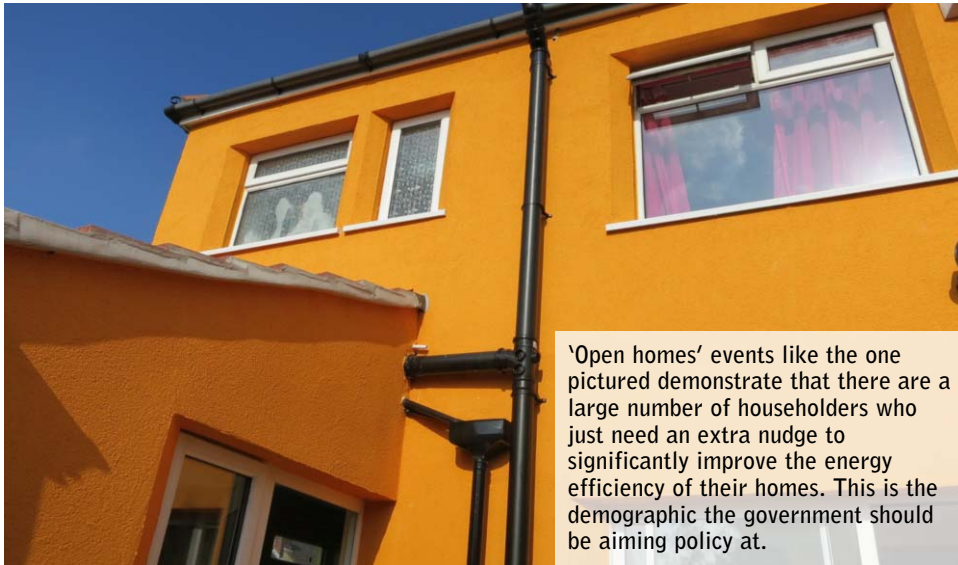




'Open homes' events like the one pictured demonstrate that there are a large number of householders who just need an extra nudge to significantly improve the energy efficiency of their homes. This is the demographic the government should be aiming policy at.

Want more energy efficient homes? Focus on the home owners 'ready and willing' to act

CSE responds to government's call for evidence on building home energy efficiency market

The government needs to update its perspective of what's stopping home owners from improving the energy performance of their homes.

And it should prioritise supporting more local initiatives to accelerate market development.

These are the main messages of CSE's response to the Department for Business, Energy and Industrial Strategy's Call for Evidence on Building a Market for Energy

Efficiency (www.bit.ly/2s3xWA0), which focused on the owner-occupier market.

Building on previous analysis by CSE, chief executive, Simon Roberts OBE, said: "The government's understanding of the barriers to action is based on surveys which typically include all types of owner-occupiers, rather than just those who are actively considering taking action. As a result, they have a misleading picture of what's stopping action and how effective different policies might be.

"One size doesn't fit all. The government should focus on understanding the characteristics and needs of those households who are ready and willing to act

– who just need one final nudge to persuade them to install insulation or buy solar panels, for example."

Our analysis of visitors to Green Open Homes events (www.greenopenhomes.net) provides a very clear picture of who these people are. And we reckon they require a very different type of policy intervention than those laid out in the Call for Evidence.

You can see our short response to the Call for Evidence at www.bit.ly/2x8N19g.

Simon concluded: "We hope that our response will encourage BEIS to take a more sophisticated look at this market and develop a better understanding of the home-owners who are most likely to be 'next to act'. This would drive new policy interventions and prioritise local action to accelerate the market."

We estimate there are over a million 'early adopter home-owners' who are ready to make significant energy efficiency improvements to their homes which they can fund themselves. But they won't act without a builder they can trust.

Our response to this consultation reiterated the insights in our 2017 presentation 'Do the next million first' (www.bit.ly/2tZUQrK). This proposed that policy should be focussed for now on 'early adopters' rather than the homeownership population as a whole.



Inside energise ...

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p4 Heritage or climate?



p5 Summer school for young environmentalists



p6 Wind power: No more cherry-picked factoids, please



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Meet the Substation 7



OpenLV

▲ Bath and West Community Energy

From shifting power demand times to developing local tariffs, and from increasing the take up of solar PV to exploring battery storage, seven pilot community projects are planning to make novel use of electricity substation data



Seven community groups have been selected as part of a ground-breaking trial that will provide access to open data on local electricity networks – specifically electricity consumption data from small substations.

The winning ideas could have a real impact on the future of local networks while providing benefits to people living nearby.

See box, right, for a brief overview of each successful application. Or for a bit more detail, see the write up at www.cse.org.uk/news/view/223.

OpenLV is a Network Innovation Competition project led by Western Power Distribution and EA Technology.

It is making live data from local electricity networks available for socially beneficial uses for the first time - not just to community groups but also to selected businesses and academic institutions.

CSE's Bridget Newbery is managing the communities aspect of OpenLV and helped pick the winning seven groups. "There are a lot of great ideas out there," she said. "The projects we've selected cover a variety of applications from micro-grid development to making the best use of new tariffs, and from awareness raising to demand management."

www.openLV.net

The seven groups whose ideas are being trialled ...

Marshfield Energy Group will develop an app to allow local people to see real-time energy demand and grid carbon intensity, and adjust their use accordingly. Data will also be used for exploring the possibility of time-of-use tariffs, and for the expected increase in electric vehicle use.

Bath & West Community Energy will use OpenLV data to develop a demand management app to enable homeowners to adapt their energy use and encourage the take up of battery storage and solar PV.

Tamar Energy Community's project will centre around awareness raising, changing energy use behaviour, and the development of local tariff models.

Rooftop Housing Group will trial an app on a housing development in Cheltenham that will give residents access to their community's real-time electricity demand, with the intention of

raising awareness and changing energy use behaviour.

WHG Housing Association will develop an app for use in a single tower block that will help drive forward an electric heating retrofit project and help residents make the most of a new tariff that rewards off-peak electricity consumption.

Exeter Community Energy Ltd will develop an app to show local users energy use at substation level, data on local generation from assets owned by the group, and information about national grid carbon intensity.

Owen Square Community Energy will use substation data to promote take up of low carbon technologies by local households and match up solar PV and heat pump installations in a way that optimises the output of the local low voltage network.



All this from a humble substation

"We can do more to make community energy more inclusive"

Harriet Sansom recently authored a report that looked at how more lower-income communities could benefit from local energy projects. It's an issue close to CSE's heart. Here she explains how moving community energy out of its middle-income niche might be achieved ...

In low-income neighbourhoods, community energy activities rarely emerge directly from the grassroots – that is, from residents coming together to start a initiative, be it a solar project, a collective buying scheme or similar.

Instead, it is normally intermediary organisations – often very local ones, deeply embedded in the community and with paid staff – who are the catalyst for this activity.

The contrast with more affluent areas is significant. Here, the greater levels of skills and resources – including money and time – mean that these communities can more easily develop their own energy projects, often quite complex ones involving considerable amounts of cash and taking several years to come to fruition.

It was mainly these kinds of groups, rich in community-level capacity, who were ready and able to take advantage of the policies and subsidies which

ushered in a 'golden era' of community energy schemes from 2008 to 2016.

Similarly, even where support programmes such as the Urban Community Energy fund and Green Open Homes* were in place and specifically designed to encourage community energy, it was those community groups

* See www.cse.org.uk/ucef and www.greenopenhomes.net



Energise Barnsley has installed solar panels on over 300 council owned homes, 75% of whose tenants are elderly and a quarter of which have pre-payment meters.



Harriet Sansom is a project manager in CSE's Local and Community Empowerment Team.

with organisational capacity and awareness who were able to take advantage.

None of this is to say that there aren't community energy initiatives in low-income areas – our report lists a dozen great examples. But it does mean that a different approach is needed to make community energy more attractive in low-income communities.

And this is why Rachel Coxoon, our Head of Local & Community Empowerment, has been spearheading the development of action research projects like Powering Up (www.cse.org.uk/powering-up) in low-income areas, so we can develop and test new

approaches.

I believe the first step is to make community-based organisations and businesses more aware of the range of benefits community energy activities can bring. The community energy sector has an important role in this communication. And in parallel to this, support programmes need to be designed so that dedicated capacity is directed towards low-income communities.

There are two good conduits for this support. The first is community development and

"A different approach is needed to make community energy more attractive in low income communities."

regeneration organisations who are well placed to ensure that projects address local priorities and build long-term social capital. They are embedded in, and trusted by, the local community, so are better able to engage residents than outsiders, and are also able to counter the idea that low-income areas have "bigger things to worry about" than local energy. And the second is local community businesses who are invested in the vibrancy and success of their neighbourhoods, which community energy initiatives can help build.



The report 'Bringing local energy benefits to deprived communities' was funded by the Barrow Cadbury Trust. Download it from www.cse.org.uk/news/view/2237

New local energy website

We're in the process of building a new website to bring together various strands of our local energy work. At the moment this is dispersed around the internet with various sites including www.cse.org.uk/thesource, www.cse.org.uk and www.planlocal.org.uk (right).



The plan is to launch the new site in the summer, so watch this space ...

In the meantime, you can stay in touch with the work of CSE's local energy team by signing up to our community energy newsletter at www.cse.org.uk/projects/view/1262#Newsletter

Sustainable energy and heritage buildings

Report for Historic England seeks to join up the policy-making process

A study we authored has been published by Historic England. Written principally for the benefit of local authority officers it covers the issue of policy-making within the context of sustainable energy and heritage assets.

It takes the serious form of a Conservation Research Report, but the subject is far from dry. At its heart is the issue of how to protect historic buildings while at the same time reducing carbon emissions and allowing people to make their homes warmer and cheaper to heat: a dilemma faced by every local authority in the country.

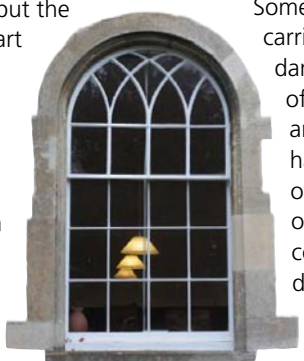
"Naturally, conservation officers tend to be experts in heritage and conservation legislation and policy," said CSE's Martin Holley who manages our work with Historic England and other conservation bodies.

"But they may have only limited knowledge of the local authority's wider statutory duties, such as those relating to

climate change, energy and housing.

"Similarly, council staff in the housing or sustainability departments probably don't have a good understanding of planning and conservation legislation, or have the skills to really assess what makes a building historically significant, so when they propose measures to improve energy efficiency, they're not necessarily taking into account the specific heritage values of the building."

It's clear, therefore, that there are tensions across local authority statutory duties, and that these play out on the ground in daily decision-making. There is a danger that one legislative responsibility overshadows the other, so local authorities may under-perform in some of their duties or give contradictory advice to the public when asked for advice on improving energy efficiency.



Sometimes this leads to work being carried out that irreversibly damages the historic significance of a particular building, or even an entire street. On the other hand, there are many examples of energy efficiency works to older buildings being refused consent, leaving residents dealing with cold homes and high bills, but with no support for finding an appropriate alternative solution.

"What this means," said Martin, "is that a joined-up approach between different council departments – principally housing, planning, conservation and sustainability – is necessary, and that is what our report provides."

If you make an old building more energy efficient – by replacing windows, for example – what happens to its historical significance?

Download 'The Sustainable Use of Energy in Traditional Dwellings: Legislation, Policy and Decision Making' from www.cse.org.uk/news/view/2212

CSE supports campaign to close cold homes loophole

We're backing a demand spearheaded by climate change charity 10:10 to close the loophole that allows private rented sector landlords to duck their obligations to make their homes warmer. The campaign was launched in October.

Government regulations require landlords of poorly insulated properties to upgrade them in order to make life more comfortable for their tenants, reduce their fuel costs and cut carbon emissions. Homes rated in EPC bands F and G (e.g. the coldest) must be brought up to band E.

However, an exemption exists allowing landlords to not undertake this work if it will cost them money – which it almost certainly will since government energy efficiency schemes to fund such improvements have mostly closed or been significantly scaled down.

"As long as this loophole is open, the hardest to heat homes in the UK will be left uninsulated," said CSE's chief executive, Simon Roberts.

"It's time the government started worrying less about property owners and more about society's most vulnerable people.

"We're talking about 300,000 homes, here – that's at least 600,000 people. Between them, they'll spend an additional and unnecessary £1bn over the next five years unless the buildings they live in are brought up to band E.

"And it's not just the money. Living in a cold home is bad for your physical and mental health, it damages children's educational development and it's downright miserable.

"If the exemption is there, landlords will apply for it. This is why we support 10:10's campaign."

Read more and support the cold homes campaign at www.bit.ly/2kuI9ls





To download these free documents, or find out more about CSE's low carbon neighbourhood planning work including the support we offer, go to www.cse.org.uk/projects/view/1343.

This edition of the Low Carbon Neighbourhood Planning guidebook and our work to support neighbourhood planning groups is being funded by the Esmée Fairbairn Foundation.



NEW

Low carbon neighbourhood planning guidance



The new and updated edition of our popular Low Carbon Neighbourhood Planning guidebook is out now. The guide was written to help community groups develop a positive and ambitious neighbourhood plan, and includes a foreword by Hugh Ellis of the Town and Country Planning Association.

Neighbourhood plans are officially recognised by the planning system and provide a legally robust opportunity for communities to produce positive and ambitious sustainable energy plans.

CSE's Dan Stone said: "Society faces significant challenges relating to our communities, economy, health, and environment. A neighbourhood plan that looks at our immediate surroundings through a low-carbon lens offers a unique opportunity to set out a positive and ambitious vision for the future and increase the community's resilience in the face of these challenges."

The guidebook is part of a programme of support we offer to neighbourhood planning groups. This also includes self-assessments – one rural, one urban – to help planning groups rate their draft neighbourhood plans and see how they perform in terms of climate change and sustainability, and where they can be improved.

"We're helping a large number of neighbourhood planning groups to include a strategy for energy transition in their plans," said Dan. "And we're keen to do more, so get in touch!"

You can contact Dan on neighbourhoodplanning@cse.org.uk.

"Don't water down climate policy"

This Spring, CSE trustee Peter Ellis wrote an opinion piece on our website in which he expressed concern – which CSE shares – that climate policy was going to be significantly watered down in the proposed new planning framework.

The government had just published its proposed revisions to the National Planning Policy Framework (NPPF) and what Peter observed was the distinct weakening of any climate-friendly policy.

"Gone is the inspiring rallying

cry that 'planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions'," said Peter. "And gone, too, is the requirement for local councils to adopt proactive strategies in line with the Climate Change Act 2008."

"The explicit support for energy efficiency improvements to existing buildings has also been dropped. No good – or indeed, any – reason has been given for these changes."

"The NPPF sets out the government's planning policies for England and its overall vision for the planning system. It's where the priorities are laid down for how our towns and cities will change over time, for how we provide enough affordable homes and for our

stewardship of the environment.

"What goes into the NPPF in turn informs the planning policies and planning decisions of local councils, so it directly and quickly affects us all."

The government launched a consultation (now closed) on its proposed revisions, to which both Peter Ellis and Dan Stone, CSE's in-house planner, responded.

"Sadly, the government has missed the opportunity to set planning an ambitious agenda for cutting carbon" said Peter. "But if enough of us say 'not good enough' then perhaps the government will listen."

Download both consultation responses on
www.cse.org.uk/news/view/2229



Peter Ellis joined CSE's trustees in June 2014. He's an experienced town planner, used to engaging at the highest levels of government, and with leaders of business and the third sector. He was also a member of the Energy Minister's Renewables Advisory Board.

Bright Green Future: 2018 applications open

Do you know a young person who is passionate about the environment? Bright Green Future is an environmental leadership programme for 14-17 year olds who want to create a more sustainable future for our planet, learn about climate change and environmental protection, gain confidence and meet like-minded people.

The Bright Green Future programme is made up of four main elements: training, a local project, work placement and a short residential summer school. Each young person on the programme is assigned a mentor to help them find a work placement and organise their project.

Applications for Bright Green Future are now open. For more details, download the guidance document from Join Us page of the website: www.bright-green-future.org.uk/join

This is the third year that the programme has run, and the comments we've been getting back from young people on the programme are very positive ...

"Being a part of Bright Green Future has opened up my eyes to the world"
LISA, 2017

"I've learned so much that I wouldn't have anywhere else, including at school."
HESHAN, 2016



Bright Green Future urges young people to step up, be heard and take action ...



Participants also got the chance to do some more outdoorsy things including walks around the reserve, a bushcraft course and plenty of marshmallow toasting.

A fantastic four days was had by all and there were many fond farewells (and even some tears!) at Bristol Temple Meads station as the participants headed home.

"Bright Green Future is all about inspiring young people to get involved in creating a more sustainable future" said Roy (below). "The fact that summer school was so well received has given us hope that we've achieved that in our own small way.

"All our participants were fantastic and we were so impressed with their enthusiasm, knowledge and ideas."

"A fantastic four days": Summer camp on Folly Farm

Teenagers from across the UK travelled to Folly Farm Nature Reserve in Bristol last summer to take part in the first Bright Green Future summer camp. This four-day residential camp was the grand finale of a year spent on the Bright Green Future programme – attending workshops and webinars, running local projects and doing work placements.

The summer camp was led by CSE's Roy Kareem and involved speakers from the Town and Country Planning Association, Protestival, the Houses of Parliament and South Gloucestershire Council amongst others.



Project leader, Roy Kareem

Common Concerns About Wind Power: 2nd edition published

A new and expanded version of our hugely popular book *Common Concerns about Wind Power* is available.

The second edition is more detailed than the first, with over 120 pages and 16 chapters covering specific subjects such as energy payback times, materials consumption, subsidies, intermittency, offshore wind, public acceptance, property prices, effects on wildlife, safety, shadow flicker, noise and radar.

Each chapter is backed up by dozens of peer-reviewed papers as well as a significant number of government studies.

Since the first edition was written, much has changed in the legal, economic and political sphere. However, the demand for accurate, balanced and factual information to counter the many misconceptions about wind power is as strong as ever.

Simon Roberts, CSE's chief executive explains: "Even though the government has withdrawn support for onshore wind, it is - according to the government's own figures - the cheapest form of low carbon electricity generation. So it's important that public discourse and policy decisions about this important technology are well-informed and draw on a wide range of high quality evidence rather than cherry-picked factoids to suit a line of argument - either in favour of wind turbines or against."

Rachel Coxoon, CSE's Head of Local & Community Empowerment said: "What this

document aims to show is that, implemented as part of a progressive energy portfolio, wind power can significantly reduce both the UK's carbon footprint and its dependence on fuel sources that may become less secure in the future or that leave a costly and hazardous legacy for future generations."

"However, wind power is not appropriate everywhere and can impact communities in different ways. We hope that, by publishing this research, communities themselves will engage constructively with the best available evidence to judge if there is a place for wind turbines in their own locality."

Over 10,000 print copies of the first edition were distributed and over 60,000 digital versions downloaded - the most popular document on our site to date.

Download *Common Concerns about Wind Power* (2nd edition) from www.cse.org.uk/common-concerns-wind

Dramatic reduction in offshore wind costs ... and nuclear myth-making

Back in September 2017, the sustainable energy world was in a state of satisfied shock following the news that offshore windfarm energy-generating costs had fallen faster than even the most optimistic forecasts.

As reported across the media the cost of subsidies for new offshore windfarms fell to £57.50 per megawatt hour (MWh) for plant coming on stream in 2022-23 - half of what it was in 2015.

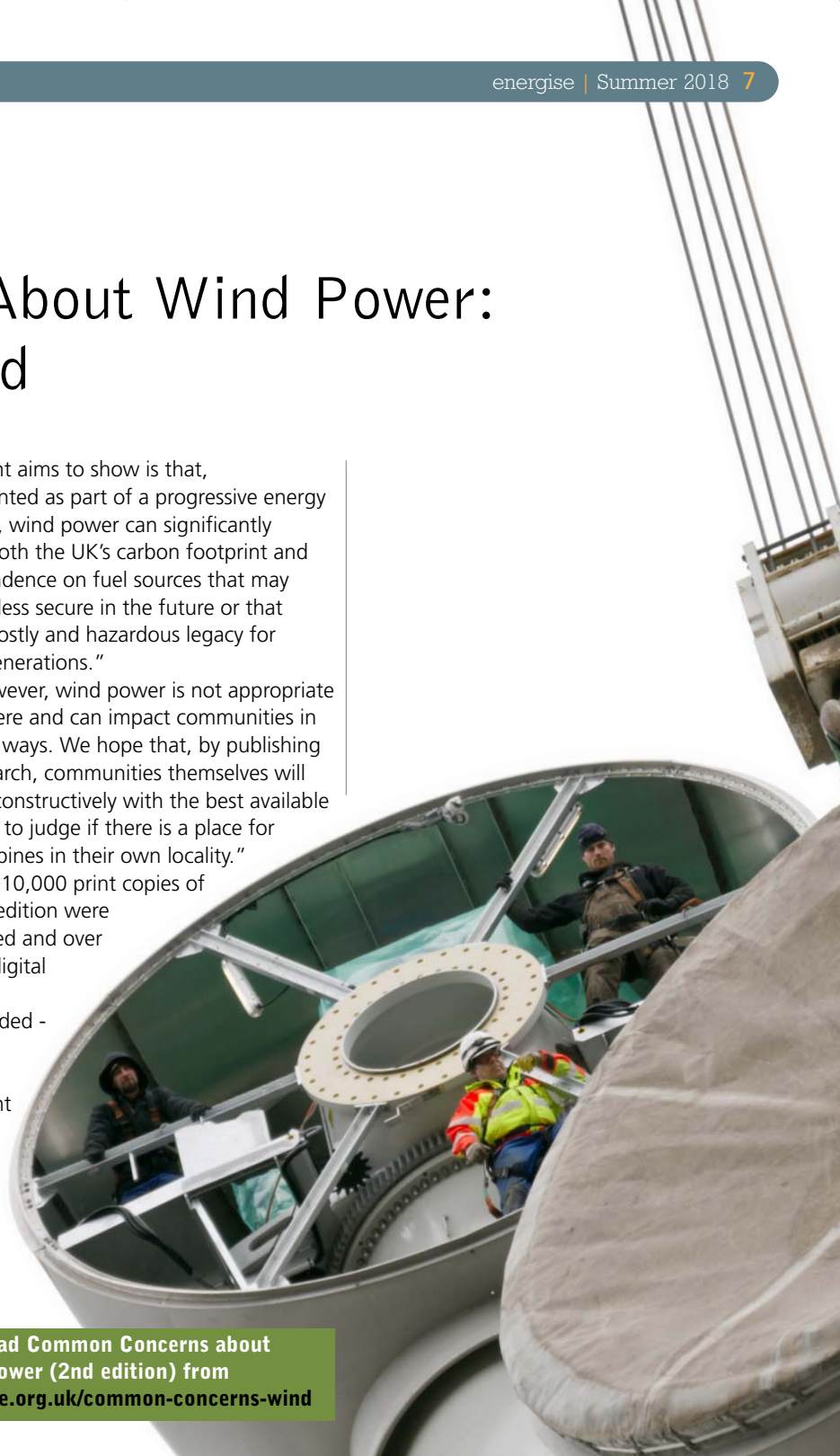
This compares to the index-linked £92.50/MWh that electricity consumers will fork out to EDF for the new nuclear plant at Hinkley Point in Somerset.

"This is an amazing reduction in costs over a relatively short space of time," said CSE's chief executive, Simon Roberts. "It's been driven by rapid technological advances and the opportunity to use much larger turbines offshore. And made possible because the government backed the technology, providing support for innovation and a dedicated market for these vital early stages."

"Contrast this to nuclear where costs are still rising despite 60 years of eye-watering public subsidies."

Unsurprisingly, the nuclear industry is in no hurry to join in the celebrations. Tom Greatrex, chief executive of the Nuclear Industry Association, was quoted on the BBC as saying "It doesn't matter how low the price of offshore wind is. On last year's figures it only produced electricity for 36% of the time."

"This is nonsense from someone fast becoming the industry's mythmaker-in-chief," says Simon. "The true figure is more like 80% because the turbines generate some power even at quite low wind speeds. Greatrex is citing the load factor. He's perpetuating a myth - and you have to think it's deliberate given it's so blatantly incorrect."



Ian Preston tots up the impact of CSE's energy advice team

Every year I take a moment to crunch the numbers and get a sense of the impact of our energy advice services.

This year we answered 11,376 enquiries from 8,264 households. Among them were 2,360 people with a health condition (cardio-vascular, mental health, respiratory and arthritis being the most common).

We saved people a whopping £1.4m over the year. This includes £10k for two clients in Wiltshire, both living in desperate circumstances and

whom we identified as being eligible for back payments for a host of benefits.

But money doesn't tell the full story and the support and human contact we give people – many of them lonely, isolated or distressed – is immense.

We receive countless emails and letters to say thank you. A particular highlight this year was from someone who got their £200 Surviving Winter Grant at just the right time; it got them through the next few weeks and made an immeasurable difference to their lives.

We're expecting to do even more this year – and we're looking forward to it!



We've moved ...

After 10 years in Bedminster, Bristol we've relocated to new offices in the centre of the city. Our new address (St James Court, St James Parade) is oddly similar to our old one (St Peter's Court, Bedminster Parade), and our phones remain the same.

We're in a modern office block right next door to the oldest building in Bristol, the venerable St James Priory which dates from 1129.

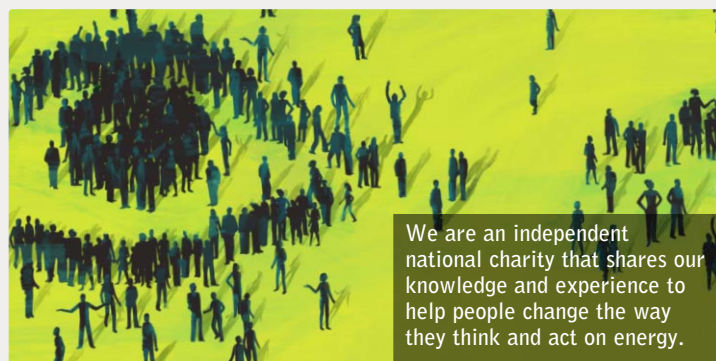


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Centre for Sustainable Energy

Switched on since 1979



We are an independent national charity that shares our knowledge and experience to help people change the way they think and act on energy.



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sustainable
energy

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Charity 298740 | Company 2219673

Founded 1979

Who's who at CSE

Chief Executive

Simon Roberts OBE

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Ian Preston Head of Household Energy Services | Elizabeth Adams Senior Energy Advisor | Paola Aldana Energy Advisor | Nick Clack Fuel Poverty Advisor | Elliot Clark Energy Advisor | Shareen Elnagy Energy Advisor | Lisa Evans Project Manager | Natasha Hope Energy Advisor | Kath Lindsay Energy Advisor | Pete McNeil Fuel Poverty Advisor | Cora Paine Advice Team Leader | Jon Parvin Dorest Project Advisor | Sonia Pruzinsky Project Officer | Karen Smith Senior Energy Advisor | Kate Thomas Senior Project Manager | Mark Tyler Senior Energy Advisor | Jamie Walters Senior Energy Advice Project Manager | Jenna Wilcox Energy Advisor | Lorna Wilcox Senior Energy Advisor | Paul Winney Project Manager

Local & Community Empowerment

Rachel Coxoon Head of Local & Community Empowerment | Megan Blyth Intern | Rachel Haycock Senior Project Worker | Roy Kareem Senior Project Manager | Bridget Newbery Senior Project Manager | Harriet Sansom Project Manager | Ellie Stevens Project Worker | Dan Stone Project Manager | Mark Wells Project Officer

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Joshua Thumim Head of Research & Analysis | Dr Toby Bridgeman Senior Researcher | Mark Gibbons Software Developer | Daisy Goaman Project Officer | Andrew Gonnet Senior Software Developer | Dr Tom Hinton Senior Software Developer | Nicky Hodges Senior Researcher | Martin Holley Senior Technical Project Manager | Annette Lamley Project Officer

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Janine Michael Head of Development & Communications | Dr Nick Banks Senior Devt Manager | Courtenay Crawford Communications Officer | Jennifer Coles Senior Development Manager | Jonathan Twomey Senior Development Manager | Tim Weisselberg Communications & Publicity Manager

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