



# Green Centre News

## Latest News

- The Green Centre is to have monthly 'themed' displays. Organized to coincide with its usual Saturday opening hours upcoming subjects include kerbside recycling and low impact lifestyles.
- Green Centre's Rent set to Increase. We have been informed our rent is to go up 100% in 2013. As always, any offer of support is greatly appreciated.
- ZWM hopes to launch it's own recycling education service later in 2013. Further details will be released soon.

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## ZWM supports big rise in waste disposal charges *by A Jessopp ZWM*

Zero Waste Mann has offered its support to the Dept. of Infrastructure in its decision to vastly reduce the financial 'subsidy' given to local authorities sending waste to the Island's incinerator or government controlled landfill.

From 1st April 2013 disposal charges will go up to £57.35 per tonne, a near doubling of the current cost, rising to over £160 per tonne by 2018 and a sum equal to that paid by commercial businesses. ZWM have long held the view that the rebate paid to local authorities was stifling the opportunities for the recycling of domestic waste as it always seemed financially cheaper for them to have



householders' waste binned and burnt than recycled.

Now that this financial disincentive is to be removed it should prove far more viable for public authorities and private contractors to offer a recycling service to householders, as every tonne of recyclable waste diverted from the incinerator or landfill should save them money. It will now make financial sense to remove as much glass, metal, paper, textiles, cardboard and plastic material from people's refuse bins and have them sent away for recycling and also to compost garden waste.

It's now going to cost much, much more to send your waste here!

Without doubt this could provide new employment opportunities and it has been found elsewhere 'green' policies can stimulate local economies as businesses and individuals offering services to reuse and repair items become established.

Without doubt there will be some whinging and whining from certain quarters who will want to oppose the measures as 'unfair to the ratepayer', but this argument will be used by the lazy and unimaginative few. The more enlightened will accept the rise in cost as the only sensible option and embrace the coming opportunities with enthusiasm. Perhaps, householders, if they truly want to minimise the financial impact, will also accept a fortnightly bin collection rather than expect the local authority to take away all the refuse they produce every week. After all, if you take out everything that can be reused, recycled or composted there will be very little left in your wheelie bin.

## Lancashire Nut-pot *by Sarah Calverley ZWM*

This recipe uses local seasonal vegetables. You need one pot slow cooking in the oven or a slow cooker.

Ingredients: Potatoes; Onions; Carrots; Parsnips.

Seasoning to taste: cloves; bay leaf (+ herbs of choice e.g. rosemary, thyme, sage) salt and pepper.

Nuts of choice: e.g. walnuts, or peanuts or mixed nuts.

You don't need to add water as the vegetables release juice – but you may like add a little water or cider to make it more moist.

Preparation:

Slice the vegetables.

Place a layer of sliced onions on the bottom of the casserole dish, then alternate with layers of sliced potatoes.

Fill the dish with layers of potatoes, onions, carrots and parsnips and nuts with seasoning. Finish with a layer of potatoes. Put the lid on.

Cook at a low temperature for a few hours until potatoes are soft.

Serve and enjoy.

## Cold Fusion - Fact or Fiction *by George Fincher MEAC*

Way back in 1989 two physicists Stanley Pons and Martin Fleischmann caused a media frenzy when they announced that they had obtained more energy out of an experiment than they had put in. If true then this was a potentially cheap form of energy, hence the mass media interest. The claim was that the excess energy could not be accounted for by 'chemical reaction energy' so some form of nuclear reaction seemed to be occurring, though the reason for the excess energy could not at that time be explained.

The media dubbed the experiment 'cold fusion' as opposed to conventional fusion. Fusion is the process where atoms fuse together and release vast amounts of energy in doing so. This is the process by which the sun (and all stars) burn to produce the energy that keeps them hot. In fact very hot. To get 'conventional' fusion to occur temperatures of tens of millions of degree C are required in order to overcome the nuclear forces that keep the atoms as separate entities.

At these very high temperatures the atoms (typically hydrogen) can overcome the nuclear forces and merge to produce a different element (helium in the case of hydrogen fusion). Because of Mr Einstein's famous equation,  $E=mc^2$ , the fusion of the atoms causes a vast amount of energy to be released, keeping the process hot and therefore allowing the process to continue (the sun is still hot its just that we never see it for all the clouds covering the IOM).

Now conventional fusion research, aimed at producing fusion energy, uses very large amounts of money because the problem is so extremely difficult to solve. Large test sites have been built to progress the long term goal of producing fusion energy. So cheap, room temperature fusion would turn all this complex expensive conventional fusion research on its head. It seemed too good to be true.

Many other Physicists tried to duplicate the Pons-Fleischmann experiment, but at that time none managed to get the excess energy production to occur. Even Pons and Fleischmann could only get their experiment to produce excess energy 50% of the time. So the whole 'cold fusion' idea became ridiculed with the media now turning on Pons and Fleischmann and claiming them to be con men. Pons and Fleischmann were in fact genuine sincere Physicists though they have since said they were naïve in referring to nuclear reactions.

The effect of this media savaging of Pons and Fleischmann was to stop nearly all other experimenters from pursuing 'cold fusion' as no one wanted to be the subject of the mass media witch hunt that Pons and Fleischmann suffered.

Now fast forward to the present day. A number of things have changed. Cold fusion is still used to refer generally to this type of research, but most people involved in the research refer to it as LENR (Low energy nuclear reaction). There is still a stigma to the use of the term 'cold fusion'. The Pons and Fleischmann experiment, and similar experiments, have now been repeated by many researchers. Though there is no accepted theory as to just what is happening, it is clear there is something happening that has still to be explained by the scientific community. There are still only a relatively low number of researchers active in this field of research.

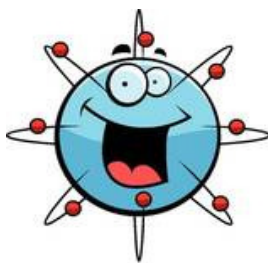
Perhaps more intriguing, there are a number of researchers who claim to be close to bringing products to market that use LENR techniques to produce heat. A typical application would be as a space heating device. The best known of these researchers is an Italian inventor Andrea Rossi, whose company is called Leonardo Corporation. He has a device referred to as e-cat (which stands for energy catalyser) which is claimed to produce more energy than it uses (by a factor of 6 so not a marginal effect). He claims to be gearing up towards mass production.

E-Cat is claimed to be a carbon emissions free method of generating heat (and potentially electricity), though it does need to be supplied with nickel and a secret catalyst to allow it to transform nickel into copper with excess heat being produced.

Is cold fusion fact or fiction? Well there seems to be something happening that is as yet unexplained via a scientific theory and still difficult to get much detail on due to the chequered history. Is e-cat or similar devices fact or fiction? There is definitely nothing on the market as yet, but Rossi has been working on LENR for a lot of years now, using his own money to fund it and is looking to maintain control by building up a production facility slowly without external investors funding (and therefore taking control of his product). It is not the normal modus operandi of a con man.

In 1992, Fleischmann moved to France with Pons to continue their work at the IMRA laboratory (part of Technova Corporation, a subsidiary of Toyota). Fleischmann died at home, on 3 August 2012, of natural causes. He had suffered from Parkinson's disease, diabetes and heart disease. Pons is now aged 69.

**“Though there is no accepted theory as to just what is happening, it is clear there is something happening that has still to be explained by the scientific community.”**



Cold Fusion may not be a con job after all.

## IOM Friends of the Earth Energy Policy Statement

IoM Friends of the Earth applauds the unanimous 2010 Tynwald vote supporting the policy of 15/15 and the sensible expenditure of public funds to commission the comprehensive AEA Technology Report showing the Isle of Man a way forward.

We welcome Minister Shimmin's statement in Tynwald (16.10.12) that he believes the Mott MacDonald Report and the AEA Technology Report show that achieving 15% of electricity through renewables by 2015 "is feasible", and that he "remains optimistic".

We further welcome Chief Minister Bell's statement on Manx Radio (21.10.12) that he believes that "We must reduce our carbon emissions. We are committed to doing everything possible to achieve this." We therefore look forward to seeing him take the lead in sourcing renewable energy and promoting energy saving initiatives.

The Government has a duty to the public to address renewable energy initiatives with the same vigour it applies to, for example, perceived threats to the financial services sector: the damaging consequences of inaction are equally, if not more serious.

IOM FOE would like to acknowledge the input of Peter Christian, Ian Costain and Cat Turner in the preparation of the Policy Statement published below.

1. The scientific reality of man made or anthropogenic climate change (ACC) is established beyond reasonable doubt (see ref \*) Policy makers must not be diverted into time consuming arguments with ACC deniers.

2. ACC is the single most dangerous and pressing threat to life on the planet. **All** nations have a responsibility to do what they can to reduce carbon emissions and reliance on fossil fuels.

3. The Government should urgently review the recommendations and financial modelling in the Mott McDonald & AEA reports. If no scientifically sound contrary evidence has been shown, then the Government should make a firm statement to that effect, and move forward on the reports' recommendations on practicable renewable energy.

4. We believe the following measures should be pursued:

- i) Re-invigorate the stalled commissioning process for a 20MW on-shore wind farm. On shore wind is the only practicable mature renewables technology capable of providing the desired level of electricity generation suited to the Island.

-electricity thus generated **will** be within acceptable price bands considering the continued increases in gas and oil.

-it will reduce reliance on imported fossil fuels.

-capital costs will be borne by the developer, NOT the public, so break-even timescales are not relevant.

We look to Tynwald to be bold and courageous in engaging public opinion and to have the vision to move beyond obstructive and sterile notions such as 'it wouldn't be popular'. We urge them to continue to implement the 15:15 Policy and in doing so they will be planning for the needs of future generations and leaving a better legacy for them.

- ii) Require the MEA to remove disincentives to micro generation.

- iii) Devise strategies to reduce space heating & energy consumption i.e:

-continue programme of enhanced public sector housing insulation.

-require higher insulation standards through building control regulations.

-promote public awareness and incentivise retro-fit domestic insulation.

-investigate electricity demand management.

**All interventions must not put unfair financial burdens on those least able to pay. In conjunction with this we must construct a locally relevant definition of fuel poverty.**

- iv) Use the planning system to encourage passive solar gain by appropriate orientation of new housing.

- v) In the medium term develop strategies and policies to establish the Island as a centre for R&D of other renewable energy technologies. This has huge potential but is **NOT** an alternative to taking urgent action on already available technologies.

(\*) Sample reference: Intergovernmental Panel on Climate Change, United Nations Environment Programme, Inter Agency Council.



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[www.foe.org.im](http://www.foe.org.im)

You can sign up for  
ZWM's:

**'Give Up Plastic  
Bags for Lent'**

campaign at the  
Green Centre, and  
collect a card you  
can show to check-  
out assistants.

**Campaigning for the Island's environment**

**Could you become a 'Street Buddy'?** *by Andrew Jessopp*

It's curious how so many people are prepared to volunteer to clean up other peoples' rubbish from beaches around the Island but seem to ignore litter etc outside their house or workplace.

Perhaps with the pressure on the Manx government to find money for front line health and education services now is not a good time for the public to expect taxes to be spent on paying government workers to pick up litter or clear away other discarded material.

Admittedly prisoners or people on community service could be made to undertake this work, but there would still be the cost of paying someone to supervise them.

So surely it would be far better if this 'service' was provided totally free of charge by local residents, some of whom after all must be the ones who left the litter in the first place.

It would only take a small dose of civic pride by a community to have a disproportionately beneficial effect on the appearance of the neighbourhood relative to the amount of effort it would take to sweep the pavement once in a while.

So why not club together with some of your work colleagues or neighbours and see how quickly you can help improve the appearance and cleanliness of our Island.

Footnote: ZWM would welcome individuals or groups seeking further advice to contact them and are also able to supply litter pickers.



The Green Centre Crew show how it's done

**Could you give up plastic bags for Lent?** *by Hilary Cairns ZWM*

How many people have made New Year resolutions and given up already? Well it's not too late for redemption. Very shortly it will be Lent, and a perfect time to redo those resolutions for a short time.

Lent 2013 begins on Wednesday, February 13 and ends on Saturday, March 30.

So what will we all be giving up, chocolate is the normal victim and we generally all give up something that will benefit us personally.

So here is another idea; what about giving up something that will help the environment?

Plastic bags use oil and it takes about 43 gallons of oil to produce 10,000 plastic bags!

Would we rather have oil or plastic? So even though you might think by not accepting a plastic bag it will not help, it does - and in lots of ways!

As easy as you all might be thinking, 'That's an easy thing to give up', think again; and I challenge everyone who reads

this to give it a try for Lent.

I tried it last year (and continue to this day not accepting bags) and it means I have to remember to take a bag with me every time I go out, as you don't actually realize how much stuff you buy on a daily basis.

Quite often the shop assistant has your purchases already in the plastic bag before you realise what has happened.

I have been in shops where I have stated quite clearly that I don't need a bag and before you know it, and as if by magic, the stuff you have bought is in a plastic bag.

At that point you either give up and accept the plastic bag



Why not take a reusable bag when you go shopping

or watch the queue behind you get longer while the shop assistant is made to remove the contents of the plastic bag and give them to you.

So to help you all Zero Waste Mann has FREE Morsbags to give away to anyone who will accept the challenge. These can be collected from the Green Centre and are made at the IOM Prison from recycled fabrics.

We would love to know how many bags you all save. Let us know at:

[info@zerowastemann.org](mailto:info@zerowastemann.org)

Take a look at the Morsbag website:

<http://www.morsbags.com>

And last of all don't worry if a plastic bag sneaks in; try again the next time you go shopping!

Footnote: The IOM Prisoners to date have made the grand total of 2,565 bags so we must have saved a few gallons of oil, so let's all do our bit for Mother Earth!