The Oil Drum: Campfire

Discussions about Energy and Our Future

The Promise of Decentralization, Localization, and Scale-Free Self-Sufficiency

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Many, if not most of our current economic and political structures developed in an environment of expanding, readily available, comparatively inexpensive, and high-quality energy supplies. While there is certainly debate on this point, it seems likely that these same economic and political structures will fare poorly in an environment of continually contracting, more expensive, and lower-quality energy supplies. How can our political and social structures change to continue to meet the needs of humanity (and the limits of our planet)? Are there any alternative structures that could allow us to maintain, even dramatically improve our collective quality of life despite an ongoing decline in the quality and availability of energy? Specifically, what role will decentralized and localized production play in our future political system and economy (and what role are they already playing, especially in less developed countries)? Are decentralization and localization realistically implementable solutions? That's the general topic for tonight's Campfire discussion—below the fold, I will outline some possibilities and provide additional questions for discussion.

Below, I outline a number of topics for discussion. All of them relate to the potential to change our social, economic, and political structures in ways that may allow humanity to maintain and improve quality of life despite continually declining availability, affordability, and quality of global energy supplies. In short, they are all premised around the a core vision: that we can re-tool our civilization to eliminate the structural requirement for growth and to focus on providing true quality of life with far less energy use by building scale-free self-sufficiency and resiliency. Many people will label this as pie-in-the-sky fantasy—my hope is that this brief list of discussion questions will spur a discussion on both the potential and pitfalls of such a structural approach to our civilization's energy crisis. In other words, rather than try to find a way to reverse energy descent, can we and should we instead find a way to improve our lives despite energy descent?

1. Scale-Free Self-Sufficiency. (Further Reading) If we don't move toward true self-sufficiency, our civilization will continue to demand unsustainable levels of growth (see my essay on The Problem of Growth for a discussion of how peer-polity competition demands growth in the absence of self-sufficiency). If we hope to prosper during energy descent, we need first to control growth, and second to develop resilient access to food, water, community, and information. It may be possible for us all to live in totally isolated and self-sufficient compounds, but who would want to? I think the solution to this dilemma is "scale-free self-sufficiency," or sourcing our needs in as localized a manner as possible. For example, grow some food, get as much of the rest as possible from as local as possible. Can this really serve as the basis for prospering during energy descent? If not, how should we structure our economy so as to allow us to do so?

2. 100,000 garages. (Further Reading) It's tempting to think that the massively complex and

complicated production of our industrial economy cannot be replicated on the hamlet scale, and at a minimum keeps us dependent on at least some centralized and distant manufacturing and resource supply chains. But what could we produce with a highly networked economy of small, localized manufacturers? What can't be made in our collective garages with proper planning and information sharing?

3. Open-source IT and "franchise handbooks" for a sustainable civilization. (Further Reading) Almost all research, case studies, and information developed by our civilization's considerable scientific and information processing capabilities goes to developing larger, more "efficient," more centralized solutions. What is the potential to develop sustainable communities by instead focusing our collective information processing capabilities on establishing, improving, and building locally-suitable variations on best practices for small, local self-sufficiency. If we put the kind of effort into developing sustainable, resilient, low-input, and highly sustainable garden systems that we currently put into defense R&D, what kind of results are possible? Can such an effort be organized from the ground-up (like open-source software often is)?

4. Designing for quality of life defined by experiential and social wealth, not material wealth. (Further Reading) We often define "quality of life" in terms of material consumption—something that it seems fairly clear will decline due to energy descent. But is material consumption really what gives our lives quality? Our current system is geared toward maximizing production and consumption—how can it be redesigned to instead maximize our health, our happiness, the vibrancy of our communities, and other sources of true "quality" of life?

5. State backlash and the "Diagonal" economy. (Further Reading) Is any attempt to decentralize and localize our civilization doomed to fall victim to either a state backlash (if there is enough energy surplus for a powerful, centralized state), or to turn into a dystopia of local strong-men controlling the peasantry? What if the fabric of the localized economy does not try to supplant or directly confront the current structure, but rather produces a "diagonal," an alternative and coexisting structure that gradually grows to replace the decaying system?

6. On a more direct note, what successes or failures have YOU experienced with decentralization, localization, and scale-free self-sufficiency as a means to weather energy descent? What examples would you point other to (either as success story or cautionary failure)? What is your opinion on whether we should attempt a "structural" solution to energy descent—and if not, what do you propose?