14 LIFE BELOW WATER

masters' union university

MASTERS' UNION | ANNUAL IMPACT REPORT 2025

life *below* water

Conserve and sustainably use the oceans, seas and marine resources.



SDG 14 IMPACT REPORT

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01 Introduction

Sustainable Development Goal 14 calls for the conservation and sustainable use of oceans, seas and marine resources. Although its focus is marine, many of the pressures it addresses begin on land. Untreated wastewater, industrial discharge, plastic and solid waste, runoff, sourcing choices and infrastructure decisions can all affect rivers and, ultimately, coastal and marine ecosystems.

We approach SDG 14 through our role as a business and management institution. Our contribution is to prepare future leaders to treat water quality, waste, sourcing and environmental safeguards as material considerations in commercial decisions, while our own campus choices, teaching, research and engagement reinforce responsible practice.

Our corporate-embedded campus model is intentional. We locate our leased campuses within active business districts so that learning, industry engagement and shared resources stay close to the corporate world. Within this model, we select premises whose property-level systems support water efficiency, wastewater treatment, reuse and responsible waste management.

These systems are managed by the property owners. Our responsibility is to choose such environments, use the available systems responsibly and align the practices we control with them.

This report presents our contribution through four connected pillars: Research, Stewardship, Outreach and Teaching. It separates activity we control from landlord-managed infrastructure and explains what each body of evidence means for SDG 14.

PILLAR	INTERPRETATION
Research	Dr Ajith Babu's Noyyal River study connects industrial operations with freshwater pollution and the need for effective effluent control.
Stewardship	Property-level water treatment, reuse and waste systems reduce the footprint of the premises we occupy. They are managed by the landlord.
Outreach	Pro bono sustainability teaching at four public colleges and participation in ASSOCHAM's sustainability and water councils extend our reach.
Teaching	Immersions, coursework and a maritime case connect management decisions with aquatic pressures and transition.

02 Research

Our faculty research portfolio includes Dr Ajith Babu's study of industrial discharge and river-water quality. The work connects business activity, pollution control and the health of freshwater systems.

2.1 Research on Industry and River Health

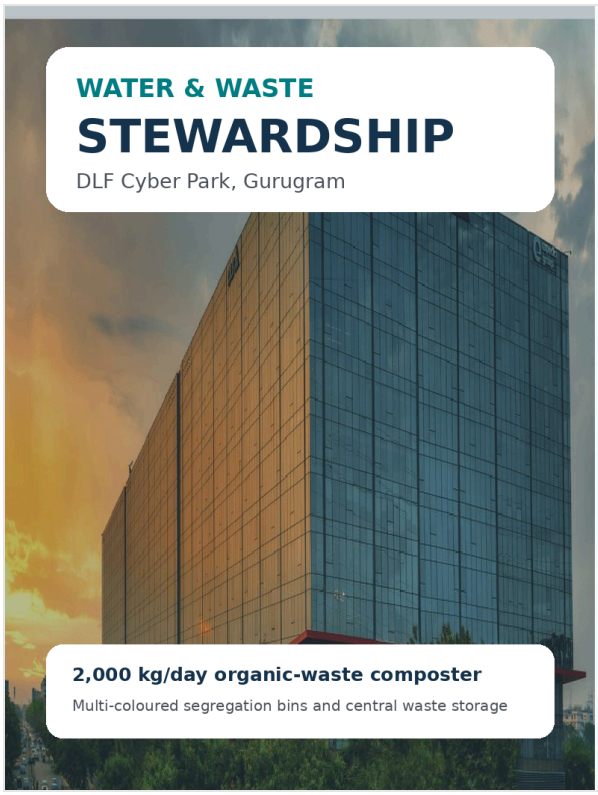
Dr Ajith Babu, P. Chinnaiyan and S. Abhinaya's 2017 study, "Effect of Dyeing and Textile Industry on Noyyal River Water Quality, Tiruppur: A Case Study", examines the effects of textile and dyeing operations on the Noyyal River. It was published in the International Journal of Civil Engineering and Technology and documents how industrial effluent can alter river-water quality and create environmental pressures beyond the factory boundary.

The study matters for Life Below Water because pollution generated on land moves through river systems and can affect downstream ecosystems. For managers, it shows why industrial growth needs effective effluent treatment, regulatory compliance and environmental monitoring.

03 Stewardship

We operate from leased premises at DLF Cyber Park and CDS Corporate Tower, placing our academic community within Gurugram's corporate ecosystem while sharing the infrastructure of established commercial developments. The certifications and systems described below belong to the properties and are managed by their owners.

Our stewardship lies in choosing comparatively resource-efficient premises, using the available systems responsibly and aligning the practices we control with the buildings' environmental controls.



Verified infrastructure evidence

Figures reproduced from the attached GRIHA and LEED records

4 STAR
GRIHA provisional rating
Awarded 2022

82.65%
reduction in building water demand
Against the GRIHA base case

1,300 kLD
MBBR sewage-treatment plant
Installed on site

10 / 10
LEED Water Efficiency points
DLF Cyber Park, Platinum

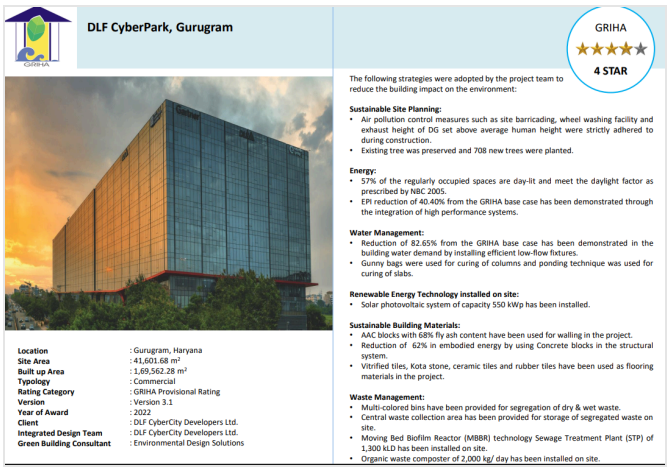
Source: DLF Cyber Park GRIHA case-study card and LEED BD+C v2009 scorecard

Property-level water and waste infrastructure at DLF Cyber Park

3.1 Water-Efficient Premises

DLF Cyber Park holds a GRIHA 4-Star provisional rating awarded in 2022. The case-study card records an 82.65% reduction in building water demand against the GRIHA base case through low-flow fixtures.

Its January 2022 LEED O+M scorecard awards 13 of 15 Water Efficiency points. Students and staff therefore work in a development designed to reduce water demand and improve wastewater performance.



DLF CyberPark, Gurugram

GRIHA ★★★★★ 4 STAR

The following strategies were adopted by the project team to reduce the building impact on the environment:

Sustainable Site Planning:
- Air pollution control measures such as site barricading, wheel washing facility and exhaust height of DG set above average human height were strictly adhered to during construction.
- Existing tree was preserved and 708 new trees were planted.

Energy:
- 57% of the regularly occupied spaces are day-lit and meet the daylight factor as prescribed by NBC 2005.
- EPI reduction of 40.40% from the GRIHA base case has been demonstrated through the integration of high performance systems.

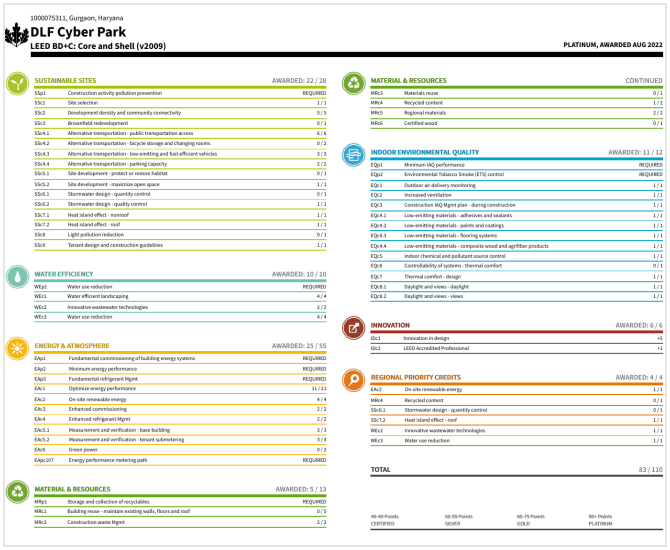
Water Management:
- Reduction of 82.65% from the GRIHA base case has been demonstrated in the building water demand by installing efficient low-flow fixtures.
- Gunny bags were used for curing of columns and ponding technique was used for curing of slabs.

Renewable Energy Technology installed on site:
- Solar photovoltaic system of capacity 550 kWp has been installed.

Sustainable Building Materials:
- AAC blocks with 68% fly ash content have been used for walling in the project.
- Reduction of 62% in embodied energy by using Concrete blocks in the structural system.
- Vitrified tiles, Kota stone, ceramic tiles and rubber tiles have been used as flooring materials in the project.

Waste Management:
- Multi-colored bins have been provided for segregation of dry & wet waste.
- Central waste collection area has been provided for storage of segregated waste on site.
- Moving Bed Biofilm Reactor (MBBR) technology Sewage Treatment Plant (STP) of 1,300 kLD has been installed on site.
- Organic waste composter of 2,000 kg/ day has been installed on site.

Location	: Gurugram, Haryana
Site Area	: 41,601.68 m²
Built up Area	: 1,69,562.28 m²
Typology	: Commercial
Rating Category	: GRIHA Provisional Rating
Version	: Version 3.1
Year of Award	: 2022
Client	: DLF CyberCity Developers Ltd.
Integrated Design Team	: DLF CyberCity Developers Ltd.
Green Building Consultant	: Environmental Design Solutions



10000753111, Gurgaon, Haryana

DLF Cyber Park

LEED BD+C: Core and Shell (v2009)

PLATINUM, AWARDED AUG 2022

SUSTAINABLE SITES AWARDED: 22 / 28

SSp1	Construction activity pollution prevention	REQUIRED
SSc1	Site selection	1 / 1
SSc2	Development density and community connectivity	5 / 5
SSc3	Brownfield redevelopment	0 / 1
SSc4.1	Alternative transportation - public transportation access	6 / 6
SSc4.2	Alternative transportation - bicycle storage and changing rooms	0 / 2
SSc4.3	Alternative transportation - low-emitting and fuel-efficient vehicles	3 / 3
SSc4.4	Alternative transportation - parking capacity	2 / 2
SSc5.1	Site development - protect or restore habitat	0 / 1
SSc5.2	Site development - maximize open space	1 / 1
SSc6.1	Stormwater design - quantity control	0 / 1
SSc6.2	Stormwater design - quality control	1 / 1
SSc7.1	Heat island effect - nonroof	1 / 1
SSc7.2	Heat island effect - roof	1 / 1
SSc8	Light pollution reduction	0 / 1
SSc9	Tenant design and construction guidelines	1 / 1

WATER EFFICIENCY AWARDED: 10 / 10

WEp1	Water use reduction	REQUIRED
WEc1	Water efficient landscaping	4 / 4
WEc2	Innovative wastewater technologies	2 / 2
WEc3	Water use reduction	4 / 4

ENERGY & ATMOSPHERE AWARDED: 25 / 55

EAp1	Fundamental commissioning of building energy systems	REQUIRED
EAp2	Minimum energy performance	REQUIRED
EAp3	Fundamental refrigerant Mgmt	REQUIRED
EAc1	Optimize energy performance	11 / 33
EAc2	On-site renewable energy	4 / 4
EAc3	Enhanced commissioning	2 / 2
EAc4	Enhanced refrigerant Mgmt	2 / 2
EAc5.1	Measurement and verification - base building	3 / 3
EAc5.2	Measurement and verification - tenant submetering	3 / 3
EAc6	Green power	0 / 2
EApc107	Energy performance metering path	REQUIRED

MATERIAL & RESOURCES AWARDED: 5 / 13

MRp1	Storage and collection of recyclables	REQUIRED
MRc1	Building reuse - maintain existing walls, floors and roof	0 / 5
MRc2	Construction waste Mgmt	2 / 2

MATERIAL & RESOURCES CONTINUED

MRc3	Materials reuse	0 / 1
MRc4	Recycled content	1 / 2
MRc5	Regional materials	2 / 2
MRc6	Certified wood	0 / 1

INDOOR ENVIRONMENTAL QUALITY AWARDED: 11 / 12

EQp1	Minimum IAQ performance	REQUIRED
EQp2	Environmental Tobacco Smoke (ETS) control	REQUIRED
EQc1	Outdoor air delivery monitoring	1 / 1
EQc2	Increased ventilation	1 / 1
EQc3	Construction IAQ Mgmt plan - during construction	1 / 1
EQc4.1	Low-emitting materials - adhesives and sealants	1 / 1
EQc4.2	Low-emitting materials - paints and coatings	1 / 1
EQc4.3	Low-emitting materials - flooring systems	1 / 1
EQc4.4	Low-emitting materials - composite wood and agrifiber products	1 / 1
EQc5	Indoor chemical and pollutant source control	1 / 1
EQc6	Controllability of systems - thermal comfort	0 / 1
EQc7	Thermal comfort - design	1 / 1
EQc8.1	Daylight and views - daylight	1 / 1
EQc8.2	Daylight and views - views	1 / 1

INNOVATION AWARDED: 6 / 6

IDc1	Innovation in design	+5
IDc2	LEED Accredited Professional	+1

REGIONAL PRIORITY CREDITS AWARDED: 4 / 4

EAc2	On-site renewable energy	1 / 1
MRc4	Recycled content	0 / 1
SSc6.1	Stormwater design - quantity control	0 / 1
SSc7.2	Heat island effect - roof	1 / 1
WEc2	Innovative wastewater technologies	1 / 1
WEc3	Water use reduction	1 / 1

TOTAL 83 / 110

40-49 Points	50-59 Points	60-79 Points	80+ Points
CERTIFIED	SILVER	GOLD	PLATINUM

DLF Cyber Park LEED O+M scorecard

3.2 CDS Corporate Tower

Our institutional self-assessment report records that we also operate learning and administrative spaces in CDS Corporate Tower. The property's LEED Gold scorecard records 8 of 11 Water Efficiency points, including full credit for indoor and outdoor water-use reduction, water metering and rainwater management.

As with DLF Cyber Park, the result belongs to the certified property and its developer. As an occupier, we benefit from these systems and work within them.

1000129302, GURUGRAM, Haryana

CDS Corporate Tower, Udyog Vihar

LEED BD+C: Core and Shell (v4.1) — GOLD, AWARDED JUL 2024

SUSTAINABLE SITES — AWARDED: 6 / 13

Prereq	Construction Activity Pollution Prevention	0 / 0
Credit	Site Assessment	0 / 1
Credit	Protect or Restore Habitat	0 / 2
Credit	Open Space	1 / 1
Credit	Rainwater Mgmt	3 / 3
Credit	Heat Island Reduction	1 / 2
Credit	Light Pollution Reduction	0 / 1
Credit	Tenant Design and Construction Guidelines	1 / 1
Prereq	Solar Access to Green Space	REQUIRED
Prereq	Offsite Financial Support for Habitat Protection	REQUIRED

WATER EFFICIENCY — AWARDED: 8 / 11

Prereq	Outdoor Water Use Reduction	0 / 0
Prereq	Indoor Water Use Reduction	0 / 0
Prereq	Building-Level Water Metering	0 / 0
Credit	Optimize Process Water Use	0 / 3
Credit	Water Metering	1 / 1
Credit	Outdoor Water Use Reduction	3 / 3
Credit	Indoor Water Use Reduction	4 / 4

ENERGY & ATMOSPHERE — AWARDED: 18 / 33

Prereq	Fundamental Commissioning and Verification	0 / 0
Prereq	Minimum Energy Performance	0 / 0
Prereq	Building-Level Energy Metering	0 / 0
Prereq	Fundamental Refrigerant Mgmt	0 / 0
Credit	Optimize Energy Performance	10 / 18
Credit	Enhanced Commissioning	6 / 6
Credit	Advanced Energy Metering	1 / 1
Credit	Renewable Energy	0 / 5
Credit	Enhanced Refrigerant Mgmt	1 / 1
Credit	Grid Harmonization	0 / 2

MATERIAL & RESOURCES — AWARDED: 2 / 19

Prereq	Storage and Collection of Recyclables	0 / 0
Prereq	Construction and Demolition Waste Mgmt Planning	0 / 0
Credit	Building Life-Cycle Impact Reduction	0 / 5
Credit	Environmental Product Declarations	0 / 2
Credit	Sourcing of Raw Materials	0 / 2
Credit	Material Ingredients	0 / 2
Credit	Construction and Demolition Waste Mgmt	2 / 2

INDOOR ENVIRONMENTAL QUALITY — AWARDED: 4 / 10

Prereq	Minimum IAQ Performance	0 / 0
Prereq	Environmental Tobacco Smoke Control	0 / 0
Credit	Enhanced IAQ Strategies	1 / 2
Credit	Low-Emitting Materials	0 / 3
Credit	Construction IAQ Mgmt Plan	1 / 1
Credit	Daylight	2 / 3
Credit	Quality Views	0 / 1
Prereq	ETS Control for Projects in Japan and Airport Projects with Security R...	REQUIRED

INNOVATION — AWARDED: 4 / 6

Credit	Innovation	3 / 5
Credit	LEED Accredited Professional	1 / 1

REGIONAL PRIORITY CREDITS — AWARDED: 4 / 4

Credit	Optimize Energy Performance	0 / 1
Credit	Rainwater Mgmt	1 / 1
Credit	Heat Island Reduction	1 / 1
Credit	Outdoor Water Use Reduction	1 / 1
Credit	Indoor Water Use Reduction	1 / 1

LOCATION & TRANSPORTATION — AWARDED: 16 / 20

Credit	LEED for Neighborhood Development Location	0 / 20
Credit	Sensitive Land Protection	2 / 2
Credit	High Priority Site and Equitable Development	0 / 3
Credit	Surrounding Density and Diverse Uses	6 / 6
Credit	Access to Quality Transit	6 / 6
Credit	Bicycle Facilities	0 / 1
Credit	Reduced Parking Footprint	1 / 1
Credit	Electric Vehicles	1 / 1

INTEGRATIVE PROCESS CREDITS — AWARDED: 0 / 1

Credit	Integrative Process	0 / 1

TOTAL 62 / 110

40-49 Points	50-59 Points	60-79 Points	80+ Points
CERTIFIED	SILVER	GOLD	PLATINUM

CDS Corporate Tower LEED Gold scorecard

3.3 Wastewater and Waste Systems

DLF Cyber Park's environmental-clearance compliance report for 1 April to 30 September 2024 records a total water requirement of 1,872.6 kLD, a fresh-water requirement of 779.7 kLD, wastewater generation of 1,150.4 kLD and an on-site sewage-treatment capacity of 1,300 kLD. It also records 1,092.9 kLD of reusable treated water and six rainwater-harvesting pits with twin bore wells.

The report states that wastewater is treated to the tertiary level and reused for landscaping, cooling towers and flushing, resulting in zero discharge to the municipal drain. Treated-water quality is monitored against applicable standards.

The property generates 4,531 kilograms of solid waste per day. Biodegradable waste is composted on site, while segregated dry, plastic and domestic hazardous waste is sent to authorised recyclers or vendors. DLF manages these systems at the property level.

Within our leased premises, we use the available segregation systems. Colour-coded bins separate wet and dry recyclable waste, and campus practices discourage unnecessary single-use plastic.





Waste-segregation systems within our occupied premises

3.4 Institutional Role within Leased Premises

We do not own or operate the underlying water and waste infrastructure at DLF Cyber Park or CDS Corporate Tower. Our stewardship lies in an intentional leasing strategy that places us at the centre of the corporate world while selecting buildings with documented water-efficiency and waste-management systems.

Within those premises, we use shared resources, follow the available segregation arrangements and align our own campus practices with the environmental controls maintained by the property managers.

04 Outreach

We extend sustainability learning through public-college programmes, industry councils and national forums.

4.1 Sustainability Education Beyond Campus

Our faculty deliver pro bono sustainability education through programmes with Miranda House, Hansraj College, Sri Guru Gobind Singh College of Commerce and Shaheed Bhagat Singh College. Across five engagements at the four colleges, they delivered 66 hours of teaching.

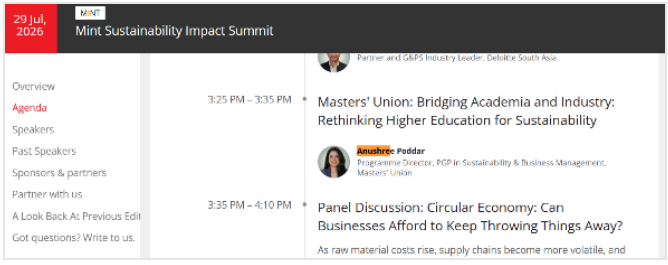
Sessions covered circular economy, resource conservation, sustainable business, ESG and environmental-impact measurement, helping learners connect business activity with pressure on water and natural systems. The programmes widen access to sustainability knowledge beyond our enrolled students.

4.2 Industry and Policy Engagement

We take part in discussions through ASSOCHAM's National Council on Sustainability and Environment and National Council on Water. This connects our academic work with dialogue on clean water solutions, technology, water-use efficiency and policy across government, industry and academia.

4.3 Mint Sustainability Impact Summit 2026

On 29 July 2026, we sponsored and took part in the fifth Mint Sustainability Impact Summit in Mumbai. Dr Anushree Poddar, Programme Director of the PGP in Sustainability and Business Management, joined a session on bridging academia and industry for sustainability.





Mint Sustainability Impact Summit 2026 agenda and event creative

4.4 Related Environmental Activity

Our alumni, students and staff have taken part in plantation drives in Gurugram and the NCR region. These activities support terrestrial ecology and may help control runoff.



Community plantation activities involving Masters' Union participants

05 Teaching

Teaching is our strongest pillar for SDG 14, because students meet water, waste and maritime questions through business education. This report focuses on content with a clear connection to aquatic pressures or marine-sector transition.

5.1 Applied Maritime Case Learning

The Navalt case brings maritime transition into management education. It helps students examine how supply-chain choices, technology scaling and operating models can support lower-emission mobility on water.

We do not conduct marine science. We equip business learners to evaluate transition pathways in an aquatic industry. Prof. Shiril Saju, who wrote the case, also published Solar boats: opportunities and challenges towards achieving sustainable water transport in Manufacturing Today on 8 June 2024.

5.2 PGP Immersions: Applied and Immersive Learning

5.2.1 Adani Ports, Mundra, Gujarat

The Adani Ports immersion places students in the operating context of port-led logistics, coastal infrastructure and maritime trade, which interact directly with coastal environments. Students consider how shipping, logistics infrastructure and environmental management fit together where industrial activity meets a coastal ecosystem.

5.2.2 Swades Foundation, Rural Maharashtra

The Swades Foundation immersion exposed students to an integrated rural-development model spanning water, sanitation, health, agriculture, livelihoods and governance. Students study decentralised water solutions and see why water reliability, sanitation and community institutions must be managed together for lasting results.



PGP Immersion participants at Swades Foundation

This is mainly freshwater and sanitation learning. It helps students understand how land-based water management can affect downstream aquatic systems.

5.2.3 TIEEDI, Darjeeling, West Bengal

The TIEEDI immersion examined circular operations, composting, bio-enzymes, paper upcycling, permaculture, regenerative forest management and traditional ecological knowledge. Students saw how closed-loop resource systems connect water, soil, waste and biodiversity, which gives supporting learning on pollution prevention, runoff and watershed protection.



PGP Immersion participants at TIEEDI

5.3 PG Programme in Sustainability and Business Management

The 16-month PG Programme in Sustainability and Business Management covers environmental policy, circular economy, sustainable supply chains, responsible sourcing, climate risk, ESG and natural-resource management.

Water is treated as both an environmental resource and a business dependency, because sourcing, production, waste and discharge decisions affect water quality and availability.

5.3.1 Curriculum Areas with Direct Relevance

Environmental Systems provides the clearest alignment through ecosystems, natural capital, biodiversity, water cycles, pollution pathways, monitoring and restoration. Waste Management addresses segregation, treatment, plastics and zero-waste planning.

Circular Economy and Circular Technologies examine material flows, recovery and traceability, while Sustainable Supply Chains addresses responsible sourcing and supplier performance. Applied cases and ClimateTech learning help students examine how organisations can monitor water use, manage pollution pathways and design more resource-efficient operations.

Together, these courses help students trace how commercial decisions become environmental pressures and where organisations can intervene.

5.4 Venture Learning

The Venture Lab allows students to build climate-oriented businesses. Mellovia, a Masters' Union venture that makes biodegradable rice-husk kitchenware as an alternative to plastic products, replaces plastic at source and so can reduce the persistent plastic that leaks into waterways.

06 Institutional Direction

We already teach how business decisions reach rivers and coasts, work from premises with strong water and waste systems, and take sustainability learning to other colleges. Our ambition is for our graduates to treat the health of water, rivers and oceans as part of every commercial decision.

6.1 Leaders Who Protect Water

We want every manager we teach to see how a supply chain, a port or a plastic choice reaches rivers and coasts. We will keep adding applied cases on ports, rivers and plastics to Environmental Systems, Waste Management and our immersions.

6.2 Premises that Protect Water

We want to keep choosing premises with strong water-efficiency, wastewater-treatment and waste-management systems as we grow, and to make recycling and less single-use plastic part of campus life.

6.3 A Voice on Water

We want to become a respected voice on water risk, industrial pollution and responsible business, building on Dr Ajith Babu's Noyyal River study and our place in ASSOCHAM's sustainability and water councils.

14 LIFE BELOW WATER



SDG 14 IMPACT REPORT

masters' union university