

# Strengthening Commitment to Sustainable Development

Sustainability is at the core of every business decision at DNL. We strongly advocate for the belief that embracing sustainability presents businesses with a remarkable opportunity to foster intelligent innovation and achieve profitable growth. By prioritising sustainability, we strive to establish an equitable society that operates harmoniously within environmental boundaries while simultaneously cultivating a financially viable enterprise. Our ongoing commitment involves actively reducing our environmental impact and consistently seeking groundbreaking product solutions that yield environmental benefits.

We are spearheading sustainability by implementing responsible practices in our operations. Our endeavour is to evolve into a responsible chemical manufacturing company while embracing transparency in the timely disclosures of our social, environmental and economic performances.

Our sustainable development plan is aligned with the UN Sustainable Development Goals (SDGs). Our commitment to United Nations Global Compact (UNGC) principles has enabled us to augment our contribution towards the global 2030 Sustainable Development Goals. We have always endeavoured to minimise negative and maximise positive environmental and social impacts. Our R&D, technical services operations teams work tirelessly to achieve the objectives of safe and sustainable manufacturing.



## Sustainability framework at DNL

We have identified Health and Safety, Responsible Sourcing and Supply Chain sustainability, Energy and Climate change management, Water and Waste management, Biodiversity and Compliance as priority areas and continue to work on these parameters to improve business sustainability. We have been developing short-term and long-term measurable goals and objectives pertaining to these areas. We benchmark our systems and practices with peers and identify best practices across industries.

Our Board provides leadership to the Group and strategic direction to the management. It is collectively responsible for promoting the long-term success of the Group through the creation and delivery of sustainable shareholder value. As part of its decision-making processes, the Board considers the long-term consequences of its decisions, the interests of various stakeholders including employees, the impact of the Group's operations on the environment and the need to conduct its business ethically. This is achieved through a prudent and robust risk management framework, internal controls and strong governance processes.

We believe in the philosophy of zero harm, zero waste and zero discharge and our efforts are continuing to make progress on this vision. We have improved our safety records over the period and minimised waste generation through reduce, recycle and reuse policy. Our ambition is to reduce carbon emission significantly in line with India's target.

We support all 17 Sustainable Development Goals (SDGs), along with our prioritised SDGs for the business.

In line with our commitment to the greater good, we strive to strengthen our contribution towards the global 2030 agenda for sustainable development.

# **Contribution to UN SDGs**



We actively contribute to economic growth and improvements in the quality of life of people globally. As a responsible employer, we provide wages and benefits to our employees which enable them to maintain their standard of living and uphold our supply chain responsibilities. Through strategic investments and partnerships, we make a positive contribution to combating poverty by strengthening and revitalising communities and improving infrastructure. Our initiatives and capacity helped economic growth directly and is expected to help the marginalised and economically weaker section of the society.



Through our various CSR initiatives, we enable people to earn their livelihoods and support them in becoming 'Aatmanirbhar' through skill development programmes and vocational trainings. We provide organisational, financial and technical support to Women Self Help Groups for them to set up small business and run it independently.



Employee Health and Safety are core business values at Deepak Group, We strive to eliminate negative health impacts from exposure to chemicals in the workplace, at homes and in the communities. Innovations and a commitment to product stewardship have increased the availability of products with health and safety benefits while reducing their environmental footprint. This includes accelerated deployment of best practices in safe production, distribution and wielding of chemicals in emerging markets through practicing and upholding principles of Together for Sustainability, Nicer Globe, Responsible Care. We are also working for healthcare of communities through our CSR initiatives on Healthcare. Please refer to Page No. 90 for more details.



Equitable quality education supports economic growth, improved public health and stable societies. We promote science education through philanthropic investment and specific initiatives that target certain regions or populations, including technical apprenticeships and programmes which help improve the professional skills of existing and potential employees. We have been operating mobile libraries under our CSR initiative called 'Project Vivek Vidya', across villages to promote quality education for all. Please refer to Page No. 94 for more information on Project Vivek Vidya



We continue to support the participation, contribution and success of people throughout the industry through the implementation of programmes and management approaches to advance gender equality.



We undertake initiatives for the reduction in water consumption, wastewater generation and strive towards zero liquid discharge. In addition to this, DNL has installed RO plants at various villages. We have worked with the Government to eradicate open defecation in various villages in Gujarat. During the year under review, the Company recycled and reused 4,20,000+ KL of waste water.



We are continuously improving energy efficiency across our facilities. We have taken various initiatives and have made investments in equipments that reduces energy consumption and/or increases efficiency. Further, we have also installed rooftop solar plants at some of our manufacturing facilities.



The safe production and management of chemicals is crucial to economic growth and enhancing quality of life for people globally. Innovation provides business opportunities and a sustainable foundation for global growth. Furthermore, upholding labour standards and respecting human rights throughout DNL's operations and the entire value chain represents a substantial opportunity to advance human development globally.





DNL is strengthening its production assets to promote resilience. Frameworks that promote industrial symbiosis for the Company and their value chains help address environmental and resource concerns, reduce raw material and waste disposal costs, earn new revenue from residues and by-products, support circular business models and develop new business opportunities.



As a multi-locational company, we encourage development that reduces inequalities. In addition to this, we carry out CSR activities in many states across the country which helps reducing inequality among people and facilitate healthy and safe lives.



The Company's manufacturing facilities provide employment to local people, reduces pressure on cities and make cities more sustainable and inclusive, thereby improving the lives of the urban poor.



Our production processes help improve the quality and efficiency of products. Through Responsible Care and the Global Product Strategy, we are committed to advancing sustainable management of materials in all its phases and achieving greater transparency in environmental, health and safety performance.



We are taking concerted actions to address the issue of climate change through a variety of initiatives including: energy efficiency, reducing the footprint of our products and development of innovative solutions to avoid downstream emissions. In addition, we are working to build resilience and adaptive capacity for the sector and its supply chain in response to the impacts of climate change. We also play a key role in the development of solutions that will enable other sectors to strengthen their resilience to climate-related risks.



We collaborate with others in the value chain to reduce marine pollution of all kinds, including nutrient pollution and the prevention and reduction of ocean plastic waste.



We continuously measure and manage our environmental footprint. This includes efforts to mitigate negative impacts that some products can have on ecosystems and biodiversity by improving product formulations and design as well as managing such products. The Company strives to reduce its impacts on land and other natural resources through improving operational management and amplifies philanthropic efforts to halt environmental degradation and protect critical ecosystems.



We are focussed on maintaining standards of ethical business conduct throughout the value chain. This can be achieved through partnerships that reduce corruptions/frauds existing in the supply chain. We also engage with local, regional, national and international bodies on societal structures and laws to promote responsible business practices (including anti-bribery and anti-corruption).



Partnerships are a key enabler to accelerate sustainable development and advance the SDGs.

# At DNL, we participate in opportunities to:

- Collaborate with downstream partners, government organisations, NGO groups and other involved stakeholders working towards sustainable development;
- · Contribute to improving environmental and safety performance in emerging countries through capacity building;
- Incorporate collaboration as a critical pillar of sustainability efforts/programmes and share technologies/science with partners to enhance sustainable development globally; and
- Encourage open innovation initiatives for the sector.

#### **Our commitment to environment**

Our unwavering commitment to environmental protection drives us to continually enhance our practices. We actively pursue improvements in energy efficiency, diversify our sources of energy, implement water recycling and reuse systems, responsibly manage materials and waste and optimise resource allocation. These initiatives not only enable us to achieve operational excellence but also significantly minimise our environmental footprint.

# **Key initiatives**

## **Energy Conservation**

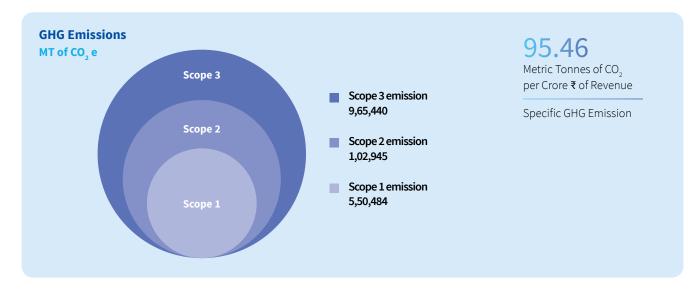
We believe that the efficient and effective use of energy brings agility and resilience to our operations and maximises value creation for our stakeholders. Therefore, we focus on managing our systems and processes to enhance the efficiency of our operations, thus improving specific energy consumption. We undertake selection of energy-efficient technology and equipment across our plants for the conceptualisation of the project. Equipment and technology in the existing plant are also upgraded based on feedback provided in the energy audit. We have replaced the conventional HPMV LAMP with energy-efficient LED light fittings as well as substituted old motors with energy-efficient motors. Installation of waste recovery boilers and steam turbines to generate power are also some of the key projects that we have undertaken. We have replaced solid or liquid fuel with clean fuel i.e. natural gas to enhance energy efficiency and reduce emissions. Further, installation of cooling tower fans with variable frequency drive (VFD) has significantly contributed to power savings and reduction in evaporation loss of cooling water.





# **Climate Change**

Climate change has become an established fact and is intertwined with human activities and industrial operations. Taking well-informed, decisive actions to help address climate change is a priority for our Company. We aim to reduce greenhouse gas (GHG) emissions and building resilience in our business, value chain and local communities, without affecting our growth trajectory.



Our greenhouse gas emissions reduction plan includes the following:

- Promote the use of renewable energy sources
- Implementation of energy efficient equipment in manufacturing processes
- Reduce the specific energy consumption by operational excellence

### Water stewardship

We have adopted numerous water conservation activities such as the installation of Mechanical vapour re-compression (MVR) methodology at Roha and Nandesari plants to recover and reuse water from effluent streams and achieve zero liquid discharge. We have also installed Multi Effect Evaporator (MEE) followed by RO to recover condensate water. This initiative resulted in saving 100 KLD of water consumption. 500 KLD of Reverse Osmosis System to recover OBA and Hydrogenation effluent stream at Dahej location was another significant measure to reduce freshwater consumption. During the year, we have recycled and reused 4,20,000+ KL of waste water.

### **Tree plantation**

DNL has undertaken a massive tree plantation drive with the help of the Forest Department in Village Shelavali, Taluka: Shahapur Dist.: Thane, State: Maharashtra. Around 55,000 trees of local species are planted on 50 hectares of land which has helped in bringing positive impact to the environment such as carbon offset, biodiversity conservation, improved air quality, soil erosion prevention and water management. It also provides employment opportunities to the local persons and results in afforestation.





### **Initiatives to value creation**

We have identified Health and Safety, Responsible Sourcing and Supply Chain sustainability, Energy and Climate change management, Water and Waste management, Biodiversity and Compliance as priority areas and continue to work on these parameters to improve business sustainability. We have been developing short-term and long-term measurable goals

Initiatives	Remarks
MVR (Highly efficient and eco-friendly low temperature evaporator with MVR system)	<ul> <li>Highly efficient and eco-friendly low temperature evaporator with MVR system for treatment of wastewater and treated wastewater is recycled back to the process.</li> <li>Specific advantages of our low temperature evaporation system using MVR over MEE evaporation system are:</li> <li>Low steam requirement</li> <li>Low fuel consumption for steam generation</li> <li>Low footprint requirement</li> <li>Less maintenance cost and operation cost</li> </ul>
400 KLD - RO Plant	By installation of RO plant, discharge of 300 KL per day of treated wastewater to CETP will be reduced by recycling treated water and conserving natural resources.
Protecto from Cresol from effluent	Effluent from the Nitration plant is treated to extract cresol from the effluent which is used to produce the new formulation as "Protecto". This initiative has reduced incinerable waste by converting it into useful products.
Energy saving like Optimisers	<ul> <li>Installation of ML/AI algorithm based new technology (Smart Power Optimiser) in the power distribution system which will lead to power savings of 9% in power consumption.</li> <li>Direct Savings in Kwh and Energy Consumption cost Reduction @ 9%</li> <li>Demand side management - Peak demand reduction (KVA) up to 9%</li> <li>Optimised and clean power by series electrification through impedance matching technique</li> <li>Better power quality suppressing spike/surge, inrush and transients</li> <li>Protection of Electronic circuits and VFDs</li> <li>Deliver pure sine waveform by filtering both utility power and solar PV input</li> <li>Reduce Machine idle time by operating within nominal/rated voltage levels</li> <li>Reduced maintenance cost and early ageing of equipment</li> <li>Safety from Short circuit and single phasing</li> </ul>
Hydrogen moisture reduction	In hydrogenation process at Dahej, DNL uses hydrogen through pipeline which contains more moisture and is installed with a moisture separator which helped in cost reduction.
Sodium Sulphate quality improvement with realisation improvement	Reduction in Off-spec product generation by improving quality of product by process improvement resulted in higher realisation.
Installation of Energy efficient Motors	We replaced 50 Motors with energy-efficient motors resulting in the reduction of power consumption of 5,200 kWh/Year.
Installation of VFD	Variable frequency drives were installed for distillation column bottom circulation pumps resulting in the reduction of power consumption by 45,000 kWh/Year.

# **Other Activities**

Other notable environment protection activities include installation of online continuous emission monitoring system (OCEMS) for air emission monitoring and control. We also successfully converted canteen waste to biofertiliser and the same is used for green belt development. ETP sludge and agro waste will be used as fuel in the boiler along with coal which is under trial. This will help in utilising the waste generated and reducing coal consumption.