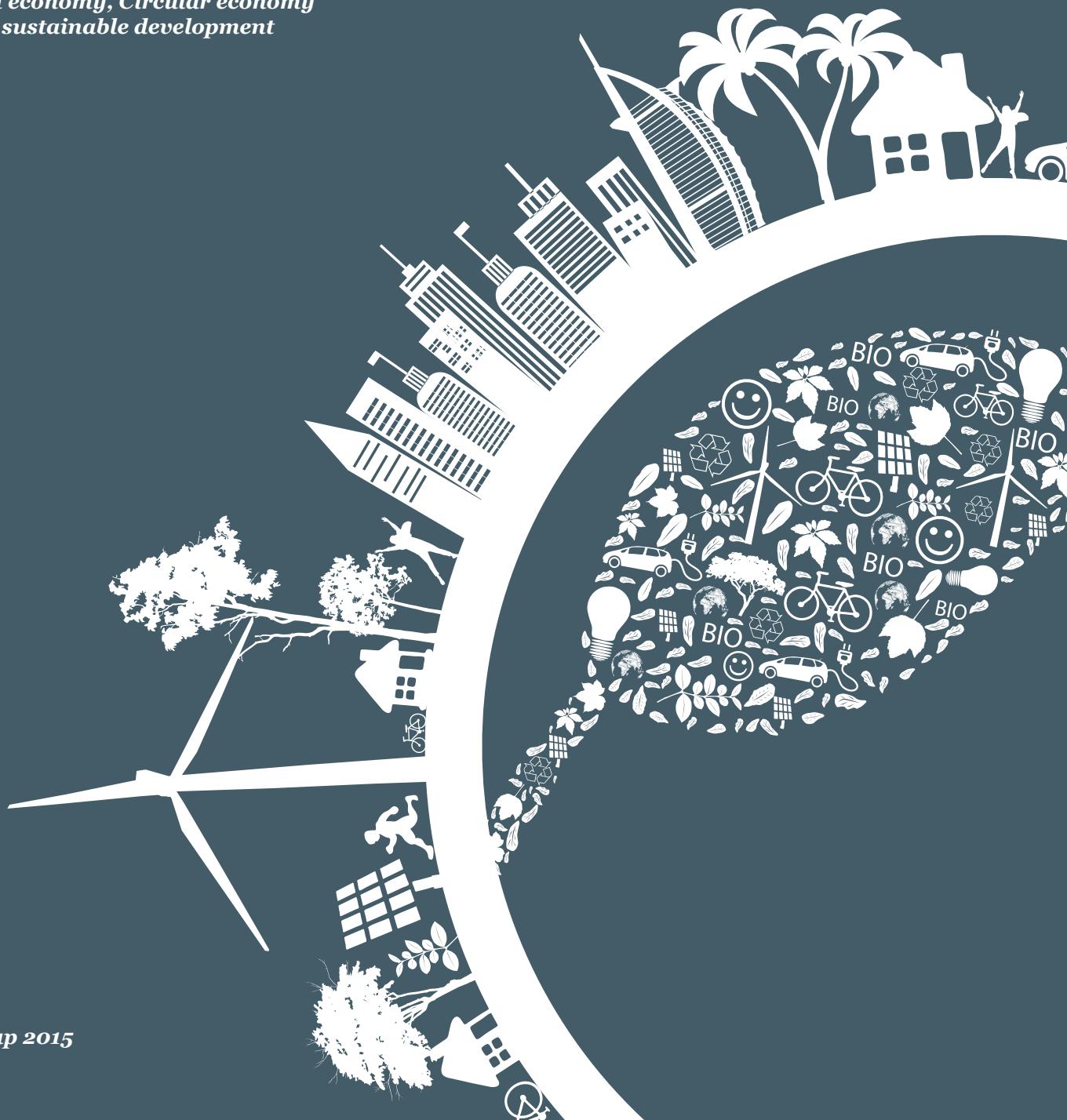


talking sense

*Leadership thoughts and opinions
on Green economy, Circular economy
CSR and sustainable development*



EMG presents a new series of Sustainable Business Innovations and CSR Thought Leadership interviews with clients and other parties in our network with the goal of inspiring more people about the benefits of integrating corporate responsibility into profitable business.

The interviews include executives, senior government and NGO officials, prominent financiers and heads of CSR for some of the world's largest multinationals.



Danish Ministry of the Environment

Growth is green and provides business opportunities

*An interview with Ms. Ida Auken, former Danish Minister of Environment on green innovations, closed loop, sustainable product designs, urban revitalization & entrepreneurial enthusiasm
Member of the Advisory Board, EMG*

”Danish companies use CSR strategically – to increase competitiveness, to access new markets, to be resource-efficient, to cut costs, and to develop new and innovative products.”

An interview with Ms. Ida Auken, the Danish Minister for the Environment (2011-2014)

In 1971 Denmark established a Ministry for the Environment and was the first country in the world to implement an environmental law in 1973. Does this ease up your work from the perspective of reputation or it does it impose more demands in order to keep up with expectations? What are the expectations of the Danish people and neighbouring countries?

During the 1960s and 1970s Denmark experienced massive economic growth. Along with the new consumer society, the need for environmental regulation quickly became clear. That is why we as a country today can say that we have a relatively long tradition of taking good care of our nature, water and other resources. Danish citizens expect their drinking water to be fresh and clean and they expect that they can take a swim in the ocean without any risk from pollution.

Of course, it is no easy task to find the perfect balance between use and protection. We are a small country and our space is limited. But the awareness of environmental issues among the people, industry, agriculture and organisations definitely helps. I strongly believe that we need to have a close partnership with all participants to make the right decisions. In many cases we are first movers when it comes to environmental regulation and I think a lot of our neighbouring countries are impressed with that.

Can you tell us more about the bright green environmental movement?

The core elements of the bright green movement are innovation, closed loop material cycles and sustainable product designs, urban revitalization and entrepreneurial enthusiasm to transform our society into a more sustainable society. This is very much along my own line of thinking and I firmly believe it can pave the way for serious improvements in resource efficiency, and it should of course be embraced at the highest political levels in order to support this development.

The response of the bright green movement is to transform the challenges of today and send a positive message to businesses and other key figures that there is only one type of growth in the future, that this growth is green and that it provides business opportunities. In my mind it is clear that those who are able to connect the challenges of the resource/climate crisis and the economic crisis will be the market leaders of the future. I also believe that it is absolutely crucial to mobilise action through a positive narrative rather than speaking about sustainability merely as a challenge. A positive drive is a prerequisite to initiating a fast-track green transition.

How do you think the national culture and values of a country play a role and influence corporations in their responsibility plans and in their own value-building?

Denmark can be proud of a large number of Danish companies leading the CSR agenda, and I am convinced that there is a reason for this:

First of all environmental issues have been part of the public as well as political debate since the early 1970s. Denmark was the first country to adopt an Environmental Act and this has driven Danish companies to ‘green’ their corporations and pioneer green technologies. However, my task as Minister for the Environment is not only about legislation and compliance – it is also about encouraging companies to go beyond compliance and embrace CSR: eco-labels, environmental management systems, sustainability reporting, resource efficiency, etc..

The demand in Denmark for green products is clearly visible. We are one of the front runners in the EU

Having said that, we should not lose sight of the urgency of the challenges with which we are confronted and we should not forget that the overall target in terms of resource use should be an absolute decoupling between economic development and environmental impact. Attention should therefore also be given to our absolute levels of resource use – to avoid resource efficiency gain in one area and resulting in increased resource use in other areas. This can easily be forgotten in the bright green enthusiasm for green innovation.

An important element in this respect is people’s awareness and consumer behaviour. Who wouldn’t want to hang on to our cars and IT-gadgets, but if only they were designed to be sustainable? At the same time, there’s no question that in addition to taking on board green innovations, we need to change our habits. Most of these changes, often called for by the so-called “dark greens” – eating less meat, cycling/walking more, for example – also possess significant potential in terms of achieving environmental results.

regarding the public procurement of green goods and services. Furthermore, the Danish consumer leads the world in the purchase of organic products, and the Nordic eco-label- the swan–is recognized by 90 % of Danes. From my point of view, CSR is not only driven by culture and values, and is definitely not driven by philanthropy. CSR is driven by business and hereby becomes a part a company’s DNA and new business model.

Danish companies use CSR strategically – to increase competitiveness, to access new markets, to be resource-efficient, to cut costs, and to develop new and innovative products. A recent analysis showed that more than 22,000 Danish companies produce and sell green products and services – that is 20% of our companies!

From an environment perspective, what are the greatest challenges and opportunities for Denmark in the next 10 years and in the long run?

I like to think of challenges and opportunities as two sides of the same coin. In the long run – and even just within the next 5 to 10 years - we need to be smarter in the way we address the issues that are not just challenges for Denmark but challenges for the global environment and for the health and prosperity of us all.

Just one example: we have come far in our efforts to improve air quality in Denmark's largest cities, yet too many people are still badly affected by pollution. This is a problem we share with cities all over the world. Examples of other significant challenges that still require attention include the scarcity of clean water, biodiversity loss, climate change, the dispersion of toxic chemicals, and unsustainably high levels of resource use.

The opportunity is to deliver a green solution to these problems which at the same time strengthens the basis for growth. For example, we must develop technologies that reduce emissions from cars, power plants and ships; develop alternatives to fossil fuels, new business models and so on; and develop a framework around it that supports its market uptake both through regulation and through voluntary instruments such as green procurement. The challenge is to do it – the opportunity is to do it now and do it just a little bit better than the rest.

Given that Denmark is almost entirely surrounded by water, how are you engaging with neighbouring countries from the perspective of water/ sea and marine conservation?

As Minister for the Environment, I give very high priority to close coordination with other marine countries and within sea areas to ensure the coordinated protection of the seas surrounding Denmark. Therefore Denmark already coordinates its efforts in relation to the marine strategy framework directive within the EU, and we will continue to do so in the years to come.

As part of this coordination, Denmark sees cooperation regarding the regional sea conventions as very important. This includes OSPAR (covering the North Sea) and HELCOM (covering the Baltic Sea). Furthermore, Denmark has the chairmanship for HELCOM until the summer of 2014, and I will

personally chair the HELCOM ministerial meeting in 2013. It is my ambition for the meeting to result in an ambitious declaration by which we agree on the environmental challenges we are facing right now and on what needs to be done in the years to come. We intend to focus on areas that need extra attention such as the effects that marine litter has for the Baltic Sea, noise pollution and the spread of alien or invasive species.

How does the Danish government support Danish companies that want to go the extra mile pursuing green innovations?

The Danish government supports green technology development through a number of targeted programmes, including a green technology development programme. Furthermore, the government actively promotes green public procurement.

Specifically, we produce guidelines for public procurers regarding green product requirements, and green specifications are incorporated into a large number of multi-year public procurement framework contracts.

In addition, a green procurement partnership between the Ministry of the Environment and major town municipalities has been established in order to encourage further targeted green demand. Other instruments in support of such companies are environmental certification and labelling schemes, whereby the Ministry for the Environment provides financial support to an independent eco-labelling secretariat, which provides assistance and guidance to companies.



*The company that proved
that business can be good
for the world*

An interview with Adam Lowry, co-founder of Method

” You could have a perfectly sustainable product, but if nobody uses it, that – in my mind – is not innovative.

**So what we have to do is
create products that are more sustainable
but are also products that people love
and love to use.’**

An interview with Adam Lowry, co-founder of Method

One of the great ironies about most of the cleaning products around today is that their ingredients are some of the dirtiest for the environment – such as ammonia and bleach - and many of them are highly toxic or even cancerous.

But there is one small company that for the past decade has been working quietly – and sometimes not so quietly – to turn this reality upside-down.

At the turn of the millennium, Adam Lowry and Eric Ryan – who had been friends since childhood – put their heads together and decided to revolutionize the cleaning product market with stylish, eco-friendly and people-friendly products made with nontoxic ingredients that “clean like heck and smell like heaven.”

Since then, Method has grown to become a 100-million-dollar company with a wide range of sustainable cleaning products in stores across the US, Canada and the UK. As EMG found out when talking with co-founder Adam, the company has in some ways only just begun its journey to prove that sustainability-minded business can be a powerful force for good in the world.

You've been known to say that Method is about progress, not perfection. Tell us more about what you mean by that and some of the current initiatives you are working on

I'll start by saying what 'progress, not perfection' is NOT about, and that's an excuse to do less than absolutely everything you can to innovate around sustainability.

It is an acknowledgement that actually getting people to follow your lead and adopt your innovations is the most important – and often the trickiest – step in the sustainability process.

What I mean by that is that you could have a perfectly sustainable product, but if nobody uses it, that – in my mind – is not innovative. So what we have to do is create products that are more sustainable but are also products that people love and love to use.

I truly believe adoption is the most important part of the innovation process. Once we have people using our products, that then gives us license to do the next big innovation. This helps us bring consumers with us on the sustainability journey, so we can arrive at our destination quicker than if we spent our time dreaming up the 'perfect' product that no-one actually used. So with that backdrop in mind, here are a couple of examples of how we're doing this.

The first is refills. For a few years now, some stores have offered facilities for customers to refill household cleaning product containers, but this concept has not been achieved on any reasonable scale. The reason for this is because the process hasn't been designed to actually be more convenient for consumers. What we've done is to create a simple branded refill pouch that merchandises well and is really simple to use in the home, which encourages people to start refilling.

If we can get people across the first 'convenience' barrier, then we can start implementing this to scale. It's a good example of how we are putting the 'progress, not perfection' mantra into action.

A second innovation that we are working on is more technological; and that is biosynthetic surfactants. Traditionally, someone designing a cleaning product has the choice between a petrochemical, an oleo chemical or a natural surfactant detergent as the base of their product. The simplistic thought might be that the 'natural' product will always be the better one. In most cases that's true, but the fact is the 'natural' choice might not actually be that much more sustainable. While they are not petrochemical, naturally grown ingredients may have high land use impacts. They are a step in the right direction, but they are not the be-all and end-all.

So one thing that we're working on is using microscale bioreactors – which are essentially yeast – as microfactories to produce surfactants that are not petrochemical and also have no – or at least very, very little – land use impact.

Like all the stuff that we already use in Method's cleaning products, they're non-toxic, biodegradable and people-friendly. This is a real technology breakthrough that you'll start to see in our products in the very near future.

Tell us about your newly-launched product, the ocean plastic bottle. How did the idea come about?

When you study the problem of ocean pollution – which is mostly plastic – what you learn is that the only real solution is prevention. As you and I know, there's no practical way of going there and cleaning up the Great Pacific Garbage Patch. It's not an island; it's a soup, so the main issue is that any clean-up effort is impractical. The real solution is preventing the plastic from getting into the ocean in the first place. And if you're going to do that, one of the very best ways to do it is simply to use the plastic that's already on the planet.

However, recycling rates in the US and UK are very low. It's estimated that less than half – perhaps as low as 25% – of plastics, get recycled, which means for every pound of plastic that's recycled, three pounds end up in landfills or in the environment somewhere.

So what we need to get better at is closing the material loop, and using the plastic that's already on the planet.

This is something that Method has done for many years. There's no virgin plastic material in any of the PET we make. On its own, this is not something that's very interesting for the mainstream consumer to think about.

So what we wanted to achieve through the ocean plastic project was simultaneously raise awareness about this important issue and point to the solution.

Essentially, we have created a product that people said would be impossible. People would say there's no way you can take plastic out of the middle of the ocean and make useable, recyclable packaging from it. Well, we've done just that, and you can buy it at your regular supermarket. By demonstrating that the impossible is possible, we're removing the excuse that any company has for not using 100% post-consumer waste.

There is a general belief – often perpetuated by the media – that only harsh chemicals can remove harsh stains. However, Method is proving that this is not the case. How did you achieve that?

I have a four-year-old, so I'm very familiar with the issue of harsh stains! The idea that a product has to be full of 'dirty' chemicals in order to clean something is really an outdated mindset. But unfortunately it's one that's deeply held, and so you really have to get people to try it, to believe that it doesn't necessarily have to be that way. And so this becomes our biggest challenge as a company. If we can just get people to try our products, they're always impressed with the performance. Then, immediately, any deeply-held assumptions about cleaning products melt away instantly in people's

minds, and then you've really achieved something. You've established a precedent in one person's mind about what a sustainably designed product is, and what it can do. That can then start filtering into other parts of their lifestyle.

But yes, getting people to try our products remains our number one challenge. Once they do, they become true believers. There's no easy way to do that on a massive scale, and that's why we just have to keep doing what we're doing year after year.

How can consumers play a role in pushing the cleaning manufacturers to produce more sustainable products? Does it come down to legislation, or is it more than that?

Consumers can do what they have always done – vote with their dollars. It's the most powerful force of all.

Beyond this, I would ask consumers simply to challenge their assumptions that only the products with the harsh chemicals will get something clean.

I would encourage them to give products like Method a try, of course; but it's not just us. There are many other high quality products in many different categories that are sustainably designed and still perform highly.

In giving these products a try they might learn that high quality, high performance products don't have to be used at the expense of human health or environmental values. And ultimately that is going to be the quickest and most powerful driver of change.

It does bring up an interesting point though, which is that the harshest cleaning products out there are made by very large companies that have been in the cleaning business for a very long time. These companies have a reputation to protect. It's certainly more efficient for them to just market those products as being 'greener', than it is to reinvent them. Don't be fooled by that! If you're a consumer, challenge these assumptions.

Is Method considering the development of any other types of products, such as child care or women's beauty products? Would that be a natural next step for future growth?

This is something that we are constantly looking at because we've got some tremendous consumer loyalty to our brand. Some of the most common requests we get from women are for bodycare, skincare and kids' products, and right now we already have a very limited range of these products, with very limited distribution.

From a business perspective, one of the things that we always have to keep our eye on is that we are driving enough depth, while also driving breadth.

As a smaller company, it's always a question of resources.

Do we dedicate ourselves to carving out another share point in the laundry detergent category – which is massive – or do we develop lots of new products in adjacent categories. That's a conversation we have every day at Method. I'd like us to see us explore those opportunities a lot more some day.

In 50 years from now, what would you like people to look back at and say about what Method achieved at this point in history?

I would like Method to be seen as the company that proved that business can be good for the world. I would also like people to look back and see that we did it in one of the most uninteresting consumer categories there is!

What I mean by that is simply that people don't think about cleaning products very much. But if you can make beautiful, high performance, highly sustainable products in a category as commoditized as household cleaning and be successful, then you can do it anywhere!

Hopefully 50 years from now, the majority of businesses in all sorts of categories will have followed our lead, and together we will have created a world where business is the driving force behind sustainable change.



How the supply chain plays a key role in CSR & sustainability strategy

*An interview with Markus Terho,
Head of Sustainability, Nokia*

“Leading sustainability is not about pushing certain ideas onto others, but rather looking at how we can work with others to make a better impact on the industry as a whole, and create a better end result.”

An interview with Markus Terho, Head of Sustainability, Nokia

Anyone who has gone shopping for a mobile phone any time over the past 15 years would recognise the name Nokia. What makes Nokia interesting when it comes to sustainability is that this company has highly efficient manufacturing processes, and has supported its suppliers in this field in long-term agreements.

Its supply chain is interlinked with all aspects of the company and its consumers, and it is this management of the supply chain which is considered to be a major key to the success of the company as a whole.

Nokia employs the Smart manufacturing technique which together with its unique combination of in-house manufacturing and outsourcing has enormous impact on its competitiveness worldwide.

EMG spoke with Markus Terho, Head of Sustainability for Nokia, about the things the company has learnt along the journey and what new milestones are appearing on the horizon as it continues.

Nokia was recently voted by Newsweek as one of the world's top 15 greenest companies. Tell us about some of the things you've done to achieve that, and how you have influenced your industry.

To start with, we were the first company in the electronics industry to change our view on how we manage materials that go into our products.

Typically what consumer electronics companies do is form a list of materials that are not permitted to be used in their products, which they then send to their suppliers with instructions to comply. This is actually a very old-fashioned way of doing things, which we did until the mid-nineties when we had a clear change of viewpoint and direction.

As of the mid-nineties we have wanted to know about every substance involved in the components, parts, sub-assemblies, or even the very materials that we use. A simple piece of plastic has several different materials in it, so our aim is to know exactly what is in our products, right down to that level. When we first undertook this initiative, many said it would be impossible to ascertain all this. They thought no-one would give us the information, or that it would be impossible to manage, or that it would be very costly and our business would suffer. This has never happened! However, it took us a long time - more than six years in fact - to build this capability. It has helped us significantly. Many external requirements have been initiated by regulators in Europe, the USA, China and other parts of the world, such as new materials being added to a restricted list, or totally banned from use in certain applications or products.

Now, when the discussion on the policy front starts and scientists start to look at new evidence and debate whether a certain substance should be regulated or not, we can immediately go into our component database and see where we use this substance, and evaluate whether it can be replaced by something else. We also look at how much effort will be required to tweak it in the future.

We have now developed this capability to provide a full material declaration – a 100% breakdown – of what materials are in a component or a part that one company might supply to another. With this information, we have created a standardized system incorporated into our supply chain, which lets us intelligently manage substances of concern in our products and ensure that the highest global standards are met. It's been good to see some other electronics manufacturing companies following our lead on this. We are also very active with regard to cooperation within the electronics industry supply chain.

We make sure we manage risk factor areas, such as working conditions, workplace safety, environmental impact and ambitions of the company, and how information about these areas is exchanged within the supply chain. We look at how Nokia, with its many suppliers, can categorize and assess risk with certain types of manufacturing processes, materials and locations, for example. Nokia has also been an active participant in the Global e-Sustainability Initiative (GESI), which is an industry-wide effort to help the biggest players in the industry work for example with the same information about products and materials. We've been able to simplify that process quite radically, so that instead of every company having to seek out information for itself, it is all commonly available among companies using the same system and approach.

With things like this, where we have taken an approach of developing something based on our needs, we always try to look at how we might be able to help the wider industry in areas we feel are important. Leading sustainability is not about pushing certain ideas onto others, but rather looking at how we can work with others to make a better impact on the industry as a whole, and create a better end result.

Tell us about the early days at Nokia and how your practices of care for the environment, CSR and sustainability have developed through the years.

There is so much to tell. I'll try to be brief about this! The journey started with us looking first at what we do as a company and how we could lower the environmental impact of our own operations: our factories, our offices and so forth. That was our starting point.

Very soon we discovered that the biggest environmental impact was made not within our own operations, but elsewhere in the product lifecycle. We undertook the first lifecycle assessment in the industry, and found that the biggest environmental impact actually occurs in the use phase, with phone charging.

Periodically we conduct new life cycle assessments to determine where the most significant environmental impacts of our products are and then focus our improvement efforts on them.

We have since made significant efforts to help where we can with that, with innovative steps around making the charging of our phones much more efficient, to the point where

today our phone charging technology is even hundreds of times more efficient than it used to be. This was the second phase.

The third phase was looking at the product-related environmental impact issuing from the companies supplying Nokia – that is, those companies making the parts, materials, and sub-assemblies that are used in the final mobile device – and how we manage that impact.

More recently, in the past three or four years, we've added a fourth phase to our journey, which looks at how we can help the people who use our products to utilize them for something positive, in the categories of health, education, their livelihood or decreasing their personal environmental impact.

So that's been our journey; from looking firstly at our own operations, then our products, then our supply chain, and now that of the consumer.

How has Nokia structured the organization to enable sustainability to reach its potential?

Sustainability, for us, is a dual responsibility, meaning both environmental and social responsibility.

Each of the business units and teams in the company are held accountable not only for financial results but also for how they are meeting our environmental and social requirements.

My team's role is to make sure that everyone in the business units as well as our leadership team knows and understands the performance criteria to be met by each of the units.

Whether they are dealing with an R&D decision on what type of materials to use or what technologies to choose, considering operational issues around the transport of finished goods, or observing how we receive goods from other companies, the decision criteria must always include sustainability alongside other decision-making features.

This is integrated into the way that we make our decisions. Beyond that, it is the CEO who is ultimately responsible for Nokia's sustainability performance.

Naturally at the end of its use there are still many high quality materials in a mobile phone. What are the challenges of getting these nutrients back to be used in the making of new products?

Collecting old, obsolete products from consumers continues to be a challenge, not only for Nokia and phones, but for everyone in the electronics industry.

An interesting point for us is that consumers tend not to throw away their old mobile phones. Our research showed that the average household, no matter where it is, contains five obsolete mobile phones. There are some very simple reasons why people hold onto them. It's partly because they want to have a familiar back-up phone to hand in case their new one doesn't work. Apart from this, studies we've carried out show that people just seem to have a strong personal attachment to their old phones.

So the good news for us is that these products are not merely going into landfill. They are kept at home in desk drawers, meaning there's no negative environmental impact resulting from disposal. However, they do contain valuable materials – copper, gold, silver and palladium to name a few – that can and should

be recycled, because this would lower the environmental impact that comes from having to find new materials for the manufacture of new products.

So if individuals can bear to part with their old phones for recycling, this will be a good environmentally-friendly deed! Customers can return phones to any location where we repair our products, and we have systems in place that will recycle a phone efficiently. This is actually legally mandated in EU countries and in many states in the USA, as well as in China and Australia.

Of course, if you are able to prolong the useful life of a product, that's good from an environmental point of view. There's no need to manufacture a new device if you have a product that is still technically capable of handling all the communication needs of a second, third or fourth user. Our role in this recycling scheme is to catch those products that no longer have value to the user.

How is sustainability embodied at Nokia, both at your global headquarters in Finland and around the world?

We have a very simple philosophy. Whatever we do – and this doesn't just apply to sustainability – anything that the company undertakes always has an internal standard of performance. And that's the same no matter where we operate.

A Nokia product sold in India or China has the same characteristics as one sold in the United States, Germany, Spain, Finland or wherever. It's a key principle that enables us to maintain a global standard of quality.

Specifically, though, our journey of sustainability began in 1991, with our signing the International Chamber of Commerce's Charter of Sustainable Development. This document has sixteen points, which we took on board and began implementing across the company.

Soon after that we developed our first official company-wide environmental policy. Since then, our work has gradually evolved so that now it also incorporates social responsibility. Sustainability for us, clearly means environmental responsibility and social responsibility.

What do you consider will be the greatest challenges for your industry over the next decade, and what will be Nokia's unique challenges?

The ICT industry differs from many other industries in that we actually have the potential to lower the environmental impact of other industries and even individual people.

The challenge will be helping them understand how they can make this happen in their own company or lives.

For example, Nokia technology has the potential to reduce the energy needs of the transportation industry simply by getting good quality information from one person to another. With the help of the 'Nokia Drive' navigation system we can re-route trucks, or even individuals driving their own cars, to find the most fuel-efficient way to travel from A to B.

The potential also exists for ICT to make positive social changes in industries like health and education, not to mention in the lives of individuals wishing to reduce their personal environmental impact. We have already innovated several different technologies

available free of charge to help in this way. However for the next decade at least transportation is going to be our continuing focus, and not just the transportation of goods but also of people. This is because when you consider the environmental impact of an individual in the world, this can be roughly divided into three categories: you have to eat, you have to live somewhere, and you have to move about in the world. With the help of a mobile phone we can significantly lower the environmental impact of moving around. This is where we see a great deal of potential for Nokia in the future.

The main challenge is convincing others that there is huge positive potential. How do we communicate that challenge and make it clear that if you and I and maybe a few hundred million other people start to use mobile devices to reduce our personal environmental impact we will make a positive difference to the world.

How have the Finnish national culture and values played a role in your company's corporate culture & values, and what are the greatest personal rewards when working in the field?

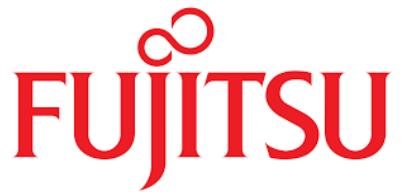
That's a good question. Because the natural environment is so physically close to us in Finland, we are naturally proud of it and strive to look after it. At Nokia this is something we've built into how we work as a company around the world. We have a set of common values which apply wherever we are.

The greatest rewards definitely come in small packages. I would say that some of the most positive things I've ever heard have come in the form of small emails from someone in Pakistan, or Indonesia, or Argentina, saying how much they appreciate some small part of our environmental or social responsibility program. Some people ask us why we don't make more noise about some of our most successful sustainability achievements.

It's certainly one of the challenges we face, because while we want as many people as possible to know about our programs to lower our environmental impact or build social benefits with the help of our mobile devices, we don't want people to think that we just do these things for the marketing.

However, when a customer is thinking of choosing a Nokia product, we certainly do want them to be thinking about the fact that it was made with the lowest environmental impact, and that it can help them reduce their own.

We do make great products, but knowing that these have a positive impact on society in this way is definitely the greatest reward.



Using technology for the greater good

*When a company leads in Sustainability & CSR
An interview with Alison Rowe,
Global Executive Director Sustainability, Fujitsu*

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*The role of technology for a safe
and prosperous society going forward
is our high level vision.*

*We believe that following that vision and that
principle of long-term thinking
using technology for greater good
– is our core business.”*

An interview with Alison Rowe, Global Executive Director Sustainability, Fujitsu

Consumer technology companies face perhaps some of the biggest challenges when it comes to sustainability as their products' energy usage, materials and disposal processes are coming under increased scrutiny by environmental groups and consumer watchdogs. However, some companies are responding to the challenges with equal vigour, and an increased commitment to sustainable innovation.

In February this year, Fujitsu – one of the world's leading computer hardware manufacturers – was ranked third out of 21 companies on Greenpeace's Cool IT Leaderboard, which recognizes technology companies' leadership in their effort to stop climate change.

EMG spoke with Fujitsu's Global Executive Director for Sustainability, Alison Rowe, about the journey the company has taken to achieve such success in sustainability, and how they are using technology for the greater good.

Tell us about your role at Fujitsu and your own personal journey.

My first personal sustainable business challenge occurred when I worked for my previous employer. I was responsible for a technology product that was stored up in a warehouse and needed to be disposed of or recycled.

The problem was the product had lithium batteries in it which, according to the legislation at that time, could have gone to landfill. It became my first green business case, where I looked at finding different options for the safe disposal and green recycling of the parts, which required an innovative approach.

My successful efforts earned me the label of 'The Green Lady' at the company! This then led to me working on some carbon trading products at the business, which eventually led to me taking on this current role at Fujitsu, where I've now worked for over five and a half years.

I originally joined Fujitsu's consulting department in Australia with an idea to set up sustainability consulting services from an ICT point of view, which was quite new. The aim was to build up a framework for a service offering that would help our customers reduce their emissions with the use of technology.

This approach was quite successful and we won a few major opportunities to work with some big branded companies. It was also a very important process for us to work out how we could focus strategically on sustainability as a whole company, rather than sustainability just being something in a corner that might produce a report once a year. We saw this was a good and different way that we could interact with customers that could also generate new business and revenue.

I have since rolled out this consulting service into Fujitsu's UK, US and Canadian operations, and for the last couple of years I've been working very closely with the Japanese head office on our global strategy. At the moment I'm deep into working out what our company policy, targets and goals will be for our company to aim to achieve by 2020. While it's not the sort of thing that you might think of doing when you grow up, it's certainly the career for me now. I love it, and it's something I wouldn't change going forward.

What is Fujitsu's journey? When did the company embark on that journey, and what were its early roots of sustainability & CSR that Fujitsu still follows today?

Definitely one of the reasons I joined Fujitsu was because of its long-term heritage in environmental sustainability. It goes all the way back to 1938 when there was a deliberate environmental business case put forward around the building of the original manufacturing plant in Kawasaki, Japan.

Before its construction, they asked questions about what the building of that site would mean from an environmental point of view, with regards to such things as biodiversity loss, and they calculated a deliberate program and built the factory with a natural environment. If you go there today it's quite amazing.

You wouldn't think that you're walking into a manufacturing site; it feels like walking into a nature park. There is flora, fauna and a purpose-built lake. And it shows just how ingrained sustainability has been in the company since its foundation. There have been many milestones since then, such as the setting up of our Environmental Management Committee in 1993, which has helped with the

development of a whole range of sustainable products and services. However, I think one of the most interesting things we have is a policy plan that looks ahead to the year 2100 and at what our role as a company will be, which is really thinking long-term. Part of that comes from the culture of Japan, and its desire to live in harmony with nature, which is all about the long-term view and not a quick, short business cycle. So that cultural aspect is definitely an influence. We have a concept that's called the "Fujitsu Way" which is very much our DNA and how we operate. Environment & sustainability is at the core of that, and then the role of technology for a safe, prosperous society going forward, is our high level vision.

We believe that following that vision and that principle of long-term thinking, - and using technology for greater good - is our core business; then revenue and the financial side will follow.

What is your view on material management and energy efficiency/effectiveness? What is Fujitsu's approach?

We've been very proactive in working with the extent of a product responsibility concept, which involves doing full lifecycle analyses of products and our manufacturing sites. We can typically recycle around 90% of a product at the end of its life. We make numerous products out of old ones, such as using recycled compact disks to make the casings for our laptop computer products. We've also used some of the other recycled parts to make pens, staplers and other office products.

But I think the most interesting thing we've been looking at is the materials that go in to our products at their beginning, such as bio plastics, which are made from maize, for computers and keyboards. These are far less hazardous products, as they come from natural sources. We've also been looking at reducing the weight and the packaging of our products, along with the distribution systems, which are all part of a complete life cycle analysis.

In my view, the most important thing to focus on is energy efficiency. The fact is the IT industry globally is responsible for about 3% of global emissions, which might not sound like much, but it's roughly the equivalent of the aviation industry. However, by 2020 the ICT industry will be responsible for 6% of global emissions, which is about the same as the aluminium or cement industry. This will be due to the growth in population that will be using technology by 2020. One in ten people in China had a computer in 2012. By 2020, that will be one in two.

So, we need to make energy efficiency sexy again, because it's often thought that this has been 'done'. However, doing things like focusing on renewable energy and using technology a lot more efficiently within our communities – such as smart grids and sustainable data centres – will have a greater impact.

What is distinctive about companies that truly incorporate CSR and sustainability as a core part of their business, rather than having them as an isolated attachment?

In my experience, companies that want to look as if they are sustainable tend to create large teams to take responsibility for sustainability. Ideally, a company's sustainability team should be small, and aim to ensure that everyone is taking responsibility for sustainability, not just an appointed department.

At Fujitsu, we don't have a large team, but we've made sure that all of our business functions take responsibility for sustainability within their respective departments.

Whether this is around operational efficiency, product manufacturing, or even sales – all parts of our business are responsible.

We have a sustainability board that governs that in our company, and we also have a sustainability leadership team, and then the sustainability team is small and flexible and have really a governance and coordination role, and the KPI's (key performance indicators) and delivery is done right across the business. So for me, they're the sort of signs to say that it's integrated, rather than a big team sitting separately.

What do you see as being the great challenges for new generations of executives? How will a company's commitment to CSR, or lack of it, affect its corporate reputation?

I certainly think that young professionals choosing an area of specialisation will find it very challenging because there will be so many competing priorities for sustainability. There will be issues around infrastructure, services and global supply chains, and organisations of all kinds will need to respond strategically and collaboratively.

The result I think will be to see CSR become critical to reputation. We've seen a lot of examples where there's been some fantastic corporate talk about sustainability, but when it comes to managing issues and risks right down to the community level, the real meaning can get lost.

Integrating sustainability into the core of business practice will be the real challenge.

That said, there's no doubt that career paths for young executives in this industry are going to be exciting.

It will be about coming to really understand the complexities of the world in which we work, and how to keep focused on prosperity as well as environmental sustainability.

What is the greatest personal reward you find in working at a company like Fujitsu?

Helping set the direction for a company with such a long-term sustainability strategy is especially rewarding, and it's an area where you never stop learning.

There are new innovations being developed for increasing sustainability all the time, and there's always somebody else who's doing something great that you can learn from, so it's really quite inspiring, while also challenging.

Getting to work in this space with a company that 'gets' sustainability so well means it often doesn't feel like I'm actually going to work. I find I have a much greater connection to what I do, every day, which makes it very special.



Transparency as a key to building trust

*An interview with Andre Andreu,
Head of CSR & Reputation for Telefonica*

”

*So the more transparent you are,
and the more trusted you are,
the more confident you are –*

therefore the better risk manager you are.

For sure. And this is extremely clear.”

An interview with Andre Andreu, Head of CSR & Reputation for Telefonica

With a presence in 25 countries and a total workforce of around 285,000 professionals and more than 309 million customers, Telefonica is not only one of the largest telecommunications companies in the world, it is also one of the most influential in corporate social responsibility.

As a leader in sustainability for almost a decade and a half, the company was recently voted by Newsweek as being one of the top 15 greenest companies in the world, with a particularly excellent rating on transparency.

EMG recently caught up with Alberto Andreu, Head of CSR & Reputation for Telefonica to find out more about his company's journey and why he believes telecommunications will save the world.

**“*and when risk has no owner,
you have a problem*”**

Telefonica is frequently voted by Newsweek as one of the top 15 greenest companies in the world, with an excellent rating on transparency. What are the company's key milestones or pillars?

One of the key things to remember about Telefonica is that we began travelling on this sustainability journey around 12 years ago. This means we have been thinking and working and taking leadership on these issues for a much longer time than many others in the market. Over those 12 years we have marked several key milestones, the first of which occurred at the very beginning. What we did at the outset was to identify where the risks were in the company which would affect our sustainability and reputation. It was a very important thing to do. We spent almost a year on this, creating a 'risk map' for the entire company; looking at strategy risk, marketing risk, operational risk and human resource risk.

In doing this, we realized that those risks that related to corporate reputation and corporate sustainability seemed to fall in between a number of different departments. No single department was taking ownership of this risk; and when risk has no owner, you have a problem. This was a key discovery for us in turning around our thinking on sustainability. The second milestone was defining the company's sustainability goals, and developing a global plan to communicate these internally. We defined our core pillars of sustainability in a report, which became an important communication tool for the company to show our one internal policy, our one internal procedure and internal auditing of our CSR activity. This was key to helping us gain our reputation on transparency.

The third milestone came in 2006 when the Board of Directors created a committee, run by independent board members, to track and follow all things at the company that related to reputation and corporate sustainability.

The fourth milestone was stakeholder engagement. We worked very closely with the CSR committee representatives so that we could continue to understand all the requirements of sustainability so to continue the improvement of our ongoing CSR reporting and development of policy. The fifth milestone came with the international recognition we received for our CSR activity. While we are a Spanish company, we are well aware that we are also a global company, with locations across Europe and Latin America. To receive high ratings from groups like the Carbon Disclosure Project, and being selected for involvement in global initiatives like the UN Global Compact have helped us very much.

Finally, in my mind, the sixth most significant milestone for Telefonica has been all the things we are doing in relation to social innovation in business. We started our journey by identifying risk, but now we are trying to create social ecosystems to help business create more partnerships.

Essentially, understanding a company's corporate culture is key to understanding its behaviour in relation to its sustainability. Basically the more transparent you are, the more trusted you will be. And it's clear that the more sustainable you are, the more you will reduce your risk exposure in the market.

Telefonica has more than a quarter of a million employees. How is cultural diversity managed and how are you keeping up the relationship with suppliers and customers?

I like to say that we are a Spanish-born company, but we have an international mindset. We are a company which has a huge presence in Latin America, but we are also in the UK, so we also incorporate values coming from there, as well as from Germany, Ireland or wherever we may be based.

What we usually say is that we are Brazilians in Brazil, we are English people in UK, we are a German company in Germany, we are a Mexican company in Mexico, and of course, we are a Spanish company in Spain.

In this way, we like to define ourselves as being a ‘multi-domestic’ company, much more than a ‘global’ company.

However, speaking ‘globally’ for a moment, we are trying to define a common policy for Telefonica all over the globe, particularly in terms of supply chains. However, in terms of thinking ‘locally’, every market where Telefonica exists should be able to capture real business opportunities in its own area. This ‘multi-domestic’ company culture is quite different from French national companies, for example, and we are also quite different from Anglo-Saxon multinational companies. I think it is a very good approach to the market, because it lets us be global while also respecting the local identity of our company wherever it is based.

What do you believe are the greatest challenges today for the telecommunications industry as a whole? What do you foresee will be sustainability and environmental challenges in 20 to 50 years’ time?

The huge challenge that we have to face in the telecommunications sector is the digital environment. The digital world is going to change everything about how we operate. It’s going to change the way in which our customers relate to the company, and it’s going to change the ways in which our customers relate to each other in social networks. It will also change the way that our customers engage with education, their doctor; even the government!

In the digital environment, all these connections will be made through telecommunications companies, like our company.

The telecommunications industry is already facing many issues relating to the new dynamics of the digital environment, such as how we deal with privacy, data protection and Internet safety for kids. These things all bring their own risks for the industry, and are going to increase in the future.

However, while we should be able to deal with these new risks in the future, we also must also aim to connect the digital space with the local space; that is, connecting people not only in the social network but also those in their physical networks – their town, their city and their country.

How do you see environmental responsibility developing, especially in relation to material management and dealing with products at the end of their life cycle?

In terms of CSR and corporate responsibility, it's very relevant to identify what we call the 'materiality' risk of our business. This takes into account a broad spectrum of global issues that cover the economic, social and environmental dimensions, which range through everything from supply chains and electromagnetic fields, to privacy, diversity and freedom of expression in countries that we deal with.

We analyse this through a 'materiality matrix', which is a tool created by the Global eSustainability Initiative (GeSI) four years ago for measuring the sustainability of a business. We are utilising this matrix in our global network, and through this have come to the understanding that in every country, things are different.

For instance, in Latin America, the material recycling of digital devices is quite relevant, but it is not as important in Europe.

Similarly, what's relevant in Germany is not as relevant in Peru, for instance.

There is a global 'big picture' but the reality is that when it comes to material management, we need to take into account the perspectives of the individual countries.

What are the rewards of working for a company that is so transparent and open and what do you see is the future global leadership role for the company in sustainability?

There are a number of different rewards. Firstly, in terms of the company, we've found that the more transparent and sustainable we are as a company, the more trustworthy we become to the market. This enables us to do business with confidence, and manage risk better. Secondly, there is the simple, yet powerful realisation that telecommunications will be at the centre of all the solutions to the problems that the planet may face in future. Think about it! ICT solutions are crucial for our education and health systems and reducing energy usage.

All these things are at the centre of sustainability policy.

It's my view that telecommunications will help transform the planet, and I'm proud that Telefonica is at the forefront of that.

I have no doubt that as telecommunications continues to become more central to people's lives, Telefonica will be there at the centre. We want to help people to join in and enjoy the social and educational aspects of the new digital environment.

We want to be the platform, the bridge, the hub, the proxy, if you will, between people's lives and the digital environment. And in being at the centre of people's lives, we will then be able to play out our key role of bringing sustainable solutions to the world.



Sustainable Palm Oil

*When a company leads in Sustainability & CSR
An interview with Secretary General of the
RSPO, Darrel Webber*

“ The possibility exists for the sustainable development of palm oil where the triple bottom line is maintained – for people, planet and profit.

And it can only be done if we constantly ask the right people the hard questions about how to keep this balance.”

An interview with Secretary General of the Roundtable for Sustainable Palm Oil, Darrel Webber

Palm oil is the most efficient edible oil crop in the world. It produces 10 times more oil per hectare of land than any other edible oil. So if you remove a hectare of palm oil from the edible oil equation, it has to be replaced by 10 hectares of something else to meet the demand. – says the Secretary General of the RSPO.

Please tell us about the Roundtable for Sustainable Palm Oil, its mission, and some of the key achievements in its first 10 years.

The RSPO is a not-for-profit association that has been in existence since 2004, and which aims to unite stakeholders along the palm oil supply chain. This includes the producers, the processors, the manufacturers, the consumer goods manufacturers, the retailers, the financiers, and the social and environmental NGOs.

Our mission is simple: define what sustainably grown palm oil is, and promote its use. We certify crude palm oil as well as those products in the market that use it.

We have a vision to transform markets, making sustainable palm oil the norm. We've made some big achievements in the last 10 years. The first milestone

was in 2005 when we developed a set of standards for the sustainable production of palm oil. By 2008, the first RSPO-certified products were coming on to the market. Since then, we have made progress so that today, 14% of all palm oil produced in the world is certified sustainable according to the RSPO.

Of course, we need to go much more than 14%. While we have more than 1000 members in over 50 countries, this is still only scratching the surface. We really need to tap into the markets of China and India because these are the largest consumers of palm oil. But our overall mission is to transform this commodity into one that is sustainable, and to make sustainable palm oil the norm.

What for you personally have been the main reasons for wanting to get involved in improving the managing of the cultivation of palm oil?

I left the corporate world and joined the WWF to do conservation work on the ground. This took me to those parts of the world where the landscape has oil palm development, as well as very high biodiversity.

The most charismatic species in those landscapes were the elephant and the orang-utan. My job was to negotiate with the plantation sector to help them use better management practices to allow for wildlife corridors for these and other species, and to allow for a more environmentally-friendly approach to use of chemicals.

It was during these times that I came to the realization that the business sector of the palm oil industry had created some serious problems. But from my work with them, I knew they had the potential to create the solutions as well. At that time I was at WWF Malaysia,

and WWF international asked me to join them instead. They had just begun work on creating the RSPO with some other individual organizations. I was brought in because there was a need for someone who understood the industry to begin negotiations. So that's how I stumbled into it.

I firmly believe that the possibility exists for the sustainable development of palm oil where the triple bottom line is maintained – for people, planet and profit. And it can only be done if we constantly ask the right people the hard questions about how to keep this balance.

So what is the RSPO's definition of 'sustainable' when it comes to the cultivation of palm oil? How is it defined?

Our current definition of sustainable is based on standards that cover three core areas. The first is legality, which means we need to be able to say that the palm oil was produced on a plantation situated on land that is legally obtained, and all its operations have to require licences and permits.

The second core component is people. We need to be sure that the palm oil plantations were established with the free, prior, and informed consent of the local communities around them. We also need to know that the plantation is operating with the best interest of the workers in mind, and that it employs best practices when dealing with its employees.

The third core component relates to the environment. We need to make sure that these plantations will not develop at the expense of primary forests, that they have not been developed at the expense of what we call 'high conservation value areas' and that they have used best practices to avoid environmental damage.

What are the key benefits for a company that becomes a member of the RSPO?

The main benefits we've seen for producers are that they gain access to premium markets, as well as gaining a better understanding of how to manage their business across international situations. For example, some palm oil companies are multinational, with plantations in Malaysia as well as Indonesia or Africa, where each country has different laws and social issues. We find that if these companies employ the RSPO standards, they are better able to deal with these different situations, and manage the hurdles of legal, social and environmental issues.

The other benefit for the producer is they become more efficient. Because everything is recorded, it's more transparent, which leads to less conflict and, in turn, less disruption in an operation. Our members also employ better agricultural practices for their yields.

For the buyers, investing in a sustainable supply chain means that they are investing in a supply chain that they can always rely on. If a producer is unsustainable, he tends to have problems with either his people or the environment. If he has to close down operations, then the buyers at the other end of the chain can't get their regular supply, which means they have to source it somewhere else, or there will be price spikes in their supply, which they don't want.

For buyers, certified palm oil is not only an investment in a long-term supply chain, it is also an issue of reputation.

Have you considered setting higher standards for more advanced companies, such as gold and silver standards in addition to one general standard? If so, what would be the differences?

We have considered this. If you look at us compared to other similar initiatives – Fair Trade, the Forestry Stewardship Council, the Marine Stewardship Council, the Better Sugar Initiative – it's fair to say that we have grown the fastest. But even then, we are only currently certifying 14% of the total production of palm oil, so we are effectively still just a 'niche' in the market, and you cannot hope to transform the market if you continue to remain a niche player.

Currently, it's our view that with all the effort we are putting into refining the one standard and getting it through a very complex supply chain, it would be a negative thing for us to introduce an additional higher level of the standard. That would create a 'niche within

a niche', which as I've said makes it very hard to transform markets.

We do recognize that some companies want to move faster, but we all have to use the same supply chain, which would create a problem. This is because the supply chain, as we currently understand it, is finding it very difficult to keep up with the demands of production of sustainable palm oil in competition with the production of so-called 'unsustainable' palm oil. The supply chain is simply not that flexible right now. I think while it's good to have some differentiation between the faster moving companies, our focus is on transforming the markets, so we should avoid perceptions of being niche at all costs.

I understand that RSPO members account for about 40% of the global production of palm oil. What do you see as the challenges for achieving a higher percentage than that, and how do you see that changing over time?

I think the 40% figure is nice to hear, but it doesn't really mean anything. It means that these companies have joined the RSPO, but have not necessarily changed their practices. It's like joining a golf club. You can become a member of the golf club with all the bragging rights that entails, but it doesn't mean you can play golf. Many of our member companies have not even got on the golf course yet; they've just become members.

I think it's more important for us to increase the percentage of certified sustainable palm oil to a much higher amount. That's where our energy is; to do that, we have to ensure that there is demand for certified palm oil, not just production. Rather than focus on 14% production, we should look at it as 14% consumption

of certified palm oil. At the moment we are not getting 14% of consumption; we are getting something like 7-8%. This means that only half the certified palm oil we produce is actually used in products that are sold as certified sustainable palm oil products.

So what is your response to people who say the RSPO is not doing enough, or needs to do more?

My response is, yes! We do need to do more! We currently review our standards every five years and have just completed our first review, which is now waiting to be endorsed. So we are moving forward. To those who say we aren't doing enough I say join in the debate! Come and be part of the RSPO, and talk with us about how you want to see things move forward.

The unique thing about organizations like ours is that we create policies and standards through a multi-stakeholder discussion. Any discussion that we have must have balanced representation from each of the seven categories of stakeholders. We have NGOs, buyers, producers and financiers all in one room, discussing standards and policies. What's even more

unique is that we approach decision-making through consensus. Everybody in the room has to agree. If there is even one person who does not agree, a policy cannot be made.

In this way we ensure that everybody is on board, and that there is a richness in the conversation because we have brought all the stakeholders together. That's also how we stay current and relevant. Those outside the organization will not know this, but if they really want to change, our system allows for them to participate in these discussions as equal partners.

Compared to 10 years ago, what are the key changes you've seen today with international companies that want to steer clear of associations with deforestation and social conflict due to palm oil cultivation?

Ten years ago many companies simply did not know about these issues associated with palm oil production. While many do now, many others still don't get it.

What I mean by this is that there are still companies that insist on the complete removal of palm oil as an ingredient. I always tell these companies that they have to understand that palm oil is the most efficient edible oil crop in the world. It produces 10 times more oil per hectare of land than any other edible oil.

So if you remove a hectare of palm oil from the edible oil equation, it has to be replaced by 10 hectares of something else to meet the demand.

If you save one hectare of rainforest from palm oil destruction, you're actually putting at risk 10 hectares of Amazon land for producing soya or maize, or canola, or corn – none of which is anywhere near as efficient as palm oil.

So to those people who think we can do without palm oil, I tell them that is the wrong approach because to produce something else is ultimately doing more harm than good.

How do you see demand for palm oil developing over the next few decades?

I think demand for palm oil will be driven by the rising affluence of those fast-developing countries in the world that they call the BRIC – Brazil, Russia, India and China and mainly because of their shift towards processed foods. A lot of palm oil goes into processed foods, and the more affluent a country you are, the more processed foods you will consume. Rising affluence also means products like shampoos and soaps will be in greater demand, and they also have a lot of palm oil in them. In fact, probably around 50% of anything you find in the supermarket contains palm oil. Toothpaste, pharmaceuticals and many cleaning agents contain palm oil derivatives. And of course anywhere you see ‘edible oil’ on the list of ingredients in processed foods it is most likely to be palm oil.

The public became more aware of the environmental issues related to palm oil during the period of rapid expansion in the palm oil industry in south-east Asia in the mid to late nineties. Then in the early 2000s there was the regional haze that developed in Southeast Asia that grabbed the world’s attention. Many people pointed the finger at the oil palm developers in Indonesia who were burning the peat soil in order to clear oil palm plantations. Thanks to the Internet, awareness increased dramatically.

The fact is RSPO is a direct reaction to all that. It was a reaction of some organizations who witnessed those events, who understood the issues, and decided that they had to do something about it. This is why they formed the RSPO in 2004.

What lessons we could learn from Europe that could help speed up the process of moving towards a greater demand for sustainable palm oil in other regions?

Many European companies have clearly decided to take a stewardship role in this issue. They didn’t wait for consumers to ask for it; they decided that it was the right thing to do, and they did it. I think that’s very important. Because a few took this more proactive approach, that inspired others in Europe which influenced the market.

Of course, the battle is only half won in Europe. There is still a long way to go. There was some solidarity in some markets, like in the Netherlands where they took the lead with a national platform on sustainable palm oil. The industry there grouped together and decided that they would make a commitment by 2015 to bring in only sustainable palm oil to the Netherlands.

That was then followed by a national commitment by the Belgians, and recently there’s been a commitment from the British government as well.

China and India are developing at such a rapid pace that it’s very hard to impress upon them that there are other things that are supposed to be on their agenda as well as growth, such as sustainability. The challenge in China and India is to get them to move away from the belief that sustainability is expensive. China and India are both very price-sensitive markets, and the initial reaction to innovations such as this is usually: will this cost more?

The challenge is how to tell them that it is imperative to invest now, to ensure the security of their supply chain. Food security is very high on the agenda of China and India, so that’s probably the clearest message we should be communicating: linking sustainable supply chain to food security.

What are your greatest concerns for countries like Malaysia and Indonesia now – and 50 years from now – in terms of the effects on the cultivation of palm oil?

Malaysia and Indonesia started early in palm oil cultivation, so obviously they were first ones to make the mistakes. However, my fear is they didn't learn fast enough to rectify these mistakes. There are now new countries starting to produce palm oil, especially in Africa and Latin America, and we know that these countries don't intend to make the same mistakes. They have the benefit of starting while having learned the lessons of others' mistakes, which makes it easier for them.

Secondly, because of the fact that sustainability was not taken into account in the early days of the industry – which was over a hundred years ago – the rapid expansion of palm oil is going to have negative impacts for generations, especially in the long-term repercussions to the ecology of those areas. The challenge is whether we can mitigate these negative impacts and help change these practices.

What do you see as the key challenges and opportunities for the RSPO in the next 10 years?

The key challenge and opportunity will be how to make sustainable palm oil the mainstream. It's a challenge because it has never been done before! Nobody has ever mainstreamed a sustainable commodity, but I think we have to try to be the first. I think a tipping point will occur when we have reached a target of 19% of all palm oil consumption being certified sustainable, but that's just my view. The pace at which we're growing today indicates that there is a real possibility of hitting that level within a decade, but more work needs to be done.

I think the RSPO is definitely an imperfect solution, but still a solution. It started off with a few individual organizations knowing that they would not be able to get the perfect solution, but at the same time knowing that they had to get started somewhere, at some point. I think the key thing people need to understand is that we are still evolving, and still innovating. We know we have a long journey ahead of us, but considering the upward trend of our growth, we are definitely heading in the right direction.

“The key challenge and opportunity will be how to make sustainable palm oil the mainstream. It’s a challenge because it has never been done before!

Nobody has ever mainstreamed a sustainable commodity, but I think we have to try to be the first.”

Interface[®]

The global challenge of social sustainability

*Interview with Nigel Stansfield,
Chief Innovations Officer, Interface.*

” For us sustainability is a huge differentiator. And with our new targets for social sustainability we continue to deliver on our founder’s dream of being a restorative company.”

Can you tell us about the very beginning of your journey?

Our journey started back in 1994, when our founder Ray Anderson had what he has often called an epiphany. Our key global customers had asked him what Interface's response to sustainability concerns and issues was. Ray knew that we were compliant with all the relevant legislation, but realised that the customers wanted to hear something deeper and more meaningful.

So he assembled a taskforce of engineers, policy makers and various other people from across the organization to address this concern. Shortly before he met with them he was given a book The Ecology of Commerce by Paul Hawken, and as he read it he had a 'spear in the chest' moment and faced the realization of the waste legacy that industry was leaving to children – our children.

So he addressed that meeting in 1994 by saying that we can change, we can be an ecologically sound company that is profitable and that can make a difference. The journey we've taken since then is the direct result of Ray's passion, belief, enthusiasm and leadership in this area.

Our Mission Zero pledge, which is to eliminate any negative impact we may have on the environment by 2020, was very audacious in those days. Our philosophy is that nothing should enter our factory that isn't going to leave as value to the customer.

Could you give us an example of how innovation in product design has contributed to the corporate responsibility principles of your company and your customers?

In 1998 we developed a product called Entropy by going back to nature. Our head of design in the US, David Oakey, was responsible for that. Inspired by Janine Benyus' book Biomimicry, he tasked our design team to consider how nature designs a floor. They visited the woods in Georgia, where our headquarters are based, and studied the leaves on the forest floor, the gravel in the river beds and so on to see how nature approaches floor design. They found that patterns were completely random and at first seemed chaotic, yet maintained a fundamental order when viewed as a whole. Taking this idea to the design table, we launched the world's first random design carpet tiles. No two tiles are quite the same, and they feature a haphazard element of pattern or colour that allows them to be laid in any direction.

The clear sustainable benefit, of course, is being able to replace an individual tile rather than the entire floor – which also means less transportation and the significant reduction of waste during the installation process.

Entropy(tm) rapidly became our best-selling product, and continues to be a source of inspiration for architects, designers and other customers alike. The product has a unique quality and real personality. It led us to start talking about creating order from chaos, and customers suddenly didn't just want tiles neatly arranged in the same colour or laid the same way. They realized that a floor could be much more dynamic and that they could create a unique space.

This is a perfect example of how innovation meets design and how together they embrace sustainability in a really effective way. We continue to push the boundaries with our random design tiles, and we're proud of this just as we're proud to have set the trend on sustainability. Many of our competitors are now also following the path we embarked on in 1994, and we're happy to see this as it helps advance our industry.

How hard is it always to deliver on CR when you've played such a leading role?

Leading sustainability is a sweet burden and a challenge we're happy to take on. Sustainability is embodied in our organization and we attract talented people who say they'd never have considered joining our industry if it weren't for our Mission Zero goal. They are drawn by our leading position as global pioneers in sustainability.

Sensitizing stakeholders is also one of the seven main focus areas of Mission Zero. Our supplier and partner Aquafil is able to depolymerise recycled nylon. One of the sources of nylon they use are old industrial fishing nets, so we've been working with them to develop a business model whereby these fishing nets are collected from coastal communities in developing countries. This is done in such a way that the people's livelihoods are improved and they are given access to services such as banking and micro-financing.

We're now in the second phase of this pilot project in the Philippines on a barrier reef, working at a local level with NGOs and coordinating with the Zoological Society of London, a global marine conservation charity, setting up village savings loan associations. This includes gathering the nets and selling them to Aquafil. In this way we receive improved recycled content, Aquafil has an additional source of raw materials, and the villages are provided with an additional source of income.

So what are your next steps?

Once you've eliminated waste, you're on top of your recycling programmes, so how do you move forward? The pilot project I mentioned is our way of continuing the legacy of being a restorative company, giving something back. It's about redesigning the way we do business – creating a more sustainable future for everyone. We've spent the last fifteen years focusing on environmental sustainability – waste, energy, emissions, technical cycles. Parallel to that, in the last five years or so we've started to embrace social sustainability even more. Many organizations are only looking at traditional environmental issues in this respect.

The inclusive business model we're now working with in the Philippines is an example of how we're starting to address the huge global challenge of social sustainability. We're leaders in our industry; we have the highest market share and are a billion-dollar company.

We're profitable, and we attract and retain great talent, which is a huge asset. We encourage people in our organization to learn about and understand sustainability through our internal 'Ambassadors' programme, and education on sustainability continues to expand outside our organization. For us sustainability is a huge differentiator.

And with our new targets for social sustainability we continue to deliver on our founder's dream of being a restorative company.



WORLD GREEN BUILDING COUNCIL

Building a greener world from the top down

*An interview with Jane Henley
CEO of the World Green Building Council*

” The fact is we need to create frameworks that ensure quality extends through the whole life of the building, rather than ones that fluctuate with changing policy and market environments.

An interview with Jane Henley CEO of the World Green Building Council

It's been estimated that the buildings in which we live and work every day account for around 40% of the world's energy usage. Clearly, any country that wants to get serious about sustainability has got to look at the role its built environment is playing in its overall infrastructure and the impact it will have on future energy needs.

EMG recently caught up with Jane Henley, CEO of the World Green Building Council, while she was in Dubai for a green building conference.

We wanted to find out more about the latest progress the WGBC has been making towards improving the sustainability of the global built environment, how it is working towards creating Smart Cities around the world and what the challenges still are for the future – from the phase-out of hazardous materials and PVC to energy efficiency and water use.

From her global vantage point, Jane also shared with us her perspective on the lessons that can be learned from those countries and cities that are leading the world in green building, what benefits they are seeing from these initiatives and how they are collaborating successfully with each other and the building industry – from designers and architects to energy companies and governments.

What are the key initiatives that the WGBC is working on and what are the special issues you are promoting?

The World Green Building Council is the overarching body for all the Green Building Councils that exist around the world. There are currently 93 countries which have member Councils, and our role with them is twofold. Our first task is to help the individual member councils become stronger in their respective countries. We do this by building their internal capability and sharing information between GBCs so as to speed up knowledge exchange on how to work with governments and how to address various challenges, as well as handling many operational issues.

The second aspect of our work is outward facing: that is, we have the conversations with governments, developers and investors who are still saying 'Why should we build green? What's in it for me? Where's the value?' So much of our focus is on building the business case for the Green Building Council, and we are currently

pulling together all the latest information on this from around the world to produce a report which will be published in March 2013. In terms of special issues, the business environment remains a real challenge for our members. I think when the message of sustainability becomes a core value of a company and is really incorporated into their business it drives the bottom line value for the company, rather than being seen as an expense or an add-on.

This is something we're seeing as a very important task for us at this point in time, especially in the current tough global financial situation. People still tend to take a very short term view of investment, where it becomes all about immediate benefits, who gets that benefit and how to justify the return on that investment. We are really out to expand the view of sustainability as a core business driver.

How is awareness of sustainability changing and evolving in the building industry? Is your message getting through?

The Green Building Council model targets the top 25% of industry. We're about targeting the leaders at the quality end of the market. In many countries, especially those where the GBC has been around for a while, that part of the market is saturated, and green building is already common practice. Builders there just wouldn't build a class A or quality building without taking green principles into account; it's just not done.

For example, a statistic I saw the other day from the US stated that currently 44% of all new construction starts certified as green. This means green building is no longer a niche market activity. This is primarily being driven by demand from corporate tenants who understand the performance and productivity benefits of occupying a green building. So now that almost half the market is trending towards green

building, our challenge - indeed our mission - is to transform the whole building sector to make sustainability truly mainstream.

We are now at the second phase of that journey, where we are asking what this means to the wider industry. The early adopters have got it, which is great, and we've built a foundation of capacity in the industry. We've got over 300,000 people trained around the world in green building skills, and so now we want to deploy that capacity into all building types and all sections of the building sector. So that's the next challenge, and it's one of the reasons why we want to pull together the business case, so that it makes sense to everyone and not just those at the highest levels.

Sustainable cities: What can you tell us about the WGBC's role in this, and what is the outlook for the future?

One very exciting thing that we are focusing on at the moment is the partnership we have just signed with the C40 (www.c40cities.org) which is part of the Clinton Climate Initiative. This is a partnership between the 40 biggest cities around the world to become more sustainable. We are working with them to create a support system for cities to be able to implement progressive green building policies that meet their visions for sustainable cities.

It's actually now been expanded to 58 cities, but the term C40 is meant to focus on the 40 biggest. New York City Mayor Michael R. Bloomberg is the current chair, leading the C40 with a steering committee and the executive leadership team.

Being involved with cities shows how our industry has matured. We've made great progress focusing on one building at a time, but cities don't work like that. Cities are complex, and understanding that integrating thinking between buildings, infrastructure, housing, retail, recreation and so on is how we make truly great cities. We are looking at how people are connected, how buildings are connected, where people live as compared to where they work and how they get to places. All of this together determines the quality of life.

For us, this is about expanding our network and influence so that we are not just focusing on one building at a time. This partnership is an opportunity to work with cities all around the world to integrate our knowledge into the bigger picture, so it's quite an exciting time for us.

What's needed to get other countries to follow these leads and how can the process be speeded up?

What we need are leaders who are committed to taking a long-term view of sustainability in every aspect of society. In countries with political cycles that change every three or four years this can be extremely hard to do, as decisions about the built environment are often made based on immediate, short-term market conditions.

The fact is we need to create frameworks that ensure quality extends through the whole life of the building, rather than ones that fluctuate with changing policy and market environments. Incentives for industry to act are only really needed to overcome inertia and change economic paradigms in the short term.

The building industry is set up to meet demand. Companies like Google understand the business benefits of occupying space that meets its business needs but which also contributes to staff productivity.

Companies which look beyond a building simply providing a roof and a place to house staff see their building as a core service to their business and are driving the shift in the building industry. Tenants understanding the benefits of a green building to their business is the key.

Which countries or regions around the world would you say are the most advanced when it comes to green building and what can we learn from them?

The countries that are most advanced are the ones where there is a sustainability-minded building industry that combines with government policy which understands the macro-economic benefits of green building. Governments that understand that buildings that use less energy and less water are ultimately better for people and more productive for businesses understand that the country benefits from implementing policy that supports green building.

Thinking of particular countries where this is happening, Germany is definitely a leader. There's also some fantastic policy coming out of California now, especially around energy efficiency.

At a city level, there are some interesting programs emerging in Portland (USA) with the Eco-Districts Program, which is also now starting to take off around America, showing that city governments are thinking about sustainability in existing neighbourhoods and districts within their cities.

There are some great things happening in Australia at the higher end of the market in the commercial sector. In Scandinavia, high standards of green building are common practice and have been for a long time. They haven't necessarily been that vocal about it, but over the last few years they have established a GBC in most of Scandinavia and are seeing their practice remaining extremely high in comparison to the rest of the world; they are now exporting those skills to the global market.

I'm also impressed by the work that is happening in Abu Dhabi, where they have taken a comprehensive and fascinating approach. They have adopted high standards of green building over the last two years, but what they've come up with is not just a green building rating system, but also a whole support system and education system that is focused on energy and water demands management projected through to 2020. Because they generate all their energy from fossil fuels they have looked at how they can manage an appropriate growth trajectory, and are rolling out a program called Estidama to manage their capacity to meet the demands for energy and water.

This approach is very similar to Singapore's, which is very government-driven but also involves the private sector. Singapore has committed to reducing energy intensity by 35% by 2030. Much of this will be achieved through energy-efficiency standards in existing buildings. They can't keep building new power stations and don't want to be energy dependent on their neighbours, so it makes sense to focus on demand-side management. They see it as energy security issue, in that the efficiency of the built environment will deliver security for their people. As we've seen, it's the countries where green building is driven from the top down which are delivering results on improving sustainability. We know that it's not possible in all countries as not all countries have governments like that, but we're still seeing what we can do to facilitate this where possible.



Business cannot succeed in a society that fails

*An interview with Peter Bakker, President WBCSD,
World Business Council for Sustainable Development*

” What I discovered while being a CEO is that if you aim to address these issues you create very powerful mechanisms that can tangibly improve the state of the world.

I have seen with my own eyes the good that can be achieved within a company when it gets serious about sustainability and environmental issues.”

Please tell us about yourself and your journey

I have worked in business for almost 30 years, the last 10 of which were as CEO of TNT, the third largest global transport company in the world. Over that period, I gained an increased understanding of the growing concern of sustainability and how it is part of a larger perspective rather than just the bottom line of an individual business. Whether that relates to poverty or the environment, it's clear to me that every business makes an impact on these things and that this is reflected in our annual business results.

What I discovered while being a CEO is that if you aim to address these issues you create very powerful mechanisms that can tangibly improve the state of the world. What's more, in so doing, the relationship between the company and its employees can change for the better. I have seen with my own eyes the good that can be achieved within a company when it gets serious about sustainability and environmental issues.

However, while I have discovered the power that sustainability can have on business, I have also discovered what the limitations are in implementing it. While the CEO may strive to push a sustainability agenda, he or she must also answer to shareholders, who may sometimes have a completely different agenda.

At the point when the company I was leading decided to split into two parts I decided that 10 years as CEO was long enough. The same summer I resigned I also turned 50, which is a nice milestone at which to stop and ask oneself, 'What am I going to do with the rest of my life?' The opportunity to be President of the World Business Council for Sustainable Development (WBCSD) came up just at that time, so I was pleased to take on the responsibility, especially as it provided the ideal position for me to continue working on sustainable solutions for business.

Tell us a bit about the role of the World Business Council for Sustainable Development

The WBCSD is an organization made up of members that are businesses with an interest in sustainability. Two years ago, the organization produced a document called 'Vision 2050', which was a highly significant statement as it was the first time that a business organization plainly stated that the way business was being conducted globally was no longer sustainable. The planet as we know it literally cannot sustain the effects of modern business practices: a radical transformation of almost everything we do is needed. There can be no more 'business as usual'.

This document described a vision with nine pathways to develop the world as we know it now into a world that is sustainable.

This vision is summed up comprehensively in one phrase: "9 billion people all living well within the boundaries of the planet."

The WBCSD recognizes that the planet we live on now is going to have to cater for the further growth of the world's population, estimated to reach 9 billion by the year 2050. However, to do so will require eradicating poverty and giving everyone access to healthcare, education and energy, while also recognizing that we all need to respect the environmental boundaries of the planet, which we simply are not doing well enough today. We need to find a good balance between economic, social and environmental growth.

What are you currently focusing your efforts on at the WBCSD?

What I realized over the course of last year is that while it is great to have the Vision 2050, for most people, thinking about 2050 is too far away, too abstract. So, to address this, we have decided to create more pragmatic targets for 2020 that are linked to the vision of 2050.

So three of our top priorities for the coming years are:

- Biodiversity loss (which is not exclusively related to ecosystems degradation)
- Nitrogen cycles (which are related to agriculture and food, affecting things like the development of fertilizers)
- Climate change (which is of course related to fossil fuel use and therefore to our whole system of energy production)

While we are still to confirm all priorities for the 'Action 2020' WBCSD, it is very unlikely that energy, ecosystems and aeroculture won't be part of the focus. We will of course also be emphasizing the importance of considering financial, environmental and social factors as well into business management.

What are your personal goals for the years ahead at the World Business Council for Sustainable Development?

I want to play a key part in the establishment of global processes that lead to sustainable societies, collating the evidence and increasing the recognition that businesses are the leading part of the solutions that are needed to achieve this, rather than being seen as the cause of all problems, which is how some conservatives still tend to see them.

Secondly, I would like to build on creating a real momentum in business for embracing the change that is needed for making a more sustainable world and help more businesses see it as an opportunity rather than a cost.

Thirdly, I hope to be one of the architects responsible for the complete redefinition of the way we account for the corporate performance of business. It's time we valued the performance of businesses across all impact areas – in terms of financial, environmental and social profits and costs. Integrated reporting is vital.

If you could give one key piece of advice to a business looking to become more sustainable, what would it be?

The first step is always to think about running your business more efficiently from an energy perspective and increasing resource performance productivity. Doing this will create an immediate cost saving, and will help reduce negative environmental impacts at the same time.

The fact is, however, that there are many sustainability measures that almost any business can implement that make economic and environmental sense.

Every company has to ask itself some pertinent questions. Do we want to make the change and be a leader in sustainability, or do we want simply to be a follower? Do we really want to be seen as one of the laggards that are going to be forced to change our ways only by environmental and social legislation? There is still a real advantage in being an early adopter!

In the times we live in now, we are very close to seeing our whole society recognize that the way we are living as a species is not sustainable.

This is why I reinforce the following powerful statement whenever I can in my work with the WBCSD: Business cannot succeed in a society that fails.

” Every company has to ask itself some pertinent questions.

Do we want to make the change and be a leader in sustainability, or do we want simply to be a follower?

Do we really want to be seen as one of the laggards that are going to be forced to change our ways only by environmental and social legislation?”



The Blue Economy business model: shifting society from scarcity to abundance

*An interview with Gunter Pauli,
Author and Initiator of The Blue Economy*

**” I think we have to be more honest
and rigorous with ourselves;
the solutions we want have to be real solutions.**

**You cannot create collateral damage
elsewhere while solving a problem here.”**

An interview with Gunter Pauli, Author and Initiator of The Blue Economy

For someone who has made his mark on the world in an effort to make it a greener, more sustainable planet, Gunter Pauli – author, academic, business commentator and environmental entrepreneur – is perhaps known best for his work *The Blue Economy*.

Initially a project undertaken by Pauli to find 100 of the most innovative nature-inspired technologies around the world, *The Blue Economy* has since become one of the defining books of the environmental movement in the last decade.

His vision of a world where human technology and business activity is inspired by the natural global ecosystem has motivated millions and is changing not only the way industry does business but most importantly how it thinks about how it conducts its business.

Perhaps over and above all these pursuits is Pauli's work as an educator of children, through more than 100 fables he has written to introduce them to the science that underpins this marvel of natural systems and how we can be inspired to improve our actions.

EMG spoke with Gunter Pauli about the inherent challenges in his ongoing work of communicating the *Blue Economy* message to a sceptical business world, and how it is having an impact on some of the world's most environmentally challenging industries, from fisheries and food production to energy generation and mining.

Please tell us about what you are currently working on.

My main work today is to re-think fishing. It's one of those sectors that is in crisis because we are over-fishing. It is also one of those sectors where we have invested a lot of time and effort to make fishing more productive, by creating bigger nets, or stronger boats, or by starting fish farming, for which we also need to catch more fish because the fish that are farmed are fed with fish that we have caught from the sea. So we've started designing a fishing system whereby we don't use nets any more. That was the first premise. Take away the nets. It's part of our Blue Economy philosophy that you substitute something with nothing, so you substitute the nets with an 'air curtain' of bubbles that catches the fish in just the same way as dolphins or whales catch them. It works beautifully too, because the mother fish which are full of eggs will not be caught in the bubbles. They can swim out of the bubbles. The result is you're catching relatively smaller fish instead of the big fish, because you need the big fish to procreate more fish.

So we have a whole initiative set up around this. The main project is in Morocco where the fishermen used to earn 2,000 dollars a ton for sardines, and today they're earning 10,000 dollars a ton. Since they can catch much more efficiently, it's brought a complete change in revenue. Their boats are catamarans that work only using electricity derived from wind and solar sources, and the fish are all processed on the boat, so when the boat arrives in the harbour, everything is done already – including the Omega 3 COLD and FRESH extraction, the filleting, and even the smoking. So that's one of the biggest projects I'm working on right now.

The main challenge is that we have to catch the right fish. If you keep on catching older fish, particularly the egg-bearing females, then you are continuously shooting yourself in the foot. If we are just catching the smaller fish and letting the bigger fish go, then we will have a long-term, sustainable fishery. The fact is a mother fish aged ten will have five times fewer eggs than a mother fish of 15. Can you imagine the long-term effects of this? If you let these fish go, you will have five more years of fish every spawning time!

Some in the fishing industry still say, 'Look, we just catch fish! We have our nets, and we catch everything, and what we don't like we throw away.' This is very simple thinking on how to catch more fish, instead of creatively thinking about how fish regenerate, and finding ways for the older fish to live longer.

The second major project I'm working on is mining. Mines are a symbol of destruction, as well as symbols of water pollution, social disintegration and unsafe working environments. They are places where people get killed on the job. So we have started to design a complete new model for mining, where the mine will not only produce minerals but generate water, and will stimulate the local economy rather than simply letting it collapse when the mine eventually closes. That's a project we've just initiated, and we need to think more fundamentally, more creatively, about how we can build up such an economy.

Have you engaged with large mining companies to see how they can help with their size and experience?

Yes, I have visited mines everywhere in the world; from Chile, Colombia, South Africa and Ghana to the United States and Australia. I've also visited the old closed mines in Belgium, Germany and Japan. The aim of this has been to motivate our team to rethink what could now be a model for mining in the future.

Mining has to become like surgery. When you have appendicitis, the doctor must cut you open – there's no other option – but you don't want to have a scar. You want the scar to be as invisible as possible, and you expect the doctor to be very careful and precise. The same should go for when we cut into the earth. I think we succeed from the start if we have a mentality that thinks of mining as surgery, rather than excavation. Even the words we use to describe mining are already the wrong ones! If we start thinking of mining as very precise 'extractions', as opposed to 'excavations' – that is, creating explosions with dynamite – I think we can turn the mining industry around.

I believe we can use the existing experience of the mining companies and build on their strengths. For example, mining companies are one of the very few companies that think truly long-term. Unlike most businesses, mining companies are always thinking 25 to 50 years into the future. To do what they do, they must set up very long-term capital investments and long-term operations. This gives them the stability to work on building up social capital in the community. If you're only thinking about the profits for the next quarter, you can't build up this social capital.

So the mindset of a mine and a mine management system is actually very conducive to building up social capital. However, this has not been happening, which is why we're looking at the innovations and new business models that we can propose in order to make the mines an engine of development forever! This is not just for the company itself while it's operational, but for the long-term community in which it is involved.

You have been involved in The Blue Economy and sustainability for a long time. Do you feel that things have changed and if they have, how are they changing?

The biggest difference is that government and business awareness of the issues around sustainability has increased. Beyond that, they're speaking out about it as an important issue. 20 years ago, no one was really talking about it. Unfortunately however, the challenge we still face long-term is that this awareness has been translated into an army of lawyers and legal advisors who try to structure everything into conventions and treaties and so on, which just doesn't work!

So the good news is we're aware of sustainability – but the bad news is we gave it to lawyers! Today, environmental law has become a 'specialization'; international conventions, or even the discussions about the Kyoto protocol, are in the hands of lawyers. It becomes all about words and not action. Too much talking, not enough doing! I don't think that helps us towards a better future.

What is the role that companies can play themselves and what is the role that the media in particular can play?

Every outlet of communication –be it digital, print or broadcast – believes environmental issues are important, meaning they will always be on their agenda. That's the good news. The bad news is they only tend to bring the bad news! There is much less focus on solutions. Once in a while something positive gets through, but generally we're still bombarded by all the bad news! So we're in desperate need of the media giving exposure to the solutions that are out there.

As just one example, when I made my one hundred cases available open source, no media organisation picked it up! Not one! One journalist eventually wrote one article about one case, but there was no systematic coverage by anyone. I talked with everyone from Reuters to CNN, but it was all too much good news! So we really need two things; one is media that is prepared to look at the good news about environmental solutions, and secondly, we have to be much more rigorous about presenting these solutions to them.

What do you think is the reason?

I believe that here we have a challenge. The challenge is that the solutions must be based on solid science. We don't need 'Mickey Mouse' science, which is science that does not really bring a concrete solution to the challenges we face today.

Consider solar energy for example. I hear people say, 'We have a solar panel that is more efficient, because it has new chemistry and a new layer'. I'm saying that's not a solution. Why not? Because as long as you keep on using only one side of the solar panel, you're missing the point! Solar cells work on both sides, so you should have solar on both sides! The engineers will say that when you use the sun on both sides with a mirror, it gets too hot and so will not work! Well, we know that when we drive our car, the engine must be cooled.

I'll give you another example. A company that is polluting with mercury, and cuts pollution by 80%, is still polluting with mercury. You can't say that because you're doing less badly, you are therefore doing well! So we are giving value and rewards to companies who are doing less badly. That doesn't make any sense!

We are permitting so much green washing when we are happy to see a partial solution that we don't realize that we're not promoting the real solutions. It's like the whole crisis I went through when I realized in 1993 that I was destroying the rainforests in Indonesia while selling biodegradable soap in Europe! I had to wake up and see that what I thought was delivering a solution was actually destroying the rainforest! That is no solution!

I think we have to be more honest and rigorous with ourselves; the solutions we want have to be real solutions. You cannot create collateral damage elsewhere while solving a problem here.

If you don't use water your car will overheat. So why not use water to cool down our solar panels and we'll have electricity and hot water at the same time?

What I am saying is that we need to look at very simple, practical solutions to use solar cells in this way, and that this should become the standard. And if you do that, then even the least efficient solar cells on the market today will generate more electricity and energy than the most expensive, newly-invented high tech solution that someone may have designed. What I'm arguing is that we need to look for the obvious answers that are right in front of us, instead of going for the ultimate, high-tech solution. Keep it simple!

Do you see that national culture and values of countries can play a role in influencing corporations in their responsibility plans, and their own values?

think we need to go beyond values. We need to go a little bit deeper and look at the philosophy that is underpinning the way we do business. If the philosophy of a business is to cut costs, then we might as well all start by getting junk produced in China. That's how the logic goes. If you're only operating with the philosophy of cutting costs, then you have to produce more and more of the same at lower and lower marginal costs. Then you have a consumption society the way we have today.

If we were to change the philosophy, as we propose, into one that believes that instead of cutting costs you should generate more value with what you have, then you have a completely different approach to business!

I'm arguing for a fundamental shift in philosophy. We cannot continue this cost-cutting obsession. Why at the same time are we not making use of our resources? Let's not forget that, for example, when Nestlé makes Nescafé instant coffee, 99.8% of the coffee bean is wasted. 99.8%! Now, you cannot say that you will not use the 99.8%, and you cannot claim that you're only going to make money out of the 0.2%! You cannot claim that!

It's philosophies like this that are the reason why we have 25% of young people in the world unemployed. In some countries it's around 50%! Now, if that's the society that you want to create, then you have forgone all claims to call yourself a responsible corporation. It's not because you will not be competitive by growing mushrooms; you will have more turnover, you will make healthy food cheaper, and you will eliminate your waste streams.

When I hear about examples like this, I sometimes wonder what is wrong. I've come to the conclusion that it's because we have the wrong philosophy. The philosophy of business the way it's perceived today is not conducive to social and ecological development. It is only meeting a bottom line satisfying the shareholders with cash flow.

If you look at your life and the key things that you have achieved, was there a point when you fully realised what your true passion is?

Well the most important passion that I have in my life right now is writing children's stories and fables. To date I have written 104 children's stories, and 36 have been published, with nearly a hundred million copies in print.

It's been suggested that if children do not have a relationship with nature, we cannot expect them to defend that nature.

I would respond with two reflections. First of all, if we as parents only teach what we know, our children can never do better than we do – and when it comes to nature, we have goofed up as parents. So first of all, we have to give a degree of freedom to children, to imagine and to learn things that we as parents could not imagine.

I'll give you an example from one of my fables. We want children to know that an apple falls down from the tree because of the law of gravity. But we never teach the children – because we were never taught – how the apple got up in the tree before it could fall down! So if you don't understand that in nature things go up and down – and not only down – then you cannot understand the cycles of nature. This is something that has been very much missing from our education. We don't even understand how nature works! So even if we connect with nature the way that we as adults have learned to do, then we're still messing up because we don't understand how it works. It's one of the most critical things that we do not know.

Therefore if we think there is poor soil and there is rich soil, then it follows that we'll assume that poor soil will need genetically modified organisms put into it or nothing will grow. We have this incredible biodiversity all around us, which is one of the greatest treasures that we have, but we don't understand it.

I think my greatest accomplishment in life, which gives me the most satisfaction, is to be able to sit down with children and tell them stories! I'm a storyteller. My life and my passion is telling stories!

We think that if soil is dry we need to genetically modify plants so they can grow in dry soil. No! Instead, we should find another plant that knows how to grow in dry soil naturally. This is what biodiversity is all about.

So not only have we lost the connection but when we do have a connection, we don't see how the system works. That is also the underlying reason why I write my fables. It's because in the fables we have to bring all the knowledge, all the connections, all the relationships together to understand how these systems actually function!

To conclude, I'll give you one more example. We learn to distinguish the male from the female in animals. We know how to distinguish the male from the female in plants. But with mushrooms – one of the greatest providers of protein in our world, with more species of mushroom than there are animals and plants combined – we can only distinguish male from female in 5% of the species. Now, if we don't know what is male and female, what do we actually know?! We know nothing!

Human logic tells us to go out and genetically modify in order to create food for people. Why instead don't we just go back and learn a little bit about how nature is really functioning? Once we have done that, we may be in a better place to start designing real solutions. But as long as we're blindly focused on costs and profit, we'll never be able to get to that point.



The future must be a green one

*An interview with Simon Mills,
Head of Sustainable Development for the City of London*

“The fact is you cannot prevent the march of history. We are facing a tsunami of challenges going forward with the additional 2 or 3 billion people who are going to need housing and feeding and watering and energy, and we simply cannot deliver services using existing models.

So the future must be a green one.”

An interview with Simon Mills, Head of Sustainable Development for the City of London

The London underground is absolutely essential to the success of the City of London, and it is used by more than 3 million people every day. Currently, we only have a residential population of around 8 or 9 thousand people per square mile, but more than 300,000 commute into the city to work every day.

The projections are that by 2025, 450,000 people are going to be commuting into the city.

EMG spoke with Simon Mills, Head of Sustainable Development for the City of London, about the work he has done over the past decade, and what he believes it will take for the city to meet the challenges of the future.

How does the London Underground fit in with the smart city concept, and how do you see this developing further in the future?

Within London, we face some significant challenges when it comes to the smart cities concept. Because we were the world's first megacity, a lot of the infrastructure which we still use today is from the Victorian era, so it's over a hundred years old. This is very different from the new megacities which are springing up in India, China and the Middle East for example, which have such a great opportunity actually to build integrated systems.

Still, for London today, there are tremendous opportunities for industry within this particular sector. We know that there are going to be all these extra people, we know that cities are going to have to expand and that there will be more megacities. So it's the companies which are developing the new technologies, systems and professional services to address this which are set to make a huge amount of money.

The concerning thing that I've noted in recent years is that there has almost been an abrogation of responsibility by policymakers at a national level when it comes to the social and environmental issues around sustainability and climate change.

What we are seeing is this leadership vacuum being filled by corporates. When I talk to individuals in the corporate sector, they are incredibly frustrated because it seems to them that they are the only ones thinking long-term about infrastructure systems for energy, water and waste management, which require investment over 20 to 30 year periods.

However they are unable to engage national politicians in any meaningful discussion about the types of policy stability which are needed to enable the investment in this infrastructure. We've certainly seen this in the UK with energy policy and carbon targets.

The issue is that, from the City of London Corporation's perspective, we are competing directly with other global financial centres. The view is that if you're a business and can trade anywhere – all you need is a broadband connection and a laptop after all – why would you want to locate in rainy old London?

Ideally, the answer has to be – for example – because the air quality is considerably better than Hong Kong, or that it's easier to get to than Singapore, and that the quality of life and the health service are better than New York, and the crime rates are lower. These are factors with which we are competing.

However, the dialogue in the future is going to be between corporates and regional and city governments rather than corporate and national governments, because with the collapse of the public sector, it's almost as though national governments feel powerless actually to deliver the infrastructure, investment and policy stability that are needed for economic development.



Revolutionary Dubai microfinancing platform

*An interview with Genny Ghanimeh,
Founder & CEO of Pi Slice Microfinancing*

” I hope to create a community of lenders and borrowers, where people really help each other horizontally.

The old model of philanthropy and charity was top to bottom; a horizontal model will not only create more efficiency, but also more ‘solidarity’.

What inspired you to start a micro-lending platform?

It was early 2010, when I was climbing Mount Kilimanjaro with a group of friends. It did not take longer than 2 days for me to get into a raw state of being – a state when everything and anything that is not essential to your being just naturally leaves you and you're left with what's basically raw in you.

I was deeply immersed in this state until day 5, one day before reaching the top! I suffered from altitude sickness, and I had to descend, accompanied by one of the guides, to recover. Of course, I was, back then, in a semi state of euphoria due to the lack of oxygen; yet despite my breathing difficulties I insisted on having a conversation with my guide, asking him all sorts of questions. At some point I asked him how many times he climbs Kili in a year. His answer was at least 6 times, because it allows him to make enough money to transfer his daughter from a public school to a private one. My natural reaction was to propose to sponsor her schooling, since the amount was about US\$ 250.

What followed was beyond words! My guide froze and tears rolled down his eyes, as if the universe had given the world to him! I will never forget that moment, from what I saw in front of me to how I felt, and it was then that I said to myself that if I have to live for one more day, this is what I want to be doing; this is the heart I want to be touching and be touched by.

An array of events preceded the Kili moment. I had experienced lots of losses of different kinds, many in a row or in conjunction. That led me to rethink and transform my own life with a new sense of determination and awareness. I grew very interested in supporting others, particularly through microfinance; so I started building up for a microfinance institution in my home country. This exercise exposed me, more in depth, into the industry that fascinated me – but what captivated me even more was all the people who work and dedicate themselves to this purpose.

Why do you believe Pi Slice is providing a critical element towards a better world?

We live in a society with many constraints: our politics, our social instability, our bureaucracy, our regulations, our banking funding strategies, our unemployment levels, our corporate mindset of self-interest and our own mindsets of personal limitations.

A micro-entrepreneur could try unsuccessfully to go through all these constraints and finally settle for discouragement... but what if there were a way to bypass all our constraints, all our borders, all our limitations, and what if bypassing them all is just a click away?

So this is what Pi Slice truly achieves: a new model that makes old models obsolete and thus trigger a movement of change in people's mindset and hopefully inspire other entrepreneurs to follow through.

Pi Slice is a web-based social platform which represents a new channel of funding for Micro Finance Institutions. Its framework is a unique connecting system that links individuals and companies – who wish to invest – with MENA based MFIs – that in turn use the funds to provide micro-credit to their customers. Through this web-based platform, motivated individuals and companies can help MFIs in the MENA region to build a sustainable future for micro-entrepreneurs, as well as a favourable ecosystem for development at the macro level.

When you think about making a difference in developing the MENA region, you might consider donating to a charity or an NGO, as most people do. What if you could instead direct a portion of your investment portfolio towards financing microfinance institutions?

Not only would you get a return on your investment and diversify your portfolio, but you would also participate responsibly in the social development from the base of the pyramid.

As a corporate partner, the commitment is made visible on a dedicated partners page. A dedicated lending page – with logo & branding – highlights their involvement in Pi Slice projects and showcases their loans and their audience's engagement. The corporate partner will be able to mobilize their employees and clients through meaningful incentives that will highlight the company's social actions.

To me, connecting to the private sector and building a lending page for corporates where they can invite their audience and community to come and lend and create a success story is what really makes Pi Slice unique. It demonstrates a new social responsibility model where one can capitalize on the community one reaches.

Ultimately, I hope to create a community of lenders and borrowers, where people really help each other horizontally. The old model of philanthropy and charity was top to bottom; a horizontal model will not only create more efficiency, but also more 'solidarity'.

Pi Slice offers an ideal solution to companies that wish to engage their employees and clients by leveraging both online and offline resources to make CSR actions interactive, tangible and engaging while measuring the impact.



*You don't have to do any
of this, survival is not
mandatory*

*Interview with Walter Stahel, Founder Director of the
Product Life Institute in Geneva*

” If a company begins selling performance instead of selling goods, and thereby retaining the ownership of the goods through rental or leasing arrangements, it then has a guarantee that it will have the resources necessary to produce new goods in five years’ or ten years’ time.”

Please tell us about the closed loop economy/circular economy model/principles of Cradle to Cradle

When we first started having the waste discussion in the 1970s – when most waste was simply dumped in landfill – somebody coined the term ‘cradle to grave’, which put the emphasis on having better quality graves for waste; this to me was not really progress. As a reaction, I started using the term ‘cradle to cradle’, which emphasized that graves are the solution of last resort.

The reason why I prefer the term ‘circular economy’ or ‘loop economy’ to ‘cradle to cradle’ is the word economy, because it is the economics that, for me, are the most important thing. And if we look at the economics, then it’s very clear that the smallest loops – in other words, reusing, repairing, re manufacturing and re marketing goods and components in an industrial context – is where you get the biggest financial benefit, that being the lowest price for the consumer or the highest profit margin for the manufacturer.

When considering economic factors, one also needs to consider what will create the highest ecological benefit. For example, it’s vital to know what the embodied or ‘virtual’ water ratio of materials is when you are creating new products. The smallest loops also create the highest social benefits because they are labour intensive. They use very few material and energy resources, and as they are decentralized, they benefit regional economies by providing local employment. Thinking in the context of sustainability, we are always trying to optimize these three factors – economic, ecologic and social. Some applications of the circular economy are actually quite old, and we may not realize the number of things we already do that fit into the circular economy. Take, for example, the concepts of reusing, remarketing and repairing – the biggest success story regarding these ideas is eBay and all the other national and regional websites that allow people to sell used goods consumer to consumer, or business to consumer. Of course, before eBay we had flea markets and second-hand clothes shops, but what exists today is a huge global remarketing platform, which is exactly what we are trying to achieve with the circular economy model.

eBay aims to remarket goods at the highest price. While profitability is a core aim of the business model of the circular economy, its main goal is performance. That means rethinking the idea of buying and selling goods as services, rather than products – so what we are buying and selling is performance.

The business model of renting goods has always existed in the industrial economy, but in a circular economy this is expanded to include a much wider range of items. If we can rent cars, apartments and offices, why not also rent clothes? Renting robes or uniforms for special occasions is common, so why not other sorts of clothes? Rental handbags is today one of the big growth businesses, while renting tools and equipment is commonplace on building sites (business to business), particularly where specialized tools and equipment are required. Consumers can rent computers and mobile phones at almost any airport.

The circular economy also favours ‘shared’ goods as services, such as public transport, including railways, airlines, metro buses, city bikes and taxis, as well as pay-roads, toll bridges and toll tunnels. In all of these transactions, you are buying performance. You buy the right to use the item, but with the security of knowing that its performance is guaranteed, and its lifecycle will be properly managed. The latest developments in this area of ‘buying performance’ are in the field of electronics. We all use the Internet, smart phones, cloud computing, e-banking, and so on. With all of these technological devices, people forget that they’re using satellites to provide their service. Even when simply using an automated teller machine to get money when you’re abroad, this transaction goes via the cloud, via the Internet, and via satellites. GPS is used everywhere today, from aviation and logistics, shipping and oil drilling to the cars we drive. In all these cases, we are buying a service that we have no responsibility to maintain; we just enjoy its performance with satisfaction. The performance economy takes the principles of the circular economy to the extreme, where we no longer buy goods but simply services. To a certain degree, we as consumers, businesses – even politicians – are already fully engaged in this new economy.

What's your view on the taking back of materials, as relating to the reuse or disposal of toxic materials?

If a company retains the ownership of its goods and materials, it has an incentive not to put any toxic materials into the product. If it has to include them, it will do so in such a way that it's easy to take them back and separate them out.

Being especially careful not to integrate them into materials or products in such a way that they can't be taken out. This is especially true for the very expensive materials such as rare earth elements that are used in electronics and IT products, which cannot be recycled.

What's your view on the taking back of materials, as relating to the reuse or disposal of toxic materials?

It's simply because the problems we have been discussing, are mostly problems of industrialized countries such as in Europe and North America. Developing countries have a completely different problem. They have a scarcity of resources, including goods, skills and food. In situations of scarcity, the best strategy that we have is mass production to produce cheap goods to raise the quality of life of the population.

In emerging economies like China, once they have a stock of infrastructure, goods and public services, they can then start to care for this stock and carry out proper operation and maintenance processes. However, if you consider countries in Africa where poverty and scarcity is the rule, the circular economy is not much use to them. They first have to accumulate wealth before they can build stocks of infrastructure and goods, which they can then maintain and conserve.

Cradle to Cradle will never be a global model. It's already used in less developed countries, but only because of poverty. People are forced to repair and remanufacture goods but in a very 'low tech' way. They are also recycling in a very polluting way. The recycling smelters in Africa and Asia burn electronic products in order to recover the rare earth elements.

So many of the less developed countries are already applying Cradle to Cradle principles, but – ironically – in a disastrous way for the environment and human health.

The traditional, linear concept of the industrial economy still has many advantages for economic actors, and one is that you externalize the cost of risk and waste. Currently there is no legislation that would force a business to internalize these costs. If you can externalize it to the nation states and consumers, then your profit margin is higher, you make more money.

In the long-term, you also have to consider political stability. For example, there is one very green project being developed in the Sahara desert, called DESERTEC. It is a huge solar panel farm that will generate electricity that will be transferred to Europe. The project is about five years old and supported by a number of major European companies. However, if you look at the situation in the Sahara today, it might seem crazy to invest billions in a region where the policing is done by Al Qaeda terrorists! I think if you want to help Africa, or many of these countries, then you need to give them help so they can help themselves, but don't try to get involved in doing it for them.

What are key obstacles on government level, and what could be the solutions?

These are mostly to do with the existing frameworks conditions in the current economy. Basically, policy makers are still living in the industrial economy – in other words, if they want to create jobs or do something to grow the economy, the only thing they can think of is a programme like ‘Cash for Clunkers’, for example. They want to scrap cars that are just eight or nine years old and make people buy new cars. They completely ignore the alternative, which would be to remanufacture the engines of these cars, because it’s mostly in the engine where you can improve the environmental performance of the car. Remanufacturing engines would probably cost about the same as what the Cash for Clunkers initiative paid and it would maintain 80% of the material investment in the car, which is the body, and make it a better car.

However, I think the biggest impact that policy makers could make is with regard to taxation. If we had ‘sustainable taxation’, which would be a tax on non-renewable resources (energy and materials) and no tax on renewable resources—and work, human labour, is a renewable resource—it would give activities of the circular economy an immediate incentive.

The second key aspect of sustainable taxation would be that value added tax (VAT) is only levied on activities where there was actually value added. Since all the activities of a circular economy inherently maintain value, they should not have to pay value added tax.

This concept has been accepted in principle by the UK treasury and several other European countries, such as in Scandinavia, where there is 25% VAT. By not levying VAT on repairs, remarketing or remanufacturing of goods, you would create a clear signal to business that it’s beneficial to get involved in the sustainable activities of the circular economy.

Income tax is essentially a European invention. Historically it has been introduced to finance wars. In France, it was the First World War in 1914. In England, it was the Napoleonic Wars in the early 19th century. After the wars had finished, the tax was never abolished, because the countries had got used to this nice new income.

Countries like China, Russia and India don’t tax wages. In the United States, 11 states have no income tax and another 12 I think are looking at abandoning it. So how are they getting their income? Well, Texas, for example, is getting its tax income simply by taxing oil production. Similarly, Florida taxes the construction industry. In Russia, half of the national tax income comes from taxing oil and gas production and sales.

Governments should tax things that they want to restrain, and not tax the things they want to promote, such as labour. But of course, each country has to make its own decisions about taxation based on its individual national priorities.

What can businesses do to be drivers of the circular economy/ closed loop economy?

The biggest decision businesses wanting to promote the circular economy can take is to develop business models for taking back and remarketing their own products. This involves designing products for their full life cycle, through modular conception using standardized components, and system solutions instead of products.

The simple fact is if a business doesn't take back its goods, then it can't profit from its goods at the end of their life. There is little incentive to design things to be environmentally friendly if it increases your costs but doesn't bring much in return. Why produce smart goods if somebody else will profit from them? If instead a company switches to selling the performance of its products, which means retaining the ownership of them, and logically also their embodied resources, and may substantially increase its future profits

Throughout the 20th century, commodity prices have been steadily trending downwards. However, since the year 2000, commodity prices have gone up, and now are again at a level comparable to 1900. Clearly, it does not make sense to retain ownership of materials and resources when the new commodities are cheaper than ones bought ten years ago.

However, if commodity prices go up, it suddenly makes sense to retain the ownership of goods because, simply put, the goods of today in the market are the resources of tomorrow, but at yesterday's prices.

If a company begins selling performance instead of selling goods, and thereby retaining the ownership of the goods through rental or leasing arrangements, it then has a guarantee that it will have the resources necessary to produce new goods in five years' or ten years' time.

It also has the option to remanufacture the components or even the entire goods themselves, instead of putting them through a recycling loop. That decision is up to the individual manufacturers, if they retain the ownership. Only then can they decide what the most profitable option is for the business at the end of the technical service life of a product.

Another approach that has been quite popular in the UK for example, is carbon offsetting.

At the moment the price of carbon is about 3 euros per ton, so obviously the market for carbon has collapsed, and it only existed in Europe anyway.

The other problem facing carbon offsetting is finding investment opportunities. Sustainable investment today is just 5% of all investments, and if you look at some of the big companies where you can buy carbon offsets, they invest most of the money in money markets because they simply cannot find enough opportunities to invest the money they are collecting to carbon offsetting activities.

So the idea was interesting, but it meant that companies could whitewash their carbon footprint. In reality – as I've said about many things before – either you do it yourself, or you find another solution. Outsourcing the problem is certainly not a solution.

So when we look after the stock we have and better ways to manage it, we move away from the idea that we can solve our problems by producing more goods, at least in the industrialized countries, our economy moves closer to a circular economy and our society benefits its nature of regional job creation, waste prevention and a greatly reduced resource consumption.

What are some of the challenges that business could face in implementing a switch to the closed loop economy model?

Consider the example of carpet manufacturer Interface. Their CEO Ray Anderson led Interface and championed the practice of leasing carpets for over ten years and yet the idea has still not caught on with many businesses. The problem is not the company, but their customers, who may believe that they can manage the whole system at a cheaper cost than what Interface selling ‘carpet as a service’ can do.

Public budgets, for example, are clearly earmarked for schools, roads, or the military, but when it comes to taking a binding agreement on sustainability for 20 years, as Interface proposed with their green carpet lease, then the government’s treasury has a big problem because then they lose the ability to shift budgets between sectors.

If governments make a lease agreement they have a fixed cost per year. If they buy a carpet and make it last for 20 years with local services, but after 20 years find themselves in a difficult financial situation – such as the sequestration in the United States, or the austerity measures in the EU – then they simply solve the problem by not buying new carpets.

This flexibility of the treasury is lost when governments lease carpets in long-term leasing agreements. Normally people don’t want to talk about these obstacles, but this is one of the realities why many of these new business models run into brick walls in the marketing stage. It is simply because the customer has other problems that have nothing to do with the carpet, but there is no way to overcome this other problem.

It all depends on the type of business. Michelin selling car tires as services, while jet engine manufacturers are selling power by the hour. However, these markets are very clearly defined and the customer can see an advantage in both cases. They no longer have to think about the products, because they get them as a service at a fixed price, which is the best option for them.

In the car industry, which is another mass market, the idea of selling performance, or cars as services, is a business model completely at odds with what they are doing today. Today they are very efficiently producing cars in centralized, globalized supply chains, and then selling them through dealerships.

If a car manufacturer wants to go into car sharing or rental car schemes, it means he must have representatives or rental offices at every airport and in every town, and he can no longer really optimize his knowledge of efficiently manufacturing mass producing cars.

What often happens in the shift from selling goods to selling services is that because companies have a completely new challenge to meet, they need new skills, and have to set up new distribution channels and take-back channels. Business people would ask themselves: why shouldn’t we simply continue the traditional business model, even if it isn’t sustainable? Even if it doesn’t contribute to job creation, if it doesn’t save resources or prevent waste but is a lock□in situation between the government and industry, why do it? It’s relatively obvious where the levers are to change things, but who really wants to change things?

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So why should businesses do it?

Well, the fact is, they don't have to do it. When I gave presentations in the 1990s about the circular economy, I would often conclude with a slide that said 'You don't have to do any of this, survival is not mandatory'. I gave up using it after someone told me that slide was really depressing, but it is still the case for sustainability.

You can completely ignore all the concepts of the circular economy, but if one of your competitors picks it up and it's successful, then you have solved your problem, because your company will disappear.

This interview was also re-published by Guardian and UN magazine UNIDO.



OSMOSIS
INVESTMENT
MANAGEMENT

Sustainability is an economic imperative

*An interview with Gerrit Heyns,
partner at Osmosis Investment Management London
Member of the Advisory Board, EMG*

”We’re not environmentalists or activists. We don’t tell a company what they should be doing, or how they should be doing it.

**We’re finance people.
Our objective is to identify and capture investment returns.”**

Interview with Gerrit Heyns, partner at Osmosis Investment Management London

‘Psychotic Optimist’ is not the sort of title you would usually find on a business card, but it’s one that Gerrit Heyns, one of the founding partners of Osmosis Investment Management, is more than happy to accept. “Actually, I’ve borrowed it from a real psychotic optimist, and he’s not a bad role model”, says Mr. Heyns.

After 20 years of building and managing emerging market equities businesses for global and regional banks in the Far East and Russia, he was struck by the billions predicted to be spent on new products, processes, technologies and services required to transition from a resource indifferent world to one that recognizes the reality and implications of resource constraint.

In 2009, Gerrit co-founded Osmosis Investment Management, which has developed a unique perspective on sustainable investment that is pragmatic and objective. Their Model of Resource Efficiency, or simply MoRE*, identifies forward thinking sustainable behaviour in large organizations; behaviour that the market rewards today and which will define product, process and service innovation for decades to come.

In an article he wrote for the Harvard Business Review in September 2012, Gerrit claimed – on the back of MoRE data – that “resource efficient companies (those that use less energy and water and create less waste in generating a unit of revenue) tend to produce higher investment returns than their less resource efficient rivals.”

The potential of Osmosis Investment Management has certainly not gone unnoticed. Gerrit Heyns ranked high on the annual list of ‘The Top 50 People Influencing Global Finance’ (2013) published by the Institute of Chartered Accountants in England and Wales. This list, which includes CEOs and CFOs of some of the world’s most prominent financial institutions and heads of state, has the objective of predicting who will be having the greatest influence on global finance in the coming year.

What is your motivation for sustainable investment?

We're not environmentalists or activists. We don't tell a company what they should be doing, or how they should be doing it. We're finance people. Our objective is to identify and capture investment returns.

The motivation for Osmosis had its beginnings in the Stern Report on Climate Change that came out in 2007. What was clear from this document was that there is going to be a lot of money – billions and billions – that will be put into development and deployment of products, processes and services to address the sustainability needs of a changing world over the next 40 or 50 years.

It's hard to predict the challenges of tomorrow, but we do know that the world population is growing at a rate of one billion every 12 years.

The highly demanding aspirational new middle class is growing at an even faster rate. Resource, food, housing, land and water constraint is already impacting if not challenging every one of us in some manner.

Our aim is to identify the businesses that understand their particular challenges with respect to resource constraint. We are looking for the companies that are working to address those challenges proactively. It's not about cool technology or new service methods.

And it's not "hug yourself, feel good" stuff either. Sustainability is an economic imperative. Companies that are more resource efficient generate greater shareholder value and have done so for many many years.

“And it’s not “hug yourself, feel good” stuff either. Sustainability is an economic imperative.

Companies that are more resource-efficient generate greater shareholder value and have done so for many many years.”

What are the key sustainability elements that you look for in a company?

What we're essentially looking at is corporate behaviour on a large scale. The economics of sustainability require organizations to adjust their thinking and execute in a more forward-thinking manner. It's not about changing logos or renaming products to sound "green". And it doesn't happen overnight. The mind set and the behaviours permeate an entire business over time.

Our research is quantitative, based solely on publicly disclosed data. We analyse observed and reported energy, water and waste in a company with respect to revenues generated.

This tells us the resource intensity for each of these factors. It also gives us an understanding of the resource efficiency of a company, that is, how effective they are at turning a litre of water or a kilojoule of energy into a unit of revenue. We have found that companies which are relatively more resource efficient than their peers also tend to have better operating margins, return on assets and return on equity. Essentially they provide better shareholder value.

In terms of helping sustainability become a more prominent pillar of investment decision, what is your key message?

Sustainability is an economic imperative. Companies that use less to create more show greater sustainability; as a business, for the environment and for the world as a whole.

Additionally, there is a large and growing mountain of useful relevant public information sitting in the corner of every fund manager's and analyst's office. It's material information, but CFO's the world over are frustrated that it is underutilized. It is largely ignored because it's not easy to interpret. It lacks context and consistency. It's hard.

We demonstrate that using sustainability data to construct a portfolio of the most resource efficient companies from across the economy tends to produce attractive investment characteristics, characteristics that lead to greater investment returns.

Fifty years ago, when you bought a car, the two questions you had for the salesman were "How fast does she go?" and "Can I get it in red?". Today, it's "How much fuel does it use?" and "Can I have the hybrid version?"

Behaviours have already changed considerably and they continue to change. Awareness is the key and that grows every day.

We live on a four billion year old spinning mass. The only constant is change, and fortunately we are the most adaptive inhabitants to date, aside from the crocodiles.

How can you not be optimistic?

” *What we’re essentially looking at is corporate behaviour on a large scale.*

The economics of sustainability require organizations to adjust their thinking and execute in a more forward thinking manner.

It’s not about changing logos or renaming products to sound “green”. And it doesn’t happen overnight.



Recognition for companies that want to be good rather than less bad

*An interview with Bridgett Luther,
President of the Cradle to Cradle Products
Innovation Institute*

“Company after company is saying they would replace the hazardous materials they use with ones that are safe for people and the planet if they could, but they just don’t have access to materials that offer these benefits.

At the institute our aim is to enter into conversations with companies.”

An interview with Bridgett Luther, President of the Cradle to Cradle Products Innovation Institute

Since publication, the concept of Cradle to Cradle® has become one of the most influential approaches to innovative product design and corporate social responsibility, and has inspired the establishment of the Cradle to Cradle Products Innovation Institute.

As administrators of the Cradle to Cradle CertifiedCM Products Program, the institute works with leaders from academia, the NGO environmental community, government and industry to implement a standard for assessing and constantly improving products. Those that meet the stringent criteria of this rating system receive a Cradle to Cradle certification mark.

As material scarcity becomes an increasing issue for the planet, Bridgett Luther outlines the opportunities and benefits that are becoming increasingly appealing for businesses using the Cradle to Cradle Certified Products Program as a pathway to boost their bottom line.

What is your motivation for sustainable investment?

The main goal of the institute is to make Cradle to Cradle the number one preferred gold standard for sustainability around the world.

Our organisation is leading this very smart Cradle to Cradle system – the system which our co-founders and supporters believe will bring about the next industrial revolution. At the institute, we focus on one very specific leverage point: how things are made. This is such a big deal – so pervasive, and so ripe for transformation – it's a major strategic leverage point for revolutionizing the global commerce system.

The core function of the institute is basically to manage and continuously improve a public, third-party verified program for designing and manufacturing safe and healthy products, in the context of so much more than a 'regular' circular economy model. We also work to increase the number of individuals and organizations qualified to help designers and manufacturers through this process.

What are the benefits of Cradle to Cradle certification?

The benefits of pursuing Cradle to Cradle product certification are diverse and range from saving resources, raising environmental standards, averting regulatory risk and organizing a company's supply chain to simply attracting the best talent. But the real payoff is having the opportunity in the long-term to manufacture innovating, safe and healthy products in wide markets that redefine quality and beauty in ways that are in line with informed consumer expectations. Let's face it, lovely-looking products that have health risks to people or the environment can't really realistically be beautiful or high quality.

The Cradle to Cradle Certified Products Program provides product designers and manufacturers with systems-based guidance and accountable metrics for turning the making of something into a positive force for society and the planet. More specifically, while 'material reutilisation' is one of the characteristics of a certified product, there are four other quality categories that make the program about so much more than "closed loop"; these are material health, renewable energy and carbon management, water stewardship and social fairness.

If all industries would commit to the Cradle to Cradle certification process they would unite in creating polymers, resins, foams and surfactants, for example, that are safe for people and the planet. In fact, our 10 year goal is to allow every penny we make to fund some of that research for new materials.

What we really hope is that no economy has to repeat what McDonough and Braungart call a 'strategy of tragedy'. With positive innovations in hand, there's no reason to repeat the mistakes of the industrial systems of previous centuries.

It's not by chance that the organization is based in California. In your view, what have been the reasons for California's success in terms of getting sustainability off the ground?

California is a good launching pad, because our state is far ahead of other regions of the US in terms of environmental standards and are continuing to push the envelope. What drives this is that there are simply so many people here. Currently the population is around 35 million, and that's expected to grow to 60 million by 2050.

You can talk to people who grew up and lived in Los Angeles in the 1960s who remember a time when the air was almost unbreathable. It was just a visible grey pall that was there all the time, and because people could literally see the problem of air pollution it led to California stepping up legislation on exhaust emissions and climate change. So California has been on the leading edge for a long time.

Energy efficiency and renewable technologies weren't really on the scene until California took the lead and created legislation regarding carbon emissions. This sent a very clear message to the market, and it was a message that was heard by venture capitalists who then put a lot of money into renewables and raised awareness of these issues.

Companies that want to be good rather than less bad don't want to use any hazardous materials at all. What are the key challenges during the process of phasing out, and what are the opportunities?

One of the challenges is that as companies go through the certification programme, they may find that some of the materials needed haven't yet been invented! It is estimated that about 67% of materials needed do not yet exist. Similarly we're finding that there are lots of safe and healthy materials out there, except nobody knows about them.

Company after company is saying they would replace the hazardous materials they use with ones that are safe for people and the planet if they could, but they just don't have access to materials that offer these benefits. At the institute our aim is to enter into conversations with companies.

People may think it was Al Gore's movie which got everybody all excited about sustainability, but I'm absolutely convinced that all the venture capital investment in sustainable technology would not have happened if Governor Schwarzenegger had not created markets for that technology in companies based in California.

I can also say with confidence that it was the book 'Cradle to Cradle' by Michael Braungart and William McDonough that inspired much of the thinking behind the move to better materials in products. The people who worked in the Department of Toxic Substances Control read their book and realised they could actually imagine a world where the state wouldn't need a Department of Toxics any more if all materials were captured, recycled or composted.

If you consider that 67% of what we need hasn't even been invented, then somebody is missing an incredible opportunity. It's a huge market opportunity that chemical companies in particular aren't really looking at, but should be, because it could actually affect their bottom line and increase their business. They have the capacity now to create the materials that people are going to be asking for in the future.

So it's about products, but it's also about innovation and creating new markets. As more people demand Cradle to Cradle Certified products, so the demand for safe and healthy materials will increase. When more companies come on board, very quickly – commercially speaking within three to five years – we'll actually see a boatload of new materials being invented.

One of the key elements of the Cradle to Cradle principle is material reutilisation. How does the model turn the limitations of material scarcity into sustainable abundance?

Let's look at a couple of everyday examples. Firstly, I was left an amazing old-style toaster by my grandmother. It was 25 years old and worked perfectly but I didn't use it as it didn't have all the features I want and it was very energy-inefficient. The better solution would have been to send it somewhere where its parts and components could be recovered and used to make a better toaster! Similarly, when my father passed away I inherited his car with really poor miles per litre. Now I'm stuck with this huge asset with poor fuel consumption. If my father had leased it, I could have taken it back, and swapped it for a new model.

So this is where recovery and reuse strategies, as a key part of the Cradle to Cradle principle, gets really interesting, because crucially it allows consumers to feel good about consuming. They're participating in the creation of better products and helping to create morally responsible jobs.

The key requirement is that a product is designed for reuse right from the start, so that when it gets to a recycling facility the materials can be pooled and deployed effectively, reclaiming biological and technical nutrients. There may be some great materials in a chair that can be reused, but if the chair hasn't been designed properly then it is difficult to get those materials back.

Secondly, it's vital to have the infrastructure in place to collect the old products for recycling. Are you going to deploy someone to come and pick up your stuff, or will individuals need to take their things to a depot where they will be effectively processed? There's so much wasted potential here; in simple terms, my mailman comes up delivering my mail yet goes away empty-handed. The postal service could be a big part of 'optimizing the nutrient stream'.

We have to change our mindset. In simple terms it's figuring out how to change the dynamic where the plastic bottle is just as valuable as the aluminium can, because producing virgin plastic gets too expensive. And when it comes to material scarcity, the biggest problem that we're going to be facing is with rare earth minerals. We are sending valuable resources overseas instead of using them to re-energize American manufacturing businesses and jobs.

What's more, the electronic waste that goes to various countries overseas is not recycled fully; in many cases they only take out the high value materials and everything else goes to landfill or is incinerated. Our estimate is that only about 10% of an old computer, for example, is actually getting turned into a new one. We should be taking advantage of the valuable materials that we are now throwing and/or sending away, turning them into resources for a revitalized manufacturing sector.

As soon as we start to make that sort of mental change, we'll really be making progress. That's one of the things I love about Cradle to Cradle: we talk about end of use, not end of life. We're getting more people to think this way and changing the language accordingly. Trends we see heading in this direction include reverse logistics, urban mining, and extended producer responsibility.

When no-one sees a trash truck any more but only a 'resource recovery wagon' we hear the circular economy model at its best, moving forward in the public's attitude. This is how we start to change our actions for the better.

What can we expect to see from the institute over the next few years? What will be your key focus areas?

Cradle to Cradle is the only certification of its kind that gives a visible indication of the entire sustainability of a product. Because of the multi-attribute criteria, it's the best way to communicate a product's sustainable attributes to the consumer, and shows that the company producing it is committed to making the world a better place.

People look for labels which clearly show what's in a certain product, so they know what's in them (which has fuelled the growth of a whole organic food movement), or on them (such as lotions and shampoos). So labelling products with Cradle to Cradle certification is a top priority, and consumers are going to see a lot more marketing and brand communications around certification.

Clarity regarding the benefits of the product is paramount. We don't want it to be just a boutique thing; we want it to be bigger and better and more mainstream than that.

To achieve this, we're encouraging companies to get certified, and our certification levels rise from basic to bronze, silver, gold and platinum. What's so good about this is that you receive credit for moving in the right direction, and people can distinguish between those companies that are just starting on the sustainability road and those that are much more optimized.

We're already covering a variety of sectors. Besides industrial applications, we also have considerable traction with textiles, and within the fashion industry. We're continuing to work with Red Carpet Green Dress at the Academy Award's ceremony as a part of our effort to move the industry towards Cradle to Cradle, and which will culminate in a campaign that openly shows key industry people acknowledging their preference for Cradle to Cradle Certified products.

We are focused on shifting the mindsets of manufacturers and designers to meet the expectations of those we see as the Cradle to Cradle generation: healthy children who grow up surrounded by products that keep them safe and healthy while raising their quality of life – something we believe every child everywhere in the world deserves.

Over the next years we'll be employing this focus on healthy children to deepen the acceptance and embracing of Cradle to Cradle product innovations for homes, schools, clothing and textiles, and a range of other products for infants and children.

Ultimately, companies that embrace Cradle to Cradle are doing so because they see that they can grow thriving businesses in ways that create sustainable abundance, health, and even happiness. Once that light goes on in a business person's mind, they ask why anyone would want to make products in any other way. In this world, commerce, consumption, business, and investment can make you feel good and enlightened, not guilty.



***Thinking what could be done,
not what should not be done***

*An interview with Giuseppe van der Helm,
President of the Board at EUROSIF
- European sustainable investment forum*

“Many people complain about large multinational corporations because they have enormous power,

***but it’s that same power that can make a dramatic positive difference in the world.* ”**

An interview with Giuseppe van der Helm, President of the Board at EUROSIF - European sustainable investment forum

What compelled a president at a chemical company to leave his job and take up theology, only to end up becoming one of Holland's leading advocates for sustainable investment?

EMG spoke with Giuseppe van der Helm about his unique life journey, his work with Eurosif and the VBDO, and his relentless passion for putting real meaning into the concept of stockholder values.

We are keen to hear how you got to where you are today, and how you came to your view on the importance of sustainability in business.

It was a gradual transition. I had been working at Valvoline Europe for several years, as president. I had a good salary, a nice car, and the company was doing just fine. But somehow in the midst of this, I felt something was not right. It's not that the job was bad, but I just found myself starting to ask some simple questions: Is this it? Am I really working on something meaningful?

Of course I was immediately aware that there would be some serious consequences if I left Valvoline. It was not a decision I took lightly, and I discussed it extensively with several people close to me. However, one year later, I left the company and went on a trip around the world. I ended up sitting on a lovely beach somewhere all by myself, and thinking what I wanted to do next. Perhaps bizarrely, I decided to study theology!

I enjoyed this study, but then the questions started coming again: What am I going to do now? How do I move forward? Who wants a business guy with a theology degree – or a theologian with business experience?

I ultimately came to the realization that this study and my life experience together was a benefit and an asset.

Put simply, I wanted to improve the world. I am an idealistic person and not ashamed to say that. But I also know how to run a business. We live in a business-minded world, and companies have to make profit. But at the same time, business also needs a soul, which is expressed through their values and ideals. Without a soul, a company cannot truly thrive. Otherwise, if you only concern yourself with creating value for shareholders, you eventually come to a point where you ask: What is the shareholder valuing? Is it just profit for profit's sake?

It's my firm belief that when a company follows ideals of sustainability the rewards are much larger and longer lasting. One can then be proud and say: This is what I am meant to be doing, and how I impact the lives of other people! It is why I'm now proud to be doing these roles with VBDO and Eurosif.

How do you see the role of the CEO in making a company more sustainable?

In my experience, the CEO is key to the whole thing. We regularly organize stakeholder dialogues for large organisations and can have up to 40 key stakeholders from a company attending.

We sit down and talk about relevant CSR topics for the company, and ask for input from those stakeholders and what should be done. However, if a CEO is not on board with creating a sustainable business, it's almost inevitable that efforts will fail. Cultural change in business must come from the top.

I've been doing this work for six years now, and coming from a life in business, it's in my blood. I know a good business case when I see one, and sustainability is definitely a good business case. But while there are plenty of numbers to back this up, we should not forget the moral and ethical side as well. Companies tend to shy away from that argument, because morals are about right and wrong, and nobody wants to be told they are wrong. But CSR is more than simply compliance with legislation. A company does have a soul, and that means a CEO has to think about how the company behaves. You sit down with your stakeholders and open up a discussion about how you will meet your moral obligation to be sustainable.

So it shouldn't be a one-man show, but the fact is that it starts there. It should filter through the organization, and live through the organization. Then, when the company is 'drenched' in sustainability, a CEO leaving won't change this, because the company is now living and breathing it.

One of the things we also recommend is that bonuses for management and the board be based on both long-term performance and CSR performance. This is because the board cannot realize these goals by themselves. They're just a few people; it's the organization that has to perform.

So if they can make sure those smart, measurable goals are the same throughout the organization, and reward their people for their performance in realizing those targets, they will then get their own bonuses and take care of good reporting in the organization at the same time.

What do you think are the greatest sustainability & CSR challenges for new leaders?

There are so many things. As a planet, we are facing a global food crisis. The forecast is that we will need to produce the same amount of food in the next 50 years as we produced in the last 5000 years, so that's quite a challenge. Then there are crises in energy and water, the raw material crisis, the climate crisis – these things will not just go away quietly. In our world things are shifting very rapidly, and there will be big consequences.

Something that I have been finding increasingly encouraging however, is the power and capacity that large companies do have to address these issues. Many people complain about large multinational corporations because they have enormous power, but it's that same power that can make a dramatic positive difference in the world.

Consider world trade, for instance. Around 50% of world trade – 50%! – is done within these multinational companies. If you compare that to the power of countries, multinationals are clearly becoming much more influential, because they have the capability to move money across the world in seconds, and achieve things in the financial sector so much more quickly than countries can.

The biggest issue of course is how to hold these companies accountable for sustainability and CSR.

In conclusion..

I want my work to be something I'm proud of, that I can talk about at home to my children and say, this is what I've been doing! Look what we did to change the lives of people in those countries! That's what motivates me, and what I believe will motivate other people too.

But who can hold those people accountable? If, for example, you are in Africa, living with the consequences of activities by an oil company, who do you go to? Who gives you access to justice? The answer may lie in international legislation, established by the United Nations for example, that puts pressure on these countries to address sustainability. These things will take time obviously, but we need to get to a situation where there's more equality and cooperation between several countries on these issues.

Ensuring large multinationals abide by common regulations is a crucial step, but because that will take a long time, we need to already now work on helping large companies find their soul. Ethics need to be championed, and we should also work on developing their conscience, and their commitment to justice - both social and environmental justice.

So who can best help with this? It's the stakeholders. These are people who are concerned about the company, and want the best for the company because in helping them they are helping themselves. If you don't know the answer yourself, don't sit and wait. Use the help that is out there. Use your stakeholders' motivation, their knowledge, their thinking, their ideals and their conscience.

There was a point in my life when I felt like I was lacking that feeling of success, but I hope that now, in the positions I currently hold with VBDO and Eurosif, I will be able to contribute to some real changes in the world.

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EMG presents a new series of Sustainable Business Innovations and CSR Thought Leadership interviews with clients and other parties in our network with the goal of inspiring more people about the benefits of integrating corporate responsibility into profitable business.

The interviews include executives, senior government and NGO officials, prominent financiers and heads of CSR for some of the world's largest multinationals.



Founded in 2004, EMG is an advisory firm that is on the cutting edge of corporate social responsibility (CSR) thinking, strategizing, and implementation. A veritable pioneer in what it does, EMG was the world's first CSR consultancy to be certified for the promotion of Cradle to Cradle, the leading international circular economy model. EMG's founder and CEO, Drs Daan Elffers, was one of the first people in the world to receive certification to operate as a consultant in this area.

As befits its position as an innovator, EMG believes that organizations need not wait to be instructed or compelled to take up CSR-related ideas; rather, it makes sound business sense for them to become drivers for change, and for them to become leaders in global sustainability initiatives. As Elffers has stated, "Be a seeker, not a follower ... "

The consultancy has a proven track record of achievement, and applies advanced systems-thinking methods to explore synergies between people, planet, and profit. Proficient in its mastery of the relevant theory, EMG and its panel of consultants adopt a personal approach, and work in close collaboration with clients and stakeholders to formulate strategies and activities that ensure the best possible outcomes in an approach that is innovative, responsive, effective, responsible, and transparent.

With offices based in Amsterdam, Cambridge, London and Dubai, with satellite offices in Doha, Jeddah and New York, EMG is the winner of numerous awards, and is recognized as an international authority in the fields of CSR and sustainability.

EMG's advisory board is chaired by HH Prince Pieter-Christiaan Michiel van Oranje-Nassau of the Netherlands.

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