

GLOBE/Club of Rome event

New Economics – ways out of the crisis



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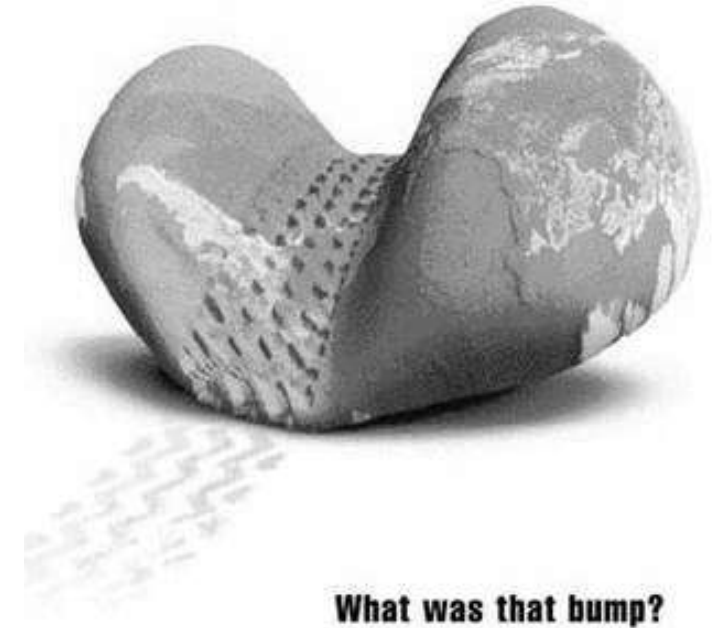


IMSA AMSTERDAM
SUSTAINABILITY & INNOVATION

CvR001/2009

KEYWORDS

- Crisis
- Need for new policies
- Need for new instruments
- Transition, change



TARGETS

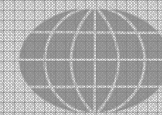
- Ways out, hope, spirit
- Restore employment
- Revive growth
- Reduce climate impact
- Energy security



MEANS ARE NOT

- Return to business as usual
- Free-market fundamentalism
- “Has-been” banking
- Macro-economic indicators such as GDP or NNP

The latter exclude the existence of critical transitions and regime shifts in natural resources (climate, oil peak, ecosystems, oceans, ...)



Imagine skiing down a slope:
a slight shift in direction at the top means
arriving downhill x00 meters out of direction

How to do such in the economy?



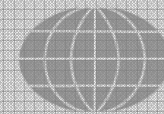
THE SUSTAINABLE ECONOMY SCENARIO - THE NETHERLANDS -

- First models 1980/1985
- Reviewed 1990/2000
- Updates 2000/today
- Based on existing macro-economic model



QUESTION:
IF WE DO CHANGE, HOW,
AND WHAT RESULTS?

- Drastically reducing energy use
- Moving from fossil/nuclear to solar
- Then what (disposable) income?
- Employment?
- Climate effects?



EXAMPLE COUNTRY THE NETHERLANDS POPULATION 16 MILLION

- Strong heavy industry
- Dense transport, high mobility
- Important agriculture sector
- High personal savings ratio



SCENARIO MEASURES

- Shift taxes from labour to resource use
- Decline in wages, as income is a claim on production from resources
- So lower income claims
- Increase 0.5 million jobs
- Move to more services, plus resource efficiency leapfrog
- Overall disposable income increase (reason: decrease in unemployment allowances)



SCENARIO MEASURES

- Energy tax, increase in fuel prices
- Lower VAT in labour-intensive sectors
- Higher VAT in resource-intensive sectors
- Domestic consumption \Rightarrow standard per household + extra charges over the standard



SCENARIO MEASURES

- Decentralised solar and wind; not subsidy but guaranteed (payed) supply to the grid
- Fiscalities to sell Negawatts
- Factor-10 measures \Rightarrow construction, waste, traffic, agri, infrastructure

FUTURE



WATTS



OVERALL RESULTS FROM YEAR 0 TO YEAR 20

	Business as usual	Sustainable economy
• Disposable income per head	+ 7%	+ 4%
• National income GDP	+ 35%	+ 35%
• Fuel consumption	+ 10%	- 25%
• Electricity use	+ 38%	+ 6%
• New electricity capacity	+ 11,000 MW	+ 6000 MW
– of which coal	4000 MW	0
– of which nuclear	3000 MW	0
– of which co-generation	4000 MW	6000 MW
• Share of wind, solar, hydro, heat pumps, biogas, etc.	4%	6%
• Annual environmental costs (% of GDP)	1.1%	1.6%
• Unemployment, year 20	635,000	200,000



US DATA ON ECONOMIC REVIVAL AND SUSTAINABILITY

When 1 billion dollar capital expenditure in energy: then how many jobs created?

Retrofitting building	6750
Wind power	3347
Solar thermal (CSP)	2274
Solar PV	1481
Geothermal	883
Coal	868



FORMENS HUS I HÄLLEFORS SWEDEN

The first house in the world to be certified according to Factor 10 resource efficiency



Exterior finished in December 2003



MACRO-ECONOMIC MEASURES

1. Tobin Tax on Global Casino/flash capital
2. Reduce financial complexity products on financial markets
3. Invest in public housing (restore / improve / insulation / carbon neutral)
4. Invest in infrastructure
5. Change the tax system
6. Introduce components of the sustainable economy scenario

