Resilient Communities

Sustainable transitions
in an age of climate change

Dr. Stewart Barr

Outline

- Research context: consumption, citizenship and sustainability;

- Vulnerabilities and uncertainties in an age of climate change and 'Peak Oil';

- From global sustainability to local resilience

- Building local 'resilience' for the future;

- Transition communities and the challenges of a post 'Peak Oil' world.

Consumption, Citizenship and Sustainability

"We all – governments, businesses, families and communities, the public sector, voluntary and community organisations – need to make different choices if we are to achieve the vision of sustainable development"

(DEFRA, 2005, p. 25)

Consumption, Citizenship and Sustainability

"The act of consumption is becoming increasingly suffused with citizenship characteristics and considerations. Citizenship is not dead, or dying, but found in new places, in life-politics" (Scammell, 2000, p. 351)

JOHN CLARKE · JANET NEWMAN · NICK SMITH
ELIZABETH VIDLER · LOUISE WESTMARLAND

CREATING
CITIZEN-
CONSUMERS

Changing Publics and Changing Public Services
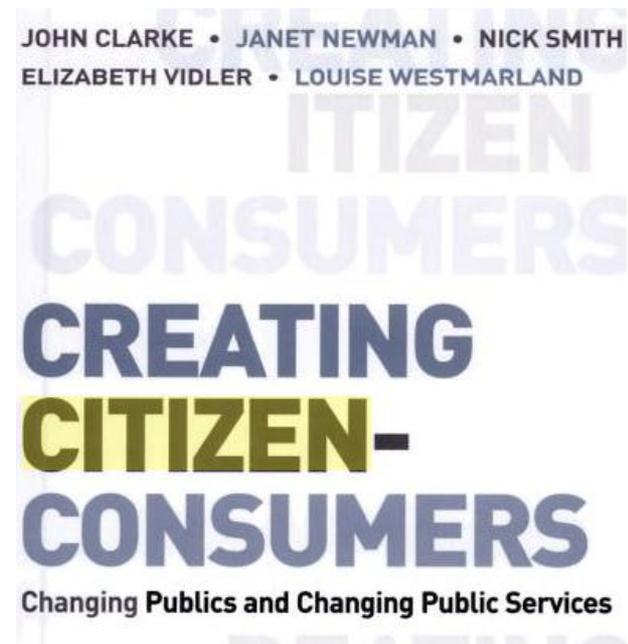
Choice Architecture

"...any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic incentives. To count as a mere nudge, the intervention must be easy and cheap to avoid. Nudges are not mandates. Putting the fruit at eye level counts as a nudge. Banning junk food does not" (Thaler and Sunstein, 2008, p. 8).

"...not all non-regulatory interventions are nudges in the standard understanding of the term. Nudges prompt choices without getting people to consider their options consciously, and therefore do not include openly persuasive interventions such as media campaigns and the straightforward provision of information" (House of Lords, 2011, p. 12).

The Role of Social Transformation?

• How effective will individualised policies be at driving major change?

"The comfortable perception that global environmental challenges can be met through marginal lifestyle changes no longer bears scrutiny. The cumulative impact of large numbers of individuals making marginal improvements in their environmental impact will be a marginal collective improvement in environmental impact. Yet we live at a time when we need urgent and ambitious changes"
(Crompton and Thogersen, 2009, p. 6)

Vulnerabilities and Uncertainties

In the UK

| 2020s | 2030s | 2040s | 2050s | 2060s | 2070s | 2080s |

Severe risks to national infrastructure: coastal defences, sewage system, rail

Modest increase in agriculture yields

Floods like those of 2007 will be frequent

Several UK species struggle to adapt.

Heat wave of 2003 will be 'normal' by the 2050s

By 2080, 4°C rise in average summer temperatures

Temperature of the hottest summer days up by possibly 10°C

Up to 40% reduction in summer rainfall

Source: Intergovernmental Panel on Climate Change Fourth Assessment Report (2007), UK Climate Projections (2009), Stott et al Human contribution to the European heat wave of 2003, Nature (2004)

Vulnerabilities and Uncertainties

10% probability level
Very unlikely to be less than

50% probability level
Central estimate

90% probability level
Very unlikely to be greater than

Summer
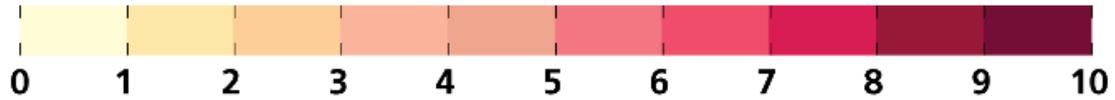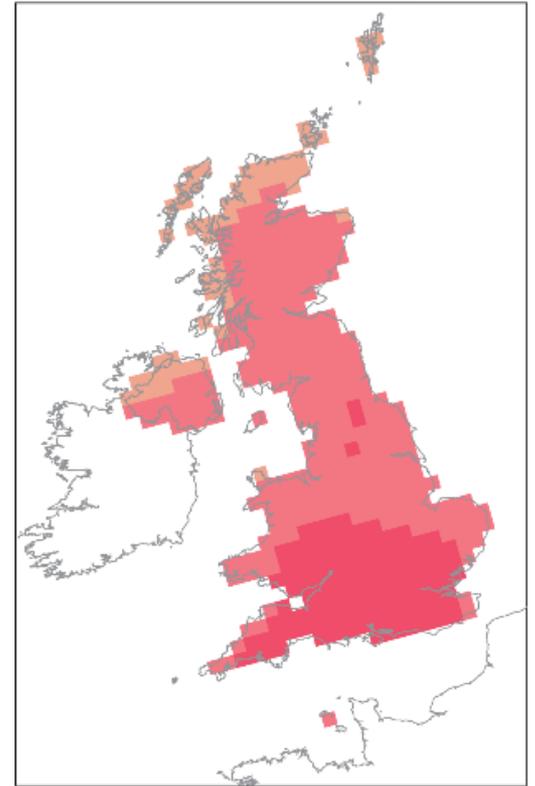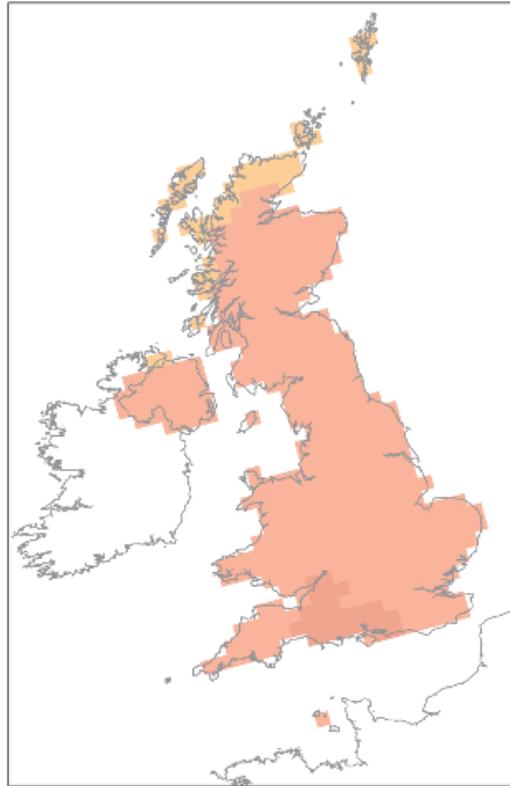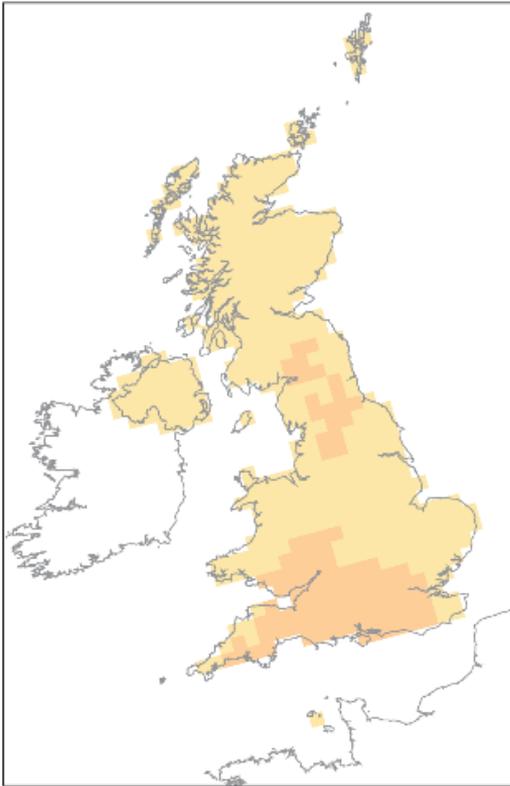
Change in summer mean temperature (°C) for the 2080s, Medium emissions scenario

UK CLIMATE PROJECTIONS

10% probability level
Very unlikely to be
less than

50% probability level
Central estimate

90% probability level
Very unlikely to be
greater than

Winter

−70 −50 −30 −10 0 10 30 50 70
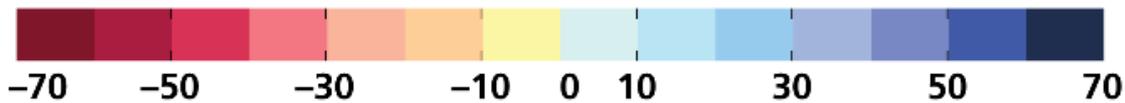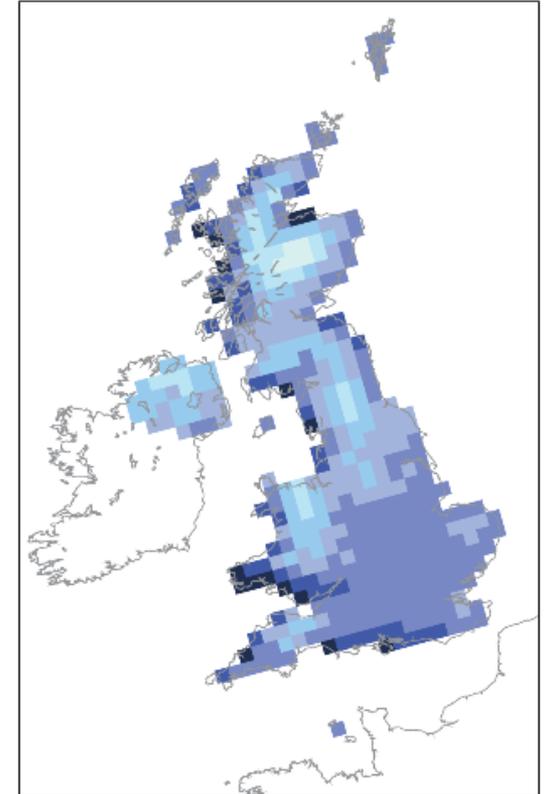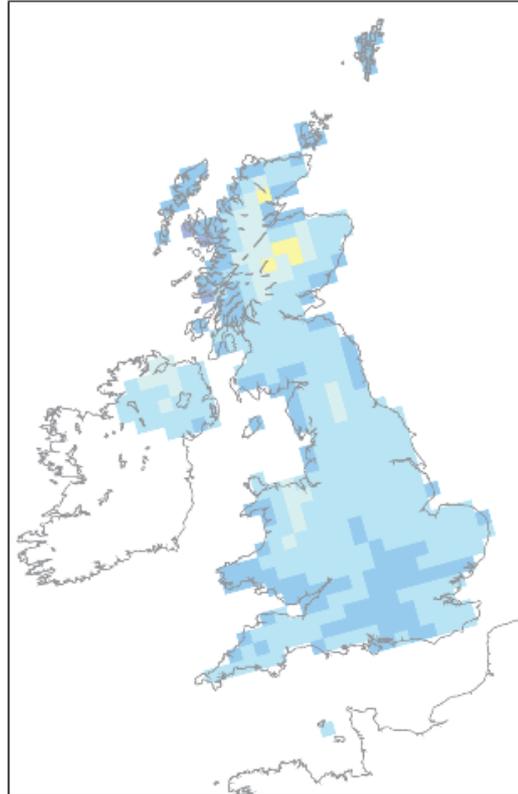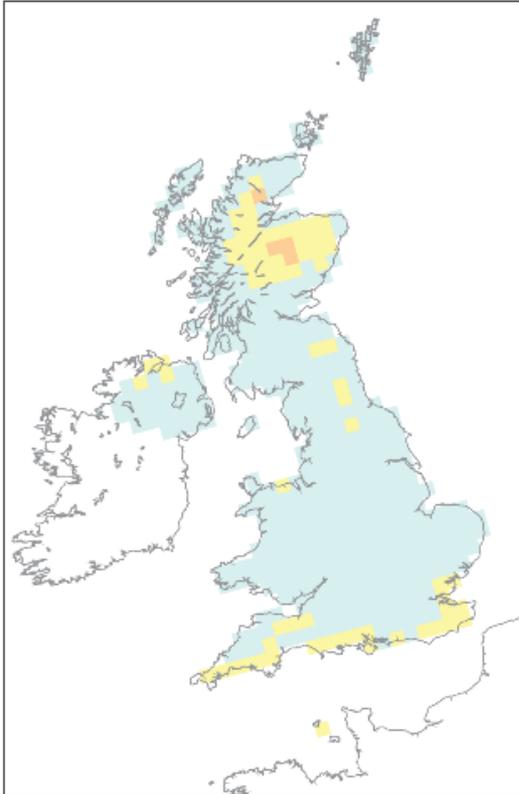
Change in winter mean precipitation (%) for the 2080s, Medium emissions scenario

Vulnerabilities and Uncertainties

World Crude Oil & Lease Condensate Production (million barrels/day)

Peak 1 May 05 74.30
Peak 1 Dec 05 74.27
Peak 3 July 06 74.14
Forecast
Decline rate = -1% /yr
Decline rate = -4% /yr

Source: EIA, Skrebowski et al
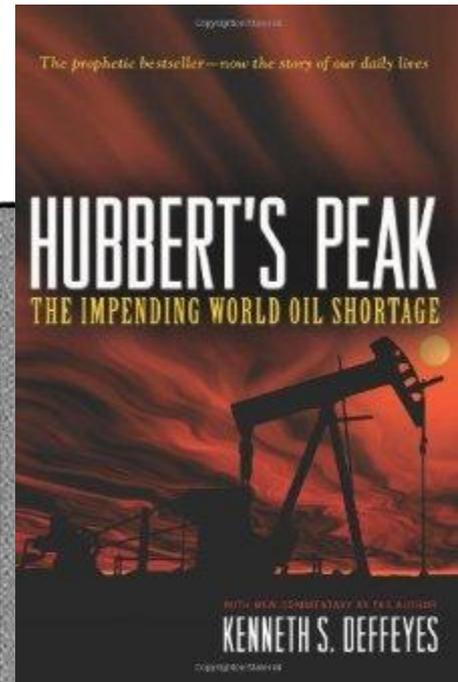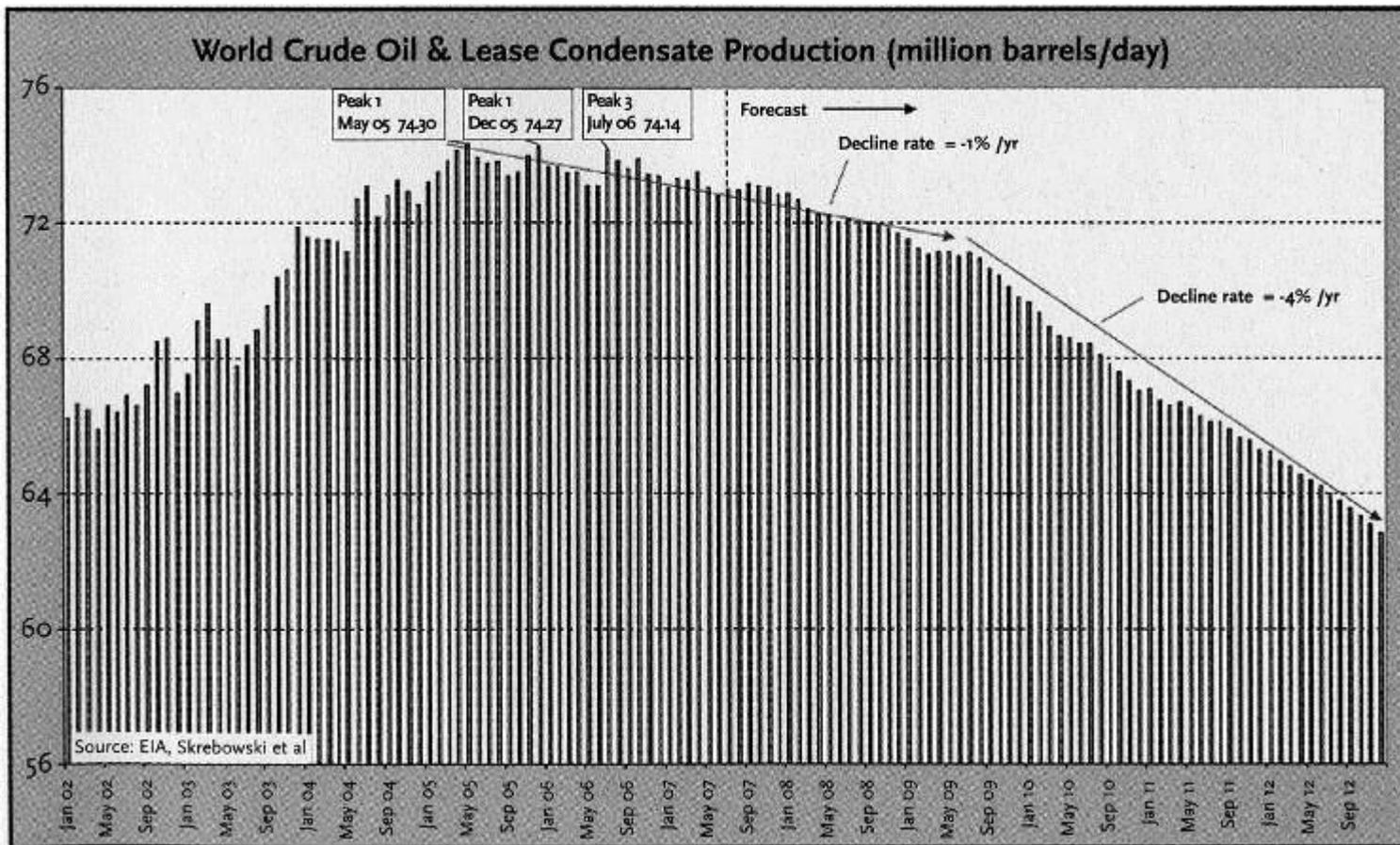
Credit: www.theoildrum.com

HUBBERT'S PEAK
THE IMPENDING WORLD OIL SHORTAGE
KENNETH S. DEFFEYES

Vulnerabilities and Uncertainties
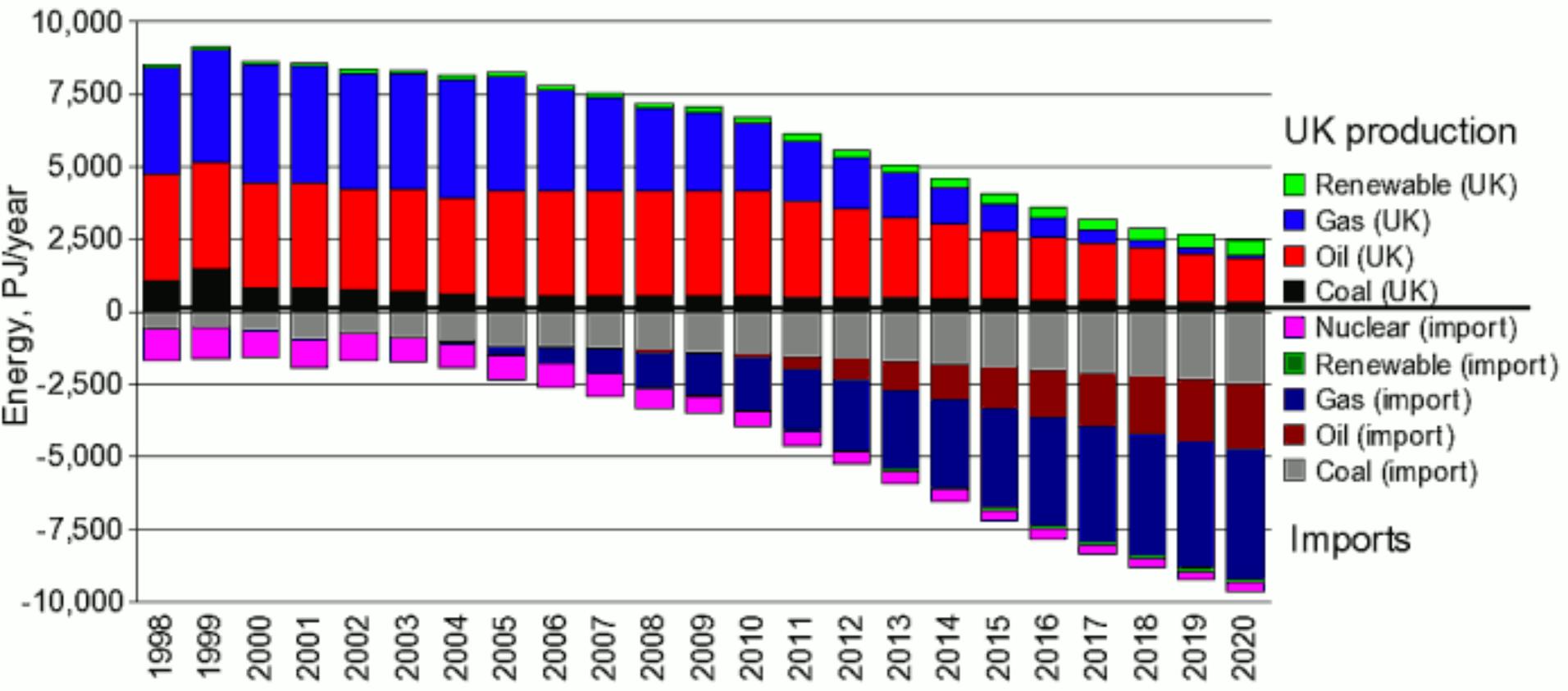
From Global Sustainability to Local Resilience

- From considering distant and globalised concerns to local threats;

- From deploying reactionism to promoting activism and situated pragmatism;

- From 'governing' sustainability to place-based decision-making;

- Ideas of local resilience…

Building local 'resilience' for the future

- Resilience as a natural systems approach (Adger, 2000):

"[The]…ability of a system, from individual people to whole communities, to hold together and maintain their ability to function in the face of change and shocks from outside" (Hopkins, 2008, p. 12).

Building local 'resilience' for the future

"In this way it may involve measures aimed at mitigation (prevention) and adaptation (one form of reactionism), but resilience is also **an active, community-based, internally-driven and holistic approach that should, in theory, provide greater protection against external shocks**" (Barr and Devine-Wright, in press, presenter's emphasis).

"By shifting focus away from an ultimate end goal of sustainability, to an ongoing process of enhancing resilience, **managers, planners, council members, and residents can examine the community in its entirety, the interrelations among the various elements within a community**, and how these elements collectively enhance community resilience and ultimately move a community toward sustainability" (Callaghan and Colton, 2008, pp. 932-933, presenter's emphasis).

Resilient Communities (Hopkins, 2008)

Not adding Resilience

- Centralized recycling
- Ornamental tree plantings
- Sourcing organic food internationally

- Imported 'green building' materials
- Low-energy buildings
- Carbon offsetting

- Ethical investing
- Buying choral CD's
- Sky sports
- Consumerism

Adding Resilience

- Local composting
- Productive tree plantings
- Local procurement specifying local production, supporting emerging and new industries
- Specifying local building materials
- The local 'Passivhaus'
- Local community investment mechanisms
- Local currencies
- Singing in the local choir
- Playing football
- Reciprocity

The ideal 'Sustainable Community'

"A group of people who share common culture, values and / or interests, based on social identity and / or territory and who have some means of recognising and (inter)acting upon these commonalities" (Dictionary of Human Geography, 2009).

In this Context…

"A sustainable community:

*Utilises nature's ability to provide for **human needs**, without undermining its ability to function over time;*

*Ensures the **well-being of its members**, offering and encouraging tolerance, creativity, participation and safety;*

***Empowers people with shared responsibility**, equal opportunity and access to expertise and knowledge with the capacity to affect decisions which affect them;*

*Consists of businesses, industries and institutions which **collaborate as well as compete, are environmentally sound**, financially viable and socially responsible, investing in the local community in a variety of ways"*

(Rogers and Ryan, 2001, 282)

Transition communities and the challenges of a post 'Peak Oil' world

THE TRANSITION HANDBOOK

From oil dependency to local resilience
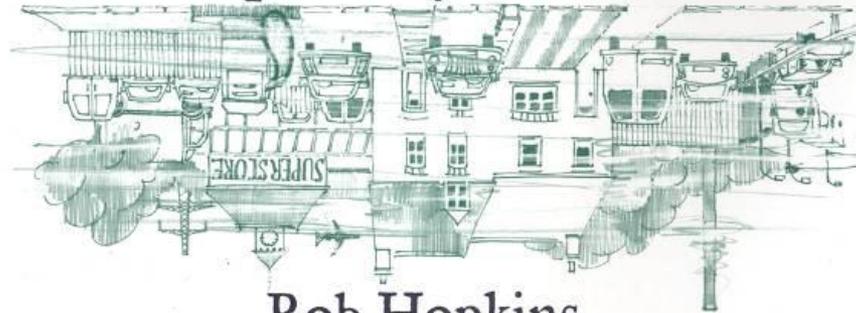
Rob Hopkins
Founder of the Transition movement

"If your town is not yet a Transition Town, here is the guidance for making it one. We have little time, and much to accomplish." — Richard Heinberg, author of *Peak Everything*

Transition Town Research

- The Role of Values in Major Social Change;

- 3 Transition Town Communities (Exeter, Crediton and Ottery Sr. Mary);

- Ethnographic research and action research approach.

Key attributes of Transition

- Sustained and tangible social transformation;

- Place-based communities:
"Have a desire to advance ecological sustainability, community self-reliance, and social well-being in Vancouver? To grow more food? To connect with others in your community to create positive local responses to things like climate disruption, depletion of natural resources, and economic instability?"

- A re-connection with nature and natural systems;

- A non-political framework for governing;

- Inner Transition:
"in many instances the greatest resilience for the community is, it is argued, to be found in an inner changing of the self that becomes open to change and alive to the possibilities of new ways of living in a post-Transition world" (Barr and Devine-Wright, in press).

Transition Priorities

- Energy descent planning;
- Local food growing and community supported agriculture;
- Reduced consumption and a reliance on local procurement;
- Environmentally sustainable mobility;
- Active discussion of Transition through regular community meetings and open space events...

Sustainable Crediton

'Governing' Transition

"Successful Transition Initiatives need an unprecedented coming together of the broad diversity of society. They dedicate themselves to ensuring that their decision making processes and their working groups embody principles of openness and inclusion…The intention of the Transition model is not to centralise or control decision making, but rather to work with everyone so that it is practiced at the most appropriate, practical and empowering level, and in such a way that it models the ability of natural systems to self organise" (Transition Network, 2012).

Challenges for Transition

- Working within or outside the Neo-liberal economic framework: the challenge of consumption;

- Being part of everyday political, social and economic realities in localities;

- Presenting a united message through consensus decision-making;

- Focusing on the controversies of 'environment'… and the 'opportunities' of economic crisis;

- Vision(s): governance, scale, power, democracy, boundaries of the future.

A Dystopian future?