Industry Sustainable Development

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In today’s age of rapid urbanization and industrialization, sustainable development is certainly the need of the hour for businesses and governments at large. Regardless of the size of the organization, nature of business and geography, there is an incumbent need for everyone to take up this challenge of developing ways to meet the future demands while maintaining the necessary balance in the environment, all in a commercially viable manner.

Issues like paucity of clean water, adverse climatic changes across the globe are concerns that affect the well-being of every individual on this planet and hence these problems could only be dealt with a collective effort, driven by a mass consciousness. While the awareness on this front has increased in the recent past, a lot yet remains to be done.

Admittedly, every product and amenity that we use in our daily lives today is composed of chemicals and it cannot be denied that it is here to stay. Right from the toothpaste that we use in the morning to the melamine plates that we use for dinner at night, various chemicals are used to make these products is a reality today. Needless to say, our lives cannot improve without these chemicals. Herein lies the challenge to facilitate the growth of the chemical industry in a sustainable manner. Contrary to popular beliefs, the growth of the chemical industry is possible in a sustainable and environment friendly manner.

To foster sustainable growth of the industry, there is a need for uniform standards in environmental management across the globe and every organization should be equipped with tools to monitor, measure and evaluate the implications on the environment and risks at its areas of operation. This should be audited regularly by the organizations themselves and then reviewed by certified authorities.

Environmental guidelines need to be developed on the basis of industrial work practices to sustain consumption of natural resources. The guidelines must ensure that these standards are maintained across the supply chain of the business process. Suppliers, vendors, transporters, employees and all those who impact the business should all be informed and trained to abide by the same standards. These standards should meet all legal requirements in the area of operation and should ensure compliance with statutory and environmental regulatory requirements. Overall, organizations should strive to reduce consumption of renewable resources, develop productive ways of reusing and recycling the used/waste resources. Health, safety, quality and environment should form the key focus areas of sustainable development.

This would gradually raise the bar for standards on protection of environment, utilization of renewable resources and most importantly it would foster innovation amongst the community to come up with safer and better ways of pursuing their operations.

In order to achieve sustainable development, it is quintessential for companies to invest in technology and innovation. Adoption of newer technologies and innovation in processes and practices would provide us the necessary tools to achieve higher standards of safety, quality and environmental protection.

For the chemical industry, it is even more critical to innovate in order to make products that are of high quality, which have been developed by sustainable means as well as meet the future needs of the customer.

Climate protection is one of the greatest challenges of the 21st century. For nearly 500,000 years, the carbon dioxide concentration in the atmosphere remained more or less constant. However since the beginning of industrialization around 200 years ago, it has climbed rapidly. If the current rate of development continues, the level of CO_2 in the next few years will nearly double.

Along with the rest, the chemical industry has been called upon to operate energy efficiently and reduce greenhouse gas emissions. The good news is that it has done

that very successfully. In fact, the chemical industry is not just a part of the problem of emissions (CO_2 and other effluents) but is also a ubiquitous provider of solutions to all these problems.

Unfortunately, there are fears in the minds of people regarding the products and business practices of chemical industry, especially with regard to the environment. On the contrary, it is a fact that it is possible to do good business in the chemical industry as well, while protecting the interests of the community and the environment. We believe that all risks related to the health and safety of all stakeholders and environmental protection can be minimized to a great extent by adopting the following measures:

- Comply with applicable legal requirements and other requirements that relates to plant and process safety, occupational health and safety hazards and environmental protection.
- Continuously analyze and improve practices and processes to reduce their risk and adverse impacts on the health of the people and the environment
- Encourage employees to actively participate in hazard identification, risk assessments, incident investigation and change management that may affect plant and process safety, occupational health and safety hazards and environmental protection.
- Provide appropriate information and training on the plant and processes, work related safety and the need and means of environmental protection to everyone working at the site.
- Provide an ergonomically safe work environment to prevent occupational injuries and illnesses to everyone working in the plant.
- Investigate and analyze the cause of work-related injuries and illnesses as well as environmental related incidents or damages; and take preventive action to eliminate the root cause of occurrence.
- Regularly audit the quality of final products, raw materials, emissions and wastes etc and take action in case their composition does not comply with the standards.

The other area which is demanding attention worldwide is clean water. Increasing globalization and increase in world population is putting a lot of pressure on this resource, which is a basic need for living. Developing products and practices to minimize consumption of water for industrial purposes and generate methods to recycle waste water are some ways to save our future from a potential crisis.

While climate protection and conservation of water are the more obvious challenges, education is another important area to achieve holistic sustainable development. Organizations must consider it is an inclusive business challenge to advance the society through education and appropriate training. Young minds must be nurtured to develop the right skills that organizations need, in present and in future. Corporate organizations, academicians and professionals must come together to develop an ecosystem where knowledge and skill enhancement of students go hand-in-hand. This would hone their ability to understand business problems and think about a feasible solution for the problem.

Last, but not the least, the rampant use of fossil fuels is an area of concern globally, as it is contributing to greenhouse effect and subsequent climatic changes and also leads to depletion of natural resources, which are not easily renewable. With India witnessing high economic growth, the usage of fossil fuels will increase further in our country. However, India has a huge potential to use renewable sources of energy to drive its growth in a sustainable manner, and make it an even better place to live for the next generation. The uses of renewable sources of energy like solar energy, wind energy are gaining traction and hold a lot of promise for the future.

For children of today, issues of sustainability would only magnify tomorrow unless we act cohesively and progressively to overcome the challenges and work towards a safe, healthy and green future.

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