B4E

Business for the Environment

Global Summit 2011

27 – 29 April, 2011
Shangri-La Hotel
Jakarta, Indonesia



Delivering Transformative Solutions for our Planet

Summary Report

Kementerian Negara Lingkungan Hidup
Republik Indonesia

WWF

BKPM

KADIN INDONESIA

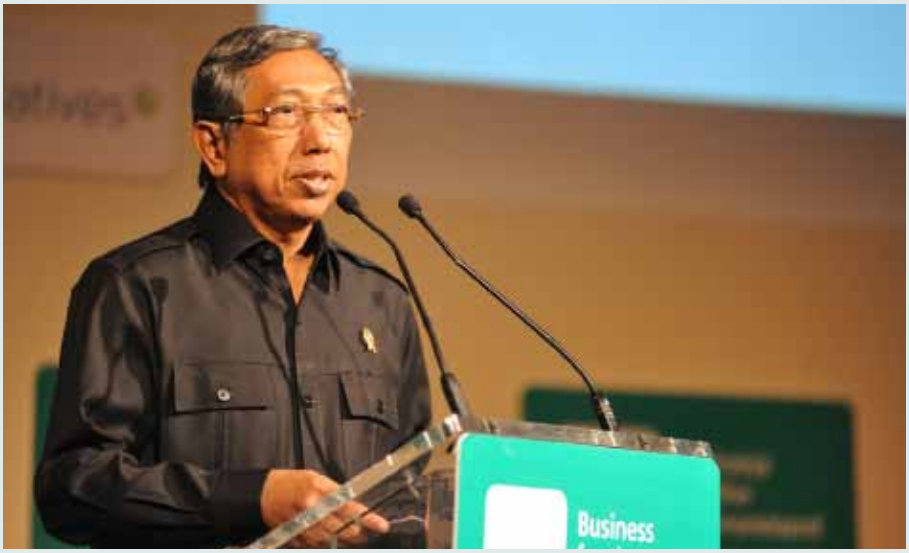
globalinitiatives

B4E, Business for the Environment, is the world's leading international conference for dialogue and business-driven action for the environment. The fifth annual B4E Global Summit is held in Jakarta from 27 - 29 April 2011, in partnership with WWF, Global Initiatives and the Government of Indonesia and KADIN. Themed "Delivering transformative solutions for our planet", the Summit will explore a new approach to business leadership that provides innovative, sustainable solutions and services for a clean economy and low-carbon future.

Contents

Thursday, 28 April 2011
Opening Statement

Gusti Muhammad Hatta,
Minister of Environment, Republic of Indonesia



This forum is essential as a medium for change, with views and ideas on how to synergize economic growth and environmental preservation to produce transformative solutions to save the planet. The Summit will support efforts by business leaders and businesses to use diversity and natural capital to devise solutions and services for a clean and green economy and sustainable future.

Climate change is not just an environmental challenge; it has the potential of unwinding years of development that could dramatically affect the future of humankind.

The post-Industrial Revolution world has seen rapid and fundamental changes in the way humans consume and live their daily lives. Over the last decade, the acceleration in globalization has bought tremendous benefits for people living in both the developed and developing worlds. At the same time, poverty and environmental degradation has continued to worsen, with an expanding world population and increase in international economic activities. It is clear that water pollution, land degradation and other types of pollution are not solely environmental issues, but also economic and development challenges. For instance, climate change is not just an environmental challenge; it has the potential of unwinding years of development that could dramatically affect the future of humankind. The economic consequences of the disaster require a global long-term response. Responding to these circumstances requires significant additional investment. This is why discussion of the green economy as a transformative solution is one that is timely and opportune.

The environmental as well as economic challenges today are immediate and complex. The green economy needs to be transformative and inclusive; it should aim for resource efficiency, poverty eradication and job creation and ensure sustainable economic growth. Indonesia has translated the green concept into its long-term national environment plan for 2005-35; the goal is a green and everlasting Indonesia. Indonesia believes that green economic strategies should: (1) promote resource efficiency and future competiveness to all stakeholders including the private sector and communities; (2) develop policies and guidelines to be implemented at international and local level through specific policy reforms, programmes and projects; and (3) build capacity for demonstration projects, partnerships and networking.

Governments face many challenges in managing natural resources and the environment. It is important to emphasize that bringing about more sustainable development will require the tireless efforts and partnership of all stakeholders.

Hopefully this dialogue will result not only in the development of a green business concept but also in an appreciation of the balance between human needs: preserving natural resources and environmental sustainability while continuing economic growth.

Suryo Bambang Sulisto,
Chairman, KADIN (Indonesian Chamber of Commerce and Industry)

For a number of reasons, Indonesia is the perfect place to be hosting discussions on transformative solutions for the planet at this time. Firstly, Indonesia has already been hard-hit by the impact of climate change, with flooding, landslides, forest fires, damaged crops and fisheries that affect millions of people and businesses every year. Second, through deforestation and forest fires, Indonesia is a significant contributor to greenhouse gas emissions that cause climate change. Third, and perhaps most importantly, Indonesia is the place where the Summit's transformative solutions can happen. Through collaboration with public and private sector and international and local partners, strategies and technologies can be developed and tested here to address the global problem.

Indonesian businesses can play an instrumental role in finding and delivering these solutions. Already, they are increasingly taking part in the movement towards developing a cleaner and more sustainable low-carbon economy. As Minister Gusti recognized, Indonesia's diversity and capital are great 21st century assets. These assets can be used in sustainable and innovative ways for long-term economic growth and development and at the same time contribute significantly to global efforts to reduce carbon emissions and promote long-term environmental sustainability. Indonesia's natural assets offer many investment opportunities, not just in forestry, agriculture, food production and resource development, but also in approaches to manufacturing. Minister Gusti again recognized that Indonesia must develop an investment regime that gives real incentives for high quality investors to bring in and develop their technologies and sustainable business practices. Indonesia's business wants to be a partner in this development and to develop its own capacity to develop and use these technologies and practices.

It is vital that the vast number of small and medium-sized enterprises, with their importance to Indonesia's economy, be brought into the movement for a sustainable environment.

This Summit can serve as a platform to showcase practical approaches, especially given Indonesia's level of development and awareness. It is vital that the vast number of small and medium-sized enterprises, with their importance to Indonesia's economy, be brought into the movement for a sustainable environment. This will require innovative approaches to capacity building. Minister Gusti is ready to support the process of delivering transformative solutions by enabling Indonesian businesses to engage. Yesterday, KADIN endorsed the launching of the Indonesian Business Council for Sustainable Development to create a platform for business leadership to act as a catalyst for change towards sustainable development. By the end of 2011, KADIN will provide the government with a white paper outlining ways in which Indonesian businesses will be part of the solution.

A quote from the famous inventor and environmentalist, Burkminister Fuller, sums up what the Summit is about: "You never change anything by fighting the existing. To change some thing, build a better model and make the existing obsolete".

Thursday, 28 April 2011
Opening Statement

Kemal Stamboel,
Chairman of the Executive Board, WWF Indonesia

This Summit is a chance for partners to renew their commitment and pledges to sustainable economic growth. These pledges have to go beyond slogans to produce concrete results. Businesses cannot work alone, and civil society is here to partner them.

Human beings have developed complex economies and social systems but have not always taken into account the natural limits of the planet. Now they are seeing the impact of climate change. The world is experiencing high commodity prices, a food and energy crisis, growing population and increasing demands for limited resources. While the full climate change story is still unfolding, the future is already made uncertain by the consequences of man's economic ways.

For 50 years, WWF has worked to promote sustainability and biodiversity conservation and has grown to be one of the largest environmental organizations in the world with more than 1,300 WWF projects and initiatives, and some 5 million supporters. In Indonesia, WWF works at field, local and national level in 26 sites. Activities range from helping preserve the habitats of species such as the Java Rhino, to working with indigenous people in Papua to encourage sustainable land use. WWF has joined with teachers and students to ensure that the educational curriculum promotes sustainable development. It also supports companies committed to greening their ways and facilitates a fair market exchange for common community products.

WWF believes in being forward-looking, innovative and solution-oriented. It works with companies to improve management and adopt best pro-environment practices through initiatives such as the Global Forest and Trade Network, Green Offices and the Heart of Borneo's green business network. Collaboration with businesses is mutually beneficial. It helps increase WWF's impact and achieves conservation goals by increasing businesses commitment to sustainable development and environmentally sound corporate practices. This in turn boosts the corporate brand, winning customer loyalty.

This Summit is a chance for partners to renew their commitment and pledges to sustainable economic growth. These pledges have to go beyond slogans to produce concrete results. Businesses cannot work alone, and civil society is here to partner them.

In this International Year of Forests, forest conservation must become a way of operating for businesses. WWF calls upon business to support the goal of zero-net deforestation and forest degradation by 2020. The scale and urgency of the problem requires a united response. The governor of Central Kalimantan has already taken the first step and inspired his province to be the first province for the REDD plus initiative. Many others are joining him. The province has successfully restored peat land that can prevent more than 1 million tons of carbon from being emitted in just a 50,000-hectare plot.

Consumer goods companies are also pledging to mobilize resources to achieve the zero-net deforestation. Companies such as Carrefour and Nokia are developing and implementing sustainability programmes in line with the zero-net deforestation goal and the government's 26% to 41% GHG reduction target. The growing efforts of companies towards environmental and economic sustainability are also reflected in the actions of the public. The Earth-hour event, for example, managed to mobilize millions of people. In Jakarta alone, 170 megawatts of energy was saved in one hour. WWF urges others to follow the bold Indonesian pledge on emissions reduction targets.

Andrew Steer,
Special Envoy for Climate Change, The World Bank

Ten years ago, only 10% of World Bank countries asked for help with climate change. Now almost 90% ask, and consider climate change one of the major issues of the partnership.

More than 90 countries have registered their intentions to address climate change with the UNFCCC. The problem is it's only about 60% of what needs to be done by 2020, if the world is warming by 2 degrees. For developing countries, up to 54% of GDP could be lost, permanently. The world is currently on the way to warming by 3 to 4 degrees, so effects could be much more serious.

There is good news though. In Cancun last year, the world made good progress building trust and agreeing on some important steps. On mitigation, countries agreed to register plans and open them to discussions, with 2015 set as the date to review the level of adaptation needed. Reforms in offset markets will lower costs and help more flows to low-income countries. The clean development mechanism could continue to operate after 2012 even in the absence of a new commitment period under the Kyoto Protocol. Progress was made to halt deforestation with an agreement in principle on country-level approaches and incorporating forests into global offset carbon markets. And the mechanism for developing technology centres in key developing countries was agreed. The challenge for negotiators is to add flesh to the bones of these agreements.

Ten years ago, only 10% of World Bank countries asked for help with climate change. Now almost 90% ask, and consider climate change one of the major issues of the partnership. Countries are using their own money and mixing it with international support. Last year, more than $250 billion were invested worldwide in clean energy, more than half in the developing world and $53 billion in China. Indonesia is becoming a serious player in renewable energy, particularly geo-thermal, where 27,000 mega watts of untapped capacity exist. There are also innovations at policy level and 100 countries now have renewable energy targets and policies.

More countries are introducing market-based instruments to reduce emissions. The World Bank has launched a $100 billion facility to help 20 middle-income countries introduce market-based mechanisms.

Carbon markets need to be reformed to take larger sums of money and go to low-income countries too. Other financial innovations include green bonds allowing organizations to tap into savings market to support developments in developing countries. The World Bank groups have already issued more than $3 billion in green bonds. Money is essential, and today is the first meeting of the Interim Community for the New Green Forum which potentially will be the largest international fund ever created, some $20-$30 billion a year.

Indonesia is showing great leadership with an ambitious target to lower GHG emissions by 26%. This is linked to a serious plan to conserve forests, including analysis of alternatives to logging, participation of key stakeholders, a new institutional legal framework and serious financial commitment from the government and international community. Indonesia is not willing to trade environmental protection for economic growth and job creation. The slogan is 26 with 7 – 7% being the rate of growth needed to employ its growing workforce.

Thursday, 28 April 2011
Opening plenary

Rethinking business: A solutions provider for the planet

Moderator:
Lasse Gustavsson (LG)
Executive Director, Conservation, WWF International

Sarwoto Atmosutarno (SA)
President Director & CEO, Telkomsel

Stuart Dean (SD)
CEO, GE ASEAN

Peggy Liu (PL)
Chairperson, Joint US-China Collaboration on Clean Energy (JUCCCE)

Frits van Djik (FD)
Executive Vice President, Zone Director for Asia, Oceania, Africa & Middle East, Nestle

Key points
The three most important take home messages are: First, solutions are available, it's a matter of scale and speed. Second, an important part of the solution is coming together across supply chains and industries to benefit from each other's expertise and streamline solutions across supply chains and industries. Finally, we have no choice, this must happen.

LG: How do panellists meet the challenge of new business thinking and what are the biggest obstacles to overcome to make this deep change?

SA: The key message is to use the benefit of mobile communication and mobile broadband infrastructure to stimulate and change people's behaviour and create a knowledge-based society.

While understanding the negative impact that aggressive broadband infrastructure could produce, if deployed unwisely, Telkomsel believes that the benefits of mobile communication services can have a far-reaching positive impact on the environment. Having the ability to conduct business and activities on hand increases efficiency and productivity while access to mobile communication has also increased the competitiveness of the rural economy.



SD: For the private sector to be involved, customers and companies need to be able to get a return on the investments that they're being asked to make.

It's going to take a huge amount of cooperation between governments, NGOs and private companies to really help solve these problems. So it's critical to get progressive government policies in place to encourage these kinds of investments. Subsidizing fossil fuels is not a good way to discourage use, nor to encourage emerging technologies. There are other ways to protect the underserved population, via income redistribution for example.

FD: Working with suppliers is about creating shared value. It is not about just putting up a plant or importing raw materials. Yes, Nestle is a commercial company and has to create value for its shareholders, but at the same time, it also needs to create value for society, and the community it operates in.

Every country needs a vision. Government must play a lead role in aligning all the stakeholders in taskforces, to work together towards solving these challenges through actions not words.

PL: The problem is how to bring solutions to China that can be implemented on a large scale. JUCCCE's role is to accelerate tipping points by convening key decision makers in China with solution providers from around the world. China is rapidly becoming the clean-tech laboratory of the world. Take just about any single technology and China is trying it out in terms of designating pilot cities and letting them experiment with solutions. These solutions, once they work, can be scaled across the country very quickly.

Discussion

Discussion focused on how to mainstream solutions on a scale that matters. While there are a lot of new initiatives and discussions on sustainability, it is usually the same group of people involved. This is where governments have a role to play. Business associations and NGOs are where we need to push this agenda further. We need more conversations about cradle to cradle transformational change, not individual technologies, individual policies, or individual stakeholders, but the entire supply chain.

Responding to a question from the audience, panellists gave examples of converting waste to wealth by capturing methane gas from organic waste in landfills and shared waste management facilities in Chinese industrial parks.

The most important point for any successful collaboration is to find opportunities for win-win.

Thursday, 28 April 2011
Presentation

The economics of ecosystems and biodiversity

Pavan Sukhdev,
Study Leader, The Economics of Ecosystems and Biodiversity (TEEB)

The economics of ecosystems and biodiveristy (TEEB) project began in 2007. Nature gives us many resources which are valuable to the economy, but most come free. Because of lack of price or economic invisibility, we do not value the resources and they are depleted and lost.

The economics of nature has an important message for development...We have to think of a different economic paradigm which includes recognition of natural capital.

An example is rainforests. They contain and capture roughly a quarter of total carbon stored on land. They are also amazing mitigation engines, absorbing 5 gigatonnes of carbon dioxide compared to 32 gigatonnes emitted by the global economy, capturing 15% of our emissions. But until recently, nobody was paying for these hugely valuable services.

The Brazilian rainforest is a water pump that provides rainfall by precipitating water from the Atlantic into the plains which form the granary of Latin America. A trillion dollar economy hinges upon the availability of freshwater for agricultural production for export and consumption. But no one pays for this.

The problem is too big to ignore. Because of economic invisibility, the profits of corporations are not a good measure of the value we add to society since they do not measure what we take away in terms of emissions, pollution, use of freshwater, etc. The cost to society of doing business is almost 6 trillion dollars, or 10% of the world's economy.

When we calculate how much these services are worth (the cost of freshwater and nutrients), for countries like Indonesia, India and Brazil, it can easily reach 10 to 20% of GDP on a nine-year basis. This fails to account for benefits such as fieldwork for the poor farmer's wife, leaf litter for his cattle or protection for his crops from the effects of droughts and floods. All these benefits together are worth between 50-90% of a poor farmer's total income.

The economics of nature has an important message for development. We can't just tell 1.2 billion subsistence farmers to move to cities. We have to think of a different economic paradigm which includes recognition of natural capital.

The World Bank has recently launched a project which accounts for the value of natural capital in national accounts. Finally, the true wealth of nations will be reflected in their balance sheet. There are success stories. In Kampala, Uganda, an economist worked out that a wetland had 8-10 times more value as a sewage waste disposal facility than as converted agricultural land so it remained as wetland.

Certification of products is accelerating around the world, with many big names – Mars, Cadbury, Kraft, Unilever – showing that recognising the value of nature can actually help improve performance.

4.5 years ago, the Indian government introduced a scheme to pay a minimum wage to farmers during off season to rebuild local ecology – replanting forests and building dams, resulting in improved freshwater availability and soil fertility. This labour-intensive work has created 30 million jobs off season and increased agricultural yields. The World Bank calculates that a 10% increase in yield can lead to up to 5% reduction in poverty.

A TEEB business coalition is being formed and I hope that businesses, governments, and civil society, are all engaged and able to take this forward.

Presentation

Google Earth Engine: A new planetary-scale platform for environmental data and analysis

Rebecca Moore,
Engineering Manager,
Google Earth Outreach & Earth Engine, Google, Inc.

At Google, we have a commitment to a new model of philanthropy, which is technology-driven. We choose a small number of projects which leverage Google's capabilities and information, infrastructure, and engineering to address global challenges. Google Earth is a good example of this.

Our first case was forest carbon monitoring in the Brazil. Scientists asked Google to help stop deforestation of the Amazon by creating an alert system to monitor and report on areas of suspicious change. The problem was that this would require terabytes of satellite imagery data which would take weeks to analyse. To resolve the problem, Google agreed to make Google Earth imaging available for analysis. Accessing satellite imagery, airborne data, light data, radar data involves huge amounts of information that requires tremendous pre-processing to get to a useful state. There's also the problem of the many different methodologies. To resolve these issues Google launched Google Earth Engine, a new technology platform for global scale environmental monitoring and measurement. The platform operates as a data catalogue with access to an unprecedented trove of satellite imagery data. It also provides a framework for new applications to be developed or existing applications to be ported so that they can run at scale much faster than has been possible before.

The first project was to bring online the last 25 years of satellite imagery collected over the entire world. With this data, Google can produce different maps for analysis. For example, countries need to create reference baselines for forest cover in 1990, 2000 and 2005. It's very difficult for them to do this as they need to remove clouds and problems in the imagery. Google do all that automatically.

You can derive certain valuable information from airborne or satellite imagery, so-called remote sensing data, but valuable information must also be collected on the ground. Google have begun using Android smartphones that are web-connected, and empower local communities and community-based REDD projects to collect important forest inventory data.

The next offering is parallel processing which provides access to computers in Google data centres for computation. Google uses it to split up large sets of imagery into and sends each piece to a different computer which runs the analysis. The results are brought together and stitched back into the final analytical result. An example in Mexico required analyzing 53,000 land set scenes. It took 15,000 hours of computation but because Google ran it on a 1,000 computers in parallel, it was done in less than a day. It would have taken almost three years otherwise.

The final area is the actual applications that can be built on this platform. Google worked closely with Emazon, an NGO in the Brazilian Amazon, who have created a monthly alerting system for areas of suspicious change. Google are now working with the natural capital project that does valuation of ecosystem services, bringing that to scale. To ensure that there are no barriers to developing countries using Earth Engine as they develop REDD capacity, Google has donated 20 million CPU hours and provides technical support in technology transfer to help them develop these capabilities.

Thursday, 28 April 2011
Parallel sessions

Future fuels: Determining the choice of future fuels

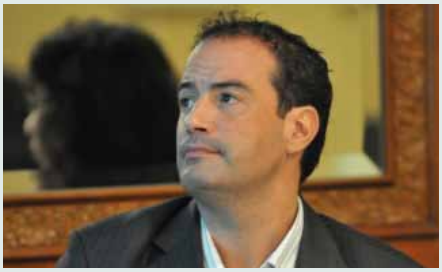
Moderator:
Rob Daniel, First Secretary, Joint Head, UK Climate Change Unit, British Embassy, Jakarta

Ho Hiang Kwee, Director, DNV Clean Technology Centre

Selvasothi Selvaratham, Assistant Manager, Industry Development, ICES

Ben Sutanto, Director, Istra Internusa

Yani Witjaksono, Country Manager, Bronzeoak




Key points

Business is really the driving force of the transition to a low-carbon economy rather than government, particularly in terms of technology solutions. But government should assist business in moving forward in terms of the regulatory framework and clear policies as well as in pricing strategies.

There's a lot of concern about sustainability of future fuels and we need to look at it in terms of the environmental, social and economic challenges, as well as over the life cycle of the fuel.

Ho Hiang Kwee

When looking at future fuels as part of the energy system, we need to focus on managing risks as well as as enhancing the sustainability of use. It's not just a question of the availability of technology to allow their use, there are also more difficult questions related to cost competitiveness and the practicalities of use such as efficiencies, cost, scalability, environmental impacts, time and space, and storage issues and so on.

There is interest in developing fuels that are more directly compatible with hydro-carbon fuels which could make them more useful and applicable without big changes in infrastructure.

Benjamin Sutanto

The keyword is sustainable power production. The technology of gasification is not new but there have been some additional technology breakthroughs which make this a more attractive option from both a cost and sustainability viewpoint.

Selvasothi Selvaratham

ICES is conducting a feasibility study into converting micro algae into biofuels suitable for helicopter engines. The advantages of algae are that it is non-food, does not involve freshwater and has 10-15 times higher productivity than other biomass. Selvasothi Selvaratham believes that biofuels will be the portfolio solutions for the future. While they're not perfect, they can be used in existing infrastructure and existing engines. Their future depends on improved technology and better profitability through increased yields.

Yani Witjaksono

The Government of Indonesia has set an ambitious target of 5% of all energy to come from biofuels by 2025 in line with its pro-growth, pro-poor, pro-job strategies. However in spite of the initial enthusiasm of investors, only two have successfully implemented projects in the field. To succeed, there are some serious challenges to overcome: the commitment and seriousness of the government, including clear government policies to tackle access to land, and demand – is the market ready yet?

Outcomes

Business's role is to keep pushing government to provide the regulatory framework necesasary to develop innovative solutions for the development of future fuels. But advances in technology will only be taken up if the overall solution is economically, socially and environmentally sustainable.

Green buildings: Towards Zero Carbon

Moderator:
Jay Witherspoon, Vice President, Water Sustainability Director & International Technology Leader, CH2M Hill International

Ho Tong Yen, CEO, Sino-Singapore Tianjin Eco-City Investment & Development Co. Ltd

Rob Fletcher, President Director, PT Philips Indonesia

Raymond Yau, Arup Fellow and Director, Arup

Key points

Stakeholders need to look at whole-life carbon instead of just operational carbon since this provides 70% of a building's carbon footprint. They also need to focus on the five materials which have the highest cost contribution and highest carbon footprint.

Most building codes today only cover the vertical – buildings. They don't really take into account the horizontals – utilities, infrastructure, cement, waste water treatment, etc. So what is the true cost for green buildings?

Ho Tong Yen

Tianjin Eco-City is a sustainable city which aims to be a model for sustainable urban development. By being affordable without government subsidies, it can be practical, replicable and scaleable.

Environmental sustainability begins with master planning. The city is divided into eco-cells with easy access to public transport. All buildings comply with green building evaluation standards and make the most of passive building design rather than cutting edge technology which most Chinese cities would probably not be able to afford.
The city is set in a thriving region to be economically sustainable, and attracts green industries by offering a concentrated market for green products and solutions.

It is socially sustainable through the provision of affordable public housing, workers' dormitories to support industry and barrier-free access to buildings.

Raymond Yau

The building sector contributes 8% of total emissions reductions in Hong Kong but consumes almost 90% of electricity.

The government has recently commissioned a zero-carbon building project which aims to stir up building suppliers, developers, end users into producing buildings that go beyond zero carbon to become carbon positive. While the project itself is small-scale, it's in a very high-density environment. The aim is to explore all possible passive design measures before adopting more energy-efficient systems that can reduce operational carbon.

There are a lot of institutional arrangements that need to be put in place to expand use of renewable energy.

Rob Fletcher

Most of the new buildings that will be built in the next 25 years will be in Asia Pacific and up to 75% will in urban areas by 2050.

Electricity for lighting consumes around one-fifth of global electricity, and in urban areas and buildings it can be as high as 38-40%. Making the most of advances in lighting is therefore a key factor in building greener buildings. LED technology offers lighting that is dimmable, does not contain hazardous waste, has a design factor that's attractive for engineers and is continuing to increase in efficacy.

Discussion

The usage of a building over its lifetime should be included in the calculation for green certification.

Panellists highlighted some of the shortcomings of having a unified green certification system including issues such as cost, who decides, based on whose criteria, as well as whether local authorities are allowed to impose their own standards. A system should also include social and economic considerations.

The cost of sustainable buildings is key and panellists recommended engaging stakeholders in an integrated design process and taking the practical approach and doing what works in the local environment, rather than using expensive new technologies.

Thursday, 28 April 2011
Parallel sessions

Renewable energy: 100% Vision

Moderator:
Malcolm Jacque, Executive Director, Wasabi Energy Limited

Rafael Senga, Manager, Energy Policy Asia Pacific, Global Climate & Energy Initiatives, WWF International

Carrie Freeman, Director, Sustainable Business Innovations, Intel

Gatot Prawiro, Regional Executive, GE Jenbacher Asia Pacific

Key points

The vision of 100% renewable energy sources by 2050 is achievable. To reach it we need to maximise energy efficiency and energy conservation and use new technologies to bring renewable energy sources to scale while keeping costs down.

While educating the public is important, we also need government policies in place to encourage the development of renewable resources.

Gatot Prawiro

GE is committed to provide the energy equipment that the market needs to take renewable energy sources to scale.

Carrie Freeman

Intel is helping to create a marketplace for renewable energy to become a viable part of our energy ecosystems. Intel purchases 85% of its US-based energy consumption from renewable resources and invests in 20 different renewable energy companies.

Rafael Senga

We already have the technologies to reduce global energy demand by more than 40% and these should be deployed now, without delay. Renewable energy must be regarded as the first option, not an add-on. Where we are unable to replace fossil fuel yet, for example in industrial processes that require fuels that deliver extremely high temperatures, we need to use these fossil fuels as cleanly and as efficiently as possible, and deploy carbon storage.

Initial costs will be quite high, but WWF project that by 2035, the global economy will have net cost savings. Current fossil fuels subsidies are wasted resources that should be re-channelled to make our energy system more efficient and clean.

WWF is seeking to create an enabling environment to make geo-thermal energy a main power source. Indonesia hosts about 40% of the world's geo-thermal resource. The key strategy is to partner with leading geothermal energy companies to remove barriers hindering geothermal development.

Malcolm Jacques

Even with the most ambitious plans being implemented on greenhouse gas emissions in the EU, it's not enough to meet the 80% reduction target. We need to have far more vigorous activities and policies in place to be able to implement energy-efficient programmes alongside renewable energy programmes. One option is to capture waste heat power energy. The technology to convert it to power is already there so this could be a quick win if government fills the policy gap and encourages this efficiency.

Discussion

While the cost of power generation from fossil fuels will continue to go up, costs to generate from renewable sources will come down as more technology comes online and economies of scale come into play. Solar energy in particular is benefitting from new technologies such as concentrating solar panel power.

While it's important to educate the public, this needs to be supported with a carrot and stick approach.

R&D is key to produce clean energy technologies. There is probably no one technology that will get us to our target; we should therefore focus on strong capacity and technologies that show the highest potential benefits.

Parallel sessions

Smart grids: Enabling the transition to a low-carbon economy

Moderator:
Martin Hauske, Director, Global Energy & Utilities, IBM Growth Markets Unit

Jaakko Aho, Global Head, Smart Grid Software Solutions, Nokia Siemens Networks

Djoko Prasetyo, Deputy Director of System Planning, PT PLN (Persero)

David Oxford, Regional Smart Grid Business Development Manager, GE ASEAN

Key points

To benefit from smart grids, industry needs proper regulations and policies in place, before it does anything else, that encourage transmission among producers. It also needs to have a clear business case proven in pilot because it cannot deploy so much capital without good returns.

Djoko Prasetyo

For smart grid implementation to work, there has to be some sort of energy transaction whereby customers can react to pricing signals, leading to greater efficiency and reactivity. The right set of policy and regulations is also essential. In Indonesia, heavily subsidised tariffs remove any incentive for the customer to reduce consumption and fixed pricing removes incentives for business to invest in renewable energy generation.

Technology is a prerequisite in terms of smart metering and better control of electricity into the networks. Integration of renewable energy to the distribution grid will mean managing a lot of smaller scale generation rather than one large generation energy flow to the customer. Once inside the home, energy efficiency can be managed through intelligent devices and appliances.

Jaakko Aho

There are multiple drivers for smart grids. From the government side, the driver is to provide enough energy to assure GDP growth.

Consumers want to see benefits too and it's up to industry to show them how to benefit from smart grids by educating them to make intelligent decisions about their consumption. Lower energy consumption should produce lower energy bills, and should encourage electricity companies to find more sustainable ways of creating and distributing that energy.

David Oxford

In the future we're going to see a new ecosystem of power generation and distribution with more decentralized, smaller power plants and more renewable energy that's connected directly into the distribution part of the grid. As we integrate different types of renewable energy we'll need to manage intermittency, variability and congestion. Both solar and wind power depend on sources of energy that are intermittent and this requires new technologies to handle energy storage. Plugging renewable energies into the network creates a two-way power flow which causes voltage irregularities which will require utility companies to look at redundancy schemes differently.

Martin Hauske

IT is critical to ensure the flow of information between participants of smart grids. Through real-time visibility, industry can ensure stability of the grid and improve asset management, while consumers can respond to monitoring data to reduce consumption.

Smart grids should be seen as part of an overall energy value chain and stakeholders should integrate these value chains if they want to optimise efficiency.

Discussion

Before investing in smart grids, we need to understand the business requirements and then decide what technologies will fit those requirements. Reliability of power is essential as without it you can't function economically. It's important to get a reasonable return on investment so we must use the new capabilities to their maximum potential. Communication and education are essential because without them there is no consumer buy-in and therefore no change in demand.

Thursday, 28 April 2011
Parallel sessions

Sustainable forestry and agriculture: Balancing social, economic and environmental development

Moderator:
Tony Simons, Director General Designate, World Agroforestry Centre

Teh Choon Bok, Corporate Advisor, PT Pasifik Agro Sentosa

Arshad Chaudhry, President Director, Nestle Indonesia

Mohammad Rafiq, Senior Vice President, Programs, Rainforest Alliance

Andrew Chan, Senior Executive Director, PwC Advisory Services, Malaysia




Key points

By ensuring sustainable management of forests and agriculture land, we will be able to sustainably conserve and manage 70% of the global land area.

We need actionable knowledge and approaches to create more impact in a sustainable way. Evidence of this will prompt greater investment and better policies for sustainable forestry and agriculture.

Mohammad Rafiq

Solutions for sustainability have to be based on supply chains. That means integrating sustainability across every part of the supply chain.

For this to happen, you need credible standards so that people can measure performance. And you can't do it without producers' help. By improving management practices and rewarding good practices you encourage the sustainability of sustainability efforts.

Arshad Chaudhry

Sustainability is about creating shared value for every stakeholder in the value chain. Business is a solutions provider to the stakeholders, finding innovative ways to meet the needs of society while faced with the limits of resources.

Nestlé provides technical assistance and support to 33,000 farmers to improve the productivity and quality of the milk that they are producing. Improving productivity helps the environment and at the same time improves the economic and social conditions of the farmers and the communities they live in.

Teh Choon Bok

PT Pasifik Agro Sentosa tries to upgrade degraded land wherever possible and leaves about 20-25% of the planted area with forests intact. For agricultural conservation, they utilise every bit of land, for plantation crops and their own food production, generate green energy from solar and effluence, and use integrated natural pest control and organic fertilisers.

Andrew Chan

Data on businesses' progress towards sustainability tends to be qualitative, rather than quantitative since many companies have not been tracking their actions formally. In addition, there is the problem of ownership of sustainability within the business which hampers ability to manage it on a strategic basis. In many companies, reporting of sustainability belongs to the communications department which doesn't necessarily have the awareness of what's going on operationally to actually derive value from sustainability by measuring, monitoring, tracking and showing verification of the results they're achieving.

Discussion

We need to have a credible certification system that gives public accountability for the actions of businesses. Companies should not see it as a quick route to charging higher prices, although premiums are available if sustainability leads to improved productivity and quality. While there are major variations between different standards, organisations should work together to improve them and raise the bar.

Business needs to take a long-term view of sustainability while balancing this with the needs of different stakeholders who may have shorter term views such as the farmer who needs monthly income to feed his family. Results can only be achieved by acting together. Business can either continue to complain about governments and systems and people, or take the initiative to bring stakeholders together to act. One area where this is needed is in sustainable intensification of agriculture to create more food production.

Parallel sessions

Sustainable supply chain: Searching for the sweet spot

Moderator:
Helen van Hoeven, Director, Market Transformation Initiative, WWF International

Vikram Agarwal, Vice President Procurement, Asia, Africa, Central & Eastern Europe, Unilever Asia

Dejan Lewis, Senior Manager Asia (South), The Forest Trust

Martin Stuchtey, Director & Co-Lead, Zero-waste Economy Initiative, McKinsey & Company

Coco Ushiyama, WFP Representative, World Food Programme




Key points

The management of natural resources will become increasingly important for business. In the future, corporate growth will only be achieved through good management of land, water and air, whilst not forgetting the livelihood of people at each end of the supply chain.

No one can do this on their own, so companies, NGOs, governments, and the UN all need to work together to make it happen.

Martin Stuchtey

Industry could cut the entire energy footprint of transportation by half by using value density, reducing distance travelled, changing the modal mix, and employing technology to improve energy efficiency.

An even more efficient solution would be to adopt a circular economy starting with design concepts that ensure that components re-enter the primary product life cycle over and over again, rather than being deposited.

Dejan Lewis

Consumers want to know where a product is made and visibility in the supply chain is key for businesses to ensure efficiency. However achieving basic visibility on a supply chain is difficult.

As they begin to understand the complexity of their supply chains, businesses need to have a dedicated team to drive this through the organization. Once they have mapped the supply chain, they can set targets, establish traceability systems and then look at rationalizing and consolidating the supply chain. This takes time and companies need to be patient while reporting progress along the way.

Vikram Agarwal

Operating in 100 countries with distribution and sales in a further 70 countries, Unilever uses it volumes to obtain business growth while reducing its environmental footprint and enhancing its social impact.

For each brand, the company looks at the life cycle impact, not just the origin or waste generation, as well as the social, economic and environmental impacts. Even making a small change in a product leads to a huge overall impact because the multiplication factors are large.

Coco Ushiyama

The World Food Programme has one of the most complex supply chains, reaching 100 million vulnerable people in 80 countries. Over the last few year, the WFP has faced enormous challenges to its traditional supply chain and its ability to get food to hungry people quickly. The future looks even more challenging and we need to take action collectively to assure food security.

Discussion

If we accept that resource productivity is so important, and find the markets and institutions to get us there, many of the social and environmental problems that are downstream of that will go away. What we need is a public-private partnership. Business can help by providing the demand to buy only products produced in a certain way; NGOs and experts can provide the specific domain knowledge, while government provides the regulatory framework.

Standards and certification are an extremely important tool for commodities. NGOs support them because they know standards help drive entire industries.

Supply chains are about price, quality and delivery but they're also about relationships. It's not about avoiding risk; it's about generating livelihoods and developing longer term collaborative relationships.

Thursday, 28 April 2011
Parallel sessions

Technology and communications: Influencing change

Moderator:
Ranjit Barthakur, Advisor, Tata Consulting Services

Rebecca Moore, Engineering Manager, Google Earth Outreach & Earth Engine, Google, Inc.

Alison Rowe, Global Executive Director, Sustainability, Fujitsu

Jim Walker, International Programmes & Strategy Director, Co-Founder, The Climate Group

Key points

The ICT sector has an enormous opportunity to reduce carbon emission through managing its own carbon footprint and in helping other sectors.

ICT provides transparency, and transparency is knowledge which improves decision-making and can be shared and developed into transformative solutions.

Alison Rowe

ICT contributes about 3% of global GHG emissions. Data centres form a large component of this so one way to reduce emissions is to use renewable energy. A key enabler for sustainability solutions for the future is cloud computing which is self service and pay per use. By 2020, 50% of global IT will be on cloud services. The next transition will be to a intelligent human-centric society, where technology learns from and adapts to human behaviour. In the future there'll be a range of different networks - personal, home, neighbourhood and wide area - all within a smart city concept, and deploying intelligent applications.

Rebecca Moore

Business and government decision-making improves by engaging with people that have lived in a sustainable fashion in traditional ways on their land for thousands of years. A tribe in the Amazon is using Google technology to put its village on the world map and seek help in preserving its forests and culture. They're the first tribe in the Amazon to get a legal opinion that they own the carbon in their trees. This means they own the ecoservices offered by their land and can therefore actually engage with the carbon market. They're now using smartphones to measure and monitor their forests, and are building a plan to offer carbon offset.

Jim Walker

There are three main areas where information technology can enable other sectors to reduce emissions: automation of processes which are currently not automated; providing information to influence behaviour, for example through real-time energy information or mobile phones apps that allow you to use public transport better; and through substituting products for services, such as videoconferencing for travel. These solutions are estimated to represent a 600 billion euro cost-saving opportunity by 2020.

Discussion

The availability and transparency of data on energy use is essential to make people change their behaviour. Consumers want transparency in the cost of goods or services, including the environmental cost.

Just pursuing smart opportunities on a commercial basis is not enough to reduce carbon emissions. It has to happen within a framework of constraints on carbon emissions, together with open-source standards for smart technologies. The public sector must lead. In fact, governments will drive deveopment of these technologies through large-scale procurement of smart solutions for sustainable urban life.

Some companies are very value-driven about the environment and sustainability while others pursue it more in terms of business opportunity. Whatever the strategic business objective, companies who lead can produce a disruptive technology that can change people's lives.

ICT has been traditionally very sales-driven. However, as the cloud model develops, this will enable scaleability and access to other industries or smaller businesses that might never have had the technology otherwise. So less investment can be matched with more opportunity.

Thursday, 28 April 2011
Afternoon opening address

Gita Wirjawan,
Chairman, Investment Coordinating Board, Republic of Indonesia

The private sector plays a critical role in finding innovative climate change solutions through research and technology advancements. The public sector should accelerate the adoption of these technologies by providing an enabling environment that would make them more financially feasible.

The African proverb, "If you want to go quickly, you go alone. If you want to go far, you go together", highlights the challenges of our efforts to mitigate and adapt to climate change. We need to go far quickly. Even though there are many examples of companies making business choices to protect the environment, the truth is, as an international community, we are still a long way from achieving the kind of development and innovation needed for a green economy.

Indonesia has set out an ambitious target to reduce greenhouse gas emissions by 26% from business users by the year 2020. It is also addressing climate change through forest, coral and marine management as well as through renewable energy utilisation. Many have commended Indonesia for the commitment and leadership it has shown over the years in the area of climate change, particularly since the Bali roadmap created during COP13 in 2007. In fact, our commitment towards environmental sustainability is nothing new. It's in our heritage. Efforts towards preserving environment can be traced back centuries ago, long before sophisticated research and global negotiations on climate change mitigation and adaptation took place. Old manuscripts and inscriptions show that jobs such as forest rangers who monitored the sustainability of forests, and animal rangers who ensured sustainable hunting practices, had been around since the 9th and 10th centuries. Furthermore, these inscriptions highlighted the penalties for those who failed to follow the rules. For hunting for example, failure to follow the rules would lead to additional tax payments or imprisonment and there were further laws against illegal logging. Another inscription dating back to the time of King Alanga from Kediri kingdom highlighted the importance of reforestation. A quote from an inscription from the Majapahit kingdom says, "Those that burned paddy fields, regardless of the size, will have to pay the owner of the field five times the damage and a fine to the ruling king".

Whilst the B4E global summit highlights the value of exchange of ideas, and learning from global experts and stakeholders on environmental issues, these manuscripts and inscriptions show the value of learning from our heritage. Our ancestors, despite their limited access to new technological advancements, had a wealth of wisdom that we could and should tap into.

The private sector plays a critical role in finding innovative climate change solutions through research and technology advancements. The public sector should accelerate the adoption of these technologies by providing an enabling environment that would make them more financially feasible, including through a system of incentives and disincentives. Many companies have corporate goals for biodiversity and environmental sustainability. It is my hope that this forum will be the catalyst for more such endeavours among the business communities. We, at the Indonesian Investment Coordinating Board, from BKPM are ready to assist companies to be part of the climate change solution.

Thursday, 28 April 2011
Keynote address

Helen Clark,
Administrator, UNDP

One billion people live in extreme poverty, and rely on the natural environment for their livelihood and primary assets. Preserving ecosystems is critical for their daily survival. How to advance human development and progress for all those yearning for better lives while also securing the future of our planet and its ecosystems is one of the greatest challenges of our times.

The priority at next year's Rio+20 summit will be an agenda for transition to a cleaner, low-carbon and climate-resilient world economy, which also enables us to generate inclusive growth and eliminate extreme poverty and hunger. Achieving this will mean turning old development models on their heads.

Far-sighted governments are working to put REDD+ into action. It links development gains to preserving forests, not clearing them. The role of governments is critical in setting policy frameworks, enforcing the relevant laws and regulations and doing the monitoring, reporting, verifying of what is happening. But governments cannot produce results alone. Win-win outcomes need to provide gains for local communities and for the private sector. Meeting the sustainability challenge requires strong business engagement in research and development, investment and innovative solutions, whether they be in renewable energy, energy efficiency, green technologies, or the design and build of sustainable cities. Increasingly, in global markets, those goods and services with high carbon footprints and negative social cost will become less competitive and less desirable for consumers. The proliferation of green certification systems indicates the future markets will demand much greater compliance with environmentally and socially responsible standards. I believe that markets will adapt to these global frameworks.

Meeting the sustainability challenge requires strong business engagement in research and development, investment and innovative solutions, whether they be in renewable energy, energy efficiency, green technologies, or the design and build of sustainable cities.

Three years ago, UNDP became part of a new global partnership with governments and businesses to promote inclusive business models called "The Business Codirection". It encourages companies to adopt business models which spread the benefits of growth more widely. These models show how jobs can be created, how farmers and developing countries can be supported to increase their incomes and how people can be supported to access affordable technologies. With support from the government of Turkey, we have launched an international centre for the private sector and development to promote best practice and inclusive business models. If these models can become business as usual, the results will certainly be transformational on a huge scale. We've taken a similar approach to identifying profitable business models which also contribute directly to environmentally responsible development.

Economic growth which is inclusive and sustainable requires capable government institutions and good policy and UNDP works to help countries build the institutional frameworks and the capacities they need to attract and drive private investments and new sources of funding such as that available through REDD+ and the emerging carbon markets that are helping countries design energy policies which will attract investment and sustainable decentralized options enabling energy to be supplied to poor and marginalized communities.

Thursday, 28 April 2011
Keynote address by Guest of Honour

Susilo Bambang Yudhoyono,
President, Republic of Indonesia

Despite enormous effort by the international community, a global climate treaty is still elusive. Business should not wait for multilateral negotiations to produce a new global climate treaty. It can act now to make a difference.

It is time to find new ways to resolve the challenges that we face. We need solutions that transform the way we live, produce and consume. Solutions that place the environment and climate security at the heart of every public and corporate policy and that make economic growth and technology not the nemesis but the ally of climate stability. We need solutions that show practical means to slow, stop and reverse climate change. While we are not short of creative solutions we still lack political will in some nations. Clearly governments alone can no longer produce the solutions. To secure our climate future, we need a combination of government policies, market incentives, technological innovation, civil society and corporate participation. Financing is also key and we fully support the establishment of a clean climate fund for enhancing actions on climate change. National interests and global interests are intertwined. While we all remain committed to the principle of common but differentiated responsibility and respective capability, developed countries must take the lead and developing countries must also do more and find the right division of labour between them. Without it, there can be no climate stability for our planet.

Business should not wait for multilateral negotiations to produce a new global climate treaty. It can act now to make a difference.

In Indonesia our mantra for a green economy is called "Pro-growth, Pro-job, Pro-poor and Pro-environment". And of course, pro-business. With the support of the international business community, we believe we can achieve 7% growth and 26% reduction of greenhouse gas emissions by 2020. To achieve these goals, Indonesia is developing schemes to reduce greenhouse gas emanating from forests and pitlands. It has also established funding initiatives to support low-carbon emission development and has requested UNDP to facilitate a financial institution that can manage the REDD+ fund.

Indonesia has one of the largest rainforests in the world and it can play a significant role in reducing global carbon emissions. At the global level, Indonesia has spearheaded greater cooperation to conserve and manage forest sustainability through the Forest 11 forum. We are also actively pursuing bilateral forestry cooperation.

At the national level, Indonesia has developed a REDD+ strategy to manage Indonesia's natural resources and reduce carbon emissions without abandoning industries vital to the economy. Indonesia allocates expansion of plantations and other economic activities to already degraded or low-carbon areas. Indonesia has more than 30 million hectares of degradable land which means there is sufficient land available for economic production including the future growth of palm oil and forestry. New policies and incentives will support those who turn unproductive land into high yielding and productive assets.

The government recently launched its economic corridor frameworks which will be the road map for Indonesia's sustainable economic growth. It is a plan that merges Indonesia's commitment to reducing greenhouse gas emissions with clear steps for achieving strong and sustainable economic growth.

Thursday, 28 April 2011
Plenary discussion panel

Scaling-up investment and regional cooperation to deliver green economy solutions

Adam Schwarz
Senior Advisor, McKinsey & Company Asia

Olav Kjørven (OK)
Assistant Secretary-General & Director, Bureau of Development Policy, UNDP

Teras Narang (TN)
Governor, Central Kalimantan, Republic of Indonesia

Gita Wirjawan (GW)
Chairman, Investment Coordinating Board, Republic of Indonesia

Rachmat Witoelar (RW)
President's Special Envoy for Climate Change, Republic of Indonesia

Key points
Upgrading to the next generation of sustainable economic growth will require unprecedented levels of investment, and unprecedented levels of cooperation and collaboration between government, business communities and civil society organizations. What role should government play in facilitating investments? How many and what kinds of incentives are needed to promote this kind of investment? How can we spur more regional and national cooperation, both in terms of technical and financial assistance and flows to drive more investments in the sector?

RW: While it is logical to promote business for economic growth, Indonesia has recognised the value of facilitating businesses that promote environmentally sound businesses. This is why they have added a fourth environmental principle to the three basic principles of business. There is political will to support businesses that are committed to the environment.

OK: We will not succeed unless there is a partnership between government, the private sector and civil society. For fundamental change to happen, the private sector cannot simply sit back and wait for governments. Governments have a critical role to play because only they can set the rules of the game globally and nationally. But this doesn't always happen, due to vested interests, resistance to change, or pure bureaucracy. Real change requires a culture change at national and sub-national levels. Once there is a clear signal that the rules of the game are about to change, behaviour changes immediately.

Governments have a critical role to play because only they can set the rules of the game globally and nationally... Real change requires a culture change at national and sub-national levels. Once there is a clear signal that the rules of the game are about to change, behaviour changes immediately






TN: Learning from the mistakes of the past 30 years when overexploitation of natural resources resulted in deforestation and degradation in Central Kalimantan, there is a new vision to integrate and balance the 3Ps – profits for growth, people and planet. This single vision drives all programmes and aims to ensure an attractive environment for businesses to make effective use of natural resources while preserving them for our future generation.

GW: Over the last 17 months, we have encouraged more and more smart capital to come into Indonesia but private investors need to play a bigger role in educating people to ensure that money goes to the right places to build the trajectory to a green economy. Take geo-thermal, Indonesia represents about 40% of the global resource in geo-thermal and yet probably less than 2% has been realised in terms of actual investments. We need to get away from the public sector, the old ODA mindset, and find ways to bring the private sector into play in a constructive way.

Discussion

While governments create the rules of the game and incentives, it's the private sector that has to deliver the results. That's why in areas like REDD where money flows based on performance, the private sector needs to show leadership to make things happen. Businesses can create new areas for growth and profits through innovation. At the same time, lowering emissions is not just about planting trees, or a carbon capture and storage system, it is about everybody doing their bit.

The Indonesian government needs to be more proactive with incentives for pioneering, innovative, job-creating businesses and disincentives for behaviour that is bad for the environment.

To ensure that effective mechanisms to target climate-friendly environmental projects go to the provinces that need them most, negotiators and bureaucrats need to think more about how communities and provinces make use of them. They should design instruments with the broadest range possible of players so that they can be valuable and scalable in the private and public sectors.

Transformational change usually requires a combination of visionary leadership from the top to frame what are the challenges and put in place a framework for action, combined with strong public pressure and support for change from the bottom.

Thursday, 28 April 2011
Working groups

Smart system solutions for our planet

Sustainability is now recognized as a key driver of business innovation. The most advanced type of sustainability-based innovations, known as smart systems, combine new technologies and business models to transform and deliver solutions across sectors and industries.

In these working groups, participants from a cross-sector of industries will come together to explore how smart systems can provide powerful, transformative solutions to a wide range of environmental and climate-related problems. Each working group will discuss the opportunities for smart system solutions in their industries, the challenges and obstacles to implementing these solutions and the potential impact of smart systems for their businesses and for the environment.

Building and living solutions

- **Claude Fussler,** Special Advisor on Innovation & Sustainability
- **Caroline Bayliss,** Director, Australia, The Climate Group

- **Alex Buechi,** Manager, Building Solutions, PT Holcim Indonesia
- **Constant Van Aerschot,** Director, Lafarge, Co-Chair, Energy Efficiency in Buildings, WBCSD

Discussion Leaders:

- **Chris Sebastian,** Co-Founder & Marketing Director, PT National Energy Solutions
- **Raymond Yau,** Arup Fellow & Director

Key points

Building professionals underestimate the impact buildings have on the environment and overestimate the costs to produce energy-efficient buildings. This is one of the reasons why the industry is not moving fast enough to find transformative solutions.

It's important to recognise that buildings account for a large environmental impact not just in terms of energy consumption (40%), but also water and waste. The challenge is how to create buildings with significantly less environmental impact while still having a quality of life for more people. While some solutions already exist we need to find policy and financial initiatives, as well as technical and business smart solutions to accelerate and expand at the scale needed to address the problem.

Alex Buechi - Using modern technologies, we want to prove that Indonesia has every single resource available; there is no need to import. For example, concrete has a huge thermal storage capacity. So if you cool concrete, it will radiate over hours, at the temperature it's been cooled to. This means that you can use concrete to cool a house with much smaller air-conditioning systems, reducing energy consumption by about 50%.

Constant Van Aerschot – The World Business Council for Sustainable Development is helping governments to come up with business models that can achieve energy-efficient buildings. The technical solutions to reduce energy consumption in a multi-storey residential building are completely different to those required for a simple family home. The decision-making process, laws, and the way buildings are run and managed are also different. The WBCSD looks at which policy packages are actually working and their effects on CO2 emissions. The models that work can then be applied across cities. The Council tests policy packages by looking at the impact of a carbon tax or increase in energy prices and the factors that would induce people to make an informed choice about energy efficiency in their homes or workplaces.

Caroline Bayliss – It's critical for governments and private sector developers to work together to achieve real sustainability at the precinct level. This means moving away from the focus on single buildings to bring together smart building solutions and achieve low-carbon and climate-resilient communities. A climate-smart precinct is one where systems talk to each other and there is real-time reporting. Residents can monitor their consumption and take action to fix their behaviour.

It's also time for governments to look at their institutional policies and regulatory barriers and to understand what incentives they can put in place to attract the private sector into climate-smart developments. Sustainability is still seen very much as a premium market segment. It's crucial that both the public and private sector develop the policies and technological solutions to provide entry-level bio-homes.

Outcomes

The panellists called for policy packages not single policies, including building energy codes and transparency; pricing strategies that incentivise people to make energy retrofits; more investment in R & D; workforce training, and a change in mindsets and behaviour.

Thursday, 28 April 2011
Working groups

Energy solutions

- **Alex MacGillivray,** CEO, Climate Business
- **GBS Bindra,** Global Innovation Director, Logica
- **Sanjay Kuttan,** Director, DNV Clean Technology Centre
- **Peggy Liu,** Chairperson, Joint US-China Collaboration on Clean Energy (JUCCCE)

- **Hasbi Lubis,** Marketing Manager, GE Energy Services, Asia Pacific
- **Luluk Sumiarso,** Director General, New and Renewable Energy & Energy Conservation, Ministry of Energy and Mineral Resources, Republic of Indonesia

Discussion leaders
- **Jaakko Aho,** Head, Energy Solutions, Nokia Siemens Networks
- **Malcolm Jacques,** Executive Director, Wasabi Energy Limited
- **Nyoman Iswarayoga,** Director, Climate & Energy, WWF Indonesia

Key points
Panellists discussed the importance of transparency and building collaborations to make people braver in taking the first step. It's important to find better ways of communicating solutions to make it easier for consumers to access them. In commoditised markets, companies are providing services rather than products.

Gita S on behalf of Luluk Sumiarso – The Government of Indonesia wants to develop integrated policies to cope with climate change, not just focusing on renewable energy. We cannot approach climate change as a business model since business solutions are not enough. We need more government engagement, to introduce a regulatory framework and reforms in financing to be able to meet the 26% reduction in GHG target, and to promote public-private partnerships to implement the new strategies.

GBS Bindra - Many progressive utilities are moving away from being just transporters and builders of commodity electrons and are developing a new business model that focuses on value-added services rather than products. Under the new model, utility companies use smart grid and smart lighting technologies to provide houses with the most energy-efficient technologies which are replaced every time new technology appears. It's a win-win situation. Consumers and utilities benefit from energy savings while equipment suppliers use the savings that result from long-term contracts to update household equipment and reinvest this in R&D.

Sanjay Kuttan – In terms of solutions, we need to have both solutions for problems, and solutions for vision that bring to bear everything that we have learned so far so that we can avoid future mistakes.

By 2050, 70% of the population will live in cities, placing huge strains on infrastructure. It's therefore important to build infrastructure that is cleaner and managed in a way that minimises risks. We must also deploy clean technologies and smart technologies in rural areas to create opportunities for growth and allow communication with the cities thereby removing the incentive for people to migrate to cities.

Peggy Liu - The biggest problem to finding the right energy solutions is not a lack of technology; it's in how to collaborate effectively. What we need is an online map of sustainable projects around the world that is mapped against a matrix of key goals and barriers for each sector. Then we need to be able to match resources, whether it's money, expertise, land, government approvals, etc., to the most worthy projects. At the same time, we need a new model of collaborative leadership that can clearly articulate what vision is needed to help society transform itself to adapt to today's global challenges.

Hasbi Lubia – While there are both technical and commercial challenges to finding energy solutions, the real problem is the question of who starts and how? In Indonesia, for example, there are plenty of renewables but to move from 4% to 20% of renewables in the grid by 2020, the challenge is who will start?

Outcomes
To encourage innovation and allow them to make profits, businesses need a clear policy framework. Government must encourage demand by changing consumer behaviour.

Forest and biodiversity solutions

- **Rod Taylor,** Forests Director, WWF International
- **Seiji Kawazoe,** Associate General Manager, Sumitomo Trust & Banking Co. Ltd.
- **David Steuerman,** Programme Officer, Business & Biodiversity, Convention on Biological Diversity
- **Robert Hunink,** Global Head of Wood Products Business, Olam
- **Ana Carolina Srbek ,** Environmental Senior Analyst, Vale
- **Jean Pierre Caliman,** Director, SMART - Research Institute
- **Adam Schwarz,** Senior Advisor, McKinsey & Company Asia

Discussion Leaders:

- **Rob Evans,** Technical Advisor, PT PwC Indonesia Advisory
- **Eka Namara Ginting,** Commissioner, PT Rimba Raya Conservation
- **Mohammad Rafiq,** Senior Vice President, Programs, Rainforest Alliance
- **Howard-Yana Shapiro,** Global Director, Plant Science & External Research, Mars Inc.
- **Dorjee Sun,** CEO, Carbon Conservation

Key points

We need smart solutions to help maintain natural capital and biodiversity within forests. Technological solutions are important together with new business models and supporting government policies.

Seiji Kawazoe - Investment in biodiversity funds is limited at present but business opportunities and business strategies are increasingly focusing on biodiversity so investing in these companies offers good long-term prospects, with higher returns.

David Steuerman - Biodiversity should not be segregated from climate change. Businesses need to understand what ecosystem services are, and why they're important. If you just plant trees but have a monoculture, you risk having the ecosystem collapse which is worse than not doing anything.

Robert Hunink - While big companies have invested heavily to manage forests sustainably, there is no level playing field and others are logging illegally. If business is to continue to invest, companies need access to capital markets at affordable rates, and small and medium operators need to join the legal business community and implement forest management plans too. Governments should offer financial incentives to help consumers change their behaviour to buy only sustainably produced wood.

Ana Carolina Srbek - Vale's sustainable development policy is a legal instrument to establish principles and guidelines for actions, emphasizing the company's social, economic and environmental responsibility.

Jean Pierre Caliman - A key way to maintain diversity is through reducing the pressure on forests. This can be achieved through only extending plantations on degraded land, and not planting on high carbon stock land. Intensification will improve yields and even within plantations, companies should improve biodiveristy. This has the added benefit of improving soil fertility and water quality.

Adam Schwarz - Technology and smart systems can play a big role in improving productivity, but a key challenge is to close the productivity gap between big agro-firms and smallholders. In palm oil for example, 40% of volume is produced by smallholders, yet there is a 20% gap in productivity.

Outcomes

The government has an extremely important role to play in terms of clear predictable policies and enforcement capacity to provide a level playing field and protect HCV areas and prevent encroachment in forests. It should also produce a national database of degraded land and resolve land ownership issues. Affordable financing is also key to encourage investment in sustainable management.

A resource efficiency approach requires good, strong leadership from all sectors and pilot projects to test out practices and spread the message. Transparency is key for investors and consumers and this can be achieved through certification and strong standards.

Integration of the sector is important to achieve geographic and producer scale with revenue as the incentive. Subsidies can help, along with sharing of best practices.

To increase the ability of stakeholders to participate requires extension services and capacity building, both to increase productivity and to enable them to be part of the decision-making.

Thursday, 28 April 2011
Working groups

Transport and mobility solutions

- **Thomas Tang,** Regional Director, Corporate Sustainability, AECOM Asia
- **Gregory Long,** Managing Director, Cascadiant Indonesia & Malaysia

Sungwoo Kim, Head, Sustainability, KPMG Korea

- **Axel Muench,** Head, Business Development, Industry Sector Mobility Division, Siemens ASEAN
- **Katharina Tomoff,** Vice President, GoGreen, Deutsche Post DHL

Discussion Leaders:

- **Yoga Adiwinarto,** Transportation Specialist, ITDP
- **Wilson Tan,** Director, Corporate Responsibility, Legal & Public Affairs, TNT Asia Pacific
- **Novianto Herupratomo,** VP, Corporate Quality, Safety & Environment Management, Garuda Indonesia

Key points

Finding solutions to achieve sustainable transport and mobility include harnessing innovative technology in integrated systems, and having the political will to enact policies that facilitate technological advances and change consumer behaviour.

Katharina Tomoff - To measure carbon use, Deutsche Post DHL has created a carbon accounting system within the Finance Department but lack of international standards and sub-contractors' reluctance to share information makes it difficult to measure this completely. To reduce our carbon footprint we need to work with competitors and the industry to generate standards for road-freight transportation. This will give consumers the opportunity to opt for green service providers.

Sungwoo Kim - The transport industry is moving towards a multi-dimensional, disruptive innovation strategy by converging with IT and other industries to produce systems that consume less fuel and are also more convenient for drivers or operators. There are three drivers for this strategy: extreme competition, ideal technological spread and sustainable development.

Axel Muench - The industry is moving away from selling products to selling complete integrated solutions. Information technology is key to these solutions. It's all about connectivity, providing easy access and information and managing it efficiently.

Gregory Long - The technology for electric vehicles is realisable. They can work and have the range to become a viable solution in the transportation sector. However public acceptance is some way off and governments or businesses need to develop the charging infrastructure that allows them to use renewable sources of energy, store energy, and then give back to the grid in cases of emergency.

Outcomes

There's currently a gap between government plans for electric vehicles and businesses' supply as they seek a guaranteed market to support their investment. The focus at the moment is on passenger vehicles since there is still insufficient range for commercial vehicles as well as the challenge of charging fleets of vehicles overnight and the pressure this places on the electrical grid. There is also a shortage of capacity to maintain large fleets of electrical vehicles.

Government could speed up the uptake of electrical vehicles with legislation to fund testing of new technology for proof of concept, and through development of electrical grids, to ensure adequate supply and the use of renewable sources.

We need to use smart solutions, particularly supported by IT, to encourage different modes of transportation and integrated systems to boost demand and improve the service of public transportation. If people travel more efficiently, this boosts economic growth. The simplest way to avoid emissions from transport, however, is to support solutions based on working from home.

Political will is essential and government needs to remove fuel subsidies that disguise the actual costs of transportation and to change consumer behaviour through taxing vehicles based on carbon dioxide emissions, and imposing a congestion charge for the use of road space.

Water management solutions

- **Rod Parsley,** Partner, Perella Weinberg Partners
- **Martin Stuchtey,** Director & Co-Lead, 2030 Water Resources Group, McKinsey & Company
- **Bernard Ducros,** Vice President Asia, Danone Water Business

- **Kiyoshi Kinugawa,** Chief Executive & Chief Innovation Officer for Asia, Hitachi, Ltd.
- **Jay Witherspoon,** Vice President, Water Sustainability Director & International Technology Leader, CH2M HILL International

Discussion Leaders:

- **Michael Roeder,** Region Leader, GE Water Equipment Services, Asia Pacific
- **Ivan H.K.Tsang,** Regional Director, Water & Urban Development, South East Asia, AECOM

Key points

Water is the most critical natural resource and yet there is no traditional market pricing mechanism to facilitate a supply and demand balance.

Since water is the most capital-intensive sector on an assets-revenue basis, business needs to find smarter more cost-effective solutions to the issues of availability and quality.

Martin Stuchtey - There are solutions to meet the growing demand for water, driven by efficiency and productivity improvements. The correct pricing of water is one part of the solution but the most important is to secure a new definition of who the constituents are. The problem is not just for political leaders, it needs the input of users to understand and accommodate the realities of resource scarcity.

Bernard Ducros - It takes leadership to manage water resources at country, basin and village level. Stakeholders need to work together to understand the problems and find credible, workable solutions that take into account the consumer, community and the environment.

Jay Witherspoon - To meet growing demands from agriculture and an increasing population, we need to change our mindset on new sources of water. Water conservation can only work until a certain point and then you have to use energy to treat it in order to give it up to 100% water reclamation. One solution is to be more decentralized in harvesting water from the treatment system to meet agricultural or industry needs.

Kiyoshi Kinugawa - Water is a big consumer of electricity - almost a third of the cost of clean water comes from energy, or electricity – so one challenge is to reduce this input.

Outcomes

Two-thirds of the solution to water issues are on the demand side. There is a huge productivity opportunity to make better use of water. Australia, for example, has shown how a framework of water entitlements and positive incentives have encouraged farmers to move from paddy to high-value crops and from flood irrigation to drip irrigation to respond to increasing water scarcity.

Between 70-80% of potable water is used for agricultural needs, 5-10% for residents, and 20-30% for industry. It's therefore crucial to look at different agricultural approaches to ensure food security and conserve water. This may mean changing the culture and infrastructure of countries to grow different produce based on climate variations, as well as introducing full cost recovery for the water provided. Solutions require the collective responsibility of public, private and micro community stakeholders. Success stories can help encourage take-up. Pointing out that there is a strong economic case for water and energy saving is the first step.

Making water clean requires a large energy footprint or use of chemicals. Transparency is crucial for users to understand their footprint and plan how to optimise future water use, whether for agriculture, drinking water or in products and product development. Investing in better water management systems is something that users will pay for and an accounting system would provide the transparency necessary for users to do risk mediation for the future.

Thursday, 28 April 2011

B4E Youth Dialogue

Hayden Turner
National Geographic Wildlife Presenter

Helen Clark (HC)
Administrator, UNDP

Nadya Hutagalung (NH)
Activist &Founder, www.greenkampong.com

Frits van Dijk (FD)
Executive Vice-President, Zone Director for Asia, Oceania, Africa & Middle East, Nestle

Discussion
Each country needs a vision. Once that's in place, the next step is to align the business community, government and civil society, and then move forward with small, actionable projects. People get impatient quickly so it's important to take action and celebrate small success stories.

It's also important that young people make their expectations of leaders clear and let leaders know that they have an awareness of what's happening to the environment and want to see actions.

Social media allows young people to share thoughts with thousands of others. This can have an enormous influence on decision makers.

Getting the price of renewable energy down is essential to move beyond the oil-based economy. A big issue is the level of support that developed countries will give to developing countries to acquire technologies to generate greener energy.

Under the old model of development, forests were cleared for other uses of land. Today we need to show that development is compatible with keeping forests, and then support people to have a good living while maintaining their forests. Indonesia can be a world leader in forest conservation, but developed countries need to support it to do this.

The private sector can play a role too by refusing to source products from land which has been deforested, as well as through the development of new technologies that can increase crop yields.

> You are citizens with a voice, and need to challenge leaders to take on the issues that you really care about

Consumers have power. They want to know what's behind the brand, where the product comes from, and if it's being grown sustainably. When companies realise that consumers are buying from competitors who have better practices, they too will change. Is sustainability the key driver of business innovation? Or is business innovation the key driver of sustainability? It's a virtuous circle. If business doesn't make profits, it can't survive and do research and development. Without a sustainable environment there will no more business, because there will be no more raw materials, no more water. And it's not a matter of making less profits to become greener. Companies have profit targets and they can make those profits in a responsible manner. Panellists said there was a mixture of options available for clean public transportation but stressed the importance of not leaving the solution to government and city leaders alone. Each individual can take responsibility by sharing cars, using bikes or walking, showing individual leadership to make a real difference to the environment.

When asked what can be done to degrade the noise pollution of wind turbines, panellists stressed that it is down to technology to reduce noise so that wind energy becomes viable, and can be located closer to where the energy is needed.

While the future may seem daunting, young people shouldn't give up. They need to find a particular cause that they're passionate about, be it journalism, design, urban planning or agriculture, then set a goal and work towards it. They are citizens with a voice, and need to challenge leaders to take on the issues that they really care about.

B4E, the world's leading conference for business-driven action for the environment, celebrates the International Year of Forests 2011 in Indonesia, delivering transformative solutions for our planet

Friday, 29 April 2011
Opening addresses

Kuntoro Mangkusubroto,
Head, President's Delivery Unit for Development Monitoring and Oversight, Republic of Indonesia

Message delivered on behalf of Kunturo Mangkusubroto by Heru Prasetyo, Secretary, REDD Task Force

Yesterday in his speech, the President stated that Indonesia is committed to growing the economy by 7% and reducing greenhouse gas emissions by 26% with "business as usual". As the Presidential Delivery Unit how can we deliver on this promise?

Firstly, we must understand the context. Indonesia represents 1% of the total area of the planet and 3% of its population. We have chosen Kalimantan to be a pilot province for REDD, which represents 2.5% of Indonesia's surface area and 1% of the population. Perhaps then we should consider Indonesia as the pilot country for the world for climate change?

Climate change is a global challenge and Indonesia has some critical elements that influence the final outcome: we have sea, quarries, mangroves, forests and biodiversity. Indonesia is therefore an important player in combating climate change because we have the tools and the resources to do it. But we cannot act alone. To deliver, we need to unite with the world and deliver as one.

To address the huge challenges before us we need to use our resources, but we won't be able to use them if they are compromised. Therefore we need to plan how to use resources, to strategize, execute, monitor and control them. These are the elements that we require if we are to embark seriously in this battle for less than two degrees increase of the temperature of the world.

Unity of purpose in society, business and the government is imperative. The challenge is too big for us to see it separately from different platforms. We need to combine our strengths and minimize our weaknesses so that we don't compromise the power of the resources we have.

To develop policies, the government must listen, welcome inputs and as far as possible, develop those policies together with businesses. Unity of purpose in society, business and the government is imperative. The challenge is too big for us to see it separately from different platforms. We need to combine our strengths and minimize our weaknesses so that we don't compromise the power of the resources we have.

Delivery on the President's promises is not going to be easy, especially while maintaining business as usual. We need to have a cool head and take calculated steps forward. In our agreement with Norway, we said we needed two years of breathing space to be able to step back, access our growth of the past, and plan a path forward that is pro-growth, pro-environment and pro-business.

In September, our friends in CIFOR together with the task force of REDD+ Indonesia will have a business conference to look into how we can really shape up the "delivering as one" concept. And I challenge you, to come to B4E 2013 and check if we delivered on our promise.

Agus Purnomo,
Special Assistant on Climate Change to President, Republic of Indonesia

We have set the long and mid-term goals and have already secured a foundation of democratic governance. The task ahead is to shape the democratic structure and the processes that bring democracy in a way that it will benefit the majority of people while protecting the basic rights of the minorities.

Yesterday the President referred to the green mantra of pro-growth, pro-job, pro-poor, pro-environment and commented on the challenges of juggling these four balls.

The first "ball" is our nature conservation commitment, especially our commitment to preserve remaining primary forests. This huge area of forests with high biological diversity requires substantial efforts to maintain. We need many more rangers, a bigger maintenance budget, law enforcement activities, and local green economic development to address the drive for deforestation. These rich biodiversity areas serve at least three strategic functions, namely as the insurance function to support life, as the living space of our indigenous communities and as our savings for the future development of medicine, food products, handicrafts and tourism.

The second "ball" is facilitating growth of the economy. The government is geared to add infrastructure, facilitate economic investment and improve the connectivity of our nation. Land is needed for roads, railways, electricity generation, plantations, rice fields, settlements and industrial areas. Yesterday the President pledged more than 13 million hectares of degraded forest land for economic expansion and for growth with equity. The detailed implementation planning needs to be discussed with all stakeholders, especially with industries who make the economic development reality.

The third "ball" is in committing to reduce greenhouse gas emissions in our economic development activities. The impact of greenhouse gases releases needs to be carefully considered in finalising the revised special plans and in designing economic programmes. International support can be mobilized for finding alternatives to land use on forests and pit lands. That will consequently reduce the amount of carbon released in the atmosphere.

The fourth "ball" is the good governance ball, which is a set of policies and actions on anti-corruption, improving political processes, increasing the efficiency and effectiveness of central and local bureaucracies, and better local community engagement. We have set the long and mid-term goals and have already secured a foundation of democratic governance. The task ahead is to shape the democratic structure and the processes that bring democracy in a way that it will benefit the majority of people while protecting the basic rights of the minorities.

I'd like to leave you with two further questions to consider. First, what are the requirements for business to join the bandwagon of clean and transformative economy? What needs to change within industry and other economic players? What needs to be delivered by the government to facilitate transformation from a polluting and destructive economy to a green and equitable economy? Secondly, how can we improve cross-sector, cross-stakeholders' communication? Is this important conference once a year sufficient, or do we need other means of communication? Communication that can bring constructive feedback and that can encourage and motivate businesses to do better and avoid the blaming game. To implement a grand scheme that builds on government policies, international cooperation, market incentives, technological innovation, civil and business cooperation, we must communicate.

Friday, 29 April 2011
Plenary discussion panel

REDD+ partnerships for delivering sustainable economic growth

Adam Schwarz (AS)
Senior Advisor, McKinsey & Company Asia

Frances Seymour (FS)
Director General, Center for International Forestry Research (CIFOR)

Dorjee Sun (DS)
CEO, Carbon Conservation

See Teck Ann (STA)
Chief Executive Officer, Rajawali Plantations

Gemma Boetekees (GB)
Global Netwrok Director, Forest Stewardship Council

Key points
Given the importance of forestry and forest products and land use sectors to Indonesia's growth and the preponderance of greenhouse gas emissions that come from those sectors, making REDD+ work lies at the very heart of the government's 7/26 strategy.

FS: REDD is an experiment that hasn't unfolded yet. Indonesia is the world's pilot and we're using a 3E framework – what's effective, what's efficient, what's equitable to make it work. There are technical issues and financial issues that need resolving as well as governance. We need to face the fact that we don't know how to create a level playing field to make sure all relevant stakeholders have a seat at that table.

DS: The issue with carbon credits is not supply, it's demand. Where do private companies go when demand slows? You've got all these people protecting forests, but what do you do with the credits? In the absence of government-led demand, we have to find a way to bring business into the REDD equation, so that they really understand the value of land.

STA: For sustainability and growth to complement each another, businesses and government need to do their part. Businesses must operate legally and sustainably; maintain Indonesia's brand image as an exporter; improve access to non-forested land and increase agricultural productivity.
The government must assure clear rules on what land can be used for what purpose and how to access more land; better law enforcement to ensure a level playing field among competitors and an incentive for all businesses to comply with laws; investment infrastructure to keep costs low.





GB: FSC works with environmental members, social members and economic members. Our business is safeguards. It is vital that safeguards for communities, indigenous groups, small holders and biodiversity go along with the economic benefits of financial mechanisms such as REDD.

Our certification system represents an independent set of criteria that can be used on a voluntary basis by companies to prove that they are taking into regard social criteria, land tenure, access to the land for communities and indigenous groups.

Discussion

How can we make REDD work in a demand-constrained world? Demand will eventually come onstream and hopefully businesses can bank credits to grant in the future. If there is no future demand, then government and business must work even closer together, to make business be sustainable by choice because it is profitable, and governments enforce strong regulations to ensure that it actually happens.

We need to be aware of putting in place too many regulations. Certification is a big challenge to businesses because there are so many things to comply with and this affects business sustainability. Incentives need to come into play to help balance costs and benefits.

"...we have to find a way to bring business into the REDD equation, so that they really understand the value of land."

While increasing productivity is a great end, it's not enough. Depending on relative prices and other constraints related to land availability, increasing productivity can actually increase the rate of deforestation.

One of the big challenges in REDD is monitoring. We tend to use high tech ways of measuring forest cover and changes in carbon stocks, instead of working with local communities and giving them simple tools which would actually be a lot cheaper and accurate enough for the purposes that we need for REDD. The fourth 'E' = easy.
In response to a question on how to stop companies from using REDD+ to 'green wash', one panellist said we need a roadmap to look at the entire footprint of a company and make sure that just because it's stopping deforestation in one area, it's not opening up new forests in another.

Friday, 29 April 2011
In Conversation

Ram Nidumolu,
Founder & Chief Executive Officer, InnovaStrat

In Conversation with
Umran Beba,
President, PepsiCo Asia Pacific

In the end, it comes down to leadership. You have to be committed otherwise it won't happen.

RM - I want to ask Umran to talk about 3 'S's - success in sustainability, stories, and stewardship.

UB: Since 2006, Performance with Purpose has been PepsiCo's motto. Every company has responsibility to deliver financial returns, or growth, but you also need to have a purpose.

We focus on three areas: human sustainability, talent sustainability and environmental sustainability. In delivering financial results and growth, we make sure that we have the right products for consumers; a serious commitment to reduce water energy packaging and waste reduction, and also develop our people and involve them in decisions.

In Asia Pacific, PepsiCo has 18 markets. The best human sustainability project I can share is in the Philippines. There are two dimensions to the project. The first delivering safe drinking water to communities in need. Through the "Water Hope" project, the group determines the areas where there is a need for safe water and establishes water stations. A social entrepreneurship model takes over where dealers buy the water and deliver it to the community, make some money and earn a decent living. So safe drinking water reaches the right people and if there is any money left, we use it to finance an educational corner back at the station. Our commitment is to provide safe drinking water to three million people by 2015.

We also use this dealer system for distributing a nutritious cracker that has been fortified with iron, zinc, and vitamins. In this case, we are not looking at making money but at serving the community; that's the human sustainability side of the equation.

In terms of investments, capital investments especially, we have investments in capacity, innovation, productivity and sustainability. Today about 15-20% will be in productivity and sustainability. I put it together because as you decrease water energy packaging waste, there is increased productivity and the return on investment is evaluated like a growth project. But you need to have more flexibility on the timeline sometimes. It can be five or ten years, depending on the project. These investments are the ones you have to stamp and seal and not touch.

Working in a company that really cares for sustainability is very important, and I see the Generation Y people we are recruiting are all looking for meaning in the workplace.

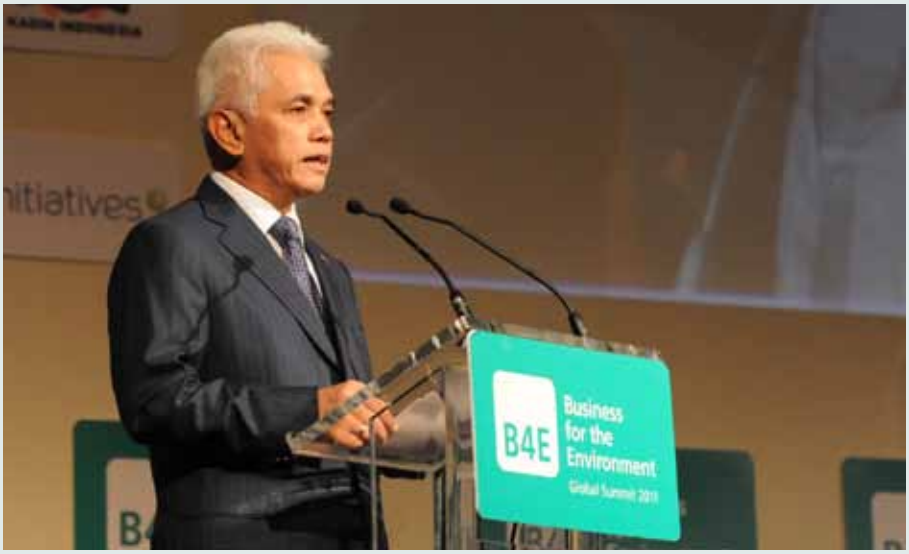
In Thailand, we have environmental sustainability projects for waste reduction in the fruit plants. We are using potato waste for animal feed, cooking oil for bio-diesel, then using and selling the potato water as starch. Employees know everything that is going on in that plants, and they can associate themselves with the outcomes easily through the Key Performance Indicators related to these items. The exciting part is that we are continuously striving to do more. In the end, it comes down to leadership. You have to be committed otherwise it won't happen.

Learning from failures and setbacks is a key aspect of leadership. In 1999, I was in Turkey when we had a major earthquake. Even though the plant had been built to the best standards at that time, it wasn't enough to withstand a 7.6 magnitude quake. While it's difficult to foresee future mega trends, even with careful planning, you need to prepare for the unexpected because life is changing, the planet is changing.

How you lead is very important. First you have to walk the talk. You cannot cancel sustainability investment by saying it's a choke on your finances. You must protect your investments and make sure that things happen.

Declaration from business coalition to support President Yudhoyono's Commitment on Climate Change

Speaker:
Hatta Rajasa,
Coordinating Minister for the Economy, Republic of Indonesia



Finding workable solutions [for climate change] needs a higher level of collaboration than we have ever seen before.

The issue of climate change is a great challenge which no single country can avoid. The poor are particularly vulnerable to the unpredictability of the weather. Economic development programmes have often ignored any negative impact on the environment and failed to take into account the value of the environment and losses caused by resource degradation. However, in the longer term, it may be impossible to achieve sustainable economic growth with such an imbalanced view of the value of resources and the value of economic welfare.

Environmental degradation caused by excessive use of natural resources has resulted in a high cost of development. Therefore, better natural resource management and low-carbon development are considered as important alternatives. The green economy is the solution to this challenge. A green economy is economic development baased on sustainable development to improve our well-being and social equity while significantly reducing environmental risk and ecological scarcity.

The green economy is a win-win solution that balances the need for environmental conservation while at the same time, allowing the economy to grow. It also allows us to reduce the level of carbon emissions, which is an important part of taming climatic change. A green economy may promote the use of clean energy and low-carbon technology as substitutes for fossil fuels as well as reduce the carbon footprint in energy production, to promote resource efficiency, reduce forest degradation and deforestation and minimize or even prevent biodiversity losses. To implement green economic development, we must use our creativity and knowledge wisely and gain the support of all stakeholders.

In 2011, we expect the Indonesian economy to grow by 6.4% and increase to 7% by 2014. Growth will mostly come from investments and exports supported by domestic consumption. Indonesia realises the importance of minimizing the negative impact of growth and has committed to reduce GHG emissions by 26% by 2020, through its own capability. This is good, but emission reduction could reach more than 40% if international assistance was forthcoming and part of our development policy.

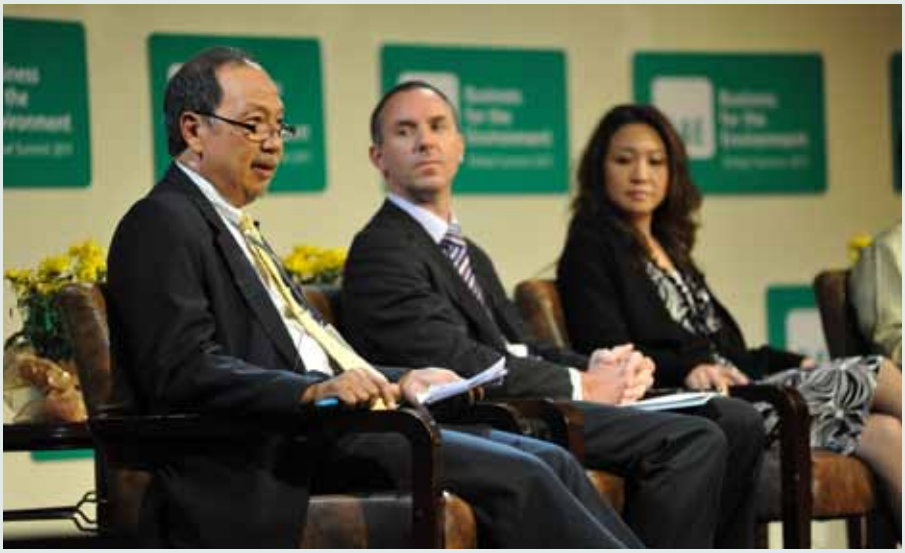
In a developing country like Indonesia, economic growth is vital to create employment, reduce poverty and increase people's welfare. However, in order to reduce the negative impact of economic growth in the environment, we have taken the following measures. First, supporting zero-net deforestation, by phasing out products coming from deforestation of ecologically important forests. Second, reducing our carbon footprint by investing heavily in energy and resource efficiency programmes. And third, promoting sustainable business practice throughout the supply chain, supporting programmes to protect high biodiversity areas with natural carbon storage, investing and promoting sustainable urban planning, land use management and promoting sustainable consumption.

Climate change is such a big economic, social and environmental challenge that no one stakeholder alone can solve it. Finding workable solutions needs a higher level of collaboration than we have ever seen before.

Friday, 29 April 2011
Plenary discussion panel

Advancing sustainable business in Asia

This summit can bring a message of hope to the world. The conclusions should not stay in a drawer, but be brought to COP16 to explain what companies are already doing and the needed incentives demanded of government to foster new ways of doing things.



Alex MacGillivray
CEO, Climate Business

Daud Dharsono,
President Director, PT SMART Tbk

Peggy Liu (PL)
Chairperson, Joint US-China Collaboration on Clean Energy (JUCCCE)

Bret Mattes,
CEO & Managing Director, Star Energy

Derren Green (DG)
Director, Sustainability, Asia Pacific & Japan, SAP

Arpin Wiradisastra (AW)
President Director, PT Danayasa Arthatama Tbk, Artha Graha Network

Key Points
A sustainable business is where profit, people and planet overlap. Businesses need to understand that sustainability is not about adding costs or cutting part of the business, it's about saving money by changing behaviours. The only way to achieve this is to get people to understand that sustainability is about driving incremental improvements, adding value to your business and the communities and environment around you. It must make business sense or people will conveniently ignore it. Action should start with individuals.

DD: Our sustainable policy includes conformity with government regulations, engagement with the local community to improve livelihoods and educate, increased productivity to improve yields, and sustainable operations that conserve forests.

The key success of this policy is a common understanding of global sustainability with government support by way of rules and regulation.

DG: To become green, businesses need to improve the way they do business across the supply chain. As an IT company, we help them improve processes so that small incremental changes have a big impact, and businesses see how improved efficiencies actually save costs. Sustainability needs to be about profits and good business sense.

PL: As long as you understand who holds the seat of power and how you can enable that person with solutions and deploy them in practical ways, change can happen on a very large scale in China.

We only work with people who already understand the need and urgency of going green. We believe in convincing the top of the top, so we work with CEOs, ministers, etc. because they bring others to the platform. It's important to concentrate on the most practical, easy-to-achieve, win-win situations that can be accomplished in three years or less.




AW: We have to make some deadlines to achieve sustainable development in Asia. 60% of our tropical forests are lost already through illegal logging and smuggling. So we need to make a start by committing not to buy a single product from tropical forests.

Activities to reduce emissions could begin tomorrow and the cost to meet the 2020 target is actually very cheap, $1.5 billion, roughly 15% of the current annual fuel subsidies bill.

BM: Meeting the target of a 26% reduction in GHG by 2020 requires the rapid implementation of a coherent national energy policy that co-ordinates and directs public and private investment. Indonesia has abundant supplies of renewable energy sources and yet only 4% of primary energy is currently renewable. Activities to reduce emissions could begin tomorrow and the cost to meet the 2020 target is actually very cheap, $1.5 billion, roughly 15% of the current annual fuel subsidies bill.

Discussion

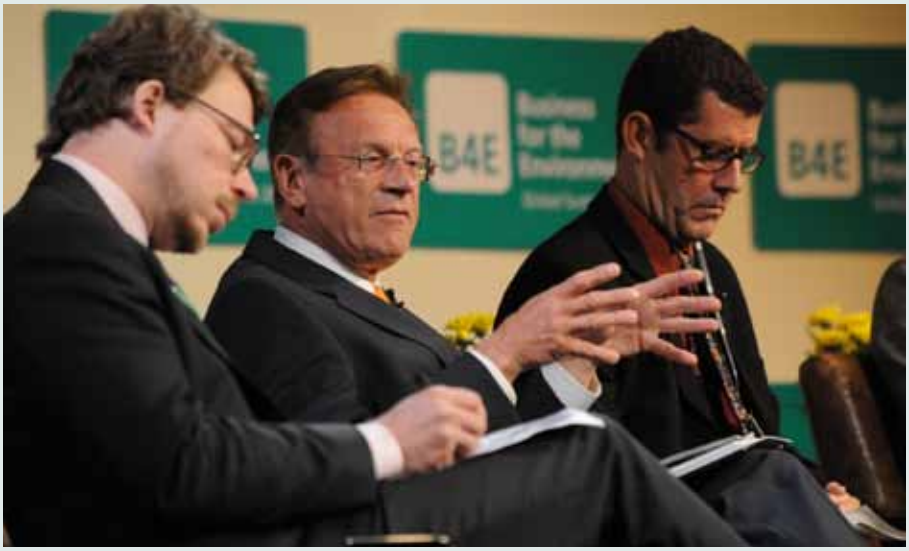
Indonesia has the most geo-thermal potential in the world. Now it needs to develop the political will and policy to support its development. There needs to be an even playing field and a tariff that's appropriately structured to attract investors.

In response to a question about hybrid transportation, one panellist says that there are many ways to cut emissions, including changing the shape of the vehicle, type of fuel, driving style and road systems. Working with the products you are transporting and changing packaging to fit onto the track also optimizes fuel efficiency.

Businesses want to make money so if you can help them figure out how to make more money and get to the right target market, they will work with you. Through the power of collaboration, businesses can look at a single set of expectations instead of being paralysed by a multitude of different supplier requirements or changing government standards, thus making it easier for them to concentrate on improving efficiency.

Friday, 29 April 2011

Report from working groups



Building and Living Solutions

Claude Fussler, Special Advisor on Innovation and Sustainability, highlighted the need for integration of design. Affordable and economically and ecologically efficient housing is possible, it's all down to mindsets. Public policy needs to stimulate business through credit products, stricter building codes and reinvestment pricing for water and energy. We need to educate the whole supply chain and promote more consumer-friendly technologies to encourage efficiencies.

Forestry and Biodiversity Solutions

Rod Taylor, Forests Director, WWF International, said that while there are many good business models for forestry conservation, they are undermined by uncertainty and conflicting regulations. To encourage more long-term thinking, the group proposed a green economy pilot zone where all the old bureaucracy and rules wouldn't apply and there would be the opportunity for policy creativity. There would be mechanisms to bring in and respect the rights of communities and smallholders, with a smart system for resolving land disputes.

Energy Solutions

Alex MacGillivray, CEO, Climate Business, emphasized the need for personal leadership and group collaboration to implement smart energy systems. The objectives of a smart system need to be very clear so that people can understand the costs and benefits. This comes down to education and empowerment of consumers in order to build demand. There also needs to be a clear policy framework and transparency on issues such as subsidies in order to get people to take first steps. The interoperability of technology could speed up both progress and uptake of new technologies.

Transport and Mobility Solutions

Katharina Tomoff, Vice President, GoGreen, Deutsche Post DHL, highlighted the need to push technological progress that's already in place such as alternative vehicles and smart traffic management systems. At the consumer level, there needs to be improved public transport with smart ways to incentivize people to use it. Individual drivers should be educated to drive more efficiently.

Where possible we should remove the purpose of travel altogether through video-conferencing, but where travel is essential, it's important to provide a transparent system to make it easier for individuals, businesses, and shippers to choose a green mode of transport, e.g. through a common standard for measuring carbon.

Water Management Solutions

Jay Witherspoon, Vice President, Water Sustainability Director & International Technology Leader, CH2M HILL International, stressed the need to look at the total water cycle in order to be accountable for our water footprint and to work collaboratively with all stakeholders.

The group looked at harnessing the power of technology through the dual strategies of conserving water and reducing usage and treating water to recycle it. Technology is also a way to reduce risk.

The group stressed the need to market price water. This is a difficult area due to historical and cultural free pricing. Governance also needs to be tackled as conflicting demands put huge pressures on politicians to keep prices low and increase or restrict supply.

Water scarcity is a slow-growing event and we need powerful leadership and governance to develop strategies to manage water globally.

Discussion

The chairs discussed how to get people to respond to the chronic risk of environmental degradation. One way to change behaviour is through a carrot and stick approach of technology and taxes. Accountability is key. Once business leaders become aware of their environmental footprint they see ways to save resources. Involving customers in developing green solutions is a good way of ensuring buy-in.

Friday, 29 April 2011
Plenary discussion panel

Inspiring change: The role of media and film in advancing solutions for our planet

Hayden Turner
National Geographic Wildlife Presenter

Matthew Godfrey
President, Y&R Asia

Graham Hill
Founder, Treehugger.com, Vice-President, Interactive Media, Planet Green

Nadya Hutagalung
Activist & Founder, www.greenkampong.com

Wimar Witoelar
Columnist & Media Personality

Key points
Media has a responsibility to spread a pro-green message. It can do this by influencing social norms and ensuring that programme content includes inspiring stories. By providing information about the why and the how of issues, media can help people move from understanding to actual action.

Since media is a business motivated by profit, businesses can influence content by buying advertising based on the quality of messaging, the quality of programming.

WW: Media in Indonesia is free of state control but it is not free from the control of money and power. We need international support for the media to help raise the awareness of the Indonesian people. At the moment, people don't see climate change as an environment issue, they see it as a political one, either being for or against the government.

NH: Media stars have the power to affect the minds of thousands of people and they should use their platforms responsibly to spread the messages of sustainability. At the same time, media like the Internet is giving individuals the power to lead by example as broadcaster, publisher or advocate. We no longer need to wait for the TV networks to produce the right content.


MG: Much of today's advertising is about fuelling consumption but this needs to change if media is to spread the message of sustainability. Business has the opportunity to influence content by only spending money with media that broadcast content geared to the right kind of message. It's up to media to take accountability for its content and mainstream the environmental message.

GH: To help push green in the mainstream we need to walk the talk. First we need to go for depth to add value. We also need to look at usability, to provide the right kind and amount of information to help our audience make decisions and take action. This includes teaching them to think for themselves, building on general concepts and approaches and helping them to understand scale to focus on what's important.

While most people are inspired by fear, we also need to inspire by hope and by connecting with people so that the message is real, not just a concept.

Business has the opportunity to influence content by only spending money with media that broadcast content geared to the right kind of message. It's up to media to take accountability for its content and mainstream the environmental message.

Social norms are very important in influencing behaviour and the media can help create social norms to make it cool to be green. Convenience is also key. Businesses, citizens and governments have to create systems that make sense and build the right incentives for people to choose the green path.

Discussion

At the moment we try to inspire people with facts, giving them logical reasons why they should do or not do some thing. Instead we should create interesting lifestyle programmes that are educational, and raise awareness to develop lifestyle choices.

While businesses should be producing green products, there is room for placing a premium on the best products. Saving the planet should have a premium on it. It is worth paying more for and there are consumers who can afford it.

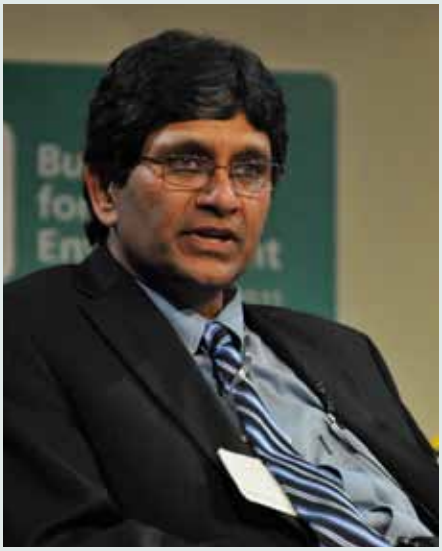
A really good approach is to bring green to people wherever they are, in the office, at home, or out shopping, by integrating messages into popular programmes. It is key to work with media owners to get space and content because once they have the ratings, businesses will follow with advertising. If businesses are also educated, they can influence media to deliver the right messages.

Vegetarianism is the easiest way for an individual to reduce their carbon footprint.

Friday, 29 April 2011
Plenary discussion panel

Delivering transformative solutions for our planet

To achieve transformational change you need to: engage people, particularly decision-makers; be transparent to create tipping points for people to change behaviour; focus on innovation.



Ram Nidumolu (RN)
Founder & CEO, InnovaStrat

Ranjit Barthakur (RB)
Advisor, Tata Consulting Services

Carrie Freeman (CF)
Director, Sustainable Business Innovation, Intel

Alison Rowe (AR)
Global Executive Director, Sustainability, Fujitsu

Jim Walker (JW)
International Programmes & Strategy Director, Co-Founder, The Climate Group

Key points
Current economic models force a choice between development and sustainability of natural resources. New models are been developed which understand the value of eco-systems and follow the notion of shared value contributing to the society and to the environment. To adopt new models we need to change mindsets.

RB: The concept of naturenomics helps us understand the interdependence of nature and economics. It addresses capital formulation through the recognition of natural asset values.

Innovation such as mobile phones and the Internet led to transformative change and empowerment of people. For further transformation change we need to change organisational mindsets and start valuing natural resources. We can no longer just focus on balance sheets and profits. Without ecology, there will be no economics. Therefore we need to use innovation to find solutions to maintain our resources.

CF: The purpose of business is to support human kind. It's not just for profit, it's something that we should all benefit from.

To achieve transformational change you need to: engage people, particularly decision-makers; be transparent to create tipping points for people to change behaviour; focus on innovation. For any kind of change there has to be benefits and it's important to communicate and work with people until they see the benefits for themselves.

New business models will move away from pure revenue models to redefine the interaction of government and private sector and provide benefits to multiple players.

AR: Our vision for 2020 is to look at a human-centric intelligent society where technology learns from human behaviour. In order to innovate, we need to change our business model and focus on how to generate revenue for the business and customers and at the same time have a greater good for the community.

It's important to educate stakeholders and have a clear and simple message that can change mindsets and drive change.

JW: The main decision makers in societies are the leaders who must give credibility to the idea of sustainability and start to change mindsets. However, it takes leadership at many different levels to bring about change. Big organizations can make innovative reforms but smaller organizations have more flexibility. Leadership takes different forms depending on the economic sector and part of the world you operate in.

There is also no one mindset. There are many different ways in which business or government can lead, and it doesn't necessary have to be values-driven.

Outcomes

There is a big shift from economic competitiveness to ecological competitiveness. We will soon take for granted the notion of shared value creation and wonder why we ever talked in terms of exclusive financial competitive advantage.

The fundamental shift we need to make is to be much more collaborative and long-term in our thinking.

It's important to set bold targets to drive efficiencies. By showcasing what they are doing that works, business leaders make it easier for policy-makers to design successful policies that can be quickly scaled around the world. This is part of the diffusion of leadership.

B4E Global Summit 2011 Indonesia

Business Declaration on Climate Change

One of the most pressing economic, environmental and developmental challenge of our times, climate change weakens economic development, hinders progress towards the Millenium Development Goals and has potentially irreversible impact on ecosystems and biodiversity. Business, governments and civil society globally need to consciously undertake a common effort to deliver a low-carbon economy, and in so doing, support more equitable and sustainable development.






Around the world, business leaders and companies are already shaping a green economy, discovering new ways to grow investments and seize opportunities. These progressive companies demonstrate that, under the right policy conditions, the green economy leads to increased investment, jobs and a more sustainable future.

Indonesia has been at the forefront of action on climate change and has taken a global leadership role among countries in its policies on reducing emissions from deforestation and forest degradation. President Susilo Bambang Yudhoyono has sent a clear message that the world must take a more sustainable, low-carbon development path towards a new Global Green Economy, committing Indonesia to reducing emissions by 26 percent by 2020, and up to 41 percent with international support.

WE, THE PARTICIPANTS AT THE B4E GLOBAL SUMMIT 2011, support the Indonesian President and Government's commitment to reduce emissions by 26 percent to 41 percent by 2020. We will achieve this through both individual company initiatives and by working collectively in partnership with governments and NGOs. We commit to:

1. Support net zero deforestation by 2020 by phasing out products coming from deforestation of ecologically important forests

2. Reduce our resource intensity by investing heavily in energy & resource efficiency programs, and in programs to redesign products and supply chains to achieve more transformative change

3. Promote sustainable business practice throughout supply chains

4. Support programs protecting areas of high biodiversity and natural carbon storage

5. Invest in and promote sustainable urban planning and integrated land-use management

6. Intensively promote more sustainable consumption patterns in Indonesia

We are committed to working in close partnership with the Indonesian government to achieve these ambitious goals and deliver successful action on climate change. The costs of inaction are far greater than the costs of action.

Strategic Partner

AG Network

Artha Graha Peduli

Corporate Partners

Gas Negara

PHILIPS

sinarmas agribusiness and food

APP

TELKOMSEL

Supporting Partners

APRIL

BMW

BNI

GT Radial
Product of
PT GAJAH TUNGGAL Tbk

SAP

GE

HITACHI
Inspire the Next

Nestlé
Good Food, Good Life

PERTAMINA

Official Airline

Garuda Indonesia

Global Broadcast Partner

CNN
GO BEYOND BORDERS

Official PR Firm

FLEISHMAN HILLARD

Media Partners

BERITA SATU
JakartaGlobe
GLOBE

METRO TV
Knowledge to Elevate

MI MEDIA INDONESIA
mediaindonesia.com

Eco-Business.com

Summit Partners

AMCHAM INDONESIA

BRITCHAM

CastleAsia

CLIMATE BUSINESS

THE CLIMATE GROUP

eurocham

Global Initiatives promotes sustainable global development through a series of television programmes, media projects and international events. These initiatives highlight global issues and offer partnership solutions to some of the greatest challenges facing the world.

Partnership Initiatives:

B4E Business for the Environment

B4E, Global Business Summit for the Environment
The Business for the Environment Global Summit is a leading international conference for dialogue and action on the environment. B4E 2011 will bring together leaders from government, business, NGO and other stakeholders to discuss collaborative action in response the environment and climate
www.b4esummit.com

RESPONSIBLE BUSINESS

Responsible Business Global Forum
The Responsible Business Global Forum provides an unique opportunity for CEOs and senior executives to join leaders from government, NGOs and other international organizations to discuss global issues and explore solutions that place corporate citizenship at the very centre of international business.
www.responsiblebusiness.com

Responsible Business Television
Responsible Business is a television series produced by Global Initiatives showcasing leading global corporations that, in partnership with government, NGOs and other international organizations, are developing business-driven solutions to some of the greatest challenges facing our world. Not only to improve corporate reputation or increase profits, but because it's the right thing to do.
www.responsiblebusiness.com

global initiatives

To learn more about these leading initiatives and opportunities for corporate partnership please contact: Benjamin Tan

80 Raffles Place, UOB Plaza 1, #36-00, Singapore 048624
T +65 6248 4625 E benjamin.tan@globalinitiatives.com
W www.globalinitiatives.com

B4E

Business for the Environment

Global Summit 2011

WWW.B4ESUMMIT.COM

Kementerian Negara Lingkungan Hidup
Republik Indonesia

WWF

BKPM

KADIN INDONESIA

globalinitiatives