Outpost Manual

A Post Carbon Guide to Low Energy Living and Global Relocalization

by

Post Carbon Institute

Preview Version (0.9)
5th January 2005

Request for Comments

http://beta.postcarbon.org

to be published in
Fall/Autumn 2005 by
New Society Publishers,
Gabriola Island, BC Canada

Post Carbon Institute

This Preview version of Post Carbon Institute's Outpost Manual is a Request For Comment (RFC) from people who have expressed interest in the Outpost Program. We would like you to comment, suggest, critique, and add to the ideas we are proposing around: Global Relocalization; how to set up a community based Outposts; and the Scripts to begin to develop your community program. It is still clearly a draft document. The final version, which will be published by New Society Publishers in Autumn/Fall this year (2005), will be longer (and shorter in places) than this draft, and we intend to examine all your comments very carefully and take them into account. Please add your comments to our website at http://beta.postcarbon.org.

Please submit feedback on the style and content of the manual by January 18, 2005 at: http://beta.postcarbon.org. We realize that this is very short notice, but it is dictated by the needs and schedules of the book publishing world. We need to turn in a completed manuscript on February 1, 2005.

Coinciding with the preview release of the manual is the beginning of a four-month Beta Program for community groups that are preparing for an energy constrained future. Already ten groups have agreed to participate. We have a number of outpost coordinators, and two staff, who will assist participants in getting projects started quickly.

Beta participants will provide feedback throughout and at the end of the beta period. The feedback and insights from the Beta Program will be used to improve the Outpost program, the Relocalization Project database, and subsequent editions of the book. If you have not already done so, contact Celine at outposts@postcarbon.org to register your group for the Beta Program. Beta program web site: http://beta.postcarbon.org.

Thank you for your interest in Post Carbon Institute and setting up a community based Outpost to begin experiments in Low Energy Living.

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Acknowledgements

This document is designed to help ease the difficult but inevtiable transition to the Post Carbon World. The information, ideas, and concepts herein have come from many sources over many years. It is important that we acknowledge the people whose unpaid work has been instrumental in the development of this guide.

Thanks to Richard Heinberg for his ideas and encouragement and suggestions through the past two years and for subtitling his new book, Options and Actions for a Post Carbon World, as well as for his input on this document. Thanks to Marilyn Bardet and the Benicia-Vallejo Outpost for being the first experiment. Thanks to Eric Eimen for creating and sustaining the longest active Outpost - in Los Angeles county of all places, sharing materials, and hosting events. Thanks to all of the folks in the Bay Area Peak Oil group and Post Carbon San Francisco for their part in helping us understand what works and what does not at a metropolitian level.

Thanks to all those that contributed comments on previous versions of this doucment.

Thanks as well to the legion of volunteers that have helped both Post Carbon Institute and Global Public Media, and especially Jake Gordon of Britain who developed the new Global Public Media website. These splendid efforts have enabled us to have the time to focus on developing the Outpost program.

Finallny, thanks to our members, who have pledged to help underwrite our efforts, and to the legions of people that purchase books and DVDs from our online store, and to the people that write us appreciative notes.

Your support and help is invaluable financially, spiritually and emotionally.

Foreword

Under capitalism, man exploits man. Under communism, it's just the opposite.
John Kenneth Galbraith

The whole history of civilization is strewn with creeds and institutions which were invaluable at first, and deadly afterwards.
Walter Bagehot

A criminal is a person with predatory instincts without sufficient capital to form a corporation.
Howard Scott

Climate change and fossil-fuel depletion numbers seem to tell an incredible story, and they tell it with more power and resonance with every passing day. We assume that you believe and accept these concepts, as we do. They tell us to use much less; much less of everything, but particularly, much less energy, what Richard Heinberg calls "powerdown." Given our current knowledge of climate change and hydrocarbon reserves, the best policy in an ideal world would be to manage without hydrocarbons at all, to create in effect a "post-carbon" world.

Unfortunately, thanks to the laws of physics and chemistry, hydrocarbons are the most efficient and compact way that exists to store energy. In small quantities they are more or less manageable; in large quantities they are plainly a catastrophe. In recognition that what we need desperately are workable, small-scale operations that citizens and communities can act on, some renewable hydrocarbons will be necessary. I suspect that as long as there is humanity on the planet, they will be using some hydrocarbons. We should, nevertheless, aim for post-carbon energy systems—no hydrocarbon use wherever possible, and renewable hydrocarbons where absolutely necessary, especially if it helps make a transition to post-carbon systems.

A post-carbon world will be an ideological paradigm wrench rather than a shift, and all of us will therefore need to greatly enhance our critical thinking skills. Learn as much about global and local history as you can, and not just the official version, which contains large amounts of propaganda and is designed to be mythical in the pejorative sense. Learn how your country has used military force, violence, and genocide to achieve power. This applies to all North American, European, and some Asian countries, not just the United States and Britain.

Learn about the dreadful history of corporate globalization (essentially a final amalgam of empire and capitalism) and how, like other empires before it, it cannot operate without high levels of coercion and violence. Discuss new political systems that are not based on capitalism or communism, or any of the post-Enlightenment systems of materialism, all of which require endless growth. Engaged citizens will need to form their own think tanks and action committees to examine what each locale and community might do on its own and with others. There will need to be a harsh examination of the roots and

development of liberalism and libertarianism, and of the contradictions between freedom, equality, and democracy. Above all, get engaged and active.

Since we aim to be practical, in the earlier stages, the tasks and actions will be more modest, but in the longer run, the goal is to enact Global Relocalization – relocalizing life as much as possible in as many places as possible, in an integrated way. This will eventually mean producing locally as many of our daily needs as possible. This is no small undertaking!

As such, Post Carbon Institute is a propositional not a protest organization. We see more value in building a movement than protesting what we do not like. We therefore eschew civil disobedience for corporate disobedience – that is, producing locally so we can stop spending our money on corporate goods (which in most cases would be more aptly referred to as 'bads' than goods). The Community groups or Outposts[1] advocated in this book are a vital part of experimenting with these ideas and contributing local data that other communities may learn from.

[1] We use the term outpost to mean "a settlement on the frontier of civilization [syn: frontier settlement]" (from WordNet Princeton University) in the sense that our planned activities are on the edge of industrial civilization and hopefully providing a bridge to a low-energy civilization consisting of millions of interdependent sustainable communities.

Chapter 1. Oil Peak and the Perfect Storm

Our ignorance is not so vast as our failure to use what we know.
Marion King Hubbert

Your home is regarded as a model home, your life as a model life. But all this splendor, and you along with it... it's just as though it were built upon a shifting quagmire. A moment may come, a word can be spoken, and both you and all this splendor will collapse.
Henrik Ibsen

In 1956, a prominent petroleum geologist M. King Hubbert stood behind the podium prepared to present the results of his groundbreaking research on future United States oil production at the American Petroleum Institute's annual conference. Five minutes earlier, he had just got off the phone with his employers at the Shell Oil head office who were trying to convince him to withdraw his prediction. Hubbert, who had an extremely combative personality, went ahead with his announcement, predicting that U.S. oil extraction would peak in the early seventies and go into permanent decline.

At the time, this prediction seemed ludicrous. The U.S. was the largest oil producer and exporter in the world, as well as largest creditor nation and manufacturer of tools. Hence, many scoffed at his prediction. In the years leading up to 1970, Hubbert's once stellar reputation steadily deteriorated. In 1970, energy traders loudly proclaimed that U.S. production was greater than ever, thinking they were further dismissing Hubbert's theory. As it turned out, U.S. oil production peaked in 1970 and began a permanent decline. The negative aspects of U.S. oil peak manifested in the country's vulnerability to the oil shocks of the 1970s and has increased its need for control of foreign oil and now natural gas.

Several relevant lessons can be inferred from Hubbert's story in the context of modern industrial history. First, the peaking of oil production can be predicted for an aggregation of fields. Second, people tend to suppress, discredit, and ridicule predictions they find unpleasant; this is exceedingly common in the ecological realm. Third, those who control production do not want others to understand the nature of supply.

Just as United States oil production peaked in the early seventies, global oil extraction is reaching its limits, will soon peak, and then decline inexorably. [reference Hubbert] Many prominent petroleum engineers and energy analysts believe the peak will occur this decade. The Association for the Study of Peak Oil and Gas was founded by Colin Campbell in 2000; they have been compiling extraction data for every country and now predict global extraction peak to be in the next several years; their best estimate being 2006. The outlying predictions for a mid-century peak from the U.S.G.S. are generally considered to be based on poor scientific methods, and an unlimited belief in 'economic substitution.'

Disagreements not withstanding, global oil extraction will soon peak and begin its decline. Such is the inevitable course for a finite resource on a finite planet. Only the timing is still in question. Given the preponderance of prominent and credible experts that are predicting a peak within the next ten years and the problems with outlying predictions, a relatively high likelihood must be attributed to the possibility of a near term peak. Because revamping our cities and infrastructure will take decades, the most conservative and sensible action would be to begin rebuilding now while fossil energy is still relatively inexpensive.

The inevitable decline of global oil extraction will debilitate the global economic system upon which most of us rely upon for much of our daily sustenance, be it food, electricity, gasoline (petrol), credit, and plastics. Yet it is just one of the potential levers of change. Weather extremes could easily push the post-peak North American natural gas supply into the red. The UK will be a permanent net importer of oil and gas well before 2010.

Furthermore, population is growing far beyond the carrying capacity of the planet (with or without fossil fuels). After millennia of slow steady growth to just over 1 Billion in 1850, world population has undergone exponential growth, more than quintupling up to 6.1 Billion by 2000. Two of the most important factors that spurred and enabled this growth spurt was the discovery and widespread use of oil as fuel for the internal combustion engine and feed stock for industrial processes as well as the use of natural gas for ammonia-based fertilizer production. Although the rate of population growth is lessening paradoxically as populations become more affluent (and more energy intensive), the number of people on the planet is still growing 1.2% per year and is project to be over 9 Billion by 2050 [2004 World Population Data Sheet of the Population Reference Bureau, http://www.prb.org]. Edward O. Wilson laments

> "When Homo sapiens passed the six-billion mark we had already exceeded by perhaps as much as 100 times the biomass of any large animal species that ever existed on the land. We and the rest of life cannot afford another 100 years like that."

The growing demands upon the natural world by increasing population, the extraction and burning of fossil fuels, and other human activities are stressing ecosystems and the ecosystem services upon which life depends to or near the point of collapse. After decades of obfuscation by industry-funded pundits, the populace is beginning to become aware of the growing threat of disruptive climate change due to greenhouse gas emissions. Meanwhile, pollution is rapidly pushing broad swaths of sensitive species such as amphibians towards or past the brink of extinction in the fastest species die-off since the Dinosaur era. Fossil water is being relied upon to augment diminishing supplies of fresh clean water and to meet the ever increasing water demands of wasteful and growing populations; many have forecast that water will rival if not surpass oil as the basis for conflict in the 21st century. The list of disturbing ecological stresses is daunting and beyond the scope of this book.

In the face of increasing population, per capita food production is declining despite increased use of (oil-based) pesticides and (natural gas-based) fertilizers and irrigation with water pumped from fossil aquifers. With water scarcity, top soil erosion, and salinity due to over-irrigation, food production is no longer able to keep up with the burgeoning population.

Furthermore, concern is mounting about the gargantuan U.S. federal deficit, trade imbalances, and the declining U.S. dollar, a faith-based currency since 1971 when Nixon took the U.S. off the gold standard. Because oil and grain exports are principally denominated in U.S. dollars (resulting in "dollar hegemony") and many foreigners have significant assets invested in the U.S. economy, there certainly is a case to be made for ongoing support of the currency and therefore the U.S. economy. Nevertheless, some top financial advisors believe "Economic Armageddon" is very real scenario, and almost unavoidable. [http://business.bostonherald.com/businessNews/view.bg?articleid=55356]

The confluence of these factors is brewing up a "perfect storm." When any one factor passes its tipping point, it may trigger or exacerbate the others; for example, the "Economic Armageddon" scenario could reduce oil supply even before the peak occurs, while oil peak may trigger "Economic Armageddon" itself. Regardless of how the Economic Armageddon scenario plays out, the huge U.S. deficits will certainly inhibit the U.S. capabilities for investing in a sustainable future (e.g., renewable energy, organic food production, rebuilding cities for less energy).

Clearly, this perfect storm is on the horizon; weathering the storm will force industrial civilization to make profound changes to its "operating systems." In all plausible scenarios, the incredibly wasteful "American Way of Life" and the global monoculture it has spawned will soon be obsolete. The question is how much preparation will we do and how much of our society will be washed out to sea.

The historical record does not provide many hopeful examples. Many complex civilizations and empires have imploded when faced with such daunting stresses [reference J. Tainter, Ronald Wright]. In some cases, such as Easter Island, from archeological remains we can surmise the depths of the barbarity that ensued. These fallen civilizations were not as technologically savvy as we are, yet our technology seems part and parcel of most of the problems we face. Beyond technology, those with access and knowledge certainly have a greater historical perspective and, in the Internet, unprecedented capabilities for communication and information sharing.

Modern communications coupled with the widening gap between the haves and the have-nots since the 1973 [http://www.usatoday.com/news/washington/2004-08-16-income-disparity_x.htm accessed January 1st, 2005], have led more people than ever realize that the Global Economic System is actually not intended to work for them. A movement spearheaded by the International Forum for Globalization (http://www.ifg.org) and countless activists combating economic imperialism in the Southern Hemisphere is forming behind the concept that a better world is possible. [Alternatives to Economic Globalization A Better World is Possible, International Forum for Globalization, 2004]

At the same time, major world powers in the name of the so-called 'war on terror' (which looks suspiciously like a substitute for the Cold War) are waging pre-emptive wars and creating the legal infrastructure for clamping down on the rights of their citizens. The difference between draconian controls and martial law in the context of extreme resource scarcity while elites barricade themselves away from the masses and that of a better world may hinge on the extent to which we begin defining, creating, and preparing a world that we want to see, not that of eternal violence and wastage. We envision a world of sustainable communities that are locally self reliant for basic needs, with a network of supply chains for useful but less vital needs.

While even modern history provides ample examples of disastrous responses to stresses including the Irish Potato Famine, the rise of the death camps in Nazi Germany, and the starvation of North Koreans in the 1990s, we also have some informative examples such as the migration of people from the cities back to farms in the Great Depression [Overshoot: The Ecological Basis of Revolutionary Change, William R. Catton Jr., 1980] and Cuba's agricultural transformation after losing their subsidized Soviet Oil in 1991. [Sustainable Agriculture and Resistance: Transforming Food Production in Cuba, Funes et al., 2001]

Survival Options

With any impending crisis, a segment of society aware of the possibilities will begin to prepare for their own survival. This occurred en masse with the Y2K movement in many industrialized nations in the years leading up to the year 2000. With news reports in mainstream publications such as the National Geographic, Wall Street Journal, New Yorker, Barron's, BBC, and New York Times and the influx of web sites covering peak oil such as lifeaftertheoilcrash.net and peakoil.com, awareness of peak energy is beginning to rise, prompting conversations about even basic survival. In fact, there is a web site now titled survivingpeakoil.com and continuing dialogue about survival on a number of Yahoo email lists including Energy Resources, Running on Empty 2, and Energy Roundtable.

Survival during the transition from our petro-pollution global economic system into the post carbon world can be considered on various levels ranging from the survivalist go-it-alone approach, through more self-reliant communities, to elite-ruled fiefdoms, all of which do exist to some extent now. But while some families may be prepared to isolate themselves on inaccessible, remote parcels of land, this is clearly not a possible or sustainable option for most of the world's population - there simply is not enough land and intensified destruction of rainforests and watersheds will increase the stresses on essential ecological systems. Furthermore, humans are social animals and most would not enjoy the amount and breadth of work required to live as an individual survivalist, not to mention the diminished variety and diversity that accompanies such an arrangement. Thus, we believe the approach most likely to work long term and for most people will be on the community or bioregional basis.

Urgency

"We could be on the verge of seeing a collapse of 30% or 40% percent of [Saudi Oil] production. In the imminent future, and imminent means sometime in the next three to five years, which also, you know, it could be tomorrow."
Matt Simmons, Chairman of Simmons & Company International
24 February 2004. Global Public Media.

On October 25, 2004, crude oil prices which reached a peak of $55.67 a barrel. Rapid demand growth in China, India and the United States forced the Organization of the Petroleum Exporting Countries (OPEC) to pump at their highest level in 25 years. Higher energy prices can hurt consumer spending and corporate profits.

The "official explanation" (from mainstream news media) is that concerns over supply and security for Middle East and African producers helped drive crude prices higher; the media was awash with reports on "terrorism premium" and various supply disruptions due to sabotage and extreme weather events. A number of mainstream print media including the New York Times, National Geographic, Barron's, Wall Street Journal and others, reported that some experts believe that the strong impact of minor supply disruptions on oil prices is due to global oil peak and other that experts believe that "peak oil" is nonsense.
Although crude prices dropped back 22 percent in the last two months of 2004 (supposedly "on signals that higher fuel costs were beginning to weigh on economic growth" though it is not obvious how such signals might cause the drop,[2] the average U.S. crude price was 34 percent higher in 2004.

Whether one believes peak oil had an impact on prices or not, oil price fluctuations in 2004 show that oil prices are beyond control of The Market, technology, and OPEC, and those rapid fluctuations occur when demand approaches supply. As the Chinese economy barrels on 8-10% growth and other countries such as the U.S. and India, the demand for oil continues to rise and will certainly approach and overtake supply at some point, the instability in oil prices will certainly be exacerbated when production goes into demand.

It is urgent that we act now. Yet how many times have we heard and ignored such urgent calls? Everything still seems to be going alright though - at least for those in control of the economy and the media. But energy peak will change that, even before climate change, which is tending to affect higher latitudes first and poor communities hardest. Energy peak will affect the heaviest energy users the most. At first they will use their control of the money system to stave off disaster, but as Britain will soon demonstrate, that will not last long. If or when the US suffers a severe enough dollar crisis, it will find itself catastrophically exposed as the world's largest energy importer. It will be completely vulnerable to the desires of the few energy exporters, many of whom have good reason to want to bring the reign of the American Empire to a swift end (though

[2] See, for example, *Stocks Slip on Day But Up for 2004*, Reuters Fri Dec 31, 2004. http://www.reuters.com/financeNewsArticle.jhtml?type=businessNews&storyID=7215920

they will obviously not say so publicly). The American military have presumably understood this. The Pentagon may not be willing to stand by as the military complex[3] is emasculated by energy and economic constrictions.

Both those living inside and outside the US should realize that if global oil peak happens within this decade, as now forecast by a growing number of energy analysts, then they must start taking measures to rebuild their own communities now. This is a quite different kind of urgency from the usual calls to save the rainforests, or the koalas, or the Yangtze, all of which are in deep trouble, but none of which clearly and directly affect most of us in the insulated, industrial world.

Another reason for urgency is that amongst the dominant forms of corporate globalization, the trend towards fewer family farms and the continuing loss of infrastructure, knowledge and wisdom about locally sustainable living gathers pace almost with each passing day. Thanks to this, there are ever fewer working examples and models that can be applied to a given locale.

Although many progressive and environmental organizations shun urgent calls for action, the latest science about the state of ecosystems and energy supply, and the degrading world political situation are "shouting" for attention and response. For industrial civilization, it appears that time has never been more of the essence. It is crucial that those who are aware both swell their ranks by actively spreading the message and begin preparing for much leaner times. The downside of further discussion and studies, of waiting for "them" to think of a new technology, of relying on corporations to provide for us and The Market to sort things out, and of closing our eyes and putting our heads in the sand is too dreadful to imagine.

We find ourselves at the proverbial yet familiar crossroads. We were here thirty years ago in the 1970's when the Club of Rome and others warned that there are limits to growth on a finite planet. In retrospect, the predictions appear to have been very prescient and even too mild. Clearly, we would be on a much sounder ecological and energy footing now if in the 1970s we had heeded their calls for massive conservation and the large scale development of renewable energy. Although our understanding of the natural world is still incomplete, highly credible information from legions of scientists worldwide indicate that our current path is unsustainable, and will ultimately lead to immense human suffering. In this book, we invite you to consider a new path that has the possibility of replacing our likely future with one that energizes you and your community. But first, we look into the chasm between where we are now and a future that we want.

[3] The Club of Rome was viciously attacked for things it did not say both in the mainstream media and by economists and industry-backed scientists.

Bridging the Carbon Chasm

"I think we should basically look at this like we looked at nuclear warfare, and say - that would be so awful if it happened; let's do something, put a warning system in and so forth. We're just stupid as a society to say, phew! Now I know that we don't have any problem for fifty years. That's great if we're right, but if we're wrong, it's awful."
Matt Simmons, Chairman of Simmons & Company International
26 May 2004. Global Public Media.

Maps are useful. If we know where we are and the direction we are headed, maps can help us to ascertain our future destinations. If we create a conceptual map of civilization based on corporate globalization, the ultimate destination is clearly ecological collapse whether due to climate change or some collection of other major ecological disasters in the making such as fishery and top soil depletion, air and water pollution, forest clearing, et al. Other likely destinations introduced above include dollar collapse, resource conflicts, growing inequity, and resource exhaustion with oil and natural gas peak being some of the most likely near term destinations.

Oil and gas peak could be the trigger to get off this treadmill to tragedy, providing a possibility to avert more ecological collapse, but we are woefully unprepared for living in an energy constrained world. As explained later, we will need return to locally self-sufficient communities that produce and consume their daily necessities largely within the confines of their bioregion. We call this relocalization and it needs to occur globally. The process we call Global Relocalization is anathema to corporate globalization; the complete opposite – a new map. The result is designed to be an ecologically stable world with more of the things we like (equity, beauty, satisfaction) and less of the things we don't (conflict, stress, treachery). We regard this as reasonable and realistic not utopian or revolution. Human beings do not have to be driven solely by greed, even though our history is not always very inspiring.

This brings up the question, "How do we bridge the chasm between the current global economic system that is dependent on non-renewable hydrocarbons to a world of interdependent locally self sufficient communities?" Corporate globalization is self-perpetuating and self reinforcing, effectively punishing all that do not play its zero-sum game. Every day more and more of Earth's last subsistence farmers are brought into the global monoculture. Many progressives and free thinkers are hoping that the necessary change in consciousness to break free from the clutches of this malignant system will come through political action, social justice, education, or some other means. The difference between what is happening and what needs to happen is stark – the carbon chasm. We have no illusions that it will occur without considerable stress and suffering. In fact, we believe that the necessary paradigm wrench has the possibility of occurring only during a time of crisis, be it fossil fuel depletion or otherwise, and that it is our duty as aware Earth citizens to get prepared.

Peak Oil is an Ecological, Rather than a Technical Problem

By Richard Heinberg, Founding Member of Post Carbon Institute

The problem of peak oil is not merely a technical one that can be solved by the substitution of other energy sources. It is, in essence, a particularly nasty instance of the universal ecological dilemma that every species, and every human society, encounters from time to time. The ecological dilemma consists of three interrelated factors:

- Population pressure,
- Resource depletion, and
- Habitat destruction.

There are six possible responses to the ecological dilemma:

- Move elsewhere (i.e., find territories that are under-exploited);
- Exploit existing resources more intensively (many human technologies, including fire and agriculture, provide ways of doing this);
- Discover new exploitable resources (oil, uranium, and so on);
- Limit population (in humans, cultural strategies have included sexual taboos, infanticide, prolonged lactation, birth control, and other measures);
- Limit resource usage (e.g., through ethical systems that valorize voluntary poverty); or
- Die off (usually from famine, disease, or predation).

The first three responses are "supply-side," while the latter three focus on the "demand side" of the survival equation. For most species, supply-side options are usually limited, and so demand-side responses predominate. For example, when deer overpopulate the woodlands of the American Midwest, their numbers are usually eventually culled through starvation and predation (including hunting by humans).

Our species, in contrast, has become extraordinarily good at finding and implementing supply-side solutions to the ecological dilemma. We have populated virtually the entire surface of the Earth; we have invented new technologies (including plows, steam shovels, and stock exchanges) to exploit resources more intensively; and we have discovered new resources (from aluminum to zinc) that can temporarily enlarge our environment's carrying capacity. We have succeeded spectacularly, and the current global human population level is a testament to our ingenuity. (See chapter 1, pages 19–32,

of The Party's Over for a lengthier description of the supply-side strategies that humans have developed over the millennia.)

But our very success brings grave problems.

Because nature cannot tolerate the unlimited proliferation of any species, supply-side strategies succeed only temporarily and are subject to the law of diminishing returns. They sometimes eventually result in spectacular population crashes in species that have momentarily benefited from them.

That is why the solution to the problem of oil depletion cannot consist merely of the development of an alternative energy source. Much of our usage of energy goes to facilitate the extraction, transformation, and use of other resources — metals, soils, water, and so on. Without an accompanying demand-side response, merely continuing to increase the supply of energy to our species from alternative means will mean the continued depletion of other resources, more competition for those dwindling resources, and an eventual crash. It is our reluctance as a species to undertake demand-side solutions to the ecological dilemma — and not merely our inability to find a suitable substitute for oil — that is leading us toward collapse. Yes, we need to make the transition away from fossil fuels, but we must do so in the context of a concerted effort to reduce the size of our population, the scale of our economic processes, and our impacts upon the biosphere. Otherwise we are merely briefly forestalling the inevitable.
Of course we wish to find a way to preserve our current way of life. No one wants to undertake basic change unless we have to, especially if doing so means restrictions on reproduction and individual consumption. But business as usual is simply not an option, even if there is a solution to the energy problem in isolation. The way out of the ecological dilemma requires no technological breakthrough; indeed, purely technical "solutions" may only distract us from addressing the underlying problem. The way out is to restrict per-capita resource usage and to reduce the human population. If we do that, then alternative energy sources may help. If we refuse to do it, then nothing will help.

(Adapted by the author from Powerdown: Options and Actions for a Post-Carbon World, New Society Publishers, 2004)

When surveying the enormity of the carbon chasm, the path to self reliant communities in balance with nature is not immediately apparent, especially if one has been raised in North America or Europe. Upon further reflection, the only clear response that has the possibility of being an integrated and comprehensive solution is to begin relocalizing our communities and economies, and it needs to occur globally.

Chapter 2. Global Relocalization

I think God's going to come down and pull civilization over for speeding.
Steven Wright

Civilization is the limitless multiplication of unnecessary necessities.
Mark Twain

Biosphere destruction due to human activities clearly threatens all life on the planet, human and otherwise. The problem is systemic: business as usual (i.e., corporate globalization) presages catastrophic climate change, extreme species extinction, fish depletion, untenable body burdens of toxics, not to mention largely unhealthy disconnected lives along the way. Human civilization is egregiously far from a steady state and is (literally) driving in the wrong direction. There are no easy solutions and some light green claims that we know exactly what to do seem to us both false and misleading.

The imminent peaking of global oil production and the fact that natural gas production has already peaked in North America could be the catalysts for positive transformation of industrial society. Peak and Decline could also trigger an unprecedented disaster. Essential systems that form the foundation of industrial civilization depend on unfettered access to cheap oil and natural gas. As supply begins to drop and is no longer able to meet demand, less work will be done – which means less materialist economic activity. Alternative energies, conservation, and new energy carriers will undoubtedly play a role in future energy systems, yet collectively they will not be enough to preserve industrial society as we know it. The possibility for largely positives outcomes demands significant preparation, careful planning and appropriate action, and enduring behavior change.

Without unprecedented preparation and cooperation, however, oil and natural gas depletion will precipitate massive disruptions to essential systems such as food, energy, transportation, security and health care, and almost certainly, a major decrease in the earth's carrying capacity. If mainstream awareness of energy peak occurs during a crisis, we will find ourselves well along the amoral path of endless war for control of dwindling resources the path of, black hydrogen fueled by coal and a reemerging nuclear industry, further restrictions on citizen and human rights, and increasing concentration of wealth through globalization and the money system. During a period of draconian governance in the midst of a permanent energy crisis, (which already seems to be happening in the US and the UK) all of the gains garnered by environmental and social justice groups in the past 50 years are subject to roll back at best. At worst, recent history is full of examples of what happens when humans with powerful weapons get desperate – they reach for demagogues, Fascism and war.

What is Global Relocalization?

Though no panacea exists for dealing with the peaking of energy supply, we believe that Global Relocalization is the most significant policy that we can implement now. Put simply Global Relocalization is the process by which communities far and wide localize their economies and essential systems, in an integrated and coherent way. These systems include food and energy production, water, money, culture, governance, media, and ownership. The Global par refers to the fact that a relocalizing needs to happen in a broad scale, but that it must not be done in an isolated fashion, but in communication with each other, that regions ca decide how to handle production of the larger item. Some planning does not mean over whelming state planning. The idea is produce locally where possible. The process of relocalization will require that we rebuild our cities and towns to dramatically reduce transport needs and support localization of essential systems - ecological city design provides a framework for this transformation. To address effectively energy scarcity and curtail biosphere destruction, relocalization must occur globally and with some degree of bioregional integration – that is another word for Global Relocalizaiton. Other important parts of the foundation are non-violent conflict resolution, ecologically sustainable use of a portion of Earth's resources, and social justice

Essentially then, human civilization needs to prepare itself to do less materially with much less energy and fewer natural resources, with the ultimate goal of living within what is left of a reasonable carrying capacity, however reduced that may be. Any other approach can be considered a form of assisted suicide – with nature doing the assisting.

Communities will also need to integrate in appropriate ways the experience and knowledge developed by existing organizations and individuals working on localization on both the policy and community levels, including science that supports localization efforts, and the practices of those indigenous peoples that have not yet been wiped out by empire and its latest incarnation, corporate globalization. Within a locale, relocalization efforts will ideally involve community groups, NGOs, local businesses, nearby farmers, and municipal government.

Relocalization will herald the creation (and in some cases, re-creation) of locally self-reliant communities that produce and consume largely within the confines of their bioregion, but on a far grander scale than examples from the historical record. In the community-based model, stability will only be achieved if neighboring communities are also locally self reliant - hence our call for global relocalization; the alternative will be an ongoing struggle to protect one's permaculture patch from bands of starving and/or well armed marauders.

As globalization moves into a major 'offshoring' phase the U.S. as a whole, and many other places have been hemorrhaging manufacturing jobs and skills, they become still more reliant on the pathological global economy. Yet there are examples of relocalization springing up worldwide. Venezuela is embarking on a new program called "endogenization" that is "development from within, with materials from within, by those

within for those within".[4] While 206 centers for endogenous production are already up and running throughout the country, close to 34,000 cooperatives in agriculture, construction, services and manufacturing are in the works. Depending on reports, between 40-60% of Cuba's vegetables are grown in cities, in community gardens, on balconies and rooftops.

Eco-villages and intentional communities are being formed worldwide in a widespread move towards self reliance. In the United States, the city of Portland pioneered the concept of urban growth boundaries and is making strides in a number of directions including reclaiming intersections, bike paths, and more. City Repair, a multidisciplinary, non-profit organization based in Portland, which works with place-based communities to effectively recreate the infrastructure of the public commons where people live (http://www.cityrepair.org). Northern California is a center of the local food movement, with non-governmental organizations such as The Ecology Center, People's Grocery, and Edible Schoolyard leading the way. Farmers' markets and Community Supported agriculture are proliferating.

On the micro level, much is happening to relocalize many aspects of life. Recognizing the activity around permaculture, sustainable energy, water harvesting and conservation, local currencies and local food among other important topics, it seems that at least some of the knowledge needed to make the transition is already known or in development. Thus the task confronting us is more one of experimentation, application, and adaptation than invention. Indeed history books will often be guide books both in how to experiment and what has already been invented. We need to determine the suitability of existing and emerging solutions to specific locales and apply them in an integrated fashion to meet the community's needs. Through experiments, it will be apparent that some places cannot support their current populations, while others will be able to. Now is time to find out before a crisis is upon us.

[4] Development is a problematic concept, but at least they are trying to be nationally self-reliant.

Chapter 3. Post Carbon Experiments and Outposts

You must be the change you wish to see in the world.
Mohandas Gandhi

Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.
Margaret Mead

At a minimum, when we find ourselves in a crisis situation, every community needs to have in place groups of people with expertise, experience, tools, relationships, working models and plans for a Post Carbon world - in effect a parallel public infrastructure. About one billion people still live much less industrialized lives, though their way of life is rapidly being usurped by transnational corporations in their aim to commoditize this finite planet. When a full-scale crisis occurs, existing conceptual maps will be in tatters, people will be confused and distressed. They will seek a new map. Ideally, at the onset of such a crisis, they will link up with people in their community that are as prepared as one can be, and willing to help them understand how they can positively participate in the transition into the Post Carbon world.

Forming this parallel public infrastructure is the purpose of Post Carbon Experiments or Outposts. The intent is both to work with existing groups and form new groups to quickly and efficiently conduct experiments to figure out what works in the locale, thereby preparing for a crisis-triggered transition into an energy-constrained world. The practical nature of these Experiments means not only that benefits will be reaped all the time, irrespective of crises, but that we must build systems that can survive with or without crises.

Post Carbon Experiments or Post Carbon Outposts are an attempt to close the loop of local food, local money and local energy. Starting to close any of these loops will strengthen your community in a variety of ways including local self-security, food security, a sense of place, neighborhood beauty, and socially. As with many endeavors, with large potential benefits, a large amount of work and patience will be required as well as research of a historical, practical and theoretical nature and a willingness to try things when there is no guarantee of success.

Outposts are Action Initiatives of Post Carbon Institute. We are working with groups of concerned citizens – the 'walking worried' and their loved ones – to prepare their communities for the Post Carbon Age. These groups are *Outposts* in the sense that they are community-based extensions of Post Carbon Institute; they operate independently yet receive the benefit of our analysis of the root causes of the problems. They can use the electronic infrastructure developed by the Institute, as well as connection to a larger

meta-community of communities, and get help with fundraising while in turn helping us to fundraise. Outposts work cooperatively in their local community to put theory about living with less hydrocarbons into practice while sharing knowledge and experiences with the global network of community groups working on these issues. The central activity of Outposts will be conducting relocalization experiments and projects. Outposts, to varying extents, especially those that are neighborhood-based, will also have a social component that will strengthen both relationships and the community in general.

Outposts choose projects and experiments based on the resources and needs of their community as well as the interests and availability of those involved. They operate relatively autonomously and look to Post Carbon Institute for support and as a means to network with other communities. A myriad of possible projects exist that could help a given community prepare for a Post Carbon Age. A set of initial Project Scripts (or outlines) can be found in this manual to help Outposts begin. Outposts are encouraged to suggest improvements or possible variations on these scripts as well as contribute entire scripts that they develop. We are developing a Relocalization database which will contain project scripts and pertinent documentation about previous experiments, thereby providing the basis for designing new experiments and projects appropriate for a specific locale and circumstance.

Key project areas include raising community awareness, developing energy and ecological literacy, car pooling and car cooperatives, local small scale food production (e.g., urban farming), local money, and local energy. In addition to experiments, Outposts have social and cultural events and other activities that may not be directly related to relocalization experiments, but which in fact often turn out to be vital glue for helping communities rebuild. Outposts aim to make an immediate positive difference in their communities and have good time along the way. Non-corporate, non-electric music made by, the community and celebrations of all kinds and carnivals, will be vital.

Parallel Public Infrastructure

Outposts are not a campaign – rather they are seeds from which we hope will spring a parallel public infrastructure to support the transition into the Post Carbon Age. Why parallel? Because the existing social and economic systems are presently obviously incapable of helping realize a reasonable life, incapable of meeting the current demands of all citizens and do not have contingency plans to address the ramifications of oil and natural gas peak. Certainly, cities, suburbs, and towns rely upon and require tremendous energy inputs currently provided for by fossil fuels, and most if not all, have not seriously considered how they might keep the lights and water on and the food coming to the locale in the context of permanent energy shortages. We need to create a parallel infrastructure that will serve as a safety net for communities when the existing system falters.

Why public? The damage wrought upon communities worldwide by corporate globalization and privatization of the commons is undeniable. While privatization may be positive for corporate coffers, it clearly leads to concentration of wealth, denial of service to the most vulnerable in the community, and the externalizing of ecological and

social costs [IFG report]. By creating a public infrastructure, we have the opportunity to build in democracy and the local culture, and we can make sure that it involves the community on the difficult way ahead.

Key components of a parallel public infrastructure include:

- Networks of individuals, groups, NGOs, local businesses, local government agency
- Contingency plans for basic community needs
- Conservation and ration plans
- Local currency, local food, local money
- Knowledge, experience, and expertise for the locale

Low Energy Living

We envision a future where people come together and work collaboratively and cooperatively on the collective future of their communities. They aim to amicably choose and amend ways to govern themselves, adhere to agreements and notify others when they are unable to do so, create safe space for the discussion of different perspectives, and foster a creative and grounded culture that encourages responsible experimentation.

Outposts are the seeds from which sprout a parallel public infrastructure of much more self-reliant communities that trade primarily within their bioregion, but also with, neighboring bioregions for diversity and co-operative strength. A given area will start with one or a few outposts composed of people throughout the area. Groups will split along geographic lines as they grow larger until they get down to the neighborhood/community level. Ultimately, there will be no outposts; in their place, will be bioregions of locally reliant communities that cooperatively share information, trade, and resources. The participants in outposts are the early adopters and many will become teachers along with others that are practicing low energy living now. Through the outpost experience many people will form lasting friendships and relationships.

Through the evolution of Outposts into cohesive communities, we shall re-make our towns and cities so that they work with little or no use of cars and localize our activities through the process of Global Relocalization. This will entail making, growing, or getting our daily needs locally, from local people and local producers. Local means not owned by a large or distant corporation. It means not being a link in a long supply chain. It means locally owned, using local inputs wherever possible to make goods for local consumption with much less, if any waste. This is absolutely vital. We shall need to make the places where we live, work, and study beautiful, so that they are worth caring about and being in. We will end laws and regulations that help force us into a consumption-oriented, fuel-wasting, car dependent existence and create new guidelines and rules that encourage a fruitful balance between human activities and nature.

All of these activities will help to reduce our personal and community material throughput. Therefore, creating less waste and using less overall energy.
This document is intended to provide ideas and approaches on a broad canvas as well as offering some specific guidelines in the form of Scripts. Just as locales differ, all groups have different characteristics and idiosyncrasies, so we present multiple possibilities and invite groups to try out what feels best for them; and if it does not work out, try something else. Forming community groups, organizing, and working on low-energy living is an experiment in itself. Ideally, this document will provide the basis for getting started as quickly and purposefully as comfortable for the group, while having an enjoyable time in the process. Starting community groups can be challenging on many levels, especially when all the precedents are long forgotten. So keep a light heart, be practical, and above all, don't give up. We strongly encourage people to work on projects that they find energizing. (This may sound more democratic and caring that we are currently used to. It is certainly very different from the corporate-military pseudo-democracies now pertaining in most industrialized nations.)

Some energy sources that do not fit into a Post Carbon future are nuclear energy of any sort, liquefied natural gas, clean coal, methane hydrates and zero-point energy.

Post Carbon Projects/Programs

Outposts choose projects and experiments appropriate for their community, based on the interests and available time of participants. Below are suggested topic areas that are relevant to Post Carbon living.

1. Food – community gardens, garden networks, Grow Biointensive, Permaculture, sustainable agriculture, biodynamic farming, no till agriculture, beekeeping, reduced meat & fish consumption, Community Supported Agriculture (CSA), farmers markets, non-industrial diets, bulk foods, organic food
2. Housing – eco-villages and eco-cities, co-housing, green building, and remodeling for low energy use, financing and ownership options, housing and neighborhood design
3. Energy Generation – wind turbines, photovoltaic, biofuels, tidal, micro hydro
4. Transportation – bicycles, car-cooperatives, ride sharing, public transit, horses (in rural areas), and car-free zones
5. Barter and Alternative Local Economics – local currencies, alternatives to money, demonetization
6. Local Energy – energy cooperatives (windshare, solarshare, geoshare, bioshare), consumer choice, energy-backed currency, Local Energy Banks
7. Organizing – community organizing, cooperatives, demonstrations, conferences, training, garden networks, fundraising
8. Water – native food gardening, water gathering, gray water use, arid agriculture, 'dry farming'
9. Local Business - community-owned businesses, salvage and repair shops, cooperatives, transitional opportunities, local energy consulting, relocalization services, locally produced products, local ownership, investment, creative financing
10. Local politics – follow the money, learn your local political initiative process, changing land use and zoning ordinances, running for office

11. Discussion of over-population and ecological overshoot – voluntary reduction of fertility
12. Personal – eco footprint, assessing and reducing consumption, repair, reuse, recycle, share, gifting, green products
13. Neighborhood – watch, cleanup, sharing, gardens, commons
14. Media – independent media, community, letter writing, fax and phone campaigns
15. Security – food, water, nonviolent conflict resolution, educating nearby communities, investment
16. Outreach – Screenings, schools, workshops, conferences, lectures, products, memes, tabling at festivals (having a booth, kiosk, or table at an exhibition or event), volunteers, libraries, training, teach-ins
17. Energy and ecological literacy – schools, classes, demonstrations, open houses, tours
18. Fundraising – educational products, events, conferences, grants, donations, dues, CSA and Community Supported Manufacturing
19. Training public speakers
20. Corporate disobedience – coordinated actions, local merchant lists, boycotts, recycle, reuse, repair, curtailment, community choice

Experimentation

Many of the actions described here will depend upon the characterisics of your locale and circumstance, and there are many others that could be added, but it still makes quite a list. Nevertheless, these are not things that only a saint or millionaire could do. Some of these proposals are clearly going to be very difficult, or perhaps impossible in the short run for many people, but some are possible for almost anyone in the industrialized world right now. In the medium to long term, the only way to achieve this kind of change is with a new, low-energy public infrastructure, where cities, towns, and villages are once again designed for humans and not cars, and vital needs are met with locally produced energy, food, and money.

Trying ‘post carbon’ experiments with local money-energy-food systems is indispensable. Universities and high schools are ideal units, but anywhere with an already strong sense of community, cohesion and place—and some soil and water, will be fertile ground for those willing to try. Places with less sense of community should still try Post Carbon Experiments. The kinds of shared tasks involved will actually help build community. We will need a range of possibilities of local parallel public infrastructure so that as things get worse a gradual transfer can be made.

Types of Post Carbon Experiments

In Section Two of this book we have outlined four types of activities or experiments which groups can undertake: Inventory, Local Think Tank, Research, and Action. Each of these has specific projects or what we call scripts outlined to make it easy for a group to follow them. The four types of experiments can build on each other in a cumulative fashion or they can be undertaken one at a time or done concurrently, depending on the size and ambition of the group.

We start out with Inventory because it is important to take stock of all the attributes of your community before rushing out to instigate change. By understanding the natural, man made and political structures of a community, priorities can emerge. This information can be gathered together to help new members of the group when they join. It can also help when your group comes to advocate for another project that you have done your "background homework". The Inventory is the basic building blocks for all three other types of Experiments.

Think Tanks synthesize knowledge and information and then propose policies for their members. Who in turn advocate for those policies to be implemented. Communities should have people, citizens, reading and thinking about world events and scholarly thinking and how this will affect their communities and what are the best ideas their locale should implement. Many local governments and institutions may not know about oil peak and the ecological imperative and taken it into account in their long term planning. Local Think Tanks can help to educate and persuade the rest of the community as well.

Some of the areas which may be identified in the Inventory many need more study. Research scripts are of a more scientific, qualitative and quantitative nature. By collecting this data it will help your group have an in depth understanding of which specific projects would be most suitable for your local.

All of the previous three are building towards changing the infrastructure in your community. Action scripts outline some Post Carbon Experiments your community can do to begin to create a Parallel Public Infrastructure. We hope that eventually these projects will help your community move from a fuel to a foot economy and that you can have great public transport, local money, local food and local energy.

Benefits of Being an Outpost

A key part of Post Carbon Institute's mission is working with local groups to reduce their communities' dependence on fossil fuels. Post Carbon Institute provides guidance to Outposts and supports and collaborates with Outposts on non-political efforts. (In the future, we will likely develop a Political Action Committee in America so that we may participate at some level in political action as well. Other countries may have different possibilities.) Some may not find the term Outpost appropriate for their community and

we are open to what groups want to call themselves. Look on the Outpost page at www.postcarbon.org to see what other groups are called.
We also encourage existing groups to add Post Carbon Experiments to their range of programs.

The key benefits include:

- Being part of an international network of communities working to relocalize their communities.
- An online repository linking together communities, enabling outposts to document their experiments and share their results with the network. The repository stores project scripts. [Coming soon]
- A link to the home page of the Outpost on Post Carbon Institute site, as well as hosting for Outposts' web sites
- Assisting Outposts with setting up local email lists (e.g., for announcements and for discussion) and with sending out periodic newsletters.
- Help with communication and networking between Outposts and outpost participants through forums at http://forums.postcarbon.org and newsletters that incorporate submissions from Outpost participants.
- Provision of speakers for public lectures to help raise awareness in your community (Outpost must cover travel and accommodation expenses). We can also help your local media connect with the same speakers through telephone interviews. Also access to the Post Carbon Speakers Training program
- In the US, Outposts are able to accept tax-deductible donations that can be channeled to Outpost projects. Post Carbon Institute is an initiative of MetaFoundation, a US chartered non-profit foundation, with offices in Canada and the US so far. Working through MetaFoundation, Outposts can raise funds from tax deductible contributions for projects co-sponsored by Post Carbon Institute. MetaFoundation will provide receipts to donors. MetaFoundation will be the fiscal sponsor for any foundation, funding or grant applications made and offer charitable tax receipts to supporters. We fully intend to be present in Europe soon, and anywhere else that wishes to prepare for a Post Carbon World.
- Post Carbon Institute is a research broker and connector between groups who have been experimenting with aspects of parallel public infrastructure and community groups who would like to implement them.
- Information on the successes and challenges of other Outposts through newsletters
- Information on the latest thinking about relocalization through our written pieces.

Case Study: The Bay Area Peak Oil Group

The Bay Area Peak Oil group started after a well attended Oil Awareness Meetup in Oakland, California in June 2004. 15 people attended and could not hear across the table because of the din of the bar and grill. Collectively we decided to hold the next meeting at my house regularly and to use the Meetup as a feeder to the group. The group was intellectually strong and knowledgeable about the oil predicament, yet unable to adhere to even a small amount of structure. After several months of talking around a purpose without a commitment, roles, or a decision-making process, we established a relationship with a library near public transport. In conjunction with Post Carbon Institute, some members of the group helped out at screenings and events. We set up an Orientation meeting for the people who signed our list and passed out flyers as well; 17 concerned citizens attended. Modifying a suggestion from one of the new people, at our next meeting we split into three groups: contemplative, hunker down, and 'get out of Dodge'. The latter two are action oriented. 'Hunker down' are the people whose first preference is to stay in the Bay Area and work here on being a positive factor in the inevitable transition to a Post Carbon world. This group plans to do experimental events in the neighborhoods of members to see where realism catches on. Through this experience, we found that smaller groups are more inclusive and generate more lively conversations, and better ideas. *David Room, Bay Area Peak Oil Member*

Steps to Becoming an Outpost

The function of the Outpost is to develop awareness in your community and that this awareness will lead to the action of developing of a parallel public infrastructure. (see glossary for definition)

Outposts can be a program of an existing group intent on renewing its sense of purpose in the context of our predicament and wanting to expand their focus to include a relocalization program. Examples include co-housing groups, neighborhood watches, intentional communities, community organizations, green clubs, church groups, chapters of national environmental, peace, and social justice organizations. The advantage of starting this way is that people already know each other and may have effective systems and processes in place. These groups will likely work more on a community or neighborhood basis, focusing on raising awareness within the neighborhood and surrounding communities, as well as local food and energy projects.

Outposts can also be new groups that come about through film screenings (of End of Suburbia for example), local conferences and events, community and neighborhood organizing, and even Meetups. These groups tend to start as metropolitan groups in which people come from various backgrounds, have various understandings of our

predicament and solutions, geographic locations and interests. As a metropolitan or city-wide group, their focus may be more on discovering common interests, raising public awareness through outreach activities such as screenings and tabling at events, advocacy work with respect to regional and municipal public policy, connecting with related organizations and special-interest groups, as well as encouraging and supporting the creation of community-focused groups. One of the key relocalization activities of the metropolitan level groups will be exploring the possibilities of municipally sponsored local currencies. The film-making model described below is especially well suited such activities. All these actions are addressed in this Guidebook, and Post Carbon Institute will also help and advise groups.

Another way to get started is by forming a local think tank. Local think tanks can take many forms; they can be a sub-group of a larger Metropolitan group or a separate group. At the simplest, they can be a group of people new to relocalization that read and discuss certain books, publish articles on what they learn, using their Outpost website as well as whatever other outlets the can, and write letters to the editor. On the more ambitious side, they can be well-connected, knowledgeable individuals who want to take lead in charting the course of relocalization in their locale by engaging communities, NGOs, business, and municipal governments.

The Importance of Multiple Groups within a Locale

In a given locale, having a metropolitan group and/or a local think tank, and multiple community-focused groups is highly desirable. As explained above, metropolitan, municipal, and community-focused groups have different yet overlapping foci. Any type of group can come first. They can have overlapping membership and should collaborate as appropriate. In fact, the metropolitan group can serve as the hub that helps facilitate sharing and collaboration among groups in the locale.

Extending the idea of metro groups, eventually a bioregion-level group that facilitates sharing and collaboration among metropolitan, municipal, and community groups will be essential.

Getting Started Now

Once you (and preferably others) have committed to establishing an Outpost in your locale, follow the steps below.

- Take a look at the beta section of our website: http:// beta.postcarbon.org
- Contact Outpost Director at Post Carbon Institute to discuss your ideas and group – outposts@postcarbon.org .
- Once we have established email contact we can have a telephone conversations to help establish a group or advise communities wanting to try Post Carbon experiments
- Decide what to call your group.

- Each person must agree to and sign the Outpost Agreement (see below) or fill out the form at http://agreement.postcarbon.org
- As appropriate, David Room (dave@postcarbon.org) will help set up your web presence and list serve for the group.
- Each person in the Outpost should become an annual supporting member of Post Carbon Institute within 3 months at whatever membership level they feel appropriate. This helps promote Post Carbon Institute and will greatly increase the likelihood that foundations will consider supporting Post Carbon Institute. Become a member at http://member.postcarbon.org.
- Contact Celine Rich, celine@metafoundation.org, if you would like MetaFoundation to be a fiscal sponsor for a grant application or if you need to give a tax receipt to a local donor of money or materials (in the US, we are also developing fiscal partnerships in other countries).
- Post quarterly reports of your Outpost on the Post Carbon website (this will help your group focus its activities and other groups who may be working on the same project learn from each other)
- We have outlined a number of possible projects (scripts) to begin with and we suggest using the film-making model to begin your projects.
- Document projects as appropriate using the forthcoming Localization database. In the meantime, send documentation to Celine Rich via email, celine@postcarbon.org.
- An Outpost may undertake several scripts simultaneously, such as getting one person to run for municipal office and continuing to learn about the issues.

Soon we will have an online process for registering an Outpost. For now, just contact Celine Rich (celine@postcarbon.org) and she will assign you an Outpost number. (Beta program only)

Charter Outposts

As Outposts are registered, they are assigned a unique number. The numbers are ascending, indicating the relative timing when the Outpost started. We expect that there will ultimately be thousands or tens of thousands of groups worldwide. The Charter Outposts are the set of the groups in place when we achieve a critical mass worldwide. We have tentatively identified the critical mass as three months after there is at least one Outpost operating in every state and province of two of the most egregious energy consuming nations, namely the United States and Canada. We shall be working hard in 2005 to establish Outposts in other regions, including Europe, Australia, and many other less consuming nations that wish to participate.

Charter Outposts will play a key role in spreading the relocalization message to nearby communities and will play a leadership role in the Outpost initiative and the shaping of the future of civilization. The existing outposts are:

1. Benicia-Vallejo Outpost
2. LA Post Carbon
3. Post Carbon Alaska
4. For The Future (Santa Barbara)
5. Hudson Mohawk Socio-Economic Collaborative
6. Toronto, Ontario
7. Flagstaff, Arizona

And we have inquiries from many more people in North America, Europe and worldwide.

Jumpstart an Outpost

Working on creating a parallel public infrastructure is an awesome and daunting project, hence it is important to get a quick and productive start by the simplest means. Ideally, participants will feel a sense of achievement from the beginning and throughout the process.

Below are some tips for getting off to a productive and satisfying start:

- Meet regularly. We suggest the full group meet at least once a month and that project teams meet or communicate more frequently as appropriate
- Rather than get bogged down on procedure, use a facilitation process that will help people get into groups based on common interests and begin talking about what they want to do. Invite a skilled facilitator to help out with the initial

meeting(s) and/or to join the group. Take a look at the scripts on facilitating meetings and Open Space (on page 47), and craft a process that is appropriate for your group. The aim is to get things done.

- Start some projects. Share the Post Carbon scripts with the group. Encourage people with common interests to create follow-up conversations and to make commitments about what they are willing to do.
- Use two emailing lists – a low volume list for important announcements (e.g., meetings) and a higher volume list for discussion. Some people may want to filter the latter list to a subfolder (or choose not to receive it).
- Document, document, document! Make sure that for every group discussion someone has committed to taking notes and posting them to the mailing list within a couple of days.
- Create a meeting agenda, with roles and responsibilities prior to meetings. Initial roles are facilitator, scribe and time keeper. If roles have not been assigned prior to the meeting, make that the first discussion after any social time.
- Consider using a talking stick to keep the conversation respectful.
- Have fun. Include social time at the beginning (and perhaps the end) of each meeting
- After social time, schedule a time for announcements, new developments, and requests for the group's support.
- After announcements, separate into groups based on interests or projects as appropriate.

How Willits Started its Community Group

Case Study by Jason Bradford
Dec. 30, 2004

Willits is a small town in Mendocino County, California. The overall population of the county is about 90,000, with 10,000 in the broader Willits area. It sits within the Little Lake Valley at about 1400 ft in elevation between ridges of the Coastal Range. Early 20th Century, the economy was largely agrarian based. Then forestry dominated until the 1980s. Aside from the large services sector, it now has a mix of light industry, lumber mills, animal husbandry, and marijuana production. There was a large influx of former urbanite "Back to the Landers" in the 1970s that slowly changed the culture of the area. People are very creative around here, and local artists and artisans abound.

My immediate family and I moved to Willits on August 1, 2004. Having grown up in California, we were looking for a place that was close to our roots, had a small town character within a largely rural setting, and a culture that seemed ready to

do something about Peak Oil, climate change, economic globalization, and related ills in the world. Nowhere seemed perfect, but Willits had a lot going for it and my wife got a job here.

We began settling into our 1903 home, made of Redwood and needing many repairs as well as efficiency upgrades. I started to make connections in the community. It was not difficult. The local coffee house was full of conversation. People were talking about books I had read, such as "The Party's Over," and how none of the Presidential candidates were proposing to deal with what really mattered. At the open house for the Willits Environmental Center (WEC) I saw a flyer about the "Big Rollover" written by Randy Udall about six years ago. SolFest in the nearby town of Hopland promoted the need for alternative energy and lifestyles www.solarliving.org/solfest2004.cfm). I attended a Willits workshop in biointensive farming by Ecology Action (www.growbiointensive.org). The whole staff as well as the handful of local participants knew about resource depletion and its effects on food production and distribution. It was a cultural milieu waiting to be stirred.

On Oct. 18th, I organized a showing of the film "End of Suburbia" at the WEC. About 20 people came, including the major, another city council member, and a local reporter. After the film we sat in a large circle and had a lengthy, rather open discussion.

The WEC has a large marquee that all the traffic on Main Street, which is synonymous with US Hwy 101, can see. Literally, thousands of cars and trucks pass this sign each day. A steady stream of messages about "Peak Oil," "End of Suburbia" screenings, and "Sustainable Willits" meetings have been there for months now. Initially, I had also placed about 20 flyers on public bulletin boards around town. Before the first meeting, an article ran in the local paper titled "Bradford: Oil will 'peak' this decade." Next came the headline, "Planning for the end of oil. Film and discussion of energy alternatives at the Willits library on Monday, November 8." That event attracted about 60 people and overflowed the meeting room. It was similar in format to the first: (1) see film, (2) moderated discussion. A buzz started going around town by now. It was front page news ("Life After Cheap Oil: Got a Blueprint?" www.energybulletin.net/3132.html). We'd had a packed house and lively discussion. Many of the local "movers and shakers" were engaged. So I really needed some sort of strategy to deal with this. I had never been involved in community organizing before and was brand new to this scene. But people started coming forward asking how they could help. I had to find some way to get this away from me as a focal point and turn it into a process that the public owned.

The next meeting, Nov. 23 at the Willits high school cafeteria, was an attempt to do that. A crowd of ca. 90 showed up, and was divided roughly in half between those who wanted to watch the movie and those wanting to start "doing something." I had come up with the idea of breaking into "Study Groups" where

people would organize around their interests. Before just leaping to "Action" I wanted folks to get a sense of where we are now versus where we are possibly headed. This would ground us in reality and establish a "frame" within which we could envision a transition. I solicited proposals for these groups and the obvious ones came up: Food, Water, Energy, Shelter, Transportation, Security, Local Currency, Education, Politics and Governance, Community Farm and Ecovillage, Funding, etc. But we never actually divided up during that meeting. People still needed to voice their general concerns and ideas. It was a two and a half hour chat session that was very cathartic but not terribly productive. The crowd was obviously diverse and it was becoming hard to know how to keep them together. Some were far into the process of absorbing the information, others were brand new and couldn't relate to the enormity of it all. I really needed a smart strategy to manage this.

Fortunately, others understood my needs and stepped forward. My new friends Jackie and George helped me plan a new format for the meetings. We arranged a great space at the Willits Charter School, which was pleased by what we were doing. From early on, I had told the group that we needed to move through phases of awareness, planning and then action, although they would always blend into each other. The next news article reflected our shift ("Sustainability Planning Underway" www.energybulletin.net/3655.html). Another publicity boon came through a new local radio show called "The Party's Over" that aired every other Monday from 9 to 10 am (www.kzyx.org). Richard Heinberg was the second guest www.globalpublicmedia.com/interviews/269), and I was the third www.globalpublicmedia.com/articles/330) on the program. I was clearly among a well informed general public that had a strong sense of place and a feeling of local empowerment. Not long before I had arrived, Mendocino County had become the first in the nation to ban Genetically Modified Organisms. This was a huge rallying point, and my goal was to create another movement. The daunting fact was that we couldn't rest after an election, we had to shift the culture permanently.

Now we have a Steering Committee of about 20 people. We meet every other Monday between the regularly scheduled large gatherings. We combine pot luck meals with strategic planning and the nitty-gritty of making sure the next event runs smoothly. A well established, local non-profit (www.redinet.org) two blocks from my home is now our legal umbrella group. So we have a great office and a way to manage donations and obtain grants. Another local nonprofit has provided us with Web Services. We are using a "wiki" to allow people to create the web site based on our work (www.cloudforest.org/Willits_Economic_Localization). The WEC provides us with liability insurance for our meetings. A city council member has arranged for us to meet in the Community Center at no charge. A coalition of like-minded community organizations has allowed this happen. This is an evolving process, but I'll describe the elements we now have in
place for the meetings and why we think they are useful. As someone enters the doors they find a "greeter" next to a donation box, and a contact sheet I use to build an email list. A large collection of books and videos is laid out on another

table and a sheet is used to keep track of check-outs. Chairs are arranged circularly or semi-circularly in the main room and the Agenda is written out on a large board. At the top of the hour I ask people to take a seat so we can get started. Once we are settled I give this standard "Welcome and Thanks" along with a small set of corresponding visual aids:

WELCOME and THANKS

1. As an introduction to newcomers, I offer a reminder to all of us of who we are and why we are here: Simply put, we're a group of people working together to design a plan for making Willits a great community to live in.

2. We came together for different reasons. Some of us are concerned about fossil fuel dependency, some of us are looking for a more sustainable lifestyle, some of us have ideas to share, some of us are curious about what's going on. Most of us are here because want to create a community with other people who share our vision.

3. Our basic premise is that key aspects of our current lifestyle are not sustainable or desirable.
Our goal is to shift from an economy based on GLOBAL systems, energies and resources, to an economy based on LOCAL systems, energies and resources. Our purpose is to figure out, by working together, a long-term plan for making this transition.

4. To accomplish this, we are meeting every other week to participate in study groups. On alternate weeks a smaller group of us meets to organize and plan.

We've broken down this task into 4 phases:

a) TAKING INVENTORY where we get to be detectives and researchers, discovering what we already have here and what resources we are starting with
b) ENVISIONING THE FUTURE where we get to be dreamers + visionaries
c) PLANNING THE TRANSITION where we get to be artists + architects of our future
d) IMPLEMENTING THE PLAN where we get to be the builders of our community

5. So, your mission, should you choose to accept it, is to help wherever you can. Right now we need people to come up with the questions and research the answers that will flesh out our plan. We need people to help with note taking, timekeeping, and computer entry. We need contacts and supporters within the community. And we need you to spread the word.

Then I review "Tonight's Agenda." We have a separate space where we invite newcomers to watch "End of Suburbia," and one or two moderators are available after the film to handle discussion. The bulk of the crowd divides into an evolving

set of ca. 6 "Study Groups" that range in size from 3 to 20 people. Each Study Group gets an assignment that has been worked out by the Steering Committee and communicated to the group organizers and facilitators ahead of time (usually members of the Steering Committee anyhow). The tasks for the evening are reviewed and then they have about 1.5 hours to work together.

Here's an example of the Agenda and Study Group Assignment

Handout from the Jan. 3, 2005 meeting:

TONIGHT's AGENDA

7:15 Newcomers are invited to join a study group, or watch the video and meet with our orientation leaders Brian + Ken. The rest of us will break into study groups.

9:00 We'll reconvene and each group will get a chance to share what they worked on.

9:30 We'll wrap it up and give you a chance to mingle.

STUDY GROUP ASSIGNMENT for tonight

Your facilitators have the same information I'm about to give you, and will help guide you through this.

Right now we are in Phase 1: Taking Inventory. We are concentrating on these areas: Food, Water, Energy, Shelter, Transportation, Health/Medicine, Social Organization. If you aren't sure which group to go to, just choose the one you either know the most about, or are most interested in researching. The format we are using to complete this phase is a research model. Within our groups we are generating a list of questions designed to figure out what is going on locally. The answers to these questions will provide the documentation for our research. No judgments here, just a clear picture of our current status.

We have 3 goals tonight:

(1) Your group needs to decide and agree on a way to collect and organize the information they are gathering. We've given your facilitators the Food Group's format as an example. They use an outline of the questions grouped by category, much like a table of contents. Answers are collected on Q+A sheets, labeled with a reference number, and the reference number is written on the outline next the question it refers to.

(2) You should continue to refine and focus your questions based on our Phase 1 goals. Remember, this is when we get to be detectives, getting out there and

figuring out what currently exists in our town, and empowering ourselves with local knowledge. The answers are out there already. We don't need to be experts in our groups; we just to know where to find the local experts. So generate a good list of questions, then allow some time for people to volunteer to go get the answers.

(3) Take a couple minutes at the end to have some fun. We want each group to come up with 3 things they are willing to do TODAY, related to their group topic. Then come back and challenge the rest of us to do the same! Before we break, we want to take a moment to acknowledge that many of you already have really great ideas about what needs to be done. We're so excited and encouraged by this. We're asking that you continue to collect and make notes of your ideas, but that you wait to discuss them until Phase 2. We know how hard it is, but for now, we ask you to continue to be patient, work together, and stay focused on the process. Phase 1 is essential in setting the foundation for what we build.

Any questions?

Go Willits!

Notice how we are trying to keep people with different skills and interests involved. We have learned that not everyone is going to be a keen researcher, but they may want to contribute in other ways. A local artist wants to produce visual aids, for example.

We reconvene in the main space and give each group about 5 minutes to share what they've done. This is an important component for many reasons. Many people would like to be part of more than one Study Group, so at least they can hear what is happening and make some suggestions if their ideas are not voiced. The groups are dealing with components of a larger system, and at some point linkages need to be made. We begin seeing the linkages and learning how to make them early on. Some groups are more organized than others and these become models.

I remind people when the next meeting is scheduled. In encourage them to keep spreading the word. At the closing I have something to say that re-enforces our purpose and creates a hopeful vision. Here's an example from the Jan. 3 meeting:

WHY ARE WE HERE? WHAT ARE WE DOING?

People are critters with the same basic needs of other animals. The quality and availability of air, water, food and shelter places limits on how many people can exist. We use energy to do the work that makes these basic resources available.

We have a big problem, however. Most of the materials we rely on for our survival come from far away places. Our food is shipped from hundreds to thousands of miles away. Since it takes water to grow food, we are essentially importing water as well. Our primary energy sources, fossil fuels and the electricity generated by them, are all imported via transmission wires, pipelines and tanker trucks. And they are non-renewable, meaning they will some day become progressively less available. That day may be soon.

In sum, we are part of a global economy that is highly reliant on depleting resources, and that damages ecological systems. This means we have little control over, or even awareness of, the processes that sustain our lives and are actively undermining the function of basic environmental services, such as climate regulation. We have created a situation both insecure and irresponsible.

The reverse of this predicament would be a locally sustainable economy. I use the rubric "Economic Localization" for the as yet undefined process we will go through to create this system of living. Being local gives us an understanding of and control over how our economy works. Being sustainable means we are living off of the reliable income of solar energy and recycling essential nutrients back to the land so that fertility is maintained.

The contrast between a locally sustainable economy and the globally unsustainable one we now rely on is dramatic. Facing such a change can be both daunting and inspiring. I'll sketch out a vision of what this new economy might look like.

Nearly all our food would be produced and consumed within the Little Lake Valley. We would know our farmers, and indeed many of us would be farmers at least part time. Food would be high quality and clean, grown using non-polluting, life-promoting methods. The local landscape would be a vibrant mosaic of colorful, ever-changing fields, interspersed with restored native habitats.

To move around, we would rely mainly on our own muscle power. Instead of hitting the gym for a workout, we'd be walking and biking to and fro. The sound and smell of cars and trucks would be a distant memory. Some electric vehicles would still help a bit, but these would have a quiet hum. Railroads may come alive again. Kids could explore their neighborhoods without the fear of being flattened.

The creative energy of our friends and neighbors would make life interesting. Processing, storage and preparation of our local food would become a form of functional art. Locally produced crafts of all kinds would be needed. The tools for basic living would take on the character of the people making them. Things of lasting value would be revered and the irrelevant or cheap ignored and discarded. This would enhance our interpersonal relationships and the quality of the environment we co-create. We would develop a profound awareness of the beautiful cycles of life and know our place within these. The universal values of

personal integrity, good work, community, and appreciation of our diverse talents would become ingrained in the population.

So let's make this process an exciting challenge. Whether you are mainly motivated by fear, hope, desire or a combination of all these doesn't really matter. The key is that you remain committed and engaged in some way. We will make use of whatever your particular interests and talents are because this is a big, long-term project that will evolve and require many skills.

So, thanks for being here and "Go Willits!"

The meeting finishes with the phase "End and mingle!" For the next half hour or so people float among and gather in small groups while chairs and tables are put back in their places. I enjoy watching and receiving many hugs, handshakes and smiles.

Finding Collaborators

As with the early participants of any movement, it often feels like you are the only person in your community that took the Red Pill.[1] You can, however, ferret out others that may be receptive to learning more about our energy predicament. Below are some of the likely suspects.

- Folks that were concerned about ecology and energy in the 1970s
- Y2K activists, students, community leaders
- People with solar panels on their house and/or food producing gardens
- Bicyclists and people without cars (or who dislike cars)
- Simplicity and slow food/living movements
- Anti-globalization, permaculture, climate change, car-free, eco-city activists, food security, sustainability, local money, 9-11 truth, anti-plastics, renewable energy, anti-corporate personhood, peace, and biodiesel activists
- City planners, teachers, solar installers, green builders and architects
- Renewable energy providers, alternative media, resale and reuse businesses, farmers markets
- Artisans (blacksmiths, potters, weavers, seamstresses)
- Those who eat less or no meat and fish

Besides direct interaction, hosting or co-sponsoring events is one of the best ways to get the attention of such people in your community. Particularly effective are documentary screenings (such as End of Suburbia), lectures, presentations, town hall meetings or conferences. Attending relevant events can also provide the basis for networking. Once you get sufficient interest to schedule a meeting, make sure to get it on the events calendar of the local radio station(s), newspaper, weeklies, and web sites such as craigslist.org. Handing out flyers can also be effective. Contact Post Carbon Institute if you would like help with templates for flyers or other promotional and informational material.

[1] In the movie *The Matrix*, the Red Pill contains both reality and the truth.

Wanted: Outpost Coordinators

Post Carbon Institute will work with community groups on preparing for low energy living. We have inquires from over 200 people worldwide including many in North America and Europe. We are setting up a network of part-time coordinators to work with the community groups in a specific region. The coordinator will field questions and help keep the Outpost on track, with any specific guidance that may be required from the Program Director at Post Carbon Institute. The coordinator will also report on communications and progress to Post Carbon Institute. At this early stage, the position may only take a few hours a week and the work can be timed to fit your schedule. A coordinator can be work from anywhere in the world with ready access to a phone and the Internet.

Skills: Interest in and substantive experience in some or all of the following: energy, oil depletion, natural gas depletion, environment, community building. The coordinator would have familiarity with or demonstrated ability to quickly learn the basics about local money, local food, renewable energy, and car cooperatives. Experience working in team environments and/or with community groups. Coordinators should enjoy talking to and working with a wide variety of people, have a good sense of humor and an ability to handle multiple demands with competing priorities. An Outpost coordinator, as will any member of an Outpost, will need to sign Post Carbon Institute's statement on Global Relocalization (this can be done online - the URL and the statement can be seen on the next page).

Contact Celine Rich, Program Director at outposts@postcarbon.org.

Post Carbon Institute

Outpost Agreement

(All Outpost members need to sign this agreement online at http://agreement.postcarbon.org)

WHEREAS, just as with all other living beings, humans too are subject to the universal ecological dilemma of population pressure, resource depletion, and habitat destruction

WHEREAS, the global economic system characterized by corporate globalization is herding industrial civilization in a disastrous direction along each component of the universal ecological dilemma such that we face a perfect storm of global oil extraction peak, continuing population growth, declining per-capita food production, climate change, pollution, habitat destruction, loss of biodiversity, and unsustainable levels of U.S. debt. (Which will affect the whole world.)

WHEREAS, the global economic system is largely fueled by and dependent on cheap fossil fuels, most notably oil (40%), coal (x%) and natural gas (20%) of global energy consumption.

WHEREAS, oil and natural gas are the feed stocks of many industrial processes, notably industrial agriculture, as well as key components of many products upon which we rely including plastics, synthetic fabrics, medicines, and chemicals.

WHEREAS, many petroleum geologists believe global oil extraction is peaking and will soon go into inexorable decline, while natural gas has already peaked in North America, and global gas will also follow oil into permanent decline.

WHEREAS, no portfolio of existing or emerging substitution technologies or market-based solutions can plausibly enable (much less guarantee) us to continue business as usual and living as we do.

WHEREAS, we are headed for a crisis and likely to experience collapses of varying degrees and in unprecedented proportions; sufficient elevation of consciousness, conservation, policy, green business, and innovation are too little and too late, and therefore unlikely to change any macro-level trends prior to a severe crisis.

WHEREAS, a key component of our response to oil and gas peak and the negative consequences of corporate globalization is the process of Global Relocalization, such

that communities globally become more self reliant and essential human needs to the greatest extent possible are met within walking distance. Although many aspects of the ideas, knowledge, and models are being worked on, they will need to be applied at the local level through a widespread and coherent experimentation process.

WHEREAS, when a crisis occurs, every community needs to have a Post Carbon-like group with expertise, experience, tools, plans and working models for local food, money, energy, water, media, governance, ownership, and culture, and to network with other like-minded groups locally, regionally, and globally thereby creating a parallel public infrastructure that will provide the basis for transitioning from the petro-pollution economy into the Post Carbon World.

I _(name)_____ agree to participate in _(Post Carbon Experiment affiliation)_____ in _(city, state, and country)_____ to raise awareness, create community and a sense of place, and/or begin relocalization experiments, all with the intent of moving from a fuel to a foot economy and contributing to the development of a parallel public infrastructure, whether I intend to stay or leave my present locale. I certify that whilst part of an Outpost I shall be a member of Post Carbon Institute (http://member.postcarbon.org) effective from the date of this agreement; I understand that these goals will not be met by using violence or nuclear energy.

_____ _____

Signed Date

Chapter 4. How to Begin an Outpost and Use the Scripts

Now that you have agreed to be an Outpost Coordinator and have a group interested in working with you, whether it is one or twenty others, this section will help you decide on where and how to begin. We suggest a film making model for getting Outposts started. This allows groups to organize in a fluid way which is appropriate for them. It means that people with expertise can be brought into a project on a temporary basis, as their time permits. This model allows for lots of people to contribute in important but less skilled roles, which certainly helps boost morale and keeps participants engaged. When the project is finished, there can be a "wrap party' or celebration of a job well done. On subsequent scripts undertaken by the group, participants can play different roles. This keeps participants interested and builds their repertoire of skills and experiences.

Scripts to Begin with

- First meeting – Facilitators Guide to Beginning a Post Carbon Outpost
- Creating an Open space for Conversation

The Film Making Model

Films are projects with finite durations that require quite a lot of coordination and collaboration. Once the central outcome is achieved (e.g., the film is completed), a celebration ensues and participants move on to the next or often different projects. The foundation if this model is the script, many of which are provided in this document. Post Carbon experiment scripts outline the purpose of the project, roles, tools, steps, and resources.

A core group or even one person can write the script or use the one(s) we provide. Then, after reviewing the script or getting a debriefing of its content, others choose (or choose not) to join in. The 'crew' agrees to collaborate with the core group for the duration of project. In this model, the script does not change substantively during the project. This metaphor could also be that of a play, or that of an orchestra. If you have ever worked on such an endeavor, you will understand the focus on a central idea (the script) and on a central outcome (e.g., opening night). This is not meant to imply that there is only one way to work-through a script – all productions of Romeo and Juliet differ along the lines of their unique combination of vision, interpretation, resources, actors and actresses, location, and audience.

Films (and plays) require a few central people who can fulfill the roles of director, producer and other key roles, as well as a cast or crew of others to help get all of the work done.

This approach works when the script or project requires a number of skilled people. Each person knows their specific role in regard to the script and work towards a well-defined, predetermined goal.

This approach also works for propositional and proactive projects and relocalization experiments. For instance, a few people might have a vision for a community garden and decide to do some initial ground work and planning. The core group then pitches the idea to the community, encouraging input and others to join in so that the garden can be built. After the garden is established the group may switch to another organizational method for continuing operations of the project.

As you consider and work through projects, keep in mind that the scripts presented herein are a guide, not a rulebook. Use your own ideas and judgment and tailor them to your community as appropriate. Please document your changes to and deviations from the scripts in the online localization database or send to scripts@postcarbon.org.

Never forget the wrap party. It is very important to celebrate your achievements with gatherings of food, drink and music along the way.

A Call for Scripts

The foundation of the Outpost initiative is a network of collaborative relationships between the Outposts and Post Carbon Institute, Outposts and other entities, and among Outposts in the network. The network is intended to be resilient and decentralized enough such that the collaboration continues regardless of the function or dysfunction of any node in this network. Hence, our intention is for most of the scripts to originate from the network rather than Post Carbon Institute.

As your group develops new scripts (or alters existing scripts) to meet local needs, keep in mind the need to document your work as these scripts will undoubtedly be useful for groups in other locales both in your bioregion and beyond. Here are some ideas for scripts:

- Drastic energy conservation consulting service
- Train peak oil and relocalization speakers
- Develop education curricula (for any level or age group)
- Make a short film or public service announcement
- Pitch then produce a radio show
- An eat local campaign

We are pleased that so many talented people are already involved or are soon to be and about the variety of locally based talent, experience, and expertise, and the enthusiasm folks are bringing to the Outpost program. We expect that we will soon receive many excellent scripts and models, as well as experiment results that will prove immensely

valuable to the relocalization movement. Please send your new scripts to scripts@postcarbon.org. Contributors will be recognized.

We also need help managing and performing the process of updating and improving the scripts submitted to Outposts and comments on existing scripts. Email scripts@postcarbon.org if you are interested.

Group Facilitator's Guide to Beginning a Post Carbon Experiment

Synopsis: This will help the group decide what project to begin with.

Roles:
Facilitator: can be from within the group or someone from outside the group
Group: three or more people who want to develop low energy living strategies for their community.

Time Frame: 2-3 hours

Tools: Large pad of paper, a selection of colored markers, and some tape.

Project Outline
Facilitator's Role: to help the group come up with as many ideas as possible, then synthesize them into an action for the group. This is not about doing one person's idea - it is about how all of the ideas of the group and the skills of the participants fit together to do something the group thinks is important.

1) Brainstorming: ask the group a series of questions. Note these on the large pieces of paper. Try asking the same question in different ways and encourage very open thinking – this is not the time to edit the ideas – no judgment should be placed on the ideas gleaned at this stage.

Questions could include:
Purpose

- What issues are most important to you?
- What would you like the group to achieve?
- Who should hear your message?
- Who else should be involved?

Resources

- How much time do you have?
- What sorts of things do you like doing?
- What specialized skills do you have to offer?

Action

- What could you do to act on what you have identified as important?
- What projects have you heard of that you admire and thought were successful and why?
- What are some of the actions you could do?

TEA BREAK
This should happen in the same space and include drinks and snacks. It is important for participants to have informal conversations. It is also important that the energy created

during the brainstorming session not be dissipated which would happen if each participant went off on their own during this time.

2) Analyze: The Facilitator should hang all of the papers on the wall and begin to group the ideas together. Then the group reconvenes and the Facilitator leads them in a discussion of how the ideas fit together. The Facilitator has to be quite strong in asking how 'does this idea fit with this other point'? Remember to note everything on the large pieces of paper. This is the challenging part of the workshop, where new ideas and understandings can happen. At this stage the group is still open to all proposed ideas.

3) Synthesize: This is the point where we begin to focus on the best ideas for the group. Here the group can discuss what action we can take, given the resources identified to achieve our purpose. If you run into difficulties, ask what is blocking the group. Remember to note everything down.

4) Recap: What happened and what points were agreed on and what action is to be taken?

Evaluation and Report
Is the group enthusiastic about the collective idea? Please write a two paragraph report about your group's experience with this process and what they decided to do.

Create an Open Space for Conversation

Synopsis: Open Space is a self-organizing practice of inner discipline and collective activity which releases the inherent creativity and leadership in people. By inviting people to take responsibility for what they care about, Open Space establishes a marketplace of inquiry, reflection and learning, bringing out the best in both individuals and the whole.

When to use it:

- Where conflict is holding back the ability to change
- Where the situation is complex
- Where there is a high degree of diversity
- Where there is an urgent need to make speedy decisions
- Where all stakeholders are needed for good decisions to be made
- Where you have no preconceived notion of what the outcomes should be

In the context of an outpost, Open Space is particularly useful for getting groups of people who have not worked together into conversations about common interests.

Probable Outcomes:

- Builds energy, commitment and shared leadership
- Participants accept responsibility for what does or doesn't happen
- Action plans and recommendations emerge from discussions as appropriate
- You create a record of the entire proceedings as you go along

Roles:

- Facilitator
- Meeting attendees - To date, we know that Open Space accommodates groups from 5 to 1500 people. It can be run for a couple of hours to 3 or more days; consecutively or over time; at one site or at multiple sites connected by computer and/or phone and video. The longer the space is open, the more transformative the outcomes.

Time Frame: 2.5-3 hours

Tools: Paper, marking pens, ballpoint pens

Project Outline

How it works:
The Law of Two Feet means you take responsibility for what you care about -- standing up for that and using your own two feet to move to whatever place you can best contribute and/or learn.

Four principles apply to how you navigate in open space:

1. *Whoever comes is the right people*
   Whoever is attracted to the same conversation are the people who can contribute most to that conversation—because they care. So they are exactly the ones—for the whole group-- who are capable of initiating action.
2. *Whatever happens is the only thing that could've*
   We are all limited by our own pasts and expectations. This principle acknowledges we'll all do our best to focus on NOW-- the present time and place-- and not get bogged down in what could've or should've happened.
3. *When it starts is the right time*
   The creative spirit has its own time, and our task is to make our best contribution and enter the flow of creativity when it starts.
4. *When it's over, it's over*
   Creativity has its own rhythm. So do groups. Just a reminder to pay attention to the flow of creativity -- not the clock. When you think it is over, ask: *Is it over?* And if it is, go on to the next thing you have passion for. If it's not, make plans for continuing the conversation.

How Open Space works when there is conflict:
The Law of Two Feet gives participants freedom to move at any time to a discussion they care about. Caring creates common ground, and helps to remind participants of higher purpose.

The steps in brief:
1. Select a focusing statement or question for your gathering. It should frame the higher purpose and widest context for your discussion in a positive way.
2. Invite the circle of people: all stakeholders or all the people you'd like to have in the room. Include the theme, date, place and time of gathering in the invitation.
3. Create the circle: Set up chairs in a circle or in concentric circles, leaving space in the center. Choose a blank wall for the Agenda Wall and label it AGENDA: AM, PM across the top. Set up a table for computers near a wall you label NEWS. Put blank sheets of news print (about quarter size of a flip chart page) and colored felt pens in the center of the circle. Near the Agenda Wall and the News Wall put masking tape for people to post papers on the walls.
4. To begin the gathering: Facilitator explains: the theme, the simple process the group will follow to organize and create a record, where to put things up and find out what is happening, the Law of Two Feet, and the Principles of Open Space. Then, facilitator invites people to silently meditate on what has heart and meaning for each of them.
5. Opening the marketplace: the Facilitator invites anyone who cares about an issue to step into the middle of the circle and write the topic, their name, a time and place for meeting, announce it and post the offering on the Agenda Wall -- one sheet per topic—as many topics as he/she wants. They will be conveners who have responsibility for facilitating their session(s) and seeing to it that a report is made and shared on the News Wall.

6. When ALL offerings are concluded, the Facilitator invites people to sign up for what they are interested in and take responsibility for their schedules, using the Law of Two Feet.
7. People participate in discussions. The Facilitator takes care of the space. Reporters enter discussion reports in the computers and printouts are posted on the News Wall.
8. Closing Circle: all reconvene an hour before closing to share highlights, "ahas" and key learnings in a Dialogue format: simply listening to whatever people have to offer without discussion, or you can pass a "talking stick" for each person to hold as he/she is talking, or to pass along if the person doesn't want to contribute anything.
9. Mail out whatever record is created and an address list to all who came.
10. If it is a several day gathering, do steps 3 through 8 daily.

Evaluation and Report

- Please write a short report about your group's experience with this process and how you have catalogued this information.

Resources:

- http://www.openspaceworld.org/wiki/wiki/wiki.cgi?OpenSpaceFacilitatorsToolbox
- http://www.openspaceworld.org/tmnfiles/describe.htm
- www.spiritedwork.org
- Jeff Aitken (tzimtzum@earthlink.net) has used Open Space for an initial Outpost meeting.

Chapter 5. Inventory Assessment

Rather than rush out and haphazardly begin building a Parallel Public Infrastructure, please take the time and effort to take an inventory of and understand the current state of your community. This inventory assessment will provide insight into strengths that can be built on and where challenges may lie. Inventories will help you understand how to motivate your community and provide background information for your Research projects. Thoughtful review of the community needs assessment will provide your group the basis for deciding which action or project you want to undertake first. It will also provide facts and information for making a case to other community members, both of the importance of the project and of their participation.

Scripts for Inventory Assessment

- Nature and resources
- Society and business
- Municipal and regional political structure
- Local needs
- Skills database
- Corporate Disobedience

Nature and Resources

Synopsis: Understanding your community and bioregion and its resources is a great starting point for choosing projects and experiments to undertake.

Roles:

- researchers – to gather the information
- compilers – to put the information in an accessible and useable form for the group

Time Frame: 1-3 Months

Tools: Telephone, Library, Internet, Interviews

Project Outline

To map the natural features of your community and bioregion. This could include arable land, weather, flora and fauna.

Community

- Identify the type of soil your community has.
- Identify the growing season and what type of staple calorie crops thrive in these conditions.
- Identify the physical footprint of the community and types of land use. Gather maps and photos of different areas. Get information on population size, proportion of types of housing, percent owner-occupied, and the population density. Identify community gardens and vacant lots.
- Identify unique physical, social, and economic characteristics of the community.
- Get climate summary data on insolation, sunshine days, degree heating and cooling days, rainfall, and wind patterns.
- Find out where the water comes from and its quality.
- Identify the energy sources for your community. Where are power plants located and what type of infrastructure do they have? What are the regulations around independent energy? Can you choose which source your power comes from?
- How is global climate change affecting your community?

Bioregion

- Identify bioregion boundaries
- Identify other communities in the bioregion
- Identify food production in the bioregion
- Identify locally produced goods in the bioregion

Evaluation and Report

- Please write a short report about your group's experience with this process and how you have catalogued this information.

Resources:

- Bioregions: http://www.planetdrum.org

Society and Business

Synopsis
Understanding your community and its resources is a great starting point for choosing projects and experiments to undertake. To map the landscape of civil society and cultural organizations already in your community and the focuses of the projects they are doing.

Roles
- researchers – to gather the information
- compilers – to put the information in an accessible and useable form for the group

Time Frame
- 1-3 Months

Tools: Telephone, Library, Internet, Interviews

Project Outline

A good way to learn about your community is to conduct a community asset inventory. It is best to undertake this on a neighborhood level with a neighborhood-based group doing the work. Cataloging a community's assets involves a door-to-door survey of one's neighbors, in three parts.

1. An inventory of the gifts, skills, and talents of neighborhood residents is compiled.

2. You locate and list all associations in your neighborhood, and you need to make this list as broad as possible. For example you would include social clubs, religious organizations, sports clubs and teams, PTAs, civic organizations, gardening clubs, etc.

3. Finally you develop a list of formal institutions; these might include private businesses, public institutions (libraries, schools, parks, etc.), and non-profit agencies (hospitals, community development agencies, etc.).

There are several reasons why community asset inventories are a valuable first step; the two most important are: 1) it helps community members identify their local assets and provides them with a list of all resources that might be pulled into a process of neighborhood visioning or regeneration; and 2) the very process of creating an asset inventory gets community members talking to each other about their shared hopes and concerns.

Extend this process to address the following:

- Identify civil society and cultural groups and the projects they are doing.
- Find out about the history of your community and bioregion, including foods, energy sources, water, local currencies…

- Identify the types of businesses in the community, whether they are locally owned and/or have local produced goods.
- Identify transportation and commuting patterns, bicycle and pedestrian areas, mass transport, car pooling and sharing options, car-related infrastructure.
- Find out about food production, community gardens, farmers markets, community supported agriculture, groceries and markets. Find out about people diets of people in the community.
- Determine what happens with waste, how much of it there is, and what recycling programs handle.
- Find out about health care, locations of hospitals, number of ambulances, response times, average life spans, and cost of health care.
- Identify localization efforts, community organizations, and associations.
- Identify media outlets and ways to submit information
- Find out about the historical land uses and review the General plan (see glossary).
- Get demographic data by age, race, sex, income for the community

Evaluation and Report

- Please write a short report about your groups experience with this process and how you have catalogued this information.

Municipal and Regional Political Structure

Synopsis: Get to know the municipal politics in your locale: how it works, who's involved, what commissions are working in your community. Find out what laws inhibit localization and how to change them.

Roles

- Leader
- Research team

Time Frame

- Preparation 1-2 months

Tools

- Telephone, Internet, Library, City Hall

Project Outline

- Identify the responsibilities of the local government (for example, what decisions are inside and outside their range of their control?)
- Identify all government agencies and their funding
- Identify municipal leaders and review their voting records
- Review governing documents for the municipality and determine how decisions are made and how the initiative process works
- Review the zoning ordinances and land use, and identify laws and ordinances that inhibit localization
- Review the number of police officers and fire fighters, and their distribution
- Identify government subsidies and how local taxes are used
- Map out ties between local and regional politicians and business
- Identify your municipal policies and laws on energy, food, transportation, land zoning, and support of locally owned and operated businesses
- What are the rules and regulations around running for office and what positions are open and when?
- Review the municipal energy policy and the General Plan
- Evaluate the extent to which the city has contingency plans in place to maintain essential services during energy shortages
- Investigate setting up a Citizen Advisory Committee to help with decision-making on energy-related issues.
- Investigate forming community councils, neighborhood associations, Neighborhood District Coalitions, Neighborhood Crime Prevention and other municipally sponsored community oriented groups
- Determine whether the municipality would consider a town hall meeting or consensus conference on energy

Evaluation and Report

- Please write a short report about your group's experience with this process and what the best sources were.

Local Needs Assessment

Synopsis: Estimate the amount of food, energy, and water currently being produced in the locale and the additional amount coming from outside the locale necessary to meet the needs of the community. Also, estimate how much waste is being produced and where it goes.

Roles

- Leader
- Research team

Time Frame

- Preparation 1-2 months

Tools

- Telephone, Internet, Library, City Hall

Project Outline

- Estimate the number of people and the current consumption of food, energy, and water and the weight/volume of material waste.
- Estimate how much consumption could be reduced through conservation
- Identify local sources of food, energy, and water and the amount produced
- Determine how much additional food, energy, and water would need to be produced to make the community self reliant.

Evaluation and Report

- Please write a short report about your groups experience with this process and what the best sources were.

Skills database

Synopsis: Who has what practical skills in your community? These may include what a person does for paid employment, what they do for a hobby or an elderly person who remembers skills and methods from their youth. This is an electronic database that your community can keep adding to as community members learn new skills and people come in. As your group undertakes Research and Action oriented scripts, you will quickly be able to find the skilled people in your community to help. A skills database can also be paired later on with a LETS type of barter or local money system.

Roles

- Interviewers, data compilers

Time Frame: 1-2 months

Tools: Telephone, Computer, meeting people

Project Outline

Talk to as many people as possible in your community and find out what skills, obvious and hidden, they have which will be important in a low energy world. Who are the folks with knowledge of working the soil, growing plants and saving seed? Who has the practical manufacturing skills of metal work, pottery, weaving, sewing, carpentry? Who remembers how to do things with little electrical equipment? Who are the local musicians that can perform at a community celebration? Who has the practical administrative skills to help your group achieve its parallel public infrastructure goals? Who can make tools? You can add to this list as you begin talking to the people in your community. Don't forget to tell them why their skills are going to be important.

Get each person's contact details and ask their permission to be contacted for advice or instruction on their skill.

Evaluation and Report

- Please write a short report about your groups experience with this process and what the best methods of collection were.

Corporate Disobedience

Exploring ways ordinary people and groups can disengage from globalization and help draw resources back into their local economies and cultures by not buying from global corporations anything they are not contractually bound to. It is a kind of legal version of civil disobedience.

With the idea of non-violent, coordinated civic action to try to halt and even significantly change the direction our so-called leaders are taking us in, particularly in the matter of the use of mechanized violence. However, stopping military carnage at its source will take more than the usual civil disobedience: it will take corporate disobedience, because it is corporations who control so much of how life is lived, and death is done. And we are surely almost all of us feeding the corporations just as fast as we can.

We need coordinated action to stop giving the corporations our money - most especially this means cars, mortgages, energy, and industrial food, but it also includes industrial entertainment, clothes, furniture, tools - in fact, the list is almost endless, and encompasses almost everything we use and are told we need. Disconnecting from corporations is going to be ferociously difficult, but will involve far more than protests, and much more even than just boycotting their products, which would be hard enough on its own. To make disconnecting from corporations work, the public must start making things again; effectively taking back the means of production (this is a vital part of Post Carbon Institute's Global Relocalization policy). Local production can (once again) be done through a lively, wide and varied mixture of traditional and newer operating forms - publicly owned, privately owned, family owned, co-operative, for profit, non-profit, direct and indirect democratic control, and perhaps new institutional forms yet to be created. Furthermore, taking back the means of production, especially of energy production (harvesting is a better term), is, we believe, the only way that villages, towns, cities, and regions will be able to fund their public spending and begin to escape the totalitarianism of the corporate stranglehold.

Without some significant measures to start changing the filthy, brutal, selfish, destructive, militaristic, greedy system which produces the national and global pyramid schemes (eg the former British empire, now transferred to and metamorphosed into the American empire) which are destroying people and planet before our eyes, then civil disobedience own its own will be doomed to failure. Linked with corporate disobedience (which is by definition never illegal, and thus less intimidating in some ways), a wide range of civil protests may have a significant and lasting effect. Otherwise we fear that such actions will be empty gestures waiting to turn up as manicured images in the next cynical Nike or Coca Cola commercial or in some new toxic, violent video game.

Personal Corporate Disobedience

Synopsis: This exercise determines the extent to which we are dependent on corporations and identifies opportunities for clipping the corporate umbilical cord.

Roles

- Corporation dependent consumer, group of consumers to compare notes and offer support and advice

Time Frame: 1-3 hours, then monthly evaluation

Tools:

- Internet, paper, pens, computer, bills

Project Outline

Prepare a budget

1) Create a list of all of your monthly income. If you have any sources of income that are received annually then simply divide this number by 12. It is important to list all sources including alimony, child support, side jobs, etc. This figure will set the cap on your total budget.

2) Create a list of all your monthly expenses. If an expense occurs less frequently, simply prorate it to fit a monthly format. Be sure to include such expenses as; housing, food, transportation, utilities, entertainment, etc. It is wise to track your spending for a full month during this stage of budgetary planning. Save your receipts and each evening write down your expenses for the day. This is the best way to gain an accurate reflection of actual expenses. Alternatively, you can use your bills and checks to identify significant, recurring and periodic expenses; include these as separate line items in your budget.

3) Make sure that you have line items for utilities, food, personal care, entertainment, and transport as these are generally areas where corporations play a large role in our lives.

4) Add new categories if necessary. Three areas that are often overlooked are 1) debt reduction 2) retirement savings and 3) emergency savings. An emergency fund will ensure that there is an adequate amount available to cover an unforeseen even (i.e. the car breaks down) should it arise. This will prevent the use of credit which can quickly break a personal budget.

5) List this information into a spreadsheet with income separated from the expenses.

6) Determine if your income covers all of your current expenses. If the answer is no, then expenses need to be reduced. One way to do this by cutting out corporations.

Identify Corporate Dependence

7) For each expense line item, estimate the percentage that is paid to a corporation and enter this information in the spreadsheet. Multiply each percentage by the amount of the corresponding line item to get the amount paid to corporations; the sum of these across all expense line items is your corporate dependence.

8) Identify the line items with the largest amounts paid to corporations and think about how the interactions can be reduced, or they can do with out or can be replaced locally.

   For instance – someone who eats lot of packaged foods might consider locally produced foods, cooking more, and eating out less. They could identify the common foods they eat and see what it would take to make these at home by finding recipes and scoping out the costs of bulk foods and produce.

   As another example, someone who purchases electronic equipment and tools may consider how to keep such goods in good shape to extend their lifetimes. And when they break, how to repair them and whether one can purchase a replacement from a locally owned shop rather than a chain or big box store like Walmart.

   Estimate the changes in dollar terms from not interacting as much with corporations for each line item and enter them in a new column in the spread sheet.

9) For the line items with the largest amounts paid to corporations, consider the extent which sharing with your neighbors and friends could reduce the amount that you pay to corporations. Adjust the spreadsheet as appropriate.

10) For each income item, estimate the percentage that is paid by a corporation and enter this information in the spreadsheet. Multiply each percentage by the amount of the corresponding line item to get the amount paid by corporations; the sum of these across all expense line items is your exposure if the corporation's plans change.

11) If a significant amount of your income comes from a corporation, evaluate the extent to which it is certain and consider how you might respond if it was no longer available.

12) Identify several corporate disobedience actions that you are will to start today.

Report Back to Group

13) Report back to the group and share what you have found about your buying habits and what strategies you have for reducing your corporate dependence.

14) What strategies do others in the group have and how might you work together?

Investigate Coordinated Corporate Disobedience

15) See the work of those such as Arundhati Roy trying to coordinate avoiding corporations.

16) Find out whether there is a local Freecycle http://www.freecycle.org, Craigslist http://www.craigslist.org, and/or other gifting list or site through which recycle things in the community.

Evaluation and Report

- Please write a short report about your experience with this process and the actions you are going to take on.

Resources:

- Online Budget Form: http://www.moneyadvise.com/budgetform/
- Budget Worksheet: http://www.moneyadvise.com/worksheet/
- Personal Budgets and Money Saving Tips http://www.personal-budget-planning-saving-money.com
- http://www.CorporateDisobedience.org
- Book on the Simplicity Movement such as "Your Money or Your Life: Transforming Your Relationship With Money and Achieving Financial Independence" by Joe Dominguez and Vicki Robin and Choosing Simplicity: Real People Finding Peace and Fulfillment in a Complex World by Linda Breen Pierce and Vicki Robin
- AntiConsumerism Movement UK website: http://www.enough.org.uk/
- Overcoming Consumerism: http://www.verdant.net/society.htm
- Catherine Austin Fitt's Solari Project: http://www.solari.com
- Overcoming Consumerism: http://www.verdant.net/society.htm

Chapter 6. Local Think Tank

Creating a Local Think Tank is very useful in many circumstances and especially helpful for members and communities new to the concepts of Peak Oil and relocalization, and when participants come from a diverse and/or wide geographic area such as the Metropolitan area of a large city. Think Tanks can run concurrently with any of the other types of scripts. Think Tanks facilitate teaching and learning among participants and in the community. Their purpose is essentially idea advocacy in public. This understanding can help a group create and advocate low energy living policies to their local governments, write articles for local newspapers and be articulate about the issues in order to persuade fellow citizens.

Scripts for Local Think Tank

- Film Screening guide (e.g., for End of Suburbia)
- Coordinated letter, fax and phone campaigns
- Reducing personal energy use
- Study Groups (e.g., Powerdown, High Noon)
- Develop an educational project
- Energy audits
- Localization Advocacy
- Relocalization Committee

Film Screening Guide

Synopsis – Raise awareness of our energy and ecological predicaments, as well as related issues, through special film screenings, film festivals, and regular film screenings. This script is written for a film screening and can be adapted for festivals and a series of screenings.

Roles

- Host/ organizer – someone to get the screening started and usher it through to fruition
- Cosponsoring organization – one which has a ready audience and/or access to a venue and video projector.
- Helpers

Time Frame – 2 weeks - 2 months; but only 6-10 hours of work.

Tools: DVD or VHS player and projector, DVD or VHS copy of film, Internet, clipboard, pen, donation container, change. We suggest that groups start with the End of Suburbia. Other possibilities include Our Synthetic Sea, Blue Vinyl, The Future of Food, The Red Pill, Hijacking Catastrophe, The Corporation or The Take, and other hard hitting documentaries.

Project Outline
The intent of screenings is to raise awareness within a community or metropolitan area. Most screenings are considered successful if:

1. Attendees feel like they have learned something important
2. Funds are raised for sponsoring groups including the outpost
3. Attendees sign in or sign up, providing their contact information (especially email)

This is a guide, not a rulebook. Use your own ideas and judgment. If you want to have a screening with 6 friends at your house, most of this will not apply though you may still find it an interesting read. Also, if you have any suggestions, please send them to screenings@postcarbon.org.

Getting started

Screenings can be as small or large as you like. Below is a list of the types of screenings that have been done or are being considered:

- Immediate family
- Family gatherings such as reunions
- Gatherings with friends and family
- Meetings of clubs, organizations, and companies
- Movie nights of clubs, organizations, and companies
- House parties are great

- Book and movie clubs
- Preceding conversation cafes
- Events at ecology and community centers, libraries
- Conferences
- Community forums
- Fundraisers
- High schools, colleges, and universities
- Local independent theaters that have a DVD projector
- Prior to discussions with authors with recent books about our energy predicament such as Julian Darley, Richard Heinberg, Michael C Ruppert, Matt Savinar, Sonia Shah, and Michael Klare.

In many cases, organizing a screening does not have to be an inordinate amount of work. The key is to get help. My favorite approach is to find organizations that want to co-sponsor the screening which have a ready audience and/or access to a venue and video projector.

Good candidates for co-sponsoring screenings are:

- Local environmental groups
- Local social justice and peace groups
- Other advocacy groups focused on car-free living, simplicity, biking, biodiesel, etc…
- Eco-villages, co-housing, and other shared living groups
- Green builders, architects advocating new urbanism, solar and wind power companies
- Urban, environmental, ecology, and energy studies departments at local universities, colleges, and community colleges
- Environmental, social justice, documentary, and other film festivals
- Eco living, renewable energy, and social justice conferences
- Public transportation unions
- City urban planning departments
- Political candidates running for office on a Post Carbon platform

Call or email the appropriate organizations in your area asking them whether they would be interested in being involved in screening the film. Let them know that it can be a fundraiser for their organization as well as an opportunity to have a discussion of their cause in the context of our energy predicament. Ask them whether they could help promote, setup, provide a venue and audio-video equipment, participate during the screening and the cleanup.

Preparation

1. Order THE END OF SUBURBIA
Order the DVD or VHS from the online bookstore of Post Carbon Institute (http://www.postcarbon.org). The cost is US$24 plus shipping. Note that you can

reimburse yourself for the cost of the film and other screening expenses from donations collected at the screening.

You may also consider ordering some additional DVDs to be sold at the event. *This is the best way to ensure that your screening has the potential to spawn additional screenings and viewings of the film.* At screenings, we sell DVDs for $25 U.S. and normally 10-20% of the audience will purchase the DVD. You can get 10 copies at $18 each at http://store.postcarbon.org or you can get a case of 30 for $12 each. You can return unused copies provided they are in their original condition. If you would like to take some copies on consignment, contact screenings@postcarbon.org.

2. Make a to-do list and assign tasks to helpers
Below are examples of key activities for the screening. Make a list of tasks applicable to your screening. Figure out which will be done by co-sponsoring organizations; delegate the remaining tasks to helpers as appropriate; if at all possible, match helpers to activities that they enjoy.

- Locating a venue
- Event planning
- Distribute or hand out flyers at events, farmers markets, college and university campuses, etc.
- Help out at a screening; setup equipment and chairs; collect donations at the door; handle the signup sheet; sell DVDs; bring refreshments; answer questions about the Outpost; speak after the film; cleaning up
- Post announcements online - email lists and forums - solicit suggestions from other volunteers
- Send announcements to newspapers, radio and TV stations
- Coordinator: Provide assistance to volunteers with tasks, verify that tasks get completed

3. Locate a venue
Potential venues include homes, churches, colleges/universities, libraries, organizations, and even local theaters. Look for groups in your area which are likely to be interested in this documentary – local Green Party Organizations, Sierra Club and IndyMedia chapters, sustainability, environment or social justice organizations. Many such organizations are affiliated with churches and universities which gives them better access to good venues. Also, look for local independent theaters and organizations that are already sponsoring periodic screenings of films on topics not sufficiently addressed by mainstream media and politicians.

4. Develop a donation/door policy
We recommend the following donation policy "Suggested donation: $5 to $15, nobody turned away for lack of funds". Donations after any expenses from the screening are allocated to the sponsoring organizations. Alternatively, you may charge at the door per the release form provided by the End of Suburbia producer Barry Silverthorn.

5. Notify Post Carbon Institute about the screening
Submit your event to the event calendar at: http://eos.postcarbon.org/postevent.php. Your event will not show up until it is approved. To get it approved, send an email to screenings@postcarbon.org mentioning that you have posted a new event. If you are screening The End of Suburbia, send emails to electricwallpaper@hotmail.com and Eric@PeakOilAction.org to get the event posted on The End of Suburbia site and Peak Oil Action.

6. Consider purchasing materials to sell or distribute
As above, consider ordering some DVDs to be sold at the event. This can be a fundraiser for the Outpost and will help multiply the impact on the community. You may also want to consider purchasing copies of 16 page booklet of Richard Heinberg's The Party's Over. They are $1 each. We recommend giving away as a thank you for donations or selling them.

You can get the DVDs and the The Party's Over booklets from http://store.postcarbon.org

7. Create an email and a printed flyer
Make an email and printed flyer/announcement for your event. You can use the examples at as the foundation for materials for your screening: http://eos.postcarbon.org/prom_materials.htm#announce.

Postcard size, professional flyers are available at http://store.postcarbon.org. You can print the details of their event on 1" x 2-5/8"mailing stickers and affix them to front the flyers.

8. Invite friends, neighbors, co-workers, acquaintances from organizations, and thought leaders in your community
Inviting people in person or over the phone gets the best response. Sending emails has a lower response rate but allows you to reach a much larger group.

Also consider posting a local or private event on http://evite.com. Evites are a good way to spread the word about the event and gauge how many people are thinking about attending.

Evites for private events are sent to emails that you provide. We suggest sending the Evite to your network of friends, family, and colleagues as well as local thought leaders.

Local events are displayed on Evite to people who provide their zip code or find it while browsing or searching evite.com;
We suggest setting up a local event. Below is the example text we use for local events. Once you have set the local event, then use the "Email guests" or "Promote event" feature to send to people you know. Add a personal message that asks them to use the **Evite Friends** and/or **Tell Friends** links to pass on the message.

Example of text for description of Evite Event
Come join us for a screening of the new documentary "The End of Suburbia: Oil Depletion and the Collapse of the American Dream" followed by a discussion of issues raised.

With brutal honesty and a touch of irony, The End of Suburbia explores the American Way of Life and its prospects as global demand for fossil fuels begins to outstrip supply....

After the film, [put name here] will lead a discussion....

Free admission; donations accepted....

Sponsored by Post Carbon Institute and [put co-sponsor here]

Please use Evite's "Tell friends" feature to pass on info about this event….

The other option is to set up a private Evite. In your personal message, remind people to use the **Invite More Friends** link to pass on the Evite to others.

9. Post announcement on online sites
Post the announcement to online local community sites such as craigslist.org and indymedia.com. Also post at the Oil Awareness Meetup http://oilawareness.postcarbon.org.

10. Print out handouts and sign up sheet
Download the file for the tri-fold Post Carbon Institute brochure from http://eos.postcarbon.org/handouts.htm and print out enough copies for the number of guests expected. Also print out copies of the Outpost's flyer or brochure, if any. Also consider some other handouts on that page.

Download the file for the Post Carbon signup sheet (http://eos.postcarbon.org) or make your own. Print out enough copies of the signup sheets for the number of guests expected. Make sure you have a clipboard and pen for the signup sheet; it is best to tie the pen to the clipboard with a piece of string and allow sufficient slack for writing.

11. Check out the venue before the event
Visit the venue with sufficient advance time that you can resolve any issues that arise. Ideally, you will be able to survey the facility at the same time of day as the screening. Take a look at the parking situation, seating, and bathrooms. Identify locations for the TV/projector, the information table, and snacks and/or refreshments.

12. Make a Checklist List for the day of the event
Checklists are a good way to make sure nothing falls through the cracks. http://eos.postcarbon.org/prom_materials.htm has examples.

The Main Event

1. Arrive early before the screening to setup

Arrive at least 45 minutes before the event to setup chairs, TV/Projector, refreshments, and the information table. When someone is available to staff the information table, put out extra copies of the END of SUBURBIA DVD for sale, the donations box, and the sign-up list.

At larger venues, we recommend playing the bonus cartoon on the End of Suburbia DVD, "Destination Earth" (or some other short related piece such as Our Synthetic Sea) 20 minutes before show time; it keeps the audience entertained while waiting for the stragglers to get seated.

We recommend having a person actively collecting donations (or entrance fees) in a designated container at a table where people enter the venue.

2. Prior to the film

At the front of the room, thank people for coming and tell them the schedule for the evening (e.g., watch the film, then Q&A for 30 minutes), remind them to turn off cell phones, and tell them where the restrooms or lavatories are. Also mention that this a project of the Outpost and that people interested in finding out more can ask questions after the film or speak with a designated outpost member. Invite them to get on the sign up sheet if they have not already done so.

If appropriate, ask the audience to stand up, stretch, find someone they do not know sitting nearby, and spend a minute each introducing themselves and explaining why they came. If the audience is less than 6 people, this can be done in one group.

Note that there is an edited version of the End of Suburbia that removes two words that might be considered inappropriate for young audiences. The appropriate version can be selected from the on screen menu. Consider asking the audience what their preference is.

3. After the film

Invite the audience to get involved with the outpost and highlight some of your activities, including doing more screenings in the area to raise awareness. Ask people to make sure they sign the list and indicate whether they would like to get involved and whether they would like to host or help out with a screening. Pass around the sign-up list, preferably on a clipboard.

4. Have a discussion after the screening

If you are not having a question and answer session after the film, invite people to discuss the film in small groups. Ask people to separate into small groups by neighborhood, community, or geography such that each group has from 3 to 8 people; help bashful

people by separating them into natural groups. Ask them to talk about their reactions to the film using the following questions as a guide:

- To what extent will our community be affected?
- What local groups are already working on related issues (e.g., local food, local energy, local money, water, transport, green building, etc…)?
- What more could be done in our community and by municipal government to prepare for an energy-constrained future?

They should use 5-7 minutes for each question and one person from the group should be prepared to report back to the larger group after about 30 minutes discussion. The facilitator will comment and lead the discussion.

Alternatively, the groups can report back after each question.

After the discussion or Q&A, thank everybody for coming.

5. Finish with message from the Post Carbon Institute

"I have been requested by Post Carbon Institute to read this message to you verbatim. Post Carbon Institute thanks you for participating in this conversation. You are part of an experiment to see the extent to which film screenings can raise and broaden the general awareness of peak energy issues. Our "Raise Energy Awareness" campaign is a worldwide effort to conduct film screenings that in turn spawn more screenings. We are hoping that one or more of you will be open to host a screening or to find out more about how you could help out. If so, please see [fill-in as appropriate] afterwards. We also want to remind you that your donations go to [fill-in the sponsoring organizations as appropriate]. Your support enables us to continue working to raise the awareness of peak energy. Thank you for participating."

6. Ask for feedback

As people begin to leave, have a volunteer ask individuals for feedback on the movie - either verbal or written. Or the feedback could be requested in the first email to the list.

Evaluation and Report

The Day(s) After

1. Send materials to Post Carbon Institute

Send the list of emails, first, and last name from the sign up sheet and any feedback on the movie to screenings@postcarbon.org with a note about the screening, and indicating that the emails need to be added to the PCI mailing list. Submit donations through the online bookstore at Post Carbon Institute or send a check or money order to the Post Carbon Institute:

Canada Office
Post Carbon Institute
Suite 323 - 2730 Acadia Rd,
Vancouver BC, V6T 1R9

United States Office
Post Carbon Institute
5807 Fremont St.,
Oakland, CA 94608

Make sure you notify us that the funds are to be put aside for your Outpost!

2. Evaluate the screening
Post your evaluation of the screening at
http://www.postcarbon.org/mailgust/viewtopic.php?t=3296.

3. Email the list
Thank people for coming to the screening. Invite people to submit feedback on the movie at http://eos.postcarbon.org and click SUBMIT YOUR REVIEW. Indicate what the local group is doing and how to get involved.

4. Write an article about the screening
Write a short news article which includes the feedback and post it to your local http://www.indymedia.org site and/or send it to a local periodical.

Evaluation and Report

- Please write a short report about your groups experience with this process.

Resources:

- The End of Suburbia site: http://www.endofsuburbia.com
- Post Carbon's EOS site: http://eos.postcarbon.org

Coordinated Letter Writing, Fax and Phone Campaign

Synopsis:
The letters to the editor section of your local paper presents an ideal forum for getting your message about oil peak, low-energy living and global relocalization to its readers, both local citizens and politicians. More people read the letters to the editor section than almost any other part of the paper. From the newspaper's point of view, letters help the editors decide which topics to cover in future news stories or editorials. Even more important, elected officials carefully monitor this section along with the editorial page to gauge local opinion.

Roles

- letter coordinator – to keep track of which stories were responded to by whom and when and to ensure all papers in your area have a constant stream of letters written by a variety of people. Post letters on group website.
- letter writers – respond to articles you see in local papers. Also respond to articles identified by the coordinator. Bcc the coordinator on your letter so that it can be added to the group's website.

Time Frame: continuous

Tools

- computer, typewriter, fountain pen, pen
- knowledge of local media

Project Outline

- Inventory all papers in your community, from the community to the regional papers.

- Check each newspaper's submission guidelines. Most newspapers prefer emailed letters. Always include your phone number, e-mail and address since most publications will want to call to confirm that you wrote the letter before they publish it.
- When doing an editorial letter writing campaign, target several papers in your district at the same time and encourage people to explore different angles on the same issue. Legislators pay more attention to issues when they see that a number of people hold the same concern.
- Letters should be 250 words maximum. State your point in the first paragraph. Stay on the same subject. Support it with facts, quotes, and numbers in the second. Use the last paragraph to restate your point and make your recommendation.
- Check out the talking points on www.postcarbon.org. to help draft your letters

- Write as a member of your local Post Carbon Group,
- Avoid rambling sentences and big words.

- Open with a specific reference to a recent news story, editorial, or previous letter. "Recent" news story, editorial, etc., means no older than a few days. For the very biggest papers, no further back than 48 hours. You can use the reference to that item as a springboard for stating your case. Your letter can support and expand on something already in the news, make a point that was omitted, or disagree with and correct misinformation in whatever form it appeared.

- Localize your letter — explain how the issue will affect your area or personalize the letter by mentioning people in your own life or community who will be affected. A personal story will make your letter compelling.

- Accentuate the positive. When you criticize, also propose a response to the problem or a better alternative, if possible.

- Don't be disappointed if your letter does not get printed. Newspapers get many letters every day and can't print all of them. Most papers won't print the same writers over and over again. Therefore, if you have had a letter published recently, get another member of your group to sign the next one. This is where the Letter Coordinator will need to be active and keep track of who has been published where. Also try having a number of members submit a letter on the same topic at the same time. Editors are more likely to print letters on 'popular' issues.

- Working a local reference into your letter also helps. For example include the name of a local politician or place.

- Don't be afraid to ask for action — tell readers what you want them to do. This includes your elected representatives; you can be sure they read the letters to the editor. By putting their names in the letter and asking for action, such as a vote, co-sponsorship of a bill, an explanation, you get their attention fast. Always include a website for readers to reference -this could be your local website, or the postcarbon.org website.

- Clip the letter from the paper and send it with a note to the politician's office.

Evaluation and Report

Let us know about strategy works and what issues get the editors attention. Note any letters which get published and document them on your post carbon website.

Reducing Your Personal Energy Use

Synopsis
Aim to reduce the amount of energy used by each member of the group by a factor of 10. To support other members of the group as they find methods for reducing the amount of energy they personally use in their life.

Roles (each participant can play all roles simultaneously)
- Energy Reducer
- Sharer
- Supporter

Time Frame: Rest of your life

Tools
- Facts, determination, support

Project Outline
The single, fastest way to reduce general energy consumption is by sharing. It's that simple, and that hard. Sharing is precisely the opposite of what the dominant Anglo-Western culture teaches the world. The individual uses far more of everything than a group that shares, which may be good for the economy, but disastrous for everything else. Whatever the political system, if this obsession with self and the individual is not greatly reduced, our desire for energy will certainly continue to grow. The results of that growth will not remain a mystery for very much longer.

A simple analysis of where we use most energy quickly reveals that private personal mobility—namely, cars—are the largest single item. After that comes electricity and heating. Taking action to reduce very significantly, say by a factor of ten, the amount of electricity or heating that an average home uses is a very formidable, medium- to long-term task. Massively reducing the amount of energy we consume in our daily mobility is, however, a far, far simpler and quicker task. First, we simply aim to use our legs as the primary mode of transport, and we keep that aim for the rest of our lives. That means walking, something that most people can do in most kinds of weather for most of their lives. Bicycling is secondary to walking, but it is a very important and useful second. It is possibly the most energy-efficient form of transport available.

Now come the excuses and reasons for not using our legs, and jolly good reasons they may be. The trouble is that when several hundred million relatively wealthy people all make good excuses, nothing changes. So we need some transitions, and we need them fast. In some English-speaking cities there is a semblance of public transport. None of them matches an average European city, and that is a very important point in itself. For most places, however, public transport is either nonexistent or pathetic. For the short term therefore, in most North American cities, there is really only one choice: some form of car pooling on a grand scale. It can and should be done, both by forming or expanding car cooperatives and by instituting formal ride-sharing, or what the Germans rather catchily call *Mitfahrgelegenheit*—"with journey opportunity." In rural areas, these measures may

be quite impractical, then again they may not. But the biggest users of energy are city dwellers, so it makes sense to start from there. There is a very large, thriving (and attractively priced) car co-op in Vancouver, Canada (and more in Victoria and Nelson).[5] At the end of 2004, in Vancouver, there were nearly eighteen hundred active members and over ninety cars.[6] That works out to one car for just less than twenty people. This is a really serious reduction, and it is being done in an averagely overgrown, badly designed, car-choked, strip-malled, grid-bound, single-zoned North American city with some of the worst social problems in the industrialized world. If Vancouver can do it, practically any city can do it.*

Ride sharing works very well in Germany and Austria, and also in some places in North America. It is much more difficult in North America, if only because of the ingrained notion of individual freedom, not to mention fear of violence and mistrust of strangers. Nonetheless, it will have to be tried on a wider scale.

The first result of car co-ops and ride sharing is that easy, spontaneous, medium- or long-distance mobility is definitely impaired. We have to think before going a few miles, plan ahead a bit. We have to walk or cycle a few blocks to get the car. It forces us to examine how necessary that motorized journey is, and whether the job could be done some other way, such as by walking.

* *One major of benefit of a car co-op is the amount of money saved on not buying cars, let alone not running them. If twenty car owners all had cars with an average sale value of US$10,000, and they became members of a car co-op, the sale of the cars would net $200,000 and the total cost of joining for all twenty members would be $10,000. That would leave $190,000 available for starting a relocalization project. In our neoliberal era of deliberately starving social, cultural, and community services into extinction, that is an enormous amount of money.*

Another less obvious, yet powerful element to be shared is housing which if planned appropriately will also have the added benefit of reduced driving. Consider cohousing and cooperative housing arrangements where common areas (e.g., big kitchen) are shared and each family has private space as well. Not only are heating and cooling reduced, a strong sense of community can develop through daily interaction and shared resources. Large, detached, single family homes will become increasingly expensive and difficult to run and heat.

Clearly a litany of other actions can also reduce your energy consumption though none are likely to have the magnitude of effect as reducing your driving or changing your housing arrangement. Examples include:

- Use your muscles as the main form of transportation.
- Eliminate or moderate your heating and air conditioning use – insulate your house and/or your body
- Support locally owned businesses

[5] "Vancouver Co-operative Auto Network," http://www.cooperativeauto.net/ and Car Share Network, an international list of car-sharing organizations http://www.carsharing.net/index.html (accessed February 10, 2004).
[6] "Vancouver Promotes Car-Sharing," http://www.mirabilis.ca/archives/001277.html

- Purchase locally produced products and food
- Practice corporate disobedience – do not purchase the products of multinational corporations (especially cars and mortgages), unless you are already contractually bound to do so. Post Carbon Institute is developing a program to co-ordinate this activity (along with other interested groups). See CorporateDisobedience.org.
- Eat lower down the food chain; try to move to a plant-centered diet with the goal of eliminating flesh products from your diet (this takes time, planning and knowledge)
- Turn off the TV, or reduce your watching as much as possible (you will probably need to increase your social and community activities to make up for a perceived loss of 'community' - however, if you don't watch television, you will have more time and energy for real life family, friends, and community)
- Have only one child
- Tell others about the benefits of reducing energy use and how to do it, and encourage them to do the same. Encourage others to join or form Post Carbon Outposts.

Evaluation and Report

Report on your website some methods that worked and didn't work for your group.

Study Groups - Learning about the Issues

Synopsis: It is crucial for members to become well informed about the issues of energy peak, land use, transportation and local concerns. It is also important to have a collective knowledge of resources for responses including local money, local energy and local food.

Roles

- Moderator (can be a rotating position) – sets topic for discussion (with participation for the group) and ensures that each person present has an opportunity to participate.
- Participants – reads moderator's topics and other web and printed material. Comes to the gathering with comments or questions.

Time Frame: continuing monthly or bi-monthly for half to one hour depending on the number of people

Tools:

- Books, websites, journals, magazines and newspapers

Project Outline
This can take on two forms: report or discussion. These readings can support other work that your group is undertaking and can help you both plan and make decisions.

Report
A member gives a synopsis of the piece they have read, highlighting the most relevant points and talks about its relevance and impact on the group. Synopses are particularly helpful when there are scarce resources such as only one book in the library or articles which may only be in specialty magazines or expensive academic journals (such as energy journals).

Discussion
Each member reads the same piece, such as a book chapter or a newspaper article and then comes with a question for the group to discuss. The moderator ensures that each person has an opportunity to speak.

Suggested Reading

- *The Party's Over, Oil War and the End Of Industrial Society* by Richard Heinberg
- *Powerdown: Options and Actions for a Post-Carbon World* by Richard Heinberg (July 2004) http://www.powerdown.ws (check out the form a group section)
- *High Noon for Natural Gas - the New Energy Crisis* by Julian Darley (July 2004) http://www.highnoon.ws (check out the form a group section)
- *How to Grow More Vegetables* by John Jeavons
- *The Growth Illusion* by Richard Douthwaite
- *Eco Cities: Building Cities in Balance with Nature* by Richard Register

- *Rebuilding Community in America: Housing for Ecological Living, Personal Empowerment, and the New Extended Family* by Ken Norwood, AICP and Kathleen Smith
- *Blood and Oil: The Dangers and Consequences of America's Growing Dependency on Imported Petroleum (The American Empire Project)* by Michael Klare
- *The Truth About Oil & the Looming Energy Crisis* by Colin Campbell
- *Crossing the Rubicon: The Decline of the American Empire at the End of the Age of Oil* by Michael C Ruppert
- *Hubbert's Peak: the Impending World Oil Shortage* by Kenneth Deffeyes
- *The Geography of Nowhere* by James Howard Kunstler
- *Superbia! 31 Ways to Create Sustainable Neighborhoods* by Dan Chiras and Dave Wann
- *End Of Fossil Energy And Plan For Sustainability* by John Howe
- *Our Ecological Footprint: Reducing Human Impact On The Earth* by William E. Rees and Mathis Wackernagel
- *Limits to Growth: The 30 Year Update* by Meadows, Randers, & Meadows
- *Biodiesel: Growing a New Energy Economy* by Greg Pahl
- *Overshoot* by Robert Catton
- *Interim Report: Intrinsic Consequences of Economic Globalization on the Environment* (2002) by International Forum on Globalization
- *Ripe for Change*: *Rethinking California's Food Economy by* International Society of Ecology and Culture (2004)
- *A Prosperous Way Down* by Howard T. Odum and Elisabeth C. Odum

Suggested Web Sites and Pages

- ASPO http://www.peakoil.net & ASPO newsletter http://asponews.org
- Car Free Cities http://www.carfree.com/
- Cultural Economist http://www.futurereality.org
- Culture Change http://www.culturechange.org
- Eco City Builders http://www.ecocitybuilders.org
- Energy Bulletin http://www.energybulletin.net/
- Friends of Earth Model for Staring a Community Group http://community.foe.co.uk/local_groups/starting_a_group/
- From the Wilderness http://www.fromthewilderness.com
- Global Public Media http://www.globalpublicmedia.com
- Grow Biointensive http://www.growbiointensive.com
- Institute of Local Self Reliance http://www.ilsr.org/
- Life After the Oil Crash http://www.lifeaftertheoilcrash.net/
- Local Energy http://www.localenergy.org/
- Museletter http://www.museletter.com
- New Rules http://www.newrules.org/
- Oil Depletion Analysis Centre (ODAC) http://www.odac-info.org/
- Path to Freedom http://www.pathtofreedom.com

- Peak Oil Action News http://peakoilaction.org
- PeakOil.com http://www.peakoil.com
- Planet Drum http://www.planetdrum.org
- Post Carbon Institute http://www.postcarbon.org
- Ruthless Guide to Peak Oil and Gas by Julian Darley http://www.postcarbon.org/subpage.php?page=resources&sub=slides
- Slow Food http://www.slowfood.com/
- Solari http://www.solari.com
- The Community Solution http://www.communitysolution.org

Evaluation and Report

- Please write a short report about your groups experience with this process.

Localization Advocacy

Synopsis: Identify laws and ordinances that inhibit localization (e.g., grey water, zoning) and prospective laws (e.g., requiring x% local food in restaurant) that would encourage it, and organize campaigns around these issues. Go to the city council. Make web sites for the issue. Get local merchants involved…. Think about the core areas: money, food, energy, public and muscle transport, local business and manufacturing, reusing and reducing waste, getting your daily needs within walking distance.

This script will be written during the course of our research. If you have any experience or suggestions to help us complete it, please let us know through our website feedback form: http://beta.postcarbon.org.

Thanks,
Post Carbon Team

Develop an Educational Project or Product

Synopsis: Put your creative energies to work and develop an educational product or project about our energy or ecological predicaments or relocalization. The result of this script can be used by others and even sold locally and possibly on Post Carbon Institute's webstore as appropriate.

Roles

- Facilitator – leads session to brainstorm and select a project.
- Project leader – keeps the project on track and makes sure it gets done
- Developers – develop the project or product
- Fact checker – checks and documents any references
- Copy writer - writes promotional copy for the project of product
- Product manager

Time Frame: 1-6 months; variable and depends on various factors including the complexity of the project and the time availability of developers

Tools:

- Depends on kind of project chosen

Project Outline

Identify a genre of educational project or product that the group will develop. Consider bumper stickers, posters, curriculums for various ages, etc..

As a group, brainstorm on the possibilities for projects and/or products within that genre and afterwards select one based interest, usefulness, and viability.

Assemble the necessary tools and develop the project or product. (Post Carbon institute will help you directly and/or put you in contact with others doing similar work)

Make sure all references and facts are correct and include reference documentation. Write promotional copy for the product.

Evaluation and Report

- Please write a short report about your groups experience with this process.

Conduct a Personal Energy Audit

Synopsis: A simple rule-of-thumb exercise shows the scale of how deeply we are over-connected and dependent on far-distant, unknown and unknowable sources of energy

Roles

- Individual

Time Frame: 1-3 hours for initial assessment plus 15 minutes per month on an ongoing basis

Tools:

- Internet, paper, pens, computer, energy and water bills, gasoline purchase records

Project Outline

1) Review energy and water bills. (Water can be considered or the sake of this analysis to be "embodied energy".) Note the units used for electricity (kilowatt hours), gas (e.g., therms), and water. Note the current month's consumption and if available the comparison with the previous year. Put your values into a spreadsheet; include the previous year's numbers if available. In the spreadsheet note the quantity measures and the cost of each energy source.

2) Familiarize yourself with the conversion terms for electricity, gas, and water.

   One **kilowatt-hour** is equal to 1,000 watt-hours. The energy expenditure of 1 kWh represents 3.6 megajoules. To help visualize a kWh, we can define it in terms of the physical exertion a person would have to expend to generate a single kWh. In your home, you would have to beat a batter mixture with a spoon, at an incredible speed, steadily, for 10 hours, to generate energy equal to one kWh.

   A **therm** is a commercial unit of heat energy equal to 100 000 Btu. (A BTU is the amount of energy necessary to heat one gallon of water one degree.) Because there have been several definitions of the Btu, there are two official definitions of the therm. In both cases, rounding up, a therm is approximately105 megajoules or about 29.3 kilowatt hours of electrical energy. One therm can also be provided by about 96.7 cubic feet of natural gas. Multiply therms by 0.95 to get gas usage in terms of CCF (hundreds of cubic feet).

   Each gallon of gasoline is about 115-128 megajoules or about 32-36 kilowatt hours.

   Many water districts measure water bills in hundred cubic feet or HCF. One HCF equals 748.05 gallons.

   Ponder the amount of prodigious amounts of energy and water we as individuals

consume.

3) Now look at the rates we pay for each unit of energy and water. Ponder how litte for are charged for energy and water, and how we have built our society and lives around continued access to cheap energy and water.

4) Review your gasoline bills and estimate your annual usage. Put both the number of gallons per month and the cost in the spreadsheet.

5) Evaluate your electricity uses. Note which appliances and devices remain "on" such as refrigerators and computers. Review their voltage specifications. If specifications are not available for your appliances, consider using a power measurement device. Such devices can also be used to measure the power draw when appliances and devices are "off" but still plugged in.

6) Check the insulation in your attic, ceilings, exterior and basement walls, floors, and crawl spaces to see if it meets the levels recommended for your area. Insulation is measured in R-values—the higher the R-value, the better your walls and roofs will resist the transfer of heat. The U.S. Department of Energy (DOE) recommends ranges of R-values based on local heating and cooling costs and climate conditions in different areas of the nation.

7) Note the incandescent light bulbs in your home and the extent to which they are used. (An incandescent bulb for the refrigerator is not a big deal since it is only on when the refrigerator door is open which presumably is not very often.)

8) Use the Home Energy Audit from the Lawrence Berkeley Laboratory to compare your energy use to average home in North America, and to help identify likely candidates of your greatest energy losses.

9) Review the Energy Savers site as appropriate and identify how you might reduce energy.

10) Use the water budget calculator at H_2OUSE. Review the site to identify opportunities to save water.

11) Put together a list of actions that you can reduce your energy consumption and prioritize them with respect to their potential impact. Create a demand reduction plan to reduce your energy and water consumption.

12) Think about how you might cope if there were prolonged shortages of grid energy and water. What aspects of your consumption could you curtail or drastically reduce? How can you begin now? Make these part of your basic demand reduction plan or a contingency plan.

13) Carry out your plan, while monitoring your energy and water usage and keeping your spreadsheet updated.

Evaluation and Report

- Please write a short report about your experience with this process and your demand reduction plan. Discuss how this energy audit could be extended to your community.

Resources:

- Home Energy Saver site: http://hes.lbl.gov
- AC Power Measurement device: http://www.realgoods.com/shop/shop3.cfm?dv=3&dp=302&ts=1025344&kw=measure
- U.S. DOE Office of Energy Efficiency and Renewable Energy "Energy Savers" site: http://www.eere.energy.gov/consumerinfo/energy_savers/
- H2OUSE site: http://www.h2ouse.org
- Conversion factors relevant to petrochemical activities http://www.chemlink.com.au/conversions.htm

Relocalization Committee

Synopsis: for developing greater public awareness of “peak oil"/gas shortage and environmental crisis and its local/regional impacts, and to foster preparation at the municipal/regional level for a predicted energy-depleted future. This script was inspired by Marilyn Bardet Coordinator of the Benicia/Valejo Outpost.

Roles: Committee members

Time Frame: Ongoing

Tools: information, tenacity and perseverance

Project Outline

- To be municipally sponsored or initiated by grassroots, to serve as an advisory body, for the benefit of the public, city staff, council, members of the business community and service providers;

- to educate and prepare local communities for the looming energy crisis; provide actual forum for local research, debate and planning;

- to reckon the potential scope of the crisis and to anticipate potential local and regional impacts; to define local use of the Precautionary Principle; (put this term in the glossary)

- to help foster successful first steps at the local level, toward community transformation, sustainability, energy conservation, and "re-localizing" projects; to weigh options, strategies and solutions for promoting local energy conservation, as a first step, and also local "renewable" sourcing, such as small windmills and solar technologies. recommending incentives to industries that produce them.

- to fulfill CA legislative mandate for 20% conversion to renewable energy sources by 2017.

  RATIONALE, argument to promote formation of green ribbon committee:

- Right now, in any given community, including among its decision-makers, there's no critical mass of people that have enough timely information to think comprehensively and act responsibly with regard The Elephant in the Room: the energy crisis at hand. Few people, therefore, are prepared to judge planned future local (or regional) development projects in this context, or to analyze potential disruption of delivery of goods and services, owing to energy supply problems. Municipal budgets are already severely strained; setting financial priorities with

regard to potential multiple threats to energy supply within the decade is imperative.

- There would be immediate usefulness in having a local green ribbon committee as an educational forum, to address the public and city council: a green ribbon committee could serve a community¹s decision-makers by providing an "established dialogue space" a "go-between" for debate on energy issues, offering the public, council, city staff, service providers, business community members latest information, through regular meetings, access to experts, lectures, workshops, etc., with hope that diverse people and interests can develop consensus about what options are available and what programs are best to prepare city and residents for a transition to a post carbon future.

- Green ribbon committees could sprout in municipalities all over the state. This would give opportunity to a much greater local public audience, via Council level reports and regional reports based on conferences for municipal green ribbon committee representatives. Scope of the coming "peak oil/gas" crisis should be understood to have synergistic effects as it hits particular regions.
- If a municipality cannot afford to pay for staff time, and therefore will not form such a committee, then a green ribbon committee could be initiated at the grassroots level. Support for programs of the committee would have to be found, but expenses could be kept to minimum if Internet connection (through Post Carbon Institute and/or other orgs) is utilized for communication, publicity, etc. A community-driven green ribbon committee could support the development of "transition projects" such as car-sharing, urban farming and developing local money supply, and these could gain support from Post Carbon Institute through information sharing with wider region and people doing similar projects.

The precedent for forming "green ribbon committee" was established by Mayor Hahn of L.A

Mayor Hahn established what he coined a "Green Ribbon Committee" to advise him along with city staff and council, with regard to implementing the new CA legislation mandating 20% conversion to renewable clean energy sources by 2017. Apparently on the advice and support of his green committee, Mayor Hahn made momentous decision, on Aug. 25, to pull out of an agreement L.A. made with other western cities to commit millions of dollars to build a new coal-fired power plant in Utah. Mayor Hahn decided instead to take L.A.'s share of the investment pot and support development of green renewable energy technologies instead. Although I¹m sure there¹s more politics to the story than this, at least we can see that instituting "green ribbon committees" as "green" advisory bodies can serve a powerful function for energy and environmental decision-making at highest levels of municipal governance and can initiate or support calls for new legislation, projects, etc. at local, regional or state level.

Evaluation and Report: Please write a short report about your experience

Resources: ?

Chapter 7. Research

Research is going to be a vital component for Outposts. The work and the results will help your group understand the local situation better, and help decide which areas to concentrate on first, and what resources and limitations are most significant.

As we build the network, Outposts near to one another or in similar bio-regions will be able to share and adapt results using the online Global Relocalization database that Post Carbon Institute is developing especially for Outposts. In the earlier stages, inevitably the research will be more basic and the shared knowledge base will require vigorous augmenting. For those with research inclinations, the tasks are potentially very exciting and rewarding.

Wherever possible, existing work available in the public sphere should be sought, particularly material published by government departments and statistical agencies, weather and climate bureaux, universities and think-tanks. Post Carbon Institute will be very active in helping and co-ordinating Outpost research.

It is envisioned that this research will have a number of outcomes. It is clear that very little public research is being done on these issues, particularly not in the English-speaking world, and sadly, not in our universities. In order to help change this, but also as end in itself, we shall need public laboratories and research stations (as used to exist commonly in many nations). We fervently hope that some of this research will begin to take place at universities, and we hope that Post Carbon Centers (or Centres if you are in England, France or Canada) or similar will begin to be situated on universities in many countries. It is also intended that Outpost research will lead toward the publishing of Post Carbon Guides to the locale (though we do not expect to see The Post Carbon Guide to Las Vegas any time soon).

The following topic areas have been identified as being of particular importance. We expect to add to this list and welcome any suggestions. This is certainly not a comprehensive list. Please help us make it more so! Also, we appreciate and hope that amongst our readers there will be those with great knowledge in many of the following areas. We welcome further elucidation and corrections of errors – especially well before the published edition of this guide!

Initial Research Topics

- **Soil analysis**
  - What is the composition of your soil?
  - How fertile is it?
  - How well is it drained?
  - Where is it and how is it positioned (in a valley, on hills, steep slopes, in the lee of a forest, mountains etc)?
  - Does the municipality or local government own any significant fertile land?
  - How expensive is the land with fertile soil?
    - Is it likely to be available?
  - Is the fertile land capable of being dry farmed, or will it require irrigation?

- **Water analysis**
  - What is the annual average precipitation (rain and snow)?
  - What are the annual precipitation patterns (they can vary remarkably even for places a few miles apart)
  - Most importantly (and this relates to the dry farming question), when does most of the rain fall – in the winter or in the summer?
    - If mostly in the winter, as in common in many parts of the world, then great attention will have to given to the hydrological system and where and how to collect and store water.

- **Hydrology**
  - What is the nature, extent and flow of local rivers, if there are any?
    - What state are the rivers in?
  - Are there or were there underground rivers?
    - If the latter have they been culverted, or simply filled in and built on?
  - What is the extent of ground water, is it regularly recharged by normal precipitation or is it so-called 'fossil water,' and effectively non-renewable?

- **Space Heating**
  - Geo-exchange heating systems
    - Cost?
    - Ground source or air exchange?
    - Is there a local manufacturer?
    - Is there a local installer?
  - Community heating
  - Community-scale combined heat and power
  - Biomass burning including eg
    - wood chips
    - corn pellets
    - and related, biogas

- **Energy – Fuels**
  - Biodiesel
    - What are the benefits and drawbacks of biodiesel and other liquid biofuels, and what role should their use play in your locale?
    - Do you have a local producer of biodiesel?
    - How much biomass and land will it take to provide feedstock for production of biodiesel?
    - Does it make sense to build a biodiesel production plant?
  - Are there suitable locations and feedstock for small-scale biogas digesters?

- **Energy - Electricity**
  - Is you electricity system publicly or privately owned?
  - Are you allowed to sell electricity back to the grid?
  - What is your average insolation (amount of sun falling on a given area) and what is the pattern of it throughout the year?
  - What local solar device manufacturers do you have in your locale or region?
    - Passive – eg for water heating?
    - Active – photovoltaic?
    - If neither of the above, how close is the nearest producer of any of these things?
  - Where are nearest (reasonably) good sites for wind?
  - Where are the nearest wind turbines made?
  - What are the problems of instability when wind production makes up 15% - 20% of the electricity production?
  - Do you have any good sites for micro-hydro installations?
  - Were there mill-ponds in the locale?
  - Are there suitable sites for mill ponds?
  - What are the main ways electricity consumption can be reduced for
    - households?
    - communities?
    - manufacturing?
    - commerce (including retail)?

- **Economy / Politics / Demographics / Knowledge**
  - What is the current basis of the local economy?
    - In particular, is it heavily based on
      - resource extraction?
      - commerce and trade of imported goods?
      - the so-called information economy?
      - the service economy?
  - What small and medium-scale manufacturing (economists refer to this as SMEs – small & medium-sized enterprises) used to (or still) exist in your locale and region?
  - What staple non-food items are, or could be, made locally and/or regionally at medium scale?

- Where is your nearest source of iron, steel, and other metals, both in terms of production and ores? Is there enough scrap iron and steel around, mainly in the form of cars and other large manufactured objects to feed a local iron and steel reclamation industry? Same questions for copper and other vital metals, and also for glass.
- Are there skilled local metal and glass makers to work with the reclaimed feedstock?
  - What will the furnaces be fired with?
- Are there skilled local potters?
  - Where will the clay come from?
  - What will the kilns be fired with?
- Could wind turbines be made locally/regionally?
- Could solar panels or cells (much more difficult) be made locally/regionally?
- Are there shops or stores selling food and vital daily needs within walking distance?
- Do you have regular farmers' markets within walking or cycling distance?
  - If not, or only for short periods of the year, what are the requirements for and obstacles to increasing their presence or starting one?
- Do you have regular street markets?
  - Again, if not, or only for short periods of the year, what are the requirements for and obstacles to increasing their presence or starting one?
- What is the demographic composition of your locale?
- What is the political composition?
- Do you have a private or a public health system?
- What is the structure of your retirement and pension system?
- Are there people in the locale and bioregion with deep knowledge of the traditional systems of production and culture that were displaced or destroyed by the new economy. This could mean any or all of the following:
  - industrialization at various stages
  - the new information/service economy
  - industrial agriculture replacing traditional food growing
  - exports or luxury crops replacing staple crops

- **Transport**
  - What is the state of public transport (transit) if it even exists in your locale?
  - Has it been removed? If so, are there any traces left that could be salvaged?
  - Is your locale totally dependent on the automobile?
    - If so, is this because it has been built for car dependence, or could it relatively easily be retrofitted for walking, bicycling, and small electric vehicles?
  - Is your nearest bicycle shop/store within walking or easy cycling distance?
  - Where is the nearest bicycle manufacturer? Where do they get the chains from?
  - Many experimental electrical vehicles have been designed in the last thirty years. Most of them have languished, but not because they badly designed or

made. There may be local knowledge about such vehicles, and willingness to experiment with building them. Small electric vehicles with a limited speed will undoubtedly be useful, especially during the long transition to low energy living. Consideration should also be given to small-scale electric transit vehicles such as trams.

Please go to http://beta.postcarbon.org if you have any comments, suggestions on, additions to, or critique of the above.

Chapter 8. Action - Relocalising money, energy, food, governance, culture, transportation (and more)

Action Scripts are experiments in building a Parallel Public Infrastructure. As with all experiments they may not work or may need to be adapted to your specific locale. The sooner we begin experimenting, the sooner we will discover what works and what does not in our communities, and the better prepared we shall be for when the economic and energy situation changes dramatically. Clearly it is less risky and stressful to experiment while such activities are optional endeavors, and when failure can be considered as providing useful information rather than in a panic or crisis situation when survival may hinge on experiment outcomes. Examples of unpreparedness litter the dark side of human history.

Scripts for Post Carbon Action Experiments

Please note: this is a proposed list of scripts for the action section. Some scripts are incomplete and others are only ideas. We wanted to share the scope of projects we are thinking about with you. They will be written in during the course of our research. If you have any experience or suggestions to help us complete it please let us know through our website feedback form: http://beta.postcarbon.org.

Thanks,
Post Carbon Team

- Develop a flyer for your Outpost
- Governance & Community
  - Run for local office on a Post Carbon Peak Oil platform
  - Start an Eco-Village in your neighborhood
  - Creating a public space (e.g., closing a street)
- Money
  - Start a local money system
  - Retirement fund
- Food
  - Start an Organic Food Co-op
  - Fruit Tree Project
  - Developing a community gardens
  - Networks of neighborhood gardens
  - Strengthen farmers' markets

  - Develop or join a CSA

- Transportation
  - Start a car co-op
  - SpaceShare Car Sharing
  - SpaceShare Green Events: Make Events That Consume Much Less

- Culture
  - Documentary film project
  - Community play
  - Open a local cinema/theatre or do a film series
  - Community tour

- Energy
  - Local power system
    a) when you can sell to the grid
    b) when there is prohibitive regulation
  - Implement the best local power generation and manufacturing based on your research project

Create a Flyer for the Outpost

Synopsis: Design and produce a beautiful and informative flyer for the outpost that can be used when tabling at events, screenings, or otherwise when trying to convey the essence of the group.

Roles

- Facilitator – leads session to brainstorm on the theme and message of the flyer, and to parcel out roles
- Copy writer – develops the copy for the flyer
- Editor – Refines the copy as appropriate
- Graphic Designer – creates graphics and designs the flyer
- Helpers – get the flyer copied or printed

Time Frame: 1 month

Tools:

- Internet, paper, pens, computer, graphic design and layout software (Post Carbon Institute can help advise)

Project Outline

- As a group, brainstorm on the possibilities for flyers and afterwards select one based interest, usefulness, and viability.
- Assemble the necessary tools and develop the project or product.
- Make sure all references and facts are correct and include reference documentation.
- Write copy for the flyer.
- Design the flyer, create graphics, and integrate text.
- Review and edit as appropriate. Finalize and get the flyers printed or copied as appropriate.

Evaluation and Report

- Please write a short report about your groups experience with this process.

Resources:

- Eric's flyer

Run for Municipal Office on a Relocalization Platform

Synopsis: by running as a candidate in a municipal election the issues of low energy living will have a higher public profile in your community. And if the candidate wins, then these issues will be brought into council chambers. Understanding your municipal government and how it works is essential for getting local things done in the near term.

We encourage all of you who have the stomach for politics to consider running for municipal office and begin preparing immediately. Regardless of outcome, your voice will be heard and reported in local media, further propagating the seeds of transformation.

In North America, it is possible to be a candidate for city council, mayor, commissions, school boards and other elected officials in municipal government. In other countries this may vary.

Roles

- Candidate
- Research team
- Election team

Time Frame

- Preparation 1-3 months
- Campaign variable depending on local conditions

Tools

- Telephone, library, City Hall, Internet

Project Outline

- Complete the "Area Awareness: Municipal Politics" script
- Register you candidacy
- Contact Post Carbon Institute so the we can provide the latest research, and web & email list support
- Outline your platform – what local energy and relocalization issues are most pressing in your town?
- Recruit volunteer helpers
- Create web site for your campaign
- Some resources to consult on the important details of campaigning include:
    - Check you local library for resources on how to run elections in your particular type of jurisdiction
    - The book "How to Run for Local Office: a complete guide for winning a local election" may also be helpful http://www.winelect.com/

Featured Policy Area:
Consistent with our Relocalization Statement, the Relocalization Platform advocates that all of the following be local: food, energy, money, manufacturing of essentials, media, ownership. We advocate also the rebuilding of cities so that much less transport and energy consumption is required. This is perhaps the most difficult physical task of all.

Relocalization Platform

Sound municipal governance for the transition into the Post Carbon Age requires:

- Nimble government that rapidly reconfigures for energy scarcity (see glossary)
- Active support for relocalization, locally owned businesses, worker-owned businesses, cooperatives, and ecological city design
- Innovative municipal tools to affect land and energy use such as zoning ordinances, transfer development rights, tenancy agreements, and community benefit agreements
- A contingency plan (or "Plan B") that addresses how essential systems will work with less energy
- Long term emergency plans
- Pressure on national leaders for support of local efforts, including demands for a global carbon tax to support local initiatives and experiments.

As we consider solutions and policies that will mitigate our energy predicament, we must adhere to the following guiding principals:

- Reduce energy consumption
- Reduce materials throughput
- Use peaceful and non-violent means

(this could be the short version of the global relocalization statement that people sign)

The platform has the following components:

1) USE MUCH LESS & MAKE LESS MESS
Everything featured in Einstein's famous little equation ($E=mc^2$) should be on our list for reduction. If we use less energy and mass as inputs, we'll produce less material outputs that nature has no use for, such as heavy metals, PCBs (polychlorinated biphenyls), dioxins, CO^2, etc... ad infinitum. Using less light is very important, since electric lights, though less energy intensive than say heaters, are left on so much longer that they are significant energy users. They also encourage us to work longer hours. We can and must work less, and with less oil around we won't be able to do as much work anyway, so we may as well get used to it. The best way to get used to anything difficult is by planning for it. The alternative is usually ugly and painful.

2) Rules on local ownership and local operation of food production

- Much more urgent steps should be taken to relocalize food production. Yes, CSA is helpful, but much organic agriculture is still too dependent on oil and gas (tractors and grain drying for example), and also the word 'organic' is becoming strongly co-opted by agri-business. Local rules must be put in place which explicitly (if possible) or implicitly enforce local ownership and local operation. The easiest thing to do would be to do this by regulation. More subtle methods will be perverted by the corporations. Explicit rule making will certainly face great hostility from agri-business and every other multi-national - at some point these battles will have to come into the open.
- Strongly encourage biointensive techniques of food production which build the soil, and consequently need much less water. Biointensive techniques also require lots of people, by definition. As the industrial economy decays, this will soon be seen as a good thing by more and more people.
- Encourage farmers markets, food sharing and redistribution

3) Access to locally produced food

It is vital that small food shops be reinvented or started from scratch, as well as the old-fashioned wholesaler and street markets. Otherwise it will remain virtually impossible for the new professional food growers to get their product to market. This will include deliberately creating:

- European style street markets on regular days, or indeed everyday when things get going. This will mean closing streets to cars. This can be a beginning towards getting rid of all private cars completely. Copenhagen has done amazing work in this regard.
- Small food shops to be encouraged in every possible way:
    - Implement tax breaks (or total holidays) for a long time to help them fight supermarkets (which should be driven to extinction with all speed and vigor)
    - Charge minimal or non-existent property rents for small shops
    - If one-story strip malls dominate the old high street or town center and if they cannot be quickly bulldozed, then explore whether housing can be placed on top of them. Best to get rid of strip malls altogether, and build something with two or three stories of housing on top of the shops. It is vital that this looks as beautiful as possible, and that it is designed to last a reasonable length of time (at least one hundred years). We just won't have the resources to keep rebuilding the kinds of wretched garbage that developers are throwing up now. This old-new high quality building work, which should have a strong vernacular flavor, and if possible involve the development of a tradition of vernacular builder-designers, should try to avoid all the normal patterns of architect-developers. These people have helped wreak destruction on cities and communities across the planet. There may be some resistance to this notion. All this work will be very

helpful for increasing employment. Local materials should be used, and systems of collecting discarded materials should be developed, so that such things can be re-used or re-fashioned into something useful. Until the wasteful age of petroleum arrived, this was ordinary and natural practice. It must become so once again (see **artisan production** below in 5).

4) Transport

- Urgently get public transport (publicly owned) into the village/town/city area, especially to feed the traditional high street, square, or plaza and (if they existed) pre-petroleum main shopping areas and other public spaces. If such centers never existed, look at European models, and the American towns that were built before petroleum, and designed to foster some sense of community and belonging. Almost all post war (1945) planning and design should strongly avoided, including of course, suburbia and all modern shopping malls, which will one day be torn down or simply abandoned. It would be better to dismantle them now, whilst we still have the energy. There are at least some things in them that can be re-used, such as glass, metals and wood.
- If remotely possible try to put in trolley buses or even better trams. This will be a huge bonus in the decades to come. But even rubber-wheeled buses are much better than nothing. Obviously they must not be natural-gas powered. If internal combustion engines are the only short-term option, then look at making the buses biodiesel compatible (though note that biodiesel is no panacea see glossary for pros and cons). Trolley buses and trams will require electricity, which must be produced locally, and they will require wire and rails. Both these use commodities which are already becoming much more expensive. It is possible in the future, that dismantled suburbia and malls may furnish some of the resources.
- Strongly encourage car co-operatives or non-profits, or indeed, make them public car share operations. Interesting examples exist in Vancouver and San Francisco. The Mitfahrgelegenheit system in Germany is very successful at coordinating ride sharing for ordinary private cars, and SpaceShare (a MetaFoundation Initiative) is an Internet based system designed to help ride sharing [see http://www.spaceshare.org].

5) Create or re-create the pre-industrial revolution system of artisan production and reinstate selected light manufacturing capacity

Deliberately develop an economy based on artisans producing as much as possible of local vital needs. This will require similar measures to helping small stores. Policymakers should think very seriously about metal and vessel makers, e.g. blacksmiths, potters. We must drastically reduce the amount of packaging that we use, especially plastic. We need to return to using permanent containers such as pots and baskets for holding and transporting things. Basket making is a special and very important art and craft, but it takes time to revive. Other vessel making, such as metal, clay and glass, takes a lot of energy - where is that energy going to come from? In the past it was from coal, charcoal and trees. Natural gas has become the source of choice for industrial process heat. Any tendency to use any of these unfortunate energy sources will have to be vigorously

resisted. Public research (which means publicly funded and publicly accessible) will need to be done now, to start experimenting with what works for a given locale. For instance, direct solar energy appears to be quite impractical for firing the high-temperature kilns needed for many types of waterproof glaze. Biogas may be a substitute but there will definitely be problems. How are we going to make glass? There is plenty of glass to be recycled, but it is a notoriously energy intensive. However, life without glass will definitely be difficult, if not downright brutish, therefore let us to the research and development now.

6) Energy harvesting machines

In general, encourage a highly diverse, localized energy harvesting web, with a strong emphasis on storage to avoid the inevitable problem of intermittency which attends all solar energy harvesting, be it direct (photovoltaic) or indirect (wind). Urgent attention must be given to short-term storage (overnight) and long term seasonal storage to balance the lower insolation (solar radiation striking Earth) of winter. Therefore

- Strongly encourage public research and development of energy harvesting and storage machines. The U.S. was once the leader in solar cell research. Reagan destroyed all that. However, instead of encouraging the usual brutal and empire-oriented notions of being the 'leader,' relocalization encourages being very good (rather than best, which after all may still be terrible) and some-sufficiency, since total self-sufficiency is not usually a practical (or even sensible) short-term goal, and may be demoralizing. Also, encouraging regional co-operation and sharing will be vital. We have thousands of years of practice of doing this.
- Not only will engaging in R&D and production of small-scale energy machines be good for employment at every level of mental and physical ability and engagement (combined with demand reduction), it is the ONLY way to achieve energy security. Universities must somehow be pried away from their terrible path of corporate capture, and return to or start doing research in the public interest, instead of corporate research, almost all of which, being bound for the military or the mall, is designed either to destroy the planet or people or both, as fast as possible. Given the utterly craven state of universities this will be perhaps the most staggeringly difficult undertaking of all. Since de-corporatizing universities may be impossible, municipalities should urgently investigate setting up small-scale public laboratories.
- Build or rebuild a local wind turbine industry. Denmark is the clearest example. Note however that they are having difficulties with grid instability as they reach towards 20% of electrical capacity - again, a better electrical storage system would help solve this problem, though so would a more de-centralized power system.(and demand reduction)
- Encourage research and production of small-scale biogas digesters. India, Turkey, and some places in Europe have decades of experience. Large biogas digesters are designed for industrial hog and cattle farms. This should be strongly discouraged. Ideally, such factory farms should be driven from the face of the planet with all speed.

- Encourage the development of micro-hydro generators. These are designed to have minimal impact on rivers and suffer less from intermittently problems. Of course as with any renewable source, micro-hydro is location dependent.

7) Ground source heating or geo-exchange space heating
Businesses should be vigorously encouraged in this area, and great help given to replace natural gas home and office heating with geo-exchange. However, at the same time, care must be taken to make sure that there is enough renewable energy & storage, to run the heat-exchange pumps, otherwise this will exacerbate the problems with electricity generation.

8) Local energy centers & local energy banks
Look at the possibility of setting up local energy centers which will help disseminate and coordinate information about all of the above, and also, in combination with local energy banks, help collect revenues from the sale of public power and help administer loans and other services devoted to reducing energy usage and waste in houses and offices. This includes the retrofitting of geo-exchange mentioned above, and also the fitting of insulation. Local energy centers and local energy banks will be a key part also, in helping start car co-ops, develop bio-diesel co-ops, and install co-generation, biogas digesters, and as soon as possible, introduce municipally-backed local currency experiments, most likely tied to the public generation of renewable electricity. Local Energy Banks are likely to be very helpful with starting co-operative and mutual business and become vital in helping to allay the growing pensions and retirement problems seen in the industrialized world.

Evaluation and Report
Let us know how the campaign goes, so that your progress can be shared with other groups. After the election, please record how localization and energy issues were picked up. What worked successfully and what would you change?

Start an Eco Village in Your Neighborhood

Synopsis: Turn your neighborhood into an eco-village. This is a quick way to build relationships and start down the path of simpler, less energy intensive living, while at the same time creating community and a sense of place. This script was submitted by Bruce Thomson.

Roles

- Visionary Leader
- Helpers

Time Frame: 3 months – 1 year

Tools:

- Depends on the projects you take on

Project Outline

Invent a 'village' (neighborhood) of no more than about 600 homes. That way people are truly quite nearby each other, about max five or six blocks maximum. Choose physical borders such as major highways, a river, a huge industry wall, etc. and include a map in every newsletter to give everyone a definite sense of place and a sense of belonging (Even clearly exclude outsiders from it. They can create their own villages if they want to (preferably in coordination with others). Make it clear, you're either 'in' or 'out', so it's not a confusing shambles of cronyism.)

Get a council map of the streets and houses from the city council, (usually about $20 or less in the US). Then scan it and copy from it your 'village' only, and put a village name on the top. You can get your village 'recognized' officially if you and a neighbor or two write to the council asking for speed bumps or landscaping, using your map. The council staff will start referring to your area by the name you've given it, and using your map borders when talking about it.

Make friends with city councilors, and get them on your side. Invariably they have supported my 'villages.' Don't let them 'own' you though.

When you get interested participants, hold a small meeting.

Get yourself voted in as the president of the [Neighborhood Name] Village Resource Group (which gives you excellent credibility as an elected representative when talking to council or institutions).

Ask the others if they'll help you by delivering the newsletter to a street or two next time you put the newsletter out. I have about four deliverers, plus me. It only takes a half hour to do a street, so you're not asking for much.

Also, create a listserve for them and others interested in neighborhood conversations.

Even do that first, and put the website address in your first newsletter.

If you can promote a community garden or even a parkette, it becomes a physical public meeting place other than just your home. A garden can also mean food production.

I've put in hundreds of hours developing my villages. It has sometimes felt awesome and 'miraculous' though, materializing friendships (and even a girlfriend, conveniently, within easy walking distance of course) from a meaningless block of a city full of strangers. Note: There's no pay in it, it's all social benefits.

My activities, were sometimes hard work and even dirty (litter cleanup where rotten meat and disposable diapers were dumped into our home-made litter bins, attracting crawling maggots and retch-inducing smells). But still they were mostly interesting and satisfying. Here is a list of things I've done:

- Inventing the village, by choosing the area, and the name, and the logo, using PC
- Publicly cleaning up neighborhood litter on my own, to attract attention and participation.
- Scouting round the village to see the issues (litter, vandalism, crime, loneliness)
- Taking digital camera photos for newsletter, and musing about at home on my PC at night
- Constructing home-made litter bins and installing them at strategic points.
- Regularly clearing the bins on rubbish day, with council consent, and help from other residents.
- Similarly, creating doggie bag dispensers, and ensuring they were supplied with plastic bags.
- Using a word processor to create newsletters, deciding content, events, contacts to put in
- Organizing creation of parkettes, transforming junk land into lovely gardens
- Hosting and facilitating meetings of between two and 29 neighbors
- Conferring with city council on traffic calming, waste management, beautification
- Regular mowing of parkette lawns, removing stumps, weeding,
- Paint spruce-ups, and regular graffiti paint-over, (free paint from council's toxic waste depot, & locals)
- Getting irrigation tap for parkette installed by council
- Confronting louts and loutesses in a teenage gang
- Helping family-worried residents get crack house (drugs, wholesaler) & marijuana business stopped.
- Unsuccessfully opposing loss of some greenspace to developer-built crowded townhouses
- A 50-attendee commemoration in the parkette, of an old resident who helped us build the parkette
- Arranging whole-village garage sales. (Be sure to make your signs look 'rough & ready' cheap, not 'flash')

- Going to movies on cheap night with residents, and also going on village walkabouts with them.
- Cuppas, meals with residents, litter pickup sessions, phone yarns, arguments, lovemaking, laughing.

We made a list of our favorite local small business with products, hours and phone number as well as ownership information. We hand them to people that ask for directions or locals that may not know about them. The response is overwhelming: "Oh thank you, I've been looking for a good cleaner, or shoe repair shop, or used furniture store"...etc. Any fool can locate the local Toys R Us or Walmart, but to find the struggling little toy shop or small grocery store with home delivery is not so easy. You can make such a list in your area. http://www.verdant.net/resist.htm

Evaluation and Report

- Please write a short report about your groups experience with this process.

Resources: ?

Creating a Community Public Space

This script will be written during the course of our research. If you have any experience or suggestions to help us complete it please let us know through our website feedback form: http://beta.postcarbon.org.

Thanks,
Post Carbon Team

Script to be adapted from the City of Portland idea

Each Intersection Repair project is **the work of neighborhood residents**. It is the people who live in the neighborhood who decide that they want the public square, what it will look like, how it will function and how it will develop. One neighborhood may **paint a giant mural** on the intersection and stop there. Another may go through many phases: painting the street, installing a community bulletin board, building a mini-cafe on a corner, reconstructing the intersection with **brick and cobblestones**, opening businesses to make it a village center... and on and on! Maybe people want a **focal point for their neighborhood**, a place for community interaction and seasonal celebrations. Maybe they want to slow down traffic, and let **pedestrians share the public space of the road** equally with cars.

Duration is a year

How It Works (we may want add a how it works category to the scripts template)

The **Intersection Repair Project** facilitates the citizen-led conversion of existing **street intersections** into **public squares**. The project has three components:

- **educating** communities about the *need* for public squares.
- **activating** interested communities to *explore ideas* for creating a public square.
- **assisting** involved communities through the process of *converting a street intersection into a public square.*

Public gathering places encourage **communication** and **social interaction**, and provide a **sense of place** -- essential components for building vibrant neighborhood communities. The **Intersection Repair Project** provides a way for Portland citizens to reclaim the identities of our communities and *return public squares to our neighborhoods*. This innovative project establishes a concept that:

- **reinterprets existing public space** and adapts it for a new, socially uplifting use.

- establishes a site and a framework for **local participation** in a process of "community building itself."
- provides a **focus for neighborhood identity**.
- provides a place for the things that happen in the **heart of a community**, such as *news sharing*, tool lending, garden *produce exchange* and spontaneous conversation.
- establishes a **locally-made sense of place**, built by participation and cooperation.

Benefits

There are many **direct** and **indirect** benefits of converting a street intersection into a public square:

- increased *communication and interaction* between neighbors
- a stronger sense of *local identity and culture*
- *reduced traffic speed*
- *beautification* of the public environment
- greater *neighborhood participation* in community affairs
- increased sense of *neighborhood livability*
- *lower crime rates*, and safer adjacent streets
- increased *tolerance* of diversity

From the City of Portland

10 Steps to an Intersection Repair
A public square in every neighborhood...

In January 2000, the Portland City Council established City Ordinance #172207, the first "Intersection Repair" ordinance, which set a precedent of **allowing neighborhoods to develop their own public gathering places** in certain street intersections. Through a process of creative involvement, neighborhoods are now **legally empowered** to design and build public places that reflect their **local culture**.

Intersection Repairs are currently governed by the most recent applicable ordinance, #175937 (9/19/01).

STEP 1 - Assemble a representative group of residents living within a two-block radius of the street intersection you would like to consider for an Intersection Repair. Ascertain through discussions whether there may be sufficient local support for a project, especially including the property owners and/or residents immediately adjacent to the site.

STEP 2 - Contact City Repair. Call us at 503/235-8946 and tell us you want to explore doing a project! We're a non-profit citizen organization set up to guide you through the Intersection Repair process and provide you with technical assistance.

STEP 3 - Hold a neighborhood meeting. Notify all residents within the two-block radius of the Intersection Repair site (the "affected area") for this meeting, where you should discuss the state of your neighborhood, the value of public gathering places and the idea of the Intersection Repair.

STEP 4 - Form a core group that can begin the process of involving more residents within the two-block radius "affected area". Conduct planning meetings to determine a time schedule for your community involvement processes, including design workshops, installation dates, maintenance plans and an organizational structure.

STEP 5 - Hold a preliminary event, such as a large block party in the intersection, so you can close the space for a day and get a sense of what it feels like when people are there together. You might have music, creative activities, or a potluck to test the idea for an Intersection Repair.

STEP 6 - Conduct neighborhood workshops to determine your design concept and organizational structure. The City Repair Project can provide technical assistance in establishing criteria for developing a sense of place, identifying a local structure of responsibility and involvement, and facilitating group discussion and mediation.

STEP 7 - Before you receive final approval from the City, there are **two things you will need** to do in order to complete your project. Start working on these during your neighborhood workshops:

> 1) You will need to **provide signatures of approval** of each owner and resident *adjacent to the proposed site*, and of at least 80% of the residents (on per household) *within two standard city blocks*. (A business tenant is equivalent to a household.)
>
> 2) You will need to form **a neighborhood organization** with responsibility for organizing neighborhood participation in the project and overseeing the usage and maintenance of the new public place. The City Repair Project can provide a model for you to use and help you form the organization.

STEP 8 - Present your concept to the City Traffic Engineer for approval.

STEP 9 - Create Your Public Square! If your plan is approved by the City, you can start creating your Intersection Repair with a day of installation and celebration. It is a good idea to involve as many of the talents and skills of local residents as possible in the processes of construction, installation, and during celebration events and performances.

STEP 10 - Look to the Future. After your day of installation and celebration, your organization will need to review its work and provide for ongoing work on a sufficiently regular basis to ensure the Intersection Repair's proper usage and maintenance. It is important to hold further discussions, and design workshops -- as your community and local culture develop, so will the look and usage of your new public square. Keep the City and The City Repair Project involved at every step of your process and, be sure to abide by the open-ended conditions of the City Intersection Repair Ordinance.

Resources: ?

http://www.cityrepair.org

If your group has both the desire and the energy to work together to do something, schedule another potluck with more of your neighbors - and invite The City Repair Project. We'll give a **short slide presentation** on Intersection Repair, help you identify neighborhood goals and resources, and talk with you about next steps for a neighborhood project.
When you're ready, contact us to discuss your idea and set up a plan for action!

Start a local money system

This script will be written during the course of our research. If you have any experience or suggestions to help us complete it please let us know through our website feedback form: http://beta.postcarbon.org.

Thanks,
Post Carbon Team

Community Retirement Fund

This script will be written during the course of our research. If you have any experience or suggestions to help us complete it please let us know through our website feedback form:
http://beta.postcarbon.org.

Thanks,
Post Carbon Team

Start an Organic Food Co-op

This script will be written during the course of our research. If you have any experience or suggestions to help us complete it please let us know through our website feedback form:
http://beta.postcarbon.org.

Thanks,
Post Carbon Team

Script to be adapted from this article by Dan Chiras

Organic Produce at Bargain Basement Prices

By Dan Chiras

You recycle, conserve energy at home, drive an energy-efficient car, and take short showers. You vote green, and lately you've been even trying to curb your consumer tendencies. You even buy recycled-content toilet paper and write occasional letters to your congressional representatives to support the environment.

Despite your green lifestyle, there's one obstacle you've never been able to overcome: the high cost of organic produce at your local grocer. During the summer, providing your family with organic produce is no problem. You grow your own. In the winter, though, when snow covers your garden, like many other gardeners you purchase produce from a local grocer. While you prefer to buy pesticide-free lettuce, hormone-free milk, and eggs produced from free-range chickens, the cost can presents a road block.

In most stores, organic produce and conventionally grown fruits and vegetables are light years apart in cost. Whereas a regular head of lettuce might run 99 cents, maybe $1.50, a head of organically grown lettuce costs over $3.95.

The difference is hard to ignore; and for many, the price barrier is difficult, if not impossible, to overcome.

But there's a way around this economic barrier.

People of Organic Produce

In Evergreen, Colorado in the Foothills of the Rocky Mountains one energetic resident, Mary Denham, and four friends joined forces in 1999 to form a community-wide organic food buying co-op. "I started the co-op," says Denham, "out of frustration. It was hard to go into a regular grocery store and see the poor selection in the organic section. They never looked very fresh, and they were way too expensive."

Designed to reduce the cost of organic produce and make healthy fruits and vegetables more widely available in this small mountain community, the co-op is still running strong. In fact, it's never been stronger, despite some ups and downs along the road. Never short on good humor, they dubbed the group "People of Organic Produce" or

The POOP Co-op. For political correctness, its title has been transformed to Lovers of Organic Produce, or LOOP. We're all lovingly referred to as "loopers" with its various connotations.

Here's how it works:

Each week one member of the co-op is volunteers to be in charge of the produce order. That individual places an order at Vitamin Cottage Natural Grocers, a locally owned retailer thirty minutes away by car from our sleepy little town. Vitamin Cottage offers a potpourri of organic fruits and vegetables.

When the number of families that participated in the group was around a dozen, the person in charge each week simply got on the phone on Sunday and called each member of the co-op to see who was interested in a box. With answering machines to take messages, the process took only a half an hour or so.

Now that the co-op has grown to over 30 families, though, we're relying on participants to call the weekly coordinator if they're not interested in receiving a box of produce. That saves a lot of phone calling. If you don't call, you get a box. Plain and simple.

The order is phoned in to the produce manager at Vitamin Cottage on Monday morning. The affable, ever pleasant JP begins by rattling off a list of this week's specials, and then works with the coordinator to secure the best prices among his various suppliers.

The next day, the coordinator picks up the order, trucks it home, and divides the produce among the participants. Over the next few hours, participants show up, chat, and haul off their box of fresh produce. There's no store front, no overhead -- and once the boxes have been picked up there's little evidence of our tiny covert operation to make the world safe from pesticides and artificial fertilizers.

Saving Money, Saving the Earth

Vitamin Cottage sells organic produce to our co-op by the case, charging us cost plus 20 percent, saving each family a huge amount of money! I estimate that I receive $40 - $50 worth of organic fruits and vegetables each week for approximately $20 – plus or minus a little. Orders typically consist of 8 to 10 items, a mixture of organically fruit and vegetables. When asked if she felt she and her family were getting their money's worth, co-op member Karin Claus remarked, "Absolutely. If you try to buy $20 worth of organic produce on your own, the money just doesn't go very far."

Our coop also makes it possible for members to place special orders – for example, for a large order of carrots just for their family, say for making carrot juice. The coordinator will pick up the order and invoices that item separately.

The organic co-op is a fantastic way to feed a family. My kids and I, eat a much healthier diet -- that is, lots more fruits and vegetables -- since we joined the group. When asked what he liked most about the co-op, member Tony Stowe remarked, "Meeting the people, and being surprised by different fruits and vegetables that we have never tried before." Karin Claus echoed Tony's sentiments: "Receiving a variety of produce each week – instead of the usual stuff I buy." On a personal level, my children and I have been also introduced to produce we might otherwise not have even considered. In a sense, this forces us to experiment with new foods and widens our gustatory horizons.

Yet another benefit is that we're no longer ingesting pesticides in our food! Over the long run, this could reduce our chances of contracting cancer.

The organic coop also helps build community. Over the years, new friendships have been grown. The day of pick up is always a great opportunity to get caught up on the latest happenings in and around our mountain community. I personally look forward to visiting with several members of the co-op who have much in common with me. It's nice to know there are like- minded individuals around.

Ordering can a be fun, too. Claus remarked, "You have complete control to pick out whatever you want!"

Lest we forget, by participating in the organic co-op, we're helping to promote an important economic activity, one typically performed by small family-operated farmers. Compared to corporate farmers, the little guys are often better stewards of the land.

Finally, we're no longer contributing to the production of pesticides and artificial fertilizers and the systematic chemical drenching of America's cropland and all of the attendant effects of this systematic application of biocides and artificial fertilizers in the name of increasing agricultural production.

Not a Bowl of Cherries

This system does have some drawbacks, however. It is not all a bowl of cherries. For one, participants are never quite sure what they're going to receive from one week to the next. The order is completely up to the discretion of the coordinator. Those individuals who need to plan their meals ahead of time, find this system unacceptable, and usually drop out within a short time. (Be sure to warn prospective members of this potential downside!)

Another problem is that participants sometimes receive food they don't particularly like
-- or don't know how to cook. For instance, I like onions, but they don't like me very much. When we receive a large order of onions, I typically give them away to neighbors. There was a time when we were receiving a lot of pomegranates, and I didn't have the foggiest idea what to do with them!

To solve this problem, you might ask members to write up a list of "undesirables" -- fruits and vegetables they detest. You may also want to set up your co-op so that individuals can call the weekly coordinator to make requests for specific food items. Members can also trade for produce they prefer. For example, one member's onions might be traded for another's broccoli. To help those who don't know what to do with unusual fruits and vegetables, members can share recipes or tips on cooking or preparing unusual food items. Recipes also help those who don't quite know what to do with four bunches of spinach. (Over the years, I've learned some great spinach recipes!)

Another minor problem is that some individuals may be unable to keep up with a weekly box of produce. To address this in our co-op, some members (myself included) order every other week – or order half boxes. For vegetarians, the program is a godsend. Co-op member Tony Stowe remarked, "There are times when we get small boxes of expensive produce. Other times we get big boxes of seasonal produce. Being vegetarians, we always eat everything, except the box they come in."

How to Get Started

Starting an organic co-op can be a challenge. When our group started, Mary and her friends just sat down and talked about it. They started with about ten families. "But we

had no idea of how they were going to select produce each week, what it would cost, how to split it up or distribute it," noted Mary Denham. "We made lots of mistakes at the beginning. We weren't real clear about how much it was going to cost. And the price for each member shot way up when there weren't a lot of people participating some weeks. Sometimes we weren't sure how food came in a case. We got a case of ginger, for instance, to share among ten people, which was way too much!"

"Members came up with lots of cool ideas at first, too. Some of which we tried. We thought, for instance, that it would be neat if the person of the week could deliver produce to each member's doorstep," laughed Denham. "It was a cool idea, but it didn't work out...I remember driving around in the dark looking for one member's house."

Thankfully, readers can benefit from the experience of our little group.

If you're interested, I recommend that you start small and be patient. Contact a local organic grocer or, lacking that outlet, contact the produce manager at a conventional grocery store that sells organic produce to see if they'll work with you. If so, ask if they'll sell you produce by the case at a good price – hopefully no more than 10 - 20% above their cost.

Once you've established a supplier, you might ask a few neighbors and their friends to give it a whirl! You'll need ten people give or take a few to kick start this effort, and make it worthwhile.

At first, a small group of people can run the co-op. But as those people move on, you may need one leader to provide continuity. "In the beginning," Denham noted, "she wasn't the leader. The group that started it took on that task. But as the old timers dropped out, we needed one person to keep track of calendar, talk with new members, and recruit volunteers." Mary's taken on that role. Although it can be frustrating and time-consuming, it's well worth it. I'd suggest, if you have a leader, that that person receive his or her fruits and vegetables free at least once a month, maybe more often. It might cost members of the co-op an extra dollar or two per week, but it's well worth the work of a strong and dedicated leader.

One other bit of advice: "Keep it simple, so it can sustain itself," advises Denham. "Any idea that could make it more complicated or difficult we abandoned."

As you gain experience, you can recruit additional members by word of mouth or through ads or articles in a local newspaper. Our local newspaper ran a story on our co-op that tripled our membership almost overnight!

To reduce the workload of the organizer, you'll want to prepare a written description of the "program" and procedures. It can be handed out or e-mailed to all new members or people who are considering joining. This helps newcomers learn the "rules" and reduces the time required by the organizer/coordinator. Also, be honest and let all new or prospective members know the potential downsides as well as the many benefits.

In a co-op with a dozen members, each member will be in charge 4 or 5 times a year, which means they'll have to order, pick up, and distribute the produce four or five times a year. To ease the burden, members can also work in pairs. One person, for instance, can call members and place the order. Another can pick up and sort the produce.

People who want to belong but can't participate in the pickup of produce, for example, because of their employment, shouldn't be excluded. To compensate more active members, though, they could be charged a few extra dollars to make up for the fact that they can't do the pick up and sorting. You might even consider giving the person of

the week his or her produce that week for free, as a small financial incentive – and a token of your group's thanks.

Those who like to buy unusual foods for the co-op on their week might consider providing members with recipes, as noted earlier. Joe O'Leary, a member of our co-op says, "Some advance warning of what's being ordered might help, too. That way, I have a day to find out how to prepare chard or kale or green cabbage for the next week. Sometimes this stuff just sits in our fridge and wilts before I can figure out how to use it." Those in need of assistance can go online and ask members for recipe suggestions.

Speaking of online: our group now uses the internet to coordinate our program and distribute the schedule and solicit volunteers. You might consider the same system. It really saves time!

Organic food co-ops take time and patience to get running, and will require a persistent leader or two who is willing to take up the slack and beat the bushes for volunteers from time to time. The benefits are so great, however, that it is well worth your time.

Other Action Projects

These are other scripts that will be developed during the course of our research and writing. If you have any experience or suggestions to help us complete it please let us know through our website feedback form: http://beta.postcarbon.org.

Thanks,
Post Carbon Team

Food

- Fruit Tree Project
- Developing a community gardens
- Networks of neighbourhood gardens
- Strengthen farmers' markets
- Develop or join a CSA

Transportation

- Start a Car Co-operative

SpaceShare Carpooling and Room-Sharing at Your Events

Synopsis: When you are planning a large event, we will provide tools for carpooling, room-sharing, green-logistics and networking.

Roles:
Event Planner: Have the event planner contact us, and we will work with her/him to help make your event green in a variety of ways.

Outreach: You can encourage all the events you attend to carpool & be green. Pass this along: www.spaceshare.com/announcetoallies.pdf or see our greening guide at www.spaceshare.com/green

Contact: info@spaceshare.com, or call 510-520-6175. See www.SpaceShare.com for details.

Project Outline
SpaceShare, working with the MetaFoundation's Green Events Initiative, helps make events more environmentally friendly, letting attendees rely on community instead of oil. We'll work with your event planner to help the event consume less energy. We provide a wide variety of tools for connecting people to save resources which vary according to the needs of your event.

We can help people travel with others, saving both environmental and financial resources:

* Drivers can find their neighbors and carpool.

* Share a hotel room, or local residents can offer space for a homestay. A great way to make the gathering more affordable for students and others on a low budget.

* Network with others on the flight or train. Spending a flight talking to someone about the conference can be a tremendous improvement over flying alone.

* At the airport or train station, match with people arriving at the same time, to share a taxi or car rental. There is no reason for people to arrive in a new city alone.

We can also help people network:

Imagine if you could interview every person attending your conference, and help them make the perfect connections.

* Would you match mentors with youth, by region and specialty?

* Help students team up to start new student organizations or projects?

* Start discussion groups based on the themes of the conference?
We also have a guide to the best information about making your event green on the web: www.spaceshare.com/green

Evaluation and Report

How green are your events? Do attendees come alone, leave alone -- or do you find ways to connect people both to save resources and to strengthen your community? Do you "relocalize" your events, by helping neighbors meet neighbors and get active close to home? How do you handle other green issues: do you offer rooms to travelers? recycle? encourage facilities that you rent to be greener? Send your summaries and ideas to both SpaceShare and the MetaFoundation's Green Events Initiative at info@spaceshare.com

SpaceShare Green Events: Make Events That Consume Much Less

Synopsis: There are new tools and new techniques to make events consume much less energy and reduce materials throughputs, from carpooling to recycling organics to room-sharing, composting to relocalizing. Be part of the transformation; help make events of all types greener, preaching far beyond the choir.

This is a project of the MetaFoundation's Green Events Initiative and SpaceShare.

Roles for Local Groups:

- Local Team Lead[s] & Outreach Team
- Web Research
- Phone & Email Outreach

Contact events in your area, encouraging them and guiding them to run green events. Start by encouraging some of the simplest steps such as carpooling to every event. Follow up by encouraging recycling, composting, community building & relocalization, organic food, room-sharing, and much more. Step by step, your group could have all the convention meeting places in your region running green events. You will focus on outreach to event planners in your region, and perhaps attend events in your region to do some environmental outreach & education (when attending events, including issues such as Peak Oil is fine.) SpaceShare & The Green Events Initiative will handle some of the work ourselves, and provide connections and materials to help you and the event planners with the rest.

Roles for Volunteering Directly with Green Events:
Outreach to Events by Issue (peace events, animal rights events, etc)
Outreach to City Planning Departments
Outreach to Environmental Organizations
Grant Writing
Arts & Graphics Design
Work on the Green Events Guide (online)
Call with your interests to hear about other roles

Contact: info@spaceshare.com, or call 510-520-6175. See www.SpaceShare.com for details.

Project Outline
MetaFoundation's Green Events Initiative, working with SpaceShare, does outreach to (and at) events to encourage events planners and event attendees to make gatherings as green as possible.

Step 1: SpaceShare has built tools for connecting people so they can rely on their community rather than waste oil. Some of these tools provide obvious cost savings and help event planners improve the networking benefits of their events: so unlike other necessary environmental improvements, event planners can easily be convinced to implement the SpaceShare tools.

Step 2: Green Events is compiling a guide of other ways to make any type of event as green as possible, while also reaching out to thousands of individuals travel green and spread the tools. Using SpaceShare's tools as an icebreaker ("asphalt-breaker") to begin the process of making events environmentally friendly, Green Events pushes the envelope and works on education.

Step 3: You can make a wonderful change for the planet and for community building. We have many varied roles for which details can be found on our website our by contact us. But the main role, a great role for a group that wants to make the most pragmatic difference possible, is outreach to the events in your region or your field of interest. There are tens of thousands of events that should be using these new tools. Some of the hardest work has been done, the tools have been developed. It's now up to the environmental community to decide if these tools are worth the effort to spread and implement. We need a few more volunteers and interns for our project (telecommuting is fine,) and are also hoping that small groups will take this project on. Small groups can very easily have a huge impact in their region. We'll provide guidance, but for a quick summary: research and contact the events in your region, and help us work together to make their events green.

Our Vision is to make events across North America* green. We're not thinking small: we hope to green thousands of events, exposing millions of people to pragmatic, effective tools for conservation. We want everyone to see that environmentalism and community building work. With your help, we'll succeed at greening events, and move on to churches, synagogues and mosques, then to colleges, and eventually make it possible to step outside with a cell phone and get a ride, making it much easier to live without your own car. A better world is possible.

Evaluation and Report
Compare work with the Green Events Initiative, hour by hour, with your projects. In terms of actual conservation and resources saved, and in terms of education "beyond the choir," what are the best projects you can do? If you work with Green Events, we will make amazing use of your time and efforts: help thousands of people carpool, tens of thousands be exposed to green tools and education.

Contact: info@spaceshare.com, or call 510-520-6175. See www.SpaceShare.com for details.
* Post Carbon Institute will be glad to talk to those in other continents about similar ventures.

Documentary Film Meta-Project

Julian Darley

This is an initiative - really a meta-idea – that I have long cherished that is part of a wider analysis of what happened to English-speaking film-making after the Second World War. The Documentary Film Meta-Project idea is that we should promote, by whatever means we can muster, a long and broad wave of documentaries from and about the real world - local films and beyond, a 'nouvelle vague Anglaise', as it were (to counter the malaise of one-dimensional, corporatised film that has, with a few exceptions, essentially strangled the medium of film story-telling). Many of these documentaries, like the folk music from the late nineteenth century would be interesting in themselves, but the meta-idea is that they might inspire something much larger than themselves - a new-old, reinvigorated kind of storytelling, that relies not on violence or other sensational elements, but on the drama of life, great or small, set against a historical backdrop of the extraordinary dangers that we now face on a planet reaching its limits. The world depicted would, for instance, be a stark contrast to the mesmerising banality and idiocy of the mall and unlimited consumption.

Fortunately, though it cannot be said of feature films, the documentary is already enjoying a revival, partly thanks to Michael Moore and others - and of course 'The End of Suburbia' can and should be counted high among this new popularity of factual narratives. The Moore style is not really replicable though, and his budgets are enormous compared to what most people could manage, so there must be analysis of this movement, and theory about *why* it is flourishing now, and where it might go. This is important. The *nouvelle vague* wrote about itself in the *Cahiers du Cinema*, and generally artists who make their mark, to some extent orchestrate their rise using other media, especially print.

There are a couple of key elements to discern and promote to make this revival of documentaries more than a blip in itself, and to make the meta-idea of documentaries as seed and soil part of a more general revival in storytelling.

First, we must reconnect with the past and with what makes us human, animal, alive. We must rediscover the local, examine traditions for what might be both good and bad, understand as much as we can of our history, our anthropology, the elements that make up our cultural atmosphere that we breathe in a sense, and that inspire us - or send us into mindless denial and delusion.

The second is more mundane, but also very important. Relatively inexpensive (for most of us in the West anyway) means for making technically high-quality film, or rather video, have just about arrived, especially since the advent of reasonably priced, fairly high quality digital video editing programs for the desktop (or laptop) computer. What is really new is the means of distribution. The Internet can show reasonable resolution (certainly better than lousy American NTSC television) to a greater and greater number of people, that is, if the broadcaster can stomach the bandwidth charges, since micro-

payments have never taken off. We are have an idea about this, connected with local currency, but that is for another place. For the moment, the Internet situation is presumably moving towards higher quality/bandwidth for less money - Moore's law (Gordon of Intel, not Michael of Flint) and economies of scale having their uses from time to time.

The other key physical distribution element is the arrival of lower cost video projectors. In North America at least, it is now possible to purchase a low-end video projector for about US$500, and despite its modest specifications (by today's standards) it is quite suitable for the purpose of small-scale public showings. Caveat and admission: It is true that a video projector is, for most of us, neither locally made nor something we could easily knock up in an afternoon with a saw and some sticky-back plastic. However, we have found that in the matter of communications we have had to make a large exception regarding technology and non-localness. Without the technology of communications you would not be able to see this electronic book, and we would most certainly not have been able to produce it. So, we use the a pretty full array of communications technology. And I think that video projectors, along with the right films and some coordination, could allow a revival of village and small-town cinemas and theatres, such as existed before the Second World War (that dread watershed once again).

Part of making this work will be creating a message of confidence and can-do. A message that it is time not only to take back the means of production of money, energy and food, but also of culture, of music, of storytelling. Because it has all been taken away from people, so that now, most people can't play an instrument, read music, or sing or play together, with or without printed notes. Part of this reclaiming of culture, will be rekindling the idea that people can make things, that they can make them well - if they learn the skills and have good tools (that 'bad workmen' line is wrong and debilitating in my opinion), and that by so making the things of the world, we can remake the world, or at least a part of it, our human part of it. Maybe if we take up the tools to start making the human part again, we'll be able to give a little of the world back to nature - and before nature takes it by force.

Other Action Ideas

These are other scripts that will be developed during the course of our research and writing. If you have any experience or suggestions to help us complete it please let us know through our website feedback form: http://beta.postcarbon.org.

Thanks,
Post Carbon Team

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Culture

- Community play
- Open a local cinema/theatre or do a film series
- Community tour – walking tour and Post Carbon Tour

Energy

- Local power system
  a) when you can sell to the grid
  b) when there is prohibitive regulation
- Implement the best local power manufacturing based on your research project

Glossary

- **Biofuels** – Biofuels are fuels produced from farm-grown resources. Bioethanol is an alcohol-based substitute for petrol/gasoline, and is produced from sugar beet and wheat. Biodiesel, which is a heavy fuel ignited by compression (rather than a spark), is a substitute for diesel and is produced with three main feedstock ingredients: oil seed rape (or canola) or other vegetable waste oils; methanol (methyl alcohol); and lye – sodium hydroxide or potassium hydroxide. To produce biodiesel in significant quantity (a daily production of upwards of 30 gallons or 100 litres) requires a small-to-medium scale plant, costing at least $20,000, and very likely much more.
- **Biogas** - Biogas is a mixture of gases, usually methane and carbon dioxide, with other trace gases. It is produced by a few kinds of microorganisms, usually when air or oxygen is absent. (The absence of oxygen is called “anaerobic conditions.”) Animals which eat a lot of plant material, particularly grazing animals such as cattle, natural produce large amounts of biogas (which is rather difficult to capture, as you may imagine). In an animal, the biogas is actually produced not by the cow or elephant, but by billions of microorganisms living in its digestive system (the same is true of humans). Biogas also develops in bogs and at the bottom of lakes, where decaying organic matter builds up under wet and anaerobic conditions. Besides being able to live without oxygen, methane-producing microorganisms have another special feature: They are among the very few creatures that can digest cellulose, the main ingredient of plant fibers. Another special feature of these organisms is that they are very sensitive to conditions in their environment, such as temperature, acidity, the amount of water, etc. Flammable biogas can be collected using a closed tank of animal manure and other vegetal matter, designed in such a way that the gas accumulates, and can be lead off to places where it is required for heating by burning. Biogas is carbon-neutral. The carbon-dioxide which is released when the methane burns, was all fixed from the atmosphere in the first place. Biogas makes an excellent fuel for cooking stoves and furnaces, and can be used in place of regular natural gas, which is a non-renewable fossil fuel. Biogas is a source of renewable energy. Its energy content is less than that of natural gas (it usually has about sixty percent of the energy of natural).
- **Biointensive & “GROW BIOINTENSIVE”** – Biointensive is a system based on ancient Chinese methods of sustainable agriculture and on French refinements in the 19th and early 20th century. John Jeavons has developed from this a system called "GROW BIOINTENSIVE" sustainable mini-farming, which is currently being used in 110 countries, proving its effectiveness for meeting the needs of communities and individuals in a wide range of climates, soils and cultures. With "GROW BIOINTENSIVE" sustainable mini-farming, a farmer can produce 2 to 6 times the yield compared to commercial agriculture, while using 67%-88% less water, 99% less energy and 50%-100% less purchased organic fertilizer per unit of yield compared with commercial agriculture. It is a method that allows gardeners and farmers to transform scarcity into abundance. While U.S.

agricultural practices deplete the soil 18 to 80 times more rapidly than it is built up in nature, sustainable "GROW BIOINTENSIVE" mini-farming, when used properly, has the capacity to *build the soil up to 60 times faster than in nature*, while producing high yields with a fraction of the resources normally required. "GROW BIOINTENSIVE" has proven to be an effective and sustainable way of improving lives and the environment, and the worldwide need for further dissemination of this information and skills training is great. http://www.growbiointensive.org

- **Bioregion** – A bioregion is a distinct geographic area (often defined by a watershed) which encompasses a unique and coherent set of soils, climate, geological underpinnings, native plants and animals, and human culture. A bioregion refers to both geographical terrain, and a terrain of consciousness – to both a place, and the ideas that have developed about how to live in that place. One day, bioregional (and/or watershed) designations may become our primary natural addresses.
- **Car co-operative** – A car co-op is a not-for-profit car sharing co-operative that provides access for members to a fleet of co-owned vehicles. Members can book a vehicle for as little as half an hour or as long as needed. The co-op maintains and operates the cars: you book them with a simple phone call or more frequently and conveniently now online. You drive a clean, well-maintained car every time. Car co-ops typically reduce car ownership by a factor of well in excess of twenty (especially since many households will have a joint membership) – that means twenty times few cars on the roads or parked. It also means that people in badly designed car-dependent cities can begin to make a transition to low-energy living without losing still necessary mobility. There is no question that more planning is required before making a journey, but this is, in effect, practice for a future of much less oil.
- **Car-free living** – An existence where one's mobility needs are met with transport methods other than cars, such as walking, bicycles, trams, rail, or buses. Generally this requires one to live in an area with adequate public transportation and nearby shops.
- **Co-housing** – Co-housing is the name of a type of collaborative housing that attempts to overcome the alienation of modern subdivisions (bland, cloned areas of utilitarian and soulless housing, eg suburbia) in which no-one knows their neighbors, and there is no sense of community – and probably very few amenities. Co-housing is characterized by private but often physically connected dwellings with their own kitchen, living-dining room etc, but also sharing extensive common facilities. The common house may include a large dining room, kitchen, lounges, meeting rooms, recreation facilities, library, workshops, and children's space. Usually, co-housing communities are designed and managed by the residents, and are intentional neighborhoods: the people are consciously committed to living as a community; the physical design itself encourages that and facilitates social contact. The typical co-housing community has 20 to 30 single family homes along a pedestrian street or clustered around a courtyard.

Residents of co-housing communities often have several optional group meals in the common building each week.

- **Collapse** – When used in a technical sense, collapse refers to a reduction in complexity of a society or civilization usually uninvited and mostly unplanned for. The measure of complexity most often referred to is the amount of work specialization (or indeed over-specialization) amongst the population and will tend to correlate with the amount of division of labour. Complexity may also include the amount of highly skilled creative or artistic activity a society displays, but the second half of the twentieth century (which has seen the near extinction of classical music composition and many other fine art forms) shows that this need not be so.
- **Community Supported Agriculture** (CSA) – CSA is a partnership of mutual commitment between a farm and a community of supporters which provides a direct link between the production and consumption of food. Supporters cover a farm's yearly operating budget by purchasing a share of the season's harvest. CSA members make a commitment to support the farm throughout the season, and assume the costs, risks and bounty of growing food along with the farmer or grower. Members help pay for seeds, fertilizer, water, equipment maintenance, labour, etc. In return, the farm provides, to the best of its ability, a healthy supply of seasonal fresh produce throughout the growing season. Becoming a member creates a responsible relationship between people and the food they eat, the land on which it is grown and those who grow it. This mutually supportive relationship between local farmers, growers and community members helps create an economically stable farm operation in which members are assured the highest quality produce, often at below retail prices. In return, farmers and growers are guaranteed a reliable market for a diverse selection of crops.
- **Community Supported Manufacturing** (CSM) – is a new concept that Post Carbon Institute is developing with Outposts. As the name suggests it is based on the concept Community Supported Agriculture, but instead of producing food, the production might be copper tubes, knives and forks, bicycles – in fact just about anything and everything we need for daily life, but which needs to produced at a community or even regional level, because its manufacture requires complex techniques or needs careful oversight because of technical or safety issues.
- **Consumer choice** – Consumer choice or “retail wheeling” permits retail consumers to buy power (electricity) from any utility or marketer. With consumer choice, a Wisconsin customer would have the option to buy electricity from a North Dakota or Canadian utility, or a local independent generator — or any supplier offering greener power (or lower rates) than its current utility.
- **Corporate disobedience** - coordinated action to stop giving the corporations our money - especially cars, mortgages, energy, and industrial food, but also including industrial entertainment, clothes, furniture, tools - in fact, the list is almost endless, and encompasses almost everything we use and are told we need. Disconnecting from corporations is going to be ferociously difficult, but will involve far more than protests, and much more even than just boycotting their

products, which would be hard enough on its own. To make disconnecting from corporations work, the public must start making things again, effectively taking back the means of production. See **Community Supported Manufacturing**.

- **Energy crisis** – a huge subject, but essentially it means that demand or at least desire for energy tries to exceed supply. This can never happen since energy is absolute limiter of activity and there is literally no substitute for energy. This will come as a surprise to economists who believe, and have led the willing public to believe, that there is a substitute for everything. Famous energy crises include the Oil Shocks of the 1970s and California. The major difference between all former energy crises and Peak Oil production which the world is soon to experience is that all previous energy crises were temporary and in effect man-made – they were inspired by political motives (1970s) or by corporate greed (California 2000). Peak Oil – and even more importantly – the permanent decline which follows, is a matter of geology finally imposes limits first on the rate at which we can extract petroleum from the earth, then eventually on the absolute amount.
- **Eco cities** – An "ecological city" integrates nature and modified environments, in which ecosystems, including the concentrated activities of people, exist and develop in ways that maintain the viability of the ecosystem indefinitely. An eco-city perspective is holistic – all parts of the city and its region are connected. An eco-city is neither viewed in isolation, dissected into unconnected parts nor defined solely by individual distinguishing features.
- **Eco-villages** – An eco-village is a human-scale full-featured settlement in which human activities are harmlessly integrated into the natural world in a way that is supportive of healthy human development and can be successfully continued into the indefinite future.
- **Energy cooperatives** – A non-profit membership organization that helps consumers and communities obtain the information, goods, and services they need to control energy costs. Often members may purchase goods and services as en bloc (as a collective group) to save money and improve purchasing power.
- **Energy-backed currency** – An idea that has been briefly and very successfully tried in the past, in which the key productive item is energy, and the issuer of a local currency also controls all or some of this energy production. The only real problem in the most famous known example of Schwanenkirchen, Bavaria (1931), which used a local coal mine was the energy source, was that, apart from the pollution, the German government shut down the currency because it was seen as becoming a threat to the State. Nevertheless, as renowned local economist, Richard Douthwaite points out, it is "a superb pointer for us." [see http://www.feasta.org for Douthwaite's book *Short Circuit*]
- **Geo-exchange (or ground source heat pumps)** – Geo-exchange technology uses the earth's renewable energy, just below the surface, to heat or cool a home or other building, and to help provide hot water. A few feet beneath the surface, the earth's temperature remains fairly constant all year round – ranging from 45º or so in northern latitudes to about 70ºF nearer the Equator. Geo-exchange takes advantage of this constant temperature to provide extremely efficient heating and

cooling. In winter, a water solution circulating through pipes buried in the ground (or in a body of water, such as a lake or a river) absorbs heat from the earth and carries it into the building. The geo-exchange system inside uses a heat pump (in winter it is essentially a refrigerator in reverse) to concentrate the earth's thermal energy and then to transfer it to a standard central heating system, either a hydronic system (hot water in radiators) or air circulated through standard ductwork, to fill the interior space with warmth. In the summer, the process is reversed: heat is extracted from the air in the house and transferred through the heat pump to the ground loop piping. The water solution in the ground loop then carries the excess heat back to the earth. The only external energy needed for geo-exchange is a certain amount of electricity needed to operate the ground loop pump and whatever other pumping the central heating system normally requires. The ratio of electrical energy in compared with the 'amplified' heat energy out (into the house or building) is called the CoP, or Coefficient of Performance. For a ground source this can range between about three and five. This is a very significant gain, though one must take note of the extra potential strain that will be imposed on the electricity generation system, unless the fuel system being replaced was already electricity. In that case the gain is all the more impressive. In temperate climes, it is also possible to use the air as the heating or cooling source. The advantage is that the system is cheaper to install. The disadvantage is the CoP is about half that for a ground source. Nevertheless, an amplification of two to three may be very useful in many circumstances.

- **Global Relocalisation (or Relocalization)** – see chapter with that title in this manual.
- **Green building** – "Green Building" or "Sustainable building" practices promote construction of buildings that are healthier for the occupants and healthier for the environment. Such practices can reduce the tremendous impact that building design, construction and maintenance have on both people and nature. According to the U.S. Department of Energy's Center for Sustainable Development, buildings consume 40% of the world's total energy, 25% of its wood harvest and 16% of its water. The building industry is the nation's largest manufacturing activity, representing more than 50% of the nation's wealth and 13% of its Gross Domestic Product. Energy and material consumption in buildings can contribute significantly to global climate change. Sustainable building practices go beyond energy and water conservation to incorporate environmentally sensitive site planning, resource efficient building materials and superior indoor environmental quality. Some of the key benefits are: lower electric and water utility costs; environmentally effective use of building materials; enhanced health and productivity, long-term economic returns, and reduced environmental impact.
- **LEED** - LEED provides a complete framework for assessing building performance and meeting sustainability goals. Based on well-founded scientific standards, LEED emphasizes state-of-the-art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. LEED recognizes achievements and promotes expertise in

green building through a comprehensive system offering project certification, professional accreditation, training and practical resources.

- **Local energy** – Decentralized energy generation (more literally collecting or harvesting) on a small scale in local communities.
- **Local Energy Banks** – A system being developed by Post Carbon Institute that will try experimental implementations of energy-backed local currency. (See **Energy-backed Currency**)
- **Local food** – Food grown locally for local consumption. (See also **Community Supported Agriculture**)
- **Local money or local currency** – Physical currency (such as notes as in Ithaca Hours, Calgary Dollars, Salt Spring Dollars, Time Dollars), or LETS transaction systems (in which transactions are recorded in a book or online). Such systems are designed to help local communities (re-)develop a local economy, both keeping money flowing within the system (so that it doesn't get sucked out by distant corporations) and to help buffer against artificially cheap imports from countries where labour and environmental conditions are appalling and more or less unregulated. (See also **Energy-backed Currency** & **Local Energy Banks**)
- **Mitfahrgelegenheit** – A long-established ride-sharing system which operates across Germany. The word means "with journey opportunity". (See also **Car Co-ops**)
- **New Urbanism** – New Urbanism is an urban design movement that burst onto the scene in the late 1980s and early 1990s. New Urbanists aim to reform all aspects of land development. Their work affects regional and local plans. They are involved in new development, urban retrofits, and suburban infill. In all cases, New Urbanist neighborhoods are walkable, and contain a diverse range of housing and jobs. New Urbanists support regional planning for open space, appropriate architecture and planning, and the balanced development of jobs and housing. They believe these strategies are the best way to reduce how long people spend in traffic, to increase the supply of affordable housing, and to rein in urban sprawl. Many other issues, such as historic restoration, safe streets, and green building are also covered in the *Charter of the New Urbanism*, the movement's seminal document. [available online at http://www.cnu.org/aboutcnu/index.cfm?formaction=charter&CFID=5769759&CFTOKEN=56816985]
- **Oil Peak** – also known as Peak Oil, and a derivative of Hubbert's Peak refers to the global phenomenon that will occur (or is possibly now occurring) when we reach a maximum extraction rate of petroleum from the whole planet. Such an extraction peak happens to every oil field assuming no economic or political factors intervene. Some technological methods can extend the peak into a plateau, but they will usually ensure that the permanent decline is all the quicker. Saudi Arabia is likely to be the reference case for this. (See also **Natural Gas Peak**)
- **Outposts** – Community groups that are beginning to prepare for an energy constrained future.

- **Parallel Public Infrastructure** – a network of community groups, businesses, municipalities and their local governments, NGOs etc, that have expertise, tools, relationships, plans, and working models for providing basic needs within walking distance. This will therefore also mean a new or retrofitted physical infrastructure to deliver those needs, especially of distributed, local electrical power, local fuel, local food, housing, farming and business laid out for muscle-powered transport, not combustion-engine transport. It will also include the ability to make and deliver locally or regionally as many basic and finished products as possible, including metals, glass, pottery, paper, wood, and (re-)building matierals. Post Carbon Institute's Outpost Initiative is designed to develop into a parallel public infrastructure that will be in place before we enter the next crisis.
- **Peak Oil** – See **Oil Peak**
- **Permaculture** – Permaculture introduces design into agriculture in order to create permanent high-yielding agricultural ecosystems, so that humans can thrive on as little land as possible, thus leaving as much land as possible as wilderness, if necessary helping the wilderness re-establish itself. This visionary global mission is encapsulated in the word 'permaculture', a shortened form of 'permanent agriculture'. In order to implement this global vision, we need local solutions, because everywhere on earth is different in climate, land form, soils and the combinations of species which will thrive. Not only does the land and its potential vary from place to place, but so do the people vary in their needs and preferences and their capacities. Every place and community requires its own particular design. Hence at the local level, permaculture designers often refer to permaculture as being about designing for 'permanent culture'.
- **Post Carbon Groups** – in other words Outposts – which are what this manual is designed to help set up and promote!
- **Relocalization** – see chapter entitled *Global Relocalisation* in this manual.
- **Renewable energy** - *renewable energy* resources, such as wind and solar energy, are constantly replenished and will never run out (until the Sun explodes that is). In fact, with the exception of tidal energy, all renewable energy comes either directly or indirectly from the sun. Sunlight, or solar energy, can be used directly for heating and lighting homes and other buildings, for generating electricity, and for hot water heating, solar cooling, and a variety of commercial and industrial uses. The Sun's heat also generates the winds, whose energy can be captured with wind turbines. The winds and the Sun's heat cause water to evaporate from the seas and oceans. When this water vapour turns into rain or snow and flows downhill into rivers or streams, its energy can be captured using hydroelectric turbines. A word of caution is in order however, because large-scale hydroelectric dams can and usually do wreak havoc on the ecosystems (and often people) their huge reservoirs displace. Furthermore, as the trees and other submerged vegetal matter decompose, they emit carbon dioxide, which some authorities calculate more or less eliminates any saving in carbon emissions from the hydro-electricity that is generated. By contrast, micro-hydro or 'run-of-river' hydro-electric generation is designed to work with the existing river and eco-system, not to

replace it. It will inevitably generate less electricity, but it can be done so sustainably and in concert with the aquatic life of the river or lake. Other renewables energy sources include biomass (eg trees and crops), geothermal (only applicable in a few volcanically active areas, such as Iceland), geo-exchange (see **Geo-exchange**), the tides, and waves.

- **Ride-sharing** - Sharing your ride to work, to the shops, to school, or to an event - in a carpool, vanpool, bus, train, shuttles or a combination of these - is called ride-sharing. In the USA, commuting just 15 miles each way every day, can cost as much as US$1,764 per year. In Europe the monetary cost will likely be much higher. Sharing the ride with just one other person can cut your commuting costs in half, as well as reducing your per capita GHG (GreenHouse Gas) emission.
- **Shared living** - In response to changing economic, social and family characteristics and the environmental dangers of today, shared living communities are new forms of housing which are intentionally designed to support sustainable ways of living. Shared living communities are presented as a way to provide a supportive social/family lifestyle, cost of living savings, energy savings, a safe place for raising children, and cooperative sharing of resources. These communities balance private living spaces with abundant common amenities such as child care facilities, gardens, workshops, exercise rooms, common dining spaces, etc. The emphasis is on creating intergenerational, extended family communities where cooperative human enterprises can foster social stability, economic viability, and environmental health. To do this, we need to cultivate the lost art of cooperation and working together in a spirit of community. (See also **Co-housing**)
- **Simplicity** – Simplicity is a growing trend in the United States and other industrial countries. Millions of people (by some estimates over 50 million) are trying to slow down, work meaningfully, be engaged in relationships, family and community, get out of debt and reduce wasteful consumption. Unfortunately because this behaviour and attitude is still far from the mainstream, those who try to enact simplicity may easily feel alone and isolated. Too often, one is acting as an individual, trying to do what one can in this unpleasant commercial climate which is pushing us all to consume (and waste) more and more. The Simplicity Forum honors these valiant personal efforts -- and intends to organize this nearly invisible constituency to work actively towards changing both the culture and the policies that drive over-work and over-consumption.
- **SpaceShare** – see *Run for Municipal Office* (page 95) and http://www.spaceshare.org.
- **Universal Ecological Dilemma** - see Box *Peak Oil is an Ecological, Rather than a Technical Problem* by Richard Heinberg (on page 13).

