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Worldwatch Institute is an independent research organisation recognized by opinion leaders around the world for its accessible, fact-based analysis of critical global issues. With its headquarters in Washington, D.C., Worldwatch has catalysed effective environmental decision making since 1974. In 2011 Worldwatch Institute established its European office in Copenhagen, Denmark. Worldwatch Institute Europe aims to deliver the insights and ideas that empower European decision makers to create an environmentally sustainable society that meets human needs.

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Seeing a business as a complex organism within an ecosystem of the globalized business world naturally leads to a mimicry of nature, and nowhere is this more apparent than the circular economy model. Waste from one process becomes raw materials for another, thereby eliminating waste in the traditional sense. In the business world, this leads to greater resource efficiency and encourages a high level of collaboration between businesses throughout the supply chain.

This collaboration and accompanying benefits can also be harnessed in other ways. Not only do resources flow in loops rather than straight lines ending in landfill, but the close symbiosis between companies facilitates the sharing of knowledge and (often underutilized) resources, challenging the traditional notions of ownership through rental of goods as a reflection of the non-rival nature of knowledge-sharing.

Such significant and all-encompassing change has to come from the top – leadership must be by example. Management structures must mirror these new business values, and the collaborative, symbiotic relationships between companies should be reflected in flat, inclusive, and participatory structures within business. Businesses and people shouldn’t be viewed as mere cogs in a machine, but as agents for change, and owners of their work, and the planet. That is the beginning of the gradual but essential process of cultural change – necessary for long term results, but we needn’t wait long to experience these results – as you will read, the companies we’ve profiled in the report are already proving the profitability of this new paradigm.
Introduction

There is a values revolution where constituencies in society are beginning to demand not only more, bigger, faster, cheaper, now, but they’re beginning to demand better, claiming institutions that are capable of creating real human prosperity.'
Umair Haque, Director of Havas Media Labs

One of the main puzzles of our time is how to avoid climate change and safeguard ecosystem health while simultaneously improving human wellbeing and enhancing social justice without destabilizing the economy. As a part of its Living Economy project, Worldwatch Institute Europe is examining how European businesses are generating business value while considering environmental and social challenges.

On the road to sustainable prosperity it is important for all stakeholders to find symbioses. Businesses have a very important role in the road towards a Living Economy – an economy that has as a goal to improve human wellbeing and quality of life, moving away from pointless consumerism, without compromising natural resources. How can business promote environmental and social sustainability, and at the same time have positive returns on investment?

A Living Economy focuses on achieving economic prosperity through a long-term process driven by environmental sustainability, human wellbeing and happiness.
**The Premise for Transitioning to a Living Economy**

The business landscape is changing; corporations today are facing growing challenges in performing their business-as-usual, ranging from resource scarcity and rising prices for raw materials, to social degradation and enhanced exposure to global scrutiny through social media channels. Moreover, the collapse of financial systems and the on-going economic crisis have not only been signaling the end of the industrial era-model of doing business, but also the need for a systemic transformation to meet new 21st century global challenges, impacting both the societal structures and the business world.

Therefore, it does not come as a surprise that a rising number of corporations have started their journey on the road to sustainability, reconsidering the type of value they create, and acknowledging that their long-term commitment to integrating sustainability into business operations is now translating into a profitable future. Studies show that companies engaged in sustainability experience a positive return on investment.³

More and more businesses are starting to realize that creating resilient business models – models that withstand financial crises – is dependent on creating value for society and addressing its real needs. This can be done by pursuing profits while improving the lifestyle of stakeholders when addressing issues such as cutting energy use or decreasing the usage of non-renewable resources, the need for economic growth, and expanding access to services and products for the four billion people living on less than one US dollar per day.

As it became clear at the U.N. Rio+20 Earth Summit in 2012, the most urgent step for all stakeholders is cooperation. The lack of cooperation in the past has been proven to be one of the reasons leading to the present crisis for civil society, governments, and the business sector. Thus all parts of society can clearly see that working together, towards a common future, is the way forward.

**Business Innovation in a Living Economy**

The objective of this report is to offer business leaders and entrepreneurs a better understanding of how to create shared value through sustainable business. Our viewpoint is that return on investment can be enhanced through sustainable business practices; a hypothesis to be tested through our case studies and a collection of surveys and insights from international experts, all of which will be included in the following sections of this report.

The way towards prosperity for 21st century business inevitably intersects the road to sustainability; doing well while maintaining balance on interactions with nature, and contributing to the wellbeing of people. Modern society faces a myriad of issues, but within those issues the road to sustainable business can be uncovered.

The report examines the drivers behind the current shift in the business world towards more sustainable practices, presents innovative sustainability initiatives in four European regions: Scandinavia, Northern, Eastern, and Southern Europe, and proposes practical suggestions for changing management in a Living Economy.

*How do we do more with less? At the rate we are going, we are consuming 1.5 planets; by 2020 demand on natural resources will surge, brought on by a population growing to 9 billion, while our natural capital is getting scarcer and commodity prices are rising.⁴*
Sustainability has become a buzz word used in boardrooms and business consultancy reports as well as in national growth strategies. Much of this is owed not only to environmental organizations’ pressure on business decision-makers, but also to the corporate world itself; sustainability leaders worldwide are challenging their own and their peers’ way of doing business-as-usual, embracing a forward-thinking vision, where the value of the products or services to be created is not achieved at the expense of depleted resources and social upheavals.

When it comes to defining sustainability, the closest thing we have to a commonly agreed definition comes from the Brundtland report issued in 1987, where sustainable development is defined as one “that meets the needs of the present without compromising the ability of future generations to meet their own needs”. This does not mean that the sustainable approach to business is to be confused with the sustainable development agenda put forward by a global alliance of actors. Rather, this definition should be used as a compass to create and steer inspiring goals for one’s business organization.

Creating sustainable value is becoming the new norm, or simply good business. Businesses worldwide are faced with increased costs and efficiency challenges on their production lines, with unstable financial markets and commodity price volatility, public scrutiny and impending regulation, among other issues. In attempting to address these issues

“...We long for a kinder sort of capitalism – one that views us as more than “consumers”, one that understands the distinction between maximizing consumption and maximizing happiness, one that doesn’t sacrifice the future for the present, and one that doesn’t regard the earth as an inexhaustible resource.

Gary Hamel, visiting professor at London Business School
they are starting to embrace sustainability as a strategic tool for growth and development.

Visionary leaders approach sustainability as a way of ending their dependency on non-renewable material (e.g. oil) through radical recycling, which can prolong the life-cycle of their products and maintain stable production costs. They look for cooperation and collaboration with stakeholders such as suppliers to tackle issues that are too big to handle on their own. Their aim is to lead not only their company, but their industry forward by making the case for sustainability, and they constantly look to inspire and engage their employees in fostering a culture of knowledge sharing and open innovation.

However, despite the spread of a sense of urgency in tackling environmental and social challenges, doing business sustainably remains an enigma for many. It is the goal of this report to explain some of the approaches to sustainable business development, and to emphasize its merits through the illustration of sustainable business initiatives in Europe. We hope entrepreneurs will gain insights into what it takes to do business sustainably: the ups and downs of this journey and the challenges to be overcome in tomorrow’s business.

Society is at a crossroads where values are revisited in light of growing discontent with industrial-era practices; customers and employees are becoming increasingly aware of the dire consequences for societal wellbeing if businesses do not take immediate action. Front-running entrepreneurs are perceptive of these major risks and they are taking action to alter their business models in order to meet the environmental and social challenges of the 21st century. In doing so, forward-looking companies are becoming more transparent and open to dialogue towards stakeholders, they are optimizing their resource consumption, redesigning their supply chains, investing in innovative technologies, adapting their manufacturing cycles to green standardization, and reducing waste, while adding a human face to the global market.

New Challenges to Expect
Business need to be prepared for unpredictability - whether that’s policy, climate, or consumer change.

Global systemic disruptors such as climate change, rising costs for energy and fuel, water and resource scarcity, not forgetting ecosystem decline among others, pose a real threat to the future of society as we know it. Global think tanks such as the World Economic Forum and various networks of researchers and consulting professionals are sounding the alarm proclaiming the end of business-as-usual and the need for a paradigm shift in the way we conduct our economic activities. Society is approaching the limit to our non-renewable resources (clean water being the most critical issue) and there is widespread discontent sweeping our society as unemployment and financial marginalization are on the rise.

A recent report issued by the World Economic Forum following an annual survey of more than 1000 experts found that rising greenhouse gas emissions is rated among the global risks most likely to occur in the next 10 years (Figure 1). An increase in greenhouse gas emissions would lead to a rise in temperature levels threatening to affect the global economic activities due to degradation of natural resources, access to clean water being a paramount risk.

Average Likelihood

![Figure 1. Likelihood of global risks according to over 1000 experts. Source: World Economic Forum 2013.](image-url)
Reduction of energy costs, waste generation, and stakeholder expectations towards innovations for sustainability are climbing rapidly to the top of managerial concerns.

Existing data reveals a shift in driver prioritization concerning businesses’ attitude towards embracing principles of sustainable business development throughout the last 3 years. A U.N. Global Compact survey interviewing 766 CEOs around the world cites brand trust and reputation as primary motivators in taking action on sustainability issues, with an overwhelming percentage of 76; only 44% citing potential for revenue growth and cost reduction, while customer demand ranked 4th with only 39%. Part of the explanation is that companies were eager to restore public trust in businesses, following the dire social consequences of the financial crisis hitting in 2008.

A Global Outlook on Managers’ Preferences

Studies point to the fact that climate change impacts are basically outpacing our efforts to adjust to and alleviate some of these effects, and that “Even doubling our current rate of decarbonization would still lead to emissions consistent with 6 degrees [C] of warming by the end of the century. To give ourselves more than a 50% chance of avoiding 2 degrees [C] will require a six-fold improvement in our rate of decarbonization™. According to a recent World Bank study, a 4 degrees warming would lead to a sea level rise of 0.5 to 1 meter by 2100. This could threaten the livelihoods of major coastal urban hubs and island communities and increase the number of extreme weather events i.e. droughts and floods affecting global food production.

Figure 2. Moving beyond reputation. % of respondents, n=2,956. Source: McKinsey Global Survey 2011.
the classic sustainability authority, represented by the CEO and the Chief Sustainability Officer, is now shifting, being shared with those empowered with operational authority (Chief Operational Officer) and with budgets (CFO).

One explanation of the CFO’s involvement in sustainability policies could be the risks implied in the near future by energy and commodity price volatility. According to the research done by Verdantix for the Deloitte study, CFOs continue to cite supply chain risk as one of their top concerns (Figure 5).

In comparison, a McKinsey survey from 2011, comprising 2956 responses from managers around the world, emphasizes a shift from reputation as primary motivation to reducing energy use (63%) and waste (61%) (Figure 2). Backing this argument, a 2012 Ernst&Young survey with 272 respondents, mostly from the USA, reports a staggering majority in support of sustainable business development due to potential for increased energy costs (93%) in the near future (Figure 3). Changes in customer demand, brand risks, and stakeholder expectations follow suit, with 87%, 87%, and 86% respectively.

Moreover, recent surveys point to a change in attitude of Chief Financial Officers (CFOs) concerning sustainability. A 2012 survey conducted by Verdantix, compiling 250 interviews with CFOs from companies with an average revenue of 12 billion USD and representing 14 regions in the world, concluded that the general trend is having the CFO engaged in the company’s sustainability strategy. The survey reported that 49% of the CFOs interviewed saw a significant link between sustainability performance and financial performance (Figure 4). Additionally, it seems there is a strong link between sustainability performance and financial performance.

**Figure 3.** Source: Ernst & Young 2012.

In the next 12 months, how important will the following factors be in driving your sustainability initiatives?

**Figure 4.** CFOs are coming to the table. Source: Deloitte 2012.

One explanation of the CFO’s involvement in sustainability policies could be the risks implied in the near future by energy and commodity price volatility. According to the research done by Verdantix for the Deloitte study, CFOs continue to cite supply chain risk as one of their top concerns (Figure 5).

In the next two years, how significant will the following risks be to your firm’s financial performance? Rank 1 to 7 with 1 being most significant.

**Figure 5.** Source: Deloitte 2012.
Drivers for Success

There is evidence to back up the correlation between sustainability performance and financial performance, but trade-offs should be considered as well.

Moving the business forward, and building a competitive advantage is a different arena. This is where companies innovate and find/create new markets (growth strategy). This is also where companies can outperform compared to their competitors. A Boston Consulting Group survey found that two thirds of the respondents have started to reap the benefits from employing sustainable business practices. The study shows a tipping point in sustainability, where sustainability embracers are starting to see a profit due to embedding sustainability in their strategic and operational decision-making (Figure 6).

The effect of sustainability-related actions/decisions on organization’s profitability.

![Figure 6. Source: MIT Sloan School of Management & Boston Consulting Group 2012.](image)

Similarly, a recent Harvard Business School paper concluded that the group classified as High Sustainability firms financially outperformed their counterparts, categorized as Low Sustainability firms (measuring stock performance from 1993 to 2010; Figure 7).

The common view in both of these study reports is that companies that have embraced sustainability throughout their organization, business operations, and stakeholder management have done so over the course of many years.

However, research emphasizes that managing both financial and sustainability performance is a game of careful considerations due to the existence of trade-offs in costs (i.e. converting a traditional energy-plant into a sustainable one could lead to the loss of jobs); consideration must be given also to what areas of sustainability to focus on, and on timing (legislation, social expectations) when choosing the option carrying greater value.
Top management commitment

Research has identified some metrics where high performers in sustainability differentiate themselves from the low performers, and gain financially as a result. There are three elements where high performers stand out: sustainability is addressed at a corporate governance level, partnerships and collaboration are key, and sustainability is an integrated component in the business strategy.12

High performers in sustainability are more likely than low performers to adopt formal responsibility for sustainability at a Board level and to have a Board committee responsible for sustainability. Moreover, high performers are 50% more likely to have CEO commitment for sustainability, and twice as likely to have separate reporting and a separate function for the chief sustainability officer. Moreover, they are twice as likely to have operational and personal key performance linked to sustainability, and 62% more likely to link sustainability performance with financial incentives (Figure 8).

Which of the following factors led to changes in your business model as a result of sustainability?

Customers prefer sustainable products/services
Legislative/political pressure
Resource scarcity (e.g. increased commodity prices and price volatility)
Competitors increasing commitment to sustainability
Stricter requirements from partners along the value chain
Owners’ demands for broader value creation (i.e., more than profits)
Competing for new talent
Customers willing to pay a premium for sustainable offerings
Meeting demands of existing employees
Maintaining “license to operate”

Secondly, high performers increase the level of collaboration with stakeholders, such as customers and suppliers (Figure 9). In tackling their carbon footprint, companies with complex supply chains are increasingly engaging their suppliers in developing measurable metrics to lower their CO2 emissions. Where social impact is imminent, high performers develop a back-and-forth communication strategy with their customers, which leads to greater insight on innovation. For this reason, most high performers cite customer preferences for sustainable products/services as the main driver in altering their business models.13

Finally, high sustainability performers employ a strategic approach to sustainability, with 94% reporting that they integrated sustainability into strategic planning, compared with 53% in the low performance group. Moreover, they are more likely to invest in R&D for sustainable products or altering current products to increase their sustainability to reach new markets.14
Customer Trends

Customer and stakeholder pressure is playing an important role in the observed shift towards more sustainable business. During the past decade consumers have increasingly become more conscious and well-informed demanding products and services that compromise neither environmental nor social well-being. In a recent Deloitte survey, a clear trend towards greener products was evident; a large percentage of customers believed that green products were of higher quality and were willing to pay 10% more for these. 17

In explaining the need for businesses to create shared value, Michael E. Porter and Mark R. Kramer stress the fact that corporations have been impacting societies (environmentally and socially) for decades without noticing the link between the welfare of their bottom lines and the well-being of society as a whole.18

Viewing profit-making as separate from serving societal needs has led, among other things, to the general public’s mistrust concerning the business sector. A study from the global communication group Havas Media shows that nearly 85% of customers worldwide expect companies to become actively involved in solving social and environmental issues, an increase of 15% from 2010.19

Rising awareness of environmental challenges alongside an overwhelming majority of customers expressing concerns about environmental sustainability continue to pressure business towards more sustainable practices. A recent Deloitte survey in the U.S. found that 95% of business travelers surveyed believe the hotel industry should be undertaking “green” initiatives. Deloitte concluded that “By 2015, shifting customer attitudes will continue their current trajectory forcing governments to address the socio-economic landscape and “real” market in which business operate.” 20

While it has always been good business practice to be mindful of environmental impacts, today’s customers are demanding higher...
standards for eco-friendly products. A transparent business, with a strong commitment to responsibility towards sustainability, as well as the development and expansion of environmentally-friendly products, is becoming necessary in maintaining profitability for companies.

Over the next five years, which stakeholder groups do you believe will have the greatest impact on the way you manage societal expectations?

Figure 10. What stakeholder groups do CEOs believe will have the greatest impact in business strategies concerning societal expectations. Source: U.N. Global Compact 2010.

In a recent U.N. Global Compact survey of 50 CEOs across 27 countries, it was identified that individual customers as well as business and government customers are increasingly driving companies’ strategies for developing sustainable products and services. CEOs identified the customer as the most important stakeholder in influencing the way in which they will manage societal expectations over the next five years: 68% of the respondents selected consumers among the most important stakeholders, even above employees (45%), and governments (39%); (Figure 10).21

Additionally, in the same survey CEOs see the need to increase the provision of customer information and set clear standards, as well as direct government incentives and investment in areas such as energy, transport, and public infrastructure attitudes and needs.

What is Next?

In the post-industrialized 21st century, customers are becoming aware of the impact their personal consumption habits have on the surrounding ecosystems. As a result, they demand that the products and services they use are created with respect to the society and the environment and they will remain customers of the businesses that will honor these commitments.

Future business leaders will most likely be those companies that make and follow a commitment to integrate environmental and social sustainability into their core strategy and processes. This is a long-term process; therefore it is an advantage to get started sooner rather than later. In the next chapters we will take you through some of the milestones of this journey, as we follow in the footsteps of both small and large companies.
The beginning of the 21st century bears the mark of change: changing the way we conceptualize making business and changing cultures as we go along with business innovations for sustainability. As discussed in the previous chapter of this report, faced with the sustainability imperative, businesses are turning to their supply chains to increase efficiency of scarcer resources i.e. energy use, water consumption, and cut down their costs. Forward-looking companies however, are proactive rather than reactive; they see opportunities for innovations within their industry before the need arises, and change starts with shifting towards a new way of thinking: how to re-design a product/service to best address market demand, how to re-shape customer experience and how to re-imagine one’s industry.

This seems to be in fact a transition period for businesses, an exciting time to explore innovative practices European companies are applying in order to become attuned to 21st century challenges and be prosperous.

A business in the living economy engages in sustainable practices and uses a different set of parameters to define value creation: minimizing its direct or indirect strain on natural resources while maximizing benefits for the community and its own bottom line. Redesigning one’s manufacturing process to eliminate toxic emissions, safeguard employees’ health, and decreasing landfill or using recycled materials waste are only a few illustrations of the positive impact this shift in the business operations or strategy can incur on the environment and in the social community.

Human wellbeing and happiness are at the heart of a Living Economy. Restructuring our modern culture in a way that inspires human wellbeing and happiness, enforces ecological sustainability, and at the same time creates a viable economic future, is the basis. In the business sphere this can be translated into transforming the current business culture to one honouring living economy values, working in partnerships with civil society, maximizing resource efficiency and diminishing the strain...
on natural resources, whilst generating a positive financial return on investment. Functioning in accordance with living economy values is not only a possible future, but one that could lead business and the whole of society into prosperity and wellbeing; emerging successfully out of the current economic, social, and ecological crisis.

Laudable as it is, cutting down emissions and mere compliance with sustainability standards is not sufficient to pull ourselves out of what looks to be a bleak future for coming generations. It could be a good start on the journey towards a Living Economy. Assessing one’s performance in terms of decreasing CO₂ is the low hanging fruit for many actors in the business world, as the business case is obvious leading to saving energy and other resources (Figure 11).

**Figure 11.** Approaches to business sustainability,

What business people really need is a paradigm shift in the way they think of making their profits – being reactive to current challenges is not enough. **Proactive thinkers** have the talent to inspire and motivate people around them towards a higher goal i.e. giving their industry a make-over, changing their business model, disrupting the market through innovation etc. In doing so, system-thinking is crucial, because it forces people out of their comfort zone and it allows the mind to be open to unforeseen possibilities and to question outdated practices.

Incremental improvements in mitigating losses in natural and social capital are only targeting the symptoms; getting at the root of the problem implies radical and sometimes transformative innovations:

**Figure 12.** Business Innovation in a Living Economy Model

As illustrated in Figure 12, in a Living Economy companies engage in multiple sustainable initiatives conducive to the outcomes of the model put forth by Worldwatch Institute Europe, described earlier in this chapter. Our model for business innovation in a Living Economy is not restricting businesses from taking on other initiatives than those presented here, but it does pinpoint the premise of walking the path towards true prosperity and human progress.

Reducing and reusing, as well as recycling resources i.e. water usage, energy efficiency, physical materials in manufacturing or sharing resources, are all part of this process. Gradual improvements in business operations and processes could lead to cutting costs and improving value chain efficiency; however, as discussed in the first chapter, the state of the world is shifting towards one where resources are scarcer, customers become more apprehensive to their needs and business competitiveness is redefined in terms of effective solutions to environmental and social challenges. In this context, minimizing one’s footprint by using the first two methods in the model is praiseworthy but not enough to deliver the true potential of what our society could
This model could be a part of a Living Economy, since it focuses on redesigning the way businesses are managing resources, which is one of the main transformations needed in the path towards a Living Economy. Other paths leading the transition towards a Living Economy will be explained in more detail in the final chapter of this report.

The Circular Economy Model

The circular economy model seeks to transform the very roots of doing business by rethinking product design in a way that would facilitate re-use of materials – a state of perpetual motion, in which waste is non-existent i.e. reuse/recover used materials. Putting it in practice though requires a radical re-design; components for a product need to comply to two specifications only, either act as bio-degradable by-products, and move back into nature’s regenerative processes i.e. as food waste, or act as a technical nutrient, to be reclaimed in the making of other products (Figure 13).³

Circular economy model is described as a strategic thinking tool geared on two critical outcomes that aim to alleviate man’s imbalance with nature: reduction of waste flows and reduction in the raw materials to be harvested from the natural capital source. The goal of the circular economy model is to implement a radical redesign in the product/manufacturing process, so that materials can be reclaimed to re-enter new production cycles, with a maximum increase in resource efficiency.³

As conscious and well-informed customers demand more sustainable products and services that compromise neither environmental nor social wellbeing, many companies adapt models driven by circular economy principles.

The circular economy model applies a broader perspective on what our economy could look like if we are to cope with the challenges posed by scarcer resources and rising energy costs, paving the way towards a living economy.
economy. Its business practice applications are various, and companies apply a wide set of conceptualizations akin to the business sustainability agenda, which are more specific in their focus, such as Industrial Symbiosis, Sharing Economy or Cradle-to-Cradle. The concepts of Triple Bottom Line and Shared Value are other approaches to sustainable business which can be successfully applied by managers in tackling the business challenges described in the previous chapter.

**Research Methodology in this Study**

Understanding the connection between innovation and sustainable practices, acknowledging the implementation difficulties and comprehending the value these initiatives add to the companies, can help other businesses to replicate these or even create new innovative practices that could lead to a more prosperous future.

In the following chapters we will present nine examples from European businesses that are moving towards a living economy and prospering from applying sustainable innovation in their business. The goal of these presentations is to illustrate what drives sustainable innovation within European businesses and which are the touchstones on the road towards a living economy. The case studies cover a broad part of Europe varying from East to South to North Europe.

Between January and April 2013, we conducted qualitative interviews with nine European businesses in Denmark, Greece, Germany, Luxembourg, the Netherlands, Serbia, Sweden, and the UK. The interviews were conducted either in person and recorded, or in written form, with the people responsible for sustainable initiatives within each company. The companies participating in this survey varied in size, products, and region of Europe in which they operate. The aim was to cover a broad spectrum of European business by investigating companies of different magnitude, operating in different cultures, and focused on different markets.
It is our view that one of the most important pillars of sustainable business in a living economy is the ability to innovate. We see patterns of different kinds of innovations in businesses, which we have classified into four main categories that will be explained thoroughly as the initiatives are presented, from recycling of resources to long-term prosperity (x axis, Figure 14).

The scale of innovation applied in each initiative may vary, ranging from optimizations or small improvements (*incremental innovation*), to totally new solutions (*radical innovation*) to innovations transforming a company, or even a whole industry, by its market breakthrough (*transformational*; y axis, Figure 14).

**Figure 14.** Living Economy Matrix: criteria for business cases.
Resource optimization and recycling are hot topics in many companies today since aspects where businesses are called on to act are resource scarcity, environmental hazards, and price volatility which are affecting supply chain processes on a global scale. Focusing on using recycled resources makes waste obsolete, which is an important criterion for sustainable business.

Triple bottom line (TBL) - also known as the People, Planet, Profit bottom line framework – introduced by John Elkington is supportive towards the old managerial dictum of managing only what one can measure. TBL refers to measuring profit and loss not only in economic terms, but also incorporating the environmental and social impact businesses can have. Elkington, a prominent supporter of sustainable business practices coined the concept of TBL in 1994 as a means of capturing the significant effects, both negative and positive, that businesses can incur throughout their activities in the life of the communities in which they operate1.

TBL is meant to guide managers in balancing decisions when it comes to making profits at the expense of natural resources or social wellbeing. As our first case study shows, the TBL framework is used strategically to cut down operational costs in a transitional scenario where renewable resources are becoming the new norm.
advocating for renewables is a main goal even if there is no financial gain a priori, for example bio-plastics are more expensive than conventional plastics. An interesting approach has been based on the ethics that have been governing company culture for two decades, as Mrs Mink puts it “We are a values-based company”.

The company is not only committed to minimizing the amount of resources used, but also to using renewable resources from responsibly-managed sources. These commitments became actions in 2012, as over twenty billion packages the company’s customers put on the market carried the FSC global forestry certification label.

How to put into action a sustainable strategy

Taking us through the company’s policy in the past decades, Mrs. Mink explains that even prior to the company’s 2020 strategy, published in 2011, they used to assess the environmental and social megatrends such as resource scarcity, population growth, and food scarcity, as defined by the United Nations. Following an analysis on how these trends can impact their business, the company would create a plan on what must be done in order to achieve long-term prosperity.

In 2010, when Tetra Pak started working on their 2020 strategy, sustainability was included as one of the four main pillars of this strategy. Under this pillar, environmental excellence was defined with three main areas of work: Firstly, sustainable products with the minimum environmental footprint possible based more on renewables. Secondly, a 2020 target of doubling recycling from the 2010 level. Finally, focusing on capping CO2 emissions at 2010 levels with the climate program covering the whole supply chain of the company, Mrs Mink points out that “CO2 trade offs will be in the long-term a virtual currency for companies.”

On applying their goal, Mrs. Mink explains that the company uses internal targets, which are then given to specific business units in order
Up to 2020 we want to cut our CO₂ emissions to 2010 levels, double recycling from 2010, and of course we want to grow the business which is a massive task.

Mrs. Mink explains that when it comes to innovation and product development, the environment has been part of the process for a long time. Nowadays, the main focus is to get the environmental footprint minimized, carbon emissions down, and to increase the renewability of materials.

One of Tetra Pak’s most interesting initiatives is the use of bio-based plastics as the closing parts of their packaging. The company used academic research on the environmental benefits of the usage of renewables instead of fossil-based materials to base their application of the bio-based plastics.

The whole process was an internal company initiative and a result of work by the team responsible for new materials driven by the company’s commitment to the use of renewables. Some of the difficulties towards the implementation of this innovation were the availability of the materials and the lack of sustainability criteria for some of the feedstock used.

The first launch of the product was in Brazil with a successful response from customers and other users of the products. The company aims with this product to be a pioneer within the industry and lead the market of carton packaging using bio-plastics. “It is still too early to say,” Mrs. Mink concludes, “but support from customers and users has been positive.” Additionally, this initiative reinforces the strategy of the company towards resource optimization and use of renewables instead of fossil-based materials.

Bring sustainable innovation to your products

Sustainable products are a key priority to secure our company’s long-term competitiveness.

Product creation is driven by environmental impacts and one of our key strategies is use of renewable products and materials coming from responsibly-managed resources.

Tetra Pak’s goal is to remain one of the leaders in their field and their viewpoint is that this can be achieved through sustainable innovation. Their future strategy aims to secure sustainable sources of new materials so as to be able to deliver similar products to the bio-based plastics. Additionally, they wish to drive innovation of more sustainable solutions that can also be cost-competitive; since most sustainable and environmentally friendly products are more expensive, therefore making market competition difficult.

Work in partnerships

One of the main drivers behind the company’s sustainable course has been the successful partnership with civil society, contributing towards ensuring sustainability. Stakeholder partnerships with NGOs and customer groups have worked well in the bio-plastics case. The partners cooperated to ensure that internationally-agreed standards on sustainability are followed, to achieve full visibility and make sure bio-plastics come from acceptable sources.

to assess what each unit has to do to achieve these targets. This has become a part of regular business planning, which allows the company to get the necessary resources, build their capacity and train its employees.
As Mrs. Mink points out, working in partnerships with customers and suppliers is a key to successful sustainable innovation. Tetra Pak uses paper board for its carton packages and one of their main priorities is ensuring the paper comes from sources that are managed in a way that promotes biodiversity and is sustainable for local communities. In order to efficiently achieve this, they have partnered up with organisations that have expertise in these fields, such as the WWF, the Forest Stewardship Council (FSC), the High Conservation Values Resource Network, and they are also members of the Global Forest and Trade Network.

Cooperation can be mutually beneficial since Tetra Pak seeks the partners’ guidance to define ambitions and objectives while simultaneously helping the organisations achieve their social and environmental objectives. The company seeks other opportunities to directly engage civil society in cooperative projects and activities that promote and enhance certification of sustainable products. Together with their partners they undertake workshops, for example on life cycle assessment, an academic and scientific topic, which has proven very useful for its employees.

As Mrs. Mink explains, “we are in dialogue with society.” What Tetra Pak tries to do through these partnerships is “outside → in”. The direction the company follows is informed by what customers expect combined to the fact that it is a values-based company with a belief in renewable resources.

Mrs. Mink discusses the way these partnerships work most successfully. “It is very important when you engage in a partnership to have clear objectives and realistic expectations on how far the other party can go.” Tetra Pak builds concrete partnerships on very specific issues and areas, for example sustainable forestry or recycling. As they have learned by experience it is extremely important to build a common fact base, what are the anticipated actions of each partner. That way, in times when cooperation between the partners becomes difficult, there is a process in place that works for all, revealing the issues on the ground.

Partnerships grow and that is a matter of trust, which has to be built on all sides; starting small to get to know each other and then select specific partnerships in order to be able to dedicate time and effort to the work. Mrs. Mink explains that this is important when partnering with NGOs, since they are even more constrained with manpower than the industry is.
One Company’s Waste is Another Company’s Resource

Companies have been using recycled resources for years in order to cut their costs and minimize strain on the environment, as the case of Tetra Pak has shown, decreasing waste volumes on landfills, or reducing demand for raw material extraction. Other companies, however, have seen beyond the immediate potential for recycled materials and have developed a collaborative model to foster new ideas on how to grow one's business. What the Industrial Symbiosis (IS) model essentially aims at is exchanges of industry by-products, thus savings costs of waste discharge disposal and preventing waste landfills. The residual products traded between organizations include steam, dust, gases, and slurry, among others.

In their efforts to create a framework responsive to decreasing amounts and costly access to raw materials, policy-makers equate IS with a model addressing mainly the reuse and recycling of waste as a key resource for more sustainable business practice. Practitioners however, have noticed multiple opportunities within an IS model, that go beyond the profitable exchange of physical assets, water, energy, or byproducts. Through cooperation, businesses are able to accrue benefits which are greater than the sum of their individual efforts: according to practitioners, by engaging industries and other organizations into a network, synergy conditions are being created for new ways of doing business, which exceed physical boundaries i.e. geographical proximity is not required in sharing the know-how. Cross-industry knowledge transfer, continual learning, and expertise sharing within the network could lead to various forms of innovations that foster economic growth and bring about environmental benefits.

Case 2: NISP - A Circle of Resources Between Companies

ESTABLISHED: 2003
LOCATION: United Kingdom
COST SAVINGS: EUR 1.21 billion (2005-2012)
ACTIVITY: Network facilitating cross-industry learning in tackling resource costs
NETWORK: 15,000 members (95% SMEs & Micros)

LIVING ECONOMY CRITERIA: Transformative Innovation, Recycling

Getting his inspiration from a by-product synergy model implemented in the US that charged businesses to participate, Peter Laybourn, Chief Executive of International Synergies Limited came up with the idea of creating an Industrial Symbiosis (IS) pilot project at a regional level (Scotland, West Midlands, Yorkshire & Humberside) introduced in 2003, meant to address the green growth agenda by emphasizing the potential for business development. In 2005, the programme received Government investment from a landfill tax fund which enabled the launch of the first National Industrial Symbiosis Programme (NISP) in the world. This investment in the programme meant that the network was free and therefore accessible to all businesses regardless of size or sector; so there were no barriers to entry, which enabled SMEs and Micros to join the programme.

Since then, NISP has become an oft-cited example of tackling the resource efficiency and carbon reduction challenges, by facilitating thousands of synergies among members within the network that result in reducing CO2 emissions, reducing costs, hazardous waste, use of virgin resources, and industrial water usage (Figure 15). The IS model addresses mainly industry outputs, inputs, and processes.
wisdom of the crowd. Although sustainability is not explicitly featured on businesses’ agenda when opening up to a synergy, as Mr. Laybourn explains, the business case is compelling enough to join the network and fish out a business opportunity, which often translates into a measurable benefit for the environment. Perhaps for this reason, Mr. Laybourn is not concerned with the boundary between the concepts of novelty and innovation: “Innovation doesn’t have to be new innovation because some technologies are quite mature in one sector, but if you introduce them to another sector, for them it could be a piece of innovation. So it doesn’t always have to be inventing something different, you can transfer what already exists into a new situation.”

The way the network membership works is that, companies join by providing information to practitioners who create a ‘virtual business card’ in the NISP database. The information covers contact credentials and details of a company’s waste or by-products produced or any other input/output concerning business processes or technologies. Having a free point service, in the form of match-making workshops, the IS facilitators help in identifying mutually beneficial synergies between one or more members in the network: “By talking to the companies in the programme we identify some of their problems and issues and if we can know about the problem I think we’re halfway to solving it because what we can do is put the companies in contact with the right innovation partners.”

In this sense, NISP is facilitating a demand pull on innovation, one that is “demand led, responding to the actual needs, problems, issues of an industry; it’s not trying to second guess and provide solutions that industry doesn’t want.” Academic research into NISP synergies has revealed that 70% of these connections have yielded some form of innovation, mostly involving cross-sector knowledge transfer (new application of an existing technology), while 19% involved the pull of new research & development to market.

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**Figure 15.** NISP’s audited outcomes in 2012. Source: International Synergies.

The OECD has identified the NISP model as “an excellent example of systemic innovation vital for future green growth”. Sticking to the denomination of Industrial Symbiosis helped the programme differentiate from buzz words such as resource efficiency XYZ, or green XYZ, or eco XYZ, but in Mr. Laybourn’s opinion it also helped in emphasizing an essential characteristic: engagement. Through the network various organizations are connected in tackling environmental challenges, on a matchmaking basis. Other concepts and tools i.e. eco-design, and cradle-to-cradle for sustainable business are tangential to the IS model: “Industrial symbiosis is the only one that has engagement and the network at the heart of the concept and easily works across sectors and at scale”, Mr. Laybourn says.

**Problem-solving beyond the firm-level**

Innovation is essential for the continual growth and development of the business sector. In an Industrial Symbiosis model such as NISP, instead of finding solutions internally, businesses can benefit from the
Changing mindsets as business practices evolve

As Mr. Laybourn tells it, “the business case is more compelling than perhaps any other altruistic reason for being involved in the programme”. However, the quality of interactions and synergies within the network is not static; if some years back the government landfill tax increase acted as an external incentive for businesses to join NISP “over a period of time, we found that companies were coming to the workshops and contacting us, not so much responding to external drivers, but simply for seeking new business opportunities.” Sharing one company’s issues on e.g. expensive disposal of hazardous waste or another problem a business could face its first step in building a synergetic cooperation within the network; the more information that company reveals about its resources or other impediments to its growth, the higher the number of synergies it gets: “We never set out to do a full audit report, but we found that information over a period of time is voluntarily given to us by the company because they see the benefits in doing so.”

Despite the fact that larger organizations are less represented in the 15,000 member network, they do have an impact on the other SMEs or Micros when it comes to knowledge transfer but also company culture: “Through the programme, companies do meet some more enlightened companies, for example people like Ricoh and Toyota are involved in the programme and some of the small companies do learn from them and pick up some of their values.” One case Mr. Laybourn recalls is where Toyota hosted a NISP workshop and discussed the payback they got and how fast that was from implementing new LED lightning. His observation was that the peer-to-peer interaction is more compelling than consultancy or government advice when it comes to being able to persuade others to take action; an effect which International Synergies has termed as the “cascading best practice sharing effect.”

Another unintended effect, though rare within the network, is the transformation of business models. Although IS addresses mainly physical resources, by-products, and processes, one company saw the opportunity to diversify its business, with the help of a regional NISP representative. John Pointon & Sons Ltd. was classified as an animal renderer providing the service of incinerating animal carcasses resulting in high energy use and numerous wastes. Due to regulatory changes, the company had to rethink its waste disposal. Joining the NISP it entered into a trial with a leading cement manufacturer to test whether the waste of the first company could serve as fuel source for the latter. What they discovered was that, not only did the business’ by-products (meat and bone meal, previously discarded as ash on the landfill) met the demand for fuel but they could also provide raw material replacement due to its calcium components. As Laybourn concludes: “the company changed its business model from an animal renderer into a clean tech energy company being involved in bio-diesel production and anaerobic digestion and now supplies energy to the national grid.”

As radical as the case above might look, it cannot come as a complete surprise; due to the long-term engagement encouraged at NISP, businesses are being exposed to various tools of process assessment i.e. product life-cycle, and to best practice sharing. This situation could, in time, lead to changes in the business culture i.e. increase process efficiency, being more open to out-of-the-box thinking when searching for solutions.

Challenges

However, crunching the numbers to highlight the financial and environmental benefits brought by NISP so far has not shielded the network from challenges pertaining to its future resilience. One of them is policy support, which is much needed when engaging the SMEs and micro-size businesses, representing approximately 95% of the members. As Mr Laybourn points out “keeping the high level of support is crucial, politics can change overnight! I don’t see a pure commercial model delivering anything like the benefits of something having the support of the government or other institution.”
Having created a market for industrial symbiosis, International Synergies is now competing with others for government and institutional investment; additionally, the company is facing difficulties in retaining its highly-skilled workforce as budgets oscillate from one year to another. Based on these, the company is considering alternatives for NISP, as Chief Executive Laybourn admits: “We are right in the middle of the transition to a commercial NISP model and what we see initially is a drop-off in membership. The nature of a commercial model is that we’ll perhaps end up having to chase a fewer number of clients who have the resources to pay for a service and we will not deliver the enormous public benefits as the programme has done in the past which will be a great shame.”

“ I think there is a tendency when it comes to sustainable innovation to try to define it as a silver bullet – it has to be absolutely transformational – and my view is that we ought to do what we can today and not try to design perfect solutions which might never be implemented. That is why I like Industrial Symbiosis because it has a demand pull on innovation and it solves the problems of today.

Prevention of Waste and Energy Efficiency

Businesses have a large impact on the environmental conditions of the areas they operate in. Therefore, using sustainable environmental innovations in order to minimize negative environmental impacts can have a significant effect on the wellbeing of their surroundings, on pollution prevention, and on energy efficiency. An old saying says “money saved is money earned”, and making the most of what one has can lead to even more benefits than drawing-in recycled resources. Savings stemming from optimizing use of resources such as heating, energy, and water (cutting costs) pinpoint the competitive advantage to be gained by forward-looking managers.

When companies account economically for resources, use, and disposal, the money they pay doesn’t reflect the actual price. If the price of cleaning up the polluted waters of India and China destroyed by the textile industry were counted in the price of the disposal, the business case of the present scenario would not be as attractive as it is today. Some companies are already trying to take the environmental and social cost into account by using the Triple Bottom Line (TBL) framework, as explained in the beginning of this chapter. This framework consists of three bottom lines – a social, an environmental, and an economical bottom line. Each bottom line is measured by a set of indicators.

The TBL framework is helpful in weighing the benefit/cost ratio; in the long run, the ratio impact on company’s bottom line is directly proportional to the positive impact on natural capital. What the TBL approach essentially points at is the need to measure the true cost of doing business: not only in monetary terms but also in terms of loss of natural resources and degradation of human living conditions – which are termed in economics as externalities. Externalities are usually associated with costs incurred to the broader society that result from business activities e.g. a manufacturing plant causing air pollution, which could be a health hazard for the communities surrounding it, and lead to health costs among the affected population.
TBL accounting has been embraced by many forward-thinking corporations as a check and balance method in running their operations i.e. assessing the ethical codes of their suppliers, performing internal audits, looking at ways to increase efficiency of non-renewable resources. Ambitious as it is though, TBL is difficult to realise due to the complexities involved in measuring the financial value of natural resources – as John Elkington, father to the concept of TBL, explains: "If you try to account for the natural capital embodied in a forest, for example, it is not simply a question of counting the trees and trying to put a price-tag on the lumber they represent (...) Wider forest functions that need to be added in the equation include contributions to the regulation of water (in the atmosphere, water table, soils, and surface waters) and of greenhouse gases like carbon dioxide and methane".8

Following a similar rationale, it is equally difficult to measure the impact on social communities in monetary terms i.e. toxic work environment, lack of basic human conditions, lack of health and safety regulations in place etc. Hence, we need to move beyond the present way of measuring progress. As stated, some companies are already trying to account for their environmental and social profits and losses. Puma SE stands as an excellent example of a company that is trying to embed TBL thinking into their business operations and strategies.

Case 3: Accounting Environmental Profit and Loss at Puma SE

Puma SE, part of the PUMA Group, along with Cobra Golf, and Tetron. Its sustainability platform is promoted at an organizational level as a three-pillar programme: Puma.Safe working on promoting environmental protection and on employee safety, Puma.Peace advocating the global Day of Ceasefire and Puma.Creative, aiming at bringing together artists and different organisations for a mutual creative exchange and offering them an international platform. Puma's initiatives on sustainability have ranged from committing to CO2 emissions, water, waste, and energy mitigation by 25% by 2015, to a Cradle-to-Cradle collection entitled InCycle, where basket shoes and T-shirt collections launched toward the end of 2012 are bio-degradable, meaning they are able to disintegrate without leaving any waste behind over a period of six months.

Its most notable initiative, however, has been the Environment Profit & Loss Account (EP&L), launched in 2011. The person behind this initiative is Mr. Jochen Zeitz, former CEO and Chairman at Puma SE, and current Director of Kering and Chairman of the board’s sustainable development committee: the idea of conceiving and developing the EP&L was inspired around the natural capital conceptualization, put forward by The Economics of Ecosystems and Biodiversity (TEEB) report.9 The principle at the base of natural capital applies an economic methodology when it comes to biodiversity and ecosystem services, in order to
address the critical issue of maintaining prosperity and alleviating poverty while being dependant on non-renewable resources.

As Dr. Reiner Hengstmann, Global Director for Puma. Safe, explains, valuating ecosystem services is not a new idea; Puma’s innovation was to combine supply chain use of ecosystem services with environmental economic valuations, also known from the TBL framework. The goal of EP&L is to measure the real costs incurred by business activities, costs that are inflicted upon natural resources e.g. fresh water, clean air, biodiversity, and rich soils.

The following steps are meant to promote an understanding of potential benefits arising from implementing an assessment methodology at product level, taking the example of the first ever tool created to measure businesses’ economic impact on natural indices.

Make sustainability part of your DNA

According to Reiner Hengstmann, building a strong sustainability strategy needs to be embedded at the level of values a business organization upholds: “Sustainability for Puma is core business; it is part of Puma’s DNA, I would say an essential part, in terms of decisions which have been made. Whenever we make a decision we have to think of the three pillar-approach and sustainability is part of them.”

The EP&L was designed in cooperation with the Kering sustainability department and the Environmental Economics specialists at Pricewaterhouse Coopers, and Trucost. The methodology has been assessed against the relevant academic literature, and has focused on five main areas: energy, water, waste, air pollution, and land use. The first challenge Puma faced was creating the methodology from scratch because “there was no standard to build upon [...] Puma took the conservative approach wherever appropriate.”

The way the EP&L works is to multiply the environmental impact of Puma’s operations, supply chain included, with an environmental eco-efficient i.e. the water consumption in China multiplied by a local environmental co-efficient; that way, Puma seeks to materialize a USD value by which externalities; the sum of social and environmental impact of business activities, thus become internalized or integrated within business strategy.

Puma went further with its initiative by conducting a product level EP&L in 2012 within its cradle-to-cradle certified collection i.e. the InCycle basket shoe and the biodegradable cotton shirt. The goal is to better understand the impact of individual products but also to help customers assess one environmentally-friendly product from another, by attaching a value of Euros and Cents. This aims to raise customer awareness by offering them a standard to work with in comparing sustainable products on the market; the idea is to emulate the long standing business practices of product information disclosure, such as a table on a cereal box revealing nutritional information which leads to an impact on customer behaviour.

The analysis revealed substantial improvement in terms of lowering environmental impacts: taking the case of Puma’s InCycle basket compared to Puma’s Suede, the price of CO₂ emissions through manufacturing, usage, and disposal decreased by 35%; water consumption costs decreased by 21%, waste cost was reduced by a third, while air pollution and land use costs were diminished by 14% and 20% respectively.
Raise awareness both inside and outside your company

Although they have not yet communicated tangible benefits for the company, Puma is taking initiatives towards engaging its employees to understand the scale of impact Puma is having on the environment, and to trigger a reflexive evaluation on each employee in order to effectively embed sustainability at a core level, where all employees are embracing the principles for sustainable prosperity. This poses difficulties due to the complexity of the project i.e. scale of operations, and due to the innovation level required. Making the change will take time; progressing towards a different way of doing things starts, as Dr. Hengstmann proposes, with “communication at an elementary level, introducing the subject of accounting for ecosystem services and internalizing these impacts.”

The difficulty in doing effective change management within a large corporation such as Puma is obvious but it is also necessary; aligning the company’s strategies for sustainability with employees’ commitment to these strategies is paramount. Puma’s management is constantly taking action to achieve a level of convergence between the EP&L’s mission and business practices; one initiative was to undertake an additional “Internalizing the EP&L” project as a way to identify further hot spots for improvement.

The management seeks to engage its employees in shifting to a different mindset by conducting training sessions for the personnel; additionally, the EP&L strategy is communicated at CEO level for all of Puma’s staff during internal events such as “Town Hall Meetings”.

However, engaging employees is not sufficient to change the way businesses run their activities. In order to scale this change at an industry level, other businesses would need to adopt this method as well: “if Puma decided to continue with this initiative, the impact within industry is probably minor, the thing is that this analysis has to be implemented by the entire industry. If you really want to have an impact it has to be an industry-wide action.”

In a similar manner, suppliers need to jump on the same boat, as Dr. Hengstmann points out: “The biggest issue is that businesses need to understand what does it mean to be more sustainable, especially suppliers, therefore we are looking into intensifying capacity building [...] and providing them with technical assistance programmes. But this is a long road we have to take.”

Challenges

The EP&L is a scalable solution other industries can work with in measuring their impact on natural resources. Puma’s parent company, Kering, has already been taking steps in developing and customizing the EP&L methodology during the roll-out of the EP&L across Kering’s Luxury and Sport & Lifestyle brands, and by bringing together a group of third-party environmental experts to assess the methodology developed by Puma in 2011.

The panel agreed that EP&L is an appropriate tool to support business strategy, act as a risk management and communication tool, but also emphasized further areas to work on in order to effectively scale up the solution. Water pollution was recommended as an area to be included in EP&L’s parameters, and local variables were discussed as a means to fully grasp the impact at the local level of both the business and suppliers’ impact.
Another method of doing away with business externalities is to reconsider the value of existing resources and re-distribute these more efficiently according to needs. As the internet start-up Floow2 demonstrates, entrepreneurs have much to gain from rethinking the next business models in terms of their value proposition in the context of abundant, underutilized resources.

The Sharing Economy or Collaborative Consumption model posits that, by leasing instead of selling, businesses can mitigate the cost challenges posed by raw material procurement and thus reduce costs significantly by collecting and recovering used products: “Simply put, sharing-economy companies’ business model is based on providing access to goods and services rather than their outright ownership, often through peer-to-peer networks. In a nutshell, these companies decouple consumption from economic growth. Much of what is being offered in the sharing economy is available for a price, though some of it is free”.

The underlying principle of the sharing economy model is that leasing resources is more, or at least equally, advantageous than ownership from the point of view of the cost-benefit ratio. Additionally, it also eases the strain on resources by preventing virgin material extraction in new manufacturing cycles and low-season unemployment. The innovation within the Sharing Economy rationale resides in the opportunity to re-think a business’ value chain design by cutting costs and maximizing resource efficiency.
Case 4: Transitioning from Ownership to Sharing at Floow2

Floow2 was created in 2012 by a team of entrepreneurs who joined forces in an effort to create a new business model meant to promote “a more efficient use of the existing overcapacity by sharing it with other companies.” Founder and entrepreneur, Mr. Will Robben got the idea of a collaborative business model in 2009, when he was working in the construction sector.

Figure 16. Floow2 Model of Collaborative Consumption in the B2B market.

He noticed that due to overcapacity, construction equipment turned into a redundant asset. Two years later, his new business model started to be implemented, and the online market place, the Floow2 website, was launched. With a background in marketing and sales, Mr. Robben teamed up with Mr. Kim Tjoa, a specialist in legal affairs, and with Mr. Rob Haenen, who possessed a financial background, as managers and Board members of Floow2. The management team attracted seed capital into their start-up company and set up a horizontally-structured international organization made up of independent and qualified professionals. Their value proposition was a business-to-business online platform, where companies in the heavy equipment market would share the overcapacity of business resources i.e. tools and personnel that are underutilized half of the time, as a commodity in a virtual market place. As Marketing and Communication Officer Laury Zwarts explains: “In the construction, health care, transport, knowledge & skills, logistics, and services industries, much production capacity is unutilized, but we don’t see it. FLOOW2 makes this hidden abundance transparent and thus tradeable.” Companies are given the option of renting out their equipment or services on a limited period, e.g. waste handling containers and electro cables in the construction industry or towing, recycling, or animal trucks in the agricultural sector.

By the end of 2012, Mr. Robben decided to exit the start-up in order to focus on new business model generation. At present, Floow2 is managed by Mr. Tjoa and Mr. Haenen who decide the direction of the business, while strategic decisions are made through collaboration with team members. The flat-type business culture allows members to apply their own methods in their line of work as long as it benefits the company. Floow2’s organizational structure seems to follow along the lines of...
Its revenue comes from advertisement fees of one euro per day and subscriptions for those seeking to rent out their equipment or personnel.

The niche Floow2 seems to be focusing on is the lack of transparency when it comes to existing equipment and trained personnel who have not been deployed to their full capacity. The goal is to highlight the potential for matchmaking when it comes to demand and supply. One way of capitalizing on existing resources is to share them in exchange for a fee, which could contribute to raising revenues without investing more effort than shipping the equipment in due time and under the conditions agreed with the company renting the resource.

Existing abundance makes overproduction obsolete

The model of value chain sourcing proposed by Floow2 prevents overproduction of equipment on the market as it taps into the existing abundance of underutilized resources. This is particularly relevant in the circular economy debate, as resource and energy savings are deemed to be crucial in moving forward to a prosperous economy. Likewise, fueling demand on the market for human resources is paramount for developing a sustainable economy, in line with the principles of circular model.

By trading on the platform supplied by Floow2, start-ups have the advantage of accessing resources at a rental price, which is a cheaper alternative to investing capital in new equipment, thus mitigating the usual costs i.e. insurance, maintenance etc.

Challenges

Despite its tantalizing proposition, Floow2 is faced with the challenge of being dependent on companies’ ability to deliver on time and under the conditions agreed in the contract. Special attention is given to the SME sector which “needs some level of assurance that the equipment they need will be available when they need it and this can only occur when
Energoprojekt Oprema a.d. was created in 1989 and is one of the ten joint stock companies within the Energoprojekt system. Its activities include engineering, contracting, and realization of projects in Serbia and abroad, in the field of power engineering, HVAC, electrical installations, industry facilities, ecology and general-purpose facilities.

As the quality department manager of the company, Mr. Branislav Sladic explains, the predominant trend within the company is the adaptation of environmental and sustainable practices to the construction of the projects it is engaged in. Energoprojekt is trying to push forward new initiatives and invest in the development of skilled staff that care about the environment and society.

One of the main focuses of the company is constructing facilities that will be environmentally friendly during their usage, with less harmful emissions and lower energy consumption – higher energy efficiency. Such examples are the constructions of the new boiler plants in the health centres of the two larger cities of Serbia: Belgrade (2009) and Niš (2012). These constructions, financed through the World Bank, the Serbian Energy Efficiency Project for the Ministry of Health, and the respective
Clinical Centres, replaced older units with new, more energy efficient, and environmental friendly ones.

These constructions helped revive the urban environment at those locations, reduced pollution, and were designed in such a way as to be more friendly to staff and patients, improving social conditions. Presently, these health centres operate with higher energy efficiency, partly on electrical energy as a heat recovery-cogeneration plant was included. Additionally, these two projects have been significant both in terms of the financial operations of the company and in terms of understanding and acquiring practical knowledge on modern, environmentally friendly technologies in the field of energy supply.

These projects were realised hand-in-hand with the shift of the company’s focus to more environmentally friendly practices and were designed by an interdisciplinary working team with the aim of the environmental and social revival of the areas they were built in.

Creating change by rethinking your goals

As a rather large company and an important employer within a small country, Energoprojekt Oprema a.d. has a strong impact on the environmental conditions of the regions it operates in, as well as in the mentality of society. Therefore, its recent commitment to creating new sustainable projects has had a large impact. This commitment came after the evaluation of the importance of encompassing other kinds of profit, such as environmental and social, in the decision-making process. As Mr. Sladic points out, this transition is regarded by the company as a big challenge towards its future success.

Energoprojekt Oprema a.d. has, for decades, realized various projects in the field of energy, creating knowledge and experience in that area as well as an associated culture within the company. One of the main goals for the future success of the company’s projects is to enhance those qualities with new environmental innovation practices.

Sladic explains that the investors’ mentality has shifted, since they are presently taking into account sustainability as a precondition for successful implementation of an investment project. Therefore the company is trying to meet their demands by also planning to include more renewable energy technologies in their facilities (solar, wind, geothermal, water, etc.).

Be a frontrunner in your region

In Serbia environmental practices, such as sorting and disposal of waste for recycling, have recently become important. Energoprojekt Oprema a.d. is trying to place itself in the middle of these changes taking place within the country by minimizing its environmental impacts through construction periods, recycling, and building environmentally friendly facilities with fewer harmful emissions and greater energy efficiency.

The two boiler plant projects have been unique for such clients in the region, because there had previously been no investments in such facilities. Until now, Mr. Sladic explains, the health centres covered their

Knowledge, experience and evolving corporate culture constitute a good foundation in order to build facilities that will meet demands of sustainability.
European companies were applied in them. In the near future the company is expected to move towards cleaner energy, as they are preparing for the realization of several mini hydro-power plants, and participation in projects to build wind and solar power plants. Such projects would be innovative and could make a significant contribution to energy sustainability in Serbia. Also, other Serbian construction companies are increasingly directing their activities towards more environmentally friendly projects as the wider community recognizes the enormous benefits of such initiatives.

The company’s mentality of being a frontrunner in Serbia within the prevention of environmental impacts has contributed to its long success from the large municipal wastewater treatment plants in Kragujevacin in 1991, to the BREEAM certified project - “green” business building Block 26 in Belgrade, with the continuous improvement of their construction practices.

Mr. Sladic has been in charge of many similar projects as the ones described here. He is a firm believer in environmental sustainability, constantly educating himself. In his free time he is developing a project for environmental education with the vision of implementing it within Serbia. But one of his repeated comments is that the outcome of all these projects was based on teamwork and cooperation.

One of the problems faced throughout the construction of the boiler plants, were attempts to reduce the project costs at the expense of

"Construction work can be successful only if sustainability is understood as a primary goal of all that you work on, of all that you build. This is the only way you can create a real added value and improve quality of life for society as a whole."

energy needs from one large and several small boiler plants, several decades old, which were placed within the clinical centre perimeter and operated with coal and fuel oil. As a result, environmental degradation, energy inefficiency and operational reliability were important problems. Additionally, the operating costs of the facilities were quite high.

With the new facilities some of these problems were eliminated and others reduced to a more acceptable level. Patients and residents can breathe much cleaner air, noise and dust have been significantly reduced, and the entire area has a different quality of life and appearance. Hygienic conditions have been improved, and sufficient quantities of heat, process steam, and electrical energy for patients and their treatment are constantly, reliably available.

As these impacts become visible, the boiler plants built in Belgrade and Niš are seen as an innovative examples, and other health centres are about to start such projects. Enegroprojekt Oprema a.d. has obtained good references on the construction of such facilities and hopes that they will be able to contract the future works in the other health centres.

Mr Sladic stresses that these boiler plants may not be considered innovative in Western Europe, but in this region they certainly represent something new, since the latest technological solutions of well-known

"I believe that such facilities can be a roadmap for society in which direction to go in the construction of power plants in the region."

Environmental sustainability is starting to become integrated into the company’s mainstream business activities and development and is permeating the mentality of the company, altering the way of thinking of its employees.

Mr. Sladic has been in charge of many similar projects as the ones described here. He is a firm believer in environmental sustainability, constantly educating himself. In his free time he is developing a project for environmental education with the vision of implementing it within Serbia. But one of his repeated comments is that the outcome of all these projects was based on teamwork and cooperation.

One of the problems faced throughout the construction of the boiler plants, were attempts to reduce the project costs at the expense of
environmental sustainability and energy efficiency. A large team of engineers and economists worked on the projects and it is due to their dedication that the environmental goals were not jeopardised in order to minimize costs. The team was fully responsible for constructing the facilities with regards to the environmental, economic, and social issues of the areas. The vision was clear and the team’s engineers were responsible for selecting the technical solutions that were important for facilitating sustainability.

For Mr. Sladic, it is important for the whole team to operate on the same values. It is his view that in order for a company to progress profitably, its employees must be constantly educated about new technologies and innovative ways of thinking. The procedure towards the realization of the projects for the healthcare facilities has contributed significantly to developing new knowledge and technology and encouraging the training of the company’s staff in green building.

"I would like to emphasize that it was teamwork encouraged by the company-overall policy of sustainability implementation ... and I feel proud because we have made a significant contribution to improving the quality of life of a vulnerable population such as patients, as well as improving the wider urban environment."
The way front-running companies are doing business is changing and will change even more. They are producing new types of products, with new types of processes. They are measuring value differently and the involvement of collaborative partners is increasing. One of the ways change takes place is when visionary CEOs are committed to sustainable innovation, then the company’s employee mentality can move from a mainstream industrial culture to a more sustainable one.

A leading business model that could potentially transform one’s business is the cradle-to-cradle model, which enables end-products to be decomposed and reused, in a similar manner to the precepts of the circular economy model. Based on the idea that mere recycling can only slow down the irreversible degradation of natural resources and eco-system health, authors Michael Braungart and William McDonough propose that radical innovations be used to redesign products and processes: “If humans are truly going to prosper, we will have to learn to imitate nature’s highly effective cradle-to-cradle system of nutrient flow and metabolism, in which the very concept of waste does not exist.”

This model could significantly increase the product life-cycle while cutting costs in waste management and complying with green standardization. The Cradle-to-Cradle (C2C) philosophy states that waste is food. Therefore, instead of the take-make-dispose, business-as-usual or cradle-to-grave model – where materials are harvested, shaped into products, and discarded after being used – the C2C model proposes that society engages in economic activities mimicking natural processes, where every material, process or emission serves as fuel in a larger ecosystem. Likewise, components in a product need to have a positive impact for both people and the environment.

This means that the concept of waste is eliminated through smart design, where instead of improving an existing product, we look at the very blueprint of its production cycle and take out all toxic elements that could impair the reclaiming of components. Similar to the circular
A noteworthy example of C2C is Dutch company Van Houtum’s Satino Black washroom assortment, where all components are toxic-free and the plastic used in the soap dispensers is reusable due to the innovations in product design. Both products and services are C2C certified, meaning they are safe for the environment and for the users. Starting small with one product within their collection, Van Houtum has embarked on a transformational journey, aiming to convert the whole company to a C2C model.

Van Houtum is a family-run business, whose core activity is toilet paper manufacturing. In addition, the company offers a range of other washroom products, such as soap, toilet seat cleaners, and washroom dispensers. Their production is aimed exclusively at the business-to-business market, using wholesalers as distributors.

In cooperation with their suppliers and under the guidance of EPEA Germany, Van Houtum created the product line Satino Black – a Silver Cradle-to-Cradle certified product line. The toilet paper is made out of 100% recycled fibre, all additives are non-toxic and/or bio-degradable, and biogas is used as energy source in the production. The assortment also includes soap dispensers made out of recycled plastic (former dispensers). Both the liquid and foam soap are cradle-to-cradle certified, in cooperation with their suppliers.

The management seeks to scale the processes and operations used for the Satino Black assortment to cover the entire business at its plant facilities in Swalmen.

CEO Bas Gehlen explains the company’s development strategy: “We are working on our footprint, we are working on creating products that..."
are 100% safe, 100% responsibly produced. Satino Black is just a start, we’re trying to make it bigger and bigger and more beautiful. Looking at energy, looking at water, looking at the raw material in it, to make a lot more progressions”.

The company is not yet ready to assess the financial returns of the Satino Black assortment; as he explains it, their C2C collection is a long-term investment. To reach the point where they are now, they had to invest approximately 80% of their innovation efforts into the Satino Black product development. Bas Gehlen is aware of the costs incurred in the present, but Van Houtum’s perspective on the products’ potential is what keeps the project going: “[i]t may seem more costly now, but in the future it will be very cost effective, because waste and energy cost money. So if you can turn that around into a positive agenda, and you don’t talk about waste but you talk about renewable energy and reduction of CO₂ emissions etc., you can also talk about cost benefits”.

The following steps are meant to condense some of the lessons Van Houtum has gained over the years by working to re-design its way of doing business according to the C2C model, and the company’s approach to re-positioning itself in the market.

Challenge your company’s values

When the Chamber of Commerce launched a call for projects on C2C in 2007, Van Houtum’s CEO Mr. Henk van Houtum and Mr. Gehlen, then COO, saw both an opportunity to improve their manufacturing processes and a necessity to comply with ever growing customer demand for sustainable products. According to CEO Bas Gehlen, the C2C model employed in designing and manufacturing the Satino Black assortment has been perceived by the management as a natural fit with the already existent company’s culture: “Our founders didn’t talk about sustainability at that time [1935], but they had respect for people, they had respect for the village they were working in, and this is a basic value around sustainability”.

In line with the C2C philosophy, the management team decided to re-construct the company’s vision on corporate responsibility and to assert its growth strategy and ambitions by taking steps to transform Van Houtum into a sustainable supplier:

“We want to have a positive contribution to all our stakeholders, so sustainability for us is not reducing negative impact but working towards a positive impact [...] Sustainability is about the whole way of doing business: hiring employees, educating and training them, it is about investments, about product innovations, everything”.

Since paper is a disputed raw material in the sustainability debate, the management realised that innovation based on C2C principles could potentially change the way they do business. Having the senior management’s support, they started out by setting up the project team in charge of running a C2C trial at Van Houtum, which was formed by a technology specialist, a chemist, a buyer, and the Chief Operating Officer at the time, Bas Gehlen. The next step was to involve their suppliers: in doing so, Van Houtum discussed with them what would be the mutual benefits out of implementing a radical change to business processes and operations.

Think differently about your stakeholders

Emphasizing the business case for all parties involved, mainly creating products that were new for both Van Houtum and their suppliers, the management succeeded in getting people on board with their project. They addressed it step by step, looking first at the core of their business – toilet paper, later on looking at ways to create recycled soap dispensers and non-toxic soap products, together with their suppliers: “We involved all our suppliers to discuss the concept of cradle-to-cradle, why we want it and why we think cradle-to-cradle is a good business opportunity; then we asked them “why do you think it’s useful for you?” So we did this with every supplier. And then we asked them to cooperate with us on creating
Converting the whole company to a C2C model is a long-term goal at Van Houtum, but steps are being taken in that direction already. In 2012, the company invested in improving the manufacturing capacity to scale up production of C2C-certified toilet paper. The decision to change Van Houtum’s business model was taken at a managerial level, but the leaders made sure all of their 200 employees understood the principles of cradle-to-cradle manufacturing. Discussions were run in small groups to get everyone’s attention and opinion on the matter. Additionally, as part of their Christmas gift, employees were offered DVDs containing a documentary film on cradle-to-cradle, accompanied by a questionnaire, which needed to be filled in to register for a prize. The goal was to motivate their employees to reflect on the meaning of the C2C model.

The positive attention they received after launching their C2C certified products on the market created a sense of pride within the organization, which reinforced people’s motivation to further embed the sustainable model at their core business, so much so that the management committed to further investments in scaling up the production of C2C products.

Avoid “green” communication

Van Houtum created a whole commercial concept around C2C. Rather than communicating about their C2C products as an add-on to their customers’ business, they chose to talk about values.

Three years into developing their product, the management team realised that sharing in the cradle-to-cradle story was only one part of their product’s story: making a breakthrough on the tissue market with Satino Nature, a green, C2C certified product, became the next challenge. How to stand out from the crowd of green products? As Mr. Gehlen tells it, Van Houtum “noticed that people would say it is interesting but that was it. It didn’t make a difference in the market place”.

The nice thing about the cradle-to-cradle concept is that you only need to explain what it is and then you don’t need to explain why it is necessary; if you understand the message you get inspired.

Function and quality are implicit, but telling the story has required more efforts than perhaps the company envisioned, i.e. in their interaction with their wholesale distributors. In order to improve the visibility of Satino Black, Van Houtum not only built a commercial concept around its product line, but it also took the initiative to organize an annual event meant to train distributors’ sales staff to market sustainable products.

a cradle-to-cradle product, and this process led to everyone accepting it”.

In addition to engaging suppliers in the innovation processes, Van Houtum turned to his customers as well in order to promote the product. Addressing sustainability at its core business – paper tissue manufacturing – meant finding a supply of materials that was not harmful to the environment, and not costly for Van Houtum’s economic model. The management team also anticipated a future threat: the need to import recycled paper from the USA or other European states meant a significant increase in its CO₂ footprint, not to mention the transportation costs incurred. Instead, they chose to develop a local-for-local model, closed-loop system to retain recovered paper in their region, by convincing their customers to have their paper collection company deliver their recycled paper (i.e. shredded paper from the archives) to Van Houtum, which in turn would manufacture their Satino Black toilet paper: “We try to approach new sources of recycled paper and make closed-loop deals by asking them ‘Hey, may we use your recycled paper to make your toilet paper?’”

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In addition to furnishing completely the office washrooms of their end-customers, the company has designed a black tile which can be used to highlight customers’ contribution to minimizing their CO2 footprint i.e. percentage of water usage, electricity saved by choosing a sustainable hygienic supplier. The information provided on the tile is tailored to each individual office, following an assessment tool developed by Van Houtum and audited by Lloyds.

Choosing to create a whole marketing campaign around its Satino Black C2C product was a strategic move. Their goal was twofold: first, raise their customers’ interest on the unusual choice of colour and of pictures with punk hair-styles or tough-looking boxers, all under the marketing tag of “Dare to be Black”, and second, to introduce a whole assortment for washrooms, from toilet paper and hand towels to soap, foam, and black soap dispensers – an entirely sustainable line of products designed to stand out from the crowd.

As Mr. Gehlen explains, good communication on sustainable products is crucial in commercializing it: “It’s not only sustainability, it’s also design. Sustainability should not be something about less quality, it must be about top quality.”

We think marketing is also very important, not just saying you’re green, you must tell your story, you must explain to your stakeholders what you’re doing and why. [...] It’s about learning how to say the story, how to bring it out.

Challenges

Van Houtum’s story is not challenge-free: finding enough raw material and enough bio-gas fuel to increase the Satino Black product line is now on its priority list; coming up with viable, cost-effective solutions is Van Houtum’s next strategy in scaling up the C2C process, by looking at its innovation processes. In relation to their paper supply, the company is testing a few options, still in pipeline phase, to escape its dependency on recycled paper, which poses significant challenges as most sources of recycled paper are found in the USA, China, and the Middle East. One of the options is using new sources for fresh fibres, an innovation Van Houtum is currently looking into. Regarding the renewable fuel supply, another option would be to rethink ways to use their own materials as fuel in the future.

Despite the overwhelming amount of free publicity they got due to their sustainability efforts, distribution through wholesalers is key to selling their products. Van Houtum takes it as part of their job to teach their distributors how to present the Satino Black to their end customers, and continuously look at ways to do things differently in order meet customer demand for more sustainable products.
**Undergoing a Cultural Shift**

The cradle-to-cradle process design is built on the premise of undergoing a mind-shift regarding our economic models, and for those that show an enhanced commitment to its philosophy it could even lead to laying the foundation to re-build one’s business organization entirely.

The triple bottom line (TBL) perspective can contribute as well to changing mind-sets in the boardroom; truly committing to the TBL precepts can broaden the managerial perspective. As the next case study shows, triple bottom line needs to be assessed systemically; sustainability is not a matter of one man’s journey, achieving tangible results can be dependent on collaborations with other actors that can impact or are being impacted by business activities. The Act NOW network provides the example businesses can follow in building up alliances towards a common, successful, and sustainable future.

**Case 7: Harnessing the power of collaboration in the Act NOW network**

- **ESTABLISHED:** 2011 as Grundfos’ pilot project, 2013 founded in Brussels
- **LOCATION:** Scandinavia, with plans to expand in Europe
- **ACTIVITY:** Business-led network creating awareness around existing solutions for energy efficiency technologies
- **NETWORK:** Businesses, NGOs, and municipalities
- **LIVING ECONOMY CRITERIA:** Radical Innovation, CEO Commitment

The Act NOW network was created at the initiative of Grundfos A/S – a global manufacturer of circulator pumps – with the goal of inspiring action among business decision-makers in tackling energy efficiency challenges. With a turnover exceeding EUR 3 billion and with approximately 18,000 employees around the world, Grundfos realized that the way to maintain its position in the market was dependent on its ability to provide its customers with energy efficient solutions that would contribute to cutting costs and emissions. With this goal in mind, Grundfos set about creating the initiative “Meet the energy challenge-NOW” meant to emphasize the need to address energy efficiency in the market for pumps by collaborating with stakeholders i.e. policy-makers at the European level.

According to Grundfos’ calculations, 10% of the world’s total energy consumption goes into pumps; developing efficient technologies would significantly reduce the global energy consumption while cutting costs and decreasing CO2 emissions. In doing so, Grundfos started looking at its core business – production of pumps for heating, air-conditioning, water supply, sewage etc. – and the waste incurred in terms of resource usage.

The Act NOW network was launched in 2011 as a pilot project at the recommendation of Grundfos’ Corporate Affairs Director, Energy and
Climate, Mrs. Lisbet Bræmer-Jensen. The seeds of this network, however, had been long groomed by Grundfos’ President and CEO Mr. Carsten Bjerg, who had started to integrate sustainability issues into company strategy back in 2008. One direction was to strengthen stakeholder participation and target new groups, enabling Grundfos to economize on its know-how in new technology design. One question followed naturally: how to do it? The top management soon realized it wasn’t enough for one company to act on its own; therefore they went out and tested the potential for building up support around this strategy by forging cooperation with various stakeholders.

As Mrs. Bræmer-Jensen, now Founder and CEO of Act NOW explains, “the idea was to attract like-minded partners to the platform and provide a forum for sharing knowledge, demonstrate best practice cases and advocate the urgency of doing something now using present day technologies and solutions.”

“We cannot do it alone, we need to see the growth of other business components than we know today, we need to develop some new strategies and maybe we should sell our knowledge.”

The Act NOW network became an independent, non-profit partnership in January 2013, with official founding in Brussels, supporting the EU Commissioner for Climate Action’s initiative “A world we like, with a climate we like” by co-hosting events in five European markets the EU official has targeted to disseminate information on energy-efficient, eco-friendly technologies. The network currently comprises eight members in Northern Europe, ranging from businesses, to non-governmental organizations and municipalities with an interest in energy efficiency i.e. buildings, production plants, supply systems etc., and plans to expand to 25 more partnerships in Europe by 2014. The partners are required to fund the network and to come up with business case illustrations as part of the network’s efforts in spreading the word on available green energy solutions. In exchange, partners are provided with access to potential customers and to policy decision-makers. Additionally, the network acts as a marketing tool for individual members, who get to be exposed on a sustainable platform, which also acts as the communication tool between members.

Build support around your strategies

Changing industry and shaping market opportunities is a difficult thing to do, and large companies do not escape this challenge, despite their advantage of scale. What Grundfos foresaw was the potential for aligning different stakeholder agendas in creating a critical mass to support its growth strategies. Mrs. Bræmer-Jensen poses the argument that businesses are best-equipped to address the sustainability agenda due to their capacity to design the necessary technologies and implement the appropriate practices required by politicians and sustainability-conscious customers.

Indeed, the barrier sits within the lack of consensus on how to implement these practices: no company is an island in the man-made eco-system. The effects of the anthropogenic global warming are off the scale of one’s potential to solve these challenges, be it a multinational or a political leader. Mrs. Bræmer-Jensen views her role as a facilitator in shaping the discourse towards genuine action: “politicians can set up all the good frameworks but we need you and I to implement them. But what should I implement, what is the right solution? And that’s why I see Act NOW as a pathfinder in a jungle where we would like to highlight all the good, scalable solutions.”

As she admits, Mrs. Bræmer-Jensen employs a systemic approach to tackling business opportunities against a sustainability agenda: “the responsibility is no longer on the shoulders of the businesses, but also on...
The shoulders of the whole of society. We need to see a paradigm shift, where everybody feels this kind of responsibility! The new paradigm advocated by the Act NOW network addresses the imperative to move from command-and-control systems to a model allowing cross-sector partnerships i.e. collaborating with the traditional “stick-and-carrot” actors such as policy-makers and NGOs, in developing appropriate solutions to society’s environmental problems.

Authentic or not, strategies built around sustainability need to deliver shareholder value at the end of the day, and the business case for sustainability is paramount in gaining industry support. The energy sector is key to start building the argument towards a better world, through better solutions, because the fruits are quick to ripen (as shown in the previous chapter) and bottom line benefits i.e. cutting costs, are often accompanied by lower footprints and positive morale among stakeholders, such as employees, customers, and political leaders.

The good thing with energy is that it has a huge impact for society and for the world – right now. If you are waiting for the ultimate solution, the ultimate is here […] All the technology is invented – we don’t have to wait until 2020 or 2030 because the solutions are already available, so start implementing them!

The triple bottom line model (TBL) is useful in getting a perspective on the consumer and political expectations triggered by the business sector; it builds up the mindset needed to approach business strategy for growth and expansion in a world constrained by economic growth alongside diminished natural capital: “We need to look into a business case where sustainability is integrated very much [into company’s strategies] because resources are scarce. Action is necessary now, we need to do something! […] you cannot just allow yourself to say ‘this is not part of my business’”. By embedding social and environmental concerns into the business rationale, companies find it easier to understand the premises for a productive dialogue: “We need to include them [stakeholders] in our decision-making process.” Even so, stakeholder cooperation is not a magic pill: “It takes time to convince them, and takes time to understand how we can find a common approach.”

Shape your market opportunities

The Act NOW network provides an arena for testing green energy solutions. There are various degrees of involvement among members, but they all provide the piece of the puzzle needed to create a learning curve within the network: some members come up with the know-how on a specific solution and other members road test that solution while benefiting from the support of the rest of the network. Innovation occurs as a result of the group dynamics – and of the organic development of the initiative. Members keep the discourse on-going outside the network, attracting new potential collaborators.

Best practice cases are used as illustrations for other business leaders to replicate and test the appropriate solutions to their challenges. All members are expected to exchange ideas and solutions and participate in the learning process: “each partner can bring some good case stories and say ‘this is what we have done – this is what we would like to do, is there someone in this area, in this room, in this platform able to help me and solve this?’”

The partnership with the EU Commissioner for Climate Action, Connie Hedegaard has opened the gate for numerous opportunities for the network. Hedegaard has chosen five markets (Italy, Poland, Portugal, Bulgaria, and Lithuania) to launch an environmental campaign whose goal is to change the business culture in these regions: “In Denmark we have worked with green solutions for many years. And both industry and
Challenges

Companies find it difficult to make investments to optimize their business processes in the context of an ongoing crisis. Managers are reluctant to change their way of thinking because focus remains solely on increasing the bottom lines: “they cannot afford to add resources […] right now because they need to be more focused on ‘fire fighting’.”

Shifting legislation is another issue most companies need to face. As Mrs. Bræmer-Jensen concludes, this is due to business-as-usual thinking, where companies are merely reactive to policy-making – a traditional framework Mrs. Bræmer-Jensen no longer envisions for the forward-looking companies. Being proactive and taking action i.e. start thinking differently, could be one way to shield companies from market uncertainties as regulators interfere in correcting business behaviour.

Show responsibility and take action

For the past two years Mrs. Bræmer-Jensen has networked intensively with numerous global players to spread the word on Act NOW’s mission and to gather wide support for its members’ engagement efforts. The organisation is positioned at the moment on a steep learning curve, having to figure out potential synergies between members, testing both opportunities but also limitations. As Bræmer-Jensen admits, Act NOW is not the cure to society’s problems but it is a good place to start acting. Likewise, Act NOW is not changing business models yet, but it does provide the forum to spark a multi-stakeholder debate on societal transition to a new paradigm. The Act NOW CEO believes that the financial crisis should not be used as an excuse to avoid taking responsibility; instead, it should reinforce the view that current practices affecting entire eco-systems, on a global scale, are no longer sustainable from an economic point of view. The platform is slowly leading the conversation towards changing attitudes and mindsets. A new business model could be one characterized by “networks and partnerships across all types of businesses and borders and “a holistic approach” in business strategy. Given the scale of current challenges society tries to mitigate, actors can no longer ignore the value of cooperation.

Sustainability is not only an add-on. It’s a lifestyle. It’s part of the company’s DNA, so to say. Some companies haven’t been ready and it takes time – and it should take time, because you cannot change perceptions from one day to another. But you can start, and I really believe that top management needs to walk the talk.
Long-Term Prosperity

Businesses within a living economy aim at long-term success, beyond short-term profits. Companies which target long-term prosperity apply sustainable environmental and social practices, creating added value due to their vision, and they tend to be more resilient to financial shocks. Such companies are more agile, they are fast to react to change within their customers’ behaviour or policy regulation, and have more democratic structures since decision-making is not restricted to senior management.

Our next case study illustrates the argument above; what the Greek cosmetics company APIVITA essentially does is looking into its future and laying its foundations today. This approach is very much in line with the Shared Value model, a concept coined by Michael Porter and Mark Kramer in the Harvard Business Review in 2011, which says “creating economic value in a way that [also] creates value for society by addressing its needs and challenges”. In practice, it consists of a financial, social, and/or environmental return on investment. Creating shared value is a principle addressing the very core of the business processes, one that does away with short-termism, and one that links economic benefits to social progress. As Porter and Kramer pinpoint, shared value is not about redistributing value, but it is about making investments to leverage current systems in order to share a bigger pie than in the traditional, business-as-usual mode of thinking.

In a nutshell, shared value epitomizes smart, system-wide thinking – seeing the bigger picture and taking action beyond present needs and requirements. In doing so, businesses need to challenge their current practices and make radical innovations. Explaining Google’s business model philosophy against the innovation caveat, Transparency Engineering leader Brian Fitzpatrick expresses this concisely:

“Disrupt yourself before someone else comes and does it.”

Case 8: At APIVITA sustainability flourishes as values of the past meet technologies of the future

ESTABLISHED: 1979
LOCATION: Athens, Greece
EMPLOYEES: 171
TURNOVER: EUR 29,380,000
ACTIVITY: Natural cosmetics
MARKET PLACE: Greece, Japan, Hong Kong, USA, United Kingdom, Spain, Australia, Singapore, Romania, Ukraine, Benelux area

LIVING ECONOMY CRITERIA: Transformative Innovation, Long-Term Prosperity

Back in 1979 the married couple Niki and Nikos Koutsianas, inspired by the life of the bee, the diversity of the Greek Flora, Hippocrates’ holistic approach, wellbeing and health, turned their love, faith, and passion for creation, people, and a better way of life into APIVITA, the first natural cosmetics company in Greece. Thirty-four years later with the same values, and the same passion they have taken APIVITA to four continents and 14 countries promoting more than 300 natural cosmetic products with respect to nature and to society.

In APIVITA one of the main goals is creating value in the surrounding environment and society. A long-term sustainable strategy has been applied throughout the company since its birth, seeing beyond the present needs and taking into account the broader picture is the basis the company was built on. APIVITA, meaning “the life of the bee” in Latin, has the underlying value that environmental and social gains outgrow financial ones, and this attitude has actually brought a sustainable financial return on investment. Addressing the social and environmental challenges of the region the company operates in has proven to ensure financial sustainability and has brought resilience through the current economic crisis. Working in Greece, a country that
was hit severely by the crisis, APIVITA was only slightly affected and even managed to create value through social innovation, moving forward both the company and the community.

The company manufactures cosmetics from bee products, herbs, and plants indigenous to Greek nature. These plants are grown locally from organic and sustainably managed sources with respect to biodiversity, enhancing local agriculture. Through their years of existence, APIVITA has encouraged numerous farmers to turn to organic cultivation of medicinal and aromatic herbs that used to be cultivated in Greece in the past. Additionally, one of the company’s main goals is to safeguard bee biodiversity by supporting sustainable local bee cultivation. These initiatives have a bilateral effect, ensuring a sustainable organic resource for the company and at the same time creating a stable income for local farmers, supporting ecological agriculture and preserving biodiversity. In the past few years the company has been promoting the development of a national natural agriculture strategy based on small organic polyculture herb agriculture schemes – planting multiple crops in the same space, in imitation of the diversity of natural ecosystems.

Mr. Choukalas, APIVITA’s Head of Sustainability, explains that one of the main values behind the company’s strategy is based on the view that the natural and social capital of mankind should be kept renewable as a source of livelihood and civilization. As the company’s brand has become through the years synonymous with natural products and biodiversity preservation, its customers are steadily increasing.

**Acting meaningfully towards long-term sustainability secures prosperity**

One of the reasons sustainability is embedded in the APIVITA company philosophy and resulting products is that top management is fully committed to embracing sustainable development principles. Sustainability has always been at the core of the company’s business strategy and all its investments are aligned with it. Their innovation and research department works on encompassing the philosophy, inspiration, and values of the company into new green sustainable products; such as using microalgae diversity for the development of new environmentally friendly cosmetics.

The company is under many certification schemes in order to ensure good application of its sustainable practices. As Mr. Choukalas explains, APIVITA is part of the green ingredient policy, green packaging material policy, and ethical advertising policy. Additionally, their CSR program is audited and reported according to the Global Reporting Initiative.

APIVITA has recently committed to a climate change strategy “Plan 0 – near Zero Emissions Responsible Operations” by 2020. This strategy places emphasis on the core processes of analysing the Life Cycle of products and services, concretely measuring their carbon emissions in order to effectively reduce these. Another step towards a prosperous future is the inclusion of circular economy concepts in their long-term sustainability plan with the goal of being in a position to successfully implement these by 2020. As Choukalas says:

“Our products are clearly dependent on natural resources - plants and bees - and our growth ultimately depends on the social wellbeing of consumers so we have extra incentive to ensure that our climate change strategy and our carbon emission reduction plan is implemented efficiently.”

Discussing the recent global socioeconomic crisis, which hit Greece especially hard, Mr. Choukalas says that “it was a result of a lack of business ethics and ecological intelligence that led us to an economic crisis, APIVITA was only slightly affected and even managed to create value through social innovation, moving forward both the company and the community.

Our focus on ecological and social knowledge is our most promising initiative.
dead end and a deep social crisis.” He points out that the current socioeconomic crisis is merely a reflection of a global environmental crisis, the outcome of the lack of energy and resource management policy implementation as well as the lack of cooperation between different stakeholders.

Choukalas points out that APIVITA sees this situation as an opportunity to innovate, explore new frontiers, create strong partnerships with civil society and satisfy the growing customer need for sustainable solutions in the quest for an improved quality of life and wellbeing. For APIVITA, prosperity is linked to the successful implementations of social and environmental sustainability practices.

Give something back

In February 2012 Medecins Sans Frontieres (MSF) and APIVITA joined forces and planned the biggest cooperation of NGOs and private corporations in Greece. The national campaign “Pastilles for the pain of the others” came at the time when Greece was within a severe economic and social crisis. APIVITA manufactured packages of six sugar-free candies with honey and thyme, from natural biological materials from Greek producers, giving the money from all purchases to MSF worldwide.

After the initiation of the campaign the partners reached out to pharmacists and to the entire business community, and more importantly, to Greek society creating a chain of solidarity that reaches out to the less privileged, the needy, the less fortunate, the ones without access to health care “I believe that the “Pastilles” are for our pain because every time I buy and eat one I feel a lot better because I know I have given care and hope to others.”

One of the difficulties in this particular campaign was to engage all of APIVITA’s suppliers. As Mr. Choukalas says, “we did not want them to simply give us good prices, we wanted them to understand the project and to consciously engage in it as advocates of the cause it serves.” Additionally, it took some effort to convince everyone that would be involved - employees, pharmacists, media, customers - that there were no grey zones and that this was an authentic, fully-transparent, cause-driven social project. “In times of crisis there are always trust issues and people need to feel truly connected and completely informed and we focused on providing the required environment.”

In November 2012 the campaign was launched with an extraordinary response from the public. Five months later 3000 pharmacists all over Greece were selling the pastilles without profit and 350,000 fellow citizens had bought them creating an immense chain of solidarity. Many international public figures gave their voice to the marketing of the campaign making it a truly travelled initiative. Due to the magnitude of this campaign, APIVITA was branded as one of the most ethical companies in Greece and received a lot of positive media coverage.

The staff of APIVITA put a lot of their free time into making this campaign a reality. But in a time of crisis, helping their fellow citizens has brought gratification and satisfaction, and it has been a reminder that one can indeed work in a company and at the same time honour his or her ethical values. This initiative, through its measurable results, has reinforced the company’s existing culture of caring about human wellbeing and working as a team towards an idealistic goal.
Engage your employees together with civil society to work towards sustainability

One of the projects APIVITA has been involved in was the creation of the Hippocratic Botanical Garden on the island of Kos, where Hippocrates lived in ancient Greece. This project started six years ago, when the president of the International Hippocratic Foundation and a delegation of environmental and cultural NGO representatives approached the company with the idea, in order to ask for financial support. The company decided, instead of just financially helping, to create a partnership and take active part in the creation of the botanical garden.

The aim of this partnership was to safeguard the biodiversity of the ancient plants that can only be found in Kos, “a modern Noah’s ark”, as Choukalas puts it. APIVITA uses these plants as resources for its products, and values the preservation of their biodiversity, as well as the dissemination of the knowledge around the benefits of their usage. The final goal of the project is for the gardens to become a scientific, cultural, social meeting point were future generations can tap into the heritage of Hippocrates the father of Medicine.

Mr. Choukalas explains that the main pitfall of the initiative was the fact that Kos is a remote island away from Athens. To solve this, a mini Hippocratic Botanical Garden was established in Athens, in order to give access to APIVITA’s employees. After resolving the issues, the first step was to inform customers and stakeholders about the importance and contribution of Hippocrates and his teachings and engage the local community, especially the young, in the planting and care of the garden. The second step was to make a seed bank in order to sustain the garden. The third step was to establish a collection of paintings contributed by modern Greek artists that depict the plants used by Hippocrates and organize a traveling art exhibition to help disseminate the Hippocratic heritage.

The final, ongoing, step is to engaging the public in the project. A product will be designed by APIVITA especially for this cause and that part of the earnings will be directly allocated to the project. “If customers see and understand their participation in a form of donation, it has an added value because it spreads the word,” Choukalas says.

The long-term aim is to ensure that the Hippocratic Botanical Garden of Kos will be a self sustained organization that will preserve and promote the cultural heritage of the area. For that reason an NGO, Hippocrates 2500 years, was established to manage the gardens along with the municipality of the island. Individuals and companies have already offered their volunteer work and their financial aid.

The company became so attached to this initiative that at the end of 2012, Hippocratic plants where planted in the new bio climatic facilities of APIVITA. Furthermore a specialized botanist takes groups of visitors and employees during work hours for a walk around the garden and adjacent hills in order to share this knowledge and show them the value hidden all around them. The company’s employees were again engaged in a partnership project with an ideological goal, this time aiming at enhancing ecological sustainability, as Choukalas points out “[…] it’s our business”

Now the concept is part of our daily lives, part of our business, so we talk about it and take care of it!
Creating Value Beyond Borders

Working towards achieving long-term prosperity is one principle strongly supported in the Shared Value model; the link between the financial stability of a corporation and the wellbeing of society is solidified as the concept of economic value tends to grow outdated. Forward-looking businesses perceive the economic profit as one side of the coin, capturing the value to society at the other side. As its authors claim, Shared Value does not decouple the need to address social and environmental challenges from profit-making; on the contrary, building one's strategy around these issues could ensure financial sustainability and enhance efficiency in business processes and operations.

Our final case study in this report exemplifies in practice the premises of Shared Value creation. The story of the Baisikeli company is guided by its founders’ values: increasing their wealth at the same time as they contribute to raise the standards of living for their customers.

Case 9: Baisikeli - creating value beyond cultural borders

Established: 2007
Location: Denmark
Employees: 15
Turnover: EUR 1.6 million
Activity: Bicycle shop renting, repairing and selling new and second hand bikes
Market Place: Copenhagen (Denmark) and Beira (Mozambique)
Living Economy Criteria: Long-Term Prosperity, Radical Innovation

When cousins Henrik Smedegaard Mortensen and Niels Bonefeld got their idea of shipping scrapped bicycles from Denmark to Mozambique, they had no clue what the impact of their vision would be. Since 2007, Baisikeli has set up two bicycles shops in Copenhagen – repairing, renting and selling primarily second-hand bicycles – and one bicycle workshop in Beira, Mozambique – fixing and selling second-hand bicycles. Since the beginning Baisikeli has doubled its earnings every single year.

Circular economy and shared value terminologies are not part of their language because there is not much room for theory in their business model, as the owners themselves admit. But for many others, Baisikeli is one of the business examples of what a circular economy model would look like in practice: Instead of the take, make, and dispose business-as-usual model, Baisikeli invests in prolonging the life-cycle of discarded bicycles and sells them for a profit, after refurbishing them in their shops in Copenhagen and Beira. The profits are channelled into developing a cycling culture in Mozambique, by setting up a fully-functioning shop for repairs and sale of bikes.

Discussing the Baisikeli business model with its owner and co-founder
In the case of Baisikeli, we are talking about a business that helps people to create a better life with our products, without harming the environment while we make a profit on it. Henrik Smedegaard Mortensen, we observed some essential steps that Baisikeli has tested over the years, steps that can translate the concept of creating shared value into a practical, profitable project suited for their organisation.

Review your mission and values

Baisikeli is the Swahili word for bicycle. The founders of the small bicycle shop in Denmark have developed their business model around the idea of spreading the cycling culture in rural Africa, based on their vision for a future prospering continent where growing urban development and owning a bicycle could mean “healthier cities and happier, closer people,” according to owner and co-founder Henrik Smedegaard Mortensen.

With estimated earnings of EUR 1.6 million in 2013, Baisikeli plans to open a new workshop in Mozambique by the end of the year and increase the rate of shipping of scrapped bikes significantly in order to meet the growing demand for their products. Part of their project this year is putting an education program in place where they would train what they hope to be their future workforce when expanding in Mozambique. Additionally, the education programme they envisage could also address a cost challenge related to their workforce: “It’s very costly to educate bike mechanics, it takes a long time; so, if we make an education, where we have maybe 20 students per year we could also get better employees.” Without foreseeing it, their passion for social innovation has become a catalyst for business growth, making it possible to realize their ambitions for sustainability.

Go the extra length

Baisikeli’s business model is pretty straightforward: buying bicycles from insurance companies in Denmark and collecting discarded bicycles for the Copenhagen municipality, refurbishing and selling the good ones in their shops in Copenhagen and shipping the rest as scrap to the African shop for repair and sale.

Profits made in Denmark have been used so far to finance their bicycle start-up in Beira, which is supposed to replicate the workshop in Dybbølsbro (Central Copenhagen). Henrik Smedegaard Mortensen expects that the workshop in Beira will become self-sustaining this year. Their goal is to have their two bicycle shops trade between each other across borders, and grow the business beyond its current marketplaces.

As Mortensen explains, Baisikeli’s business model meets the needs of rural residents in Mozambique for affordable transportation, while at the same time providing for their conscious-minded customers in Denmark who “think that by buying they are being part of a bigger objective. It’s not the reason why they come here but it is an add-on.”

Their impact in Mozambique is quite significant in the lives of the rural population. Meeting the needs for low-cost transportation, Baisikeli contributes “to making life easier [for locals] by using maybe one third, even much less time on transport, because their alternative is walking.” Moreover, the local farmers use bicycles as transportation vehicles for their merchandise: “if you’re selling fruits at the local markets that means...
Share a good story

As the owners admit, progress has been made at the micro-level and it is quite costly; getting to where they are now took “a lot of work and it cost a lot of money, but it’s been also very meaningful”, as owner Mortensen reveals. Sales at the bicycle shops in Copenhagen have been boosted by the free publicity approach at Baisikeli: owner and sales representative Henrik Smedegaard Mortensen has been keen on sharing their story and most of all, their vision of transforming the African transportation culture, through various media appearances.

Their outreach strategy was simple and truthful; telling the story how it is, and sharing their vision with their customers in Denmark. As a result, Baisikeli has become well-known in its business, converting itself into a financially-strong contender in the Copenhagen marketplace for bicycle shops.

Challenges

The cousins’ challenge resides in keeping up with the demand for second-hand bikes in their shop in Beira, given that increasing the amount of shipments cannot cover the market they’ve created for themselves. For this reason, Baisikeli’s ambition is to be able to develop the knowledge and skills to design and manufacture their own label of bicycles in the future, a project idea on which they are currently working to develop through collaborations with entrepreneurs in Mozambique. One project in the pipeline is the production of steel frames for their customers in Mozambique by the end of this year.

"If we are growing as fast as we want to, soon we will not be able to meet the needs or demands with second-hand bikes."

Imagine lots of bigger cities in Africa that are developing now, growing at a fast rate; what if they could learn from the mistakes of the Western world, in the way we built our cities: instead of allowing three times more space on the road for cars, add a wide lane for bikes. Imagine that we could be part of the movement and help people ride more bikes in more cities in Africa – that would be a very big dream for me!

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You can carry twice the amount of crops in half the time, which means you can increase your income by about 400%. “
Going through the initiatives of the nine European businesses presented in this report, one can see a broad spectrum of innovation and business models for creating sustainable prosperity. All companies focus on innovating practices and are going through a dynamic procedure of step-by-step change. One common characteristic of these businesses, no matter what market they are concentrating on, is their common goal: a prosperous future connected to sustainability. Companies functioning in a living economy will use innovative practices and in some cases reinvent themselves. Focusing on other parameters than simply the financial and economic ones; social and environmental wellbeing, happiness and preservation of natural resources will be part of daily business.

The following chapter will unveil some of the key points businesses need to consider when steering their organizations towards the prosperous future envisioned in a living economy.
It is crucial that companies are responsive to the need of their markets – this may include the health of the environment surrounding the local community, or the eco-system of resources a company uses in its processes, or the social progress businesses can contribute to through their products and services. This report has presented various types of markets our case studies are targeting, from the sustainability-conscious consumer in Greece to the developing communities in Mozambique, to entrepreneurs seeking more affordable solutions to the needs of their business. Building on that, the following section will provide recommendations for business managers who wish to search for innovation drivers and change their organizations on the path towards a living economy.

Companies in a Living Economy

The business examples that we have presented in this report are acknowledging the importance of stakeholder relationships as an advantage, since that way companies turn out to be more adaptive and responsive to changes in the surrounding world, i.e. companies that are using scenario planning on resource supply like Tetrapak. Hence, they will be more capable of adjusting their supply to shifting demand and they will be able to outperform their peers by optimizing the existing resources in a climate characterized by scarcity and price volatility. As illustrated by the Floow2 and NISP case studies, innovative business models restructure, at least in part, their value chains by creating networks to procure the resources they need in a way that’s advantageous for both their expenditures and for the well-being of the environment.

To understand the kind of collaborative business models that Floow2, NISP, Baisikeli, and Act NOW represent, it is necessary to let go of the

In this chapter:
- Management style in a living economy is more inclusive
- Top management commitment acts as a driver to innovation and business transformation
- Business leaders are looking at new ways to measure progress and prosperity
- As part of a whole, companies should be collaborating with all types of stakeholders
- In a living economy, making a profit is compatible with contributing to human and environmental well-being
old fashioned business school concepts that strategy and communication should be divided into internal and external, that suppliers are outside the company, that you need to own your resources rather than rent their service, and that employees are ‘resources’ to be used, rather than people to be guided.

No company is an island: its bottom line depends on its surroundings, such as access to resources, the world economy, other businesses, customers, policy regulation, and opinion makers. Companies are part of a greater ecosystem.

Figure 17. Illustration of a Living Economy (by Liselotte Østerby and Josefine Cambell).

One of the ways a company in a living economy is creating value is by considering its relationships with the surroundings, both material and human. They collaborate with their peers to make better products and services. In order to obtain recyclable, non-toxic raw materials, the corporation is collaboratively minimizing tangible and intangible waste, using resources efficiently, creating innovative products and services that provide for real needs, defined by interacting with its users (Figure 17).

UK-based NISP is a catalyst for such resource exchange; they have built a business on providing a network for innovation partnerships and matchmaking, i.e. engaging companies which have by-products from industrial production to interact with businesses that can use these as resources. That way, their by-product exchange leads to lowering the cost of waste disposal, reducing landfill usage, and minimizing harmful effects on the environment.

Floow2 has built their commercial concept based on the networking principle, by facilitating the spread of information regarding idle resources, which can be rented out to businesses and start-ups which do not wish to own and support the costs of maintaining heavy equipment. What came out of their commercial model was a new service market for heavy, industrial equipment and other resources; a win-win situation for all parties involved.

While NISP, Floow2 and Act NOW are collaborative by nature, cooperation with external partners can be a challenging task for many other companies. Nevertheless, companies such as Tetra Pak, Apivita and Van Houtum have created a few successful collaborations and partnerships, working together with different stakeholders on making sure their resources come from sustainable managed sources, and on increasing recycling.
**Three Management Principles**

In the living economy model more factors than the financial indicators are included in measuring wealth, progress, and success. It is not a choice between economic success and human wellbeing, but a win-win situation with a long-term perspective on prosperity. We have shown in this report that it is possible and desirable to make a profitable business while contributing to human and environmental wellbeing. It is our hope that these examples of practices we have collected in this report can be of inspiration and proof to other leaders who wish to change their business organizations.

Some of the true innovators today are those business people who are inspiring change within their business organisations. The initiatives featured in this report are driven by people who are choosing to step out of the mainstream and create something new, to the benefit of both their business and the surrounding world. These companies are starting to walk the long path of sustainable business. A path that in a living economy is about long-term prosperity in a wider sense than the mainstream perspective which is currently mostly focused on maximizing the next dividend for the owners. When we discuss long-term perspective, we include a sustainable financial return on investment; all the businesses we have presented in this report are economically sound.

**Principle 1: An inclusive management style is needed to get things going**

**Principle 2: Change requires leadership and top management support**

**Principle 3: Strengthening the market position takes cultural change**

By communicating with the business managers featured in our case studies, we have found that regardless of whether they come from large corporations, small companies, or start-ups, they all lead their business organisations based on the following principles:

**Principle 1: Inclusive management style**

Collaboration at an internal and external level is key in a living economy: a manager will be cooperating, listening, and engaging with employees and other stakeholders.

As showcased in this report, employees in particular are positively impacted by an inclusive management style, their motivation increases as does their productivity. This is particularly relevant to bringing home a trophy, which could be the prime minister’s visit to one’s headquarters (e.g. Van Houtum), or public recognition as a leader in its market (e.g. APIVITA). The impact of positive feedback on one’s performance is not exactly news, but in a business organization it sometimes reinforces the business case of developing a sustainable initiative; employee creativity and commitment to the business’ strategy for growth are as important as crunching down the numbers in measuring the benefits of this particular initiative.

As our cases have shown, making a transition towards a living economy is not subdued to instant monetary gratification; rather, it serves the long-term goal of reaching a financial value that is resilient to 21st century challenges.

The leadership style of the inclusive manager is quite different from the traditional hierarchical leadership style, where the manager is the knowledgeable one, who divides the work. In this, more complex world – if compared to the industrial age, one that some business managers still believe we are in – it is impossible for one manager to know it all.

In a living economy, top management engages employees in feeding-in an organizational culture based on the principle of creating meaningful value, one that goes beyond the dividend imperative. In the living economy culture, employees are encouraged to participate in the process of innovation, as the Van Houtum and Floow2 cases illustrate. This is an excellent method of inspiring ownership of these initiatives among the personnel. As pinpointed by the cases mentioned above,
positive morale is the strongest of incentives. Being part of something bigger than oneself is often sought to be the mark of true leadership and commitment to one’s goals. That way, businesses can truly align their mission with their employees’ values.

From the close connection to the market and key stakeholders the Living Economy companies are able to adapt faster. As illustrated in the Flow2 case, management models are adjusting to the conditions on the market. When the market provides business with the communication tools i.e. web network, to facilitate cross-boundary cooperation among management and employees, a new management model emerges: one where independent professionals are united in a single goal i.e. change an entire industry practice, and are given the freedom to use their creativity and skills for the greater good of their company i.e. self-managed teams. In turn, this translates into lower managerial costs and more efficient organisational processes. When it comes to fostering a flat culture as opposed to a hierarchical one, business size makes a difference. Small and medium-sized companies are more inclined to adopt this culture than larger corporations.

**Principle 2: Leadership and top management support**

Can new initiatives emerge bottom up? Certainly, but at some point they will need top management support, since significant change is only possible when you have that support. However, it still takes vision and management skills to get the organisation moving, even if a change management program is not initiated.

Management support has been crucial to execution for the change agents featured in this report. Let us give you some examples: Mrs. Lisbeth Bræmer-Jensen initiated Act NOW while she was still working in Grundfos. The question here is, if she would have succeeded without the support of CEO Carsten Bjerg? Mrs. Bræmer-Jensen is a strong communicator and her skills to make the business case clear and get people on board has definitely been fundamental to the birth of the commercial Act NOW network. It has had support from top management at Grundfos since it started, which was crucial to get it going. At the moment, Act NOW is strong enough to stand alone and has become an independent organization.

Also Mr. Choukalas at APIVITA has had full support from the company’s CEO in materializing projects working on increasing solidarity within civil society and safeguarding local biodiversity. At Puma the CEO is taking part in the internal awareness campaign on EP&L. At Tetrapak, management has been integrating sustainability for the last 20 years. As Mrs. Mink explained, Tetrapak is a valued-based company and top management has always supported sustainability strategies, even when they were not the best financial option, as was the case of using bioplastic material into their carton containers. It is most likely that none of these initiatives would have happened without the support of top management.

In many companies the owners or top management will demand a business case to support initiating of new projects or change. Having a good business case for sustainability can be a strong driver; the more the organization sees the benefit, the more support the initiatives will get. Hence, it is important to start the journey focusing on those initiatives that have strong business cases. At present, the business case for resource optimization is getting stronger and stronger as resource scarcity becomes more stringent. Other kinds of initiatives might not have an obvious traditional business case. Therefore, it might be necessary to reinvent the measure used from earnings, to include competitiveness, innovation insights, or other factors.
The Act NOW's CEO and Founder Mrs. Bræmer-Jensen believes the business case of saving energy and thus saving valuable resources is a win-win situation for both the business sector and society at large; she also believes the business case is a concrete approach to changing habits in a business organization, which are often incentive-driven. The top management at Puma S/E has redefined its business parameters by adding costs on natural capital into the company's value chain assessment, a bold move aimed at making it more tangible for Puma to take action accordingly. Changing the business culture is not an easy journey, especially for the business giants, but Puma's journey has already started by launching the Environmental Profit & Loss (EP&L) standards in 2011.

The goal of making the journey towards a living economy is to lay the foundation for people's wellbeing and happiness. It is not the intention of this report to redefine business's reason of being, which many believe is that of making money only, but rather, to paint the bigger picture business organizations are part of, and their connection with and impact on society at large.

Making the shift towards a collaborative mindset in the business organisation and creating the market for new services and products requires cultural change within the company. Determined organisations that embed the principles of living economy at their core can sometimes alter their industries by shaping customer behaviour and preferences (e.g. Floow2).

Culture can be changed gradually over time. One way of achieving this is by engaging the organization in projects that challenge the competencies and capabilities of the company. Initiatives as the ones discussed in this report can be such drivers: a small new initiative might not seem game-changing in itself but the organizational learning from new types of projects such as new collaborations should not be underestimated. In most cases the change towards a living economy will be a gradual transition.

Reaching a leading position on the market for toilet paper as a sustainable company has been Van Houtum’s main goal in approaching the cradle-to-cradle model; the C2C certified Satino Black assortment is the result of much more than product redesign: in order to get where they are now, the management has committed to transform the business culture towards embedding sustainability at its core. By cooperating with their suppliers in designing new products on the market, combining functionality and design, Van Houtum has contributed to spreading the sustainability culture to industry peers.

Floow2 is shaping their market as well; their customers are given the opportunity to perform their business at equal if not lower costs by simply shifting to a new mode of doing business: sharing and renting resources, which keeps the business running by minimizing the environmental damage. Their business model is a radical one because it introduces a new method that can lead to changing customer behaviour i.e. B2B transactions, and changing business cultures implicitly.

Principle 3: Strengthening the market position takes cultural change

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Check List for a Transition Towards a Living Economy

BUSINESS CASE
1. Choose a tangible and small-scale initiative (pilot project).
2. Develop new Key Performance Indicators (KPI’s) to measure other benefits/results (trophies) beside the immediate earnings, such as improved customer or supplier relationship, improved resource supply, insight for innovation, and employee morale.
3. Make the environmental and social return on investment visible, aligned with the financial one.

MANAGEMENT
1. Use dialogue instead of monologue with your employees and select those employees with most potential for creativity and innovation.
2. Engage in dialogue with suppliers, civil society, and public institutions etc., to better understand the context of your business; create self-managed teams, to deliver the desired goals and give them space and resources for operation.
3. Be open to cooperation with diverse stakeholders.

COMMUNICATION
1. Assess your present situation (social and environmental strength and weaknesses) and match your communication activities with relevant actions to show commitment.
2. Explain your goals on a personal level (discuss with your employees in small groups). Discuss your goals with suppliers and all other stakeholders (organize meetings or events).
3. Share the personal story behind the product/service to your customers (be open to inquiries from civil society). Be consistent and honest in delivering your message.

COLLABORATION
1. Search for those stakeholders (suppliers, NGOs, public organizations) that share in your stake and start a small project together.
2. Search for those network hubs your organisation can contribute to and benefit from (learning, innovation, solving an issue etc.)
3. Scale up to partnerships with those stakeholders who complement the set of skills and knowledge needed in your organisation.

What our interviewees have illustrated in this report was their ability to foresee the changing conditions affecting their markets and their own organizations, and their focus on innovation as a solution to their customers’ problems as well as to their future challenges.

Therefore, it is our belief that in order to thrive in this market, given the challenges framed in this report, making money has to match certain principles that are conducive to customers and stakeholders’ wellbeing and happiness.

Those principles have been sketched in this present chapter, based on the data provided by our participatory research project.
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