

WORKSHOP – LIVING WITHIN ENVIRONMENTAL LIMITS

Board member leads: Andy Hicklin, Rosemary Dowie

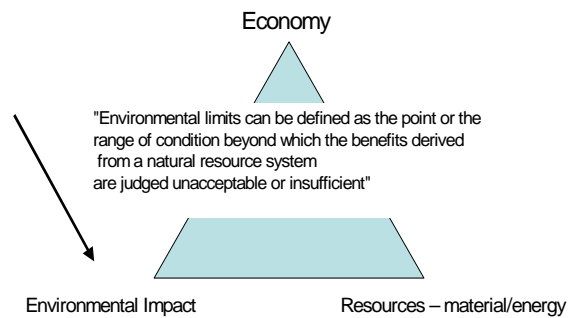
Presentation 1:

Neil Murdoch
Climate Change

Towards a Logical Structure for Environmental Limits

Neil Murdoch, Environment Agency

What do we mean by Limits?



Aspects of Limits

- Topic
- Problem
- Knowledge
- Approach
- Stakeholders
- Economics
- Environmental Benefits
- Current Status
- Action

Water Quality



Air Quality



Water Resources



Land/Soil Quality



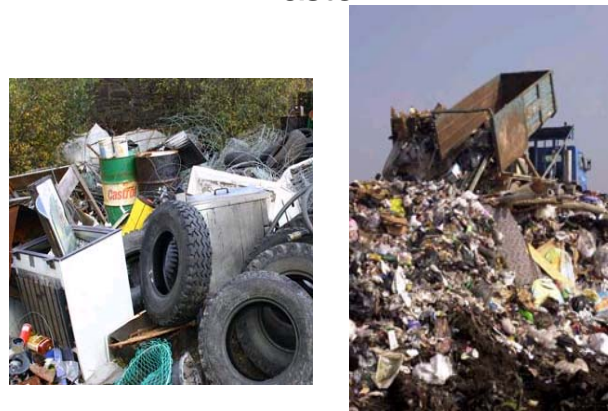
Biodiversity



Landscape



Waste



Flooding



Climate Change/ greenhouse gases



Problem

Management of limited resources

- Eg Common land
- No limits
- Tragedy of the Commons
- Garrett Hardin 1968

Approaches – Regulatory /voluntary

- 'The key to addressing ... pollution ... is not just money but good governance'

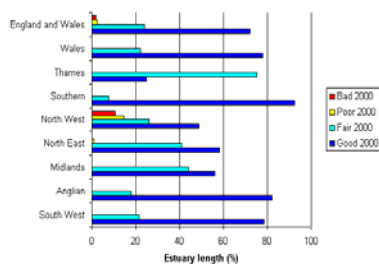
http://www.economist.com/world/international/displaystory.cfm?story_id=10566738

- Creates level playing field
- Voluntary – cultural change

Knowledge/ Scientific Basis

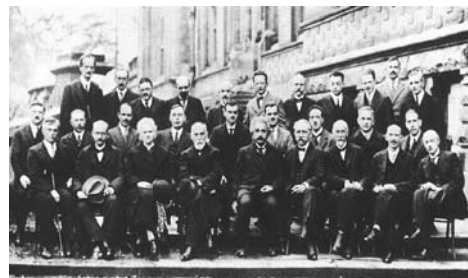
- Each topic has its own basis of expertise

Regional estuary water quality: 2000



Stakeholders

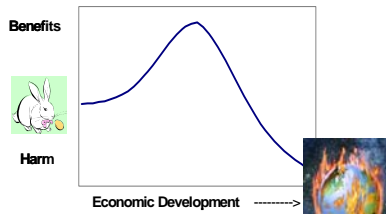
- Do we know who they are?
- Are they engaged?
- Are they Happy?



Economics

- Relationship between growth and limits?
- ‘economic growth, coupled with good governance, may yet prove to be a source of solutions rather than problems ‘

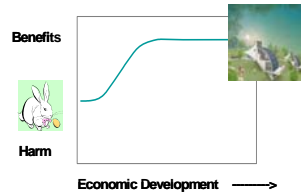
Benefits and harm vs economic development – a view



Economics

- Relationship between growth and limits?
- ‘economic growth, coupled with good governance, may yet prove to be a source of solutions rather than problems ‘

Benefits and harm with economic development – a second view -



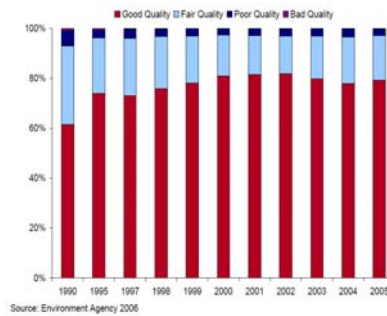
Environmental Benefits

- Need to define, quantify



Current Status

Figure 7.10 Chemical River Water Quality in the South West 1990 - 2006, percentages



Source: Environment Agency 2006

Topic	Water Quality	Air Quality	Water Supply	Land/Soil Quality	Biodiversity	Landscape	Flooding	Waste	Climate/ Greenhouse gases
Problem (understood)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Science (Knowledge)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Approach (regulatory or voluntary)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stakeholders (identified and engaged)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economics (cost issues)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environment (benefits)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Current Status (Environment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action Needed									

Thanks



North Somerset Partnership
Annual Event
22 April 2008

Living Within Environmental Limits

Phil Neve



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The Transition Movement

A positive and local response to
climate change and peak oil

Or how we may live well in the post
oil age...



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**Before
Fossil Fuel**



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Fossil Fuels



1750



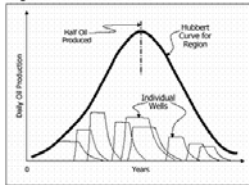
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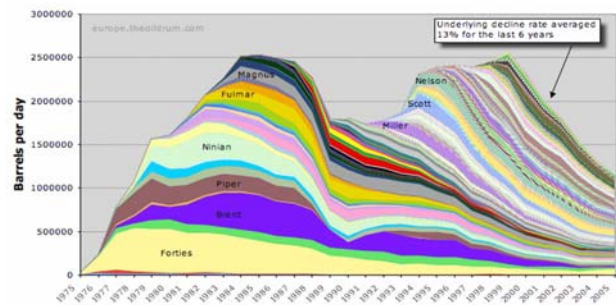
M King Hubbert

HUBBERT CURVE
Regional Vs. Individual Wells



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UK Oil Production

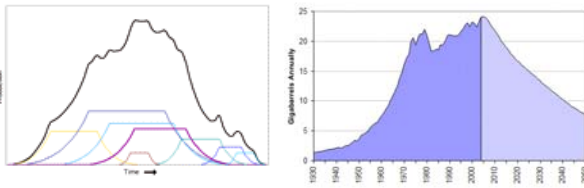


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Oil Production Curves

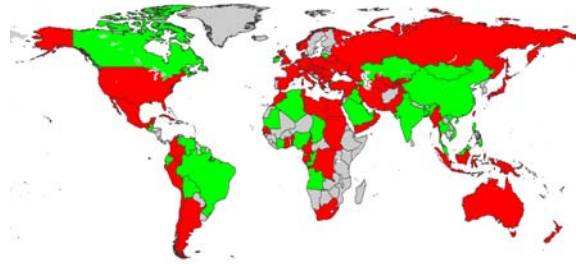
Wells and Fields

World Production



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Oil Producers - 98

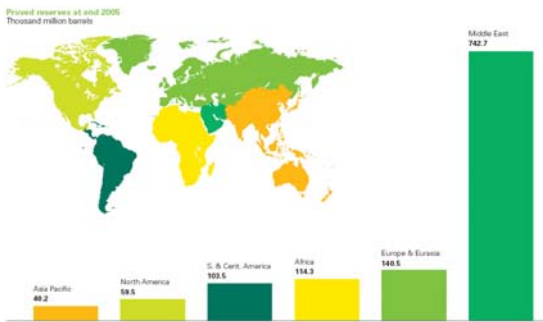


Post Peak Oil Producers - 64



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Proven Reserves end of 2005



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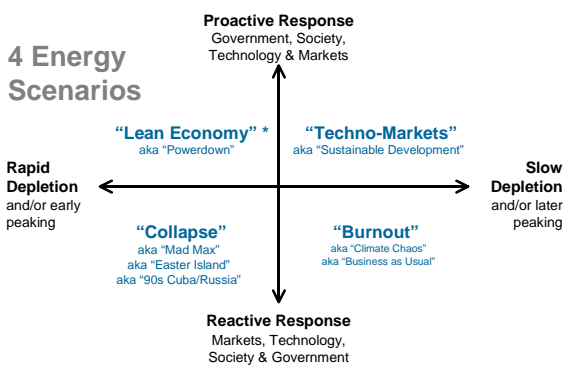


Blessing or curse?



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4 Energy Scenarios

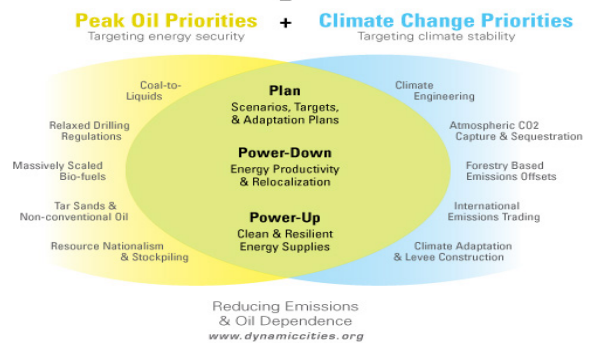


Bryn Davidson - dynamiccities.squarespace.com



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Energy Transition Priorities



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“Living Within Environmental (and
Natural Resource) Limits”

Building Resilience



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The Transition Approach



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4 Key Assumptions

- Lower energy consumption is inevitable
- Our communities lack resilience
- Act collectively and now
- By using our collective genius we can build a new model



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Totnes – TTT, First Transition Town

- 12 months awareness raising from Sept 2005
- Unleashing Sept 2006
- Films and presentations
- Training – Skill up for powerdown
- Workshops – eg oil vulnerability
- Local Food Directory
- Solar HW challenge
- Local Currency
- Oral history archives



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The Transition Model

12 steps

1. Interim steering group for steps 1-5
2. Awareness raising
3. Lay the foundations – networking with others
4. Organise the great unleashing
5. Form sub-groups
6. Use open space
7. Develop visible practical parts of the project
8. Facilitate re-skillling
9. Build a bridge to local government
10. Honour the elders
11. Let it go where it wants to go...
12. Create an Energy Descent Action Plan



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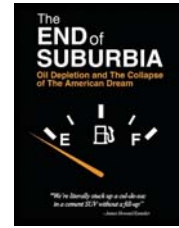
What is the message?

Climate Change, Peak Oil and the Transition Movement

... it's a POSITIVE message.



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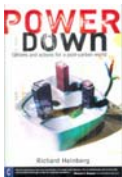
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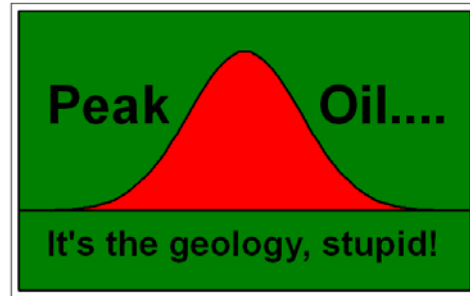
Richard Heinberg



David Strahan



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This workshop considered the following aims:

SCS Aim: Tackle climate change by reducing emission of greenhouse gases.

Improvement: Raised awareness about the causes of climate change and local people, organisations, schools, businesses and institutions reducing their carbon footprint.

SCS Aim: Assist service providers, businesses, and communities to adapt to the effects of unavoidable climate change and to increasing energy costs.

Improvement: Support the local economy to take full advantage of new technologies and other business opportunities, and by helping businesses to adapt to rising energy costs and effects of climate change.

WORKSHOP OUTCOMES

SHARED PRIORITY: LIVING WITHIN ENVIRONMENTAL LIMITS

Aim 1 : Tackle climate change by Reducing emission of greenhouse gases

Improvement we want to see: Raised awareness about the causes of climate change and local people, organisations, schools, businesses and institutions reducing their carbon foot print

How do we achieve this together?	Who should be involved and <u>WHY</u> ?	What could your contribution be?	
			Contribution	Organisation
Lead on Sustainable Housing - change in culture	<ul style="list-style-type: none"> • Planning authority • Builders/architects • Demonstration 	<ul style="list-style-type: none"> • Direct reduction • Living a sustainable life 	Awareness raising	Avon Wildlife Trust TENONS
Transport - change in culture Local carbon offset fund to raise awareness and sponsor sustainability projects	Airport			
Use planning policies/controls for new development	Planners/developers	Reduce energy/resource use in '2 new towns to be built'	Raise awareness with the decision makers	North Somerset Partnership to contribute to wider vision for developments
Individual organisation's 'green travel plans'	Partners and stakeholders	Reduce car dependency	'Transition Towns' model on a larger scale - May need target eg two 'new towns' to be transition towns	
Big investment in public transport is needed	<ul style="list-style-type: none"> • Bus companies • Network rail (Portishead) 			

SHARED PRIORITY: LIVING WITHIN ENVIRONMENTAL LIMITS**Aim 1 : Tackle climate change by reducing emission of greenhouse gases****Improvement we want to see: Raised awareness about the causes of climate change and local people, organisations, schools, businesses and institutions reducing their carbon footprint**

How do we achieve this together?	Who should be involved and <u>WHY</u>?	What could your contribution be?	
			Contribution	Organisation
May need more 'regulation' eg reduce 'choice' eg in schools – local school only therefore no need to travel.		Education of locally elected representatives	Raising awareness with planning committees	
Small, local projects 'owned' locally				
Transition towns approach to new developments				
Need to build time for above into planning process – without increasing overall elapsed time	<ul style="list-style-type: none"> Planners/town 'master planning' 		Contribute ideas to master planning – from wide cross section of stakeholders eg police, health, fire	
Reduced food miles Reduced meat consumption	<ul style="list-style-type: none"> Supermarkets Farmers Shoppers Low-tech agriculture 			
Reduce packaging Use biodegradable packaging materials	<ul style="list-style-type: none"> Suppliers Supermarkets 			

SHARED PRIORITY: LIVING WITHIN ENVIRONMENTAL LIMITS

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			Contribution	Organisation
Existing housing/communities: 'Transition Towns'	Community Activists NSC			
New developments (including the '2 new towns' - Best practice at design stage <ul style="list-style-type: none"> o Energy, water, crime, local infrastructure - Encourage neighbourhood level rather than house-level energy generation, water harvesting and re-use - Educate elected representatives in 'best practice'	<ul style="list-style-type: none"> • Architects • Developers • Sustainable Development Commission 			

SHARED PRIORITY: LIVING WITHIN ENVIRONMENTAL LIMITS

Aim 2 : Assist service providers, businesses, and communities to adapt to the effects of unavoidable climate change and to increasing energy costs

Improvement we want to see: Support the local economy to take full advantage of new technologies and other business opportunities, and by helping businesses to adapt to rising energy costs and effects of climate change

How do we achieve this together?	Who should be involved and <u>WHY</u> ?	What could your contribution be?	
			Contribution	Organisation
Relocalising. Realistic not 'romantic ruralism' Recognise these are big strategic decisions	Everybody. Not necessarily new groups etc. Every org. and group needs to be on board. Whole partnership needs to be engaged in developing creative solutions	<ul style="list-style-type: none"> • Need to communicate across borders • Need to understand and work with our relationship with near urban centres • Recognise interdependence of city/rural and between different sectors in NSP 	<ul style="list-style-type: none"> • Police in local areas • PCT – local service centres not 'supercentre' • Education – smaller schools 	<ul style="list-style-type: none"> • Police • PCT • NSP
Use existing networks and education systems and learning to spread the message				
Use local knowledge, expertise and creativity – motivation for change will likely come from young people				
Coordinate action across the partnership				
Rethink way we travel. Plan for access to services	Transport companies			

SHARED PRIORITY: LIVING WITHIN ENVIRONMENTAL LIMITS

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			Contribution	Organisation
Using existing technology and resources eg factories/aerospace industries could be changed very easily to manufacture wind turbines and other environmental technology other than technology that uses oil				
Behaviour change – Individual understanding and choices. Concentre on what is popular eg keeping local services rather than 'doom and gloom'	<ul style="list-style-type: none"> • Use media • Tap into existing campaigns 			
Local government and other local authorities/organisations should be enablers for this process				
Need to concentrate on peak oil not just climate change		Time to economically recover eg wind farms		
Develop nuclear fission	Government	No dangerous by-products	Encourage	Government

SHARED PRIORITY: LIVING WITHIN ENVIRONMENTAL LIMITS

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How do we achieve this together?	Who should be involved and <u>WHY</u> ?	What could your contribution be?	
			Contribution	Organisation
Economical growth – ie not just growth for growths sake <ul style="list-style-type: none"> - relate to fuel efficiency - education and culture change - sustainable - biodegradable, use recycled materials and continue to use glass Better management of mobility and packaging More efficient transport system – subsidise? Tax incentives?	Food All throw away less Fridge management International issue Better use of agricultural land Better pay management	Less use of resources and put to better use, issue of problem of plastics, identify Limitations on batteries Better use of food, reduce waste eg sell by dates Be more seasonally aware Better use of minibuses – subsidise	Individuals, companies and government Importance of education and buy locally Caution on biofuels	All – from local, national, international level North Somerset Council and central government
Problem of longer travel to work	Need for managing of modes and interchange eg car-bus, car-train	More effective transport system Mix of housing Related issues		
Local carbon offset fund to increase awareness and promote sustainable projects				