A dilemma for manufacturing companies adopting green practices is that these are unlikely to generate profits in the short term. But a trade-off for long-term gains is both necessary and sustainable if the organization’s vision is set firmly on the triple bottom line—people, planet, and profits.

The rapid depletion of natural resources and the adverse effects on the environment from the last few decades of consumption-led growth have catapulted to center-stage the issues of sustainable development and growth. On one hand, manufacturers now find it imperative to address the challenges arising from resource constraints in their business, while, on the other, they are under increasing pressure from the community to respond adequately to the adverse impacts of industrial
Green Manufacturing is about using green energy, developing green products, and employing green processes while reducing resource use and wastage. These goals align well with the innate desire of companies to improve their competitive advantage, making a compelling business case for going green.

Drivers of Going Green

Green manufacturing is about using green energy, developing green products, and employing green processes while reducing resource use and wastage. These goals align well with the innate desire of companies to improve their competitive advantage, making a compelling business case for going green. Making the same products using fewer resources and less energy as well as adopting new, efficient technology and streamlined processes help reduce costs and the environmental footprint. An example of leveraging such technology would be storing data in green data centers, which can save up to 20% on energy costs that green manufacturing methods deliver. Many organizations see it as an opportunity to gain from the business models of the low-carbon world that is shaping up. A better sustainability profile also enables organizations to enhance their brand image in a world growing acutely conscious of the perils to the environment. The market for low-carbon environmental goods and services is currently estimated at $5.2 trillion and is expected to grow to more than $6.5 trillion by 2015. Japan’s automaker Toyota has so far sold a staggering 4.6 million environment-friendly hybrid cars, with 1.02 million selling this year until October.

Green credentials can make businesses more attractive to investors and financial analysts who are beginning to scrutinize organizations’ sustainability performance alongside their financial performance. Also, companies are finding that showing environmental stewardship contributes to winning the war for talent and gaining the loyalty of environmentally conscious consumers. The Green Journey

Wipro started its green journey in 2006 as a voluntary initiative and introduced its first RoHS desktop in 2007, much before the directives were implemented in India. Wipro’s green strategy rests on three main pillars: chemical management, energy, and e-waste. All Wipro-made computers now restrict or exclude RoHS chemicals; all Wipro products are now Energy Star certified; and we have a voluntary take-back program running from 2007-08 in partnership with authorized recyclers. These initiatives are in keeping with our vision for social responsibility for businesses, and have helped Wipro rank at the top of the Greenpeace Guide to Greener Electronics this year.

Wipro’s experience in the adoption of green manufacturing practices shows that organizations need to go beyond standalone initiatives and adopt a holistic approach tied to a long-term sustainability vision. This includes making green a core part of business strategy, executing green initiatives across the value chain, and communicating and promoting the initiatives and their benefits to all stakeholders. Some learnings from Wipro’s experience in addressing the challenges of going green are listed below:

CREATE A SHARED VISION

Going green requires buy-in from all stakeholders, from employees to suppliers to investors to the society. The process of creating a shared vision helps people become aware of differing views about the future, and get their buy-in. Employees from the biggest asset of an organization and must be empowered and motivated to take ownership and innovate. A top-down approach—telling employees what the vision is and how to get there—will not bring results.

EVOLUTIONARY, NOT REVOLUTIONARY

Aiming green goals is an evolutionary process and needs continuous effort on the part of the organization. It calls for constant monitoring of technology developments, business environment and regulations, customer demands and expectations from the society, and adopting best practices and better technology and processes. For example, Wipro started by voluntarily restricting six RoHS substances but it was a long process to get our suppliers RoHS compliant and remove restricted chemicals from the supply chain. Wipro products now limit the use of 21 chemicals.

LONG-TERM COMMITMENT

A dilemma for manufacturing companies adopting green practices is that these are unlikely to generate profits in the short term. Additionally, there could be a need for significant investments in the initial stages due to the change in the mix of components, onboard new suppliers and subsequent supply-chain logistics issues. Wipro saw the cost of RoHS-compliant computers go up by about $15 a piece initially, but the price difference has come down as the supply chain and the RoHS ecosystem have matured. Such trade-offs of short-term profits for long-term gains can be sustained only if the organization’s vision is set firmly on the triple bottom line—people, planet, and profits.

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Rewards of Going Green

Apart from the increased efficiency and savings from lower energy costs that green manufacturing methods deliver, many organizations see it as an opportunity to gain from the business models of the low-carbon world that is shaping up. A better sustainability profile also enables organizations to enhance their brand image in a world growing acutely conscious of the perils to the environment. The market for low-carbon environmental goods and services is currently estimated at $5.2 trillion and is expected to grow to more than $6.5 trillion by 2015. Japan’s automaker Toyota has so far sold a staggering 4.6 million environment-friendly hybrid cars, with 1.02 million selling this year until October.

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GREEN CREDENTIALS CAN MAKE BUSINESSES MORE ATTRACTIVE TO INVESTORS AND FINANCIAL ANALYSTS WHO ARE BEGINNING TO SCRUTINIZE ORGANIZATIONS’ SUSTAINABILITY PERFORMANCE ALONGSIDE THEIR FINANCIAL PERFORMANCE. ALSO, COMPANIES ARE FINDING THAT SHOWING ENVIRONMENTAL STEWARDSHIP CONTRIBUTES TO WINNING THE WAR FOR TALENT AND GAINING THE LOYALTY OF ENVIRONMENTALLY CONSCIOUS CONSUMERS.

ALIGN TO BUSINESS GOALS
To be successful and to get continued support from investors and the top management, a green initiative should be aligned to the organization’s business goals. Early on in our sustainability journey, we took the long-term view that corporate social responsibility is non-negotiable as the pressure on limited resources increases. Embedding green manufacturing goals within such a strategic framework lends them a better chance of success. Conversely, adoption of green practices can spur innovation and customer satisfaction, allowing their strategic value to be more appreciated above immediate cost concerns.

MONITOR THE METRICS
It is important to define the key metrics in the journey to sustainability because what gets measured gets done. These metrics could include greenhouse gas emissions, energy consumption, recyclability, and re-use of materials, pollution, going non-toxic, etc. By assessing the value generated by green initiatives, organizations can track their progress and establish benchmarks for achievement. For instance, the energy efficiency of Wipro products has gone up significantly since the adoption of green practices.

CLOSE THE GREEN SUPPLY LOOP
While manufacturing green products is important, it is equally important to close the loop for end-of-life products if the impact on the environment from discarded products has to be minimized. In a supply loop, the beginning and the end of the value chain are linked together, which ensures a sustained flow of components, finished products, and waste products among suppliers, manufacturers, and customers. Wipro started voluntary take-back centers in 2007-08 and has found the effort gaining traction now that the EPR rules are in place in India. Last year, Wipro collected 248 tons of e-waste, including non-Wipro peripherals turned in by customers.

REVIEW SUPPLIERS’ PRACTICES
This is a key part of the going-green strategy. Large companies with complex supply chains will need to effectively pass on the green requirements to their suppliers to go green. IBM, for instance, is asking its 28,000 suppliers to deploy environmental management systems (EMS), measure existing environmental impacts and set new goals, publicly disclose their metrics, and in turn cascade these requirements.

REPORT AND DISCLOSE
Last but not least, for success in green manufacturing, organizations need to report their targets and achievements publicly. Reporting enables investors and the general public to assess how far the organization has advanced toward its green goals, and to take informed investment decisions. Such public scrutiny will, in turn, spur greater internal discipline in setting and achieving those goals. It also enables organizations to create awareness about best-practices and bring greater management attention to issues of sustainability.

SUSTAINABILITY IS NON-NEGOTIABLE
Adopting green manufacturing practices and achieving green targets require long-term commitment and sustained effort on the part of businesses. They need to take a strategic view of sustainability and involve all stakeholders in the process. Wipro started on this journey, impelled by a long-term vision of sustainability. It is something that manufacturing organizations cannot side-step any longer, owing to the increased scrutiny on their environmental performance as well as the pressing need to reduce resource use. Although faced with a long road ahead, those who do take the steps toward these goals will find rich benefits in the well-being of the larger community, in addition to improvements in their bottom line.

The adoption of green manufacturing practices has become foundational for businesses in view of the rapid depletion of natural resources and the impact on the environment from the proliferation of electronic waste. These practices add to the competitive advantage of organizations as well as position them to benefit from the market for low-carbon environmental goods and services—currently estimated at $5.2 Trillion and expected to grow to more than $6.5 Trillion by 2015. However, organizations need the rigor provided by regular sustainability reporting to sustain the long-term vision and continuous commitment required by the green journey.

Sustainability reporting has grown in stature in response to the increasing public focus on the responsibility that businesses have towards the natural environment and the community, from which they make profits. Organizations that do not set carbon targets or fail to achieve them run the risk of damage to their brand image, more so in an era of heightened environmental sensitivity.