



Annual Sustainability Report - 2024

Our Commitment to a Greener Future



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Message from CEO & Executive Director

“Rethinking healthcare is not a choice—it is a strategic imperative. By leading with compassion and sustaining with purpose, we can safeguard both human health and the health of our planet.”

At our hospital, our mission has always been to protect and improve human health. Today, that mission also means protecting the health of our planet. Climate change is a pressing public health challenge, and we are committed to responding with responsibility and action.

We are proud to present our 2024 Sustainability Report, showcasing the meaningful actions we’ve taken to measure, manage, and reduce our environmental footprint. We have begun tracking our greenhouse gas emissions, integrating low-carbon practices into clinical care and operations, expanding telehealth, improving energy efficiency, and reducing waste and single-use materials. These initiatives are aligned with global sustainability frameworks and grounded in our core belief that every team and every individual has a vital role to play. While these are important first steps, we know the journey is long. Sustainability requires collective effort, innovation, and continuous improvement. Together-with our staff, patients, and community-we can build a healthier, more resilient future for generations to come.

Best Regards,

Dr. Santosh Shetty

Executive Director & CEO

About Our Hospital

At our hospital, we are committed to delivering compassionate, high-quality care to every patient while advancing a sustainable future. Over the years, we have reduced our carbon footprint, invested in renewable energy and strengthened our ability to adapt to climate-related challenges, ensuring that our care is both excellent and environmentally responsible

Our Guiding Principles:

VISION- MISSION -VALUES



“We aim to be a global healthcare institution that combines the best in medical treatment with strong ethical principles and a culture of care” and

“To be an institution that offers comprehensive quality healthcare services under one roof through transparent patient-centric care ensuring patient safety, privacy, and dignity. An institution where Every Life Indeed Matters.”



Integrity

- To deal with all stakeholders, patients, partners, employees, vendors and the community - in a spirit of fairness and integrity.



Transparency

- To respect the patient's right to know at every touch point by providing information that is clear, concise, relevant and easy to understand.



Maximum Care

- To re-evaluate every hospital system, process and procedure to ensure that patient and their loved ones receive maximum care and comfort.



Self-Improvement

- To instil a process of learning and self-improvement at every level through continuous training, focused research and peer review.



Patient Dignity

- To safeguard the dignity of patients by protecting their individuality and privacy at all times.



Social Responsibility

- To dedicate itself to living up to its responsibility in social service, community health, and environmental safety.



Patient Safety

- To take responsibility in building a culture of safety and to instill a “just” culture promotes patient safety to make healthcare safer for everyone.



Passion for Excellence

- To believe in having a passion for excellence in every aspect of the work we do; in the overall delivery of service to our customers, in ensuring that we meet the highest international standards

[Discover our logo.](#)

ENVIRONMENTAL STEWARDSHIP

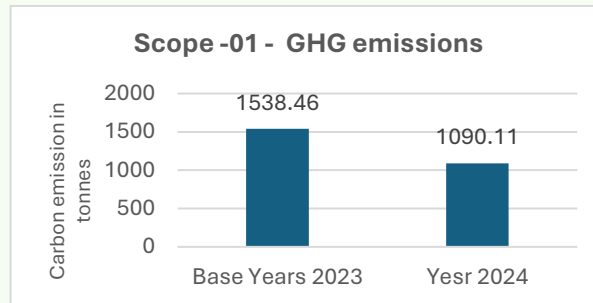
As a leading healthcare provider and major employer, KDAH carries significant social and environmental responsibility. Recognizing its impact, the hospital has integrated sustainability into its programs over the past ten years. In 2024, KDAH further strengthened this commitment by adopting a long-term Sustainability Strategy alongside a 2025 - 2030 Action Plan, outlining its roadmap for sustainable healthcare delivery and operations.

Over the years, most planned initiatives have been successfully implemented, with several key actions. Notable achievements include the successful implementation of a Building Management System (BMS), and achieving 50% energy utilization from renewable sources, forming a sustainability committee and team, sharing a sustainability framework, taking energy-efficient measures, introducing programs to minimize food waste for staff, and developing sustainable models of care.

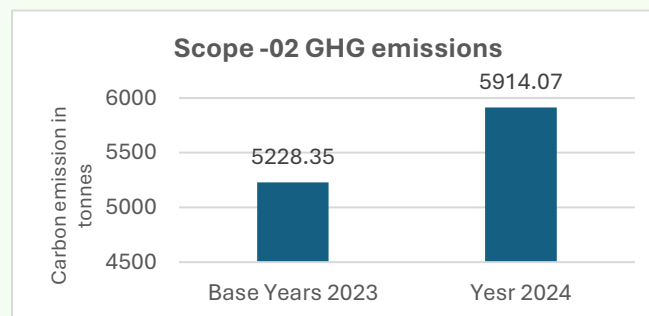
KDAH has aligned its sustainability goals with national and regional objectives, breaking them down into measurable targets. By 2024, a significant portion of these targets had been achieved, with efforts continuing in 2025 to maintain and enhance performance.

Ongoing projects, progress, and achievements reflect KDAH's tangible commitment. The hospital recognizes that these milestones are part of a broader journey toward long-term, sustainable healthcare infrastructure and delivery, working closely with partners to decarbonize the broader healthcare value chain.

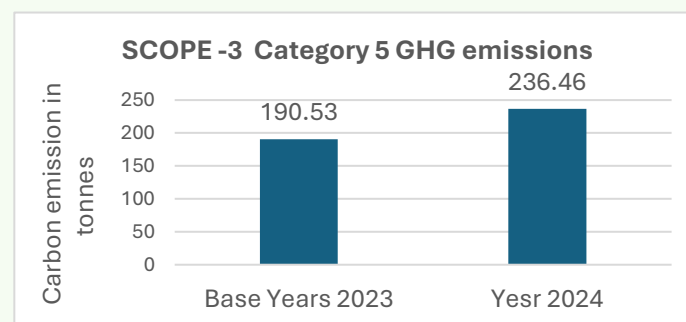
Performance Snapshot – Carbon Emissions (Base Year 2023 vs. Year 2024)



Scope -01 emissions decreased significantly by about 29.1 % from baseline. This was largely due to stopping the use of desflurane in Kokilaben Dhirubhai Ambani Hospitals (KDAH) and switching to greener anesthesia drugs (sevoflurane). Coupled with successfully reducing the use of N₂O and N₂O/O₂-50/50 vol. we achieved significant reductions in direct emissions.



Despite our efforts in implementing energy efficiency projects, Scope 2 emissions increased compared to the baseline period. This was primarily due to higher temperatures and humidity from 2023 to 2025. Offset initiatives include the increased use of renewable open-access power and increase LED retrofits. The renewable share accounted for 51.7% of total electricity, contributing significantly to avoided emissions (~934 tCO₂e).



Slight increase due to increased patient turnover. Improvement focus includes the intensification of internal staff communications and engagement, as well as the broadening of recycling efforts. The hospital continues to advance toward producing less waste through 'plastic-lite' initiatives and reductions in food waste generation.

Between 2023 and 2024, the hospital achieved:

- 26.7% reduction in MDI usage.
- 17.8% reduction in DPI usage.

Reduction in inhaler consumption — showing a positive shift in sustainable respiratory care and resource optimization.

KDAH Sustainability Highlights

- **Renewable Energy Integration:** Expanded use of solar power at KDAH facilities and strengthened energy monitoring through advanced Building Management Systems (BMS) to optimize electricity usage across critical operations, including safe medication storage.
- **Greener Anaesthesia Practices:** Phasing down the use of high-greenhouse gas impact anaesthetic agents, in line with global best practices, to reduce emissions from operating theatres.
- **Green Building Standards:** Hospital infrastructure designed to meet energy-efficient and eco-friendly benchmarks, incorporating LED lighting, water conservation systems, and energy-efficient HVAC.
- **Device Reuse and Circular Practices:** Implemented programs for reprocessing and safe reuse of certain medical equipment to reduce single-use plastic waste and minimize landfill impact.
- **Sustainable Procurement & Design:** Introduced green procurement guidelines and embedded sustainability standards into facility planning and engineering processes.
- **Green Pharmacy & Clinical Optimization**
 - Reduction in total inhaler usage between 2023 and 2024 demonstrates significant progress toward low-carbon and sustainable clinical practices. This decline reflects:
 - Optimized treatment protocols that promote precise and need-based prescribing, reducing medication waste.

- Improved disease management through early interventions and better patient education, minimizing dependence on inhalers.
- Responsible procurement and inventory control, aligning with the hospital's circular economy and low-carbon care strategy.
- A shift toward greener pharmaceutical practices, as inhalers are among key contributors to healthcare-related greenhouse gas emissions due to propellants.
- This trend directly supports SDG 3 (Good Health and Well-Being) and SDG 13 (Climate Action), highlighting how clinical excellence and environmental responsibility can progress hand in hand.
- Macerators in patient care areas — reducing waste, conserving water, and supporting infection-free, low-carbon operations.”

Governance and Strategy

KDAH's Sustainability Strategy, officially launched in 2024, aims to reduce environmental impact while promoting inclusion and sustainable practices. By the end of the year, several objectives had been achieved, including strengthened sustainable mobility, reduced the use of anaesthesia gases and the hospital's engagement in responsible digital transformation. The year was also marked by continued efforts to promote inclusion, combat discrimination, and implement a sustainable framework. A Sustainability Fund was also established.

Sustainability Strategy and Action Plan: The 2030 Sustainability Strategy, adopted in 2024, is structured around three strategic pillars: “**Climate and Health,**” “**Equality, Diversity and Inclusion,**” and “**Sustainable Consumption and Production.**” It is operationalized through an action plan comprising nearly 30 measures to be implemented by the end of 2025.

Sustainability Fund: KDAH established a Sustainability Fund to support initiatives that contribute to achieving the hospital's sustainability objectives. The fund primarily finances actions aimed at reducing environmental and climate impacts across operations.

Sustainability Targets: Alignment with Regional Goals , KDAH has aligned its sustainability goals with national and regional objectives, setting measurable targets across human resources, environment, mobility, digitalization, procurement, and food services. Progress is tracked annually to ensure accountability and continuous improvement.

Sustainability Committee: The Sustainability Committee oversees the implementation of KDAH's sustainability strategy and reflects the hospital's ongoing commitment to stakeholder engagement. To support monitoring and decision-making, the committee has implemented **SAT (Sustainability Accelerator Tool) software**, which helps track progress on initiatives, measure impact, and identify areas for improvement.

Stakeholder Engagement: Collective Action for Sustainability Collaborative workshops with staff and patient-partners have generated actionable ideas across operations. Initiatives have focused on greening hospital spaces, promoting diversity, equity, and inclusion, combating discrimination, and encouraging sustainable food practices. These contributions help shape KDAH's 2026–2030 sustainability action plan.

On 5th June, we celebrated World Environment Day in alignment with the global movement led by the United Nations Environment Programme (UNEP). On behalf of UNEP, a heartfelt thanks was extended to our team for helping make the occasion truly memorable. The impact of these efforts goes beyond a single day-it strengthens awareness, inspires sustainable action, and contributes to shaping how we live with and care for our shared planet.

1 Climate and Health

KDAH continues its efforts to reduce environmental impact, optimize energy consumption, and promote the ecological transition in healthcare. In 2024, the hospital implemented energy optimization measures, introduced electronic health records, upgraded critical technologies, and advanced ongoing sustainable mobility initiatives.

Carbon Footprint 2024

- **Scope 1:** 1090.11 MT CO₂e
- **Scope 2:** 5,914.07 MT CO₂e
- **Scope 3 (Category -05):** 236.46 MT CO₂e (full tracking expected by 2025)
- Emissions Avoided: 498 MT CO₂e through clinical operational)
- Emissions inventory covers **CO₂, CH₄, N₂O, HFCs**, following the Greenhouse Gas Protocol.

Green Spaces and Biodiversity

KDAH has created dedicated areas for plantation and greenery within its premises, ensuring that natural spaces are preserved and enhanced. These green zones not only improve air quality and provide a healthier environment for patients, staff, and visitors, but also support biodiversity and contribute to the hospital's ecological transition goals. This ensures ecological management of green spaces.



Sustainable Mobility

KDAH continues to promote sustainable mobility through its 2024 initiatives. All staff have been actively encouraged to use public transportation for their daily commute. Today, nearly 98% of employees travel by metro or local trains, significantly reducing the hospital's carbon footprint while easing road congestion and promoting cleaner air in the city.

Promoting Ecological Transition in Care: Initiated in 2023 with support from the anaesthesiology department, eco-responsible medical practices in:

Anaesthesiology: Reduced high-impact anaesthetic gases and optimized IV medications during surgeries

1.1 Internal Climate Sustainability Action Plan

1.1.1 Energy Efficiency & Carbon Reduction

- KDAH Energy & Efficiency Initiatives – Chronological Overview
- 2008 – Building Management System (BMS) implemented to optimize energy operations.
- 2008–2013 – CFL lamps installed to reduce electricity consumption.
- 2009 – Kitchen equipped with LPG to PNG (Piped Natural Gas) systems.
- 2009 – High-Speed Diesel operated hot water boiler converted to Piped Natural Gas (PNG).
- 2013–2014 – Transition from CFL to LED lighting with motion sensors.
- 2013–2014 – Electrically operated equipment converted to PNG.
- 2022 – Fan Coil Units (FCUs) replaced to increase temperature efficiency.
- 2023 – Thermostats upgraded with automatic airflow and temperature controls.
- 2024 – Refurbishment of 4 chiller plants for higher energy efficiency.
- 2024 – Dual supply auto-changeover panels installed for lifts' main supply to prevent breakdowns.

2024–2027 (In Progress)

- 100% conversion to LED lighting (ongoing).
- Heat-resistant paint applied on external surfaces to reduce heat ingress (completion by 2027).
- Revamping lighting systems to reduce number of fixtures while increasing illumination with advanced technology.
- Refurbishment of elevators with gearless motors to save operational costs.
- Replacement of one chiller with an energy-efficient model.
- 2025–2028 (Planned) – Replacement of AHUs and refrigerators with high-efficiency models.

2028 (Planned)

– Replacement of walk-in coolers with high-efficiency models.

2030 (Planned) – Hot boilers to be replaced with heat pumps, significantly reducing fossil fuel dependency.

Future action plan:

Solar system for hot water generation

1.2 Water Conservation & Management

- 2012: Hydropneumatics systems introduced for maintaining optimal water pressure.
- 2015: Water-saving initiatives launched.

In Progress:

- Replacing flush walls with flush tanks to reduce water consumption.
- Ongoing waterproofing works to prevent leakage and wall damage.
- 2024: Effluent Treatment Plant (ETP) installed to complement existing STP for advanced wastewater treatment and reuse.
- 2025- 2027 Water harvesting & Drip irrigation for gardening

3. Infrastructure Refurbishment & Climate-Resilient Facilities

- 2024: Floor renovation program initiated, focusing on reuse strategies to minimize repainting.
- 2024: Cooling tower refurbishment to improve thermal efficiency.

2025–2028 (Planned):

- Refurbishment of elevators (in process, completion by 2028).
- Wall and ceiling panel cladding initiated to reduce recurring painting and enhance infection control.
- Additional rainwater harvesting pits

Ongoing:

- Waterproofing projects to increase building resilience.
- Uneven surface as well as natural stone restorations process in progress by 2027
- Tree plantation upgradations (2023-24)

4. Equipment & Operations Optimization

- 2009: Preventive Maintenance (PM) program initiated for continuous operations.
- 2023: Total Lab auto machine t (TLA) introduced.
- Standardized: Filter washing processes for HVAC to ensure energy efficiency and air quality.

Ongoing:

- Replacement of old inefficient pumps with new high-efficiency pumps to reduce breakdowns.
- Walking around maintenance
- Dedicated team for Daily cleaning of equipment areas and all shafts

5. Power Supply Resilience

In Progress:

- On Load UPS power supply for patient elevators – to be completed by 2026 (Three elevators to be completed 5 are in progress)
- Main power substation provided redundancy supplier of New DG set Completed in 2024
- Motion sensors evaluation and updated in other area



Our engineering team leads the hospital's green transformation—combining innovation, preventive maintenance, and sustainability-driven design to achieve measurable environmental impact.

2 Diversity, Equality and Inclusion (DEI) at KDAH

At KDAH, equality, diversity, and inclusion are fundamental values that guide both staff initiatives and patient care. In 2024, several actions were taken to strengthen inclusivity across the hospital and to foster a culture that reflects respect, fairness, and accountability. A special focus was placed on reinforcing mechanisms to protect individuals and combat harassment, discrimination, and inequity.

2.1 Combating Harassment, Discrimination, and Violence

KDAH has a zero-tolerance policy towards all forms of harassment, discrimination, or workplace violence. The hospital is committed to ensuring that every staff member, patient, and partner feels respected, valued, and supported.

- Reporting mechanisms is confidential.
- The platform complements existing grievance redressal committees.
- Awareness campaigns such as “*Respect at the Workplace*” and “*POSH* (Prevention of Sexual Harassment at Workplace Act).” “*Service Standards*” were conducted, reinforcing the message that harassment, violence, or discrimination will not be tolerated.

2.2 Promoting Respectful Workplaces

An Internal Complaints Committee (ICC) has been established to address issues of harassment and ensure a safe, inclusive workplace. The committee is headed by women leaders and is fully accessible to staff across the organization. Regular trainings are conducted for employees on Prevention of Sexual Harassment (POSH), reinforcing awareness, accountability, and zero tolerance towards harassment or discrimination in the workplace.

In 2024, KDAH celebrated International Women’s Day with a dedicated staff event focused on empowerment and awareness. Alongside this, regular yoga sessions were introduced as part of our wellness and inclusion programme — promoting physical, mental and emotional well-being across all staff groups. These initiatives reinforce our commitment to inclusive workplace culture and holistic staff support.

2.3 Promoting Equitable Access to Healthcare

KDAH remains committed to ensuring that healthcare is inclusive and accessible to all, with particular attention to vulnerable groups.

- Accessibility for patients with disabilities was well established and effectively implemented.

2.4 Evolving Towards an Inclusive Culture

As part of the HR Strategy 2024-2028, KDAH launched a new leadership competency framework aimed at fostering participative, adaptive, and responsible leadership.

- The framework has been embedded into HR processes such as recruitment, training, and performance reviews.
- In 2024, 30 managers participated in workshops to adopt and implement the framework, with rollout continuing in 2025.
- Women at KDAH: While women make up over 75% of the workforce marking steady progress towards gender parity. Notable milestones include the appointment of women to key positions such as:
 - Head of the Nursing
 - Head of the Human Resource
 - Head of the Bio Medical Engineering department
 - Head of the Billing
 - Head- Quality & Patient Safety
 - Head of the Pharmacy department

In 2024, KDAH celebrated International Women's Day with a dedicated staff event focused on empowerment and awareness. Alongside this, regular yoga sessions were introduced as part of our wellness and inclusion programme — promoting physical, mental and emotional well-being across all staff groups. These initiatives reinforce our commitment to inclusive workplace culture and holistic staff support. “



2.5 CSR and Community Health Activities: Equal access to healthcare: a stronger commitment



Ms Tina Ambani, Chairperson, Kokilaben Ambani Hospital honours Shri Nitin Gadkari, Minister of Road Transport & Highways, Government of India for his support and endeavour towards thalassemia treatment for children – Photo By GPN

Ensuring fair access to care for vulnerable groups is a priority at KDAH, regardless of the nature of services and needs, particularly for people living with disabilities.

[Thalassemia, Way Forward' with Hon'ble Minister Nitin Gadkari As the Guest of Honour](#)

3 Sustainable Consumption and Production

KDAH continues its commitment to responsible consumption and production, ensuring that resources are used efficiently while promoting the principles of the circular economy. Through equipment reuse, sustainable sourcing, food-waste reduction, and optimized waste segregation, the hospital reinforces its role as a healthcare leader with a strong environmental and social responsibility focus.

3.1 Sustainable Food: Local Sourcing and Responsible Nutrition

KDAH's Food and Nutrition Services prepare meals daily for patients, staff, and visitors, emphasizing sustainability, nutrition, and community solidarity.

- **Local and seasonal sourcing** is prioritized, reducing transportation-related emissions while supporting local farmers and producers.
- In 2024, **100% of fresh vegetables were sourced locally**, with a significant proportion coming from farms within Maharashtra.
- Essential food products such as milk, flour, and yogurt are also procured from certified suppliers committed to sustainable practices.

KDAH serves only vegetarian food, thereby significantly reducing the carbon footprint associated with food services. KDAH also donates surplus safe-to-consume meals to partner organizations, strengthening its social impact while minimizing food waste.

3.2 Preserving Resources: Reducing Waste and Encouraging Reuse

- To further reduce single-use packaging and bottled water dependency, KDAH launched a **refillable water bottle program** across the hospital.
- **Eco-friendly uniforms** made from sustainable fabrics were introduced for clinical staff, offering comfort while reducing the hospital's carbon and water footprint.
- Anti-food waste actions, such as discounted staff meal packs at the end of service and meal-sharing initiatives, helped save more than **2,000 meals** in 2024.
- Awareness campaigns and staff training on **waste segregation and medical waste safety** enhanced compliance, with over **2000 employees trained** last year.

3.3 Building a Healthcare Circular Economy: Equipment and Furniture: Extending Life Cycles



KDAH actively supports a circular economy model by reusing, upgradation, refurbishing, and donating equipment.

- At KDAH, we recognise that the traditional linear “take–make–waste” model of healthcare is unsustainable. This is why we are integrating circular economy practices across procurement, operations, and waste management, with a focus on extending the life of medical equipment, reducing waste, and improving efficiency.

- Bio- Medical Engineering team upgraded the **MRI Vario system to Skyra Fit** rather than purchasing an entirely new machine. This refurbishment not only enhanced clinical capabilities and improved energy efficiency but also extended the equipment's life span by several years. The decision avoided the high costs and environmental impacts associated with new MRI installation, including civil works and site preparation, while minimizing service downtime and ensuring continuity of care for patients.
- Similarly, the **Paediatric 2D Echo (EPIQ) machine** underwent a **software upgrade** that significantly improved diagnostic precision. Instead of discarding and replacing equipment, KDAH chose to invest in extending the machine's lifecycle, thus reducing electronic waste and aligning with resource efficiency goals.
- In waste management, KDAH has introduced a **macerator system** for the disposal of contaminated items such as bandages, cloth, and gloves. This innovation reduces infection risks for staff, ensures hygienic disposal, and decreases the volume of clinical waste requiring incineration, contributing to safer and more sustainable hospital operations.
- These initiatives demonstrate how **refurbishment, software upgrades, and advanced waste technologies** can deliver both environmental and economic benefits. By embedding circular principles into our operations, KDAH continues to strengthen sustainability while maintaining high performance and patient safety standards
- **Hospital beds, medical devices, and diagnostic tools** were donated to partner institutions in underserved regions of India, improving access to healthcare.
- Reusable and repairable items are prioritized for internal use, and older devices are refurbished by certified vendors for safe second use.

3.4 Responsible Digital Practices

With healthcare increasingly digital, KDAH has also taken steps to minimize the environmental impact of its IT systems.

- **Energy efficiency upgrades** in hospital data centres to reduce electricity consumption.
- Paperless initiatives—such as avoiding unnecessary printing of reports, labels, and prescriptions—were expanded across outpatient and emergency services.

- More than **3 tonnes of IT equipment** were refurbished or responsibly recycled in partnership with certified e-waste handlers.

3.5 Information, Awareness and Engagement

Throughout 2024, Kokilaben Dhirubhai Ambani Hospital (KDAH) continued its efforts to build awareness and engagement on sustainability and inclusivity. The hospital fostered a culture where equality, non-discrimination, and environmental responsibility are integrated into daily operations for the well-being of patients, staff, and the community.

3.6 Events:

Stakeholder Engagement

On 5th June, we celebrated World Environment Day in alignment with the global movement led by the United Nations Environment Programme (UNEP). On behalf of UNEP, a heartfelt thanks was extended to our team for helping make the occasion truly memorable. The impact of these efforts goes beyond a single day—it strengthens awareness, inspires sustainable action, and contributes to shaping how we live with and care for our shared planet. Eco-Challenges: Green Mobility & Waste Reduction Campaigns

a. Green Campaigns & Responsible Waste Disposal **Go Green Stay FIT’ Campaign with BD India**

Joined the “Go Green Stay FIT” campaign with BD India to emphasize safe injection practices and proper disposal of insulin syringes/needles.

Every Action Counts: Energy-Saving and Waste Segregation

KDAH reinforced its “Every Action Counts” staff campaign, focusing on practical eco-gestures such as:

- Optimized air conditioning usage in summer and efficient heating management in winter.
- Switching off non-essential lights and equipment.
- Promoting paperless workflows via electronic health records.
- To strengthen waste management practices, KDAH developed a new interactive training program on biomedical and recyclable waste segregation. The program was recognized internally during the 2024 KDAH Quality Day for its innovative approach.

3.7 Dialogue and Collaborations

KDAH actively contributed to local and national dialogues on sustainability in healthcare.

The hospital participated in:

- City-level healthcare sustainability forums with municipal authorities.
- Partnerships with academic institutions to study energy optimization in hospitals.
- Private-sector collaborations for green procurement and supply chain improvement.
- [NABH guidebook on “Climate Action & Sustainability in Healthcare,” KDAH is listed as an example of hospital initiatives contributing to a healthier environment](#)

Year-wise Sustainability Actions plan implementation at KDAH		
Year / Period	Area	Action Taken / Planned
2008	Energy Efficiency	Building Management System (BMS) implemented to optimize energy operations.
2008–2013	Energy Efficiency	CFL lamps used to reduce electricity consumption.
2009	Equipment & Operations	24/7 Preventive Maintenance (PM) program initiated for continuous operations.
2012	Water Conservation	Upgraded Hydropneumatics systems for optimal water pressure.
2013–2014	Energy Efficiency	Transition from CFL to LED lighting.
2015	Water Conservation	Water-saving initiatives launched.
2022	Energy Efficiency	Fan Coil Unit (FCU) replacement to increase temperature efficiency.
2023	Energy Efficiency	Thermostats upgraded with automatic airflow & temperature controls.
	Equipment & Operations	Total Luminance Adjustment (TLA) introduced.
2024	Energy Efficiency	Refurbishment of 4 chiller plants for higher energy efficiency.
	Water Conservation	Effluent Treatment Plant (ETP) installed to complement STP.
	Infrastructure	Floor renovation program initiated (reuse strategies to minimize repainting).
	Infrastructure	Cooling tower refurbishment to improve thermal efficiency.
2024–2027 (In Progress)	Energy Efficiency	100% conversion to LED lighting (ongoing).
	Energy Efficiency	Heat-resistant paint applied on external surfaces to reduce heat ingress.
	Energy Efficiency	Revamping lighting systems to reduce fixtures while increasing illumination.
2025–2028 (Planned)	Energy Efficiency	Refurbishment of AHUs and refrigerators to high-efficiency models.
	Infrastructure	Refurbishment of elevators (completion by 2028).
	Infrastructure	Wall & ceiling panel cladding for infection control and reduced painting.
2028	Energy Efficiency	Upgradation of walk-in coolers.
2030	Energy Efficiency	Hot boilers to be replaced with heat pumps, cutting fossil fuel dependency.
Ongoing	Water Conservation	Replacing flush walls with flush tanks to save water.
	Water Conservation	Waterproofing works to prevent leakage & wall damage.
	Infrastructure	Waterproofing projects to increase building resilience.
	Equipment & Operations	Filter washing processes standardized for HVAC efficiency & air quality.

	Equipment & Operations	Replacement of inefficient pumps with high-efficiency pumps.
	Power Resilience	Dual supply auto-changeover panels for lifts (UPS + main).
	Power Resilience	Kitchen equipped with PNG (piped natural gas) & auto-changeover systems.

Annex 1 – KDAH Sustainability Strategy

2024 Reporting of the 2025 Action Plan

The Kokilaben Dhirubhai Ambani Hospital (KDAH) is committed to driving healthcare sustainability by aligning its operations with **India’s COP26–COP29 climate commitments**, the **Maharashtra State Majhi Vasundhara Abhiyan**, and international **health sector net-zero goals by 2050**.

The **KDAH Strategic Plan 2030** defines measurable objectives and actions across three strategic pillars:

1. **Climate and Health**
2. **Diversity, Equality and Inclusion**
3. **Sustainable Consumption and Production**

This 2024 report summarizes progress on the **2025 Action Plan**, detailing initiatives completed, ongoing, or planned, and setting the foundation for the 2026–2030 strategy.

National & State Commitments

- **India’s Climate Goals:** Net-zero emissions by 2070; 45% reduction in emissions intensity by 2030 (2005 baseline); 50% electricity capacity from non-fossil fuels by 2030.
- **Maharashtra Initiatives:** *Majhi Vasundhara Abhiyan* — focus on air, water, earth, fire, and sky, promoting clean energy, resilience, biodiversity, and community action.

The **KDAH Green Plan 2030** is structured around three strategic pillars:

1. Climate and Health
2. Diversity, Equality and Inclusion (DEI)
3. Sustainable Consumption and Production

This report presents monitoring of progress toward the **2025 Action Plan** and 2030 objectives. Achievements highlighted reflect 2024. A full review will be conducted in 2025 to inform the next planning cycle (2026–2030).

1. Climate and Health: for 2030 | 2025 Action Plan:

Objective	Achievements 2024	Outlook
1. Establish and Implement a Climate Plan	Carbon footprint assessment completed. Executives with sustainability KPIs (100%).	Annual carbon accounting continues. Climate-energy plan aligned with 2030 real estate strategy.
2. Reduce Energy Consumption	16,792 MWh consumed (–2%). Refurbished 4 chiller plants, thermostat upgrades, FCU replacements, staff awareness campaigns.	Full LED transition by 2027. AHU & refrigerator refurbishment (2025–2028). Boilers to heat pumps by 2030. Motion sensor complete building Solar panel for hot water boilers EC fan motor for AHUs – 2025-28 Replacement old pump into energy efficient pumps 2025- 26
3. Increase Renewable Energy	51.7% renewable energy achieved. Rooftop solar expansion preparations.	Scale solar energy production; integrate heat-resistant paints and energy-optimized lighting.
4. Sustainable Construction & Renovation	Floor reuse program; cooling tower refurbishment.	Elevators, walk-in coolers, refrigeration systems by 2028; wall/ceiling cladding to reduce painting & improve infection control.
5. Water Conservation & Management	ETP commissioned; waterproofing ongoing.	Flush wall replacements with tanks; continued potable water reduction. Monitoring of water flow quantity and replacement .
6. Waste Reduction & Circular Economy	Biomedical waste segregated; recycling partnerships started.	Expand circular economy initiatives (PPE reuse, furniture recycling).
	UPS batteries recycling	

7. Low-Carbon Mobility & Transport	Shuttle optimization; transition to CNG/EV ambulances started.	Full electric fleet integration by 2030. EV charging for electrical vehicle
8. Green IT & Digitalization	Digital patient records expanded, paper use –40%. Recyclable cartridges	Full digital workflows; server energy optimization.
9.Low-Carbon Care: Clinical Practices	3.5% virtual patient appointments	Continue to increase telemedicine usage to reduce patient travel and clinical carbon footprint.
10. Reduction of GHG emissions from clinical activities	Annual CO ₂ e avoided. 50.5% reduction	Expand low-carbon clinical protocols; integrate carbon impact assessment into clinical pathways.
11. Low-Carbon Care: Operational Practices	Annual CO ₂ e avoided 1000 t	Implement further operational efficiency measures
12. Resilient Healthcare Delivery (Climate Adaptation)	Backup generators upgraded; heat-resistant paints applied.	Climate-resilient infrastructure integration (cooling systems, floodproofing).
13. Education & Engagement for Climate-Health	Staff trained on climate-health	Expand community awareness campaigns and patient engagement by 2025.

2. Diversity, Equality and Inclusion (DEI)

2025 Action Plan:

Objective	Achievements 2024	Outlook
Strengthen Governance & Accountability	Executives assessed (100%). 2,435 staff trained on sustainability & DEI.	Strengthen Internal Complaints Committee; expand awareness campaigns.
Inclusive Employer Practices	Pre-employment medical check up for all staff	Preventive occupational risk focus; 100% awareness targeted.

Strengthen hospital's contribution to society through outreach clinics, child health programs, and staff-driven CSR.	<p>Outreach clinics in underserved areas</p> <p>Child treatment programs launched (focus on preventive & curative care)</p> <p>Staff volunteering activities formalized</p> <p>CSR funds allocated for community health</p>	Continue Outreach clinics in underserved areas, Child treatment programs.
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3. Sustainable Consumption and Production

9 objectives for 2030 | 2025 Action Plan: 25 actions

Objective	Achievements 2024	Outlook
1. Responsible Procurement	36 sustainability partnerships; vendors engaged on supply chain sustainability.	Expand supplier sustainability audits in 2025.
2. Waste Management & Equipment Optimization	Standardized HVAC filter washing; preventive maintenance; pump replacement; lift auto-changeover; kitchen PNG operations.	Further biomedical & packaging waste reduction; transition to high-efficiency AHUs & refrigeration.
3. Sustainable Materials & Supplies	Segregation of biomedical waste at source; safe disposal practices.	Promote reduced single-use plastics, sustainable packaging, green procurement.
4. Efficient Water Use & Reuse	ETP + STP functioning; water-saving fixtures.	Expand rainwater harvesting; reduce potable water demand.
5. Sustainable Food & Catering	Eco-friendly cafeteria practices initiated.	Expand local sourcing, reduce food waste, promote healthy diets.
6. Energy-Efficient Equipment & Technology	Smart lab automation, robotic surgery, Radixact® & EDGE™ systems introduced.	Scale energy-efficient medical technologies across departments.

7. Logistics & Supply Chain Optimization	Serum tube consolidation; improved stock management.	Reduce carbon footprint, streamline transportation & deliveries.
8. Green Building Operations	LED lighting, efficient HVAC, water management systems implemented.	Complete retrofits; adopt sustainable building certifications.
9. Staff & Community Engagement	Staff eco-initiatives; community awareness programs.	Expand sustainability culture, train new staff, and engage local community.

Conclusion & Next Steps

Achievements 2024:

- 51.7 % renewable energy adoption
- Carbon footprint baseline established.
- 100% executives & staff trained in sustainability
- 36 partnerships driving sustainable supply chain engagement
- ETP water treatment systems installed

Next Steps 2025:

- Scale rooftop solar & renewable projects
- Strengthen staff-led eco-initiatives
- Expand DEI programs and gender balance
- Deepen supplier sustainability audits

A full review in 2025 will form the foundation for **the 2026–2030 Sustainability Strategy**.


Annex 2 – Sustainability Index

KDAH Sustainability Report 2024




This index provides a snapshot of performance against KDAH 2030 Sustainability Strategy objectives, highlighting achievements and status of 2025 Action Plan implementation.

1. Climate and Health

Objective	2025 Action Plan	Status 2024	Key Metrics / Achievements
1. Establish and Implement Climate Plan	3 actions	✅ Completed	Scope 1. Scope 2 & Scope 3 GHG emissions : started monitoring
2. Reduce Energy Consumption	5 actions	🔄 In Progress	Energy consumption: 16,792 MWh (–2% vs 2023); 4 chiller plants refurbished; FCU & thermostat upgrades
3. Produce and Consume Renewable Energy	3 actions	🔄 In Progress	Renewable energy: 51.7% (solar + green electricity); rooftop solar planning underway
4. Promote Sustainable Construction and Renovation	3 actions	🔄 In Progress	Floor renovation reuse program; cooling tower refurbishment; wall & ceiling cladding launched
5. Water Conservation & Management	3 actions	🔄 In Progress	Water consumption/patient: 7.93 m³; ETP installed; waterproofing ongoing
6. Waste Reduction & Circular Economy	3 actions	🔄 In Progress	100% source segregation; recycling partnerships initiated
7. Low-Carbon Mobility & Transport	2 actions	🔄 Completed	Transition to CNG/EV ambulances; shuttle optimization
8. Green IT & Digitalization	2 actions	🔄 In Progress	Digital patient records; paper use –20%
9. Resilient Healthcare Delivery	2 actions	🔄 In Progress	Backup generators upgraded; heat-resistant paints applied
10. Education & Engagement	2 actions	🔄 In Progress	Staff trained on climate-health nexus
11. Low-Carbon Care: Clinical Practices	5 actions	🔄 In Progress	Telemedicine adoption to reduce travel emissions Digital Transformation Technology upgradation

			<p>Antibiotic stewardship programs</p> <p>Inhalers consumption</p> <p>Medical gases consumption</p> <p>Automated alerts for abnormal lab results to speed up interventions.</p>
12, Low-Carbon Care: Operational Practices	9 actions	 In Progress	<p>Digital HR and payroll systems (Completed)</p> <p>Reduction in single-use plastic bag (Implemented)</p> <p>Online appointment and payment systems</p> <p>Reusable bags</p> <p>Reduction in Chemical Consumption Reduces hazardous waste generation.</p> <p>Improves indoor air quality and staff safety.</p> <p>Lowers procurement and disposal costs.</p> <p>Supports green hospital certification</p>

2. Diversity, Equality & Inclusion

Objective	2025 Action Plan	Status 2024	Key Metrics / Achievements
Strengthen Governance & Accountability	3 actions	 Completed	100% executives evaluated; 2,435 staff trained
Inclusive Employer Practices	2 actions	 In Progress	Pre-employment medical visits for all staff
Career Management & Mobility	2 actions	 In Progress	50 participants trained on management programs
Community Engagement	4 actions	25 clinics conducted; 5,200 patients reached	<p>25 clinics conducted; 5,200 patients reached</p> <p>1,200 children treated; vaccination drives conducted</p> <p>320 staff participated in CSR programs</p> <p>Funds allocated for CSR activities</p>

3. Sustainable Consumption & Production

Objective	2025 Action Plan	Status 2024	Key Metrics / Achievements
1. Responsible Procurement	3 actions	 In Progress	36 partnerships; suppliers engaged on sustainability
2. Waste Management & Equipment Optimization	3 actions	 In Progress	HVAC filter washing; high-efficiency pumps; dual supply lifts
3. Sustainable Materials & Supplies	2 actions	 In Progress	100% biomedical waste segregation; safe disposal practices
4. Efficient Water Use & Reuse	2 actions	 In Progress	ETP + STP functioning; water-saving fixtures
5. Sustainable Food & Catering	2 actions	 In Progress	Eco-friendly cafeteria practices started
6. Energy-Efficient Equipment & Technology	3 actions	 In Progress	Smart lab automation; robotic surgery; Radixact® & EDGE™ systems
7. Logistics & Supply Chain Optimization	2 actions	 In Progress	Serum tube consolidation; stock management improvements
8. Green Building Operations	2 actions	 In Progress	LED lighting, efficient HVAC, water systems implemented
9. Staff & Community Engagement	2 actions	 In Progress	Staff eco-initiatives; community awareness programs

Legend:  Completed  In Progress  Not Initiated

Annex 3 – Sustainability Indicators

KDAH Sustainability Report 2024

This table presents **quantitative indicators** for monitoring sustainability performance across all three pillars.

Pillar	Category	Indicator	Unit	2024	Target 2027	Remarks / Reference
Climate and Health	Energy	Total energy consumption	MWh	16,792	↓	Hospital-wide energy use; includes heating & electricity; BMS optimization
		Share of renewable energy	%	51.7	↑	Solar + green electricity; milestone achieved early
	Water	Potable water consumption	m ³ /patient	7.93	↓	Water-saving fixtures; ETP + STP integration
		Water reuse	m ³	300	↑	Effluent treated & reused via ETP
	GHG Emissions	Scope 1	MT CO ₂ e	1090.11	↓	
		Scope 2	MT CO ₂ e	5914.07	↓	Purchased electricity; renewable share 51.7%
		Scope 3 per patient	MT CO ₂ e	236.46	↓	Waste generation
	Low-Carbon Care: Clinical Practices	% of virtual patient appointments		3.5%	↑	Telemedicine adoption to reduce travel emissions
		CO ₂ e tons avoided by low-carbon practices				
	Low-Carbon Care: Operational Practices					Reduction in Chemical Consumption Reduces hazardous waste generation. Lowers procurement and disposal costs.

						Supports green hospital certification
Diversity, Equality & Inclusion	Governance & Accountability	Executives with sustainability KPIs	%	100	–	25/25 executives evaluated
		Staff trained in sustainability & inclusion	%	100	100	2,435 staff trained
Sustainable Consumption & Production	Responsible Procurement	Sustainable suppliers engaged	Number	36	↑	Annual monitoring
	Waste Management	Biomedical & packaging waste segregation	%	100	100	Source segregation, safe disposal
	Equipment Optimization	High-efficiency pumps & AHUs installed				Replacement / Refurbishment of old inefficient pumps
	Water Efficiency	ETP + STP operation & water reuse Number				Supports potable water reduction
	Sustainable Food & Catering	Eco-friendly cafeteria practices				Initiatives started in 2024
	Logistics & Supply Chain	Serum tube consolidation & stock management				Waste reduction & efficiency improvement
	Green Building Operations	LED lighting, efficient HVAC, water systems				Floor renovations, cooling towers, wall cladding
	Staff & Community Engagement	Eco-awareness campaigns				Staff & community initiatives

Annex 4 – SDG Alignment and Community Impact 2024

KDAH Sustainability Strategy – Reporting of the 2025 Action Plan

This annex presents KDAH’s alignment with the **United Nations Sustainable Development Goals (SDGs)** and highlights the hospital’s **community outreach, clinical programs, and CSR initiatives** conducted in 2024. These actions complement the three strategic pillars of the KDAH Sustainability Strategy: **Climate and Health, Diversity, Equality and Inclusion, and Sustainable Consumption and Production.**

1. Climate and Health – SDG Alignment

Key Actions	Achievements 2024	Relevant SDGs
Energy efficiency & renewable energy adoption	16,792 MWh energy consumed; 51.7% renewable energy; chiller and AHU refurbishment	SDG 7 – Affordable and Clean Energy; SDG 13 – Climate Action
Water conservation & reuse	7.93 m³ potable water per patient; ETP + STP operational; water-saving fixtures installed	SDG 6 – Clean Water & Sanitation
Sustainable building & construction	Floor renovations, cooling tower refurbishment, LED	SDG 9 – Industry, Innovation and Infrastructure; SDG 11 – Sustainable Cities & Communities

	lighting, wall cladding for thermal efficiency	
Increase virtual patient consultations to reduce travel emissions	3.5% of total OPDs	SDG 3 (Good Health & Wellbeing), SDG 13 (Climate Action)
Reduce GHG emissions from clinical care	50.5% reduction	SDG 3, SDG 13

2. Diversity, Equality & Inclusion – SDG Alignment

Key Actions	Achievements 2024	Relevant SDGs
Governance & accountability	100% executives evaluated; 2,435 staff trained in sustainability and inclusion	SDG 5 – Gender Equality; SDG 8 – Decent Work & Economic Growth
Gender equality & inclusive workforce	Leadership pipeline expanded; apprentice programs implemented	SDG 5 – Gender Equality; SDG 10 – Reduced Inequalities
Disability & accessibility	All staff trained	SDG 3 – Good Health & Well-being; SDG 10 – Reduced Inequalities
Community outreach & CSR health programs	Pediatric treatment programs, free health camps, clinical outreach clinics –children treated, camps conducted	SDG 3 – Good Health & Well-being; SDG 10 – Reduced Inequalities; SDG 17 – Partnerships for the Goals
Inclusive employer practices	Pre-employment medical visits; workplace accessibility programs	SDG 8 – Decent Work & Economic Growth; SDG 10 – Reduced Inequalities

3 Sustainable Consumption & Production – SDG Alignment

Key Actions	Achievements 2024	Relevant SDGs
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Responsible procurement	36 partnerships; suppliers engaged on sustainability practices	SDG 12 – Responsible Consumption & Production; SDG 17 – Partnerships for the Goals
Waste management & equipment optimization	HVAC filter washing, high-efficiency pumps, dual supply lifts, PNG kitchen systems	SDG 12 – Responsible Consumption & Production; SDG 13 – Climate Action
	Macerator installation supports hygienic waste management and resource-efficient care delivery	Align with SDG 3 (Good Health), SDG 6 (Clean Water), SDG 12 (Responsible Consumption), SDG 13 (Climate Action)
Sustainable materials & supplies	100% biomedical waste segregation; safe disposal practices maintained	SDG 12 – Responsible Consumption & Production
Efficient water use & reuse	Water-saving fixtures, STP + ETP operational	SDG 6 – Clean Water & Sanitation
Energy-efficient equipment & technology	Smart lab automation, robotic surgery (Toumai®), Radixact® & EDGE™ systems	SDG 7 – Affordable & Clean Energy; SDG 9 – Industry, Innovation & Infrastructure
Staff & community engagement	Eco-awareness campaigns; community training programs	SDG 11 – Sustainable Cities & Communities; SDG 17 – Partnerships for the Goals
Waste reduction & circular economy initiatives	Printer cartridges refilled 100%, reusable items promoted	SDG 12, SDG 13

CONCLUSION

KDAH’s sustainability actions in 2024 demonstrate strong alignment with **Global SDGs** while advancing **local community impact** through clinical outreach, pediatric care, and CSR activities. The hospital’s approach ensures:

- Integration of environmental, social, and governance (ESG) principles into operations
- Sustainable, equitable healthcare access for underserved populations
- Staff and community engagement to foster awareness and collective action

Summary of 2025–2030 Strategic Priorities

I. Environmental Sustainability

1. Scale Renewable Energy & Efficiency:

Achieve $\geq 65\%$ renewable energy share through solar expansion, energy-efficient chillers, and heat-pump technology.

2. Advance Circular Economy Practices:

Promote refilling, reuse, recycling loops, macerator adoption, and low-waste operations across clinical and support areas.

3. Accelerate Low-Carbon Care Transformation:

Implement green OTs, virtual consultations, low-GHG anesthetic alternatives, and optimized supply chain logistics.

4. Enhance Sustainable Water & Waste Management:

Reduce water intensity per patient by 15%; ensure 100% biomedical waste segregation and recycling partnerships.

II. Health Equity & Social Responsibility

5. Expand Community Outreach & Paediatric Programs:

Reach $\geq 2,000$ children and underserved patients through outreach clinics, vaccination drives, and CSR health camps.

6. Strengthen Diversity, Equity & Inclusion (DEI):

Maintain 100% staff sustainability training and ensure gender balance in leadership; integrate accessibility for all patients.

7. Promote Health Resilience to Climate Change:

Strengthen infrastructure (cool roofs, EC fans, heat-resistant paints) and clinical preparedness for heatwaves, floods, and air quality events.

III. Governance & Leadership

8. Integrate ESG Metrics & SDG Dashboards:

Embed SDG-aligned performance indicators into enterprise dashboards and sustainability reporting systems.

9. Enhance Supplier Sustainability & Governance Oversight:

Conduct supplier ESG audits, link sustainability KPIs to leadership appraisals, and ensure board-level sustainability governance.



“Sustainability is not a choice; it is a responsibility for the health of people and planet.” —
WHO