy as depicted in the exhibit below.

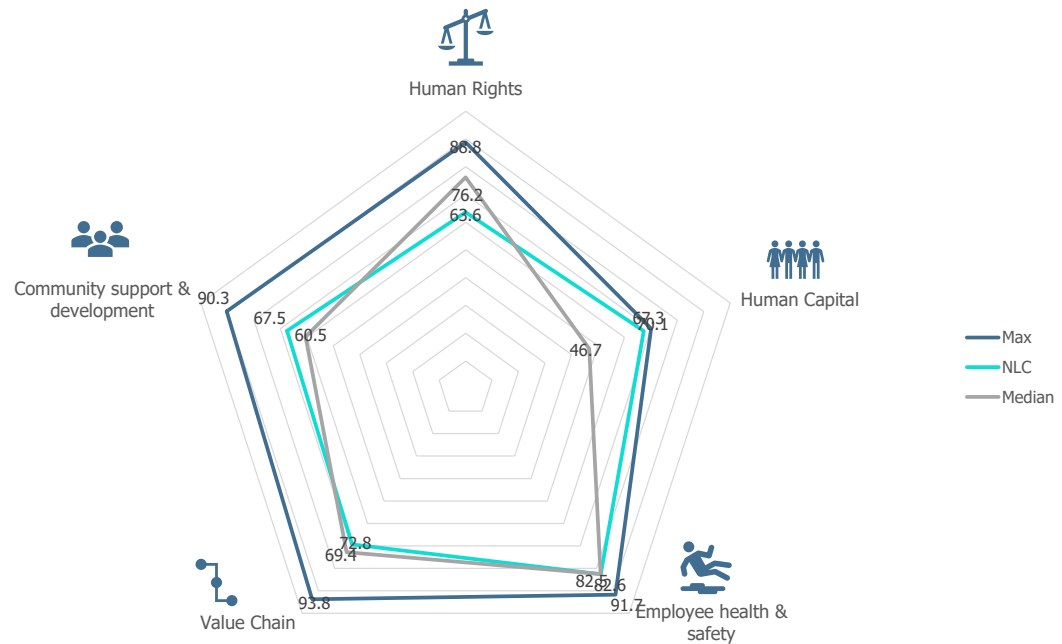
Materiality	Environment	Social	Governance
H I G H	GHG Emissions and Climate Change Risk Management Energy Efficiency	Employee Health & Safety Community Support & Development	Business Ethics Oversight on ESG
M E D I U M	Water Usage & Management	Human Capital Human Rights	Reporting, filling & disclosures Board Composition
L O W	Effluent & Waste Biodiversity	Value Chain	Remuneration Board Functioning

Environment Pillar

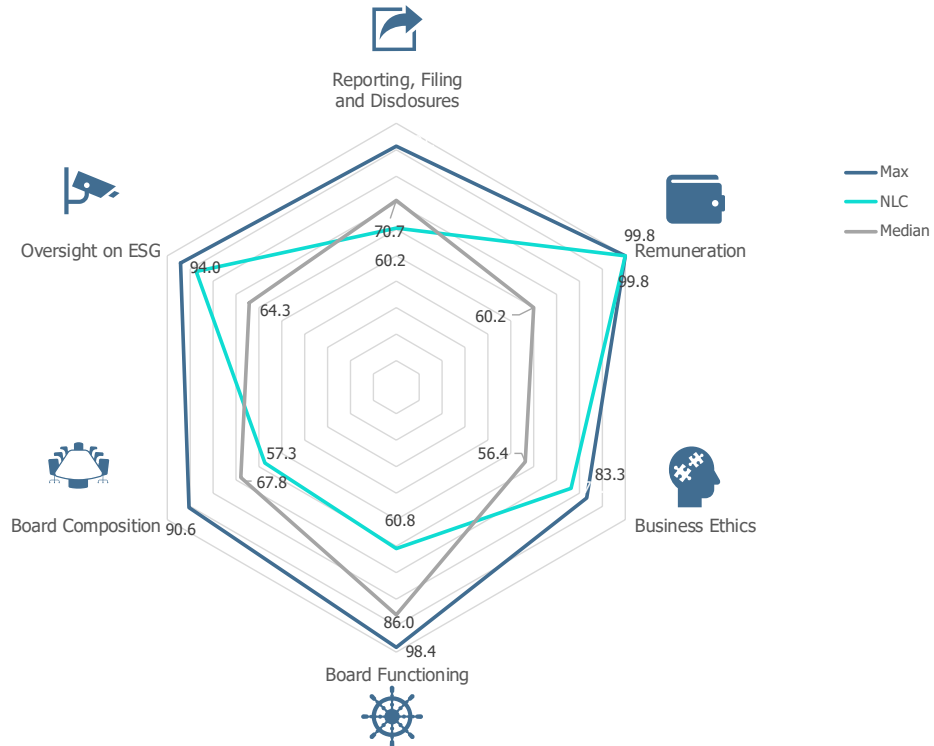


¹ Comprehensive analytical insights, inferences and benchmarking is provided in CareEdge-ESG's detailed ESG Report

Social Pillar



Governance Pillar



Summary Pillars and Theme Scores

Theme	NLC	Industry Median
Biodiversity	37.5	37.5
GHG Emissions and Climate Change Risk Management	42.8	46.4
Effluent & Waste	56.5	51.3
Energy Efficiency	50.1	63.2
Water Usage & Management	37.5	35.8
Total Environment Score	44.9	50.2
Human Rights	63.6	76.2
Human Capital	67.3	46.7
Employee Health & Safety	82.6	82.5
Value Chain	69.4	72.8
Community Support & Development	67.5	60.5
Total Social Score	73.4	69.0
Reporting, Filing and Disclosures	60.2	70.7
Remuneration	99.8	60.2
Business Ethics	76.2	56.4
Board Functioning	60.8	86.0
Board Composition	57.3	67.8
Oversight on ESG	87.5	64.3
Total Governance Score	75.7	63.4
Total ESG Score	61.2	59.1

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About:

CareEdge is a knowledge based analytical group that aims to provide superior insights based on technology, data analytics and detailed research. CARE ESG Ratings Limited (CareEdge-ESG) is one of the India's pioneer ESG rating provider fostering sustainability with ESG insights. With an aim of being a catalyst of change for a sustainable future with the most credible ESG assessments, CareEdge-ESG provides a 360-degree appraisal for the ESG performance benchmarking cum transition enabling ESG risk mitigation and enhanced decision-making capabilities for all stakeholders.

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