



A Journey of Sustainability and Responsibility

August 2024

Sustainability - is in our DNA



Our Powering Progress

NRL's Growth Journey is focused on 4 major goals



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Powering Stakeholders

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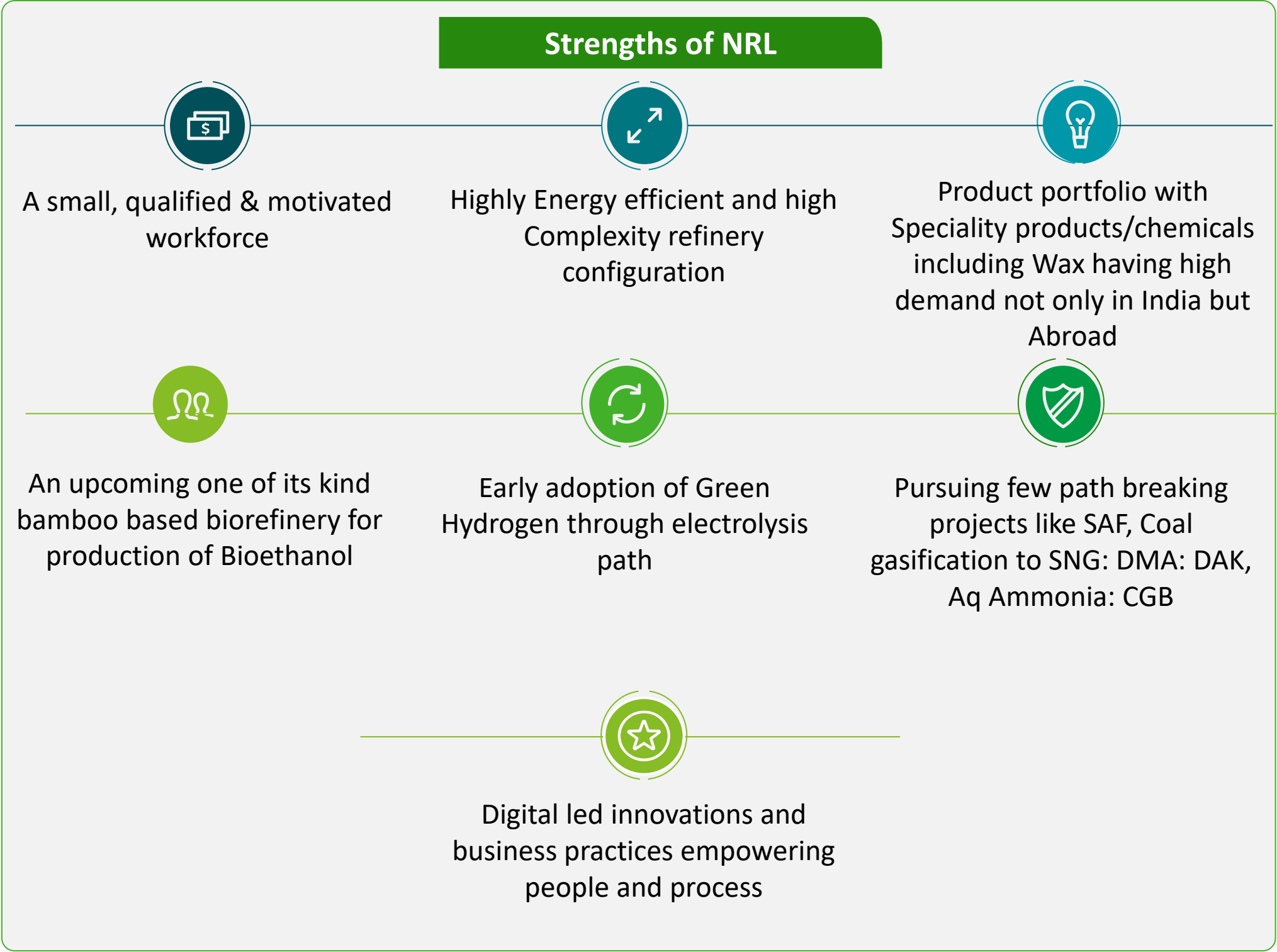
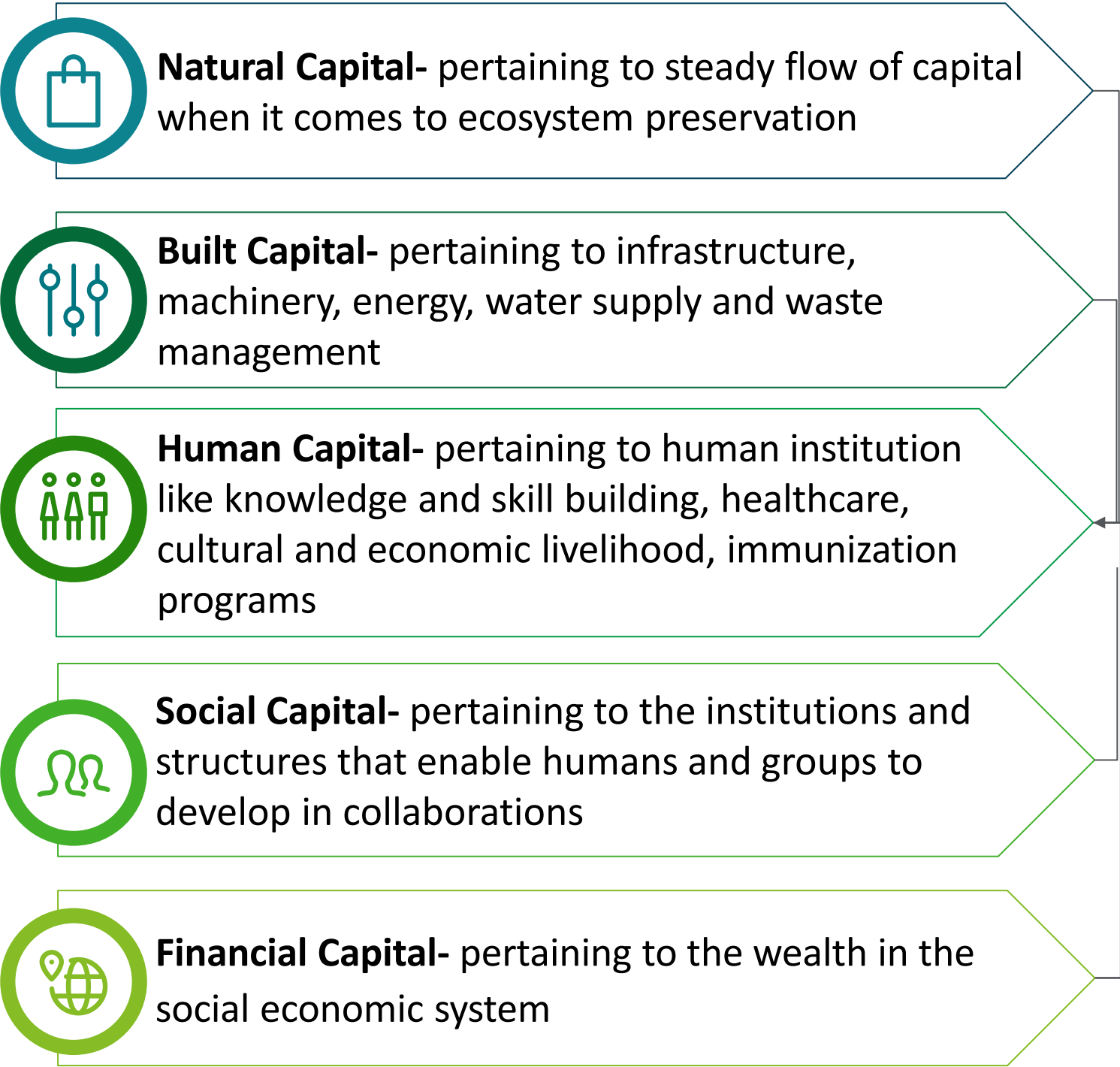
- NRL holding a dynamic portfolio and disciplined **capital allocation** Y-o-Y basis
- Maintaining a decent balance sheet upholding core business in energy supply for sustenance
- Company ensuring **economic sustainability** maximising flow of income from stock of capital and maintaining the **stock yielding the income**
- Diversifying energy profile investing in **alternative & cleaner energy fuel**



NRL would Exemplify as a compelling investment case in coming years

Powering Stakeholders

Recognizing the importance of triple bottom line (TBL) theory, 5 forms of capital offers a holistic view of NRL's performance and impact behind just financial profits



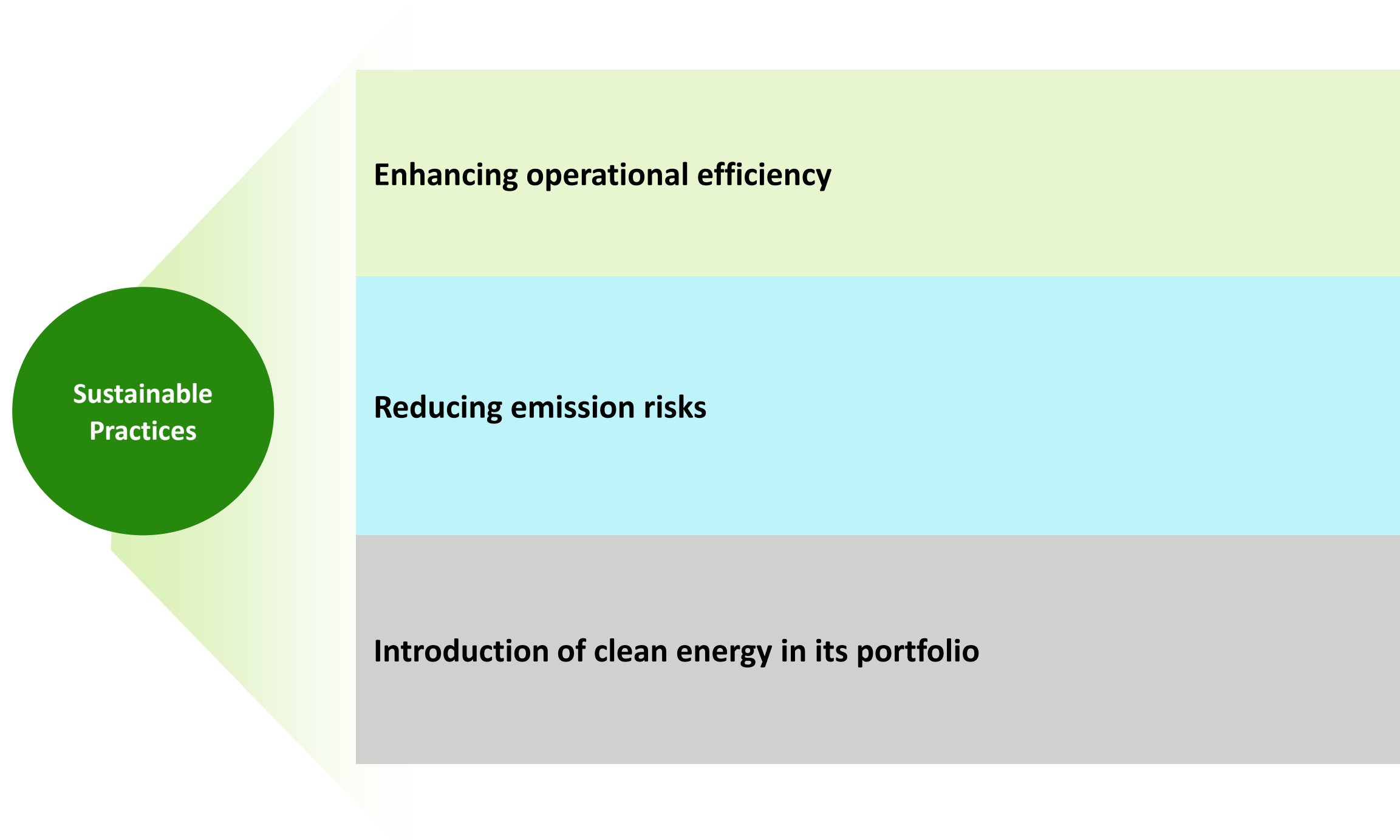
Integrate decisions to consider effects in all three areas of people- profit- planet (PPP)

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Caring for Nature

Enhancing Sustainable Energy Practices

NRL relies on three core strengths



Leveraging Technology with Digital Initiatives for Sustainable Operation



1

- ERP business environment powered by SAP S4HANA

2

- Digital Twin for Heat Exchanger Maintenance
- Digitally led project Execution PMO Project monitoring
- Facility Digital Twin for NREP Expansion project

3

- SAS platform : Unified data infrastructure and Predictive Maintenance Model Influence of process parameter on the performance of the equipments
- Acoustic Sensor-Based Energy & Emission Monitoring /Flare monitoring ,
- Drone Based Inspection .

4

- Analytics for Data driven Decision support in Business
- Asset Reliability & Improvement Programs (GE-Meridium APM)

5

- E Logbook : To have a centralized view of all logbooks kept at the field level allowing trending process parameters and done away with manual activities in field

6

- Smart Truck Parking and Access Control solution /AI Facial Recognition and Safety Detection/ Truck Safety Checking App
- Digital Fire and Safety Command Centre covering key systems of safety applications of Security and Life Safety
- AI-Based CCTV Surveillance in Construction safety alert and Monitoring

7

- Implementation of ARC GIS for monitoring of CSR Project life cycle Management and Pipeline ROU mapping

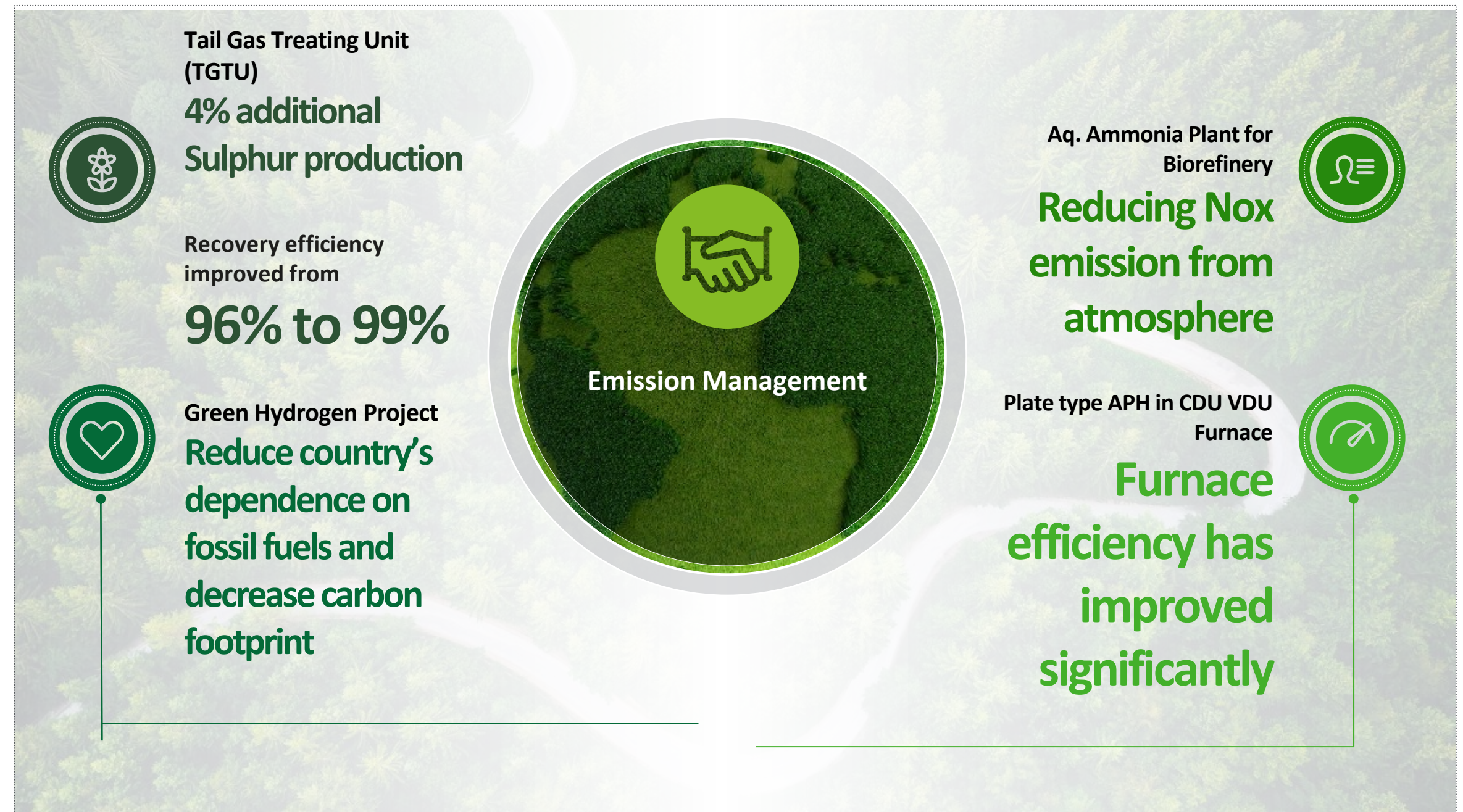
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- Paperless office workflow built on IBM Business Automation Workflow solution
- Robotic Process Automation (UiPath) deployed for automation of repetitive manual office activities in business .

Caring for Nature

-  **Tail Gas Treating Unit (TGTU)** With TGTU, emissions from Sulphur Recovery Unit have significantly decreased from 6000 ppm to 100-300 ppm.
-  **Production of Biofuels** will help meet ethanol demand in future for Ethanol Blended Motor Spirit supply and **contribute immensely to socio economic growth of the NE region**
-  **Green Hydrogen Project** offers a **renewable energy-based alternative** for meeting Hydrogen requirements in refinery.
-  **Aq. Ammonia Plant for Biorefinery** Earlier NH₃ rich waste was incinerated but now with the waste is being recovered to produce aqueous ammonia that caters the functioning of the adjacent biorefinery.
-  **Construction of Flare stack height** The elevation of Flare stack height helps in mitigating emissions at atmospheric layer **resulting in drop of intensity of emission.**
-  **Decanter System for Slop processing** This initiative resulted in Reducing the asphaltene and other contaminants in slop and eased reprocessing thereby increased the run length of DCU, **Improving operational availability significantly.**

Key Outcomes of the Initiatives



Impact on biodiversity and creation of Carbon sink

01

2.6 lakh tons

NRL is undertaking development and construction of three bamboo nurseries in Assam

60 lakh saplings in 15,000 hectares

03

3,696 tons

NRL has taken up two flagship initiatives for plantation in two districts viz Golaghat and Nagaon under compensatory afforestation drive in degraded land areas

1,65,000+ saplings in 75 hectares

02

7700 tons

NRL has pursued with Forest Department, GoA for compensatory afforestation in Abhoypur Village, Dibrugarh District

3,50,000+ saplings over 28 hectares

04

2800 tons

NRL is undertaking an afforestation project both in Assam and Bihar under the Green Credit Program

55 hectares of land

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Aiming NZE by 2038

Net Zero Journey

Paris Agreement- COP21

- Limit temperature rise at 1.5degC

COP26

- Reach net-zero by the mid of the 21st century.
- India declared its net zero target by 2070.

ETAC Committee

- Constituted by MoPNG advised Oil & Gas companies to declare their target year to achieve NZE

SEBI

- Through a regulation made mandatory for top 1000 listed companies to report their emission.

ICM

- BEE will be the Indian Carbon Market Administrator
- Sector wise technical committees to set targets
- CCTS is being drafted

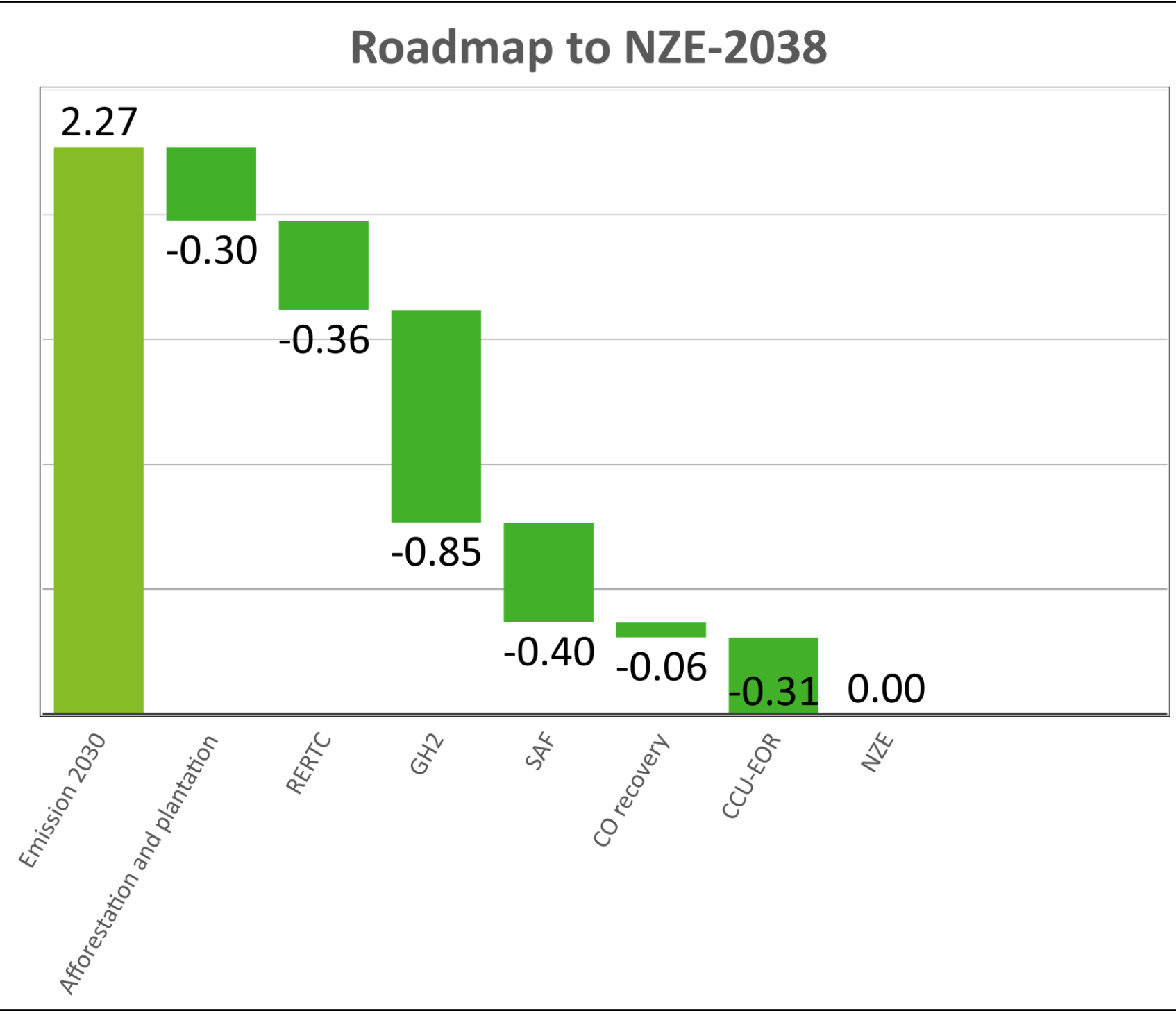


Net Zero Targets and approaches

*NRL Scope 1 and Scope 2 emission –
Net Zero goal by 2038*



Aiming NZE by 2038



...while we rewrite our own future as a firm.

Gathering constructive ideas to formulate a strategic **NZE roadmap** curating schemes including **low carbon projects, green hydrogen, biofuels, CCUS and massive plantation drive to increase carbon sink**

Actions we take

In Collaboration with varied stakeholders benefitting and contributing to bigger cause of all concern the climate change



Actions we take

Environmental Stewardship to drive with dedicated team and linking target with their KRA to bolster growth collectively

Sustainable Business Practices



Sustainable procurement practices	Sustainable Environmental practices	Sustainable Safety practices	Sustainable HR practices
- NRL is committed to sustainable sourcing of inputs through meticulous vendor selection process which involves various checkpoints ✓ Labor Law compliances ✓ Environmental considerations ✓ Supporting local economic development - For procurements valued less than Rs.200 crore, NRL sources exclusively from indigenous vendors and contractors - Keeping aside raw materials, y-o-y improvement on sourcing material sustainably	- Safety reclaim plastic products following with SOPs - EPR registered as Brand owner and importer for Paraffin Wax and Calcined Petroleum Coke and imported goods in accordance with EPR guidelines - In production, 1.24% slop reused along with input material to total material	- Occupational health and safety compliant with ISO 45001 standards - Townships, operating locations, laborers, and employees are all covered by the system - A separate Corporate HSE department under board supervision - Stakeholder engagement activities, trainings pertaining to operations and product safety conducted with nearby communities and clients - Providing comprehensive non-occupational medical and healthcare services to its employees/workers through VK NRL Hospital	- Human rights requirements are integral components of all business agreements and contracts. This encompasses ensuring adherence to minimum wage standards, compliance with labor laws, and provision of insurance for all workers involved, all of which are explicitly outlined in the tender document - These stipulations ensure that human rights are upheld throughout the supply chain and business operations, reinforcing NRL’s commitment to ethical practices and welfare of all workers

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Powering Lives

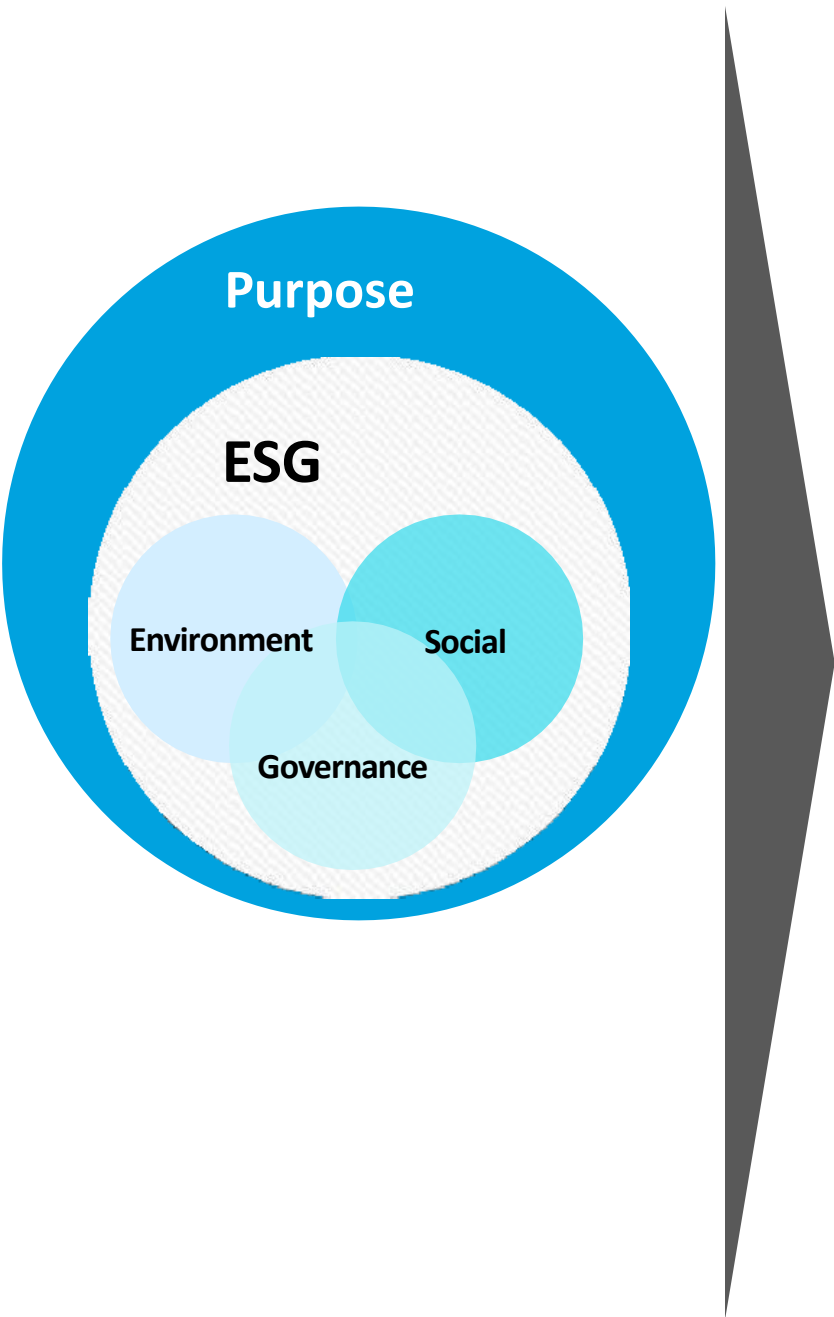
Powering Lives



NRL becomes hopes for tens of thousands of people energizing their lives with:

- **Rural electrification with Solar lights**
- **Skill development training** like welding ,cutting, scaffolding ,wax candle making
- Flagship program like **VK NRL Nursing school for girls** , NSDC enabling recruitment India /abroad
- Enterprise development programme viz **Krishi karma with** Custom hiring centre
- **SwanirBhar** ,livelihood with animal husbandry, agriculture
- **Project Jeevan dhara** for drinking water plants in nearby areas, **Parichannata** for building toilets), **Nirmal chahar** for providing waste handling equipments & e -rickshaw carrying waste bins.
- **Scholarship scheme** for meritorious students across all operating locations of NRL
- Flagship scheme: **Football academy ; mobile medical camp ; financial aid to person with critical illness**
- **Inclusive education environment**

Environmental, Social and Governance (ESG) & UN Sustainable Development Goals (SDG)



Environment	Social	Governance
Assessing a company's impact on the planet, including its resource usage, emissions, waste management, and efforts towards sustainability.	Evaluating a company's relationships with employees, customers, communities, and other stakeholders.	Scrutinizing the company's leadership, ethics, transparency, and accountability. Strong governance ensures responsible decision-making and long-term value creation.
Energy, Efficiency, Water, Waste, Biodiversity	Health & Safety, Human Rights, Talent Attraction & Retention, Training & Development	Corporate Governance, ESG Policies, Ethical Business Practices, Supply Chain Management

ESG framework adopted to align business strategies with broader stakeholder interests. Company made disclosures with BRSR which is a strategic tool that **engages stakeholders, supports sustainable decision-making processes at all levels within a company, shapes business strategy, guides innovation and drives better performance and value creation, attracts investments.**

NRL is stepping up environmental ambitions and shaping them to contribute to **UN Sustainable Development Goals**

Identifying the priority SDG targets for company based on the two entry points

- ☐ Risk to people and environment
- ☐ Beneficial products, services or investments

Potential SDG in company’s perspectives are:





THANK YOU