

# CHIRAG BHIMANI

## ENVIRONMENT, SUSTAINABILITY AND CLIMATE PROFESSIONAL



### Experience

<b>Nov 2021 – Current</b>	<ul style="list-style-type: none"><li>✓ <b>Chief Executive Officer, Rupam Eco Green Textile Park Association</b>, Mahijada, Tal.: Daskroi, Dist.: Ahmedabad (Three Phase Green Field Textile Park Project with a total 15 MLD ZLD-CETP) (<a href="http://www.regtp.org">www.regtp.org</a>)</li><li>✓ <b>Senior Consultant, Council on Energy, Environment and Water</b>, New Delhi, India (Asia's Leading Not-For-Profit Policy Research Institution) (<a href="http://www.ceew.in">www.ceew.in</a>)</li><li>✓ <b>Executive Director (Environment &amp; Sustainability), Optimor Ventures LLC</b>, Lewes, Delaware USA (<a href="http://optimor.co">optimor.co</a>)</li><li>✓ <b>Techno-Legal Consultant, Ahmedabad Municipal Corporation</b>, Ahmedabad, India (<a href="http://ahmedabadcity.gov.in">ahmedabadcity.gov.in</a>)</li><li>✓ <b>Advisor, Universal CO<sub>2</sub> Emission and Offset Registry Private Ltd.</b>, New Delhi, India (A Global Carbon Credit Registry having strategic tie up with various International Carbon Exchanges) (<a href="http://www.ucarbonregistry.io">www.ucarbonregistry.io</a>)</li><li>✓ <b>Expert Member BAT (INDIA) and Member of Sub-Group for Study on Cross-Country Comparison of Selected BREFs of BAT Projects of Waste Incineration Sector, Pulp and Paper Sector and Integrated Iron &amp; Steel Plants Sector</b>, Environment Directorate, Organisation for Economic Co-operation and Development (OECD), Paris (<a href="http://www.oecd.org/chemicalsafety/risk-management/best-available-techniques.htm">www.oecd.org/chemicalsafety/risk-management/best-available-techniques.htm</a>)</li><li>✓ <b>Principal Consultant, Kadam Environmental Consultants</b> (assessment of Carbon Footprint, Carbon Credit, Monetizing Carbon Credits, Carbon Trading etc.) (<a href="http://www.kadamenviro.com">www.kadamenviro.com</a>)</li><li>✓ <b>Technical Expert, Gujarat Cleaner Production Centre (GCPC)</b> (established by Industries &amp; Mines Department, Government of Gujarat, Gandhinagar) (<a href="http://gpcpgujarat.org.in">gpcpgujarat.org.in</a>)</li><li>✓ <b>Technical Advisor, Paryavaran Mitra</b> (Environmental Policy Advocacy) (<a href="http://paryavaranmitra.org.in">paryavaranmitra.org.in</a>)</li><li>✓ <b>Ambassador 2023, Island Innovation</b> (<i>Bringing together the private sector, government, utilities, NGOs and universities to advance innovation for sustainability in islands worldwide</i>) (<a href="http://islandinnovation.co">islandinnovation.co</a>)</li><li>✓ <b>Project Consultant, Vesta, PBC, USA</b> (<i>working to reverse climate change and ocean acidification by greatly accelerating the Earth's natural long-term process of rock weathering through Coastal Carbon Capture</i>) (<a href="http://www.vesta.earth">www.vesta.earth</a>) (Till Nov. 2023)</li><li>✓ <b>Senior Technical Advisor, The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH</b> (German Corporation for International Cooperation GmbH) (<a href="http://www.giz.de">www.giz.de</a>) (Till Nov. 2022)</li></ul>
<b>Feb 2019 – Oct 2020</b>	<ul style="list-style-type: none"><li>✓ Freelance Environmental Professional, Ahmedabad, Gujarat, India</li><li>✓ Indian Senior Expert (Legal Framework), Adelphi (a leading independent think tank and public policy consultancy on climate, environment and development), Germany (<a href="http://www.adelphi.de/en">www.adelphi.de/en</a>)</li><li>✓ Expert, Tata Centre for Development, University of Chicago, Delhi Centre (<a href="http://tcd.uchicago.edu">tcd.uchicago.edu</a>)</li></ul>
<b>Jan 2013 – Jan 2019</b>	<p>Divisional (Unit) Head, Head Office, Gandhinagar Gujarat Pollution Control Board (GPCB), INDIA (<a href="http://gpcb.gujarat.gov.in">gpcb.gujarat.gov.in</a>) (State [Provincial] Environment Protection Agency) <i>(Bhavnagar, Amreli, Junagadh, Gir-Somnath, Banaskantha, Patan, Porbandar, Ahmedabad Rural, Botad &amp; Ankleshwar Districts, BRAP – Ease of Doing Business (EODB), Emissions Trading Scheme (ETS), Real Time &amp; Continuous Emissions Monitoring System (RT&amp;CEMS) &amp; Best Available Techniques Reference (BREF) Document Divisions)</i></p>
<b><u>Key Duties &amp; Responsibilities at GPCB</u></b>	
<ul style="list-style-type: none"><li>✓ Implement strategies for the management of environmental issues impacting on land, air, water and people including air pollution, water pollution and wastes for the Districts / Areas / Divisions assigned</li></ul>	

<ul style="list-style-type: none"> <li>✓ Liaise and consult with Government, industry and community groups regarding implementation of environmental management and protection</li> <li>✓ Review, make recommendations and decide on applications for statutory approvals like Consent to Establish (CtE), Consent to Operate (CtO) and Hazardous Waste Authorisation and, where appropriate, recommend conditions to be applied to statutory approvals for the industries in the Districts / Areas / Divisions assigned</li> <li>✓ Implement, analyse and report on complaint investigations into environmental management and protection</li> <li>✓ Preparation, Compilation and Submission of various types of information as required by various authorities, government departments and agencies</li> <li>✓ 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.</li> <li>✓ Strategise and implement Information and Communication Technologies (ICT) in GPCB including own website (<a href="http://gpcb.gujarat.gov.in">gpcb.gujarat.gov.in</a>) and e-governance portal XGN – eXtended Green Node (<a href="http://gpcbxgn.gujarat.gov.in">gpcbxgn.gujarat.gov.in</a>) for functioning of Board</li> <li>✓ Strategise, Develop and Implement Continuous Online Monitoring System for Water Emissions, Air Emissions and Ambient Air Quality within the State and display the same in public domain</li> <li>✓ 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</li> <li>✓ 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 managed the BREF Information System (BIS) platform vital for the communications under BREF preparation</li> <li>✓ Nodal and Coordinating Officer, GPCB for coordinating with CPCB on various issues like e-Samiksha (virtual platform for monitoring of follow-up action on the decisions taken during the presentations made by different Divisions/Zonal offices/State Boards to the CPCB Chairman), INDIA E-Track (MIS developed by CPCB for enabling the furnishing data/information by the SPCBs, updated information and quick access of data on 17 Categories and Grossly Polluting Industries) and various other regular review meetings at CPCB</li> <li>✓ Technical Committee Member representing Gujarat State in the Pilot Project - “Emission Trading Scheme for Particulate Matter from Stationary Sources in India” at National Level</li> <li>✓ Nodal Officer and Head, “Emission Trading Scheme for Particulate Matter from Stationary Sources in India” for implementation, execution and operation of ETS including policy formulation for Continuous Emissions Monitoring System, Data Acquisition and Handling System, Market Design and Strategy, Permit Allocation and Pricing etc.</li> <li>✓ 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</li> <li>✓ Editorial Committee Member for the GPCB in-house magazine – “Environmental Action”</li> </ul>	
<b>Feb 1996 – Dec 2012</b>	Deputy Environmental Engineer (DEE) and Assistant Environmental Engineer (AEE), Gujarat Pollution Control Board, INDIA
<b>Oct 1994 – Jan 1996</b>	Assistant to Senior Professional Structural Engineer Mr. Mulvantbhai G. Domadia, Professional Engineer, Rajkot INDIA ( <i>Held Professional Engineer License</i> )

### Areas of Interest

<b>Climate Change Mitigation through Coastal Carbon Capture and other Innovative Technologies</b>	<b>Best Available Techniques (BAT) Reference Documents</b>
<b>CDR through Carbon Markets and Carbon Pricing</b>	<b>Innovative Business Models for Renewable Energies like Solar, Wind, Tidal etc.</b>
<b>Air Quality Management using innovative tools like Satellite Based Measurements, Market Based Instruments like Emissions Trading Scheme etc.</b>	<b>Environmental Management using innovative technologies like Remote Sensing, UAVs &amp; Drones, Artificial Intelligence etc.</b>
<b>Contaminated Sites Remediation and Management</b>	<b>Coastal &amp; Marine Pollution Management</b>
<b>Environmental and Climate Change Policy, Planning &amp; Data Analytics</b>	<b>Sustainable Development Solutions for Small Islands for issues like Plastic Waste, Clean Water, Energy etc.</b>

## Education

**Master of Technology – Environmental Engineering** from Swarnim Startup and Innovation University, Gujarat INDIA – Thesis on *“Comparative Study of Reactive Media for Remediation of Ground Water Contaminated by Industries Using Permeable Reactive Barriers”*

**Bachelor of Civil Engineering** from Sardar Patel University (Studied in Birla Vishwakarma Mahavidyalaya – Engineering College), Vallabh Vidyanagar, Gujarat INDIA – Electives – *“Air Pollution Control”* and *“Advanced Structural Analysis”*

## Achievements / Awards

**Three Gold Medals** viz. from Birla Vishwakarma Mahavidyalaya (Engineering College), Sardar Patel University, Vallabh Vidyanagar and Institute of Engineers (India) for best performance at Graduate Level

Cumulative Performance Index – 9.70 (out of 10.00) and Ranked **FIRST** in the University in the FINAL YEAR at Graduate Level

Cumulative Grade Point Average – 8.79 (out of 10.00) and Ranked **FIRST** in the University at Post Graduate Level

## Professional Memberships

Member of the Forum for Air Quality Modelling in Europe (FAIRMODE) - A joint response initiative of the European Environment Agency (EEA) and the European Commission Joint Research Centre (JRC) ([fairmode.jrc.ec.europa.eu](http://fairmode.jrc.ec.europa.eu))

Member of the Forum on "Earth Observations of Crop Burning and Air Pollution over India" joint initiative of NASA and USRA ([www.firesandaq2020.info](http://www.firesandaq2020.info))

Member of Institute of Engineers (India) ([www.ieindia.org](http://www.ieindia.org))

Member of Scientific & Technical Committee & Editorial Review Board on Environmental & Ecological Engineering, International Research Conferences at The World Academy of Science, Engineering & Technology ([www.waset.org](http://www.waset.org))

## Books Authored

**Navigating Sustainable Seas** : A Comprehensive Guide to Carbon Markets and Trading ([Amazon Book Store](#))

**Sustaining Paradise** : Sustainable Development in Small Island Developing States ([Amazon Book Store](#))

**Tides of Change** : Mitigating Plastic Pollution in Small Island Developing States ([Amazon Book Store](#))

**Navigating Blue Frontier** : Exploring Blue Economy in Small Island Developing States (Under publication)

## 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 Applied Remote Sensing Training Programs organised by National Aeronautics and Space Administration (NASA) USA on:

- ✓ Satellite Derived Annual PM<sub>2.5</sub> Data Sets in Support of United Nations Sustainable Development Goals (15 & 29 March 2017)
- ✓ An Inside Look at how NASA Measures Air Pollution (26 & 28 May 2020)
- ✓ Remote Sensing of Coastal Ecosystems (25 August, 1 & 8 September 2020)
- ✓ MODIS to VIIRS Transition for Air Quality Applications (22 October 2020)
- ✓ Introduction to NASA's "Black Marble" Night Lights Data (3 December 2020)
- ✓ Satellite Observations and Tools for Fire Risk, Detection, and Analysis (11 & 27 May 2021)
- ✓ Using Earth Observations for Pre- and Post-Fire Monitoring (18 & 20 January, 2022)
- ✓ Evaluating Ecosystem Services with Remote Sensing (23, 25 & 30 August, 2022)

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

## Presentations / Publications

Presentation on "Innovative Tools in Environmental Governance" on 9 October 2012 at Harvard Kennedy School, Harvard University, Cambridge, MA, United States of America

Specifications and Guidelines for Continuous Emissions Monitoring Systems (CEMS) For P M Measurement with Special Reference to Emission Trading Programs by Dr. Dipankar Saha, Chirag Bhimani, et al. – Central Pollution Control Board, New Delhi, 2013-14

Issues and Challenges for Emission Trading Scheme for Particulate Matter in India by Kavitha B.V., Bhimani Chirag, et al. – Journal of Environmental Research and Development, Vol. 9 No. 03, January-March 2015

A Critical Literature Review on Emission Trading Scheme by Ekam Patel, Chirag Bhimani, et al. – International Journal of Advance Research and Innovative Ideas in Education, Volume 2 Issue 3 May 2016

A Critical Literature Review of Air Pollution in Cement Industry by Kruti Shah, Chirag Bhimani, et al. – International Journal of Advance Research and Innovative Ideas in Education, Volume 2 Issue 3 May 2016

e-Governance - Governing Tools - A booklet on checks and balances in the Online Portal of GPCB by Chirag Bhimani, et al., January 2017

Review of Emissions Trading Schemes Across The Globe - Chirag Bhimani and Bina Patel – International Journal of Advance Research and Innovative Ideas in Education, Volume 3 Issue 4 July 2017

Presentation on "ENVIRONMENTAL GOVERNANCE - Towards Better Enforcement & Monitoring" at National Conference on Air and Water Pollution: Innovations in Regulation, Abatement and Monitoring jointly organized by EPIC-India and NITI Aayog on 7 July 2017 at University of Chicago Centre, New Delhi

Presentation on "Challenges in DAHS for CEMS" at CEM India 2017 (Conference on Emissions Monitoring) on 28 September 2017 at New Delhi organised by International Labmate Ltd., United Kingdom

Contributing team member for the book "CEMS – Continuous Emissions Monitoring System – A Technical Guidance Manual" published by Centre for Science and Environment, New Delhi, India in September 2017

Presentation on "Implementation Challenges in CEMS: Indian Experience" at CEM 2018 (Conference on Emissions Monitoring) on 16 May 2018 at Budapest, Hungary

Lecture at National Conference on Innovation in Pollution Regulation on 13 August 2018 at University of Chicago Centre, New Delhi
Presentation on “e-Governance In Emerging Economies” at European Corporate Governance Conference on 2 April 2019 at Bucharest, Romania
Presentation on “An Overview of BREF in Gujarat, India” at Workshop to Promote the Ratification of Protocols of the UNECE Air Convention with Focus on Countries in the EECCA Region organised by United Nations Economic Commission for Europe on 14 May 2019 at Environment Ministry, Berlin, Germany
Presentation on “CEMS - Gujarat Experience” at Jharkhand State Pollution Control Board, Ranchi on eve of World Environment Day, 5 June 2019
Presentation on “Environmental Modernisation in India” at the III Climate Forum of Cities, Moscow 2019 on 5 September 2019 organised by Department for Natural Resources and Environmental Protection, Moscow City Government at Moscow, Russia ( <a href="http://eipc.center/en/news_en/environmental-modernisation-of-industry">eipc.center/en/news_en/environmental-modernisation-of-industry</a> )
Passive in-Situ Remediation of Contaminated Ground Water using Permeable Reactive Barrier by Chirag Bhimani and Dhvani Joshi – International Journal for Scientific Research & Development, Vol. 7, Issue 4, June 2019
Presentation on "Opportunities and challenges for BAT in India and current status" at Fourth Meeting of Expert Group on BAT on 23 October 2019 organised jointly by the Expert Group on BAT and the OECD Secretariat of the EU4Environment project at Seoul, South Korea
Presentation on “Current status of BAT in India” at International Workshop on BAT on 24 October 2019 organised by Ministry of Environment, Republic of Korea at Seoul, South Korea
Presentation on “Legal framework for wastewater treatment and reuse in the industry” in the online expert certification program on industrial water management organised by International Centre for Clean Water (ICCW)- Indian Institute of Technology Madras (IITM) in association with Confederation of Indian Industries (CII) - Southern region, Chennai on 7 August 2020
Presentation on "How to conduct CEMS and CEQMS Audit" at the online training program for Industry officials, regulators and other stakeholders on "Understanding Real-time Monitoring for Industries and its Audit Methodology" “CEMS Audit” on 28 September 2020 organised by Centre for Science and Environment, New Delhi
Presentation on "CEMS Audit Methodology" at the "Advance Training Programme on Continuous Emission and Effluent Monitoring System for Regulators" on 29 September 2021 at Anil Agarwal Environmental Training Institute, Nimli, Rajasthan organised by Centre for Science and Environment
Presentations at 6th meeting of the Expert Group on Best Available Techniques (BAT) under the Environment Directorate Chemicals and Biotechnology Committee of Organisation for Economic Co-operation and Development (OECD), Paris on 8 and 9 November 2021 co-hosted by EIPC (Russian BAT Bureau), Moscow, Russia
Presentation at the International Conference "The Concept of Best Available Techniques: Application across the World" on 10 November 2021 organised by EIPC (Russian BAT Bureau), Moscow, Russia
Presentation on "Air Pollution Control Devices" at the "Training Programme on Air Pollution" on 10 March 2022 at Anil Agarwal Environmental Training Institute, Nimli, Rajasthan organised by Centre for Science and Environment
Presentation on "Air Pollution Control Devices – Selection and Case Studies" at the "Training Programme on Air Pollution" on 11 March 2022 at Anil Agarwal Environmental Training Institute, Nimli, Rajasthan organised by Centre for Science and Environment
Presentations at 7th meeting of the Expert Group on Best Available Techniques (BAT) under the Environment Directorate Chemicals and Biotechnology Committee of Organisation for Economic Co-operation and Development (OECD), Paris on 20 October 2022 organised by OECD, Paris
Presentation at the Kick – off Workshop with the Consultative Group of Experts on “Development of BAT Reference Document for Textile Sector in India” on 9 November 2022 organised by Central Pollution Control Board and German Federal Environment Agency (UBA) at New Delhi
Presentation on “Enhancing Inclusivity and Accessibility to Climate Technologies for All” at the Climate Technology Capacity Building Workshop on 8 September 2023 organised by – United Nations Institute for Training and Research (UNITAR) - Centre International de Formation des Autorités et Leaders (CIFAL), Jeju, South Korea and United Nations - The Climate Technology Centre and Network (CTCN)

Several Trainings Sessions for newly recruited District and Sessions Judges at Gujarat High Court Judicial Academy, Ahmedabad on Environmental Acts and Rules – 2012 to 2018

Visiting Lecturer at Nirma University, Ahmedabad for the subject “Air and Noise Pollution” specifically for the topics - Air Pollutant Modelling and Air Quality Monitoring and Pollution Control” – 2021

Lectures and presentations at Nirma University, Birla Vishwakarma Mahavidyalaya, Charotar University of Science & Technology, Ahmedabad University and various other such academic and professional institutes on Environment related topics including techno-legal issues and innovative technologies and initiatives – 2010 to 2023

Presentation on "Innovations That Improve Freshwater Administration Processes On Islands: A Synthesis of Hard and Soft Innovations" at the International Water Resources Association's 1st Islands Water Congress Hosted by Jarðfeingi - The Faroese Geological Survey at Tórshavn, Faroe Islands on 06 September 2024

Invited as a Keynote Speaker on “Advancements in Carbon Capture Technologies” at ANE Global Meet and Expo on Green Energy and Environmental Technology organized in Dubai, UAE from 27 to 29 March 2025

Presented and spoken as well as lectured at several academic and training organisations and institutes such as Law Institute, Nirma University; Udgam School for Children etc. for the subject related to Environment and Sustainability including relevant Rules and Laws as well as awareness

***(All above and other presentations can be seen and downloaded from my website mentioned as under)***