



## Newsletter January 2009

Interesting times indeed we are living, with this harsh winter and the credit crunch! This seems the beginning of the transition in some ways, so a good time to become more resilient and learn new survival skills: “skilling-up for power-down” in Hopkins-speak!

So 2009 is the year that BC could become TT... please encourage friends and neighbours to attend the Transition talk next month.

Thanks to all our contributors to the newsletter and to all our supporters, and those of you living as greenly as you can! Just to remind you, our strap-line is

**“Encouraging the responsible use of the Earth’s resources”**

Please support us in future by keeping in touch, sending me your ideas and opinions for the next newsletter, attending our events and encouraging other people to join Wasteless Society. Together we can make a big difference.

And it’s the domestic decisions that count: about which fuel we use to keep us warm and fed this winter, buying local food and growing our own, where we go on holiday, and whether to take the car or the bus, and how we deal with our rubbish! Go well, and happy new year!

Rosa

### FORTHCOMING EVENTS

**Thursday January 29<sup>th</sup>: Transport Event:** WS joins forces with The BC & District Bike Group 7.30pm at **The Three Tuns**, Bishops Castle

**“ How to get around in a rural area and cut your carbon emissions”**

With speakers **Les Lumsdon**, and **Nick Holden** of Gfleet (Sustainable Transport Consultant) Come hear and discuss some new ideas on a subject that affects us all

**Monday 16<sup>th</sup> February: Rob Hopkins on TRANSITION TOWNS. 7.30 at The Three Tuns** (rescheduled from last Autumn when he was ill.) Rob is well-known for his book *The Transition Handbook* and for enabling dozens of communities to change from oil-dependency to local resilience. [www.transitionculture.org](http://www.transitionculture.org)

Tickets (and *The Handbook*) available from Art & Artisan Books, Bishops Castle tel: 01588 630435, or Textile Traders. Advanced booking recommended! Cost: £4 (£2 conc)

Many people are keen to initiate Bishops Castle as a transition town, so to get us going, *there will be Follow-up workshops on Transition towns with Pat Robinson. More details at Rob’s talk, or ring Pat 01588 630558*

**Week starting Jan 26<sup>th</sup>:Green Week at Severn Hospice Shop** in BC. They will be giving a free CFL to everyone who donates stuff, and promoting gardening and composting, and running a Green Quiz! Do drop in and support them.

**Thursday 26<sup>th</sup> February: WS Board Meeting in Priestweston.**

**Saturday March 15<sup>th</sup>: Day workshop: An Introduction to Permaculture** with Stephen Nutt, at Rosa’s house and garden in Priestweston.

Booking essential by March 1<sup>st</sup> Details: Ring 01938 561404

**Thursday March 26<sup>th</sup>: FOOD FORUM 7.30 at The Three Tuns**

**A panel of local “experts” involved in Food and its production will present their ideas, and all can discuss how we can eat more sustainably.**

**Wed 29<sup>th</sup> April: Film Night**, including our own **Wasteless Society Film** made by Jonny Keeley, and an environmental feature film (to be decided), in collaboration with The Film Society at **The Three Tuns**

**Monday May 18<sup>th</sup>** Debi Lewis and Tania Dolley: **Deep Ecology - The Work that Reconnects** as developed by Joanna Macy 7.30 in the **Fletcher Room, Bishops Castle Community College** (*first entrance on left after X-roads on A488*)  
*This is a Quest Spiritual Network event. [www.joannamacy.net](http://www.joannamacy.net)*

*Have you had your Household Energy Survey done yet? If not, do contact the HES office at Enterprise House, BC tel: 01588 638738*

### **Other Local Groups**

**Thurs. Jan 22<sup>nd</sup>: TVEG** (Teme Valley Environmental Group) are showing a 20min film called *Farming with Nature*, then holding a social with locally produced Ploughman's Supper. In Knighton. More details from Christine Brook tel: 01547 528866

**Tuesday 24<sup>th</sup> March at Montgomery Town Hall:** MEG (Montgomery Environment Group) have invited **Sir John Houghton CBE FRS**. He is an internationally renowned climate scientist, and was Chair of the Intergovernmental Panel on Climate Change. He still keeps very much up to date on these issues. Contact: Mike Membury tel 01686 668643

#### **Local news:**

- Recycling: Collection improvements at Crowgate. Thanks to Neil Hird and other volunteers for keeping up this valuable resource
- Solar panels on Bishops Castle Town Hall and Hospital and Primary School? Under investigation. More details from Neil Hird
- Community Anaerobic Digester (AD). WS is in partnership with BC Energy Group. Funding is being sought. James Murcott suggests 2 ADs at Crowgate: one processing STW's sewerage, and a second processing kitchen waste, green garden waste, grass etc, with a target of 100kw. Acting co-ordinator: Miranda Stanley  
e: [Miranda.laurie@btinternet.com](mailto:Miranda.laurie@btinternet.com)

More info on any of these points from Neil Hird

**Membership Subscriptions** Dennis Twist, our tireless company secretary and treasurer, asks that anyone who has still not paid their subs, due 1.12.08, please pay soon  
Cheques payable to *The Wasteless Society*. See address at foot of letter

#### **Recycling Christmas stuff**

Both Christmas trees and Christmas cards can be put out for collection with your green waste, or taken to the Household Recycling Centre. In addition, you can donate your cards to the Woodland Trust Christmas card recycling scheme - see [www.woodland-trust.org.uk/cards/](http://www.woodland-trust.org.uk/cards/) for more information. WH Smith shops usually have a card recycling box in January

Wrapping paper can be recycled via your kerbside collections or taken to the Household Recycling Centre - as long as it isn't metallic or coated paper

The Love Food Hate Waste campaign (see [www.lovefoodhatewaste.com](http://www.lovefoodhatewaste.com)) is encouraging people to re-use their food left-overs instead of throwing them away. UK families are throwing out an average of £600 per year of food, much of which could be re-used. The Love Food Hate Waste website contains recipe suggestions that make the most of your left-overs, as well as suggesting portion sizes to minimise waste.

## **The Planet and the Slump by Jim Gaffney**

If any politician, pundit or media outlet has pointed out how desperately this beautiful planet we live on needs a massive recession, or even a proper full on depression, in the human economy, then I have yet to see it.

For example, a slump in the rate of energy consumption for transport and domestic and commercial heating and electricity would offer a little respite from the relentless outpouring of greenhouse gases. It appears that no matter how often the powers that be insist they are really worried about Climate Change, and they certainly will do something effective really very soon, somehow or other the overall emissions just keep on rising.

Similarly, for all the fine words, the rainforests continue to be hacked down, the oceans continue to be over fished and polluted, species continue to disappear, the deserts continue to expand, etc. etc. etc.

If we think of the looming recession from the perspective of the earth, its climate, its species and its resources we might want admit to ourselves that the apparent interest of the human species in maximising its own consumption and the interest of every other living thing in sheer survival are diametrically opposed. If we're honest, the best thing for the rest of nature would be the disappearance of the human species altogether.

Unless we mend our ways. Nearly all the above-mentioned politicians, pundits and hacks have also avoided talking about the recession, (or slump if that's what it's going to turn into), as an opportunity. An opportunity, for example, really to reform the financial system, so the banks invest only in genuinely responsible undertakings. For an idea of what can be done I recommend a look at the website of Triodos bank, [www.triodos.co.uk](http://www.triodos.co.uk). Will governments take advantage of the golden opportunity, as banks need huge amounts of public money, to get them moving towards true sustainability? And how about the motor industry? It's absolutely essential that the whole direction of research and manufacture is fundamentally shifted. (Probably towards producing no more private vehicles running on the internal combustion engine AT ALL). Barack Obama has dropped a few hints about some changes in return for masses of public money. We can only hope he has the will and the scope to go far enough.

It may be that the recession will bring some very serious challenges to many of us. Many "green" thinking people feel, as I do, that it might be the start of a profound process of change that we in the rich world must, at last, face up to. Our over consumption really will have to stop. How we manage that, and how much we continue to enjoy our lives, may depend to some extent on how successfully we can co-operate in our local neighbourhoods, towns and villages. If we can work out clever, powerful and loving ways to support each other, many aspects of our lives might even get better! In that case, some of us might not fear the recession, but might be able to join our fellow species and give it a cautious welcome!

## **THE GREAT NUCLEAR DEBATE**

**Following Dennis Twist's article on Nuclear Power in the September newsletter, we now have responses from Adam and David Gillen, and Dennis' response to them! Keep them coming!**

**First Adam's:**

## Why we shouldn't abandon hope and rely on nuclear power. Or **An inconvenient solution**

***“An intelligent man knows how to solve the problem that a wise man would avoid” – unknown.***

I suspect James Lovelock and George Monbiot are intelligent men. I am not so sure they are wise. Even if there were no other option nuclear remains the wrong thing to do. Very quickly, just three things that make nuclear power a bad idea:

1. What do we tell the kids? Not as much radioactive waste is produced by new generation plants but mighty hazardous it is and here for many generations. Is this ethical?
2. What do we tell the neighbours? If we adopt nuclear as our solution to climate change then every country in the world has the right to build nuclear (including Iran, North Korea etc). Is this secure?
3. Just another junky fix? As all countries seek to follow suit then demand for uranium (a finite material in the form usable in nuclear power stations) increases. Not only do we stay dependent on oil but we also become dependent upon uranium (bringing with it the same territorial and geopolitical problems). Is this smart?

Nuclear is a short-term solution with no hope. Future generations will look back and despair that we chose such a short-term technical fix when the problem demanded so much more of us. If nuclear power were the only choice then I, personally, would still say no but I would fully understand why so many good and true people are acknowledging its place in our energy mix.

Why would I, personally, say no? Simply because I don't think the human race deserves to be let off the climate change hook. A technical fix (and nuclear is only a sticking plaster, not the fix) will lull us in to a sense of arrogance that will not solve future problems of food, water and population. Climate change is, I believe, our opportunity to work out how the human race learns to live in balance with our one planet. Nuclear power just gets in the way of this.

However there is an alternative. One that is a far better; sustainable, secure, available here and now and low carbon. One where technology will play its part but one that is not dependent on things yet to be discovered or invented. The solution I am describing involves things like:

1. Decentralising the energy production system for the UK (all sorts of energy owned by all sorts of people in all sorts of places). Common elsewhere, can begin tomorrow in the UK.
2. Adopting a new business sector for the UK, which makes profits when people save energy instead of consuming it. Big businesses do it, householders and small businesses are deprived of it.
3. Reinstating our commitment to our farming industry to minimise the energy used when we eat.

All of this reconnects people to their planet. None of this is rocket science (or nuclear physics) yet to be invented. All of it involves vision, courage and, most importantly, people. None of it we have to wait for. And the best bit is that we – the people – don't need anyone's permission to get on with it. We can lead and politicians will have to follow.

If nuclear power is an intelligent man's solution to climate change then trusting and empowering the people is the wise man's way of avoiding current and future impacts of people on the planet!

Adam

*As a footnote - if you feel you must accept nuclear power please don't do it without also hedging your bets. Sign up for your free Household Energy Survey now, and play a part in one of those companies that both saves energy and makes money.*

### **And a response to Dennis' article from David Gillen**

Many times in a Wasteless meeting someone has said "We need to educate the public" and I have replied "It is we who need to be educated." Well, it's never too late to start so I would be grateful if someone can explain to me how an electric hob is more efficient than gas (as stated in the Newsletter).

Perhaps Mr Twist could explain the subtleties of his argument - "Yes, nuclear power produces waste but that's no reason to not use a finite resource". How much ore is there, Dennis? And how much energy is expended getting it out of the ground and processed? But never mind facts and figures, Lovelock agrees with Dennis; Lovelock is the chap who says we should use one third of our land for towns, factories etc, one third for intensive agriculture and one third should be left wild. Does that sound like a good idea? I don't think Lovelock explained where the energy for said intensive agriculture was going to come from.

But, never mind, Monbiot agrees with Dennis. That would be the Monbiot who wrote that individuals can do nothing about the problems of peak oil and climate change. Well, if that's the case, Wasteless can disband.

Come on, Dennis - if you have an argument in favour of Nuclear be good enough to make it. "We've got a lot of waste - a bit more won't matter and some awfully nice chaps agree with me" is an insult. Dennis did get one thing right, though, and it's good to see joined up thinking in the newsletter. Demand for electricity is likely to increase. Evidence of the veracity of his assertion is there on the same page.

One of the "slights of hand" of the Pro-Nuclear lobby is that nuclear is very good at meeting the base load. Another way of looking at it is that nuclear is very bad at matching supply to demand so other generators are switched off at night allowing nuclear to supply the base load. This adversely affects the profitability of flexible efficient generators. The more we increase the base load the more the nuclear lobby will argue we need nuclear - the more we use Economy 7 the more we increase the base load so get building those nuclear power plants - cook electric, build nuclear.

Joined up thinking! Well done, Wasteless.

### **And now – Dennis' response to David Gillen's article:**

1. I didn't like nuclear plants before and I still don't but I think that in order to have a secure electricity supply in 10-30 years time the UK should build some new nuclear plants now to replace those reaching the end of their useful lives. This is a temporary stop-gap measure, not a permanent solution.
2. I am not advocating nuclear plants as the answer to CO2 emissions, though I do think they would provide a useful contribution. I deliberately put "climate change" as the last of my three reasons in favour of nuclear power.
3. I think that David has missed the point when he scorns my argument that we shouldn't rule out nuclear power on the grounds that it produces waste. Of course it does, and it is a major problem (though only an incremental one) but in my view it is the lesser of two evils. The point I was trying to make was that the use of ANY finite resource produces problems and that we cannot rule out nuclear power, or any other activity, on the basis that it uses up the resource and/or causes waste or other problems. Should we stop mining iron, copper or other

minerals or, indeed stop using fossil fuels to make the chemicals which are used in practically every item in our households, workplaces, hospitals, schools etc?

4. David's dismissal of Lovelock and Monbiot as "awfully nice chaps" is completely misplaced - both of them are eminent and serious environmentalists.  
Dennis

And from the Nuclear power plant to a kitchen near you.....

### I Love my Aga By David Finney

How many times have I heard this mantra – more than I care to count. Typically “It’s so nice to always have a warm kitchen” or “You can’t beat an Aga bake”. What I never hear, until I reveal the terrible truth, is that range cookers such as Agas and Rayburns, fired by dated wick burners and required to be operated on a twenty-four hour regime, run at a typical efficiency of only 40% (compared with 85% for a typical central heating boiler) and, if used as the sole cooking device, they burn fuel over a twenty-four hour period compared with a typical cooker used at most for only two hours per day.

Let us start by remembering the primary function of a range cooker is to provide cooking services. Cooking in an average UK home consumes 830kWh of heat energy, usually by burning gas or electricity. An oil fired Aga cooker range (for example, type OE, without a boiler for heating hot water and a few radiators), according to fuel consumption figures published by Aga, consumes 51 litres of oil per week so it will use about 2650 litres of oil each year if used as the sole cooking device throughout the year. At 45 p per litre of oil this will cost over £1,190 per year. (*Current price is about 36p per litre – Ed*) Ignoring for the moment that the Aga also heats the kitchen and takes the chill off the room above (and over heats the kitchen and the room above during the summer), burning 2650 litres of oil releases 27,295 kWh of heat, ( $2650 \times 10.3 = 2,795 \text{ kWh}$ ) nearly thirty-three times the UK annual average amount of energy used for cooking ( $2,7295/830 = 32.89$ ). If an electric cooker were substituted for the Aga annual cooking fuel costs would fall from around £1,190 to £116 ( $830\text{kWh} \times 0.14\text{p} = £116.20$ ), saving about £1,074.

Burning this amount of oil generates about 7,100 kg of carbon dioxide per year ( $2,650 \times 2.68 = 7,102 \text{ kg CO}_2$ ). If an electric cooker was used instead, the carbon dioxide generated by cooking would fall to 357 kg carbon dioxide per year ( $830 \times 0.43 = 356.9$ ), a reduction of over 6.5 tonne. It is true that the Aga provides heating for the kitchen and assists with the heating of the room above by slow conduction through the kitchen ceiling, so some of the above fuel use and carbon dioxide pollution can reasonably be attributed to providing this. Unfortunately most of this heating is provided unnecessarily overnight or when the kitchen and the room above are not in use. As Agas are only 40% efficient at converting the energy available within the fuel to useful heat, compared with around 85% for a modern non-condensing oil fired boiler, switching to using the existing central heating only to heat the kitchen and room above *only when required* would more than double the efficiency of fuel conversion into heat. Ignoring for moment the need to cook and to take an extreme case of energy use in order to make a point, if our Aga lover substituted a 2kW electric heater, without a thermostat, to heat the kitchen in place of the Aga, how many hours a day would it need to be on during the 8 month heating season? Six, eight, ten, twelve? Let us take the most extreme possibility and assume 12 hours per day. This will consume  $12 \times 2 \times 30 \times 8 = 5760 \text{ kWh}$  over the eight month period but all this is available to heat the kitchen (and the room above) as electric heaters are 100% efficient at the point of use. Add to this a further 553

kWh (830 x 8/12) required for cooking and the total energy used is 6313 kWh compared with 27,295 kWh of heat used by the Aga. Using 6,313 kWh of electricity in this way would generate 2715 kg of carbon dioxide compared with 7,100 generated by the oil fired Aga. It is sobering to reflect that 60% of this energy used by the Aga disappears immediately up the flue as it is only 40% efficient and half its energy use occurs over night when it serves no useful purpose. The example chosen, of a 2 kW electric heater, without a thermostat, switched on for 12 hours per day is obviously ridiculous as it would be switched on and off to match occupancy and it would, hopefully, have a thermostat fitted so the actual heat demand would be much lower.

National statistics for oil fired central heating and hot water production in detached properties indicate an average annual consumption of 2570 litres and reflecting on the above model, I estimate that if our Aga lover abandoned the Aga and relied on the central heating system to provide all heating, including that in the kitchen, it would consume at most only another 400litres p a.. Taking this into account the saving in costs would be reduced from around £1,074 to £894 and savings in carbon dioxide would be reduced by 1070 kg.

For those Aga lovers who still might prefer the pain of paying for their Aga rather than being without it I can offer a way of improving the efficiency of the beast. An Aga is so inefficient because it employs a crude low temperature vapour burner which evaporates a high proportion of fuel which drifts up the flue unburnt or only partially burnt. In contrast, a modern oil fired central heating boiler sprays the fuel as minute droplets into the burner where the fuel can thoroughly mix with oxygen and fully ignite before escaping up the flue. There is one company, Snughome Cookers Ltd (sic) which converts range cookers from wick burners to pressure jet burners. There informative, if rambling website can be accessed at:

<http://www.snughomecookers.co.uk/>

and the page concerned with oil fired Agas is at:

[http://www.snughomecookers.co.uk/oil\\_agas.htm](http://www.snughomecookers.co.uk/oil_agas.htm)

As the website explains, when converted to a pressure jet burner the Aga becomes much more controllable and can be switched off overnight. The fuel is burnt at around 85% efficiency but the pressure jet burner is noisy when operating, just as a normal central heating boiler is. The cost of conversion is around £2,500 minimum but perhaps for some Aga addicts this is a price worth paying!

### **Wasteless Society: who are we?**

**Board of Directors:** Rosa James(current chair) Jim Gaffney, Dennis Twist, Kate Evans

**Recycling:** Neil Hird e: [n.b.hird@btopenworld.com](mailto:n.b.hird@btopenworld.com)

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