TERI-BCSD
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TERI-Business Council for Sustainable Development (TERI-BCSD) — initiated by TERI — is a regional network partner of the WBCSD (World Business Council for Sustainable Development), Geneva (www.wbcsd.org). It provides an independent and credible platform for corporate leaders to address issues related to sustainable development and to promote leadership in environmental management, social responsibility, and economic performance.

Calendar of Events

January 2014, Mumbai
Resource Efficiency in Buildings Workshop: Overcoming Barriers by Identifying Problems and Solutions
Phone: 011-24682100
Email: smriti.bhatnagar@teri.res.in

February 2014, Mumbai
India GHG Programme: Capacity Building Webinar on Goal Setting
Phone: 011-24682100
Email: amullick@teri.res.in

January 2014, New Delhi
The GRIHA Summit 2014
Phone: 011-28034413
Email: priyanka@teri.res.in

February 2014, New Delhi
High Level Corporate Dialogue: How would Businesses Lead India’s Energy, Water, and Food Security
Phone: 011-24682100 (Extn. 2386)
Email: sushant.anand@teri.res.in

February 2014, New Delhi
Delhi Sustainable Development Summit: Attaining Food, Water, and Energy Security for All
Phone: 011-24682100
Email: dsds@teri.res.in

Disclaimer: The views expressed in this news magazine are those of the authors and do not necessarily reflect the views of TERI or its affiliated organizations.
We had a very successful year with our unique action-oriented initiative Chief Sustainability Officers’ (CSO) Forum. The yearlong work by three special interest groups were presented at the 11th Leadership Summit for Sustainable Development (LSSD) in Mumbai in October 2013. Increasing participation by more and more companies is proving the point that business appreciates the need to mainstream sustainable development in its planning and practices. The Leadership Summit further enforced the message where four captains of Indian industry deliberated how business can leverage environmental and social responsibilities into business opportunities which are well justified for business action.

Thus the lead story in this issue shares with you how business has been leveraging innovative approaches to address their environmental and social concerns while creating newer business opportunities. As we go along, business necessarily needs to be supported with financing to undertake more environment preserving and society supporting projects and programmes. The world over the Banking, Financial Services and Insurance (BFSI) industry has been mostly seating on the fence; looking primarily at the financial viability of a project. Few organizations have internalized environmental and social risk assessment while profiling comprehensive risk of a project investment. Time has come to institutionalize this in the industry. Policy makers and regulators must acknowledge the importance and create a conducive regulatory framework. In the coming days, we will engage with select BFSI industry leaders to deliberate and find ways to improve India’s commitment to sustainable development with the active support of the BFSI industry.

This issue of EnCoRE coincides with TERI’s annual flagship event the 14th Delhi Sustainable Development Summit. The summit will deliberate on the nexus between food, energy and water security for the seven billion on our planet now, and nine billion by 2050. It’s heartening to observe that business has a major participation at this event, joining hand with thought leaderships and policy-makers.

We at TERI-BCSD remain focused on the effective role of business to lead the way, ensure economic growth while sustaining environment and improving living standard of world’s population. We appreciate our member companies for their commitment and look forward to a larger participation in the coming days.

“WE AT TERI-BCSD REMAIN FOCUSED ON THE EFFECTIVE ROLE OF BUSINESS TO LEAD THE WAY, ENSURE ECONOMIC GROWTH WHILE SUSTAINING ENVIRONMENT AND IMPROVING LIVING STANDARD OF WORLD’S POPULATION.”

Dipankar Sanyal
CEO, TERI-BCSD
Leveraging Sustainability Marketing to Assume a Competitive Advantage
Radhika Kapoor, TERI-BCSD

Sustainability is an integrated and holistic approach towards incorporating the triple-bottom line (people, planet, profit) considerations in an organization’s business strategy and practice. To put it simply, sustainability is an organization’s commitment to be responsible and accountable to the society and the planet for the impact of its product and services, while maintaining its focus on the profit motive.

Businesses across the globe have realized that positioning their company to be responsible towards the environment and society can prove to be a big market differentiator, apart from helping them mitigate their business risks and meeting stakeholder expectations. Firms also understand that consumers increasingly are willing to buy products that are manufactured in sustainable ways, even at a premium.

According to Boston Consulting Group’s market research companies that offer differentiated green products and bring down costs across the entire value chain have been rewarded with higher margins and market share. Conscious consumerism is the key word defining this generation of consumers. According to BBMG market research, companies offering products and services that deliver quality, affordability and sustainability will do better with conscious consumers than those that do not. In the near future, companies could expect consumers demanding sustainability as a hygiene and safety factor, rather than a ‘good to have’ add-on. This establishes the business case for institutionalizing the sustainability paradigm within an organization to leverage the responsible company brand association and thereby expand the market. The ‘leaders’ have already started employing a sustainability oriented approach to marketing their products and services, and we will soon see others follow suit.

Marketing a product or service using a sustainability driven approach involves various managing with its multifarious elements to communicate shared value. Your sustainability marketing intervention must look into aspect such as: Leveraging product attributes, harnessing efficiencies for branding and cost reduction, promoting sustainable packaging and distribution, branding and promoting ‘sustainability’, involving the customers in the conversation and addressing end of lifecycle management. This article promotes you to think about the ‘win-win’ of creating a sustainable-competitive-advantage by growing responsibly.

Leveraging Product Attributes
Leading organizations across the globe recognize that emphasizing the sustainability attributes of their product and service will help them leverage the customer mind share and help them gain a competitive advantage as against the others in the same product or service category. Product stewardship and sourcing responsibly towards manufacturing of a product has many reassuring benefits. One such example of product stewardship is Levi’s® Waste<Less jeans made out of used plastic bottles.

Harnessing Efficiencies for Branding and Cost reduction
While marketing a product or service, institutionalizing efficiencies is critical towards cost savings. However,

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1 http://www.economist.com/node/14301663
2 https://www.bcgperspectives.com/content/articles/consumer_products_sustainability_capturing_green_advantage_for_consumer_companies/
companies are going beyond that paradigm and leveraging this as a conscious, step towards natural resource conservation. Target, an American retailing company, is one such example, looking proactively at using its resources responsibly, eliminating waste and minimizing their carbon footprint. Target leverages these initiatives towards reducing its operational costs as well as promoting itself as a responsible retailer, which helps Target accrue the hard earned trust of its consumers.

**Sustainable Packaging and Distribution**

Sustainable packaging is an integral part of marketing a product. Consumers are sensitive to the entire product packaging and design elements to gauge a company’s footprint and sustainability efforts. Using hazardous packaging material can be detrimental to an organization’s image. Coca-Cola is an example for promoting sustainable packaging and Nestle, is another example for ensuring sustainable distribution.

**Branding and Promoting Sustainability**

While branding and promotion go hand in hand, promotion requires a constant message to be communicated to all the stakeholders at all times. One such example is how GE (General Electric) portrays itself, through its project Ecomagination which commits to building innovative solutions for today’s environmental challenges while driving economic growth.

Sustainability branding is an effective tool to leverage the sustainability performance of an enterprise to build a positive brand image. The marriage of sustainability and business objectives helps strengthen the relationship with the customer. For example, HUL (Hindustan Unilever), FMCG (Fast Moving Consumer Goods) company, has been scaling up initiatives for social good across brands under its ‘project sunlight.’ Its recent Domex Toilet Academy has the objective of building 24,000 toilets in India by 2015 in areas that lack sanitation facilities. Another interesting example is that of PUMA, a leading sport lifestyle company which made the first ever attempt to come up with an Environmental Profit and Loss Account (E P&L), a strategic tool designed to help PUMA identify and manage the environmental risks, while simultaneously look out for new and sustainable business opportunities.

**Involving the Customer in the Conversation**

Any marketing activity is incomplete if it doesn’t involve the customers in the conversation. Building your sustainability story is as important as actively involving the customer. It is important to remember that customers get associated with only those brands which resonate with their ideologies and personas.

For example, Patagonia, an American apparel brand, has launched the — Common Threads Partnership, through which it engages consumers in a collective pledge to buy only what they need (and will last), repair what breaks, reuse (share) what they no longer need and recycle everything else.

Another example of this engagement is, Quantas, an Australian airline, which has introduced the Carbon Neutral program, where its customers can partner to neutralise or offset their share of flight emissions.

**Addressing End of Lifecycle Management**

Marketing should also look into details of effective end of lifecycle management to engage with customers even after the purchase has been made. For example, NOKIA, Finnish communications and IT multinational, initiated a campaign which helped to recycle all the components of an old phone. This campaign established Nokia’s stewardship in material management and its sensitivity towards the environment.

Another example is TETRA Pak, a food processing and packaging solutions company, who in association with TERI, engaged in a campaign called ‘Your Cartons My Classroom’ (YCMC) to create classroom furniture like desks and shelves for thousands of underprivileged children by recycling used TETRA Pak cartons. Integrating these elements would form a holistic sustainability marketing strategy for your organization.
Innovating to Drive Change in Transportation
Andre Veneman, AkzoNobel

The movement of people and goods is crucial for the world’s economy. Whether it is travelling for work, visiting friends, or using products shipped from another country, we rely on transport to go about in our daily lives. However, our roads, train stations, ports, and airports are busier than ever as the population is growing rapidly with almost everybody moving into cities.

Globally, the transportation sector is expected to grow continuously, with a geographical shift in demand and manufacturing of the developing economies. But with this growth, the environmental concerns are also growing. Presently, more than 60 per cent of the 87 million barrels of oil consumed every day, powers the world’s transportation sector, and liquid fossil fuels account for 94 per cent of the energy supply to the sector. If the transportation sector has to be successful in reducing its impact and if it is to contribute to the limiting of global warming to less than 2 °C, it cannot continue to develop under a Business As Usual (BAU) scenario.

The World Business Council for Sustainable Development (WBCSD) in its 2050 report has forecast that universal access to low carbon transport is expected by 2050. An 80 per cent reduction in energy used by light-duty vehicles is also forecast, along with
a 50 per cent drop in energy usage within shipping/freight transportation.

These changes will create challenges and opportunities for all those companies operating within these sectors. If suppliers such as AkzoNobel are to effectively respond to these trends, they will have to focus on bigger, bolder innovations that can substantially improve sustainability, and deliver better value for customers.

The transportation sector needs such sustainable solutions. If companies are to develop such solutions, they need to recruit the very best people — pioneering chemists and engineers; strategists with acute insight into the markets, needs, and global trends that will shape our world. Naturally, businesses need to commit to investing the necessary funds. Despite challenging economic conditions, AkzoNobel has actually increased its R&D spend in recent years. The company invested over €370m in research and development last year, two-thirds of which was focussed purely on sustainability.

The fruits of this investment by AkzoNobel can be seen in its products such as Intersleek. Intersleek enables ocean-going ships to move faster and use less fuel through the use of anti-fouling coatings. Another example is a world class basecoat/clearcoat system that AkzoNobel have developed for aeroplanes which has redefined the application process. Requiring just one coat instead of the usual two or three, it dries in two hours (rather than 10), and offers lower dirt pick-up, resulting in lesser need for cleaning. The potential weight reduction brought about by using less paint also means improved fuel efficiency.

It is also important for companies to recognize when they need to work with others. An “open innovation” approach is being employed increasingly by corporations who realize that they can no longer rely solely on internal resources to maintain a competitive edge. Businesses need to fully embrace the model of open innovation. Why? Simply because in a world where pace is getting faster and faster, it’s difficult, if not impossible, for companies to have all the knowledge, skills and know-how available in-house to take ideas into the market place quickly or cost-effectively enough.

Organizations need to work up and down the value chains with others who have complementary capabilities to their own — suppliers with whom they can work to develop more sustainable raw materials; customers and end-users who can guide them in market needs and trends; and universities of course that can help them identify emerging sciences that can be developed into useful technologies.

In summary, incremental improvements will not be enough if we are to successfully tackle the sustainability challenges facing the transportation sector. It is only by delivering radical solutions and developing big and bold innovations that we will be able to drive significant change. Companies that can provide this will ultimately stand to benefit.
Leadership Summit for Sustainable Development

29 October 2013, Mumbai
Chief Sustainability Officers' Conclave II

30 October 2013, Mumbai
TERI-BCSD organized its annual flagship event — The 11th Leadership Summit for Sustainable Development. The Summit witnessed participation of over 130 delegates who came together on a common platform to address the challenges the earth is facing at this point of time. Mr Dipankar Sanyal, CEO, TERI-BCSD, welcomed the delegates and invited businesses to internalize sustainability in their business planning and processes, across all lines of business.

At the inaugural session, Dr R K Pachauri, Director-General, TERI, spoke to the gathering about the precarious situation that the earth presently is in. He expressed his deep concern about how corporate activity was affecting the common resources of the world. He quoted Mahatma Gandhi by mentioning a profound quote about the over usage of the natural resources of the world — “The natural resources can be utilized in any amount that the people want, but in the books, debit equals credit.” The essence of this quote was explained by him to be that the global resources were utilized in a manner that did not make a proper assessment of the negative impacts that the usage was causing. Dr Pachauri mentioned about an IPCC report that was released in Stockholm. He emphasized the business community to know more about the Report. The imperative role that the society plays for business was stated. He emphasized the fact that businesses cannot succeed in a society that is failing. If there were problems with the society it meant that there were problems with the inputs to the market and corporate activity. He also stressed on the urgency with which we need to take action to ensure that we are on the path to sustainable development.
After the address by Dr R K Pachauri, TERI-BCSD launched their knowledge report on ‘Low Carbon Industrial Growth in India’ in collaboration with the YES Bank.

Mr Ton Büchner, CEO and Chairman of the Board of Management and the Executive Committee, AkzoNobel spoke at length on the importance of ensuring sustainable development. He enlightened the audience about how the concept of sustainability has been incorporated within the operational practices of AkzoNobel. Some of the eminent dignitaries speaking at the summit, among others, were Mr Deepak Amitabh, Chairman and Managing Director, PTC India; Ms Naina Lal Kidwai, Country Head India and Director Asia Pacific, HSBC; Mr Ajit Gulabchand, Chairman and Managing Director, HCC; Mr Duncan Van Bergen, Global Head, Long Term Market Development, Shell; Mr Mahendra Singh, Executive Director, Shree Cement; Mr R Mukundan, Managing Director, Tata Chemicals; Mr Prasad Chandran, Advisor, BASF India; Ms Rabab Fayad, Director--Regional Network, WBCSD; Mr Pooran Chandra Pandey, Executive Director, UNGC; and Mr Martin Wright, Founding Editor, Green Future, Forum for the Future, UK.

The session on ‘Implementing Sustainable Development in Business: The Practitioners Perspective’ followed. Chief Sustainability Officers of 14 leading corporates shared their thoughts on mainstreaming sustainability within the organizational ethos.

The reports launched during this session were:
- Knowledge Paper on Operationalizing Sustainability in Value Chain
- Integrated Water Management Framework for Corporates
- Compendium of Energy Efficiency and Renewable Energy Best Practices in Leading Indian Corporates

**Dialogue with Corporates — TERI-BCSD Business Ecosystems Training**

TERI-Business Council for Sustainable Development (TERI-BCSD) is an industry-led consortium of sustainability practitioners. We realize that efficient hand holding is required. Hence we leverage the technical knowledge in the TERI repository for the benefit of those organizations which have embarked the journey on the path of sustainable development.

We strongly believe in partnering with organizations to develop a symbiotic relationship for the purpose of knowledge sharing. It is with this idea in mind that TERI-BCSD conducts business executive training for organizations belonging to a range of different industries. These business executive trainings serve the purpose of knowledge-sharing sessions where areas for mutual cooperation are identified by TERI-BCSD. As stakeholders in the developmental story of India, we understand the importance of harnessing each other’s core areas of strength. TERI-BCSD with its interaction with GAIL for instance, realized that addressing energy efficiency and renewable energy issues is of utmost importance. It is here that we sensed an opportunity to step in and leverage TERI’s expertise in the area of energy efficiency and renewable energy for the benefit of GAIL. Similarly, we identify the core areas of functionality for each of the organizations before we take up business executive trainings. These trainings pave way for further engagements with organizations. Together, as a team we take up sustainability initiatives that will help the organizations in achieving their goals in the area of sustainable development and Corporate Social Responsibility.
TERI inaugurated its Biomass Energy-Based Village Electrification and Cold Storage Project in Bileria Village, District–Sitapur on 28 November 2013. TERI started working on a concept in 2006, whereby, indigenously available biomass resources could be used to operate small, decentralized cold storages at the village level. In addition to providing cold storage facility to the farmers, such a system — it was envisaged — would also supply grid-quality power to the village; thereby offering a holistic solution to some of the key problems faced by agrarian India. Since cold storages can be cooled to temperatures as low as 0 °C, a wide variety of fruits, vegetables, and horticulture produce can be stored in them. The electricity generated by the system is enough to power domestic, community, as well as productive loads in a typical village. TERI has...
installed its first field level prototype at Sitapur, Uttar Pradesh with support of AusAID and in partnership with CSIRO. It is envisaged that the successful implementation of this system can open up avenues for its replication in other regions of India as well. Besides providing cold storage facilities as a means for rural economic development, the system will also be providing electricity to the rural households and communities. The socio-economic impacts of this would be multifold. Some of them are electricity for lighting — resulting in a clean environment, increased hours for study and social interaction, and an improved quality of life. The project assumes significance, since excess produce either floods the market and results in an oversupply or is totally wasted; and an artificial scarcity is created during non-harvesting periods.

Promoting Rooftop Solar Photovoltaic Systems in India

The Energy and Resources Institute (TERI) has developed the first-of-its-kind cloud-based open-source Web-GIS Tool for estimating rooftop solar power potential for Indian cities. The main objective is to develop a high performing and flexible Web-GIS tool to estimate the rooftop solar power potential for Chandigarh. This is considered as an important step to promote solar rooftop photovoltaic (PV) systems in Indian cities. There is a need for a tool to showcase solar resource potential in a user-friendly format so that users can investigate their locations of interest and perform pre-processed analysis. Geographic Information System (GIS) is the obvious tool to achieve this because it provides visual reference — a map of the entire city showing the buildings which have solar PV installation potential.

TERI aimed at a tool that could be used by anyone rather than only those having access to proprietary software. The proposed Rooftop Web-GIS Tool for India will be an ideal medium to showcase investors the logistics of rooftop solar energy investment. This tool will have the following benefits:

- It will enable the user to estimate the rooftop solar power potential of the selected area or, buildings for a particular location with respect to various SPV technologies.
- It will act as a Decision Support System to carry out the pre-feasibility assessment of putting rooftop PV system for a particular location.
- It will also help users to estimate the potential GHG mitigation through solar rooftop route for a given location/building.
The Municipal Solid Waste (MSW) generated in the major cities of India is generally disposed off in unsecured landfills where it gradually decomposes to produce Landfill Gas (LFG) which primarily comprises of methane (CH₄) and carbon dioxide (CO₂) both of which are considered to be potent Greenhouse Gas (GHG) Emissions. The methane gas (CH₄) is 21 times more potent than CO₂ and poses to be more hazardous in terms of GHG. Presently, these gases are being released in an uncontrolled way into the atmosphere. There are close to 5,100 cities and towns in the country, and most of them have at least one (mostly two) such MSW disposal sites, which are a source of uncontrolled release of methane.

The Fourth Assessment Report of the IPCC (AR4) estimated the methane emissions from the waste sector to be around 1,300 MtCO₂-equivalent for the year 2005 of which a large contribution came from the waste disposal sites. Exploitation of methane rich fuel from these waste disposal sites can provide a valuable source of renewable energy. This is also in line with requirements of Municipal Solid Waste (Management and Handling) Rules, 2000 which states that any landfill gas generated at the site should either be captured for gainful use or flared. To demonstrate availability of LFG and viability of its thermal or electrical use, The Energy and Resources Institute (TERI) developed a pilot demonstration proposal. The objective of...
this pilot demonstration, supported by Ministry of Environment and Forests (MoEF), was to capture and recover the LFG currently being emitted from the Okhla waste disposal site in Delhi by using indigenously developed clean technology and thereby demonstrate the use of captured energy to reduce the risk of uncontrolled methane emissions from the landfill site. Okhla waste disposal site is currently being used by the Municipal Corporation of Delhi (MCD) for disposal of MSW. The Okhla waste disposal site was selected for a pilot study for the following reasons:

- The disposal site has a suitable flat terrain available for setting up pilot; accessibility of DTH for putting up gas wells is also not a problem at site.
- Waste disposal history of around 19 years.
- Suitable depth (average 30 m) available for possible LFG generation and recovery.
- Densely populated residential areas towards eastern and southern sides of the landfill site, therefore it needs to be closed and rehabilitated at the earliest.
- Presence of commercial activities such as a container and DTC depot and ESI hospital near the site which can be possible end users of LFG.
- Proposed laboratory for environmental monitoring to be set up at Jamia Millia Islamia which is located in close proximity to the disposal site.

The estimated quantity of MSW disposed till date at Okhla waste disposal site comes to around 5.4 million tonnes. To extract LFG gas from the given plot in the waste disposal site, a series of vertical gas extraction wells, one central at 20 m depth and three sets of pressure probes (total 9) at a depth of 4 m, 6 m, and 12 m, respectively, were sunk in PVC pipes and sealed by bentonite. The gas was extracted using a mechanical blower. The extracted gas was scrubbed to remove H2S and chilled to remove moisture before further flaring. The LFG extraction was monitored for an year to check the concentration of CH4 and CO2.

The result of monitoring showed that average concentration of CH4 was around 43.3 per cent and CO2 was around 16 per cent which is similar to the biogas generated from anaerobic process. The purified LFG thus, can be successfully used for thermal application even as a cooking fuel. The pilot was successful in extracting LFG at the rate of 50–60 m3/hour on an average day. Using this data and data for climatological and geological conditions of disposal site, it was possible to model the LFG generation for the entire landfill site assuming uniform disposal of waste all along the disposal site. The models used were USEPA Landgem and IPCC models. As per these results, one can get steady yield of LFG at the rate of 2723 m3/hour from the entire waste disposal site. Different uses of the extracted LFG as evaluated in this pilot study, based on order of preference in terms of capital expenditure and return in terms of gas usage for fuel needs can be categorized as:

- Its use in existing landfill facility for thermal applications (e.g., leachate drying).
- Its use around the landfill facility (e.g., use as fuel in boiler in ESI hospital or as a cooking fuel for neighbourhood population).
- Its use for power generation if the grid for evacuation is in the vicinity as in the case of Okhla disposal site.
- Its purification to remove residual CO2 and use as CNG by neighborhood DTC depot.
- Capture and flaring if the gainful use is not possible.

However, the proposed infrastructure for extraction and purification of LFG can only be done after proper closure of the exhausted landfill site with clay and HDPE liners to prevent fugitive escape of LFG and maximize its capture. Thus, such landfill sites should be closed properly by local authorities before attempting any LFG recovery.
India is set to become the world’s third largest energy consumer by 2020, after China and the United States of America. With our burgeoning population and the rapid industrialization, domestic energy production cannot keep pace with the growing energy demand. Crude imports grew annually at close to 10 per cent in the last decade and coal imports grew at over 20 per cent per annum during the same time.

India’s energy situation requires a three-pronged approach — to improve energy efficiency, accelerate development of domestic resources, and promote the use of cleaner energy sources. As our economy and population grow, the challenge will be to pursue economic imperatives alongside energy security; environmental stewardship and good health for future
generations—all at the same time. A major contribution that the government can make is to become a provider of cleaner, more reliable, and affordable energy for the people. The onset of winter smog in Delhi has once again brought the issue of air pollution to the forefront and rightly so. India has some of the most polluted cities in the world, ranking 126 out of 132 countries in a global Environmental Performance Index survey conducted by the Yale and Columbia universities. This air pollution is due to inefficient consumption of energy resources, industrial activities, a heavy dependence on fossil fuels, and a rising vehicle population. Coal-based
thermal power plants and industrial boilers are a key source of nitrogen oxide and particulate matter and are among the major contributors to declining air quality.

Air pollution has become the fifth leading cause of deaths in India. The World Health Organization (WHO) estimates an annual mortality number attributed to air pollution at a staggering 500,000. The economic impact of pollution and environmental degradation has cost the country US$80 billion, equivalent to 3 per cent of the GDP, according to The World Bank.

As a country, we may be facing a shortage of domestic gas supply in the interim, but natural gas is an abundant resource. The International Energy Agency calculates that gas will last for more than 230 years — at current consumption rate. It is the cleanest fossil fuel as it has relatively low carbon dioxide emissions. Other emissions such as sulphur oxide, nitrogen oxide particulates, and heavy metals are also significantly lesser than other fuels.

India needs more exploration and domestic production to keep up with demand, and Shell welcomes the recent initiatives proposed by the Ministry of Petroleum and Natural Gas in this regard but it is important that this long-term initiative is complemented by natural gas or LNG.

What is needed to meet India’s energy requirements is a balanced energy mix. Globally, it is well established that there is no “silver bullet” to achieve this. But any plan to create a balanced energy mix that addresses environmental concerns for India should put natural gas at its centre. Gas is a clean fuel uniquely positioned to address the country’s energy challenges and can play a central role on a pathway to allow carbon, low-pollution energy system with an increasing share of renewable energy.

Further delays in the use of natural gas and other cleaner fuels will only increase the use of environmentally inefficient fuels, thereby exacerbating pollution. China and other Southeast Asian countries are already dealing with problems associated with extreme levels of air pollution. We can choose to learn from the experiences in these countries by early adoption of the measures to address this problem.

India should not make unnecessary trade-offs between growth and competitiveness, health and environmental sustainability, and energy security. An energy system with greater efficiency, more natural gas, and a growing share of renewable energy makes available a pathway without this trade-off — for the benefit of our nation and people.
TERI strongly feels that implementing sustainable development measures should be an integral part of the entire value chain of an organization. For sustainability to mature into the integral part of an organizational structure and culture, and for organizations to reap tangible long-term benefits, businesses need to operationalize sustainability across the value chain—upstream, instream, and downstream.

Bearing this in mind, TERI launched a knowledge paper titled “Operationalizing Sustainability in Value Chains” at the Leadership Summit for Sustainable Development on 29 October 2013. This knowledge paper was developed with the active engagement and support of the Value Chain working group of the CSO Forum. The working group companies—YES Bank, Mahindra and Mahindra, CLP India, and SAP India—have contributed immensely towards drafting this paper, after hours of discussion and debate.

This knowledge paper aimed at addressing the fundamentals of a sustainable value chain management, substantiate the benefits an organization can leverage through a collaborative interaction with the key stakeholders of their value chain, and provide a step-by-step guide to the process involved in institutionalizing sustainability in the organizational practices and processes. The paper can be a ready-reckoner for organizations to implement and practice value chain management sustainability and present some examples to inspire action by leading corporates. The paper primarily focusses on two major sectors, the Manufacturing Sector and Financial Services Sector, and addresses the methodologies and processes for operationalizing sustainability in their value chains.
Positive Influence of Responsible Investment and Finance

Sumantra Sen, Responsible Investment Research Association (RIRA)

The Responsible Investment Association Australia (RIAA) and closer home Association for Sustainable and Responsible Investment in Asia (ASrIA) are dedicated to promoting sustainable finance and responsible business practices in the various markets. Responsible Investment Research Association (RIRA), the India SIF, was launched in early 2013 and is getting acceptance from the financial sector.

Research from across the globe, clearly points towards the interest in developing models and tools for ESG integration, in all the asset classes going beyond public equities. Globally, the asset owners including pension funds and insurance companies are leading the way by embracing ESG integration for their entire portfolios. For instance, CalPERS — the US$260 billion fund — has approved integration of ESG issues as a strategic priority.

On the same lines, for business lending and project finance, the banks are making efforts to align their operations to the Equator Principles. Based on the IFC Performance Standards, the latter is a credit risk management framework for managing environmental and social risk in project finance transactions. The forum began with 16 Signatories in 2003 but has grown to a significant list of 79 at last count.

Investment management professionals are increasingly looking at sustainable investment as an opportunity to enhance their practices by staying ahead of the curve and differentiating themselves. And the Stock Exchanges are exploring how they can work together with investors, regulators, and companies to enhance corporate transparency on ESG parameters and encourage long-term approaches to investment. The United Nations’ lead Sustainable Stock Exchanges’ (SSE) initiative is one such peer-to-peer learning platform for encouraging sustainable investment practices.

The significance and bearing of ESG externalities and how these impact the health of economies, has not been overlooked by the regulators and policy-makers across the world. They have been emboldening the investors and asset owners to pursue active ownership and be the stewards of a greater business responsibility.
Responsible Finance in India

While the regulators have played more of a supporting role in encouraging market-based solutions elsewhere in the world, in India, as was expected, they have had to play the lead role in introducing some fundamental practices around ESG issues. Although, responsible finance practices have existed closer home in several parts of Asia for more than a decade, the trend has not gained similar traction in India. The commitment by the financial organizations and domestic investors continues to be relatively weak and most of them including insurance companies and pension funds, continue to remain inoperative in this space.

There have been only a few examples from the country on adoption of global principles — two PRI signatories from India to date, IDFC and Solaron Sustainability Solutions and two for UNEP – Fi, namely, Yes Bank and IL&FS. The IDFC is also the only Indian signatory to the Equator Principles. However, some of the international banks operating in India may be global signatories to one global standard or the other.

Amongst the stock exchanges, the Bombay Stock Exchange has launched the live carbon index, the BSE-GREENEX, in collaboration with gTrade (supported by GIZ promoted by Federal Republic of Germany, Observer Research Foundation, and IIM-Ahmedabad). It is also a member at the UN’s lead Sustainable Stock Exchange initiative.

But overall, very few Investment and Finance practitioners have awareness of the tools, best practices, and of the dedicated ESG India index. This lack of awareness and absence of comparable ESG data have often been cited as key reasons why the financial community has not taken active steps in integrating them in the decision-making process.

Addressing these gaps around ESG disclosure, the regulatory measures initiated by the Ministry of Corporate Affairs and subsequently endorsed Securities Exchange Bureau of India (SEBI) are landmark developments. The National Voluntary Guidelines (NVGs) issued by the Ministry of Corporate Affairs in 2011, encouraged companies to demonstrate their adoption of responsible business principles to their stakeholders. Later in that same year, SEBI passed a board resolution which has mandated listed companies to report on their Environmental, Social, and Governance (ESG) initiatives through a Business Responsibility (BR) report (along the principles of NVGs). Even as this resolution states that the directive will be straightaway applicable to the top 100 listed companies (by market capitalization), it also advises that remaining companies will gradually come under its scope. The Company’s Bill and the new legislation related to sustainability of Companies, further illustrates the trend towards an increasing policy focus on disclosure of the Indian companies. Effectual integration of a formal CSR policy in companies’ strategies and operations can play a role in further mainstreaming of these issues.

Galvanizing the Responsible Financial Community

The regulations can only create an environment that facilitates transparency and healthy dialogue around ESG issues. For taking the movement to the next level it is important that all the participants advance their engagement with the subject and align their practices along these principles. The heartening news is that on a closer analysis, it is possible to recognize the growing awareness amongst the financial institutions about these issues. While only a handful of the participants are aligning themselves to internationally accepted principles, many institutions who are not publicly announcing their commitment are in the process of developing their own frameworks and set of practices.

Having a pre-requisite — that is a broadly accepted framework for disclosures — in place is a good start. The quality and comparability of the data will hold the key. The ESG indicators are not seen just as a reflection on the brand or reputation management but also as reflection on the strategic, innovative, and cost-reducing capabilities.

The advancements in disclosure practices will not yield the desired results if the objective usage by the financial community does not gather acceptance simultaneously. The latter should be literate in interpreting and analysing the same. Enhancing the capabilities of the professionals through focussed training programmes will assist in expediting the understanding and adoption process.

The entire discourse between companies and financial institutions on ESG issues has to take place in mainstream discussions on business strategy and should be fully aligned with the scope of companies’ top management responsibilities and investor communications. The Indian Investment story may be momentarily questioned, but the country’s long-term economic growth potential provides an opportunity to the corporates as well as the financial sector to leap a frog and establish a sustainable business model.
Ganeshotsav Greener, but More Needs to be Done
Union Ministry of New and Renewable Energy (MNRE) will be building the world’s largest solar power project in the cold desert of Ladakh. Expected to generate 5,000 megawatt (MW) of power, it will put Rajasthan a little behind, which had a capacity of generating 4,000 MW of solar power. Once completed, the power project is expected to not only meet the local demand, but can make Jammu and Kashmir a power surplus state. Officials say this surplus power can then be sold to other states. However, some officials also say that the project is just at a proposal stage and it will take another 20 years for completion. Given the disadvantage of the high altitude location and climatic problems, it will take longer to set up a fresh transmission line for power supply and distribution, feel experts.
Source: Sustainuance
Link: http://www.sustainuance.com/worlds-largest-solar-plant-to-come-up-at-ladakh/
Dated: 21 November 2013

Sustainable Beef Farming: A Sustainable Agriculture Initiative
The Sustainable Agriculture Initiative (SAI) Platform’s Principles for Sustainable Beef Farming cover a wide range of aspects in the broad theme of sustainable farming systems. The principles make sure they address economic, social, and environmental sustainability, requiring achievements in each area of beef cattle production. The aim of the group which consists of Europe and Unilever aims to develop a safe supply chain for beef products while taking utmost care of the natural environment, the social and economic condition of farmers, their employees and local communities and safeguard the health and welfare of beef cattle. The beef guidelines came out of the Beef Working Group which comprises representatives from companies including: Bord Bia, McKey Food Service, Vion Food Group, Quality Meat Scotland, Livestock and Meat Commission for Northern Ireland, ABP, Beef and Lamb New Zealand, FAI Farms, Nestec and Dawn Meats.
Source: Sustainuance
Dated: 03 December 2013

Roof Rain Water Harvesting Structures by TATA Power
Tata Power, India’s largest integrated power utility, in association with Aga Khan Rural Support Program, installed Roof Rain Water Harvesting Structures at Modhva village, Gujarat, under the ‘Sagarbandhu’ project. The objective of installing the systems in the village was to leverage technology to make efficient use of natural resources and mitigate the unavailability of adequate water supply. Along with this the project also generated awareness about the usage of natural resources. The project will not only ensure continual supply of water in times of droughts, but will also prevent flooding in low-lying areas. The Roof Rain Water Harvesting Structures will help in replenishing the ground water table, thus, enabling dug wells and bore wells to sustain adequate water.
Source: 2degreesnetwork
Link: https://www.2degreesnetwork.com/groups/supply-chain/resources/beef-sector-collaborates-develop-new-set-principles-sustainable-farming/
Dated: 03 December 2013

One Million Solar Systems in Bangladesh
Grameen Shakti, a Bangladeshi rural energy based company is an offshoot of the Grameen Bank, the pioneering micro-finance institution, which was established in 1976. Currently, Grameen Shakti is one of the largest and fastest growing rural-based renewable energy companies in the world. As on December 2012, Grameen Shakti had installed more than one million SHSs in rural areas with more than 22,250 SHSs installed per month. This success especially was the result of a unique approach, blending market, and social forces together to take the world’s most up-to-date technology to the rural people.
Emerging Markets Much Quicker to Embrace, Integrate Sustainability into Business

The John Lewis Partnership has become the latest company to commit to drastically increasing its use of renewable energy. The UK retail giant announced a new partnership with SmartestEnergy to supply over 380 of its stores with 100 per cent clean power. This move comes in the time of rising energy and fuel costs and hence will enable the company to save up on their operational cost.

Source: Sustainable Brands
Dated: 18 December 2013

Hershey has Committed to 100 per cent traceable, sustainably sourced palm oil by the end of 2014

The Hershey Company is committed to continuous improvement and transparency in their sustainable sourcing efforts. While Hershey uses palm oil in a variety of its products, it notes that it is a very small consumer in the global palm oil market. The new pledge demonstrates a stronger commitment with specific safeguards that exclude palm oil sourced as a result of deforestation or the destruction of wildlife habitat, the clearing of high carbon stock forests, and peat land expansion. Hershey is one of the world’s major buyers of palm oil for use in products, purchasing around 1.5 million tonnes of Palm Oil every year, making up about 3 per cent of the world’s total production.

Source: 2degreesnetwork
Link: https://www.2degreesnetwork.com/groups/supply-chain/resources/hershey-has-committed-100-traceable-sustainably-sourced-palm-oil-by-end-2014/
Dated: 24 December 2013
<table>
<thead>
<tr>
<th>Month</th>
<th>Tentative Week</th>
<th>Event</th>
<th>Working Group</th>
<th>Mode of Interaction</th>
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<tbody>
<tr>
<td>January</td>
<td>Week of 13th January</td>
<td><strong>Webinar on CSR</strong> Understanding the Companies Law, Lawyer’s Perspective, Leveraging CSR for Business Growth</td>
<td>CSR (All other Working Groups can attend this)</td>
<td>Virtual Participation from Desktops</td>
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<td></td>
<td>Week of 20th January</td>
<td>Introductory Consultation for All Working Groups: Mapping the Projects</td>
<td>All</td>
<td>Conference Call</td>
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<tr>
<td>February</td>
<td>Week of 10th February</td>
<td><strong>Webinar on Energy Efficiency Retrofits</strong> in Existing Buildings</td>
<td>EEB (All other groups can attend)</td>
<td>Virtual Participation from Desktops</td>
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<td>March</td>
<td>Week of 10th March</td>
<td><strong>Site Visit to an Energy Efficient Building with Noteworthy Waste Management Features</strong></td>
<td>EEB+Waste Management (All other groups can attend)</td>
<td>Physical Meeting</td>
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<td></td>
<td>Week of 24th March</td>
<td><strong>Webinar on Industrial Waste Management</strong> Classifying and Understanding Waste Materials and their Usage Industry Wise</td>
<td>Waste Management (All other groups can attend)</td>
<td>Virtual Participation from Desktops</td>
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<tr>
<td>April</td>
<td>Week of 1st April</td>
<td>Consultation of All Working Groups in Mumbai</td>
<td>All</td>
<td>Physical Meeting in Mumbai</td>
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<td></td>
<td>Week of 14th April</td>
<td><strong>Webinar on CSR</strong> Tools and Methodologies to Measure the Impact</td>
<td>CSR (All other groups can attend)</td>
<td>Virtual Participation from Desktops</td>
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<td></td>
<td>Week of 21st April</td>
<td>Consultation of All Working Groups</td>
<td>All</td>
<td>Conference Call</td>
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<td>May</td>
<td>Week of 5th May</td>
<td><strong>Webinar on Energy Efficiency Retrofits</strong> In Existing Buildings: Focus on HVACs and Other Solutions</td>
<td>EEB (All other groups can attend)</td>
<td>Virtual Participation from Desktops</td>
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<td></td>
<td>Week of 12th May</td>
<td>Site Visit for a CSR Pilot Location or a Visit to TERI’s CSR Intervention Site</td>
<td>CSR (All other groups can attend)</td>
<td>Physical Meeting</td>
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<tr>
<td>Month</td>
<td>Week</td>
<td>Event</td>
<td>Group Access</td>
<td>Participation</td>
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<td>June</td>
<td>Week of 2nd June</td>
<td><strong>Webinar on Industrial Waste Management</strong> Business Case Studies on Waste-to-Wealth</td>
<td>All other groups can attend</td>
<td>Virtual Participation from Desktops</td>
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<td>Week of 16th June</td>
<td>Consultation of All Working Groups</td>
<td>All</td>
<td>Conference Call</td>
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<td>July</td>
<td>Week of 7th July</td>
<td><strong>Webinar on Value Chain Sustainability</strong> Tools and Methodologies</td>
<td>All other groups can attend</td>
<td>Virtual Participation from Desktops</td>
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<td></td>
<td>Week of 21st July</td>
<td>Consultation of All Working Groups in Mumbai</td>
<td>All</td>
<td>Physical Meeting</td>
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<td>August</td>
<td>Week of 4th August</td>
<td><strong>Webinar on CSR</strong> Planning and Implementing Holistic and Integrated CSR</td>
<td>All other groups can attend</td>
<td>Virtual Participation from Desktops</td>
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<td></td>
<td>Week of 4th August</td>
<td>Consultation of all working groups</td>
<td>All</td>
<td>Conference Call</td>
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<td>September</td>
<td>Week of 1st September</td>
<td>Sharing the First Draft of the Work Done by All Working Groups</td>
<td>All</td>
<td>Conference Call/Email</td>
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<td></td>
<td>Week of 15th September</td>
<td>Reviewing the Final Draft of the Projects Undertaken in the Working Groups</td>
<td>All</td>
<td>Conference Call</td>
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<tr>
<td>October</td>
<td>Week of 1st October</td>
<td>Preparation for the Final Presentation to be done at the Leadership Summit</td>
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<td>Conference Call</td>
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<td>Week of 14th October</td>
<td>Presentations at the Leadership Summit for Sustainable Development</td>
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<td></td>
<td>Week of 15th October</td>
<td>CSO Conclave and High Level CSO Roundtable Starting with the Next Round of Engagements</td>
<td>All</td>
<td>In Delhi</td>
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<td>November</td>
<td>Week of 10th November</td>
<td>Update on the Minutes of the CSO Conclave</td>
<td>All</td>
<td>Email</td>
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<td></td>
<td>Week of 24th November</td>
<td>Consultation of All Working Groups</td>
<td>All</td>
<td>In Delhi</td>
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</tbody>
</table>
ENCoRE

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For more details, please write to radhika.kapoor@teri.res.in

Call for nominations towards joining Working Groups

Thematic Tracks
- Energy Efficiency in Buildings
- Social Responsibility
- Sustainability in Value Chains
- Waste Management

Industry Focus
- Chemical Industry

CSO Forum 2013–2014
Chief Sustainability Officers’