

Only 45% Indian businesses disclose ESG risk

A recent industry survey conducted to examine ESG (environmental social and corporate governance) measurement, management and disclosure revealed that preparedness for ESG disclosure is high but prevalence of public disclosure is low. 97% of the businesses surveyed managed ESG risk but only 45% disclosed. ESG disclosure was more prevalent (at 70%) in the businesses that are among the top 100 listed; and was less prevalent outside that group (with only 33% disclosing ESG data).

Some of the key findings of the survey include:

- Management of ESG issues is high due to reduction of operational risks and enhancement of reputation
- Preparedness for ESG disclosure is high but prevalence of public disclosure is low
- Businesses and investors have a desire to track ESG performance for similar reasons (e.g. reducing operational risk and building brand image) however; there is a lack of clear communication between the two on the value of ESG disclosure
- The opportunities businesses perceive from ESG include gaining access to new markets and increasing operational efficiency
- Respondents cited regulatory and supply chain concerns as the highest ESG risks facing their firms (loss of market share was also identified as an important concern)
- Public disclosure on ESG is primarily driven by compliance. Currently reporting to different regulators exists in very different formats (platform for aggregation and digitization is needed)
- The NVGs announced by the Ministry of Corporate Affairs in 2011 have been a key driver that have brought ESG disclosure into business consciousness for the top 100 listed companies on account of the SEBI mandate announced in 2012.

The survey was conducted as a part of the sustainable finance working group on Sustainability Disclosure and Reporting of the Sustainable Business Leadership Forum. The survey was conducted within three target verticals (Pharmaceuticals/ Chemicals, Automotive and Automotive Ancillary, Agro/Food Processing and Consumer Products) to examine how ESG measurement, management and disclosure improve business operations, reduce risk and enhance access to capital.

Inside

News

2



5
SustainabilityHead
Interview
Beryl Lopez
Siemens gets
vendors
to fall in line

8

CEOTalk
Paul Polman,
CEO, Unilever
Turn Capitalism
into a Force
for Good



Ranking

10

Wipro, HCL in elite
Greenpeace Cool IT list

RoleModel - G.V. Dasarathi

11

Kachra mane
How to Build a House
from Waste

RingsideView

13

Anant G. Nadkarni
New Insights into
Cost Accounting

SocialTech

14

Social drones
How a Mumbai start-up is
helping Uttarakhand



17
SocialExecutive
Aravind
Sitaraman
Scientist Turned
Social Activist

Books

19

Events

23

Renewable Energy Contributes 6.4% in India

THE contribution of renewable energy to the total power generation is estimated to be 4.7%, 5.5% and 6.4% during 2010-11, 2011-12 and 2012-13 respectively. A capacity addition of 11,246 MW has been achieved from renewable energy sources during the last 3 years, Minister for New & Renewable Energy, Dr. Farooq Abdullah said in the Rajya Sabha recently.

Renewable power generation capacity of 14,657 MW has been added in the country during the 11th Five Year Plan period. A potential of over 2, 45,000 MW from various renewable energy sources have been estimated in the country. So far 28,067 MW renewable power generation capacity have been installed.

To encourage use of renewable energy sources, the ministry encourages private sector investment and offers incentives such as capital subsidy, generation based incentive, accelerated depreciation for renewable energy projects, among others.

Poor CFL Bulbs Disposal = Mercury Poisoning



TRUE, CFL bulbs have brought down energy consumption but they are posing a big danger of mercury poisoning of the environment. The law mandates that we must give the used bulbs back to the manufacturer for proper disposal.

Lt. Gen. V.J. Sundaram, famous for his contribution to India's missile program, is leading the drive against careless attitude of users, manufacturers and also that of the government in not enforcing the law. "We are sitting on a time bomb of mercury poisoning of our children because it is going into water, ground and food. This is silent poisoning and nobody is raising their voice." He is launching a campaign shortly. Watch this space for more details.

IBM Introduces Hybrid Renewable Energy Forecasting Technology

IBM has introduced a new power and weather modeling technology that will improve the dependability of renewable energy resources. IBM's new Wind and Solar Power Forecasting System combines climate modeling with big data analytics to accurately predict the availability of wind power and solar energy.

This technology will help utility companies enhance their ability to integrate more renewable energy into the power grid. Clean energy output will increase, allowing a reduction in carbon emissions for individuals and businesses. The solution has been named "Hybrid Renewable Energy Forecasting" (HyRef). It makes use of advanced cloud imaging technology and sky facing cameras to track cloud movements, while sensors on the turbines monitor wind speed, direction and temperature.

The data assimilation based solution, when implemented in conjunction with analytics technology, will be able to deliver accurate local weather forecasts within a wind farm as far as one month ahead of time, or in 15-minute increments. HyRef makes use of local weather forecasts to predict the performance of every single wind turbine and estimate the amount of generated renewable energy.

With this level of insight available to the utilities, they will be able to manage the variable nature of wind and solar more efficiently, and forecast the amount of power that can be deployed into the power grid or stored more accurately. Energy companies will also be able to integrate other conventional energy resources such as natural gas and coal.

Source: PR Newswire
<http://www.justmeans.com/blogs/ibm-introduces-hybrid-renewable-energy-forecasting-technology>

Wal-Mart launches new sustainability index for suppliers

WHEN it comes to carbon emissions reporting, the \$406 billion retailer appears to be suggesting that suppliers go through the Carbon Disclosure Project. Additionally, Wal-Mart sees its new sustainability index leading to a universal standard that can be applied across "all retailers, all suppliers," said Wal-Mart chairman and CEO Mike Duke.

"We see this as universal - this is not a U.S. standard," Duke said during a July 16th meeting to unveil the firm's new sustainability index. It may be several years before shoppers see "green" ratings on product shelves. In the meantime, Wal-Mart aims to ask 15 questions on the sustainable practices of its some 60,000 suppliers. The questions will be in the following four areas: energy and climate; material efficiency; natural resources; people and community.

New CO2 limiting device

PARAM JAGGI, Founder and CEO, Ecoviat, has launched an innovative product that reduces carbon dioxide emissions directly from the exhaust of your motor vehicle.

Called CO2ube, it unique features: simple, inexpensive, H.O.V. Pass & EPA Tax Credit (Pending Approval) and mobile-application to track your emissions. Param Jaggi and Jonny Cohen were named to the 2012 & 2013 Forbes '30 under 30: Energy' list. The CO2ube (pronounced: C-O-Tube) is a device that fits directly on the exhaust of any motor vehicle. The device uses photosynthesis and simple chemical reactions to diminish carbon dioxide from the source itself. The idea started when Param Jaggi (now 18), was 13. After doing a few years of lab work with bio-fuels and bio-reactors, he thought that carbon should be captured at its source. The CO2ube uses basic biology and chemical processes to reduce carbon dioxide emissions from the exhaust.

GlacialLight adds new energy efficient LED products

GLACIALLIGHT, a division of the Taiwanese technology manufacturer, GlacialTech Inc., has added GL-FL180, a 175W AC-input LED Flood Light with Philips Lumileds LED chips to its popular range of energy efficient LED lighting products.

Built for adverse environments, GL-FL180 features aluminum die-cast alloy housing, high-strength glass, stainless steel skid proof screws and phase-change metal (PCM) thermal interface material (TIM). These combinations of features make GL-FL180 ideal for high temperature, corrosive or high vibration environments; for example, beaches, general factory sites or chemical factories.

Making the most out of LED technology, GlacialLight's GL-FL180 converts electricity to light with outstanding efficiency. Compared to equivalent mercury flood lights, this LED flood light consumes far less power for the same light output.

With the environment in mind GlacialLight designed the GL-FL180 Flood Light to contain no hazardous chemicals, such as mercury, and to create no harmful radiation emissions such as UV or IR, making them more eco-friendly than traditional lighting. This AC input flood light is also more economically friendly compared to traditional lighting products because of both lower power consumption and greater amount of light produced.



BIMTECH wins Gold



BIRLA Institute of Management Technology (BIMTECH), Greater Noida, received Gold Award for its post graduate program 'Sustainable Development Practices' and effective engagement between the industry and the institute. The award was handed over by Dr. Shashi Tharoor, Minister of State for Human Resources and Development, Government of India, recently.

The jury included Dr. Devi Singh, Director, IIM Lucknow; Fr. E. Abraham S.J., Director, XLRI, Jamshedpur; Dr. Pritam Singh, DG, IMI & Former Director IIM Lucknow; Dr. Rajan Saxena, Vice Chancellor, NMIMS University, Mumbai; Dr. Debashis Chatterjee, Director, IIM Kozhikode and Dr. Sesha

Iyer, Director, S.P. Jain Institute of Management & Research, Mumbai.

The Awards instituted by MBAUniverse.com had received more than 50 nominations from B-schools and University MBA departments across India such as IIM-Kashipur, T.A. Pai Management Institute, Manipal, Goa Institute of Management, Jaipuria Institute of Management, Great Lakes Institute of Management, Chennai, ITM-Navi Mumbai.

Prof. N.N. Sharma, Chairperson of the course said this program is an epitome of seamless engagement between institute and industry which pervades from design to delivery.

Dow Jones Sustainability Index update

Bank of America, UBS, UPS added, Johnson & Johnson, HSBC, Vodafone deleted

EVERY September, the Dow Jones Sustainability Indexes (DJSI) are updated, following a review by sustainable investment research firm RobecoSAM. Launched in 1999, the DJSI is one of the earliest sustainability indexes which now include the top 10 % of the largest 2,500 companies in the Dow Jones Global Total Stock Market Index, ranked according to their economic, environmental and social performance.

However, Bank of America's inclusion is generating a fair amount of controversy among NGOs tracking the bank's ongoing financial support of the coal industry in India. The government of India has selected several foreign banks - including Bank of America and Goldman Sachs to sell shares of Coal India estimated to be worth \$ One billion.

Siemens Gets Vendors to Fall in Line

Siemens has grown into a Rs. 12,000 crore, 18,000 people blue-chip multinational company in India. It's a market leader in electronics and electrical engineering and is a strong player in city infrastructure, energy and healthcare. It has a nation-wide sales and service network, 21 manufacturing plants. As a global leader in several of the businesses it is in, Siemens has been proactive in sustainability related issues as well.

In a conversation with **SustainabilityNext**, **Beryl Lopez** shares some of Siemens' strategies and activities in the sustainability area:



What is Siemens' global sustainability policy and targets?

Sustainability at Siemens is not only "green" but also covers social and economic aspects. We assemble the following topics under the umbrella of sustainability: employees, environmental protection, environmental portfolio, supply chain management, occupational health and safety, compliance, corporate citizenship, customer partnerships and innovation. As a globally operating technology company, Siemens is aware of its responsibility and is taking it seriously. For the sake of future generations, we want to act responsibly and make economic, ecological and social progress. That's how we see sustainability and how we are acting.

What is Siemens' India sustainability policy and targets?

Sustainability is a key pillar of the corporate strategy at Siemens, with the three areas – environment, economy and society – governing all the activities at the organization. In India, Siemens has put in place various initiatives for creating a sustainable environment. This includes not only making employees, suppliers, business partners and customers' environmentally-conscious but also encouraging all stakeholders to choose approaches that support sustainable environment.

We have initiated the Green Building initiative across seven locations in India. In 2010, Siemens Ltd. had announced an investment of Rs. 10 crore till the end of

2012 to make its offices in India more energy efficient. The Green Building initiative was implemented as a part of the Siemens Sustainability Program and the Energy Efficiency Program (EEP) aiming to reduce energy consumption and CO2 emissions in buildings by at least 15% by the end of 2012. The energy savings realized by Siemens Ltd. in the first year of the EEP program, amounted to nearly 7 lakh kWh units. This was a saving of 18% vis-à-vis the previous year - equivalent to reduction in CO2 emission by 473 tons per annum.

Rainwater harvesting and Sewage Treatment Plants have been implemented in all factory locations and some offices. In FY 2011, the company started the process of identifying suppliers whose production sites will be subjected to an analysis of their environmental performance and energy efficiency. The goal is to reduce energy and CO2 emissions.

As part of the qualification of the suppliers there are various questionnaires and forms to be certified by the vendor before he is certified as ready for business with Siemens. This is part of the supplier qualification guideline. These questions touch upon compliance, child labour, use of hazardous materials and environmental certifications received. Besides this, there are certain contract clauses that have

been recommended to be a part of the standard contract clauses as per the compliance guidelines. There are also specific safety clauses/penalties which are incorporated as part of the civil and labour contracts.

What have been its challenges with Indian eco-system in implementing its sustainability strategy?

Low awareness, perception that implementation is costly, legacy technologies and infrastructure.

What are its future plans?

Project Asha was launched as an integrated, sustainable development project aimed at providing electricity, drinking water, irrigation support, adult education, health awareness and livelihood support to an off-grid village. Amle village in Mokhada taluka, Thane district, which is around 130 kilometers from Mumbai, is the beneficiary of this Corporate Citizenship project. The tribal community of Amle has around 350 villagers who survive on subsistence farming. Through Project Asha, Siemens India aims to turn Amle village into a self-sustainable community within three years with its technology and support, making the remote, inhospitable hamlet into a model for the rest of the off-grid villages in India.



Siemens' team launching a CSR project



Indian Sustainability Congress - 2013

www.isustainability.in

4 - 5 December 2013

Vivanta by Taj , MG Road,
Bangalore, India

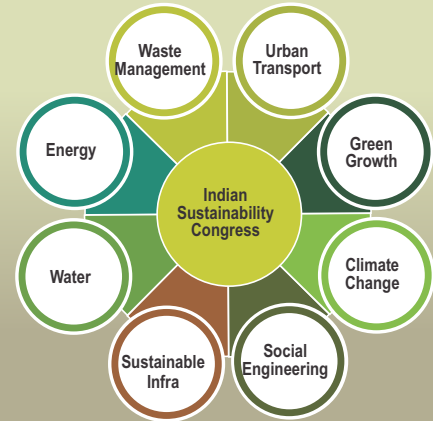
Themes

- Sustainability for Future Generation
- Using sustainability to drive business innovation and growth
- Government Schemes and Opportunities for Sustainable Technology & Product Development
- Investment opportunities and challenges in Sustainable Technologies & Products
- Opportunities and challenges in Technology transfer and licensing
- Sustainable Technologies and Products last mile implementation
- CSR spend mandate for Public companies and limitations

Indian Sustainability Congress – 2013 (ISC-2013) envisaged to be an Annual event with facets of Thought Leadership, Recognition and Rewards for Achievers, Products and Technology Demonstrations, Trade Fair, Vendor Development, Collaboration and Networking opportunities.

Towards this, Indian Sustainability Congress intends to engage with the Departments of the Government of India, Government of Karnataka, International Organisations, Research Institutions and Associations working towards growth of Sustainable Technologies and Products. Various Indian and International Enterprises working in building the Sustainable Technologies and Products will exhibit and demonstrate their expertise in the area of Sustainability.

The purpose of the Indian Sustainability Congress is to exchange emerging ideas and explore Technologies towards protecting the environment and optimizing natural resources so as to achieve sustainable development and societal benefits through the generations. The congress will provide a common platform for engineers, researchers, innovators, practitioners, investors to interact and collaborate to achieve overall sustainability from a systems perspective, using engineering & technological innovations.



Who Must Attend?

CEOs
Presidents
Directors
Policy Makers
Investors / Fund Managers
Heads of Government Departments
Heads of Sustainability Development
Heads of CSR
Heads of Strategy and Planning
Chairpersons / Head of NGOs
Directors and Heads of Institutions and Research Centers
Heads of International Funding Agencies

Take Aways

- Two Full days of Conference and discussions by Global Thought Leaders
- International Speakers and Subject matter Experts
- Opportunity to build Business and collaborate
- Opportunity to explore Associations, Affiliations, Partnerships and Funding
- View to Sustainable Technologies & Products
- Opportunity to Network

Call For Papers

Papers are invited on all aspects of the thrust areas of the ISC 2013. Authors are requested to submit abstract(s) of about 300 words. Decision on suitability of the paper/s will be conveyed after scrutiny of the abstract. Authors will have to register as Delegates to present selected paper/s. All abstracts of papers will be published for distribution at the Conference. Authors can email the Abstract/ Full Paper (papers@isustainability.in), on or before 31 October 2013 to The Convener, Indian Sustainability Congress - 2013.

Benefits as Sponsor and Partner

Format of the congress is more exclusive than any other event in the segment. ISC host series of opportunities for you as technology companies to meet and network with high profile delegates from, Government, Industry and Global Associations who promote Sustainability. 500 Entrepreneurs, Industry Gurus, Professionals, Academicians, Bureaucrats, Investors, Policy makers and Regulators will attend the two days of exclusive Sustainability congress.

Benefits as Exhibitor

The ISC - 2013 hosts an exclusive Exhibition for two full days on the 4 - 5 of December at Vivanta by Taj at Bangalore, parallel to the Conference and Awards. There will be 500 decision makers, institutions and Corporate who will be visiting the exhibition. This is an opportunity for you to be there, to do business.

Sangram Nayaka
+91 94481 18232
+91 80 6568 1956 / 6555 5823
sangram@isustainability.in

Samar Pratap Singh
+91 97423 30572
samar@isustainability.in

Paper Presentation & Delegation
+91 99806 10017
papers@isustainability.in

Organizer



Knowledge Partners



Organizing Partner



Source Kapital

CSR Partners



Media Partners



Hospitality Partner



Secretariat Address:

#5, Sri Vinayaka Towers, 7th Cross,
Domlur Layout, Bangalore, India

Phone:

+91 80 65592501

Email ID:

marketing@isustainability.in

We have to Turn Capitalism into a Force for Good

Excerpts of Unilever CEO **Paul Polman**'s address at 2012 C.K. Prahalad Award for Sustainable Leadership

CK was an enormous man. He used to be on our HUL board where he introduced us to the concept of the BOP into the company before he wrote the book 'Fortune at the Bottom of the Pyramid.'

CK was a special man to us. The Unilever Sustainable Living Plan to help the world's consumers would not have been possible without CK because next to a business thinker and an academic, he was a friend of Unilever, a trusted advisor and in some sense a voice of conscience for us as we were developing our business model at Unilever. For 10 years he was at the Hindustan Lever board and many times I talked to him he obviously knew the company better than I will ever know. His insights and wisdom was what made us tick was extraordinary and obviously being a member of the Unilever top management, he would give us a lot of insights. So it's not a surprise that we learnt a huge amount from him.

We are working on everyday in his name, the Unilever Sustainable Living Plan and the Standards of Corporate Behavior we are setting could not have been possible without him. His 'Fortune at the BOP' taught us to unlock the enormous potential; in fact, it was the root of the success of HUL, root of our success in many other places.

His mantra that was always striking to me from the first day was we are not producing for the BOP but we are producing with the BOP. It's a small word difference but it makes a huge difference. Because of that vision of respect and total inclusion he brought dignity to people – people who felt they were nobody he made them into some body. The Shakti Ladies program in India now has about 80,000 of them work for us. It is more of improving women's wealth and we have long ago discovered that investing in women is investing in families, nutrition and growth. Investing in men unfortunately leads to him stopping in the corner to have a drink.



Any growth has to be responsible and equitable growth

So a decade ago we thought of this principle of 'shared value' was becoming popular. Michael Porter and others spoke of it. I think CK understood that very well that any growth has to be based on responsible and equitable growth. I think capitalism in itself has lifted an enormous number of people out of poverty, created enormous wealth for many people.

But after the 2008 crisis more than anything else capitalism has got a bad name. One billion people who go to bed hungry every night; still a child dies every 6 seconds, 2 ½ billion people don't have access to basic hygiene; 400 million people are unemployed. The system is severely stressed and like any system if too many people feel that they are not part of it, are not getting the benefit from the system, it will ultimately be rejected. That's why you see movements like Occupy Wall Street movement are rapidly spreading. So the challenge for us actually is to capture this wonderful energy that capitalism can have and turn it into a force for good.

It requires us to do two things that are very clear in our minds. The first one is to take a little bit of a longer term perspective and the other is to reset the priorities of our business. This short-termism is leading us to a management of expectation of the quarterly reporting, expectation of the financial analyst instead of the management of our business and I don't think that is very good.

I don't think I recall any decision that I take on the basis of 90 days. If you take the weekends out it is 76 days, you don't make R&D decisions on 76 days and nor do we make capital decisions nor investments on humans in 76 days. So to go out there and report to the 25 years old what we are doing in three months just doesn't seem to me like a very useful exercise. For that reason we abolished guidance, abolished quarterly reporting, I did that the first day I became CEO because I simply figured that they can't fire me the day they hired me! It's time that the world goes back to sanity if you agree and hopefully more and more companies are going to do that as well.

We need to look at another business model; this is a world that already uses 1 ½ times the world's resources. According to WWF, in fact, I hate to say that 150 million Americans use a quarter of the world's resources. There are many people in the rest of the world that are inspired to live like them.

When they built the Statue of Liberty on the East Coast of the US they forgot to build the statue of responsibility on the West Coast. With all the liberty that we have as MNCs, bringing our products to all the consumers that we serve also comes with a high degree of responsibility. It is very clear to me that business cannot just be a bystander in the system that actually gives it life; it has to take responsibility and show leadership to manage these problems. For that reason we made the Unilever Sustainable Living Plan. Most businesses operate under the principal of how can we use the environment and society to be successful; we just changed the little word "use" and said how can we "give" the society and environment to be successful.

Unilever Sustainable Living Plan

Our Unilever Sustainable Living Plan helps us take deep responsibility of the total value chain, totally decouples

our growth which is very ambitious for us from our environmental impact. Of the audacious 50 time-bound targets, three of them involve totally moving out of non-sustainable sourcing of agriculturally-based materials. The second one is reaching a billion people with hygiene and well-being and the third, a total decoupling of our business model.

The interesting thing is, when we launched our audacious plan, it did feel a little uncomfortable and we certainly didn't have any of the answers to do it on our own. Lots of people talk about technologies that are needed or new inventions that we can do today just by living a little bit more responsibly. But to get a coalition going of different companies like we did with Global Consumer Goods Forum which the responsible governments and others in the NGO world can really move us forward. Sustainability of agricultural materials moved in one year from 10% and then we didn't really have a history to be ashamed of to 24% last year and sustainable palm oil for example we will be 100% sustainably certificate this year and sustainably traced to the sourcing by 2015, that's not far off either.

In terms of reaching hygiene, improving well-being of the billion consumers, last year, we reached 135 million consumers with clean drinking water, a brand called Purit or the hand washing brand called Lifebuoy. We are starting to make progress.

I am moving forward with some incredibly bold activities. \$155 billion being pressed for greener cities and public transport, sustainable energy for all is gaining momentum, food security, the empowerment of women, the water, natural capital gets more into integrated reporting. The theme of the conference was the future we want and hopefully that's a future that is sustainable, equitable for all of us and that's obviously why we started working very hard.

At the end of the day it's about coalitions – we cannot solve the problems we have if we keep doing the same thing. Einstein set the definition of insanity as doing the same thing over and over again and expecting different results. But we also know that time is running out. Benjamin Franklin said we can delay but time that we lost will never be found again and I think that should rally us enough.

Wipro, HCL in elite Greenpeace Cool IT list

TWO Indian IT companies, (Wipro 5th and HCL 13th) have made it much ahead of several Fortune 100 global companies in Greenpeace sixth annual ranking of Cool IT companies 2013. Surprisingly TCS has been removed in this year's ranking due to 'significant decline in performance'. Google and Cisco are ranked first.

Greenpeace launched the Cool IT Challenge in 2009 to call on Information Technology (IT) companies to power technological solutions needed to fight climate change. Greenpeace believes that the IT sector possesses the innovative spirit, technological know-how and political influence to bring about a rapid clean energy revolution. It also takes into account in-house energy management and contributions to the wider green economy.

SMART 2020 report, published in 2008, had noted the IT sector's opportunity to drive transformative change in the consumption and production of energy, with the potential to drive a significant reduction in the greenhouse gases (GHGs) that cause climate change. This analysis was reconfirmed in 2012 in the SMARTer2020 report, with global estimates of GHG reduction potential exceeding 16% by 2020.

However, Greenpeace said, the sector still lacks leadership in demanding policy changes needed to drive investment in

clean technology and renewable energy deployment. "To combat the formidable power of this dirty energy political bloc, IT companies have to take vocal leadership in advocating for renewable energy, as well as the IT energy solutions they can provide as the backbone of a modern, 21st century energy infrastructure."

Wipro earned a significant increase in its score in this Leaderboard, gaining 10 points and raising its overall ranking to 5th place, primarily on the strength of its score in the IT Energy Impact and Advocacy leadership criteria.

HCL increased its score in its second ranking in the Cool IT Leaderboard, primarily through greater advocacy leadership in India, providing critical support for laws supporting renewable energy. However, HCL still lags far behind its competitors in offering IT energy saving solutions, and also has substantial room for improvement in mitigating its own climate footprint.

Greenpeace sixth IT Leaderboard report looks at 21 global leaders in the space covering market solutions that can help customer's reduce energy use, internal energy footprint and their advocacy of new governmental policies encouraging the adoption of renewable energy and energy efficiency. It's surprising the list doesn't include, as it did last year, two of the biggest names in the high-tech industry, Apple and Facebook.

Overall Scores		
Company Ranking		Score
1st	Cisco	58
	Google	58
3rd	Ericsson	51
4th	Fujitsu	44
5th	Sprint	43
	Wipro	43
	HP	43
8th	IBM	40
	Alcatel-Lucent	40
	Vodafone	40
11th	SoftBank	39
12th	Microsoft	34
13th	HCL	28
14th	Dell	27
15th	SAP	24
16th	Telefónica	21
17th	NTT	20
18th	AT&T	19
19th	NEC	17
20th	Toshiba	13
	Hitachi	13

Source: Greenpeace.org

A Techie Builds his House from Waste

G.V. Dasarathi, Director, Cadem Technologies, is the proud owner of Kachara Mane. 'Kachra' means waste thrown into a dustbin and 'Mane' means house. This is part of his 'walk the talk philosophy' of his life which is sustainable living. Cycling to office is one of his many daily activities that result in optimum use of scarce natural resources. He promotes a movement called CyBaNa (which means use cycle, bus and walk in Kannada) to reduce traffic congestion.

Like charity begins at home Dasarathi does what he can but he's also a community guy. Seeing Bangalore, which is currently grappling with poor garbage management issues, he has started a campaign for garbage segregation and recycling program called Sada Zero in his locality, Sadashivanagar. **SustainabilityNext** features heroes like Dasarathi so that many more get inspired by him. Here, he answers a few questions:



How did it all start? What was your inspiration?

I have been careful about reducing my carbon footprint for a very long time. Buildings in India have always struck me as being overdesigned with no consideration of environment-friendliness. When we talk of an environment-friendly building, it typically means rain water harvesting, grey water recycling and solar energy. It does not mean reducing the overdesigning and waste of construction material.

When it was time to get our house built, I decided that it would have massive doses of reuse and reduce. Coincidentally, around this time, I read about Mr. Vishwamurthy's house in RT Nagar in Bangalore in a magazine which is completely built using reused construction material. I went over and met him and saw his house, picked up some ideas.

Experience and challenges you faced while building Kachra Mane?

The house is built on top of an existing house, so we had to build around it and did not have the freedom of designing from scratch. We had to do a lot of research on the suitability of materials and construction techniques. Many of the materials used and the ideas were new to carpenters and masons. They made mistakes that we had to later correct.

What are the materials that you sourced, how did you go about it?

Actually, almost everything that's used in the house – pinewood from packing cases for the basic structure - walls and roof supports; used glass for the walls and windows; bamboo corrugated sheet for the roof; discarded granite paving stones for the front yard (from footpaths - the granite stones were being replaced by cement and mosaic tiles); used stainless steel sinks for the kitchen and utility; used wash basins, commodes, taps and showers for the toilets; used lamp shades, etc.

What is the economics of your house? Cost and maintenance wise?

The cost was around half of what a normal house would cost, and so was the construction time. The wiring and plumbing is mostly exposed to improve maintainability. Most of the walls are made of glass that require no maintenance other than an occasional wipe. Since there are very few cement walls there is very little painting that's needed.

Can this be a model for affordable housing for the poor? How can this be scaled up if we have to build millions of such houses?

The design here is just about using these three basic principles: build for a life of 25 years; reuse and reduce; question the usual design that results in the typical oversized buildings that we see around us. These principles can definitely be a model for any home, large or small.

What are your future plans?

Generating our own electricity through solar power, reducing the use of water, and recycling water. We had a grey water recycling system that did not work out. We are in the process of revamping it. We are also thinking of installing dry toilets or a black water harvesting system.

www.lowcarbonlife.in





New Insights into Cost Accounting for Sustainable Business

BUSINESS seeking people's involvement to co-create human value is one glorious side of sustainability. The other side is more on how various segments of society remain accountable and responsible to people whose lives are impacted by their work. Coming to the later part, I am reminded of what is said in a famous book 'Weldon's Cost Accounting' written over half a century ago that, cost is a fact, price is a policy and value is an opinion. These three dimensions enormously affect our daily lives. In these columns each of these are dealt separately. The first one is, 'Cost is a fact' which provokes new insights into cost accounting for sustainable business.

I was invited to speak at the House of Lords, upper house of British Parliament at a lecture series jointly organized by the Chartered Institute of Management Accountants (CIMA) and a unique think tank called 'Tomorrow's Company,' both based in London. It was a rare honour to speak to such an august audience, and even more morally exciting to say how those who reinvented their identity from financial, to cost, to management accountants (meaning CIMA of which my father was one of its oldest Fellow), would perhaps be the most deserving to lead the way to co-create a completely new paradigm of accounting for Sustainability.

As systems and management practice evolved, various professionals shared financial responsibilities of business, and so it evolved a new concept of management accountancy. Financial accountants became cost accountants and then management accountants. The single most difficult challenge at all times was how complexity in processes and manufacture could be accurately determined in its present states as well as be able to project future 'costs' brought down to what is known as present value or worth to help make investments. So far, what mattered were the elements of traditional business – materials, labour and various activities could be identified with various stages of processing and the minute elements of cost.

Beyond Triple Bottom Line

CIMA and such other bodies across the world may be contemplating as to what might turn out to be the possible certified global sustainability professional. And, will traditional concepts like 'Management' and 'Accountant' change to something higher in value? Will it bring in a new order of sustainability assessors and evaluators? I hope yes, and there are good reasons why this could happen!

Firstly, business has moved away from its original sole purpose of making profit to enhancing human well-being. In its narrow avatar of serving just the fewer, a business model is more of a microcosm of Prof. C K Prahalad's pyramid subverting the fundamental principles of sharing wealth through short-term 'cost-reduction' measures. CSR expenses are almost absent, and in any case they are a small one or two per cent of profits.

Secondly, as thought-leaders from Tomorrow's Company develop a complete action-research on tomorrow's value, there is a new and an original argument (different from the Triple Bottom Line) that a business and its every possible decision needs to be tested in a multiple if not at least triple contexts – manufacturing, intellectual, social, natural, economic, and human! So, this will require 'accountants' to move on further – identify social and other risks to determine a process and programs to mitigate them with their true costs such as carbon reduction over the years, rehabilitation of people when sensitivity demands it, enhance expertise levels among employees internally with those along the value-chain and a host of issues never considered before by traditional accountants or bankers or even economists in understanding the real nature of 'cost' that future generations would have to pay.

Ultimately, we have to find answers to the growing questions on whether operational and investment costs are 'facts' or more importantly, do our costs have to also reflect the social and environmental truths?



DRONES have acquired a bad reputation for their use against militants in Afghanistan and Pakistan. Until a trio in Mumbai announced that their drones have social uses as well, it was hard to believe drones could have any other use.

A start-up by a trio from Mumbai started 'Social Drones' which are now in use in relief work in flood hit Uttarakhand area. Airpix carried out aerial surveillance in the flood-hit areas using these drones to capture the current state of affairs. The aerial photographs of Uttarakhand will be used by the volunteers of Rebuild Uttarakhand to plan better for the campaign and spread awareness.

Airpix, a professional aerial photography and video production company, creates highly specialized aerial media for its clients. It uses remote-controlled flying platforms known as multi-copters, to obtain photos and videos from "never before" perspectives. Combining state of the art

technology and passion for the creative, Airpix has set the benchmark in aerial photography by making it affordable.

HD quality

Using advanced tools like GPS navigation, live camera feed, real-time flight data analytics to obtain high resolution aerial photos, the company is able to ensure content of the highest quality. "We offer stunning HD quality aerial videos which

The Social Drones team has 7 drones ready with them and is gathering resources to go into production where they can take drones to the masses. Social Drones is looking to make drones available to everyone at a price point of Rs 40,000 but it is still a thing of the future

were a thing in the movies till now. Be it low altitude close-ups or high altitude landscapes, we ensure you get the right shot,” said Rajesh, one of the founders to Yourstory.in, an online newsletter for entrepreneurs.

Rajesh Mane, Aniket Tatipamula, and Neeraj Waghchaure were batch mates at the VJTI college in Mumbai studying engineering. They were always passionate about building drones. They built several prototypes for aerial vehicles but the kind of drone they wanted to make never took flight. But they beat all odds to launch their Social Drones in May 2013.

Social Drones has been started with the aim of delivering better and unconventional applications of drones to the society, such as disaster management, relief camp, emergency situations (fire brigade). Their first assignment was, accidentally, during the recent Uttarakhand disaster. Due to limited resources, the Social Drones could not go immediately, but their team landed in August and stayed for a good 2 weeks.



The company has conducted surveillance practices across Uttarakashi, Gangotri, and Maneri, documented huge content. In their next phase of operations, they'll be carrying out aerial delivery of light weight material such as medicines, across rivers and across land slide areas in case of emergencies. The largest Social Drone is about a meter in length and the width is about 60cm. It can carry a maximum weight of 2kg at the moment.

Drones for the masses?

The Social Drones team has 7 drones ready with them and is gathering resources to go into production where they can take drones to the masses. Social Drones is looking to make drones available to everyone at a price point of Rs 40,000 but it is still a thing of the future. For generating revenues, Social Drones has launched an alternative wing called Airpix which is into aerial photography. “Airpix operates in area where there is a lot of scope to get projects and bring in money for the company to deploy into research and development,” says Rajesh. Airpix takes up projects in areas like real estate photography where the builders and others get a good sense of how the land is laid out.



All the above pictures taken by the drones

www.socialdrones.org



NOW on your iPad iPhone Android phones

ManagementNext
StayInspired

Knowing Aravind Sitaraman



Aravind Sitaraman is a rare man – A computer scientist with 57 patents at Cisco and a 2012 Karnataka Rajyotsava Award winner for social service. Son of a freedom fighter, he has a strong urge and drive to transform India. He believed he could do that by joining politics. He even quit his top job at Cisco to take up social work full-time between 2004 and 2007; a period he recalls as his best phase of life.

It was a proverbial return of the prodigal son when Aravind heeded Cisco's big boss John Chambers call to come back and do what he wanted to. It was a perfect deal. As president of inclusive growth, Aravind drives the CSR activities of the company.

Aravind feels he has cracked the 'happiness formula' for executives after nearly three decades of intense corporate and social life aided by ancient wisdom. He has written a yet-to-be-released booklet for executives who have questions about balancing various demands.

Benedict Paramanand caught up with Aravind to know how he lives two lives and much more...

How do you balance your aggressive social life with aggressive professional life?

Well, if your social life becomes a professional life, you don't need to balance it. What you have to do in life is to do what you want to do, then, you don't have to balance. Most of the times, people are caught in situations where what they are doing and what they have to do in life, is not what they want to do. So what I always tell people is, you need to figure out a very fast way to get to the fourth quadrant - which is what you have to do is what you want to do.

You can get there in two ways - you can grow in your present career or have an attitude change to get to do what you want. Most people give up their best things first. Let's say, for example, certain family rituals that they you like doing, something that makes you internally peaceful, that's the first thing that people will drop. They won't stop movies, cricket or pub hopping and they will always say they don't have time. So, for me, attitude change is most important because most people cannot manage both their careers and their personal need for a fulfilling life. But if you change your

attitude about what you are doing, you will easily find your way there and will love what you are doing. It's all about choice.

You relocated to India in 2000 after a very successful career in Cisco in the US. What has been your experience so far?

I wanted to come back and join politics. I wanted to change (the country). Coming from a freedom fighter family, you want to do something. The year 2000 was my second home coming. In 1985 I came back after studies and I wanted to join politics but was talked out of it. In 2000, when I came in, Cisco said if you are going back to India why don't you help set up this site. So, I said 2 years and it ended up being 4 years, and at the end of 4 years I said, I have to see what I want to do. I quit and talked to many people. I realized I will make a terrible politician; I was way too transparent, too ethical and uncompromising.

So I put all my energies into social work which is what I really wanted to do – change through social work. It's probably the three years - from 2004 to 2007 - are the most productive



years of my life. I am very proud of what I have done. Those three years were very fulfilling because I worked enormously long hours.

As I was working, doing all the social work, developing website, guess what I was worried about every day? My SEO rankings! I asked 'what am I doing? I am searching for achievement again? That's when it dawned on me that you don't have to leave a role and go somewhere else to find fulfillment and achievement. You can be where you are to find a happy balance and that was a big learning.

Strangely enough, I didn't realize it then but our philosophy teaches that – you don't have to go anywhere (to find fulfillment). Having seen a lot of rural India I was very convinced that for this country to go forward, it has to leapfrog and technology is the way to change it. Strangely enough at that time I got a call from Cisco.

When I met John Chambers, Cisco CEO, four years ago,

he said you probably can do more for society in Cisco rather than from outside. In many ways he is right because I started the 'Feed a Child program' in Cisco, we feed 38,000 children every day. We started 'Adopt a School program', eight schools benefit from it. We did Samudhaya, a huge community of people. I agree that if I had not been in Cisco then my range of influence would have been smaller.

Is that a message for many aspiring change agents - you don't have to get out of the system to make a difference....

That's what got me to write a book about it because so many people are coming and asking me, usually in their 40s, usually men – what do I do? Where is my career going? What is my life about? The focus of the book is - how do you graduate your life, how do you move up the scale without losing your core essence. You don't need to become a sanyasi to do that.

The book is based on my personal experience. I'm sure many can get some insights from it.



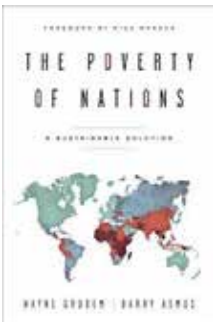
Climate Change, Sustainable Development, and Human Security: A Comparative Analysis

By **Dhirendra K. Vajpeyi, Maria Bondes, Antonio Marcio Buainain, Natalia Eremina, Cheng Fang-Ting, Leonid M. Gregoryev, Laura L. Janik, Craig Johnson, Palakodety Sita Janaki Kreshina, Norman Laws, Rebecca McGuire, Ramkumar Mishra, Roopinder Oberoi, Mahendra Prasad Singh, Miguel Rocha de Sousa, Alla Salmina, Clifton White, Paul Williams.**

Lexington Books, 2013

This anthology of scholarly essays on climate change, sustainable development, and human security presents a comprehensive analysis of severe global warming and its potential to impact all aspects of human life and security. It has been observed that climate change will most drastically impact poor tropical regions of the world for various reasons.

The main focus of this collection of essays is to analyze the pro and cons of the global warming and climate change debate among scholars, policymakers, and scientists, as well as to examine the potential adverse impact of global warming/climate change on social and economic development and human security.



The Poverty of Nations: A Sustainable Solution

By **Barry Asmus, Wayne Grudem**

Crossway, 2013

The whole world has a stake in the war against poverty and leaders across the globe are looking for a permanent solution. That's why economist Barry Asmus and theologian Wayne Grudem have teamed up to outline a robust proposal for fighting poverty on a national level. These two experts believe the solution lies in a comprehensive development plan that integrates the principles of a free market system. Speaking to the importance of personal freedom, the rule of law, private property, moral virtue, and education, this book offers a clear path for promoting economic prosperity and safeguarding a country's long-term stability—a sustainable solution for a world looking for the way forward.

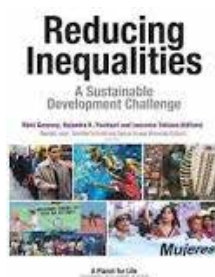


Environment and Sustainable Development

By **M.H. Fulekar, Bhawana Pathak, R K Kale**

Springer, 2013

Global society in the 21st century is facing challenges of improving the quality of air, water, soil and the environment and maintaining the ecological balance. Environmental pollution, thus, has become a major global concern. The modern growth of industrialization, urbanization, modern agricultural development and energy generation has resulted in the indiscriminate exploitation of natural resources for fulfilling human desires and needs, which has contributed in disturbing the ecological balance on which the quality of our environment depends. Sustainable development envisages the use of natural resources, such as forests, land, water and fisheries, in a sustainable manner without causing changes in our natural world.



Reducing Inequalities: A Sustainable Development Challenge (A Planet for Life)

By **Rémi Genevey, Rajendra K. Pachauri, Laurence Tubiana**

The Energy and Resources Institute, TERI, 2013

The 2013 edition of A Planet for Life represents a unique international initiative grounded on conceptual and strategic thinking, and most importantly empirical experiments, conducted on five continents and touching on multiple realities. This unprecedented collection of works proposes a solid empirical approach, rather than an ideological one, to inform future debate.

The case studies collected in this volume demonstrate the complexity of the new systems required to accommodate each country's specific economic, political and cultural realities. These systems combine technical, financial, legal, fiscal and organizational elements with a great deal of applied expertise, and are articulated within a clear, well-understood, growth- and job-generating development strategy.



Renewable Energy for Unleashing Sustainable Development: Blending Technology, Finance and Policy in Low and Middle Income Economies (Green Energy and Technology)

By **Emanuela Colombo, Stefano Bologna, Diego Masera**

Springer; 2014 edition (December 6, 2013)

The book aims at analyzing technologies and business models within a new approach to sustainable global resource management. It produces a set of recommendations for further activities and networking on access to energy services and renewable energies. The first part reviews the issue of access to energy, as precondition for socio-economic progress. A global description of the current situation is depicted, with an analysis on access to electricity, share of modern fuels and future trends.

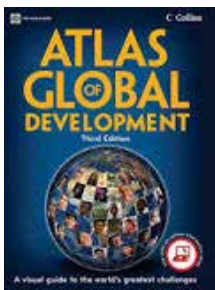


Integrating Sustainable Development into International Investment Agreements: A Guide for Developing Country Negotiators

By **J. Anthony VanDuzer, Penelope Simons, Graham Mayeda**

Commonwealth Secretariat, 2013

As International Investment Agreements (IIAs) continue to evolve and become increasingly complex, a key challenge for developing countries is how to maintain coherent investment obligations that are consistent across any overlapping treaty provisions. An even greater challenge is the effective negotiation of trade in services and investment commitments in Preferential Trade Agreements to make foreign investment supportive of development.

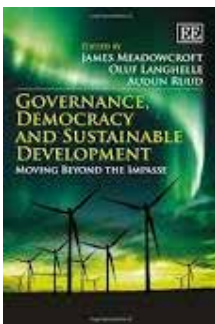


Atlas of Global Development: A Visual Guide to the World's Greatest Challenges (World Bank Atlas) World Bank (Author)

World Bank Publications; 4th edition, 2013

The completely revised and updated fourth edition of the Atlas of Global Development is a comprehensive guide to the most critical issues facing our changing world today. It's a visual guide to global issues with easy-to-read graphical presentation with every topic presented by colorful world maps, tables, graphs, and photographs.

Topics that are shaping our world key development indicators, from poverty, population growth, and food production to climate change, foreign direct investment, and international trade. The latest, authoritative statistics from the World Bank's World Development Indicators database The Atlas comes with an interactive companion online atlas, the new World Bank e-Atlas of Global Development, and new to this edition, a companion mobile app.



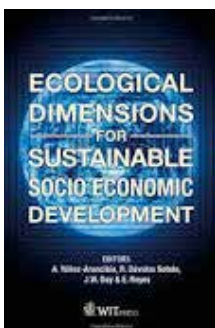
Governance, Democracy and Sustainable Development: Moving Beyond the Impasse

By James Meadowcroft, Oluf Langhelle, Audun Ruud

Edward Elgar Pub, 2013

The contributors explore the difficulties developed countries are experiencing in coming to terms with environmental limits and the resultant challenges to the democratic polity. They engage with different dimensions of the governance challenge including norms, public attitudes, citizen engagement, political conflict, policy design, and implementation, with a range of environmental problems such as climate change, biodiversity/nature protection, and water management.

This book will interest researchers, academics, and graduate students in environmental politics and public policy. It is ideal for use as supplementary reading in a wide range of university courses, while NGOs and policymakers will also find it of considerable value.

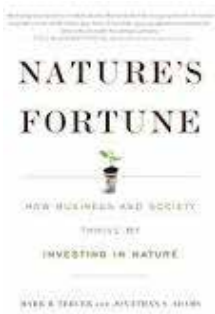


Ecological Dimensions for Sustainable Socio Economic Development

By A. Yañez-Arancibia, R. Davalos Sotelo (Editor), J. W. Day (Editor), E. Reyes

WIT Pr/Computational Mechanics; 2013

This book fills a gap in the literature on environmental sustainability by addressing the topic from the perspective of social and economic development. Progress in understanding and achieving sustainability requires the integration of scientific, social, economic, and legal issues. Yet progress in understanding and achieving sustainability will only be achieved through integration of scientific, social, economic, and legal aspects.



Nature's Fortune: How Business and Society Thrive by Investing in Nature

By **Mark R. Tercek, Jonathan S. Adams**

Basic Books, 2013

What is nature worth? The answer to this question—which traditionally has been framed in environmental terms—is revolutionizing the way we do business.

In *Nature's Fortune*, Mark Tercek, CEO of The Nature Conservancy and former investment banker, and science writer Jonathan Adams argue that nature is not only the foundation of human well-being, but also the smartest commercial investment any business or government can make. The forests, floodplains, and oyster reefs often seen simply as raw materials or as obstacles to be cleared in the name of progress are, in fact as important to our future prosperity as technology or law or business innovation.

With stories from the South Pacific to the California coast, from the Andes to the Gulf of Mexico and even to New York City, *Nature's Fortune* shows how viewing nature as green infrastructure allows for breakthroughs not only in conservation—protecting water supplies; enhancing the health of fisheries; making cities more sustainable, livable and safe; and dealing with unavoidable climate change—but in economic progress, as well.



Green Illusions: The Dirty Secrets of Clean Energy and the Future of Environmentalism (Our Sustainable Future)

By **Ozzie Zehner**

University of Nebraska Press. 2012

We don't have an energy crisis. We have a consumption crisis. And this book, which takes aim at cherished assumptions regarding energy, offers refreshingly straight talk about what's wrong with the way we think and talk about the problem. Though we generally believe we can solve environmental problems with more energy—more solar cells, wind turbines, and biofuels—alternative technologies come with their own side effects and limitations. How, for instance, do solar cells cause harm? Why can't engineers solve wind power's biggest obstacle? Why won't contraception solve the problem of overpopulation lying at the heart of our concerns about energy, and what will?

This practical, environmentally informed, and lucid book persuasively argues for a change of perspective. If consumption is the problem, as Ozzie Zehner suggests, then we need to shift our focus from suspect alternative energies to improving social and political fundamentals.

The first book covering the full gamut of strategic management concepts and processes, and weaving sustainability into every one of them.

International Conference on Ecosystem Conservation, Climate Change and Sustainable Development

3 - 5, October, 2013 | Thiruvananthapuram, Kerala, India

<http://ecocasd2013.in/>

8th Sustainability Solutions Summit

14 - 15, October, 2013 | ITC Maurya, New Delhi, India

<http://www.cii.in/>

International Symposium on Municipal Solid Waste Management Sustainable Solutions for Clean and green Earth

15 -16, November, 2013 | Hyderabad International Convention Centre, Andhra Pradesh, India

<http://www.cii.in/>

Energy Security Conference 2013

27, November, 2013 | Imperial, Janpath, New Delhi, India

<http://www.cii.in/>

International conference on solar and biomass energy

28 - 29, November, 2013 | Chennai, Tamil Nadu, TAMILNADU, India

<http://www.icsbe2013.com>

International Conference on Renewable Energy and Sustainable Energy

5 - 6, December, 2013 | Coimbatore, Tamil Nadu, India

<http://www.karunya.edu/eee/ICRESE13/>

Energy Expo 2013

5 - 7, December, 2013 | Gujarat University Hall, Ahmadabad, Gujarat, India

<http://www.cii.in/>

International Conference on Sustainable Development 2013 India

4 - 6, December, 2013 | Chandigarh, Punjab, India

<http://www.ontariointernational.org/India2013/ICSD-India.htm>

IEEE International Conference on Green Computing, Communication and Conservation of Energy

12 - 14, December, 2013 | Chennai, Tamil Nadu, India

<http://www.rmd.ac.in/ICGCE2013/contact.html>
