

The End of Linear Planning

SSP₅ Canada

Global Impacts & Correcting the Errors of the Oil Age.

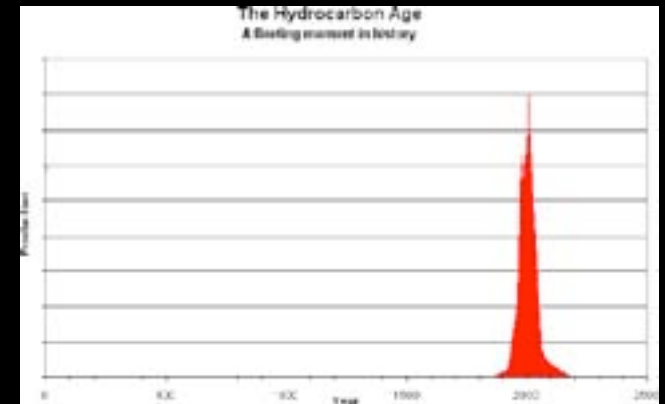
Introduction

Overview of Global Impacts

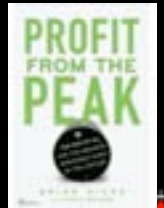


Food Security and Community Planning: Triage to New Towns

So Little Time, So Much To Do.
Food Inflation, Food Shortages, the
end of Cheap Energy is here.



1. Micro Scales: Rescue of inner cities, new green fingers for sustainability
Triage rescue of the suburban edges: policies for sustainable local food for survival
2. Intermediate Scale: New Rail oriented settlement patterns: a BC vision
3. Macro Scale: global impacts on 7 Regions of Canada: policy impacts.
The Mid Canada Line: revisiting new sustainable towns in the Boreal Edge.



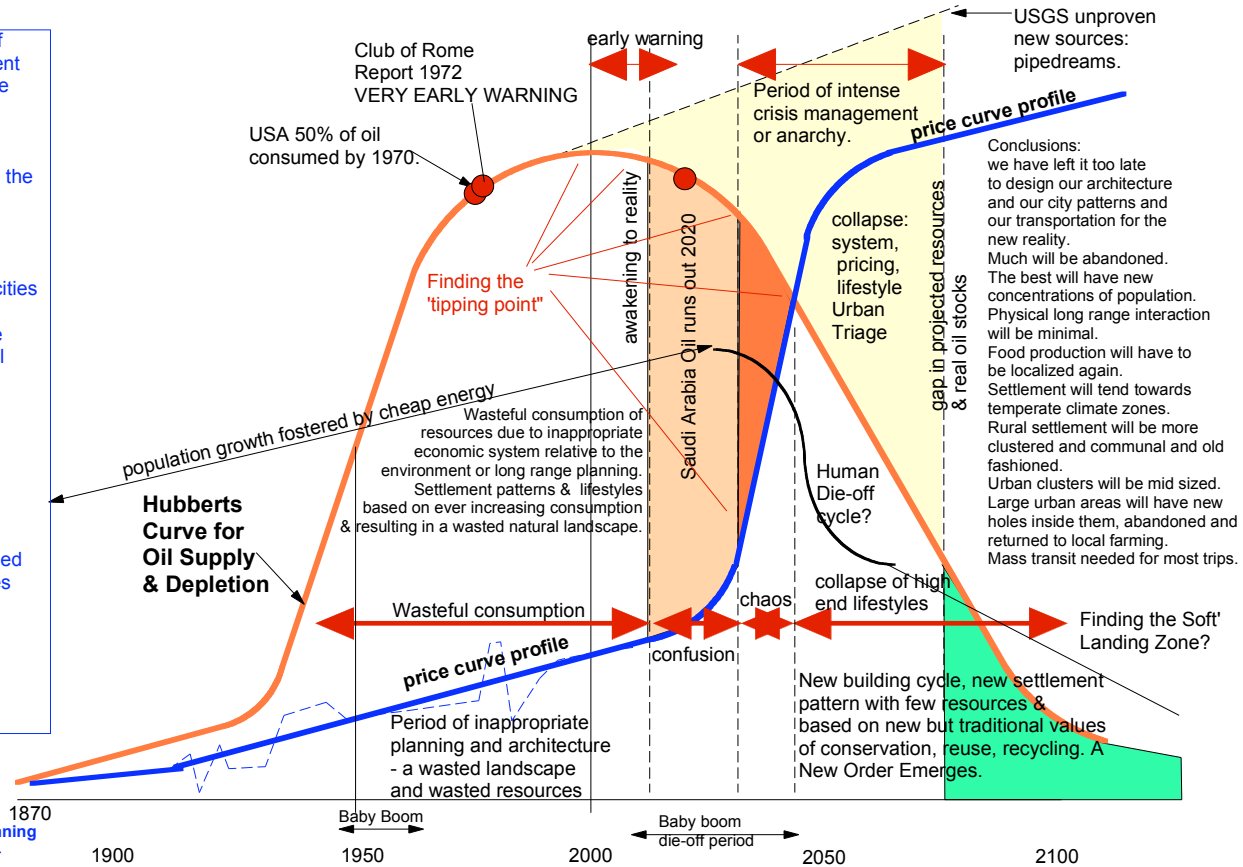
Hubberts Curve & Sociology

THE DEPLETION OF RESOURCES & THE IMPACT ON PATTERNS OF HUMAN SETTLEMENTS:
THE NEED FOR LONG RANGE STRATEGIC SUSTAINABLE PLANNING.

We are neglecting the design of appropriate patterns of settlement & transportation systems for the fast approaching new reality of energy scarcity & resource depletion.

We need strategies to deal with the following new realities:

- settlements will tend to be located in temperate climate zones & on higher ground.
- large sections of our existing cities will be abandoned as they are unsustainable. New appropriate concentrations of population will emerge as physical long range interaction becomes minimal.
- food production will return to restricted smaller areas and serving local needs.
- mass transit will be used for inter and intra city movement of people & goods.
- settlements will be compromised of smaller towns, smaller houses & narrower streets.
- localized industry, farming & market return. Proximity to food production, social networks & natural reserves will mark points of new community.



Our true
historic
niche...
how one
species
wasted a
planet.

The Olduvai Civilization and the end of cheap energy.
Of why gasoline should have been taxed at a "thousand dollars a litre".



Interpretation:

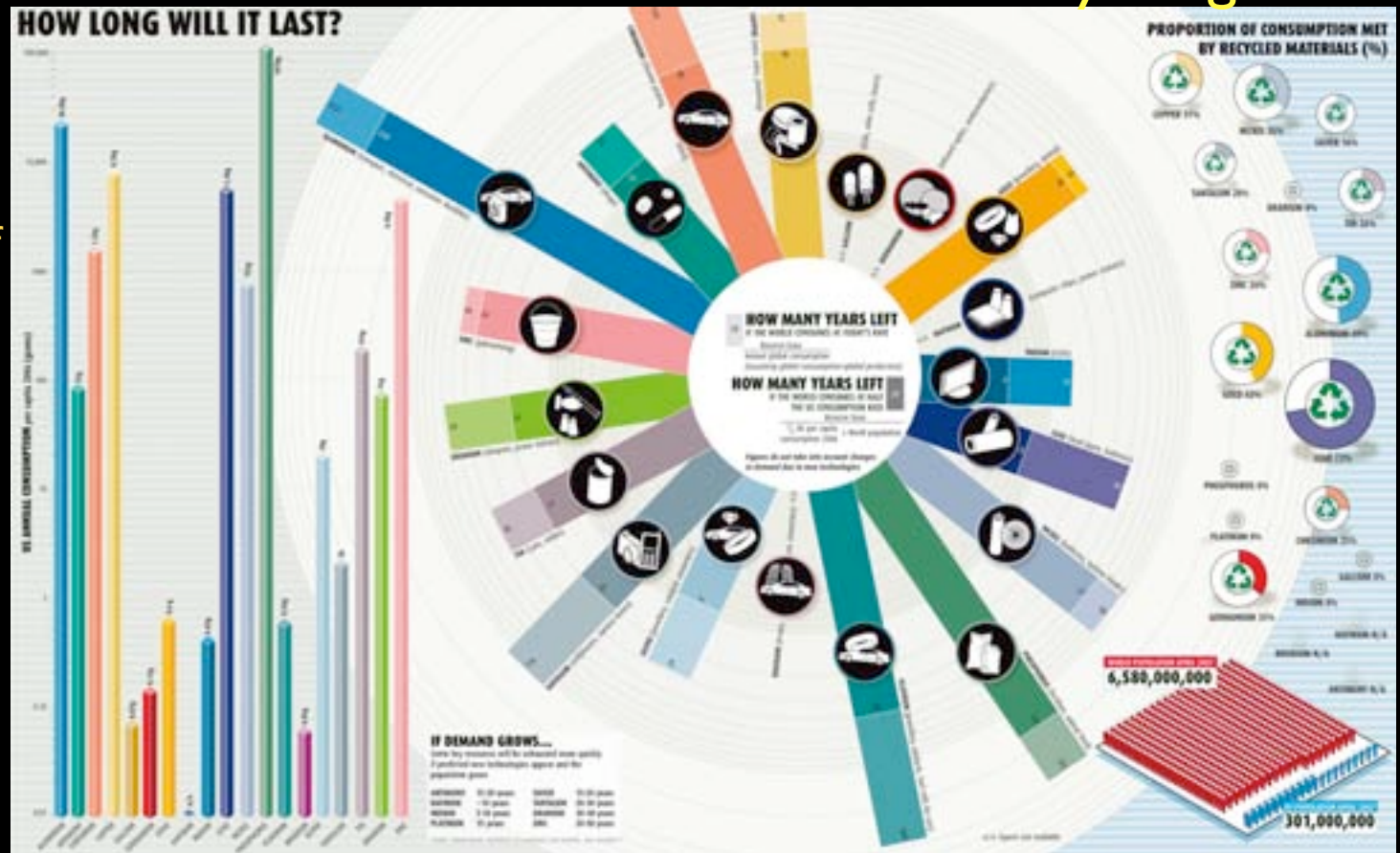
Current market of 100 years, short term thinking, loss of opportunity
A thinking civilization would have planned & charged on a 10 to 100 year pricing
A planning for survival species would have charged on a thousand to a million year demand horizon
Richard Duncan, the Olduvai theory, we blew it all in a century with nothing left of significance.
Issue, can we recover fast enough to at least conserve what is left?
For those that bank on Technology Rescues, that is extremely dangerous gamble.
All alternate technologies require oil to make the machinery to make them work.

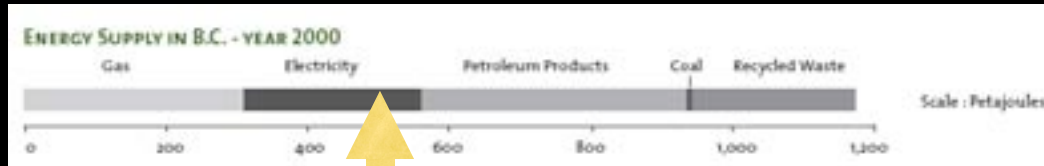


It is not just Oil:

- We have consumed most of our resources of this planet in almost every category.
- All current linear plans for more growth have less than a decade of possible realization.

The Peak Everything Era....





U.S. already raiding BC energy

Energy in BC

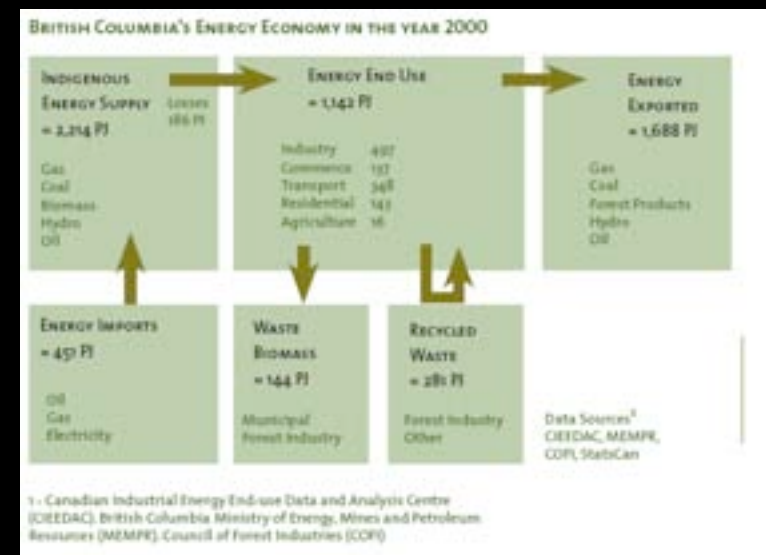


How come farmland & food gets lost in all of this?



First success will invite mass migration then new shortages

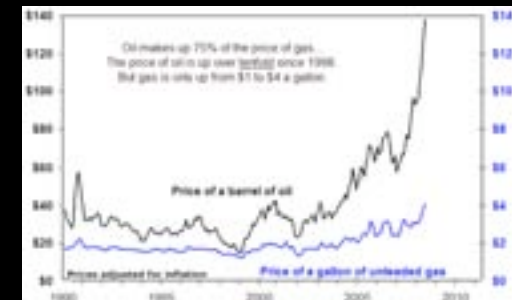
Don't think of using less, just find more energy. Hello Global Warming.



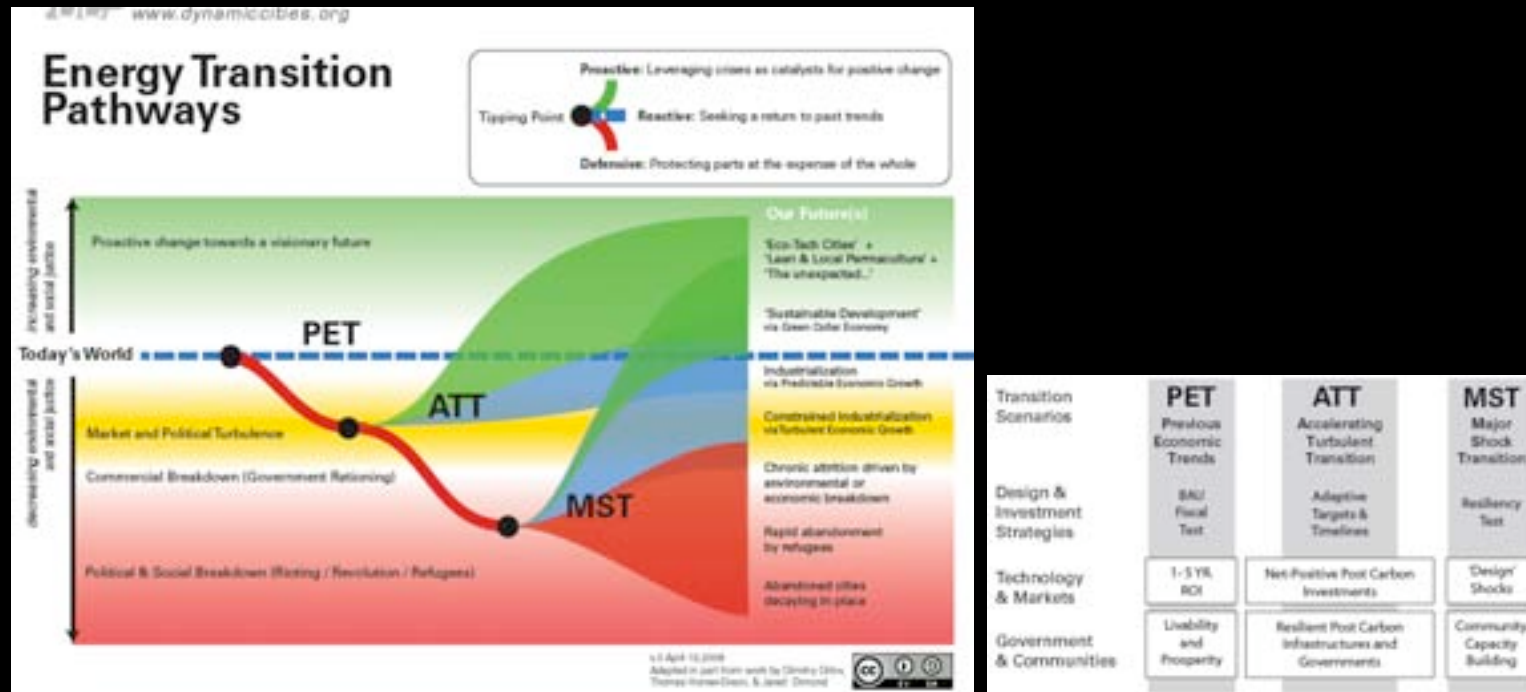


Global Impact Time

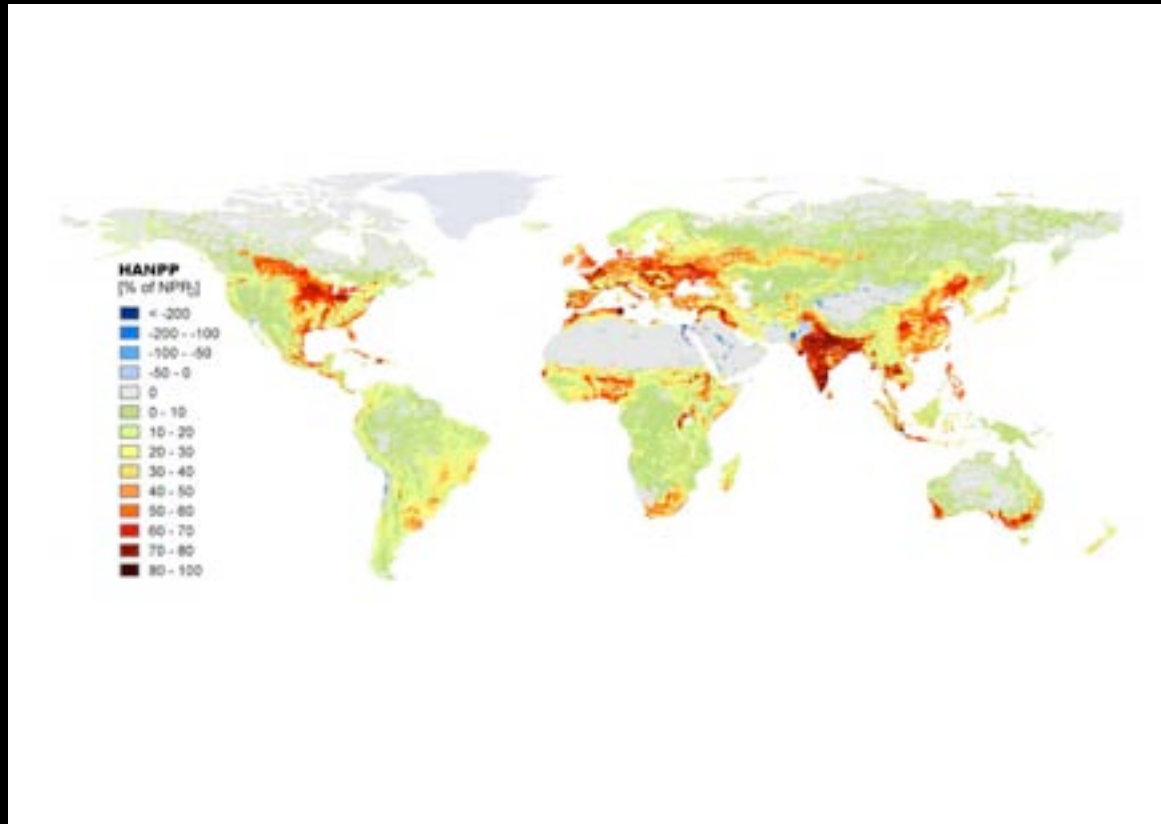
- Global warming: loss of croplands, water- famine?
- Too radical a shift in plant regimes- famine?
- Peak Oil: first the \$200 Papaya, or loss of imports
- Then the Mass Migration: fleeing a loss of energy.
- We need food for a quantum increase in population: or we need a quantum decrease in population, in extreme considerations. Volunteers?
- Or we need to make other corrections. (Too late? We should have done that in the '70's)



Another view.

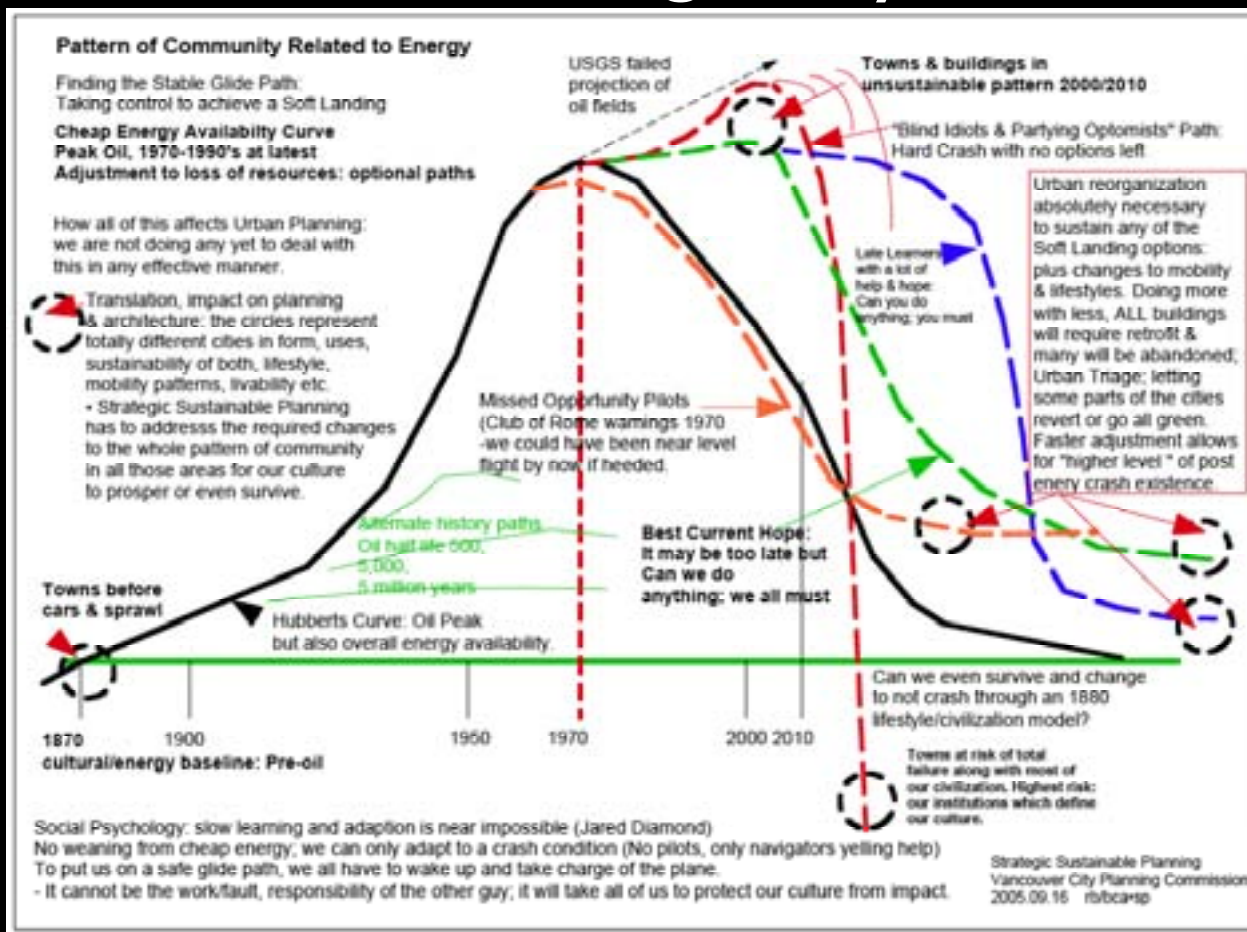


Human Dominance of Earth Resources

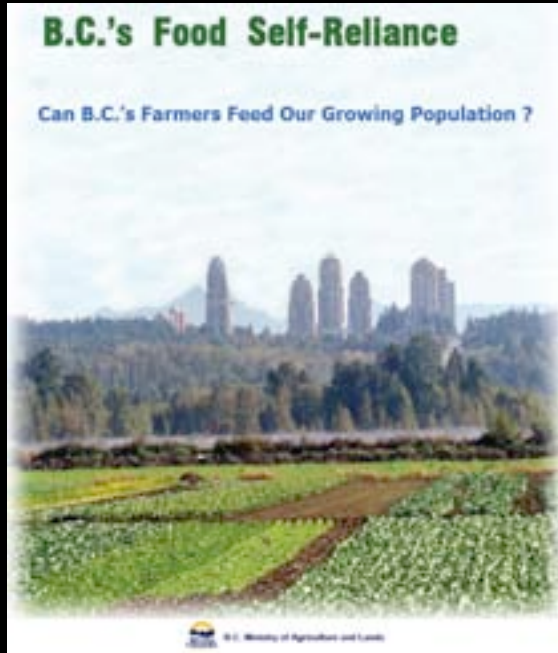


Where to you
think you should
be on this map if
the oil based
economy
disappears
underneath you?

Radical Change: city rescues



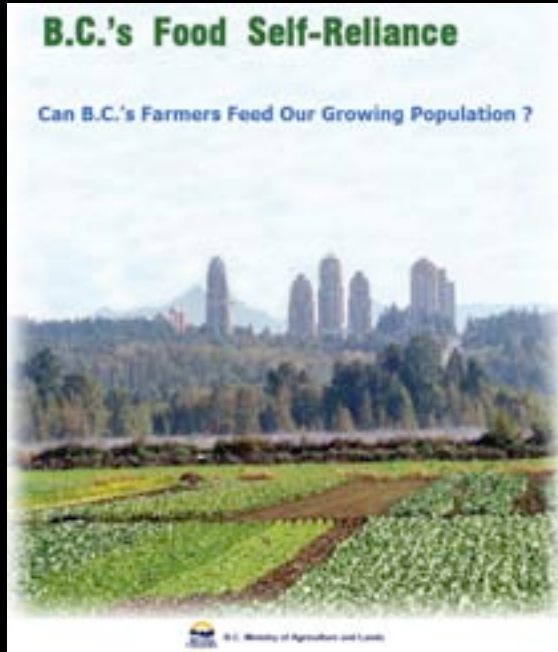
You actually have to do something this time to save yourself, your family & community.



Thinking Laterally

- Bend the old rules to get **more green edge by adding more sustainable density to the urban side** of the boundary.
- Add more green to the urban side, in fact **claw back lost farmlands**.
- Deepen the secured edges and put the **critical wedge pieces into permanent public land trusts**.
- Provide for young farmer leasing, new farms and community garden functions for urban residents to have access to farm and field and forest uses.
- Don't forget to add agro-industrial/**food processing** to urban sides.

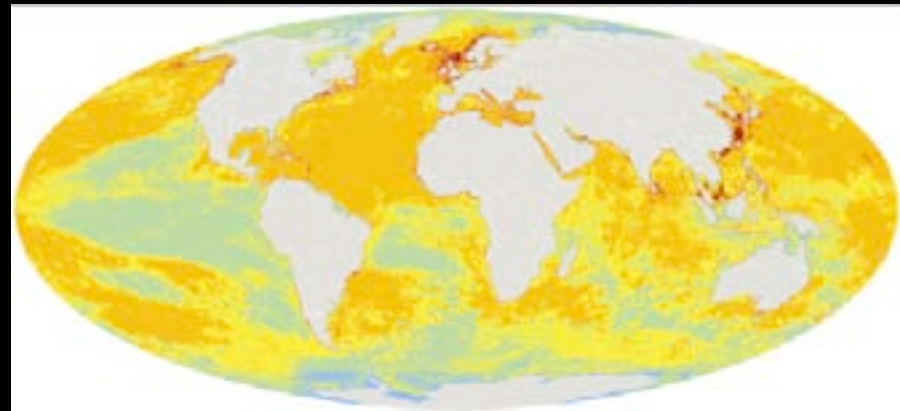
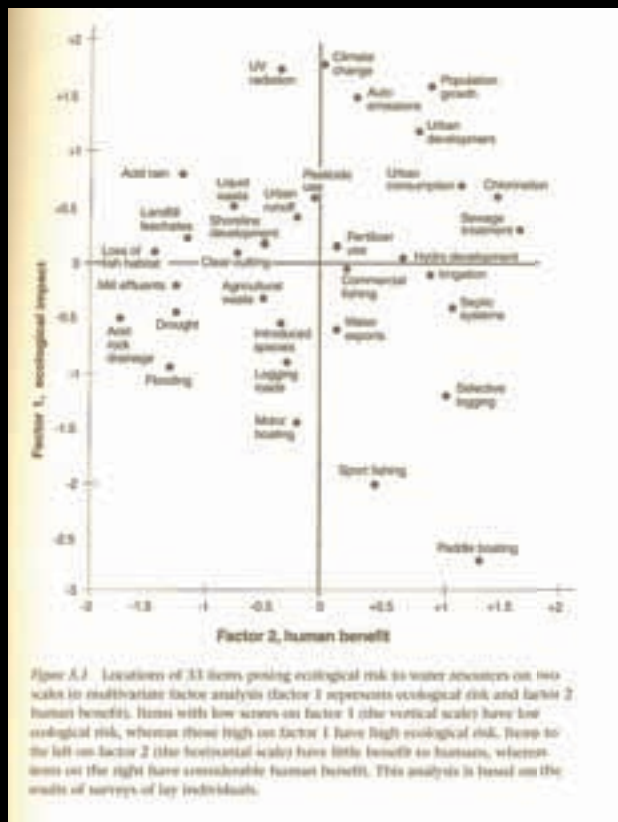
Food Group	B.C. Consumption Million Kg's	B.C. Production Million Kg's	% Self-Reliant
Dairy	1080	607	57%
Meat & Alternatives ¹	467	298	64%
Vegetables - Grown in B.C.	764	331	43%
Fruit - Grown in B.C.	372	273	156%
Grain for Food	335	43	14%
Total - Grown in B.C.	2798	1562	56%
Fruit - Not Grown in B.C.	330		
Vegetables - Not Grown in B.C.	1		
Sugar	136		
Total - B.C.	3245	1562	48%



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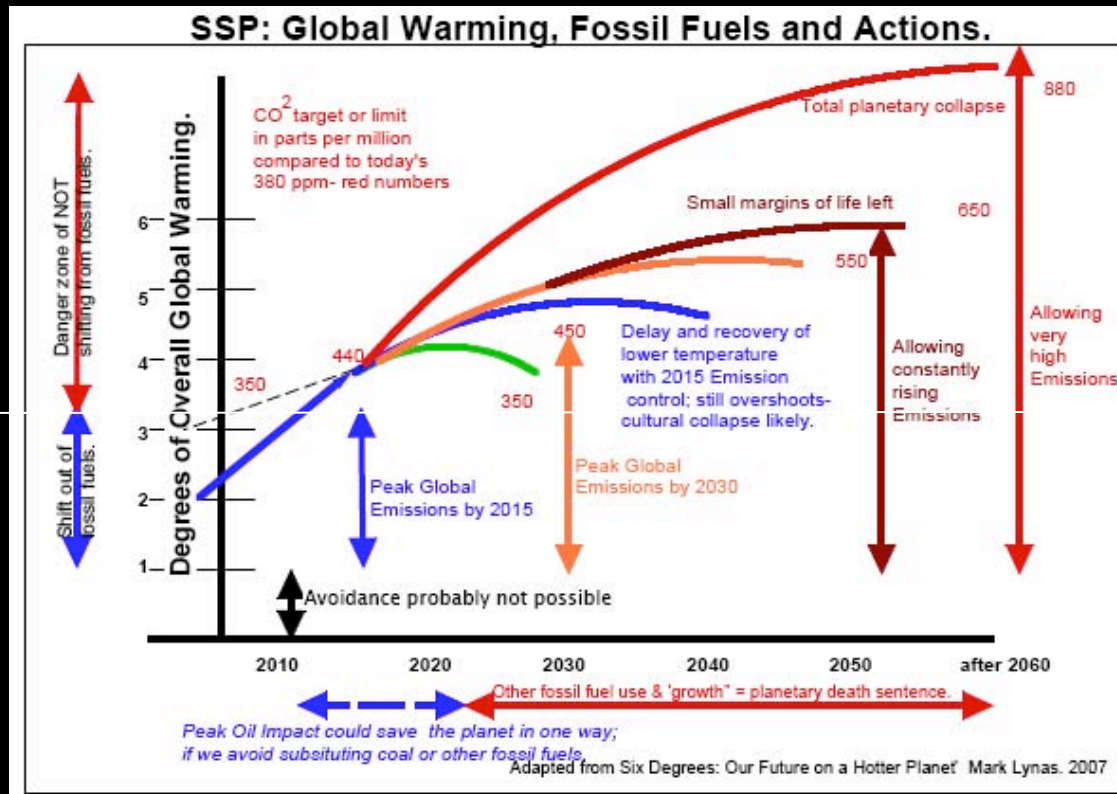
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How Warm Is My Planet?

And what are you doing to heat it?

Fossil Fuels & Heat- point of no return



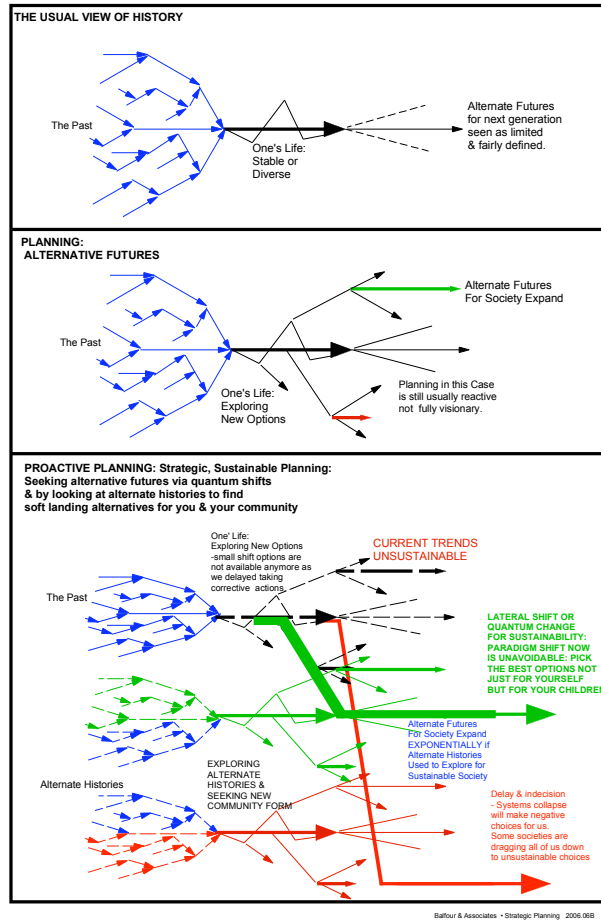
Revised
safety
limit
2008



Your Tasks:

Radical lateral re-thinking: -a necessity.Or failure

ILLUSTRATING QUANTUM SHIFTS IN STRATEGIC PLANNING:
YOU & YOUR PATTERN OF COMMUNITY MAKING RADICAL CHANGES IN SELF DEFENSE & TO MOVE AHEAD
SEEKING A SOFT LANDING & AVOIDING A SOCIAL/ECONOMIC/ENVIRONMENTAL COLLAPSE.



Your Choices?
I. -awareness....

We have created a
century of waste
and city engineered for
cars.

This city is not
sustainable nor
even functional for our
future....
The 21st century will be
more like the 18th
century, not the 20th.



Food Security Questions

- The one dollar lettuce which is 90 cents of transport costs is nearing an end.
- Global shifting of all 'stuff' including food from afar is to end. The port & highway infrastructure is about to become redundant.
- Green farm edges of towns are essential but also new internal green farm fingers and urban industrial downtown farming are not just good ideas but soon essential to community survival.



Peak Oil Summary

- Human habitation built in last hundred years on patterns of land use waste and high energy cost transportation will collapse, putting pressure on cities either traditional or well-designed for post oil operations.
- Immediate green fingers of food production is necessary for any post 2010 settlement; either find the farm space or move the population. There is no option.
- There is no panacea from technological rescue or any surprising new energy find to save you.
- The only recourse is conservation & a new community pattern.



Climate Human Impact Summary

- Past stability allowed for growth of human numbers, climate instability will cause a collapse of populations.
- Loss of oil/cheap energy means withdrawal from hostile deserts, cold climates is unavoidable.
- Loss of stable coastal plains & farmlands will push all of us into more marginal farm areas
- Climate extremes will focus growth by factors of ten into the 'best environments', marginalizing the new poor, the presently comfortably- well off.



Oil Wars & derivatives on top of climate change!



- compounding of emergencies increases trigger points & risks multiply.



Global warming is just as much a threat to the world dominance of the US ruling class as is losing a war in Iraq - and they know it. Those who invade countries for oil based on lies are the same people who pretend climate change isn't happening. It's the same mindset.



A Reminder: you are what you eat?

Cereal grains - 61.0 kilograms

(kg) per person

Refined sugar - 22.3 kg/person

Beef - 13.9 kg/person

Pork - 9.7 kg/person

Poultry - 13.4 kg/person

Eggs - 12.3 dozen/person

Fish - 6.5 kg/ person

Cheese - 9.9kg/ per person

Ice Cream - 5.8 litres/person

Yogurt - 4.9 litres/person

Milk - 58.7 litres/person

Table cream - 2.1 litres of table
cream/person

Fresh Fruit & Vegetables - 37.6 kg/
person

Processed Fruit & Vegetables (froz.,
cans) - 8.0 kg/person

Juice - 23 litres (half orange)/person

Oils and fats - 18.6 kg/person

Coffee - 86 litres/person

Tea -52 litres/person

Soft Drinks - 85 litres/person

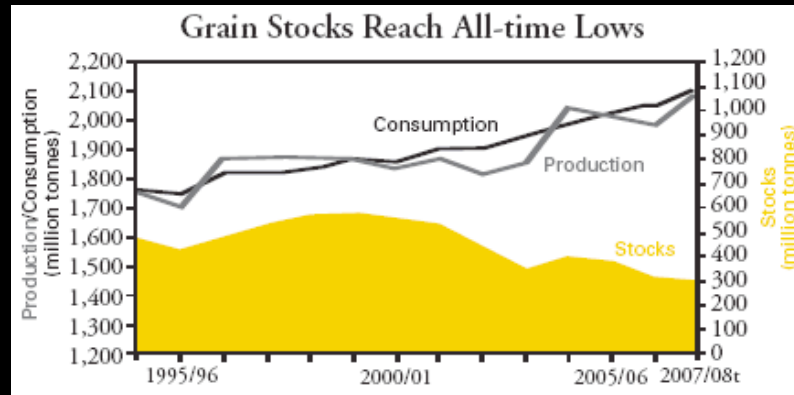
Beer - 77 litres/person (age 15+)

Wine- 13.9 litres/person (age 15+)

Spirits - 7 litres/per person (age 15+)



Agricultural Inflation



- Loss of agricultural lands, loss of coastal plains & cities
- Mining of soils cuts food production and nutrients
- Growing & migrating population demands more food
- Farmland rush will outstrip supply.
- and, Sea level rising will remove major areas round the world



SSP₅ Winnipeg

- The Winnipeg 2008 presentation is using the 2006 session only as jumping off point:
- *Strategic Sustainable Planning: as in we are not doing it yet. We do NOT have a generation to change. We are it. Radical and rapid change to the patterns of our communities will happen. Can we control this to make a better place for all, or do we suffer the consequences of rapid change with no forethought or control? We look at practical policy in A, Strategic Plan in B, and a Vision in C.
- **A. Community Triage** from 2006 only sets the stage in this presentation of 2008. The limitations of urban agriculture leads to recovering the dead zones; the urban edge policies to recover the green fingers to feed the red ones- not idealistic but practical how to make both city and country work while not destroying the latter, micro scale, edge planning and Green Urban Fingers
- **B. BC Triage**; moving to Rail, Farms & the Mountain Communities.
- **C. Canada Scale**: At a larger scale the impact of peak oil and climate change precipitating mass migration means we have to revisit macro planning; using this excuse I am revisiting the Mid Canada Corridor report of 1969 in light of mass urban triage;

*SSP: Parent's Guide to avoiding Mad Max.



Welcome to SSP sessions '08

- 2005 Vancouver Planning Commission SSP I Peak Oil Game
- 2005 Peak Oil Motion taken to GVRD, FVRD, HSRD, SCRD
- 2006 World Urban Forum: session on Agriculture & food.
- 2006 VCPC, Post Carbon & New City Institutes SSP2
- 2007 BC Agrologists Session: exposure to SSP Global Impacts
- 2007 SSP3 Nelson BC Food Security Conference
- 2008 Kwantlan College goes global on impacts exposure SSP4u.
- 2008 Pan Canada SSP: Food Security and Mass Migration SSP5



YOU are here.



Stewardship

There are lots of options
for other land uses to go
in other places, but no
place for farmland to
retreat to.

&
SWAT
teams.



Now we go
to Parts
1,2 &3.

Our farmland, our source of food needs more
advocates, defenders and stewards. You First.

