

Can Yoga Save Planet Earth?

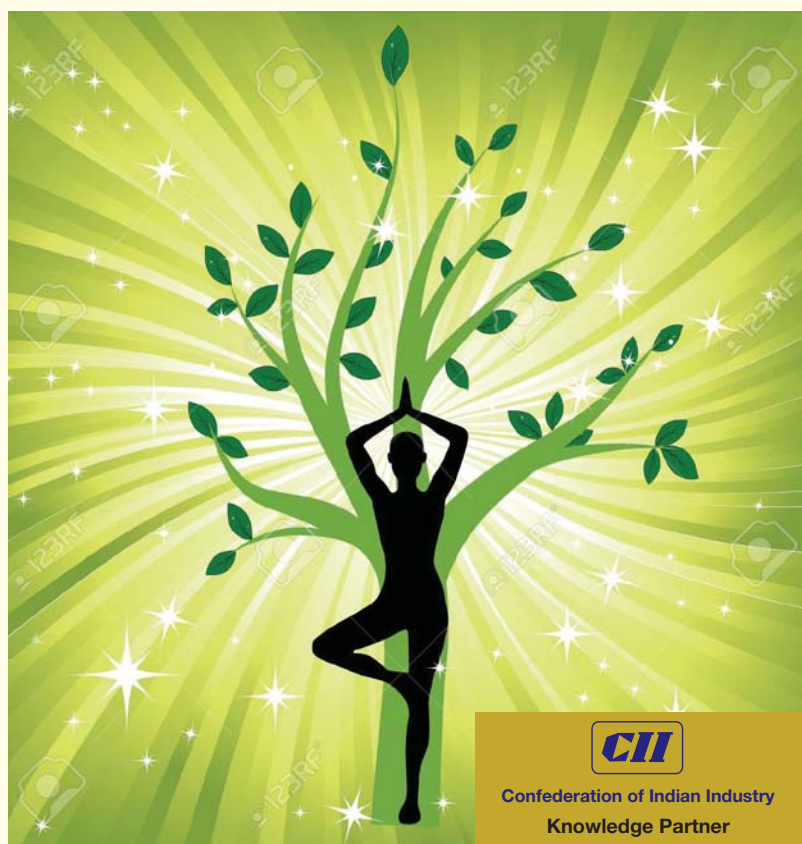
Can yoga be the much needed inside-out approach to save and rejuvenate Planet Earth from manic destruction? It appears it can

By Benedict Paramanand

If Yoga is India's gift to world of mental and physical fitness, it appears it has also given one of the most powerful sustainability tools to it. With Prime Minister Modi's resolve at reclaiming yoga as India's heritage through an international movement, he may well be leading the revolution for transforming the world's lifestyle away from reckless consumption to one which is responsible. Mahatma Gandhi was perhaps the first leader of the modern sustainability movement when he said: "There is a sufficiency in the world for man's need but not for man's greed."

Yoga gurus believe that Patanjali's Ashtanga Yoga, a code of conduct written 2500 years ago, could lead to a spiritual revival across the globe. This code, consisting of eight aspects (limbs), has individual, social and also environmental and economic dimensions.

Despite global community's major initiatives towards addressing climate change, they seem to be too feeble



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Purpose: To excite Indian businesses, SMEs, executives and students about the immense business opportunity in not only adopting Sustainability as Strategy in their companies but also inspire them to the possibilities of a big market for innovative sustainability products and services.

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in the face of considerable and continued degradation. Consumer and corporate behavior don't seem to reflect the extent of urgency needed to address issues such as pollution of air and water bodies and destruction of natural habitats. The impact of clean-tech is still far away.

One of the reasons for the current despondency is because all the solutions to mitigate risk reflect an outside-in approach. Problems of such immense magnitude need to be addressed by both outside-in and inside-out approaches.

Can yoga then be the much needed inside-out approach to save Planet Earth? The following accounts offer hope:

Victoria Jansen, a senior at Crescent Valley High School (Oregon US), shared her experience at Corvallis Sustainability annual town hall meeting, in March last year.

"For me, yoga was an escape when I found my mind telling myself I was not perfect, that I needed to change. I wanted people to see that, if you let it, it allows you to think about the world in a different way, have clarity in difficult situations, and find solace. But I also wanted to bring people together, break away from the labels of high school, so that students could have an opportunity to identify themselves, and in doing so, be inspired by all the things they have to offer to the world.

By building these communities, you open doors for creating a healthy environment through social wellbeing. These interactions are what bring about change. By connecting with other people, you are allowing yourself to experience life and connect with the world around you.

This, in my mind, is the basis of sustainability. "Going green" is about building these communities, these frameworks, so that people can be inspired so that ideas can be generated. All the world's environmental problems can, and will be solved one day, when we remember the impacts our communities can make, on others, the world and the environment. And when we remember that no change ever begins without the incentive of inspiration." <http://livewellstudio.com/pages/our-vision>

Yogi-Nomad

Here's another account by **Nizhen Hsieh**, a yoga teacher affiliated with Yogi-Nomad, an NPO dedicated to expanding consciousness through yoga worldwide. www.yogi-nomad.org#sthash.tbXI6V2N.dpuf

"What came out of my Yoga Teacher Training in Nepal was the



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understanding that true sustainability and benevolence begins within the self. If we don't unlearn the bad habits that arise from the acceptance and understanding of our unsustainable behaviors, we will always be hindered from achieving the kinds of changes we want to create.

Yoga has given me an internal sustainability that not only allows me to maintain and cultivate a sense of wellbeing, but also encourages my energy to be extended to my surroundings and community, beyond the window to this world and life at large."

Permaculture

Commenting on a post on yoga Uma Viswanathan wrote, in 2010 that "Yoga and sustainability are, indeed, very connected. I actually teach programs in Haiti that merge yoga with permaculture (a discipline of sustainable design).

Yoga allows one to let go of holding onto the past ways of doing things and also lets us release any anxiety we have about the future. We become able to see the systems and practices around us more clearly, and approach them with more innovation. We feel more connected to (and responsible for) the well-being of our planet and our fellow people. This makes us care enough to actually choose to implement sustainable solutions.



This perspective is having a profound effect in Haiti right now. We're training Haitian young adults as yoga teachers, permaculture trainers, and in community empowerment, so they can transform their own country from the inside out." <http://www.nouvelleviehaiti.org>.

These accounts clearly show that yoga is more than a health regimen? Organizations such as The Art of Living and Isha Foundation are doing phenomenal work in India and in several countries with yoga as their fundamental transformative tool.

The contagion effect of millions of people doing yoga is bound to have a positive impact on the social and environmental ecosystem. Everyone hopes it could also influence aggressive and quick policy-making.

Connecting Good Corporates & Good NGOs for CSR

Problem of plenty is as difficult to handle as problem of scarcity. The Indian government's mandatory two percent spend on CSR projects has thrown up the problem of good companies chasing right projects to fund and the right NGO which can implement them.

The NGO community is eager but is not able to market itself too well.

SustainabilityNext is one of India's better platforms that can connect the two effectively so that precious time and resources can be used optimally.

The e-magazine is sold on **Magzter.com** and **Newshunt.com** and read by more than 40,000 business leaders, NGOs, entrepreneurs and graduate students.

Companies can **advertise here** to attract the best of people and NGOs to maximize the impact of their funds and NGOs can advertise to showcase their projects and capabilities.

Please write to Suchitra Jayaprabhu at Suchitra@managementnext.com or call 80-41126557.
www.sustainabilitynext.in, www.managementnext.com

Sustainable Smart Cities India

3 - 4 September 2015, Vivanta by Taj, Bengaluru, India

Conference Overview

India faces rapid urbanization and the urban population set to rise by more than 400 million people by 2050. It is also estimated that in the next 15 years, the urban population will contribute nearly 75% to the India's GDP. The government has identified the need for creating well planned cities that can match and foster this growth. In last 12 months, India has been extremely aggressive in executing its vision of setting up 100 Smart Cities and the cabinet on 29th April 2015 has approved the Centre spending of about INR 1 lakh crore (USD 15.6 Billion) on urban development under two new urban missions — Smart Cities Mission and the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) of 500 cities. The vision is to preserve our traditional architecture, culture & ethnicity while we implement modern technology. These smart cities are currently attracting global investment, will create new job opportunities, improve communications and infrastructure, decrease pollution and ultimately improve the quality of living.

Some of the top challenges will include devising a fool-proof plan to develop smart cities, meaningful public-private partnership, increasing the renewable energy, water supply, effective waste management, traffic management, meeting power demand, urban mobility, ICT connectivity, e-governance, etc., while preparing for new threats that can emerge with implementation of these new technologies. "Sustainable Smart Cities India" will bring in national and international experts and stakeholders in this sector to discuss the opportunities and challenges in creating smart and responsible cities and citizens. Conference will help in creating a roadmap for converting the smart cities vision into a reality that is best suited for India.

Event Highlights

- 200+ Prequalified Delegates
- 20+ Interactive Sessions
- 5+ International Case Studies
- 20+ Solution Showcase
- 4+ Panel & Round Table Discussions
- 16+ Hours of Networking Opportunities

Invited Chief Guest

Shri. Vinay Kumar Sorake

Honorable Minister for Urban Development, Govt. of Karnataka

Advisory Panel & Keynote Speakers



Pratap Padode, Founder & Director,
Smart Cities Council India



Gautham RK, Head – Operations, Sustainability
Excellence, **Cushman & Wakefield (I) Pvt Ltd**



Karan Grover, Principal Architect
Karan Grover & Associates



M Selvarasu, Director, **LEAD Consultancy & Engineering Services (India) Pvt Ltd**



Karuna Gopal, President,
Foundation for Futuristic Cities



Shyam Khandekar, Founder, **MLC**

@Indiansmartcity

Benefits of Attending

- Participate in envisioning smart and responsible cities
- Understand the feasibility of building smart cities from existing unplanned cities
- Identify ways to retain tradition and culture while developing futuristic cities
- Learn from international case studies
- Gain knowledge on the available technologies
- Meet and network with the government authorities, corporate majors and market experts
- Take away sensible, tangible and actionable conclusions

Who Should Attend:

Government Bodies, Regulatory Bodies, Local Authorities & Policy Makers (Ministers, Mayors, Commissioners, Administrators, Municipalities, City Planners), Stakeholders of National Missions: Smart Cities Mission, Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Digital India, Make In India and Swachh Bharat Abhiyan, Infrastructure development firms, Urban Planners, Architects, Designers, Real Estate Developers, Project Management Consultants, Conglomerates, Senior Stakeholders of Industrial Corridors, Public and Private Companies involved in Smart Cities Public and Private Transport Operators, Metro Rail, Traffic Management, Gated Communities, Business Parks, Tech Parks, Organisations with large office spaces Research & Development Centre, Tourism, Hospitality, Entertainment, Citizen Communities (NGOs)

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The Ecological Sin

Willfully harming the ecology of Planet Earth will soon be a sin, says Pope Francis in his recent encyclical to Christians titled 'Encyclical Letter Laudato Si' Of The Holy Father Francis On Care For Our Common Home.' With this, the Pope has elevated the conversation about climate change from a mere environmental phenomenon to also include the spiritual, moral and ethical elements. And the ecological sin is not only against God, but also against the neighbor and the future generations



Analysts say the encyclical will have a huge influence on the current climate change dialogue between nations which is gearing up for the global summit in Paris in December this year. Pope Francis is expected to address the summit.

Here's a cursory glance at the highlights of the 180-page encyclical which experts say is a document with far-reaching significance not only to Christians but to the whole world.

- It is the duty of the Church (implying all religions) to add a spiritual dimension to climate change
- Promote ecological consciousness
- Theology and ecology are not independent, they thrive together
- Pursuit of individual happiness is the major cause
- Deep respect for science
- Slow action, delays and half-measures major cause of the problem
- Corrupt culture and inadequate laws are equally responsible for the mess

Action Points

- Advocacy for honoring the planet and not seeing it as something meant for exploitation by humans
- Put an end to frenetic consumption
- Reject throw-away culture and promote reuse

- Deep restraint in consumption of natural resources
- Climate Change harms the poor the most – work towards greater ecological equity which will result in greater social and economic equity
- Need for ecological asceticism – A new way of life

Pope Francis has called for 'A global ecological conversion.' He is optimistic about humans arriving at a solution. He said: "Humanity still has the ability to work together in building our common home. Here I want to recognize, encourage and thank all those striving in countless ways to guarantee the protection of the home which we share. Particular appreciation is owed to those who tirelessly seek to resolve the tragic effects of environmental degradation on the lives of the world's poorest. Young people demand change. They wonder how anyone can claim to be building a better future without thinking of the environmental crisis and the sufferings of the excluded."

The Pope's clarion call can have a greater effect if religious leaders of all faiths take his cue and get organized to influence their followers. Until the faithful, who are also the consumers, change their behavior and apply pressure on businesses, the change will be slow.

Link to the full document http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html

Ryman Eco font cuts ink use by 33%

Ryman Eco, a new font by stationary brand Ryman claims that its new font, which is available for free download, uses a third less ink and toner than standard fonts such as Arial, Times New Roman, Georgia and Verdana.



Dan Rhatigan

The company believes that if everyone used the new font, it would save over 490 million ink cartridges and could help lower CO2 emissions by over 6.5 million tons, the equivalent of 15 million barrels of oil every year.

“Recycling alone isn’t doing enough. So I am asking individuals and businesses, especially those who use print a lot in their day-to-day operations, to download Ryman Eco for free and make it their default print font. It’s the easiest thing in the world to do but could

make a world of difference,” a senior company executive said.

The font has been designed by Monotype and Hogarth. Dan Rhatigan, Type Director at Monotype, explained the process. “The entire concept for Ryman Eco is about the final print experience and finding the perfect balance between saving ink, legibility and aesthetics.

The idea of more efficient fonts is not new. Dutch company Spranq released its Ecofont in 2008. In other approach to reducing the environmental impact of printing, software startup PrintEco developed a plug-in for commonly used browsers and applications such as Microsoft Office that automatically optimizes the content of documents to fit on a smaller number of pages — helping users save paper and reduce printing costs.

Ink is 15 percent of the carbon impact of a printed page. Adobe has tried something similar. It launched something called Lean Print, a software-only effort to squeeze efficiency with little effort on behalf of the user. Its impact is not known yet.

Watch Dan Rhatigan on Ryman Eco video
<https://vimeo.com/103907391>



Global levels of CO₂ passed 400 parts per million

Although short-term local measurements of 400 ppm have been recorded previously, this marks the first time since record keeping began that CO2 levels were above 400 ppm globally for a month in March this year.

Passing 400 ppm could be an ominous sign of what might come next -- and it sends a clear signal that the world must act ahead of the UN climate talks in Paris this December. Already, deadly effects of climate change in the form of rising seas, monster storms,

wildfires, and extreme weather of all kinds are common not an exception.

The safe level of carbon dioxide in the atmosphere is 350 parts per million.

The only way to get there is to immediately transition the global economy away from fossil fuels and into renewable energy, energy efficiency, and sustainable farming practices.

Four MNCs shift their business models for sustainability

The new business models are more financially sound in the long term, according to the authors of a new report, which argues that a sustainable future needs new business models.

In a forthcoming report on business model innovation, *Model Behavior II: Strategies to Rewire Business*, *SustainAbility* tells the stories of four multinational companies that have shifted their business models to become more sustainable.

For **Novelis**, rather than continuing to source virgin, primary aluminum, it moved to recycled aluminum because it made more financial sense and would position the company to be resilient to climate change.

To differentiate itself from competitors at the high and low end of the market, **Starbucks** realized that green building provided more value to numerous stakeholders.

Fibria

acknowledged that while demand for its traditional paper products would remain strong for years, it was risky to depend on historic patterns of demand and began to shift its mindset about how to use its forest and land assets differently.

And as part of a larger effort to retain its core customers – farmers – **Syngenta** changed its sales approach to focus more on what farmers needed to capture extra value from their yields.

Part of the appeal of system-level transformations, including business model shifts, is reconsidering the economic landscape so that new, radical and more sustainable developments also make financial sense.



NASA finds aquifers depleting fast

The world's largest underground aquifers – a source of fresh water for hundreds of millions of people – are being depleted at alarming rates, according to new NASA satellite data that provides the most detailed picture yet of vital water reserves hidden under the Earth's surface.

Twenty-one of the world's 37 largest aquifers — in locations from India and China to the United States and France — have passed their sustainability tipping points, meaning more water was removed than replaced during the decade-long study period, researchers announced Tuesday. Thirteen aquifers declined at rates that put them into the most troubled category. The researchers said this indicated a long-term problem that's likely to worsen as reliance on aquifers grows.

Scientists had long suspected that humans were taxing the world's underground water supply, but the NASA data was the first detailed assessment to demonstrate

that major aquifers were indeed struggling to keep pace with demands from agriculture, growing populations, and industries such as mining.

"The situation is quite critical," said Jay Famiglietti, senior water scientist at NASA's Jet Propulsion Laboratory in California and principal investigator of the University of California Irvine-led studies.

Underground aquifers supply 35 percent of the water used by humans worldwide. Demand is even greater in times of drought.

Rain-starved California is currently tapping aquifers for 60 percent of its water use as its rivers and above-ground reservoirs dry up, a steep increase from the usual 40 percent. The aquifers under the most stress are in poor, densely populated regions, such as northwest India, Pakistan and North Africa, where alternatives are limited and water shortages could quickly lead to instability.

Morgan Stanley closes \$500 million inaugural green bond

Morgan Stanley announced recently that it has closed on the issuance of a \$500 million green bond, the firm's inaugural green bond and the latest step its ongoing strategy to advance market-based solutions to social and environmental challenges. Since 2006, it said, it has facilitated over \$61 billion of capital for clean-- tech and renewable energy businesses.

Funds equal to the net proceeds of Morgan Stanley's green bond will be allocated to various renewable energy and energy efficiency projects. A substantial amount of these funds will correspond with investments in existing and future third-party renewable energy projects.

Ahead of this offering, Morgan Stanley created a green bond framework that is aligned with the Green Bond Principles. The framework describes the process through which projects are selected to receive funding, with the aim of ensuring that the Morgan Stanley green bond operates with high levels of transparency, disclosure and verification.

Morgan Stanley has been a pioneer in green bonds, underwriting transactions globally for multilateral development banks, corporates, agencies and municipalities. Several of these transactions have included notable industry landmarks, including the first-ever corporate green bond, the first-ever automobile asset-backed securities green bond and the first-ever U.S. university green bond.

Morgan Stanley is committed to helping clients develop and pursue sustainable investing solutions, like green bonds, that can address social and environmental challenges at scale," said **Morgan Stanley Institute for Sustainable Investing CEO Audrey Choi**. "Through the Institute for Sustainable Investing and our Investing with Impact Platform, Morgan Stanley is well-positioned to meet the growing demand for quality sustainable investing products."



Five global shippers collaborate to drive sea freight sustainability

Recently, five major companies from the beverage and chemical industries announced collaboration on sustainability initiatives in the shipping sector. FrieslandCampina, AB InBev, AkzoNobel, DSM and Huntsman will join forces under the BICEPS (Boosting Initiatives for Collaborative Emission-reduction with the Power of Shippers) network to create momentum for sustainability improvements in shipping.

The group plans to "develop a common and concurrent approach to sustainability in their procurement of ocean freight and selection of carriers," according to a BICEPS statement. It will also take steps to streamline

compliance and reporting requirements of shippers to carriers. Other shippers are invited to join.

The collaboration supports the companies' individual sustainability goals as well, such as AB InBev's goal to reduce carbon emissions in its global logistics operations by 15 percent by the end of 2017 — a first for the brewing industry — and FrieslandCampina's aim for climate-neutral growth throughout its chain.

The collaboration comes as the Global Shippers Forum (GSF) warned this week that maritime carbon emissions, which compose approximately 2.2 percent of the global total, could increase to over 5 percent by 2050 if left unchecked.

Unilever is world most sustainable brand

Unilever has reaffirmed its leadership position as the world most sustainable brand according to the 2015 *Sustainability Leaders* report.

The report produced by think tank sustainability and research consultancy GlobeScan indicated “Unilever is in the leadership position throughout much of the world, with the leadership margin being the largest in Europe”.

GlobeScan inquired 816 qualified sustainability experts drawn from corporate organizations, governments, non-governmental and other organizations in 82 countries including Africa\ Middle East, Asia, Europe, North America and others in terms of corporate sustainability leadership and Unilever topped the ranking.

“After dominating our corporate sustainability

leadership ranking for more than five years, Unilever has further improved its position and is now ahead of competitors by 27% points”. The report revealed.

A major trend reflected in the report is a growing divide among sustainability experts on the relative importance of a clear, well defined statement of corporate values versus a business model that integrate sustainability.

This year, 26% of experts said that corporate values including the beliefs of the company executives were the most important driver for sustainability.

By comparison, 22% argued that making sustainability part of a core business model was more important.

Adobe helps customers cut paper waste

Paperwork is still being generated in this digital age. In the US, 30 billion documents are printed annually, Kevin Lynch, vice president of document services for Adobe, told TriplePundit. Here are a few more staggering facts:

- The average U.S. office worker generates about two pounds of paper and paperboard products daily.
- About 90 percent of all office waste is paper.
- Approximately 500 paper documents are signed by the average authorized employee annually.

Much of the paper waste generated in U.S. offices can be eliminated. A document created, signed, shared and stored in Adobe Document Cloud has 91 percent less of an environmental footprint than it would if it were printed, and it has a cost savings of over 90 percent.

Sometimes all it takes is for a customer to see the impact of his or her choices — in this case: how much water, waste and wood they will save by not printing. GreenMeter for Document Cloud allows customers to enter in the amount of paper they would normally print and see how much water, waste and wood they'd save by not printing. For example, a business that reduced printing by 10,000 documents would save 11,427 gallons of water, 961 pounds of waste and 3,725 pounds of wood.

KLM saved 1 million sheets of paper, which translates into 120 trees and 10 million liters of water.



Using eSign services helps Pepperdine University in Malibu, California, save time: The college reduced turnaround times with eSign from days or hours to an average of just 19 minutes.

Kuhn Krause, a leading provider of farm equipment, has also found value in using e-signatures. The company calculated a five-fold reduction in the cost of paper printing.

Adobe strives to promote sustainability from within. Its internal campaign to reduce business travel, called “Skip a Trip,” encouraged employees to take a voluntary pledge to skip one business trip in 2014 and use the Web conferencing tool Connect instead. Through the campaign, employees saved 331 metric tons of carbon emissions in just eight months. They also avoided 711,000 miles of air travel, which is equal to traveling around the world 29 times, and a savings of over 37,000 gallons of gasoline.

<http://www.triplepundit.com/special/creativity-social-innovation/adobe-helps-customers-ditch-paper-waste/>

World's most sustainable office building opens in Amsterdam

A cutting-edge new office building has officially opened in Amsterdam's Zuidas. The Edge was named the world's most sustainable office building by the Building Research Establishment (BRE), the world authority on building sustainability. The title formerly belonged to One Embankment Place in London.

The Amsterdam building was developed by OVG Real Estate. The principle occupant of the 40.000 m2 building is global professional services provider Deloitte. Other notable companies leasing space in the building are AKD, Salesforce, Henkel, Sandvik and Edelman.

The Edge is designed not only to be incredibly environmentally friendly, but also to foster the comfort and well-being of workers and the surrounding public.

The Edge collects and recycles rainwater and is energy-neutral - heated by a thermal aquifer and powered by solar energy. Its walls are heavily insulated to preserve heat, and it is oriented so as to maximise the amount of daylight that penetrates during working hours.

Via new technology from Philips which links LED lighting to Ethernet, workers can use a phone app to control the temperature and lighting in their own workspaces. This system not only reduces energy usage; it also helps the building managers monitor overall efficiency.

Its parking lots are open to the public after working hours. The building also features an ecological corridor for use by local bat and bird populations.



Sweden retains crown as world's 'most sustainable country'

Sweden is still the most sustainable country in the world, according to a recent ranking by sustainable investment company RobecoSAM. The Country Sustainability Ranking study, which is based on an analysis of a wide range of environmental, social and governance (ESG) factors, gave the Scandinavian nation a score of eight out of 10.

Sweden narrowly beat Switzerland and Norway to the pole position, retaining the number one ranking it secured last year. The report praised the country for its high performance against a range of green metrics, arguing its ability to respond to environmental threats mitigates risks for investors.

The country also performed highly in against so-called governance metrics, including its commitment to liberty and equality, and social factors such as investment in education. **However, Sweden received only an average score for its energy usage and the proportion of power coming from renewable energy, demonstrating room for improvement.** However, REN21's separate 2015 Renewables Global Status

Report placed the country third for renewable power capacity per capita.

The UK came in fourth in the RobecoSAM ranking, scoring 7.5 against the ESG metrics and performing better than average for emissions and biodiversity, as well as environmental risk. Like Sweden, however, the country achieved an average score for clean energy use. New Zealand, Ireland, Germany, Denmark, Australia, and Austria complete the top 10. Meanwhile, Nigeria came bottom of the 60 countries ranked, behind Venezuela, Egypt, Thailand and China.

Johan Duvyesteyn, senior researcher at Robeco Quantitative Strategies, stressed how the ranking will help potential investors identify countries with the lowest level of sustainability risks. "Our statistical analysis helps us identify which sustainability criteria are financially more relevant, which in turn helps us make better-informed investment decisions," he said.

<http://www.businessgreen.com/bg/news/2414952/sweden-retains-crown-as-worlds-most-sustainable-country#>

IKEA plans green stores in India

Swedish multinational and world's leading home furnishing retailer IKEA announced it is investing one billion dollars globally to reduce carbon pollution. IKEA is yet to finalize the locations of its stores in India — it is in various stages of finalizing locations in Telengana, Haryana, Maharashtra and Uttar Pradesh.

Speaking to ET, Steve Howard, Chief Sustainability Officer, IKEA Group, said: "When we do open up our stores in India we will set up renewable energy sources for our stores, including solar panels on the roof tops and car parks. But in the meantime, we are working in partnership with our suppliers, sometimes even co-financing efforts to reduce our carbon footprint, improve energy efficiencies."

IKEA has been sourcing from India for nearly three decades. It is presently working with nearly 50 suppliers. IKEA's India office works with these suppliers, monitoring their competence levels concerning quality, compliance, sustainability especially the use of water, energy and chemicals.

IKEA is proud of some of its suppliers' green achievements. Asian Fabrics has successfully decoupled from grid, which is dominated by coal-fired power by moving to solar and wind sources. It installed a 1.5-MW photovoltaic array and four wind turbines generating 20 MW of energy and in doing so achieved 100% energy independence.

Howard said that if the existing initiatives are replicated by other South Asian suppliers then



there is a potential to save more than 241 million (\$300 million) in energy, water, and resources cost over the next five years. As part of the company's Supplier Goes Renewable Initiative, energy audits at four suppliers in India have identified potential savings of 11,199 MW, which translates into reduction of 4,813 tons of carbon dioxide emissions.

The 1 billion that IKEA will spend globally on climate action would go to — 500 million on wind energy, 100 million on solar panels, and 400 million through the IKEA Foundation to help vulnerable communities which are already dealing with the adverse impacts of climate change.

The IKEA Foundation, the company's charitable arm, already works with communities in India, particularly in the cotton growing belt. Of the 120,000 cotton farmers it works with globally, a large section comprises Indian cotton farmers. The foundation's work in India has been focused on ensuring that children of cotton farmers are in schools and not working and in empowering women with job skills.

Housing for all by 2022

PM Modi formally announced the ambitious Smart Cities program and the 'Housing for all by 2022'. Here's a KPMG report which lists what this entails on the ground

- By 2022, India needs to develop about 11 crore housing units
- Investments of more than USD2 trillion or about \$ 250 to 260 billion annual investment until 2022
- Investments will need to grow at a CAGR of 12 to 13 per cent (unadjusted for inflation) in 2022
- 70 per cent of the housing needs till 2022 should be concentrated in nine states
- Urban housing is to account for about 85 to 90 percent of the total investments; the focus should be on affordable urban houses, which is 70 per cent of the total urban housing requirement
- About 1.7 to 2.0 lakh hectare of land is expected to be required to fulfil urban housing need by 2022.

Mathura to become model of sustainable development

Authorities in Mathura have decided to protect cows and their grazing pastures besides taking urgent steps to develop new grazing grounds for cattle in the Yamuna river flood-plains as part of a model for sustainable development.

Divisional commissioner Pradip Bhatnagar revealed the plans at a conference on promotion of organic farming and the cattle wealth of Lord Krishna's land comprising parts of Agra district, Mathura, Vrindavan, Goverdhan, Barsana, Nandgaon, Gokul and Kosi.

He warned that the excessive use of chemical fertilizers was creating numerous health problems, including the rising incidence of cancer cases, as in Punjab.

"The Mathura district with a record number of private gaushalas with more than a lakh cows, generating tones of cow dung manure, which was not only safe but could help the soil regain its lost fertility, deserved to be promoted as a model zone of ecological balance and nature based sustainability."

The official said he would shortly constitute a committee of activists, gaushala owners,



environmentalists and departmental heads to suggest measures and monitor steps to transform Mathura district as a model of sustainable development.

Bhatnagar said he would not only ban use of polythene in the district but also work on a plan to minimize use of chemical fertilizers.

The conference was attended by gaushala owners, social activists and environmentalists who pleaded for drastic measures to integrate traditional cow economics with modern-day technology.

AP to set up its own smart cities

The AP government has decided to set up its own smart cities even as the Centre is seized of the ambitious plan to create 100 smart cities across the country. The AP smart cities will be independent of the Centre's proposal to create modern infrastructure in select cities and towns.

The government has appointed PricewaterhouseCoopers (PWC) as the overall consultant for the smart city project, which aims at creating seven smart cities.

Six months ago, the state government had sent a list of seven cities for inclusion in the Centre's smart city list but, the latter is yet to take a decision on the proposal. The state's proposal includes the capital region, Guntur, Tirupati and Rajahmundry.

The Centre is likely to take a decision on smart cities on June 25. However, the state government has decided to develop smart cities on its own. The government is involving international agencies to prepare master plans for the proposed smart cities. Visakhapatnam was earlier selected under the Indo-US project on smart cities.

SC Infra Limited has shown interest for the preparation of master plan for Nellore while Yokohoma city council will fund the project for Kakinada. Surbana, which is assisting the Singapore government on the master plan for the capital city, will take care of Amaravati. Astran Institute of Technology will extend support to Kurnool. The Ispat Group has plans to take up Tirupati as the smart city.



CM Vasundara Raje Inaugurating The Metro

Cisco to help Jaipur turn into smart city

In Jaipur, technology leader Cisco is investing in IoT (internet of things) to transform the metropolis into a smart city. The Jaipur Development Authority (JDA) will collaborate with Cisco to develop a blueprint for smart infrastructure that will enhance efficiency and service quality for more than 3.5 million residents.

A digital infrastructure will feature connected transport, interactive kiosks, wireless broadband, safety and security services, traffic management and environmental updates, in order to improve real-time access to services like parking, lighting and water.

Smart Cities are about people not technology alone, Simon Moores



“Who’s responsible when a smart city crashes?” Futurologist Dr. Simon Moores asked this question during his keynote session at IFSEC London recently, but had no answer.

“Smart cities” like Songdo, Korea, are full of Internet-of-things(IoT) devices -- smart electric meters, street lights that adjust to the number of people on streets, RFID chips to monitor traffic flow or even to track how many recyclable items are being properly disposed of. “Integrating an entire city full of these networks presents an almost intractable problem,” Moore said.

The Internet of Things still faces “two really, really big challenges,” he said: security and a lack of standards. It creates another avenue for attacks, and the attack surface is huge, Moores said.

He pointed out that the problem of “forever day” vulnerabilities -- holes in legacy systems that manufacturers no longer patch -- also become a greater threat.

However, the bigger trouble may come from the big data generated by all these smart devices. “The value isn’t in the IoT at all,” said Moores. “[And] ... the real value is in the ability to apply the data from the sensors at the endpoints.”

As the amount and value of this data increases, its value as an attack target could increase -- both attacks that steal private information or manipulate it and damage its integrity. As Moores explains, the persistent collection of data about people’s movements also raises privacy concerns -- something that some cities citizens’ are beginning to push back against.

Until now, Moores said, smart city development has focused on technology, not people; cost-savings, not security; and top-down, not bottom-up approaches.

A “long, messy, and incremental process” is ahead, he said, and the winners and losers will depend upon how well they can adapt.



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Aruna Rangachar Pohl (*middle with shades*) –
Executive Director, IFHD, with a farmer group

How IFHD is Nurturing Farmers' Enterprises

Not many realize that millions of Indian farmers are passionate entrepreneurs who fight several uncertainties to produce what they set out to. Yet, the ecosystem for doing business for them in smart and transparent manner is barely developed. Decades of co-operative movement has delivered very little. India's biggest challenge today is to transform thousands of small farm producer bodies into sustainable and climate-friendly business enterprises.

Hivos, an international organization, launched an incubation facility called ProCIF (Producer Organization Catalyst and Incubation Facility), in March 2013, at Bengaluru, as a possible model to ensure sustainable and eco-friendly farming and other livelihood related activities like fishing, animal husbandry, horticulture and forestry. Its pilot projects have shown excellent results and the model is in the scale up mode already. Since January 2014, ProCIF is managed by IFHD (Indian Foundation for Humanistic Development), a not-for-profit foundation based in Bengaluru.

A ProCIF 2014 annual report states the following facts:

- Out of the 27 FPOs (farmer producer organizations) under ProCIF, 13 FPOs have been given technical assistance and mentorship
- 17 FPOs are in incubation phase accessing soft working capital finance from FWFB.
- One FPO (Kabini Organic FPCL) is accessing funds at market rate interest from NABFINS

Interestingly, the positive response from Indian and global financial institutions is helping ProCIF make

steady progress. IFHD has initiated conversations with various stakeholders like NABFINS to increase the fund pool for FPO's. It has also been identified by the Navajbhai Ratan Tata Trust (NRTT) for the development of the ProCIF platform for 15 more FPO's. "The idea is to provide comprehensive support from access to finance to 360 degree technical assistance so that they are able to break-even faster and become sustainable, cash positive enterprises," says **Aruna Rangachar Pohl, Executive Director, IFHD**. She is alumnus of Indian Institute of Management (Ahmedabad), and has 25 years of varied entrepreneurial and senior management experience primarily in the food, agriculture and retail sector. She is supported by a team of professionals with similar academic credentials and experience in working in the private sector, with NGO's as well as those who have established FPO's themselves.

IFHD's challenges and learning opportunities are immense. To begin with, it is managing the multi-stakeholder partnership comprising different actors and fund instruments. Selection of the FPO and its promoter NGO is a vital decision in the effectiveness of the ProCIF pilot program. So is identifying low cost, green technologies. It currently maintains 19 off- farm and 21 on-farm technologies which will be deployed to help farmer groups to move towards more sustainable production models.

Assisting Emerging FPOs

ProCIF is assisting many FPOs that have been supported through grants either through government or private promoters. Around 400 FPO's have received seed funding from the Small Farmers Agri Business Consortium (SFAC), a Government of India funded institution. ProCIF assists these FPO's to take their vision forward, beyond grant funded phase to build sustainable enterprises as well as an enabling ecosystem of services to incubate them.

ProCIF is breathing new life into such FPOs with its unique incubation model, combining different funding instruments with technical assistance and mentoring support. ProCIF as a platform makes it possible for FPOs to embark onto its incubation ecosystem at different entry points, making it accessible at all stages of an FPO's lifecycle.

Impact

For over 27,000 producer families representing approx. 1, 35,500 rural people in India:

- Reducing risk for 25,500 producers (from inputs, indebtedness, trade vulnerability)
- 25 FPOs commence operations under the mentoring program of ProCIF with access to finance
- The pilot demonstrates the social innovation of the ProCIF model over an area covering approx. 67,500 acres (@ 2.5 acres x 27,000 families) of small holding farms spanning nine major states in India in different agro-climatic zones and socio-economic contexts

Despite signs of early impact, ProCIF has to tackle several challenges if it is to make a larger impact. They are:

- a. Building commercial viability of the business models of the FPOs
- b. Developing effective governance frameworks and monitoring systems
- c. Creating effective management structures and an understanding of member roles in the FPO
- d. Developing the technical skills to manage operations, business opportunities and commercial activity

By 2018, ProCIF hopes to incubate 100 FPOs with the objective of improving the economic status of more than 100,000 small producers across India.

www.ifhd.in

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Recipients of Green Manufacturing Excellence Awards 2015

Company Name	Location	Award
Overall Leader Award		
Bharat Petroleum Corporation Limited - Mumbai Refinery	Mahul	Overall Leader Award
Johnson & Johnson Limited	Mulund	Overall Leader Award - 1st Runner Up
Hindustan Unilever Limited	Barotiwala	Overall Leader Award - 2nd Runner Up
ITC Limited	Bengaluru	Overall Leader Award - 2nd Runner Up
Leaders Award		
Mahindra & Mahindra Limited - Farm Equipment Sector	Nagpur	Leaders Award - Mega Large Business
ITC Limited - India Tobacco Division	Ranjangaon	Leaders Award - Mega Large Business
Hindustan Zinc Limited - Chanderiya Lead Zinc Smelter	Chanderiya	Leaders Award - Mega Large Business
Hindustan Unilever Limited - Haldia Detergent Factory	Haldia	Leaders Award - Large Business
ACC Limited - Lakheri Cement Works	Lakheri	Leaders Award - Medium Business
Challengers Award		
Sesa Sterlite Limited	Jharsuguda	Challengers Award - Mega Large Business
Bajaj Auto Limited	Chakan	Challengers Award - Mega Large Business
Dr. Reddy's Laboratories Limited - FTO - 3	Bachupally	Challengers Award - Mega Large Business
JSW Steel Limited	Vijayanagar	Challengers Award - Mega Large Business
Lakme Lever Private Limited	Gandhidham	Challengers Award - Large Business
UPL Limited - Unit 2	Ankleshwar	Challengers Award - Large Business
Grasim Industries Limited - Birla Cellulosic	Kharach	Challengers Award - Large Business
UltraTech Cement Limited - Reddipalayam Cement Works	Ariyalur	Challengers Award - Medium Business
United Breweries Limited	Golconda	Challengers Award - Medium Business
Philips India Limited	Chakan	Challengers Award - Medium Business
Schneider Electric Infrastructure Limited	Vadodara	Challengers Award - Medium Business
Darjeeling Organic Tea Estates Private Limited - Ambootia Tea Estate	Darjeeling	Challengers Award - Emerging Business
Nilkamal Limited	Pondicherry	Challengers Award - Emerging Business
Safety Excellence Award		
Johnson & Johnson Limited	Mulund	Safety Excellence Award - Overall Winner
Henkel Adhesives Technologies India Private Limited	Jejuri	Safety Excellence Award - 1st Runner Up
Wrigley India Private Limited	Bangalore	Safety Excellence Award - 2nd Runner Up

Company Name	Location
Certificate of Merit - Challengers Category	
ACC Limited - Sindri Cement Works	Sindri
Hindustan Unilever Limited - Mangalore Detergent Factory	Mangalore
Olam Agro India Limited	Varikoli
Sentiss Pharma Private Limited	Nalagarh
Sesa Sterlite Limited	Lanjigarh
UPL Limited - Unit 1	Ankleshwar
Welspun India Limited	Anjar
Certificate of Merit - Believers Category	
Henkel Adhesives Technologies India Private Limited	Jejuri
J. K. Ansell Limited	Aurangabad
J. K. Cement Limited	Nimbahera
JK Tyre & Industries Limited	Chennai
Kariwala Industries Limited	Falta
Kirloskar Ebara Pumps Limited	Kirloskarwadi
Oil India Limited	Duliajan
Raymond UCO Denim Private Limited	Yavatmal
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Sanofi India Limited	Ankleshwar
Schneider Electric India Private Limited Power Factor Correction Unit	Bangalore
United Breweries Limited	Bombay
Usha Martin Limited	Ranchi
Wrigley India Private Limited	Baddi
Wrigley India Private Limited	Bangalore
Zydus Cadila Healthcare Limited	Baddi
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Hindustan Unilever Limited Haldia Detergent Factory	Haldia
Hindustan Zinc Limited Chanderiya Lead Zinc Smelter	Chanderiya
Philips India Limited	Chakan
UltraTech Cement Limited Reddipalayam Cement Works	Ariyalur
Wrigley India Private Limited	Baddi

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Make in India

Why Domestic Solar Power Component Manufacturing Needs More Support

The Government of India needs to do much more if domestic manufacturing of PV cells and other solar power components is to take off earnestly. **Bhupesh Verma, Vaishalee Dash and Dr. Sharath Rao** of the Center for Study of Science, Technology and Policy (CSTEP) suggest ways of doing that

The Indian solar industry has grown leaps and bounds in the last five years. The Jawaharlal Nehru National Solar Mission (JNNSM) introduced in 2010 played an important role in this development. **The installed photovoltaic (PV) capacity increased from a mere 46 MW in 2010 to 3,700MW in May 2015.** With the advent of the solar boom, the PV manufacturing industry has invested a large amount of capital in setting up manufacturing lines to cater to the local demand. The current annual domestic cell and module manufacturing capacities stand close to 1,400 MW and 2,800 MW respectively. The bulk, if not all, of the cell and module manufacturing in India is based on crystalline Silicon (c-Si) technology.

JNNSM, which has been conceived to be realised in three phases, mandates the use of locally manufactured solar cells and modules by engaging the government's Domestic Content Requirement (DCR) stipulation. This was evident in Phase I and Phase II bidding guidelines. Even in the recently released Phase II Batch II Tranche I draft guidelines, 25% of the targets have been kept for bidding under DCR. Despite this, **lower-priced imported modules from China and the US, armed with better financial offerings, have hampered the business of domestic PV manufacturers' module.** As a result, till the middle of last year, around 80% of cell and 50% of manufacturing capacities were lying idle. The situation has improved since then.

Challenges

A host of challenges affect the domestic PV manufacturing industry. Firstly, the Indian PV industry is mostly dependent on the import of critical raw materials and components such as silicon wafers, Ethylene Vinyl Acetate, Polymers (Polyvinyl Fluoride - Tedlar, Polyethylene Terephthalate - Mylar).



Secondly, despite the surplus availability of polysilicon (the ingredient from which Silicon wafers are derived) across the globe, which has seen a record low price of \$16-18 per kg, the industry is dominated by a few players. **In 2013, five vendors were responsible for 81% of the annual global polysilicon production (215,000 metric tonnes). Thus, market manipulation, is a possibility and a cause for concern as it could disrupt supply in the future.**

Thirdly, there is a dearth of skilled labour which makes the survival and competitiveness of the industry doubtful. In addition, the high cost of debt/capital and higher cost of electricity and its unreliability compel manufacturers to maintain a diesel back-up. With rapid

advances in cell-making technology worldwide, Indian manufacturers are finding it difficult to keep pace with their global counterparts. Also, domestic manufacturers lack the inclination and funds to pursue R&D activities.

Way Forward

A study by the Center for Study of Science, Technology and Policy (CSTEP) analysing the solar manufacturing supply chain in India showed that c-Si cells constitute more than 55% of the module cost and the Balance of Module(BOM) – PV Glass, Encapsulant, Backsheet, Tabbing Ribbon, Junction Box and others comprise about 25%. However, the study also revealed the presence of a robust BOM industry in the country. The study identified a few critical components and developed an ‘import vs. indigenise’ strategy for the PV industry (c-Si based technology). **The study recommends that BOM components be locally manufactured in the short term (next 3-4 years)** while continuing to both import and indigenously manufacture c-Si cells. This will strengthen the current manufacturing capacity, making it competitive in the international market.

To support the domestic PV industry, the Government has also declared a number of measures. The ‘National Manufacturing Policy’ announced in 2011 was merged with the ‘Make in India’ initiative launched in 2014 and a host of incentives were announced specifically for PV module and BOM manufacturers. Exemption from custom and excise duty comprised the bulk of incentives. The exemptions were also extended to equipment purchased for manufacturing the aforementioned components.

In addition, under the Modified Special Incentive Package Scheme (M-SIPS), announced by the Department of Electronics and Information Technology (DeitY), 20% and 25% subsidy on capital expenditure has been announced for entities establishing cell and module lines in Special Economic Zones (SEZ) and Non-SEZs, respectively. Reimbursement of excise duty and countervailing duty is also applicable for capital equipment purchased for Non-SEZ units. Further, for high technology units, such as fabrication units (wafer manufacturing facility), reimbursement of central taxes and duties have also been provided.

With the recent enhancement of the JNNSM targets to 100,000MW, the National Thermal Power Corporation (NTPC), the largest owner of thermal power plants

in India, has announced that it will build solar plants exclusively with Indian-made cells and modules.

Further, solar projects taken up by the Indian Army, Railways and other public sector enterprises (including NTPC) will be subsidised by INR 1 crore for each MW of capacity, only if they source cells and modules from domestic manufacturers.

The Government has encouraged each of these public sector companies to install 1,000 MW solar PV projects. This will ensure that the PV manufacturing industries operate their full present capacities and add more production lines in the future. On these lines, Bharat Heavy Electricals Limited (BHEL) has proposed to set up Rs. 3,000 crore silicon wafer manufacturing facility in Sakoli (Bhandara District), Maharashtra and is currently awaiting funds from the National Clean Energy Fund.

What More?

The Government can and should do more.

Facilitating access to low cost and longer tenure finance for the manufacturers is a must. There should be adequate incentives towards R&D and commercialisation of novel technologies to support polysilicon and cell manufacturing. The Government should also support large-scale pilot projects engaging the ‘High pressure Fluidised Bed Reactor (FBR)’ or ‘Trichloro Silane (Hydrochlorination Process)-Siemens’ technology to manufacture polysilicon. Research on P-type Monocrystalline Passivated Emitter Rear Contact (PERC) Silicon cells, Multicrystalline Passivated Emitter RCT (PERCT) technology and N-type Mono crystalline Silicon cells should be financed and encouraged via public-private cooperation.

Additional support to the **development of manufacturing clusters** with fully integrated manufacturing plants and skill-building facilities are some of the policy levers that can lead to a robust PV manufacturing industry in India. The Government’s plan to train and create a skilled workforce under the National Skill Development Mission (NSDM) is a great initiative which could help transform and take the solar sector to greater heights.

The ‘sun can truly shine’ on India’s domestic PV manufacturing sector if the challenges are addressed and these different mechanisms are implemented in unison.

Banks Can Influence Sustainability Models

As a provider of financial resources and related services, banks have the potential and ability to positively influence thinking and therefore the strategies of businesses towards sustainability, says **N Sunil Kumar, Director – RBS Foundation India and Head of Sustainability, RBS N.V.** in a chat with SustainabilityNext



What's the purpose of RBS Foundation?

The Royal Bank of Scotland (RBS) is a large international banking and financial services company. As part of its sustainability mandate, RBS believes in inclusive growth and demonstrates it by supporting local communities in the countries in which it operates. In India, the RBS Foundation was set up with the purpose of supporting equitable growth and sustainable development.

Through its “Supporting Enterprise” program, RBS Foundation India facilitates financial inclusion and inclusive growth by enabling people to enhance their incomes through household enterprises. In its design is an inherent focus on women, youth and farmers in some of the most excluded regions of the country.

RBS Foundation India projects have directly supported over 90,000 households in 11 states across India.

Your target is to ‘Be the Most Trusted’ bank by 2020 – how will the foundation help?

As a financial services provider, RBS has a responsibility to provide finance efficiently and responsibly. An integrated aspect of responsibility is developing a trust amongst clients, customers, shareholders and the society at large. That trust is built in the way we support economic development and create value for society more broadly. The impact of the Foundation and the work being undertaken through its “Supporting Enterprise” program has given confidence to the stakeholders to engage with the bank; an important stepping stone to develop trust and do business with us.

How is the 2% CSR rule influencing the funding options of RBS Foundation?

RBS through RBS Foundation India has been undertaking community development work even before CSR became mandatory. While we have always had a strong connect with the wider community and have evolved a strategy for deploying our community resources very productively, the CSR mandate in a way endorses the work that we have been doing. We will strive to continue with our work on inclusive growth and financial inclusion for sustainable development.

What is your leadership mantra and how much have you achieved using that since you joined RBS Foundation?

My leadership mantra is to advocate and implement change with a sense of responsibility. Responsibility is fundamental to any individual or organization's success. So, while I have always explored new and creative solutions for more efficient and impactful results, my thought, action and choices have all reflected on a sense of responsibility. This was instrumental in designing the framework and implementation of strategy of RBS Foundation India.

At every stage, ranging from formulating the mission of the Foundation, the quality of projects undertaken, their implementation, engagement with stakeholders was driven by responsible thought and action. It was the sense of doing good in society in a responsible manner that has resulted in RBS Foundation India supporting over 90, 000 households across India. This sense of responsibility has also resulted in my colleagues lending

their support through skill and time to ensure that the objectives of the Foundation are met successfully.

How much of influence can the banking sector have on sustainability strategies of businesses?

Banks play a key role as drivers of the economy in any society. Needless to add, you just need to look at the sensitivity of markets, GDP and inflation to any rate changes or changes in monetary policies announced by central banks across the world.

As a provider of financial resources and related services, banks have the potential and ability to positively influence thinking and therefore the strategies of businesses towards sustainability. This can operate at two levels: First, on how an industry, whether a bank or any other business, manages sustainability vectors such as consumption of water, energy, paper, their carbon footprint within itself.

Second: In the way manufacturing industries, especially those sectors with the biggest impact on environment

While banks can make a conscientious choice of funding and financing businesses that are more sustainable in their production and revenue generating streams, banks can and have engaged with production units in ways that have resulted in these production units redesigning their processes to eliminate or minimize their polluting factors and enhance their environmentally positive factors.

manage their production processes. While banks can make a conscientious choice of funding and financing businesses that are more sustainable in their production and revenue generating streams, banks can and have engaged with production units in ways that have resulted in these production units redesigning their processes to eliminate or minimize their polluting factors and enhance their environmentally positive factors.



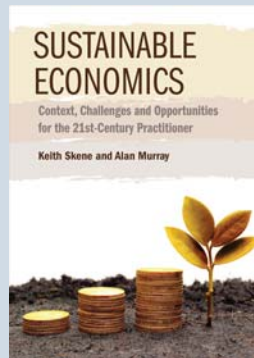
RBS Foundation India supports the Todas, a tribal community residing in the foothills of Nilgiris in Tamil Nadu. Under the project, support is provided to revive and develop the traditional craft of embroidery “Puthukalli” practiced by the community for generations as a household enterprise. Training on refining the craft and access to markets is provided thereby creating an alternative and sustainable income generating source for the women but also contributing towards their empowerment

Recommended Text Books

Sustainable Economics: Context, Challenges and Opportunities for the 21st-Century Practitioner

By Keith Skene and Alan Murray, Greenleaf Publishing, April 2015

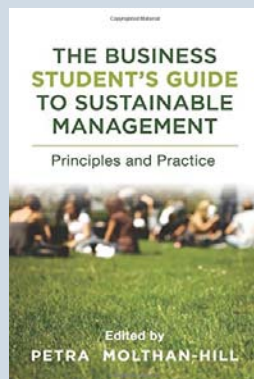
A handbook with wide potential usage for both undergraduate and postgraduate students, as well as practitioners, presenting current thinking on sustainability. It explores the ecological models which underpin economic sustainability theory and re-examines the consequences of modern ecological thought on business strategies relating to sustainability. Extensive free teaching materials are now available



The Business Student's Guide to Sustainable Management: Principles and Practice

By Petra Molthan-Hill, Greenleaf Publishing, July 2014

This textbook is a comprehensive business student's guide to sustainable management. Aimed at undergraduates, Masters students and MBAs, this is the first book to offer a full introduction to sustainable management from a business perspective. Now with a free 59pp study guide for course leaders, this is a crucial textbook for both students and teachers alike.



Sustainable Frontiers: Unlocking Change through Business, Leadership and Innovation

Wayne Visser, Greenleaf Publishing, June 2015

A collection of short, readable chapters that maps the developments of CSR and sustainable business, uncovers the realities, challenges preconceived thinking and envisions a different future.



Practical Wisdom in Management: Business Across Spiritual Traditions

By Theodore Roosevelt Malloch, Greenleaf Publishing, October 2014

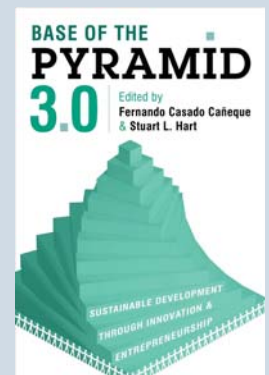
Covering 10 major religions, this book explores how practical wisdom from spiritual traditions permeates corporate cultures. It includes case studies of over 20 multinational corporations analysed with an emphasis on their spiritual values, alongside business and strategic issues.



Base of the Pyramid 3.0: Sustainable Development through Innovation and Entrepreneurship

By Fernando Casado Cañeque and Stuart L. Hart, Greenleaf Publishing, March 2015

In this ground-breaking new book, Stuart L. Hart and Fernando Casado Cañeque have worked with members of the BoP Global Network to shake the tree, look objectively at what has happened since 2002, highlight why earlier applications of BoP haven't worked and propose new objectives and ways of working to formulate more sustainable solutions.



Thinking the Twenty-First Century: Ideas for the New Political Economy

By Malcolm McIntosh, Greenleaf Publishing, February 2015

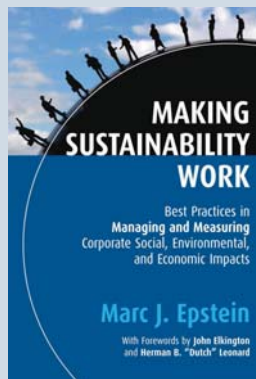
Combining science, philosophy, politics and economics, this book takes a provocative look at the changes required to build a new global political economy. This call to action advocates a balanced political economy with transdisciplinarity, accountability and transparency at its centre.



Making Sustainability Work [2nd Edition]: Best Practices in Managing and Measuring Corporate Social, Environmental and Economic Impacts

By Marc J. Epstein and Adriana Rejc Buhovac, Greenleaf Publishing, January 2014

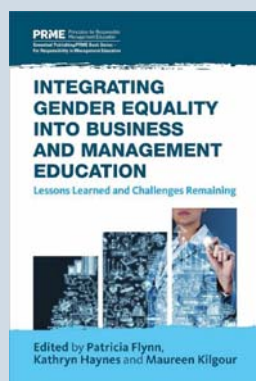
The ultimate “how-to-do-it” guide for corporate leaders, strategists, academics, sustainability consultants, and anyone else with an interest in actually making sustainability work for organizations. An updated edition of a landmark book at a time when a growing number of corporate leaders are asking for urgent help in “getting this done”. A free 59pp study guide is now available for faculty members/course leaders.



Integrating Gender Equality into Business and Management Education: Lessons Learned and Challenges Remaining

By Patricia M. Flynn, Kathryn Haynes and Maureen A. Kilgour, Greenleaf Publishing, May 2015

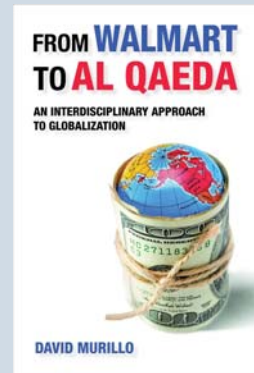
This book provides conceptual and research rationales as to why responsible management education must address the issue of gender equality it explores the challenges of integrating gender equality into management education and how they can be overcome.



From Walmart to Al Qaeda: An Interdisciplinary Approach to Globalization

By David Murillo, Greenleaf Publishing, March 2015

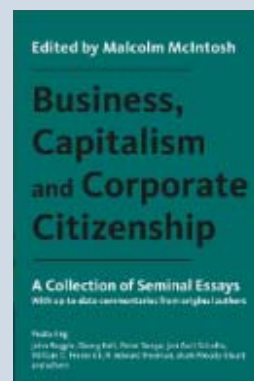
The book uses an interdisciplinary approach to address the complex question of globalization. The interrelationship between political theory, economics, anthropology, history, moral philosophy, business management and finance are used to explain the vision. A free set of slides for use in lecture presentations is now available for faculty members/course leaders to accompany this book.



Business, Capitalism and Corporate Citizenship - A collection of seminal essays

By Malcolm McIntosh, Greenleaf Publishing, June 2015

In the first decades of the twenty-first century, the theory and practice of corporate citizenship and responsibility adapted significantly. The pieces in this volume capture the essence of these changes, with illuminating reflections by their authors. Featuring contributions from John Ruggie, Peter Senge, R. Edward Freeman, Jan Aart Scholte and Georg Kell, it charts the rise of corporate citizenship, sustainability and CSR.



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|| Expected participation from Australia, Canada, China, Emirates, Finland, France, Germany, Hong Kong, Indonesia, Japan, Malaysia, Nepal, Netherlands, Saudi Arabia, Singapore, Sweden, Switzerland, Sri Lanka, UK, USA.

Objectives

- Expose the participants to the latest global trends in green buildings
- Provide a platform for networking
- Facilitate exploring new business opportunities
- Enable market transformation of green products and equipment

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Glimpses of Previous Editions of Green Building Congress



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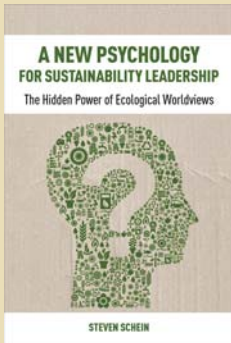
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* Confirmed as on 04.03.2015

BOOKSHELF



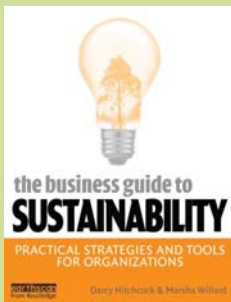
A New Psychology for Sustainability Leadership: The Hidden Power of Ecological Worldviews

By Steve Schein, Greenleaf Publishing, July 2015

Schein explores the psychological motivations of sustainability leaders and shows how they relate to overall effectiveness and capacity to lead transformational change. By empirically grounding key theories from developmental psychology in sustainability leadership practice, the author encourages us to think about leadership in a different way and explores how the complexity of sustainability is driving new approaches to leadership.

The book

- Explores the psychological motivations of sustainability leaders in relation to transformational change
- Drawing on interviews with seventy-five leaders in more than forty multinational corporations, NGO's, and universities
- Innovate research in leadership psychology, will be important reading for business leaders, academics and students



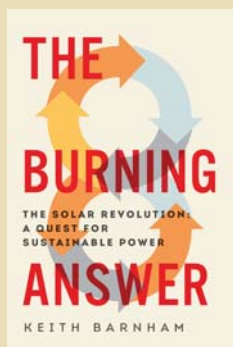
The Business Guide to Sustainability: Practical Strategies and Tools for Organizations

By Darcy Hitchcock & Marsha Willard Routledge; 3 edition (April 3, 2015)

This is a practical introduction to implementing a comprehensive sustainability strategy in any organization. Written by top business consultants, this useful book can be applied in both large and small enterprises.

This edition shifts away from a discussion of CSR to focus more squarely on sustainability. It explores strategies for implementing sustainability in each of the functional areas of the corporation (accounting, HR, operations, etc.), while providing examples from a range of sectors, including manufacturing, services, and government. The book also includes the author's S-CORE assessment tool to help organizations determine whether they are on the right track, identify new opportunities, and assign accountability and responsibility.

Brimming with interesting stories and examples, and covering new developments such as the emergence of BRICs and the effects of the Great Recession, this book will interest managers, business owners, and students for whom sustainability is a priority.



The Burning Answer: The Solar Revolution: A Quest for Sustainable Power

Keith Barnham, Pegasus, May 2015

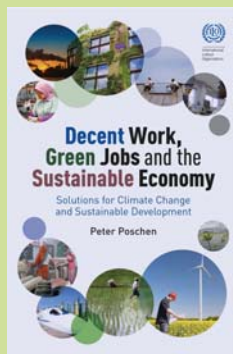
Using the little-known equation $E=hf$ as the foundation for a compelling new vision, *The Burning Answer* reveals the importance of embracing solar energy as the only solution to the global energy crisis.

Our society faces a choice. We could be enjoying a sustainable lifestyle but we have chosen not to. In three generations we have consumed half the oil produced by photosynthesis over eight million generations. In two generations we have used half our uranium resources. With threats from global warming, oil depletion and nuclear disaster, we are running out of options. Solar power, as Keith Barnham explains, is our necessary solution.

In *The Burning Answer* he uncovers the connections between physics and politics that have resulted in our dependence on a high-carbon lifestyle, which only a solar revolution can now overcome. Einstein's famous equation $E=mc^2$ led to the atomic bomb and the widespread use of nuclear energy; it has delayed a solar revolution in many countries. In a fascinating tour of recent scientific history, Keith Barnham reveals Einstein's other, less famous equation, the equation the world could have relied on.

Barnham explains that the roots of solar energy lie in a little known equation $E=hf$, an equation which was coincidentally celebrated (and explained to the world) by Einstein in the same year he discovered $E=mc^2$. He alleges that the former equation has been overlooked in favor of the latter, much to our detriment, and Barnham is here to offer us a solution: We can still turn things around and solar energy is the key. While everyone is aware of solar energy, people are still not paying enough attention, and so as well as explaining the science behind it, Barnham takes his subject forward to advise on what we should be doing to utilize this amazing energy source.

In this provocative, inspiring, passionately argued book, Keith Barnham outlines actions that any one and all of us can take to make an impact now and on future generations. *The Burning Answer* is a solar manifesto for the new climate-aware generation and a must-read for climate-change skeptics.



Decent Work, Green Jobs & Sustainable Economy: Solutions for Climate Change and Sustainable Development

By Peter Poschen, Greenleaf Publishing, June 2015

This book demonstrates that green jobs can be a key economic driver, as the world steps into the largely uncharted territory of building a sustainable global economy. This book provides a comprehensive overview of climate change, sustainable development and decent work. It addresses the challenges of achieving environmental and social sustainability and turning the vision of decent work for all into a reality.

- Argues that a transition to a global sustainable economy is possible, through the integration of green jobs and decent work
- Essential reading for researchers, academics, practitioners and policy-makers

Course

Science and Management for Sustainable Living

www.bhoomicollege.org

Post Graduate Diploma Course in Sustainable Development (PGDM-SD)

<http://bimtech.ac.in/>

M.Sc. in Sustainable Development - Distance learning Course + information

The Global Open University

<http://nagaland.net.in/>

Post-Graduate Certificate in Sustainable Enterprise

Indian Institute for Sustainable Enterprise

<http://theiise.net/pgcertinse.html>

Postgraduate in Sustainability Management

Silver Bright Institute of Management

<http://www.htcampus.com/college/silver-bright-institute-management-sbim>

Post Graduate Diploma in Sustainability (Distance learning)

Chhattisgarh University

<http://www.cguniversity.com/>

Post Graduate Diploma

IGNOU- Indira Gandhi National Open University

<http://www.ignou.ac.in/>

MBA in Environmental Science

School of Management & Infrastructure and Development Studies

<http://www.minds-india.org/>

Master of Architecture (Sustainable Architecture)

Bharati Vidyapeeth Deemed University

<http://www.bharatividyaapeeth.edu/Campuses/Pune/default.aspx>

MBA and MA in Sustainability Management

TERI University

<http://www.teriuniversity.ac.in/>

M Tech, MSc Environmental Science

Thapar University

<http://www.thapar.edu/>

PG Diploma

Entrepreneurship Development Institute of India

<http://www.ediindia.org/>

M Tech in Environmental Engineering

The National Institute Of Technology, Tiruchirappalli

<http://www.nitt.edu/home/>

Advanced Diploma in Bio Degradable & Solid Waste

Vellalar College for Women

<http://www.vellalar.com/Arts/carrer-oriented-programmes.php>

PhD in Environmental Science

Gauhati University

<http://www.gauhati.ac.in/>

MSc in Environmental Science

Dr Babasaheb Ambedkar Marathawada University

<http://www.bamu.net/dept/environment/>

Advanced Diploma in Energy

Vidya Prasarak Mandals Polytechnic

<http://www.vpmthane.org/polywebnew/courses.html>

BSc in Environmental Science

University of Calicut

<http://www.universityofcalicut.info/>

PhD in Environmental Science

Punjab University

<http://puchd.ac.in/>

MSc in Environmental Science

Bharathiar University

<http://www.b-u.ac.in/>

MA in Environmental Economics (Distance Learning Course)

Annamalai University

<http://www.annamalaiuniversity.ac.in/>

PhD in Environmental Bio-Technology & Solid Waste Management School of Environmental Sciences

Jawaharlal Nehru University

<http://www.jnu.ac.in/main.asp?sendval=SchoolOfEnvironmentalSciences>

MBA in Energy & Environmental Science

Symbiosis Institute of International Business

<http://www.siiib.ac.in/programmes.aspx>

Workshop on TOC for Ever Flourishing Companies

1 July - 3 July 2015, Hotel Taj West End, Bangalore

<http://www.cii.in/>**Redefining Supply Chain in the light of GST**

07-08 July 2015, Hotel Palladium, Mumbai

<http://www.cii.in/>**CII - Online Session on CSR "Concept of Social Enterprise - Its Relevance and Impact on CSR"**

09 July 2015 from 11:00 Hrs to 13:00 Hrs

<http://www.cii.in/>**AUTO SCM 2015**

23 -24 July 2015, Hotel the Grand, New Delhi

<http://www.cii.in/>**"Creating an Uncontested Market Space" using Blue Ocean Strategy**

9 July 2015, 1500 - 1700 hrs

Live Webcast from CII India Habitat Centre, New Delhi

Advanced Training Programme on IGBC's Green Building Rating Systems

16-17 July 2015, Kolkata

<http://www.cii.in/>**Eleventh India Innovation Summit 2015****"Realizing the National Dream"**

06-07 August 2015, Hotel ITC Royal Gardenia, Bangalore

<http://www.cii.in/>**TCEE 2015 – Complete Event for Electroplating Industry**

11-12 August, 2015, ITC, Chennai

<http://www.cii.in/>**2nd Edition of the Conference on Building World Class Manufacturing Automation & Robotics: Sustainable, Scalable and Safe**

Wednesday, 12th August 2015, Noida

<http://www.cii.in/>**OH&S Training Workshop on Construction & Project Safety Management**

0900 – 1730 hrs : 12th & 13th August 2015 (Wednesday & Thursday) : Hotel Hilton, Chennai

<http://www.cii.in/>**Smart Cities Landscapes 2015**

September 10-11, 2015 in New Delhi, India

http://www.infoxg.com/smart-city-landscapes2015.php?event_name=Smart%20City%20Landscapes%202015**B2b Meetings With International Trade Delegations @ Global Sme Business Summit 2015**

7-8 December 2015, India Habitat Centre, Lodi Road, New Delhi

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

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