

Peak oil and climate change: Building resilience at the local level

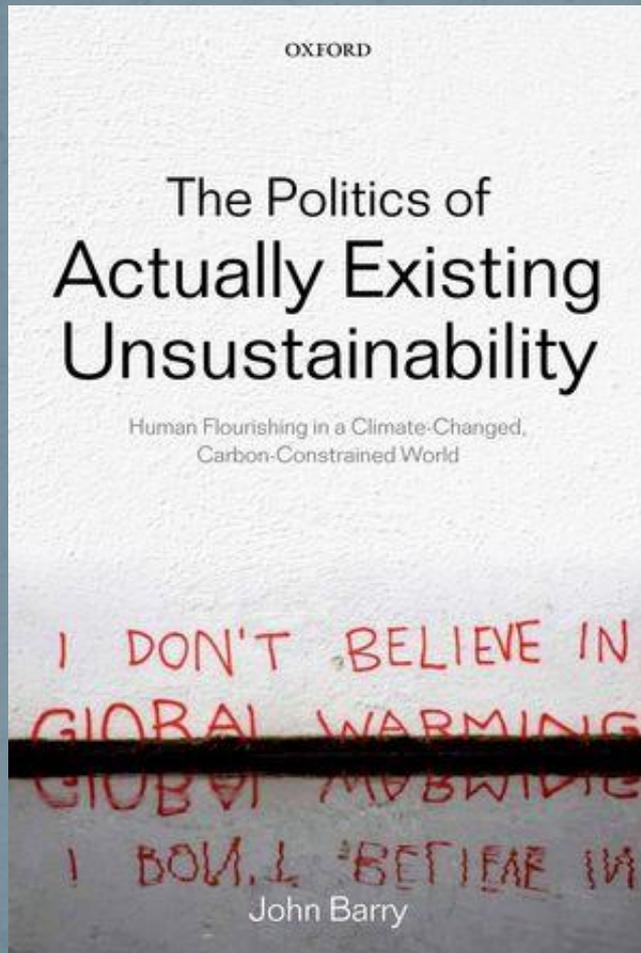
Dr. John Barry
Queen's University Belfast
j.barry@qub.ac.uk



Some Orientating Thoughts ...

1. Don't read beauty magazines. They'll only make you feel ugly.
2. Slow, down, relax – there is wisdom in Winnie the Pooh's words, "Sometimes I sits and thinks. And sometimes I just sits."
3. Commit serial acts of senseless beauty as often as you can.
4. Its easier to ask for forgiveness than permission
5. Political activism is the rent you pay for living on the planet.
6. Experts should be 'on tap, not on top'.
7. Something should be desired because it is good, not 'good' because it is desired.
8. When you point your finger at someone else, there are 3 pointing back at you.
9. Don't sit on the fence, you'll only get splinters on your arse.
10. When running for elected office, dress to the right...and vote to the left.
11. We know we're making progress towards sustainability when our schools and hospitals are well-resourced and it is the Army that needs bake-sales to raise money for weapons

Context



Link between injustice and unsustainability

Link between inequality, orthodox economic growth and unsustainability

Link between diminished human flourishing and economic growth beyond a threshold

Link between orthodox economic growth and cheap oil

Enjoy

Climate Change

Check out our use of HFCs to cool its drinks contributed to climate change. Ban HFCs. www.college-spotlight.org

Context....

- “The potato, long an essential staple of Irish agriculture, will be stressed by prolonged summer droughts. It is likely that potatoes will no longer be a commercially viable crop over much of Ireland”

Changing shades of Green: The Environmental and Cultural Impact of Climate Change in Ireland, (2008, p.4)



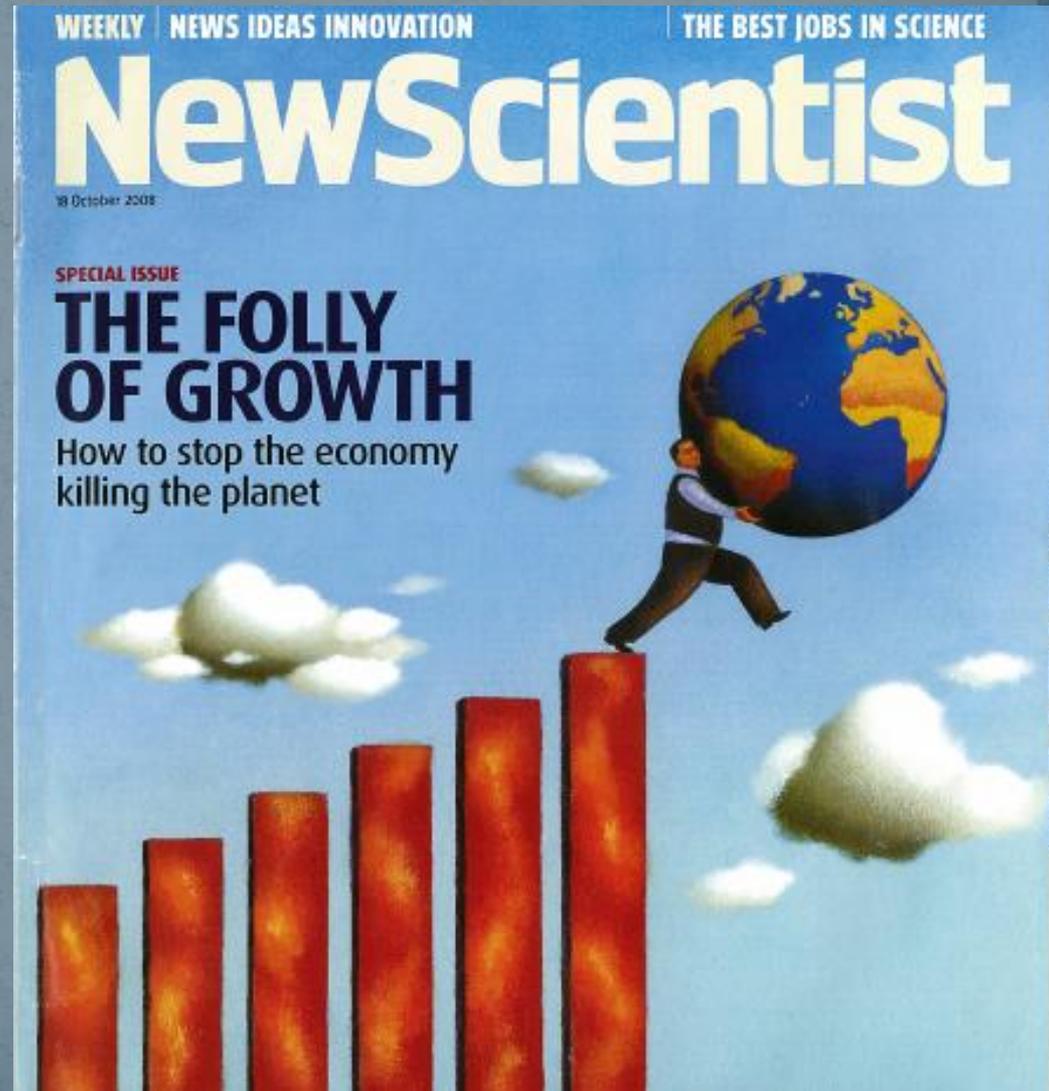
Armed...only with
peer reviewed science

Context: “...our economy is killing the Earth”

“This is the logic of free-market capitalism: the economy must grow continuously or face an unpalatable collapse. With the environmental situation reaching crisis point, however, it is time to stop pretending that mindlessly chasing economic growth is compatible with sustainability. Figuring out an alternative to this doomed model is now a priority.”

‘Why politicians dare not limit economic growth’ Tim Jackson, pp. 42-3.

New Scientist, 16 October 2008



Response to peak oil and climate change

Looking at **peak oil** alone you look for replacements – tar sands, remote fields such as the Antarctic, bio fuels, coal to liquids, unconventional oil , ‘fracking’ etc.

Looking at **climate change** alone you may look for energy intensive solutions to mitigate climate change, including nuclear.

When **peak oil** and **climate change** are taken together

you have to redesign the system.

“System change, not climate change”

Peak Oil and the coming carbon constrained and low-carbon era



'THREE WISE PUMPS'

Why is oil so important ?



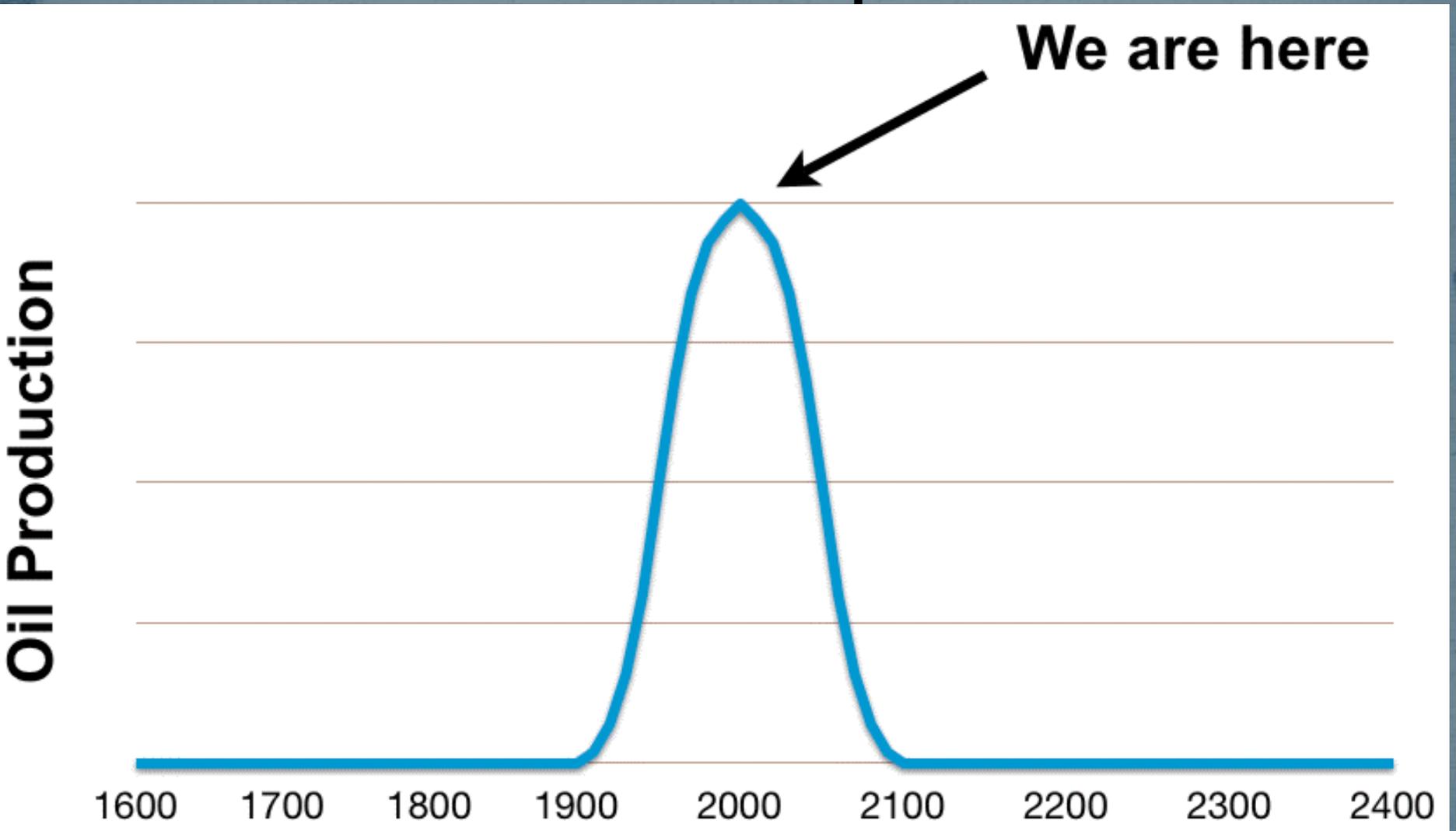
Name two or even one thing in this room not made in whole or part or transported here in whole or part with the use of oil or another fossil fuel?

Peak Oil

Peaking of World Oil Production – Impacts, Mitigation and Risk Management, by Hirsch et.al. (2005), commissioned by the US Department of Energy.

Peak oil represents “an unprecedented risk management problem...the problems associated with world oil production will not be temporary, and past ‘energy crisis’ experience will provide relatively little guidance. The challenge of oil peaking deserves immediate, serious attention, if risks are to be fully understood and mitigation begun on a timely basis” (Hirsch et.al 2005:5).

The View from the top...



Forfas 2006 report, 'A Baseline Assessment of Ireland's Oil Dependence – key policy considerations'

“The high probability that a supply of cheap oil will peak over the next 10-15 years poses a serious challenge for the global economy. We in Ireland are more dependent on imported oil for our energy requirements than almost every other European country and it will take up to 10 years to significantly reduce this dependence. *Therefore, it is essential that we now begin to prepare for such a challenge.*” (Forfas 2006:1).

The report concludes, “while it is often difficult for policymakers and businesses to take a long-term view of the issues that they face, that is the requirement in regard to the peak oil challenge” (Forfas 2006:27).

Cubic Mile of Oil/Year





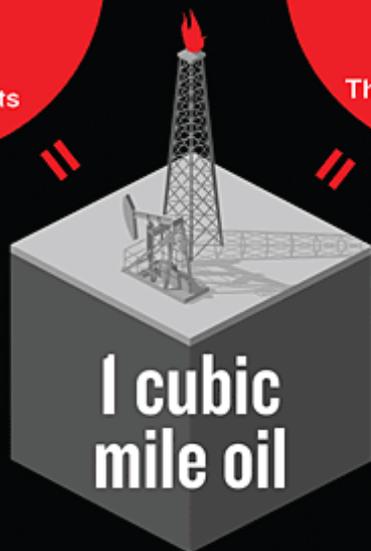
104

Coal-fired plants
(each year for 50 years)



4

Three Gorges Dams
(each year for 50 years)



**1 cubic
mile oil**



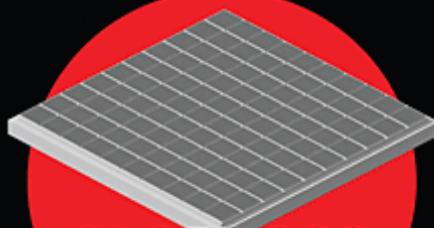
32 850

Wind turbines
(each year for 50 years)



52

Nuclear power plants
(each year for 50 years)



91 250 000

Solar panels
(each year for 50 years)

Choices....

“We need to leave oil,
before oil leaves us”.

Fathid Biriol, Chief
Economist,
International Energy
Agency



or

Fracking for
natural gas

Continuation of
‘business as usual’

“planned retreat from
fossil fuels” former
Green Party energy
minister, Eamon Ryan

Nuclear power



Building resilience at the local level

Protecting the vulnerable and recognising our vulnerability

Local resilience – combining justice, democracy and sustainability

Inevitability of relocalisation of the economy, make this a positive choice rather than something thrust upon communities

Experiments in social innovation in response to peak oil and climate change – led by communities themselves

Absolute precondition for any form of local resilience in context of climate change and peak oil is community, creating and recreating bonds of solidarity

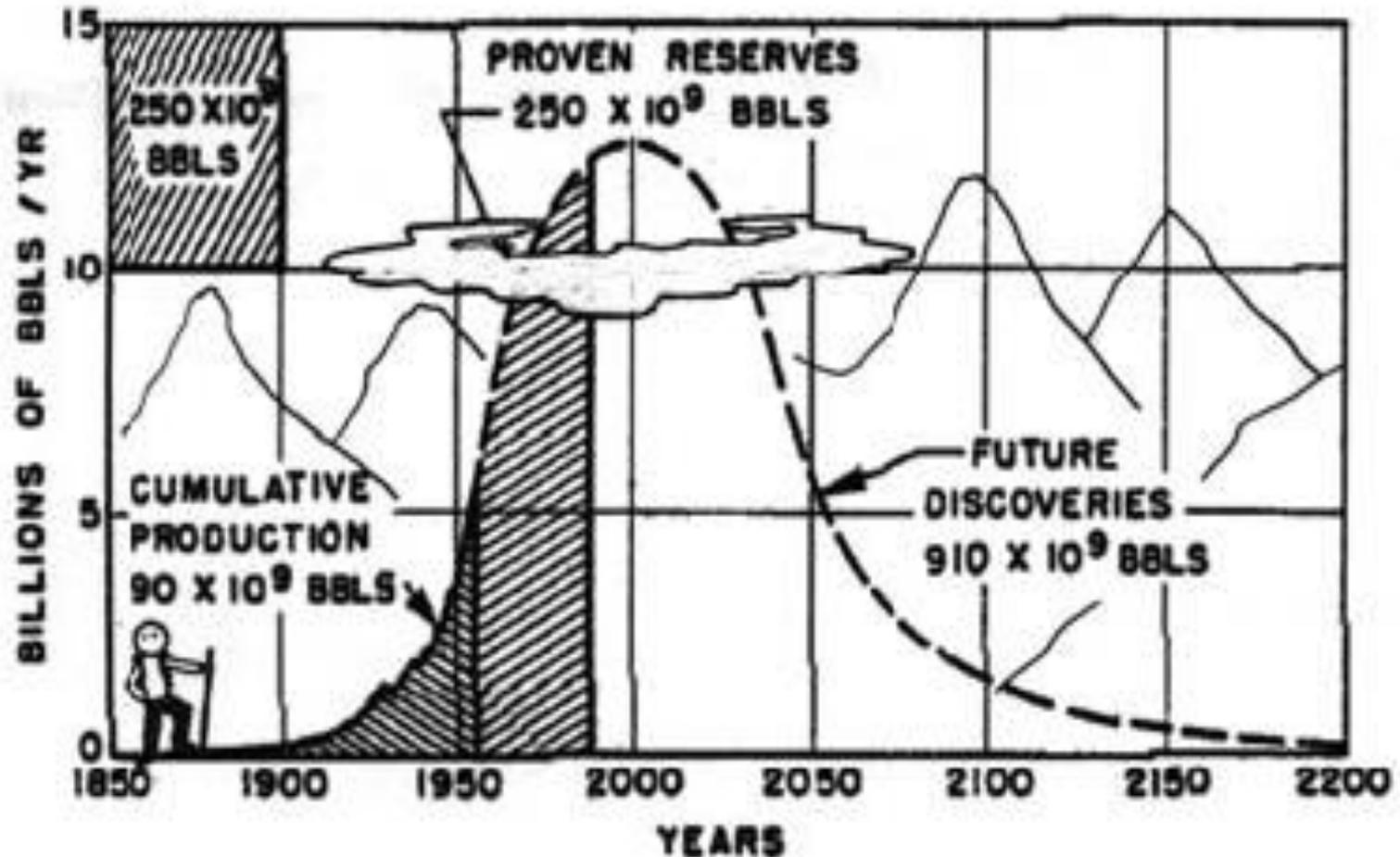
Inclusion – everyone is needed



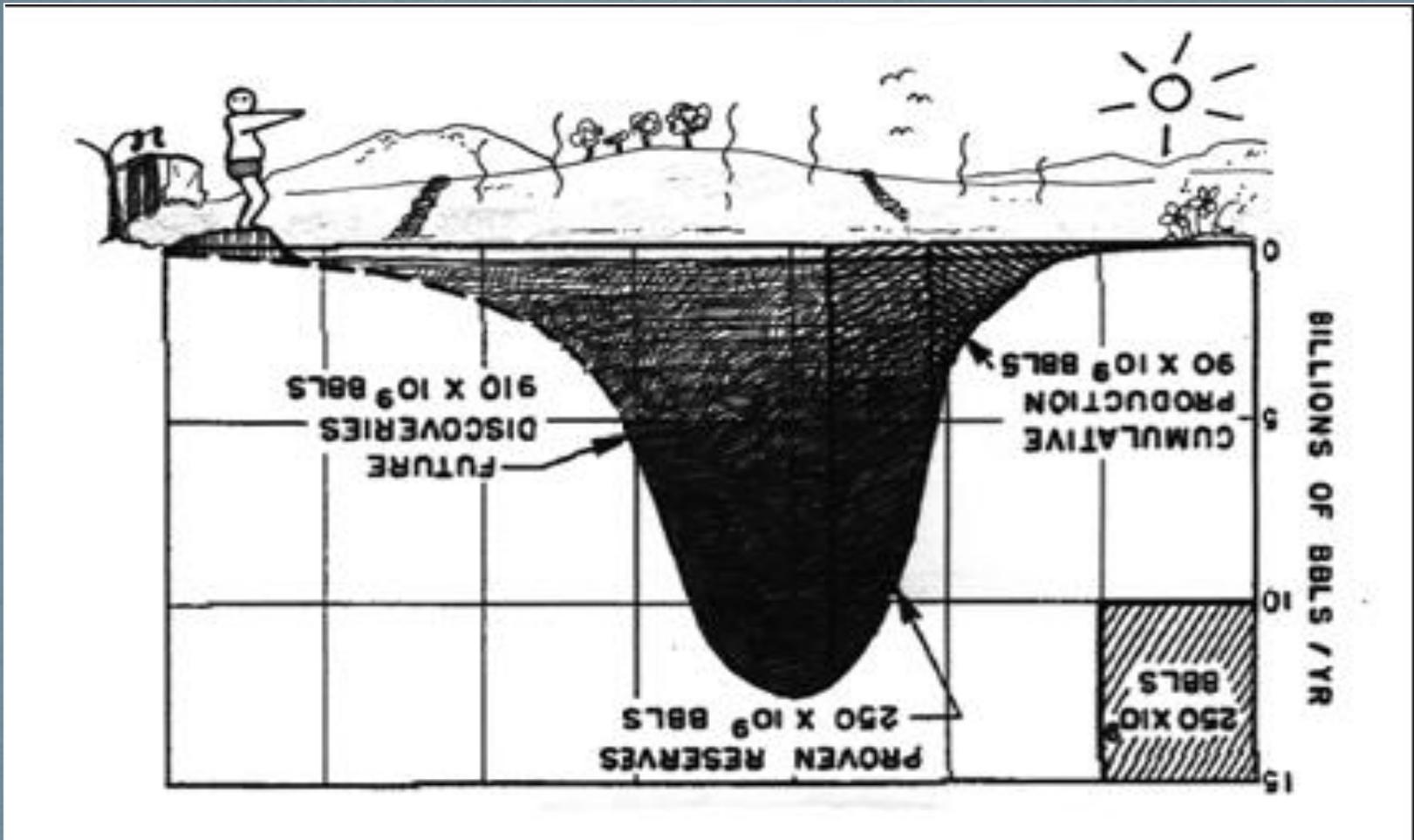
Transition Town Movement

1. Life with less energy is inevitable;
2. We have lost our resilience to be able to cope with climate and energy shocks;
3. We have to act for ourselves and we have to act now;
4. By tapping our ingenuity and vision we can together design ways of living that are more rewarding.

Changing the perspective from...

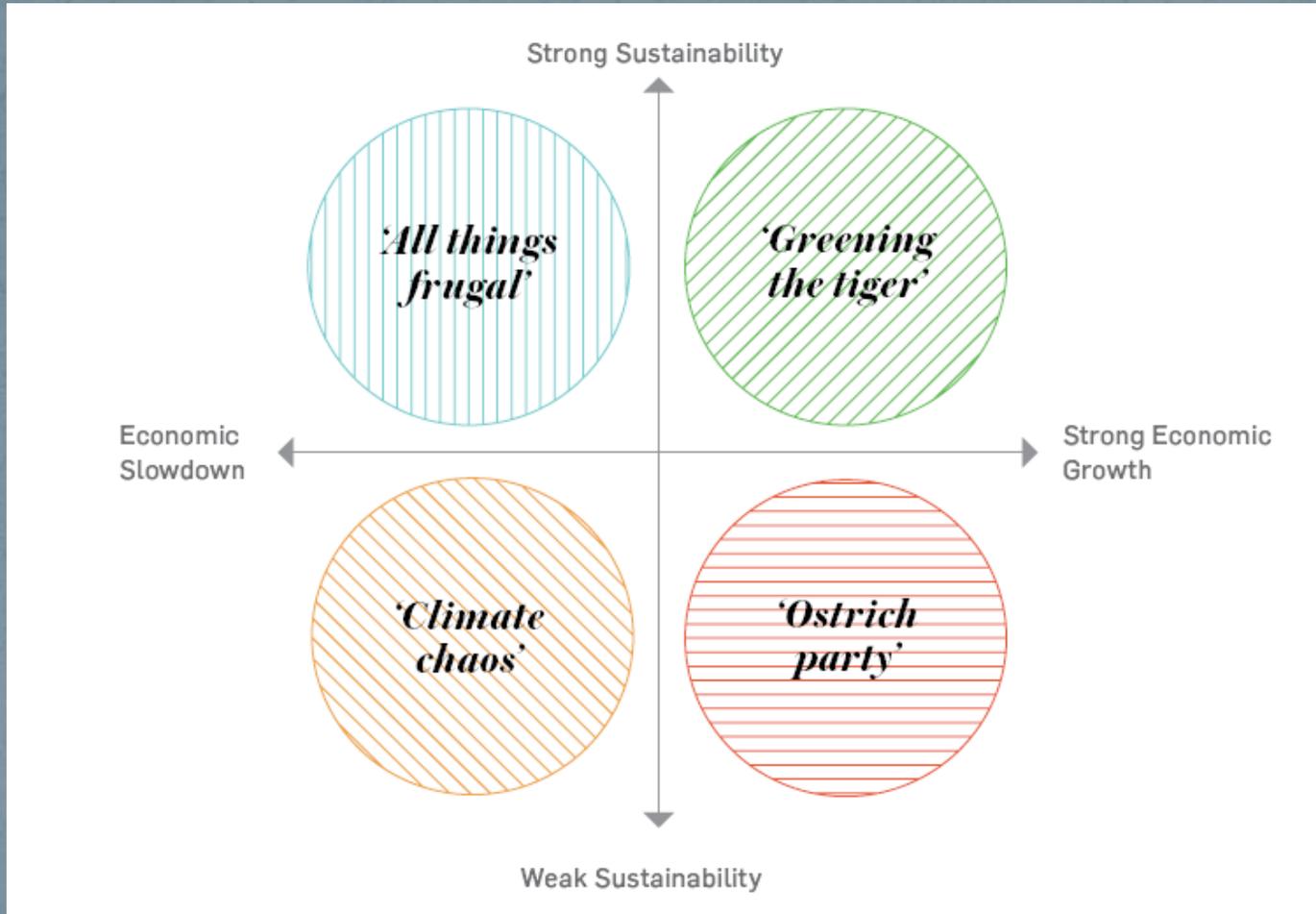


To...



Peak oil as something we need to swim/navigate through rather than climb...

Which future?



All things frugal...beyond orthodox economic growth

Poverty is caused by inequality

Climate change is caused by burning fossil fuels

Mistake to think we need endless economic growth to eradicate poverty

Economic growth requires inequality to work

Economic growth acts as a substitute for equality

Contracting economy increases pressure to reduce inequality - a new 'social contract'

Issue is redistribution of income, wealth, work (formal and informal) beyond a threshold

Challenging the assumption of economic growth as a PERMENANT FEATURE OF THE ECONOMY



'STEADY AS SHE GOES'

“It takes a lot of cheap energy to maintain the levels of social inequality we see today, the levels of obesity, the record levels of indebtedness, the high levels of car use and alienating urban landscapes. Only a culture awash with cheap oil could become de-skilled on the monumental scale we have.”

—Rob Hopkins

Local resilience and the social economy

How do we increase human flourishing in a low carbon and low energy world beyond orthodox economic growth and employment?

Beyond carbon fuelled capitalism...

Growing the social economy and balancing it with the public and private economic sectors

Central plank of an alliance between sustainability/environmental movement and community sector

A new economic model needed...

Decarbonisation of the economy as a response to climate change and energy insecurity requires the removal of state subsidies that are currently locking us into a carbon based economy

Sharing out of available work – 3 day working week

Productivity gains leading to more free time not more production and consumption

A Sustainability war economy?

Rationing as a mode of distribution – tradeable quotas not carbon taxes

Sharing of resources and assets – libraries, laundromats and light-rail

Collective consumption and cooperative production

A climate changed, carbon constrained Ireland (and world) which is resilient and sustainable is a different society and economy – not a ‘greener’ version of what we have currently?

Ireland's Coming Green 'Emergency'?

“In our living memory, the scale of economic re-engineering needed to prevent catastrophic climate change has only been witnessed in a wide range of countries during war time. No other approach looks remotely capable of delivering the necessary volume of emissions reductions in the time needed. In that light, we can learn from war-time experiences, positively and negatively. The best of those lessons can then be translated into our contemporary circumstances. As Churchill said, it is not enough that we try our best: we have to do what is necessary”.

(Green New Deal Group, 2008: 41)

Questions

What does public policy look like designed to maximise human flourishing not economic growth and employment?

What does economic policy look like when informed by climate and ecological science?

What does public policy look like when informed and based upon climate justice and carbon literacy?

Governance for a Just Transition

Need for new visions and imaginative, creative policy options and institutional arrangements

Inclusive sustainability leadership - civil society, community-based, citizen-focused sustainability

Need for economic planning, coordination and political leadership with democratic accountability and inclusion

From no taxation without representation (American revolutionary slogan from 18th century) to 'no carbon taxation without democratic participation'

Climate and energy crises require MORE not LESS democracy and citizens making decisions

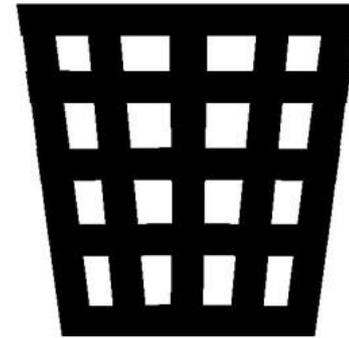
“Empires and eras end. Ways of life end. But people mostly go on. And much of what is required to keep going on, to prevent the worse outcomes is simply to come to terms with the notion that *a radical change in your way of life is not the same thing as the end of the world.* ...

The truth is that we need to find a way to find pleasure and hope and joy in a much simpler, less consumptive lifestyle. That means sacrificing some things we care about. It also means getting back some things that truly matter”. (Sharon Astyk, 2008, *Depletion & Abundance: Life on the New Home Front*, p.49; emphasis added).

The end of the world as we know it, is not the end of the world....



OR



'TRASH'



Polyp.org.uk

Thank you for you
attention
Any questions?

A 'Green New Deal' for the Academy?

Reclaiming of the 'mission' of science (including social science) to improve the human condition NOT only by producing commercially exploitable knowledge

Publicly funded research – can and ought to be seen as service for the community which funds it, NOT as an incubator for marketable innovations

Asking citizens what they want? How can research help improve their lives?

Why should democracy end at the university gates?

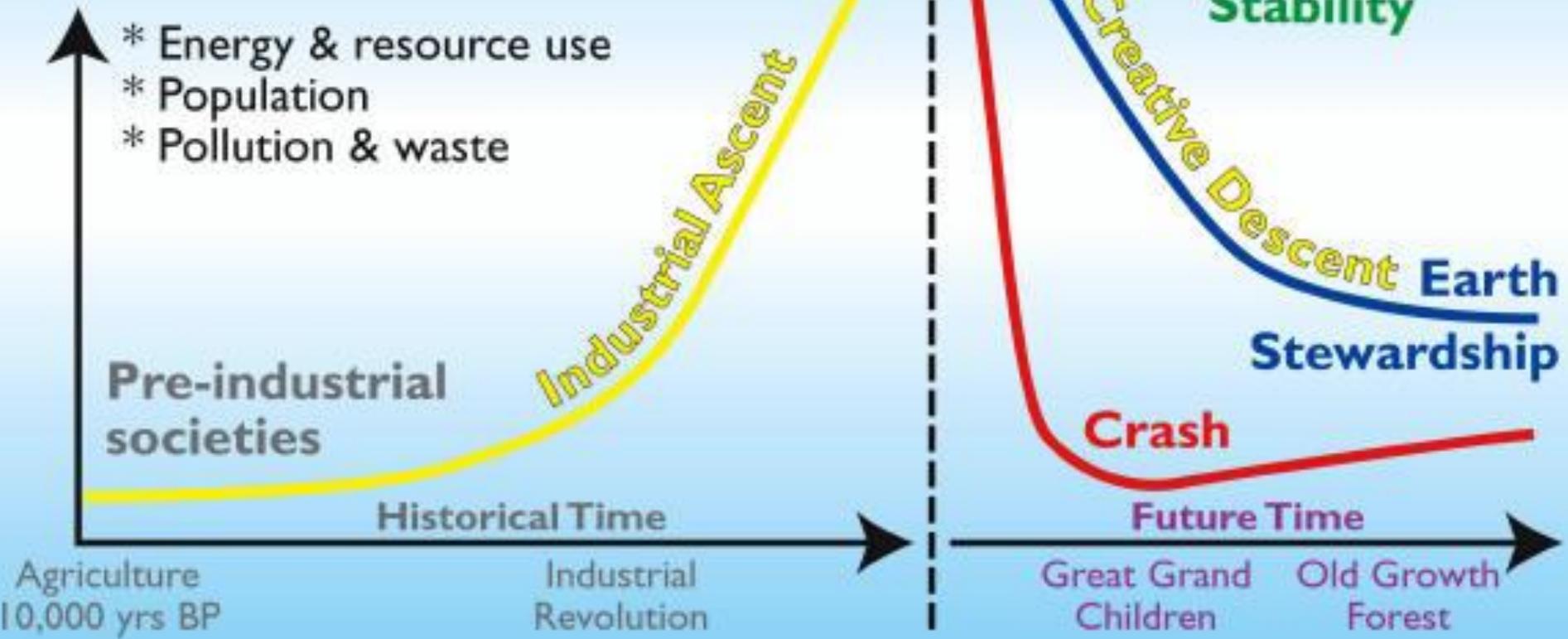
Sustainability research as action research – engaged research

Political Implications: the downsides of oil addiction



Our Energy Future

Beyond Cheap Fossil Fuels





'THE SAME BOAT'