



# **Transition Initiatives Primer**

# becoming a Transition Town, City, Community

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# Introduction

The Transition Initiative approach represents a promising way of engaging people and encouraging communities to take the far-reaching actions that are required to mitigate the effects of Peak Oil and Climate Change. These relocalization efforts are designed to result in a life more fulfilling, more socially connected and more equitable for all.

This document provides the guidelines for establishing a Transition Initiative in your community. It is an adaptation of the Primer produced by the Transition Network, a UK based Charity. Transition US is working in cooperation with the Transition Network, to build a range of materials, training courses, events, tools & techniques, resources that support Transition Initiative across the States. The role of Transition US is the same as the Transition Network: to inspire, encourage, support, network and train communities as they consider, adopt, adapt and implement the Transition model in their locale.

# About Peak Oil

Peak Oil is about the end of cheap and plentiful oil. It recognizes that the ever increasing volumes of oil being pumped into our economies will peak and then inexorably decline. It's about understanding how our industrial way of life is absolutely dependent on an ever-increasing supply of cheap oil and making the adjustments that will be necessary as oil becomes ever more difficult and expensive to obtain.

Peak Oil is not about "running out of oil"; it's about "running out of cheap oil". There will always be oil left in the ground because it's either too hard to reach, or it takes too much energy to extract. Regardless of how much money can be made selling oil, once it takes more than an oil barrel's worth of energy to extract a barrel of oil, the exploration, the drilling and the pumping will grind to a halt.

From the start of the 1900s, plentiful oil allowed an industrialized society to massively accelerate its "development". Ever since it was first "discovered", there has been more and more oil available (apart from two oil shocks in the 1970s when Middle East crises caused worldwide recessions), and each year, industrial society has increased its complexity, its mechanization, its globalised connectedness and its energy consumption levels.

The problems start when around half of the recoverable oil has been extracted. At this point, the oil gets more expensive (in cash and energy terms) to extract, is slower flowing and of a lower quality. For the first time in history, we are not able to increase the amount of oil that's coming out of the ground, being refined and reaching the market. The result is that oil supply plateaus and then declines, with massive ramifications for industrialized societies.

As we go into energy decline, we will have decreasing amounts of oil to fuel our industrialized way of life.

The situation can be summarized as follows:

- Of all the fossil fuels, oil is uniquely energy dense and easy to transport.
- Ever-increasing amounts of oil have fuelled the growth of industrial economies.

• The key elements of industrial societies - transportation, manufacturing, food production, medical equipment and drugs, home heating, construction - are all reliant on oil.

• The consistent pattern to the rate of extraction of oil, whether from individual fields, oil regions, countries or the entire planet demonstrates that the first half of the oil is easy to extract and high quality. But once about half the recoverable oil has been pumped out, further extraction gets more expensive, slower, more energy intensive and the oil is of a lower quality.

• The pattern means that the flow of oil to the market, which has been steadily increasing over the past 150 years, will peak. After that, every successive year will see an ever-diminishing flow of oil, as well as an increasing risk of interruptions to supply.

• A growing body of independent oil experts and oil geologists have calculated that the peak will occur between 2006 and 2012 (a few years of hindsight is required in order to confirm the peaking point). Many say that it is happening now.

• Technological advances in oil extraction and prospecting will have only a minor effect on depletion rates. As an example, when the US hit its oil production peak in 1972, the rate of depletion over the next decades was high, despite a significant wave of technological innovations.

To understand the degree to which Peak Oil will affect the industrial world, here is the opening paragraph of an executive summary of a report prepared for the US government in 2005 by an agency of experts in risk management and oil analysis:

"The peaking of world oil production presents the U.S. and the world with an unprecedented risk management problem. As peaking is approached, liquid fuel prices and price volatility will increase dramatically, and, without timely mitigation, the economic, social, and political costs will be unprecedented. Viable mitigation options exist on both the supply and demand sides, but to have substantial impact, they must be initiated more than a decade in advance of peaking." *Peaking of World Oil Production: Impacts, Mitigation & Risk Management. Robert L. Hirsch, SAIC* 

According to Jeremy Gilbert, former Chief Petroleum Engineer at BP, in May 2007: "I expect to see a peak sometime before 2015... and decline rates at 4-8% per year".

The opening paragraph of the Peak Oil Report produced by Portland, Oregon (population 550,000) explains their concerns:

"In the past few years, powerful evidence has emerged that casts doubt on that assumption [that oil and natural gas will remain plentiful and affordable] and suggests that global production of both oil and natural gas is likely to reach its historic peak soon. This phenomenon is referred to as "Peak Oil." Given both the continuous rise in global demand for these products and the fundamental role they play in all levels of social, economic and geopolitical activities, the consequences of such an event are enormous."

Portland has incorporated the Oil Depletion Protocol in its targets, aiming to reduce its oil and gas consumption by 2.6% per year, reaching a 25% reduction by 2020.

Apart from a few notable exceptions, national and local leaders are not stepping up to address Peak Oil problems in any meaningful way. If the political leaders aren't going to fix the problem, who is? It's going to be up to us in our local communities to step up into leadership positions.

# Taking Action at Global, National and Local Levels

Schemes are beginning to be put in place to address the challenges of Peak Oil and Climate Change at the global and national levels. Transition Initiatives complement these schemes by making sure that the changes they demand in the way we live our day-to-day lives can actually be put into practice at community level.

# **Global Initiatives**

The Oil Depletion Protocol provides a way for nations to cooperatively manage their descent to lower oil use levels. This protocol provides a model for both oil producing and oil consuming countries to systematically reduce global oil consumption. For further information, see www.oildepletionprotocol.org.

Contraction & Convergence offers a mechanism for reducing global carbon emissions and establishing much greater levels of equity in peoples' and nations' right to emit carbon. An excellent resource for this scheme is http://www.climatejustice.org.uk/about

# **National Initiatives**

Energy rationing systems appear to hold the greatest promise for reducing our fossil fuel consumption at the national level. The UK government is already tentatively talking about this highly practical solution. See <u>www.teqs.net</u> for the full story.

#### **Local Initiatives**

Local Transition Initiatives provide a process for relocalizing the essential elements that a community needs to sustain itself and thrive. The process builds local resilience in the face of the potentially damaging effects of Peak Oil while dramatically reducing the community's carbon footprint. In this way, it addresses both Peak Oil and Climate Change.

Dozens of communities in the US have joined several hundred around the world that are setting off on their relocalization journeys using the Transition model. A growing number are looking towards the Energy Descent Planning work that began in Kinsale, Ireland and is continuing in Totnes, England and many other places. While excellent examples of energy reduction programs exist under the "sustainability" banner, it is only when sustainability principles are combined with an understanding of Climate Change and Peak Oil, that a fully integrated approach to the solutions can follow.

# **The Transition Model**

The Transition Model is a loose set of real world principles and practices that have been built up over time though experimentation and observation of communities as they drive forward to build local resilience and reduce carbon emissions. We've developed a set of steps, criteria, assumptions, and guidelines to help support you through the Transition process.

Underpinning the Transition Model is recognition of the following:

- Continuous growth within a finite system (such as planet earth) is impossible.
- Reductions in fossil fuel energy availability is inevitable
- Industrial society has lost the resilience to be able to cope with energy shocks
- Peak Oil, Climate Change and Financial Instability require urgent action
- It is better to plan for change than be taken by surprise
- We have to act together and we have to act now
- We demonstrated phenomenal levels of ingenuity and intelligence as we raced up the energy curve over the last 150 years, and we can use those qualities, and more, as we negotiate our way down from the peak of the energy mountain
- If we plan and act early enough, and use our creativity and cooperation to unleash the genius within our local communities, then we can build a future that could be far more fulfilling and enriching, more connected and gentler on the earth than the lifestyles we have today.

# Starting a Transition Initiative

It all starts off when a small collection of motivated individuals within a community come together with a shared concern: *how can our community respond to the challenges and opportunities of Peak Oil, Climate Change and the economic crisis?* 

They begin by forming an initiating group and then adopt the Transition Model with the intention of engaging a significant proportion of the people in their community to kick off a Transition Initiative. They start working together to address this BIG question:

"for all those aspects of life that our community needs in order to sustain itself and thrive, how do we significantly increase resilience (in response to Peak Oil), drastically reduce carbon emissions (in response to Climate Change) and greatly strengthen our local economy (in response to economic instability)?"

Transition Initiatives make no claim to have all the answers, but by building on the wisdom of the past and unlocking the creative genius, skills and determination in our communities, the solutions can emerge.

Now is the time for us to take stock and to start re-creating our future in ways that are not based on cheap, plentiful and polluting oil but on localized food, sustainable energy sources, resilient local economies and an enlivened sense of community well-being.

# **Transition Initiative Criteria**

Transition US provides a set of criteria that indicates how ready a community is to embark on the journey to a lower energy future using the Transition Model. If you are thinking of adopting the model for your community, consider this list and make an honest appraisal of where you are on it. If there are any gaps, it might give you something to focus on while you build the energy and contacts needed for the work. The criteria are not fixed; they developing all the time.

While these criteria are suggested for establishing the readiness of a group to proceed with the work, we recognize that many groups in the US have been engaged in transition work for some time. We encourage such groups to get in touch with Transition US so that we can find ways of working together to speed the Transition of our communities.

- An understanding of Peak Oil and Climate Change as twin drivers (to be written into your group's constitution or governing documents)
- A group of 4-5 people willing to step into leadership roles
- At least two people willing to attend an initial two day "Training for Transition" course.
- An initial understanding of the 12 Steps to Transition (see below)
- A potentially strong connection to the local government
- At least one person on the core team who has attended a permaculture design course (recommended). With the Transition Model based on permaculture principles, this really does seem to make a difference

# **Additional Commitments**

In addition to the criteria, we ask all Transition Initiatives to make the following commitments:

- To ask for help as and when needed
- To regularly update their Transition web presence either the wiki (collaborative workspace on the web) or their own website (which Transition US can help you to develop)
- To send regular news updates for inclusion on the Transition US web site and newsletter
- To give at least two presentations to other local communities that are considering embarking on the Transition journey a "here's what we did" or "here's how it was for us" talk
- To network with other Transition Initiatives
- To minimize conflicts of interests in the core team
- To work with Transition US for funding applications if appropriate. In return, Transition US will support local funding applications as best it can.
- To strive for inclusivity across your community.
- To recognize that although your entire county or district may need to go through transition, the first place for you to start is in your local community.

When you demonstrate to us at Transition US that you are ready to set off on your transition journey, you will be welcomed into the international Transition community, listed as "official" on our websites, and all sorts of support, guidance, tools and resource materials will be made available to you,

**Note**: This slightly formal approach to registering Transition Initiatives has been introduced for several key reasons:

- To make sure that communities have a suitable group with the right mindset of people that understand what the process entails.
- To make sure that while we actively nurture embryonic projects, we promote to "official" status only those communities that are ready to move through the process and that we can support. This status confers additional levels of support from us, such as advice, recommended speakers, training programs, and web site support.

We need to know what US-based Transition Initiatives are doing in order to coordinate programs (such as sharing of experiences and best practices between groups, or working on combined funding bids) and to be confident that together we can support and they deliver against such programs.

# **Scales of Transition Initiative**

Since the emergence of Totnes as the first Transition Initiative in 2006, the concept has been popping up at a wide range of scales. We Celebrate this spontaneity and diversity and don't intend to be prescriptive, but rather we are happy to advise and support emerging groups as to the most effective scales on which to operate.

The 3 types of scale that initiatives seem to be taking include:

The "**Local Transition Initiative**", embedded in its own locale, where the steering group inspires and organizes the local community. This is the most frequent and easy to handle initiative, typically with communities of up to 20,000 people. Examples include Cotati, Santa Cruz, Sandpoint.

The "**Local Transition Hub**" based within a large congruent / contiguous area with its own identity (e.g. a city). This group's role is to fire up Transition Initiatives in the surrounding area and maintain a role of inspiring, encouraging, registering, supporting, networking and possibly training those Initiatives. Examples include Boulder, Portland, LA.

The "**Temporary Initiating Hub**" made up of a collection of individuals / groups from separate locales in the same region who are accustomed to working with each other in some kind of capacity. This group helps each other to fire up Local Transition Initiatives in the region and then dissolves, with the original members moving into their own Local Transition Initiatives once they've achieved some critical mass to form a local steering group. Whatcom and Pima seem to be taking this approach.

# **Transition Hubs**

Transition Hubs are responsible for ensuring for providing support to emerging Transition Initiatives, and making sure they meet the criteria from the outset. The hub is the focus for communications with the local initiatives in their area. As Transition Initiatives within the locale mature, the Hub encourages them to apply to Transition US for consideration as an official Transition Initiative. Over time, the task of "registering" communities to official status will be taken up by the Transition Hub. . Further responsibilities for ongoing support and training will likely emerge as the role of the hub develops.

When a group is ready to take on the role of a Transition Hub, Transition US need to be assured that you know what your responsibilities are and that you are ready to handle them.

Transition US suggests the following criteria for Transition Hubs:

- They have been requested by or have emerged/arisen from a significant proportion of active Transition Initiatives (both official and embryonic) within the "catchment area"
- They are organized/run/coordinated by representatives from within active Transition Initiatives (both official and embryonic) from within that "catchment area".

These criteria would, we feel, produce a demonstrably authentic, mandated, accountable, transparent, knowledgeable and suitably motivated supra-group. Other criteria regarding purpose and scope of activities will emerge as coordinating hubs form.

# **Formal Structures & Constitutions**

A key question that arises early on in a Transition Initiative is "what form should this group / organization take?" There are many options for creating an organization, each with differing requirements and attributes. To simplify matters, we're only going to discuss the not-for-profit or social enterprise options as they relate to the US. The key options are:

- Unincorporated Nonprofit Organization (not registered with the IRS or anywhere else)
- Nonprofit Corporation (registered with IRS with the designation 501(c)(3)).

# **Unincorporated Nonprofit Organizations**

#### Advantages:

- Simple and flexible
- No approval or authorization needed to set it up
- Governed by a constitution with no need to have the constitution agreed to by any outside body
- Managed by a management committee
- Not recognized in law as a legal entity
- Cheap to run
- No need to submit accounts to anyone outside of the organization

#### Disadvantages:

- Some funders may prefer a more formal structure, especially if you are looking for big sums of money.
- Liability of members and the governing body is unlimited
- Cannot own property in its own right
- Cannot enter into contracts (e.g. rental agreements)

# Tax-exempt 501(c)(3) Nonprofit Corporations

A corporation is a separate legal entity formed after its founders comply with their state's incorporation procedures and formalities. Corporations are either for-profit entities or nonprofit organizations. One main difference is its purpose (stated below) and the fact that when a 501(c)(3) tax-exempt nonprofit corporation dissolves, it must distribute its remaining assets to another tax-exempt nonprofit organization.

To qualify for federal tax exemption under Section 501(c)(3) of the internal Revenue Code, your nonprofit must be formed for religious, charitable, scientific, and/or educational purposes.

Benefits of Nonprofit Corporations:

- Nonprofit corporations are eligible for state and federal income tax exemptions as well as other tax exemptions and benefits.
- Becoming a nonprofit organization increases your ability to attract and receive public and private grants and donations.
- Forming a corporation protects members of your group from personal liability for corporate debts or liabilities incurred against the corporation. For example, creditors can go after corporate assets only, not personal assets like people's dwindling bank accounts.
- The nonprofit corporation continues to exist as a legal entity despite changes in management unless it is purposefully dissolved.

• Miscellaneous benefits include: lower postal rates on bulk mailings, cheaper advertising rates (often), free public service announcements on radio and television, and lower rates from many service providers.

#### Advantages:

- Many funders will give grants only to registered nonprofit organizations
- Often the general public and many funders regard this structure as more stable. They know the company will continue to exist even if there is a change of people involved.

#### The Harder Part:

- Preparing and filing the initial paperwork
- Bookkeeping and record keeping
- Annual filing of tax returns
- Incorporation costs and fees (approx. \$350 \$400)
- Directors do have a legal duty to act prudently and to ensure that the company manages its finances carefully
- Restrictions on paying Directors and Officers
- Restrictions on Political Activity

#### Steps:

- Nonprofit organizations first obtain nonprofit corporation status with your state by filing articles of incorporation
- Obtain a corporate income tax exemption from your state's Franchise Tax Board and from the Internal Revenue Service

For more information on forming a nonprofit tax exempt corporation:

http://www.irs.gov/charities/index.html IRS website

http://www.usa.gov/Business/Nonprofit.shtml US government website

http://managementhelp.org/strt\_org/strt\_np/strt\_np.htm Starting a Nonprofit Organization

http://foundationcenter.org/getstarted/tutorials/establish/ Establishing a Nonprofit Organization http://www.compasspoint.org/ Lots of resources, tips and help

# **Governing Documents**

All organizations need some kind of governing document. This can be a Constitution, Charter, Memorandum of Understanding, or Rules. The governing document gives a point of reference and a focus for the group or organization, and in some cases it's a legal requirement. Transition US has samples of governing docs on its website in the resources section.

# Leadership and Structure

Issues of leadership can be difficult and people throughout the Transition Movement are having discussions about it with others who have rich social and organizational experience from both practical and theoretical domains. Here's Chomsky's take on it: "If leadership is delegated, monitored, interchangeable, and recallable it can be a useful, maybe even necessary device. But it always [needs to be] viewed with a critical eye."

The term "leader" has such loaded connotations that conversations about the subject are often prone to misunderstandings and conflict. So it's important to have a clear definition of the term before discussing it in your group.

In a well-functioning group, anyone can exercise leadership for a while. Leadership is about inspiring others, taking initiative and helping a group find a direction that they want to follow. That might entail some or all of the following roles: critical thinker, ideas person, group harmony maintainer, driver, organizer, integrator/chair, external networker.

Leadership doesn't have to be about power over a group. It is about making a group feel empowered and not about hierarchy. It is not about "who is boss", it's not about management, and it's not about "followers". In particular, it's not about a permanent label that's applied to an individual. Every single one of us has leadership qualities and it's important that we develop them – we all need to be able to inspire others, and we all need to be able to start something new.

But we also need to recognize that depending on the task in hand, we're likely to flow between all the roles required – inspirer, doer, timekeeper, liaison, supporter, recorder, creator, tidier, contributor etc. If we want to be personally resilient (i.e. adaptable) and to maximize our contribution to the community transition, then we need to develop the attributes for these roles as well.

It might be that the term "leader" won't work for your transition group. Other words can be used to describe some of the nuanced roles that are needed in this area: focalizer, catalyzer, convener, coordinator, chair, hub, planner, initiator. In the end, it doesn't take long for the word to lose its connotations and become "your" word, defined by the emergent qualities demonstrated in your groups within and around the role.

Consensus is great if time isn't a scarce resource, but we believe in pragmatic solutions. In the run up to a decision, as long as everyone feels they have been truly heard, had a chance to influence the group and have heard their ideas critically but constructively evaluated then most people will be prepared to either:

- change their mind (without losing face)
- see their ideas blended with others to form something different
- accept that the rest of the group differs but want their minority views recorded

Well handled conflict usually improves the quality of decisions and degree of commitment to them.

# **Structures for Core Groups**

While we recognize that we need to be looking beyond traditional hierarchical models for Transition US and Transition Initiatives, we have not yet reached an understanding of what other models might look like and which would work for us. The small group running the Transition Network organization has adopted a hierarchical structure while seeking a more suitable model that may also be adoptable/adaptable by the individual Transition Initiatives. Chaordic, Natural Step, Viable System, Mondragon, Cooperative, Parecon and others are all being explored for this.

We recognize that there needs to be a level of fluidity - some situations call for a totally flat structure, others demand accountability (for example, to each other and to stakeholders within the community or network) and others need people to take a lead role for a time. We don't have the answers for this beyond knowing that the most successful structures will address the need for resilience, accountability, adaptability and cooperation.

Running through all the decision-making and action-taking is the imperative of time. Fossil fuel depletion and Climate Change will not wait for us to get 100% consensus on every point. The last thing we need is to slow things down with personal psychological attachments to the dogma or paradigms of a certain way of working.

# Barriers to Transition - The 7 "Buts"

When faced with the prospect of difficult change and challenging actions, humans often construct their own emotional and psychological barriers that stop them from taking those actions. In the Transition Movement we call these "The 7 Buts". Below we give some guidance on how to tackle what we've seen to be the most typical barriers to change.

# But we've got no funding...

Funding is a poor substitute for enthusiasm and community involvement, both of which will take you through the first phases of transition. Funding not always a good thing; funders may demand a measure of control, and may steer the initiative in directions that run counter to community interests.

As eco-village designer Max Lindeggar says: "If a project doesn't make a profit it will make a loss." You can make sure your process generates an adequate amount of income through the events that you hold. As an example, Transition Town Totnes began in September 2005 with no money at all, and it has been self-funding ever since. The talks, film screenings and other events that are run bring in funds sufficient to subsidize free events such as Open Space Days. You may reach a point where you have specific projects that will require funding, but until that point you'll manage. Retain the power over whether this happens... don't let lack of funding stop you.

# But they won't let us...

A fear exists among some environmentalists that any initiative that actually succeeds in effecting change will get shut down, suppressed, or attacked by faceless bureaucrats or corporations. Transition Initiatives operate "below the radar", neither seeking victims nor making enemies. As awareness of sustainability, Peak Oil and Climate Change build, many people in positions of power will be enthused and inspired by what you are doing, and will support, rather than hinder, your efforts.

# But sustainability group already exist here and I don't want to step on their toes...

Transition Initiatives work to form common goals and a shared sense of purpose with existing groups. Liaising with a network of existing groups towards an Energy Descent Action Plan will enhance and focus their work along with yours, rather than replicate or supersede it. Expect other groups to become some of your strongest allies, crucial to the success of your Transition.

# But no one in this town cares about the environment ...

You could easily be forgiven for thinking this, given the existence of what you might perceive as an apathetic consumer culture surrounding you. Dig a bit deeper though, and you'll find that the most surprising people are keen advocates of key elements of a Transition Initiative, for example local food, local crafts, local history and culture. The key is to go to them, rather than expecting them to come to you.

Seek out common ground, and you'll find your community to be a far more interesting place than you thought it was.

# But it's too late to do anything useful...

It *may* be too late, but the likelihood is that it isn't. That means your (and others') endeavors are absolutely crucial. Don't let hopelessness sabotage your efforts - as Vandana Shiva says, "the uncertainty of our times is no reason to be certain about hopelessness".

# But I don't have the right qualifications...

If you don't do it, who else will? It matters not that you don't have sustainability qualifications, or years of experience in gardening or planning. What's important is that you care about where you live, that you see the need to act, and that you are open to new ways of engaging people. If there was to be a job description for someone to start this process rolling it might list the qualities of that person as being: positive, good with people, having a basic knowledge of the place and of the key people in the town.

Remember that you are going to design your own demise into the process (see Step 1 below). Your role at this stage is like a gardener preparing the soil for the ensuing garden, which you may or may not be around to see.

# But I don't have the energy for doing this!

As the quote often ascribed to Goethe says, "Whatever you can do or dream you can, begin it. Boldness has genius, power and magic in it!" The experience of beginning a Transition Initiative certainly shows this to be the case. While the idea of preparing your town (or city, region, county, or state) for life beyond oil may seem staggering in its implications, something about the energy unleashed by the Transition Initiative process is unstoppable. You may feel overwhelmed by the prospect of all the work and complexity, but you will find that people will come forward to help.

Many Transition Initiatives have commented on the serendipity of the process, how the right people appear at the right time. Something about seizing that boldness, about making the leap from "why is noone doing anything" to "let's do something" that generates the energy to keep it all moving. Developing environmental initiatives can seem like pushing a broken down car up a hill - a hard and unrewarding slog. Transition is like coming down the other side – the car starts moving faster than you can keep up with it, accelerating all the time. Once you give it the push from the top of the hill it will develop its own momentum. That's not to say it isn't hard work sometimes, but it is almost always a pleasure.

# **12 Steps of Transition**

The 12 Steps have grown out of observations of what seemed to work in the early Transition Initiatives. They don't take you all the way through the Transition process, from A to Z, but rather from A to C, which is as far as we've got with the model today. These Steps don't necessarily follow each other logically in the order they are set out here. Every Transition Initiative weaves through them differently. The 12 Steps are a continually evolving model, shaped in part by your experience of using them.

They are not meant to be prescriptive. You do not have to follow them religiously, step by step. You can use the ones that seem useful, add new ones you come up with, and disregard others that don't work for you. For this reason the 12 Steps are sometimes referred to as the 12 Ingredients.

# 1. Set up a steering group and design its demise from the outset

This stage puts a core team in place to drive the project forward during the initial phases. We recommend that you form your Steering Group with the aim of getting through Steps 2 - 5, and agree that once a minimum of 4 sub-groups (see Step 5) are formed, the Steering Group disbands and reforms with a person from each of those groups. This requires a degree of humility, but is very important to put the success of the project above the individuals involved. Ultimately your Steering Group should be made up of 1 representative from each working sub-group.

# 2. Raise Awareness

This stage will identify your key allies, build crucial networks and prepare the community in general for the launch of your Transition initiative. For an effective Energy Descent Action plan to evolve, its participants have to understand the potential effects of both Peak Oil and Climate Change – the former demanding a drive to increase community resilience, the latter a reduction in carbon footprint.

Screenings of key movies (Inconvenient Truth, End of Suburbia, Crude Awakening, Power of Community) along with panels of "experts" to answer questions at the end of each, are very effective. Talks by experts in their field of Climate Change, Peak Oil and community solutions can also be very inspiring. Articles in local papers, interviews on local radio, presentations to existing groups, including schools, are also part of the toolkit to get people aware of the issues, and ready to start thinking of solutions.

# 3. Lay the foundations

This stage is about networking with existing groups and individuals, making clear to them that the Transition Initiative is designed to incorporate their previous efforts and future inputs by looking at the future in a new way. Acknowledge and honor the work they do, and stress that they have a vital role to play. Give them a concise and accessible overview of Peak Oil, what it means, how it relates to Climate Change, how it might affect the community in question, and the key challenges it presents. Set out your thinking about how a Transition Initiative might be able to act as a catalyst for getting the community to explore solutions and to begin thinking about grassroots mitigation strategies.

# 4. Organize a Great Unleashing

This stage creates a memorable milestone to mark the project's "coming of age", moves it right into the community at large, builds a momentum to propel your initiative forward for the next period of its work and celebrates your community's desire to take action. In terms of timing, we suggest this take place about 6 months to a year after your first "awareness-raising" event.

The Official Unleashing of Transition Town Totnes was held in September 2006, preceded by about 10 months of talks, film screenings and events.

Your unleashing will need to bring people up to speed on Peak Oil and Climate Change, but in a spirit of "we can do something about this" rather than a doom and gloom scenario. One item of content that we've seen work very well is a presentation on the practical and psychological barriers to personal change –

after all, this is all about what we do as individuals. It needn't be just talks, it could include music, food, dance - whatever you feel reflects your community's intention to embark on this collective adventure.

# 5. Form working groups

Part of the process of developing an Energy Descent Action Plan is tapping into the collective genius of the community. Crucial for this is to set up a number of smaller groups to focus on specific aspects of the process. Each of these groups will develop their own ways of working and their own activities, but will all fall under the umbrella of the project as a whole.

Ideally, working groups are needed for all aspects of life that your community needs to sustain itself and thrive. Examples of these are: food, waste, energy, education, youth, local economics, transport, water, local government.

Each of your working groups looks at their area and tries to determine the best ways of building community resilience and reducing their carbon footprint. Their solutions will form the backbone of the Energy Descent Action Plan.

# 6. Use Open Space

We've found Open Space Technology to be a highly effective approach to running meetings for Transition Initiatives. In theory it ought not to work. A large group of people comes together to explore a particular topic or issue, with no agenda, no timetable, no obvious coordinator and no minute takers. However, by the end of each meeting, everyone has said what they needed to, extensive notes have been taken, lots of networking has had taken place, and a huge number of ideas have been identified, and visions set out.

The essential reading on Open Space is Harrison Owen's Open Space Technology: A User's Guide, and you will also find Peggy Holman and Tom Devane's The Change Handbook: Group Methods for Shaping the Future an invaluable reference on the wider range of such tools.

# 7. Develop visible practical manifestations of the project

It is essential that you avoid any sense that your project is just a talking shop where people sit around and draw up wish lists. Your project needs, from an early stage, to begin to create practical, high visibility manifestations in your community. These will significantly enhance people's perceptions of the project and also their willingness to participate. There's a difficult balance to achieve here during these early stages. You need to demonstrate visible progress, without embarking on projects that will ultimately have no place on the Energy Descent Action Plan.

# 8. Facilitate the Great Reskilling

If we are to respond to Peak Oil and Climate Change by moving to a lower energy future and relocalizing our communities, then we'll need many of the skills that our grandparents took for granted. One of the most useful things a Transition Initiative can do is to reverse the "great deskilling" of the last 40 years by offering training in a range of skills.

Research among the older members of our communities is instructive – after all, they lived before the throwaway society took hold and they understand what a lower energy society might look like.

Some examples of courses: recycling grey water, cooking, bicycle maintenance, natural building, herbal medicines, basic home energy efficiency, practical food growing, harvesting rainwater, composting waste (the list is endless).

Your Great Reskilling program will give people a powerful realization of their own ability to solve problems, to achieve practical results and to work cooperatively alongside other people. They'll also appreciate that learning can be fun!

# 9. Build a Bridge to Local Government

Whatever the degree of groundswell your Transition Initiative manages to generate, however many practical projects you've initiated, and however wonderful your Energy Descent Plan is, you will not progress far unless you have cultivated a positive and productive relationship with your local government authority. Whether it is planning issues, funding or networking, you need them on board. Contrary to your expectations, you may well find that you are pushing against an open door.

# 10. Honor the elders

For those of us born in the 1960s when the cheap oil party was in full swing, it is very hard to picture a life with less oil. Every year of my life (except for the oil crises of the 70s) has been underpinned by more energy than the previous years. In order to rebuild a picture of a lower energy society, we have to engage with those who directly remember the transition to the age of Cheap Oil, especially the period between 1930 and 1960.

While you clearly want to avoid any sense that what you are advocating is 'going back' or 'returning' to some dim distant past, there is much to be learnt from how things were done in the past, what the invisible connections between the different elements of society were, and how daily life was supported when less oil was available. Finding these things out can be deeply illuminating, and can lead to our feeling much more connected to place when we are developing our Transition Initiatives.

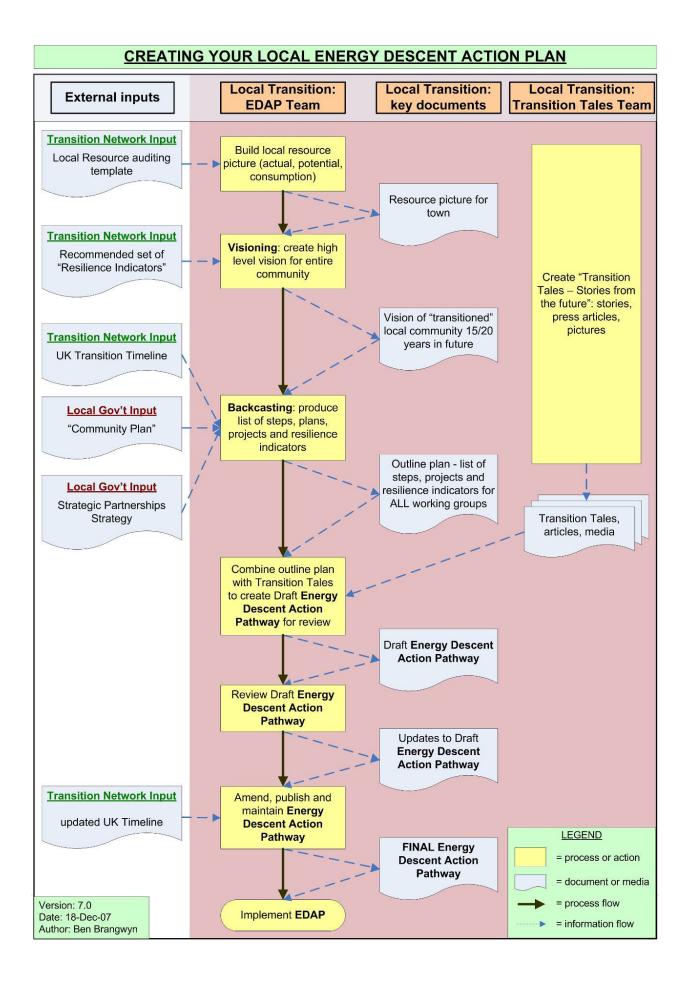
# 11. Let it go where it wants to go...

Although you may start out developing your Transition Initiative with a clear idea of where it will go, it will inevitably go elsewhere. If you try and hold onto a rigid vision, it will begin to sap your energy and appear to stall. Your role is not to come up with all the answers, but to act as a catalyst for the community to design their own transition.

If you keep your focus on the key design criteria – building community resilience and reducing the carbon footprint – you'll watch as the collective genius of the community enables a feasible, practicable and highly inventive solution to emerge.

# 12. Create an Energy Descent Plan

Since its formation, each Working Group has been focusing on practical actions to increase community resilience and reduce the carbon footprint. Combined, these actions form the Energy Descent Action Plan. It's where the collective genius of the community has designed its own future to take account of the potential threats from Peak Oil and Climate Change. The process of building the EDAP is not a trivial task. It's gradually evolving as we all experience and share what works and what doesn't.



At the moment there is only one completed Energy Descent Action Plan, the one done for Kinsale in Ireland. Although this was a student-led project, it did a very good job of producing a template that other communities could follow in designing pathways away from oil dependency. Some people find the term 'Energy Descent' too negative, and have chosen to call their EDAP an "Energy Transition Pathway" or a "Community Vision Plan".

Whatever it is called, the EDAP sets out a vision of a powered-down, resilient, relocalized future, and then backcasts, in a series of practical steps, creating a map to get there from here. Every community's EDAP will be different, both in content and style. However, they will explore a wide range of areas as well as energy: energy descent is an issue which affects every aspect of our lives.

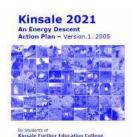
# Videos of the 12 Steps to Transition

YouTube has videos of Rob presenting the 12 Steps at the Transition Network conference in May 2007. (http://www.youtube.com/results?search\_query=rob+hopkins+twelve+steps)

# Beyond the Twelve Steps...

The 12 Steps set out a plan of action and you may be forgiven for assuming that Step 12 is the end of the process. On the contrary, it is with the completion of Step 12 that your initiative really begins! The EDAP sets out the work you will be doing in the future and in theory once you reach that stage, your initiative's job becomes the implementation of the EDAP.

# Energy Descent Action Plan (EDAP)





The Kinsale Energy Descent Action Plan (EDAP), completed in 2005 sets out how Kinsale, an Irish town in West Cork of about 7,000 people, could make the transition from a high energy consumption town to a low energy one in response to the challenge of the impending peaking of world oil production. The plan, prepared by permaculture students from Kinsale Further Education College under the tutelage of Rob Hopkins, looks at how Kinsale could navigate through uncertain times by setting out a clear vision of a lower energy future, and then identifying a clear timetable for achieving it.

These efforts were one of the first attempts for this kind of project anywhere in the world. The report looks at most aspects of life in Kinsale, including food,

energy, tourism, education and health. The report was structured in such a way to enable other communities and towns to adopt a similar process and transition themselves towards a lower energy future. The Kinsale EDAP was awarded the Cork Environmental Forum's prestigious 2005 Roll of Honor Award and, even more importantly, was formally adopted in a unanimous vote by Kinsale's town council at the end of 2005.

In essence, the EDAP paints a picture of the community that is so colorful, so appealing and so irresistible, that anyone not involved in bringing it to fruition will feel bereft of meaning in their life.

We've identified the following 10 steps in the process of creating an EDAP:

**Step 1. Establish a baseline.** This involves collecting some basic data on the current practices of your community, whether in terms of energy consumption, food miles or amount of food consumed. You could spend years collecting this information, but you aren't trying to build a detailed picture, just getting a few key indicators around how your place functions in terms of arable land, transport, health provision etc. Your working groups may have identified some of this information.

**Step 2: Get hold of any community strategy plans** that are produced by your local government. Their plans are likely to have timescales and elements that you need to take into account, and they will also be a useful source of information and data. You will need to decide how to integrate your EDAP with their existing plans.

**Step 3: The overall vision.** What would your community look like in 15 or 20 years if we were emitting drastically less CO2, using drastically less non-renewable energy, and it was well on the way to rebuilding resilience in all critical aspects of life? This process will use information gathered in your Open Space Days, from Transition Tales and a range of other visioning days, to create an overall sense of what the town could be like. Allow yourselves to dream.

**Step 4: Detailed visioning.** For each of the working groups on food, health, energy etc.(although this is trickier for Heart and Soul groups for example), what would their area look like in detail within the context of the vision set out above.

**Step 5: Backcast in detail.** The working groups then list out a timeline of the milestones, prerequisites, activities and processes that need to be in place if the vision is to be achieved. This is also the point to define the resilience indicators that will tell you if your community is moving in the right direction.

**Step 6: Transition Tales.** Alongside the process above, the Transition Tales group produces articles, stories, pictures and representations of the visioned community, giving a tangible sense through a variety of creative media, of what this powered down world might look like. These will be woven into the EDAP.

**Step 7: Pull together the backcasts into an overall plan.** Next the different groups' timelines are combined together to ensure their coherence. This might be done on a big wall with post-it notes to ensure that, for example, the Food Group haven't planned to turn into a market garden the same car park that the Health & Medicine Group want to turn into a health center.

**Step 8: Create a first draft.** Merge the overall plan and the Transition Tales into one cohesive whole, with each area of the plan beginning with a short summary of the state of play in 2009, followed by a year-by-year program for action as identified in the backcasting process. Once complete, pass the document out for review and consultation.

**Step 9: Finalize the EDAP.** Integrate the feedback into the EDAP. Realistically, this document won't ever be "final" - it will be continually updated and augmented as conditions change and ideas emerge.

Step 10: Celebrate! Always a good thing to do.

# **Measuring Community Resilience**

Resilience is the ability of a system or community to withstand impacts from outside. An indicator is a good way of measuring that. Conventionally, the principal way of measuring a reducing carbon footprint is CO2 emissions. However, we firmly believe that cutting carbon while failing to build resilience is an

insufficient response when you're trying to address multiple shocks such as peak oil, climate change and the economic crisis together.

So how might you be able to tell that the resilience of your community is increasing? Resilience indicators might look at the following:

- Percentage of food grown locally
- amount of local currency in circulation as a percentage of total money in circulation
- number of businesses locally owned
- average commuting distances for workers in the town
- average commuting distance for people living in the town but working outside it
- percentage of energy produced locally
- quantity of renewable building materials
- proportion of essential goods being manufactured within the community of within a given distance
- proportion of compostable "waste" that is actually composted
- Percentage of local trade carried out in local currency
- Ratio of car parking space to productive land use
- Amount of traffic on local roads
- Percentage of medicine prescribed locally that have been produced within a given radius.
- Amount of 16 year olds able to grow 10 different varieties of vegetables to a given degree of competency
- Percentage of local building materials used in new housing developments

While some indicators will be universal, many will be place-specific and will emerge from the EDAP process. The Transition Network is developing universal resilience indicators, along with an overarching master timeline covering energy, climate, food etc. This timeline is available in a new Transition Network publication: *The Transition Timeline*, by Shaun Chamberlin (available from Chelsea Green Publishing).

# **Role of Local Government**

The role for local government that is emerging, favored by government officials and Transition Initiatives alike, is "supporting, not driving". We are all aware that local government will play a crucial role in the work of Transition Initiatives to build resilience in local communities. Over recent months, we're seeing that role emerge from both the existing Transitioning Initiatives and from new communities in the earliest stages of contact with us.

The Post Carbon Cities program publishes a guidebook written specifically for local government in the US and Canada, which explains the issues, implications and guidelines for making the transition to a low carbon future. It is an excellent resource for Transition Initiatives to be able to offer their local government officials, to get them interested in working together towards Transition in their municipal. You can find it here: http://postcarboncities.net.

Local government agencies are proving to have done much of the work that needs to be done, and are so far very willing to engage meaningfully with Transition Initiatives. In a number of communities, early contacts came from government agencies. We welcome this participation wholeheartedly.

The following excerpts are from emails, voicemails or direct reports from members of the steering groups for existing Transition Initiatives:

o **City Councillor:** "I'm a city councillor in xxxx and have been following the transition towns network with great interest... I'm trying to get hold of any documents etc that provide a brief summary of what transition towns are all about that I can circulate to members and officers. Please can you point me in the direction of resources?"

o **Mayor:** "My name is xxxx, Mayor of xxxx. I am very interested in using my Mayoral year to begin some local green initiatives. I intend to organize an event for the Autumn to kick things off. I would be very interested in hearing from you and to have someone from your network as one of my keynote speakers at the event."

o **City Councillor:** "I am involved in a group setting up a Transition project in xxxx, which we hope to become a pilot for the rest of the city."

o **Chairman of Council:** "I am Chairman of xxxx Council having been a Councilor for 6 years... I have proposed that the Community Planning Group take the 'Transition' issue forward... The Primer is extremely helpful and I look forward in due course to visiting Totnes."

o **Chairman of Town Council**: "We've recently taken over the town council in the local elections, we put Transition Towns in our manifesto and now we need to come along to your conference to learn more about how we support the community in setting up a Transition Initiative."

o **District Field Officer:** "Community Plans are increasingly focusing on sustainable development and 'green' issues so the Energy Descent Action Plans seems a logical next step."

In Totnes local officials congregated to explore how an understanding of peak oil and climate change might inform their work and their decisions. 23 councilors, from local parish councils, Town Councils and the District Council, as well as the local Member of Parliament attended. A number of elected officials are now active in Transition Groups within the overall initiative and the Town Council has officially endorsed the Transition Initiative.

The following recommendations come from local government officials active in existing transition initiatives or in discussions about potentially helping their community adopt and adapt the Transition Model:

o **Chairman of Town Council**: Whilst I would see the Council being supportive to a Transition Town movement, one of the things that I found most attractive about Transition Towns was the grass roots community involvement. In my experience the very best model is the Council supporting and encouraging the various communities, but much if not most of the initiative coming from the various community groups. We as councilors need to be aware that Transition Initiatives are not something that we bestow on the community, it is not going to be just a badge or symbol for the council, it is something that will happen anyway, though Council support will help and assist the birth. The Council may also help the ideas to move into parts of the community that might otherwise not be reached.

o **Councilor:** "I strongly believe that Transition Initiatives need to engage and involve Local Government in all their activities, and that their field of influence needs to reach into Central Government. While it is critical that Transition Initiatives remain non-political, and do not become Council-led, they need to be Council-supported and Council-informed. It is important to remember that Local Governance is there to support the community, and furthermore, it consists of people who live and work in our communities. It's time we moved beyond the boundaries of 'them and us' and realized that we all need to work together if we are going to effectively address the challenges ahead of us."

o **Local councilor**: Let the ideas arise from the community and remain under community control. The job of the council is to facilitate, to listen, possibly to provide advice, contacts or funds and, most important, to ensure that bureaucracy does not get in the way of grassroots initiatives.

# **Getting Businesses Involved**

Businesses know that they must adopt more sustainable practices, and many are already doing so. The emphasis on CSR (Corporate Social Responsibility) and triple bottom line accounting may be steps in the right direction, and carbon trading could yield substantial cuts in global CO2 emissions. However, none of these address the impact that Peak Oil will have on businesses with long supply chains, or that serve markets in distant locales.

Businesses with a long term perspective that are aware of the constraints fossil fuel depletion will have on the globalized economy, need to be looking in general at oil dependency throughout their organization and at four specific areas: supply chain, waste, energy usage and markets.

There's work in some Transition Initiatives to help businesses address these areas. Three specific examples are oil vulnerability auditing, business exchange and local complementary currency.

**Oil vulnerability auditing** takes a detailed look at how rising oil prices might impact a business, examining costs and availability of raw materials, energy costs of key processes and transportation costs involved in selling and marketing. Once a model is produced and costed, scenarios can be run with varying oil prices. With the inevitable and dramatic price rises ahead for oil and all types of energy, certain areas of a business may not be viable. In that case, mitigation plans can be put in place, perhaps looking at alternative raw materials sourced more locally, and opening up markets that will be less affected by high transportation costs.

Business exchange is a project that takes a different look at waste. It aims to match up companies where one business's waste is a raw material for another. For example, the building trade discards huge amounts of wood that could be used by companies making wood chips for the new type of household boilers.

A high profile way of building resilience in the local business sector is by launching a **local complementary currency**. Local currencies strengthen local economies by avoiding the leaky bucket syndrome, where wealth that is generated within a community "leaks" out to the wider economy at large. Totnes has launched its own complementary currency by printing thousands of Totnes Pounds and releasing them in the community. In Totnes more than fifty local businesses have signed up to accept the Totnes Pound in payment for goods and services. Transition Initiatives envisage a more localized future, where production and consumption occur closer to home; where fragile supply chains vulnerable to surges in oil prices become prohibitively expensive and have been replaced by local networks; and where the total amount of energy consumed in business is significantly less than current unsustainable levels.

As the network of Transition develops, we expect to see all sorts of unexpected connections and ways of working with businesses to emerge. This is essential because a Transition Initiative that fails to work creatively and proactively with the business community will enjoy only limited success.

# The Wider Context of Transition

The potential for building Transition Initiatives in the US is vast. There are nearly 20,000 cities and towns, and any number of rural communities that are going to have to navigate their way through energy descent, either proactively or reactively.

Along with the community-based Transition Initiatives, each individual needs to evolve away from personal addiction to oil and ecologically devastating practices, away from the complex web that locks them into the endless growth paradigm. This will be easier for some than others, but we all have to do it. Each of us needs to travel closer to a heartfelt understanding of the living earth that if we want humankind to survive. We have to weave ourselves back into the fabric of the planet, and comprehend that the "humans are separate from the earth" duality underpinning our industrialized societies is false, misleading and a one-way ticket to an earth far hotter than we can handle.

This journey involves fully feeling the unbearable weight of accountability for what's happening and the complicity we all have in supporting this unsustainable paradigm. For some, it involves feeling the pain of the planet, and that can be overwhelming. This journey into realization is best undertaken with fellow travelers to share the burden and provide support. Taken alone, it's a lonely path that many turn away from, lacking sufficient emotional support.

The Transition message suggests gathering some stalwart supporters around you and taking the plunge. And when you've come out the other side, wiser, more resilient and more determined, you can act as a guide to those who come after you, for their need will be great.

# Conclusion

Transition Initiatives hold much promise to see humankind through the great energy transition of the 21<sup>°</sup> century. With cooperation, coordination and a following wind, we have the potential to create a more fulfilling, more equitable and more sustainable world.

We collectively demonstrated huge levels of ingenuity and spirit as we climbed up the energy curve. There's no reason that we can't use those same qualities to design our way down the other side. The challenge is to find a way to navigate the down-slope of Peak Oil while taking actions to address Climate Change. As a species, we'll be transitioning to a lower energy future whether we want to or not. It is far better to ride that wave than to be engulfed by it.

# APPENDIX 1. Connecting with Earth - the lyrical journey of the carbon atom



Though we must reduce our destructive use of carbon, never forget that carbon is also the building block of life. You have around 700,000,000,000,000,000,000,000 carbon atoms in your body (representing 10% of your mass), each of which has already performed countless dances not unlike the one you're about to read. Carbon participates in a never-ending journey, connecting us all, for better or for worse. If ever you thought you were unconnected to the planet, this essay, adapted from an essay by Primo Levi should put you right,

"An atom of carbon lies for hundreds of millions of years, bound to three atoms of oxygen and one of calcium, in the form of limestone not too far from the earth's surface. At any moment the blow of a pick

axe may detach it and send it on its way to the lime kiln, plunging it into the world of things that change. It is roasted and, still clinging to its oxygen companions, flies from the chimney and into the air. Its story, which once was immobile, has now turned tumultuous.

It was caught by the wind, flung down on the earth and lifted ten kilometers high. It was breathed in by a falcon, descended into its precipitous lungs, but did not penetrate its rich blood and was expelled. It dissolved three times in the water of the sea, once in the water of a cascading torrent, and again was expelled. It travelled with the wind for eight years: now high, now low, on the sea and among the clouds, over forests, deserts, and limitless expanses of ice; then it stumbled into capture and the organic adventure.

The atom we are speaking of was borne by the wind along a row of vines. It had the good fortune to brush against a leaf, penetrate it, and be nailed there by a ray of the sun. Now our atom has formed part of a molecule of glucose. It travels from the leaf to the trunk, and from here descends to the almost ripe bunch of grapes. What then follows is the province of the winemakers. It is the destiny of wine to be drunk. Its drinker kept the molecule in his liver for more than a week, well curled up and tranquil, as reserve energy for a sudden effort; an effort that he was forced to make the following Sunday, pursuing a bolting horse...

The atom was dragged by the bloodstream all the way to a minute muscle fiber in the thigh... and later, as carbon dioxide, was breathed back into the air. Once again the wind, which this time travels far, sails over the Apennines and the Adriatic, Greece, the Aegean, and Cyprus: we are over Lebanon. And the dance is repeated.

The atom now penetrates and is trapped by the venerable trunk of a cedar, one of the last in the world. It could stay in the cedar for up to 500 years but let us say that after twenty years a wood worm has taken interest in it and swallowed it. The woodworm then formed a pupa, and in the spring it came out in the shape of a moth which is now drying in the sun, confused and dazzled by the splendor of the day. Our atom is in one of the insect's thousand eyes.

When the insect dies, it falls to the ground and is buried amongst the undergrowth of the woods. Here are at work the omnipresent, untiring and invisible micro organisms of the humus. The moth has slowly

disintegrated and the atom has once again taken wing. It takes to the air... and eventually comes to rest on the surface of the ocean, then sinks slowly.



A passing coccolithophore appropriates the atom to build its impossibly delicate shell of calcium carbonate. Soon it too dies and glides to the bottom of the ocean, where it is compacted with its trillion companions and their own carbon atoms. In geological time, tectonic plate movements bring this sediment, now as chalky cliffs, to the surface of the earth, exposing our atom once more to the possibility of flight in the complex dance of life."

Now look at your hand – a scar perhaps, or a fingernail. Think of it as less of a hand, more of a temporary resting place for countless carbon atoms. A place where they're taking a mini-break before they continue on a vast never-ending journey that encompasses the depths of the oceans, the highest skies, the dinosaurs before you and creatures we can't even dream of that will come after us.

Are you feeling connected yet?

# **APPENDIX 2. Resources**

# Movies for Raising Awareness

Movies are proving to be extremely useful tools for raising awareness of the issues we face. However, be aware that some can burden the viewers with feelings of doom and despondency, demotivating them and reducing their willingness to take positive action.

Types of movies that are useful include those that:

- Explain the problem (such as "End of Suburbia")
- Create inspiration for solutions (such as "Power of Community"). These are a little thin on the ground, though there is a "Transition The Movie!" in production
- Reawaken our deepest connection to the earth and other forms of life

# Movies – Reconnecting with Nature

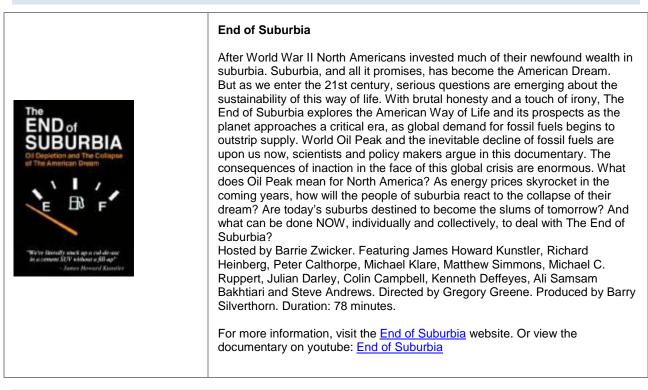
Movies in this category are perhaps best viewed at home with some select friends. The licenses are usually more restrictive than the other categories. These movies work by gently drawing together the tenuous threads that connect all life to the planet and all life forms to each other. They also help overcome the dominant anthropocentric view of this planet. Somehow, watching a spider weave a web underwater, fill it full of air, then pull its prey into the bubble and consume it, makes man's technological achievements appear distinctly primitive. The following list of movies are highly recommended:

- Microcosmos
- Planet Earth (Discovery Channel Series)
- Baraka
- Koyaanisqatsi
- Winged Migration

# Movies - Peak Oil, Climate Change, Economics and Possible Solutions

Note that with all of these movies, it's important to create an event, rather than just a screening. Here's how you might do that:

- Introduce the film personally by putting it into the context of your overall hopes for your community
- Have everyone turn to someone they don't know and, in turn, introduce themselves and explain what brought them to the event that night.
- Show the film
- Have everyone pair up (preferably with someone they don't know) and do an active talking/listening exercise about their impressions of the movie (i.e. one talks for 3 minutes while the other listens, then they switch over). You can give direction with something like "Say what gives you cause for concern and then what gives you cause for hope about the movie"
- Run a Q&A on Peak Oil and/or Climate Change whichever is relevant to the movie. Make sure you have someone there who knows what he/she is talking about.
- Watch out for the "I'm alone in the depths of my fear" questions they're often a cry for counseling or connection and can paralyze a room. Acknowledge the person's fear and then ask in the room "if there's anyone here who has a part of themselves that is full of fear around this, please put up your hand". Put yours up first... and hope! Unless you're sitting in a room full of denial, you'll see a lot of hands shoot up. You can then explain that the Transition Model has a place where people can move through their fears and into a place of action (usually handled by the "Heart and Soul" group, once it's formed).



# **Recommended Movies**

#### Escape From Suburbia

In ESCAPE From SUBURBIA director Greg Greene once again takes us "through the looking glass" on a journey of discovery – a sobering yet vital and ultimately positive exploration of what the second half of the Oil Age has in store for us. Through personal stories and interviews we examine how declining world oil production has already begun to affect modern life in North America. Expert scientific opinion is balanced with "on the street" portraits from an emerging global movement of citizen's groups who are confronting the challenges of Peak Oil in extraordinary ways. ESCAPE From SUBURBIA asks the tough questions: Are we approaching Peak Oil now? What are the controversies surrounding our future energy options? Why are a growing number of specialists and citizens skeptical of these options? What are ordinary people across North America doing in their own communities to prepare for Peak Oil? And what will YOU do as energy prices skyrocket and the Oil Age draws to a close?

For more information about this film, visit www.escapefromsuburbia.com

Read reviews and discuss the film in the forums.

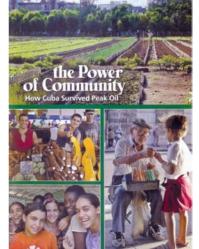
#### The Power of Community

The documentary, "The Power of Community – How Cuba Survived Peak Oil," was inspired when Faith Morgan and Pat Murphy took a trip to Cuba through Global Exchange in August, 2003. During their first trip to Cuba, in the summer of 2003, they traveled from Havana to Trinidad and through several other towns on their way back to Havana. They found what Cubans call "The Special Period" astounding and Cuban's responses very moving. Faith found herself wanting to document on film Cuba's successes so that what they had done wouldn't be lost. Both of them wanted to learn more about Cuba's transition from large farms or plantations and reliance on fossil-fuel-based pesticides and fertilizers, to small organic farms and urban gardens. Cuba was undergoing a transition from a highly industrial society to a sustainable one. Cuba became, for them, a living example of how a country can successfully traverse what we all will have to deal with sooner or later, the reduction and loss of finite fossil fuel resources.

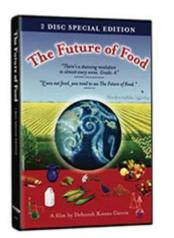
In the fall of 2003 Pat and Faith had the opportunity to return to Cuba to study its agriculture. It was a wonderful trip. They saw much of the island, met many farmers and urban gardeners, scientists and engineers – traveling more than 1700 miles, from one end of Cuba to the other. It was all they had hoped for and more.

The goals of this film are to give hope to the developed world as it wakes up to the consequences of being hooked on oil, and to lift American's prejudice of Cuba by showing the Cuban people as they are. The filmmakers do this by having the people tell their story on film. It's a story of their dedication to independence and triumph over adversity, and a story of cooperation and hope. Several Cubans expressed the belief that living on an island, with its natural boundaries, breeds awareness that there are limits to natural resources.

For more information about this film and for resouces on holding a screening, please visit <u>www.powerofcommunity.org/</u>



SUBURBIA



#### The Future of Food

THE FUTURE OF FOOD offers an in-depth investigation into the disturbing truth behind the unlabeled, patented, genetically engineered foods that have quietly filled U.S. grocery store shelves for the past decade. From the prairies of Saskatchewan, Canada to the fields of Oaxaca, Mexico,

this film gives a voice to farmers whose lives and livelihoods have been negatively impacted by this new technology. The health implications, government policies and push towards globalization are all part of the reason why many people are alarmed by the introduction of genetically altered crops into our food supply.

Shot on location in the U.S., Canada and Mexico, THE FUTURE OF FOOD examines the complex web of market and political forces that are changing what we eat as huge multinational corporations seek to control the world's food system. The film also explores alternatives to large-scale industrial agriculture, placing organic and sustainable agriculture as real solutions to the farm crisis today.

For more information about this film and for resouces on holding a screening, please visit <u>www.thefutureoffood.com</u>

#### What Will We Eat?: The Search for Healthy Local Food

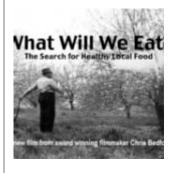
"What Will We Eat?: The Search for Healthy Local Food" (26:00) tells the story of the growing failure of the industrial food system and how a grassroots coalition of small farmers and consumers is inventing a healthy, humane, homegrown alternative. Filmed primarily in West Michigan, "What Will We Eat?" focuses on the success of the Sweetwater Local Foods Market in Muskegon – Michigan's first farmers market to exclusively sell local produce raised according to organic standards and products from animals raised humanely. The story is told through the voices and experiences of small farmers.

"What Will We Eat?" features John Ikerd, Fred Kirschenmann, Michael Hamm and John Biernbaum of MSU plus the voices of local West Michigan farmers and consumers working to build a new, revolutionary food system. Shown at the East Lansing, Muskegon, and Saugatuck Film Festivals in 2006. Reviewed by New Farm Magazine. This film is designed to shown in classrooms and public forums to begin a conversation about growing a healthy, humane, homegrown food system that lowers healthcare costs, promote economic development, and builds community.

For more information about this film, or to purchase the DVD/VHS, visit <u>www.localharvest.org</u>

#### Sustainable Table: What's On Your Plate?

Over nine months, Mischa Hedges and Digital Sense Productions traveled the west coast to learn more about our food system. During production, he found that the standard methods of producing food do not take environmental or human health costs into consideration. He also explored the many alternatives to the current agricultural system. Sustainable Table includes interviews with: Howard Lyman: Author of "Mad Cowboy",Kenneth Williams: Champion Vegan Bodybuilder, Fred Kirschenmann, PhD: Fellow, Leopold Center for Sustainable Agriculture, Marc Grossman: Spokesman for United Farm Workers, Actors/activists Ed Begley Jr., James Cromwell and many more. Digital Sense worked with individuals representing The Sierra Club, P.E.T.A., The University







of California at Davis, Organic Valley Dairy Farms, Chapman University and many others while producing this film. The result is a documentary that takes an unadulterated look into the food you eat.

For more information about this film, or to purchase the DVD, visit <u>www.sustainabletablemovie.com</u>. Visit also <u>www.sustainabletable.org</u>

#### Food For the Future



FOOD FOR THE FUTURE tells the story of the founding of the pioneering Floyd Boulevard Local Foods Market - the first farmers market in the nation to exclusively sell humanely raised animal products and organic/chemical free produce. This 12 minute film is designed to help consumers and farmers advocate for what Fred Kirschenmann calls "Local plus" food systems -- local food systems built around higher values of humane treatment of animals and respect for nature's rules and processes (organic/chemical-free). "This film is perfect for classes and meetings to begin the discuss around local, values added food," says Chef Kurt Friese, Slow Food USA. The video was produced by Chris Bedford, an award winning advocacy filmmaker. Chris Bedford makes films and videos designed to help communities build a sustainable economy -beginning with a local, healthy food system. Visit his website at www.chrisbedfordfilms.com for more information.

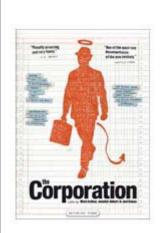
For more information about this film, or to purchase the DVD/VHS, visit <u>www.localharvest.org</u>



#### Sweet Soil

Sweet Soil shares the stories of four family farms, a natural foods store committed to supporting them and a community's passion for fresh, local food. Set to a toe-tapping, fiddle-driven soundtrack by local musicians, Sweet Soil captures the spectacular autumnal beauty of the Berkshire Hills at harvest time. The farms profiled are: Equinox Farm, a pioneer in the salad greens business; Rawson Brook Farm, a goat dairy producing Monterey Chevre for over 20 years; Thompson-Finch Farm, a farm growing diversified vegetable crops and pick-your-own fruits; and High Lawn Farm, one of the last dairy farms in the state to produce, bottle, and distribute milk under one roof. Film by Wild Hayer Productions.

For more information about this film, or to purchase the DVD, visit <u>www.localharvest.org</u>

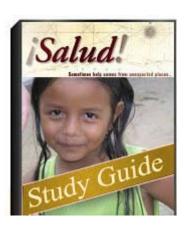


#### The Corporation

The Corporation explores the nature and spectacular rise of the dominant institution of our time. Footage from pop culture, advertising, TV news, and corporate propaganda, illuminates the corporation's grip on our lives. Taking its legal status as a "person" to its logical conclusion, the film puts the corporation on the psychiatrist's couch to ask "What kind of person is it?" Provoking, witty, sweepingly informative, The Corporation includes forty interviews with corporate insiders and critics - including Milton Friedman, Noam Chomsky, Naomi Klein, and Michael Moore - plus true confessions, case studies and strategies for change. Winner of 24 INTERNATIONAL AWARDS, 10 of them AUDIENCE CHOICE AWARDS including the AUDIENCE AWARD for DOCUMENTARY in WORLD CINEMA at the 2004 SUNDANCE FILM FESTIVAL. The film is based on the book The Corporation: The Pathological Pursuit of Profit and Power by Joel Bakan.

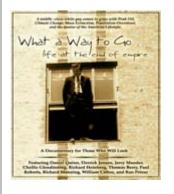
For more information about this film and for resources on holding a screening, please visit <u>www.thecorporation.com</u>

#### ¡Salud!



A timely examination of human values and the health issues that affect us all, ¡Salud!looks at the curious case of Cuba, a cash-strapped country with what the BBC calls 'one of the world's best health systems.' From the shores of Africa to the Americas, !Salud!hits the road with some of the 28,000 Cuban health professionals serving in 68 countries, and explores the hearts and minds of international medical students in Cuba -- now numbering 30,000, including nearly 100 from the USA. Their stories plus testimony from experts around the world bring home the competing agendas that mark the battle for global health—and the complex realities confronting the movement to make healthcare everyone's birth right.

For more information about this film and for resources on holding a screening, please visit <u>www.saludthefilm.net</u>



#### What A Way To Go: Life At the End of Empire

"A middle class white guy comes to grips with Peak Oil, Climate Change, Mass Extinction, Population Overshoot and the demise of the American Lifestyle." Featuring interviews with Daniel Quinn, Derrick Jensen, Jerry Mander, Chellis Glendinning, Richard Heinberg, Thomas Berry, William Catton, Ran Prieur and Richard Manning, What a Way to Go looks at the current global situation and asks the most important questions of all:

- \* How did we get here?
- \* Why do we keep destroying the planet?
- \* What do we truly want?

\* Can we find a vision that will empower us to do what is necessary to survive, and even thrive, in the coming decades?

For more information about this film and for resources (press releases, posters, post-discussion suggestions, etc) on holding a screening, please visit <a href="http://www.whatawaytogomovie.com">www.whatawaytogomovie.com</a>

Read reviews and discuss the film in the forums.



#### **Independent America**

The Two Lane Search for Mom & Pop is an 81-minute feature film which follows award-winning journalists and married couple, Hanson Hosein and Heather Hughes, as they travel 13,000 miles across America.

Traveling by secondary highways and country roads, and only doing business with Mom & Pop, the couple finds a nation at loggerheads with the free market it so proudly mastered.

From bitter battles with corporate America to revitalized Main Streets, Hanson and Heather find a truly Independent America.

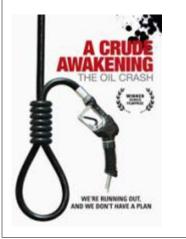
For more information about this film, to purchase the DVD, or to list your screening, please visit <u>www.independentamerica.net</u>

#### The Oil Factor: Behind the War on Terror

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After assessing today's dwindling oil reserves and skyrocketing use of oil for fuels, plastics and chemicals, "The Oil Factor" questions the motives for the U.S. wars in the Middle-East and Central Asia where 3/4 of the world's oil and natural gas is located. With exclusive footage shot on location in Iraq, Pakistan and Afghanistan, the film documents the spiraling violence now engulfing both Iraq and Afghanistan, a country conspicuously absent from the commercial media's news segments. With detailed maps and graphics, The Oil Factor features many experts and personalities such as former Defense Advisor Zbigniew Brzezinski, M.I.T. professor Noam Chomsky, the Project for the New American Century Executive Director Gary Schmitt, Coalition Provisional Authority Chairman Paul Bremer, former Pentagon analyst Lt. Col. Karen Kwiatkowski, current Iraqi government official Abdel Aziz Al-Hakim and authors Ahmed Rashid and Michael C. Ruppert. Contributing organizations include the United Nations, the International Committee of the Red Cross, Amnesty International, Human Rights Watch, Greenpeace, the Pentagon, Washington's Institute for Policy Studies, New York's World Policy Institute, London's Jane's Intelligence and Petroleum Economist, Paris' Agence France Press and Center for Energy Strategy Studies (C.E.P.S.E.) or the Organization for Economic and Cooperative Development (O.E.C.D.)

For more information about this film, visit <u>www.theoilfactor.com</u>

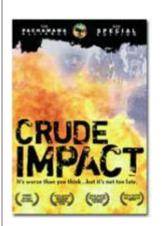


#### A Crude Awakening: The Oil Crash

A 90 minute documentary on the planet's dwindling oil resources. OilCrash, produced and directed by award-winning European journalists and filmmakers Basil Gelpke and Ray McCormack, tells the story of how our civilization's addiction to oil puts it on a collision course with geology. Compelling, intelligent, and highly entertaining, the film visits with the world's top experts and comes to a startling, but logical conclusion – our industrial society, built on cheap and readily available oil, must be completely re-imagined and overhauled.

For more information about this film, visit www.oilcrashmovie.com

About Oil Crash the movie: [PDF]



#### **Crude Impact**

Crude Impact is an award-winning documentary film which Chris Vernon of TheOilDrum.com called " a terrific film... the best documentary I have seen on the subject." This feature film explores the interconnection between human domination of the planet, and the discovery and use of oil. The objective of the film is to promote positive, hopeful change in the way we source and use energy. Changes that will create a more just and sustainable world. The film has received several awards and been recognized internationally. Crude Impact was an official selection of the prestigious International Documentary Film Festival in Amsterdam.

For more information about this film, view the trailer, or to purchase the DVD, visit <u>www.crudeimpact.com</u>

#### **Energy Crossroads**

As our global population and its appetite for energy rise drastically, resource depletion and global warming have become the most pressing issues facing humanity today. As fossil fuels power every facet of the American economy, how can we avoid an energy crisis and a possible collapse of our economy? In addition to increasing geopolitical conflicts, the process of extracting and using these crucial resources is endangering the very own habitat that we depend on to prosper as a species - pushing the earth's climate and ecosystem to a point of no-return. It is clear that in order for us to survive our modern self-destructive societies, we will have to change course drastically and as fast as possible. Scientists and experts agree that the use of renewable energy such as solar and wind power, coupled with higher efficiency and conservation, will be key factors in preserving our quality of life and paving the way to a sustainable world for our children. Will America be up to the task as it consumes 25% of the world's energy, 85% of which comes from non-renewable fossil fuels?

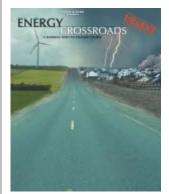
The movie exposes the problems associated with our energy consumption. It also offers concrete solutions for anybody that wants to educate himself or herself and be part of the solutions in this decisive era. The film features passionate individuals, entrepreneurs, experts and scientists at the forefront of their field bringing legitimacy and expertise to the core message of the piece.

For more information about this film, view the trailer, or to purchase the DVD, visit <u>www.energyxroads.com</u>

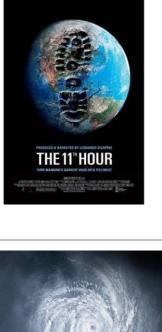
#### The Age of Stupid

SYNOPSIS - Oscar-nominated Pete Postlethwaite (In The Name of the Father, Brassed Off) stars as a man living alone in the devasted world of 2055, looking back at "archive" footage from 2007 and asking: why didn't we stop climate change when we had the chance? The Age of Stupid is a 90-minute film about climate change, oil, war, politics, consumerism and human stupidity, set in the future (world premiere in London on March 15th 2009.

For more information about this film or view the trailer visit <u>www.ageofstupid.net</u>



# The 11<sup>th</sup> Hour



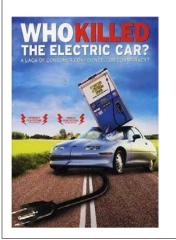
Leonardo DiCaprio's "The 11th Hour" is a feature length documentary concerning the environmental crises caused by human actions and their impact on the planet. The 11th Hour documents the cumulative impact of these actions upon the planet's life systems and calls for restorative action through a reshaping of human activity. It describes the last moment when change is possible. The film explores how humanity has arrived at this moment; how we live, how we impact the earth's ecosystems, and what we can do to change our course. The film features dialogues with experts from all over the world, including former Soviet Prime Minister Mikhail Gorbachev, renowned scientist Stephen Hawking, former head of the CIA R. James Woolsey and sustainable design experts William McDonough and Bruce Mau in addition to over 50 leading scientists, thinkers and leaders who present the facts and discuss the most important issues that face our planet.

Website: <a href="http://www.11thhourfilm.com">www.11thhourfilm.com</a> Take Action Website: <a href="http://www.uww.nuthhouraction.com">www.nuthhourfilm.com</a> Take Action Website: <a href="http://www.nuthhouraction.com">www.nuthhourfilm.com</a>

# apinconvenient fruth

Director Davis Guggenheim eloquently weaves the science of global warming with Mr. Gore's personal history and lifelong commitment to reversing the effects of global climate change. A longtime advocate for the environment, Gore presents a wide array of facts and information in a thoughtful and compelling way. "Al Gore strips his presentations of politics, laying out the facts for the audience to draw their own conclusions in a charming, funny and engaging style, and by the end has everyone on the edge of their seats, gripped by his haunting message," said Guggenheim. An Inconvenient Truth is not a story of despair but rather a rallying cry to protect the one earth we all share. "It is now clear that we face a deepening global climate crisis that requires us to act boldly, quickly, and wisely," said Gore. *Written by Plantation Productions* 

Film Website: <a href="http://www.takepart.com/ait/studyguides.php">www.climatecrisis.net</a> Companion Study Guide: <a href="http://www.takepart.com/ait/studyguides.php">http://www.takepart.com/ait/studyguides.php</a>



# Who Killed the Electric Car?

An Inconvenient Truth

The film investigates the events leading to the quiet destruction of thousands of new, radically efficient electric vehicles. Through interviews and narrative, the film paints a picture of an industrial culture whose aversion to change and reliance on oil may be deeper then its ability to embrace ready solutions. Who Killed the Electric Car? and Chris Paine were nominated by the Writer's Guild for Best Documentary of 2006. The film also received nominations from The Broadcast Critics Awards and The Environmental Media Awards for Best Documentary of 2006. The film won the audience award at the Canberra International Film Festival and won a special jury prize at the Mountain Film Festival.

Film Website: www.whokilledtheelectriccar.com

#### **Recommended Websites**

**Transition US** - The US site for Transition www.transitionus.org.

**Transition Towns** - The UK site for the Transition Network www.transitiontowns.org

Rob Hopkins' blog www.transitionculture.org.

**Energy Bulletin** - A clearinghouse of information concerning the peak in global energy www.energybulletin.net.

**Powering Down -** A blog site exploring issues around energy descent www.poweringdown.blogspot.com

**Richard Heinberg** - Richard Heinberg's site containing the archive of his Museletters. <u>www.richardheinberg.com</u>.

**The Oil Drum** - Discussions about energy and our future www.theoildrum.com

**The Dynamic Cities Project** - A non-profit organization creating energy transition strategies as a proactive response to peak oil and climate change. www.dynamiccities.squarespace.com

Post Carbon Institute www.postcarbon.org

Zone 5 - Permaculture and powerdown in Ireland www.zone5.org

Sharon Astyk's blog www.casaubonsbook.blogspot.com.

Path to Freedom - A great hands-on site www.pathtofreedom.com.

**Global Public Media** - An invaluable resource, films, transcripts and audio files of interviews and articles by many of the leading thinkers www.globalpublicmedia.com

**Last Oil Shock** - David Strahan's website, with some excellent interviews and articles. <u>www.lastoilshock.com.</u>

**The Community Solution** - a wonderful organization in the US, the people who produced The Power of Community DVD, among other things. www.communitysolution.org

Permaculture Magazine (UK) www.permaculture.co.uk

Permaculture International Journal www.permacultureinternational.org.

Association for the Study of Peak Oil & Gas (ASPO) www.peakoil.net

**Energy Efficiency and Renewable Energy, U.S. Department of Energy** - Links and information on saving energy at home

www.eere.energy.gov

**World Carfree Network -** A hub of the global carfree movement with information from around the world on how to revitalize towns and cities. www.worldcarfree.net

#### **Recommended Videos**

**Rob Hopkins, the founder of the Transition Town** movement talks about peak oil, the origin of the Transition Towns concept and how to help your community develop an "Energy Descent Action Plan" and prepare to "power down." <u>www.youtube.com/watch?v=rQF09NG00V8</u>

Rob Hopkins at the Positive Energy Conference Part 1 http://www.youtube.com/watch?v=kizxt14aPM8

Rob Hopkins at I.F.G. Conference Part 1 http://www.youtube.com/watch?v=3B0zQ1pJAaY

Several interviews with Rob, some on slightly different subjects on Transition culture here: http://transitionculture.org/essential-info/interviews-and-talks-audio/

Richard Heinberg at Resilient Communities Part 1

http://www.youtube.com/watch?v=d9srawwb5LY

Jennifer Gray, Peak Moment TV interview http://www.wordpress.peakmoment.tv/conversations/?p=254#more-254

Trathen Heckman, Creating a Home Gray Water System http://www.youtube.com/watch?v=PBMpaWq4EKE

Dr. Chris Johnstone, Q1 "Finding Your Power" Problems We Face <a href="http://www.youtube.com/watch?v=OloURbu3x3o">http://www.youtube.com/watch?v=OloURbu3x3o</a>

Joanna Macy on The Great Turning http://www.youtube.com/watch?v=LwIXTAT8rLk

#### David Holmgren, Retrofitting The Suburbs - Part1

http://www.youtube.com/watch?v=2cjhQWdbqE4

**ABC Four Corners** - Investigative journalism on the issues of peak oil, including extended interviews *www.abc.net.au/4corners/specials.htm* 

Crash Course on the Economy http://www.chrismartenson.com/crashcourse

#### **Recommended Reading**

# Essential

Hopkins, R. (2008) The Transition Handbook: From Oil Dependency to Local Resilience, Chelsea Green Publishing.

Heinberg, R. (2007) Peak Everything: Waking Up to the Century of Declines, New Society Publishing.

Holmgren, D. (2003) *Permaculture: Principles and Pathways Beyond Sustainability,* Holmgren Design Services.

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Strahan, D. (2007) *The Last Oil Shock: A Survival Guide to the Imminent Extinction of Petroleum Man,* John Murray Publishing.

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Hirsch, R.L., Bezdek, R. Wendling, R. (2005a.) *Peaking of World Oil Production: Impacts, Mitigation and Risk Management*, National Energy Technology Laboratory, US Department of Energy.

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Kunstler, J.H. (2005) *The Long Emergency: Surviving the Converging Catastrophes of the 21st Century*, Atlantic Monthly Press.

Leggett, J. (2005b.) Half Gone: oil, gas, hot air and the global energy crisis, Portobello Books.

# Climate change

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Goodall, C. (2007) How to Live a Low-Carbon Life. The Individual's Guide to Stopping Climate Change, Earthscan.

Henson, R. (2006) *The Rough Guide to Climate Change: the symptoms, the science, the solutions,* Rough Guides, London.

Monbiot, G. (2007) Heat: how to stop the planet burning, Penguin Books.

# Energy descent / Transitions

Abdullah, S. (1999) Creating a World That Works For All, Berrett-Koehler.

Bates, A. (2007) *The Post-Petroleum Survival Guide and Cookbook: Recipes for Changing Times.* New Society Publishers.

Brand, S. (1999) The Clock of the Long Now: Time and Responsibility, Phoenix Press.

Gladwell, M. (2000) The Tipping Point: how little things can make a big difference, Abacus.

Hopkins, R. (2007) *Energy Descent Pathways: evaluating potential responses to peak oil.* An MSc dissertation for the University of Plymouth. Available from www.transitionculture.org.

Korten, D.C. (2006) *The Great Turning: from Empire to Earth Community,* Berett-Koehler Publishers. Odum, H.T. & Odum, E.C. (2001) *A Prosperous Way Down: principles and policies,* University Press of Colorado.

Walker, B & Salt, D. (2006) *Resilience Thinking: sustaining ecosystems and people in a changing world,* Island Press.

Winter, M. (2006) *Peak Oil Prep: three things you can do to prepare for peak oil, climate change and economic collapse,* Westsong Publishing.

# Permaculture design

Holmgren, D. (2004) *Permaculture: Principles and Pathways Beyond Sustainability*, Holmgren Design Press. Quite simply the best book of the past 15 years.

Mollison, B. (1988) Permaculture: a Designers Manual, Tagari Press.

Whitefield, P. (2000) *Permaculture in a Nutshell*, Permanent Publications.

Whitefield, P. (2005) The Earth Care Manual, Permanent Publications.

Also highly recommended is a subscription to *Permaculture Magazine* (www.permaculture.co.uk) and to *The Permaculture Activist* (www.permacultureactvist.net).

# Food, gardening and growing

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Whitefield, P. (1996) How to Make a Forest Garden, Permanent Publications.

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Guerra, M. (2005) The Edible Container Garden: Fresh Food from Tiny Spaces, Gaia Books.

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# Rethinking economics

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