



Schweizerische Eidgenossenschaft  
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Swiss Confederation

Federal Department of the Environment,  
Transport, Energy and Communications DETEC

**Federal Office for the Environment FOEN**  
Economics section

# Living well within the planet's limits: Swiss measures for a Green Economy



***ERF European Resources Forum , 9./10.11.2016, Berlin***  
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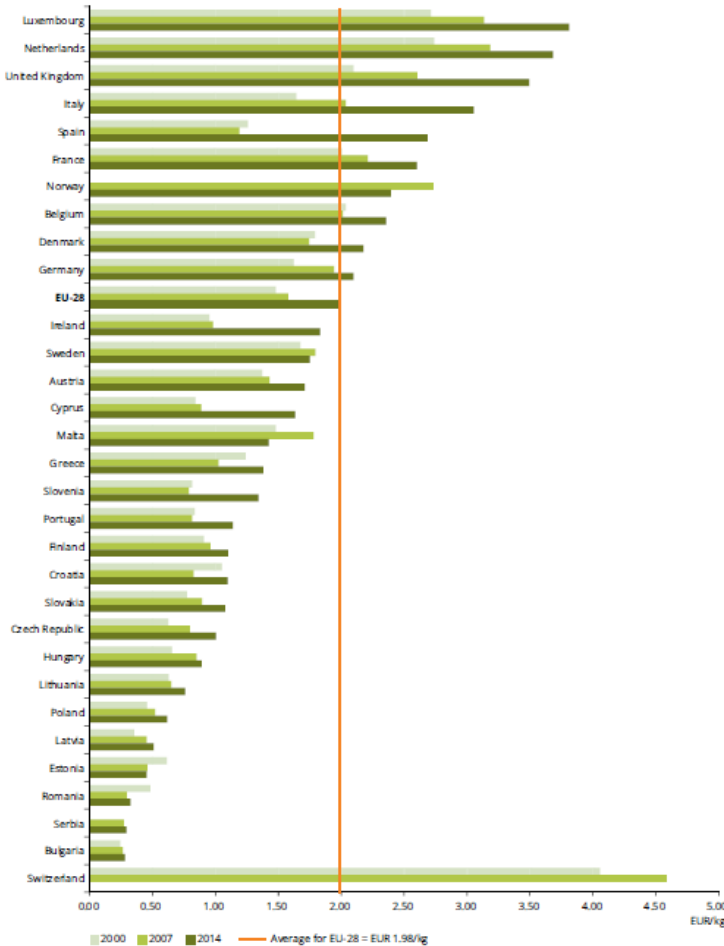
# Referendum on Green Economy in CH





# Switzerland: Efficiency leader?

Figure 2.8 Resource productivity 2000, 2007 and 2014



Source: Eurostat 2016, datasets on MFA [env\_ac\_mfa]; resource productivity [env\_ac\_rp]; and GDP and main components (output, expenditure and income) [nama\_10\_gdp], downloaded 10 April 2016.

... Yes if you define this is in a territorial perspective

→ Score reflects to a large extent Switzerland's high share of the third sector

GDP / DMC

EEA (2016) «More from less»



# ... But not in a footprint (consumption) perspective

## Material footprint (RMC)

Switzerland:  
17 t / capita

EU-27:  
14 t /capita

Source: FSO (2016)

## Greenhouse gas footprint



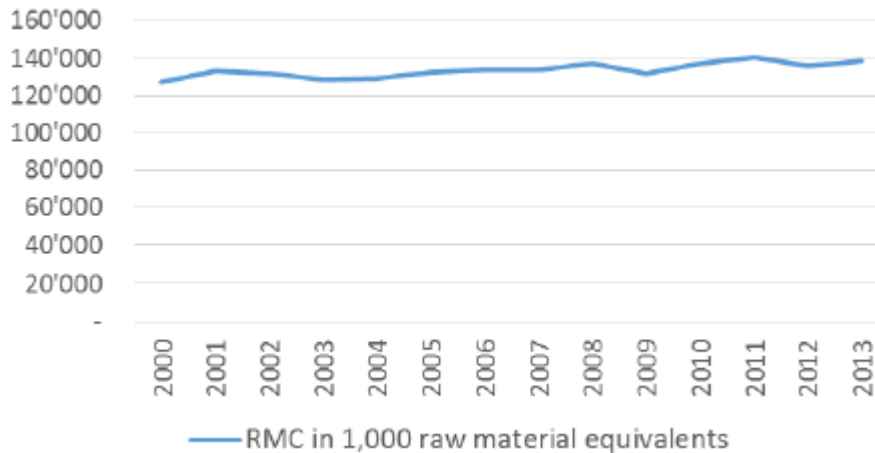
## Land use footprint



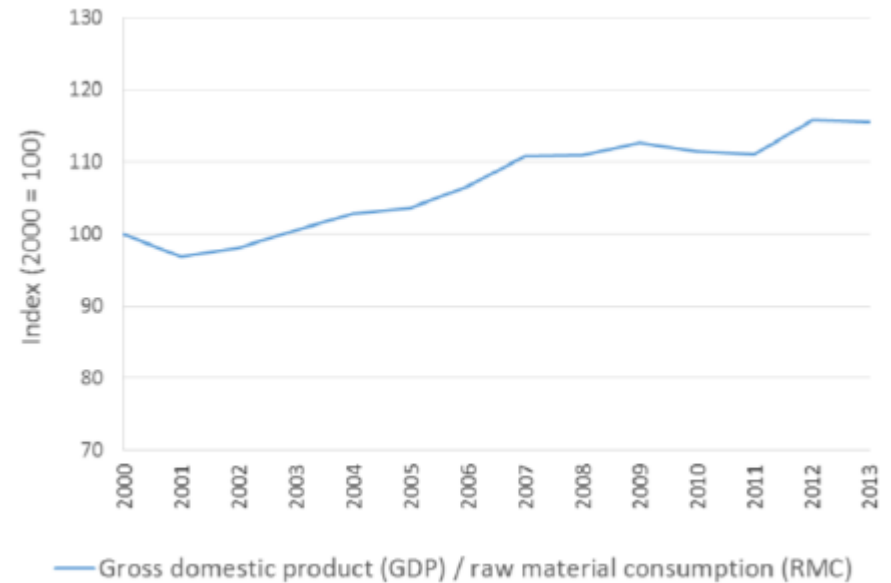


# Decoupling?

## Material Footprint (RMC)



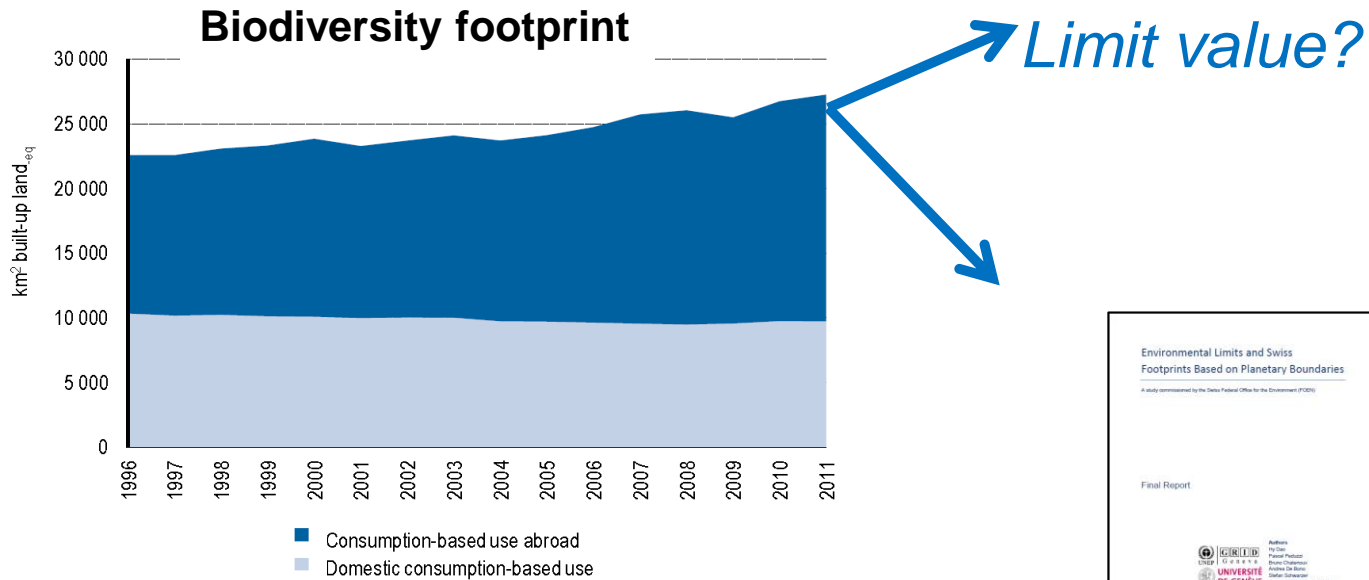
## Efficiency (GDP/RMC)



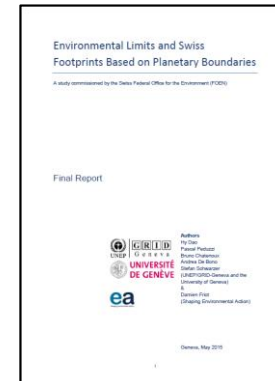
**Swiss Material footprint increased by around 9% between 2000 and 2013 despite improved efficiency.**



# What size of a footprint can be sustained by our planet?








Source: Calculations treeze and Rütter Soceco AG



## 2015: Environmental Limits and Swiss Footprints Based on Planetary Boundaries

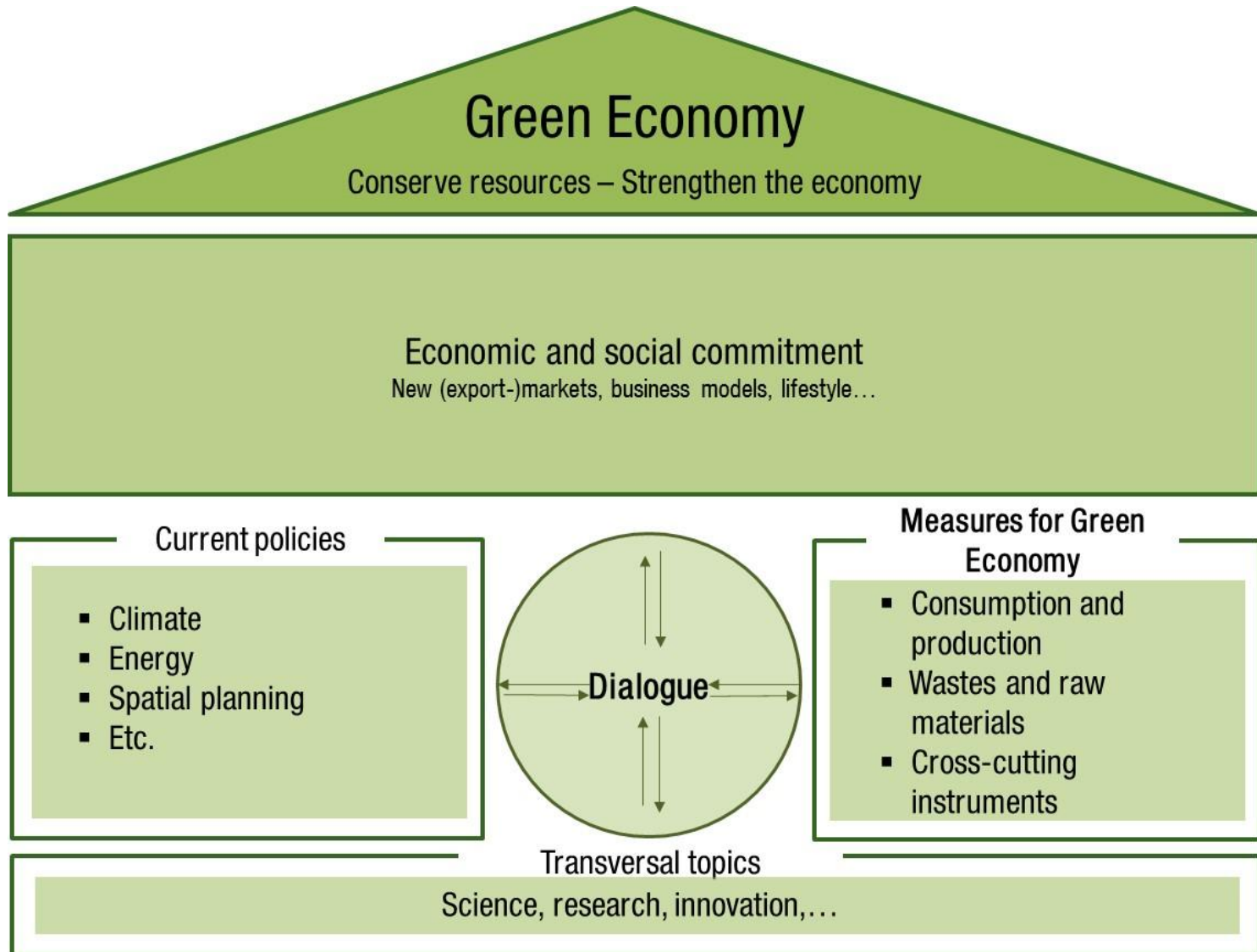


# Critical footprints, relevant areas

Clearly unsafe	Climate Change	Ocean Acidification	Biodiversity Loss	Nitrogen Losses	
		 375 ppm +1°C	 450-500 ppm +2°C		
<b>Relevant areas of consumption</b>	Nutrition Housing Mobility	Housing Mobility (Nutrition)	Nutrition (Housing)	Nutrition (incl. animal feed)	
<b>Relevant economic sectors</b>	<b>Construction services, Chemical products, Wholesale and retail trade, Energy sector</b>		<b>Agriculture and food industry</b>	<b>Agriculture</b>	
	Cross: information technology, financial services, commodity trading				
<b>Relevant product groups</b>	<b>Imported electricity</b>		<b>Animal food, coffee, cocoa, buildings, palm oil, etc.</b>	<b>Animal foods, hotels, restaurants</b>	



# Green economy in Switzerland



Source: FOEN 2016





# Green Economy – 23 Federal measures in 9 priority areas for 2016-2019

Core areas	Priority areas
<b>Consumption and production</b>	1 Environmentally-friendly consumer behavior (education and communication)
	2 Transparency and standards relating to ecologically important raw materials and products
	3 Product and process optimization (including ecodesign)
<b>Waste and raw materials</b>	4 Waste prevention
	5 Close material cycles
<b>Cross-cutting instruments</b>	6 Sector-specific approaches to enhance efficiency
	7 International engagement
	8 Incentives and strengthening the knowledge base
	9 Goals, dialogue und reporting



# Practical measures (1): Reffnet

Advisory Service for SME's in order to save materials, energy – and costs!

- So far (in two years) 42 companies have decided to implement measures, saving them at least 100 Mio. CHF / a.
- Expected reduction in environmental impacts is estimated at 240 billion Eco-Points, which equals the environmental footprint of 12'000 Swiss residents.





# Practical measures (2): Construction

Swiss FOEN is founding partner of the Sustainable Construction Network (NNBS.ch)

- Holistic approach: Energy and beyond, incl. re-usability of building materials, considerations of spatial planning etc.
- Working closely with stakeholders
- Certification of buildings launched in August 2016





# Practical measures (3): Dialogue for a sustainable financial system

✓ Successful dialogue brings momentum to sustainable finance

➤ **Since 2014** experts from the financial sector, science, non-governmental organizations and federal authorities **work together** on how the Swiss financial system could help the transition to a green economy

➤ **20 voluntary measures** in asset and wealth management, for institutional investors, in credit business, capital markets & research and education

> **Proposals for a Roadmap towards a Sustainable Financial System in Switzerland**

*A collaboration of experts of the financial sector, academia, non-governmental organizations and federal authorities  
An invitation to discussion and action*



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✓ **Policy coherence is key** to mainstreaming sustainable finance:

➤ Federal Council highlighted ecological dimension of sustainability as integral part of financial market policy

➤ Sustainable Finance an innovation driver for financial market strategy



# Practical measures (4): National Research Programme

National Research Programme (NRP) on ways of achieving a sustainable economy

The Programme will run for five years and is budgeted at CHF 20 million.



Further information:  
<http://www.snf.ch>



# The power of visions



Source: Solar Impulse/EPLF



HAND PRINT  
Action Towards  
Sustainability

Source: Global  
handprint network

Research building «NEST» near Zurich  
Itself a visionary example of sustainable building



