Steering the transition
preparing for peak oil, climate change and economic volatility

Dan Miner
www.beyondoilnyc.org

Left Forum
June, 2014
Do we need reform - or revolution - to fix the economic system?

It’s more complicated...
And some pieces are missing.
Economic growth as we’ve known it is already finished. We need to prepare for what’s ahead.

Conventional wisdom about the economy doesn’t acknowledge ecological and geological limits.

Global economic expansion was driven by expanding supplies of cheap fossil fuels, and will go into reverse when those fuel supplies decline.

We need a post-growth economy that works for everyone, and the planet’s environmental limits.
In the last century: 1.5F degrees of warming

By 2100: up to 7 or 9F warming
At the beginning of the oil age, it was easy to find and extract oil.
What’s left is hard, expensive, and increasingly dangerous to get.
Shell Oil geologist M. King Hubbert predicted in 1956 that US oil production would peak around 1970.
Can’t we just find some more?

Discoveries of “easy oil” peaked in the 1960s
World oil production by type in the New Policies Scenario

- Unconventional oil
- Natural gas liquids
- Crude oil: fields yet to be found
- Crude oil: fields yet to be developed
- Crude oil: currently producing fields
Potential impacts of fuel price and supply volatility.

- Severe energy price spikes and falls, like 2008
- Fuel shortages, like 1970s
- Higher transportation costs
- Higher heating costs
- Rising food prices - or food shortages
- Recession gets worse, and tax revenues fall further
- More poverty and crime
- More demand for mass transit and social services
50 STATES | 50 PLANS | 100% RENEWABLE ENERGY BENEFITS

Hover over state to see future projected energy mix.
Click on state to launch interactive experience showcasing benefits.

Click your state to see the benefits of going 100% renewable.

Map Key:
- Res. Roof PV System
- Comm./Govt. RoofPV System
- Solar PV Plant
- Wave Device
- CSP Plant
- Geothermal
- Onshore Wind
- Offshore Wind
- Hydroelectric
- Tidal Turbine
“Another world is possible.”

More sustainable practices and models exist. Spread them, encourage creativity, and experiment.

- use less energy
- reduce waste and pollution
- increase local resilience to disruptions
- create local jobs less tied to corporate economy
- build community connections
“You never want a serious crisis to go to waste. And what I mean by that is an opportunity to do things you think you could not do before.”
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
The Transition Movement

- Life with lower energy consumption is inevitable, and it’s better to plan for it than be taken by surprise.
- Our communities lack the resilience that will enable us to cope with energy and economic shocks.
- We have to act collectively and we have to act now.
- We must use all our skill to get down from the peak.
- Unleash our collective intelligence to proactively design our energy descent.
- We can build new ways of living that are more connected and that recognize planetary limits.
THE POWER OF JUST DOING STUFF

How Local Action Can Change the World

ROB HOPKINS

Founder of the Transition Movement
Steps in Transition organizing

- Set up a steering group
- Raise awareness of links between climate change, resource depletion and economy
- Develop visible practical projects
- Promote learning of basic DIY skills
- Build resilience at community level
- Develop local energy descent plans
- No prescriptions – an open ended experiment
- Open to new narratives and positive visioning
INTRODUCTION: PREPARING FOR PEAK OIL

Every day, businesses, government agencies and households around the world plan and make decisions based on the assumption that oil and natural gas will remain plentiful and affordable. In the past few years, powerful evidence has emerged that casts doubt on that assumption and suggests that global production of both oil and natural gas is likely to reach its historic peak soon. This phenomenon is referred to as
Sustainable Energy Independence for New York City

Preparing for fuel volatility and depletion, slowing climate change, and accelerating PlaNYC

Dan Miner
Sierra Club NYC Group
www.beyondoilnyc.org
Existing programs heading in the right direction

- Emergency preparedness programs
- Post-Hurricane Sandy resilience initiatives
- Mass transit initiatives
- Local economic development
- Urban and regional food production
- Energy conservation for buildings
Transportation

bicycles & electric vehicles
maintain & expand local rail & bus services
rebuild US rail system

Relocalize to reduce transportation needs

revitalize existing city and town centers
minimize urban sprawl
Build on NYC transit resources
...but prepare to cut transport demand fast

Reports:
Parsons Brinkerhoff and International Energy Agency

Set up rapid responses in advance:

- Car pooling programs and lanes
- Driving restrictions for odd / even license plates
- Lower speed limits
- Make public transit free
- Encourage telecommuting
- Shorter workweeks, longer days
Longer term: Electric light rail within cities

Light rail systems now expanding in Dallas, Portland, Minneapolis, San Diego, St. Louis, Denver, Houston, LA, Charlotte, Seattle…

NYC had trolleys before… we can bring them back.
Move shipping from truck to grid-powered rail

Nearly 99% of goods arrive in City by truck.

Railroads: 8 times more energy efficient than trucks.

Electric trains even cheaper to operate: can carry more, accelerate and break faster, no delays for refueling.

Combine electric rail and trucks for short hauls
Local economic development

what local needs can be served by local entrepreneurs and cooperatives

what industrial & manufacturing sectors can be profitable in NYC & NYS
Grow more food in NYC and New York State

- Food in US travels 1,500 – 2,500 miles
- Energy inputs: fertilizers, irrigation, processing
- CSAs, farmer’s markets, & community gardens
- Encourage new farmers
- Improve regional distribution
- Cut and bag facilities for produce
More gardening in cities and suburbs

• Gardening in cities and suburbs was common during both World Wars.

• At one point Victory Gardens produced roughly 40% of US vegetables.

• NYC has about 50,000 acres of yard space.
Energy conservation

• Con Edison and NYSERDA programs

• Before you get rooftop solar, get a full building energy audit and boiler tune up
The most important thing: raise public awareness

Now that you know, what will you do?

How does this align with other progressive agendas?

How can we prepare together for crisis and opportunity?
Thanks for coming!

For more information visit
www.beyondoilnyc.org

Contact beyondoilnyc@yahoo.com