



As this is the time many folk are away and enjoying the outside world, or frantically harvesting their crops while battling weeds and wacky weather, or entertaining youngsters this holiday edition covers two months. It includes air quality, cycling, trees, hedgerows and turbines, tree wardens, energy from waste and solar power.

For all reading this online links to relevant online resources are in blue and underlined, just click on them to open the link.

For those of you that use Facebook we have set up a new Facebook page and we need you all to like it and start posting information to keep it engaging and useful for us all. The link to follow is www.facebook.com/The-Greenprint-Forum-360446547708214/. Don't forget we are also on Twitter @greenprintforum.

We wish a fond farewell to our intern Bethany Lamb, like Charlie Pike before her she has been a great help at events and in carrying out research for articles and areas of work that we would otherwise not have had time to progress. We wish her all the very best in her future career.

Research shows that older people, children, unborn babies and people with heart and lung diseases as well as those living and working in particular deprived areas with higher levels of air pollution are at greater risk from air pollution. Exposure to air pollution can reduce life expectancy, by increasing deaths from lung, heart and circulatory conditions, it is recognised as a contributing factor in the onset of heart disease and cancer and can reduce quality of life by exacerbating asthma, diabetes and cognitive decline.

In July 2017 the UK Government published [summary of efforts to date and its planned approach](#) for tackling [nitrogen dioxide](#) emissions. This included plans for a Clean Growth Plan in the autumn, a strategy on the pathway to zero emission transport for all road vehicles to be published by March 2018 and a wider Clean Air Strategy to be published at some point in 2018. You may have noted the proposal for all diesel and petrol only cars and vans to be phased out by 2040 and the requirement for Local Authorities (like London, Birmingham and Derby), where EU levels are breached to draw up action plans by March 2018.

Suffolk Coastal District Council is pleased to report that nitrogen dioxide concentrations continue to fall in the revoked Felixstowe AQMA due to emissions reduction projects being undertaken by the Port of Felixstowe. These measures include the gradual switch of 54 of the 85 Rubber-Tyre Gantry Cranes, used to move containers, from diesel to electric-powered by 2020, with 38 installed to date and the gradual upgrade of internal movement vehicles and introduction of start/stop engine management systems. In addition 473,581 kWh was generated from the Ports eight PV installations.

The nitrogen dioxide levels within the Woodbridge Air Quality Management Area (AQMA) reduced in 2014 and 2015. As no improvement measures were on trial at that time it is thought that wetter, windier weather conditions resulting in dispersal of the pollutants were the most likely cause of this. Trials carried out to date have not identified any planned actions that would significantly reduce levels given the existing dominance of diesel and petrol vehicles on the road and a review of the current action plan is therefore underway. A consultation on the revised action plan will come out once this has been completed.

In 2014 an AQMA was declared for four residential properties within Long Row, Main Road (A12) in Stratford St Andrew and an action plan is now available for members of the public to comment on. Copies are held in Woodbridge and Felixstowe libraries or available [online](#).



**GREEN
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Toggam Farm Solar Farm Field Trip and Community Energy Meeting

Article based on notes taken by Bethany Lamb, picture by Oliver Kingwell



Solar power continues to grow. A [provisional estimate](#) on 27th July 2017 was that a further 3,125 installations were made in June 2017 bringing the UK to over 920,000 installs capable of generating up to a total of 12,536 MW each year. This is a very small yet important proportion of the 357 TWh of electricity supplied by all sources in the UK in 2016.

On the 10th July 2017 to celebrate community energy fortnight a group of community representatives and students visited Toggam Farm Solar Park as part of a tour organised by ÄlskaECO. At 12.45MW this is the largest council owned solar farm in the UK. It was purchased by Forest Heath District Council in 2016 for £14.5million and boasts 47,748 panels over 17.55 hectares with 189 miles of cabling (enough to stretch from the site to Swindon). The site saves on average 5,000 tonnes of carbon dioxide a year, which is the equivalent of running 3,000 homes and 2,000 cars. In the farm's first quarter it produced 4696MWh of electricity worth £490k. Revenue income of over £300,000 in year 1 is set to rise to £700,000 by year 10 and this forms a key part of the councils strategy to generating income to protect vital council services.

More information can be found on www.westsuffolk.gov.uk/environment/solarfarm.cfm

The group then discussed what action on renewables communities can take and are taking in the UK and Europe, the limitations and opportunities. Key further sources of information on these are:

- Funding: www.greensuffolk.org/at-work/funding/
- Things to think about and inspiration stations [CSE](#) and [PlanLoCal](#)
- Trailblazing work funded by Innovate UK: [Project SCENE](#), which will be home to Europe's largest community battery (2MWh) and to solar photovoltaics which will generate, store and distribute energy at a neighbourhood level, while also launching a unique energy company for residents



Turbines, Trees and Hedges



Between 2015 and 2016 although the average household electricity use went down overall electricity consumption increased marginally by [0.2 per cent](#). As vehicles and heating systems switch to electricity to reduce use of fossil fuels usage will increase. Without effective carbon capture and storage electricity needs to be generated using low carbon and renewable technologies to reduce our greenhouse gas emissions. One means of doing so is through offshore wind.

According to [RenewablesUK](#) the UK has been the world leader in offshore wind since October 2008, with more installed capacity than any other country due to our high wind speeds and large areas of relatively shallow coastal water. Indeed with 30 offshore windfarms generating over 5.1 GW of operational capacity the sector meets around 5% of annual electricity demand and this is expected to grow to 10% by 2020. For an interactive map go to: [The Crown Estate](#)

Offshore Wind is seen as a key component of the [East of England Energy Zone](#). Some of the world's biggest wind farms are being built a few miles off our coast including [East Anglia Array](#), Dudgeon, Race Bank and Galloper while other UK Round 3 developments, Dogger and Hornsea, are accessible from our deep-water harbours.

The East Anglia Array has three projects, project one is currently under constructions and represents a £2.5 billion investment by Scottish Power. It consists of up to 102 Siemens wind turbines and foundations, each rated at 7 megawatts. This gives an overall generating capacity of up to 714 megawatts. Project three was granted planning permission from the Secretary of State for Business, Energy and Industrial Strategy (BEIS), Greg Clark MP in July 2017. Project two is in development and information is due to reach the public domain this Autumn.

As many living in Suffolk Coastal know project one include ducts and undergrounding of up to six onshore cables, each at 37 kilometres in length and the construction of a converter station at Bramford. You can see the route on [The East Angle Spring Edition](#). This cable route has been planned in great detail over the last 5-6 years, starting with a detailed hedgerow, tree and woodland survey. Scottish Power/Iberdrola have a permanent environmental consultant attached to the project and they are also required to retain an arboricultural clerk of works to oversee tree/hedge protection fencing, and all tree works.

Key important woodlands will have horizontal direct drilling under them, key trees have had the cables and ducting routed around them, and the highest category hedges will be drilled under. The lowest category hedges will be cleared and replanted on a site by site species specific planting basis. Some alternative options may be used such as, for the haul road, coppicing hedges, burying them in wood chip and ground mats for the duration, and then uncovering them to regenerate. Also to coppice hedges, dig up the stools and storing them and replanting when the site is clear. Both of these options will depend on timing and time of year. Where trees and hedges are felled, all material is being chipped and stored for re-use as mulch for new planting. This will avoid trucking waste out and importing new mulch in, and will also help to retain localised soil fungi. Nick Newton and the cable team have managed to save a couple of ancient oak pollards in Bealings and all are keen to make these gains where they can. There have been a few extra hedge and tree losses to achieve highway visibility splays that were not fully foreseen at the planning stage, but these will be fully replaced. Replanting is unlikely to occur before Autumn 2018, but will be full and comprehensive, and locally specific.

**If any tree wardens affected by the cable route have concerns they should contact
nick.newton@eastsuffolk.gov.uk.**



Growing Suffolk's Tree Wardens Together



The Friends of Parklands Wood, Ufford

We need to grow Suffolk Tree Wardens to help protect and enhance this valuable resource.

Trees are a connection to our past and a gift to those yet to come. The right tree, in the right place, managed effectively can contribute to our economy, our enjoyment of a landscape, land management, our diet and our health and wellbeing. Indeed a [study](#) looking at existing research highlights the role of carefully placed trees (particularly hedges) in the deposition and removal of airborne pollutants. Trees also provide a vital habitat, shelter and food source for wildlife.

Harris, Harris and James in *Oak a British History* note that management and use of trees as a food and wood source in Britain has been occurring since colonisation from Europe (approx. 10,000 years ago). Coppicing dates back to over 5000 years. Selection of trees to grow to suit the livestock requirement (ash and elm are palatable for livestock, oak leaves contain too much tannin) and for timber has been occurring at least since biblical times. So our relationship is a long one.

This makes it all the more important for all with suitable land (not heathland or land precious for other reasons) to understand the trees and hedges currently there, their value, the threats to them (diseases, land use changes, storms) and how best to manage them, replace them if necessary and plant all with an eye for the future as well as the past. As not all have the time, inclination or skills it helps to connect those that do so that they can share their knowledge, inspire each other and overcome challenges and develop projects together which will improve our tree stock overall.

This is what the [Tree Council](#) is all about and as local authority resources become ever more stretched it is the reason passionate volunteers from Suffolk are forming a Countywide Tree Warden network. The first step for this group is to publicise the East Anglian Tree Warden Forum on 30 September at Cockfield, Suffolk which is open to new or existing tree wardens only and will cover: Trees, their values and the Tree Charter involving communities in valuing trees, tree wardens in action and Treezilla. A site visit is included. If you are a Tree Warden and have not yet received an invitation or would like to be one please contact **Frances Jannaway ideally by email francesjannaway@gmail.com** or by calling 01379 672987.

Indeed the next step for the group, which will take time, is to create a database with contact details for all Tree Wardens and all Towns and Parishes in Suffolk who do not have one yet but would like to appoint one. Experience shows that Tree wardens who serve on Parish Councils, or who are appointed by them, are in a stronger position to carry out their duties.



Give and Take

Whitton Lodge Residents Centre Greenprint Forum Give and Take day saw over 200 members of the public donating and taking items thereby keeping them out of the waste stream and hopefully saving some local folk money as well as saving resources. Thanks go to [East Anglian Children's Hospice](#), the [Benjamin Foundation](#), [Suffolk Coastal](#) and [Waveney Norse](#), [Suffolk County Council](#), [Waveney District Council](#) and [Whitton Residents Hall](#) for supporting this event.

You can run your own Give and Take days to raise awareness of the benefits of reuse over waste management. A handy guide can be found on the [Green Suffolk Website](#).

Redesigning Plastics

The Ellen MacArthur Foundation and World's Largest Lesson have recently launched a new lesson plan [Redesigning Plastics](#). This covers two 45 minute lessons, aimed at those who are 12 year or older, that introduce key facts about the global plastics economy and explore how it might be redesigned through innovation and circular economy thinking.

The lesson plan is part of a wider campaign which includes the recently launched New [Plastics Economy Innovation Prize](#). This \$2 million prize calls for innovators, designers, scientists and entrepreneurs to help create packaging that keeps plastics out of the ocean. The Challenge is open to all individuals over the age of 18 and to all validly formed legal entities.

Energy from Waste Visit

Article created from notes taken by Bethany Lamb



On the 26th July 2017 15 community representatives, students and individuals visited the Suffolk energy-from-waste facility. This facility processes waste from Suffolk left over after the recycling process – the aim is to recover energy under carefully controlled and monitored conditions. The site, procured in 2008, generates enough electricity to power 30,000 homes and injects £1million into the local economy each year. After 25 years the facility will have saved Suffolk County Council £350 million in costs associated with sending waste to landfill.

The facility itself was designed by Grimshaw architects – the same company responsible for the Eden Project – during the tour it is apparent where similar techniques have been employed to ensure maximum building efficiency. Consequently it is one of the 'greenest' buildings in the country. More information can be found on www.greensuffolk.org/recycling/where-it-goes/energy-from-waste/

Key take home: don't put electrical items in your rubbish bin as this causes spikes in emissions at the facility. Go to www.greensuffolk.org/recycling/a-z-of-recycling to find out what goes where.

Recycling Centre wins Award!

In case you missed the news: Foxhall Recycling Centre won the 'Best Civic Amenity Site of the year' at the 2017 Excellence in Recycling and Waste Management Awards. These national awards recognise innovation, dedication and success within the waste and recycling industries. The Foxhall site is working in partnership with The Benjamin Foundation charity to run [a Re-use Shop](#) at the site. In the first year around 45,000 items, that would otherwise have been thrown away, have been collected at Recycling Centres and sold in the shop, in aid of the charity. Well done to all the hard working staff who have made this possible!

Trader reminder from the Suffolk Waste Partnership

To keep within the law (specifically the Environmental Protection Act (1990)) traders need to take all reasonable steps to store and dispose of waste safely and have evidence (in the form of trade waste notes and their own waste carriers license) to show that they have. To help small businesses and travelling tradesmen who may not have the resource or the volume of waste to justify a commercial collection Suffolk's Household Waste Recycling Centres also accept trade waste at a charge. Just declare it on arrival and staff will sort out the paper work.

www.greensuffolk.org/recycling/HWRCtrade/

Drink and eat your Harvest

It remains the height of fashion to go old school and make the most of your harvest. Juice your fruit to make wine, cider or cordial; bottle it or dry it. If you have a small amount of fruit you can just deal with it in your own kitchen but if you want to get together with friends and make the most of a glut in your neighbourhood you can borrow WALGA's equipment. There is a small charge to cover insurance and repair and replacement. Borrowers who make an individual charge for their event will be asked to pay a proportion of their takings in addition to the basic hire charge.



Go to www.onesuffolk.co.uk/communitygroups to find out more.

If you are new to the world of juicing and preserving you can borrow a few relevant books from [Suffolk Libraries](#) (just go [online](#) and book them via the online system and get them delivered to a library you can get to). You can choose from: Thane Prince's jams & chutneys : over 150 recipes for preserving the harvest, No dig organic home & garden : grow, cook, use & store your harvest and Wild food : nature's harvest : gathering, cooking, preserving.

Active Travel

[Sustrans](#) have found increasing evidence that walking and cycling can play a significant role in optimising the contribution of transport to economic performance. They have recently launched a [free toolbox](#) to help local authorities and their partners make the case for, and improve walking and cycling schemes. The greatest benefits unsurprisingly come from interventions in urban areas, town/village high streets and the creation of long distance cycle routes.



[Research](#) by Sustrans indicates that women and over 55's cycle less. In Suffolk there are groups dedicated to helping people overcome barriers to cycling. Some of the groups are:

www.wowsuffolk.org.uk

sandlingsafercyclingcampaign.onesuffolk.net/

www.facebook.com/cyclefelixtowe/

www.bikeactive.org.uk

[Halesworth](#)