CHIRAG BHIMANI

Environmental, Sustainability & Climate Policy Leader
India | International



EXECUTIVE PROFILE

Senior Environmental and Climate Policy Expert with 30+ years of experience across regulatory leadership, emissions trading systems, carbon markets, Best Available Techniques (BAT), industrial decarbonization, and environmental governance.

Former Divisional Head at Gujarat Pollution Control Board (State Environmental Protection Authority) and current CEO of a 15 MLD Zero Liquid Discharge Textile Park and Co-founder & CEO of Nature Based Solutions and Carbon Credits companies.

International advisory experience with OECD (Paris), GIZ (Germany), CEEW (India), Adelphi (Germany), Vesta (USA), and global climate forums including COP28 (Dubai), INC 5.2 (Canada) and COP30 (Brazil).

Recognized leader in:

- ✓ Carbon markets & credit monetization
- ✓ Environmental regulatory reform & digital governance
- ✓ Industrial decarbonization & BAT frameworks
- ✓ Emissions Trading Scheme (ETS) design & implementation
- ✓ Continuous Emissions Monitoring Systems (CEMS)

CORE EXPERTISE

- Climate Policy & Carbon Markets & Pricing
- Emissions Trading Systems (ETS)
- Carbon Markets & Registries
- Industrial Decarbonization
- Best Available Techniques (BAT/BREF)
- Environmental Regulatory Frameworks
- Coastal & Marine Climate Solutions
- Air Quality Management using innovative tools
- Zero Liquid Discharge (ZLD) Systems
- Environmental Compliance & Permitting
- Digital Environmental Governance
- Sustainable Development Solutions for SIDS

KEY COMPETENCIES FOR NATIONAL & INTERNATIONAL ROLES

- Environmental Governance & Regulatory Reform
- Market-Based Climate Instruments (ETS Design & Implementation)
- Climate Policy & Air Quality Management
- Digital Public Infrastructure & E-Governance
- Monitoring, Reporting & Verification (MRV) Systems
- Institutional Capacity Building
- Stakeholder & Multilateral Coordination
- Data-Driven Environmental Compliance
- Public Sector Innovation & Reform

PROFESSIONAL EXPERIENCE

Founder and CEO,
Earth Group Inc., Canada | India
Jan 2026 – Present

- ✓ Define enterprise strategy positioning Earth.Do Inc. as a science-led coastal and marine carbon dioxide removal (CDR) platform through collaboration with Vesta, USA.

- ✓ Lead the development and commercialization of ocean-based CDR solutions including coastal enhanced weathering, marine alkalinity enhancement, and complementary blue carbon pathways in India.
- ✓ Drive scientific validation of marine carbon removal technologies in India through pilot projects, field trials, and collaboration with leading research institutions.
- ✓ Spearhead the development of Earth.Do's carbon registry platform with transparent protocols, digital MRV infrastructure, and high-integrity credit issuance mechanisms in India through collaboration with Vesta, USA.
- ✓ Oversee environmental impact assessments, marine ecosystem monitoring, and regulatory compliance across coastal deployment projects.
- ✓ Build strategic partnerships with governments, research organizations, coastal communities, industry stakeholders, and international climate initiatives.
- ✓ Lead capital raising, climate finance initiatives, strategic investments, and commercial partnerships to accelerate large-scale deployment of marine CDR solutions.
- ✓ Develop international expansion strategies for coastal and marine CDR projects while ensuring adherence to environmental regulations and best-practice governance through collaboration with Vesta, USA.
- ✓ Represent Earth.Do in global climate forums, scientific conferences, policy dialogues, and industry alliances to advance the adoption of high-integrity marine carbon removal.
- ✓ Foster interdisciplinary collaboration across scientific, engineering, regulatory, and commercial teams to translate research into scalable climate solutions.

Co-Founder and CEO,
Dhara NbS LLP, India
Nov 2025 – Present

- ✓ Define enterprise strategy positioning Dhara NbS as a science-driven carbon removal platform.
- ✓ Implement MRV frameworks for biochar-based carbon sequestration aligned with global standards.
- ✓ Structure carbon credit projects including additionality, permanence, leakage, and lifecycle carbon accounting.
- ✓ Lead validation, verification, and issuance processes with international carbon registries and marketplaces.
- ✓ Oversee decentralized biochar production systems ensuring sustainable biomass sourcing and net-negative emissions.
- ✓ Develop farmer integration and aggregation models to enable soil carbon enhancement and organic transition pathways.
- ✓ Lead capital raising, climate finance partnerships, and institutional collaborations.
- ✓ Drive innovation, R&D, and geographic scaling of regenerative carbon solutions.

Chief Executive Officer,
Rupam Eco Green Textile Park Association (ZLD CETP Project), India
Nov 2021 – Present

- ✓ Provide overall leadership and strategic direction for planning, development, operation, and sustainability of the 6 MLD ZLD-CETP (total of 15 MLD on completion of 3 phases).
- ✓ Act as the principal authority for CETP governance, ensuring alignment with environmental regulations, association objectives, and member industry requirements.
- ✓ Ensure 100% compliance with all statutory approvals, consents, and conditions stipulated by SPCB/CPCB and other regulatory bodies.

- ✓ Oversee design, upgradation, and optimization of CETP and ZLD systems, including ETP, MEE, ATFD, RO, evaporation, and sludge management units.
- ✓ Monitor operational performance indicators such as hydraulic load, pollutant load, energy consumption, recovery efficiency, and treated water quality.
- ✓ Ensure zero liquid discharge compliance, including effective recovery and reuse of treated wastewater within member textile units.
- ✓ Approve and supervise contracts with EPC contractors, O&M agencies, laboratories, chemical suppliers, and technology providers.
- ✓ Establish and enforce standard operating procedures (SOPs), emergency response plans, and risk mitigation frameworks for CETP operations.
- ✓ Ensure safe handling, storage, transportation, and disposal of sludge and hazardous waste in accordance with applicable rules.
- ✓ Coordinate with member textile units to ensure proper influent quality control, load management, and adherence to inlet norms.
- ✓ Serve as the single point of interface with regulatory authorities, funding agencies, financial institutions, and government departments.
- ✓ Lead environmental monitoring, reporting, and data submission, including online continuous monitoring systems and periodic compliance reports.
- ✓ Promote energy efficiency, resource recovery, and circular economy practices within CETP operations.
- ✓ Drive capacity building and training of CETP technical, operational, and safety personnel.
- ✓ Handle regulatory inspections, audits, show-cause notices, and compliance reviews, ensuring timely corrective and preventive actions.
- ✓ Represent the association in policy discussions, stakeholder meetings, and industry forums related to wastewater management and sustainability.
- ✓ Ensure transparency, accountability, and good governance in CETP decision-making and operations.
- ✓ Plan for future expansion, technology upgrades, and resilience to accommodate growth in textile park capacity or regulatory tightening.

Director (Regulatory Affairs, Environment & Circularity),
Meso Carbon India Pvt. Ltd, India
Jul 2023 - Present

- ✓ Ensure regulatory compliance for import, handling, storage, transport and regeneration of spent activated carbon — national (e.g., hazardous waste rules, customs) and international Basel/IMO/IATA requirements.
- ✓ Prepare, review and obtain environmental permits, No Objection Certificates, customs clearances and import authorizations; liaise with CPCB/SPCB, customs, and port authorities.
- ✓ Design and oversee safe logistics & chain-of-custody protocols for inbound spent carbon (packaging, labelling, manifests, transport permits), including vendor/supplier audits.
- ✓ Develop and approve sampling, characterization and testing procedures (e.g., adsorbed contaminants, TCLP/leachability, moisture, ash) to classify spent carbon and decide regeneration vs. disposal.
- ✓ Specify and monitor regeneration process controls and emission/effluent limits (air, water, waste residues); implement best available techniques (BAT) and pollution-control equipment.
- ✓ Conduct environmental risk assessments (fire, fugitive emissions, contamination) and prepare operating SOPs, emergency response plans, and spill/incident management protocols.
- ✓ Implement QA/QC and documentation systems: incoming/outgoing manifests, MSDS, Material Traceability, Environmental Management System records, and regulatory reporting.

- ✓ Lead vendor/third-party audits and due diligence for overseas suppliers/exporters of spent carbon; evaluate their handling, pre-treatment, and legal status.
- ✓ Provide training to operations, safety, logistics and QA teams on hazardous material handling, regulatory obligations, PPE, and safe regeneration practices.
- ✓ Advise on sustainability, circular-economy options and disposal alternatives (residual disposal, recovery routes), and prepare technical inputs for client proposals, risk disclosure, and stakeholder communications.

Technical Advisor,
Universal Carbon & Water Registry, India
Jan 2024 - Present

- ✓ Provided strategic technical guidance on the development and implementation of carbon and water credit projects.
- ✓ Advised on the design, validation, and verification of greenhouse gas (GHG) emission reduction and water stewardship projects.
- ✓ Reviewed project methodologies to ensure alignment with international carbon accounting and environmental standards.
- ✓ Supported the development and enhancement of registry frameworks, technical protocols, and governance mechanisms.
- ✓ Evaluated project eligibility, additionality, baseline scenarios, and monitoring, reporting, and verification (MRV) requirements.
- ✓ Contributed to the development of methodologies for carbon sequestration, emissions reduction, and water conservation initiatives.
- ✓ Provided technical oversight for project documentation, validation reports, and verification processes.
- ✓ Advised project developers, validators, and stakeholders on carbon markets, water credits, and sustainability best practices.
- ✓ Monitored developments in voluntary and compliance carbon markets, climate policy, and environmental standards to inform registry practices.
- ✓ Promoted transparency, credibility, and environmental integrity in registry operations through robust technical review and quality assurance.
- ✓ Supported capacity building through technical guidance, workshops, and stakeholder consultations on carbon and water credit mechanisms.
- ✓ Collaborated with multidisciplinary teams to strengthen climate finance, environmental sustainability, and nature-based solutions.
- ✓ Contributed to policy discussions and technical recommendations on carbon accounting, water resource management, and ecosystem services.
- ✓ Evaluated emerging technologies and innovative approaches for enhancing climate resilience, emissions reduction, and water sustainability.

Expert Group Member (India), OECD BAT Working Group,
Organisation for Economic Cooperation and Development (OECD), Paris
Aug 2019 - Present

- ✓ Contribute technical expertise to the development and revision of OECD Best Available Techniques (BAT) guidance and reference documents.
- ✓ Participate in international working group meetings, workshops, and expert consultations.
- ✓ Review, evaluate, and provide technical comments on draft BAT documents and policy recommendations.

- ✓ Assess emerging technologies, industrial processes, and environmental performance to identify best available techniques.
- ✓ Support the development of evidence-based recommendations for pollution prevention, emissions reduction, and resource efficiency.
- ✓ Analyse scientific, technical, and regulatory information from member countries and relevant stakeholders.
- ✓ Facilitate consensus-building among experts representing governments, industry, academia, and civil society.
- ✓ Benchmark international best practices and promote harmonised approaches to environmental management.
- ✓ Contribute to technical reports, background papers, and guidance documents for OECD publications.
- ✓ Evaluate environmental, economic, and technical feasibility of proposed BAT measures.
- ✓ Provide expert advice on industrial emissions, waste management, energy efficiency, and sustainable production practices.
- ✓ Represent national expertise and communicate country experiences, case studies, and regulatory developments.
- ✓ Collaborate with multidisciplinary teams to address cross-sectoral environmental challenges.
- ✓ Identify research gaps and recommend areas for future technical studies and policy development.
- ✓ Support knowledge sharing and capacity building among OECD member and partner countries.
- ✓ Maintain awareness of technological innovations, environmental regulations, and global industrial trends relevant to BAT.
- ✓ Contribute to peer review processes to ensure the scientific quality and technical robustness of OECD outputs.
- ✓ Engage with stakeholders to gather technical evidence and promote transparency in the BAT development process.
- ✓ Uphold OECD principles of scientific integrity, impartiality, collaboration, and evidence-based policymaking.

India Head and Technical Director,
Optimor Ventures LLC, New Jersey, USA
Jul 2024 - Present

- ✓ Provide strategic technical advisory for establishing and scaling the ESG vertical, aligning sustainability offerings with global ESG frameworks, regulatory expectations, and investor requirements.
- ✓ Design ESG assessment, reporting, and disclosure methodologies covering environmental, social, and governance performance for portfolio companies and clients.
- ✓ Lead technical development of carbon market solutions, including identification, evaluation, and structuring of carbon credit projects across voluntary and compliance markets.
- ✓ Advise on carbon accounting, baseline setting, monitoring, reporting, and verification (MRV) systems to ensure credibility, transparency, and audit readiness.
- ✓ Support development of digital carbon marketplace architecture, including credit classification, pricing logic, traceability, and risk management mechanisms.
- ✓ Provide technical due diligence and ESG risk advisory for investments, mergers, and sustainability-linked financing initiatives.
- ✓ Engage with international standards bodies, verifiers, and stakeholders to ensure alignment with evolving ESG regulations, climate policies, and best practices.

India Representative and Technical Project Consultant,
Project Vesta, USA
Nov 2021 – Mar 2023

- ✓ Technical Advisory & Localization: Provide expert guidance on adapting Accelerated Rock Weathering (ARW) concepts to Indian coastal, geological, climatic, and regulatory conditions.
- ✓ Site Identification & Feasibility Assessment: Support identification and preliminary assessment of suitable Indian coastal sites, including evaluation of sand dynamics, wave energy, mineral availability, and environmental sensitivity.
- ✓ Regulatory & Compliance Support: Advise on Indian environmental regulations, coastal zone management norms (CRZ), marine protection laws, and permitting pathways relevant to ARW pilot and scale-up projects.
- ✓ Stakeholder Engagement & Liaison: Facilitate engagement with Indian government agencies, research institutions, coastal authorities, ports, local communities, and industry stakeholders.
- ✓ Environmental Risk & Impact Advisory: Assist in identifying potential ecological risks, monitoring parameters, and mitigation strategies related to marine ecosystems, sediment transport, and water chemistry.
- ✓ Project Coordination & Knowledge Transfer: Act as a coordination bridge between the India-based ecosystem and the US-based Project Vesta technical and research teams, ensuring timely information flow and alignment.
- ✓ Strategic Expansion & Capacity Building: Support development of India-focused roadmaps, partnerships, pilot frameworks, and capacity-building initiatives to enable scalable coastal carbon removal solutions.

Ambassador,
Island Innovation, Portugal
Jan 2023 – Dec 2023

- ✓ Represented Island Innovation as a global ambassador, promoting sustainable development, climate resilience, and innovation for island and coastal communities.
- ✓ Advocated for sustainable development initiatives aligned with the UN Sustainable Development Goals (SDGs), particularly those relevant to Small Island Developing States (SIDS) and island communities.
- ✓ Participated in international capacity-building programmes, expert workshops, and leadership training on sustainability, climate action, communications, and community engagement.
- ✓ Promoted the dissemination of global best practices, innovative solutions, and policy knowledge related to climate adaptation, renewable energy, ocean conservation, and sustainable development.
- ✓ Contributed to communication campaigns and outreach activities to strengthen community participation and amplify sustainability initiatives.
- ✓ Supported the organization and promotion of international events, including the Virtual Island Summit and other Island Innovation programmes.
- ✓ Shared regional case studies, technical knowledge, and community experiences to support evidence-based sustainable development discussions.
- ✓ Contributed articles, presentations, and digital content highlighting sustainability challenges, innovative practices, and climate solutions.
- ✓ Enhanced the visibility of regional sustainability initiatives through professional networking, advocacy, and digital engagement.
- ✓ Collaborated with a global network of sustainability professionals and changemakers to strengthen international cooperation and collective impact.
- ✓ Contributed to the expansion of Island Innovation's global community by fostering engagement, collaboration, and knowledge sharing across diverse stakeholders.

Senior Technical Advisor,
Council for Energy, Environment and Water, India
Mar 2024 – Jun 2026

- ✓ Develop an India-specific EPA AP-42 manual for at least three selected sectors. To work across the Clean Air, Sustainable Water, and Industrial Sustainability teams to develop an Indian version of the EPA AP-42 for three select sectors, which will be finalised in consultation with stakeholders.
- ✓ Responsible for identifying and forging a partnership with a government institution (regulator/ academic) as a collaborator.
- ✓ Develop a Decision Support System by integrating CEMS Data: Collaborate with at least four SPCBs/PCCs to introduce a functional CEMS Data Integrated Decision support system.
- ✓ Responsible for conducting system requirement analyses, identifying relevant data management, alerting and verifying modules required, given state-specific scenarios, and facilitating its rollout.
- ✓ Responsible for capacity-building events and modules for at least four SPCBs/PCCs for sustainability and regular use of the DSS system.
- ✓ Support scale-up of CEEW's intellectual products across SPCBs/ PCCs: Various CEEW teams work on methods, models, policies, and practices relevant to air quality.
- ✓ Coordinated closely with the internal teams to understand the scope and relevance of these intellectual properties, and then engage with MoEF&CC/ CPCB/ SPCBs/PCCs to explore its uptake.

Senior Technical Advisor,
The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (German Corporation for International Cooperation GmbH), New Delhi, India
Nov 2020 – Oct 2021

Independent management of the two projects (with support of the supervisor) with complex multiple tasks:

- ✓ "Reduction of Air Pollution in Three Indian Cities" and "BAT Reference Document for the Textiles Sector in India".
- ✓ Responsible for planning, implementation and management of the two projects and related additional tasks of GIZ India.
- ✓ Advisory and coordination functions, dealing with a wide range of cooperation partners at senior level and disciplinary and supervisory functions for allotted project staff.

Technical Advisor and Consultant,
University of Chicago Trust, India
Feb 2019 – Oct 2020

- ✓ Advising the team on various aspects of scaling up of the five star rating program.
- ✓ Exploring opportunities for scaling up the five star rating program in states of India.
- ✓ Liaising with the respective states after due consultation with team.
- ✓ Proposing a customised program for each state based on the local requirements and the resources available with team.
- ✓ Advising the team about substantive and strategic aspects of the program during the course of its implementation in the respective states.
- ✓ Advising the team about other research opportunities in the program states.

Gujarat Pollution Control Board (State Environment Protection Authority), India

Divisional Head (Senior Environmental Regulator & Policy Lead),
(Headed - Bhavnagar, Amreli, Junagadh, Gir-Somnath, Banaskantha, Patan, Porbandar, Ahmedabad Rural, Botad & Ankleshwar Districts, Ease of Doing Business (EODB), Emissions Trading Scheme (ETS), Real Time & Continuous Emissions Monitoring System (RT&CEMS) & Best Available Techniques Reference (BREF) Document Divisions)
Jan 2013 – Jan 2019

- ✓ Implement strategies for the management of environmental issues impacting on land, air, water and people including air pollution, water pollution and waste for the Districts / Areas assigned.
- ✓ Liaise and consult with Government, industry and community groups regarding implementation of environmental management and protection.
- ✓ Review, make recommendations and decide on applications for statutory approvals like Consent to Establish, Consent to Operate and Hazardous Waste Authorisation and, where appropriate, recommend conditions to be applied to statutory approvals for the industries in the Districts assigned.
- ✓ Implement, analyse and report on complaint investigations into environmental management and protection.
- ✓ Preparation, Compilation and Submission of various types of information as required by various authorities, government departments and agencies.
- ✓ Reply and Follow-up of matters and issues with Central Government, State Government, Central Pollution Control Board, Hon. National Green Tribunal, Hon. High Court, Hon. Supreme Court etc.
- ✓ Strategise and Implement Information and Communication Technologies (ICT) in Board including own website and e-governance portal – eXtended Green Node (XGN – http://gpcbxgn.gujarat.gov.in) for functioning of Board.
- ✓ Strategise, Develop and Implement Continuous Online Monitoring System for Water Emissions, Air Emissions and Ambient Air Quality within the State and also display the same in public domain.
- ✓ Nodal and Coordinating Officer from GPCB for “Business Reforms Action Plan” (BRAP) or also known as the Ease of Doing Business Initiative of Department of Industrial Policy and Promotion, Government of India. Under Assessment of State Implementation of BRAP - 2015, 2016 and 2017, GPCB achieved 100 % compliance for all the prescribed parameters. During the Year 2015 GPCB was the only department in the country to achieve 100% compliance and the same was noted by the World Bank Group in their Assessment Report.
- ✓ Convener of the Committee for preparation of Best Available Techniques Reference (BREF) Document at GPCB. The BREF Document is being prepared in collaboration with German Federal Environment Agency (UBA) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. Has independently created and is managing the BREF Information System (BIS) platform vital for the communications under BREF preparation.
- ✓ Nodal and Coordinating Officer, GPCB for coordinating with CPCB on various issues like e-Samiksha, INDIA E-Track and various other regular review meetings at CPCB.
- ✓ Technical Committee Member representing Gujarat State in the Pilot Project - “Emission Trading Scheme for Particulate Matter from Stationary Sources in India”.
- ✓ Core team member for awards application such as National e-Governance Awards, Prime Minister’s Award, United Nations Public Service Awards, Manthan Awards etc. and could bag 5 prestigious awards for GPCB including National Award for e-Governance (Incremental Innovation) – Gold Award for 2014-15.
- ✓ Editorial Committee Member for the GPCB in-house magazine – “Environmental Action”.

Deputy Environmental Engineer,
Dec 2002 – Dec 2012

- ✓ Review, Inspect, Visit incl. sample collection and make recommendations on applications for statutory approvals and, where appropriate, recommend conditions to be applied to statutory approvals.
- ✓ Implement, analyse and report on complaint investigations into environmental management and protection.
- ✓ To scrutinize, review and recommend on applications for Consent to Establish and Consent to Operate.
- ✓ To scrutinize, review and recommend on applications for Public Hearing for Environmental Clearance.
- ✓ To review and finalize the Consent to Establish and Consent to Operate documents.
- ✓ Lead and Manage a team of environmental officers to enforce and implement environmental management and protection legislations.
- ✓ Lead, Manage and Participate in a team of environmental officers to provide an after hours on call and incident response service.
- ✓ Inspection, Sample Collection and Reporting of industries under prevalent Environment Protection and Pollution Control Legislations in context with consent application by industrial units.
- ✓ Inspection, Sample Collection and Reporting of industries under prevalent Environment Protection and Pollution Control Legislations as directed by Courts, Central (Federal) & State (Provincial) Government and other Government Higher Authorities.
- ✓ Preparation, Compilation and Submission of various types of information as required by Head Office, Central Government, State Government, Central Pollution Control Board and other various Governmental Authorities.
- ✓ Organising and Attending Meetings and Technical Seminars and Workshops such as Cleaner Production, District Crisis Group, Action Plans, GPCB Journal Club etc.
- ✓ Scrutinize and receive applications for Consent to Establish, Consolidated Consent and Authorisation, Authorisation under Bio-Medical Waste Rules and Authorisation under Municipal Solid Waste Rules.
- ✓ Reply and Follow-up of matters and issues with Head Office, Central Government, State Government and Central Pollution Control Board.
- ✓ Implement and report on compliance of Corporate Responsibility for Environment Protection (CREP).
- ✓ Worked as co-ordinator of the Experts Committee constituted by Hon'ble High Court of Gujarat (in Sept. 2005) to ascertain degradation of environment by industrial units.
- ✓ Worked as co-ordinator for Organisation Website (http://gpcb.gujarat.gov.in) and as a committee member for the GPCB Online System viz. XGN (http://gpcbxgn.gujarat.gov.in).

Assistant Environmental Engineer,
Mar 1996 – Nov 2002

- ✓ Review, Inspect, Visit incl. sample collection and make recommendations on applications for statutory approvals and, where appropriate, recommend conditions to be applied to statutory approvals.
- ✓ Implement, analyse and report on complaint investigations into environmental management and protection.
- ✓ To scrutinize, review and recommend on applications for Consent to Establish and Consent to Operate.
- ✓ To review and finalize the Consent to Establish and Consent to Operate documents.
- ✓ Preparation, Compilation and Submission of various types of information as required by Head Office, Central Government, State Government, Central Pollution Control Board and other various Governmental Authorities.
- ✓ Reply and Follow-up of matters and issues with Head Office, Central Government, State Government and Central Pollution Control Board.

Technical Advisor,
Gujarat Cleaner Production Council, India
Mar 2022 – Feb 2024

- ✓ Provide technical guidance on pollution prevention and cleaner production.
- ✓ Evaluate and recommend pollution control technologies.
- ✓ Support policy formulation and capacity building.
- ✓ Promote sustainable industrial development**.**

TRAINING / WORKSHOPS / SUMMER SCHOOLS / STUDY TOURS

- ✓ Training Program on Environment Friendly Ship Recycling at The Association for Overseas Technical Scholarship, Yokohama, Japan – February 2011.
- ✓ ICAP Summer School on Emissions Trading at Madrid, Spain – July 2011.
- ✓ ICAP-NA2050 Workshop on Developing Industrial Benchmarks for GHG Emissions at Pace University, New York, USA – September 2012.
- ✓ Training program for Online Monitoring Systems at Freiburg and Dresden, Germany – September 2014.
- ✓ Remediation of Sites Contaminated with Hazardous Wastes at Deventer, Netherlands – October 2014.
- ✓ ICAP Master Class on Emissions Trading at London, UK – July 2015.
- ✓ Training program "Remote Sensing: An Overview for Decision Makers" at Indian Institute of Remote Sensing, Dehradun – June 2018.
- ✓ Study Tour to Germany organised by German Federal Environment Agency (UBA) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH for preparation of Best Available Techniques Reference (BREF) Document at GPCB – September 2018.
- ✓ Successfully completed various Applied Remote Sensing Training Programs organised by National Aeronautics and Space Administration (NASA) USA on use of Satellite Data for Environment Protection and Management as well as Climate Change Mitigation.
- ✓ ICAP Alumni Conference 2023 at Berlin, Germany – March 2023.
- ✓ Attended Stockholm+50, International Meeting, held in Stockholm, Sweden on 2–3 June 2022, to commemorate the 50th anniversary of the 1972 UN Conference on the Human Environment as an OBSERVER.
- ✓ Attended COP 28 - The 2023 United Nations Climate Change Conference or Conference of the Parties of the UNFCCC, held from 30 November to 13 December 2023 at Expo City, Dubai, United Arab Emirates as an OBSERVER.
- ✓ Attended INC 4 - The 4th session of the Intergovernmental Negotiating Committee of United Nations Environment Programme to develop an international legally binding instrument on plastic pollution, including in the marine environment from 23 to 29 April 2024 at Ottawa, Canada as OBSERVER.
- ✓ Attended COP 30 - The 2025 United Nations Climate Change Conference or Conference of the Parties of the UNFCCC, held from 10 November to 21 November 2025 at Belem, Para, Brazil as an OBSERVER.

PUBLICATIONS & PRESENTATIONS

Authored Books:

- ➢ ***NAVIGATING SUSTAINABLE SEAS:*** Carbon Markets & Trading
- ➢ ***SUSTAINING PARADISE:*** Sustainable Development in Small Island Developing States (SIDS)
- ➢ ***TIDES OF CHANGE:*** Plastic Pollution in Small Island Developing States (SIDS)
- ➢ ***NAVIGATING BLUE FRONTIER:*** *Exploring Blue Economy in Small Island Developing States (SIDS)*
- ➢ ***TRADING POLLUTION:*** The Global Evolution of Emissions Trading Schemes
- ➢ ***BEYOND WASTE:*** Circular Economy, Resource Recovery and the Future of Sustainable Development
- ➢ ***REGENERATING NATURE:*** Nature-Based Solutions, Carbon Removal and the Future of Climate Action

Various Presentations and Papers:

- Delivered 40+ invited presentations and keynote lectures at leading international and national conferences across the USA, Germany, Hungary, Romania, Russia, South Korea, Faroe Islands, UAE, and India on climate technologies, environmental governance, emissions monitoring, Best Available Techniques (BAT), water management, and sustainability.
- Presented at prestigious forums including Harvard Kennedy School, OECD Expert Group on BAT (Paris), United Nations (UNECE, UNITAR, CTCN), University of Chicago Centre, NITI Aayog, Centre for Science and Environment (CSE), and other international organizations.
- Keynote Speaker, ANE Global Meet & Expo on Green Energy & Environmental Technology, Dubai (2025), on Advancements in Carbon Capture Technologies.
- Authored/co-authored 10+ technical publications, journal articles, guidance documents, and book chapters on emissions trading, Continuous Emissions Monitoring Systems (CEMS), environmental governance, groundwater remediation, and air pollution.
- Contributing team member for the book "CEMS – Continuous Emissions Monitoring System: A Technical Guidance Manual" (Centre for Science and Environment, 2017).
- Conducted training programmes for judicial officers, regulators, industry professionals, and academic institutions, including the Gujarat High Court Judicial Academy, Nirma University, BVM, CHARUSAT, Ahmedabad University, and other professional institutes on environmental laws, pollution control, monitoring technologies, and sustainability.

EDUCATION

- **Ph.D. in Climate Change & Environmental Technologies**
  Dissertation: Study of Removal Potentials and Cost of Carbon Dioxide Removal (CDR) Options

- **Master of Technology – Environmental Engineering**
  Thesis: Groundwater Remediation using Permeable Reactive Barriers

- **Bachelor of Civil Engineering *(Specialised in Environmental and Structural Engineering)***
  First Rank – University Gold Medalist