

Sustainable Management Practices and other Growth Strategies



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Ajay Popat has been strategizing growth and leading Ion Exchange's successful implementation by nurturing concepts and Innovations. He talks about robust processes and technologies and various key aspects of Ion Exchange's sustainability strategies.

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What are the key aspects and priorities for sustainability strategy and low carbon technologies on radar of your organization? Tell us about the goals you have set for your organization over the next 5 years for the roadmap to achieve net zero?

The key aspects of Ion Exchange's sustainability strategy is based on the purpose of our business i.e. to conserve the planet's most precious resources

through total water and environment management solutions. This is being undertaken by providing state-of-the-art sustainable technologies and solutions for managing liquid, solid and gaseous waste generated by industries, institutions, homes and communities – both urban and rural. Thus eliminating contributors which lead to adverse climate changes and help create a positive impact on people's lives and the environment.

Ion Exchange realizes that clean

environment is critical for human existence and has been investing in advanced and efficient technologies to replenish water used in its manufacturing process. We have a robust and innovative waste management strategy targeted to reduce, reuse and recycle water and all kinds of waste. Our factories make all efforts to reduce the water footprint by efficient water usage in non-product applications such as cleaning activities, gardening, and for domestic purposes. Certification under ISO 14001 ensures system adherence to environment protection guidelines and periodic reporting of compliance to senior management. Emissions generated are within the permissible limits given by CPCB.

An example is the Green Manufacturing practice followed at our resins manufacturing plant at Ankleshwar. This is the largest resins manufacturing unit in India. Ankleshwar being an industrial area having a cluster of chemical units with inadequate treatment of chemical waste generated by them; the water table and natural water source is heavily polluted. Our facility has an effluent treatment system treating waste streams to acceptable levels for discharge. Our commitment to recover water from the effluent and reduce the load on the environment led us to initiate a first-of-its-kind project to extend the treatment of effluents by a series of state-of-the-art and sophisticated membrane systems. Manufacture of ion exchange

resins generates waste streams with a lot of bio-degradable and non-bio-degradable chemicals. So, a combination of robust processes and technologies are being used to withstand the complex chemicals and convert them into harmless compounds suitable for treatment in membrane systems and to meet the sustainability and costs requirements. These initiatives have helped to reduce fresh water consumption in the plant as well as reduce the discharge of waste in the environment. There have been continuous up gradations to this process and innovations in water reuse. We are now looking at Rainwater harvesting at the plant.

Priorities in the sustainable strategy include investment in advanced technologies to replenish water used in the manufacturing process and increased use of renewable and green energy for reduction of energy and water footprints. Innovative and robust waste management strategy targeted to reduce, reuse and recycle water and all types of waste. This will be undertaken through greater adaption of cleaner and efficient technologies for waste management to lower our carbon footprint and meet the sustainability goals following the Circular Economy concept.

Ion Exchange has an extensive protocol/mechanism to test our products for their impact on the customers and the environment. Measuring, monitoring and

improving impact across the lifecycle of products and operations will continue to be another key factor of the strategy to achieve our goal to create a positive impact on nature and people's lives and transform Ion Exchange into a water positive operation. Besides this, an important part of our sustainability strategy is to ensure the well-being of our employees as well as the communities whom we serve.

Tell us about your plan to implement low carbon technologies across the portfolio to handle Scope 1, Scope 2 & Scope 3 emissions till 2030.

In order to implement low carbon technologies Ion Exchange plans to implement the following across Scopes 1, 2 & 3 emissions till 2030.

Scope 1: (Direct emissions from owned or controlled sources, Fuel combustion, Company vehicles, Fugitive emissions):

Ion Exchange will undertake a fuel switch towards more environment friendly fuel or source of power e.g. HSD to Natural Gas, adoption of Electric Vehicles in place of Diesel/Petrol vehicles.

Emissions generated by the factories are within the permissible limits given by the CPCB and the same is monitored on a continuous basis. Process optimization and efficient management of utility equipment is undertaken to reduce natural gas consumption (energy).

Scope 2: (Indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company): We will be increasingly depending on the use of renewable power from Solar PV and undertake improvements in energy efficiency (electrical and thermal) for our various operations as well as for our products and projects. Besides this, in order to reduce the indirect emissions from the generation of purchased electricity, steam, heating and cooling Ion Exchange also plans to use energy efficient equipments, replacing incandescent light bulbs with LEDs, tri-generation (heating, cooling and air-conditioning) technology, vapour absorption air-conditioning, pyrolysis, green hydrogen and automation along with demand side management.

Scope 3: (Includes all other indirect emissions that occur in a company's value chain, purchased goods and services, Business travel, Employee commuting, Waste disposal, Use of sold product, Transportation and distribution (up and downstream), Investments, Leased assets and franchises):

For indirect emissions that occur in the value chain, Ion Exchange encourages green procurement which includes use of paper waste in packing, reuse of packaging material besides supplying products in reusable/ returnable plastic containers which are used several times thus minimizing plastic waste. We also

supply products in bulk containers such as jumbo bags instead of plastic bags and tanker loads in place of barrel packaging. Ion Exchange encourages its vendors and service providers (including MSMEs) to adopt environmentally responsible, sustainable and quality management practices.

With regards to business travel we promote the use of online video-conferencing in place of physical travel (wherever feasible) for meetings as well as interviews. For employee commuting; vehicle pooling is recommended. Other plans under scope 3 include; improving the lifecycle of products, recycle of products, reuse of waste disposal by downstream industry, rain water harvesting, tree plantation, zero liquid discharge at our various factories as applicable.

Ion Exchange has a sustainability policy with regards to transportation such as shipment through low-carbon footprint mode (e.g. railways is used wherever feasible to transport bulk consignment) and use of local transportation facility is undertaken.

Ion Exchange through its CSR arm - Ion Foundation also works closely with various urban and rural communities around its factories and offices with respect to sustainable management practices. These projects/ programmes are implemented through our employees and partners.

Periodic feedback is taken from the beneficiaries as well as partners. Ion Exchange believes in investing in a long-term sustainable, socially responsible, profitable business which takes care of the interests of its stakeholders, customers, employees and the community at large.

Tell us the major challenges and cost implications for implementing low carbon technologies? How do you plan to address these?

Challenges and cost implications for implementing low carbon technologies include: technology maturity, high cost of technology, availability of local resources, etc.

The mitigation strategy includes - innovation and an increased emphasis on R&D with respect to development of efficient, technologically advanced and cost effective products and solutions, opting for low cost carbon financing, strategic investment as well as partnership and collaborations.

How will this affect the company's operations and what new products will be offered to the company?

This will help create real value for the company by contributing to business growth as innovation in products and services will provide an additional revenue stream through meeting environmental and/ or social needs. Cost savings will be accrued by cutting waste, reducing

energy and minimizing hazards and vulnerabilities. Reputation and brand image for the company and its products will increase. There will be better compliance; all this will lead to value addition for our stakeholders, customers and employees. A well implemented sustainable strategy will attract, motivate and help retain the best talent within the industry. This will also ensure that we remain the technology and market leader in India while strengthening our position in the global market. Ion Exchange's aim is to transform the Company's business strategy into a sustainable business strategy in line with our Vision – To be the leader in our business which is so vital to people's lives and the environment.

Ion Exchange is privileged to manage water and the environment for more than five decades. Providing sustainable solutions that contribute to a circular economy is the key objective of the technologies, innovative products and solutions developed by us. We are confident that we will continue to add value and promote sustainable development using our strongest assets- technological expertise, manufacturing capabilities, innovations and strategic foresight. ■

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