

# **Energy Matters**

The energy and sustainability service's newsletter Issue 47 May 2020

## Continued service in these strange times

We are living through strange, challenging and unprecedented times. Many working from home, most schools closed and those that are open for a limited number of pupils, home schooling, furloughed staff, self-isolation, illness and for some, very sadly, death and grief. The anxiety levels for our children and young people are high. Sometimes when everything is up in the air, full of uncertainty, some small piece of normality is key. At the Energy & Sustainability Service we are endeavouring to continue as normal and deliver our services. Many are already delivered remotely such as billing queries and heating controls, others like DECs and the schools' carbon reduction services are having to change their approaches. Details of how we are doing this are featured in this term's Energy Matters. In the spirit of 'hoping for the best and planning for the worst' we are hoping schools will be back to normal soon and are planning for this as well as it not being the case. We will keep you posted but in the meantime stay safe and well.

## From all of the Energy Team

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## New gas contract

Our current gas supply contract ends on 31<sup>st</sup> March 2021, and in collaboration with our purchasing partner Yorkshire Purchasing Organisation, the Energy and sustainability traded service have procured a new contract. The good news is that this is with Corona Energy, our current suppliers, so there will be no change to any existing arrangements.

## How to get hold of your bills

During these extraordinary times, you may not be able to access your billing address to pick up copies of your energy and water bills; however these bills should still be paid on time. To assist you, bills from all our suppliers can be obtained electronically.

#### **Electricity**

Contact our account manager, Mark, if you want your bills to be sent to you by email: <a href="mailto:YPO@npower.com">YPO@npower.com</a>

#### Gas

Copy bills can be downloaded from Corona Energy's web portal, MyCorona: https://mycorona.coronaenergy.co.uk/Account/Logon?ReturnUrl=%2f

Contact Dominic at the Corona YPO Team <a href="mailto:Coronaenergy.co.uk">CoronaYPOTeam@coronaenergy.co.uk</a> if you need help logging on.

#### Water

Bills can be downloaded from Business Stream's web portal, My Business Stream: <a href="https://www.business-stream.co.uk/my-account/">https://www.business-stream.co.uk/my-account/</a>

Contact Charlotte at Key.Customer@business-stream.co.uk if you need help logging on.

## Meter readings during lockdown

During lockdown, our suppliers are unable to take manual meter readings. And while many schools have Automatic Meter Reading (AMR) meters fitted, these are not 100% reliable and if one should develop a fault the suppliers will need to estimate your bills. Therefore, we ask that if you are able to do so, you continue to **read your energy meters on the last working day of the month, and enter the readings into SystemsLink immediately**. Readings entered after midday on the first of the month, have missed the supplier's cut-off deadline and will not be used when producing your bill, so if you can't do it on the last day then do it earlier rather than later.

If you have lost the log-on details for SystemsLink or experience any problems, please email <a href="mailto:energy.team@northyorks.gov.uk">energy.team@northyorks.gov.uk</a> for help.

Water bills: Our water supplier is not able to read your meters during lock-down, so they will estimate your bills based on past consumption. **If your school is completely closed**, please notify them by emailing Key Accounts Mailbox <a href="mailto:keyaccounts@business-stream.co.uk">keyaccounts@business-stream.co.uk</a> so that they can set your meter to "non-consuming" so that you don't pay for water that you haven't used.

## **Energy supply pricing for 2020/21**

Our purchasing partners, Yorkshire Purchasing Organisation (YPO) have provided the following information about energy supply prices for 2020/21.

## **Electricity**

A typical electricity bill under the framework is currently made up of 34% commodity, 65% non-commodity and 1% supplier margin.

## Commodity

The price of wholesale electricity prices has fallen in the last 12 months, although falls have been far less pronounced than Gas. The main drivers for electricity are as follows:

- Lower gas prices- On average around 50% of UKs electricity comes from gas fired power generation, therefore falling gas prices will put downwards pressure on electricity prices.
- Increase in renewable generation provides more supply.
- Carbon prices has prevented lower electricity prices, as non-renewable generators must pay more to produce electricity. However, Covid-19 has put some downward pressure on Carbon prices due to lower demand.

Through YPOs effective purchasing strategy and given that the basket is now 100% purchased, the wholesale element has fallen by 5% from 1st April 2020 compared to the current rates.

#### **Non-commodity**

Non commodity costs are expected to rise by around 10%, largely due to increases in the schemes that subsidise large renewable projects (Contracts for different and Renewable Obligations).

Overall customers can expect to see an increase in electricity prices from the 1<sup>st</sup> April of around 8%. Npower are currently going through the process of building the new rates.

## Gas

A typical gas bill under the framework is currently made up of 50% commodity, 49% non-commodity and 1% supplier Margin. The commodity part is the wholesale element which YPO purchases on the live markets through a flexible procurement strategy which manages the price risk. The supplier margin is part of the winning tenderers submission and is fixed for the framework duration. The non-commodity element is all the other charges, including network charges, metering charges, Government Taxes and levies, these charges are regulated by OFGEM.

#### Commodity

The price of wholesale gas has fallen over the past 12 months, the main drivers behind this decrease are as follows:

- 2018 and 2019 winters were both mild- This meant demand was not as high as expected.
- European Gas storage levels are at historic highs, peaked at 98% full in 2019. Storage levels are currently 15% higher than the same time last year.

- Record numbers of Liquid Natural Gas (LNG) cargoes continue to arrive at UK shores. 22 in total arrived during the month of March.
- Covid-19 has had a huge impact on Gas prices. With around half the world's population under some form of lockdown, demand for many commodities has fallen drastically.

Through YPOs effective purchasing strategy, the wholesale element is expected to fall by 14% from 1<sup>st</sup> April 2020 compared to the current rates.

## **Non-commodity**

Gas non-commodity charges are also expected to fall on the back of lower network charges for the period 1st April 2020-30th March 2021.

Overall, the majority of customers should see final billed gas rates fall by around 13% compared to what they are paying currently. Corona are currently going through the process of building the new rates.

#### Water

Water prices are set by the Wholesaler rather than by our supplier.

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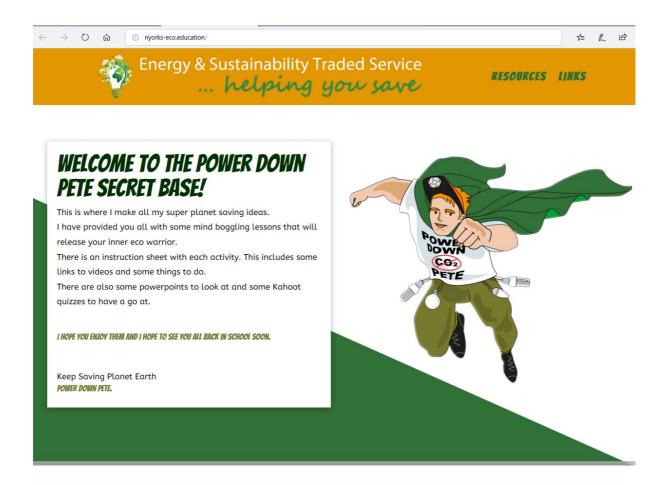
## **Cartoon Corner**



## **Power-Down Pete to the rescue!**

We are very aware that our very own super-hero, Power-Down Pete, can't visit children at the moment. So that they don't suffer from his absence, he has put together a website full of activities and videos for the kids to work through and play with. Just go to <a href="http://nyorks-eco.education/">http://nyorks-eco.education/</a> and start saving the world!

Please share this link with your pupils.



Power-down Pete is also on You Tube, just search "power down pete" to find out more about what the Energy and Sustainability team's Schools Carbon Reduction Officer can do for your school.

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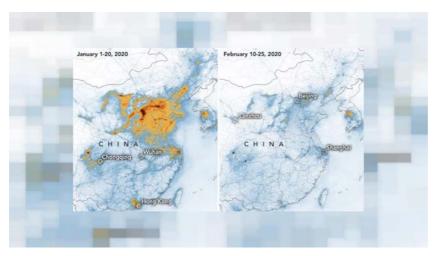
## Mission Emissions! A chance for a global reset?

It's not really appropriate to look for silver linings as the world pauses due to the Corona virus and sadly lives and jobs are lost; but perhaps it has highlighted how much economic activity in its current form and structure (fossil fuel dependent) could be changed for the better.

As we leave the car keys hanging up and turn on the web cam, can the virtual office team be a new norm? There are definite opportunities for the world to 'reset' and take a look at how we do things: the commute to work at certain set times; the endless traffic jams; the heating and lighting of huge offices and the increasing urban sprawl into previously natural and wild areas; the global interchange of people to attend international meetings; these are all things which we could address.

After the postponement of November's climate change summit in Glasgow, it is perhaps an opportunity to see how the pausing of global economic activity has reduced air pollution and carbon emissions and then give us an indication of how bold the world will have to be to meet emission reduction targets. Whilst no one would like to replicate the global shutdown, there are things we can take from this pandemic as simply a better way to do things.

Global emissions have reduced massively during the shutdown period. "In China, emissions fell 25% at the start of the year as people were instructed to stay at home. Coal use fell by 40% at China's six largest power plants since the last quarter of 2019. In Europe, satellite images show nitrogen dioxide (NO2) (mostly from vehicle emissions) fading away over northern Italy. A similar story is playing out in Spain and the UK."



Pollution levels in China

Transport pollution <u>which makes up 23% of global carbon emissions</u> has fallen with people staying in their homes cutting unnecessary travel. Driving and aviation are key contributors to global warming, <u>contributing 72% and 11% of the transport sector's greenhouse gas emissions respectively.</u><sup>1</sup>

Perhaps we just need to concentrate on the new – or old! - habits that are forming in the ways we do things. Certainly I have experienced a "make do and mend" attitude when I cannot just pop to the shops to pick up a new one – a throwback to the 1940s.

In 2018, Zurich University of Applied Sciences in Switzerland published a report <sup>2</sup> that found that when people were stopped from driving and given free e-bike access instead, they drove much less when they eventually got their car back. "Pedal cycles fitted with an electric motor and rechargeable battery pack could play a significant role in shifting our transport choice from cars to more environmentally friendly alternatives." "After one year, participants' habitual association with car use had weakened significantly.

While a study in 2001 at Kyoto University <sup>3</sup> found that when a motorway closed, forcing drivers to use public transport, the same thing happened when the road reopened, people who had formerly been committed drivers travelled by public transport more frequently.

Having just completed a skype conference with 58 colleagues it makes me think, why did we not do this sooner? Well in fact, for the past year the Energy and sustainability team have been using skype wherever possible and I was using "zoom" a year before that. I do hope this will become a new norm, as much as I like meeting up for a coffee with colleagues and managers!

The unprecedented actions we have all had to take have halted the fossil fuelled economic juggernaut that, in its current form, is damaging the earth with its associated emissions. Now is perhaps the time to make the required changes before we start its engines again. The final word goes to Prof *Mike Berners-Lee*, researcher and writer on carbon foot printing, and brother of Tim Berners-Lee whose internet invention we have all recently relied upon to connect us:

"Covid-19 is a re-evaluation and re-wiring opportunity. It won't be much fun but it does give humanity an enforced chance to stop and think."

#### References:

- 1. <a href="https://www.bbc.com/future/article/20200326-covid-19-the-impact-of-coronavirus-on-the-environment">https://www.bbc.com/future/article/20200326-covid-19-the-impact-of-coronavirus-on-the-environment</a>
- 2. https://iopscience.iop.org/article/10.1088/1748-9326/aaad73/pdf
- 3. https://journals.sagepub.com/doi/abs/10.1177/00139160121973241



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## Can your school help banish the evil Dr Freeze forever?

The energy and sustainability team have just completed a schools' pilot project around fuel poverty and staying warm and well this winter. In partnership with public health, Community First Yorkshire and the Yorkshire Energy Doctor, schools receive comics and workshops detailing how they and their families can stay warm and well and avoid becoming "zombie penguins". This is completely free to North Yorkshire schools and is delivered by our very own super hero Power down Pete.

North Yorkshire County Council's director of public health described our work as "inspirational" (below), and after the successful pilot the programme is now being rolled out to all schools across North Yorkshire. We would particularly like to engage with schools who serve a community where there may be families who need support and advice around the issues of fuel poverty and health next winter.

For further details please contact <a href="mailto:Peter.bell@northyorks.gov.uk">Peter.bell@northyorks.gov.uk</a>

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## Peter Bell

Tue, 21/01/2020 - 10:16

Its been a pleasure for the Energy and sustainability team to work in partnership with Warm & Well and public health. Using the "Zombie Penguins" kids comic concept to engage with the comunities through our school children, has been a great idea. Lets hope we can "Banish the evil Dr Freeze" forever!





② Like (1)



# new Lincoln Sargeant Tue, 21/01/2020 - 11:14

Peter, thanks for the inspirational work you and your team do. It makes such a difference to those who benefit as a result. Lincoln



reply ② Like (1)

## Pickhill Peaks in Eco excellence



Pickhill C of E Primary School recently became a member of an elite group of North Yorkshire schools when they received the coveted Eco-Schools green flag award. Eco-Schools is an international organisation which awards eco excellence through schools delivering environmental learning. Schools can choose to focus their efforts from a selection ten topics of environmental issues and delivering it through 7 steps. Many schools work their way through the bronze and silver awards, but applications to go for green flags have slowed in recent years. Pickhill school has bucked that trend and follows in the footstep of its Federated school Leeming and Londonderry, which was one of the first schools in North Yorkshire to receive a green flag over a decade ago.

To celebrate the award Power-Down Pete brought together the Yorkshire Rotters and councillor Patrick Mulligan to present the award during a "Green day" of environmental activities, where the children worked on a range of activities around food waste and energy efficiency. Councillor Mulligan, who presented the green flag, stated "environmental issues are of increasing concern to the local authority and its residents", whilst the Eco team leader Philippa Moss said "this year we have been focussing on creating a good, workable growing environment in our vegetable plots, fostering an understanding of Biodiversity in the garden and introducing the students to other cultures and their attitudes towards and the treatment of their unique environment."

Environmental education is vital for the young people of today, as they become the leaders of tomorrow. Eco-Schools empowers pupils, raises environmental awareness, improves the school environment and also creates financial savings for schools. It engages the wider local community, links to the curriculum and can help deliver Ofsted requirements.

David Attenborough said learning about nature should be "on a par" with lessons in maths and English in schools. "As our children's world is changing, our planet is also in increasing peril," "Climate change and habitat destruction are problems facing our generation and those of our children. In order to equip the next generation to face these problems, it is crucial that children grow up with an understanding and respect for our planet. Human beings depend on the natural world for everything. We are going to have to make increasing demands on people to care for the natural world. "He said teachers had "enormous power" to influence the thoughts and actions of their pupils. "Bringing nature into the classroom can kindle a fascination and passion for the diversity of life on earth and can motivate a sense of responsibility to safeguard it." https://www.theguardian.com/education/2011/jan/09/environment-lessons-as-important-as-maths-and-english-says-attenborough

The school's carbon reduction officers are fully supportive of the Eco schools programme and are both green flag assessors. They have worked with the national Eco-school's team for many years and continue to look at ways to support the schools across North Yorkshire in their efforts to put Environmental education at the heart of all schools. For more information, email <a href="mailto:energy.team@northyorks.gov.uk">energy.team@northyorks.gov.uk</a>.

# Provision of Display Energy Certificates (DECs) 2020-2021 during COVID-19

Following the unprecedented lock down and closure of schools, we wanted to keep you informed about the Energy and Sustainability Team's arrangements are for supplying your DEC(s).

The Government have confirmed that the delivery of energy performance certificates continues to be a statutory legal requirement and the legislation around DECs still needs to be adhered to. Therefore, please be assured we are still doing all the DEC preparation we normally do to ensure all schools remain

compliant for DECs. All DECs will continue to be issued as normal for all schools not requiring a site visit.

Display Energy Certificate
How efficiently is this building being used?

Certificate Nature of the Certificate Nature of t

We have been in contact with trading standards (the enforcement agency for DECs) to explain the unavoidable delay in issuing of DECS to some schools due to COVID-19. We are pleased to advise that you remain fully compliant with the regulations even if there is a delay in sending your new DEC.

We are adhering to the official advice and focussing on the importance of staying safe and protecting each other. We will therefore only be undertaking necessary site visits as and when it is safe to do so and with the agreement of schools.

When we are able to attend schools again we will be surveying multiple sites in one day in order to update outstanding DECs as quickly as possible. So if you can accommodate our requests for visits as flexibly as possible that would be of tremendous help in our efforts to catch up with our scheduled DEC programme following COVID-19

## Ten-year DEC? we've got it covered!

Smaller schools, and some schools with small buildings on campus (under 1000 square metres), have DECs than only need to be renewed every ten years. The legislation came into force in 2013 and the Energy and Sustainability Team completed DECs for all schools over the following couple of years, so these DECs will be coming up for renewal soon.

We would like you to know that you don't need to worry about your DEC expiring, as we have it in hand. We know when your DEC expires and will be in touch shortly before that date. If you take our Primary or Secondary Package, the price for renewing the DEC will be included in your package price for that year. If you don't take our package you can book an ad-hoc DEC from us. Alternatively, you can engage the services of another provider.

## What is a tree worth? From our home correspondent

Opinion piece by Vilnis Vesma, a former energy manager who has worked for many years as an independent consultant and provider of training in energy management

'We all know that trees are good and absorb carbon dioxide. But how good are they? Let's work it out...

Trees absorb carbon dioxide at different rates depending upon their age, species and other factors but as a rough order of magnitude you can say the figure for a typical tree is 10 kg per year. Meanwhile the carbon emissions associated with energy use are 0.2 kg per kWh for natural gas and (in the UK in 2018, including transmission losses) an average of 0.3 kg per kWh for electricity.

So 50.0 kWh of gas or about 33.3 kWh of electricity each generate the 10 kg of CO2 that a single tree can absorb in a year. Take that figure for electricity. As a year is 8760 hours, 33.3 kWh equates to a continuous load of only 3.8W. So one entire tree compensates for one broadband router, or an electric toothbrush, or a cordless phone, or a TV on standby (roughly).

And as for gas consumption: remember pilot lights? The little flame that burns continuously to ignite the main gas burner? If you had pilot flame with a rating of 100 watts, in the course of a year it would use 876 kWh and require no fewer than 17 trees to offset its CO2 emissions.

I like trees - don't get me wrong - by all means plant them for shade, wildlife habitat, fruit or aesthetic appearance. But when it comes to saving the planet I just think that given the choice between planting a tree and cutting my electricity demand by 3.8 watts I know what I would go for first.'

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## **Training and pupil events – Autumn 2020**

We are hoping for business as usual in the Autumn term but are also starting to put alternative plans in place, should it still not be possible to bring teachers and pupils together from different schools for training and events. We will keep you updated via Energy Matters, CYPS Info and NYES

#### How to Become a Successful Eco-School

Tuesday 13th October 9.30am-3.30pm, County Hall Northallerton, Beech Room (please meet in reception).

'How to Become a Successful Eco-School' training session is perfect for all schools, from those beginning their Eco-Schools journey to those hoping to reinvigorate eco-issues in their school. Led by a member of the National Eco Schools team, the course provides:

- Guidance on getting the most out of the Eco-Schools Seven Step process
- Advice for delivering the Eco-Schools programme whilst balancing other school commitments
- Practical project ideas for each of the ten Eco-Schools topics
- Advice on preparing for your Green Flag assessment visit

What teachers have said about our 'How to Become a Successful Eco-School,' training sessions:

"It gave me loads of ideas and I'm excited to share them with my Eco-Committee."

"The course was great, the trainer was very approachable, friendly and knowledgeable and enthusiastic with what he delivers. The content was really relevant and inspiring. It really helps that he has a very good understanding of schools, children, teaching and our workload."

"The training was terrific."

100% of teachers surveyed indicating they would now be likely to apply for an Eco-Schools Green Flag Award.

We have managed to secure a discounted rate of £100/ school for this training. To book your place, please book via your NYES account <a href="https://www.nyeducationservices.co.uk">www.nyeducationservices.co.uk</a>. Please contact NYES 01609 533 222 if you have any problems booking

For general enquiries about this training, please contact Ruth Stacey (Schools Carbon Reduction Office) <a href="mailto:ruth.stacey@northyorks.gov.uk">ruth.stacey@northyorks.gov.uk</a>

### **Pupil Farm Day**

Tuesday 20<sup>th</sup> October, 10am-2pm, Hazel Brow Farm Low Row, Richmond, DL11 6NE

Bring a group of up to 15 pupils, such as your School Council or eco committee to take part in an interactive day learning about where food comes from.

### Save the date

Healthy Schools Celebration – Wednesday 3<sup>rd</sup> November

Pupil energy event – Wednesday 18th November

## **Healthy Schools award training dates**

#### Overview

Spend time working towards your Healthy Schools award, network with other local schools and receive support from the Healthy Schools team. This term's training will be split into two sessions. AM sessions are aimed at new schools or those just starting out with the scheme. PM sessions will have a focus on



the 'Food in Schools' theme – developing a whole school food policy, healthy packed lunches, increasing free school and school meal uptake and improving the lunchtime experience.

The Healthy Schools scheme is funded by Public Health to enable all North Yorkshire schools, except Private schools who can join for a charge, to take part free until July 2021. These half day training dates are free for all North Yorkshire schools to attend, including academies, special and secondary schools. Private or out of County schools can attend for a charge of £75/ session.

## **Booking**

To book your place, please book via your NYES account <a href="https://www.nyeducationservices.co.uk">www.nyeducationservices.co.uk</a>

Any problems, please contact NYES 01609 533 222.

DATE	SESSION TIME	LOCATION	SESSION FOCUS
06/10/20	9.30am-12.00	Regen Centre, Riccall	Getting started & applying for an award
06/10/20	1pm-3.30pm	Regen Centre, Riccall	Food in Schools theme and general support
08/10/20	9.30am-12.00	Evolution Business Centre, Northallerton	Getting started & applying for an award
08/10/20	1pm-3.30pm	Evolution Business Centre, Northallerton	Food in Schools theme and general support
5/11/20	9.30am-12.00	Whitby area	Getting started & applying for an award
5/11/20	1pm-3.30pm	Falsgrave Community Centre, Scarborough	Food in Schools theme and general support
12/11/20	9.30am-12.00	Skipton area	Getting started & applying for an award
12/11/20	1pm-3.30pm	Skipton area	Food in Schools theme and general support

For general queries about the training, please email: <a href="mailto:healthyschools@northyorks.gov.uk">healthyschools@northyorks.gov.uk</a>

To register online to join the scheme go to: www.healthyschoolsnorthyorks.org