



Green Centre

GREEN CENTRE

We're always up for new ideas to promote recycling, clean energy, less consumption.

Douglas Corp is setting a good example—page 4

Businesses can save money too, a little planning may save you a lot of money, we welcome your ideas and experiences, so share with us.

Eco Vannin 1

Hydrogen fuel cell cars 2

Dark nights 3

Wild flowers area Nobles Park 4

April 2015

EcoVannin...by Cat Turner

ecovannin

Isle of Man *for future generations*

On March 3rd, after a long gestation period, EcoVannin was finally - finally! - launched. Those who've read past copies of the Green Centre Newsletter will remember that this is a partnership between IoM Friends of the Earth, Zero Waste Mann, Manx Energy Advice Centre, DED, DEFA and Manx Utilities. It aims to get real, practicable sustainability initiatives in action so that everyone on the island can get involved, and benefit. The launch event took place at the Barool Suite, and was spread over two sessions - one aimed at MHKs and heads of departments, and one aimed at the wider public and business. Both sessions were well attended.

It was great to finally have things off the ground, something which wouldn't have been possible without the help of a number of sponsors and supporters. In particular, the Manx Lottery Trust has funded two part-time co-ordinator roles, which Wendy Shimmin and Cat Turner have been appointed to - this is great news and the Steering Group is very grateful. On top of this, the Strand Group has made a significant donation, as have IoM Friends of the Earth, Manx Energy Advice and Zero Waste Mann; SITA has offered the use of its facilities for public presentations and events, and Webtech did a terrific job building us a website at very short notice indeed. You can find it here, at www.ecovannin.im - we're being trained on how to add more content, so it's worth checking back regularly for updates.

In the wake of the launch we've been flat out with follow-up meetings and the like, and we're planning to get the 8 workstreams up and running in the next few weeks. The plan is to have them hold their first meetings as soon as possible, so that they can agree, and start working towards, some quick and practicable 'wins' on which we can report back to our supporters.

The workstreams are:

- Business
- Energy
- Transport
- Education
- Media
- The Wider Environment
- Government Leading By Example
- Food

If you'd like to know more, contact the co-ordinators at ecovannin@gmail.com or look up our Facebook or Twitter feeds.

Are hydrogen fuel cell vehicles getting closer to reality? By George Fincher

Toyota has just launched a new fuel cell electric vehicle (FCEV), albeit only in Japan. The FCEV is known in Japan by the name Mirai, which means future in Japanese, an indication presumably that Toyota believes battery electric vehicles to be a short term solution until the hydrogen FCEV becomes dominant in the marketplace.

The FCEV market acceptance has been held back by cost and the lack of a hydrogen 'filling station' infrastructure. It does win, compared to battery electric vehicles, on range and time to refuel. Refuelling a FCEV is similar to filling a petrol vehicle.

The cost issue is due to the high cost of storing hydrogen and also to the high cost of the fuel cell itself (i.e. the bit of wizardry that converts the hydrogen into electric to drive the vehicle electric motors). Reducing the cost of fuel cells will help get the FCEV into mainstream vehicle production quicker. Toyota seem to have decided this is an important step to help it achieve FCEV mass market acceptance.

Toyota is therefore making more than 5600 hydrogen fuel cell patents available royalty-free, to accelerate the global development and introduction of innovative fuel cell technologies. The patents include technologies developed for the Mirai.

Toyota will invite royalty-free use of approximately 5680 fuel cell related patents it holds globally. The list includes approximately 1970 patents related to fuel cell stacks, 290 associated with high-pressure hydrogen tanks, 3350 related to fuel cell system software control, and 70 related to hydrogen production and supply. Toyota announced the initiative at this week's 2015 Consumer Electronics Show (CES) in Las Vegas.

This is a bold step for Toyota to take but it could help fuel cells become cheaper and more available. This will help FCEV's as is no doubt Toyota's aim, but fuel cells are an important technology in energy storage using hydrogen as the energy storage medium. The benefit of this boost to fuel cells may have a longer term benefit to the whole energy storage marketplace and that could be a game changer in the longer term in particular for renewable generation.

'The first-generation hydrogen fuel cell vehicles, launched between 2015 and 2020, will be critical, requiring a concerted effort and unconventional collaboration between automakers, government regulators, academia, and energy providers,' says Bob Carter, Senior Vice President of Automotive Operations at Toyota Motor Sales USA.

'By eliminating traditional corporate boundaries, we can speed the development of new technologies and move into the future of mobility more quickly, effectively, and economically,' he continues.

Toyota has previously opened up its intellectual property through collaboration, and was instrumental in facilitating the widespread adoption of hybrid vehicles by licensing related patents.

This announcement represents the first time that Toyota has made its patents available free of charge, and reflects the company's aggressive support for developing a hydrogen-based society.

Turn off the light and sleeping easy

NASA photo—light nighttimes;



Now we have put the clocks forward to British Summer Time, we can look forward to the warm summer evenings round the barbeque, the cool dark evenings are behind us. Many people are pleased to say good bye to the winter, it is the time associated with depression and darkness, but darkness is not all bad, and too much light can be harmful too.

In support of the dark nights of winter, I say it gives us a chance to rest and re-charge our energy, like a hibernating animal, uses winter to rest. Our Manx countryside uses the winter months to sleep, the leaves fall off the trees and are recycled into compost which helps new shoots grow in spring. Traditionally human communities gather the harvest in autumn, and, like squirrels stash nuts, we pickle and preserve our food to last the winter months when we conserve our own energy and rest more.

But in today's society this natural rhythm, which is in keeping with daylight and seasons, no longer holds true. We have television sets, computers, mobile phones, even our clocks and reading books now have background illumination. Our streets are lit up by street lights, shops, cars and houses. We don't have dark nights any more, there is always an amount of light in the background, whether or not we are conscious of it. People complain of insomnia and medicine is prescribed to help us sleep, but a study by the University of Quebec, funded by the National Institute of Mental Health, found that a change in behaviour is more effective than drugs in helping with sleeping problems. This and other research demonstrated that by not using the bedroom to watch TV, read, use computers, or phones; and to rise at the same time every day, helps people to sleep well, its better than taking drugs to aid sleep. This is in keeping with other research which suggests that exposure to light can affect the circadian clock.

We have evolved with the planet over the millennia and it is only in the last few generations of mankind that we have had streetlight, and lighting in our houses, now we have lighting in one form or another throughout our houses. But our bodies do not evolve as fast as our technological advances, there is a mis-match. A mis-match can create a stress and this may explain why so many people do experience sleep difficulties and why a change in lifestyle has been demonstrated to be more beneficial than popping pills. So by cutting our exposure to electrical gadgets we not only save money on electricity but we can improve our sleeping patterns and health too. Electricity may be cheap, but sleep is worth its weight in gold so to keep your gadgets on 24x7 may be a false economy.

**THE GREEN
CENTRE
YN LAARE
GHLASS**

Chester Street Complex
Chester Street
Douglas
IMI 2PG
(Opposite Iceland/Shoprite store)

Phone: 01624 666029

Email:

greencentre@manx.net

Opening Hours (Weds and
Sat Only)

10.00am - 2.00pm

(generally open on Sat until
4.00pm and sometimes even
later)

We're on the Web

www.zerowastemann.org

www.manxenergyadvicecen

tre.org

www.foe.org.im

Next Newsletter
due July 2015—
please let us know if
you've any feedback
on this one at
greencentre@manx.net!

Don't forget—we collect
printer cartridges for
recycling with Recycle
4 Charity? Last year
we raised £30 to help
Zero Waste Mann. We
can take Hewlett
Packard, Lexmark,
Canon, Neopost,
Samsung and Dell, but
NOT Epson or Kodak.

New Bee Friendly Wild Flower Gardens to be at Nobles Park



Following on from the success of the Isle of Man's EU Ruling to protect our local Manx Black Bee Isle of Man Friends of the Earth along with Isle of Man Bee Federation are sponsoring the planting of a bee friendly wild flower garden which will run parallel to Upper Dukes Road. The plan is to have an area the size of a tennis court but it will be split in two, roughly into two kidney shaped areas. Members of IOM FoE along with Douglas Corporation will be involved with helping to prepare the ground and spreading the seeds. The heavy work of preparing the ground will be done by Douglas Corporation which involves rotavating then IOM FoE members will be raking that area and spreading seeds followed by a gentle raking again.

Douglas Corporation are doing this after their very successful Green Flag area at Douglas Head, where they planted a couple of wild flower areas. Part of it was the planting out of wild flower beds which are very colourful and attractive.

The EU special status will stop importation of any bees to the Isle of Man, making us one of only three designated areas in Europe. However the Isle of Man Government has had a ban on bee importation and second hand equipment here since 1986.

For further information contact Isle of Man Friends of the Earth www.FoE.org.im if you want to get involved with bee keeping, here is a link to Isle of Man Bee Keepers who do courses on bee keeping once a year:- www.iombeekkeepers.com

Forthcoming events:

Composting workshop Community Farm 25 April 2015

Green Centre open every Saturday and Wednesday 10-2pm

EV users forum 18 April 2015