WHAT WILL THE WORLD LOOK LIKE IN 2100?

- Special report on Southeast Asia’s haze scourge
- The circular economy’s trillion dollar opportunity
- All you need to know about sustainability committees
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- How to engage employees on sustainability
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What will the world look like in 2100? It’s an intriguing question and one that the UK Met Office has attempted to answer with a newly-released map that predicts how climate change will impact humans by the end of the 21st century - assuming that we do not adapt to it.

Called the “Human Dynamics of Climate Change”, it is a delightful web of links and information that one can explore to get insights on how different impacts will interact in different scenarios. Companies gazing into the crystal ball for a hint on what the future could look like and how it could impact their businesses may just find what they need.

In Southeast Asia, the frequency and intensity of flooding events is set to increase, along with warm day temperatures. These are long-term issues that governments will have to prepare for. But for now, both the public and private sector in countries in the region are busy fighting a scourge that is more immediate - the haze.

For this second issue, we travelled to ground zero - Riau, Sumatra - to report on why Indonesian forests are burning, how companies are involved and study some possible solutions. Our special report also includes stories on related issues such as food, water, land rights and corporate responsibility.

Some other highlights include coverage of UNDP administrator Helen Clark’s inaugural lecture at the UNDP Global Centre on Public Service Excellence in Singapore, interviews with the Centre for Liveable Cities executive director Khoo Teng Chye on eco-cities and Accenture managing director of strategy and sustainability services Peter Lacy on the circular economy. This issue also features some exclusives in which subject experts offer practical advice on topics such as how to improve employee engagement on sustainability, why businesses should have a sustainability committee and how to set one up.

We have introduced a new section where we will review books in this space that seek to enlighten and/or entertain us on matters close to our heart. If you’d like to submit suggestions on what books we should review, do get in touch!
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By the end of the century, if no efforts are made to mitigate climate change, the frequency and intensity of flooding events in Southeast Asia is set to increase by 77 per cent. Warm day temperatures will go up by an average of 4.3°C and the number of days in drought will increase by 5 per cent.

But if the world takes rapid and significant action to mitigate greenhouse gas emissions such that they peak in 2040 and then decline, these numbers could be reduced.

The increase in frequency of flood events in Southeast Asia would be limited to 51 per cent, and warm day temperatures would only increase by 1.2°C. The projected increase in drought days would also be reduced to 3 per cent.

These findings were revealed in a report on the ‘Human Dynamics of Climate Change’, launched in London in July by the British Foreign and Commonwealth Office (FCO).

Developed by the UK Met Office Hadley Centre, the report examines how weather patterns, natural disasters, trade flows, food production, and water security will be affected if greenhouse gas emissions continue along a “business as usual” scenario.

The findings have been consolidated in a comprehensive map, which shows the interconnected nature of the impact of climate change. Present day scenarios of trade flows, population density and resource scarcity are presented alongside predicted changes on the map.

Read more here.
Businesses with women in leadership roles do better

UNDP leader Helen Clark calls for the removal of barriers for increased women participation in leadership roles in both the public and private sector.

United Nations Development Programme administrator Helen Clark has urged wider society to remove barriers that have held women back from taking leadership roles, pointing out that companies that include women in decision-making perform better.

Speaking at the inaugural lecture at the UNDP Global Centre for Public Service Excellence in Singapore, Ms Clark said women’s leadership in the private sector is beginning to receive increased attention and that the corporate sector is the “last bastion of male dominance of top positions”.

Ms Clark, who is also the former prime minister of New Zealand, pointed out that in OECD countries, women account for under one third of senior managers, and there is only one woman for every ten men on corporate boards.

“Clearly, there is much work to be done to close these gaps,” she said.
Recent research examining gender balance in the top 300 companies across the United States, Europe, and Asia makes the case that gender balance must be pursued not only on corporate boards, but also among senior managers on executive committees who report directly to the CEO, she added.

Thirty-eight of the top 100 companies in Europe and 71 of the top 100 in Asia have no women at all in their executive management teams, she noted.

This is despite research evidence that suggests when companies include women in their decision-making, they perform better. Ms Clark cited, as an example, one study that looked at nine companies in India run by women which outperformed the 30 leading listed firms on the Bombay Stock Exchange in year-on-year growth rates from 2004 to 2009.

“Thus the economic case for women’s equal participation and decision-making in the private sector can certainly be made… Gender equality is not just the right thing to do, but also the smart, economic thing to do,” she told the 120-strong audience at the centre on June 3.

**WOMEN LEADERS IN SINGAPORE**

Singapore was highlighted as a country where the gender gap needed to be addressed.

Ms Clark cited a recent review gender diversity on boards and among the senior management of Singapore-listed companies, which found that women in Singapore hold just 8.3 per cent of directorships on these boards. At the current rate of growth in numbers, women would represent only seventeen per cent of directors by 2030.

The Diversity Task Force said of its review: “There is low awareness about the importance and benefits of gender diversity among SGX-listed companies, and little is being done to improve gender diversity.”

Among the companies surveyed, only 33 per cent agree that gender diversity at board level is important. Overall, companies are not yet convinced of the benefits of gender diversity on boards, they added.

Singapore Member of Parliament, Dr Intan Mokhtar – who spoke at a panel discussion led by Ms Clark at the lecture – told Eco-Business that much more needed to be done to address gender equality in the workplace in Singapore.

In addition to the dearth of women leaders in business, she also noted that women’s participation rate in the workforce is 58 per cent – compared to 76 per cent for men, according to latest official figures.

“It’s about changing mindsets,” she said, observing that many women would like the opportunity to take on flexible-work arrangements when they are starting a family, or be assured of a job when they return to work.

But many employers shun such arrangements because “it’s really about the bottom line”.

“That’s where we need to look beyond bottom line and see how we can help our women to remain employable, active in the workforce and yet at the same time fulfil their responsibilities as mothers,” she added.

When asked if legislation could play a role, she warned that it could be a double-edged sword that would make it more unattractive for employers to employ women.

“Thus the economic case for women’s equal participation and decision-making in the private sector can certainly be made… Gender equality is not just the right thing to do, but also the smart, economic thing to do.”

—Helen Clark, UNDP administrator
We need a lot more dialogue to engage companies on this issue… and there are schemes that the government can look into, such as giving grants to retrain women to ensure they can re-enter the workforce.

**TAKING STEPS TO ADDRESS THE GENDER GAP**

While gender inequality has ranked low on the agenda in the private sector, recent trends show that businesses are increasingly viewing women in developing countries as potential consumers, employees, suppliers and distributors, said Amanda Jordan, co-founder of sustainability consultancy firm Corporate Citizenship.

The firm, together with Nottingham University’s International Centre for Corporate Social Responsibility (ICCSR), had analysed global business initiatives on women’s empowerment in emerging markets in a 2012 report titled ‘Women Mean Business’.

The authors found that women’s empowerment in these markets spreads economic opportunities, and increased productivity and sales for companies. Despite this, businesses faced challenges in addressing the gender issue due to a lack of understanding, limited funding to invest in initiative and a lack of senior level buy-in.

They recommended that companies take steps to address the issue such as gathering data and insights on women across their value chain, deliver social investment programmes and invest in education and training for female employees.

**WOMEN IN PUBLIC ADMINISTRATION**

Ms Clark also made a case for women’s leadership in public administrations.

“Where a critical mass of women is present in policy- and decision-making, parliaments seem to be more likely to address a range of gender equality issues,” she said.

To this end, the UNDP has launched a new report, Gender Equality in Public Administration, which highlights good practices in advancing women’s participation.

The report revealed that women represent at least 30 per cent of the public administration in many of the 34 developing nations surveyed. But while they are numerically well represented in public administrations, they are significantly outnumbered by men in leadership positions.

It calls for increased investment in women and girls including education; concrete steps to remove structural barriers that impede women’s participation such as constitutional changes; and a global tracking mechanism of women in decision-making in public administration.

“There is mounting evidence that women’s equal participation in leadership positions benefits their families, societies, economies, and countries,” said Ms Clark.

“We believe that efforts to support and advance women’s equal participation… must be prioritized, scaled up, co-ordinated, and made more visible. Change requires both female and male leadership within public administrations and beyond to champion this issue.”

—Helen Clark, UNDP Administrator
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Southeast Asia’s haze crisis – what will it take to stop the burning?

Haze pollution has been the scourge of Southeast Asia for decades. Singapore has just passed a new Bill that will criminalise companies responsible for the illegal burning of forests while in Indonesia, regulations meant to prevent and stop the fires are not always enforced. What will it take to end the scourge? Eco-Business reports from the ground in Riau.

In June last year, Singapore, Indonesia and Malaysia suffered their worst haze crisis in more than a decade when illegal forest fires in Riau, Sumatra, enveloped the region in a thick smog and resulted in record-breaking levels of pollution. Although the Asean (the Association of Southeast Asian Nations) Agreement on Transboundary Haze Pollution was established in 2002 in the wake of the last haze crisis in 1997, Indonesia has yet to ratify it.

The three-month-long haze crisis then cost Southeast Asia an estimated $9 billion from disruptions to air travel, health expenses and other business impacts. Last June, experts estimated that the unhealthy smog, which hit a record of 401 on the Pollution Standards Index, could rack up to S$1.2 billion in economic losses for Singapore.

Fed up with the lack of progress and realising the role that private companies played in caus-
ing the haze, Singapore drafted an ambitious anti-haze bill this March that would penalise companies found responsible for causing unhealthy levels of haze affecting Singapore – even if the pollution-causing fires originated beyond the country’s national borders.

The Transboundary Haze Pollution bill was revised and passed in August to include harsher fines of up to S$2 million as well as a widened definition of who can be held responsible. It also enabled the authorities to prevent individuals from leaving Singapore if they had been served notice.

While many agree the Bill might be exactly what is needed to get companies to clean up their act, it remains to be seen if it will lead to genuine change in Riau province - ground zero for most of the illegal burning. Here, many find it hard to resist the temptation to clear land by burning for agricultural expansion into forests and peatlands as it is the cheapest option.

This is despite the fact that Indonesian regulations and policies to curb fires have already been in place for some time. These include a 2001 regulation requiring plantations to have watch-towers, water wells and fire-fighting teams as well as a more recent ban on the building of new canals.

**BUREAUCRATIC BARRIERS TO FOREST PROTECTION**

However, the implementation of these regulations is hindered by a weak bureaucratic process, where provincial authorities and government agencies issue land concessions and permits to plant without checking if companies are complying with the rules.

For example, the Badan Lingkungan Hidup, Riau province, (BLH) which is in charge of environmental management and conservation, checks that applicant companies’ plans satisfy the rules - on paper anyway, such as having fire-fighting teams and water wells.

Stamps of approval from provincial authorities – which companies need in order to obtain concessions from other government agencies - are issued based on these paper checks, but it is unclear if provincial authorities or government agencies conduct onsite checks to ensure that the requirements are implemented at the plantations.

The authorities that issue permits to companies are also unable to ensure that companies comply with existing regulations which limit each company to owning a maximum 50,000 hectares of land. Companies such as paper giants Asia Pulp and Paper (APP) and Asia Pacific Resources International Limited (APRIL), which together own 2.1 million hectares of land, have circumvented this through subcontractors, which purchase land and supply to larger corporations.

It is unclear which - if any - government agency has been conducting onsite checks to ensure that the regulations, which companies claim they will abide by, are actually implemented at the plantations.

This makes it difficult to assign responsibility for fires to a specific concession holder, which is the aim of Singapore’s new law. BLH adds that sometimes, there may be more than one permit holder for the same plot of land.

The BLH representatives in Riau, who declined to be named due to sensitivity issues, attributed these lapses to a “lack of manpower and financial resources” to ensure that regulations are enforced.

The funding BLH gets from the central government, they added, is greatly reduced by the time it trickles down to the provincial level as “fees” are deducted at each stage of the bureaucratic process.

Environmental NGO Indonesian Forum for the Environment (Walhi) Riau chapter executive director, Rico Kurniawan, told Eco-Business that “it all boils down to laziness”.

He said: “The government issues permits – and the banks, too, approve loans - based on the companies’ requests without going to the ground to check if the land is really not owned by anyone. More concessions and permits have been issued than there is actual land. They will only send people to check if there is a conflict over land ownership.”
Beyond bureaucracy, Kurniawan adds that the root problem of haze is the highly flammable dried peat land which existing plantations operate on. Even if fires are not deliberately started here, a carelessly discarded cigarette butt that is still smouldering or embers blown in from a fire in the neighbouring plot of land can ignite dried peat. These fires are difficult to extinguish completely, as the layer of peat continues to burn underground even when surface fires have been put out.

In March, the concessions with the most number of fires were held by subsidiaries of APP and APRIL, according to environmental research organization World Resources Institute (WRI).

Companies operating in the region are also investing heavily in fire prevention on peat land. Aida Greenbury, APP managing director for sustainability and stakeholder engagement, said in a recent statement that the company spends more than $4 million a year on fire detection and response activities as well as infrastructure maintenance and personnel training.

Kusnan Rahmin, the president director at PT Riau Andalan Pulp and Paper (RAPP), a subsidiary of APRIL, said the group has a no-burn policy and had often been “a victim of slash-and-burn activities from outside the concession”.

He said RAPP has similarly spent $6 million on 875 staff, helicopters for water bombings, 25 car patrols, 10 fire buster cars, 27 boats and 230 water pumps to extinguish fires in the region.

Kurniawan noted, however, that companies do not have ‘blueprints’ for protecting their concession areas. “There are many routes into the forest and there is easy access to enter and clear the land by burning. The companies do not always station security personnel on the perimeter to protect the land,” he said.

He also alluded to companies who “put on a show” with fire-fighting equipment and teams at their headquarters rather than putting them to work at the various plantations.

Indonesia’s forests are disappearing faster than anywhere else in the world... The level of action must match this urgency.

**COMPANY CULPABILITY**

Along with APP and APRIL, Singapore-listed palm oil producers Golden Agri Resources and Wilmar International were also implicated in the burning of forests and peatland in Riau and the resulting haze.

Buckling under intense scrutiny and pressure from environmental groups such as Greenpeace International, Wilmar International declared a ‘no deforestation, no peat, no exploitation’ policy last December which states it will not engage in the development of High Carbon Stock (HCS) forests, High Conservation Value (HCV) or peat areas.

Other companies – APRIL in Jan, APP in Feb and Golden-Agri in Mar of this year - have since committed not to clear new land for plantations until assessments are done to ensure compliance with various regulations issued in recent decades. These laws prohibit development on peat areas that are more than 3m deep or that are in conserved or protected lands.

These regulations have largely been ignored in the past as it is not mandatory for companies to conduct such assessments. These companies now say their commitment extends to their supply networks as well.

Kurniawan said: “It comes down to the personnel making the decisions in the companies. If they are ethical, they will reject permits issued for protected forests.”

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RE-HYDRATING LAND - A SOLUTION?

One solution to help stop the burning is to re-hydrate peat areas. Kurniawan shared that the Indonesian government had previously asked local NGOs to undertake the damming of canals so as to achieve this, but the NGOs would agree only on condition that the entire sum of the earmarked IDR20 million will be used directly for the work, after deducting for taxes. After they were informed by the government that, besides taxes, various “fees” will also be deducted, the NGOs declined to take on the project.

Speaking off the record, a plantation company spokesperson based in Singapore seemed surprised to learn that the canals drained the peat areas, contributing to the haze problem. She said the canals were dug for water management purposes.

She also said that the company’s zero-burning policy applies only to operational plantations, and not to the rest of the land that they have concessions for. Getting a concession, which has a validity of three years, is just the first step in an often long-drawn process of starting a plantation. Sometimes, companies dig canals for transportation purposes during this period, inadvertently draining the peat soil.

The concession only gives a company the right to assess the land for suitability and begin negotiations for compensation with any existing residents living on the land – it does not give the company the right to cultivate. Hence, there is no motivation for the company to incur costs hiring staff and providing equipment to prevent and fight possible fires.

Kurniawan said: “Companies are not willing to undertake the damming to rewet the peat as there are too many canals and it will be too expensive. They will remain in Riau for about 30 years to take what they can of the resources before leaving.”

Meanwhile, organizations such as WRI and Greenpeace International continue to pile on the pressure for companies to commit to zero-burning policies. WRI forests program global director, Dr. Nigel Sizer, told Eco-Business in a statement that Singapore’s new law “marks a new way of doing business”.

“Any companies caught using fire illegally now face the massive reputational risk of being dragged into court in Singapore as soon as their executives step foot on the island. Their customers, bankers and insurers will surely shy away from doing business with them.

“Although the new law alone will not address all the deep-rooted causes of the fires... the message is becoming increasingly clear for individuals and companies that burn land illegally—playing with fire has serious consequences,” he said.

Bustar Maitar, head of the Indonesia forest campaign at Greenpeace International, agreed, adding that Singapore’s new law must be matched by equally strong measures from the Indonesian government.

He called on major consumer companies such as Unilever, Nestle, and Procter & Gamble to “use their power in the market to tell suppliers to stop the bulldozers and demand forest protection.”

“Indonesia’s forests are disappearing faster than anywhere else in the world... The level of action must match this urgency,” he said.
Significant erosion of freshwater quality has been added to the list of risks associated with palm oil cultivation, according to a recent study conducted by United States scientists, who focused on small streams close to palm oil plantations and forest areas in West Kalimantan, the Indonesian part of Borneo.

The researchers, who published their findings in the *Journal of Geophysical Research: Biogeosciences*, noted that while the rise in carbon emissions due to land clearing for palm oil cultivation has been widely documented, there is a dearth of study on the impact of palm oil plantations on the quality of freshwater sources close to plantations.

“Local communities are deeply concerned about their freshwater sources. Yet the long-term impact of oil palm plantations on freshwater streams has been completely overlooked until now,” said co-author and team leader Lisa M. Curran, a professor of ecological anthropology at Stanford University and a senior fellow at the Stanford Woods Institute for the Environment.

Curran and her colleagues studied the small streams flowing through palm oil plantations and smallholder agriculture in and around the Gunung Palung National Park, a protected forest area in Indonesian Borneo.
They found that water temperatures in these streams were almost 4 degrees Celsius (more than 7 degrees Fahrenheit) warmer than forest streams, while sediment concentrations were up to 550 times greater. The researchers also noted a high rate of oxygen consumption in these streams - an important measure of a stream’s health during a drought.

This situation, coupled with effects from a massive El Niño-associated drought, could lead to a ‘perfect storm’ and cause the collapse of freshwater ecosystems, warned Curran.

The study cited land clearing, plantation management - which include fertilisers and pesticides application - and processing of oil palm fruits to make crude palm oil as the sources of sediment and other harmful substances that flow into the streams.

The clearing of vegetation along stream banks also has an impact on plant life that organisms in the stream depend on for sustenance and shade, the study added.

The researchers highlighted that the study is one of the first to examine palm oil’s effects on freshwater ecosystems. The sustainability of other water resources, which include marine life such as fisheries, coastal zones and coral reefs — many miles downstream — remains unclear.

Curran and the study’s lead author, Kimberly Carlson, a postdoctoral scholar at the University of Minnesota’s Institute on the Environment, have previously conducted researches on palm oil cultivation in Indonesia.

Their research revealed that from 2000 to 2013, the use of Indonesia’s land for oil palm cultivation more than tripled, with about 35 per cent of Indonesian Borneo’s unprotected lowlands predicted to be cleared for palm oil in the coming years.

“Our findings suggest that converting logged forests and diverse smallholder agricultural lands to oil palm plantations may be almost as harmful to stream ecosystems as clearing intact forests,” emphasised Carlson.

Carlson and Curran, however, offered solutions through improved practices that include maintaining natural vegetative cover next to streams and designing oil palm plantations that do not intersect directly with waterways, as well as those practices pioneered by the Roundtable for Sustainable Palm Oil.

“We hope this work will highlight these issues and bring a voice to rural communities’ concerns that directly affect their livelihoods,” said Curran.
The Philippines, a primarily rice- and coconut-producing country, has plans of producing palm oil as a means to reforest areas that have been affected by illegal logging, to combat climate change, address food security and to increase the income of rural communities.

The Philippines has recently declared ambitions to become a major palm oil player; experts at the recently-held Responsible Business Forum on Food and Agriculture weigh in with some recommendations on how it should proceed.

BY ELGA REYES

The Philippines, a primarily rice- and coconut-producing country, has plans of producing palm oil as a means to reforest areas that have been affected by illegal logging, to combat climate change, address food security and to increase the income of rural communities.
The Philippines is currently a minor producer of palm oil in the Southeast Asian region, but this is set to change with the country recently declaring ambitions to convert some eight million hectares of idle lands across the country into oil palm plantations.

This will not only aid in reforesting denuded areas but also boost agricultural production in the country, said Ramon Paje, Secretary of the Department of Natural Resources, in a May announcement. Palm oil is also largely seen as an alternative to one of the Philippines’s major crop, the coconut, since there are more financial returns in cultivating oil palm in one hectare of land compared to farming coco trees.

Paje noted that Indonesia, which only has six million hectares of oil palm, reaps US$50 billion annually from this industry – an amount that is nearly the size of the over US$50 billion (more than two trillion pesos) 2014 national budget of the Philippines.

Leaders of the palm oil industry, however, cautioned the country to tread carefully in their palm oil expansion at the recently held two-day Responsible Business Forum on Food and Agriculture in Manila on 14 July. Discussing the challenges and opportunities of the sector, they flagged social and environmental issues that the palm oil sector faces in Indonesia and Malaysia, such as continued deforestation, increased emissions from illegal burning of trees, and the marginalisation of indigenous communities.

At a panel discussion chaired by Darrel Webber, secretary general of the Roundtable on Sustainable Palm Oil (RSPO), experts made five key recommendations for increasing productivity, improving livelihoods and reducing environmental impacts of palm oil in the Philippines:

**1. CONDUCT SOCIAL AND ENVIRONMENTAL IMPACT STUDIES FIRST**

The government’s plan to convert eight million hectares of idle and denuded lands into oil palm plantations will not only serve as reforestation efforts but also provide communities with much needed income, said Pablo Pamplona, director and secretary of the Philippine Palm Oil Development Council, tasked to assist the government in creating the necessary framework for palm oil expansion.

Webber noted the Philippines’ good intention to help communities, but pointed out that how this will be implemented on the ground should be monitored. Landscape-level social and environmental impact studies will help identify what areas are meant for cultivation and prevent encroachment on forested areas, noted the more than 30 experts who participated in the working group.

Encroachment in sensitive areas is a high-profile issue in Indonesia and other established palm oil countries, said John Clendon, managing director of Univanich Palm Oil, one of Thailand’s leading exporters of palm oil.

**2. IMPLEMENT SUSTAINABLE PALM OIL PRACTICES**

The working group also recommended that new companies venturing into palm oil in the Philippines be mindful of the financial consequences of operating their plantations unsustainably. Chaoni Huang, head of business development for Asia of British environmental consultancy Trucost, explained that there are “unpriced environmental liabilities” when a firm does not strive to meet sustainability standards or im-
prove their processes, which could eventually hurt the bottomline.

Huang, who helps organizations evaluate their operations through the value of natural capital or “making nature accountable in the market system”, cited a case study they conducted with Brazilian cosmetics firm Natura on agroforestry and monoculture systems of palm oil production. Based on their findings, the total environmental and financial benefits of operating a sustainable plantation is three times higher than the monoculture system, she said.

Monoculture, or the planting of one crop across a plot of land, is a common agricultural practice that negatively impacts the ecological balance of the soil and greater area, as well as affecting the traditional way of planting of rural communities.

Huang also added: “Once we account for the environmental benefits I think the higher cost of RSPO production should be justified, because companies forecast business risks all the time but it’s time for them to forecast the business risk from deforestation and other environmental challenges and price that into the market,” she noted.

In addition, other experts pointed out the potential gains from meeting global sustainability standards.

Sebastian Sharp, head of investor relations of Indonesian palm oil firm BW Plantation, said: “If you aim to produce high quality palm oil, you’re going to look at all these best practices like looking after the soil and using less chemicals.” This better quality oil can command premium prices, just as those experienced in the organic food and extra virgin olive oil industries in recent years, he added.

There is also a reputational risk with not being sustainable, commented Max Baumann, program advisor for environment and rural development of German government-owned development company GIZ. In Norway, there was a case of palm oil being substituted by other oils due to the former’s negative image, he said. If this image continues to be bad, consumers will demand for a product without palm oil, he emphasised.

3. GOVERNMENT AND PRIVATE SECTOR SHOULD WORK ON A PRO-FARMER MODEL

Since the palm oil expansion is aimed to alleviate the poverty of agricultural communities in the Philippines, both the government and businesses should assist smallholders in planting this crop, which is different from their usual produce of either coconut, sugar, cacao and others.

The working group recommended that the government increase education and training opportunities to farmers, set up a cooperative model, indicate a minimum price of palm oil to protect farmers’ income, and establish private-public partnerships to lease lands for building mills.

John Perrine, chairman of banana and pineapple plantation company Unifrutti Group Philippines, also noted that since sugar tariffs will
be reduced to five per cent in the upcoming Asean integration in 2015 and thus bring in competition to the local market, sugar farmers in the south will most likely turn to palm oil to replace their lost business in sugar.

And since sugarcane cultivation requires more manpower than palm oil, government intervention is required to encourage mixed development of crops, along with palm oil, to soak up this excess labour and prevent a mono-crop situation, said the working group.

4. GOOD SEEDS SHOULD BE PUBLIC GOODS
There has to be a balance of several factors to improve productivity and yield. Land is one such component, noted Clendon. This is why palm oil cultivation thrived in Indonesia and Malaysia, where there are more virgin lands and the countries are nearer to the equator, unlike the Philippines, he said.

Another main component is the seed, and this can be improved through science and technology. Scientists are experimenting with a variety that is drought-resistant and sturdier against typhoons, said Pamplona.

Currently, seeds used by large growers can produce up to four tonnes of oil palm fruit per hectare, which is twice what smallholder farmers can produce, noted the working group.

The difference is all in how good the seed is, they added. Such seeds costs about 40 per cent more and is also more difficult for small farmers to acquire. The group suggested that government provide subsidies to farmers.

5. CREATE FINANCIAL INNOVATION
The sustainability of palm oil needs to extend to financial sustainability as well, said Pamplona, particularly in terms of financial support that the government can provide. When farmers see the benefits of growing oil palm – which is more yield per amount of land used compared to soy, sunflower and coconut – many will demand to plant this crop and they will require capital to start.

Micro-financing through commercial banks can help farmers purchase equipment, vehicles and other farming needs, noted the experts. National banks or development banks should engage in risk-sharing with commercial counterparts to stimulate financial innovation that can boost smallholders’ productivity and livelihood, they added.

Lastly, they also flagged the gestation period of oil palm development, which is about five to seven years before the first harvest, as an area of concern. Government and other stakeholders should determine a long-term financing model that will encourage the sustainable development of palm oil in the Philippines. This will help deter farmers from being tempted to clear more forests before an initial harvest is done, said Webber and the experts.

These recommendations are part of a lengthier list presented at the last day of the forum, which featured six different working groups that discussed the sustainability of some of the world’s key commodities, including rice and palm oil. The event was organised by Singapore-based events firm Global Initiatives in partnership with WWF-Philippines.
Give people their land, cut global emissions

A new study by the World Resources Institute and Rights and Resources Initiative shows that government protection and legal recognition of community forest rights can lead to significant carbon emission reductions.

Governments in forested countries should look at strengthening the rights of their local communities as a key strategy to reducing billions of tonnes of carbon emissions, said a newly-released report.

Published by the World Resources Institute (WRI) and Rights and Resources Initiative (RRI) in July, the study provides evidence – the most comprehensive to date - that links government protection and legal recognition of community forest rights with reductions in greenhouse gas emissions.

The authors, who used high-resolution mapping data to analyse 14 heavily-forested countries including Brazil, Indonesia and Colombia, found that when governments enhanced and enforced forest rights, communities were more successful at reducing deforestation.

In fact, deforestation rates inside community forests were dramatically lower than in forests...
outside those areas. For example, in a part of the Mexican Yucatán, it is 350 times lower; and in the Brazilian Amazon, it is 11 times lower.

The report, called “Securing Rights, Combating Climate Change: How Strengthening Community Forest Rights Mitigates Climate Change”, noted that indigenous peoples across the world have government-recognized rights to forests containing 37.7 billion tonnes of carbon – which is about 29 times the annual emissions from all passenger vehicles in the world.

Deforestation and other land uses make up 11 per cent of global carbon dioxide emissions.

Global research organization WRI president and chief executive, Andrew Steer, said: “This golden opportunity to address climate change is staring us right in the face. With at least 37 billion tonnes of carbon safely stored in community forests around the world, strengthening community rights is good for the climate and good for people.”

“Every head of government, minister and climate negotiator should pay attention to this important, if often overlooked strategy to address climate change. It’s an approach to climate action that should be right up there with REDD+ or increasing energy efficiency,” he added.

REDD+ is a United Nations initiative that offers financial incentives to developing countries to reduce carbon emissions through protecting and restoring forests.

The report also offers cautionary tales on the fate of forests when governments undermine community forest rights. Government allocations of indigenous lands to mining, oil, and natural gas concessions are a major cause of these devastating deforestation levels, it said.

In Indonesia, for example, out of at least 42 million hectares of community forests, only 1 million hectares are legally recognized by the government. It routinely allocates indigenous community forests for oil palm concessions, industrial timber plantations for pulp and paper, and other conflicting land uses.

Deforestation is the country’s largest source of carbon emissions and its forestry management is inseparable from its climate change policies. The nation has set an emissions reduction target of 26 per cent from projected 2020 levels.

Report author Caleb Stevens told Eco-Business that despite the urgency to address the situation, the Indonesian government has delayed action on recognizing communities’ legal rights over their forest homes.

He said the government should implement the 2013 Constitutional Court ruling which for the first time recognizes community ownership over their forests. Specifically, it ruled that community forest could no longer be classified as state forest.

Every head of government, minister and climate negotiator should pay attention to this important, if often overlooked strategy to address climate change. It’s an approach to climate action that should be right up there with REDD+ or increasing energy efficiency.

—Andrew Steer, WRI president and chief executive
This is a historic breakthrough as most of Indonesia’s forests have been claimed by the government since the 1967 Forestry Law which prevented millions of forest peoples from having legal rights to their forest homes.

By mapping community forests and identifying 42 million hectares of community forests, Indonesian NGOs such as AMAN and JKPP are trying to help the government implement the new law—facilitating the process as it were by laying the groundwork, he noted.

“If these 42 million hectares are legally recognized and protected, then about 44 per cent of Indonesia’s forests would be legally recognized community forest. This would turn Indonesia from a laggard on this issue to a leader, on par with more progressive countries like Bolivia and Nepal,” he said.

The report also made five key recommendations that its authors say will significantly reduce global carbon emission from the loss of forests:
1. Provide communities with legal recognition of rights to their forest;
2. Enforce community forest rights such as mapping boundaries and expelling trespassers;
3. Provide technical assistance and training to forest communities to improve sustainable forest use and market access;
4. Engage forest communities in decision-making on investments affecting their forest; and
5. Compensate communities for the climate and other benefits provided by their forest.

Andy White, coordinator of RRI, a global coalition of organisations dedicated to empowering local and indigenous communities in forest management, said: “No one has a stronger interest in the health of forests than the communities that depend on them for their livelihoods and culture.”

“Research has shown time and time again that clear and secure property rights for indigenous peoples and local communities have greatly boosted the capacity of countries to achieve national-level forest protection and restoration.

“It’s tragic that this has not yet been fully adopted as a central climate change mitigation strategy. For us to get serious about curbing climate change, we have to get serious about respecting the rights of local communities to the lands they live and depend on,” he added.
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Organisers:
Sustainable cities need integrated policymaking

At the sidelines of the recently concluded World Cities Summit 2014, Centre for Liveable Cities head Khoo Teng Chye shared with Eco-Business why policymakers should ‘fight productively’ and engage in critical thinking to arrive at integrated, sustainable solutions for cities.

More than 100 speakers who shared their insights at the four-day summit identified the use of technology, long-term planning and honest, transparent politics as key responses to the challenges that will accompany the unprecedented speed and scale of rural to urban migration.

This year’s summit, themed “Liveable and Sustainable - Common Challenges, Shared Solutions” and co-located with the Singapore International Water Week and CleanEnviro
Singapore Summit attracted some 20,000 participants.

Jointly organised by Singapore’s Urban Redevelopment Authority (URA) and Centre for Liveable Cities (CLC), WCS also featured a platform for city mayors and leaders from around the world to share best practices with one another, and a symposium for young city leaders.

Eco-Business interviewed CLC executive director Khoo Teng Chye at the sidelines of the mega-event, about the myriad challenges that rapid urbanisation brings, Singapore’s strategic role in overcoming these challenges, and the best way forward to achieve the much-needed “integrated policymaking” that summit participants called for.

Singapore tends to fare quite well on liveability indexes - for example, it has been called Asia’s most liveable city, and it is third on the Global Liveable Cities Index. However, it has also ranked poorly on indexes relating to cost of living and inequality. How can urban planning efforts help resolve this disparity?

By definition, cities have higher concentrations of people and economic activity, and they tend to attract highly educated, higher-earning individuals as well as low-wage workers seeking a better life.

As a densely populated city lacking land and other natural resources, Singapore is certainly vulnerable to the negative impact of inequality.

Urban planning is important in mitigating the spatial manifestation of inequality in a city. Singapore’s urban planning and housing policy, for example, have had remarkable social consequences. The fact that over 80 per cent of the population live in public housing means that the low to the upper-middle income groups live in the same neighbourhoods. There are no fences or gates, and the recreational spaces are for all. Social cohesion and equity is preserved through everyday interactions and common spaces.

Economic and social inequality can also be reduced by improving the distribution of various amenities, infrastructure and resources, such as public hospitals and schools. When designing new towns, the Housing and Development Board (HDB) includes multiple affordable food options, green spaces or parks, food markets (or traditional wet markets) and supermarkets, and well-maintained libraries open to the public.

At the same time, URA allocates zoning categories to situate residential neighbourhoods near to regional malls and light industrial parks. The availability and quality of public transport, pedestrian walkways and bicycle paths provide easy access to employment clusters, seek medical treatment, and purchase goods and services. This in turn can alleviate the lived experience of urban inequity.

Ultimately, governments can no longer view income disparity simply as an economic problem to be addressed by economic agencies. Urban inequality often has spatial causes and manifestations. Hence, land use and urban planning agencies must be part of the policy solution, in collaboration with other public and private stakeholders.

The fact that over 80 per cent of the population live in public housing means that the low to the upper-middle income groups live in the same neighbourhoods. There are no fences or gates, and the recreational spaces are for all. Social cohesion and equity is preserved through everyday interactions and common spaces.

How can the private sector and civil society contribute to public policy and planning efforts in making cities more liveable and sustainable?

Through Public-Private Partnership (PPP) projects, governments and urban solutions providers can partner to develop key infrastructure projects, leveraging on the latest technologies and developing sustainable solutions for city living. While the private sector implements these projects, the government must maintain oversight and play a larger regulatory role to ensure their success.

In addition, technology applications, such as mobile phone apps, can go a long way to engage citizens in the planning and development of their cities. Public engagement is growing in importance and as residents demand to have more say in shaping their city.
Engagement during policy formulation is necessary so that initiatives can be implemented successfully and development projects will meet residents’ needs better.

While there will periodically be disagreements over specific policy decisions, these need not discourage us from seeking other areas for engagement. For example, while some in civil society were unhappy with the decision to build a road through the Bukit Brown Cemetery (an old cemetery located in central Singapore, which houses rich biodiversity as well as historically important graves), government and civil society – sometimes the same groups – are engaging each other effectively in other areas, such as the Rail Corridor (a 24-kilometre corridor of land stretching across Singapore, which was recently freed up due to the closure of the Malaysian railway station in the city centre. The community made a strong call for the land to be preserved as a ‘green corridor’) or, more recently, over Pulau Ubin (a rustic offshore island that is currently the subject of a public consultation exercise on preserving the island’s natural and cultural heritage).

The theme for WCS 2014 is “Liveable and Sustainable Cities: Common Challenges, Shared Solutions”. Cities worldwide vary so widely in terms of population, size and access to resources; what challenges does this pose to developing solutions? What opportunities does this diversity present? Every city is different in scale, history and context. No one city is a model city, and there is no one-size-fits-all solution. However, cities in the same region, or which are at the same stage of development have much to learn from one another, as well as from cities that have gone through that development stage.

In this respect, the diversity of cities at the World Cities Summit presents tremendous opportunities for learning and collaboration. Some 130 mayors and city leaders are participating in the World Cities Summit Mayors Forum this year, probably the largest ever such gathering. The scope for sharing is tremendous.

In fact, I would suggest it is quite difficult for a participating mayor to not learn something useful from such an event.

The World Cities Summit is co-located with the Singapore International Water Week and the CleanEnviro Summit Singapore, because of synergies between urban planning, water, and environmental solutions. While these synergies are very intuitive to recognise at a policy level, what challenges do cities face in translating this holistic perspective into practical solutions on the ground? That is a good question, and one that CLC had studied as part of our research. Based initially on our research into Singapore’s development experience, we have identified integrated master planning and development, as well as dynamic urban governance, as the key fundamentals behind becoming a more liveable and sustainable city.

Let me highlight one of the principles of integrated master planning and development, which we call ‘fight productively’. We sometimes think co-ordination and collaboration should ideally be smooth, but in reality, some of the friction from different agencies colliding is desirable.
Former Singapore Deputy Prime Minister Goh Keng Swee was known to create fights to encourage more critical thinking, such as in the debate on whether to have a Mass Rapid Transit (MRT) system.

Former civil service Head Lim Siong Guan told us in an interview that Dr Goh “objected to the MRT because the case for having the MRT was that ‘you have no alternative’. That’s not to say that he objected to the MRT but he objected to the logic, and to people who don’t think deeply enough and argued deeply enough”.

Going through the difficult process of understanding each side - sometimes through serious debate - before coming to a sound decision is an important part of learning how to integrate urban planning, water and environmental solutions.

This is why the fact that WCS, SIWW and CESS are being held together is so valuable. It brings such a diversity of leaders and experts, which so much depth of experience, together in one place and with a shared desire for mutually beneficial exchanges.

What is the strategic significance of an event like WCS (and its two collocated events) to urban development around the world? How does it help shape Singapore’s position in the global urban landscape?

For Singapore, the city-state is well placed to lead the discourse on integrated urban solutions. Given our small size and limited resources, Singapore has always adopted a whole of government approach to urban planning and sustainability issues. We have had a unique and successful experience in urban development, especially our high-liveability-and-high-density model, which is relevant to the growing number of urban centres.

Singapore and Singapore-based companies are also urban solutions providers for the region and world. Many companies use Singapore as a base to export their urban solutions, for example water firm Hyflux, urban developer Surbana, commercial real estate provider Ascendas and energy and water solutions firm SembCorp.

Universities are also setting up research institutes here to build knowledge in this area, for example, the Lee Kuan Yew Centre for Innovative Cities in the Singapore University of Technology and Design, the Future Cities Lab set up by ETH Zurich, and MIT. Together with private corporate laboratories like GE and Siemens, Singapore has become a strong and well-connected hub for urban solutions.
The global middle class is projected to grow to nearly 5 billion people by 2030 and almost two thirds of this new middle class will be in Asia. The growing populations and disposable incomes across the region are expected to increase demand for consumer goods such as cars and electronics, amongst others.

Against this backdrop, experts say that the traditional “take-make-dispose” economic models, where manufacturing, consuming and disposing goods are a linear process, are becoming increasingly unviable. For example, the World Economic Forum estimates that 80 per cent of the US$3.2 trillion value of the global consumer goods sector is lost irrecoverable.

It is widely predicted that current economic models will not be able to cope with the resource demands and waste management pressures resulting from Asia’s rapidly growing middle class. New, innovative economic models are needed, and the circular economy has emerged as a viable option. Image: Shutterstock.com

**The circular economy’s trillion-dollar opportunity**

Peter Lacy, managing director of Accenture’s Asia Pacific Strategy and Sustainability Services, tells Eco-Business why the circular economy will not only help manage the challenges of rapidly growing Asia, but also holds trillions of dollars of opportunities for companies.

**Interview**

**By Vaidehi Shah**
erably each year due to this wasteful model.

The idea of a ‘circular economy’ is rapidly gaining ground as a promising alternative for businesses to reconcile their need for growth with pressing resource constraints and environmental objectives.

The concept refers to initiatives to restructure manufacturing and product design in a way that the materials used are returned to the value chains, product lifespans are extended through repair and refurbishment, and consumption is reframed in terms of temporary services rather than permanent ownership.

Circular economy thinking is already being widely adopted by business leaders, and proving to be a profitable business approach. For example, a recent study by UN Global Compact and management consulting firm Accenture found that 43 per cent of automotive industry chief executives polled were already looking into the circular economy as a source of competitive advantage. The firm also estimates that circular economy approaches can add as much as US$6 trillion to global economic growth by 2030.

In a recent interview, Peter Lacy, managing director of Accenture’s Strategy and Sustainability Services in the Asia Pacific region, speaks to Eco-Business about the “circular advantage” that businesses can enjoy by embracing circular economy thinking, how governments in Asia can support the growth of the movement, and the challenges and opportunities that this new mode of doing business presents.

What are the advantages of a circular economy over conventional systems, and how can businesses gain from this?

Firstly, better management of natural resources would help save costs, and allow businesses to reduce their operational expenditure. Secondly, a circular economy allows you to hedge against increasingly expensive and volatile commodities in the marketplace, thereby minimising risk. Third, it forces you to look closely at the use and disposal of products, and the needs of consumers at a more granular level. This creates a greater understanding of the consumer, and you are better able to shape value propositions.

For companies that want to go down the circular economy route, the key thing is to understand which business model is applicable to their own industry and value chain. Examples of possible models include a ‘circular input’ model which involves materials that can be recycled or are biodegradable; the ‘enhanced differentiation’ model in which organisations offer repair, upgrading and refurbishing services for customers; or the ‘sharing platform’ model, which allows users to share goods and services.

Once companies have identified a suitable model, appropriate technologies such as digital and social media, or engineering technology can help them develop their circular economy capabilities.

In a recent article you wrote, you mention that the circular economy revolution is being enabled by the digital revolution, and that Accenture has identified 10 disruptive technologies that are driving this. How will these technologies help manage Asia’s rapid growth, and what are the challenges of scaling them up in Asia?

We looked at more than 100 technologies to come to that pool of 10. The spectrum involves everything from mobile to cloud and social tech-
Rather than relying on this mythical beast of behavioural change, we are far better off creating the right policy structures, and incentivising businesses to innovate products and services that take away the additional labour of behavioural change.

—Peter Lacy, managing director, Strategy and Sustainability Services, Accenture

From technology, through to hybrid areas like 3D Printing or, more classic engineering technologies like the life and material sciences.

However, not all of them are cutting edge or rare - 3D printing is quite advanced, but things like mobile penetration and online commerce are very prevalent in Asia already. There are lots of opportunities to pick up some of those trends in Asia and drive them towards a circular economy.

Additionally, many circular economy principles such as sharing and resource efficiency are also not alien to Asian economies. I feel positive that much of the technology, infrastructure and principles required for a circular economy can be harnessed in Asia.

In Europe, the circular economy is aided by legislation and standards such as the End-of-Life Vehicles Directive, which sets clear targets for resource recovery from vehicles, and pushes producers to manufacture new vehicles also with a view to their recyclability. Are similar standards feasible in emerging Asian economies?

Yes, Europe has been helped to a large extent by having the right policy frameworks and the right set of incentives, especially in terms of putting a price – directly or indirectly – on natural resources. In addition to the End-of-Life Vehicles Directive, there is also the Waste Electrical and Electronic Equipment Directive, and legislation on packaging and packaging waste.

I think these policies are absolutely applicable in the Asian economy. You need to find the right policy mix, but I see no reason why it should inhibit competitiveness. If anything, it forces economies as a whole to be more resource efficient, manage risk more effectively, and become more focused on customers’ needs. Countries in Asia that start to move quickly and effectively towards some of these frameworks will enjoy a comparative advantage in the circular economy.

Which Asian economies are further along the road to achieving circular economy frameworks?

Singapore is renowned for focusing on resource efficiency, given its limited resource base and its challenges in waste and water management. The country could look more actively at the circular economy not just as a resource management issue, but also as an area of future comparative advantage, given its status as a major manufacturing base, global port and logistics hub.

One of the biggest opportunities in this area is converting awareness to innovation, and tangible consumer propositions. Singapore can create comparative advantage by incentivising research and development, and creating a framework of policy incentives that put a price on certain commodities, and rewards innovation and efficiency. This will help ensure that Singapore becomes one of the hubs and clusters of innovation on this topic for the region.

The circular economy relies heavily on consumers to be active participants in the recycling or waste return process, but everyday life seems to be dominated by a “throwaway” culture.
What behavioural insights can circular economy thinking lend to efforts to address this throw-away culture in everyday life?

I personally believe that although we can rely to a small extent on individual behaviours, there is a real limit to how far you can expect people to modify their behaviours. Rather than relying on this mythical beast of behavioural change, we are far better off creating the right policy structures, and incentivising businesses to innovate products and services that take away the additional labour of behavioural change.

We are creating a value chain that is neutral or even better, restorative on sustainability issues. I prefer the idea of re-engineering the system altogether than relying on individuals at the end of the life cycle.

In addition to successful circular economy businesses, ground up movements are increasingly embracing models of free consumption such as repair cafes and freecycling. How will these movements affect the viability of the circular economy?

Digital technologies and social media have allowed such movements to go to scale at a level that was not possible in the past, but I do not believe that this is going to be a big, game-changing proposition. These platforms are also at an interesting intersection with the movement towards currency innovation, such as BitCoin. The combination of technology, the sharing economy and currency innovations make this a very interesting space to watch in the future.

The circular economy was featured as the top most trend driving sustainability innovation worldwide in a recent report released by Scandinavian think tank Sustainia. What do you think this says about the potential of the circular economy in shaping a sustainable global future?

It does not surprise me that the circular economy was such a prominent trend. I do think that it is the key concept that unlocks our global ability to drive growth and prospect, and sustain livelihoods in a way that decouples manufacturing processes from natural resource use and environmental impact. When taken to the extreme, and in the long run, I hope it even starts to restore the natural environment.

But I think we also need to be honest and open about the limitations of the approach; that is, it is very focused on resource efficiency and the environment, and does not address all sustainable development challenges. There are much broader socio-economic challenges, and we should not overstate the case of the circular economy. It is by no means a panacea, but a powerful component, and one that we will see a lot more of in the future.
The public sector undeniably has an enormous impact on the lives of citizens, from determining the quality of life, to providing physical infrastructure and access to healthcare, education, and other services. Its performance is firmly tied to a country’s developmental success and this relationship between growth and governance is a central preoccupation for the UNDP Global Centre for Public Service Excellence in Singapore.

Set up in December 2012, the relatively new outfit is a collaborative effort between the Singapore Government and the United Nations Development Programme (UNDP) to promote innovation in the public sector for developing countries. Nestled in a quiet corner of the sprawling National University of Singapore campus at Kent Ridge, the centre is also tasked with advancing debate and identifying solutions to the public service challenges of the day.

Its centre director, Max Everest-Phillips, say that its location in Singapore is key to its work given the role of the public service in the city-state’s success story. Fifty years might seem a long time, but “in
the grand scheme of history, it’s a blink of the eye” and Singapore’s development in this span of time from a fishing village to one of the most dynamic cities is a remarkable achievement, he says.

The centre has set out to identify the factors that enable an effective public service and build knowledge which it can share with other developing states. In this recent interview, Everest-Philips shares more about the centre’s work, the role of the public service in sustainable development and its relationship with the private sector.

**Can you tell us more about the Centre and its work since it opened?**

The centre is a collaboration between UNDP and the Singapore government and reflects the strong relations but also the recognition of the role that the public service played in Singapore’s success story. We are trying to learn from the Singapore experience and identify what are they key factors for policy excellence in the public service.

We’re mandated to do two things. The first is promote evidence and knowledge. Second, is to act as a convening hub to organize meetings, exchange ideas, and fertilize new thinking on how to improve public service.

We came up with a framework with four key areas:

1. **How do you get the political leadership to work effectively with the administrative leadership?** Whilst in Singapore this works effectively, this is a real source of frustration in many developing countries where both sides are at war with each other.

2. **Public service ethos and the intrinsic motivation of public officials**. It is critical for the entire way the public service works - who gets recruited, promoted, pay structures and so on.

3. **The whole question of foresight/long term planning**. How can developing countries benefit from the experience of Singapore? Developing countries should be masters of their own future, and to do so you need to be able to predict it, so you can create it. By predicting it, you are creating it, so how to do long-term planning to create resilience, adaptability, a sense of being masters of your own destiny rather than being victims of it. It’s an important transition.

4. **Innovation - it’s a problematic term.** It is inherently positive, whereas change is more neutral term. When people talk about innovation, it’s really an expectation that what has been done is going to have a positive outcome although that’s not necessarily true.

We seek to challenge ways of thinking and provide developing insights. Development work is shifting rapidly from providing money and resources to help low-income countries, to helping them develop their own policy and learn from international experience to gain success.

Our role is to help UNDP and the development community make progress in this relationship between governance and economic growth. It’s a fascinating challenge once you start thinking about how the public service makes an enormous impact in everyone’s lives. One key issue is also how to communicate its importance - the image and of the public service tends to be at best somewhat dull and uninspired.

**Can you elaborate on the public sector’s role in sustainable development? Does it rank high on the agenda in this region where many countries are still developing?**

The key point is development is not sustainable if you do not have effective policies, or the capacity not just to plan but deliver things effi-

Development work is shifting rapidly from providing money and resources to help low-income countries, to helping them develop their own policy and learn from international experience to gain success. Image: Shutterstock
The key aspect of sustainability is not that it’s effective but that people have faith in it. Research shows that when people have trust that they are being treated fairly by the state, development happens.

—Max Everest-Phillips, Director of the UNDP Global Centre for Public Service Excellence

The speed of development in Asia is fantastic and the poverty reduction is mind boggling – there are millions lifted out of poverty in the last decade which is a fantastic achievement, but the sustainability of the environment remains a major concern. Getting an effective public service is absolutely essential if you’re going to achieve sustainable development goals. The role of the public service is going to increase in importance. If the centre can contribute to this dialogue, that would be excellent.

What about the relationship between the public and private sector? How can they work together to achieve shared developmental goals? The private sector brings resources and technical skills which are crucial for development, as not everything is state-run so it is important to get that relationship working well.

There’s a famous quote from (Winston) Churchill: “Some people regard private enterprise as a predatory tiger to be shot. Others look on it as a cow they can milk. Not enough people see it as a healthy horse, pulling a sturdy wagon.”

When public-private partnerships can be made to work, it is extremely beneficial. At the same time, it’s important to look critically at this area because it’s not always successful. In the UK, for example, certain private-public projects have been bogged down with legal agreements and documents. There is also concern that a lot of the fiscal burden was shifted to the future, with hospitals being built without the full cost being understood. So there is a complexity and transparency problem. So while the principle is good, I do think that developing countries need a lot of help making sure they are not victims of partnerships that are not working in their interest, or in the interest of development.

Getting that right, and helping the public service manage this relationship effectively is a very important function – one that the international community can help to provide.
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Corporations are the only thing that can save the world

We’ve always looked to non-profits and governments to solve our most daunting challenges, when we should be looking to the business sector for solutions, says Alice Korngold.

Thirteen months ago, after reading a draft of my book, *A Better World, Inc.: How Companies Profit by Solving Global Problems ... Where Governments Cannot*, a colleague said to me: “Okay, Alice, you provide many great insights and observations, but what’s your big takeaway?” To answer his question I had to zoom way out, and when I did, the answer became glaringly obvious: Only global corporations have the resources, global reach and self-interest to build a better world.

Governments are limited by borders, and the international community has failed to come to binding and actionable agreements. Non-govern-
mental organizations and nonprofits have made great strides in advancing the human condition, but lack the resources and scalability sufficient to make transformational progress.

My conclusion about corporations rang true based on all of my research, but it startled me to make such a statement — it felt like some sort of heresy. We all know that too often elements of the corporate sector have been responsible for creating the human rights abuses, environmental degradation and economic injustices that plague the world today — and some continue to do so.

Yet, my research provided extensive evidence that some leading companies are finding solutions to the world’s most daunting challenges — and that these multinational corporations have the vast financial, technological and human capital; the global footprint; and the profit incentives and market forces necessary to make change on the level needed as we face so many problems at once, such as climate change, ecosystems degradation and poverty, and issues around education, health care and human rights. NGOs, nonprofits and governments simply do not have all of these.

That said, the evidence also shows that companies are only successful in global problem-solving when they partner with NGOs and nonprofits, and sometimes with other companies; engage effectively with stakeholders; recognize that sustainability is a matter for board governance; and commit to accountability and transparency.

For example, Allan Pamba’s work at healthcare company GlaxoSmithKline — in partnership with telecommunications company Vodafone — is saving the lives of newborns by increasing the uptake of DPT vaccines in Mozambique. By registering pregnant women on the health ministry database when they deliver their babies, alerting the mothers via text messages about the availability and importance of vaccinations, and texting reminders when it’s time for each of the follow-ups for the DPT series, GSK aims to increase the uptake for the third dose from 76 per cent to 86 per cent. “Seven million children die every year before their fifth birthday, many of these from vaccinable diseases,” explains Pamba. “A 10 per cent increase in vaccine uptake could result in hundreds of thousands of lives saved every year.” Through this mobile-enabled vaccination program, GSK and Vodafone are providing a sustainable business solution that involves community health-care workers on the front lines and engages mothers in taking responsibility for saving the lives of their children.

Pamba grew up in Kenya and worked in clinical care in the country for government services, mission hospitals and research hospitals. “As a child, I grew up in an environment where all I saw was donated aid,” he says. “I fell into a trap of ‘give me, give me.’ As a young physician I recognized that that doesn’t work. I woke up to the fact that for solutions to be sustainable, you need to earn and buy. That’s why I support this approach. It gives people their dignity.”

The GSK and Vodafone model is also good for business. “We are not a charity. We are a business,” Pamba says. “But we measure our success by the volume of medicines and vaccines that we get through into the 50 least developed countries, rather than the profit we make. Our target — set in 2010 — is to grow the volume fivefold by evidence shows that companies are only successful in global problem-solving when they partner with NGOs and nonprofits, and sometimes with other companies; engage effectively with stakeholders; recognize that sustainability is a matter for board governance; and commit to accountability and transparency.
long-term success of its business while also being good for Earth’s ecosystems. Third, companies benefit by reducing costs. Johnson Controls, for example, is retrofitting old buildings for energy efficiency — buildings such as the Empire State Building in New York City and the Inorbit Mall in Mumbai. Energy efficiency is cost effective for business tenants and so beneficial for commercial real estate companies; it’s also good for the world, especially since 70 per cent of people will live in cities by 2050, and the building sector consumes 40 per cent of the world’s energy.

Investors, consumers and employees are rewarding companies for their global problem-solving strategies. Not only are socially responsible investment assets estimated to be as high as $30 trillion, but even mainstream investors are recognizing the importance of companies investing in sustainability. According to the nonprofit sustainability advocacy group Ceres, mutual funds are showing record high support for climate change shareholder resolutions. And consulting firm Ernst & Young’s 2014 proxy preview shows increased investor attention to sustainability and board governance and accountability.

Consumers care as well. Deadly factory fires and other horrendous human rights violations tarnish the reputations of companies, while goodwill is generated by companies such as Unilever, where the CEO Paul Polman has committed the company’s mission and strategy to sustainability. Employees, too, prefer to work with a sense of purpose and for companies that are doing good in the world.

None of this is to say that governments and NGOs do not have a role to play in improving the world. Indeed, they also have essential functions. Government needs to set regulatory boundaries and hold companies accountable for their business practices. NGOs and nonprofits have been and will continue to be keepers of the flame, focusing society on pressing issues, providing experience and expertise, and ensuring that all members of society are included.

But let me be clear: The biggest opportunity we have to solve our most challenging problems comes from multinational corporations, some of which are becoming the most powerful drivers in building a better world.

Alice Korngold is a consultant and author. This post originally appeared in Ensia.
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A sustainability committee by simple definition is a body that is accountable for the sustainability strategy and performance of the business. Not only is it a core part of good governance in any company, its role is also to integrate both business and sustainability priorities so that the company is able to thrive.

There are several reasons why a sustainability committee is valuable. From our experience working with corporate social responsibility (CSR) managers from private and public companies, one of the biggest benefits of having a sustainability committee is that it can address all functions of a business.

The role of a CSR manager, by its nature, cuts across business operations and support functions to orient the organization towards a triple bottom line. Also known as the ‘3Ps’ for people, planet and profit, this practice of considering not just business profits but also social and environment aspects of a company’s operations is gaining momentum globally.

Members of a sustainability committee play a role as champions of CSR within the company. In fact, a good mix of coordinating executives, board-level representatives and non-executives can be a powerful force to drive genuine engagement on sustainability issues amongst senior leaders of the business.

This is important because a lack of sufficient backing from key decision-makers to develop and sustain the company’s sustainability efforts can
often result in resistance from parts of the business required to report or implement the change.

**HOW TO FORM YOUR OWN SUSTAINABILITY COMMITTEE**

Unlike ‘taskforces’ and ad-hoc committees that are commonly established within companies today, a sustainability committee should be a permanent structure within an organization.

Members of the committee should put aside a regular timeslot over the course of the year to meet and discuss sustainability matters. These could be high-level discussions on strategic planning, or updates on ongoing projects such as sustainability reporting or community investment decisions. This meeting needs to be regarded with the same level of importance as any other board-level meeting. Often, it can be scheduled right before or after a board meeting.

Sustainability committees are usually chaired by senior-level executives in the organization. Examples of major companies in Asia whose sustainability committees are chaired directly by the CEO include ANZ Bank, Keppel Corporation and Shangri-La International Management.

The sustainability committee at Sembcorp Industries is chaired by its Chief Financial Officer, while StarHub’s is chaired by its Chief Marketing Officer.

If you are tasked with establishing a sustainability committee for your organization, here are three considerations:

1. Start with the objectives of the business and the CSR team. Be pragmatic about the goals you have set in your sustainability programme.
2. Establish who needs to be around the table. If you are working on a proposed list of committee members, make sure you list not just the names, but also their functions and areas where they are expected to contribute to the committee, based on their skills and experience. It should include representatives from all departments needed to deliver the programme. Do not forget your subsidiaries - they may possess certain strengths or face unique challenges that are important to the business and its stakeholders.
3. Seek a range of different skills, attitudes and input; bear in mind the arrangement must fit with the corporate culture. Many committees fall into the trap of groupthink - the practice of making decisions as a group that usually results in poor-quality thinking. Not only is this dangerous if bad decisions are mindlessly implemented, the time and resources wasted on ineffectual programmes can bring more despair than hope for stakeholders. A common practice among many companies is to include at least two non-executive directors on the committee – they are usually invited based on their expertise on particular sustainability issues relevant to the business.

**CREATING STRATEGIES FOR THE LONG HAUL: CHALLENGE OR OPPORTUNITY?**

Corporate Citizenship’s latest publication, *Creating Resilient Strategies*, addresses the challenges of aligning business strategies within the wider context of societal influences.

This year-long study - which included valuable insights from interviews with 16 global companies including Jaguar Land Rover and SingTel - analysed how companies managed disruptive forces such as regulatory changes, environmental catastrophes or even social media, all of which have an impact on their business.

While coping with market uncertainty is a daily challenge for all companies, some manage to stay resilient and create new business opportunities while others end up struggling with a fast-changing operating environment because they have failed to develop strategies that are sufficiently far-sighted and robust. Vital opportunities for innovation and long-term growth could be missed in pursuit of short-term gains.

This underscores the value of a well-rounded sustainability committee. With the right combination of expertise and experience, the committee can provide the lens and context to address such challenges - whether it is working with external stakeholders to identify issues that the company may have overlooked, or questioning why progress on certain issues might not have been as fast as expected. Guided by its overarching corporate vision, this committee can be a powerful force that not only contributes to sustained business growth, but also ensures that the company stays on top of its game for a long time to come.

Junice Yeo is Director of Corporate Citizenship Southeast Asia, based in Singapore.
51 per cent of China’s population and 58 per cent of Indians are classed as ‘aspirationals’ by a global survey, a term which refers to upwardly mobile consumers who care about style and sustainability. Image: Shutterstock.com

How the “aspirationals” are changing the world

Young urban shoppers, especially in Asia’s emerging markets, tend to value both style and sustainability. This can spur the growth of sustainable products and services, and open up new collaborative business models, says Doug Miller.

Solutions to some of our intractable global challenges could be found in 2.5 billion empowered, young and urban shoppers. These are the “aspirationals”, and the way they are uniting style and social status with sustainability values represents both an opportunity for business and a lever for change.

Aspirational consumers love shopping, but they also want to be socially and environmentally responsible and they respond to brands that take initiatives in this direction. While aspirational consumers are found all over the world, they are particularly highly represented in Asia’s emerging markets: 51% of Chinese people, and 58% of Indians, are classed as aspirationals.

Aspirationals are defined the same worldwide – based on how consumers answered questions about their attitudes and behaviour in research conducted by GlobeScan and brand consultancy BBMG (GlobeScan and its national research...
partners interviewed random samples of 1,000 consumers in each country by telephone or in-person during January to April 2014; the national results are considered accurate to within 3.5%, 19 times out of 20). Those in industrialized countries, however, tend to look beyond materialism, while their counterparts in emerging economies are more motivated by enjoying their new wealth.

Yet the social “face” aspects of conspicuous consumption, so visible in many Asian cultures, are far from the whole picture. In the Chinese mindset there is a strong, long-term, collective aspiration towards social and environmental progress. Urban citizens of emerging economies are also motivated by environmental conditions that are increasing their personal health concerns.

It is in Asia that the clean technology market is alive and well. Our research suggests that serious amounts of yuans and rupees are being and will be spent on people- and planet-friendly choices. For the foreseeable future, entrepreneurs and intrapreneurs with clean tech solutions for consumers will get earlier traction in emerging markets.

Across cultures, aspirational are particularly receptive to market offers in what is variably called the sharing, collaborative or “we” economy. In emerging markets, sharing a car, washing machine or other major appliance enables consumers to benefit from it more quickly than if they had to buy it outright, while greatly reducing its footprint, in both ecological and household budget terms.

In industrial economies, a key selling feature of sharing is getting to use a higher quality car, appliance or tool than a consumer would buy themselves, without the hassle of ownership. Stylish offers like BMW's electric “i” Series automobiles are well suited to this niche.

As with other consumers, aspirational are tribal: peer identity and group norms matter to them, and they respond to opportunities for meeting like-minded people and taking collective action. Brands that find ways to leverage individual actions into collective impacts across their entire consumer base can create the modern equivalent of “brand loyalty.” Unilever’s Project Sunlight is a case in point; 83 million “Acts of Sunlight,” from improving health to helping the environment, were recorded by consumers on its website after only six months.

Other corporate platforms that are well positioned to engage Aspirationals include BT’s Better Future, HP’s Living Progress, McDonald’s Together for Good, M&S’s Plan A and The Walt Disney Company’s Be Inspired.

Being upwardly mobile and highly socially engaged, both online and offline, aspirational are more likely than others to shape societal norms in their countries. Their power as a cultural force is illustrated by the way urban Millennials have made car-sharing services like Zipcar feel “cool” to the wider population.

Consequently, aspirational represent not only an opportunity for profit, but also for well-focused government leadership and nudges to mobilize latent consumer readiness to act in new ways. People know that government and business institutions can leverage larger change than they can as consumers; the public needs to see these institutions playing their part.

Aspirationals are redefining modern consumption, unlocking the market for sustainable products and services, and propelling the economy forward through new business models. Brands that tap the power of this segment will be big winners – and they will help to address humanity’s challenges in the process.

Doug Miller is Chairman of GlobeScan, the stakeholder intelligence & engagement firm with offices in London, San Francisco and Toronto. This post originally appeared on the World Economic Forum Blog.
How to engage your employees on sustainability

Companies may have well established sustainability initiatives, but when it comes to attracting support and participation for them, how engaged are their employees, really?

Even in companies with large global or regional sustainability programmes, there could still be a palpable disconnect from employees who see this as a top down initiative. Companies who manage to overcome this eventually gain many commercial and intangible benefits, such as cost savings and improved staff morale and bonding.

It can also be a real driver of innovation and a great way to attract and retain talent – especially Generation Y, who are increasingly looking to work in companies that reflect their own social and environmental values.

According to the Gallup-Healthways Well-being Index, an annual survey of job satisfaction among employees, the single most important way to engage workers is to give them meaningful work. The survey found that organizations that do this successfully have almost four times the earnings per share growth compared to organizations with lesser engagement in the same industry.

Any kind of culture change can be challenging and engaging employees on sustainability is no exception. However, there are positive stories which we can learn from to embed green practices in a company’s culture or to use as a driver for a more fundamental sustainability transformation at the product and process levels.

So how can companies engage employees around sustainability?

Here are some key steps that may help your organisation:

1. CREATE A SOLID VISION FOR YOUR SUSTAINABILITY STRATEGY

It is important for a company to articulate its sustainability plans and vision, and for the senior management to be part of the process. When employees see their leaders walking the talk and aligning their behaviour with the company’s sustainability strategy, it enables them to feel part of something bigger than their daily work.

2. CREATE AWARENESS

Sustainability can easily be construed as a topic that’s ‘out there’ and ‘big picture’ - far removed from the day-to-day activities of employees. This is why it is important to simplify complex ideas and keep them on employees’ radars through regular talks, workshops, and hands-on activities that cater to their knowledge and interest levels. One good resource is the Singapore Environment Council’s Project Eco Office, an outreach programme that provides companies with materials to help them raise awareness and cultivate environment-friendly habits in the workplace.
3. FACILITATE RATHER THAN INSTRUCT
The best ideas tend to come from employees themselves. Andrew Bryson, Singapore-based Regional Director of Transformation - Asia Pacific at Saatchi & Saatchi, shared how his company had worked with Walmart employees to create a voluntary personal sustainability project to help them make small changes in their everyday habits towards living a greener, healthier life. These changes were driven by the idea that each action was “small, able to be done anytime, anywhere and good for the organisation and our planet.” The other principles were that participation was completely voluntary, and the actions were ‘RISE’ - repeatable, inspirational, sustainable and enjoyable.

4. FIND AND SUPPORT CHAMPIONS
It is important to seek out natural enthusiasts who are keen to take the lead on sustainability initiatives, and give them necessary support through training and other assistance. This is an effective way to tap into the grassroots energy in the organisation and is as important as the top-down push that comes from the management. Encourage these champions to form and lead green teams across different levels that nurture a diversity of perspectives and interactions.

5. MEASURE AND MAKE COMMITMENTS
Enable employees to define metrics and share them on the intranet, so as to help them track progress on their efforts to reduce their carbon footprint. Help the team create simple tools to measure and share collective savings in emissions from taking public transport, carpooling, switching off appliances and so on. Encourage friendly competition amongst various teams to make it fun and interesting. For the company’s products and supply chain activities, ensure metrics link back to employees’ performance-based reward systems, so as to incentivize them to incorporate sustainability into their work.

6. COMMUNICATE & CELEBRATE
Talk to staff about sustainability regularly through newsletters, staff meeting and company gatherings. Share stories from within the organisation about the efforts and success of various teams. Another tool to use is the company’s sustainability reports which are often painstakingly created, but seldom leveraged as a topic of discussion with staff to create employee engagement. It is also important to regularly celebrate key milestones that are achieved by employees, as this reaffirms the importance that the organisation attaches to sustainability efforts.

Organisations should also consider moving from Engagement 1.0 to Engagement 2.0, which is characterised by a higher level of employee engagement towards sustainability, where employee goals and targets are more actively connected with the company’s sustainability strategy.

A company’s focus also expands from green office practices to innovation in operations and services. The motivation for some employees to adopt sustainable practices may stem from personal passion, but in Engagement 2.0 it becomes an organisation-wide movement with clearly defined incentives and career paths linked to the achievement of sustainability targets. The efforts of employees become supported organisation-wide and the company is able to capture the business and social value of such sustainability efforts, which begin to become embedded in its DNA.

There is all round gain to be made from a business, employee, societal and planetary perspective. It’s an ongoing journey, but one that is enriching and rewarding.

Bhavani Prakash is a sustainability speaker, trainer, consultant with Green Collar Asia.com

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Image: National Environment Education Foundation
Panasonic means business with ambitious sustainability targets

The global electronics firm recently announced that it will make its products and manufacturing processes more energy efficient such that it will save a potential 8 million tonnes of greenhouse gases by 2016.

Manufacturing companies have long pursued greater efficiencies for their products, but when a company publicly declares increasingly stringent emission reduction targets to achieve this, consumers know they mean business.

This is what electronics multinational Panasonic Asia Pacific has set out to do through its Eco Declaration Framework, a global initiative in which the company announces a set of environmental sustainability targets for a three-year timeframe that it will adhere to.

Each time it announces new targets, it also publishes results on how it fared in achieving previous ones.

In its latest declaration in June, the company’s Asia Pacific office pledged that by March 2016, its range of eco-friendly home appliances such as refrigerators, air conditioners, washing machines, microwave ovens and televisions in Southeast Asia and Oceania will cut carbon emissions by 8 million tonnes across their lifespan.

The company will meet their targets by enhancing the energy and resource efficiency of

Panasonic is enhancing the energy efficiency of its consumer product ranges such that they will save 8 million tonnes of emissions through their life cycles by 2015. Image: Panasonic Asia Pacific
individual products, such as increasing the energy savings of air conditioners by 65 per cent, and making washing machines 45 per cent more efficient.

This will be achieved by harnessing Panasonic’s Econavi sensor technology, which monitors factors such as human activity in rooms, or laundry load quantities, in washing machines. The technology controls power and water consumption based on this information to use energy and resources more efficiently.

By 2016, Panasonic Asia Pacific’s manufacturing practices will also be streamlined to reduce a further 700,000 tonnes of emissions versus business-as-usual levels – that is, level of emissions projected if Panasonic’s manufacturing practices did not undergo any improvements since the fiscal year ending March 2006.

Globally, the entire Panasonic group of companies recorded 3.13 million tonnes of carbon dioxide emissions for the financial year ending March 2013.

Under the Eco Declaration initiative, the company’s regional offices set targets appropriate to their specific region. In Europe, for example, the firm has also pledged to cut carbon emissions by 10,000 tonnes across its European manufacturing sites, achieve 99 per cent recycling rates in its operations and deliver a 5 per cent reduction in waste amounts relative to production. The company aims to meet all these targets by 2016.

Panasonic Asia Pacific managing director Junichiro Kitagawa said setting such ambitious targets was necessary to help reduce energy consumption, especially in rapidly developing Southeast Asia.

By 2035, electricity consumption in Southeast Asia will be almost three times of that in 2011, he noted, citing a recent Southeast Asia Energy Outlook Report published by the International Energy Agency.

“The strain on existing resources has also led more governments to formulate and strengthen environmental legislations, particularly in the area of energy efficiency”, he said.

“To meet this growing energy demand, Panasonic aims to power eco lifestyles with our innovative energy management technologies, comprehensive products and integrated sustainable solutions”, he added, saying that the company would also expand the range of available energy-saving consumer products.

By being accountable to our stakeholders and the general public, we aim to maintain the trust they have in the company and engage them in our sustainability efforts. The Eco Declaration also serves as internal targets to bring our employees together in the sustainability cause.

—Junichiro Kitagawa, managing director, Panasonic Asia Pacific

NEW OPPORTUNITIES THROUGH SUSTAINABLE INNOVATION

Kitagawa told Eco-Business that not only does pursuing these targets help Panasonic fulfil its environmental commitments, it also helps the company accrue cost savings and create new business opportunities.

“By setting performance benchmarks, we are able to constantly challenge ourselves to do better. Strengthening our environmental activities not only helps to reduce cost through energy saving measures in our manufacturing operations, but also contribute to the development and growth of specific businesses like business-to-business and business-to-government solutions, consumer electronics and housing”, he said.

Indeed, Panasonic’s innovations in energy efficient electronics have led to collaborations with other businesses and governments on projects that make cities smart and sustainable through the deployment of technology, products and solutions, and the provision of technical advice.

These include contributing to the Low Carbon Society for the Iskandar Economic Zone in Malaysia, and the Smart Home Energy Pilot feasibility study in Singapore.
The former is an initiative by the Malaysian government to develop a green corridor in the state of Johor by implementing a slew of sustainability initiatives.

The Singapore project, jointly conducted by the country’s Housing and Development Board and Energy Market Authority, is a year-long study that assesses the feasibility of energy efficient technologies such as home energy management systems which provide energy usage data to residents.

This is Panasonic’s second Eco Declaration since the programme was launched in 2009. The company exceeded the targets set for the previous declaration which was made in April 2010.

For example, the company’s green manufacturing practices achieved 638,000 tonnes of carbon emission reductions versus business-as-usual levels between April 2010 and March 2013, surpassing their original target by 38,000 tonnes.

Panasonic also set up three more ‘Eco Model Factories’ in Singapore, Vietnam, India and Philippines in recent years to showcase sustainability efforts in the manufacturing sector. This is in line with the company’s vision to set up one ‘Eco Model’ factory in each country with manufacturing facilities.

Students can also learn about the company’s green industrial practices through visits to these Eco Model factories. About 280,000 youth have benefitted from these programmes, exceeding Panasonic’s target of 200,000, it said.

CLEAR AND OPEN COMMUNICATION

The combination of internal innovation and external outreach through the Eco Declaration Framework has helped Panasonic establish an open and clear communication channel with the company’s stakeholders, the public, and even Panasonic’s large employee base, said Kitagawa.

“By being accountable to our stakeholders and the general public, we aim to maintain the trust they have in the company and engage them in our sustainability efforts”, he shared.

“The Eco Declaration also serves as internal targets to bring our employees together for the sustainability cause”.

In addition to public trust, Panasonic’s emphasis on accountability to its stakeholders has also been rewarded with greater business growth.

“The response from our business and government partners has been positive”, said Kitagawa, referring to the new partnerships that the company has clinched in both these sectors.

“On the consumer side, there is already an uptake in eco products, from 49 per cent to 80 per cent between April 2010 and March 2013. We hope customers will continue to switch to save,” he added.

Kitagawa told Eco-Business that he hoped that Panasonic’s sustainability benchmarking would spur other global manufacturers to follow suit.

“We hope this can spur other global manufacturers to join hands in the eco endeavour”, he said.
Cities that consume 30% less energy?

Certainly
By 2050, it will be a crime to inflict large-scale damage to the environment under international law, the world will use only 4 million barrels of oil a day, down from the 89 million barrels used daily in 2011, and all the fish consumed worldwide will only come from sustainable sources.

Every nation will also have signed up to a binding agreement on greenhouse gas emissions, malaria will have been eradicated, and the world’s population will register at 8.6 billion - 1 billion less than the projected figure by the United Nations Department of Economic and Social Affairs today.

This is the vision set out in The World We Made, a creative non-fiction book by Forum for the Future founder and director, Jonathon Porritt. Published by Phaidon in October 2013, the book is presented as a series of 50 retrospective essays written by fictional history teacher Alex McKay in 2050.

The World We Made outlines key global events, lifestyle changes and technological developments that will bring the “world back from the brink of collapse” to a more sustainable, secure, and equitable state by 2050. It is a multidisciplinary effort that addresses issues as wide-ranging as energy, food and water security, poverty, health, cyber security, and financial markets.

Porritt, who has also served as co-chair of the United Kingdom’s (UK) Green Party and the chairman of the UK Sustainable Development Commission, paints a picture of 2050 that is more optimistic than most scenarios today.

This rosy vision is made credible through Porritt’s deep understanding of the complex issues driving sustainability. Some of the solutions Porritt conjures, such as the development of new biofuels efficient enough to power aircraft, and the signing of a globally binding climate change agreement in 2020 are intuitive and natural progressions from the technology and policies that exist today.

Others, such as the Vatican declaring contraception to be “a matter of private conscience rather than papal direction” in 2018, or the predominance of artificially grown meat in food markets, are more controversial. The book is also tempered with realism, and acknowledges that despite the plethora of proposed solutions, some crucial targets might not

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**The World We Made: a hopeful note from 2050**

Through a series of imaginative and well-researched essays, Jonathon Porritt’s The World We Made shows how we can achieve a more sustainable, equitable and connected world by 2050 than the one we live in today.

**BY VAIDEHI SHAH**

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*Image: Phaidon*
be met. For example, the globally agreed upon target of limiting temperature rise to 2°C will be exceeded, and despite a series of technological, social, and political breakthroughs leading up to 2050, 2045 will still be “the worst year ever from the point of view of climate change.”

Nevertheless, the efforts by policymakers, scientists, communities, and even religious leaders are puzzle pieces that fit together seamlessly to depict a world that is by no means perfect, but far more sustainable and equitable than what it is today.

Despite its overall air of optimism, *The World We Made* also paints a dire picture of what the world will look like when its current unsustainable trajectory hits rock bottom. For example, the American city of New Orleans will be permanently evacuated due to rising sea levels in 2035 and a global famine will leave 10 million dead in 2025.

Porritt has no qualms about lambasting the idea of constant growth on a finite planet as a “pathetic illusion”, and calls people who will still own personal vehicles in 2050 “crusty old nostalgics”. His frank commentary, combined with the book’s casual, conversational tone, helps make a dense and complex issue accessible to readers.

The book is enriched by a collection of photoshopped images that depict the major transformations that will have taken place by 2050. It helps readers imagine how a slum in Lagos, Nigeria could be retrofitted with solar panels on every roof, or how air travel could be completely overhauled with the invention of “slow travel” air cruisers which look like they belong more to the world of science fiction than to reality.

*The World We Made* is chock-full of seemingly achievable and effective solutions for a better future. By presenting such a vivid idea of what the world could look like in 2050, the book gives hope that there are steps that individuals, communities and politicians can take to avert the disastrous consequences of climate change, population growth and poor governance.

It is a refreshing and reasoned voice amidst a sea of troubling predictions on the planets future, such as those by the Intergovernmental Panel on Climate Change’s fifth assessment report and the UK Met Office. The book promises hope even as it urges for quick and decisive action.

In a postscript, Porritt cautions that “if we can’t deliver the necessarily limited vision of a better world mapped out in *The World We Made*, then the harsh truth is that no other vision will be available to us anyway.”

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*We can still move to address today’s converging crises faster than the speed at which those crises threaten to overwhelm us.*

—Jonathon Porritt, author, *The World We Made*
Working towards sustainability