Capacity Building Session 1

Ways to measure the impact of procurement on the environment and society

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CSCP
COLLABORATING CENTRE ON SUSTAINABLE CONSUMPTION AND PRODUCTION

COLLABORATIVE SOLUTIONS FOR A SUSTAINABLE PLANET

Agenda

12:00-13:00 Session Part 1

1. Welcoming & Agenda (5 min)
2. Introduction round (15 min)
3. Introductory presentation on the topic (15 min)
4. Interactive Part 1: "SDGs" (20)
5. Reporting back (5 Min)

14:15-16:00 Session Part 2

1. Recap (10 min)
2. Interactive Part 2: "Hot Spots and Sweet Spots of Products" (30 min)
3. Reporting back (10 min)
4. Interactive Part 3: "Conclusion for Sustainable Procurement" (30 min)
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6. Open Discussion (15 min)

Introduction

The Collaborating Centre on Sustainable Consumption and Production (CSCP)

Founded in 2005
by the United Nations Environmental Programme (UNEP) and Wuppertal Institute of Climate, Environment and Energy. Headquarters in Wuppertal, Germany

Think & Do Tank
The Centre provides scientific support to clients from the private and the public sector, in the field of sustainable consumption and production (SCP)

60 **Team Members**
with interdisciplinary backgrounds

International Scope
and activities in four continents

all photos © CSCP

Who we work with

Broad range of partners locally and globally

Introduction Round
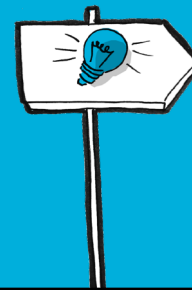
- Briefly introduce yourself...

- Why did you choose this workshop?

- What are your expectations?

Introductory Presentation
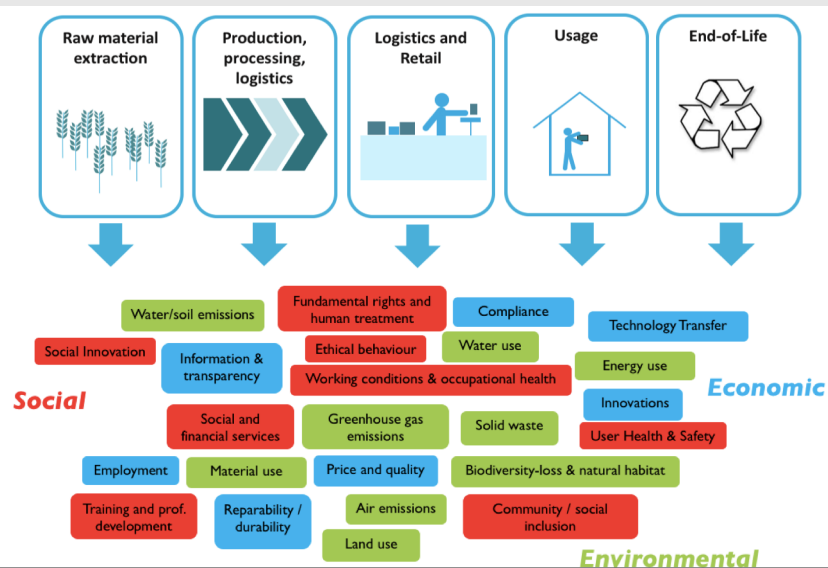
Ways to measure impacts of procurement on environment and society

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Sustainability impacts from the value chain

Raw material extraction	Production, processing, logistics	Logistics and Retail	Usage	End-of-Life

Social

- Social Innovation
- Water/soil emissions
- Information & transparency
- Fundamental rights and human treatment
- Ethical behaviour
- Working conditions & occupational health
- Compliance
- Water use
- Technology Transfer
- Energy use
- Social and financial services
- Greenhouse gas emissions
- Solid waste
- Innovations
- User Health & Safety
- Employment
- Material use
- Price and quality
- Biodiversity-loss & natural habitat
- Training and prof. development
- Reparability / durability
- Air emissions
- Community / social inclusion
- Land use

Economic

Environmental

Positive and negative sustainability impacts
Handprints & Footprints

Increasing positive impacts
- Social wellbeing
- Sustainability awareness
- Ecosystems quality
- Social gains
- …

Reducing negative impacts
- Resource overuse
- Waste generation
- Emissions
- Social consequences
- …

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Positive sustainability impacts
Examples

- **Sustainable product alternatives** give consumers a real choice

- **Better product design or smart chemicals and materials** can be the basis for more (downstream) positive impacts

- An **improvement of working conditions**, e.g. through fair trade, has a positive effect on health, income, motivation…

- **Explainable products** inspire sustainability awareness

- **Business models** can make a contribution towards the circular economy

- **Sharing and pooling opportunities** not only raise product use time but also foster community cohesion through social interaction

- **Organic agriculture** not only provides sustainable food but also fosters individual well-being and protection of nature

- **Information and communication technology (ICT) can enable people**, e.g. in sectors such as transport and logistics, agriculture, energy and building

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The SDGs as an evaluation basis

What if we assessed the contribution to the SDGs?

- The SDGs are Internationally accepted
- Comparison between products/companies possible
- Allows reference to the whole life-cycle

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A smartphone's contribution to the SDGs

Exemplary illustration
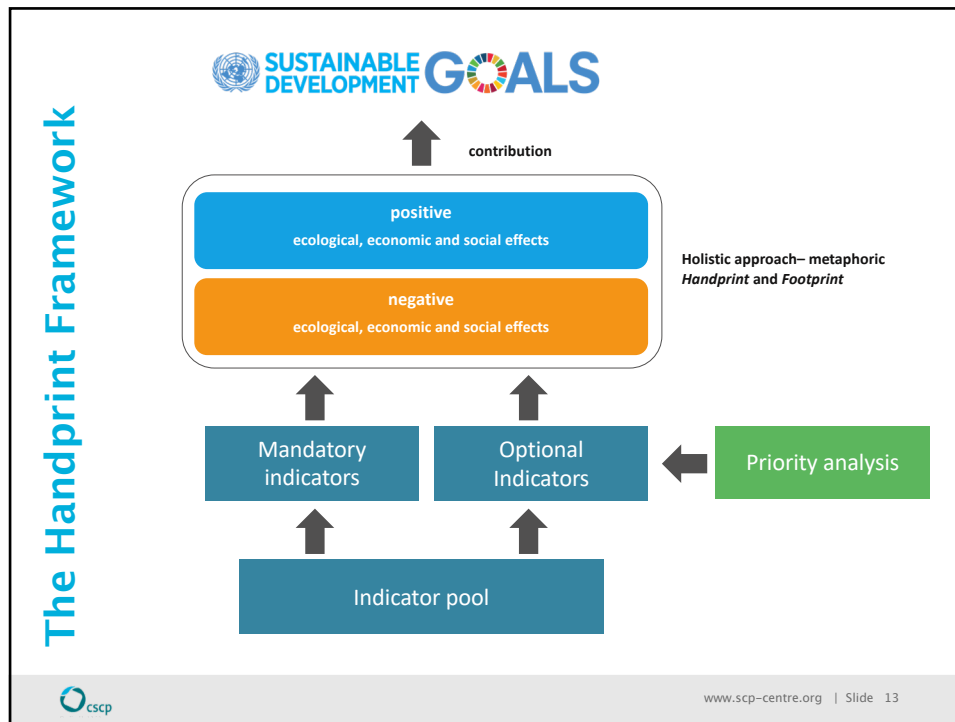
Product / Supply Chain Characteristics

- Fair wages and good working conditions
- Comprehensive information on supply chain available
- Replaceability of parts
- High usage of fossil-sourced energy

- **Blue lines** = positive impacts (Handprints)
- **Yellow lines** = negative impacts (Footprints)
- Numbers are **percentages**

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The Handprint Framework

SUSTAINABLE DEVELOPMENT GOALS

↑ contribution

positive
ecological, economic and social effects

negative
ecological, economic and social effects

Holistic approach– metaphoric
Handprint and *Footprint*

| Mandatory indicators | Optional Indicators | ← | Priority analysis |

| Indicator pool |

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Indicator–based Framework

Selected indicators

| Area	Indicator	SDG
Social	Average workers' wages compared to minimum wage and living wage	1.1, 8.5
	Ratio of women's wages to men's wages (in different salary grades)	8.5
Human Health (Risk Prevention)	Number of workers having access to protective clothing	3.9, 8.8
	Potential for human toxicity	3.9, 12.4
Environment	Potential for terrestrial biodiversity	2.4, 2.5, 6.6, 12.4, 15.1, 15.4, 15.5
	Amount of waste	12.4, 12.5
Economic	Contribution to resource efficiency (efficient input of resources, re-use, recycling,...)	8.4, 12.2, 12.3, 12.5
	Distribution of (technological) solutions for sustainability	17.6, 17.7
Governance	Transparency and standards on both company and product-/service level	12.6, 12.8
	Engagement in setting sustainability standards and legislation supporting sustainable development	16.6

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There is a short-cut...

...after the lunch-break.
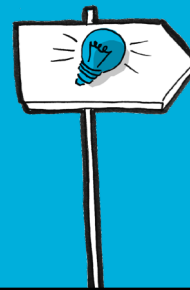
Interactive Part 1

Priority Impacts and SDGs
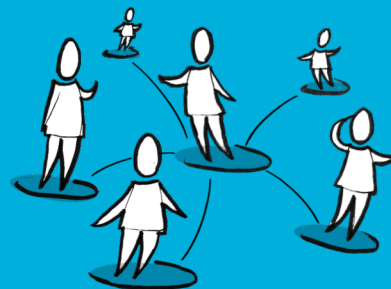
Working with the SDGs

Prioritization of sustainability targets

Task

Have a look at the SDGs. Which would be the most interesting to target for your organisation?

Make a shortlist of your six most interesting SDGs.

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The Sustainable Development Goals (SDGs), officially known as Transforming our world: the 2030 Agenda for Sustainable Development, are an intergovernmental set of aspiration Goals with 169 targets.

- **Poverty** – End poverty in all its forms everywhere.
- **Hunger and Food Security** – End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
- **Good Health and Well-Being** – Ensure healthy lives and promote well-being for all at all ages
- **Education** – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- **Gender Equality and Women's Empowerment** – Achieve gender equality and empower all women and girls
- **Water and Sanitation** – Ensure availability and sustainable management of water and sanitation for all
- **Energy** – Ensure access to affordable, reliable, sustainable and clean energy for all
- **Decent work and Economic Growth** – Promote inclusive and sustainable economic growth, employment and decent work for all
- **Industry, Innovation and Infrastructure** – Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- **Inequality** – Reduce inequality within and among countries
- **Sustainable Cities and Communities** – Make cities and human settlements inclusive, safe, resilient and sustainable

- **Sustainable Cities and Communities** – Make cities and human settlements inclusive, safe, resilient and sustainable
- **Sustainable Consumption and Production** – Ensure sustainable consumption and production patterns
- **Climate Change** – Take urgent action to combat climate change and its impacts
- **Oceans** – Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
- **Biodiversity, Forests, Deforestation** – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- **Peace and Justice** – Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- **Partnerships** – Strengthen the means of implementation and revitalize the global partnership for sustainable development

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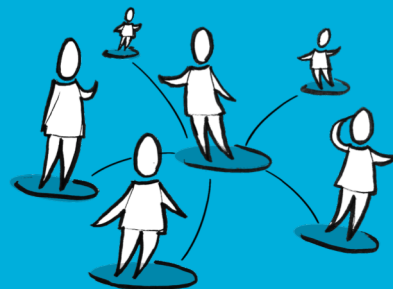5. Reporting back (5 Min)

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Interactive Part 2

Hot Spots and Sweet Spots

3/29/18

Hot Spots / Sweet Spots Analysis

A short-cut to measure impacts

Sustainability assessment of supply chains in order to identify
- **risks and**
- **opportunities**

Methodology characteristics

✓ Coverage of entire value chain	✓ Combinable with existing criteria sets, standards and guidelines
✓ Applicable on product group	✓ Applicable for all sizes of companies/organisations
✓ Visibility of leverage points/priorities	
✓ Based on semi-quantitative data	✓ Basis for the design of meaningful SSCM action
✓ Credibility through stakeholder involvement	

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Analysis of Hot Spots & Sweet Spots

A short-cut to impact measurement

| Life cycle phase	Supply Chain Practices	Actors
Material extraction	• Growing of cotton using (intensive farming model) • Ginning	• Cotton farmer in India
Production, processing	• Washing of and yarn spinning • Fabric weaving, dying, bleaching • Design, pattern, cutting, sewing • Packaging of the product	• Textile company in Bangladesh • Garment factory, Bangladesh
Logistics and Retail	• Transportation through logistic network along the value chain • Sale through fashion store	• Logistic companies Asia, Europe • Shopkeeper, Oslo
Usage	• Use by middle-class consumer • Washing on regular basis • Disposal domestic refuse	• Consumer, Norway
End-of-Life	• Disposal domestic refuse • Landfill	• Consumer • Disposer company, Norway

T-Shirt,
100% Cotton

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11

Example of an Hot Spot Analysis

Environmental Hot Spots

Ranking of identified single sustainability impacts.

- **Low / green**
  = no need for action
- **Medium / yellow**
  = should be tackled, but not that urgent
- **High / red**
  = urgent need for action
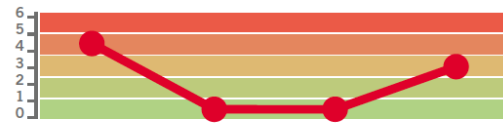
	6 5 4 3 2 1 0			
	Raw material production Agriculture	**Production Processing**	**Trade Logistics**	**Consumption End of Life**
(Raw-) material	🔴	🟢	🟡	🟡
Energy	🟡	🟢	🟢	🔴
Greenhouse Gas Emissions	🟡	🟢	🟢	🔴
Water	🔴	🟢	🟡	🔴
Land Use	🔴	🟡	🟡	🟡
Air Emissions	🟢	🟡	🟡	🟡
Water/Soil Emissions	🔴	🟢	🟡	🟢
Waste	🟡	🟡	🟡	🟢
Biological Diversity	🔴	🟢	🟡	🟡

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Hot Spots and Sweets Spots Analysis

Assessing sustainability impacts

Task

Choose a product:

- **Fair-trade Banana**
- **Car-Sharing**
- **Eco-Detergent**
- **Fairfone**

Analyse the product. Assess positive and negative sustainability impacts on your selected SDGs. Highlight the Hot Spots and most important Sweet Spots.

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Hot Spots and Sweets Spots Analysis

Assessing sustainability impacts

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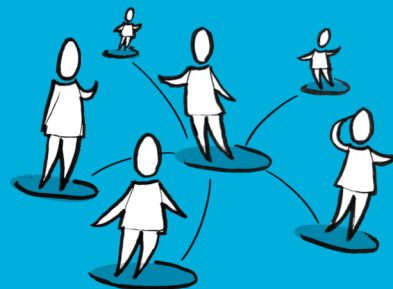
Which SDGs remain untouched so far? Which would be product/production characteristics that would enable positive impacts on your SDGs?

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Interactive Part 3

Conclusions for Sustainable Procurement

Sustainble Procuremnt

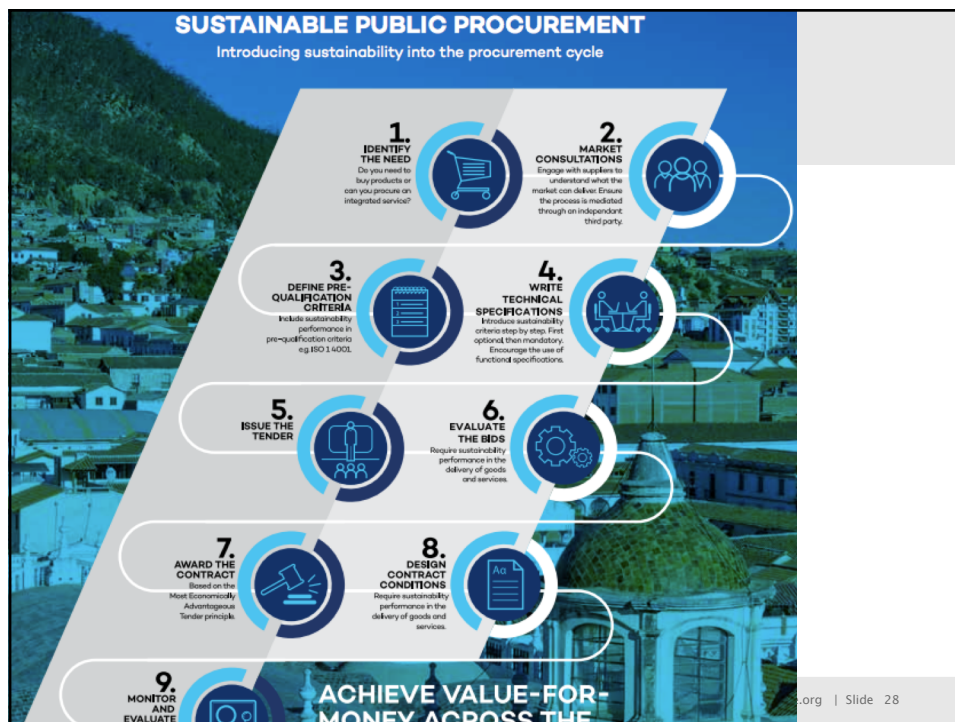**Transferring the approach into a procurer's daily business**

Task

How could you support your sustainable procurement based on the Hot Spots and Sweet Spots Methodology?

Discuss measures related to the procurement cycle. Where are entry points?

Key Words

Standards & Labels	Innovation potential	Service Contract
Communication	Related (national) strategies	Reporting
Enabling	Transparency	Corporate Social Responsibility
Product assessment	Circular Economy	Scoring Systems
Digitalisation	Regulation	Visioning
Value Chain	Organisational processes & Governance	World Happiness Report
Business Case		
Life Cycle Costs	Limits	

Materials for the Interactive Sessions

Product Example Fairphone

The phone impresses not only with its high-quality design and technical characteristics, but also convinces by its sustainable value chain.

The manufacturer provides transparency along the entire value chain.

For the manufacturing of the phone, raw materials (e.g. metals, rare earth compounds) are used, which especially benefit local economies and for instance not the armed militia, which controls local mines in some regions. So, the Fairphone only contains conflict-free minerals from the Democratic Republic of the Congo.

In addition, the replaceable battery contributes to the reduction of the environmental pollution.

For the choice of the component suppliers, good working conditions and fair wages are critical selection criteria.

Both the currenct Fairphones available so far were designed in a way, that each part can be repaired or replaced by the user.

In addition, since 2016 the source code of the software is available to the developers, so that updates can be provided at any time. Through space-saving packaging materials and efficient distribution logistics to end consumers, CO2 emissions were reduced by 30% compared to conventional smartphones.

Still, with increasing complexity, electronic manufacturing in general remains the most carbon-intensive phase (three quarters of phone's total CO2 emissions). ALso, high costs of recycling of e-waste often ends up on the landfills.

Product Example Car-Sharing

In major cities the acceptance of carsharing steadily increases – especially in industrialized countries, but also in emerging markets. Market research shows that among young people, the car is becoming less important as a status symbol. In major cities private cars are often not worth to own, the combination of public transport, the bicycle and carsharing is very attractive to many people.

For several major cities in Europe the growth potential for carsharing is considered as immense.

In major cities of the emerging economies new concepts are needed to get the growing traffic problems under control. Thus, in Beijing parking space for vehicles is expensive and scarce.

Crucial for the success of carsharing projects are a high utilization and an efficient vehicle management. However, the future of carsharing strongly depends on the local communes. It is assumed that carsharing will take a greater account in cities transport policies and that the number of special parking spaces will increase, as it is already the case with taxis.

Car manufacturers are increasingly entering the car-sharing market, and a close collaboration with car rental companies or fleet managers can be recognized. But also for independent providers the market is interesting. In the end it comes to the question of who can offer carsharing most economically and efficiently. In the long term the price will play the decisive role.

In this regard, it can be also taken into account that private car ownership requests (crucial) financial commitment and cars are time-consuming to repair (the owner often lacks skills to do that).

Product Example Fair-trade Banana

Global production exceeds 105 Mio tonnes of Bananas annually. One quarter of this being traded globally. Annually Germany alone imports about 1.3 Mio tonnes of Bananas, the annual per capita consumption reaches almost 8 kg/person, making bananas the top fruit besides apples in Germany. In 2013 around 31.500 tonnes of bananas carried the Fair Trade lable, their market share being 5%.

Fair Trade Bananas originate mostly from Latin America, usually Peru, the Dominikan Republic and Ecuador. Always imported, around 90% of the bananas sold in 2013 in Germany were at the same time certified organic, though these doubble-certified bananas do not make up even half oft he organic bananas. Bananas make people happy, even more so when they are traded along the lines of the principles of the FairLabour Organisation, i.e. certified according to Max Havelaar/ Fairtrade. For these bananas there is a premium paid on top of the stock price and the local community decides whether that is being invested into schooling, medical care, transportation or other infrastructure and what is most needed. If demand is high enough, then all bananas are sold with the label. However, if demand is low, then the bananas are still sold without the premium.

Usually for export, the riping process is controlled and steered by temperature and the gas-content of the ambient air both within riping centres as well as during transportation, and the bananas are sold between 20-35 days after harvest. Nowadays usually the variety sold are Cavensish – which had been chosen initially due to their fungal resistance. However, at present they are again being threatened by a fungus. Fertilizer and pesticides are being used, although some pesticides are banned under the Fair Trade scheme.

Furthermore the following general facts have to be considered:
- bananas are transported overseas in refrigeration containers, which consume a lot of electricity.
- retail sectors do not accept imperfect bananas, which do not meet their requirements of shape
- consumers prefer to eat bananas before fully ripen, finally leading to food waste

Product Example Detergent

Launched in the summer of 2014, a company's "Ocean Plastic Bottle" has already won several awards in recognition of its combination of a revolutionary sustainable packaging concept and tactile design, based on natural principles. The project saw the cleaning pioneer company join forces with a research lab, which conceived the design and produced the washing-up liquid bottles made from 10% ocean plastic waste and 90% recycled plastic from other sources.

The company does ask fishermen to fish for plastic waste, that is then manufactured into the bottles. As part of the project, the fishermen do receive an additional remuneration.

In the Pacific alone, fish take up the equivalent of 480 Milion 2-litre PET bottles anually, so tackling the pastic waste problem in the sea helps the fish and the whole of fauna. But it is also important to humans, as by consuming fish we are most likely to also ingest micro plastic particles. Toxic chemicals such as phosphates or acids can cause allergies and skin problems.

The dish washing agent is 100% degradable, so there are not 20% from every bottle that end up in the waste-water stream and will not be degraded within a short time, let alone could accumulate.

Still, at least one problem remains: consumers apply more detergent than it is actually necessary, ignoring instructions.

Product:	Raw Material Extraction	Production & Processing	Logistics & Retail	Usage phase	End of Life
SDG					
SDG					
SDG					
SDG					
SDG					
SDG					
SDG+					

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