

A vision for sustainable consumption

Innovation, collaboration, and the management of choice



About this document



"9 billion people living well, and within the limits of the planet." In December 2008, the World Business Council for Sustainable Development (WBCSD) published a report called *Sustainable Consumption Facts and Trends*. That report took stock of the recent developments and trends in global consumption patterns, and presented an overview of the relationship between business activities, consumer behavior, and environmental and social challenges. Then, in February 2010, the WBCSD launched *Vision 2050*, which outlined a pathway for the next four decades, to a time when nine billion people would be living well, and within the resource limits of our planet. Both reports were the result of collaboration between WBCSD member companies from a wide range of business sectors.

This report envisions what sustainable consumption could look like in 2050, and how business could help to establish it in the mainstream. It complements *Vision 2050*, which took a (primarily) production-centric view on sustainable development.

By creating this report, WBCSD member companies seek to make a constructive contribution to the global dialogue on sustainable consumption. They wish to help their fellow businesses – whether selling directly to consumers or to other organizations – to take sustainable consumption issues into account in their long-term strategies, innovation and consumer engagement activities. They also wish to help policy makers; civil society organizations and individuals understand the need for business to make an active and constructive contribution. Their ultimate objectives as companies are: to develop and provide the solutions that will enable consumers to meet their aspirations for a better life within the limits of the planet; and to allow their businesses to develop in the long term.

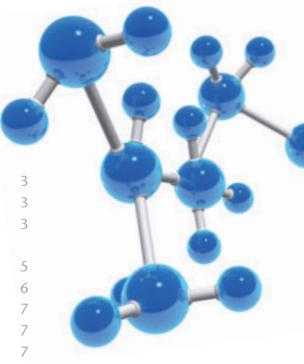
This document is part of an ongoing process of thought development and engagement on sustainable consumption, called the Sustainable Consumption and Value Chain Initiative. It has been developed by the following WBCSD members: Accenture, Borusan, Deutsche Post-DHL, Havas, Henkel, Nokia, PepsiCo, Philips, Procter and Gamble, PwC, S.C. Johnson, Solvay, Sompo Japan Insurance and Umicore. It is the result of several workshops hosted by members, including a multi-stakeholder workshop co-organized with the European Environment Agency and the UNEP/Wuppertal Institute Center for Sustainable Consumption and Production.

Contents

1.	The need for a vision of sustainable consumption in 2050 Consumption needs to change From niche to mainstream	3 3 3
2.	Our vision of sustainable consumption	5
	Better products and services	6
	Enlightened consumers	7
	Maximized total value	7
	New measures	7
	Cohesive and responsive marketplace	8
3.	A pathway to sustainable consumption	9
	Creating and managing choice	9
	Moving to the value paradigm	10
	Roles and responsibilities	11
	A possible pathway	12
	"Must-haves"	13
	Conclusion	15
	Resources	16
	Acknowledgements	17

Figures

1.	Consumer segmentation in 2050
2.	The five elements of a vision for sustainable consumption in 2050
3.	Driving sustainable consumption through innovation, choice influencing and choice editing
4.	From the linear model of value chains
5.	To the circular model of value chains
6.	To the sustainable value net
7.	Roles and responsibilities of actors in driving sustainable consumption
8.	A possible pathway toward a sustainable consumption in 2050



Message from the Co-Chairs of the Sustainable Consumption working group

"Long term success and continued growth depend on offering consumers a way to meet their needs and aspirations within the limits of our planet."



Businesses around the world recognize that sustainable consumption is a key element in any well-developed and forwardlooking sustainability program. Long term success and continued growth depend on offering consumers a way to meet their needs and aspirations within the limits of our planet.

We believe that the vision stated in the WBCSD's *Vision 2050* report – "9 billion people living well, and within the limits of the planet" – cannot be achieved with technological innovation alone; we will also need deep transformations in lifestyles and consumption patterns.

Downshifting, product labelling, local consumption and other approaches have been offered as solutions to a more sustainable lifestyle, but none has proven itself over the long term, or been sufficiently scalable. Many have had limited relevance to businesses and consumers, or been seen as too confusing, or too restricted in scope or time.

It should be a key priority for us to work with governments, consumers and fellow entrepreneurs to shape progress toward the vision for 2050. This is a complex, systemic challenge requiring new ways of thinking, working and interacting.

If we rise to this challenge, the prize will be well worth our efforts: we will develop more efficient and profitable ways to offer value to our customers and consumers; we will secure our natural and human resources for good; our brands will be stronger; and the markets will reward us.

Kirsi Sormunen Vice President, Sustainability, Nokia

Kin

Uwe Bergmann Head, Sustainability Management, Henkel

lass Began

Robert ter Kuile Senior Director Environmental Sustainability, Global Public Policy, PepsiCo

The need for a vision of sustainable consumption in 2050

The WBCSD's Vision 2050 report, and the Sustainable Consumption Facts and Trends report that preceded it, both stated that technological innovation will not be enough to address the sustainability challenge; there will also be a need for transformations in mainstream lifestyles and consumption patterns. In this chapter, we address the need to abandon the existing consumption paradigm and address a series of systemic challenges.

Consumption needs to change

Sustainable Consumption Facts and Trends showed that consumption as usual represents a threat, both locally and globally, to the natural resources on which we depend, and therefore to the wider socio-economic system. Unless tackled proactively and on time, this risk will increase hugely as the global population balloons to a projected nine billion in 2050, and a billion more people join the middle class. The additional demand for materials, energy and other ecosystem services will most likely outpace efficiency gains in the supply chain and overwhelm natural systems.

Business has an important role in preventing this, and it is in its own interest to find new solutions for more sustainable consumption patterns. Otherwise, business will face significant consequences, including:

- Rising costs: increasing competition for scarce raw materials in the supply chain will drive up costs and squeeze margins.
- Uncertainty: as the global climate warms, and the stocks of some resources approach collapse, crises become less predictable and more chaotic. The same may be said of their consequences, including market reforms and cultural shifts. Uncertainty causes inertia in markets and businesses, stifling investment and innovation.
- Increasing regulation: resource and environmental crises can cause overwhelming pressure from

voters to introduce more and stronger regulations. These can have dramatic effects on business, and can also be hard to anticipate. They can force companies into a reactive mode, rather than a more proactive (and therefore effective) one.

 Friction: the debate over sustainable consumption could become polarized and deadlocked. Innovation, productivity, brand value and sales would all suffer from the tensions between corporate objectives, consumer behavior, and sustainability.

Furthermore, consumers themselves are increasingly aware of environmental and social challenges, and looking to companies for solutions. They will reward brands for addressing their aspirations, including the need to "tread lightly". They will increasingly avoid brands that feel unsustainable or irresponsible.

From niche to mainstream

For a variety of reasons, including price, performance and false perceptions, more sustainable products and services have tended to appeal only to niche markets, with limited impacts.

For consumption to become sustainable, mainstream consumers also need to adopt sustainable solutions and behaviors. To help with this, companies need to develop offerings that are attractive, accessible and affordable.

A demand-side challenge

Surveys have shown for many years that people are increasingly concerned by environmental and social issues, and want to make better and more sustainable choices; but relatively few of them translate this willingness into behavior. The reasons for this were explored in *Sustainable Consumption Facts and Trends*, and are often related to issues such as: a lack of information, or a surplus of confusing information and labels; higher prices; higher up-front costs; an unwillingness to act alone; lower convenience or product performance; and the "rebound effect"¹.

¹ The tendency for people to use "green" products more than they would use "ordinary" products; for example, replacing a petrol-engined car with a hybrid, then driving it more.

This can be frustrating for companies that have put a lot of effort into developing more sustainable, affordable and effective alternatives, only for those alternatives to attract small shares of the market. It is also frustrating for consumers, who wish to purchase more sustainable solutions to their needs, but fail to find them; or find them unaffordable, inconvenient, unattractive, confusing, or functionally inferior.

Many products have significant environmental and social impacts in their use phase; greater, sometimes, than in their production and distribution. Cars, washing powders and electrical goods are examples. Perishable products are often thrown away without being used at all. Purchasing a more sustainable product without using and disposing of it in a sustainable manner can be more damaging than purchasing traditional options, using them efficiently, and then recycling them.

These messages and concepts can be confusing and opaque to people preoccupied with other priorities. Consumers rely on businesses to provide goods that have been made in a more sustainable way. They also look to businesses for help and guidance on which products and services to choose, how to use them efficiently, and how to ensure that they are re-used or recycled.

A supply-side challenge

Most businesses have spent years refining their processes and business models, and are operating efficiently and profitably, according to the signals they get from the marketplace.

While production efficiencies have helped to drive down the cost of some products and services, some more sustainable offerings can often be more expensive than their traditional versions. A switch to more sustainable product portfolios and business models can require additional investment, changes in corporate culture and practices, different skill sets, and better integration throughout the value chain.

For these reasons, new, more sustainable products, processes and services can struggle to get to scale, and to compete with established offerings.

The need to understand, manage and report impacts throughout the value chain also poses a new challenge, since supply chains can be opaque and highly complex. Their increasing complexity makes it difficult and expensive to assess and manage the impacts of a specific product, process or service. Changing these supply chains can be time consuming, and require new types and levels of collaboration. Existing regulatory frameworks – for example, with relation to anti-competitive behavior – can interfere with this process.

A policy framework challenge

Laws, regulations and fiscal incentives are inconsistent from one country to another, and we still lack a globally binding agreement on climate change.

The inconsistencies in national frameworks can provoke capital flight from tightly regulated countries to countries with more *laissez-faire* regimes, often with no net financial, environmental or social benefit.

Furthermore, the lack of an effective international framework allows importer countries to avoid responsibility for the impacts of production abroad.

While laws, regulations and incentives are sometimes inconsistent in these respects, they are often consistent in another way: they give existing business models competitive advantage over more sustainable ones. Despite various grants and subsidies to "green" business practices, more sustainable businesses often face higher costs, even if they stand to gain more in the long run; they have to invest more, earlier, and with longer pay-off periods.

Politicians set the framework conditions for trade; business has a clear role to play in advising them wisely and encouraging customers and staff to vote for change.

This is a tough challenge that will require the business community to work in partnership with each other, with consumers and with other key stakeholders.



Our vision of sustainable consumption

A vision for sustainable consumption by 2050, and a pathway showing how we might get there, have been developed in response to the challenges set out in the previous chapter.

The Vision 2050 report looked to a future in which nine billion people are living well, and within the limits of the planet. While that report took a production-driven perspective, this one explores the same vision through a different lens, focusing on the consumer.

The overall vision outlined in this document is this: in 2050, people live well, within the limits of the planet and society at large. "Living well" is decoupled from the consumption of physical products, and the materials that they contain. The system of production and consumption is aligned with economic, environmental and social sustainability.

Furthermore, there is not one model fitting all consumers, but a wide range of options to live a better life, within the limits of the planet. Sustainable consumption is a mainstream phenomenon. Consumers still vary in their levels of awareness of environmental and social issues, and their willingness to alter their habits accordingly (see Figure 1); but everyone has the skills and/or tools to mitigate their ecological footprint.

In 2050, there will still be a variety of consumer profiles and segments. The five "personas" presented in the graphic below illustrate the different drivers of sustainable behavior, based on gratification and a sense of agency (i.e. the ability to take action, for example through the purchase and use of sustainable products).

Legacy builders

Likely to be pioneering reformers, they will be driven by true cost accounting, the valuing of bio-capacity, or the redesign of consumption.

Pleasure seekers

Unwilling to give up their perceived quality of life, they will accept more sustainable products only if those products deliver traditional personal benefits, such as better performance or a trendier image.

Nurturers and stewards

They will sacrifice or delay their personal gratification for the good of their family, the wider community, and future generations.

Escapists

Not particularly engaged, they will favor the default marketplace.

Figure 1: **Consumer segmentation in 2050**



LOW SENSE OF AGENCY



DELAYED GRATIEICATION



HIGH SENSE OF AGENCY







INSTANT GRATIFICATION



More precisely, the vision for sustainable consumption is made up of five key elements (see Figure 2). According to this vision, products will deliver more value to their consumers, in the form of functional utility, durability, environmental profile, and physical and emotional wellbeing; consumers will be more aware, better informed, and better able to make sustainable choices; signals – and value itself – will pass more efficiently between all actors in the value chain, unleashing innovation and allowing the most sustainable products and services to compete most effectively; and the economic measures related to consumption will be redefined. New measures of success will be applied, and there will be constant dialogue between all actors in the system.



The five elements of a vision for sustainable consumption in 2050



Better products and services

By 2050, value will be delivered to customers and consumers in a smarter way. Manufacturers, retailers and service providers will help consumers to live more sustainably, by means of better product design, and by replacing physical products with services. Higher value products that are only occasionally used will tend to be rented and shared by consumers, rather than bought and owned outright. When their owners no longer need them, they will recuperate their residual value by selling them for re-use or recycling.

The practice of building in obsolescence merely to stimulate replacement purchases will have been abandoned. Modular design will help products to be useful for longer, even as new technologies reach the market. When they can no longer be re-used, or when consumers choose to throw them away, products' constituent parts will be easily separated and either re-used without further processing, or easily recycled near the point of disposal.

Information about the environmental and social performance of products and services will be readily available to consumers, at the point of purchase and beyond. This is beginning to happen, for example, with smart-phone enabled applications that scan RFID tags, bar codes and quick response codes.

By means of such technologies, products and services will also help people to manage their own health and wellbeing, for example by providing nutritional profiles and effects on blood pressure, blood sugar and other physiological indicators.

All of these changes will build even more trusted and valuable brands. This is essential, because brands are the "shorthand" on which consumers rely when making their purchasing decisions, since they lack the time, inclination and expertise to examine every piece of relevant information, every time they are confronted by a purchasing decision.

Enlightened consumers

By 2050, consumers will be much more aware of the environmental and social consequences of their choices, and motivated to avoid negative impacts. They will know how to alter their choices and habits to achieve better environmental and social outcomes, while maintaining or improving their quality of life.

Most consumers will also find ways to deal more easily with complex information related to products, and will no longer be lost in the jungle of labels and ingredient lists. More meaningful information will be available to consumers. Trusted brands and opinion formers will help consumers to find the best value, most sustainable solutions.

In return, consumers will be better able and more willing to provide their insights into the development of better products and services.

Consumers will purchase, use and dispose of products in a smarter way. They will more easily identify those products that better fulfil their needs and desires, while preserving natural resources. They will use products more efficiently, allowing tremendous gains in energy consumption and less degradation of climate and ecosystem services.

Collaborative consumption will also be widespread; people will share and/or rent products they only use occasionally. They will also adopt new consumption patterns and lifestyles, prompting further innovation of business models.

Finally, consumers will be a major contributor to the recycling process.

Maximized total value

In 2050, products and services will be better designed to offer maximum value. That value will include the classic components of direct functional and emotional utility, as well as added measures of environmental and social net benefit.

Consumers will no longer have to choose between sustainability and performance; they will be able to find and afford more sustainable products that meet their functional and emotional needs.

This new concept of value is particularly important for our vision of sustainable consumption, and is discussed further in the next chapter.

New measures

In order for these changes to occur, success itself will have been redefined at national, company and individual levels.

The ultimate goal of nations' sustainability programs should be to allow their citizens to thrive within environmental limits. The indicators of national success of these programs, therefore, will relate to human and environmental health and wellbeing. The current principal indicator – gross domestic product (GDP) – will be enhanced with a suite of indicators that distinguish between activities that build stocks of natural and social capital – such as environmental restoration, education and preventive medicine – and those associated with their depletion. Measures of national success will place consumption in the context of sustainable outcomes, and take account of quality, as well as quantity.

Under this new definition of success, growth remains possible and desirable, since it does not depend on finite resources.

At the company level, success will be defined in terms of true value: the company's contribution to human and environmental wellbeing. Because of the legal and fiscal reforms described above, shareholders and employees will benefit financially from the companies' ability to "dematerialize" their offerings and preserve or build stocks of natural and social capital. Financial performance will not be the only top line measure of corporate success: environmental, social and economic impacts will all be reported at a similar level.

Some non-financial indicators may be expressed in financial terms, to the extent that they are "internalized" and valued by the market.

At the individual or societal level, consumption will not be the main driver or indicator of economic success. Rather, individuals will gain respect and social status by adopting more sustainable lifestyles while maximizing their quality of life. Personal status will increasingly be linked with the values that are expressed through lifestyle choices. High quality, long-lasting products will still be purchased, partly because of their outstanding environmental and social performance. Wasteful consumption will be avoided.

New measures of success depend in large part on leadership. People at the highest levels of business and politics will have worked together to design appropriate key performance indicators, and to ensure that environmental, social and economic performance are rewarded by the markets better than they are today. There will be a greater level of alignment and coordination between policy makers at local, national, regional and global levels, to measure, pursue and enforce international agreements.

Cohesive and responsive marketplace

In order for products and services to be appropriately designed, and for consumers to access them, there will need to be constant dialogue between all actors in the value chain. Companies will receive information about consumer needs, desires, values and reactions in a host of ways, from the traditional (such as sales data, surveys and personal interactions with customer services) as well as new channels. Consumers will have access to information about the environmental, social and ethical profiles of products and services, both from producers, stakeholders and other consumers. There will be ever-greater use of new social media, including: online reviews and peer-to-peer communications; the delivery of product-related information at the point of purchase; and other solutions that can only be guessed at. Increasingly, producers and retailers will use the insights from electronic media to inform and test their innovation processes, and new technologies, to track how consumers are using and reacting to their products in real time.

Producers, retailers, customers, consumers and other stakeholders (such as staff, civil society organizations and politicians) will all be contributing opinions and information online, and all will know how to access the information that is most relevant to them; in effect, the system of production and consumption will become more responsive.

As a result, consumers will place greater trust in brands and companies.



A pathway to sustainable consumption

Creating and managing choice

Sustainable Consumption Facts and Trends proposed a model in which sustainable consumption emerges from three areas of business activity: innovation; choice influencing; and choice editing (see Figure 3). According to this model, each company creates its own balance between these activities, according to its sector, culture and business environment.

Innovation

More sustainable lifestyles and consumption patterns will only be possible if more sustainable products and services are available, affordable and suitable to the vast majority of customers and consumers. Within this mass market, there will be a huge variety of needs, aspirations and behaviors, so a wide variety of sustainable solutions will be required. These solutions must deliver both functional and emotional value, whilst taking their ecological footprint into account.

To develop such solutions will require businesses to innovate in a range of areas, including product design, material processing, and business models.

Choice influencing

Creating more sustainable solutions will not be enough to ensure their widespread adoption; customers and consumers will also need the necessary information, incentives and support to choose and use those solutions effectively. Companies will need to work with other stakeholders to encourage them to live more sustainable lifestyles. This implies education, access to relevant and easy-to-understand information, the use of responsible marketing and advertising, the appropriate training of customer service staff, and the innovative use of emerging technologies.

Businesses have an incomparable expertise in promoting products and services for commercial goals. They can use this expertise to influence changes in consumer demand, and speed up the transformations needed in consumption patterns. In particular, they can use the power of marketing and communications to promote sustainable solutions, efficient use, and recycling.

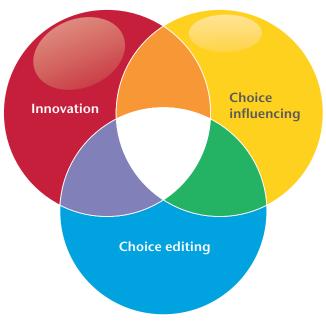


Figure 3:

Driving sustainable consumption through innovation, choice influencing and choice editing

Choice editing

Many businesses and consumers interpret choice editing as the reduction or limitation of choice, as when governments ban the sale of particular products or services. However, the most regular and prolific form of choice editing is much harder for consumers to spot. It happens on a daily basis, throughout the value chain, when suppliers, manufacturers or retailers replace their traditional raw materials, spare parts, ingredients and processes with more sustainable alternatives. They often do this on a voluntary basis, in partnership with their various stakeholders.

Overlaps

These three areas – innovation, choice influencing and choice editing – overlap. In particular, innovation is needed to develop new products and solutions, but also to make the current offerings more sustainable, and to sell them to customers and consumers. Customers' and consumers' choices are also influenced by the availability and suitability of more sustainable products and services.

These three areas of activity will make the step change needed to achieve a sustainable consumption only if they are enclosed in a wider framework focusing on the value shift.

Moving to the value paradigm

In the current business paradigm, especially the financial markets tend to prioritize short-term profit over long-term value. While the former is essential to the latter, investments in sustainability often take many years to recoup, and social and environmental costs can be externalized. In the short term, being more responsible can be less profitable.

We have already identified the need to rectify this situation by introducing new measures of success, and markets that are better designed to reward the creation of social and environmental value. The old, linear model of production and consumption, in which resources were extracted, processed and thrown away (see Figure 4), has been replaced by the circular model of value chains (see Figure 5), in which materials are used, re-used and recycled to minimize waste. The perfect example of such a system is often referred to as "closed loop".

This shift will accelerate and evolve over the next few decades, as closed loop systems become more sophisticated and 100% recovery and recycling of raw materials becomes feasible for an ever increasing share of the resource streams. They will begin to encompass more products so that the waste from one product might be used as a resource for more than one other type of product, and *vice versa*. Such systems may be described as "multiple loop" or "open loop".

However, even closed loop systems do not recognize the full complexity of the flows of materials, energy and information in modern economic systems. In response, a new, complementary model of production and consumption is emerging, in which value is better distributed, more fluid, and preserved for longer. We have called this model the "value net" (see Figure 6).

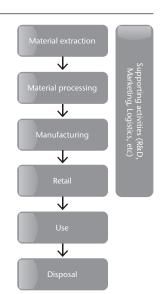
The value net retains as much value as possible, for as many people as possible, and for as long as possible. It recognizes that value can be created, shared and destroyed simultaneously in many parts of the system, rather than following a linear or circular path.

In future, "upstream" and "downstream" functions will become increasingly blurred and connected as value chains and loops transform into value nets.

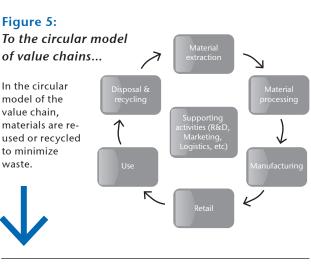
For example, there will be new mechanisms to engage consumers in what were previously

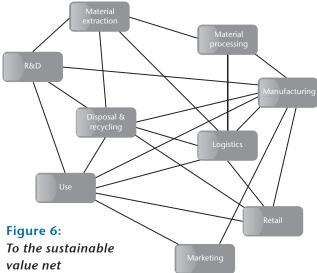
Figure 4: From the linear model of value chains...

The value chain consists of all the steps included in the production, consumption and disposal/recycling processes of a particular product or service. A typical value chain goes from raw material sourcing to disposal, through suppliers, manufacturers, retailers, consumers and other actors.



 \checkmark





In the value net, there are no longer up- and downstreams, but a network of interactions and value exchanges. The concepts of production and consumption become increasingly blurred. considered to be "upstream" parts of the value chain, such as strategy development, innovation, design, marketing and distribution. Different actors in the system will no longer be confined to a single role.

Value in its most complete form will be more effectively re-distributed and retained within the value net, rather than being lost in the form of waste or under used.

This will unleash innovation, reinforce trust and ultimately lead to new business models and smarter, more sustainable solutions.

Here are some examples of how business models might evolve in line with this new paradigm:

- Leisure: hotel companies might become brokers and facilitators of peer-to-peer domestic swaps.
- ITC: mainframes might be replaced by cloud computing, which uses redundant processing and storage capacity on personal computers connected to the World Wide Web.
- Power: big power stations might be replaced by distributed networks of micro-generators and local hubs.
- Food: intensive farming may be supplemented by smaller scale mixed farms, permaculture, gardening clubs and allotments.
- Mobility: private car ownership might be supplemented or partly replaced by a combination of car sharing, car hire, public transport and video telephony; "virtual" business travel – by means of teleconferencing that allows more eye-to-eye contact and individualized experiences – could become the norm.

Roles and responsibilities

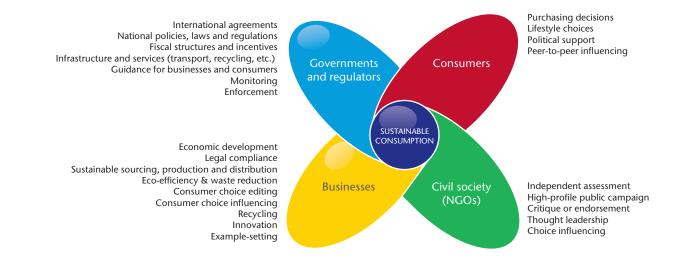
The pathway to more sustainable lifestyles and consumption patterns in 2050 involves a lot of actors with different perspectives and interests. In *Sustainable Consumption Facts and Trends*, we identified four major categories of actors, each having a specific role to play in driving sustainable lifestyles and consumption patterns (see Figure 7). Each of these actors is needed to drive the needed transformations. For instance, business needs consumer insights and enabling policy frameworks to create more sustainable choices; governments and society need business to inform policy, and to influence and empower consumers to adopt more sustainable attitudes and behaviors.

In the context of the value net, the roles and responsibilities of the four groups of actors can be summarized as follows:

- Businesses create and distribute value.
- Consumers acquire, preserve and share value.
- Governments formalize the definition of value, and design a market framework that recognizes this value and prevents impacts from exceeding their natural limits.
- Civil society organizations spot and address market failures, including the failure to recognize and reward "true" value.

Figure 7:

Roles and responsibilities of actors in driving sustainable consumption



A possible pathway

The Vision 2050 report outlined a pathway with nine elements: people's values; human development; economy; agriculture; forests; energy and power; buildings; mobility; and materials.

Some of these elements are useful from a production perspective, but less fundamental to a consumption perspective. For this report, we have used the five elements of our vision as elements of the pathway, as well as the same "back-casting" technique used in *Vision 2050*. According to this methodology, we identify the actions, "must-haves" and successes necessary to achieve the vision.

We have retained *Vision 2050's* key periods: the Turbulent Teens (from now to 2020), a period of crisis, clarification and action; and Transformation Time (2020-2050), during which the traits formed in the first decade mature into more consistent knowledge, behaviors and solutions.

Our graphic is a basis for more discussion within the business community and with other stakeholders (see Figure 8).

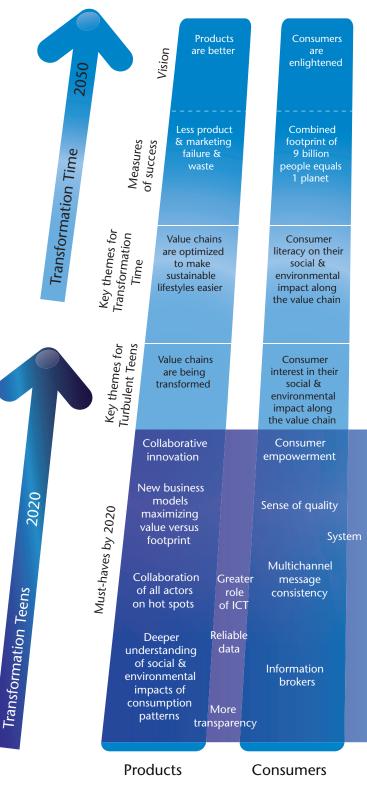
The Vision 2050 report pointed out that no country in the world manages to be both "developed" and environmentally sustainable; every country either consumes more than is sustainable, or fails to deliver adequate levels of human wellbeing (as defined by the Human Development Index). There is the potential for this problem to worsen as incomes rise and an extra one billion people join the middle class.

Therefore, national priorities for sustainability will vary such that "developed" countries concentrate on reducing environmental impacts without compromising human wellbeing, while underdeveloped and developing countries seek to increase human wellbeing in a way that is both environmentally and economically efficient. By 2050, these two paths should have converged, such that all countries share similar levels of wellbeing, and similar environmental footprints.

Figure 8:

A possible pathway toward a sustainable consumption in 2050

To a sustainable



From consumption

consumption in 2050

	Total value is maximized	me	asumption related easures are redefined	is more cohesive &		ore ive {	ź			
	Functional utility & emotional value is maximized versus the footprint Value nets optimize value creation, conservation & transfer	t	Success is measured hrough new indicators shaped by a common vision New measure & increased transparence speed up changes in consumption value chai	es ł y n n &	sta	ikeh conn omr abo expe well	ue			
	Shift toward the value paradigm		Cultura definition success a examine chango	s of are d &		C p all	impacts Developing latforms to ow people to ire information & influence each other			
thin	Better understandi of purchasir decision fact Shift to val net mode king Better defini of value Better understand of how tr generate tr value	ng ors lue els tion Valu	lead Focus versus ue shift Devel of indic Ch m alig	nent iness ershi on va	p alue prir ent sets e in et & poli	e ht cy	Trusted brokers Dialogue platforms in place Shift to value net models Enabling policy frameworks Collaborative actions New forms of consumers' engagement in product & service creation processes Development of tools & standards			
	Value			leas	sur	es	Marketplace			
	as usual									

"Must-haves"

Below is a summary of things that are essential in order to achieve the vision of sustainable consumption in 2050, as laid out in the pathway (Figure 7 on page 11).

More collaboration

More – and more complex – coalitions will be required, in which roles and responsibilities are not predefined, but constantly change, depending on the objective and types of action. In this new model, business will be a key player in educating consumers about the social and environmental impacts of their choices; businesses and consumers will collaborate to address social and environmental issues; and public authorities and NGOs will actively participate in value nets.

Most importantly, all of these actors will understand the need – occasionally or frequently – to pull in the same direction. This will be particularly crucial during the "Turbulent Teens", a period with two complementary projects: response to crisis; and the laying of foundations for a new way of living. Both of these projects require high levels of collaboration and cooperation to avoid conflict, and enable the development of appropriate solutions; costs, risks and benefits will all have to be shared.

Information exchanges throughout the value net

If consumers are to adopt more sustainable solutions *en masse*, then they need access to accurate, relevant, easily-understood and motivating information.

Business has to play an active role in helping to define and report sustainability in a meaningful way, such as through the use of information and communications technology, the collective discussion of sustainability challenges, and the development of better ways to communicate on a product level with consumers.

Deeper understanding of consumer behaviors

Businesses know much about their customers and consumers. However, this knowledge has been developed at a time when sustainability was not a great cause of concern, and most consumers did not consider sustainability when choosing products and services. Therefore, companies did not explore many latent or emerging concerns about sustainability amongst their consumers, much less address them. Today, most citizens are aware of the key environmental and social challenges, and express their willingness to do their part to combat them, as long as this does not imply significant personal sacrifice, and as long as others are also making a contribution. The tension between wanting to "save the world" and "savor the world" can make consumers behave in hard-to-understand (and sometimes apparently contradictory) ways. If we are to take sustainability to mainstream consumers, we need to deepen our understanding of what makes them tick, and help them to see the value in more sustainable products and services.

Technology

14

Technology will be essential in many ways. Most importantly, it will provide an important way for people and companies to share information, ideas and value; and it will enable more value to be extracted from fewer natural resources, thereby preserving stocks of natural and social capital.

Evolving business models

Most businesses have been built during a time when environmental concerns were less pressing, and resources were more secure. Their business models have reflected these times, and are predicated on maximizing the production and consumption of the company's products, which may not be from sustainable sources. As a result, many businesses find all or part of their product portfolios at risk, either because of their environmental or social impacts, or because of resource constraints.

In response, these businesses will adapt their business models, replacing the old products with more sustainable alternatives, including services. They will find new ways to deliver value to citizens, such as collaborating to remove systemic barriers to change, and developing system-changing solutions. They will work with other actors in the "value net", and often see new competitors lead the way.

All of this adds up to radical system change, rather than fine-tuning of business as usual.

Reinforcing trust

Sustainable consumption is a highly complex challenge, and is based on measures that are being developed and refined on an ongoing basis. It is the sum of daily choices involving a number of decision criteria; and it involves interactions and offshoots that can be difficult to understand. Business, together with other stakeholders, has an important role to play in helping consumers navigate through this complexity. Thus, consumers must be able to trust businesses to provide more sustainable products.

Being able to account for progress and contributions toward a common vision, measured through indicators that are based on a societal consensus, will also be an important element to reinforce this trust.

However, due to the complexity of the challenge, data will often be either highly abstract or very granular and open to different interpretations, depending on the perspectives and values of the observer. Specialist commentators and opinion formers, using information brokers where necessary, will continue to help consumers make sense of the data.

Finally, trust between business and policy makers will be essential to establish timely and effective regulations that help drive more sustainable consumption patterns.

Conclusion



Sustainable consumption and production is a complex and a daunting challenge for businesses, as much as for other stakeholders. Attempts to rise to that challenge have had some success, but it is now necessary to increase the pace of change. Existing solutions need to be refined and quickly brought to scale, and new solutions developed.

This report has proposed a positive way to address this challenge, by focusing on innovation, choice creation and choice editing. We have proposed a new definition of value that encompasses not only financial outcomes, but also social and environmental ones. This "true value" can be created, preserved and shared in sustainable value nets. The paradigm set out in this report recognizes our dependency on natural resources and the health of our planet, and rewards companies who can increase human wellbeing while minimizing their ecological footprint. It will help us to appreciate that humans are not in control of the natural world, but we need to develop business models and products which make efficient use of resources and enable more sustainable consumption patterns.

Consumers have a crucial role to play in achieving a more sustainable world by 2050. However, they rely on business and other actors, including governments, NGOs and the media to help them do so.

For all of this to come about, we need radical shifts and advances in a number of key areas: more collaboration between businesses, consumers, policy makers and civil organizations, especially to create the enabling environment; better ways of accessing and sharing information; a deeper understanding of human behaviors, and how to influence them; technology; new business models; and higher levels of trust between key actors in the value net.

All of these things are under way, and promise many opportunities for business; now, we need to make them happen better and faster, and we need to bring them to a global scale.





Resources

WBCSD reports



Vision 2050

In 2010, the WBCSD launched the *Vision 2050* report, an optimistic and positive vision of a sustainable world in 2050. As well as setting out this vision, it outlined a possible pathway to get us there, and set out the role of business. This vision, which was driven by 29 companies representing 14 industries, is the result of dialogues around the world involving the business community and experts.



Sustainable Consumption Facts and Trends report

In 2008, the WBCSD released one of the first reports from the business community that addresses the issue of sustainable consumption. *Sustainable Consumption Facts and Trends* took stock of the recent developments and trends in global consumption patterns, and presented an overview of the relationship between business activities, consumer behavior, and environmental and social challenges.



Sustainability through the market

In 2001, the WBCSD presented an agenda for improving markets so that they advance sustainable development. This report explains how market attributes that can serve the purpose of sustainability should be better engaged; how they can also provide the poor with more opportunities; and how they can better reflect the values of environmental goods and services crucial to our quality of life.

All reports are available on our website at www.wbcsd.org

Other resources

BSR, Business Opportunities in Sustainable Consumption, 2010

Consumer Goods Forum, 2020 Future Value Chain, 2011

European Environment Agency, State and Outlook 2010 – Consumption and the Environment, 2011

NHS, Route Map for Sustainable *Health*, 2011

Philips, Sustainable Innovation – Exploring a New Innovation Paradigm, 2011

SPREAD, The Future of Sustainable Lifestyles and Entrepreneurship, 2011

The Marrakech Process, Task Force on Sustainable Lifestyles, 2010

WEF, The Consumption Dilemma – Leverage Points for Accelerating Sustainable Growth, 2011

White P, Building sustainability strategy into the business, in Corporate Governance, 2009

WWF, *Living Planet Report 2010*, 2011

Acknowledgements

Sustainable Consumption Workstream Co-Chairs:

In 2011, Sustainable Consumption and Value Chain (SCVC) was added as a new Systems Solutions to the WBCSD work program. While the overarching governance structure of SCVC is still being finalized, the WBCSD believed it was important to keep pace with a rapidly evolving agenda and capture the current "state-of-play" in the following thought in the interim. This work was co-chaired by the following Liaison Delegates:

Uwe Bergmann (Henkel) Kirsi Sormunen (Nokia) Robert ter Kuile (PepsiCo)

Working group participants:

Guy Champniss (Havas), Dominique Debecker (Solvay), Erkin Erimez (Borusan), Guy Ethier and Staf Laget (Umicore), Winfried Haeser (Deutsche Post-DHL), Geoff Lane and Gary Sharkey (PwC), Chris Librie (S.C. Johnson), Per Sandberg (Accenture), Masao Seki (Sompo Japan Insurance), Paul Shrubsole and Peggy Goossen-Nachtigall (Philips), Peter White (Procter and Gamble).

A special thanks to PepsiCo, Philips and PwC for having hosted workshops and to the Luxury Brand Forum for having provided input to this work. Special thanks to Lars Fog Mortensen and Almut Reichel (European Environment Agency) and Michael Kuhndt (UNEP/Wuppertal Institute CSCP) for having co-organized a multistakeholder meeting with us in Brussels.

Secretariat:

Olivier Vilaça, Program Manager, Sustainable Consumption and Value Chain

Printer: Atar Roto Presse SA, Switzerland. Printed on paper containing 85.9% PEFC certified fiber and 3.2% FSC certified fiber. 100% chlorine free. ISO 14001 certified mill.

Copyright © WBCSD, October 2011 ISBN: 978-3-940388-79-7 Photo credits: Dreamstime and iStockphoto

About the World Business Council for Sustainable Development (WBCSD)

The WBCSD is a CEO-led, global coalition of some 200 companies advocating for progress on sustainable development. Its mission is to be a catalyst for innovation and sustainable growth in a world where resources are increasingly limited. The Council provides a platform for companies to share experiences and best practices on sustainable development issues and advocate for their implementation, working with governments, non-governmental and intergovernmental organizations. The membership has annual revenues of USD 7 trillion, spans more than 35 countries and represents 20 major industrial sectors. The Council also benefits from a network of 60 national and regional business councils and partner organizations, a majority of which are based in developing countries.

www.wbcsd.org





World Business Council for Sustainable Development

www.wbcsd.org

4, chemin de Conches, CH-1231 Conches-Geneva, Switzerland, Tel: +41 (0)22 839 31 00, E-mail: info@wbcsd.org 1500 K Street NW, Suite 850, Washington, DC 20005, US, Tel: +1 202 383 9505, E-mail: washington@wbcsd.org