

Seven Policy
Switches for
Global Security

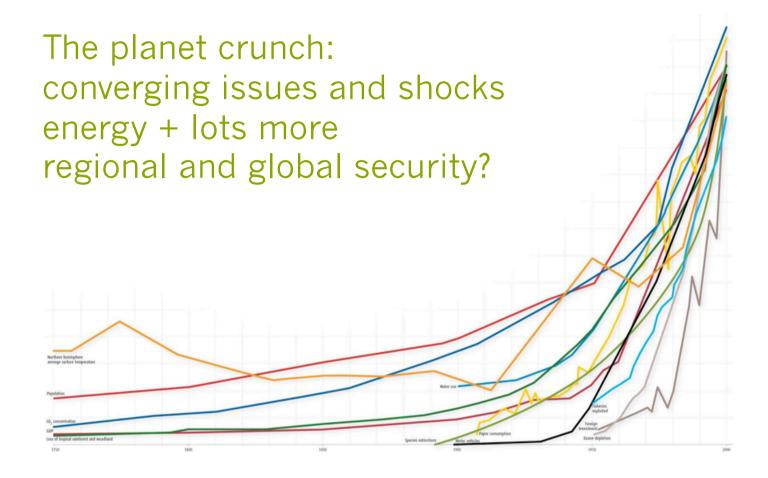


NATO Science Programme Advanced Research Workshop. Split, Croatia 17th-19th June 2009.



BlindSpot is a think-tank

United Nations Climate Neutral Network NATO Advanced Research Workshops UK Sustainable Development Panel Talks, research and advice



Some of the trends: loss of forest, CO2 concentration, species extinctions, motor vehicles, ozone depletion, water use, paper use, Northern hemisphere average temperature, population, global real GPD. 1750-2000

No global problems have been resolved

"Political efforts to curb pollution, protect forests and avert climate change have proven totally inadequate."

Achim Steiner
UNEP executive director, Oct 2008

Rising energy demand, complexity, impacts and costs.
Falling returns on energy invested.

Patchwork policy solutions.

One of many runaway effects is methane from thawing permafrost in Siberia

http://www.sciencedaily.com/releases/2007/10/071025174618.htm

Image: Sergey Zimov

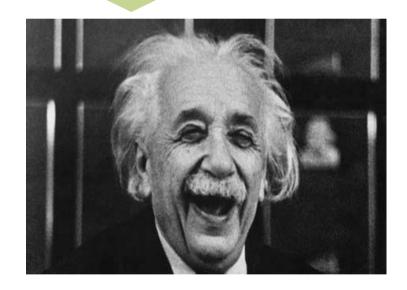


Why does it seem so hard?



John Cole http://emedia.thetimes-tribune.com

You can't solve today's problems with the same thinking that causes them



Energy security is tied to every other facet of security. The security of every region is tied to every other.

Our joined-up world

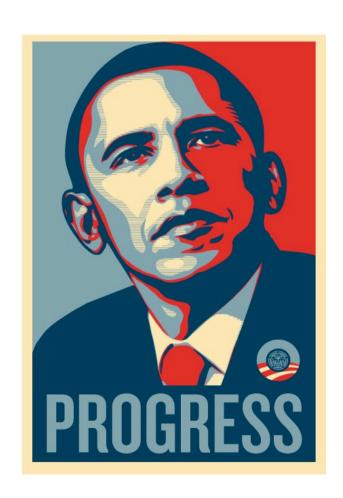


- Everything is tied to everything else. We try to manage it in pieces with patchwork policy.
- Try systems thinking to rethink systems.
- Energy, climate, ecological, economic and national security goals are indivisible and 'codependent'.
- Seek 'policy switches' at leverage points "where a small shift in one thing can produce big changes in everything".

Donella Meadows, 1999

Policy switch 1: seeking meaning in 'development' and 'progress'





"Throughout our history, the deal was we left the world in a slightly better place than we found it. That was progress. The wheel, the rule of law, penicillin. It was our covenant with our children and grandchildren."

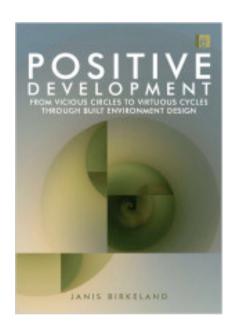
The Age of Stupid movie, 2009

Less bad is not good enough

"The view that negative impacts are an inevitable consequence of development has blinded us to the obvious. We could design development to increase the size, health and resilience of natural systems, while improving human health and life quality."

Janis Birkeland

Positive Development. Earthscan 2008
My proposed economic tool for 'positive development' is on page 339
The word 'development' is meaningless without saying whether it is positive or less-bad business as usual.



Policy switch 1: seek growth from positive development not from from less-bad activities

"The science tells us that if we are serious about saving Earth, we must reshape our economy."

New Scientist editorial, 16th October 2008

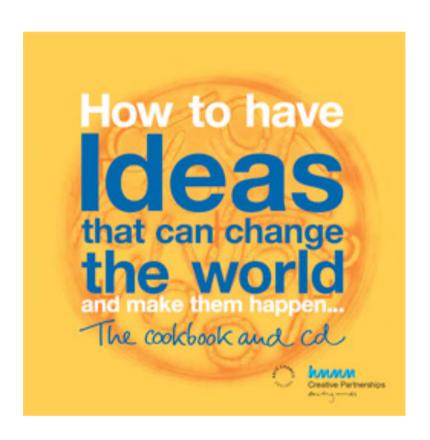
Should the economy be set up to slow the planet crunch, stop it or reverse it? No growth is no answer. The remaining policy switches can implement a strategy of positive development world-wide.

BlindSpot





Policy switch 2: from predetermined learning to curiosity-led learning



- •How to cultivate a suitable frame of mind?
- •The missing ingredient in education and policy-making is curiosity.
- "What we want to see is the child in pursuit of knowledge and not knowledge in pursuit of the child."

George Bernard Shaw

•From fragmentation of thought to creativity, engagement and collaboration

Policy switch 3: from consuming to building the basis for economic growth and well-being

"Our enormously productive economy demands that we make consumption our way of life, that we convert the buying and use of goods into rituals, that we seek our spiritual satisfaction in consumption patterns. We need things consumed, burned up, replaced and discarded at an ever accelerating rate."

Victor Lebow

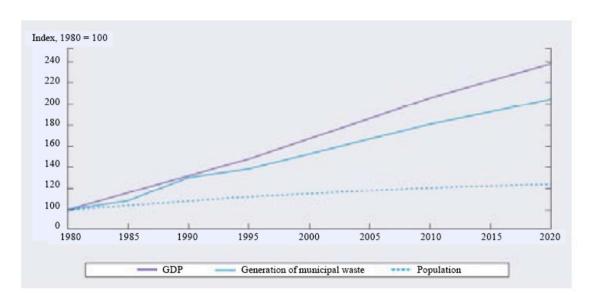
'Price Competition in 1955', Journal of Retailing. USA, Spring 1955. Page 7

BlindSpot



Waste = growth?

Municipal Waste Generation, GDP and Population in OECD Countries, 1980-2020



Source: OECD (2001) OECD Environmental Outlook.

"Total consumption of resources will continue to increase as a result of economic growth... The G8 will seek to reduce waste, reuse and recycle resources and products to the extent economically feasible."

3R Action Plan Adopted at the G8 Sea Island Summit, June 10 2004

What shape is the economy in?



It's the end of the line for linear growth.

The future for growth is circular economics.

BlindSpot





Different language for the same strategy

Kenneth Boulding, 1966. Cowboy economy vs spaceman economy.

United Nations ZERI, 1994. Zero emissions, "All waste is to be converted into value-added ingredients".

Japan, 2000. Fundamental Law for Establishing a Sound Material-Cycle Society.

Bill McDonough and Michael Braungart, 2002. Cradle to Cradle: Remaking the Way We Make Things.

China National Plan, 2006. "It is an urgent strategic task for China to vigorously develop the circular economy."

Scarce energy or scarce resources?



 Sunshine arrives free of charge at 14400 times the rate of global primary energy consumption

William Shepherd, Energy Studies. Imperial College Press, 2003, page 31

- New matter doesn't arrive at all, so waste means shrinking resources and lost wealth.
- o Finite energy sources are by definition running out. Energy security means investing away from dependence on finite sources and towards renewable sources. It doesn't mean planning for higher energy demand or burning once-used resources.

The 'wasteberg' of lost energy and resources



1 tonne Municipal Solid Waste can be burnt for energy 'recovery' or regenerated as new resources:

oRecoverable energy ~ 3500Mj

oHidden (embodied/replacement) energy ~30000Mj

oHidden (upstream) waste ~ 70t + waste to air and water

oHidden costs = poor soil, toxics exploitation, nature, jobs lost...

The 'recovery' option means no recovery for economy or ecology!

Image: City of San Francisco. Figures: www.steppingforward.org.uk, The Next Efficiency Revolution: Creating a Sustainable Materials Economy by J Young and A Sachs. Worldwatch Institute (1994), p 13

Precycling: circular economics in practice

Precycling is the activity needed to create a resource 'cycling' or circular economy and to ensure that products can take part instead of adding to wastes in ecosystems.



Image: Publicity by Berkeley City, California in 1989 www.ororkepr.com

"The U.S. Environmental Protection Agency (EPA) cites precycling as the preferred method of integrated solid-waste management. Trash is eliminated before it is created."

TEACHING THE CONCEPT OF PRECYCLING, Gillilan, Sheryl; Werner, Carol M., Journal of Environmental Education, Fall 1996, Vol. 28:1

Insurance is a more powerful economic tool than taxes or capping

- •Insurance avoids being financially wiped-out.
- •Government's role is regulation and scrutiny, not to handle the funds nor prescribe what to do.
- Can work preventively, like early fire insurance.
- Can be obligatory, like car insurance.

Recycling insurance:

- •In EU WEEE Directive
- Premiums fund recycling
- Cheaper if more recyclable
- Works for any product

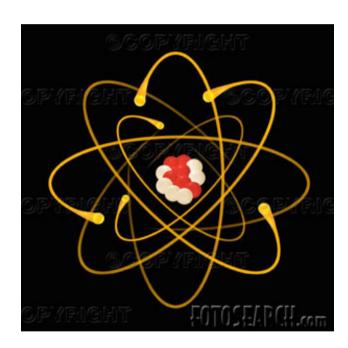


'Life insurance' for products and the planet. 'Revival insurance' for business and the economy.

- O Waste, toxics, pollution and GHG should no longer 'managed' at the end of the pipe, when it's too late. Every physical product that we can buy should be insured to account for the risk of adding to waste levels in ecosystems.
- o 'Precycling insurance' for all products, large and small, could phase out waste-dependence everywhere in a few years. A revival of the economy, ecosystems and co-operation would become viable.
- O Premiums would be paid according to 'waste risk'. Premiums would be invested to cut waste risk by supporting precycling, building technical, social and ecological capacity.
- O Producers could choose how to handle their responsibility. Cut their premiums by precycling or not bother and pay more to support precycling elsewhere. Customers and investors could choose.

Carbon belongs in carbon cycles

- Climate protected by accounting for externalities (cost of getting it right not damage costs).
- Fuels can be precycled by efficiency, substitution with renewables and ecosystem growth.
- Economic growth decoupled from material metabolism and energy demand.
- No fast-track for nuclear energy or incineration.
- No need for emissions capping or slow international haggling.

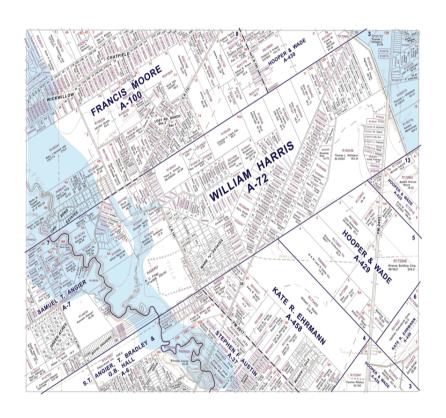


Policy switch 4: reverse an unintended macro-economic incentive for conflict

- Global military spending is estimated at \$1464 billion.
- Politicians can boost GDP with higher dependence on armed threat.
- This drives the arms race and global insecurity. Military security is 'not for sale'.
- Gross Peaceful Product simply omits weapons-related transactions.
- GPP supports a cycle of noncombative problem-solving.



Policy switch 5: including guardianship within ownership of the Earth



- Ecosystem services, biodiversity and resources are looking wobbly.
- Indigenous vs modern views of belonging. How to 'value' nature?
- Reinterpret ownership of the Earth to include a duty of guardianship on behalf of future generations.
- Switch from fighting over what's left to sharing an expansion of natural capital.

Policy switch 6: recruit surplus wealth to fix accumulated ecological, social and financial debts

- Positive development can start to prevent problems worsening.
- However the stock of legacy problems obstruct global security and can worsen with positive feedbacks.
- The world's mega-rich can invest in a world where money continues to have meaning.
- Peer-led and self-organised transformational philanthropy.
- Incentivise with 'potlatch' style status and opening of tax-havens.



What if the 10,000 richest people in the world would do what I did? – Doug Tompkins

Policy switch 7: harvest the 'money tree' for public rather than private benefit



- Most money is created by 'fractional banking' recursive relending of deposits.
- Incentives for over-issuance of credit. Credit bubble and then credit crunch. Debt remains unpayable even when the entire planet is exploited.
- "The privilege of creating and issuing money is not only the supreme prerogative of government, but it is the government's greatest creative opportunity." Abraham Lincoln, 1865
- 'Quantitative easing' is modern public money creation (although currently misused to reinflate asset price bubbles and bail-out bank losses).
- Create money for public benefit centrally and locally then spend for positive development (so giving money lasting value and meaning).

"The difficulty lies not in the new ideas, but in escaping the old ones."

John Maynard Keynes

The General Theory of Employment, Interest and Money, 1935

Thank you!

BlindSpot



James Greyson

Final slide: 25

Food production has gone 'potty'!

This 'top soil' is so impoverished it could be made into a clay pot. The crop here failed to germinate.



