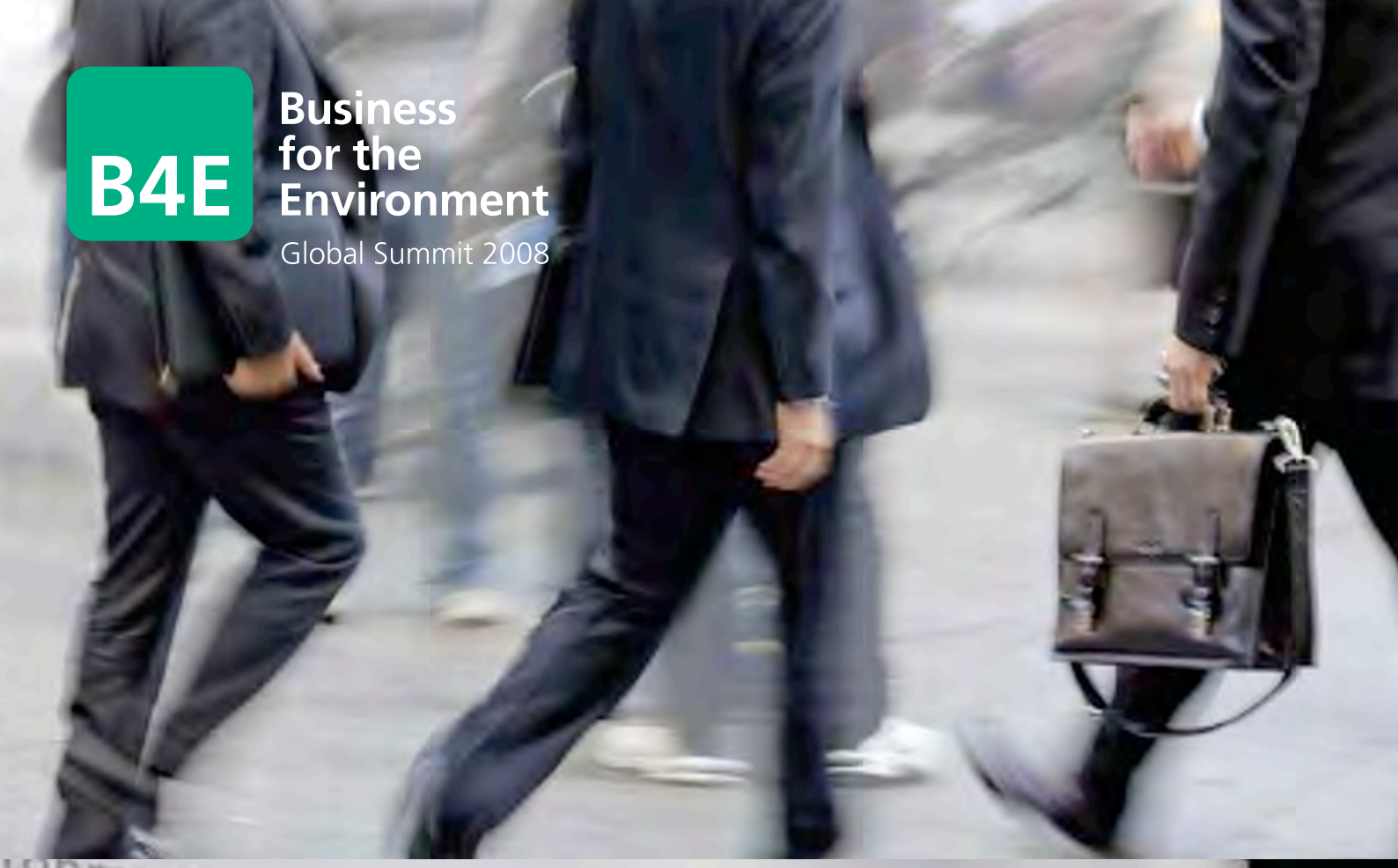


B4E Business for the Environment

Global Summit 2008

Resource Efficiency. Renewable Energy.

22-23 April 2008
Suntec Convention Centre, Singapore

Summary Report

UNEP

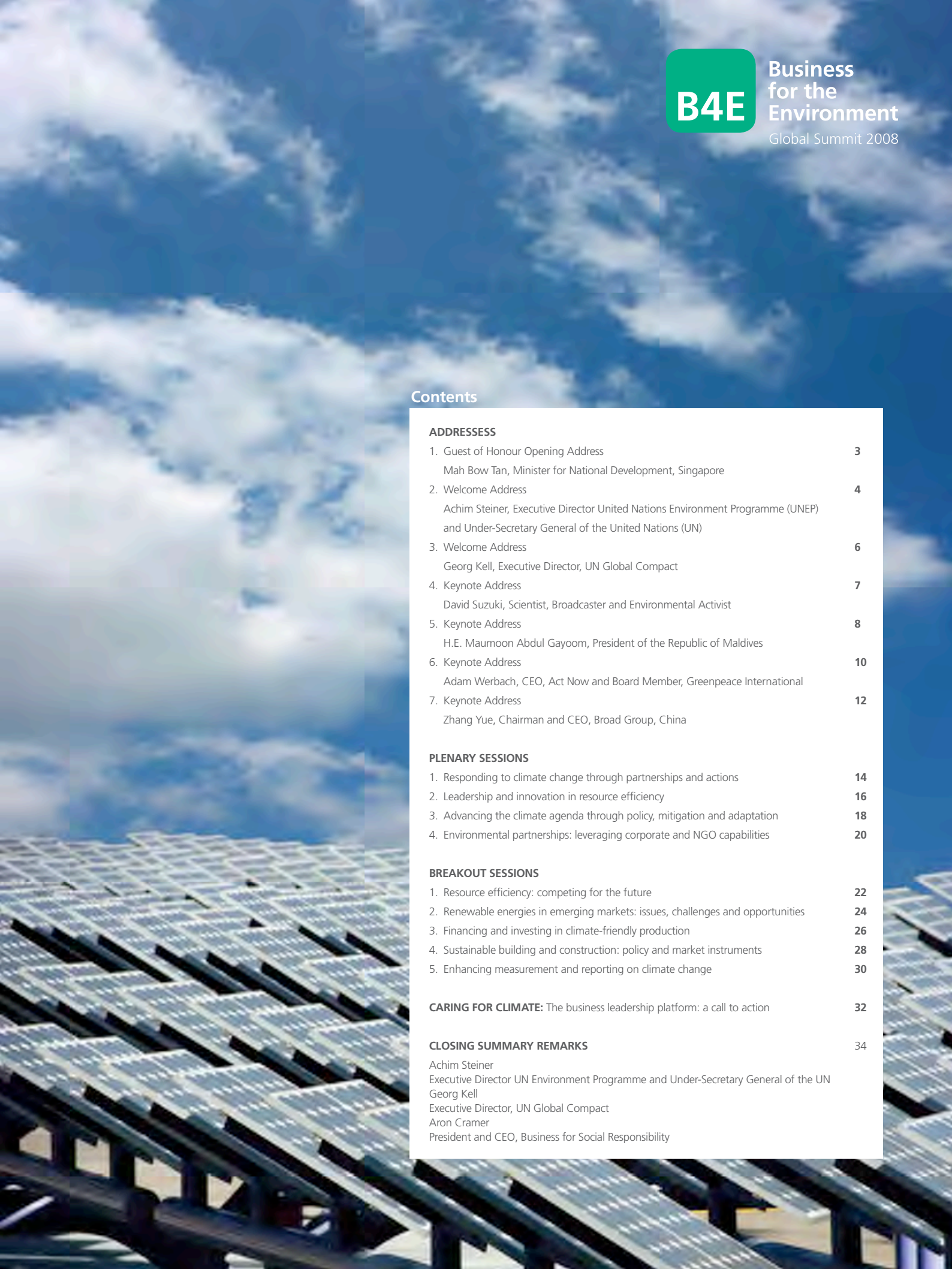
United Nations Global Compact

global initiatives

Business for the Environment
Global Summit 2008

22-23 April 2008
Suntec Convention Centre, Singapore

The human race is pushing our planet towards the edge of disaster by flooding land, sea, and air with pollution and by over use of our natural resources. These issues amount to one of the greatest challenges humanity has ever faced. As the world explores alternative growth paths, new ways of doing business are critical. Innovative solutions are pointing the way to new business models and market opportunities.



B4E Business for the Environment
Global Summit 2008

Contents

Addresses

Guest of Honour Opening Address
Speaker: Mah Bow Tan, Minister for National Development, Singapore

- As a country that imports all its energy and food, Singapore is highly vulnerable to changing market and climatic conditions.

- The history of Singapore's development shows that it has always taken a pragmatic approach to sustainability. By adopting long-term and pragmatic development strategies, it is possible to create a balance between achieving economic growth and maintaining standards of living.

- If Singapore can strike this balance, it will serve as a role model for other densely populated cities, especially those in Asia.

- Singapore's sustainable development strategy comprises three components:
  i. Introducing sustainable policies and measures:
  – Create an inter-ministerial committee for sustainable development
  – Intensify efforts to improve energy efficiency
  ii. Becoming a hub for environmental services:
  – Incentives for companies to encourage them to train employees
  – A budget of more than $300 million to promote research and development
  – Promote Singapore as a model of water resource management
  iii. Leadership from the business sector:
  – The business sector is a vital tool in promoting Singapore as a sustainable development hub
  – Businesses should become more environmentally-friendly without affecting their economic performance
  – Demonstrate that being more resource efficient allows companies to gain competitive advantage

- Both the private and public sectors should take joint leadership on sustainable development.

- Business leaders should step forward as champions of sustainable development.

Addresses

Welcome Address

Speaker: Achim Steiner, Executive Director, UN Environment Programme & Under-Secretary General of the United Nations

- Achim Steiner welcomed delegates to the B4E Global Summit 2008 by highlighting the development of the global response to climate change over the past year. At the United Nations Framework Convention on Climate Change (UNFCCC) meetings in Bali, December 2007 governments agreed to the Bali Road Map leading towards post-Kyoto, and set out a plan for 2 years' negotiation to establish a decisive climate regime by the 2009 Copenhagen meetings.

- A few weeks ago, governments met again in Bangkok to re-establish the timelines and deliverables, which Mr Steiner saw as a warning sign. He pointed out that the Bali Road Map was supposed to be a 10-year agreement, so for governments to reconvene just four months later and spend so much time rearticulating reasons why other countries should make the first concessions was disconcerting and suggested that there could be trouble ahead. Mr Steiner urged politicians to take the lead on climate change and convince both the electorate and business leaders that it must be tackled urgently.

- He pointed out that the climate change debate currently consists of a series of disconnected conversations. For instance, The Wall Street Journal recently published an article saying that climate change discourse is hysterical and based on hype. It complacently suggested that people would find a way to overcome the problem, once it occurs. Mr Steiner said it was disconcerting to read intellectuals making this argument in the face of today's overwhelming evidence for global warming.

- For instance, the Intergovernmental Panel on Climate Change (IPCC) has published a number of compelling reasons why people should take the issue seriously. Data that was collected just three years ago has already been replaced by new evidence, which predicts an even more drastic climate outcome. A week prior to B4E, a new report suggested that sea levels could rise by up to 0.8m in the next decade. Dealing with this would be exceptionally challenging as there are more than six billion people on the planet, multi-million dollar developments on coastlines all over the world and 100 million people living in coastal areas in Africa.

- The business community has a key role to play in tackling climate change, and the solution lies in generating the political will, confidence and trust needed to respond to climate change; the challenge is to identify how to make businesses that are doing nothing or are even obstructing climate change policy change the way they operate.

- Ultimately, it is the markets and consumers that will determine whether businesses invest in a different way of working and new products, or remain in the current carbon-intensive mode of economic production. Businesses are aware that consumers, faced with the evidence of climate change, are willing to change purchasing habits accordingly. Constant interaction with the public will be critical for business and governments if they want to change climate change related public policy.

- Mr Steiner reminded delegates that they live in an era where the ability to transform opinions and share knowledge is no longer a limiting factor. He cited the OSRAM energy efficient light bulbs (handed out to all B4E delegates), for which the technology is common knowledge but has suddenly become viable and is used all over the world. What we should anticipate, he said, is a completely different paradigm in the future, where public policymakers and entrepreneurs will have to work with consumers to provide products that are green and economically viable.

- Businesses will also have to look at technical and scientific problems in new, creative ways. Mr Steiner used the example of data centres: there is technology now available that can capture the heat generated from their day-to-day operations and use it for heating purposes.

- There is currently a research programme looking at how to produce cement more efficiently, including lessons learnt from the formation of human bones. While both cement and human bones are molecularly similar, it takes a temperature of 1,200 degrees Celsius to produce cement, whereas bones are formed in the body at 37 degrees Celsius. Cement production worldwide accounts for 5-10% of carbon dioxide emissions. If we can engage with business and regulators, sector by sector, to creative incentives to improve processes and products, we will achieve positive outcomes, he said.

- There are further examples of such innovations all over the world. Tokyo has invested heavily in its infrastructure so that only 4% of water pumped into the city is lost in distribution; London loses 25%. The reasons lie in the economics: it's currently cheaper to deal with wastage than reduce it. Structuring markets so that it becomes more attractive to overcome these obstacles is vital.

- 18% of Germany's energy now comes from renewable sources, while in the UK, the figure is under 10%. Denmark has increased its GDP by 70% over the past 20-25 years and yet has not used a single extra kilowatt of energy because of the way it has invested in energy resources and efficiency. In global markets, none of these countries are uncompetitive. In fact, those that have invested in resource efficiency and renewable energy over the past 15-20 years are best placed to take advantage of the new emerging markets for renewable and resource-efficient technologies.

- Businesses today pride themselves on being able to predict the future better than governments. This means that governments will also have to project a more coherent and longer-term vision, and set clearly defined sustainable policies. It can be done. Costa Rica is currently developing an information and communications technology based development strategy to drive its future economic growth, and has introduced its "Peace with Nature" concept to make the country carbon-neutral economy within13 years. By investing today in tomorrow's economy, Costa Rica is clearly planning to gain a competitive advantage in tomorrow's markets.

- UNEP's role is to facilitate and accelerate the transition to a green economy, and to speed up the implementation of projects including those with the private sector. For instance, UNEP is working with two of India's largest banking groups to create credit facilities to help nearly 100,000 rural villagers finance the purchase of solar lighting systems to decrease their reliance on kerosene-fuelled lamps. The same has been done in Tunisia where finance for 20,000 solar hot water systems has been put in place. The positive results of the project have led the Tunisian Government to introduce legislation to encourage the use of solar energy and decrease the country's reliance on liquid petroleum gas (LPG) for water heating.

- Another of UNEP's roles is to raise the public's understanding of the imperative to act, a factor that businesses take into account when planning future product development. UNEP has accepted that environmentalists need to be economically literate just as economists have to be environmentally aware, which is why it has launched a study looking at what the green economy of tomorrow will look like and identifying what the drivers, challenges and opportunities are.

- The transition to a green economy has begun, whether it is through reducing resource use or positioning a company in terms of tomorrow's markets. More people are employed today in the renewable energy industry than the entire oil and gas sector. Within 10 years from now, Germany will have more people working in clean technology than the entire automotive industry.

- Mr Steiner said he hoped everyone would walk away from B4E more inspired to identify the business opportunities in tomorrow's economy and less overwhelmed by the urgency and scale of what needs to be done.

Addresses

Welcome Address

Speaker: Georg Kell, Executive Director, UN Global Compact

- Georg Kell welcomed the delegates by setting the context that as companies become more and more global in outlook, a responsible business approach becomes increasingly important in order to succeed in the global economy.

- Businesses are proactively addressing and engaging with environmental issues, shown by the increase in UN Global Compact members, up from 50 companies in 2000 to about 5,000 comapnies currently. Reasons for this rise include companies' desire to improve the efficiency of their business operations, as well as, reducing their environmental impacts.

- Current business trends show a significant emphasis on strategic plans to create value, while at the same time managing risks and exploring opportunities. Companies are beginning to realise that environmental, social and governmental issues are increasingly material to long-term performance and that it is vital to "invest in being prepared". Early movement on environmental issues translates into long-term success for businesses.

- Taking action is not an optional add-on: the Kyoto Protocol requires the participation of everyone. Government and business need to be proactive, and companies can and must take the lead to show that it is possible to effectivly address climate change, that a green future is viable, and to prepare the groundwork for government action.

- Mr Kell said that the current economic downturn is not a reason to stop taking action. Business responsibility is more important than ever as we need to shift production to be low-cost and resource-efficient. He emphasised that, "Movement is necessary for the future."

- This summit hopes to address such questions and issues and ultimately form and shape opinions that can be transmitted to policy makers and to create an efficient medium for future investments, he concluded.

Addresses

Keynote Address

Speaker: David Suzuki, Scientist, Broadcaster and Environmental Activist

- Dr David Suzuki began his session by highlighting that climate change must be viewed as an urgent ecological problem and as one of the main challenges faced by humanity today. More than 50% of forests worldwide have been destroyed and if nothing is done, there will be no large, untouched forests left in 20 years. Current levels of water pollution and over-fishing mean there will no longer be a single commercial species of fish left by 2048. A UNEP research reported that more than 50,000 species of flora and fauna face extinction, and even the relatively isolated areas of the South Pole are suffering the effects of climate change.

- The human brain has provided us with the single most important advantage over all living species — the capability to understand the concept of "the future", and the knowledge that our actions today can affect it. With evolving lifestyle changes and technological advancements, human consumption is growing, and our increasing ecological footprint is having a huge impact on the planet. The Earth is being viewed as a source of raw materials and our demand for these is altering its physical, sociological and chemical composition.

- Scientists today are behaving in the best tradition of humanity by looking ahead and identifying the dangers and opportunities, urging us to change our ways. Humans are not paying enough attention to climate change and are adopting the complacent view that we are intelligent enough to deal with the problem of increasing temperatures when they occur.

- Dr Suzuki reminded delegates that for more than 30 years, scientists had warned that New Orleans was a disaster waiting to happen — no one should build a city on land that is below sea level and more so, in a hurricane zone, they said. The damage caused by Hurricane Katrina validated the scientific analysis; hence foresight today is as important as it ever has been.

- However there are a number of obstacles slowing down our response to the crisis, Dr Suzuki said. The current explosion in population growth is making it hard to fully understand the dangers posed by climate change. Not only is the unprecedented population growth unsustainable, the majority of the current generation was born after the Fifties when growth was seen as a benchmark of progress.

- Then there is the economic reality. In conventional economics, anything that does not have economic value is called an externality. Dr Suzuki cited an example. Recently, he got into an argument with the CEO of a tree-logging company who argued that a tree has no value until it is felled. Dr Suzuki's counter-argument was that the tree has more value when it's alive. It absorbs carbon dioxide and releases oxygen; its roots bind soil, which helps protect salmon spawning waters from silting; its roots draw up gallons of water from the ground, which are released into the atmosphere and help regulate the climate; and it provides a habitat for countless living creatures. The CEO brushed all these off as externalities. Economists think an economy can and must grow forever, but we need to ask whether economic growth is a good measurement of progress.

- Dr Suzuki reminded us that we live on a planet where the quantities of air, water and land are limited. He pointed out that anything growing steadily over time is increasing exponentially, and with finite resources, such growth can't be sustainable.

- Dr Suzuki's recommendation was to stop thinking about the economy as the bottom-line. In reality, the bottom-line is the planet's biological capacity hence, the urgent need to reduce our ecological footprint, he said. There are solutions available today that can help corporations and governments change. Most of peoples' frustration with businesses and politicians is due to their tendency to focus only on the short term.

- Dr Suzuki implored us to look ahead and define a vision for the next generation. This would focus us on working together to turn the dream of a greener world into reality.

Addresses

Keynote Address
His Excellency Maumoon Abdul Gayoom, President of the Republic of Maldives

- His Excellency, President Maumoon Abdul Gayoom remarked in his opening that the theme of the summit, Business and Markets in a Climate of Change, is very fitting as it highlights the intrinsic link between business and climate change. For the past 25 years, the Maldives has enjoyed unprecedented modernisation coupled with social and economic development. This has helped the country develop from being one of the poorest countries in the world, increasing per capita income from $300 to $2,600 today.

- More than 9,000km of coral reef, the seventh largest in the world, form the foundation of the country's development. And yet, the beauty and serenity of the islands mask the fragility and vulnerability of the country. The 1,192 islands that make up the Maldives are some of the lowest lying in the world with three-quarters of them no higher than 1.5m above sea level and the highest point just 6m above sea level. With the Intergovernmental Panel on Climate Change's (IPCC) predictions of a 18cm to 45cm sea level rise by the end of the century, and UNEP's most recent revision of an almost 80cm sea level rise, this is bad news for the Maldives. These predictions, should they occur, would render much of the country uninhabitable in the not-too-distant future.

- The Maldives has been actively calling for help to prevent a global environmental catastrophe. Last year, it highlighted the issue of the human impacts of climate change, and in March this year, the UN Human Rights Council agreed to a detailed study of the relationship between climate change and human rights.

- The Maldives has been facing serious beach erosion, coral bleaching and death, salt water intrusion and dwindling fresh water supplies. In addition, the country has suffered a severe reduction in the productivity of agricultural land. The effect on the quality of life cannot be understated, and there is an urgent need to address climate change on a global scale. The Maldives contributes a negligible 0.01% to total global greenhouse gas emissions and yet will be one of the first and biggest victims of global warming.

- For a small island state with a GDP of $855 million, there are limited financial and technological resources available to adapt to climate change. Sea walls have only been built around the capital city, Male. To replicate this across all 1,192 inhabited islands would cost in excess of $6 billion, which is not a viable option.

- All economic development in the past two decades has been guided and governed by a comprehensive environment act and regulations. The Maldives has 25 protected marine sites, 2 protected islands, 70 endangered bird species, 9 marine species, and 2 preserved mangrove ecosystems.

- In the Seventh National Development Plan (NDP), there is a commitment to protect no less than 5% of total coral reefs. Policy priorities include the implementation of a national adaptation plan and increasing awareness within communities. Environmental studies are compulsory within the primary school education curriculum with children as young as 6, learning of the Maldives' vulnerabilities. Every school also has an established eco club to inform children of the issues.

- The goal of the NDP is to improve disaster risk management. In response to the tsunami disaster, the Safer Islands Programme involves the voluntary relocation of island communities to safer and more economically viable islands with the goal of having 10 such safer islands by 2010.

- Regarding the two main economic sectors of tourism and fishing, the former is guided by environmental regulations and private-public partnership with island resorts committed to energy saving and waste management. Environmentally friendly practices are also reviewed as part of the evaluation process when awarding islands tourism development licences. For instance, the use of natural lighting has been incorporated into building design. In the fishing industry, netting is no longer permitted, and dolphin-friendly practices have been adopted. The industry is also developing the recycling of post-consumer waste products. Transport is regulated through the enforcement of emission standards. High taxes are levied on imported vehicles and those more than five years old are banned. Leaded fuel can no longer be imported into the country.

- Renewable energy development also ranks high on the agenda, both in terms of energy security and environmental policy. Energy transformation plans have been in place since January; there is a hybrid energy pilot project in the north of the country, which includes the establishment of a renewable energy grid that will be duplicated across the other islands.

- The fact that international public awareness of climate change has never been stronger, coupled with the changing mindset of the business community, is a cause for optimism. History was made at the Bali meetings in December and the roadmap agreed there could lead to a meaningful post-Kyoto agreement. However, to achieve these important objectives, the international community must be willing to listen to the smallest and most vulnerable countries.

- Emission reduction targets are not stringent enough; the current plan to stabilise greenhouse gases at 450 ppm (parts per million) and allow a 2% rise in temperature compared to 1990 levels is not acceptable to the Maldives and would be a disaster. The Maldives will persist in climate diplomacy but the business community can play an important role. Alliances and partnerships need to be forged and strengthened and the Maldives will persist in its diplomatic efforts until the safety and security of its people are ensured.

- President Maumoon Abdul Gayoom then called on the global business community to support local Maldivian entrepreneurs to share expertise and technology, and to offer financial incentives to encourage green ventures.

- He concluded by asking permission to alter a statement made by Minister Mah Bow Tan that: "The time for action is today," instead, President Gayoom remarked: "The time for action was yesterday, but we have missed that. There is no alternative for us, but to make the time for action today."

Addresses

Keynote Address

Speaker: Adam Werbach, CEO, Act Now and Board Member, Greenpeace International

- Mr Adam Werbach opened the session by sharing the observation that as much as we know that people cared about the environment, climate change was ranked 15th, 16th or 17th on a list of priorities when they were asked what they are going to act on. In reality, when one asks people if they cared about climate change, they would say: "Yeah sure", but when one asks them if they really act on it for example when they are in a store deciding to buy something, few do.

- Mr Werbach invited all delegates to join in building a movement that goes beyond the political to the personal; one that views the existential threat of global warming as a chance to change the way we treat ourselves and the planet, and aspires to have one billion active participants worldwide.

- To achieve the movement, the suggestion extends beyond a broader platform than just going green. People seek something broader than an environmental solution to the myriad problems they face in their lives. They believe climate change is happening, but they want to be part of something larger without having to sacrifice their identity. For example, people want to feel good about themselves when they look in the mirror and the way their kids look at them at the dinner table.

- Every individual is aware that things are happening now; progress is obvious. It could have been the price of oil, the war in Iraq or melting glaciers that inspired the change. No individual knows what to call it and Mr Werbach suggests that we can call it the sustainability revolution. But we cannot forget that the majority of the public do not know what the word 'sustainability' means or implies.

- Mr Werbach believes that changing the way that people look at the world and act in their own lives is more important in the long run than to focus only on the marginal ecological impacts of the individual actions people take.

- The common definition of sustainability or environmental sustainability is mainly concerned with the fate of the planet and how it affects our lives. However, Mr Werbach regards sustainability as being inclusive of four integrated, and equally important streams: social, cultural, economic and environmental.

- He called upon the audience to fight to make sure that all four aspects are included in the definition of sustainability and to give rise to the birth of a new mass movement to complement and expand our existing political efforts; a movement not just for professionals or experts but one for all the stakeholders.

- In Japan and Sweden, life expectancy is roughly 80 years; in Botswana and Swaziland it is 40 years. In our many years of development, life expectancy in Russia has fallen from 64 to 59 years since 1990.

- There are roughly 826 million people on the planet that will be hungry every night and yet, there is a much larger number of 1.6 billion people who are over-nourished and overweight. Delegates were called upon to consider for a moment that twice as many people on the planet are dealing with the problems of too much food as are dealings with the problems of too little.

- Our politics and our hardly resonates with these individuals. We cannot diminish the need to make sure that everyone has enough to eat but today's world also requires a solution for those who have too much as well.

- Mr Werbach classified "Green" as the beating heart of an emerging consumer market. "Green" represents the simple and inarguable wisdom of ecology that all things are connected; in another spectrum, "Blue" is simply a call to integrate all four streams of sustainability, social, economic, cultural and environmental. The problem today is that most people do not act on their "Green" concerns because we are people who consume. More inherently, there is no concept of "Blue" amongst consumers that integrates our consumption with our social, economical and cultural environment.

- Everything we have learnt about behaviour change is that it happens one small step at a time. As new consumers are being born throughout the planet, they are learning old consumption habits; it is unlikely that a mum who is using processed Cheez Whiz is going to switch to healthy carrots.

- Our challenge today is to inspire people to make better choices and to ask ourselves how do we make personal choice and personal change to work at a global scale. Everyone needs to ask how we can change the attitudes of billions of people, as opposed to hundreds, thousands and millions. Mr Werbach believes that working with large consumer product companies and working with companies that have large "people footprints" will be a critical component.

- When Mr Werbach was first approached by Wal-Mart, the largest consumer corporation that ever existed in the history of the planet, and was asked to work with them, he refused. As a former president of the Sierra Club and an international board member of Greenpeace, he assumed they only wanted to hire him as a PR exercise. Yet, he changed his mind when Wal-mart shared with him their 3 goals (a) to produce zero waste, (b) to be powered by renewable energy and (c) to sell only green products.

- The team Mr Werbach worked with developed a simple idea. Since no one is smart to solve the problem, the best option is to simply give the problem away. Mobilising the 2 million people working for them, Wal-mart would ask these employees to contribute to solving the problem. A simple model called PSP – Personal Sustainability Project was created and implemented.

- The PSP created a way for individuals to do something that can be repeated; something that is good for an individual, their family and the planet. It was a simple model that involved actions like biking to work, parking in a parking spot that is farthest away from the store, changing light bulbs to CFL or caring for a park. Mr Werbach's personal PSP was to make a healthy breakfast for his kids every morning while Lee Scotts', the CEO of Wal-Mart, had a PSP of recycling. All simple actions when repeated and shared have dramatic effects on people's behaviour and buying habits.

- This idea caught on like wildfire and before long, half a million of Wal-Mart associates had their own PSPs. Initially the PSPs were focused on recycling and other environmental goals but other interesting health oriented PSP's like dieting, losing weight or quitting smoking that were also enormously effective. For some reason, individuals felt that every daily action such as reading the morning papers and reading about climate change was a reminder not to smoke or to follow their diet.

- All parents on the planet are concerned for their children but what are companies doing to help them raise their children? There are few institutions on the planet that have a billion-person-reach: the government of China, the government of India, McDonalds, and Coca-Cola are such examples. Willy Sander once said, "Why do you rob banks? Because that is where the money is. Why do you work in large corporation? Because that is where the people are."

- Consumer movements can work and has worked throughout history. On Feb 1, 1964 at a restaurant in North Carolina, African-American students sat on seats reserved for white customers and this was the start of the civil rights movement. Gandhi rallied the nation in a peaceful campaign against British rule; a simple but radical move that ended an empire. Consumer movements throughout history have been quite powerful, but they always began as a result of simple actions.

- Mr Werbach encouraged the delegates to begin building a lifestyle movement in addition to a regulatory, legal and investment movement. He asked everyone to start by setting their own PSP's and went on to say that the process of personal improvement is never-ending. Individuals can start one PSP, re-commit to it or begin another or share it with a friend.

- One can start placing plants next to light switches because when people see nature next to light switches, they tend to conserve more. If one travels a lot, one can declare a no-fly week once a year. Individuals can also start buying concentrated detergent, wash laundry in cold water, or exclude meat from one meal a week.

- Mr Werbach then concluded with a call to action – for everyone to build a billion person movement.

Addresses
Keynote Address
Speaker: Zhang Yue, Chairman & CEO. Broad Group, China

- Mr Zhang Yue, who is in the air conditioning business, first encountered sustainable development issues 18 to 20 years ago in the Limitation of Growth report issued by the Club of Rome. He highlighted the fact that 90% of air conditioners globally are reliant on electricity with more than 100 companies producing these types of units. Less than 10 companies produce absorption coolers.

- The reason to switch to using absorption coolers is very simple – they are twice as efficient as electric air conditioners. Absorption coolers could benefit many industries, Mr Zhang said. For instance, the IT sector uses a lot of energy for cooling. However, though this is recognised as a problem there are few incentives to improve the sector's performance in this area and energy efficiency standards are weak. Mr Zhang cited Bangkok International Airport as an example of a building cooled entirely by absorption coolers but noted that there are few other examples.

- There are a number of ways to use air conditioning in a more environmentally friendly way, he said. Standard practice is to mount air-conditioning on the roof of a building but installing it on the ground can reduce energy use by at least 30%. Why don't companies do this? Part of the problem with air conditioning use is that there is a lack of data and performance monitoring, which would help identify inefficiencies and alternative solutions. For instance, companies often measure water use but rarely cost air-conditioning, which can account for almost 90% of a company's total electricity bill.

- Mr Zhang also stressed the need for individuals to take responsibility when using air conditioning. He said he always tells his customers to keep temperatures comfortable rather than unnecessarily low. He cited the example of how government leaders in China no longer wear a tie and dress in lighter clothing so that air conditioners do not need to be set to such low temperatures. The same practice is adopted in his company.

- He also stressed the importance of companies reducing their overall energy use. A typical building consumes 150 kilowatts of energy per square meter annually — an efficient one can consume as little as 20 kilowatts per square meter. Improving air conditioning efficiency and altering energy consumption patterns, could further reduce costs by 15-20%.

- There is no excuse for inaction Mr Zhang said. Technologies are currently available that could help businesses become more efficient.

Plenary Sessions
Responding to climate change through partnerships & actions






With abrupt changes in climatic patterns and an increasing risk of extreme climate related events, few now doubt that global warming is the most serious long-term threat to mankind. Given the omnipresent nature of climate change and the challenges posed for all sectors of society, effective action will only be achieved through multi-stakeholder international partnerships. In this session, leaders from the world's most influential business and industry groups leading on sustainable development shared their thoughts on climate change and explained how their organisations have engaged in partnerships in response to the threat.

Chair : Claude Fussler, UN Global Compact
Panelists : Aron Cramer, Business for Social Responsibility
- Andrei Marcu, World Business Council for Sustainable Development
- Adrian Hodges, International Business Leaders Forum
- Melinda Kimble, UN Foundation
- Doug Miller, Globescan Inc

- Mr Andrei Marcu highlighted that there is a need to adopt a stakeholder participation perspective rather than a geographic one, but the key issue is how to spread and share technology. Businesses are taking action to mitigate the impacts of climate change because of corporate social responsibility, regulations and globalisation but more needs to be done. Markets can and will act; however, the world has never been forced to make changes within such a tight timeframe before.

- Action on climate change needs to be stimulated by market forces. Some of these include carbon trading and policy making, and technology development, awareness and deployment.

- Ms Melinda Kimble shared with the audience that the UN Foundation is a US public charity that supports UN goals and objectives. It collaborates with the private sector to finance market-based programs that promote the development of clean energy technologies and energy efficiency.






- In her discussion, Ms Kimble highlighted the lack of policies in the US to drive the change needed to encourage the adoption of these technologies.

- The UN Foundation however, engaged in a number of initiatives to promote clean energy and energy efficiency. These include:
  - Renewable energy projects launched with the UN Development Program and e8 grouping.
  - A series of wind turbine projects along the coast of Ecuador with the pilot testing phase which began in October 2007.
  - A solar power program with the Indian banking sector to finance solar energy projects in rural India.

- The UN Foundation has also established small-scale and medium-sized entrepreneurship programs for energy development in five states in Africa with the aim of kickstarting a new approach to energy in the continent.

- Advocating strong policies, delivered through public policy partnerships to drive global negotiation on climate change, the UN Foundation is active in promoting global leadership for climate action, which includes agreements on a detailed framework, setting out steps that need to be taken including targets, timetables, and the promotion of technology transfer. It must also recognise that some level of climate change is inevitable while financing is put in place to support further action.

- Mr Adrian Hodges emphasised that there is a need for legally binding public policy to address climate change through collaboration between stakeholders. However, it is dangerous to try to make everyone do the same thing. Pluralism and competition are healthy.

- Mr Hodges added that as much as high-powered partnerships are important, bottom-up community-based partnerships should also be encouraged. Community-based partnerships can learn from other successful local partnerships. And instead of initiating change from the top down through captains of the industry, companies should listen to the views of their employees to help initiate public policy.

- Bono, the lead singer of U2, is a strong advocate of ending world poverty. In the same way, a celebrity could be used to highlight the urgent need to take action against climate change, concluded Adrian Hodges.

- Mr Aron Cramer remarked that global challenges, such as climate change, are becoming business challenges and the distinction between the two is fading. As a result, partnerships need to be designed to deliver systemic change. Without systemic change, there is a risk that partnerships will be less effective.

- When addressing climate change, partnerships must consider five factors: ecological footprint, policy, technology, consumption and markets. Mr Cramer concluded by saying that we need to radically change the way we do things if we are to tackle global warming effectively.

Plenary Sessions
Leadership and innovation in resource efficiency






Business resource efficiency, essential to sustainable development, will be an increasingly critical factor towards achieving market and industry leadership in a carbon-constrained world. This translates into consuming fewer non-renewable resources and producing less waste , while delivering the same quality in services and products. Companies can expect returns from placing resource efficiency high on their business agenda. The session involved international executives explaining how their companies have significantly reduced their environmental impact and increased profits by reducing raw materials and energy usage.

Chair : Sri Jegarajah, CNBC
Panelists : Wolfgang Gregor, OSRAM
- Neil Hawkins, The Dow Chemical Company
- Wolfgang Bloch, Siemens
- Jouko Virta, APRIL
- Arab Hoballah, UNEP DTIE

- Climate change has influenced the way businesses are run. As such, companies must embrace green innovations to become more resource efficient and explore new ideas for sustainable, long-term investments.

- There are examples of successful initiatives by companies that have become more efficient while remaining competitive. Some of these companies include: OSRAM, which reduced energy and water consumption, and waste; Dow Chemical, which reduced soil waste and absolute greenhouse gas emissions; and Siemens, which designed and manufactured energy efficient products.

- Partnerships can also be established between NGOs, the private sector and governments. Mr Neil Hawkins shared that Dow was the first private company to join the UN Foundation and it worked in China to improve energy efficiency in small- and medium-sized enterprises.






- Companies must develop strategies to avoid or reduce emissions. Mr Jouko Virta highlighted that APRIL manages landscape risk and maps the social impacts of forestry to ensure future sustainability. It also mitigates climate change through responsible forestry and all of these are integrated into their business operations.

- The panelists agreed that there are three key elements to tackling climate change: collaboration, innovation and policy.

- Increasingly, consumers are becoming more open and receptive to ideas that protect the environment. This means there is a great opportunity for businesses, governments, NGOs and consumers to get their act together. Partnerships and collaborations will only thrive when each party plays its part and develops cost-effective solutions. The Kyoto Protocol has been one big step forward. Nevertheless, these actions are not without risks. Businesses must prove to the world that the potential benefits from such environmental actions can, and will outweigh the inherent risks.

- This session also touched on issues regarding technology transfer and the biodegradability and environmental footprint of used products. As well as improving resource efficiency, recycling also needs to be looked at. Companies have realised the importance of recycling, have noticed the growing demand for recycled goods and are working on increasing the number of times a product can be recycled before being degraded. They are also trying to increase durability of products.

- A balance needs to be struck between improving energy efficiency and increasing manufacturing output to maximise profits and supply increasing demand.

- The panelists also called upon a drive for policies to focus on reducing energy consumption rather than alternative methods of energy generation.

Plenary Sessions
Advancing the climate agenda through policy, mitigation and adaptation






The UN IPCC has reported that the world will have to end its growth of carbon emissions within 7 years, and will need to be free of carbon-emitting technologies in less than 40 years in order to avoid widespread extinctions of species, mass flooding, decreased food production and higher deaths from heat waves. Governments, as policy makers, and scientists, are critical in influencing international policy development. This session discussed the importance of responsibility between governments and the private sector in the promotion of energy efficiency and the reduction of carbon emissions, as well as, the role governments should take in the lead to offer incentives such as tax rebates to encourage private businesses to become greener.

Chair : Achim Steiner, UNEP
Panelists : H.E. Maumoon Abdul Gayoom, President of the Republic of Maldives
- H.E Abdul-Qader Ba-Jammal, former Prime Minister of Yemen
- Hon. Goran Persson, former Prime Minister of Sweden
- Sen. Liz Thompson, former Minister of Energy and the Environment of Barbados
- Dr. Balgis Osman-Elasha, Senior Scientist and IPCC Lead Author, Sudan
- Dr. Atiq Rahman, Bangladesh Centre for Advanced Studies






- Throughout the plenary session, the panelists were of the view that the role of the policy maker was critical in driving positive change.

- Several notable comments from the personal experiences and observations of the panelists included:
  - The adoption of sustainable policies that eventually was not politically rewarding but needed to happen because it is the right thing to do.
  - In affluent countries, more and more citizens are demanding that politicians come up with environmental policy proposals during election campaigns.
  - In addition, suggestions of having ministers in charge of both the environment and energy to be seen as a strategic advantage rather than a conflict of roles.
  - Case studies are widely available showing that environmental sustainability can help improve peoples' quality of life.

- In looking at the political realities in today's scenario, the panelists agreed that rich nations must engage with poorer countries on tackling climate change. Major industrial countries have the resources and should set an example and display "real leadership".

- His Excellency President Maumoon Abdul Gayoom further added that smaller countries such as the Maldives are often overlooked in international discussions.

- Environmental issues should be brought to the International Court of Justice and that the right to a secure and safe environment should be recognised as a basic human right, similar to the right to food and water, he added.

- From the business perspective, the panel demonstrated how businesses too, have an important role to play in addressing global warming.

- Entrepreneurs must be enagaged on the issue because market-based mechanisms are very effective tools for tackling climate change, and the problem provides many opportunities for development.

- It is important that the business case for taking action on climate change is clear with governments offering incentives to businesses to encourage them to change the way they operate. Businesses have to view improved energy efficiency and compliance with government policies as profitable. Effective government campaigns can further help convince businesses that this is the case.

- As a conclusion, the development of partnerships between governments and the private sector is crucial for the creation of strong environmental protection policies with all stakeholders, having a responsibility to take action.

Plenary Sessions
Environmental Partnerships: leverage corporate and NGO capabilities






Cross-sector partnership for sustainable development has achieved a new level of acceptance and credibility, and is now moving into the mainstream. Yet, challenges remain for business and NGOs in establishing long-term successful partnerships for the environment. Partnerships can succeed in tackling a wide range of environmental issues by having parties being well prepared, having a shared vision, maintaining dialogue and remaining patient. It is important for businesses to go beyond philanthropy and make corporate social responsibility and corporate environmental responsibility as part of their business model to ensure sustainability and to create a competitive advantage.

Chair : David Williams, Impact DTG
Panelists :
- Habiba Al Marashi, Emirates Environmental Group
- Sheri Liao, Global Village of Beijing
- Isabelle Louis, WWF
- Uchita de Zoysa, Centre for Environment & Development Sri Lanka
- Sascha Gabizon, Women in Europe for a Common Future
- Olivier Luneau, Lafarge






- In this discussion session, panelists agreed that businesses do not operate in a vacuum and that they need to involve employees, customers and various stakeholders in order to succeed in today's environment.
- The corporate social responsibility strategy or agenda of companies can help create differentiators between companies if effectively planned and executed. However, organisations need to look beyond the economic benefits and at a broader picture to include social and environmental costs in their decision making.
- Having a multi-stakeholder approach is one of the more effective ways to achieve sustainable development. This approach removes the shifiting of responsiblities from one party to another. Sustainability is not the responsibility of governments and NGOs alone; the private sector must also play an important role.
- In the world today, businesses have to be part of the solution rather then part of the problem. Companies can fulfil that role by focusing beyond changing their own operations to placing greater emphasis on changing their customers' lifestyles.
- In reviewing the developments over the years, the panelists are encouraged that business partnerships have increased and evolved substantially over the past decade. Companies are now more focused on sustainable relationships rather than pure philanthropy.
- In the joint partnerships, it is important to work towards a common shared goal instead of pursuing one organisation's own goals. It is also vital to develop initiatives that could lead to a win-win situation for all partners.
- Partnerships of this sorts, need to be focused on sustaining itselves and stepping up especially in times of crisis, such as the present, when the world is experiencing a food crisis.
- The panelists shared how NGOs are now more sophisticated and selective about working with organisations that pollute the environment or organisations that enter such partnerships for the purpose of greenwashing. They are also hesitant on working with publically listed companies as they have to deal with shareholders interests, which today, are still financial interests.
- Where partnerships are established, the panelists called about the movement away from voluntary commitments drawn up by the business sectors, which at this point in time, are insufficient. Targets must be binding and measurable, both of which all parties involved in, can work to achieve.

Breakout sessions
Resource Efficiency: competing for the future






With growing uncertainty of energy pricing and supply, and increased global competition in industry, more companies all over the world are pursuing resource efficiency opportunities to drive competitive advantage. These companies are achieving significant reductions in corporate energy use, GHG emissions and waste production for a competitive edge with companies engaging in campaigns and initiatives to reduce their environmental impact. The session involved sharing of best practices and strategies in resource efficiency and discussed the challenges and opportunities for an eco-efficient future.

Chair : Arab Hoballah, UNEP
Panelists : Martina Bianchini, The Dow Chemical Company
- Guido Bartels, IBM
- Mark Newton, Dell
- Claude Fussler, UN Global Compact
- Leslie Chapple, Hyflux
- Roy Adair, Senoko Power
- Wolfgang Gregor, OSRAM






Companies that have successfully implemented resource-efficient initiatives set substantive goals, are transparent about verification and monitoring, and integrate their plans with business operations.

What companies can do

Companies could become involved with Kyoto Protocol initiatives such as the Clean Development Mechanism and energy trading certificates. They should move away from the "throw away" economy and commit to a cradle-to-cradle approach, where products are reused and recycled numerous times. Businesses also need to develop pricing mechanisms that factor environmental costs into products and establish partnerships with other institutions to develop uniform energy-saving standards. This type of balanced approach, comprising multi-stakeholder collaboration and shared responsibility that focuses on the economy, ecology and social aspects, is more effective than current traditional business models.

Creating customer demand

Improving efficiency requires substantial investment in research and development, the levels of which depend heavily on demand from consumers. Companies can encourage that demand in a number of ways. They can convince customers that climate change is a global issue and that they need their support. They can demonstrate that the premium customers pay for more efficient products is justifiable and that such products have tangible environmental benefits. Customers can be educated about products' environmental impacts and the reasons why they should switch to more energy-efficient versions. And they should keep customers up-to-date on current technologies and capabilities, as well as green initiatives and plans for the future. Companies also need to engage with governments and NGOs because government support is the key to running successful projects and campaigns. Frameworks, policies and partnerships are vital to help implement business initiatives.

Critical issues that need addressing

One of the toughest challenges facing companies is how they continue to supply increasing demand at the same time as reducing their environmental impact. There is a need to recognise that the world's resources are finite, and therefore limits of growth need to be established. It is also important that ways to transfer energy efficient technologies to developing countries are developed.

Conclusions

Everyone has a role to play in tackling climate change. The green agenda has to become mainstream, and the way to do that is to link environmental issues with the economy.

Breakout sessions
Renewable energies in emerging markets: issues, challenges and opportunities

Rapid economic growth in emerging markets has seen an unprecedented increase in energy demand. China will soon surpass the United States to become the world's largest consumer of energy. While the energy challenge for developing countries is clearly enormous so is the potential to exploit renewable sources such as wind, hydro and solar. This session explored the energy issue facing emerging markets as well as identified and assessed the opportunities. The session began by looking at the drivers and barriers for renewable energy adoption in Asia. Issues such as stakeholders' concerns, regulation, land use, education and technology were also raised. The session concluded with a brief summary of the various types of technologies used to harness renewable energies such as wave, nuclear, solar and gasification.

Chair : Rod Parsley, Perella Weinberg Partners

Panelists : Andrei Marcu, World Business Council for Sustainable Development
- Ashok Khosla, Development Alternatives Group
- Douglas Woodring, Motorwave Co.
- Jeremy Goon, Wilmar International
- Rafael Senga, WWF International
- Vincent Chin, Boston Consulting Group
- Chintah Shah, Suzlon Energy

Renewable energy drivers

The three distinct drivers for renewable energy in Asia are:

- Costs and incentives
- The scalability of renewable energy development projects: small generators can be easily installed in rural areas
- Global carbon dioxide architecture and frameworks

Barriers to renewable energy adoption

At the same time, there are also a number of barriers to the full-scale adoption of renewable energy. Electricity prices are highly subsidised, regulated and capped; hence, consumers have little incentive to reduce usage. For renewable energy to be adopted, the technology has to be cost efficient and commercially viable. There is a dichotomy between companies and governments wanting to reap high returns versus the low margins that renewable energy companies make. The highly regulated nature of the industry puts off investors, which impedes the research and development of renewable energies. There is also a lack of coordination between stakeholders in the industry. A business platform needs to be established to bring players together. More generally, there is an inequitable formula in the existing cap-and-trade system: credits are allocated based on the current amount of carbon dioxide generated which places developing countries at a disadvantage. A more equitable proxy such as the carbon dioxide emitted per head of population should be used.

Overcoming the barriers
A benchmark would help fund managers and individual investors invest in low carbon companies. And though there is no clear solution to the global development of renewable energy, companies that adopt best practices in this area will be well-equipped for the future.

Renewable energy: technology breakdown
There are, however, several issues relating to the various types of renewable energy. Biofuels have been getting a bad press recently and have been blamed for the increasing competition for land between food and biofuel producers, and deforestation. There has also been criticism that subsidies are distorting the demand for biofuels. Biofuels, therefore, are not a long-term solution to fuel shortages and security although encouraging advanced research and developments have been taking place at the cellulosic levels, which are transforming this perspective.

In the area of wave technology, although the technology has a lot of potential, it is expensive and is the least researched renewable energy. One barrier that needs addressing are the zoning issues regarding offshore water use, though these could be overcome by developing wave technology in countries with fewer regulatory issues.

Nuclear energy is a viable alternative and must be judged on its own merits. There is demand from developing countries for energy security, which nuclear can provide, but issues regarding nuclear waste, proliferation and safety (Chernobyl) remain contentious.

While solar energy has gained momentum, the main drawback of solar power is that it is one of the most expensive forms of energy generation. However, the cost will decrease dramatically with economies of scale. A viable generation option might be a complementary hybrid system combining intermittent wind energy with solar energy.

Finally, gasification is an extremely complex process and is difficult to source financing for due to investors' unfamiliarity with the technology.

While widespread renewable energy adoption is still faced by several challenges, the adoption process will eventually improve with multi-stakeholder contributions including incentives, technology diffusion and improvements as well as, demand driven from the consumer groups.

Breakout sessions
Financing and investing in climate-friendly production






Financiers and investors are placing an increasingly high priority on climate-related factors in their decision making process. Companies can address their climate impact by investing in more efficient production facilities, equipment, buildings and processes to achieve cost savings and emission reductions; with shareholders playing the role in putting pressure on companies to be more environmentally-friendly. From an investor's perspective, while investments in clean technology have provided high yields, there remains a significant gap between the investment funds available and the projects requiring investments. This phenomenon can be attributed to the uncertainties investors face, such as the price of carbon, government regulations and industry cycles. In order to develop investment in clean technology projects, more has to be done to address the financing gap that currently exists.

Chair : James Gifford, PRI
Panelists : Alois Flatz, Zouk Ventures
- Bill Harnett, Innovest Strategic Value Advisor
- David Wong, ABN Amro
- Conor McCoole, Standard Chartered Bank

The finance gap
A huge financing gap currently exists between new ideas and the availability of investment funds. This is mainly caused by uncertainties in the price of carbon, the coverage of the carbon dioxide market, the availability of long term subsidies and the pricing controls in the carbon market. Funds will not flow towards new technologies until there is more certainty.

Taking reponsibility
It is the responsibility of shareholders, banks and analysts to apply pressure on companies to improve their carbon performance and contribute towards combating climate change. There are many ways that this can be done. Fund managers could provide incentives for analysts to provide research on companies' involvement in sustainability development. Mr Alois Flatz, founder of the Dow Jones Sustainability Index (DJSI) shared how the DJSI has become an important benchmark for social responsibility investing for investors, providing a roadmap for companies over time. With tools such as DJSI, the financial sector, which owns the current economy, could push companies to pay attention to sustainability issues. Financial markets can






also play a role by bringing the emphasis on sustainability issues into emerging markets as well as promoting new innovative clean technologies.

The carbon impact of a company can be incorporated into equity pricing as there are tools available to quantify carbon, discounted cash flow and forecasted figures. Thus, sustainability development challenges faced by the industry will be integrated within companies' overall strategies — sustainability is now critical to competitiveness, profitability and share price performance.

Policy measures

There is a need for policy-driven changes to be made as markets cannot be expected to allocate resources efficiently. Policy makers should focus on the resource efficiency of projects. The panelists discussed how a stable regulatory framework and appropriate incentives can accelerate the development of investing in climate-friendly production. These could include:

- A feed-in tariff system which provides cash flow certainty for renewable energy companies.
- Carbon credits that take into account environmental costs and could change the economics and hence the viability, of a project.
- Schemes such as the Clean Development Mechanism, which have the ability to transfer funds directly to developing countries.
- A global emissions trading system that includes all the major players in the world, would provide greater certainty for investors.
- A bailout package could be created to help companies switch to other power sources if coal ceases to be major source of energy in the long run.
- The annual Green Banking Award recognises banks that have financed the highest number of environmentally sustainable projects. A banking alliance could be set up with the objective of contributing towards sustainability development.
- The creation of a fund involving venture capitalists, banks and other investors with the goal of supporting leading technologies to help improve efficiency. This could help create awareness about the availability of funds to entrepreneurs and encourage the development of new technologies.

Potential challenges

While materials recycling is important, it has an adverse effect on the raw materials industry. There is a need for restructuring so that materials recycling is included as part of infrastructure costs, instead of being considered as an externality. Bringing in an eco-tax policy is another potential idea but Germany's experience has demonstrated that this can be difficult.

Breakout sessions
Sustainable building and construction: policy tools and market instruments






Existing buildings are responsible for more than 40% of the world's primary energy consumption and account for 24% of world carbon dioxide emissions. Therefore, the adaptation of energy efficient technologies in buildings could make a significant contribution towards combating climate change. Despite the proven cost-effectiveness of energy efficient technologies, this potential remains relatively untapped as the benefits can only be reaped in the longer term. The challenges faced by developers and the opportunities available to them will determine those tools and instruments that can be adopted to promote sustainable building and construction, contributing to a cleaner environment.

Chair : Mark Clifford, Asia Business Council
Panelists : Ang Kian Seng, Building and Construction Authority Singapore
- Tom Hicks, US Green Building Council
- Olivier Luneau, Lafarge
- Werner Jager, Hydro Building Systems
- Zhang Yue, Broad Group China






Green building in Singapore
The Singapore Government's approach to green building is multi-faceted. The Building and Construction Authority's green building master plan features a $20-million incentive scheme for private developers and a $50-million research and development fund. Legislation has been introduced to ensure that new buildings in Singapore adhere to certain ventilation, air conditioning and artificial lighting standards. Professional training, publicity and communication plans are in the pipeline to raise awareness and recognise developers that have adopted energy efficient technologies or explored alternative energy sources through the Green Mark scheme.

Barriers to green building development
The building and construction industry is extremely fragmented and does not take a long-term approach. Designers, architects and engineers may not be aware of the most energy efficient technologies. There is also a lack of acceptance among the business community to commit the initial additional resources on green technology infrastructure. Another problem is that building end-users are not familiar with the energy savings that can be achieved by adopting green technologies, resulting in a lack of demand.

Overcoming the barriers
Standard engineering and architectural practices could be modified and better coordinated to reduce materials and electricity consumption. This would reduce the initial additional costs of constructing an energy efficient building. There is also a need for greater alignment between industry and consumers' ideas of efficient building standards. The adoption of a common electricity unit measure could be used as a benchmark for energy conservation for both public and corporate energy consumption, which would help pin down this defintion. Once the best green industrial practices have been identified, these could then be shared with other companies.

There is also a need for more private sector financing tools to fund improvements. The Clean Development Mechanism application process could be made more accessible to the building sector so that retrofitting an existing building or the adoption of energy efficient technologies in a new one would become an attractive option.

Policy changes
There is a need for government to drive policy changes through carrots (financial incentives) and sticks (legislation). As investors are mainly conservative, financial incentives and legislation ensure that technological innovations actaully make it through to the marketplace. For instance, the Korean government made it mandatory for all air-conditioned buildings to use absorption chiller technology, which reduces energy consumption by up to 50%. Similarly, other governments should be more pro-active in promoting the use of green technology. Legislation should also focus on retrofitting existing buildings rather than simply focusing on new ones. While technological breakthroughs, financial incentives, legislation and taxes may be able to influence buildings' energy consumption in the short term, education is the key to alter these patterns in the long term.

Breakout sessions
Enhancing measurement and reporting on climate change






The momentum is building today for the reduction in greenhouse gas emissions. Credible greenhouse gas management however, requires a systematic approach for tracking and measuring accurately. This breakout session looked at sustainability reporting on climate change from the perspectives of reporters and stakeholders with the issue of voluntary and regulatory guidance also explored. Finally, the session concluded with the panelists discussing the likely direction of sustainability reporting in the future.

Chair : Cornis van der Lugt, UNEP
Panelists : Simon Zadek, AccountAbility
- Karl W. Felider, DHL Neutral Services
- Aron Cramer, BSR
- Iza Kruszewska, Greenpeace International
- Ralph Thurm, Global Reporting Initiative

Reporting on climate change
Recent events have convinced the business community that climate change is real and that they need to do something about it. Measuring carbon is relatively simple: it is a defined unit of measure that can be understood by the business community. Sustainability reporting, which can be viewed as different from corporate social responsibility reporting, is a harder concept to grasp.

Difficulties faced by reporters include the lack of boundaries and the absence of guidance about what and how to measure, and a lack of benchmarks. Reporters want more regulation to create measurement standards as they are not equipped to do it themselves. More sector guidelines would also be beneficial. Reporters are also undecided on how to apportion emissions when they do not own the assets. It's not just the business community that are expected to report — there is now an expectation that organisations such Greenpeace also report on their own carbon footprint.






Expectation from stakeholders
Stakeholder organisations expect businesses to design out toxic components, recycle materials, increase energy efficiency and make information available publicly, and they want to see penalties for double standards, lying and corporate misbehaviour. Stakeholders want businesses to "stand up and be counted" instead of hiding behind trade associations. This means committing to cut emissions, adopting renewable energy, providing power-saving options to consumers, and increasing products' lifespans. Companies need to be more willing to report on sustainability development rather than reporting on the potential financial risks linked to climate change — stakeholders are more interested in the steps taken by companies to bring about change rather than the size of their carbon footprint.

Guidance (voluntary/ regulatory)
Reporting standards cannot keep up with the needs of different industries, so laws should be introduced to drive these standards. Businesses also have to recognise that reporting on climate change is fundamentally different compared to other forms of reporting. The target audience for sustainability reports are enterprises, business partners, consumers, investors and regulators. Companies should include policy engagement, research and development, and initiatives to catalyse consumer action and form partnerships for climate action and be transparent at all times. Transparency is essential for creating trust and partnerships. Reports should also include discussion about business models, contain good quality information and ensure that it's verifiable. The Global Reporting Initiative (GRI) suggests reporting guidelines — it's up to companies to add in or leave out material or immaterial indicators. Companies should take the initiative to explain why certain indicators are left out. It also advises that:

- There is a need to harmonise processes and language.
- There should be an emphasis on the strategic aspects of sustainability, and an assessment and interpretation of how their business models are affected by sustainability problem areas.
- The key is to integrate sustainability performance into sustainability reporting.
- There is a need for validation to prevent companies from using inaccurate data.

Future reporting trends
The possibility of getting regulators to validate what companies have been doing could be explored, and there is a need for large-scale assurance providers. Sustainability reporting is expected to slim down into a narrow list of metrics which are legally defined. As a result, reports might become less forward-looking as sustainability reporting enters the mainstream, defined by regulations and consolidation.

Caring for Climate Change:
The Business Leadership Platform - A call to action






Background into Caring for Climate
Caring for Climate (C4C) was established as a voluntary initiative by Global Compact members to focus on important thematic issues. 2 years ago, the 3,500 Global Compact members wanted a specific initiative focused on climate issues and energy efficiency. A group of committed participants and civil society members decided to take stock of the best practices around the world and developed a short, concise, strategic commitment document that requires signatories to focus on three key areas:

- Develop a clear strategy on climate change and set goals for the organisation.
- Build international capacity to translate the strategy into business operations.
- Report progress on an annual basis to peers and the public.

The document and subsequently C4C were both launched in Geneva in July 2007 with 230 signatories. 11 more companies signed up at the Summit, including Senoko Power, OCBC Bank, China Mobile, Tata Steel and ONGC of India and CopaGas of Brazil. The roadmap shows how businesses, by taking a lead on climate change, can improve performance throughout their supply chain. The first signatory meeting will take place in Geneva in October. C4C will also be co-hosting the World Business Climate Summit in Copenhagen in May 2009. The hope is that C4C becomes the platform for true global leadership, sets the tone and shapes the agenda at the Copenhagen meetings. The companies that signed up did so because they have an active climate change programme that they want to promote. Members exchange information on best practice and gauge what action is required to maintain momentum and speed of change.

Case Study: China Mobile
The Global Compact initiatives are conducive to the development of a company as well as its value chain. China Mobile acknowledged that the C4C movement has helped it, and that there are further opportunities to learn and improve best practice at the summit.

At the end of 2007, China Mobile had 370 million subscribers, which by April 2008 had increased to 400 million. The company's revenue was about $50 billion by the end of 2007 with a CAPEX of $120 billion. The company operates in 31 provinces with wholly owned subsidiaries in Hong Kong and Pakistan, with a total of 300,000 base stations. It ranks 180 on the Fortune 500 listing and is the world's largest company by subscriber base and network scale.

In 2007, the company's energy consumption was 8 billion kilowatt hours, and between 2005 and 2007, energy consumption increased by 20%. Revenue has grown in the same period by 15-20% annually — hence the need to focus on energy efficiency in order to further grow the company and improve economic performance.

Given its scale of energy consumption, China Mobile is aware of how its practices will contribute to global warming, as well as to its financial performance and shareholder value. Through its Green Action Plan (GAP), China Mobile aims to reduce its energy consumption by 40% by 2010, saving 8 billion kilowatt hours of energy and reducing carbon dioxide emissions by 6.94 million tonnes — equivalent to taking 1.74 million cars off the road.

Energy efficiency will form the basis of the plan, and future developments will enable further economies of scale and cost-reduction benefits. The company has involved its staff by running an employee campaign on improving environmental performance. Externally, IT vendors and partners throughout the supply chain have signed a cooperation memorandum promising to assist China Mobile in achieving its targets.

All provincial offices and subsidiaries have a deadline of 3 years to achieve specific key performance indicators and establish the GAP goals. A specialist department has been set up to promote product design, packaging and innovation, to look at business-to-business operations and promote the emissions reduction commitment.

50% of China Mobile's energy consumption is due to air-conditioning use, a global issue faced by telecommunication companies. By implementing new cycling frames and targeted cooling systems, it has reduced energy consumption used for cooling by 45%. The use of intelligent ventilation and heat exchange systems has also improved energy conservation by 20-40%.

The company has made savings in other areas, too. The energy consumption of radio base stations has been reduced by 20% by shutting down frequency amplifiers when not in use. New packaging design has enabled a saving of 750,000 hectares of forest annually, and China Mobile is promoting its use globally to partners and even competitors. The recycling of e-waste is encouraged throughout all service halls and distributors.

China Mobile acknowledged that with its growing business and subscriber base, this is a crucial time to look at energy consumption and energy efficiency. The next steps will be to mobilise its 400-million subscriber base to contribute to this green movement.

Behaviour change as a solution

Dr Ashok Kholsa shared his view in his experience of working with a variety of organisations around the world, thinking about how the systemic issues of the world need to be dealt with. Climate change relates to individual lives directly, but within the broader context of complex global systems. Climate change is a threat to the support system of the world. Life would be very difficult if carbon emissions are not stabilised and if temperatures continue to rise much further; therefore business-as-usual is no longer acceptable.

Dr Khosla touched on how individuals tend to compartmentalise our thinking between mitigation and adaptation — although the two may run along different timescales, they are essentially similar in substance and nature.

Dr Khosla shared that although the world is a complex system, the study of systems and systems science is very advanced and sophisticated. There needs to be an understanding that in complex systems, there are feedback mechanisms, and that these feedbacks have delays. These delays sometimes take such a long time to show up that what we think is the right solution may be wrong, and if design is not carefully thought through, systems could collapse. The oil and gas industry, through its exploration, extraction and resource use, is one such example.

Another stumbling block in system science was the concept of counterintuitive action. Sometimes, what seemed like common sense, may deliver the opposite of what was intended. For instance, investing in a city's economic development was intended to generate a positive outcome, but the end result could mean that more and more people want to live in it and eventually overloading its infrastructure.

To mitigate the impacts of climate change, he called upon everyone to implement major changes to our lifestyles, production and distribution systems, and even our values. These would include redefining what we think of as a "good life". This social transformation would require significant critical mass in order to translate to tangible behaviour change.

In his work with the Development Alternative Group, Dr Khosla noted how there is little difference between the rich and the poor, in their ways of exploiting resource. The affluent continue to squander precious non-renewable resources, but the poor on the other hand, are focused on survival, and hence, exploit non-renewable resources in non-sustainable ways.

Businesses, as well as governments and civil societies, all have a role in removing the disparity between both parties. If businesses want to survive, they need to recognise this as an issue, redefine plans and time horizons and develop goals accordingly.

Because of the blame culture that currently exists between countries at multilateral negotiations, governments are no good at delivering a common consensus because they have to protect their national interests. Other new actors are necessary, important and pivotal if action is to be taken. Business and civil societies need to become trustees of people's welfare and that of the community around them.

Summary Remarks: The Way Forward

ACHIM STEINER
Executive Director
United Nations Environment Programme

In his summary remarks, Achim Steiner highlighted that conversations about global warming are now happening, and B4E stands out as a unique forum for global dialogue.

Business, institutions and the public sector are increasingly engaging in conversations with two main groups. One group is comfortable with the status quo, views the current situation as the fallout from a decade ago and has little interest in change. The other group is looking at the future in a different way, either because its cash cows no longer exist, or its members are facing pressure to adapt to changing markets or competition, which is driving their need to innovate. The latter can be further sub-divided into two further groups. One comprises companies that have solutions or answers; the other comprises those trying to reinvent their business. Whatever their motivation is, the main lesson that delegates should take away from this summit is the importance of joining forces. While politicians will lead when given the means to do so, the most important factor is the interaction between business leaders and progressive regulators.

To use an example, some electricity management authorities do not regard solar technology as a feasible, viable business proposition: power companies will not buy energy from independent power producers. This clearly does not provide any incentive to companies. Recently, some authorities have started to allow the purchase of solar electricity sold to the grid but at a tariff that deducts the costs of running the grid. Under these conditions, it is currently not a viable proposition for investors. Ten years ago, the German government legally required utilities to buy renewable energy produced by anyone at a premium tariff and distribute it throughout the grid. This created supply and demand, stimulated research and development and encouraged an active venture capitalist market, making Germany the largest wind power producer today.

The perception that tomorrow's markets will be defined by environmental parameters is not often accepted as driving public policy today. Yet, the evidence shows there are actual cases of this already occurring. People are now fearful of "missing the boat" because they think they will be at a competitive disadvantage.

B4E should be seen as the annual platform where the discussion moves from the anecdotal to the practical.

GEORG KELL
Executive Director
United Nations Global Compact

Georg Kell considered the entire two days to be packed with useful lessons, from which he learnt a lot. Despite the B4E conference being relatively new, the changes that have taken place in the two years of its existence show what is possible.

Mr Kell acknowledged that the momentum of action against climate change is growing and is increasingly moving on from the issues mentioned at last year's discussion. For instance, there are fewer arguments as to why business should engage with climate change issues and a stronger business case as to why companies should become greener. The discussions now focus on knowledge, solutions, scaling up technology, the role of market instruments and relationships with voluntary initiatives.

He was happy to see that the geographical spread of participants had broadened compared to last year, with important players from many countries participating. He also observed that, similar to last year, there was a call for government to take the lead, and embed regulation within good governance, a strong framework and a supporting structure. His view was that while many good policies and agreements have been created in the past two decades, developments must continue to be fair, just and non-discriminatory. Universal principles must not be abandoned in a rush to find solutions.






He concluded that time and technology will allow the rapid implementation of solutions with particular attention being paid to the supply chain. Competencies and innovation will be the driving forces, with technology as the integral component.

ARON CRAMER
President and CEO
Business for Social Responsibility

Aron Cramer reflected on the past 15 years, questioning what the overall principle of politicians and businesses is now that the debate about climate change is over. The answer now is clear: all stakeholders are facing a future filled with immense opportunities to build and develop a more prosperous, open, fair and integrated global community.

Mr Cramer reminded delegates that they would not reach that aspiration if they were not making the right use of the limited resources that they have. It is clear that the debate is maturing to bring about the change that we need, he said.

He left delegates with some homework, suggesting that everyone take a look at predictions from Shell that looked at energy scenarios going forward to 2050. Two energy scenarios have been developed, one called Scramble and the other called Blueprint. Scramble paints a scenario of the status quo, where the emphasis is on the short term and where stakeholders are holding on to existing prosperity. In Blueprint, there is a concerted effort to develop a systematic and comprehensive approach involving policy, cooperation and a re-definition of self-interest. Blueprint provides a very plausible picture of how we can get to where we need to go, but also highlights the difficulties of stabilising carbon emissions in the atmosphere, and shows that it will require massive investment.

Mr Cramer said he thought that B4E would be the catalyst for all of us to help build the global Blueprint and was confident that it will be possible through thought, conversation and engagement.

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