The Case for Economic Localization: Responding to Global Threats through Local Action

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The Community Solution
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A Crumbling Paradigm

- Industrial economic globalization:
  - Has increased global inequity to its highest point in history.
  - Has accelerated the destruction of global ecosystems.
  - While dramatically increasing consumption, has not increased levels of well-being and happiness accordingly.
  - Is dependent upon cheap, abundant fossil fuel energy which is becoming scarce and expensive.
  - Has an alternative!
Global Inequity

Distribution of world GDP, 1989
(per cent of total, with quintiles of population ranked by income)

- Richest 20%: 82.7%
- Second 20%: 11.7%
- Third 20%: 2.3%
- Fourth 20%: 1.9%
- Poorest 20%: 1.4%

Each horizontal band represents an equal fifth of the world’s people.

Inequity Accelerating

<table>
<thead>
<tr>
<th>Year</th>
<th>Top 20%</th>
<th>Middle 60%</th>
<th>Bottom 20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>70.2</td>
<td>27.5</td>
<td>2.3</td>
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<tr>
<td>1970</td>
<td>73.9</td>
<td>23.6</td>
<td>2.3</td>
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<tr>
<td>1980</td>
<td>76.3</td>
<td>22.0</td>
<td>1.7</td>
</tr>
<tr>
<td>1989</td>
<td>82.7</td>
<td>15.9</td>
<td>1.4</td>
</tr>
<tr>
<td>1999</td>
<td>89.0</td>
<td>9.8</td>
<td>1.2</td>
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Declining Living Planet Index
Earth Crisis

- In the last 50 years we’ve changed the ecosystem more than any other period in history.
- More land was converted to agriculture in the year 1945 than in the 18th and 19th centuries combined.
- Humans have increased the species extinction rate by 50 – 1,000 times.
- In 2002 alone, natural capital was overdrawn by 23%
- 2.4% of total forests were deforested in the 1990s, we now deforest at about 1% per year
- 40% of the global population suffers from water shortages
- 3/4 of fishery stock is exploited
- 25% of coral reefs and 35% of mangrove forests are gone
Rising Global CO2 Emissions

- Atmospheric CO₂ Concentrations
- Global Mean Temperature (relative to 1960-1990 average)
reduce the resilience of the global community. With every nation dealing with local emergencies, it would be more difficult to mobilize resources to aid victims in other areas, and there would be fewer resources to mobilize.

Municipalities around the world would struggle under the burden of greatly increased demands on funds to maintain and repair basic infrastructure. Forget about safety nets—FEMA and its ilk would be bankrupt. In the world’s tightly coupled markets, financial tumult would surge through the system, leaving banks and corporations insolvent. Financial panics, largely absent for more than 70 years, would return with a vengeance.

Here at home, a flickering climate would impose an enormous tax on every individual and business. Property values in most places would plummet as boats disappeared and costs of insurance and maintenance soared. The upper-middle-class American family, today so well protected against external shocks, would find its layers of insulation gradually stripped away as fuel, food, jobs, and social order become less certain. Katrina’s aftermath exposed how quickly extreme weather can reduce an orderly society to dysfunction.

Some of the calamities that may happen—droughts that last more than a century, an advance of a hectic ice sheet toward, incessant and epic storms—simply overwhelm the imagination when we try to envision them in a world of six billion people depending on an ex-
Income vs. Happiness – World
Income vs. Happiness – U.S.

Figure 8–1. Average Income and Happiness in the United States, 1957–2002

Source: Myers
Energy Use and Well-Being

- According to the UN’s Human Development Index, a decent quality of life is achievable with 50 – 70 GJ per capita energy consumption.

- Only marginal gains in these indicators occur if per capita energy consumption increases to 110 GJ.

- Affluent countries consuming in excess of 300 GJ per capita and world’s poorest use less than 30 GJ.
GDP vs. GPI

USA Genuine Progress Indicator

![Graph showing the comparison between GDP and GPI from 1950 to 2000. The GPI line is generally lower than the GDP line, indicating a difference in economic indicators.](image-url)
Era of Abundant Fossil Fuels
World Energy Use by Source

- 36.3% Petroleum
- 25.8% Natural Gas
- 23.9% Coal
- 6.7% Hydroelectric
- 6.6% Nuclear
- 0.8% Other*

* Includes geothermal, solar, and wind power.
Source: Energy Information Administration, 2001 data.
U.S. Oil Production Peak

[Graph showing U.S. oil production with key years and production levels indicated.]
Discovery / Consumption Gap

- Peak Discovery

Discovery:
- Green bars

Consumption:
- Purple line

Billions of Barrels/Year

Years:
- 1930 to 2030

Ratio: 5/1
Recent Comments

- “Oil production is **in decline in 33 of the 48 major oil producing countries**.” Chevron-Texaco.
- “The world **lacks the means to produce enough oil to meet rising projections for demand** for fuel,” according to Cristophe de Margerie, head of exploration for Total.” “Numbers like 120 million barrels per day will never be reached, never.”
- Chief economist of China’s state oil company said that he expects **global oil production to peak at 94-100 mb/day during the next five years**.
- Victor Khristenko, Russia’s energy minister: “One can say with certainty that **the era of cheap hydrocarbons is over**.”
- Bill Clinton: “We may be at a point of peak oil production. **You may see $100 a barrel oil in the next two or three years**.”
Climate Change Challenge

- Two degrees Celsius (2°C) is the threshold of severe danger with climate change
  - Increasing water shortages by 2 billion people
  - Rainforest and biodiversity collapse
  - Forests and soils become sources of CO2 release instead of sinks
  - Significant risk of loss of the Greenland ice sheet

- The 2°C threshold will be reached at burning 400 billion tons of carbon (BTC), yet we have:
  - 700 BTC of oil
  - 500 BTC of gas
  - 3,500 BTC of coal
Globalization Conclusion

- Industrial economic globalization, dependent upon cheap, abundant fossil fuels, is consuming resources at an unsustainable rate, degrading global ecosystems to the point of climate chaos, widening the gap between rich and poor, and is failing in its own goals of human development and well-being.

- We need an alternative.
Economic Localization

- Helena Norberg-Hodge: “The essence of localisation is to enable communities around the world to diversify their economies so as to provide for as many of their needs as possible from relatively close to home…this does not mean eliminating trade altogether, as some critics like to suggest. It is about finding a more secure and sustainable balance between trade and local production.”

- Michael Shuman: “Community self-reliance suggests personal responsibility, respect for others, and harmony with nature…addition of the word “community” underscores that the ultimate objective is a social and caring one.”
Localization and Sustainability

Paul Ekins: “By producing what we consume and consuming what we produce, rather than doing either through exchange, by definition we keep the externalities, positive and negative, for ourselves. The justification for doing so is clear: we will enjoy the positive externalities, rather than giving them away, and at the same time will be responsible ourselves for the negative externalities.”
Depletion Driven Decentralism

- Physically → Economic and survival functions
  - Food production, processing, distribution
  - Energy production
  - Water / Sewage treatment
  - Clothing, tools, machines, etc.

- Socially / Culturally → Support and Quality of Life
  - Entertainment
  - Cultural goods & services
  - Relationships / Interdependencies
  - Education and transmission of skills/stories
Localization Movements

- Post Carbon Relocalization Network – “Outposts”
  - 148 groups in 12 countries
  - Willits, California
- “Transition Towns”
  - 13 towns and cities across the U.K.
  - Totnes, Devon, U.K.
  - Kinsale, Ireland
- Community Initiatives (Ballard, WA; Tompkins County, NY)
- Business Alliance for Local Living Economies (BALLE)
- Bloomington Activities
- A National Example
Willits Economic Localization (WELL)

- Food study: 13,500 population could be fed on ~ 1,800 acres, with 225 full time farmers
Transition Town Totnes

- Exploring how to prepare for a carbon constrained, energy lean world

Activities:
- Oral history project
- Working with local businesses on risk management
- Developed a local food directory
- Started a renewable energy supply company
- Nut tree plantings on “Seedy Sunday”
- Starting a local currency pilot project
Kinsale, Ireland

- Developed an “Energy Descent Plan” called Kinsale 2021, adopted by the local government

- Other Projects:
  - Food – Including the "Roving Community Garden", and proposal to establish the first Community Composting scheme
  - Energy – This group is looking at a pilot project for energy audits for a domestic situation and a business (a hotel or a municipal building)
  - Transport – Investigating pedestrianizing part of the town, and cycle repair shop
Sustainable Ballard

- A Blueprint for EveryTown USA

- Community self-reliance and sustainability is good foreign policy implemented locally. Originally organized around the idea of Ballard becoming the first US town to become energy interdependent.

- Organized around guilds: Art, Craft and Design; Community & Economy; Environment, Waste and Water; Food; Health & Medicine; Home Energy & Conservation, Transportation; Urban Planning & Building Design
A research effort developed to create an emergency plan for relocalizing the production and distribution of essential goods and services in the county.

Sustainable Thompkins
- Focused Study Circles and public Sustainability Salons
- Group Topics: Sustainable Regional Economy, Renewable Energy & Responsible Construction, Infrastructure Design, System for Community Well Being, Moving Toward a Sustainable Culture
Business Alliance for Local Living Economies

- BALLE is an international alliance of independently operated local business networks
- 50 community and statewide networks across North America with 15,000 business members overall
- “Local First” campaigns
- Support the growth and development of community-based business
- Advocate public policies that strengthen independent local businesses and farms, promote economic equity, and protect the environment
Living Economy Principles

- Produce and exchange locally as many products needed by their citizens as they reasonably can, while reaching out to other communities to trade in those products they cannot reasonably produce at home.

- Public policies support decentralized ownership of businesses and farms, fair wages, taxes, and budget allocations, trade policies benefiting local economies, and stewardship of the natural environment.

- Investors value businesses that are community stewards and as such accept a "living return" on their financial investments rather than a maximum return, recognizing the value derived from enjoying a healthy and vibrant community and sustainable global economy.

- Living economy businesses are primarily independent and locally owned, and value the needs and interests of all stakeholders, while building long-term profitability.
Bloomington Activities

- Passed a peak oil resolution in July 2006 (4 communities have done so)
- Sustainability Commission developing an index of sustainability
- Sustainability and Environmental Commission working on climate change contribution and responses
- Mayor and Council forming a Peak Oil Task Force
- Alliance for a Post Petroleum Local Economy (APPLE) – Bloomington formed as part of the Post Carbon Relocalization Network
- Local Growers Guild
- Bloomingpeak Educational Activities
Local and Less

- Can we “localize” without reducing consumption? Which should we do first?
- Plan C: Curtailment & Community
  - Focusing on individual and community-level actions
- “Sufficiency” principle
Other Plans

PLAN A

PLAN B

NEW!
NEW!
NEW!

NEW!
NEW!
Other Plans

PLAN D

[Image of a skeleton standing next to a cube]
Cuba’s Plan C

Cuba and the U.S. Today

<table>
<thead>
<tr>
<th>Category</th>
<th>Cuba</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers per 100 Students</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Doctors per 1000 People</td>
<td>57</td>
<td>28</td>
</tr>
<tr>
<td>Average Life Span (years)</td>
<td>77.4</td>
<td>77.1</td>
</tr>
</tbody>
</table>
Cuba: A National Grassroots Movement

- Community gardens – 50% of Havana’s vegetables come from within city limits

- Decentralized energy generation throughout the country

- Community-based energy efficiency programs

- WWF’s “Living Planet Report:” Cuba the only country in the world to meet requirements for sustainable development (low resource use and high living standards)