



Global Compact Network  
Germany



UNEP/WUPPERTAL INSTITUTE COLLABORATING  
CENTRE ON SUSTAINABLE  
CONSUMPTION AND PRODUCTION

# PARTNERSHIPS FOR SUSTAINABLE CONSUMPTION

In cooperation with:



GESAMTVERBAND DER  
ALUMINIUMINDUSTRIE e.V.



On behalf of  
Federal Ministry  
for Economic Cooperation  
and Development



**VOLKSWAGEN**  
AKTIENGESELLSCHAFT

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# ZUSAMMENFASSUNG

## PARTNERSCHAFTEN FÜR NACHHALTIGEN KONSUM

### ÜBER DIESE PUBLIKATION

Die vorliegende Publikation ist das Ergebnis einer Workshopreihe zum Thema „nachhaltiger Konsum“, die 2007/2008 im Rahmen der Arbeitstreffen des Deutschen Global Compact Netzwerks (DGCN) durchgeführt wurde. Mit dem Fokus auf Partnerschaften zwischen Akteuren der Wirtschaft, Politik und Zivilgesellschaft wird ein Thema aufgegriffen, das die Diskussion immer wieder dominiert hat.

In dieser Publikation werden fünf Partnerschaftstypen vorgestellt, um die große Vielfalt und potenziell erwachsende Vorteile zu illustrieren und zu weiteren Formen der Zusammenarbeit auf dem Weg zu nachhaltigen Konsummustern anzuregen. Sie stellen keine vollständige Liste oder Systematik dar, sondern beleuchten praxisorientiert wichtige Handlungs- und Kooperationsfelder.

### WAS IST NACHHALTIGER KONSUM?

Nachhaltiger Konsum bezeichnet eine Nutzung von Produkten und Dienstleistungen, die auf die Erfüllung menschlicher Grundbedürfnisse und die Steigerung der Lebensqualität abzielt. Dabei minimiert sie negative soziale und ökologische Auswirkungen entlang des Produktlebenszyklus, um die Möglichkeiten zukünftiger Generationen zur Erfüllung ihrer Bedürfnisse nicht zu beschneiden.

Nachhaltiger Konsum fokussiert auf...

- die Nutzenphase von Produkten und Dienstleistungen,
- die Entkopplung von Konsum und Ressourcenverbrauch,
- effizienteren und ressourcenärmeren, aber nicht notwendigerweise geringeren, Konsum,
- alternative Konsummuster und Werte und
- die Steigerung der Lebensqualität, die nicht unweigerlich vom individuellen Konsumniveau abhängt.

## NACHHALTIGER KONSUM AUS DER UNTERNEHMENS-PERSPEKTIVE

In der Regel finden die wesentlichen Umwelt- und Sozialauswirkungen eines Produktes nicht am Ort der Endmontage, sondern bei Partnern und Zuliefern in der Vorproduktion sowie während der Nutzung beim Kunden statt. Nachhaltiger Konsum auf Unternehmensebene bedeutet also vor allem, eine Lebenszyklusperspektive einzunehmen, um wichtige Handlungs- und Innovationsfelder zu identifizieren.

Für die Wertschöpfungskette sind in den letzten Jahren eine Reihe von Instrumenten und Initiativen entstanden. Eine kritische Betrachtung der Nutzenphase unter Nachhaltigkeitsgesichtspunkten stellt für viele Unternehmen eine neue Herausforderung dar. Eine Reihe von Aspekten eines nachhaltigen Konsums sind bereits in bestehenden Konzepten zu Corporate Social Responsibility (CSR), den Prinzipien des UN Global Compact und den Leitlinien zur Nachhaltigkeitsberichterstattung der Global Reporting Initiative (GRI) integriert. Die aktive Auseinandersetzung mit Möglichkeiten für nachhaltigen Konsum und bewusst konsumierenden Kundengruppen ist eine übergreifende Aufgabe für das ganze Unternehmen. Es betrifft Unternehmensfunktionen wie Produktdesign, Materialbeschaffung, Produktion, Logistik, Marketing, Kommunikation und Kundenservice sowie Rücknahme- bzw. Recyclingprozesse. Diesen großen Herausforderungen stehen auf der anderen Seite langfristig wirksame Treiber zur Steigerung des Unternehmenswertes und zur Reduzierung von Risiken gegenüber (vgl. Figure 7, S. 15).

## PARTNERSCHAFTEN FÜR NACHHALTIGEN KONSUM

Nachhaltiger Konsum ist eine vielschichtige und übergreifende Herausforderung. Partnerschaften bieten die Chance, unternehmensinterne Möglichkeiten und Fähigkeiten mit wichtigen externen Ressourcen zu ergänzen und synergetische Ziele gemeinsam zu verfolgen. Sie sind ein wesentlicher Treiber für soziale und ökologische Verbesserungen in Produktions- und Konsumsystemen.

Unternehmen versprechen sich von Partnerschaften für nachhaltigen Konsum:

- Zugang zu komplementären technischen, personellen, physischen, finanziellen oder Wissensressourcen
- Zugang zu relevanten Akteuren oder Netzwerken, inklusive besserer Interaktionsmöglichkeiten mit einer breiteren Öffentlichkeit und einer gesteigerten Fähigkeit zur Beeinflussung der politischen Agenda
- Gesteigerte Glaubwürdigkeit und Legitimität durch die Beteiligung relevanter Anspruchsgruppen und die Entwicklung allgemein akzeptierter Problemlösungsansätze
- Akzeptierte und praktikable Marktmechanismen zur Ermöglichung und Förderung verantwortungsvoller Konsumententscheidungen

## **A** PARTNERSCHAFTEN FÜR GEMEINSAME STANDARDS UND PRINZIPIEN...

**...um Kunden verlässlich und transparent zu informieren:** Henkel unterstützt als aktives Mitglied den Runden Tisch für Nachhaltiges Palmöl (RSPO) bei der Entwicklung und Anwendung praktikabler Herstell- und Vermarktungsmechanismen für nachhaltiges Palmkernöl.

**...um Branchenvorfürsetzer für nachhaltigen Konsum zu definieren und zu managen:** Die A.I.S.E. Charter Nachhaltiges Waschen und Reinigen fördert die Institutionalisierung einer lebenszyklusweiten Produktoptimierung bei den mitwirkenden Unternehmen der Wasch-/Reinigungsmittelbranche.

**...um Anforderungen an nachhaltigen Konsum effektiv zu implementieren:** Die Partnerschaft zwischen der GTZ und der Metro in Vietnam verbindet Trainingsmaßnahmen von Zulieferern auf der Mikroebene synergetisch mit Politikempfehlungen auf der Makroebene.

**...um praktikable Antworten auf komplexe Herausforderungen des nachhaltigen Konsums zu entwickeln:** Mit dem Product Carbon Footprint Pilot Project Germany wurde eine Lernplattform aus Wirtschaft und Wissenschaft geschaffen, um Standards für die Erhebung und Kommunikation produktbezogener Treibhausgasemissionen zu entwickeln.

## **B** PARTNERSCHAFTEN FÜR KONSUMENTEN-INFORMATION UND -KOMMUNIKATION

**...um Kunden über effiziente und schonende Nutzungsoptionen zu informieren:** Die von Volkswagen und NABU gemeinsam organisierten Spritspar-Trainings unterstützen Autofahrer dabei, durch angepasstes Fahrverhalten bis zu 25% an Kraftstoff (-Kosten) zu sparen.

**...um Optimierungen der Nutzenphase und den resultierende Kundennutzen transparent zu machen:**

Der Henkel Value Calculator erstellt für Industriekunden eine finanzielle Gesamtbilanz der Prozesseffizienz, die durch ressourcen- und anwendungsoptimierte Produkte ermöglicht wird.

**...um durch informierte Mitarbeiter ein Innovationsumfeld zu schaffen:** Der Gesamtverband der Aluminiumindustrie (GDA) hat gemeinsam mit der IG Metall einen sozialpartnerschaftlichen Branchendialog ins Leben gerufen, um gemeinsam mit Mitarbeitern und Betriebsräten innovative Ansätze für Ressourceneffizienz zu entwickeln und umzusetzen.

**...um Wissen und Erfahrung für eine effektive Kundeninformation zu bündeln:** Mit dem FORUM WASCHEN wurde eine Dialogplattform geschaffen, in der ein breites Akteursspektrum konkrete Maßnahmen für nachhaltige Produktions- und Konsumoptionen in der Wasch-/Reinigungsmittelbranche entwickelt.

## **C** PARTNERSCHAFTEN FÜR FORSCHUNG UND ENTWICKLUNG

**...um die relevantesten Herausforderungen und Lebenszyklusphasen von Produkten zu identifizieren:** Die Aluminiumindustrie führt Lebenszyklusanalysen von Produktverpackungen durch, um die Bedeutung des Werkstoffes Aluminium für Produktsysteme im Lebensmittelbereich abzuschätzen.

**...um eine konsistente Nachhaltigkeitsabschätzung für fundierte Kundeninformationen vorzunehmen:** Otto erhebt die produktbezogenen Emissionen unterschiedlicher Lebenszyklusphasen von Textilien als Grundlage

für Produktionsoptimierungen und zum Aufzeigen effizienter Nutzungsmöglichkeiten.

**...um die Einführung technologischer Entwicklungen für effizienteren Konsum zu unterstützen:** Ein Konsortium um Volkswagen untersucht und testet technische Ansätze zur Integration von Elektrofahrzeugen in bestehende Energieinfrastrukturen.

**...um bestehende Technologien für eine effizientere Nutzung zusammenzuführen:** Die Projektpartner von „E-DeMa“ entwickeln eine Energieschnittstelle für Haushalte, die eine intelligente Steuerung von dezentralen Stromerzeugern und -verbrauchern ermöglicht und dabei externe Preissignale berücksichtigt.

## **D** PARTNERSCHAFTEN FÜR NACHHALTIGE PRODUKTE UND DIENSTLEISTUNGEN

**...um Sozial-, Umwelt- und Qualitätsaspekte auf Ebene der Zulieferer zu stärken:** Gemeinsam mit Zulieferern in Brasilien, Mexiko and Südafrika entwickeln Volkswagen und die GTZ Arbeitssicherheits- und Gesundheitsstrukturen, um Sozialstandards wirksam zu implementieren und eine hohe Produktqualität sicherzustellen.

**...um relevante Nachhaltigkeitsthemen in der Zulieferkette zu institutionalisieren:** Die GTZ und Tchibo qualifizieren kleine und mittlere Unternehmen (KMU) für die Durchführung von Unternehmensschulungen zur Implementierung von Sozialstandards.

**...um Konsumenten über Herstellungsprozesse und -bedingungen zu informieren:** GRI, die GTZ, PUMA und weitere Unternehmen unterstützen KMU-Zulieferer in einem Pilotprojekt dabei, ihre eigenen Nachhaltigkeitsberichte zu erstellen.

**...um eine Informationsgrundlage für nachhaltiges Produktdesign zu schaffen:** Die Aluminiumindustrie entwickelt gemeinsam mit relevanten Anspruchsgruppen Kernindikatoren für die Aluminiumproduktion und -nutzenphase, u.a. um eine Informationsgrundlage für nachhaltiges Produktdesign zu schaffen.

## **E** PARTNERSCHAFTEN FÜR LOKALES ENGAGEMENT UND NEUE MÄRKTE

**...um nachhaltige Geschäftsmodelle für benachteiligte Konsumentengruppen zu entwickeln:** Bosch und Siemens Hausgeräte entwickelt gemeinsam mit Partnern ein Geschäftsmodell, das Einwohnern brasilianischer Favelas den Austausch veralteter Kühlschränke gegen hocheffiziente Neugeräte ermöglicht.

**...um die nachhaltige Entwicklung einer Region zu fördern:** Gemeinsam mit öffentlichen und privaten Partnern entwickelt die Aid by Trade Foundation mit „Cotton made in Africa“ ein nachhaltiges Entwicklungskonzept, das auf der Produktion ressourcenschonender und sozialverantwortlich erzeugter Baumwolle fußt.

**...um sozialen und ökologischen Herausforderungen mit maßgeschneiderten Technologien zu begegnen:** Ein von der GTZ unterstütztes Konsortium implementiert innovative Abwassertechnologie, die auf die sozialen und ökologischen Anforderungen städtischer Gebiete in Äthiopien zugeschnitten ist.

**...um die Lebensqualität durch Technologietransfer und Qualifizierung nachhaltig zu verbessern:** Mit Hilfe deutscher und indischer Partner qualifiziert KARL STORZ indische Ärzte für die Nutzung minimal-invasiver Medizintechnologie mit Gesundheits- und Kostenvorteilen für Arzt und Patient.

# WHAT IS SUSTAINABLE CONSUMPTION? AND WHY PARTNER FOR IT?

## ABOUT THIS BOOKLET

Sustainable consumption offers many exciting challenges and opportunities for the present and future. This booklet is the result of a workshop series carried out with members and actors of the German Global Compact Network (DGCN) in 2007 and 2008. It explores the importance of partnerships between organisations and institutions as an essential enabler and driver of sustainable consumption initiatives and business strategies. This booklet highlights not just existing partnerships through current and genuine examples, but serves as inspiration for further collaborations for sustainable consumption.

The workshops series and the booklet itself has been a partnership. The German Aluminium Industry Association (GDA), the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), Henkel, and Volkswagen provided support and shared practical experiences on approaches to and benefits of sustainable consumption.

## WHAT IS SUSTAINABLE CONSUMPTION?

Sustainable consumption is now top on the agenda for companies, politicians, the media and civil society. Policy makers and researchers believe sustainable consumption to be a particularly effective option because up until now, attempts to improve environmental efficiency, such as by implementing new technology and stricter environmental controls on the production side, often have been outweighed by “un-sustainable” consumption patterns and the increasing growth in environmentally damaging sectors. A number of studies even indicate that despite claims from some industrialised countries of a decrease in carbon emissions in recent years, these results have been achieved by “outsourcing” resource intense production processes to developing countries or emerging economies. In reality, a more accurate carbon emissions calculation should include the emissions from a country’s imported goods.

*“Sustainable consumption is the use of goods and services that respond to basic needs and bring a better quality of life, while minimising environmental and social impacts over the life cycle, so as not to jeopardise the needs of future generations”<sup>1</sup>*

## Business relevance of sustainable consumption – some figures

- Ethically produced product demand is likely to have the greatest positive impact on shareholder value for companies over the next five years.<sup>2</sup>
- 41% of executives say the shift toward green products exacts a major (9%) or moderate (32%) impact on their sourcing and supply-chain strategies. Over the next two years, however, this figure rises to 55% – 15% describing the impact as major and 40% as moderate.<sup>3</sup>
- Turnover of fair-trade labelled products quadrupled from 2004 to 2008.<sup>4</sup>

### HOW CAN CONSUMPTION BE SUSTAINABLE?

Our typical way of consuming – based on a linear lifecycle from resource procurement to disposal – is unsustainable. This is because the resources and energy required are not adequately supported by the natural world. There are radical differences between industrialised nations, who ‘overconsume’ resulting in environmental and social problems, such as climate change and obesity, and developing countries or emerging economies, where fundamental needs are often unmet due to ‘underconsumption’.

Sustainable consumption attempts to address these global challenges through...

- Having a stronger focus on the usage phase
- Promoting the decoupling of consumption and lifestyles from resource use
- Aiming at not necessarily less, but more efficient resource saving consumption
- Partly requiring other consumption patterns and values
- Contributing to an improved quality of life, which does not inevitably depend on the consumption level of individuals

Type of economy	Challenges for sustainable consumption and production	Example countries
<b>Industrialised</b>	Dramatically lowering resource use while maintaining economic output (“Factor 10”)	USA, Japan, Western Europe
<b>Emerging</b>	Leapfrogging to sustainable structures of consumption and production without copying western examples first	China, South-East Asia, some countries in South America
<b>Developing</b>	Developing dedicated solutions for the “low-income segment of the population”; providing a basis for sustainable growth	Many countries in Africa, some countries in South America

Figure 1: Sustainable consumption and production challenges by type of economy (Source: adapted from SCORE! 2008)<sup>5</sup>

Figure 2: Sustainable consumption as a political priority

## A POLITICAL PRIORITY – SUSTAINABLE CONSUMPTION ON DIFFERENT LEVELS

**World:** At the World Summit for Sustainable Development in 2002, participating countries pledged to promote sustainable consumption and production. In 2003, a further UN meeting took place in Marrakech and countries agreed to develop a 10-year framework plan for sustainable consumption and production (later known as the United Nations Marrakech Process). The Marrakech Process takes place through discussion within regions (Europe, Latin America, Africa and Asia-Pacific) and across regions in the form of roundtables. The work is divided into seven taskforces. Sustainable consumption is also covered by other political agreements on sustainable lifestyles and sustainable products, as well as in a Business Forum organised by the World Business Council for Sustainable Development (WBCSD). The main outcomes of the Marrakech Process are threefold and include (1) the establishment of regional and national institutions and strategies dedicated to sustainable consumption and production, (2) the development of capacity building tools and training at all levels, and (3) the implementation of demonstration projects worldwide.

**Europe:** The EU action plan on sustainable consumption and production and sustainable industrial policy was published in July 2008. It focuses on action for ‘smarter consumption’. Some of its recommendations include revision of the EU Eco-Label Ordinance, and an improved, online-based consumer information programme, especially aimed at young consumers. For retailers, the action plan proposes setting up a commercial forum. The forum will operate on a voluntary basis, and will contribute to sustainable design of value chains and more effective consumer education. Green Public Procurement (use of sustainable consumption and production in public authorities) is also an important part of the action plan.

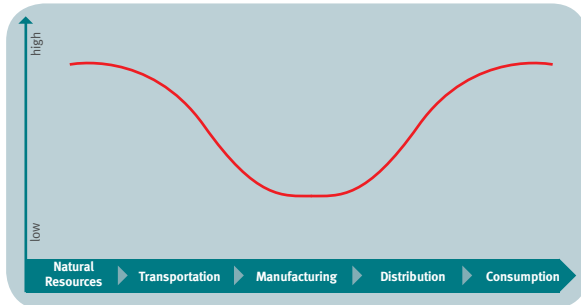
**Germany:** Most of the work on sustainable consumption in Germany is through collaboration between the state, companies and civil society. Discussion on innovative initiatives, and sustainable products and services is taking place and is planned to be continued through professional dialogues and conferences. Topics covered so far include: the role of fundamental concepts such as sustainable consumption and production patterns, marketing strategies, ecodesign, and energy-efficiency. Other events also address specific technologies or sectors such as efficient lighting, domestic appliances, retailers or ICT companies.

## HOW CAN COMPANIES FOCUS ON SUSTAINABLE CONSUMPTION?

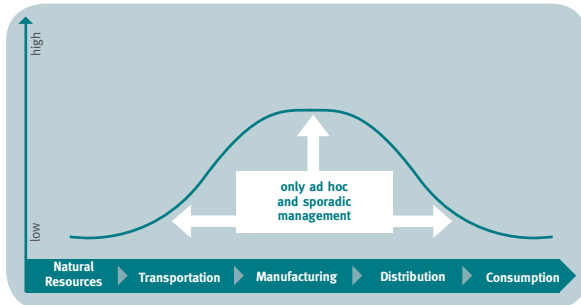
Even though there is a vast difference between sectors and products, addressing sustainable consumption in companies can be done through a common approach. This is because the most damaging environmental impacts and social concerns (and hence most relevant areas for improvement opportunities) mostly occur in a company's upstream and downstream product chains. When a product is made from material intense resources, or through complex processes requiring large quantities of raw materials, it is easy to recognise the negative effect this has on the environment. This also applies to social aspects, as human rights and working conditions become increasingly difficult to control and manage in extended supply chains involving more countries and sites.

Many of the products' life-cycle impacts do not occur on the site it is produced. For example, it is possible that a product might have a high environmental footprint because of the way it is consumed – it might be energy intensive or be difficult to dispose of. Companies are slowly recognising that a disproportionate amount of time and effort has been spent addressing site compliance issues (see Figure 3). The focus in recent years has been shifting towards the more relevant aspects of (pre-)production and supplier issues. Sustainability efforts now involve not just the production, but also the use-phase. Moreover, sustainable consumption does not just concern politicians and researchers (see Figure 2), but is a valuable business strategy too.

### 1 Opportunities and risks along the product chain



### 2 Focus of current management effort



### 3 Mismatch between the two

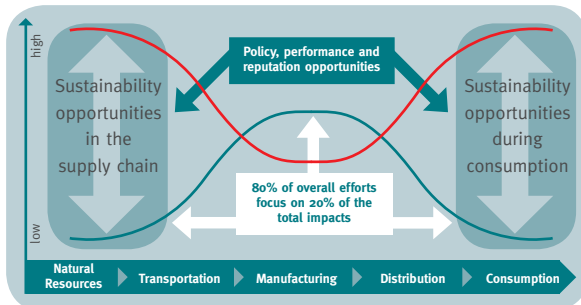


Figure 3: Sustainability opportunities in the value chain (Source: CSCP based on WWF-UK 2004)

# LINKING SUSTAINABLE CONSUMPTION TO BUSINESS CONCEPTS AND PRINCIPLES SUCH AS...

## ...CSR

Corporate Social Responsibility (CSR) is now a familiar concept in many companies. There are a great number of links between CSR and sustainable consumption. These links include the notion of product stewardship or ethical marketing. However, sustainable consumption is different in that the clear focus is on the consumer and customer perspective. Nearly all companies

claim to follow a customer-centric and service-oriented approach. Sustainable consumption expands this perspective by including not just a “greening” of existing products. It involves expanding the boundaries of CSR to include the core aspects of customer choice. This means informing responsible buying decisions, supporting low impact use, and taking responsibility for end-of-life management (see Figure 4).

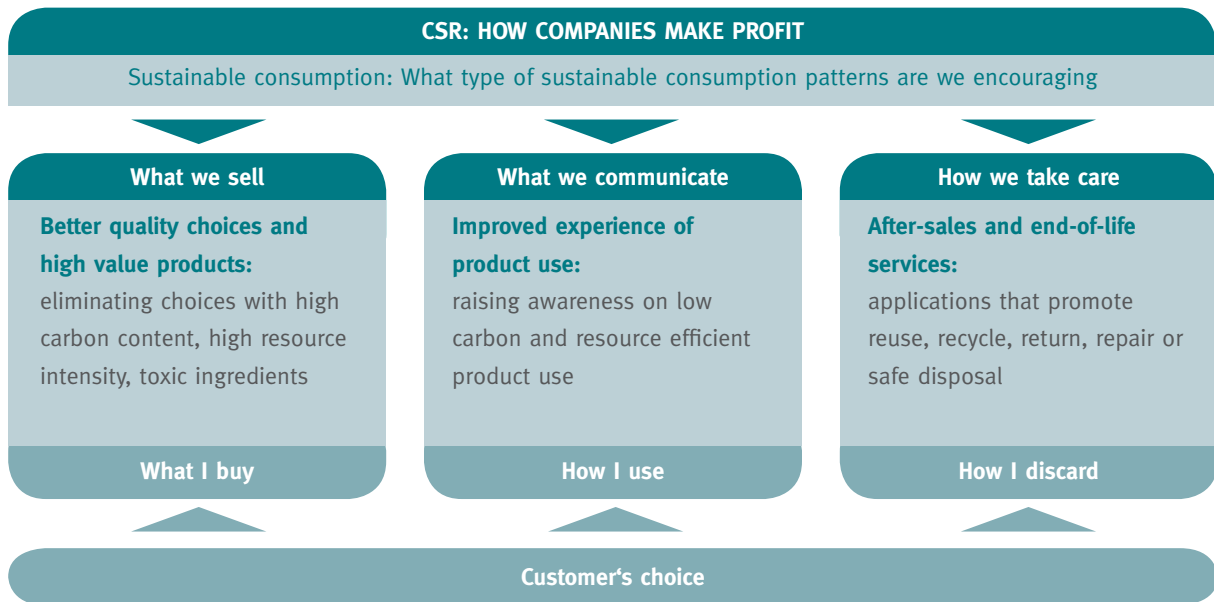


Figure 4: Expanding CSR to embrace consumption opportunities (Source: CSCP)

This is not intended to be another “add-on” to an ever-increasing corporate responsibility. Moreover, it helps to identify consumption opportunities which better serve customers, whilst also responding to the increasing societal demands and regulation aiming to extend producer responsibility.

### ...THE PRINCIPLES OF THE UN GLOBAL COMPACT

Sustainable consumption is inherently about fair and resource-saving consumption. It also means changing consumption patterns and values to improve quality of life. In this respect, sustainable consumption links to a number of the Global Compact principles (see Figure 5).

Principles UN GC	Linkages to sustainable consumption
<b>Human Rights</b> (Principles 1-2)	<ul style="list-style-type: none"> <li>• Creating consumption opportunities for low-income markets in order to provide access to basic services</li> </ul>
<b>Labour Standards</b> (Principles 3-6)	<ul style="list-style-type: none"> <li>• Rising consumer awareness for production modalities (e.g. via labelling)</li> <li>• Create new market opportunities for goods produced under sustainable labour conditions</li> </ul>
<b>Environment</b> (Principles 7-9)	<ul style="list-style-type: none"> <li>• Environmental efforts in production risk being countervailed if consumption patterns are not taken into account (rebound-effects)</li> </ul>
<b>Anti-Corruption</b> (Principle 10)	<ul style="list-style-type: none"> <li>• Especially public procurement: Sustainable consumption to avoid legal and financial risks as well as avoiding undermining the development of the poor and disadvantaged, which often are disproportionately affected by corruption</li> </ul>

Figure 5: Linking sustainable consumption to the principles of the UN Global Compact

## ...THE GRI GUIDELINES FOR SUSTAINABILITY REPORTING

The Global Reporting Initiative (GRI)<sup>6</sup> has developed a widely accepted set of reporting guidelines for companies through a multi-stakeholder approach. These guidelines also link to a number of issues related to sustainable consumption. For instance, the GRI suggests relevant sustainability issues which should be reported using specific indicators. A number of these indicators describe the consumption (or rather, the purchasing) performance of the reporting organisation.

This includes the organisation's use of resources – e.g. in terms of materials (EN1), energy (direct: EN3-4, indirect: EN7), or water (EN8) – as well as the conditions of employment, either within the organisation or the wider supply chain (Labour Practices and Decent Work: LA1-14; Human Rights HR1-9).

Other performance indicators directly relate to the social and environmental performance of products and services:

### GRI PERFORMANCE INDICATORS RELATED TO SUSTAINABLE CONSUMPTION

#### Environmental impact of products and services

- EN6 Initiatives to provide energy-efficient or renewable energy based products and services [...].
- EN26 Initiatives to mitigate environmental impacts of products and services [...].
- EN27 Percentage of products sold and their packaging materials that are reclaimed [...].

#### Product responsibility

- PR1 Life cycle stages in which health and safety impacts of products and services are assessed for improvement [...].
- PR2 Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle [...].
- PR3 Type of product and service information required by procedures [e.g. with regard to sourcing procedures, substances that might produce an environmental or social impact, safe use, disposal, other environmental/social impacts] [...].
- PR5 Practices related to customer satisfaction [...].

Figure 6: Linking sustainable consumption to the GRI Guidelines

Although stimulating sustainable consumption in companies often comes from such external concepts or agendas, internal drivers are often more convincing.

# WHY SHOULD COMPANIES CARE? SUSTAINABLE CONSUMPTION AS BUSINESS VALUE DRIVER

New markets and changing consumer behaviour is driving sustainable consumption in business. Customers are becoming increasingly aware of social and environmental issues and new lifestyles such as LOHAS (Lifestyle Of Health And Sustainability), and this is leading to considerable consumption shifts in some sectors. Other companies are recognising the need to mainstream sustainability principles within their sector (e.g. to secure long-term resource supply). What is clear is that the challenge of sustainable consumption is not restricted to the customer interface. It is a challenge running through the entire product life cycle, and it encompasses product design, materials procurement, production, transportation and logistics, marketing and communication, retail, customer service in the usage phase as well as recycling or disposal.

Addressing sustainability issues at both ends of the product chain might seem an impossible task. However, through supporting partnerships, the value created by minimising risks and increased competitive advantages, may outweigh the challenges

## Product-related regulation

- Integrated Product Policy
- Extended Producer Responsibility
- Energy-using Products

## Product quality

- Chemical sensitivity growing
- Chemical residues in textiles, food, housing
- Organic food perceived as superior and more healthy

## Efficiency increase

- Minimise life-cycle of products and services
- New business models to internalise savings
- Increase sales and revenue

## Product-related liability

- Tobacco and obesity class action law suits, especially in the USA
- Regulation-driven

## Innovation capacity

- Better knowledge of consumer needs
- Find innovation solutions and business concepts
- Increase competitiveness

## Conscious consumption

- Increasing customer awareness for social and environmental aspects
- Organic and fair trade sales growing in many countries
- Eco-tourism fastest growing tourism segment

Figure 7: Value drivers for sustainable consumption (Source: CSCP)

and efforts needed (see Figure 7). Fully tapping this potential needs a systematic approach and might require the support of different partners. It may even internally trigger major strategic decisions.

# BUSINESS STRATEGIES FOR SUSTAINABLE CONSUMPTION: A STEP-BY-STEP APPROACH

Companies can promote sustainable consumption in many different ways. These can be through product design, use of new materials and technologies, labelling and choice editing. Sustainable consumption can even mean the application of new business models relying on providing services and solutions instead of selling products. Figure 8 provides

an overview of strategy areas for sustainable consumption. Each strategy area has a number from one to six. The strategies' focus moves from existing to new (more sustainable) products and services. Finally, new lifestyles are considered. With raising number, the degree of challenge, strategic impact on the business model and the need for partnerships also increase.

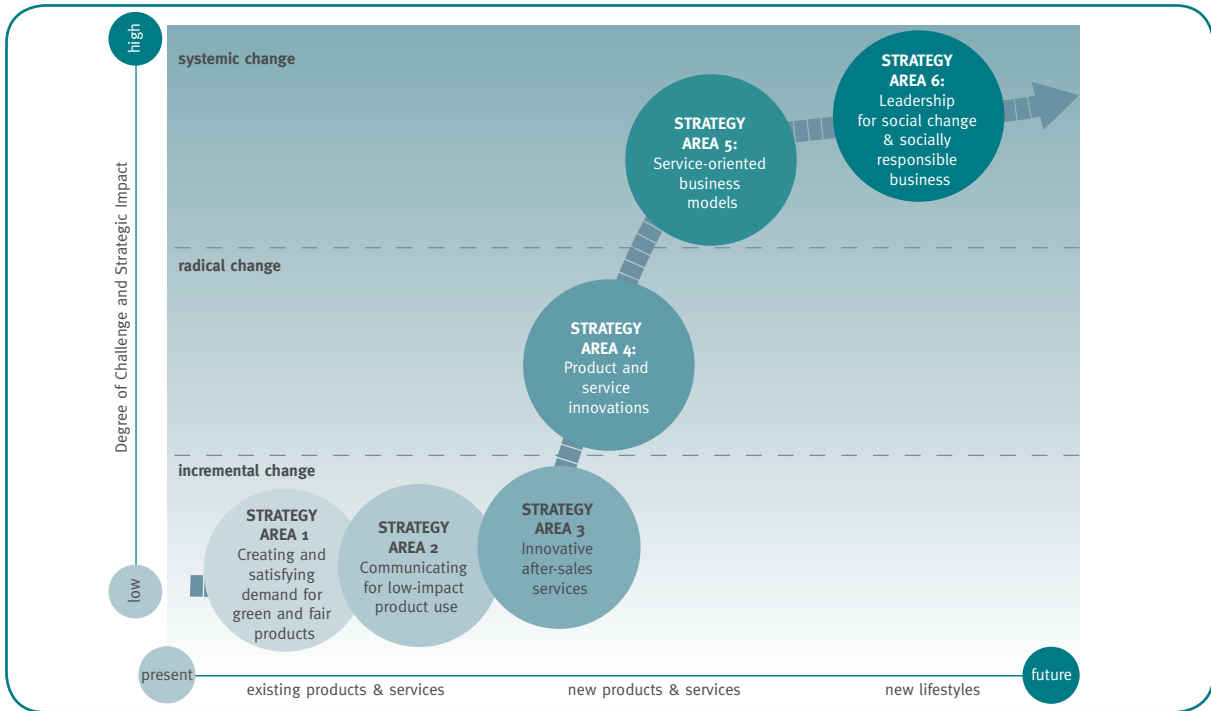


Figure 8: Strategy areas for sustainable consumption?

**STRATEGY  
AREA 1**  
Creating and  
satisfying  
demand for  
green and fair  
products

This strategy area is closely linked to retail activities and the editing out of high-impact products (often coined as “choice editing”), which is an essential enabler of responsible buying decisions.

Strategies in this area include both sourcing and marketing aspects that contribute to reducing social and environmental impacts. A supply chain can be sustainably managed when it combines clear environmental and social standards with the capacity building and motivation of people and organisations. The project of the GTZ and Metro targeting the Vietnamese fruit and vegetable value chain has expanded this approach to also address the local ministry and regulatory framework (see page 27). Marketing lower impact and better performing products can be successful through standards and labels. Henkel constantly increases the use of renewable raw materials, thus lowering environmental impacts without compromising on quality. To assure that the increasing demand for palm kernel oil does not deplete environmental resources, Henkel has joined the Roundtable on Sustainable Palm Oil (RSPO). This collaboration creates viable trading mechanisms for sustainable palm kernel oil and serves consumers as trusted information source (see page 23). Companies who participate in such projects, greatly reduce reputation risks, whilst simultaneously opening up new market opportunities.

**STRATEGY  
AREA 2**  
Communicating  
for low-impact  
product use

A fundamental aspect of sustainable consumption is to guide consumers towards efficient and responsible consumption. This is especially impor-

tant for suppliers of products with high use-dependent impacts. Emphasising that a product can be used safely, efficiently and responsibly is often not sufficient. The “Drive smart – save gas” programme offered by Volkswagen and the German Nature and Biodiversity Conservation Union (NABU) offers car drivers a training on how to drive more efficiently (see page 32). The problem must be addressed differently when considering providers of pre-products or raw materials. Often, such products are used for multiple applications with a great variety of use-related impacts. The German aluminium industry proactively meets this challenge from different angles. For example, in order to understand the role and relevance of flexible packaging within the food supply chain, selected product systems have been studied with a life cycle assessment approach (see page 40). Furthermore, an industry dialogue has been set up to bring together relevant stakeholders to promote resource efficiency in the aluminium industry. A key target group is employees in the aluminium industry, who are also addressed in their role as consumers (see page 35).

**STRATEGY  
AREA 3**  
Innovative  
after-sales  
services

Extending the lives of products in the first place is an effective way of reducing resource consumption. Besides improved product quality, supporting strategies may include after-sales services, such as long warranty periods, availability of affordable replacement parts, as well as the possibility to upgrade and retrofit products to meet the changing requirements of users. Other options include product

strategies that foster high value retention, achieved through a high degree of technical maturity and comprehensive testing (also in terms of aesthetics and design!), as well as exchange and trading platforms for used products. Companies often fear that a systematic optimisation of use phase aspects do not pay off, as benefits may be complex and difficult to quantify. Henkel's Value Calculator helps to assess costs and benefits of new products for processes of industry customers. It assists in qualifying efficiency improvements that are often closely linked to enhanced environmental performance (see page 33).

**STRATEGY AREA 4:**  
Product and service innovations

The life-cycle wide social and environmental impacts are decided in the design stage of a product or service. Sustainable consumption must therefore be integrated into this critical stage. Although the resulting innovations may significantly contribute to sustainable consumption, they may also require a more sophisticated communication and demonstration of the multiple benefits. As new technologies converge, partnerships are often the ideal setting for combining different competencies, resources, and experiences. In its fleet test of electro-mobility VW cooperates with technology partners and energy suppliers to not only explore the technical challenges, but also the wider implications for integrating electric cars into existing energy networks (see page 43).

Designing low-impact products and services often requires a profound understanding of potential issues

and life cycle impacts. Another way in which business is filling this gap is shown by the aluminium industry. On the German and European level quantitative sustainability indicators are developed, which can help to describe the impacts and benefits of aluminium in the use phase. This may serve as a knowledge base for aluminium customers to unlock resource efficiency potentials through innovative aluminium-based applications (see page 52).

**STRATEGY AREA 5:**  
Service-oriented business models

The conversion of products into services is frequently discussed as driver for more efficient consumption. Such "product-services" (or so called product-service systems – PSS) sell need fulfilment (e.g. heat, mobility, computing power) rather than products designed to do this (e.g. heating systems, automobiles, computers). In this way, innovative manufacturers can profit directly from the quality, longevity and upgradeability of their products, since they can rent or lease them to customers for a long time. Companies have a greater scope to reduce resource streams, while customers gain investment security and are freed from the risk and costs of maintenance and repairs.

Partnerships can be an essential driver for embedding efficient technology into tailored services. In development cooperation the GTZ combined its regional expertise with innovative technology and products to meet basic needs more sustainably and build capacity to create local markets (see pages 60 and 61).

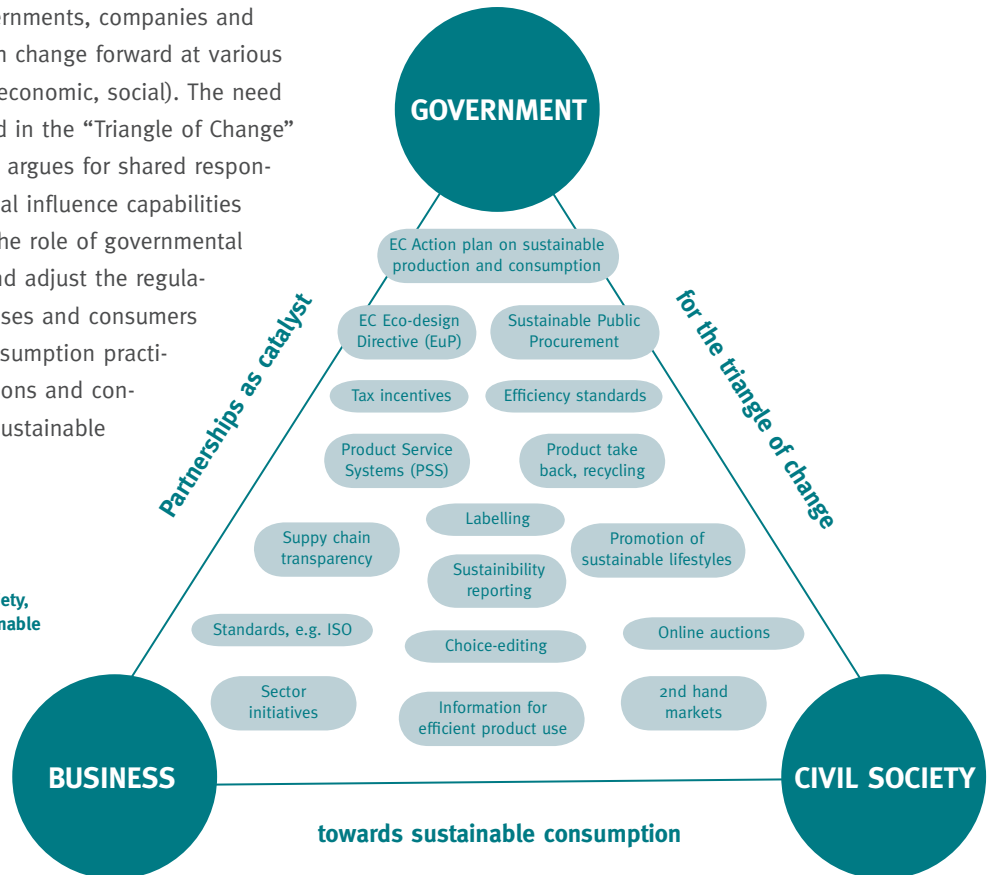
**STRATEGY AREA 6:**  
Leadership for social change & socially responsible business

Despite all the optimisation that companies can spur internally, sustainable consumption in many areas of life will require a simultaneous change in social lifestyles and values.

Alternative concepts, e.g. for the travel and mobility habits of industrialized countries, are urgently needed. Individual companies alone cannot achieve such a dramatic change. This evolution will require long-term partnerships between governments, companies and civil society groups to push change forward at various levels (legal, institutional, economic, social). The need for partnerships is reflected in the “Triangle of Change” (see Figure 9). The triangle argues for shared responsibilities bound to individual influence capabilities and active collaboration. The role of governmental authorities is to provide and adjust the regulatory framework for businesses and consumers to support sustainable consumption practices. Civil society organisations and consumers enable and make sustainable

consumption decisions based on framework and information provided by public authorities and companies. Businesses’ role is to provide goods and services that are profitable and at the same time sustainable throughout their life-cycle. Such partnerships – be they bi-, tri- or multilateral – can provide companies with effective, reliable and accepted means to inform and promote responsible consumption decisions.

**Figure 9: The Triangle of Chance: Business – Government – Civil Society,** (Source: CSCP based on UK Sustainable Consumption Roundtable 2006)



# PARTNERSHIPS FOR SUSTAINABLE CONSUMPTION

## PARTNERSHIPS AS CATALYST FOR SUSTAINABLE CONSUMPTION

Sustainable consumption is a truly crosscutting issue. Mainstreaming sustainable consumption practices does not just involve the relevant partners upstream and downstream the supply chain, or within a sector. Tackling complex challenges, such as climate change or sustainable consumption on the level of lifestyles, societal values, education, market-based mechanisms and political frameworks will only be successful through effective partnerships. The mobilisation of resources beyond the internal capabilities of a corporation is required for social and environmental improvements in production and consumption systems.

The main reason for companies to engage in partnerships for sustainable consumption may be a need for one or more of the following resources:

- **Access to** complementary technical, human, knowledge, physical and financial **resources**
- **Access to** relevant **actors and networks**, including more advanced options to engage with the wider public and greater capacity to influence the policy agenda<sup>8</sup>
- **Credibility and legitimacy** (“licence to operate”) through engaging with relevant stakeholders and develop approaches that are widely accepted
- **Viable market mechanisms** to support acting and buying responsibly

## INTRODUCING FIVE PARTNERSHIP TYPES FOR SUSTAINABLE CONSUMPTION

Partnerships are often described as collaboration of two or more organisations that are based on synergistic goals that can often not be accomplished by single organisations on their own. Additionally, partnerships are often defined as non-commercial, which means that the appropriate resources or competencies cannot be purchased through a market transaction.<sup>9</sup> However, actors such as companies, NGOs, or governmental bodies fulfil a variety of roles and responsibilities, and the boundaries between issue-driven partnerships and seller-buyer-relationships may get blurred, especially when partners invest in diverse currencies such as time, resources, knowledge, and networks. This booklet presents a great variety of business case examples and partnership types, from multi-stakeholder processes to market-based collaboration.

To illustrate the benefits and enormous diversity of partnerships, and inspire the formation of further teamwork for sustainable consumption, this booklet presents five common types of partnerships. This selection does

not represent a complete list or taxonomy of partnerships, but rather highlights crucial areas of sustainable consumption that commonly require cooperation with external partners.

	<b>PARTNERSHIPS FOR...</b>	<b>PARTNERSHIPS CAN PROVIDE E.G. ...</b>	<b>POTENTIAL PARTNERS ARE ...</b>
<b>A</b>	<b>Creating common standards or principles</b>	<ul style="list-style-type: none"> <li>• Support in defining sector priorities for sustainable consumption</li> <li>• Knowledge about customer concerns and needs</li> </ul>	<b>Associations/sector companies*</b> , competitors, (sector) stakeholder, NGOs, research organisations
<b>B</b>	<b>Consumer communication and education</b>	<ul style="list-style-type: none"> <li>• Trusted information on product performance and responsible use</li> <li>• Influence on lifestyles and opinion leadership</li> </ul>	<b>NGOs*</b> , civil society organisations, consumer protection agencies, media, governmental authorities
<b>C</b>	<b>Research and development</b>	<ul style="list-style-type: none"> <li>• Scientific life-cycle assessment, alternative technologies and application of renewable resources</li> <li>• Assistance for innovative products and services</li> </ul>	<b>Scientific organisations*</b> , universities, research centres, institutes, governmental authorities
<b>D</b>	<b>Sustainable products and services</b>	<ul style="list-style-type: none"> <li>• Insights on customer needs, culture, lifestyles as well as material stakeholder issues</li> <li>• Viable market mechanisms to support responsible sourcing</li> </ul>	<b>Customers and suppliers*</b> , stakeholder, NGOs
<b>E</b>	<b>Local community involvement and new markets</b>	<ul style="list-style-type: none"> <li>• Access to relevant networks and organisations in developing countries or emerging economies</li> <li>• Support in linking business models to social development needs</li> </ul>	<b>Development agencies*</b> , development aid organisations, local networks, NGOs

\* are described as “prototype partner” in the corresponding partnership section

**Figure 10: Five Types of partnerships for sustainable consumption**

Business case examples form the main source of inspiration. Additionally, experiences and background information from the practitioners are summarised to provide more general guidance and “lessons learned”.

# A PARTNERSHIPS FOR CREATING COMMON STANDARDS OR PRINCIPLES

**H**ere, partners agree on common standards or principles, which contribute to sustainable consumption. Each partner commits to follow or pursue the standards and principles. **Amongst others, partnerships of this type aim to:**

- Provide customers with reliable and transparent information
- Define and manage sector priorities for sustainable consumption
- Assure effective implementation of sustainable consumption requirements
- Develop feasible approaches towards complex sustainable consumption challenges

## **WHY SHOULD WE?**

This type of partnership is often driven by sectors experiencing an urgent need for sustainable consumption practices. When Unilever partnered with WWF in 1997 to found the Marine Stewardship Council (MSC)<sup>10</sup> the main goal of the company was to confront the increasing

overfishing of marine fish stocks by providing consumers with a trusted label to actively support responsible fishing practices. When whole sectors face the risk of depleting valuable resources, this can be addressed with commonly developed and widely accepted standards.

## **...TO PROVIDE CUSTOMERS WITH RELIABLE AND TRANSPARENT INFORMATION**

Henkel faced a similar challenge when expanding the use of renewable raw materials such as palm kernel oil in consumer products. To prevent environmental benefits being outweighed by harmful agriculture practices, Henkel joined the multi-stakeholder Roundtable on Sustainable Palm Oil to develop and use market-based sourcing mechanisms for sustainable palm kernel oil that are transparent for the consumer.

# CASE EXAMPLE A1: SETTING THE STANDARD FOR SUSTAINABLE PALM KERNEL OIL

**PARTNERS:** Henkel, Round Table on Sustainable Palm Oil (RSPO), GreenPalm, United Plantations

Henkel conducts all of its business in a socially responsible manner – throughout the entire value chain. As a consequence, the surfactants used in laundry detergents, household cleaners, and cosmetics are increasingly based on renewable raw materials, in particular coconut oil and palm kernel oil (currently about 35 percent).

Due to the strongly increasing demand for palm oil and palm kernel oil, there is serious concern that not all oil is currently being produced sustainably. To assure that environmental product benefits are not outweighed by non-sustainable agricultural practices, Henkel needed a clear, globally recognised, and feasible standard for producing and trading sustainable palm kernel oil. Therefore, Henkel joined the multi-stakeholder based ‘Roundtable for Sustainable Palm Oil’ (RSPO), which in November 2007 approved a certification scheme to foster sustainability in the palm oil business.



The certification scheme includes three marketing models: segregation, mass-balance, and book & claim. Henkel decided early on to focus on the book & claim approach, which enables manufacturers of products with ingredients based on palm or palm kernel oil to purchase certificates ensuring that the appropriate volumes of the respective sustainable oil are available in the market. Compared with segregation, the trade of certificates within book & claim is highly flexible and can be easily implemented. Moreover, this approach is especially well adapted for smallholders. To pilot this mechanism in the marketplace, Henkel purchased certificates for palm kernel oil for its new line of cleaning products and washing detergents. These certificates are traded via the GreenPalm database to assure full compliance with the RSPO process.

By pioneering the book & claim approach together with best-in-class partners, Henkel supports the opening up of new markets for palm kernel oil and thus drives forward workable market mechanism solutions. This approach – which could be extended to other raw materials (e.g. coconut oil) – has the potential to generate significant incentives for the production and use of sustainable palm and palm kernel oil in the short term.

## BENEFITS:

- **Henkel** benefits from a feasible market mechanism that ensures the use of sustainable palm kernel oil in the supply chain. It allows Henkel to develop and market innovative products and more intelligent solutions that combine high performance with environmental compatibility throughout the product life.
- Henkel's **customers** benefit from best-performing products that do not compromise environmental compatibility. An average 85 percent of the ingredients of the cleaning products are based on renewable raw materials. In practical terms, certificates were purchased for the Terra Activ brand range. The performance of the five household cleaners has been confirmed by the quality mark of SGS Institut Fresenius.



## ...TO DEFINE AND MANAGE SECTOR PRIORITIES FOR SUSTAINABLE CONSUMPTION

Associations may often drive sector-focussed practices and principles. The Aluminium Industry in Germany (GDA) and in Europe (EAA) defined production-related sustainability priorities using a stakeholder-based approach. The focus of these efforts is now systematically widened towards sustainable consumption issues (see pages 52).

A number of other sectors, which recognise high use-related product impacts, have started to take action. Dishwashing detergents, for example, require nearly 90 percent of their life-cycle-wide energy consumption through hot water use<sup>11</sup>; 75 percent of the energy consumption linked to a pair of trousers occurs through the customers' washing, drying, and ironing<sup>12</sup>. To tap the potential for eco-efficiency in this case, potential product developers and designers need to apply life-cycle thinking and impact assessment. On the communication side, detailed guidance and use information needs to promote the safe and eco-efficient product use. The "A.I.S.E. Charter for Sustainable Cleaning" is a common framework created by industry to promote sustainable consumption and production practices in the soaps, detergents and maintenance products sector.

## CASE EXAMPLE A2: A.I.S.E. CHARTER FOR SUSTAINABLE CLEANING

**PARTNERS:** International Association for Soaps, Detergents and Maintenance Products (A.I.S.E.), 45 producer of soaps, detergents and maintenance products, 32 retailers and distributors



The “A.I.S.E. Charter for Sustainable Cleaning”<sup>13</sup> is a life-cycle-based framework aimed at promoting a common industry approach to sustainability practices and reporting. This voluntary initiative was launched at the

end of 2004 in all EU countries plus Iceland, Norway, and Switzerland. It covers all product categories of the soaps, detergents and maintenance products industry, whether in the household or industrial and institutional sectors.

The life cycle covers a wide variety of activities and initiatives, ranging from the human and environmental safety of chemicals and products, to eco-efficiency, occupational health and safety, resource use and consumer information.

The Charter is aimed at encouraging the whole industry to undertake continual improvement in terms of sustainability and provide consumers with clear use-related information.

To become a member of the Charter, a company has to implement Charter Sustainability Procedures (CSPs) based on ISO 14000 and other standards, which apply to the design, raw materials use, manufacture and consumer use of products. In order to join the Charter, companies have to demonstrate to an independent verifier that they are able to implement and work with these CSPs.

Once a company has successfully been verified and commits to the Charter, it is required to report to A.I.S.E. annually on ten key performance indicators (KPIs) covering sustainable production and consumption aspects. These are indirectly linked to the CSPs and enable measurement of key aspects of sustainability. External verification ensures that participating companies have correctly calculated the data.



## BENEFITS:

- With the Charter in place, **A.I.S.E.** promotes sustainability as the guiding principle within the sector, and contributes to the image of a ‘responsible and sustainable industry’. Furthermore, the Charter promotes the dialogue between suppliers and (end) users, as well as between industry and external stakeholders and the public in general.
- **Companies participating in the Charter** apply sustainability thinking at all phases of the product life cycle, from product design, through to manufacture, consumption and disposal. The sustainability report allows the company to benchmark against the industry on the reported KPIs.
- One of the Charter’s main concerns is to encourage **consumers** to adopt more sustainable ways of doing their washing, cleaning and household maintenance. The Charter specifically asks companies to use icons developed by A.I.S.E for consistent Europe-wide advice to consumers on how to use the products safely and sustainably.<sup>14</sup>

## ...TO ASSURE EFFECTIVE IMPLEMENTATION OF SUSTAINABLE CONSUMPTION REQUIREMENTS

Developing widely accepted standards is a major step forward. However, ensuring that they are applied effectively presents another challenge. Globalisation and international trade mean sustainable consumption must reach supply chains all over the world. Varying national regulation, other societal priorities and realities, a lack of awareness and knowledge, or the absence of actors and institutions to provide support and monitor results may constantly challenge the sound implementation of common practices. To rise to this challenge, the partnership of the GTZ and Metro in Vietnam combined comprehensive capacity building of local institutions and Metro supply chain partners, with know-how transfer and recommendations for national ministries on regu-  
lative issues.

# CASE EXAMPLE A<sub>3</sub>: VALUE CHAIN DEVELOPMENT AND IMPROVEMENT OF DOMESTIC MARKET POLICY IN VIETNAM

**PARTNERS:** Metro Cash & Carry Vietnam, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)

The objective of the project was to qualify market players within the fruit and vegetable value chain, and establish a modern regulatory and legislative framework for the national distribution network.

During the course of the project, over 6,000 farmers, collectors, wholesalers and retailers who are part of the fruit and vegetable supply chain in Vietnam's three main farming areas have been qualified. Local training institutions held the workshops with the support of the local GTZ structure, Provincial Departments of Agriculture and Rural Development, Provincial Departments of Trade, research institutes and business associations. The training covered topics like cultivation technology, harvesting methods, quality classification, sorting, storage, packaging for sales and transportation, truck loading, methods of transportation and basic business knowledge.

The second component included the advisory and know-how transfer to the Department for Domestic Market Policy of the Ministry of Trade. It consisted of consultancy and recommendations for a legislative framework for managing and supporting the national distribution networks.

## **BENEFITS:**

- **Collectors, farmers, wholesalers and retailers** gained qualification on reduction of losses and improvement of quality and hygiene standards.
- **Staff of certification institutes** and the **Ministry of Agriculture and Rural Development** gained qualification in the field of certification.
- For **consumers**, products that comply with quality standards (such as GLOBALGAP<sup>®</sup>) are available.



Food waste is one of the most relevant consumption issues in the food sector. The partnership of GTZ and Metro lays the foundations for post-harvesting improvement. As supply chains become more effective and food quality offered to consumers increases, the next step is to address the issue on the consumer side and provide tips for optimised storage and preparation. The UK campaign “Love Food Hate Waste”<sup>16</sup> combines this with support to calculate adequate cooking portions, offers “rescue recipes” for food that need using up, or helps to effectively plan food shopping and cooking.

### ...TO DEVELOP FEASIBLE APPROACHES TOWARDS COMPLEX SUSTAINABLE CONSUMPTION CHALLENGES

Partnerships for common standards and principles can also be a response to complex and global challenges. For example, climate change draws public attention to different sectors and their role in society – either as part of the problem or as part of the solution. Editing emission data to inform responsible buying decisions is not an easy task, since many different methods are used and the results can be difficult to explain.

To tackle this problem, a group of companies has partnered with research institutions to form the Product Carbon Footprint (PCF) Pilot Project Germany. It serves as a learning platform encompassing different perspectives.

## CASE EXAMPLE A<sub>4</sub>: PRODUCT CARBON FOOTPRINT PILOT PROJECT GERMANY

**PARTNERS:** THEMA<sub>1</sub>, Öko-Institut, Potsdam Institute for Climate Impact Research (PIK), WWF and ten companies (BASF, dm-drogerie markt, DSM, FROSTA, Henkel, REWE Group, Tchibo, Tetra Pak, T-Home and Tengelmann Group)



One of the hottest topics in the debate on climate change is the role of

personal consumption, and if labelling schemes for product related emissions may provide a viable answer. In 2008 ten businesses came together to measure the lifecycle emissions of CO<sub>2</sub> and other greenhouse gases related to selected products and services – the Product Carbon Footprint, or so called PCF.

The project's key objectives include:

1. Hands-on experience: testing the practical application of current and evolving specifications for PCF assessment (ISO norms for Life-Cycle Assessment, and evaluating the applicability of BSI PAS 2050).
2. Methodical coordination: providing recommendations for methodical development and international coordination for implementing a transparent and scientifically substantiated method for measuring Product Carbon Footprints.

3. Approaches for providing credible information: discussing approaches for the provision of sensible and credible information that encourage environmentally friendly consumption decisions.

Based on the assessment of 15 different products ranging from strawberries to an internet connection, the partnership has shown that carbon footprint calculations are feasible and provide a number of benefits. Communication needs to meet certain requirements and further international harmonisation is imperative. The project results will significantly inform the current and future PCF discussion.

#### **BENEFITS:**

- **Business partners** benefit from the analysis of product-related greenhouse gas emission levels that can help to improve complex value chains. Carbon Footprints may serve as a strategic indicator for the quality, safety and sustainability of production processes within a low carbon society.
- **Research partners** gain practical experiences on the potential challenges of current/upcoming standards and provide input for the international PCF debate.
- **Consumers** may benefit from PCF approaches that are thoroughly assessed against their potential to provide reliable information for “green” buying decisions.



Developing standards or principles to monitor and limit social and environmental impacts during consumption often requires the involvement of stakeholders.

Bringing in relevant and diverse opinions and interest helps to assure that the results are

- Scientifically sound,
- Most relevant for targeted consumers and their buying decisions, and/or
- Feasible to implement, follow, and monitor.

Successful examples, such as the Global Reporting Initiative (GRI) or the Forest Stewardship Council (FSC) demonstrate how frameworks are accepted and implemented as “mutual standards”, despite stakeholders originally having differing or controversial views and interests. Such agreements benefit from a high level of credibility added by the contribution of well-trusted civil society organisations, and from a diverse spectrum of competences.

## PARTNERSHIP PROTOTYPE A: HORIZONTAL PARTNERSHIPS WITHIN A SECTOR

**H**orizontal partnerships within a sector are an effective vehicle to govern industry approaches and initiatives towards sustainable consumption, and they are of particular relevance when creating common standards or principles. However, one problem with these type of partnerships can be distrust among sector members (who are often competitors!) so that divergent positions towards sustainable production and consumption may result in principles designed around the lowest common denominator.

To avoid such situations, stakeholder involvement, legitimacy, effectiveness and transparency are the material factors for good sector-wide governance.<sup>17</sup> Most importantly, the integration of stakeholders is a necessary condition for a broad understanding of a sector's role within society. Although stakeholder integration might demand a more time-consuming and costly process, the results are generally more comprehensive as they encompass a much broader perspective on the sector's impacts and responsibilities.

Sector associations play an important role in organising and governing horizontal partnerships to create common standards or principles. These bodies are particularly good because they often have the required functional structure and sanction mechanisms. Associations can serve as a crucial driver for the sector's

sustainability agenda setting and can also inform and educate member companies, raising awareness of the importance of sustainability related topics. The image of a company also depends on its sector's image and this provides an incentive for member companies to join efforts while reducing the risk of free riding.<sup>18</sup>

# B PARTNERSHIPS FOR CONSUMER COMMUNICATION AND EDUCATION

**P**artnerships for consumer communication and education directly address consumers or consumer associations and seek to foster consumer awareness, responsible consumer choice and sustainable product use. In more detail, they aim to:

- Inform customers on efficient and low impact use
- Effectively communicate use-phase advancements and resulting customer benefits
- Raise awareness among employees and spark innovation
- Share expertise for targeted consumer information

## **WHY SHOULD WE?**

The useful life of a product only begins when it reaches the customer, where it may cause considerable environmental and social impacts that are often associated with financial implications for the user. The fuel to run cars, the washing of textiles, the heating and cooling of a building, or the electricity requirements of household appliances all impact on the users' economic, environmental, and sometimes social bottom line. For companies, sustainable consumption does not just mean

providing fair and low-impact products, it also means giving support and advice on how an application can be used most efficiently and responsibly.

## **...TO INFORM CUSTOMERS ON EFFICIENT AND LOW IMPACT USE**

The design of a product can significantly affect its environmental and social performance during its use. While this is obvious for the efficiency of energy-using applications, also social impacts can be limited by design. Current computer operating systems, for example, provide extensive parental control options to restrict the use of programmes/games or websites, as well as the (daily) duration of computer use. Although these technical opportunities exist in product design, they currently exclude use-related impacts linked to user behaviour. The fuel efficiency of cars is strongly related to weight, aerodynamics, and engine-efficiency. However, efficient driving can also save up to 25 percent fuel. Using this knowledge, Volkswagen and NABU have started a comprehensive training programme.

# CASE EXAMPLE B1: CLEVER DRIVING – FUEL SAVING

**PARTNERS:** Volkswagen, VW dealership network, German Nature and Biodiversity Conversation Union (NABU)

The aim of this campaign is to make drivers aware of the need to protect the environment, and it informs them about their individual opportunities to act. Free participation at fuel saving training (“clever driving”) is included. Both partners use diverse online and print media, as well as events, to inform the public, or rather members and customers, about the potential of resource-efficient driving. A video and a booklet containing the most important rules were developed, realised and published together. In addition, since 2002 practical eco training in theory and practice is being conducted across the whole of Germany.

Participation is open to all interested drivers. The design of the training has been jointly developed by NABU and VW. The local NABU groups, VW dealerships and a professional team of trainers work hand-in-hand to put the training into practice at each location. The practice vehicles are equipped with on-board computers that identify all essential technical data from the entire distance of two identical training journeys. The thorough joint analysis of the individual driving results, and the handover of the small brochures with tips on fuel saving (including a certificate of completion), support lasting learning success.

## **BENEFITS:**

- **VW** benefits from this plausible commitment to climate protection and sustainable mobility through increase of customer retention and loyalty of members.
- **VW dealers** establish contacts with potential customers, this way the training also indirectly serves as a “test driving” of new VW vehicles.
- For trained **customers**, the reduction of mobility costs and greenhouse gas emissions (by up to 25 percent), corresponding reduction of exhaust and noise emissions, and an increase of driving comfort and road safety can be realised.



### ...TO EFFECTIVELY COMMUNICATE USE-PHASE ADVANCEMENTS AND RESULTING CUSTOMER BENEFITS

The fundamental starting point for responsible companies committed to sustainable development is the adoption of a life-cycle perspective. However, significant advancements in the use and disposal of a product may require additional efforts during the design and production. In a strongly price-driven economy, companies often rightly fear that customers are deterred by higher prices, neglecting the positive long-term view. Additionally, transparently demonstrating consumption advancements may not be an easy task, if the benefits have an influence on a number of direct and indirect costs.

Henkel is proactively approaching this challenge by partnering with industrial customers using the “Value Calculator” to acquire a detailed understanding of the process improvements associated with a new Henkel product.

## CASE EXAMPLE B2: THE HENKEL VALUE CALCULATOR

### MAKING PROCESS IMPROVEMENTS TRANSPARENT

**PARTNERS:** Henkel, industrial customers

To quantify and visualise opportunities for process efficiency improvements to industrial customers in a transparent and easily understandable manner, Henkel has developed a new tool: the Henkel Value Calculator. Covering the customer’s application process and associated costs, the Value Calculator helps to identify – jointly with the customer – potential cost savings in the areas of energy and water, as well as waste treatment and process maintenance. It can be used to compare each step of a new process with those of an existing process. Advantages and cost savings are apparent at a glance.

Examples include Bonderite NT, a nanoceramic coating process for the metal industry, offering an alternative to iron phosphating. The new process cuts energy consumption during processing by up to 30 percent. In addition, there are no emissions of heavy metals to wastewater, and the costs of wastewater treatment and disposal are reduced. Bonderite NT therefore significantly reduces the total costs while improving sustainability performance.

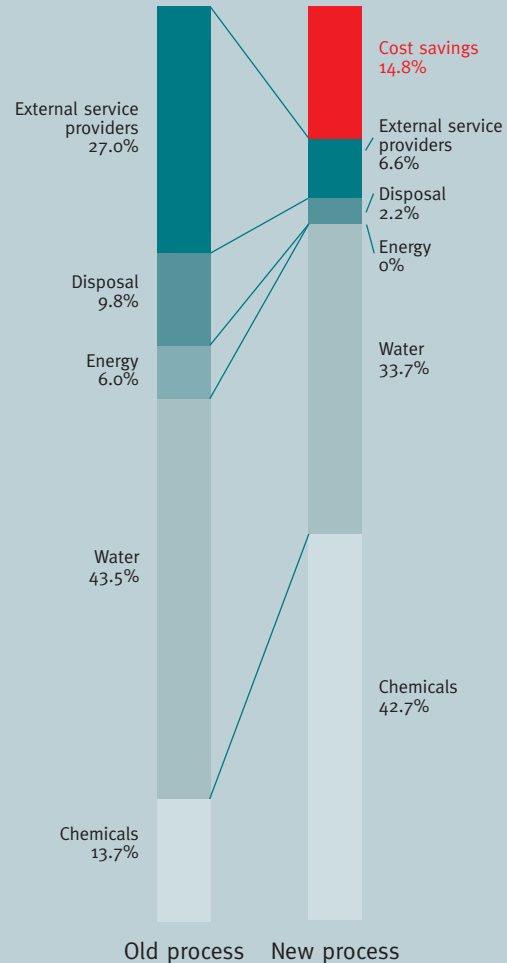
Another example for the Value Calculator are the water miscible Multan products from Henkel, characterised by a high efficient bacterial stability, excellent tribological properties and a very good level of performance in terms of cleanliness of machined parts, tools and machines. This combination of properties results in cleaner and more efficient machining processes, namely a better bath stability and longer bath lifetime. The quality of the machined parts increases while the wear of expensive machining tools is significantly reduced.

**BENEFITS:**

- **Henkel** benefits from close collaboration with customers, equipment manufacturers, and raw material suppliers. This knowledge enables Henkel to transparently quantify the benefits of innovative solutions.
- Henkel’s **business customers** can base purchasing (and processing) decisions on a detailed preassessment of total process costs, taking reduction in resource consumption, wastewater and waste costs, and quality improvements into account.

**VALUE CALCULATOR-EXAMPLE: BONDERITE NT**

in percent



The graph shows how the new process using Bonderite NT can reduce total costs, by 14.8 percent in this example, despite the higher cost of the chemicals.

### ...TO RAISE AWARENESS AMONG EMPLOYEES AND SPARK INNOVATION

It can be difficult for some companies to see the relevance of sustainable consumption if they do not have direct contact with consumers. However, even if this is the case there is still room for improvement and an audience for use-related information. The aluminium industry is often referred to as producing an energy-intensive material, but the same aluminium has a number of important advantages during use and recycling. For the aluminium industry, the target audience for use-related information includes business customers and employees. Engaging with employees, external stakeholders and experts to assess and address life-cycle impacts helps to build capacity for better external communication on use-phase impacts.

## CASE EXAMPLE B<sub>3</sub>: INDUSTRY DIALOGUE BETWEEN THE SOCIAL PARTNERS ON THE RESOURCE EFFICIENCY OF ALUMINIUM PRODUCTS

**PARTNERS:** German Aluminium Industry Association (GDA), Industrial Union of Metalworkers (IG Metall), German Federal Ministry of the Environment, Nature Conservation and Nuclear Safety (BMU), UNEP/Wuppertal Institute Collaborating Centre on Sustainable Consumption and Production (CSCP), Sustain Consult, Wuppertal Institute for Climate, Environment and Energy

This project is a dialogue process among stakeholders of the aluminium industry to promote the resource efficiency of aluminium products. Two workshops, as well as 1,700 surveys and 16 interviews, have been carried out to access untapped efficiency opportunities. Based on these results, the project aims to develop concrete schemes for communicating and fostering resource efficiency that workers (workers unions) and management (business associations), backed by policy support, collaboratively implement. Discussed efficiency measures include optimised material flows and waste loops, reducing loss of material along the value chain, and the life cycle of products.

Experiences and concrete results of the stakeholder dialogue will be made available for the network on resource efficiency, which is initiated by the Federal Ministry of the Environment, Nature Conservation and Nuclear Safety.

#### **BENEFITS:**

- Acting resourcefully enhances the **aluminium industry's** ability to compete and increases the acceptance of customers, employees and consumers.
- **Workers** are also addressed in their role as **consumers**.



#### **...TO SHARE EXPERTISE FOR TARGETED CONSUMER INFORMATION**

Companies, societal groups and authorities have many different opinions about the type, depth and presentation of information, which should be provided to users concerning safe and responsible consumption of a product.

A positive aspect of this is that through their different work and experience, these groups often possess a specific expertise, which when combined, provides an invaluable source of knowledge. FORUM WASCHEN is a platform that includes various stakeholders of the detergent sector. On a continual basis they apply the combined expertise to design actions for sustainable consumption and production.

## CASE EXAMPLE B4:

### FORUM WASCHEN

A UNIQUE DIALOGUE-PLATFORM FOR TOPICS DEALING WITH SUSTAINABILITY FOR CLEANING AND MAINTENANCE PRODUCTS

**Partners:** More than 30 representatives from scientific bodies, consumer and environmental protection groups, public authorities, trade unions, churches and industry, organised by the German Toiletries and Detergents Association (IKW)



In 2001, the FORUM WASCHEN was founded as a multi-stakeholder dialogue platform developing feasible actions for sustainable consumption and production in the detergent sector.

Once a year, a workshop with all members is held to identify, assess and discuss topics of common interest. Based on the agreed tasks, project teams are formed to develop voluntary industry initiatives for Germany.

Projects examples include:

- Campaigns and communication to the end-user on the safe and sustainable use of cleaning products.
- The annual “Nationwide Action Day for sustainable (Dish)Washing”, organised since 2004.
- Providing sound information on responsible consumption, including product-dosing (e.g. Golden Rules from FORUM WASCHEN), the responsible use of perfumes, or sustainable ways of drying laundry.

#### BENEFITS:

- The long-term trustful dialogue with **all relevant stakeholders** at one table has proved a significant step towards feasible actions for sustainable consumption and production in the detergent sector. Critical issues are discussed at an early stage, and solutions are commonly developed.
- **Consumers** benefit from concrete tips and practices they can adopt in their daily life. This enables them to choose the respective products and to use them in a safe and sustainable way.

In a time of multimedia-based marketing, consumers are often faced with information overload, which makes targeted messages to encourage responsible product choices a challenge. Partnerships do not only help provide reliable and transparent use-phase information, the different partners may also check the information is comprehensible and easily accessible, at least within each partner's wider network.

#### **PARTNERSHIP PROTOTYPE B: PARTNERING WITH NON-GOVERNMENTAL ORGANISATIONS (NGOS)**

**M**any NGO-business partnerships are still perceived as evolving around blame and justification. While most NGOs see their work as pointing fingers at relevant corporate limitations, increasingly dialogue oriented solutions are being explored. This approach can reap benefits for both partners. Companies benefit from the alternative perspectives on business processes, or a company's role and responsibility within society given by NGOs. Some also hope that the NGO's reputation will rub off on its business partner. Concurrently, NGOs may have the chance to reach their goals more efficiently and effectively. This is of particular importance, as market-based solutions appear to be a powerful means to fighting social and environmental problems.

Companies and NGOs often start from very different viewpoints. However, through a partnership both parties may realise the value of collaboration. During joint social responsibility projects in defined areas, partners may begin to notice that they can work with and learn from each other. The most advanced form of business-NGO-partnership has recently been described as a co-created business-like relationship. It entails the "development of business models in which companies and NGOs become a key part of each other's capacity to deliver value and vice versa."<sup>19</sup>

To achieve the desired results, business-NGO-partnerships need to be carefully designed. There can quite easily be conflicts of interest, for example, when NGO work is funded by businesses – a situation which often occurs given the availability of financial resources. Companies need to make sure that funding does not depend on results, and that NGO partners continue to remain a critical and thus valuable sparring partner. These partnerships often "agree to disagree" making a clear distinction between what the partnership does and what the business does. As a result there can be close collaboration where synergistic goals can be reached, whilst open confrontation remains in other areas.



# PARTNERSHIPS FOR RESEARCH AND DEVELOPMENT

**T**his type of partnership covers collaborations with research institutions (e.g. universities) to develop product or service innovations that enable more sustainable consumption options. They are not limited to technical aspects (e.g. eco-efficiency), and may also cover societal values and consumption patterns, or appropriate communication means. **Partnerships for research and development can contribute to:**

- Define the most relevant life cycle issues of product systems
- Enable consistent impact assessment for meaningful consumer communication
- Assess the wider implications of technological shifts towards low-impact consumption
- Combine existing technologies for more efficient consumption

## WHY SHOULD WE?

Research & development, as well as design, are often the most important stages for sustainable products and services. Partnerships with external research organisations may provide valuable input at different stages of development. For instance, research partners may provide guidance for setting the right priorities, (pre-)assessing impacts of new applications, or even delivering missing pieces for the successful launch of innovations on the market.

Additionally, scientifically sound research carried out by renowned and independent partners creates credibility and can be a solid base for external communication and dialogue with critical stakeholders. This may significantly support the launch of low-impact and better performing products in the market.

### ...TO DEFINE MOST RELEVANT LIFE CYCLE ISSUES OF PRODUCT SYSTEMS

Multi-stakeholder dialogues are very useful instruments to define a company or sector's responsibilities. However, research organisations can provide very important fact-based input, e.g. to highlight social and environmental “hot spots” in the product life cycle. The aluminium industry conducted life cycle assessments (LCA) to highlight the environmental relevance of flexible packaging within the food supply chain. They discovered that looking at the wider system can be very relevant to identify where material improvements might be outweighed by an increase in use-related impacts. For example, more advanced packaging, produced with less energy input, may worsen the overall balance of the product system if there is a higher likelihood that food content will end as waste.

## CASE EXAMPLE C1: PACKAGING AND SUSTAINABLE CONSUMPTION

### THE IMPORTANCE OF LIFE CYCLE THINKING IN PRODUCT INNOVATION

**PARTNERS:** German Aluminium Industry Association (GDA), European Aluminium Foil Association (EAFA), ESU Services

In order to understand the role and relevance of packaging within the food supply chain, selected product systems have been studied with a life cycle assessment (LCA) approach.

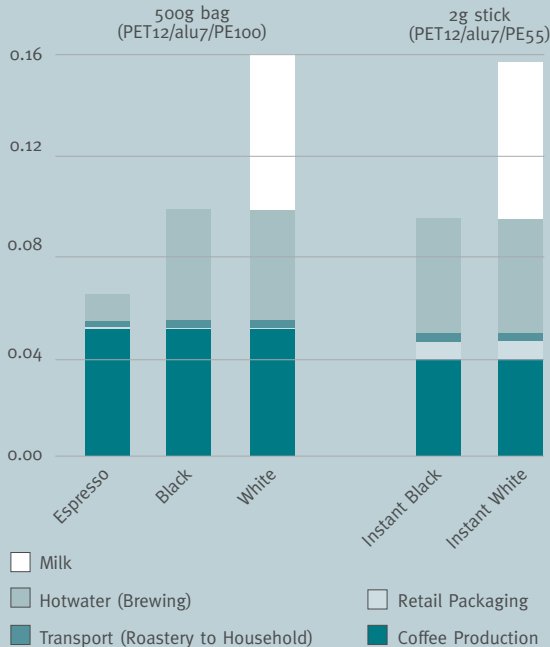
One case study was on the supply of one cup of coffee brewed from ground and instant coffee. The ground coffee was packed in a family bag and the instant coffee was packed in a single portion stick. Both packaging systems contain an aluminium foil layer as a barrier. For each of these products, all efforts in terms of resource and energy inputs and emissions have been collected and illustrated from raw material extraction and processing to final consumption and waste treatment. Sensitivity analyses were carried out exploring the relevance of consumption patterns.

## BENEFITS:

- The LCA helped to identify hot spots in European food supply chains and to derive incentives for the **packaging industries** to improve not only packaging itself, but to contribute effectively to the reduction of environmental impacts of the overall system by e.g. reducing food spoilage or over-consumption.
- Resulting data also served to raise awareness among **consumers** by illustrating their responsibility to reduce overall environmental impacts.

## CO<sub>2</sub>-EQUIVALENT

(in kg) per cup of coffee



## ...TO ENABLE CONSISTENT IMPACT ASSESSMENT FOR MEANINGFUL CONSUMER COMMUNICATION

By considering the “big picture” the overall impacts of a product can be reduced, and the risks of shifting these impacts to other stages in the lifecycle minimised. However, it is often extremely difficult to compare impacts in different stages because an effective metric must be found and applied.

One example of such a metric is the overall amount of carbon dioxide emissions associated with a product, referred to as the product’s “carbon footprint”. This is commonly used as an effective shortcut reflecting the energy-intensity of materials and processes. It can be a useful indicator for comparing production and consumption stages.

Otto Group started a research project on the carbon footprint of textiles. This initiative also revealed the significant contribution of consumption patterns to carbon emissions. Based on the information from this project, clear guidance can be communicated on how to reduce use-related emissions. Interestingly, a reduction in carbon emissions also contributes to saving money. On the production side, environmental “hot spots” can be identified and quantified. This supports the development of strategies and incentive mechanisms for suppliers.

## CASE EXAMPLE C2: CARBON FOOTPRINT OF TEXTILES



**PARTNERS:** Otto Group/ Sustain Consulting, Öko-Institute, supported by the German Ministry of the Environment (BMU) and the Federal Environment Agency (UBA)

As part of an ambitious company-wide strategy on climate protection, aiming at the reduction of all carbon emissions related to transport, mobility and location by 50 percent by the year 2020, a joint research project on the carbon footprint of textiles was launched in spring 2008.

Guiding questions of the research were:

- Where are the major sources of carbon emissions along the process chain?
- Where are major potentials to reduce the carbon footprint?
- How to approach suppliers to get them involved?
- How about the consumers' part?

Results from the textile chains in Turkey and Bangladesh show the variety of energy sources used in textile production, ranging from natural gas for generating on-site electricity, to coal fired plants for heating processes at the dyeing mill. Most energy in manufacture, for example, is used for heating water (dyeing, washing, ironing), whereas there is still considerable potential to reduce the energy input of these processes.

The carbon footprint during manufacturing processes of a white-coloured long-shirt, produced in Bangladesh, amounts to almost 3 kg CO<sub>2</sub>e. In the use phase, the long-shirt's carbon footprint will be about another 3.3 kg. When a dryer is always used, this portion may increase to up to 12 kg. Moreover, washing at 40°C instead of 30°C increases carbon emissions by one third. This approves the assumption that production and consumption phases – though more difficult to reach – require special attention. Further results will be published in the company's next sustainability report in September 2009.

### **BENEFITS:**

- For **Otto Group** main carbon dioxide transmitters along the supply chain serve as indicator for relevant environmental “hot spots” and may assist in allocating resources and efforts most economically and efficiently.
- In collaboration with the **research partners**, Otto Group strengthens its methodological know-how for determining greenhouse gases in the textile supply chain.
- **Consumers** may benefit from clear information about how much everyday consumption patterns contribute to the emission of carbon dioxide and how people can reduce their impact while using the products in question.

### ...TO ASSESS THE WIDER IMPLICATIONS OF TECHNOLOGICAL SHIFTS TOWARDS LOW-IMPACT CONSUMPTION

Technological development often evolves in an evolutionary manner so that compatibility with both surrounding technologies (e.g. supporting infrastructures), as well as customer lifestyles is maintained. The revolutionary advancements necessary to tackle global challenges, such as climate change, also involve adaptation or transition strategies for surrounding systems and infrastructures. Experience shows that customers expect new technologies to offer additional benefits and drawbacks compared to earlier systems are hardly accepted. For major technological shifts, existing infrastructure and consumption patterns often work as market entry barriers that need to be overcome.

The infrastructure for gasoline and diesel powered cars has been developed over the course of nearly a century. Volkswagen recognised the need to speed up the introduction of alternative fuel vehicles by testing the day-to-day suitability of new technologies and infrastructures. It set up a partnership including leading research and industry partners in the area of energy storage and energy supply.

## CASE EXAMPLE C<sub>3</sub>: FLEET TEST OF ELECTRO-MOBILITY

**PARTNERS:** Volkswagen, E.ON, GAIA Akkumulatorenwerke, Evonik Industries/ Li-Tec (both battery technology), Fraunhofer-Gesellschaft, Institute for Energy and Environmental Research (IFEU), German Aerospace Center (DLR), University of Münster

The aim of the fleet test is to practically test electric driving with renewable energy, and to explore the possibility of integrating the vehicles into the network of energy economy. The technology carrier of the fleet test, that is also sponsored by the German Federal Ministry of Environment, is the VW Golf model that, as a “Twin Drive”, contains an electric drive with a downstream internal combustion engine. The prototype is able to drive approximately 50 km on only electricity, thus totally free of emissions, from the socket (Plug-in-Hybrid). The Golf Twin Drive autonomously always chooses the most efficient operating modes out of the six available. From 2010, 20 test vehicles will be on the roads of Wolfsburg and Berlin to test the suitability of the battery for everyday use under various conditions. The electric vehicle is equipped with lithium-ion batteries with which it is already possible to store double the amount of energy per volume and weight as with conventional nickel metal hybrid storage.

However, according to the customer's point of view, an increase of this value five or even tenfold would be necessary to guarantee an acceptable range of 200 to 300 km.

#### **BENEFITS:**

- The **partnering organisation** foster know-how transfer and the development of new products, business models, and markets.
- **Customers** may benefit from the results in the form of safe and affordable mobility with less environmental and climatic impact and increased conservation of resources.



**Sigmar Gabriel, Federal Environment Minister (middle), Dr. Klaus-Dieter Maubach, CEO E.ON Energie AG (left), and Prof. Dr. Martin Winterkorn, CEO Volkswagen AG (right) with Golf TwinDrive**

#### **...TO COMBINE EXISTING TECHNOLOGIES FOR MORE EFFICIENT CONSUMPTION**

When single technology applications are integrated into common platforms, this is referred to as “converging technologies”. Digitalisation and miniaturisation means today's mobile phones can take pictures, play music, surf the web, receive and send e-mails or serve as a navigation system. These developments could also contribute to greener and fairer lifestyles. Mobile Internet devices may, for example, play an important role in connecting different means of transportation. For instance, the user could be provided with real time information on available public transport, car or bike sharing vehicles close by and related traffic information.

For the overall efficiency of energy systems, demand side management will play an increasingly important role. To develop the technical means on the household level, and integrate micro generation systems combining heat and power production ( $\mu$ CHP), a consortium led by RWE formed a research partnership. Combining the existing technology with information services can be a major source for innovation. However, trying to combine different hardware and software standards can still present some challenges.

# CASE EXAMPLE C4: E-DEMA

## DEVELOPMENT AND DEMONSTRATION OF ENERGY HUBS FOR HOUSEHOLDS CONNECTED TO FUTURE ENERGY TRADING MARKETS

**PARTNERS:** RWE, Universities Bochum, Dortmund, Duisburg/Essen (Ef.Ruhr), Siemens, Miele, ProSyst, Stadtwerke Krefeld-Gruppe



This project develops an electronic hub for the management and optimisation of energy supply and

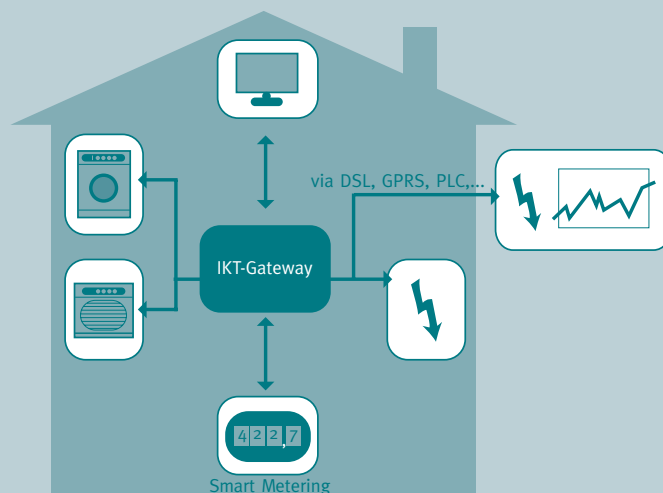
consumption for households and small businesses. It allows for the integration of decentralised electricity generation, and responds to price signals from the Energy Exchange EEX. On the consumption side, household routers (similar to current internet routers, but connected to more and different devices), may use real time price signals from the EEX to steer the energy consumption of smart (and flexible) appliances, such as refrigerators or washing machines.

On the energy production side, owners of micro generation systems combining heat and power production ( $\mu$ CHP) may be enabled to sell energy to the grid when demand and prices are high, while using energy for their own consumption needs when prices are low.

As a result, this project aims (1) to gather experiences for establishing the technical infrastructure of such a “smart grid” and (2) to increase the efficiency of small scale energy production by enabling virtual power station (compiled of  $\mu$ CHPs responding to prices, e.g. to energy consumption peaks). Pilot projects are developed in the cities of Mülheim and Krefeld. The commercial availability is expected in 2020.

### BENEFITS:

- For the **(business) partners** involved, the complex system allows for new service offers and the potential development of new products or product specifications.
- **Households** may benefit from easy realisation of energy and cost savings (transparency and automation). The resulting broader market for  $\mu$ CHP is expected to drive market penetration.



The long time-to-market for new products and services and the complex interaction with a large number of diverse partners – not to underestimate the different “logic” of sectors and technology areas – provides a challenge for many research partnerships. Synergistic goals and shared practical experience help strengthen these collaborations and overcome associated hurdles.

## **PARTNERSHIP PROTOTYPE C: PARTNERING WITH SCIENTIFIC ORGANISATIONS**

**R**easons for partnering with research organisations can be diverse. The role of research in a business is often to bridge internal knowledge gaps and assist in informed decision-making. Research institutes can also be useful for providing independent third-party verification (e.g. of product performance) that add credibility for external communication. Ideally, research is able to meet internal as well as external requirements. However, the results of contracted research may not grant the same level of trustworthiness as those of externally or independently financed studies. Companies entering into a research partnership should be clear about the desired internal and external relevance and define related criteria for selecting a partner. For example, if external communication is of high priority, the profile and reputation of the research organisation will be important criteria. In this case, companies should also seek out options to strengthen the independence of research (and results), e.g. by involving further actors or applying for public funding. A major challenge of learning partnerships is the sharing of process experiences and results within each partner organisation. Research studies hardly ever reach a wider audience. However, one-sentence-results are often unsuccessful in delivering the message, as they are far-removed from scientific implications and research settings. To live up to their full potential, research partnerships need to consider communication aspects from the beginning.

# D PARTNERSHIPS FOR SUSTAINABLE PRODUCTS AND SERVICES

Partnerships for sustainable products and services are based on vertical partnerships within the value chain (e.g. with suppliers, retailers, or customers). These aim to produce and offer more sustainable products and services to consumers. **Partnerships can be an important driver to:**

- Increase supplier compliance for lower impact, better performing products
- Effectively strengthen supply chain knowledge and institutions
- Provide customers with material supplier information
- Inform and enable low-impact product design

## WHY SHOULD WE?

Partnerships for sustainable products and services are most closely related to traditional CSR activities. Among these, assuring appropriate supply chain and production practices is a primary concern and enables a strategic response to increasing customer demand for fair and green products as well as tightening regulation. Putting forward a compulsory code of conduct is just the beginning. Suppliers often need

to be approached from the “bottom up”, with training and support activities to build and strengthen self-interest in social and environmental management. Such training and support activities require trusted supplier partnerships built up over time. Shared values concerning quality, social compliance, and environmental protection require constant and long-term efforts. In the light of recent shifts in consumer behaviour, these investments may quickly turn to account and form a key component of competitive advantage.

## ...TO INCREASE SUPPLIER COMPLIANCE FOR LOWER IMPACT, BETTER PERFORMING PRODUCTS

Introducing sustainable consumption options requires above all eco-friendly and socially acceptable supply chain procedures. For large companies, such as Volkswagen, the number of suppliers, as well as the cultural and legal institutions of different countries can present a major challenge. The public private partnership project between the GTZ, the ILO, and Volkswagen aimed to address safety and health structures for the supplier and national authority level.

# CASE EXAMPLE D1: GLOBAL COMPACT IN PRACTICE: IMPLEMENTING OCCUPATIONAL SAFETY AND HEALTH STRUCTURES IN VW SUPPLY CHAINS

**PARTNERS:** Volkswagen, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), International Labour Organisation (ILO)

This public private partnership project aimed at developing and implementing effective Occupational Safety and Health (OSH) measurements among suppliers of VW in Brazil, Mexico and South Africa. By feeding practical experiences made at the company level into the process of developing National Safework Programmes the project aimed at fostering a OSH culture on the micro and the macro level. The methods and instruments used in the supplier training included interviews, inspections, checklists, teambuilding processes, and workshops. They lead to an open communication culture, a shared understanding of relevant OSH aspects, and resulted in specific recommendation for each supplier. Beside ad hoc improvements in OSH, clean and safe workspaces as well as active employee participation appeared to also trigger the optimisation of production processes. Project evaluation showed the initiatives in Mexico and South Africa to have stimulated changes in workplace inspection which have prepared the way for a new OSH culture in the respective countries.

## **BENEFITS:**

- **Volkswagen** benefits from a better sustainability performance in the supply chain, including progress in security and quality as well as work and health safety. The results include a tested model for the implementation of ILO standards.
- **Labour related authorities** received input for the practical implementation of ILO standards and work related Global Compact principles.
- **Customers** gain indirectly from these progressions.



Experience has shown that successful collaboration between companies and suppliers cannot rely on top down standards alone. In some countries this has provoked professional “workarounds” and manipulation of compliance audits rather than the required understanding of and self-interest in good social and environmental management. Volkswagen achieved good results with its approach of voluntary participation, open communication culture, and qualified support. “Help not repercussions” created the openness needed to systematically exhibit shortcomings and identify underlying reasons.

### ...TO EFFECTIVELY STRENGTHEN SUPPLY CHAIN KNOWLEDGE AND INSTITUTIONS

Responsible sourcing is a cornerstone of sustainable consumption. Since product chains are increasingly long, complex, and global, international standards are an important means to procuring low impact materials, components, and products. The partnership of Tchibo and the GTZ aimed to create lasting structures and institutions by “training the trainers” on social standards, such as SA8000.

## CASE EXAMPLE D2: DIALOGUE ORIENTED QUALIFICATION PROGRAMME ON SOCIAL STANDARDS FOR SELECTED ASIAN PILOT FIRMS

**PARTNERS:** Tchibo, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)

The WE-Project (Worldwide Enhancement of Social Quality) delivers capacity development for local training institutions to enable them to effectively support companies and improve their social performance in the future. The selected service providers in Bangladesh, China, and Thailand are empowered to offer consultancy on social standards, and to facilitate the process of setting up tailor-made dialogue structures between management, workers and buyers at production level. A pilot group of Tchibo suppliers will be trained to identify social standard challenges at factory level and work on solutions independently. To ensure sustainability beyond the scope of this project, the training organisations will be market-oriented and offer their services to all interested parties at local prices (e.g. suppliers, international brands / buyers).



## BENEFITS:

- **Tchibo** benefits from testing a new approach toward reaching social compliance in the supply chain. Successful qualification approaches can be transferred to other suppliers, countries, and sectors.
- The **GTZ** is interested in developing a reference model to improve social standards through qualification that can also be transferred to other countries and sectors. It also aims to strengthen capacity development for local service providers.
- **Local training organisations** get to participate in a 2-year training programme directed at improving social standards at the factory level and at the organisational development as a training organisation (e.g. customer acquisition, marketing, project management). The training material can be used for further multiplication.
- Participating **local companies** receive a combination of technical training (e.g. on social standards, productivity, quality issues) and in-house dialogue training. They improve their social performance and are capable of entering into a continuous improvement process. Advanced suppliers have the opportunity to achieve special training and support for an SA8000 certification.
- The benefits for **consumers** arise from the fact that the project contributes to the aim of increasing the share of products manufactured under good working conditions.

## ...TO PROVIDE CUSTOMERS WITH MATERIAL SUPPLIER INFORMATION

In the last decade, sustainability reporting has become a standard communication and engagement instrument for larger companies, especially businesses operating in sectors with major social and environmental challenges. These reports can be seen as a breakthrough in open and systematic communication of sustainability performance. They have however often not been able to disclose sufficient consumption related sustainability information on a product basis. This is often because there are vast numbers of product groups and products, manufactured at hundreds of sites worldwide – most of which are not owned by the reporting organisation.

To increase “transparency in the supply chain” a group of companies including PUMA joined forces with the Global Reporting Initiative and the GTZ to start a pilot project encouraging small and medium sized suppliers to compile and publish their own sustainability reports.

## CASE EXAMPLE D3: TRANSPARENCY IN THE SUPPLY CHAIN

**PARTNERS:** Global Reporting Initiative (GRI), Gesellschaft für Technische Zusammenarbeit (GTZ), PUMA, SME suppliers (further business partners included Otto Group, Daimler, Telefonica and selected suppliers)

PUMA joined forces with the GTZ and the GRI in a project in South Africa that aims to increase the transparency in the supply chain of PUMA suppliers. At the heart of the project, PUMA supports small and medium-sized suppliers with issuing their own sustainability reports and therefore encouraging them to take Corporate Responsibility issues into their own hands and prepare for the upcoming Football World Cup in 2010. Supported by external consultants, three core PUMA suppliers have already published their own reports.<sup>20</sup> One of them, Imphala Clothing, even received a national award in June 2008 for their first sustainability report by the Association of Chartered Certified Accountants (ACCA).

Supporting SMEs in supply chains through training, workshops and resources, builds capacity for SMEs to initiate and continue a reporting process, and improve sustainability management and performance. Moreover, it is a good opportunity for PUMA and its suppliers to test the efficiency of other “game rules”, by introducing a bottom-up communication approach, rather than the



currently practiced top-down approach of supply chain auditing. The consumer also has a chance to get a first hand insight into the PUMA supply chain. PUMA recently announced an extension of the project towards suppliers in Europe and Asia.

### **BENEFITS:**

- **PUMA** experienced increasing awareness and ownership of sustainability aspects at the supplier level. The company gained a better understanding of the regional context and priorities in South Africa. Furthermore, PUMA achieved reputation for engaging in new concepts and initiatives related to sustainability in the supply chain.
- The **GRI** and the **GTZ** benefited from the field-testing experiences of the GRI Guidelines in the SME and supply chain context.
- **SME suppliers** introduced better management practices for sustainability issues helping to identify the potential for cost reduction and performance increase.
- Interested **consumers** have access to the sustainability reports of the three suppliers and benefit from increased transparency related to manufacturing conditions.

These supplier reports can be an interesting component of single “product sustainability reports”, because they illustrate to customers the general issues related to a product category, as well as the actual performance of the reported product. Despite very positive results, participating companies pointed out that covering and monitoring hundreds (often thousands) of suppliers by sustainability reporting remains a challenge.

### **...TO INFORM AND ENABLE LOW-IMPACT PRODUCT DESIGN**

Partnerships for sustainable products and services have a strong supplier focus, especially for those companies designing final products and applying life-cycle-thinking to the process. Nevertheless, it can also be highly relevant for companies providing raw materials or components to identify and address sustainable consumption priorities attached to their pre-products. The role of companies at this end of the supply chain is to provide business customers with relevant use-related information for low-impact product design. The aluminium industry has partnered with a number of stakeholders, including scientific institutes, to examine the potential of aluminium as an enabling material for sustainable consumption in key areas of demand.

## **CASE EXAMPLE D4: TOWARDS A SUSTAINABLE ALUMINIUM INDUSTRY: STAKEHOLDER EXPECTATIONS AND CORE INDICATORS FOR THE ALUMINIUM PRODUCTION AND USE PHASE**

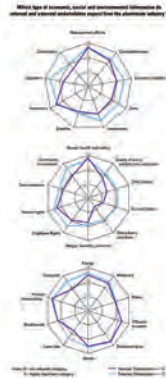
**PARTNERS:** German Aluminium Industry Association (GDA), European Aluminium Association (EAA), aluminium industry stakeholders: NGOs, customers, supply chain partners; Wuppertal Institute for Climate, Environment and Energy, triple innova, UNEP/ Wuppertal Institute Collaborating Centre on Sustainable Consumption and Production (CSCP)

Approaching sustainability in the aluminium industry requires the consideration of the whole life cycle and its optimisation of environmental and social impacts. The aim of this project was to identify categories, aspects, and indicators to provide a reliable and transparent measure of the sectors’ sustainability performance. Methodically, the Wuppertal Institute started in 2001 with a review of sustainability agendas and their relevance for the aluminium sector. This was followed by a sectoral focus area analysis to identify the most important aspects within each life cycle phase. Finally, these findings were confronted with and challenged by stakeholder expectations. Directly partnering with

external stakeholders (e.g. during workshops) assured a high quality and acceptance of the indicator set, and improved the stakeholder dialogue at an international level.<sup>21</sup> As this helped to focus on, and improve production-related issues, further activities have been started to develop sustainability indicators, which can help to describe the impacts and benefits of aluminium in the use phase. Due to its characteristics – longevity, durability, recyclability and non-corrosive nature – aluminium as a material can potentially play an important role in enabling sustainability in key areas of demand. In the demand areas transport, building, packaging, electrical and consumer durables the use phase indicators should address the most relevant impact areas, both from a market share and a sustainability perspective. Environmental impact categories thereby span issues such as global warming, acidification, and photochemical ozone formation, and eutrophication. Raising awareness and drawing attention to the importance of the use phase can help unlock resource efficiency potential through stimulating innovative applications of aluminium.

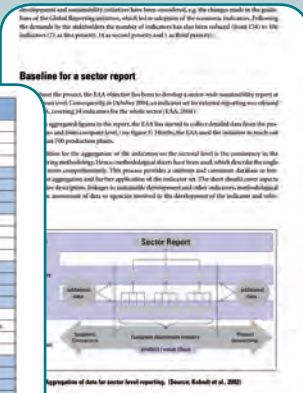
## BENEFITS:

- The indicator set reflects societal responsibility and management priorities for the **aluminium industry**. Within the sector, it can facilitate benchmarking and learning from best practices. Furthermore, facts and figures on the impacts and benefits of aluminium in the use phase, inform the debate on the roles and responsibilities of actors from business government and civil society.
- Opening and informing the debate towards the use phase can help **business customers** to unlock resource efficiency potentials through innovative applications of aluminium.
- Resulting facts can also be used to educate **consumers**, e.g. inform sustainable buying decisions, make responsible and appropriate use of products, and adopt innovative application models.



Use phase phase	Most relevant aspect
Raw material mining	<ul style="list-style-type: none"> <li>land use after mining</li> <li>usage of contemporary drugs</li> <li>protection of soil system</li> <li>mining with recovery</li> </ul>
Aluminium production	<ul style="list-style-type: none"> <li>usage</li> <li>community involvement</li> <li>local energy recovery potential</li> <li>amount of thermal energy consumed</li> </ul>
Primary recycling	<ul style="list-style-type: none"> <li>CO<sub>2</sub>, SO<sub>x</sub> emissions</li> <li>effluent electricity production</li> <li>CO<sub>2</sub> emissions</li> <li>amount of electricity consumed</li> </ul>
Aluminium processing and manufacturing	<ul style="list-style-type: none"> <li>product development</li> <li>change the technology</li> <li>management of resources</li> <li>amount of energy consumed</li> </ul>
Use phase	<ul style="list-style-type: none"> <li>reduced fuel consumption in transport applications</li> <li>reduced emissions due to light weight in transport applications</li> <li>use of life cycle products</li> </ul>
Recycling	<ul style="list-style-type: none"> <li>improvement of recycling</li> <li>management of collection system</li> <li>emissions</li> <li>reduced cost through design for recycling</li> </ul>
Transport	<ul style="list-style-type: none"> <li>weight/efficiency</li> <li>fuel/energy efficiency</li> <li>reliability</li> <li>employee training for L&amp;M processes</li> </ul>

Table 3: Most important aluminium life cycle aspect based on stakeholder survey. (Source: Kubolt, et al., 2015)



Aggregation of data for sector level reporting. (Source: Kubolt et al., 2015)

As these case examples show, sustainable consumption strategies require the involvement of all supply chain partners for defining priorities, complying with requirements, or assessing and communicating use-related information.

#### **PARTNERSHIP PROTOTYPE D: VERTICAL PARTNERSHIPS WITH CUSTOMERS AND SUPPLIERS**

**B**usiness relationships with customers and suppliers are in general not called a “partnership”. However, furthering sustainable consumption may demand a new quality of collaboration among these groups. On the consumption side, product and service providers like to position themselves as “competent partners” of their customers. These commitments often crumble as soon as unexpected failures require solutions or additional service efforts. Service partnerships with customers and consumers play an important role within the concept of sustainable consumption, as they aim to align business and customer interests. Optimising the whole product life cycle requires additional efforts that only pay off when resulting customer benefits are communicated effectively. Henkel is doing this with its Value Calculator (see p. 33). Other companies decide to internalise these use-phase benefits by offering product-services, also called “product service systems” (PSS). This enables them to directly benefit from higher durability, more upgrading options

or better recyclability of their products themselves. In the mid-term, the provision of services and the resulting strong customer relationships provide companies with invaluable insight into current customer needs and wishes. This knowledge can be relevant for new innovations and can form the basis for ongoing customer satisfaction.

On the supply and production side, all partners are increasingly required to provide relevant use- and impact-related data for materials, components and products. In today’s economy, a company often assumes different roles within different product or service value chains. With more companies entering into life-cycle thinking and sustainability reporting, the internal and external demand for extra-financial data covering social and environmental product or process performance is expected to grow. In this respect, vertical partnerships both with customers and suppliers that strategically address sustainable consumption opportunities may turn out to be a major source for innovation.

# E

## PARTNERSHIPS FOR LOCAL COMMUNITY INVOLVEMENT AND NEW MARKETS

This type of partnership links product or service offerings with social engagement. A main focus lies on creating sustainable consumption options in emerging economies and developing countries. [Here, partnerships can be an important means to:](#)

- Creating business models based on selling efficiency to underserved consumers
- Providing an integrated concept for sustainable regional development based on serving fair and green demand
- Increasing quality of life through technology transfer and training
- Addressing social and environmental challenges with tailored technologies

### WHY SHOULD WE?

Underserved markets have for a long time been unable to attract tailored products and services. Companies are now increasingly aware of an emerging consumer middle class, especially in China and India, where both

GDP and population have increased significantly in recent years. It is estimated that the middle income class (defined by an annual earning between US\$ 6,000 and US\$ 30,000 in purchasing power parity terms) is increasing by about 70 million people each year. By 2030 this class is estimated to describe almost 80 percent of the growing world population.<sup>22</sup> The amalgamation of these developments and expectations, and the growing concern about social equity and environmental impacts are stimulating a fundamental shift in thinking. Partnerships, which combine both resources and competencies between the public and private sector, hold the key to these changes. “Companies have become, in effect, the largest overseas development agencies. With the growing recognition that trade and markets are the most important drivers for development, lines of responsibility are getting blurred. Every sector is exploring new roles, working relationships and ways of ‘doing business’. Partnerships are fast becoming the preferred mechanism for delivering sustainable development.”<sup>23</sup>

### ... TO CREATE BUSINESS MODELS BASED ON SELLING EFFICIENCY TO UNDERSERVED CONSUMERS

Serving low-income consumers means identifying a number of feasible funding sources and targeting them with a tailored business model. Starting from products or services that are expected to have a positive impact on the quality of life, or open market opportunities for third parties may offer access to further financing. Bosch and Siemens Home Appliances Group has created a new market for its highly efficient refrigerators, when designing a new business model for itself and local energy suppliers in Brazil. The project has helped energy utilities to understand how “selling less” can create environmental, social and economic benefit.

## CASE EXAMPLE E1: REPLACING REFRIGERATORS IN BRAZIL'S POORER QUARTERS

**PARTNERS:** Bosch and Siemens Home Appliances Group (BSH), Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), local energy suppliers in Brazil

In conjunction with local electricity producers, BSH is exchanging the old “energy guzzling” refrigerators in Brazil’s poorest communities with new ultra-energy-efficient products. The utility companies buy the refrigerators from BSH, thus meeting their statutory duty to invest part of their sales revenue in improving energy efficiency in Brazil. The favela-dwellers receive appliances with significantly improved cooling performance and considerably reduced operating costs, free of charge. The old fridges are collected and disposed of in an environmentally sound manner. As a result of a new methodology submitted to the UNFCCC by BSH and the GTZ, the energy saved from the reduced energy consumption of the new fridges and the hydrofluorocarbons (HFCs) captured from the old fridges can now be converted into certified emission reductions under the Kyoto Protocol. The new fridges save an average of around 800 Kilowatt hours of electricity a year. With Brazil’s energy mix, this is equivalent to some two to three tonnes of carbon dioxide per appliance over the course of ten years.

## BENEFITS:

- **BSH** can sell highly energy-efficient fridges from the latest generation at a reduced price due to the proceeds from the carbon dioxide savings.
- **The local energy suppliers** invest the money in efficient use of energy instead of paying fines to the Brazilian government, or investing in new, expensive power plants. They are often able to eliminate illegal electricity connections, and get paid for electricity via the government subsidy for poor families.
- The **favela dwellers** receive a new energy efficient fridge and often qualify for the government subsidised electricity programme. Their energy bills are dramatically reduced. An official electricity bill also allows access to other social programmes.



## ...TO PROVIDE AN INTEGRATED CONCEPT FOR SUSTAINABLE REGIONAL DEVELOPMENT BASED ON SERVING FAIR AND GREEN DEMAND

Customers are becoming increasingly aware of social and environmental product information. However, the price of a product still counts most. Labels on products showing that they meet fair trade or organic criteria are gaining importance, but are still part of the niche market.

Serving more mainstream consumers requires balancing the social and environmental needs of producers. This can be achieved through pragmatic and regionally adapted strategies, and through effective, comprehensive communication.

With “Cotton made in Africa” the Aid by Trade Foundation has established an integrated concept that combines sufficient market based income creation for combating poverty, with environmental protection. This means involving many experts and partners in an open process, as well as constantly reviewing the progress. Only through such a participatory approach can the large number of social, cultural, and environmental aspects be addressed. The participating organisations and actors from different fields and backgrounds also provide a challenge for the communication within the multi-stakeholder initiative. Common goals and shared enthusiasm have turned out to be a critical success factor.

## CASE EXAMPLE E2: COTTON MADE IN AFRICA

**PARTNERS:** Otto Group, Tchibo, PUMA, Celio, s.Oliver, Tom Tailor, 1888 Mills, German Federal Ministry for Economic Cooperation and Development (BMZ), Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), German Investment and Development Agency (DEG), World Wildlife Fund (WWF), German Nature and Biodiversity Conservation Union (NABU), German Agro Action. Since 2008, the Bill and Melinda Gates Foundation also supports the initiative, contributing more than 20 million dollars, which enables the programme to expand into further Sub-Saharan countries.

In 2005, Dr. Michael Otto launched the Aid by Trade Foundation (Hamburg) to combat poverty and preserve the environment in developing countries. Its current project, “Cotton made in Africa”, promotes the sustainable growth of cotton in the Sub-Saharan region. The innovative public-private-partnership project enables smallholder farmers in Benin, Burkina Faso, Zambia and Mozambique to sustainably improve the yields and quality of the cotton they grow, and link them to progressive business partners in the industrialised world and its competitive markets.

More than one million smallholder farmers and their dependants are targeted by the initiative. In on-site courses, peasants are taught new methods of

cultivation, enabling them to achieve better crop yields and escape the cycle of poverty. The branded cotton they sell is a high-quality product in compliance with specified social, as well as environmental standards. Children are encouraged to go to school, textiles are grown alternately with staple foods and the input of chemical fertilisers and pesticides is significantly reduced, thus lowering the health hazards for the farmers.

Driven by the efforts of the Aid by Trade Foundation, the brand has become a coveted seal of quality with positive environmental, social and economic impacts. In 2008, 37,000 tons of lint cotton of Cotton made in Africa quality were sold. In this year, participating farmers in Zambia, for example, were able to increase their yields by 60 to 185 percent, due to the new methods of cultivation. Currently, an increasing number of textile retailers, including Otto Group, Tchibo, PUMA, Celio, s.Oliver, Tom Tailor, and 1888 Mills are offering their customers Cotton made in Africa textiles. The seal certifying the transparent value chain enables consumers to easily identify all textiles produced with this unique cotton.

By pooling demand for sustainable products from developing countries, retail companies, consumers and manufacturers in industrialised countries jointly trigger long-term improvements in order to overcome poverty and the destruction of the environment. It is a pioneer attempt for improving third-world living conditions through the market-driven involvement of private business actors.

## BENEFITS:

- **Smallholder farmers** benefit from an integrated on-site training approach and stable trade partnerships that comprehensively combine economic, social and environmental aspects to sustainably increase the quality of life for them and their families.
- The **foundations, development agencies** and **NGOs** involved benefit from the interaction and knowledge exchange about this integrated approach, which leads to sustainable development and empowers the farmers for the future.
- Besides benefiting from high quality supplies meeting defined social and environmental standards, participating **retailers** can enhance their reputation by actively promoting this successful and innovative initiative.



## ... TO ADDRESS SOCIAL AND ENVIRONMENTAL CHALLENGES WITH TAILORED TECHNOLOGIES

The WWF recently estimated that “exporting” high-impact consumption patterns and lifestyles of industrialised countries to the rest of the world would require three to five planets.<sup>24</sup> Emissions and resource consumption of Western countries need to be cut substantially. At the same time, developing countries and emerging economies must “leap-frog” and eliminate high-impact development stages. To facilitate this, technology advancement and know-how should be applied in emerging economies for a rapid transition into low-carbon economies. Due to quite different technological, social and cultural frameworks, not all technology transfer has been beneficial for the receiving countries. Western sanitation systems, for example, are based on historically grown infrastructure that in fact, is increasingly costly and rather inflexible to demographic and environmental challenges. Exporting such technology has often brought with it the related challenges and catalysed additional problems. Sustainable consumption in a developing country means neither copying established patterns of industrial development, nor ‘greening’ the consumption of the upper and middle class. Instead, strategies are required that consider inclusiveness of the poor and marginalised, as well as natural resource use efficiency from the beginning<sup>25</sup>. A GTZ-supported consortium implemented innovative sanitation technology customised to the social and environmental requirements of urban areas in Ethiopia. To assure long-term success, local companies are trained to take care of installation, maintenance and operation with respective business models.

# CASE EXAMPLE E<sub>3</sub>: ECOLOGICAL WASTEWATER SYSTEM IN URBAN AREAS IN ETHIOPIA

**PARTNERS:** Otter Wasser, TuTeck Innovation, Planning Group Prof. Krusche (PPK), Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)

Dry toilet systems offer a number of environmental and health benefits especially in countries without extensive water and sewage infrastructures. The implementation however, requires more than a transfer of appropriate technology. To ensure long-term success, the project relies on seven to eight demonstration buildings in each regional project. Besides demonstrating technical feasibility, the demonstration centres proactively promote private, small and medium enterprises to venture into the market of ecological sanitation. The training includes installation, maintenance and operation. Furthermore, they are supported in adapting the sanitation concept to local conditions and local production of dry toilets. Demonstration facilities are not only used for the training of the working staff, but also to raise awareness among users and reduce potential reservations. In parallel, other interested SMEs are trained in the collection, treatment, distribution and utilisation of the residuals. To increase the acceptance of farmers and other potential users of waste residuals, a test field to demonstrate the use of the secondary resources is build up.

## BENEFITS:

- The **companies** carrying out the Public Private Partnership (PPP) project in cooperation with the GTZ benefit from systematically developing a new market in the field of ecological sanitation. The presence of the GTZ in Ethiopia in the sector of housing provides for the companies' easy access to the respective local consulting firms, contractors, and small and medium enterprises.
- The **GTZ** benefits from implementing market-based development mechanisms so that initial funding leads to income and job generation (through creation of new markets). The construction sector will become more professional through new products in sanitation.
- The **trained Ethiopian SMEs** are supported in developing new business models based on social needs and environmental friendly technology.
- From an **end user** perspective, the ecological sanitation will help to economise the usage of drinking water and protect the infiltration of black water into sources of drinking water. It also facilitates the use of natural organic fertiliser in agriculture.



### ...TO INCREASE QUALITY OF LIFE THROUGH TECHNOLOGY TRANSFER AND TRAINING

Serving low- and middle-income consumers does not always require a customised approach. A number of applications, e.g. in medical equipment, offer benefits for patients and doctors almost globally, without the need for regional adaptation. Advancements may become especially obvious and worthwhile, when outdated methods can be replaced.

Despite these positive prospects, companies may face considerable administrative, cultural, and financial obstacles that can risk investments in export. Furthermore, products may require systematic training for appropriate use and long-term market development. Medical equipment company KARL STORZ partnered with the GTZ and highly respected governmental and non-governmental partners in India to make endoscopic treatment more readily available in rural areas.

## CASE EXAMPLE E4: WOMEN'S HEALTH INITIATIVE (WHI) IN INDIA

**PARTNERS:** KARL STORZ, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), United Nations University (UNU), Six Endoscopic Training Centers (4 public und 2 private hospitals in India)

The aim of this PPP project is to advocate advanced medical care for women and adolescent girls in India. The method employed is the provision of necessary training to all involved, whilst supporting ongoing communication between trainers and trainees.

Before starting the initiative, female patients from rural areas in India were required to undertake long journeys lasting several days to reach adequate medical care. Since the Indian custom requires several family members to accompany the patient, the expenses for travelling were sometimes higher than the treatment costs. The availability of modern treatment facilities utilising Endoscopy as a vital tool, substantially reduces the costs for a family for required medical treatment. In addition, the minimal invasiveness of the procedure allows early return to normal activities and hence minimises the income lost due to postoperative recovery. The six Endoscopic Training Centres (ETC) were established in selected Indian hospitals.

Each ETC committed to train a minimum of 40 suitable candidates in 12 months. Selection criteria for the trainees were, apart from clinical and academic qualifications, the free access to the required equipment and the commitment to work in rural areas after the training was completed. The costs for the training was significantly less compared to similar training offered by other institutions.

Besides the obvious medical advantages for the target areas, the initiative also contributed to the rural economy by creating new jobs for nurses, technicians and other qualified personal required in medical clinics. In addition, it also ensured that fees for treatment were levied in rural areas rather than being spent in metropolitan centres.

#### **BENEFITS:**

- Supporting training facilities will help to establish endoscopic treatment also in rural areas, thus developing new markets for **KARL STORZ** (foster sales in the long-term).
- The **ETCs** benefit from networking with hospitals in remote areas and the establishment of a referral system.
- **Trainees** receive affordable training for advanced medical treatment as a good foundation for a professional career.
- From a **patient's** perspective, the availability of modern facilities locally helps to avoid costly and cumbersome travel to obtain medical care.
- The **Indian Government** gains from shorter recovery periods that reduce the bed shortage in hospitals and the loss of working days.



Access to well-respected networks and local partners, as well as funding support, are among the most important benefits when partnering with governmental development agencies. Such partnerships may rely on a company's technology, know-how, and supply chain partners to tackle sustainable consumption and production issues on a larger scale.

## PARTNERSHIP PROTOTYPE E: PARTNERING WITH GOVERNMENTAL ORGANISATIONS

Partnerships between private companies and public development agencies have become “key institutional pathways for enabling international development and the delivery of public goods”<sup>26</sup>. As the case examples of this section have shown, cooperation does not only include the direct delivery of public services and infrastructure, but also the joint development and promotion of social and environmental rules for market and non-market actors.

Companies seeking business opportunities in developing countries or emerging economies are strongly dependent on regional expertise, including a profound understanding of institutions, cultural aspects as well as social and environmental challenges. Based on these competencies, governmental development agencies can provide significant support in linking business models to social development needs – either directly or through other local partners and networks.

Thus, synergy effects can be generated – primarily through pooling technology and knowledge – in order to increase impact and reach of economic development and business interests as well as other development goals in the health, environmental or social sphere.

# OUTLOOK AND REQUIREMENTS FOR FUTURE PARTNERSHIPS FOR SUSTAINABLE CONSUMPTION

**S**ustainable consumption does not depend solely on the availability of more sustainable products and services. Nor can it be exclusively related to responsible purchasing decisions or supportive regulation and information from governmental and non-governmental actors. Instead, sustainable consumption strategies involve all of these aspects and related actors. Unfortunately, this is not reflected in public debates where business, consumers, governments or other stakeholders try to allocate the main responsibility for sustainable consumption to a specific actor. Conflicts also arise when dealing with sustainable consumption on a product or lifestyle level. The case examples in this booklet clearly demonstrate that life cycle or value chain assessment assists business to determine the sustainability of a product. However, retailers, governments and other actors may assess the “sustainability” of a product differently, based on varying disclosure criteria or societal demand.

## ACCEPT RESPONSIBILITY – AND HOLD OTHERS TO ACCOUNT

We have argued in this booklet that partnerships – especially those among business, governments and society (including consumers) – are an essential means for clarifying individual responsibilities and commonly defining sustainable products and lifestyles. Understanding the individual roles and prospects of actors and their external expectations, helps to build partnerships that contribute both to sustainable consumption and benefit the partners involved.

**Business** can mainstream ethical practices and efficient resource use among all functions and – through sustainable sourcing practices – also within the supply chain. Focussing on customers and consumption decisions, the World Business Council for Sustainable Development (WBCSD) has summarised the key issues for business as follows:

- Making it easy and affordable for the consumer to make sustainable purchasing decisions
- Making sustainable products available and comparable – without compromising on performance and at no extra costs
- Leveraging the unprecedented power of consumers to share information about companies, products and services via social networks, to promote sustainable products, usage, consumption and lifestyles<sup>27</sup>

Companies may also significantly influence the public and political agenda by delivering innovative products and services. Demonstrating accessible alternatives for high-impact consumption areas has often not only been the nucleus for business success, but also inspired regulation e.g. to phase out harmful technologies.

**Governments** can set a framework and identify a policy mix that protects the degradation of ecosystems and human health. Fiscal structures and incentives rewarding products and services for low-impact lifestyles can be significant drivers of sustainable production and consumption. Governments may also play a significant role as a provider of guidance and reliable information for businesses and consumers. Consumers need to be able to make a distinction between substantiated green and fair product claims and greenwashing. Confusion about the added value of more sustainable product choices have been shown to prevent consumers from taking action.<sup>28</sup> Finally, governments can increase market demands for sustainable products and services using sustainable public procurement for any purchasing decisions.

**Civil society organisations** are closely linked to their specific core issues and their function as a critical observer. As such, NGOs independently assess political and commercial approaches towards sustainable consumption. Bringing in their expertise and assertiveness can either put pressure on unsustainable practices, or endorse and support those that are most promising. Having a high credibility makes NGOs an important actor for informing and influencing consumption decisions.

**Consumers** can connect societal needs and concerns with purchasing decisions. However, being a critical and responsible consumer remains a difficult task. It requires the constant evaluation of the reliability of information sources, as well as making decisions between conflicting issues, shouldering additional efforts, and potentially paying more for sustainable products and services. For the most relevant social and environmental impacts, sustainable consumption is not a question of replacing high-impact products with low-impact ones, but a question of changing lifestyles. This is even more difficult in societies with ‘conspicuous consumption’ where there is heavy societal pressure to maintain high consumption patterns, and where competitive spending and displays of wealth are encouraged. Nonetheless, the power of demand and the political support provided by consumers requires this group to assume responsibility for positive and negative external effects of consumption choices and lifestyles.

# THE SUSTAINABLE CONSUMPTION WORKSHOP SERIES

**P**articipants and actors of the Global Compact Network Germany (DGCN) discussed opportunities and challenges of sustainable consumption in four workshops in 2007/2008. The workshops were planned and moderated by the UNEP/Wuppertal Institute Collaborating Centre on Sustainable Consumption and Production (CSCP) in line with one of two DGCN focus issues for 2008 and actively supported by the GDA, the GTZ, Henkel and Volkswagen. Further input was provided by Alcan Packaging, the German Consumer Initiative, Otto Group, RWE, Starbucks Germany, and the German Federal Ministry for Economic Cooperation and Development (BMZ).

## **SCOPING WORKSHOP: SUSTAINABLE CONSUMPTION – ISSUES, TRENDS AND HOT SPOTS**

While the focus has long been on optimising production processes, attention is increasingly being paid to supply chains and the consumption phase as offering potential

for ecological and social optimisation. The workshop highlighted trends in business and politics and the spectrum of instruments for employing and promoting this approach. The diverse challenges, especially in consumer communication and information, became apparent in the presentations and discussions.

## **1ST WORKSHOP: THE CONTRIBUTION OF INDIVIDUAL COMPANY AREAS TO SUSTAINABLE CONSUMPTION**

Sustainable consumption is not just a relevant issue for marketing. Rather, the topic must be strategically anchored within the company and applied across the entire value chain. This requires enormous communication efforts, which should focus on the opportunities offered by sustainable consumption. In consumer communication, it becomes obvious that environmental responsibility is only one differentiating factor among many. Product quality and performance as well as the price must first be right.

## 2ND WORKSHOP: SUSTAINABLE CONSUMPTION ALONG GLOBAL VALUE CHAINS AND IN NEW MARKETS

Procurement of components and products that are as “sustainable” as possible from suppliers in threshold and developing countries for LOHAS consumers (Lifestyle Of Health And Sustainability) from northern countries raises the question of how to organise and control global value chains, especially in view of fragmentation over numerous subcontractors. Pure control instruments that are implemented top-down seem to be useful for defining general standards, but do not manage to address all relevant aspects. As a consequence, they are increasingly being supplemented with bottom-up approaches, including provision of know-how, learning and best-practice platforms as well as dialogue systems.

## 3RD WORKSHOP: PARTNERSHIPS FOR SUSTAINABLE CONSUMPTION

Successful implementation of instruments for sustainable consumption frequently requires a bundle of measures that will most probably also stretch across company boundaries to upstream and downstream processes and phases. Partners with similar concerns, complementary know-how, access to required resources and networks, as well as high credibility, could be a significant success factor here. The workshop discussed the five types of partnerships presented in this booklet.



## ABOUT DGCN

Since the Global Compact's launch by the then UN Secretary General Kofi Annan in the year 2000, German companies have been among the most vocal signatories and active participants. On behalf of the German Ministry for Economic Cooperation and Development and the signatories, and in coordination with the Foreign Ministry, the Global Compact Network Germany (Deutsches Global Compact Netzwerk, DGCN) is managed by its Focal Point at the GTZ: Signatories and stakeholders meet regularly, topics are discussed, partnerships forged, information gathered and resource material produced to enhance the implementation of the Global Compact's ten principles on Human Rights, Labour Standards, Environment and Anti-Corruption. As a strategic policy initiative for businesses committed to aligning their operations and strategies to these the DGCN offers learning and exchange in a multi-stakeholder setting. Since 2008, we have focused on specific issues, such as "business and human rights", "new climate change risks", and "the financial crisis and consequences for companies' sustainability policies". Year-long discussions on "sustainable production and consumption" in 2008 are concluded with the publication in hand.



## ABOUT CSCP

The CSCP – UNEP/Wuppertal Institute Collaborating Centre on Sustainable Consumption and Production – is an internationally active think-tank and “do-tank” for research, outreach and transfer activities on Sustainable Consumption and Production (SCP). The CSCP supports the Marrakech Process in the areas of both scientific research and project implementation with a special focus on capacity building in developing countries.

One of the priority areas, which shape CSCP’s work, is the area of changing individual and institutional patterns of consumption. Actions include support for consumer education, awareness raising campaigns, sharing best practices and the development of guidelines and manuals in the areas of sustainable consumption and resource efficiency. The CSCP takes up these issues in its work on international trends and patterns of consumption and the design of intervention strategies to promote sustainable lifestyles and educate among both public and private consumers. The CSCP supports the integration of environmental, social and cultural concerns into decision-making at the level of national governments, regional and local authorities, the private sector and consumer groups. The development, testing, implementation and monitoring of concrete projects, shall enable these stakeholders to leapfrog to sustainable consumption and production patterns using life cycle thinking and a human development perspective as guiding principles.



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## CASE EXAMPLES IN THIS BOOKLET:

### **PARTNERSHIPS FOR CREATING COMMON STANDARDS OR PRINCIPLES**

- Henkel joined the multi-stakeholder Roundtable for Sustainable Palm Oil (RSPO) to create a viable mechanism to support and trade sustainably produced palm kernel oil.
- The 'A.I.S.E. Charter for Sustainable Cleaning' systematically embeds life cycle thinking within related companies of the cleaning and maintenance sector.
- The GTZ and Metro partnered to train supply chain partners in Vietnam and provide recommendations for a national legislative framework.
- A group of companies and research institutes formed the Product Carbon Footprint Pilot Project Germany as a learning platform for assessing and communicating product-related emissions.

### **PARTNERSHIPS FOR CONSUMER COMMUNICATION AND EDUCATION**

- Volkswagen and NABU offer a training programme for driving efficiently and saving up to 25 percent of fuel and emissions.
- The Henkel Value Calculator transparently and effectively communicates use-phase advancements and resulting benefits to industry customers.
- The German aluminium industry started a dialogue between the social partners to raise awareness among employees and spark innovations in resource efficiency.
- With FORUM WASCHEN a multi-stakeholder dialogue-platform has been established that deals with sustainability for cleaning and maintenance products.

### **PARTNERSHIPS FOR RESEARCH AND DEVELOPMENT**

- The GDA conducted life cycle assessments to understand the wider context and impacts of Aluminium-based packaging within the food supply chain.
- Otto Group compiles the related emissions of different product life cycle stages as information source for production improvements and consumer guidance.
- Volkswagen partnered with research and industry experts in the area of energy storage and energy supply to assess the viability and wider implications of electro-mobility.
- The E-DeMa project aims to develop intelligent energy hubs for households connected to future energy trading markets.

### **PARTNERSHIPS FOR SUSTAINABLE PRODUCTS AND SERVICES**

- Volkswagen and the GTZ implemented occupational safety and health structures at the supplier level to minimise injuries and assure high product quality.
- The GTZ and Tchibo developed and implemented a qualification programme on social standards for Asian SMEs to effectively strengthen local knowledge and institutions.
- A group of companies including PUMA joined forces with the GRI and the GTZ to start a pilot project encouraging SME suppliers to compile and publish their own sustainability reports.
- The aluminium industry engaged with stakeholders to define core indicators for the aluminium production and use phase that also inform and enable low-impact product design.

### **PARTNERSHIPS FOR LOCAL COMMUNITY INVOLVEMENT AND NEW MARKETS**

- Bosch and Siemens Home Appliances Group created a business model based on providing underserved consumers in Brazil's poorer quarters with highly efficient refrigerators.
- The Aid by Trade Foundation established "Cotton made in Africa" to provide an integrated concept for sustainable regional development, by empowering smallholder African farmers to sustainably improve their yields and linking them to progressive business partners in the industrialized world.
- A GTZ-supported consortium implemented innovative sanitation technology customised to the social and environmental requirements of urban areas in Ethiopia.
- KARL STORZ partnered with the GTZ and Indian organisations to increase quality of life through medical technology transfer and training.