



PEOPLE

PROFIT

PLANET



Sustainability Report 2024

Message from Managing Director

I am pleased to present our 2023-24 sustainability report, reflecting our ongoing commitment to sustainability. Guided by the pillars of People, Planet, and Prosperity, we aim to build a sustainable business model that creates lasting value for stakeholders while protecting the planet's resources.

We are expanding our manufacturing capacity, starting with the Gelatin Division and extending to other units, to meet growing demand and strengthen our market position. This strategic initiative focuses on building a resilient supply chain, nurturing skilled talent, and ensuring sustainable practices. We remain dedicated to excellence, innovation, and contributing to NGIL's long-term success.

We are committed to continually enhancing our sustainability practices by setting ambitious targets, actively engaging with stakeholders, and driving positive change. Our vision is to achieve responsible growth that reflects NGIL's values. We sincerely appreciate your continued support as we move forward on this journey towards a sustainable and successful future.



PRAVEEN VENKATARAMANAN
MANAGING DIRECTOR





Contents

1

Company Profile

2

Highlights FYE 2023

3

Financial Performance

4

Responsible people
practices

5

Operational Excellence

6

Committed to society

7

Conserving Energy

8

Keeping clean Air

9

Conserving water

10

Effluent & Waste
management

11

Ensure safe work place

12

Environment
conservation

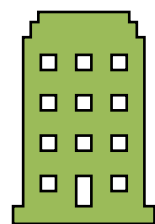
1. Company Profile

Nitta Gelatin India Ltd (NGIL) is a significant joint venture between Nitta Gelatin Inc., Japan, and the Kerala State Industrial Development Corporation Limited (KSIDC), established in 1975. As a listed entity on the Bombay Stock Exchange (BSE),

NGIL specializes in producing pharmaceutical-grade Gelatin and Collagen Peptide derived from Bovine Bones/Hides and Fish Scales/Skin. Their product applications cater to various industries such as pharmaceuticals, food, and nutraceuticals. Three out of the four manufacturing units primarily produce Ossein (OS) & Limed Ossein (LOS), intermediate products used in Gelatin manufacturing. The Gelatin division in Kochi, Kerala, focuses on manufacturing Gelatin and Collagen Peptide.

NGIL's Gelatin finds applications in various pharmaceutical processes, such as producing hard capsules, soft gels, tableting, and blood plasma expanders. On the other hand, Collagen Peptide serves as a popular health ingredient in the food and nutraceutical industry. Moreover, during the Gelatin manufacturing process from bovine bones, NGIL separates the mineral part of the bone, converting it into Dicalcium Phosphate (DCP). This DCP serves as a widely used mineral feed ingredient in the Poultry Industry.

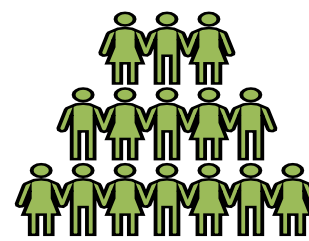
Overall, NGIL plays a crucial role in supplying essential products that impact millions of people daily, spanning pharmaceuticals, food, nutraceuticals, and the poultry industry through its diverse product portfolio and manufacturing capabilities.



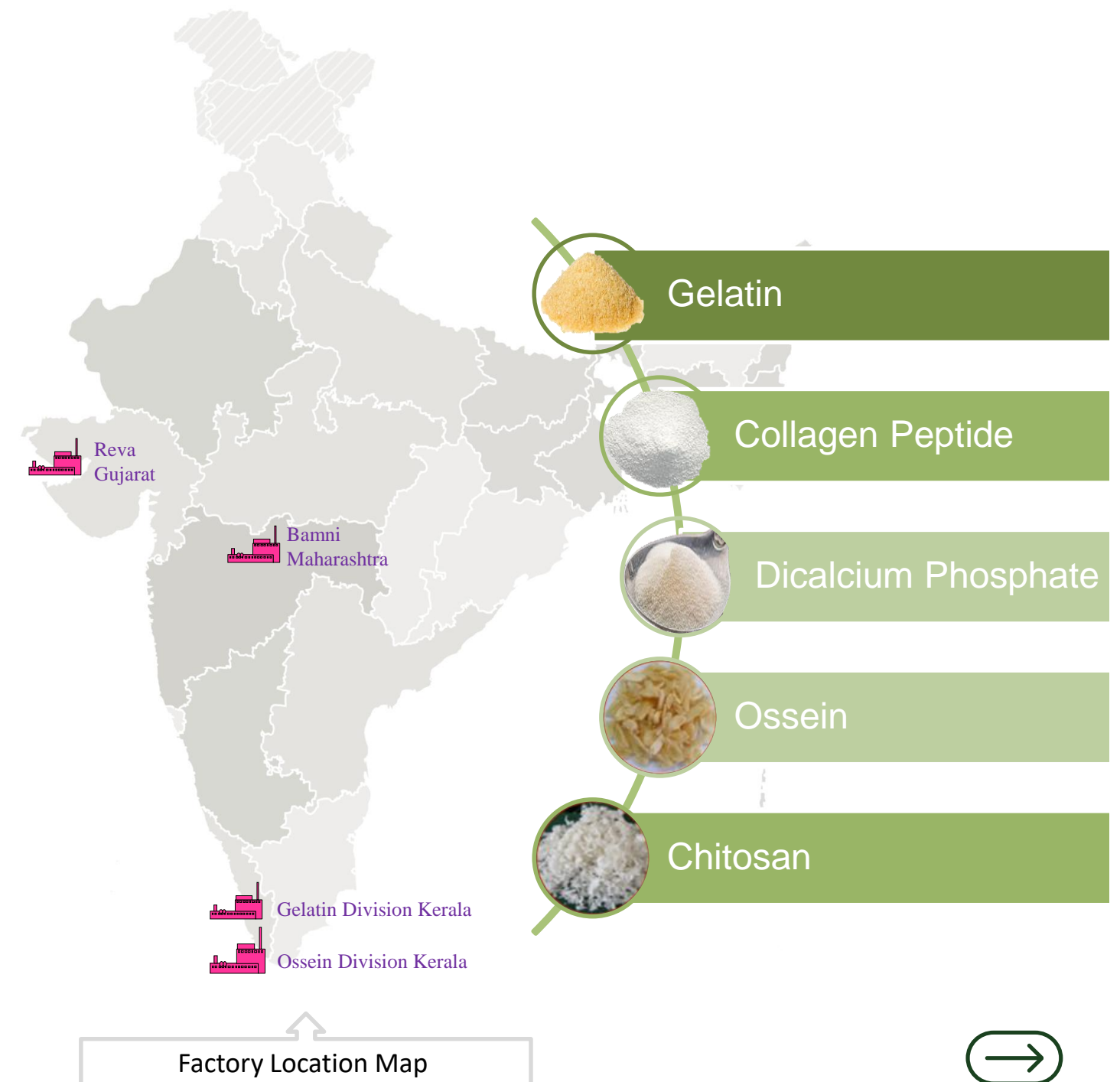
Founded in
1975



Turnover
5662 Mn



578+
employees



2. Highlights of FYE 2023-24

**3509**

Man-days of training

**4800+**

Beneficiaries of CSR projects

**8.7 Mn**spend on
CSR Projects in Rs.**7306
Mn****Market Capitalization**
as on 31st March 2024**1164
Mn****Profit Before Tax****42%****Export****35 +****Countries**
In last 5 years**50%**Reduction in
water utilization in 6 years
in Ossein Division**16%**Power reduction/MT of
Collagen since 2017-18**15%**CO₂ emission reduction
per MT of Collagen since
2017-18**24417 GJ**

Energy used from Biogas

26639 KWh

Solar Energy



4. Responsible people practices

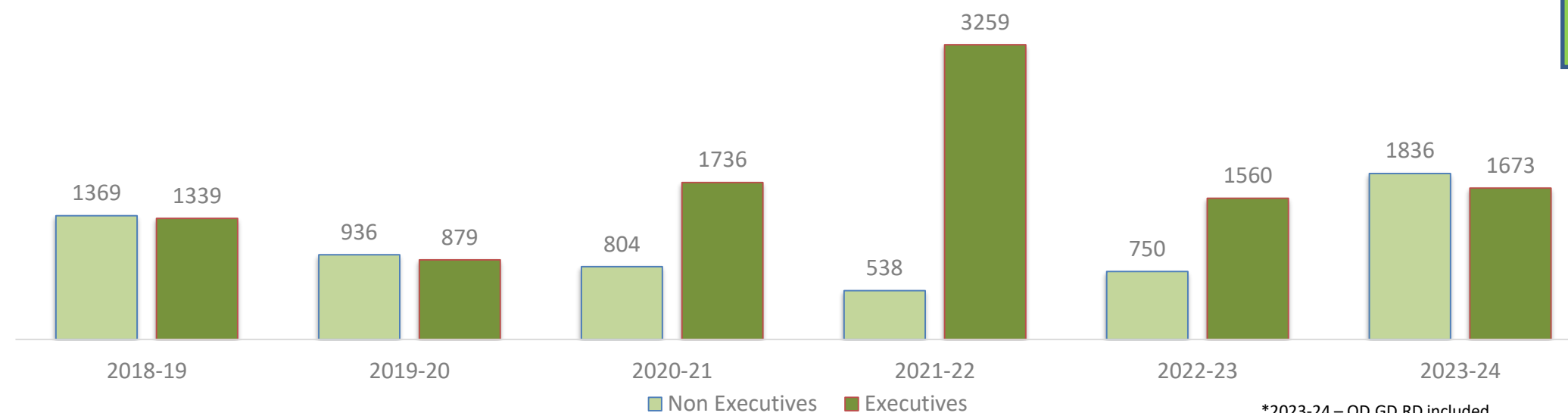


NGIL employs 578 people, covering the Ossein division, Gelatin division, Reva division, and BPL plant, along with approximately 400 contract workers. Our continuous endeavor is to attract the right talent, support their development of the necessary capabilities and skills, and encourage them constantly. The right culture and work environment inspire them to bring out their best to achieve both the professional goals of the company and their own. We ensure compliance with the laws of the land related to wages and social security. Various rewards and recognitions are in place to motivate employees at all levels of the organization.

The company has a robust and steady system to monitor and recognize employees on time, encouraging their participation in various initiatives. Senior-level executives are engaged in high-level cross-functional teams to drive projects and achieve strategic objectives, grouped as “Drishyam” projects. Every year, new projects are launched, running for 12-18 months, and successful teams are recognized with attractive rewards such as tour packages and gifts.

In terms of Training and Development, after assessing the competency level for professional and leadership development, and effective succession planning, we have designed highly customized competency development programs. We ensure sufficient exposure to employees to understand the organization in detail through job rotations, enabling executives to grow within the organization. Periodic competency mapping and development programs are conducted for executives, and skill development programs are implemented for non-executive employees

Training mandays*



*2023-24 – OD,GD,RD included



Employee Development Programmes

- Competency Building
- Skill Development Programs
- Job Rotation
- Leadership development
- Succession planning
- Mentorship Program
- Problem solving skill development
- Team Building

Employee Engagement Practices

- CFTs/SGAs
- Kaizen/5S/Safety/ToC
- External/ internal competitions
- Recreational activities
- Events- Prism Day

Rewards & Recognitions

- Unique Initiative Scheme
- 5S score-based rewards
- Kaizen rewards
- Best Employee Awards
- Excellent Department award
- Annual Cash award for significant contributions
- Safety Rewards
- Reward for Drishyam projects, CFTs, SGAs
- Reward External competition winners
- Rewards in the form of tour packages, Gold Coins, and Meals



5.0 Operational Excellence



NGIL has implemented several strategic initiatives, such as 5S, Kaizen, TPM (Total Productive Maintenance), Cross-Functional Teams (CFT), and Small Group Activities (SGA), to drive operational excellence. The primary objectives of these initiatives revolve around eradicating breakdowns, accidents, defects, losses, while concurrently focusing on cost reduction and expediting the go-to-market process. These efforts play a crucial role in bolstering the sustainability pillars encompassing People, Profit, and Planet.

In particular, Total Productive Maintenance (TPM) was integrated into NGIL's operations in 2020. It's noteworthy that all 8 Pillars of TPM are actively implemented across both our Ossein and Gelatin Divisions situated in Kerala. This concerted effort demonstrates our commitment to ensuring optimal operational efficiency and effectiveness across various facets of our manufacturing processes.

Kaizen

- Continuous improvement & Employee Engagement

5S

- Workplace Management

TPM

- Increase Productivity & operational excellence

DWM

- Stable Routine Operation

ICS

- Aid for meeting Interdepartmental expectation

RASCI(DOA)

- Responsibility & Authority delegation & empowerment

CFT/SGA

- Team Work & Problem Solving, Continuous improvement

Drishyam

- Drive strategic projects for significant improvement

PRISM Day

- Communication & Engagement

R&R

- Motivation for employee engagement in excellence initiatives

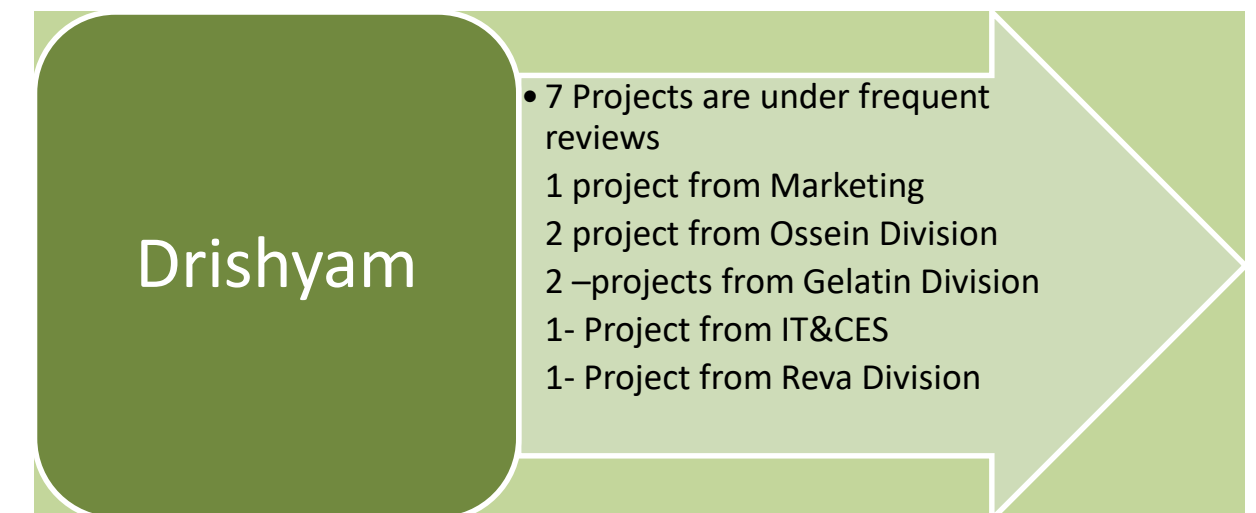
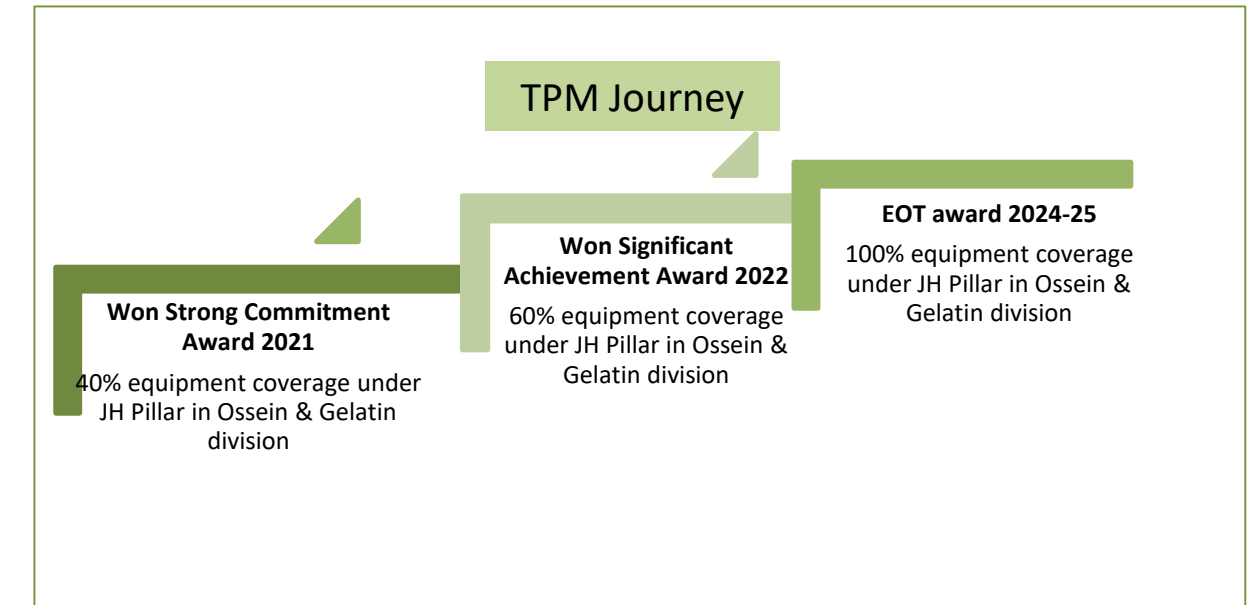
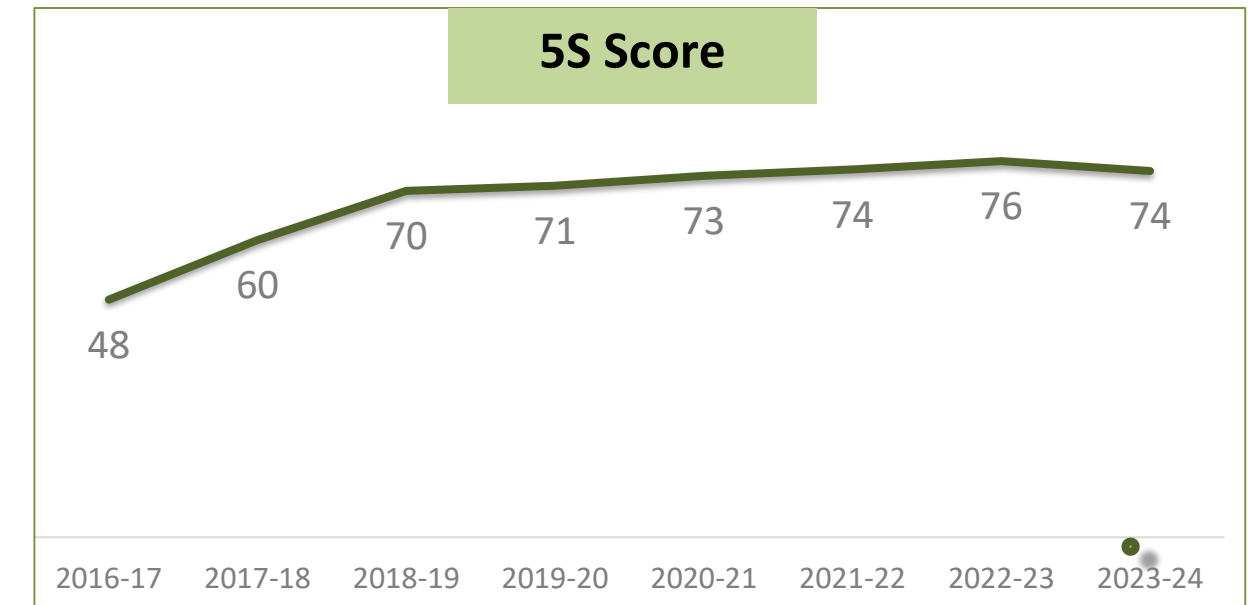
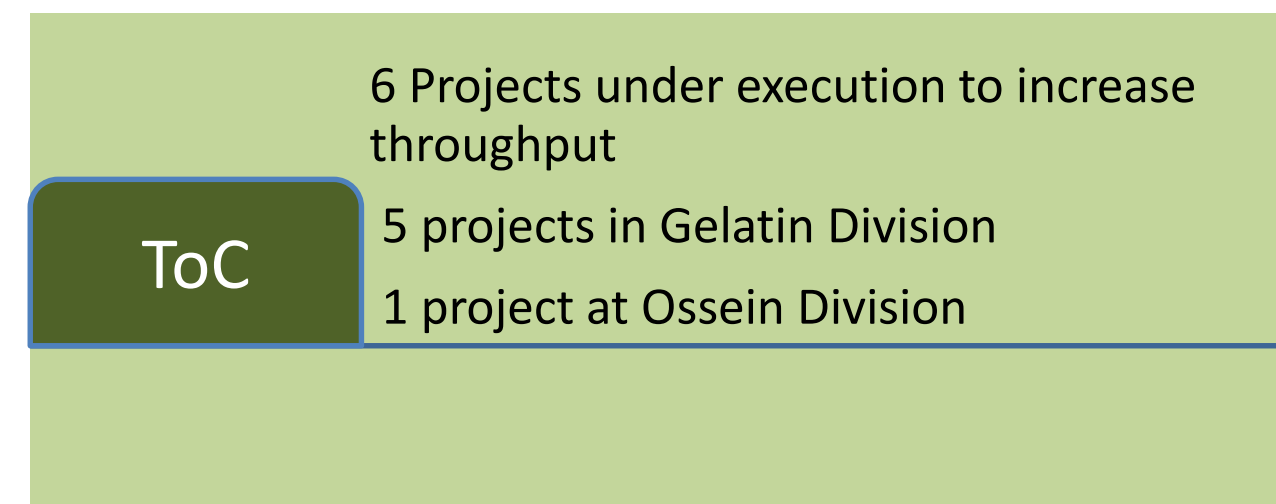
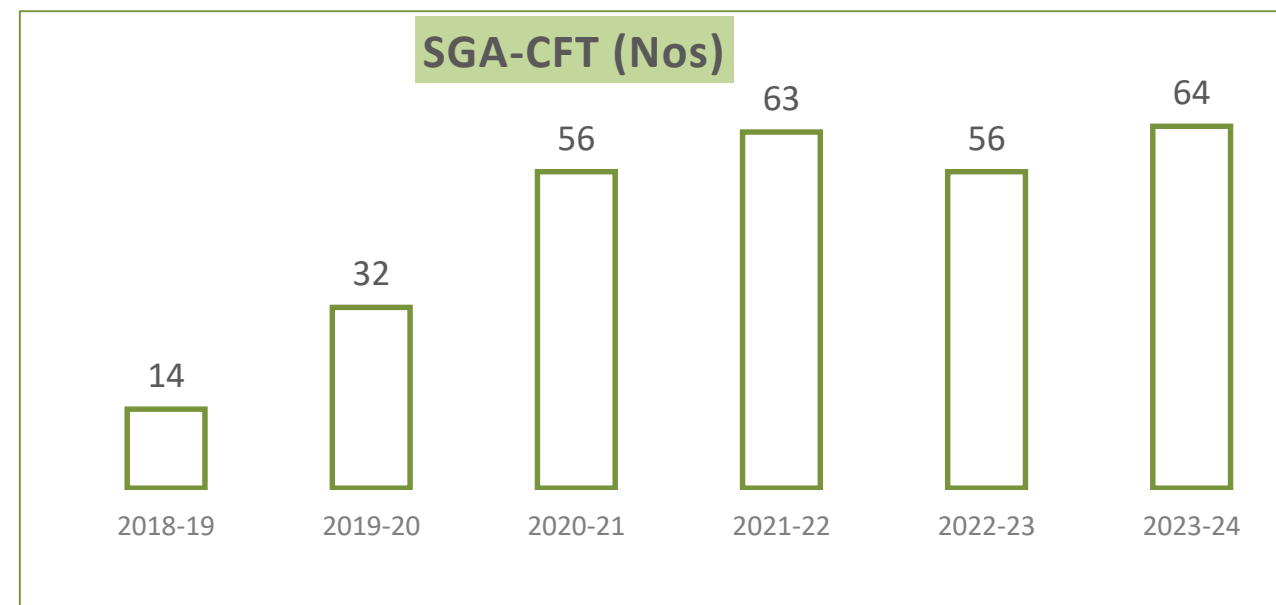
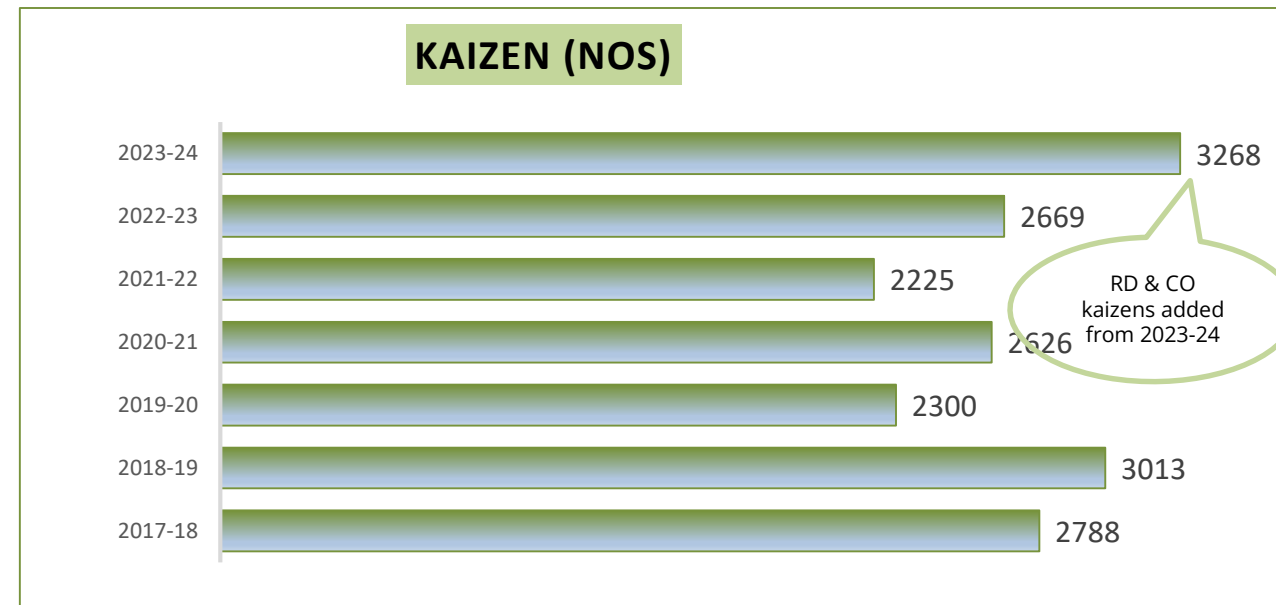
ToC

- Constraint Exploitation & Elevation

Approach to Facility Improvement

- Garden factory -OD & Rest free dry plant -GD

5.0 Operational Excellence

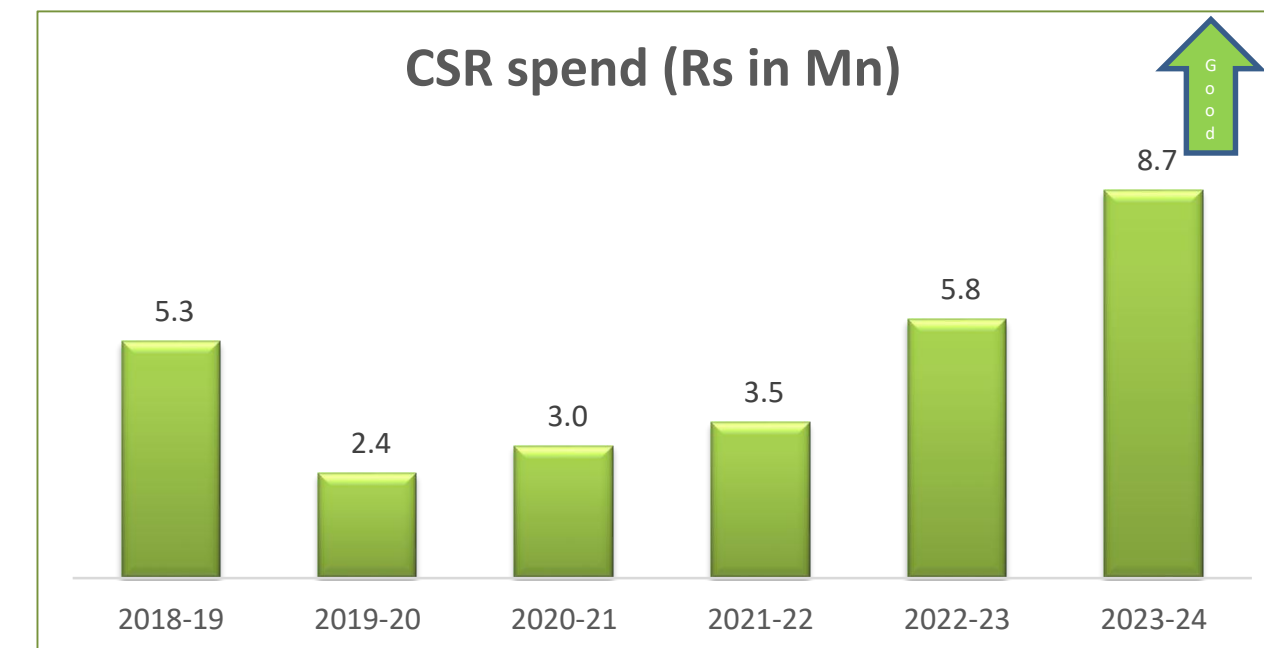




6. Committed to Society

NGIL is committed to fostering social and economic progress in the neighboring communities of our manufacturing plants through dedicated projects and initiatives. Our Corporate Social Responsibility (CSR) endeavors play a pivotal role in fulfilling our obligations as a responsible corporate entity. We consistently strive to drive sustainable growth by creating and amplifying value within the societies and local communities where we operate. Collaboration with various stakeholders such as government bodies, NGOs, hospitals, and community leaders is central to the success of our CSR initiatives. These partnerships aid NGIL in identifying and addressing the most critical needs of the community effectively. Moreover, our company actively supports sports in the local community by providing financial assistance, promoting and encouraging a healthy lifestyle among the populace.

In association with Nanma Foundation, Nitta has initiated various projects to meet the health and educational needs of the community. New Namna Batch 2023-25 started. Nitta Nanma Learning Centre is the flagship program of the Nitta – Nanma collaboration. Each year, a batch of 30+ high school students are selected from various regional schools to be coached and tutored to expand their horizons and realize their potential. In addition to regular classes on academic subjects, we provide specialized training on soft skills and personality development. In association with the Nanma Foundation, Nitta funds palliative medication for needy people. Milch Cow distribution is done in 3 phases for the selected persons under poverty lines. Study material distribution at various events.





6. Committed to Society- glimpses



EDUCATION



Nanma batch Opening 2023-25

HEALTHCARE



Super Specialty Health check-up at Chalakudy

AGRICULTURE



Distribution of chicks to BPL households



Study material distribution to students via MLA care



Health check-up Organized at Gujrat



Distribution of Milch Cow





6. Committed to Society- glimpses



SOCIETY



Rain coat distribution to Police at Kakkanad



Study material distribution to BPL category families

SOCIETY



Kids park for Kathikudam UP School



Financial medical support to cancer patient

SOCIETY



Library Renovated at Kathikudam



Umbrella distribution at Kadukutty



7. Conserve Energy

Strategically, we focus on energy conservation and cost reduction for sustainable development. We have initiated various ongoing projects to reduce specific consumption of energy. We have adopted a systematic problem-solving approach in these projects, and it ensures systematic work process management and benchmarking against our best-achieved figures on process parameters and industry, utility consumption norms, production norms, and evaluating best-in-class technologies and practices in the domain. NGIL, towards its commitment to Energy conservation undergone ISO 50001 certification for Ossein and Gelatin divisions. Both our plants are ISO 50001 certified, and a substantial reduction in fuel and power consumption has happened in the last few years with the help of various initiatives. NGIL has taken utmost care in conserving energy and minimizing energy usage through multiple initiatives.

Some of the significant energy conservation initiatives at our different units are as follows

Power reduction initiatives

1. Replacement of Inefficient motors by IE3 class motors
2. Use of Solar Energy to replace fossil fuel – panels , solar lighting
3. Switching to LED lights
4. Replaced surface aerators with more efficient floating diffused aerator
5. Drying of sludge using solar energy contributed to power and fuel saving
6. Pump audits & replacement with efficient pumps
7. Installation of VFDs to optimize energy use based on demand

Fuel reduction initiatives

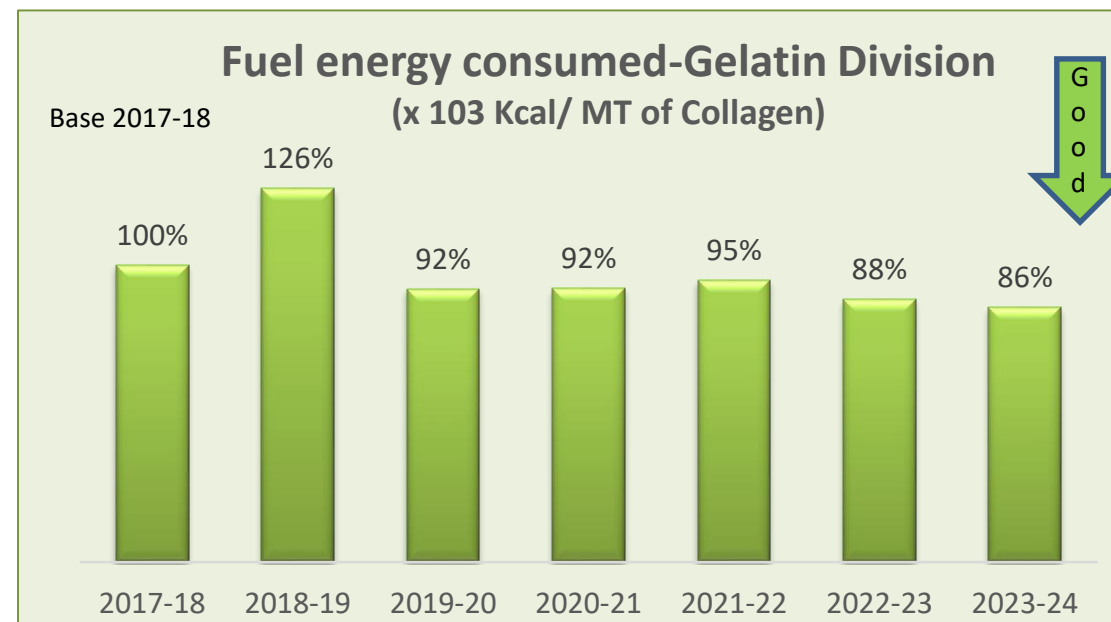
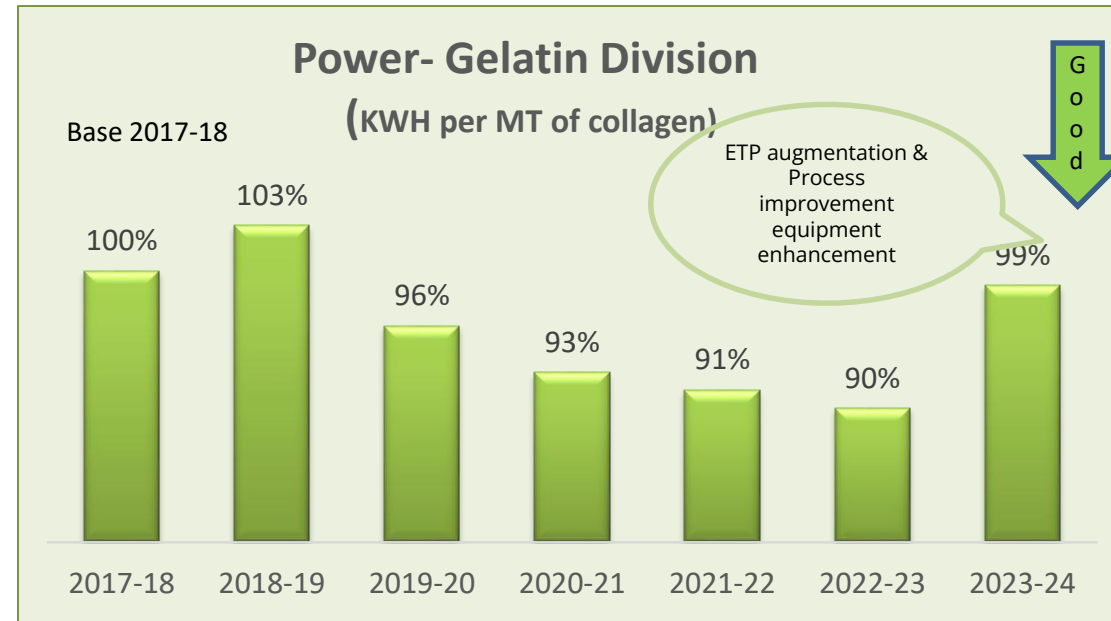
1. Anaerobic digester for biogas generation
2. Retrofitting of existing boiler for efficiency improvement.
3. Biogas burners in Heat Transfer Vessels

**AFFORDABLE AND
CLEAN ENERGY**

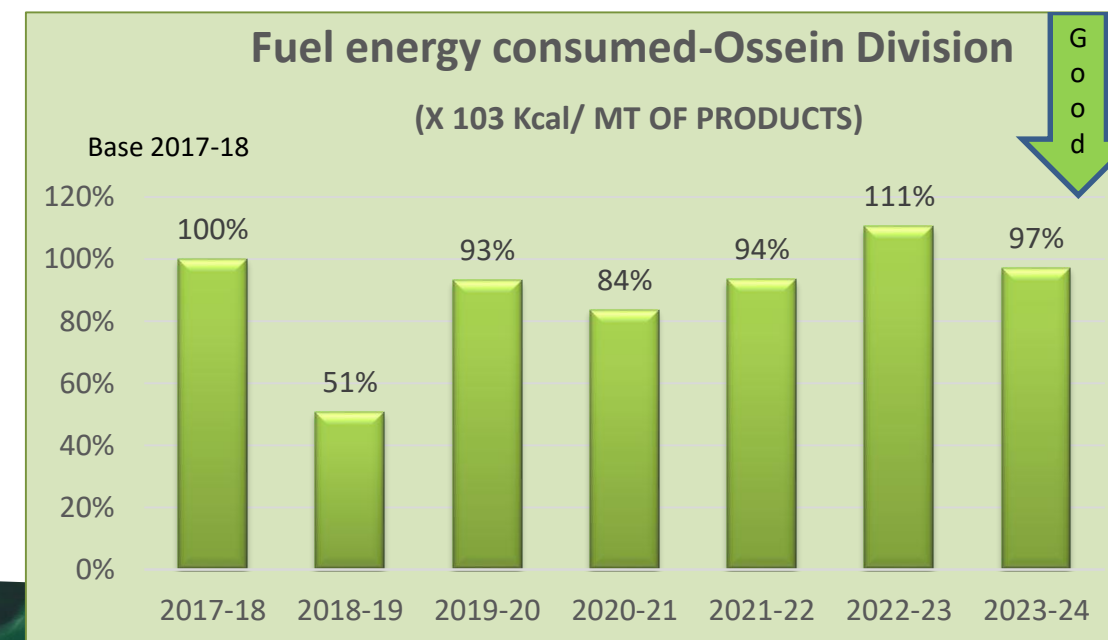
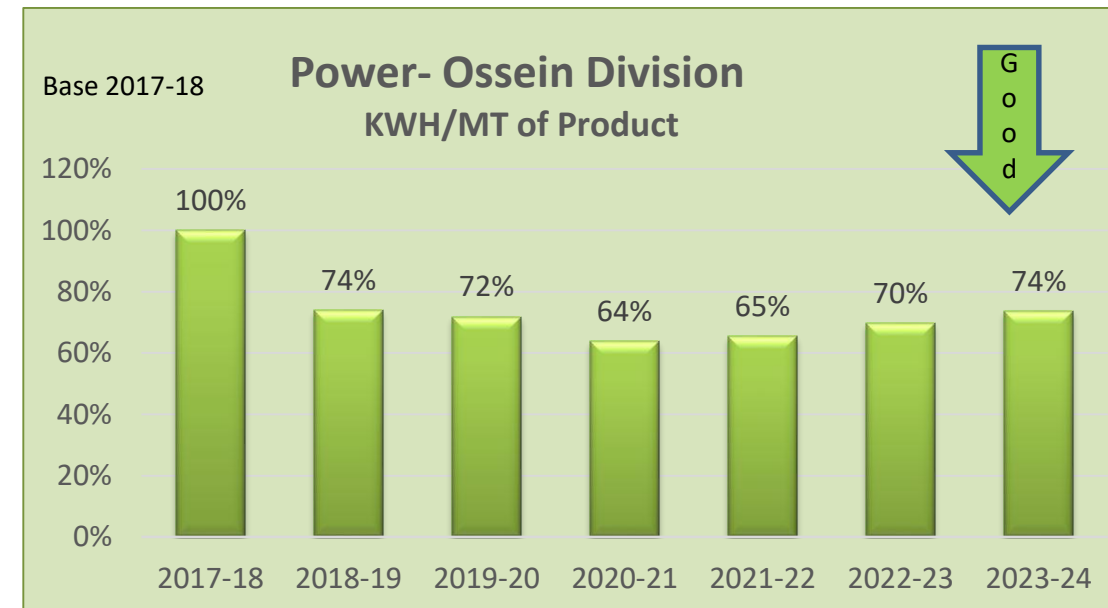


7. Conserve Energy

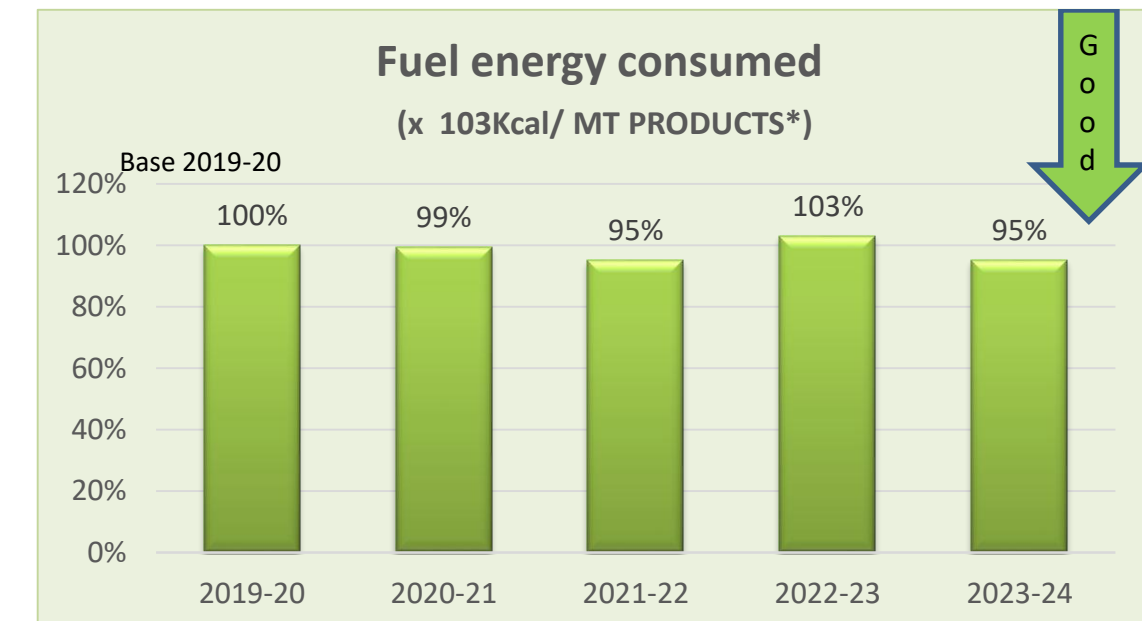
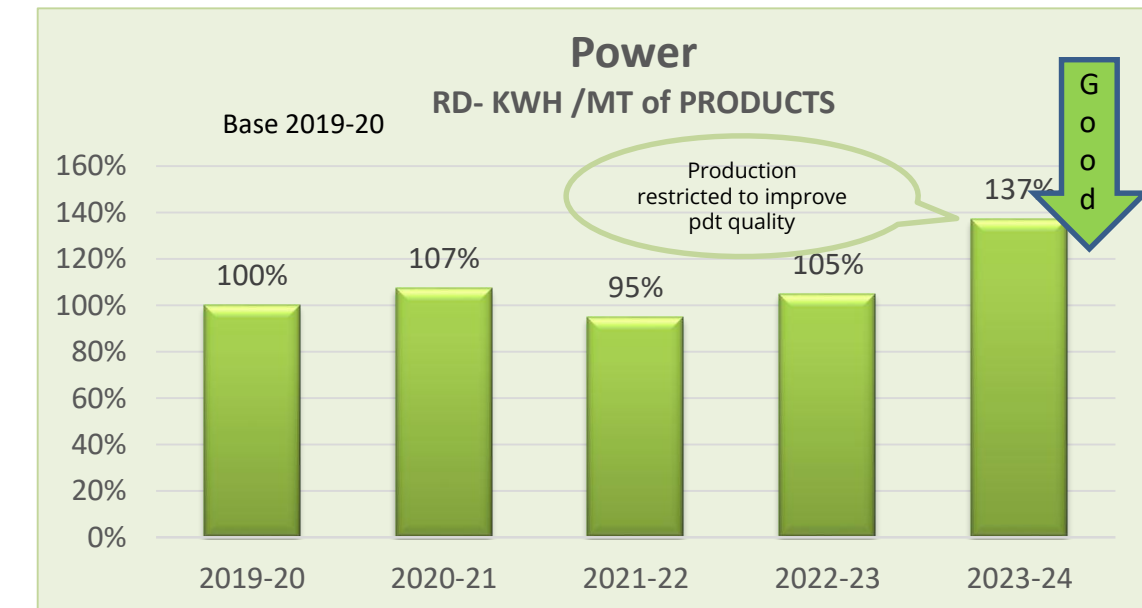
AFFORDABLE AND
CLEAN ENERGY



*Values in % compared with 2017-18 base value



*Values in % compared with 2017-18 base value



*Values in % compared with 2019-20 base value

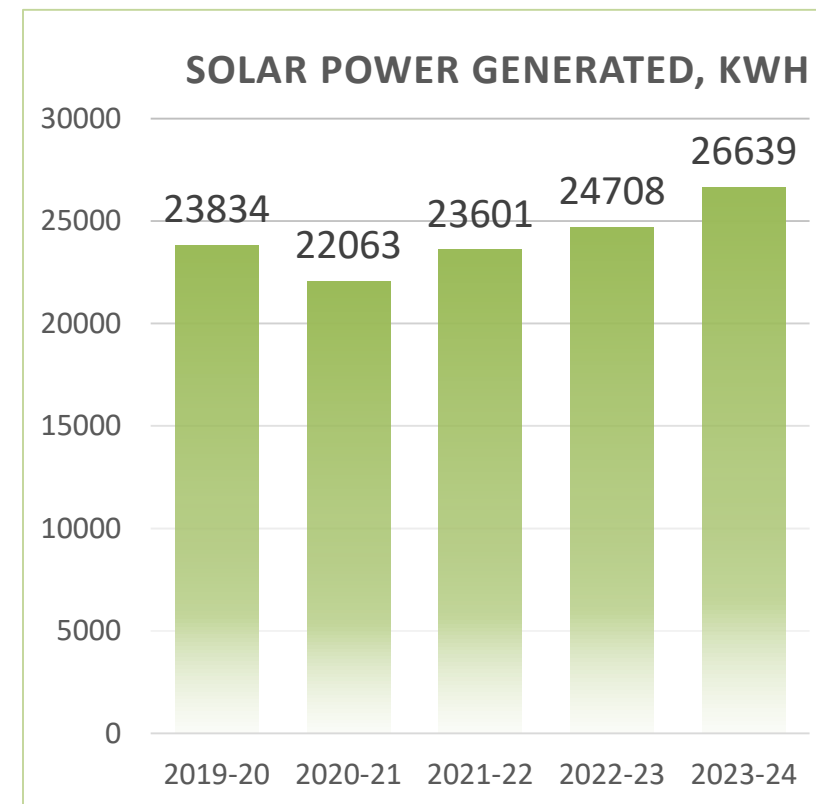


7. Conserve Energy

Utilization of Renewable Energy

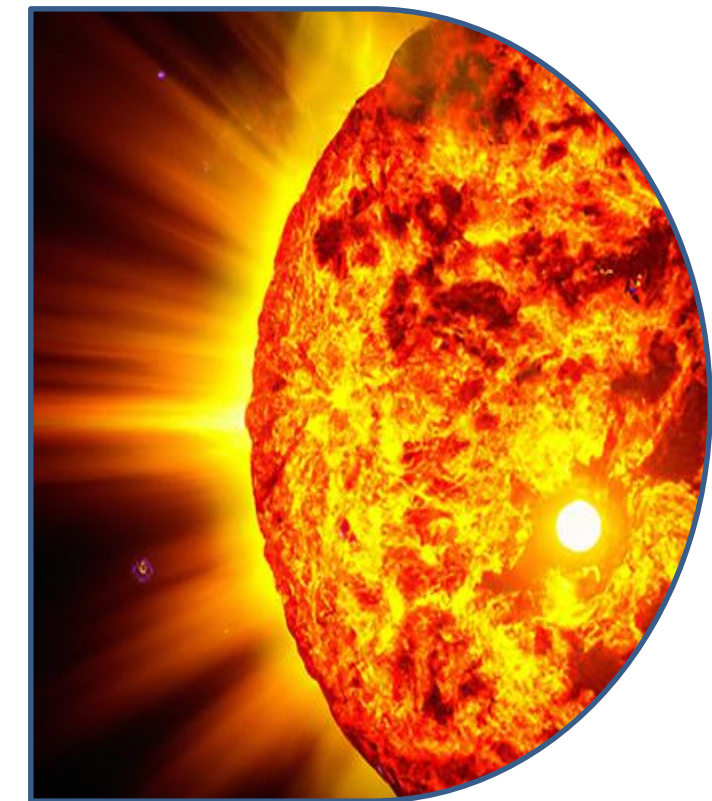
Solar Lighting :

To utilize the renewable source of energy, NGIL has installed a solar power generation unit with a capacity of 20 KW at its Corporate Office for lighting purposes. Solar lights have been installed in At Ossein Division , Gelatin Division as well Reva division in phased manner.



Solar Drying system :

NGIL has been using solar energy effectively through Polyhouse drying in its Gelatin Division for drying sludge. It saved **918 Kwh/Day** from one Polyhouse of power consumption. Horizontally deploying to Ossein & Reva divisions.



Presently at Gelatin Division we are having two polyhouse drying system.



7. Conserve Energy

Biogas production

Introduced Anaerobic biodigesters in Effluent Treatment Plants (ETPs), having several significant impacts:

- Biogas Production: Reduced fossil fuel usage
- Waste Reduction: organic waste minimized
- Nutrient Recovery: improving soil health and reducing the need for chemical fertilizers
- Environmental Benefits: By capturing methane anaerobic biodigesters help mitigate climate change
- Economic Benefits: Generate additional revenue



Environment Management and Compliance

We priorities environmental compliance by strengthening systems and procedures based on our audits and through education and other HR development programmes. We are committed to achieving our targets and compliance requirements. During the reporting year, there were no instances of monetary fines or non-monetary sanctions, or cases brought against the Company through dispute resolution mechanisms about environmental non-compliance. We not only believe in forming policies and committees but also in effectively implementing actions and achieving targets. Both the plants in Kerala have conducted environmental risk assessments and have environmental management systems and practices. We have ISO 14001 certification for our Gelatin division as well as Ossein Division



AFFORDABLE AND
CLEAN ENERGY



Rewards & Recognitions

NGIL has received various recognitions for its performance in the energy-saving initiative. It includes SEEM GOLD Award recognition from the National Energy Management Committee for Gelatin Division as well as Ossein Division for last 3 years





8.Keeping Air Clean

Our management approach focuses on reducing emissions and pollution, maximizing renewable energy use, and optimizing energy and water usage to minimize carbon footprints and wastage.

SO2, CO, and Particulate Matter Reduction:

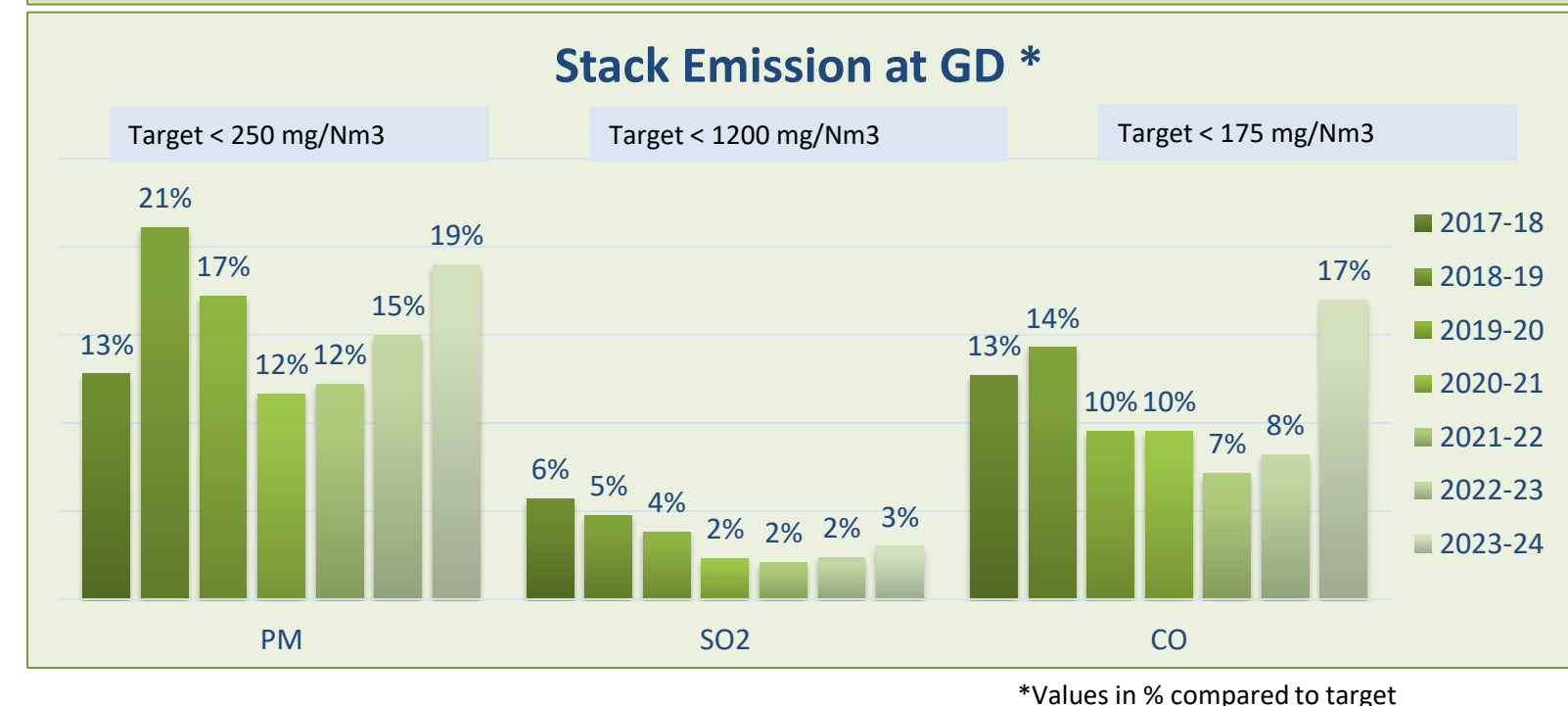
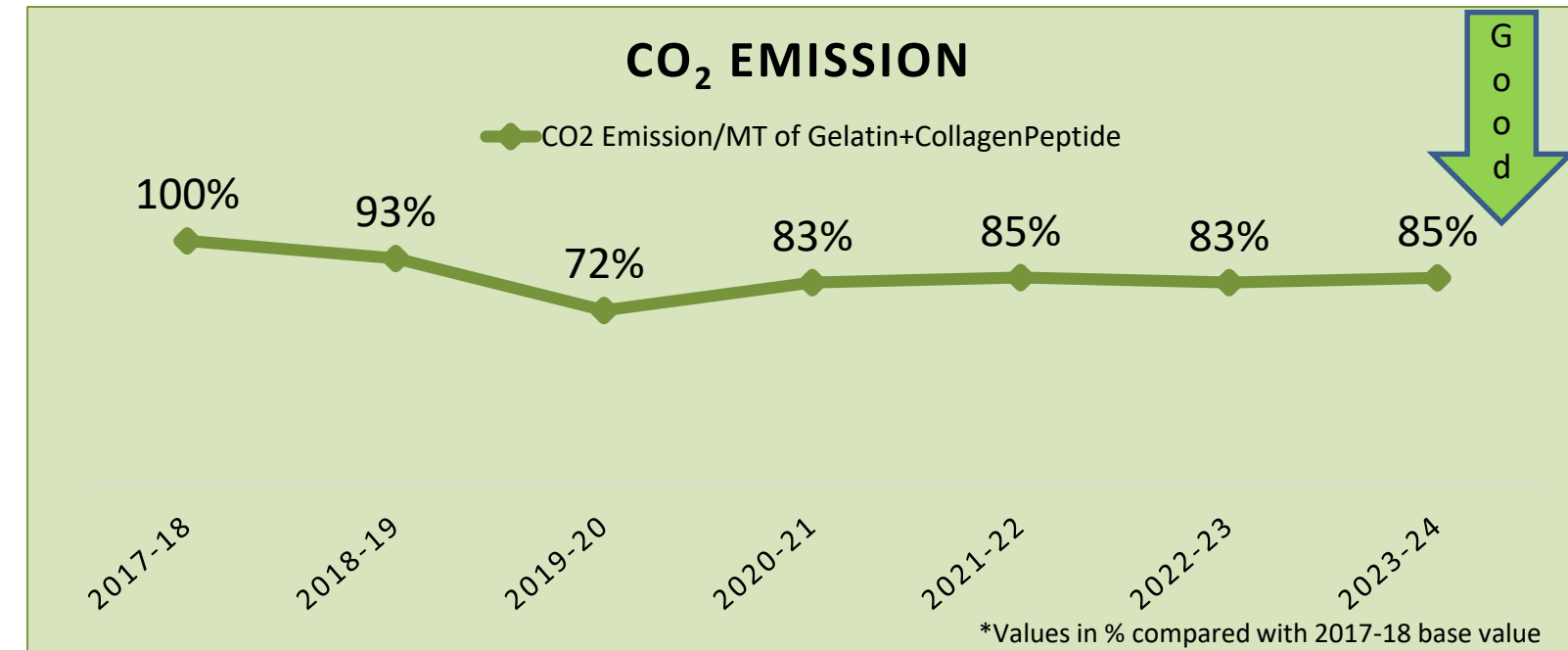
We have measures to monitor and manage SO2, CO, and particulate matter (PM) within permissible limits. Key facilities include cyclone separators, bag filter dust collectors, and reverse pulse bag houses. Ambient air monitoring ensures compliance with National Ambient Air Quality Standards. Significant reductions in boiler stack emissions have been achieved through efficiency improvements.

CO2 Emission Reduction:

Since 2017-18, we have achieved over a 15% reduction in CO2 emissions through various initiatives:

- ❑ Replacing furnace oil with biogas generated from waste.
- ❑ Enhancing boiler efficiency through technological upgrades, reducing fuel consumption.
- ❑ Converting furnace oil to rubber wood.
- ❑ Optimizing transportation for raw materials and finished products.

13 CLIMATE ACTION



9. Conserve Water



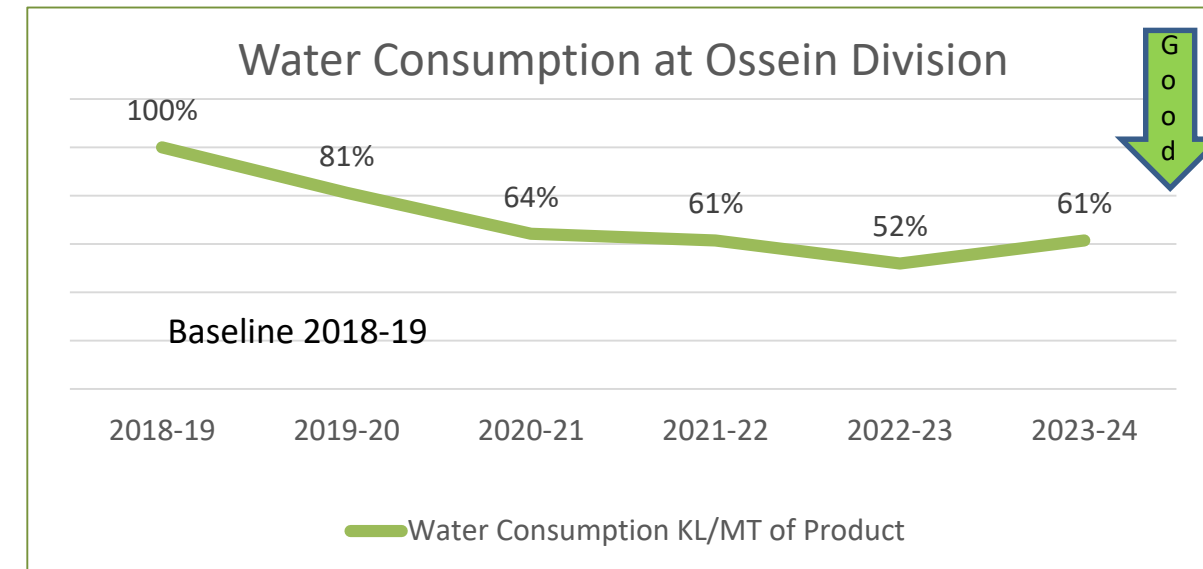
It's clear that NGIL recognizes the significant importance of water conservation and minimizing consumption, particularly in the gelatin industry, where water usage holds great magnitude. Our Ossein plant at Kathikkudam, Kerala, relies on the Chalakudy River for water supply, while the Gelatin plant at Kakkanad, Kerala, draws water from the Kadambrayar River.

To address this, NGIL has implemented various initiatives focused on holistic water management. Rainwater harvesting modules have been installed within the Ossein plant, positively impacting the surrounding groundwater table. Our approach encompasses a comprehensive strategy covering water reuse, recycling, conservation, and reducing fresh water intake.

Efforts to optimize raw water consumption are ongoing, with a keen focus on substituting fresh water with recycled water wherever feasible and appropriate. Recognizing the scarcity of water resources, NGIL has incorporated water flow meters across various processes to monitor consumption meticulously. This enables us to identify opportunities for reducing water usage by enhancing individual processes. Additionally, we diligently track specific water consumption on a year-on-year basis to gauge our progress and drive continuous improvements.

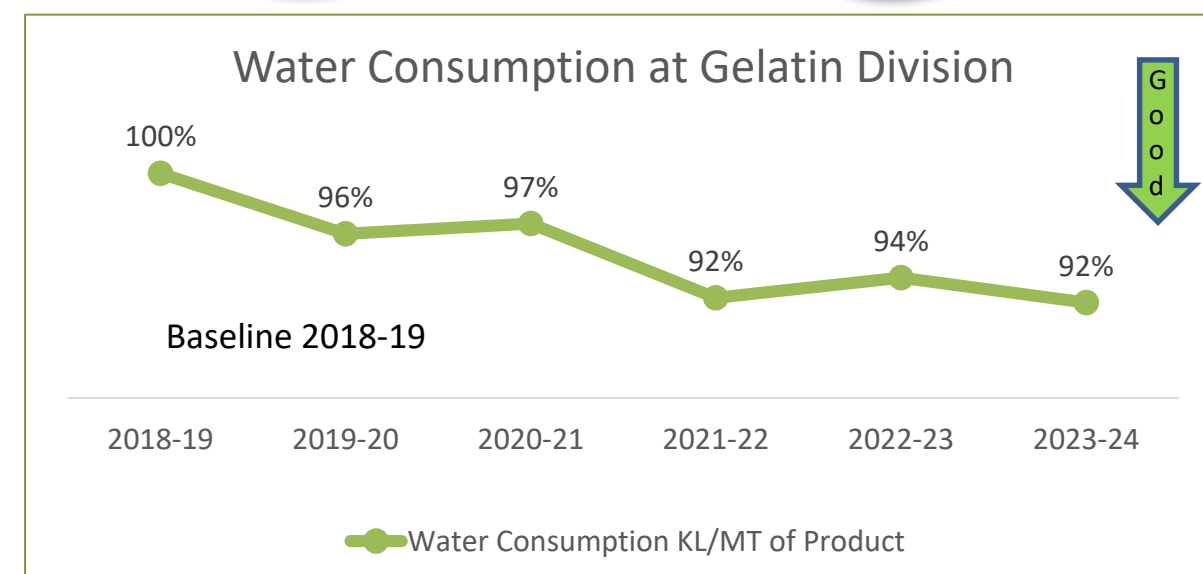
Key principles guiding our responsible water consumption practices include consistently ensuring leak-free systems for water withdrawal from the source to our plants, exploring continuous possibilities for water reuse through new technologies and process change initiatives, and implementing major initiatives for water reduction:

- Rainwater Harvesting pond of 35,000 M3 is available at the Ossein Division.
- Reuse of process water after adequate purification
- Usage of discharge water from the Vacuum pump to make up the Cooling Tower water level.
- Equipment upgrades for minimize the loss



10080 M³
Rain water used during 2023-24

159047 M³
Reuse water used during 2023-24



*Values in % compared with 2018-19 base value





10. Effluent & Waste Management

Effluent Management:

We prioritize the responsible discharge of effluents from our plants by adhering to industry-best practices. We ensure that water quality parameters like pH, Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), and Total Suspended Solids (TSS) remain within permissible limits. Our discharge procedures involve a comprehensive treatment process encompassing in-house primary, secondary, and tertiary treatments before effluent release into the river. Importantly, no wastewater is discharged outside our premises. All effluents from our plants strictly comply with the norms set by the Pollution Control Board (PCB), ensuring they have no adverse effects on surrounding land or water bodies.

Solid Waste Reduction:

NGIL recognizes the significance of reducing the quantity of disposed sludge as a critical long-term sustainability project. To address this, several ongoing initiatives have been implemented. These include utilizing higher-quality raw materials, enhancing pretreatment systems, installing biogas generation systems, and implementing sludge drying technologies, among others. These efforts aim to minimize the amount of solid waste generated and disposed of by our operations.

Biogas Plant:

Our Ossein division boasts two Continuous Anaerobic Digesters specifically installed to produce biogas from the effluent stream. This Bio-digester significantly aids in reducing effluent COD levels. Approximately 550 metric tons of effluent COD are reduced per cubic meter of biogas generated from the process waste. Furthermore, NGIL installed a new Bio-digester in the Gelatin Division. This initiative further underscores our commitment to sustainable practices and efficient waste management within our operations.

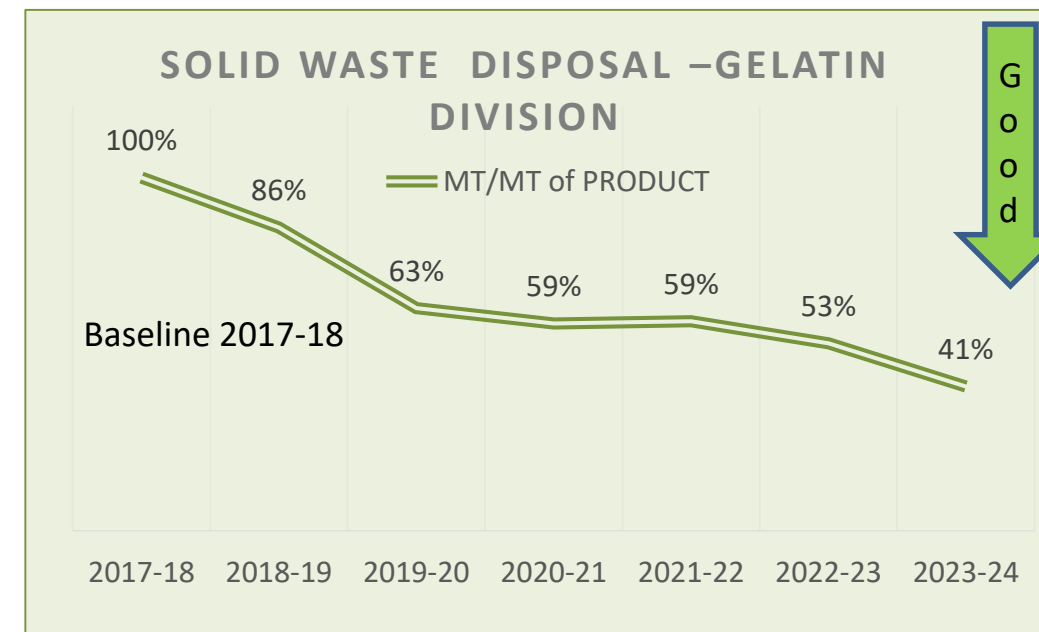
Significant Initiatives to reduce solid waste disposal

- Biodigester to generate biogas from waste
- Polyhouse drying of sludge for reducing moisture content using solar energy
- Raw material pretreatment to remove impurities before entering the manufacturing process
- Converting solid waste to fuel
- Conversion of solid waste to fertilizer and other value added products





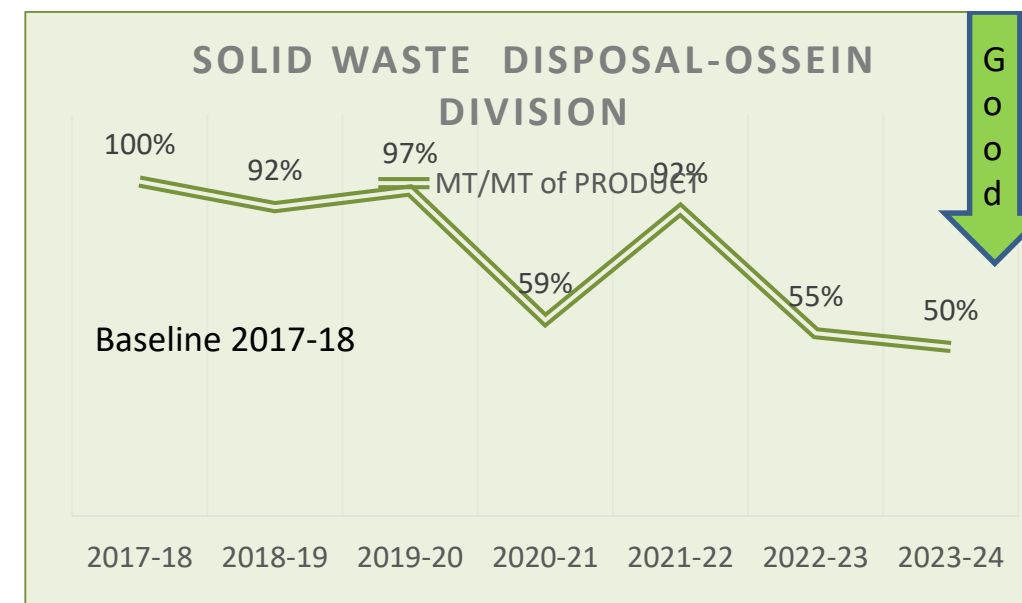
10. Effluent & Waste Management



59%
reduction in
past 6 years
in Gelatin
Division



4687 GJ
Energy from biogas-GD



50%
reduction in
past 6 years
in Ossein
Division



19730 GJ
Energy from biogas- OD





11. Ensuring safer workplace



At NGIL, safety is more than a priority—it is a core value deeply embedded in our culture, driven by the unwavering commitment of our top management. Their leadership sets the foundation for a secure work environment through strategic decisions, proactive actions, and exemplary behaviors. By establishing and upholding rigorous safety benchmarks, they ensure that robust systems, policies, and resources are in place across the organization.

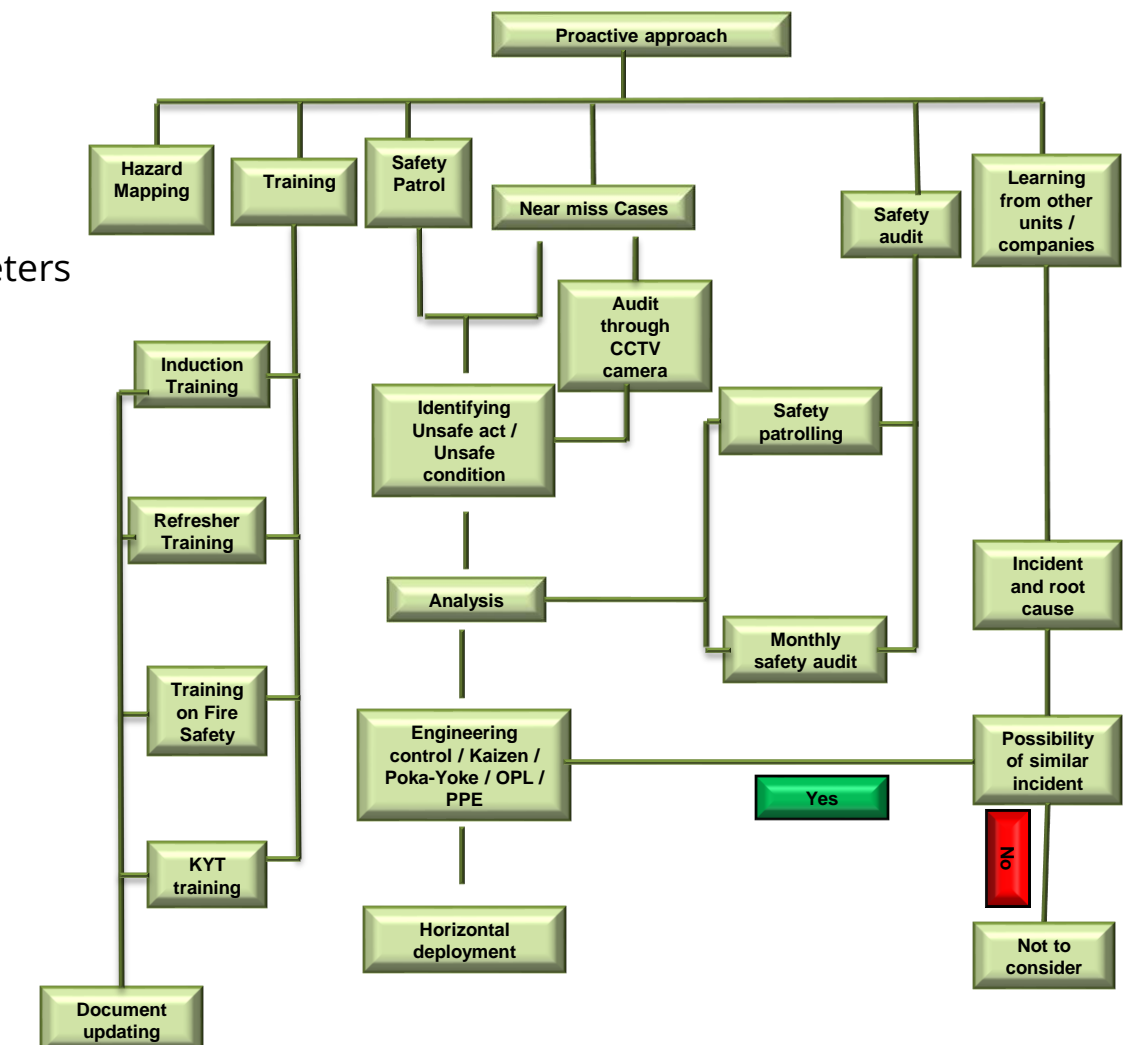
Our health and safety management approach is designed to meet and exceed the expectations of all stakeholders. Our primary objective is not only to comply with all applicable health and safety regulations but also to foster a culture of continuous improvement and safety excellence. We are dedicated to implementing comprehensive occupational health and safety policies and procedures, striving toward an accident-free workplace.

The Occupational Health and Safety management systems at our sites are aligned with internationally recognized standards such as ISO 45001. This commitment reinforces our dedication to maintaining a safe and healthy work environment while continuously enhancing our safety practices.



We regularly conduct;

1. Hazard Identification and Risk Analysis (HIRA)
2. Pre- start Up Safety Reviews
3. Review of Operational Procedures
5. Training in handling chemicals and process parameters
6. Investigation of Incidences
7. Work Permit Compliance Audits

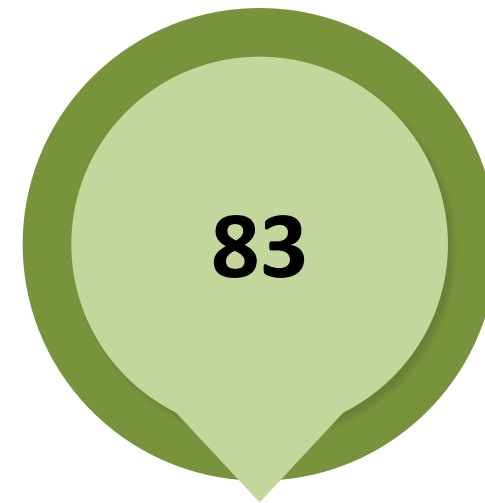




11. Ensuring safer workplace



Coverage of Employees
in Annual medical
checkup



Safety Score
FY 2023-24



Trainings
To employees 2023-24



Lost Time Injury
Frequency Rate
FY 2023-24





11. Ensuring safer workplace



Safety Day - Celebration



Safety Day - Pledge



Safety Equipment stalls



Safety Trainings



Suraksha Rath – First aid training



Mock Drill – Electrical emergency
Rescue



Mock Drill – Chemical spillage
rescue



Mock Drill – Confined space
rescue



12. Caring the Environment

The **Garden Factory** concept, introduced at the Ossein Division five years ago, was designed to redefine society's perception of manufacturing. This visionary initiative has successfully transformed the Ossein Division into what visitors now proudly recognize as a **Garden Factory**, a living testament to NGIL's deep-rooted commitment to environmental stewardship. The lush, green surroundings and sustainable practices reflect NGIL's pledge to harmonize industry with nature.

NGIL has consistently championed positive environmental actions across multiple dimensions, including air and water preservation, resource conservation, efficient waste management, responsible chemical handling, biodiversity protection, and soil conservation. These efforts collectively reinforce NGIL's dedication to sustainability.

As part of this initiative, NGIL welcomes community members to visit the factory—often described as "**A Factory Inside a Garden.**" These visits provide valuable insights into the company's green initiatives, fostering awareness and appreciation for its eco-friendly operations. By maintaining an open-door policy, NGIL promotes transparency and strengthens its engagement with the local community, furthering its mission to integrate sustainable practices into industrial operations.

LIFE
ON LAND



2300+
Sapling
planted FY
2023-24



49%
of total area
Green Belt
developed





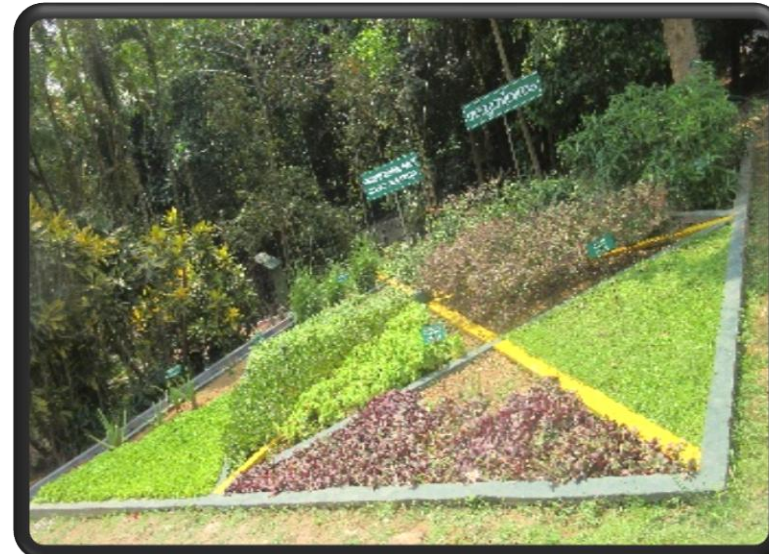
12. Caring the Environment

LIFE
ON LAND



Nakshatra Vanam

The star forest has been set up inside the campus, consisting of 27 trees that are related to 27 stars in Indian astrology. The diversity of the plants involved, their medicinal value and their association with the nakshatras make it an effective idea to protect trees and the environment.



Garden of medicinal herbs

The medicinal herb garden cultivated inside the factory compound nurtures different varieties of herbs that have relevant medicinal uses. A few of the species are Panikoorka (*Plectranthus amboinicus*), Thulasi (*Ocimum tenuiflorum*), Kattar vazha (*Aloe vera*), etc.



Pavizhamalli Flowerbed

Around 6000 saplings of the pavizhamalli flowering plants have been planted as a part of the greenery development project. In addition to bearing very fragrant flowers, the plant has many medicinal applications too.



12.Caring the Environment

LIFE
ON LAND

Fruit Garden-The factory environment also nurtures a fruit garden containing varieties of fruit plants including, trees of jackfruit, mango, guava, rambutan, mangosteen, chambakka, sapporta, gooseberry, loobikka, and others



Aquaponics system-NGIL has ventured into the Aquaponics system, which is a combination of aquaculture, which is growing fish and other aquatic animals, and hydroponics which is growing plants without soil.



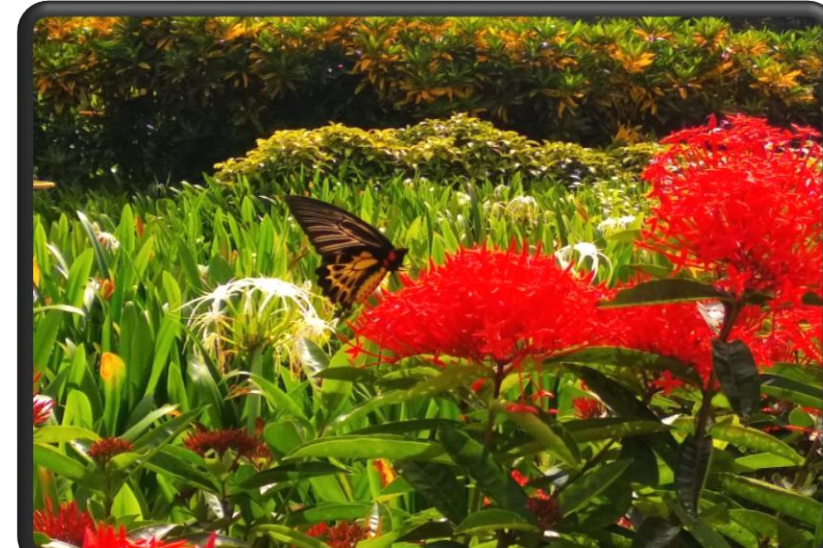
Rain shelter farming-The company has started Rain shelter farming, where different varieties of vegetables like snake guard, bitter guard, cucumber, ladies finger, long beans etc. are grown extensively



Miyawaki Forest-Approximately 30 times denser, as compared to conventional plantation techniques. Up to 30 times or more carbon-dioxide absorption compared to conventional forest.



Rain water harvesting pond
Rain water harvesting pond of 35000M³



Butterfly Park-Developed butterfly park in Ossein Division
The presence of large number of butterflies endorses the excellent quality of air maintained in and around factor premises



Thank You...

