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Valuation of Circular economy in Swiss environmental policy

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Agenda

- Introduction
- Circular Economy in Swiss Environmental Policy
- A quick glimpse at the EU-Action plan on Circular Economy
- Outlook

Introduction

Resource (over-)use

Ecological footprint

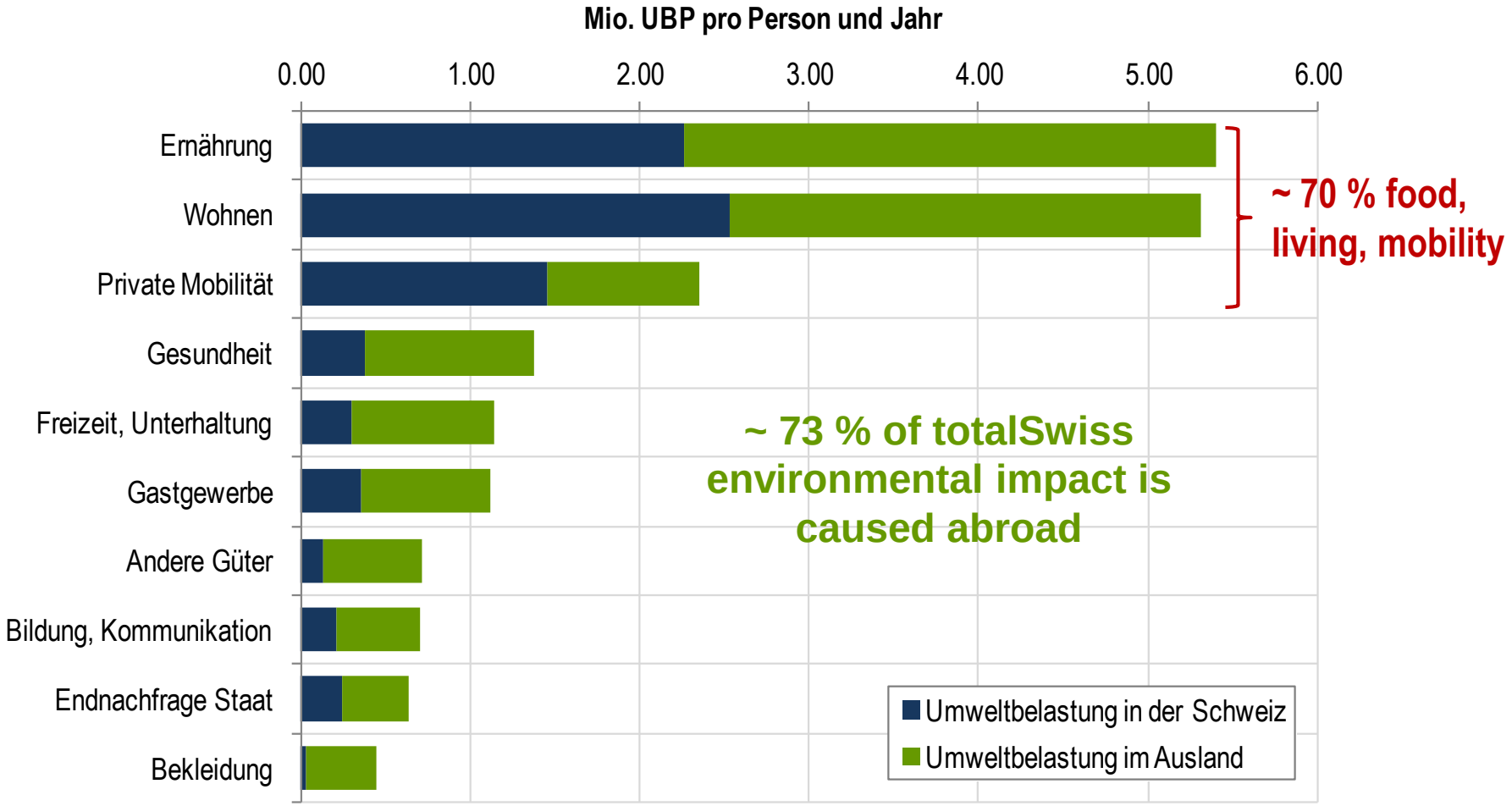
Today's human society consumes resources equivalent to 1.5 earths in order to sustain its standard of living.

If the global population were to consume the same amount of resources as ***Switzerland*** does 2.8 earths would be needed.

Source: Global Footprint Network

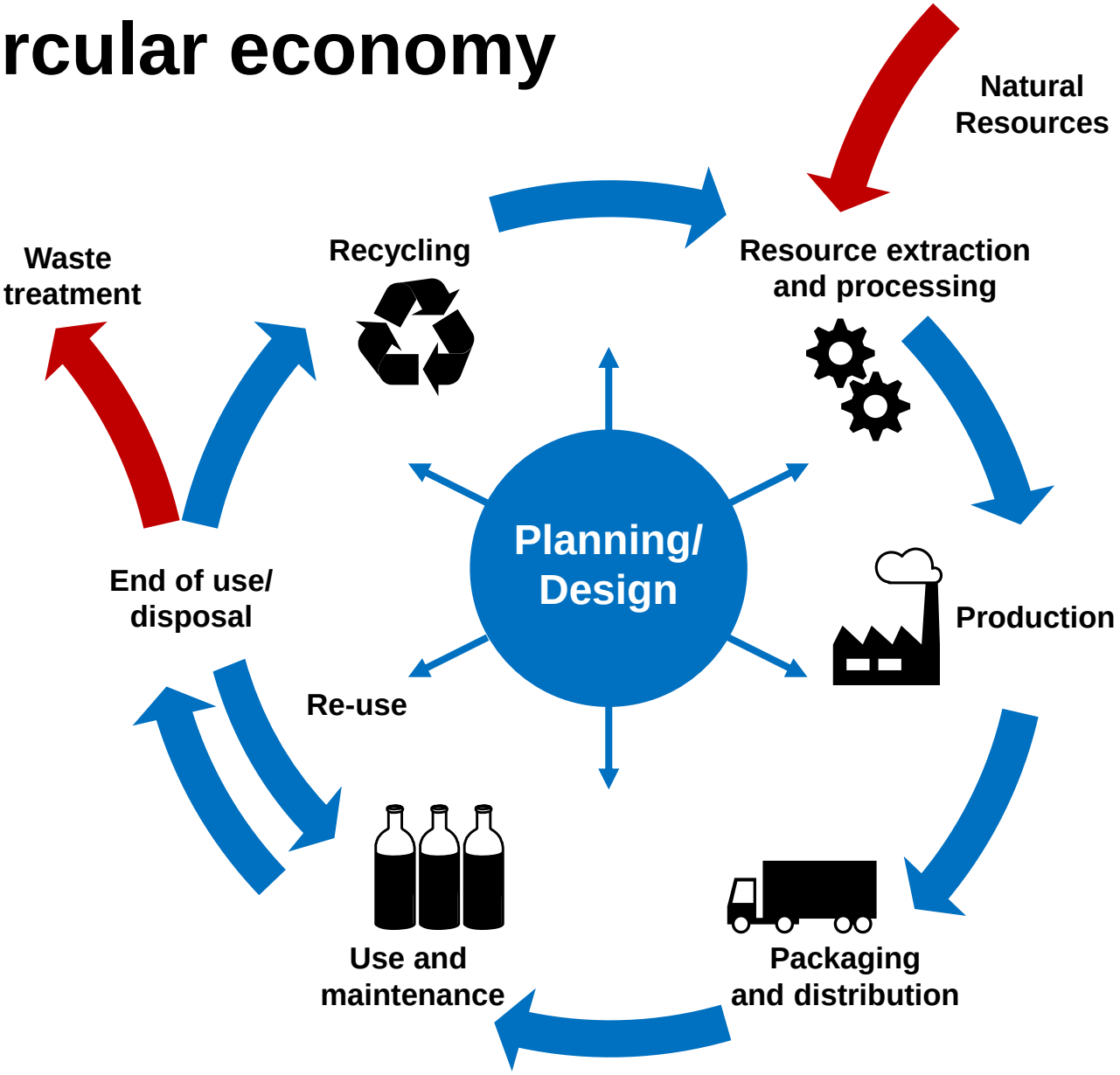
Total environmental impact of CH

divided into different consumer sectors



Source: ESU services Ltd./Rütter+Partner (2011) and Frischknecht et al. (2014)

Circular economy



Circular Economy in Swiss Environmental Policy

Circular economy

A long history…guiding principles on waste 1986…some examples…

Closed loops for a lot of materials

- 30 Mio. t unpolluted excavated material
- 4 Mio. t concrete
- 3.2 Mio. t separately collected municipal waste (54%)
- 1.6 Mio. t iron and steel scrap

A lot has been implemented

- no deposit of organic-chemical waste
- very low environmental impact of waste incineration
- recovery of metals from filters and slag
- pollutants turned into resources (HCl, metals)
- initiatives by economic actors (take-back system, financing)

Circular economy

…not yet achieved…

unclosed loops

- 12 Mio. t burned fossil fuels
- 10 Mio. t landfilled unpolluted excavation material
- 4 Mio. t mixed demolition materials (construction waste)
- 2.8 Mio. t burned municipal waste

upcoming issues

- Ecodesign
- Marketing pitfall for recycling
- Wrong foci (product vs. packaging, quota)
- Closing the CO2-loop (P2X)

Circular economy in Switzerland

Future perspectives in waste management

Better recuperation of phosphorus and metals

Better recycling of mineral waste

Prevention or better recycling of packaging

Separate collection

Better disposal of biomass

State-of-the-art facility operation

Better energetic use of waste

Decoupling of pollutants

Setting the right objectives!

Circular economy

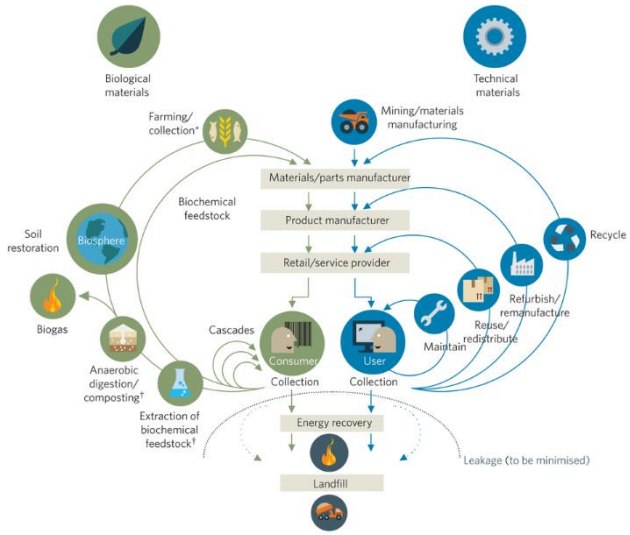
the entire loop – important leverages – activities in Switzerland

→Waste prevention (i.e. food waste, packaging)

FOEN is just starting to elaborate a waste prevention strategy

→ Minimise the loop

- substitutes & better materials
- life span
- process optimisation
- design for recycling / eco design
- get the right focus (products vs packaging)



→ Coupling out hazardous substances

- heavy metals
- organics (POPs)

→ Recycling & thermal valorisation

- low recycling rates for plastics at the time being
- recycling of demolition wastes should be at a higher level
  (new construction materials for the future designed for recycling)
- recovery of precious and scarce metals from WEEE and from slags & fly ash
- recovery of phosphorous from sewage sludge's
- Optimal energy recovery from waste treatment facilities

Legal bases

- Amendment of USG (Green Economy): legal integration of circular economy in USG
- After rejection of USG amendment in 2015:
  - existing regulation (particularly waste)
  - VVEA includes important aspects (particularly waste prevention)
  - need for action uncontested: focus on knowledge basis, voluntary measures and dialogue
- Important political framework conditions:
  - international: EU circular economy package, SDG
  - national: Green Economy Report, Sustainable Development Strategy, Sustainable Finance, National Research Programme Green Economy

Overview on key domains and foci 2016-2019

Domain	Focus
Consumption and production	1 Resource saving consumer behaviour (education and communication)
	2 Transparency and standards for ecologically relevant raw materials and products
	3 Optimising products and processes (incl. eco-design)
Waste and resources	4 Waste prevention
	5 Closing material cycles
Overarching instruments	6 Sector specific approaches for increased efficiency
	7 International commitment
	8 Incentives and support for the knowledge base
	9 Targets, dialog and reporting

Measures in consumption

- Production:
  - careful use of resources: collaboration with industry (peat, cotton, palm oil, soy, cocoa etc.)
- Use phase:
  - information and awareness-raising (e.g. Labelinfo)
  - optimise product use (repair cafes, Pumpipumpe etc.)
  - better understanding of consumer behaviour
- Knowledge basis:
  - active participation in PEF pilot projects
  - LCA data basis: Ecoinvent, WALDB, WFLDB

Green public procurement

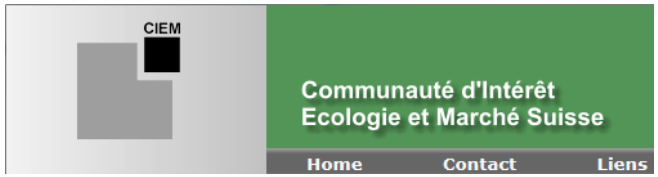
Public procurement: **6 % of GDP**
green products, cleantech, cost savings, exemplary behaviour activities according to **Org-VöB**

Procurement advisory service

- ecological purchase criteria (textiles)
- advising on tendering (Post, BIT)
- sustainability courses
- information on green innovation
- exchange of experiences with private purchasing body

Institutional stakeholders

- collaboration with cantons and municipalities
- exchange of experiences on international level (EU-UNEP)
- collaboration with Federal Procurement Conference



EU – Action plan on Circular Economy

Evaluation of EU circular economy package

Positive Aspects

Broad line of action along the entire value chain (examples)

- Extraction of raw materials
- Consumption
- Innovation
- «Green products»
- Agricultural policy
- Waste, landfill, packaging

Evaluation of EU circular economy package

Stumbling blocks

Greatest acceptance lies with measures with small impact.

- focus on waste management (small lever)
- Increase of recycling quota (wrong objectives)
- No effective reduction of material flow
- Waste regulation instead of product regulation

Circular economy package

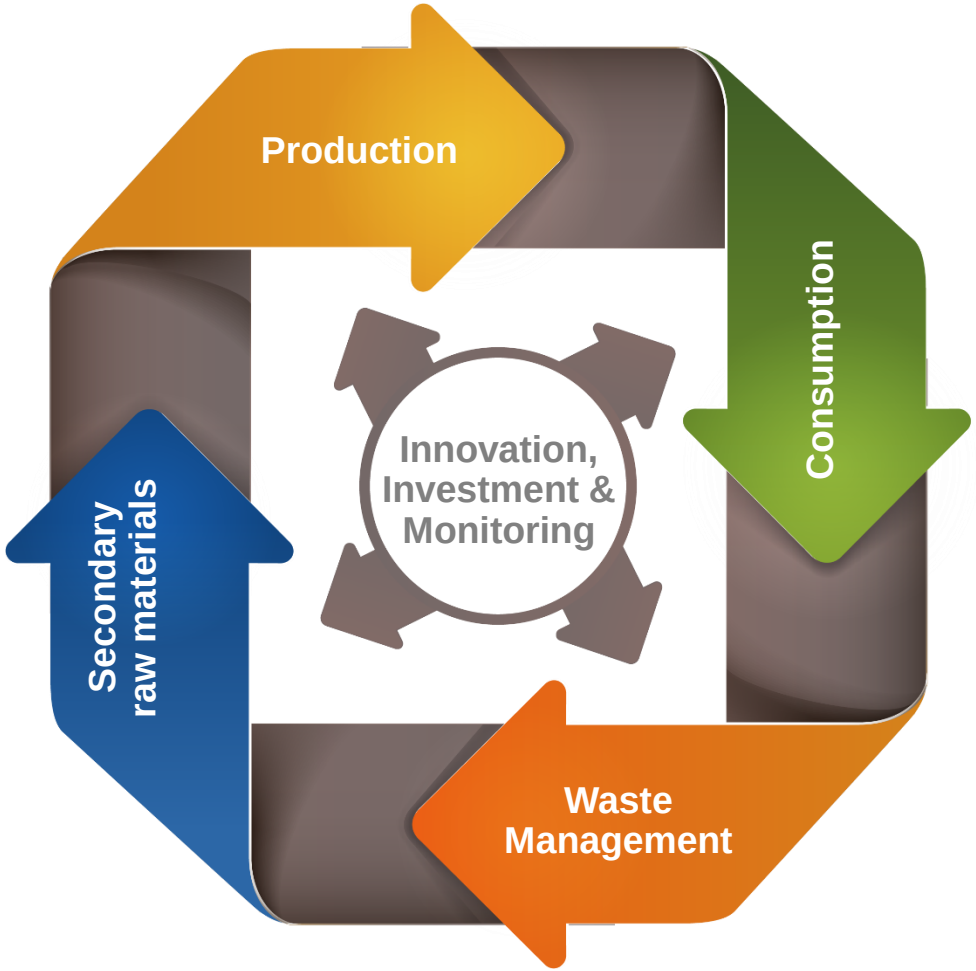
Adopted by the Commission 2 December 2015

Action Plan Communication

List of Follow-up Initiatives (Annex)

4 Legislative proposals on waste

Key action areas



Outlook

Next steps EU

- more than 50 key actions included in the EU Action Plan for a Circular Economy
  - timeline for implementation
  - progress report 5 years after adoption
  - actions to be developed in line with Better Regulation principles

- European Parliament and Council to decide on the 4 legislative proposals on waste

Next steps CH

- Implement measures of Green Economy Report
  - waste prevention plan
  - improve methodology
  - cooperation with industry, dialogue
  - information and awareness-raising of consumers
- Implementation VVEA: in force since 1 January 2016
- Continue exchange of information with EU

Future challenges

- Need for action within industry and politics
- Cooperation between politics and industry
- Acting in the international context
- Suitable general framework conditions for the economy
- Industry’s ability to anticipate can spare regulation
- Inactivity can lead to political regulation in ineffective areas

Questions?