

## 15. Post Carbon Cities: Five Principles for Local Officials

*(Adapted from **Post Carbon Cities: Planning for Energy and Climate Uncertainty** by D. Lerch, Post Carbon Institute.)*

The following five principles are essential to make a smooth transition to a post fossil fuel world. Local officials should integrate these principles into their short-term and long-range planning:

### 1. Deal with transportation and land use right away.

We've built most of our modern cities and suburbs in such a way that it is nearly impossible to meet even basic needs without using enormous amounts of petroleum-based fuels. Governments of all sizes need to use their land use and transportation planning powers to make walking, bicycling and public transport more convenient and more sensible choices than driving. Until then, most of us will have little choice but to remain dependent on an increasingly scarce, expensive and climate-changing energy source just to get around.

The built-in oil dependency of our cities and suburbs is the biggest obstacle to significantly reducing our energy use. Our dependence will increasingly threaten local economic health as the price of oil rises and becomes more volatile. Those cities and suburbs that have redesigned themselves for the post-fossil fuel world will succeed, while other localities will find it more and more expensive to move people and goods around.

Incorporate peak oil and climate change in your long-range land use and transport planning assumptions now. Don't just tinker with land use regulations and transport funding – take the time and commit the resources to make serious changes:

- **Fundamentally rethink your local land use and transport practices**, from the most mundane regulations to long-range planning processes. Are you encouraging developers to build the best possible buildings and neighbourhoods for a world without cheap oil? Are you discouraging the kinds of developments that will function poorly when petrol is three times as expensive as today?
- **Make land use and transport infrastructure decisions with 100 year timeframes.** What are the energy and mobility assumptions going into your current infrastructure investments? Are you planting the seeds for energy-prudent land use patterns?
- **Organize with neighbouring jurisdictions** to address these challenges at a regional level. Are you coordinating with other cities and suburbs? Are you protecting farmland and industrial areas throughout the region?

### 2. Tackle private energy consumption.

The vast majority of the urban energy footprint comes from private consumption, and a huge part of that comes from heating, cooling, and lighting buildings, and heating water. Reducing government consumption is an important step, but it will do very little to reduce overall community energy vulnerability without similar reductions in the private sector. Local governments do not have direct control over consumer energy use, but they can use their powers to influence the private sector in various ways. Moreover, the personal initiative and leadership of both elected officials and local government staff can carry great influence in the community.

- **Use the tools you already have** to encourage serious energy conservation and efficiency in the private sector. Create strong incentives and support for innovations like zero-energy buildings.<sup>70</sup> Lead by example in your public projects and public-private partnerships.
- **Engage the business community aggressively.** Resource efficiency saves money, and new “green” industrial and business practices are a growing opportunity for economic development. Challenge your local business leaders to reinvent the local economy for the post-carbon world.



### **3. Attack the problems piece-by-piece and from many angles.**

American professors Stephen Pacala and Robert Socolow proposed a multiple-approach strategy for mitigating climate change in 2004,<sup>71</sup> and Canadian architect Bryn Davidson has recently proposed a similar strategy for responding to peak oil. While they differ in their particulars, the authors of both strategies demonstrate that any realistic reduction of carbon emissions or oil consumption requires multiple solutions, because no single solution can alone achieve the vast reductions needed. By combining many solutions, you can reduce your region’s dependence on fossil fuels using existing practices and technologies, to reduce demand and increase supply:

- **Meet your goals with multiple, proven solutions.** Don’t look for a few ‘big fixes’ on energy and greenhouse gases. Instead, pursue many different kinds of solutions at different scales, from promoting individual energy efficiency to rethinking the fundamentals of your regional economy.
- **Enlist the entire community.** Set clear community goals and then spur action from all sides – supply and demand, public and private, household and business – to meet them.

### **4. Plan for fundamental changes...and make fundamental changes happen.**

Peak oil and global warming will fundamentally alter the way our modern globalised world works. Some change in the climate is now inevitable, and a huge amount of change in our energy supply is both inevitable and imminent.

The challenges of energy and climate uncertainty require us to approach how we manage our towns and cities very differently from the way we have in the

past. The current culture of municipal management, planning and development operates on a set of assumptions about energy and climate that must change quickly.

- **Educate and involve your fellow elected officials and staff** about the challenges of energy and climate uncertainty, and the need to change their operating assumptions accordingly. These are the people who will be guiding your community through the coming crises: raise their awareness of the problems and they will be better prepared to come up with the solutions.
- **Educate and involve your stakeholders**, which include business leaders, land developers, planners, architects, landowners, financiers, engineers, community leaders, and citizens. Make sure they understand the seriousness of the challenges at hand, and challenge them to come up with serious solutions.
- **Lead your region's transition** by integrating peak oil and climate change considerations in your own decision-making. See to it that every project you are involved with smoothes the transition and reduces energy and climate vulnerability.

## **5. Build a sense of community.**

The fifth principle is to **build and nurture a greater sense of community in your region**. The towns and cities most likely to weather peak oil well are those with a strong sense of community. Strong relationships tie together individuals, neighbourhoods, places of worship, schools, businesses, and local government. These relationships are the lifeblood of the community – without them, we start to lose civic engagement, community memory, local economic resilience, the willingness to help those not related to us, and many other qualities that make a region work well.

- Allow a mix of uses in both buildings and neighbourhoods;
- protect affordable housing, and allow accessory dwellings ('granny flats');
- develop a community policing program;
- encourage street fairs and farmers markets;
- build public squares to encourage public interaction;
- protect neighbourhood-scale schools, and set up community-school partnership programmes; and
- strengthen neighbourhood and citizen associations.

More than anything else, the resilience that comes from a strong sense of community will help your region meet the challenges of energy and climate uncertainty.

## **16. The Oil Depletion Protocol**

The Oil Depletion Protocol is an **international draft agreement** intended to mitigate peak oil by gradually and collaboratively lowering global oil demand. Local authorities that adopt the Protocol commit to cutting their oil consumption by about 3% each year, or 25% total over ten years. Signing the Protocol signals a council's commitment to reducing the energy vulnerability of its borough, city or county, and provides a series of targets by which to measure progress. It also connects the council to a growing international network of local authorities that have made the same commitment.

Visit [www.oildepletionprotocol.org](http://www.oildepletionprotocol.org) to sign the Protocol.

## 17. Community organizations

British local authorities will increasingly find that communities in their area are already preparing for peak oil through two fast-growing grass roots organizations: the Transition Network<sup>72</sup> and the Relocalization Network.<sup>73</sup>

### Transition Network

The Transition Town movement in Britain started in Totnes, led by Rob Hopkins, a lecturer in permaculture and natural building techniques who developed an “Energy Descent Action Planning” process to help communities prepare for a lean energy future. This includes local food production, local currencies such as the ‘Totnes pound’, and other forms of cooperation. The first transition towns were small towns or rural communities, though it now includes major cities such as Bristol and Nottingham, and the network is growing rapidly. More than 60 Transition communities have already been established, with another 600 in the process of being formed around the world. The movement is avowedly community led, but also keen to involve local councils wherever possible.

*The Transition Handbook: from oil dependency to local resilience* by Rob Hopkins was published in February 2008.

[www.transitiontowns.org](http://www.transitiontowns.org)



### Relocalization Network

The Relocalization Network is a programme of Post Carbon Institute intended to help rebuild communities around the local production of food, goods and energy, and to strengthen regional economies. Set up in 2003, it now includes nearly 200 member groups all over the world that are preparing for an energy constrained future. These groups operate autonomously, while receiving guidance, educational resources, and project and technical support from the Relocalization Network.

[www.relocalize.net](http://www.relocalize.net)

## 18. Policy summary

### 1. Preparing for peak oil

Peak oil means local authorities need to plan for the likelihood of rising oil and energy prices and shrinking fuel supplies. First steps should include:

- **A detailed energy audit of all council activities including transport and buildings.** This will point the way to immediate cost savings, emission reductions and greater energy security, and better prepare the authority for any short term interruptions to energy supplies.
- **An in-depth assessment of the impact of peak oil on the local economy, environment and social services** including food and agriculture, health and medicine, transport, education, waste, water supply, communications, and energy use.
- **The development of an emergency plan** to respond to sudden interruptions in oil supplies and/or sharply rising oil prices, with a particular emphasis on ‘at risk’ communities.
- **Set specific targets for reducing oil and natural gas consumption** in the local government, business and household sectors, by a significant proportion within a defined period.
- Encourage a **major shift from private to public transport, cycling and walking**, through investment in public transport and expansion of existing programmes such as cycle lanes and road pricing.
- **Reduce overall transport demand by using planning powers** to shape the built environment.
- **Shape planning rules to encourage the greatest energy efficiency** in new and existing buildings.
- Promote the use of **locally produced, non-fossil transport fuels** such as biogas and renewable electricity in both council operations and public transport.
- **Prevent infrastructure investments that are not viable in a low energy society.**
- Develop **rigorous energy efficiency and energy conservation programmes** that help businesses and individuals to reduce their oil dependency.
- **Support the growth of businesses** that supply renewable and energy-efficient solutions.
- **Launch a major public energy-awareness campaign** incorporating leaflets, the internet and an expanded network of energy-saving advice centres. The more people understand peak oil, the more likely they are to support or accept demand management measures.
- Find ways to **encourage local food production** and processing; facilitate reduction of energy used in refrigeration and transportation of food.
- **Set up a joint peak oil task force with other councils**, and partner closely with existing community-led initiatives such as the Transition Network and the Relocalization Network.
- Adopt the **Oil Depletion Protocol and Post Carbon Cities’ ‘five principles’.**