THE PRINCE OF WALES'S BUSINESS AND SUSTAINABILITY PROGRAMME 2010 LONDON LECTURE

BY JEFF IMMELT, CEO, G.E.

UNIVERSITY OF CAMBRIDGE
PROGRAMME FOR SUSTAINABILITY LEADERSHIP

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About BSP

The Business & Sustainability Programme (BSP) is a unique forum, established in 1994 by HRH The Prince of Wales and the University of Cambridge. It provides a strategic forum for senior decision makers and key executives to explore leading-edge, innovative, high-impact yet pragmatic approaches to reconciling profitability and sustainability. Over its 16 year history, the Programme has established a reputation as the leading international, cross industry and cross-sector, forum for sustainable business.

The Prince of Wales's Business and Sustainability Programme 2010 London Lecture

28th October 2010

by Jeff Immelt, CEO, G.E.

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Director, The University of Cambridge Programme for Sustainability Leadership

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Jonathon Porritt CBE, Founder Director, Forum for the Future & Co-Director of The Prince of Wales' Business & Sustainability Programme;
Jonathan Nicholls, Registrary, University of Cambridge; Greg Barker, MP, Minister of State for Energy and Climate Change; James Smith, Chairman, Shell UK.

"Our experience with sustainability leaders over the years suggests that tremendous change can emerge from relatively small steps inspired by very big ideas."

Your Royal Highness, Minister, Ladies and Gentlemen, welcome to the 2010 London Lecture for The Prince of Wales's Business & Sustainability Programme.

I am Polly Courtice, and I am Co-Director of the Business & Sustainability Programme, which for the past 16 years has been run by my institute at Cambridge University – the Programme for Sustainability Leadership. We are immensely fortunate to have The Prince of Wales as Patron of the institute.

Tonight is a wonderful example of the unique convening power of His Royal Highness, combined with the strengths of Cambridge University as one of the world's great academic institutions. Over the years we have brought together leading thinkers and practitioners from around the world, and we have been privileged to work with many major international organisations and critical business sectors to address the challenges of sustainability, drawing on cutting-edge science, world-class expertise and best practice in business and government.

Our work now involves a suite of sustainability leadership programmes as well as a growing number of policy and strategy groups for leaders that aspire to drive system change at national and international levels. Many of these are the result of the extraordinary vision and determination of The Prince of Wales. These include ClimateWise for the insurance sector, the P8 for the global pensions sector, and the Corporate Leaders Group on Climate Change, which has done so much to bring the progressive voice of business to bear in international and national climate debate. The Cancun Communiqué is their latest initiative. We hope that every company in the room will sign this communication to our international climate negotiators.

Our experience with sustainability leaders over the years suggests that tremendous change can emerge from relatively small steps inspired by very big ideas. This is clearly a view that is shared by His Royal Highness – and amply demonstrated by his own leadership. So it gives me particular pleasure to invite you, Sir, to say a few words of introduction to our speaker this evening.

Introduction
by HRH The Prince of Wales

"Climate change is indeed the biggest environmental issue we face. Yet somehow we have also to find ways of tackling all the other environmental issues too – many of which are being accelerated by changes in climate."

I could not be more pleased that Jeff Immelt has agreed to deliver this year's lecture to my Business & Sustainability Programme. Of course, he comes here as the Chief Executive of one of the world's biggest companies and I was reading that they employ some 323,000 employees. I am delighted to say, one of the companies which has put sustainability at the very heart of its business model.

Back in the dim, distant past, I asked Cambridge University – my alma mater! – to run this Programme for me as I wanted to find a way of helping businesses understand the scale of the challenges that lay before them; to help them see that 'business-as-usual' was not an option if we were to confront the environmental challenges which were ahead of us. Now, of course, we are at last beginning to see these challenges from the point of view of delivering sustainable economic development linked to climate mitigation and adaptation, whilst recognizing that we can't simply continue to live off Nature's precious and finite resources without thinking about the consequences. In those earlier days it was extremely hard, as you perhaps can imagine to get the message across, but it was as clear then, as it is now, that business will have to change dramatically. The scale of that change was made very clear to me recently when I asked Professor Tim Jackson, from the University of Surrey, to speak at an event at St James's Palace for a project called Accounting for Sustainability, I fear another of my initiatives, which is helping Finance Directors understand how to account for the resources they are using and the damage being done to Nature's own economy. At that conference, Professor Jackson spelled out, in the clearest way possible, the scale of what lies ahead of us.

(from left to right)
Jeff Immelt, CEO, G.E.; HRH The Prince of Wales;
Polly Courtice LVO, Director CPSL & Co-Director of The Prince of Wales' Business & Sustainability Programme

Today, for every dollar of wealth we create in the world, we emit roughly 770 grams of CO_2 from the burning of fossil fuels. If we are to meet our global carbon targets for 2050, and at the same time build an equitable economy in which an estimated 9 billion people can all aspire to rising Western income levels, this number has to drop to just 6 grams of CO_2.

As the economy continues to expand, stabilizing the climate could even mean turning that number negative. In other words, for every dollar of wealth created, by 2100 we will need an economy which is taking CO_2 out of the atmosphere. Carbon intensities have been falling. But nothing like that fast. In fact, global carbon emissions have actually risen by 40 per cent since 1990.

So we really do need a dramatically different approach, and it is particularly encouraging that so many of the companies which are part of my Business and Sustainability Programme are putting forward the solutions we know we all need. Foremost amongst these companies is G.E. and I am very much looking forward to hearing what they suggest.

I would just like to finish by thanking Jeff for coming to the United Kingdom especially to give this lecture and, if I may, to express immense gratitude and to thank some other members of my programme – Nestlé, ASDA WalMart and Skanska – for their help in supporting this evening's event.

Jeff over to you.

(from left to right)
Jeff Immelt, CEO, G.E.; HRH The Prince of Wales

Lecture delivered by Jeff Immelt, CEO, G.E.

Jeff Immelt, CEO, G.E.

"Today we are really emerging from an economic crisis, a financial crisis that really has the world thinking about itself in a new way. We see in many ways the re-ordering of the global economy."

Your Royal Highness, Ladies and Gentleman and honoured guests tonight, many of whom are my business colleagues and friends. Delivering this lecture is a great honour for me and it is a great honour for all of the employees at G.E.. I am especially honoured to speak about clean energy at the initiation of the Prince of Wales who has been a leader in sustainability for so long. You have been a thought leader on this subject for decades and it is an honour to be here.

Before I begin I would like to reiterate that in many ways the United Kingdom is a home game for G.E.. We have 18,000 employees in the country. We have about nine billion pounds of revenue and in the last decade we have invested more than twelve billion pounds in the country. Normally every business in G.E. is represented here. We are a hi-tech exporter from your shores, and I want to thank the government and really our business partners in the room for its great support and we are quite optimistic in the future of this country.

Today we are really emerging from an economic crisis, a financial crisis that really has the world thinking about itself in a new way. We see in many ways the re-ordering of the global economy. I joined G.E. in 1982. In the 1980s, the developed world produced 80% of the GDP growth. In the next decade the emerging markets will provide 80% of the global growth. So the world in front of us really in one generation, in my generation, has changed dramatically. Meanwhile governments around the world, the United Kingdom, the United States alike, face tremendous budget challenges and deficits that have to be addressed. There is high unemployment really everywhere in the world. We read about it in Europe and the United States but there are somewhere between 200 and 300 million people looking for a job as we are sat here tonight. People are frustrated by the role that government and business have played. They don't think in many ways that we know how to fix problems. They are not sure we know how to create growth, and they are not sure we know how to create jobs. So the institutions that people in the developed world have trusted for generations are now being challenged. In that context really what I am qualified to speak here tonight on is competitiveness. How do we compete in the 21st Century?

G.E. does business in 120 countries around the world. 120 countries and I have probably been to 80 or 90 countries in my career. And in some way shape or form there are four pillars of a competitive society: Education; Affordable healthcare; Financial systems that promote entrepreneurship; and Clean Energy. So the discussion I will have tonight on clean energy isn't unique to the United Kingdom. It is not unique to the United States; it is going on really in every country, in every government around the world.

Now the one thing is for sure that demand for energy is going to grow substantially in the next thirty years, substantially. If you just look at the automotive penetration in China and in India and project that on a pathway that remotely resembles the developed world. The need for oil and gas and coal and every energy type is going to grow substantially, so that is the backdrop. But this is all about in our mind creating a clean energy future. A clean energy future. One that is sustainable. One that emphasises energy security. One that drives competitiveness and job creation. One that reduces pollution. That has to be the vision for all of us in this room and we have to get about that change today.

Prince Charles calls this a call to a revolution. I would say to my business colleagues in the room this is the biggest opportunity that we will face in the next decades, and we have to grab it and we have to lead in this regard. Now G.E. has decided to put ourselves in the front of the clean energy future, and the clean energy challenge. G.E. today is about a 160 billion dollar global company. We are big... probably the world's biggest infrastructure company and we are a very big financial service company. We are 60% outside the United States, and we invest about 6 billion dollars a year in research and development. In some way we have been in the job of solving problems for more than a hundred years. This is really the genesis of our founding with Thomas Edison and we have that spirit today. And we've really selected two big macro global problems that we want to be the pillars of the G.E. Brand. One is affordable healthcare, and we have a very substantial presence in healthcare, and we are really driving cost, quality and access, and the other is clean energy. And it is our belief that through innovation we can align investors, employers and society, and that we don't have to think about this as a minimisation effort. We can think about this as a maximisation effort through technology and innovation.

In 2004 we started an initiative built around clean energy that we called 'Ecomagination' and we really studied the science. We sent teams of our researchers to study the science.

We came to the conclusion from purely a scientific basis that global warming is a fact, and it is caused by man. And that we believe that the science and technology inside G.E. would be sufficient to create growth and solutions. We had teams of innovators that studied our technology. We went out and talked to our customers. We studied public policy on a global basis. In 2004 we really drove forward on an initiative around clean energy that had four parts.

The first one was we committed to double our research and development on clean technology. We defined our clean technology as any innovation that would reduce our carbon output by at least 25%. And we doubled our R&D on an annual basis, to almost 200 billion dollars a year on those products.

The second thing we did is we focused on innovating and developing products. So when we first started we had fifteen products that met that goal. Today we have a hundred products that meet that goal. We said we wanted to be good for our investors so when we started this journey, we had five billion dollars of revenue in clean energy products. In 2010 we will have twenty billion dollars of revenue in clean energy products. So it is good for our investors.

We decided to run our company voluntarily along the lines of the Kyoto protocol and five years later our energy intensity has gone down by 39% and we have a net 22% reduction in carbon. At the same time we have saved money, more than 200 million dollars. We decided and committed to be visible in the public, so we were a founding member in the United States of what is called the US Climate Action Partnership, that has NGOs, industrialists, oil companies, energy companies, really trying to come together to forge public policy in the United States. So over the last five years we basically have come to the conclusion that 'Green is green'. That driving clean energy products was good for our employers, good for our investors and very much good for the brand. And I stand here today five years later to say this in many ways has been a success. It has been a success in terms of revenue growth. It has been a success in terms of reputation. But it hasn't been without challenges. And what I thought I would do is just share in the last five years some of the lessons we have learned as a company as we have gone through the evolution to be a clean tech innovator in this world.

" don't pick one fuel, don't favour one approach, but drive multiple approaches at the same time."

The first thing is, is that technology has to be in the forefront, and that the technology should be broad based and should be robust. Fundamentally for thirty... almost thirty years the Energy Sector under-invested in technology and research development. I mean from roughly 1980-2003 oil was $15 a barrel around the world and there were no real incentives to drive the kind of energy innovation and future that is required to drive sustainability and growth at the same time.

Today I think we have a very robust technology platform and that technology platform is very broad and it is getting deeper every day. And my one message I would say around technology, what I have learned, is don't pick one technology, don't pick one fuel, don't favour one approach, but drive multiple approaches at the same time. And what I thought I would do is just maybe go across just the portfolio of G.E. which is clearly what I know the most about, to give you a sense of the depth and breadth of innovation and technology that exist today in clean energy.

First conservation. Every discussion on sustainability and clean energy has to start with conservation. The new appliances that G.E. wants to introduce over the next three or four years will use 50% less energy than the products that they replace today, and this kind of innovation is prevalent. So conservation and innovation has to remain at the forefront of what we do.

"The big base load energy technologies that have existed in the past have to be re-invented and re-invested in to drive clean energy in the future."

Driving the rate of efficiency. New technologies that drive energy efficiency. The jet engine that will fly on the Boeing 787 Dreamliner that both Rolls Royce, here in the UK, and G.E. will compete for, is 20% more fuel efficient than the technologies that it replaces. The new locomotives that we introduce today have 99% fewer emissions than they had 25 years ago. So the convergence of market factors are driving innovation and technology. The big base load energy technologies that have existed in the past have to be re-invented and re-invested in to drive clean energy in the future. Coal and sequestration are technologies that will require massive investment on a global scale to get perfected. A new generation of nuclear technology that does re-processing or other things that make it environmentally sound and economic is another innovation that will be perfected and need to be invested in, in this generation.

Renewables are becoming pervasive and lower cost. The off-shore wind projects that will be based primarily in the United Kingdom but also in Germany will be big drivers of new energy sources, clean energy sources, at low cost. Solar energy is still in its infancy. And higher efficiency levels and better applicability in terms of storage are in our future. Bio-fuels represent tremendous utility as does distributed energy generation, and again will create jobs and commerce as time goes forward. An electricity grid that in many countries, and the UK included, the grid is 50/60/70 years old. The grid has to be bigger and it has to be smarter. And research and our own experience has shown that consumers who know how much electricity they are using can reduce their consumption by more than 10%, so efficiency is quite important. The ability to develop unconventional fuels. James Smith from Shell is here tonight. The whole Shell/gas evolution and the ability to use gas technology in the future represents leading edge technology, that again will help drive a clean energy future.

I am a big believer in electric vehicles. Personally I think electric vehicles give consumers empowerment, that is what they want, and we are convinced that electric vehicles are going to have a big part in the coming economy and we will invest accordingly. We have made investments in lithium batteries and sodium batteries and we will continue to push that forward.

Water re-use and conservation. I mean water and energy have to be viewed as common and consistent. These are businesses that again will be invested in, to really drive complete recycling of water that is being used in heavy process industries. Small business will benefit along with big business. Today people like small businesses; they are not so sure they like big businesses in this environment. But there are many small businesses that are innovative and have technology that will be a big part of the clean energy future.

So, my first message, my first lesson is that technology is available, it is pervasive. We have to make it low cost. We have to make it available. But sustainability will not be stopped by lack of innovation; it will be stopped by lack of courage. But the technology exists today and can be perfected, then within the next ten years we can gain control technically over a clean energy future. So point number 1 is innovation on a massive scale, a broad scale and with big business working with small business to invest to make these technologies pervasive. Lesson Number 1.

"...sustainability will not be stopped by lack of innovation; it will be stopped by lack of courage. But the technology exists today and can be perfected, then within the next ten years we can gain control technically over a clean energy future."

Lesson Number 2 that we learned is that clean energy engages the extended enterprise. Our employees love working on sustainability. They love working on clean energy. We have in our factories what we call treasure hunts where employees go and look for energy efficiency ideas. We execute about five thousand of these every year across the G.E. footprint. People are engaged, they bring new ideas. It helps us recruit on college campuses. It makes us a more relevant company. As a hundred and thirty year old company you have to be constantly thinking about what is next. In the eyes of young engineers who are graduating from college today this is what is next. It is what keeps us vibrant and alive. Our customers very much appreciate this approach.

When we first said we were going to work on sustainability in the middle part of the last decade, at first our utility customers were quite suspect and quite against us. And I would say over the past five years we really have great alignment between our energy generating customers and G.E. in terms of the value of technology. And we can extend an enterprise to include small businesses. We launched in July what is called a 'Smart Grid Challenge'. We basically put on line where G.E. is investing on a Smart Grid and we allowed every idea, every entrepreneur in the world to submit their idea for potential G.E. funding. We received 35 hundred ideas in the last 90 days; we will make 50 equity investments of small businesses that we can work with as part of

the extended enterprise to make sustainability and clean energy part of the future. So people love it. The extended enterprise leverages it and it makes us a relevant company.

"There will be ten million new jobs created in the next decade around the decarbonisation effort, and around the eminent conversion of older power generation technologies into newer power generation technologies. The debate that investing in clean energy will slow economic growth is just wrong."

The third thing we have learned. Clean energy is the way to create jobs. Clean energy is a way to create jobs. This is a source of economic competitiveness, not an economic risk. In our supply chain we have created 50,000 jobs around clean energy. Fifty thousand, just in G.E. alone. There will be ten million new jobs created in the next decade around the decarbonisation effort, and around the eminent conversion of older power generation technologies into newer power generation technologies. The debate that this... investing in clean energy will slow economic growth is just wrong. This is a place where countries, competitive countries, are getting an economic advantage. The biggest investor in clean energy in 2010 is China, not Europe, not the United States. So the decisions around investment and job creation must be made now to create jobs and competitiveness over the coming decades. So point Number Three is that clean energy is a great deal to create economic growth and jobs in the next decade. Point Number Three.

The fourth thing I learned is that business alone is not going to drive sustainability or create a clean energy future. Fundamentally the cheapest sources of electricity generation in the United States today are nuclear power plants. The one thing that every nuclear power plant in the US has in common is that the CEO that started it got fired. The disconnect between when a decision has to be made and economic benefit – are in decades, not in days – these are the long term debts and it is disconnected from the capital markets in a given moment in time. So the right investments cannot be made without stable and forthright public policy. Stability and vision in public policy is as important as long as innovation and technology. I think everybody knows the policy elements that are important, that there is not a lot that has to be recreated. It is the price for carbon. It is some form of clean energy standards. It is some form of technical incentives that allow and help fund some of the commercialisation of great technologies, and new technologies. It is some form of long term financing, infrastructure banks, infrastructure financing, that allow thirty year investments to be made. That is really it.

Senior business leaders network after the lecture.

So it is not like new policy has to be invented. There just has to be a commitment to do it, and that is what counts. And here again this is going to be decided quickly. I would say China is way in the lead. Europe has many of these things in place. In the country where G.E. is based, the United States is behind on almost all areas of public policy in energy. So that is the challenge that is in front of us. So I learned that technology is key. I learned that people love it. I have learned that it is a way to create economic growth and jobs. And I have learned that public policy has to be the underpinning of everything we do.

Now the fifth thing I have learned is despite the fact I think it is smart there are a lot of people who disagree with me. I have been quite humbled by the mission you [The Prince of Wales] have been on for 20 years, and the mission I have been on for 5 years. This is humbling because, despite all of our good work and despite the optimism we have in the future, we have not yet been able to bring all of our fellow citizens along with us. And I think we are better off being realistic about that, and not being critical about it, but being reflective about it, because in that way I think we have a chance. In general in a tough economic time people look at sustainability as being for the elite. As being something we cannot afford. I would say Copenhagen is at best mixed in terms of results and therefore we have to reframe the broad based environmental debate.

The science has been challenged and not as accurately fought back as it should have been, and as it can be. It has become a political event in the US and elsewhere around the world of where do you stand on 'Cap and Trade? Where

do you stand on Climate?' So in many ways I would say that movement is more challenged today than it was when economic times were good. So I don't say this to be negative, I say this to be realistic. In that with all the good things that are happening with sustainability and all the promise it has for job growth, we have not yet closed the deal in terms of what we have to do in sustainability and how we have to grow. Now I see this as a challenge. I think we are at a particular critical time, if people associate the fact that a bad economy means that we cannot solve some of society's great problems.

So I think we have to move forward. And I think we have to starting with me, starting with us, rebrand the discussion. Rebrand the debate and we need to do it today. In my world and the way I think about it is for a while we are going to have to go without the government. In other words in industry... If we think we are going to wait for the government to move we may be waiting a long time. So we have to in some ways create our own momentum, create our own courage and go forward and sustain clean energy, and that is certainly what we are going to do in G.E..

If I had one thing that I wish I had personally had done differently, I wish I had talked less about green, less about purely the environment and I wish I had talked more about economics. More about job creation. More about energy security. More about just broad based job creating economics. So I think the challenge that we have is not that global warming is not a big issue, it is. It is a critical issue, and it is one that we have to solve. But we have to go back and say that green equals growth. Sustainability equals jobs. Climate equals competitiveness. And that the government in energy is a catalyst and not a regulator. That government really is essential to drive change. And we have got to really inspire in business a clean energy future. That really is the role of the people in this room. That now is exactly the time, because it is less popular where we have to invest more. We have to do it more courageously and we are going to have to go for a while without the government at our back. We are going to have to go forward.

Now in our company I will just give you some examples of what we have done and what we are planning to do really between now and the end of the year to really make sure people know G.E. is not backing off our commitment to clean energy. In fact, if anything, we talk in our company about doubling down. We are doubling down on ecomagination. We are doubling down on clean energy. We are going to invest ten billion dollars in R&D over the next five years just in clean technology. A week or so ago we announced that we were moving our entire appliance production back to the United States to do clean energy products, because we wanted to make a statement that actually clean tech creates jobs in the United States and that we can do it more economically in the US

than we could in Mexico or China. We are making a statement about clean energy. Next week we will place the largest order... G.E. runs the biggest fleet business, the biggest car fleet business in the world, we are going to place the biggest order in history for electric vehicles. We are going to put half of our own sales force on electric vehicles. We have other partners like Johnson and Johnson, and Hewlett Packard, they are going to work with us, and we are going to make a big commercial commitment to electric vehicles. Tens of thousands of orders, the biggest order in history. We are going to go out and work with people in the [shale gas] industry to try and find a way to do unconventional gas exploration and completely refresh the water back to a hundred percent usable water, and demonstrate it with technology that we have the capability to drive new innovation and still be environmentally sound. We are going to do that. We are building momentum with utilities in the US... I mean my poor customers in the US really don't know what to invest in right now. So we are going to try and work together with the government, try to get our business partners in support to say maybe we cannot do economy wide energy plan, but let us take the utility industry and let us just work together, because there is broad agreement on what needs to be done. Please give us the guidance that we can go forward as a small group, that we can do it in a bi-partisan way and allow us to make the smart investments in the future. We are working with more consumers on zero energy homes

Jeff Immelt, CEO, G.E.

and our commercial real estate, it is more sustainable. Working in urban areas, on green cities, to try to make it more tangible and more real to the people that we need to convince that clean energy is important.

And lastly we continue to work in China and India because I am convinced that everybody in those countries wants a clean energy future, just like we talk about here, and in many ways they are moving faster than we are. And so, my message to my business colleagues in the room, is that your involvement in green so far has been easy. It has been trendy. It has been popular and it has been fun. Now the work has to begin. Now we have to demonstrate to people that with high unemployment and rugged economics this is not frivolous, it is not unreal. It is not just economic, it is economic. Put our money where our mouth is. Move

without support. Move with some uncertainty but move, and G.E. is going to be in the front of that campaign.

"I think one of our challenges in taking on something like clean energy and sustainability is that the leadership model of the past has to be reformed. It has to be changed. We have to have people that are broader. People that have more vision, that are longer term thinkers that are more adaptable and more connected."

I am pretty convinced there is not going to be substantial legislation in the US, at least not in the short term, but I see interest from our employees and our customers. And the way business works is when you are investing where nobody else does, you make a lot of money. So we are going to continue to go against the grain, and we are going to continue to invest because we think over the long term this is one of the best economic growth areas that the company has to invest in and roll out, and eventually I think the government will come up with that.

The last thing I want to talk about is that the other thing I have learned in our efforts, in both the clean energy initiative, but also just broadly coming through the crisis, is that we need to re-educate our employees and we need to take the new people we hire, and we need to create in many ways a new generation of leadership. We think that leadership in the 21st Century is going to be more lateral and more connected. The new leadership traits are going to have to be upon us. We are going to need to find people that are more persistent and more adaptable. We are going to have to have leaders that are more transparent in terms of what they are doing from a purpose and strategy standpoint. We are going to have what I call systems thinking. In the end a lot of these big global problems can only be solved through innovation plus public policy, plus connection with society, and you have to connect maybe four or five dots at the same time. We are going to have businesses that are networked with governments and society, and we need people that know how to do that and so I think one of our challenges in taking on something like clean energy and sustainability is that the leadership model of the past has to be reformed. It has to be changed. We have to have people that are broader. People that have more vision, that are longer term thinkers that are more adaptable and more connected. And as we do those things, as we are able to change the leadership model within G.E., I believe we will take on more issues and be able to solve more problems.

There is nothing easy about solving climate change. There is nothing easy about sustainability. But I think a new generation of leaders can really help bring it to the fore.

As a business person you know I would say, that I know we can create jobs and improve the environment at the same time. As a leader I know it is our responsibility to act in a disciplined and active way right now. And as a citizen I know that we have to engage people that don't believe in climate change and not do it in a negative way, but in a positive way to show that we can create jobs and we can create an optimistic future as we innovate and drive change. And all of those things have to be captured inside G.E..

So let me summarise a couple of big points. The world has several problems that appear to conflict at the same time. Slow growth and high unemployment and the need to reduce greenhouse gases, so many people believe that these are conflicting and that they are all occurring today. Global economics and political leadership are in transition, so governments are taking very tough stances, like Prime Minister Cameron has done here in the United Kingdom. I mean we are in a transitional moment in the economic history of the world. As a result of those two things people are afraid and they are looking for leadership right now on all the big challenges, not just clean energy, but healthcare and many challenges.

I think that in a time like this innovation both in terms of technology and business model is the only way to drive growth and solve problems at the same time. So now is the time to invest more and not less. And I know that clean energy will be one of the most important economic drivers of the future. It would be nice to have clarity and public policy, but if we don't have that businesses are going to have to act independently for a while, while government catches up and we are willing to do that. I think we should re-brand sustainability in the short term, not just as a way to save the environment, but as a source of economic growth and job creation, and energy security, and as we do that I think we can bring more people with us. We need a new generation of leaders, system thinkers, problem solvers... people that understand context in a broader horizon. And as we do these things I am quite optimistic that clean energy will be a catalyst for change. A catalyst for growth. And I really believe that technology exists that in the next decade we can start on a pathway that dramatically reduces carbon and global warming, and I am quite convinced we can do that.

So as I said your Highness, it is an honour to be here tonight. It is an honour to be in front of so many friends at a place that we consider to be so strategic to G.E. and talk about a subject that is so important I think to the future of our company and to the future of the world.

So thank you very much.

2010 London Lecture sponsor

Affordable sustainability at ASDA

We're the second largest supermarket retailer in the UK, owned by the world's biggest retailer - Walmart. In the UK we serve over 18 million customers each week from 377 stores and employ 175,000 colleagues. As the lowest priced supermarket in the UK, sustainability for us is about making more environmentally preferable products affordable and accessible for all our customers, not selling them at a premium.

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Sustainability 360

Sustainability has always been at our core, through eliminating waste and improving efficiency. In 2005 Walmart created a programme based on this heritage. We call it 'Sustainability 360'. The programme focuses not only on our operations and products but also on helping our colleagues, customers and the communities in which we operate to become more sustainable.

At its heart are three challenging and aspirational goals: to be supplied 100% by renewable energy, to create zero waste and to sell products that sustain people and the environment. These goals provide a global framework for all Walmart operating countries whilst allowing them to set specific measures relevant to their markets. In 2010 we re-launched our targets, making them even more stretching through a strategy we call 'Sustainability 2.0', which takes us up to 2015.

Real progress made to date

We've made real progress on our targets so far. We've achieved a 42% reduction in carbon emissions from new store models – and a 23% reduction in emissions from existing stores against a baseline of 2005. In our low carbon store at Bootle, Liverpool, natural light floods through the wall and sun pipes, saving enough energy to make 12 million cups of tea! We're now working towards a 35% reduction in carbon emissions from existing buildings and a 60% reduction in our new store model under the Sustainability 2.0 strategy.

We've reduced emissions from our transport fleet by 52%, an industry-leading figure. The aim for our distribution fleet is to drive 'fewer and friendlier miles' – reducing the number of road miles each year, and therefore carbon emissions too. We've introduced double deck trailers, optimised vehicle fill, and we run workshops to help colleagues drive more

efficiently. Since 2005 we have reduced road miles by 17 million miles. Our new target is a 60% reduction by 2015.

We are aiming to send zero waste to landfill by the end of this year. Our comprehensive recycling programme is now helping us divert over 85% of our store waste from landfill. All our stores already divert 100% of their food waste from landfill.

This focus on direct operations has enabled us to reduce our direct carbon footprint by 7% in absolute terms over the last two years. Supermarkets in the UK measure their footprint in different ways and include different activities.

We include every major carbon emission from energy to business travel to waste – the widest scope of any UK retailer.

We have cut our operational carbon emissions by 84,703 tonnes since 2007, despite opening 36 new stores and serving an additional 2.5m customers each week. This represents a 7% absolute reduction in CO_2-equivalent in just two years – and for every £1m of sales today we produce 66 tonnes of CO_2-equivalent compared to 83 tonnes in 2007.

Empowering our colleagues

Our colleagues are critical to the success of our strategy in their area of the business, whether they work on a checkout or manage a buying team. Our corporate sustainability team is deliberately small as real change can only be made by sustainability becoming part of everyone's day job, not the reserve of a specialist team.

To help us make the transition, we have sustainability managers in the operational areas of the business – energy, transport, packaging, products, and waste – and 'Green Champions' in each of our stores. Their role is to both support colleagues to become 'greener' and to support ASDA's corporate green initiatives both whilst at work and at home.

Products and supply chain

Over the next five years we will focus our sustainability programme on products. We've already reduced our own brand product packaging by 27%. Our free range 'Respectful Eggs' – with 50% less carbon in production than the standard free range egg – are best-sellers. This tells us that our customers want us to see more. We're working hard behind the scenes to make our products more sustainable and affordable. Take our current refillable fabric conditioner trial: customers can return and refill the packaging 9 times, and it's cheaper to do that than buy the same amount in the standard bottles.

We work with the Walmart markets around the world to share best practice and to make our supply chains more sustainable. For example we have a global goal to take 20 million metric tonnes of CO_2 our of our supply chain by 2015.

We're also working with Walmart to develop an innovative Sustainability Index. The index looks at the product and its whole life cycle in production, including packaging, water use and effects on indigenous peoples. It uses this information to 'rank' the product. It'll eventually allow buyers and customers to use this information to inform their choices and to compare products.

In October, Walmart launched its Sustainable Agriculture programme. This programme reinforces our supply chain focus and has set measurable targets to 2015. Our customers care about where their food comes from and they rely on us to ensure that it meets all their expectations, not only on taste, but also on environmental standards. This strategy will support our farmers and help deliver on our passion for affordable sustainability. The work falls under three key areas: supporting farmers & their communities; producing more food with less waste and fewer resources and sustainably sourcing key agricultural products.

So being a part of an international business enables us to make a global difference, though the competition between Walmart businesses also helps to drive innovation.

Find out more

http://aislespyblog.asda.com/environment or
http://your.asda.com/sustainability-policies

2010 London Lecture sponsor

The Nestlé approach to sustainability

At Nestlé, we believe that for our business to be successful in the long run, we must create shared value. Therefore, in all that we do, we consider the needs of two primary stakeholders at the same time: the communities in the countries where we operate and our shareholders.

While our presence in these countries itself brings new opportunities, e.g. in terms of jobs for workers, taxes to support public services and economic activity in general, our concept of Creating Shared Value takes our contribution beyond this.

By analysing our value chain we have consciously identified three areas of focus where the interests of our shareholders and society strongly intersect, namely, nutrition, water and rural development.

These three areas are fundamental to our overall business goal: 'To become the recognised leader in Nutrition, Health and Wellness, trusted by all stakeholders'.

By applying the CSV concept to our work in these areas, as well as investing resources, both in terms of talent and capital, we have invested in and instigated joint programmes with more than 100 organisations around the world to make a lasting difference with regards to global nutrition, rural development, and the sustainable use of water.

We are also using our position as a prominent global player in the food industry to promote awareness of the key issues in these areas, provoke debate on the best ways to address these issues and encourage collaborative action from corporations, governments and non-profit organisations alike. Our annual CSV Forum, which brings together global thought leaders and other actors, is a good example of this.

While Nestlé has adopted a Creating Shared Value approach to our business, we make no proprietary claim on this concept, so that Creating Shared Value becomes available to any company that wants to utilise it.

Through the Cocoa Plan, Nestlé aims to help cocoa farmers by training them in good agricultural practices to improve yields and returns, ensuring a reliable and transparent supply chain, and improving social conditions, particularly in terms of water infrastructure in cocoa farming villages.

One of the community wells in Kirehe, eastern Rwanda provided by our 2008 partnership with the Lutheran World Federation and Inter-Faith Action for Peace in Africa, to supply clean water to rural communities.

2009 highlights

CHF 107,618 million Total Group sales
278,165 Employees worldwide
71% of total sales products meeting or exceeding Nutritional Foundation profiling criteria
7,252 Products renovated for nutrition or health considerations
3,950 Popularly Positioned Products (PPPs)
165,553 Farmers trained through capacity building programmes
35% Markets covered by Sustainable Agriculture Initiative Nestlé (SAIN) programmes
3,864 Suppliers audited for food safety, quality and processing
16,5497 Suppliers who received the Nestlé Supplier Code
12.2% On-site energy generated from renewable sources
48% Reduction of greenhouse gas emissions per tonne of product since 2000
59% Reduction of water withdrawal per tonne of product since 2000
58,995 tonnes Reduction of total packaging materials weight
2.0 Lost time injuries among employees and contractors (per million hours worked)
27% Leadership positions held by women
93,146 Employees receiving formal classroom training in developing countries
42% Local Management Committee members in developing countries originating from that region

Our three areas of focus:

Nutrition

Food and nutrition are the basis of health and of our business. We seek to help people to eat a healthier diet, whether the problem is nutrient deficiency at one end of the spectrum, or obesity at the other.

For example, to improve the nutrition of around 3 billion lower-income consumers worldwide, we developed our 'Popularly Positioned Products' (PPPs) business model to fortify billions of servings of Nestlé products and make them affordable, appropriate and accessible to this important consumer group.

Our other nutrition related commitments include:

- An annual investment of around CHF 2 billion (£1.3 billion) in research to find science-based solutions to nutritional needs.
- The Nestlé Healthy Kids Global Programme, which brings nutrition education to more than 10 million children each year.
- Working with governments and organisations to understand and help address the public health issues of consumers in specific regions.
- Providing consumers with clear and relevant nutrition information on all our products through our on-pack Nestlé Nutritional Compass®.
- A nutrition strategy that is guided by the Nestlé Nutrition Council – a council of internationally recognised experts.

Water

The ongoing quality and availability of water is critical to life, the production of food and to our operations. However, we believe that the world is facing a serious water crisis, with grave consequences for global food security.

Our ambition is to produce tasty and nutritious food and beverages with the lowest environmental impact, so we strive to continuously improve our operational efficiency and environmental performance.

As a result we:

- Invested more than CHF 220 million in environmental sustainability programmes and initiatives in 2009.
- Continue to improve our water and energy consumption and CO_2 emissions.
- Are consciously moving towards renewable energy sources.
- Have prioritised packaging weight reduction.
- Work alongside our suppliers to promote sustainable practices in our supply chain, particularly with regards to water stewardship.

Rural development

The overall wellbeing of farmers, rural communities, workers, small entrepreneurs and suppliers is intrinsic to our ability to continue to do business in the future.

Nestlé spends approximately CHF 20.4 billion a year on raw materials and, in all, about 3.4 million people in developing countries earn

In Sri Lanka, our affordable milk Nespray Everyday is fortified with vitamin A and aimed at low-income families.

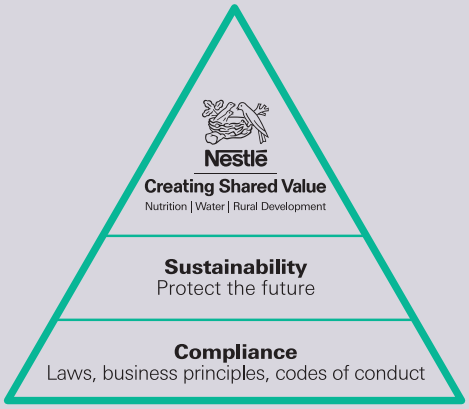
their livelihoods from our supply chain, giving us a significant opportunity to have a positive long-term impact on rural development.

We:

- Currently work directly with approximately 540,000 farmers to help them to increase their productivity, protect the environment and climb out of poverty.
- Supported 165,553 direct suppliers through technical assistance and knowledge transfer in 2009.
- Provided microfinance loans totaling CHF 48 million in 2009.
- Have committed CHF 460 million to coffee and cocoa plant science and sustainable initiatives over the next decade through our Cocoa Plan.
- Continue to work with partner organisations to address long-standing social issues such as child labour in the rural sector.

Nestlé's sustainable business model

To build a responsible business for the long-term, we manage our operations to comply with the highest standards of business practice and environmental sustainability. However, to build a profitable business for our shareholders, we go beyond compliance and sustainability to a third level: creating long-term value both for society and for our shareholders. This is what we mean by 'Creating Shared Value'.



2010 London Lecture sponsor

Skanska's journey to Deep Green™

"Technology is not a barrier. Already today, we have the knowledge and techniques to go a long way on the road to a Deep Green Society. Naturally, technology will become more refined, efficient, cheaper and easier to use. But there is no reason to wait. We'd better start doing what needs to be done." – Johan Karlström, President and CEO, Skanska."

SKANSKA

A part of Skanska's Green Initiative

Skanska is a leading international project development and construction company. The Group has expertise in construction, development of commercial and residential projects and public-private partnerships. Skanska aims to continually develop its understanding of what shapes and constitutes sustainable societies. It has long understood its responsibility to sustainable construction and is committed to contributing to a green society.

The Journey to Deep Green™

In moving our built environment beyond basic compliance with existing regulations, Skanska has identified the desired destination as Deep Green, which simply means near-zero environmental impact of projects.

What does Deep Green look like?

In a Deep Green society, assets and facilities are future-proofed by the improvement of energy efficiency and materials use and the reduction of carbon emissions and water consumption. Deep Green can be measured in zeros. Net zero primary energy, zero waste, zero hazardous materials, zero unsustainable materials, net zero water and near zero carbon construction.

How do we get there?

As part of a commitment to reduce environmental impact, Skanska has embarked upon its Journey to Deep GreenTM. The Colour Palette, a strategic framework and communication tool for Green Construction, has been developed to measure the company's performance along the way. The palette comprises three colours:

Vanilla – The construction process or product performance is in compliance with law, regulations, codes and standards.

Green – The construction process or product performance is beyond compliance, but not yet at a point where what is constructed and

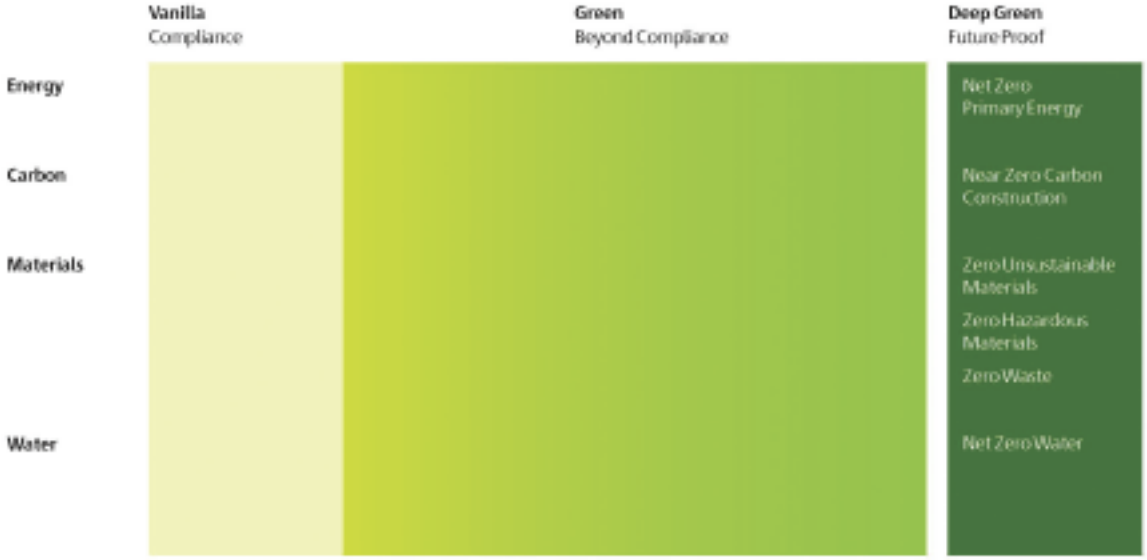
how it's constructed it can be considered to have near-zero impact. Green can be qualified by voluntary classifications such as: EU Green Building, LEED (Leadership in Energy and Environmental Design) and BREEAM (BRE Environmental Assessment Method).

Deep Green – The construction process or product performance is future-proofed –for example, it consumes zero net energy and produces zero waste. Deep Green is the ultimate destination.

Today, vanilla cities and buildings are the norm - they will get the job done at a low capital cost. However, there are also examples of green construction in many places around the world.

While existing green projects may meet today's requirements, they will not be good enough tomorrow. It is a moving target and Skanska is pushing each of its projects as far towards the Deep Green zone as economically possible.

Buildings and infrastructure can be designed and built in a way that reduces their impact. Life Cycle Costing proves that a slightly larger investment today yields even greater cost savings over time, particularly as costs of energy, water and waste disposal rise, while technology continually advances. Thinking in lifecycles– instead of only here and now – makes Skanska and its clients look at function, environmental consequences and costs; spread over a building or development's lifetime.



The Skanska Color Palette

"Environmental labels and assessment methods enable clients and developers to choose green solutions. Whilst these labels encourage green construction, Skanska believes that it is crucial to look beyond the levels prescribed by these voluntary standards because more is already possible."

The solutions are already here

Much more can be achieved today than simply complying with regulations, norms and environmental systems.

The tools to reach Skanska's Deep Green goals already exist.

Environmental labels and assessment methods enable clients and developers to choose green solutions. Whilst these labels encourage green construction, Skanska believes that it is crucial to look beyond the levels prescribed by these voluntary standards because more is already possible. For example, an EU GreenBuilding label indicates that energy use on premises is at least 25 percent lower than national requirements, but Skanska already constructs buildings and office space that use 40 to 50 percent less energy than national norms.

Deep Green building requires smart, engaged and demanding clients, the involvement of stakeholders early in the process, and partnerships with suppliers. It also requires construction companies, property owners and tenants to dedicate themselves to the structures they build by operating them as designed, making continuous improvement possible. There is also a responsibility at government level to set national goals, regulations and guidelines. Finally, it requires construction companies that have vision, foresight and a well-developed sustainability strategy, which is what Skanska's Journey to Deep Green™ is all about.

The Journey to Deep Green™ has already started….. A few firsts for Skanska

Refurbishment – Empire State Building, New York City

Skanska USA relocated its New York headquarters to the 32nd floor of the Empire State Building, which is designed and retrofitted to LEED Platinum for Commercial Interiors, the highest ranking established by the US Green Building Council. The project demonstrates that Green refurbishment can be achieved without compromising on design, function or maintenance. The retrofit has created a healthy, flexible and productive workplace, with features including:

- 50% of its energy from renewable sources
- Energy efficient systems and measures include efficient cooling and ventilation
- Daylight and space occupancy sensors optimise the artificial lighting to ensure over 35% less energy usage than lighting standard requirements
- Many of the original features have been retained and restored including the terrazzo flooring of marble chips
- Energy reduction compared to benchmark is 57%
- Energy cost savings expected to pay off this Green investment within 5 years

The Empire State Building

Residential – BlåJungfrun, Stockholm. First High-rise Passive House.

BlåJungfrun, an energy efficient apartment project constructed by Skanska, was the first high-rise public rental apartment development in Stockholm to be built according to Swedish passive house standards. The apartments do not have a conventional space heating system and are primarily warmed by the building's occupants, household appliances and passive solar heating. The apartments consequently consume less than half the energy of a conventional Swedish apartment building due to the reduced need for space heating.

Commercial offices – Lintulahti, Helsinki. First Finnish LEED Platinum.

The Lintulahti office building is an energy efficient office block, supplied with renewable electricity and efficient district heating and cooling. The development has contributed towards sustainable urban planning and promoted urban redevelopment by reusing a contaminated brownfield site. It was the first project in Finland and the Nordics to receive a Platinum LEED preliminary certification and is registered with the European Union's GreenBuilding Programme.

Healthcare – Providence Newburg. World's First LEED Gold Hospital.

The Providence Newberg Medical Centre in Oregon, USA, pioneered the use of the LEED standards as a framework to integrate sustainability into the design and construction of a medical centre and contribute towards sustainable community healthcare. It is one of the most technologically advanced and sustainable hospitals in the USA and was the first hospital in the world to be certified as a LEED Gold Hospital. The focus on overall life cycle costs, rather than the short-term construction budget, was vital in promoting sustainable design and construction, which is expected to reduce environmental impacts and operational costs throughout the life of the building.

For more information contact:

Noel.Morrin@skanska.se

THE PRINCE OF WALES'S

BUSINESS & SUSTAINABILITY PROGRAMME

UNIVERSITY OF CAMBRIDGE PROGRAMME FOR SUSTAINABILITY LEADERSHIP

The BSP London Lecture Series

The Prince of Wales's BSP London Lectures provide a unique opportunity for a senior leader from business or government to communicate their vision for the future to an audience of their peers and experts in the field of sustainable development. The Lectures have demonstrated the commitment of the speakers to take leadership from their own particular position, and have also inspired action amongst members of the CPSL alumni and their guests. For example, following a challenge set by the UK Prime Minister Tony Blair, the Corporate Leaders Group on Climate Change was created in 2005 and has since set a benchmark for business commitment in informing the development of public policy across the world.

Previous speakers include:

James Wolfensohn, Head of The World Bank

17 November 1998

"Across the globe, we are moving from a world in which governments had the sole responsibility for public good, and business maximised profits independently of the interests of society at large – to a world where the success of society depends on the close synergy of interests among business, civil society and government".

Dr Gro Harlem Brundtland, Director-General of the World Health Organisation

15 March 2001

"With political courage, international cooperation and innovative partnerships between governments, the private sector and civil society, disease can be managed and solutions found to environmental problems and health challenges."

Rt. Hon. Tony Blair, MP

14 September 2004

"The 10th anniversary of His Royal Highness's Business & the Environment Programme (now Business and Sustainability Programme) marks what is now recognised as the premier international forum for exploring sustainable development in the context of business."

H Lee Scott, CEO of Wal-Mart Stores Inc.

1 February 2007

"As businesses, we can go further – to places where we may have no connection other than a simple bond of humanity. We should look to these places and ask: Can we be profitable here and, in the process, help more people and communities build a sustainable future?"

The University of Cambridge Programme for Sustainability Leadership (CPSL) works with business, government and civil society to build leaders' capacity to meet the needs of society and address critical global challenges. Our seminars and leadership groups and our partnerships with those who make or influence decisions are designed to transform public and private sector policies and practices and build greater understanding of our interdependence with one another and the natural world. Our network of alumni brings together the most influential leaders from across the world who share an interest in and a commitment to creating a sustainable future.

CPSL is an institution within Cambridge University's School of Technology. We work in close collaboration with individual academics and many other departments of the University. HRH The Prince of Wales is our patron and we are also a member of The Prince's Charities, a group of not-for-profit organisations of which His Royal Highness is President.

UNIVERSITY OF CAMBRIDGE
PROGRAMME FOR
SUSTAINABILITY LEADERSHIP

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In the UK:
1 Trumpington Street
Cambridge CB2 1QA, UK
T: +44 (0)1223 768850
F: +44 (0)1223 301122
E: info@cpsl.cam.ac.uk

In Brussels:
48 Rue de Stassart
1050 Brussels
T: +32 (0)2 894 9320
E: info.eu@cpsl.cam.ac.uk

In South Africa:
PO Box 313
Cape Town 8000
T: +27 (0)21 469 4765
E: infor.sa@cpsl.cam.ac.uk

In Australia:
Level 5, ACA Building
118 Queen Street,
Melbourne VIC 3000
T:+61 (0)3 96 42 0220
E: info.aus@cpsl.cam.ac.uk