AMRITA VISHWA VIDYAPEETHAM

Coimbatore, India | NAAC A++ Accredited

SUSTAINABILITY & CLIMATE ACTION POLICY

Institutional Sustainability & Climate Action Policy

Policy Reference: AVV/SUSTAIN/CAP/2025

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Institution	Amrita Vishwa Vidyapeetham
Document Title	Sustainability & Climate Action Policy
Policy Category	Environmental Impact – Sustainable Institutions
Scope	All campuses, faculties, staff, students, and research units
Governing Authority	Chancellor's Office & Sustainability Governance Council
Last Reviewed	March 2025
Next Review Date	March 2026
Alignment	SDG 13 (Climate Action), Paris Agreement, GHG Protocol, IGBC

1. Preamble & Institutional Commitment

Amrita Vishwa Vidyapeetham (Amrita), a NAAC A++ accredited multi-campus research university guided by the vision of its Chancellor, Mata Amritanandamayi Devi, recognises that climate change poses an existential risk to ecosystems, communities, and future generations. Rooted in the principle of "serving the world is serving God," Amrita integrates compassion-driven sustainability into every dimension of its academic and operational life.

This Sustainability & Climate Action Policy (the "Policy") formalises the university's commitment to climate mitigation, adaptation, education, and community resilience. It is designed to position Amrita as a nationally and globally recognised leader in university-led climate action, in alignment with international sustainability frameworks and best practices.

In November 2023, Amrita publicly announced a commitment to achieve full carbon neutrality by 2030 at the Indian Green Building Council (IGBC) Platinum Certification award ceremony — making it one of the few Indian universities with a formally declared, science-based Net-Zero target.

2. Scope of This Policy

This Policy applies to:

- All campuses of Amrita Vishwa Vidyapeetham, including Coimbatore (main campus), Amritapuri, Bengaluru, Chennai, Kochi, Mysuru, and Delhi-NCR
- All academic departments, schools, research centres, and administrative units
- All full-time and part-time faculty, staff, researchers, and enrolled students
- Contractors, vendors, and supply chain partners operating on or for university premises (Scope 3 boundary)
- Community and partner organisations engaged through Live-in-Labs®, SREE platform, and sustainability extension programmes

This Policy is publicly available and shared with local governments, municipal bodies, and community organisations in accordance with Amrita's Climate Action Plan co-implementation model.

3. Guiding Principles

Amrita's climate action is grounded in the following principles:

Principle	Application
Compassion-Driven Sustainability	Embedding empathy and social equity into climate education, governance, and community engagement
Science-Based Action	Aligning all targets with the GHG Protocol, IPCC guidance, and the 1.5°C Paris Agreement pathway

Principle	Application
Community Co-Creation	Designing solutions with, not for, communities through Live-in-Labs® and SREE platform
Transparency & Accountability	Publishing annual emissions inventories, progress reports, and policy documents publicly
Interdisciplinary Integration	Embedding sustainability across engineering, medicine, business, arts, and social sciences
Gender & Social Equity	Centring women's leadership in climate solutions, as exemplified by the GEF-SGP Best Innovator Award 2026
Global-Local Nexus	Contributing to global frameworks (Paris Agreement, SDGs, Sendai Framework) while acting locally

4. Climate Goals & Quantitative Targets

Amrita Vishwa Vidyapeetham has established the following formal, time-bound climate targets, aligned with the Science Based Targets initiative (SBTi) pathway and the GHG Protocol International Standard:

Target Area	Commitment	Deadline
Carbon Neutrality	Achieve full carbon neutrality (Net-Zero) across all scopes	2030
GHG Emission Reduction	Reduce Scope 1, 2 & 3 emissions by 65% (GHG Protocol aligned)	2030
Renewable Energy	100% of campus energy from renewable sources	2035
Grid Dependency	Reduce grid electricity dependency to ≤30% of total consumption	2025
Solar Capacity	Expand on-site solar to 10 MW across all campuses	2027
Carbon-Intensive Investment	0% funding sourced from carbon-intensive energy industries (Disinvestment Policy)	Ongoing
Waste to Landfill	Zero waste to landfill through circular economy practices	2030
Water Neutrality	Achieve water-positive campus operations through STP and rainwater harvesting	2028

5. Governance Structure

Amrita's climate governance is structured to ensure accountability at the highest institutional level and integration across all campuses and units.

5.1 Sustainability Governance Council (SGC)

The Sustainability Governance Council provides institutional oversight of climate commitments and policy implementation. It is chaired by the Vice Chancellor and includes:

- Campus Directors from all campuses
- Dean, School of Engineering; Dean, School of Social & Behavioural Sciences
- Director, Amrita Centre for Research & Development (ACRD)
- Director, Amrita TBI (Technology Business Incubator)
- Chief Sustainability Officer (CSO)
- Student Sustainability Representatives (elected)
- External Advisory Member from industry/government

The SGC meets quarterly to review emissions data, approve capital investments in sustainability infrastructure, evaluate policy compliance, and report to the Chancellor's Office.

5.2 Campus Sustainability Committees

Each campus maintains a Campus Sustainability Committee (CSC) responsible for:

- Implementing campus-level action plans aligned with this Policy
- Monitoring energy, water, waste, and emissions data monthly
- Coordinating student engagement and awareness programmes
- Reporting progress to the SGC bi-annually

5.3 Chief Sustainability Officer

The Chief Sustainability Officer (CSO) is accountable to the Vice Chancellor for the university's overall sustainability performance. The CSO coordinates annual GHG inventories, climate risk assessments, policy updates, and all submissions to external sustainability assessments and reporting frameworks.

6. Greenhouse Gas Emissions & Energy Management

6.1 Annual GHG Inventory

Amrita conducts an annual greenhouse gas emissions inventory across all three scopes, in accordance with the GHG Protocol Corporate Standard:

- Scope 1 (Direct): Fuel combustion in university-owned vehicles, generators, and laboratory equipment
- Scope 2 (Indirect Energy): Grid electricity consumption across all campuses
- Scope 3 (Value Chain): Business travel, commuting, supply chain, waste disposal, and contracted services

Inventory results are published in Amrita's Annual Sustainability Report and submitted to the IGBC and other partner organisations. Verification is conducted by a third-party auditor biennially.

6.2 Renewable Energy Infrastructure

- 4 MW solar capacity is installed and operational across campuses (as of 2024)
- 306 kWp rooftop solar on academic buildings generates 567,228 kWh annually
- Real-time energy monitoring dashboards are installed in every campus building to track grid vs. renewable consumption
- MEMS sensors integrated with building systems provide live environmental data to enhance climate awareness
- A Disinvestment Policy for Carbon-Intensive Energy Industries is formally integrated into the Sustainable Campus Policy Pack; 0% of 2023 funding was sourced from carbon-intensive energy industries

6.3 Energy Efficiency Measures

- Green Building design standards (IGBC Platinum Certification achieved, November 2023)
- LED lighting retrofit programme across all campuses
- Smart HVAC systems with occupancy-based controls
- Energy-efficient laboratory equipment procurement policy
- Permeable paving to reduce urban heat island effects

7. Net-Zero Strategy & Decarbonisation Roadmap

Amrita's Net-Zero Strategy Document, aligned with global climate frameworks and ISO 14064 standards, provides a phased decarbonisation roadmap:

Phase	Focus Areas	Key Milestones
Phase 1 2023–2025	Baseline establishment, renewable energy scale-up, grid reduction to 30%	GHG inventory completed; IGBC Platinum certified; 4 MW solar operational; real-time monitoring deployed
Phase 2 2025–2027	Deep energy efficiency, green hydrogen pilots, sustainable transport	10 MW solar; green hydrogen fishing vessel pilots; electric mobility fleet; LEED-certified new buildings
Phase 3 2027–2030	Residual emissions offset, supply chain decarbonisation, Net-Zero declaration	65% absolute GHG reduction achieved; verified carbon offsets; Net-Zero certified by 2030
Phase 4 2030–2035	Carbon-positive campus, 100% renewable, global model institution	100% renewable energy by 2035; water positivity; zero landfill waste; global replication model

8. Sustainable Campus Operations

8.1 Water Management

- Sewage Treatment Plants (STPs) with advanced treatment infrastructure deployed across all campuses
- Zero-Pit Sanitation systems to reduce groundwater contamination risks
- Rainwater harvesting systems with a target of >80% stormwater capture
- Runoff management using silt-control fences, sediment basins, and debris separators in construction areas
- Permeable paving to increase groundwater infiltration and reduce stormwater runoff
- Precision erosion monitoring of vulnerable slopes with rapid response protocols

8.2 Waste Management & Circular Economy

- Segregation at source: organic, recyclable, hazardous, and general waste streams across all campuses
- Organic waste converted to compost for campus agriculture and landscaping
- Biogas plants converting food waste to energy in campus kitchens
- E-waste collection and certified recycling partnerships
- Single-use plastic elimination policy across all campuses (phased from 2023)
- Eco-friendly procurement policy prioritising recycled and sustainably sourced materials

8.3 Biodiversity & Green Spaces

- Maintenance of native plant species in campus landscaping to support pollinator populations
- Tree plantation drives (>10,000 trees planted across campuses, 2020–2024)
- Protected green zones on all campuses with no-build covenants
- Seagrass restoration: over 6 hectares restored through Blue Economy research programmes
- Collaboration with community organisations on mangrove restoration along Kerala coastlines

8.4 Sustainable Procurement & Supply Chain

- Sustainable procurement policy requiring environmental criteria in all tenders above ₹10 lakh
- Preference for local and regional suppliers to reduce Scope 3 transport emissions
- Vendor sustainability screening and capacity-building programme
- Annual supply chain emissions assessment published in GHG inventory

8.5 Sustainable Mobility

- Electric vehicle (EV) charging infrastructure at Coimbatore and Amritapuri campuses
- Shuttle bus services to reduce private vehicle use
- Cycle lane infrastructure and bicycle lending scheme
- Carpooling and ride-sharing platform for staff and students
- Virtual collaboration tools to reduce inter-campus travel emissions

9. Sustainable Education & Climate Literacy

9.1 Curriculum Integration

Amrita embeds climate science and sustainability across disciplines through a structured Curriculum Integration Framework:

- Mandatory sustainability module for all undergraduate programmes across all schools
- Elective courses in Climate Science, Environmental Engineering, Sustainable Development, and Green Technologies
- Interdisciplinary minor in Sustainability offered across engineering, business, and social science schools
- Project-based learning integrating UN SDGs, climate modelling, and field assessments
- International Joint Centre of Excellence for Energy Resilience and Decarbonisation (CERD) established in partnership with Durham University, UK

9.2 Live-in-Labs® Experiential Learning

Amrita's flagship Live-in-Labs® programme operationalises climate education through direct community immersion:

- Students and faculty spend weeks in rural communities co-designing climate-resilient livelihoods
- Active in 1,200+ communities across 28 Indian states and multiple countries
- Focus areas: agroecology, water resilience, renewable energy, climate adaptation, and disaster preparedness
- UNESCO Chair on Experiential Learning for Sustainable Innovation & Development guides programme design

9.3 Research Centres & Institutes

- Centre for Women's Empowerment and Gender Equality (UNESCO Chair holder since 2016)
- International Network for Sustainable Innovation & Resilient Futures (SustIN)
- Amrita Centre for Research & Development (ACRD) — interdisciplinary clean energy and climate research
- ARISE initiative: "Clean Energy, Water, and Technology: Innovating Sustainability" research pathway
- Amrita TBI — incubating 30+ low-carbon start-ups in 2024

9.4 Student Sustainability Societies

Amrita supports and formally recognises student-led sustainability initiatives:

- Amrita Green Campus Initiative — student volunteers managing campus biodiversity and waste programmes
- Climate Action Student Network (CASN) — advocacy and awareness across all campuses
- Annual Sustainathon event promoting climate action through community engagement
- Student representation on the Sustainability Governance Council

10. Climate Research & Innovation

10.1 Research Priorities

Amrita's climate research is organised around five strategic pillars:

- Clean & Renewable Energy: Green hydrogen, solar, offshore wind, and energy storage systems
- Climate Resilience & Disaster Risk Reduction: Early warning systems, SREE platform, Sendai Framework implementation
- Sustainable Agriculture & Food Systems: Agroecology, climate-smart farming, food security
- Ocean & Coastal Ecosystem Health: Marine biodiversity, seagrass restoration, Blue Economy
- Environmental Technology & Smart Cities: Carbon capture, IoT-enabled environmental monitoring, sustainable infrastructure

10.2 Key Research Initiatives (2023–2025)

- Green Hydrogen for Blue Economy: USD 1.2M mobilised for green hydrogen research and community-based clean energy innovation; pilot projects for hydrogen-powered fishing vessels in coastal Tamil Nadu and Kerala
- SREE Platform: Technology-driven real-time monitoring and risk analysis using geo-enabled software for bottom-up climate resilience in multiple countries
- Integrated Multi-Trophic Aquaculture (IMTA): Seaweed cultivation programme at Olaikuda, Rameswaram, restoring marine ecosystems while building women's livelihoods
- C20 India 2023: Led the Working Group on Sustainable and Resilient Communities, submitting formal climate policy recommendations to G20 leadership; inspired 7,000+ NGOs to prioritise fossil fuel divestment

10.3 Low-Carbon Start-Up Ecosystem

Through Amrita TBI, the university supports an active pipeline of climate-tech ventures:

- 30+ low-carbon start-ups actively incubated in 2024
- Focus sectors: eco-friendly packaging, clean energy, sustainable agriculture, waste management
- Collaboration with Eco Civilization, ESRI, TERI, UNDP-GEF SGP, Transworld Group, and MoEFCC
- Expert mentoring in clean energy, green hydrogen, climate technology, and circular economy

11. Community & Stakeholder Engagement

11.1 External Partnerships

Amrita maintains formal partnerships with governments, international organisations, and civil society for climate action:

Partner / Network	Nature of Collaboration
UNDP-GEF Small Grants Programme	Women-led climate action, seaweed farming, coastal resilience (GEF-SGP Best Innovator Award 2026)
Ministry of Environment, Forest & Climate Change (MoEFCC)	Policy engagement, coastal clean-up, climate literacy programmes
Durham University, UK	CERD: Joint Centre for Energy Resilience & Decarbonisation
Climate Action Network South Asia (CANSA)	Agricultural systems transformation for climate adaptation
Tamil Nadu State Council for Science & Technology	Cultural ecology and climate change workshops
Ministry of Earth Sciences	Swachh Sagar, Surakshit Sagar coastal protection campaign
TERI (The Energy and Resources Institute)	Blue economy and sustainable aquaculture research
UNESCO (Chair Holder)	Women's empowerment, gender equality, and climate action
UN & OECD Forums	Policy advocacy for climate-resilient infrastructure and early warning systems
G20 C20 India 2023	Policy recommendations on Net-Zero, climate finance, disaster resilience

12. Monitoring, Reporting & Transparency

12.1 Annual Sustainability Report

Amrita publishes an Annual Sustainability Report covering:

- GHG inventory (Scope 1, 2, and 3) with year-on-year comparison
- Progress against all targets set out in Section 4 of this Policy
- Energy, water, and waste performance data by campus
- Research output aligned with UN SDGs (SDG 13 and environmental SDGs)
- Community outreach and Live-in-Labs® impact metrics

The report is publicly available on the Amrita website and submitted to the IGBC and partner organisations.

12.2 Real-Time Environmental Monitoring

- Carbon emission dashboards installed in every campus building, displaying live data
- MEMS sensors integrated with building management systems for environmental data capture
- SREE platform enabling real-time, geo-enabled climate risk monitoring across partner communities
- Monthly campus-level energy and water audits reported to Campus Sustainability Committees

12.3 Third-Party Verification

- Biennial third-party audit of GHG inventory by an accredited environmental auditor
- Annual IGBC Green Campus Rating assessment
- External peer review of sustainability strategy by an independent advisory panel

12.4 Alignment with Sustainability Frameworks

This Policy specifically addresses the following sustainability indicators under the Environmental Impact category:

- Net-Zero Commitment: Published commitment to carbon neutrality, backed by science-based targets and formal governance oversight
- Sustainability Strategy & Emissions Reporting: Annual GHG inventory and sustainability report; IGBC Platinum certification
- Membership in Climate & Sustainability Groups: GEF-SGP, CANSA, C20 India, UNESCO Chair, UNDP, TERI, MoEFCC
- Student Sustainability Engagement: Formal student societies and representation in governance
- Sustainable Education: Mandatory sustainability curriculum; Live-in-Labs®; international research partnerships
- Environmental Research: Dedicated research centres and SDG-aligned publications in climate, energy, and ecosystems

13. Climate Risk Assessment & Adaptation

Amrita conducts periodic climate risk assessments to identify physical and transition risks to campus operations, research continuity, and community partnerships:

- Physical risks assessed include: extreme heat, flooding, cyclones, water scarcity, and biodiversity loss affecting campuses in Kerala, Tamil Nadu, Karnataka, and Andhra Pradesh
- Transition risks assessed include: policy changes, carbon pricing, stranded fossil fuel assets, and reputational risks from insufficient sustainability disclosure

Adaptation measures in place include:

- Early warning systems developed in partnership with government agencies for flood and cyclone-prone regions
- Campus flood resilience infrastructure including drainage improvements and permeable surfaces
- Water resilience through STPs, rainwater harvesting, and watershed restoration
- Community climate adaptation programmes in 1,200+ villages across 28 states
- Disaster preparedness curriculum integrated into engineering and social science programmes
- The SREE platform supports localised, bottom-up climate adaptation decision-making

14. Recognition, Awards & International Standing

Amrita's climate leadership is validated by the following recognitions:

Award / Recognition	Awarding Body	Year
GEF-SGP Best Innovator Award (Women-Led Climate Action)	Global Environment Facility / UNDP	2026
IGBC Platinum Green Campus Certification	Indian Green Building Council	2023
Highlighted in International Climate Reports	IPCC / UN climate networks	2024
C20 India Working Group Lead (Net-Zero & Climate Finance)	Civil 20 / G20 India	2023
UNESCO Chair – Women's Empowerment & Gender Equality	UNESCO	2016–present
NAAC A++ Accreditation (Highest Grade)	National Assessment & Accreditation Council	2022–present

15. Policy Review & Amendment

This Policy shall be reviewed annually by the Sustainability Governance Council. Amendments may be proposed by:

- The Chief Sustainability Officer in response to changes in legislation, science, or ranking methodology
- Campus Sustainability Committees based on operational experience
- The student body through the Student Sustainability Representatives on the SGC

All amendments require approval by the Vice Chancellor's Office and are publicly notified on the Amrita website within 30 days of adoption.

16. Formal Endorsement

This Policy has been reviewed and endorsed by the following institutional authorities:

Role	Name / Designation	Signature & Date
Vice Chancellor	Amrita Vishwa Vidyapeetham	
Chief Sustainability Officer	Amrita Vishwa Vidyapeetham	
Dean, Research & Innovation	Amrita Vishwa Vidyapeetham	
Student Sustainability Representative	Elected, 2025–2026 cohort	

Appendix A: Alignment with Sustainability Ranking Indicators

The table below maps this Policy's provisions to key sustainability indicators assessed by international university sustainability evaluation frameworks:

Sustainability Indicator / Lens	Policy Section	Evidence / Deliverable
Net-Zero Commitment (Published)	Section 4 & 7	2030 carbon neutrality publicly declared at IGBC award ceremony, Nov 2023
Sustainability Strategy & Energy Emissions Report	Sections 4, 6, 12	Annual Sustainability Report + GHG Inventory; IGBC Platinum certification
Membership in Climate/Sustainability Groups	Sections 11, 14	GEF-SGP, CANSA, C20 India, UNESCO Chair, UNDP, TERI, MoEFCC
Student Sustainability Societies	Section 9.4	Amrita Green Campus Initiative; Climate Action Student Network (CASN)
Publicly Available Sustainability Strategy	This Policy Document	Publicly available on amrita.edu; submitted to institutional partners
Sustainable Education (Curriculum)	Section 9.1 & 9.2	Mandatory sustainability modules; Live-in-Labs®; CERD (Durham partnership)
Research Centre for Environmental Sustainability	Section 9.3 & 10	ACRD, SustIN, ARISE, Amrita TBI, UNESCO Chairs
SDG-Aligned Research (SDG 13)	Section 10	Publications on climate, green hydrogen, marine ecosystems, disaster resilience
Government Funded R&D	Section 10.2	MoEFCC, Ministry of Earth Sciences, GEF-SGP co-funding
Alumni Impact in Climate / Social	Section 11	Community beneficiaries in 1,200+ villages; 2,000+ direct beneficiaries through NGO partnerships
Disinvestment from Fossil Fuels	Section 6.2	0% funding from carbon-intensive industries (formal Disinvestment Policy, 2023)

Appendix B: Key Policy References & Standards

- GHG Protocol Corporate Accounting and Reporting Standard (World Resources Institute)
- Paris Agreement (2015) — 1.5°C pathway
- United Nations Sustainable Development Goals (SDGs) — particularly SDG 13 (Climate Action), SDG 7 (Clean Energy), SDG 14 (Life Below Water), SDG 15 (Life on Land)
- Sendai Framework for Disaster Risk Reduction 2015–2030
- IGBC Green Campus Rating System
- ISO 14064 — Greenhouse Gas Accounting and Verification
- National Action Plan on Climate Change (NAPCC), Government of India
- Science Based Targets initiative (SBTi) methodology
- NAAC Accreditation Framework — Criterion VII: Institutional Values & Best Practices

Appendix C: Definitions

- Carbon Neutrality / Net-Zero: Achieving a balance between GHG emissions produced and GHG emissions removed from the atmosphere.
- Scope 1 Emissions: Direct GHG emissions from sources owned or controlled by the institution.
- Scope 2 Emissions: Indirect GHG emissions from the generation of purchased electricity consumed by the institution.
- Scope 3 Emissions: All other indirect GHG emissions that occur in the institution's value chain.
- Science-Based Target (SBT): A GHG emission reduction target aligned with the level of decarbonisation required to meet the Paris Agreement goal.
- Live-in-Labs®: Amrita's trademarked experiential learning programme in which students and faculty co-design solutions with rural communities.
- SREE Platform: Sustainability & Resilience for Community Engagement & Empowerment — Amrita's geo-enabled technology platform for real-time climate resilience monitoring.
- IGBC: Indian Green Building Council — the apex body for green building standards in India.