

How to measure/communicate *“green”/“yellow”/“no/negative growth”*?

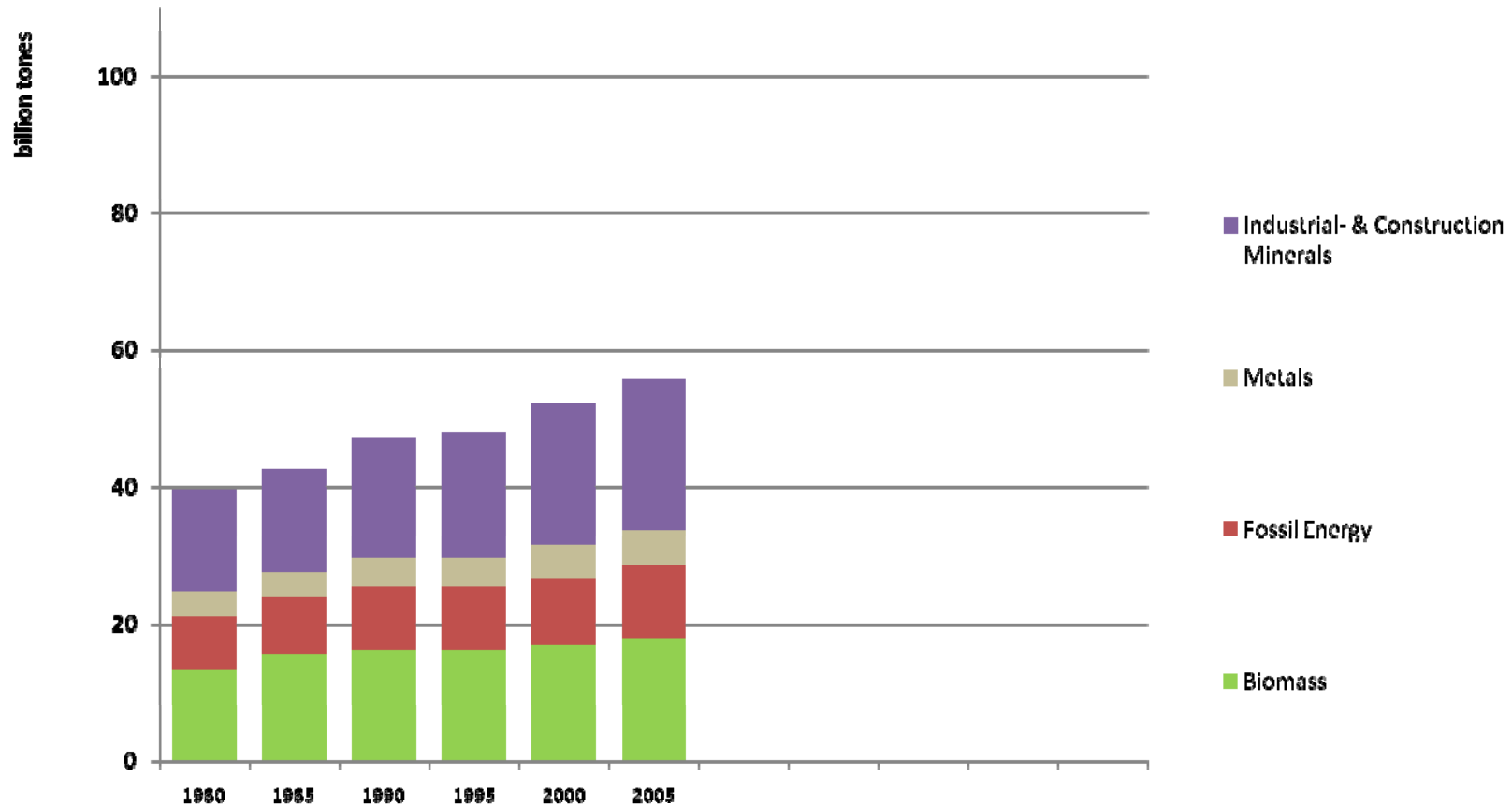
... and what to do with jobs?

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www.seri.at/FH

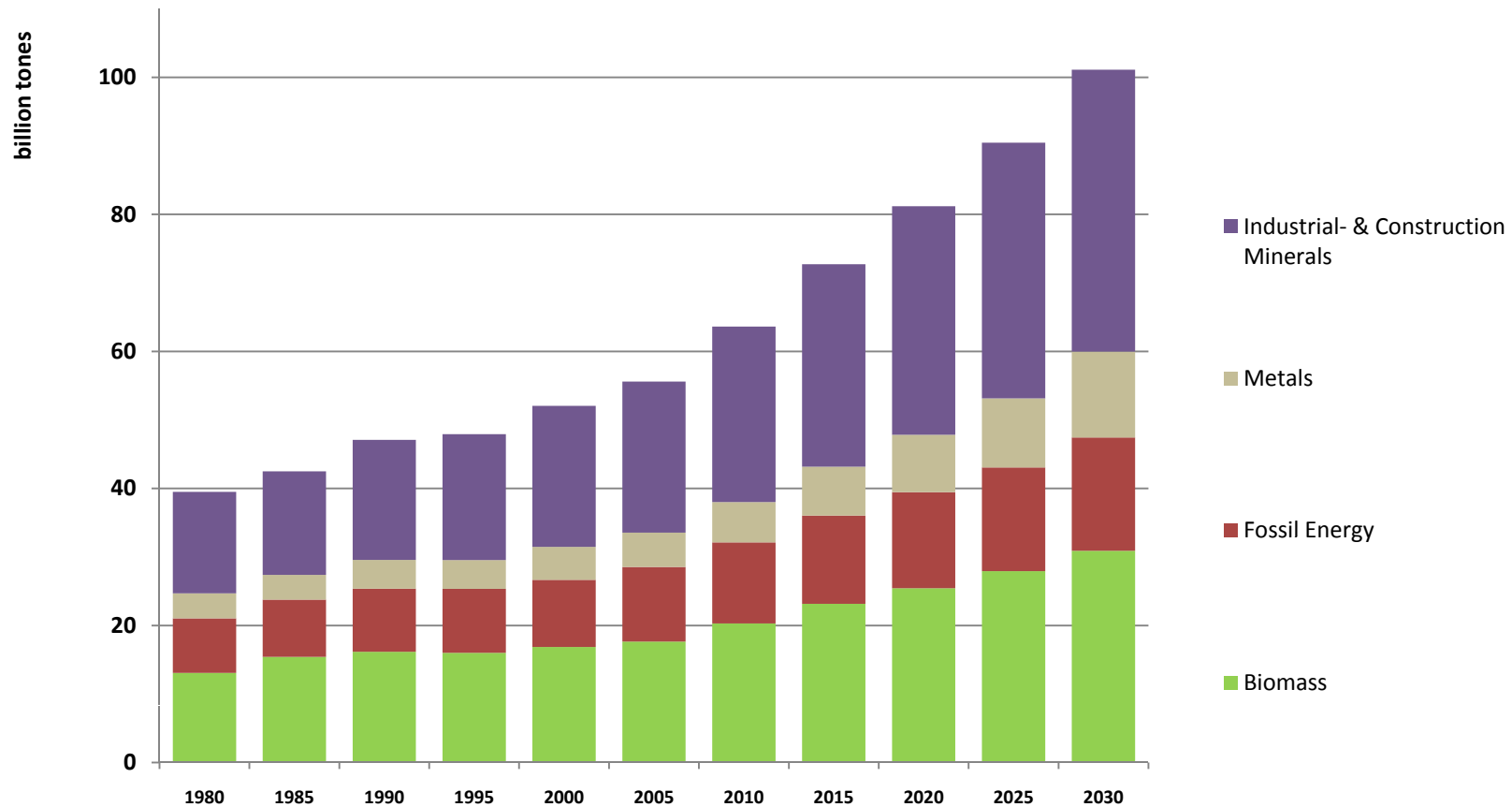


Global Resource Extraction: 1980-2005



Source: www.materialflows.net

Global Resource Extraction: 1980-2030



Source: www.materialflows.net and Lutz et al. 2009

A scenario on growth and resource use*

② Scenario until 2050:

- Proportion of high income doubles from 18% to 36%
- 45%: 1/2 wealth
- Remaining 19%: 1/10 wealth

② Achievable with 3% GDP p.a.

- i.e. with a **growth of Factor 4** of world GDP

(with practically no growth in rich world regions!)

*Meinhard Miegel (2008): Zukunft und Risiko. Die Folgen des Fortschritts. NZZ Podium, 31/01/2008

A scenario on growth and resource use*

World GDP x 4 (equal to 3% p.a.)
= Resource use x 4

BUT:
to halve the world's resource use
we need
an increase of resource productivity by a Factor 8

This is equal to 6% productivity growth p.a.

(with practically no growth in rich world regions!)

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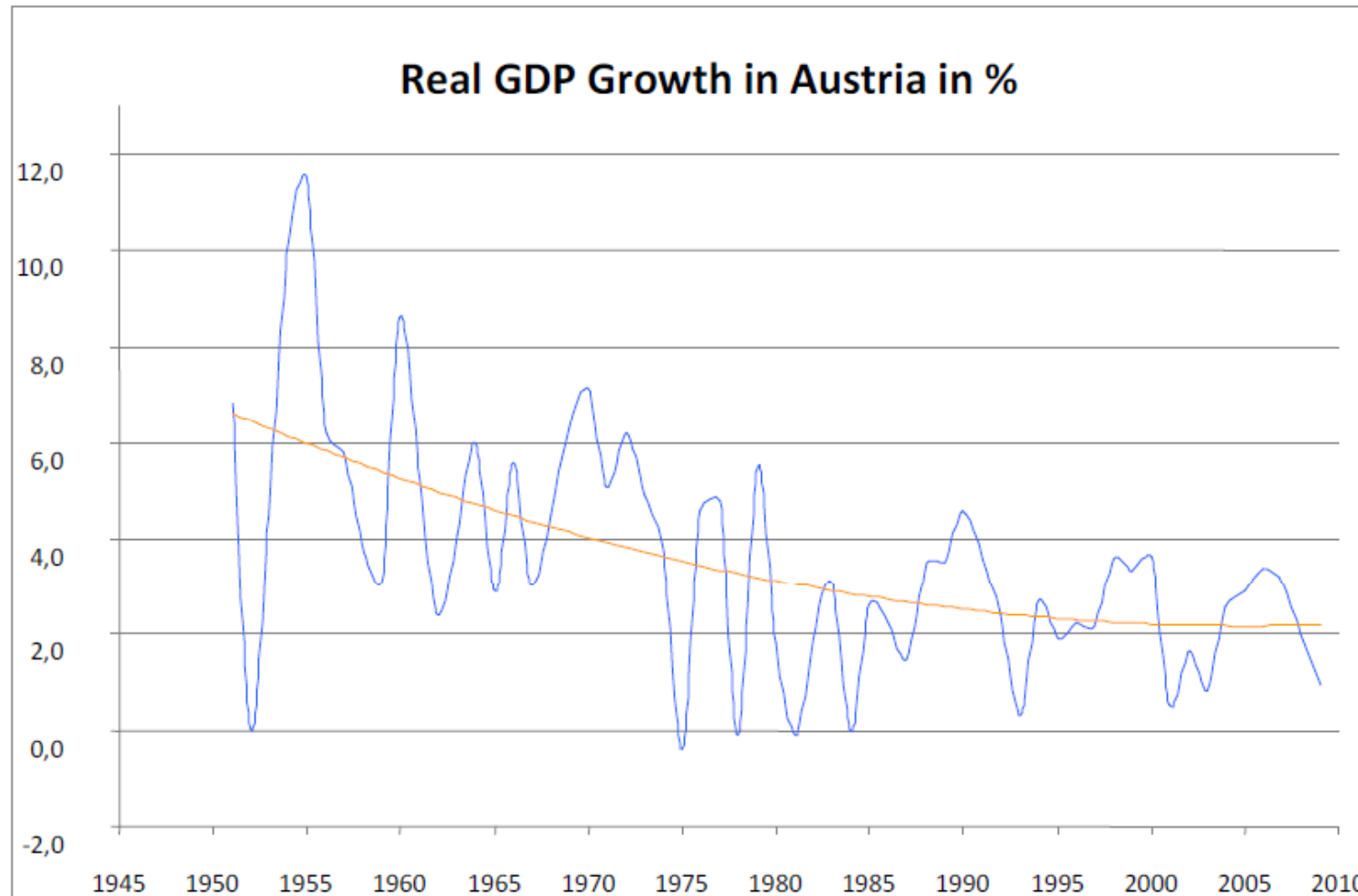
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Der systemimmanente Wachstumsrückgang



Daten: 1948–2007 Statistik Austria; 2008–2009 WIFO Konjunkturprognose (September 2008)



How to measure ?

How should we measure progress (1)



② Commission on the Measurement of Economic Performance and Social Progress (“Stiglitz-Commission”)

② Aims:

- to identify the limits of GDP as an indicator of economic performance and social progress
- to consider additional information for the production of a more relevant picture
- to discuss how to present this information in the most appropriate way
- to check the feasibility of measurement tools

② Outcome: Final report of the Commission (October 2009) that gains a lot of political interest and discussion

Commission on the Measurement of Economic Performance and Social Progress

www.stiglitz-sen-fitoussi.fr

How should we measure progress (2)



- ② Communication from the Commission 20 August 2009: GDP and beyond - Measuring progress in a changing world
- ② GDP should be complemented by a comprehensive environmental index (beyond CO2) and the measurement of quality of life and wellbeing!

Beyond **GDP**

Measuring progress, true wealth, and the well-being of nations

International Conference and Initiative

<http://www.beyond-gdp.eu>

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EU Sustainable Development Strategy

*Sustainable development „... aims at a **continuous improvement of the quality of life** and well-being on Earth for present and future generations.“*

EU Commission:

“Europeans value quality of life.“

„Frontpage indicators“: the big 3 ?



- Economic (GDP) growth
- Quality of life
- (... *environment* ...)



„Frontpage indicators“: the big 3 !



- Economic (GDP) growth ✓

- Quality of life

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„Frontpage indicators“: the big 3 !



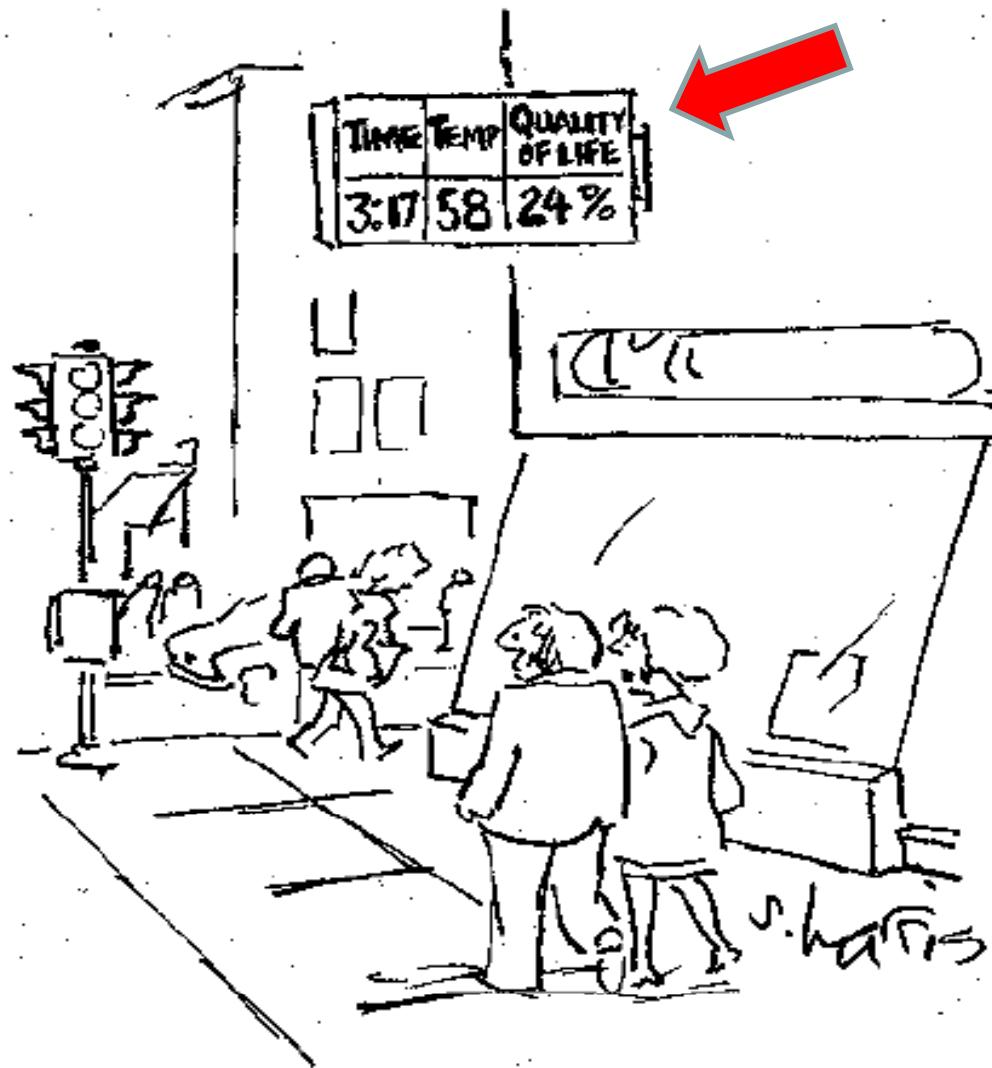
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Measurement of Quality of Life



Measurement of QoL, happiness, wellbeing

Examples:



- ① Happy Planet Index (HPI): life expectancy * well-being / carbon footprint
- ① International surveys of QoL, life-satisfaction
- ① UK's well-being indicators (national SDS)
- ① Bhutan's Gross National Happiness
- ① Calvert-Hendersons Quality of Life Indicators
- ① World Database of Happiness (Erasmus Universitat Rotterdam)



„Frontpage indicators“: the big 3 !



- Economic (GDP) growth ✓

- Quality of life ✓

- (... *environment* ...)



„Frontpage indicators“: the big 3 !



- **Economic (GDP) growth** ✓

- **Quality of life** ✓

- **Total resource consumption**



Used by EU, OECD, UNIDO ,
member states but also NGOs, businesses ...

„Frontpage indicators“: the big 3 !



- Economic (GDP) growth ✓

- Quality of life ✓

- Total resource consumption



Overall objective



Reduce the overall
resource use
caused by products

Carbon is not enough!

A set of environmental indicators



**main categories of quantitative resource use
plus the output-category CO₂-emissions**

Indicators applied

GHG emissions

Carbon Footprint

Water

Water Footprint

Land use

Actual Land Use

Non-renewable resources

Abiotic Material Input

Renewable resources

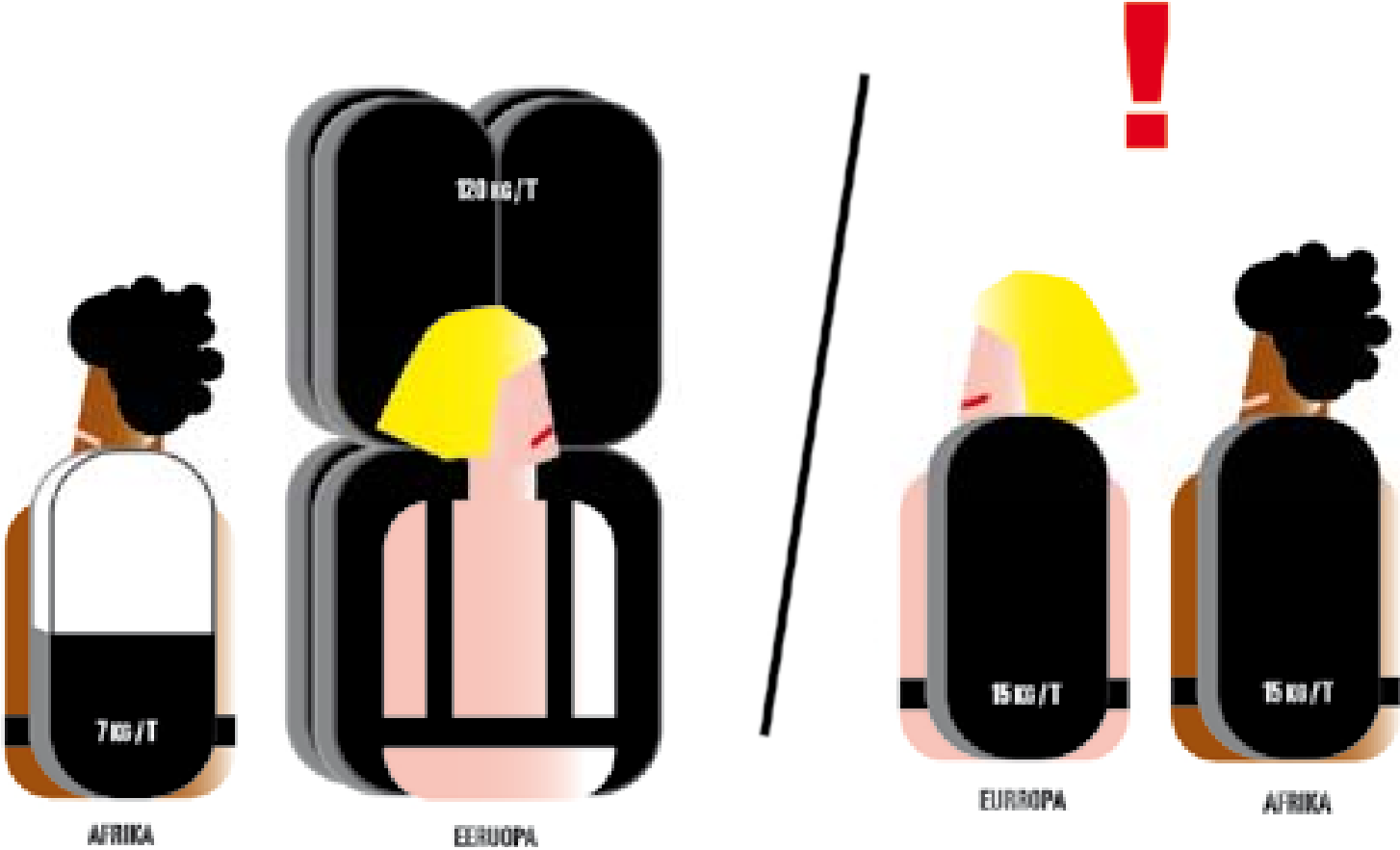
Biotic Material Input

AN AUSTRIAN WORKING GROUP ON PRODUCT SUSTAINABILITY



How to communicate?

Ecol. rucksacks: a sense of justice!



Ecol. rucksacks: concrete guidance!



Report on global resource use (2009)



SERI in cooperation with:





What about EMPLOYMENT?

BUT



The problem:

Employment depends on GDP growth
(as long as labour productivity increases)

A solution:

FAIR sharing (re-distribution) of work

Less employment -> less income
-> less (material) consumption

More quality of life
-> more time of other types of work



SERI

BECAUSE IT

Gemeinschaftsarbeit

Eigenarbeit

A Scenario

UNEMPLOYMENT

10,5 %



3,1 %

GOVERNMENT-DEFICIT



+/- 0

WORKING TIME

37,5 h



30 h



Arbeit + Ökologie

www.a-und-oe.de
(1999)

A look ahead



New project (starting NOW):

**„Auswirkungen einer anhaltenden Wachstumsschwäche.
Eine Szenarienanalyse“**

Effects of low/zero/negative growth on

Jobs, resource use, CO2 emissions ...

Analysis of scenarios...

Growth in Transition

- Project from 2008-2010
- An Initiative of the Austrian Ministry of the Environment
- Book „What kind of growth is sustainable?“
- **28 and 29 January 2010: International Conference in Vienna**



<http://www.growthintransition.eu>

Many thanks for your attention

Presentation **will be available for download** from
<http://www.seri.at>

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