

energise

Winter 2019

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February 2019: Young and old gather on the steps of Leeds town hall in one of many climate demonstrations that swept the UK in 2019.

Introducing CSE's Climate Emergency Support Programme for local authorities ...

Rachel Coxcoon heads up a new programme that seeks to support the 270 local authorities who have declared a climate emergency and might be asking what to do now ...

“This year has seen an unprecedented level of

commitment from local authorities and other public bodies to take urgent action to cut carbon emissions.

These commitments take the form of climate emergency declarations, the first of which was adopted in November 2018 by our home city of Bristol. Since then, over 300 bodies – from parish councils to city councils and the Scottish and UK parliaments – have followed suit.

These declarations – often adopted unanimously and by councils of all political colours – are a response to two irresistible forces: the overwhelming evidence of the immediate impacts of climate change, and the unparalleled public demand for political action seen not just in the high profile actions of Extinction Rebellion and school strikers, but in millions of people raising their voices in favour of protecting our climate.

But, as many local authorities are now finding, making a declaration is one thing, developing a meaningful and engaging programme that secures the zero-carbon changes needed is quite another.

Inside energise

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And this is where CSE comes in. We're investing our own funds into a new initiative – the Climate Emergency Support Programme – that will provide local councils with strategic advice and practical support, and will build on our 40 years of experience working with local councils and developing effective and socially just responses to the threat of climate change.

We want to revolutionise the way councils tackle the climate emergency and to help them to create effective strategies and practical local plans to deliver their declared climate ambitions and reap

“**For many local councils, responding adequately to the climate emergency requires a change in culture across all departments and service areas ...**

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the ecological, economic and social benefits. This is no small task, and for many will require a change in culture across all departments and service areas.

We believe that local authorities planning their net-zero journey will benefit from an independent 'critical friend' - one who has an excellent understanding of the multiple levers that they will need to use to secure change.

They'll need strategic



So you're a councillor in a local authority that has declared a climate emergency ... what should you do now?



1

Picture 1 is video footage of the moment that Mendip council in Somerset voted unanimously to declare a Climate & Ecological Emergency in February 2019. But what should councils do next? The Climate Emergency Support Programme is designed to provide route forward.



2

Public engagement is a critical factor in the development of a meaningful programme of action to cut carbon. Given a chance, most people will offer a view as to how their neighbourhood can contribute, and we'll be urging the councils we work with to include residents in all processes on this issue.



3

Pictures 2 & 3 are from a workshop we ran in Stroud earlier this year in which residents contributed to their council's neighbourhood plan.

advice on what research to commission and what can or can't be achieved through technical support. They'll need help navigating the minefields of planning policy and conservation legislation. And they'll need well designed and facilitated workshops and forums to engage with local people, businesses and organisations.

This is why CSE will draw on expertise from across our organisation for support such as district heat mapping, supporting people living with energy vulnerability, renewables, planning policy,

energy efficiency, community engagement and overarching strategy as well as workshop design and facilitation skills. We'll enrol key partner organisations to contribute their expertise on transport, waste, and emissions measurement methodologies.

We're already working with a small group of councils and there has been no shortage of demand for support from others. All of us at CSE are excited by the Climate Emergency Support Programme and I'm personally delighted to be leading such a transformative initiative. ■

■ The Climate Emergency Support Programme is led by Rachel Coxcoon, previously our Head of Local and Community Empowerment. Rachel combines extensive experience of working with community organisations with insights into the powers and processes available to local councils to shape their areas for a net-zero future. She'll be assisted by Charlie Leaman and Megan Blyth. You can contact the Climate Emergency Support Programme at climateemergency@cse.org.uk.



New resources to help Neighbourhood Planners with community engagement

CSE's Low Carbon Neighbourhood Planning Programme supports local communities who want the neighbourhood plans in their areas to incorporate climate change mitigation and adaptation policies.

The programme's flagship publication is a very popular guidebook which was updated earlier this year. And thanks to funding from the Department for Business Energy and Industrial Strategy we've published new resources for neighbourhood planning groups designed to help communities build a consensus and establish a mandate for change. They include:

1) A picklist of questions that groups can use to embed climate and sustainability issues into householder surveys.

2) A workshop outline designed to get communities involved in creating high level policy objectives for the neighbourhood plan

3) A second workshop designed to help communities work towards an informed consensus about what types of renewable energy might be acceptable within their neighbourhood and identify possible sites.

As ever, our approach is to ask questions and enable the public to consider how we should respond to the climate crisis, rather than dictate what the right answers are.

Details and downloads from www.cse.org.uk/news/view/2394

<https://maps.london.gov.uk/heatmap>

Launch of new London heatmap



The new version of the London Heat Map was launched at the start of November. It is a major upgrade of a mapping tool that was developed by CSE in 2009 and is designed to identify low carbon solutions to heating London's homes and workplaces using district heating networks.

The Mayor, Sadiq Khan, has set ambitious targets to make London a zero-carbon city through policies laid out in his London Plan and in the London Environment Strategy.

Decentralised energy projects and heat networks are a key part of this.

Josh Thumim, CSE's head of research, oversaw its production. "The London Heat Map is a web application that can help developers, local borough councils, energy companies and others to locate areas where demand for heat is at its highest and construct heat network models and assess their feasibility."

The map covers the whole of Greater London, and provides very local information for the

identification of decentralised energy opportunities. It includes data such as: Heat demand values for each building; locations of existing energy supply plants; locations of existing district heating networks; and spatial heat demand density map layer.

Importantly, the new map includes a user-friendly visual tool for heat network design. This is intended to support preliminary techno-economic appraisal of potential district heating networks.

London boroughs can use the new map to help develop their energy master plans.

Property developers can use the map to help them meet the decentralised energy policies in the London Plan and London Environment Strategy.

Energy consultants can use the map to gather initial data to inform feasibility studies.

If you have questions or comments on the map, please contact londonheatmap@cse.org.uk.

Next Generation fund: eleven community energy projects selected

Eleven community groups with bright ideas for energy innovation have been selected to go forward to the next round of the Next Generation fund which CSE is administering. Up to £100,000 will be invested in each group once they pass due diligence.

The fund seeks to support community groups who wish to trial pioneering business models which, if successful, could be adopted by others around the UK. The eleven groups, along with the initiative being explored, are (briefly):

- **Burnside Community Energy Regeneration Project** (renewable energy in a new housing development).
- **Carbon Co-op** (for a community energy data co-operative in Manchester).

- **CREW Energy** (community ownership of renewable heat).
- **Gloucestershire Community Energy Cooperative** (PV and battery installations over 400 dwellings).
- **Plymouth Energy Community** (electricity, heat and mobility in a housing development).
- **Bath & West Community Energy** (a network of small consumers able to offer flexibility services to their local DNO).
- **Chester Community Energy** (LED-lighting for small community buildings).
- **Lockleaze Energy Partnership** (1 MW cluster of solar panels on 300 roofs).
- **Nadder Community Energy** (community electric car club).



- **Brighton Energy** (locally generated solar powered community transport and EV chargers).
- **Green Fox Community Energy** (clean, locally generated heat, electricity and energy services for schools).

Next Generation, funded by the independent trust Power to Change, aims to identify and support genuinely sustainable, financially viable and innovative community businesses focused on environmental innovation.

CSE's Keith Hempshall said "We are excited by the opportunity that Next Generation represents for communities across the UK to play a full role in delivering climate emergency objectives and creating a future energy system that is more democratic, decentralised and decarbonised".

Next Generation is delivered by a consortium led by CSE and including Everoze, Low Carbon Hub, Cooperatives UK, Cooperative Futures, Social and Sustainable Capital, and SFW Communications. See the project website at www.next-generation.org.uk

Why BEIS and Ofgem need smart energy data

Access to detailed anonymised smart meter energy data will fast become a necessity for Ofgem and BEIS and other public interest actors as they design the policies and regulations to deliver smarter energy markets. Simon Roberts OBE explains why.

Access to smart-meter data for public-policy purposes is essential to avoid policy makers 'flying blind' into the energy transition. This is the lead conclusion of the first-phase report (July 2019) of the Public Interest Advisory Group on smart meter energy data, which CSE co-convened with Sustainability First.

This multi-stakeholder, deliberative exercise has explored a wide range of issues over the past two years, producing eleven detailed 'stimulus papers' to underpin the final findings*.

PIAG's work included identifying a range of use-cases for anonymised smart meter energy data to be realised in the public interest. These use-cases provide thoughtful answers to the question 'What could we do (or do better) with smart meter data in the public interest?' But we also needed to ask the question 'What *won't* we be able to do if we *don't* have access to smart meter data?'

This is instructive, not least because it's the path this country is currently taking; unlike every other country with

smart meters, the UK has no central repository of the data generated. Nor are there plans for the government to access or capture the data for its own policy-making needs or any wider public interest (though see PIAG Stimulus Paper 7 for how this might be done).

New needs created

Smart meters are one of many enabling technologies for a consumer-oriented, ultra-low carbon smarter energy system because the data they provide is a necessary component of the smarter energy system as envisaged by government, regulators and other stakeholders.

Of course, a range of commercial interests, for example energy suppliers, will have access to smart meter data - subject to a set of privacy rules. Others, such as network companies and the settlement system, will have controlled access to data to enable them to fulfil the functions they serve.

In both cases, access will enable them to design their own operations and to use the data to support their own innovation - and it is in the public interest for them to do so, provided the design and regulation of the system and its associated markets create alignment between their commercial interests and the public interest.

This design and regulation also needs to ensure that their incumbency does not

give them an inappropriate advantage over others. These include actors outside the system who may have better ideas than the incumbents - ideas which could generate greater benefits, better serve consumer needs, further reduce system costs, or enable participation by a wider range of consumers (particularly the more vulnerable).

Information imbalance

A serious information imbalance will occur if fine-grain smart meter data is not available to any of the following:

- Those regulating commercial interests in this changing system.
- Those designing policies and markets within which commercial interests act.
- Those seeking to innovate or respond to market needs or opportunities as an 'outsider'.

In this situation, bodies such as BEIS and Ofgem will be having to operate and make decisions with far less data than those they are trying to regulate or direct through policy and market rules.

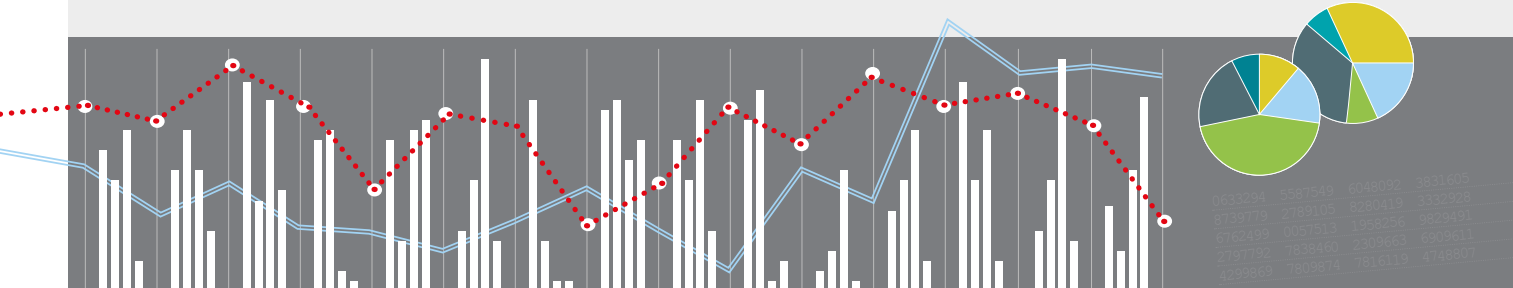
High barriers for new entrants

It is in the public interest to have effective innovation to improve services and lower costs, and this, as explained in PIAG Stimulus Paper 5, could justify making available an 'innovation test-bed' of representative, anonymised smart meter data. This will remove one barrier to entry for early stage innovators who cannot currently test their prototypes on low cost smart meter data.

Much of the discourse in PIAG has rightly been about how the public interest could be positively served by enabling the use of fine grain smart meter data to realise the use-cases. But our analysis also suggests that the public interest risks being significantly undermined if, as currently planned by government, that fine grain smart meter data is not made available as described.

A more detailed version of this article is on our website at www.cse.org.uk/news/view/2373

* All PIAG papers can be downloaded from www.smartenergydatapiag.org.uk





You can't have a birthday party without a celebratory sweet treat! This splendid gâteau was created by our own super-baker, Ellie Stevens ...

40th anniversary, 1979-2019



3



2

Presentations from our 40th anniversary conference from the following speakers are available at www.cse.org.uk/news/view/2357. They are: Dr Adam Corner (Climate Outreach, 1), Dr Becky Willis (IGov University of Exeter), Dr Barbara Hammond MBE (Low Carbon Hub), Jane Wildblood (Bath & North East Somerset Council), Felicity Jones (Everoze, 2), Alison Sleightholm (WPD), Simon Roberts, Joshua Thumim (3), Rachel Coxcoon, Ian Preston (all CSE).

The presentation by Ujima Green & Black Ambassador, Jasmine



4

Ketibuah-Foley (4), in which she discussed the lack of representation in environmental movements and what we should be doing to actively include people from BME backgrounds in the conversation, was so well received was turned into a guest blog on our website: www.cse.org.uk/news/view/2356.

Below, CSE's Annette Lamley feeds back the views of her table to the whole conference.



1

"Inspiring and excellent presentations; not the usual conference"

Our 40th anniversary conference generated some great feedback, not least the comment in the headline (which we take as a compliment: we don't do 'usual').

On that day in June, over 200 people from a wide variety of industries came together – from policy makers to energy and industry players, and university researchers to community activists.

The event may have marked our 40th year, but the aim was not to look back to 1979, but forward, and to ask how to bring about our sustainable energy future.

Many speakers and participants noted the striking background to the conference with a growing roll call of local authorities declaring a climate emergency and regu school strikes giving a voice to a new generation.

Alongside thought-provoking presentations, participants had the opportunity to share insights and address key questions such as:

- How can we scale up, speed up and, in some cases, start up the things we know need to happen and we know how to do?
- How do we overcome what's currently stopping us from taking action?
- What should CSE and others be doing to build trust in our smarter energy future?
- How do we ensure no one gets left behind in the process?

More feedback? Oh, go on then, just a couple ...

"The all-female panel after lunch - outstanding."



"Superb speakers throughout the day"

"Overall sense of opportunity and optimism."

After all that it was time for the party - some speeches and heartfelt reminiscing, and then birthday cake, canapes and drinks on the terrace (the rain held off, thankfully).

Of the evening celebration, Simon Roberts said: "This was an opportunity to toast our future - and that of the sustainable energy sector - and to thank everyone who has contributed to our journey so far: former and existing staff, trustees, people we've worked with, friends, fellow travellers in the charity and environmental sectors, funders and supporters."



Wanted: a future energy system that's both smart and fair

How do we make sure that the energy system of the future delivers social justice as well as carbon reduction?

The changes that are required to secure a smarter, more flexible, ultra-low carbon energy system will significantly disrupt the way consumers interact with the energy system - and pay for it.

But while these changes are essential, they carry with them completely new ways both to generate unfairness

“We need to transform the energy system to achieve net zero. But if we do that in ways which have significant negative social impacts, public support will evaporate”

in terms of the distribution of costs and benefits of the new system, *and* to leave people behind through the complexity and cost of participation in the future energy system and accessing its benefits.

CSE's chief executive, Simon Roberts, is leading the programme: "We need to transform the energy system to achieve net zero. But if we do that in ways which have significant negative social impacts, public support will evaporate. There is no transformation without public support, so it's vital we

understand how to deliver a system which is both smart and fair."

Acknowledgement of this risk is why many actors in the energy system have declared that "no one should be left behind in the energy system transition" and that all energy consumers should have the opportunity to benefit from the transition (e.g. to 'keep up') while bearing only their fair share of the costs.

But what does this mean in practical terms? How can such a 'smart and fair' outcome be achieved, if indeed it can? What are the implications of seeking to ensure that all consumers can 'keep up' or are protected in some way if they can't?

To explore these key questions, CSE has established a new research programme - Smart and Fair? - the first phase of which runs until January 2020 and which is



being generously supported by Scottish & Southern Electricity Networks and Western Power Distribution.

Stewart Reid, Head of Future Networks at SSEN, said: "While many have committed to the principle that 'no one should be left behind', there's still a lot of work to be done to understand what that principle looks like in practice. By supporting CSE's research, we'll be helping to build that understanding and develop approaches to inform our future practice."

Alison Sleightholm, Resources and External Affairs Director at WPD, said: "As the energy system gets smarter, WPD recognises its responsibility to ensure the most vulnerable are both protected from undue impacts and supported to participate in the benefits of new services. To fulfil that responsibility, we need to know much more about the risks and opportunities involved and are therefore delighted to support this programme that will explore these issues, identify challenges and propose solutions."

smart and fair?

Read about the Smart and Fair? project here: www.cse.org.uk/projects/view/1359



Who benefits from the transition to a smarter energy system? And who gets left behind?



BRIGHT
GREEN
FUTURE

www.bright-green-future.org.uk

Bright Green Future summer school 2019

Bright Green Future is CSE's environmental leadership programme for 14-17 year olds. It's enriching, it's fun and it's free.

Every year we support 30-50 young people through the programme which is made up of five main elements. These include an environmentally focused project that the young person runs in his or her local area; a series of webinars with inspiring figures in the environmental movement; a weekend of training and workshops; and a 5-day work placement in a sustainability-focused organisation.

The year culminates in the fifth and final element which is a 4-day residential summer school bringing to life a diverse range of theories and concepts of sustainability, from exploring green urban planning to practicing mindfulness in nature. For the past two years we've enjoyed the fantastic facilities - and decent weather - at the Centre for Alternative Technology in Machynlleth.

There's more info on the project website at www.bright-green-future.org.uk

There's a great 2-minute video on our YouTube channel shot at the BGF summer school. It features many of the young people talking about what they get out of the programme. Watch it here <https://youtu.be/5eOuBnbKmuE> - and feel free to share with friends, colleagues and others. ▼



Bright Green Future is part of a Big Lottery funded project called Our Bright Future, aimed at empowering young people aged 14-18 to lead progressive change in their communities and local environment.



Helping Stroud council create a renewable energy strategy

In 2018 Stroud District Council pledged to go carbon neutral by 2030, a bold ambition that includes moving from a reliance on fossil fuels to an energy policy based on renewables, energy efficiency and demand reduction.

To make this happen, the council commissioned CSE and Land Use Consultants to research local renewable energy capacity, in particular to understand Stroud's generating potential and to provide a

technical evidence base to underpin planning policy.

The work, led by Martin Holley, built on our understanding of the current context for renewable energy and planning policy in the Gloucestershire, much of it gained through producing the county's Sustainable Energy Strategy in 2018. (For details of this, and our hosting of the first county-wide Climate Change conference that supported authorities moving forward on carbon neutral targets see www.cse.org.uk/news/view/2259.)

The Stroud study includes scenarios for renewable energy generation deployment up to 2040, including options for new development sites, plus 'opportunity maps' to indicate the spatial distribution of resources and their constraints. Recommendations are also made on policy considerations for the draft Local Plan which goes to public consultation in December 2019.

The study will be available at www.cse.org.uk/resources after publication.



What are the opportunities for renewable energy in Stroud's green valleys?

Bristol Green Doors on film

Back in May we held a very successful Bristol Green Doors weekend. In glorious sunshine, 12 homes across the city opened their doors to the public. Some 500 people were shown round by friendly householders, happy to share their experience of installing a range of low-carbon improvements – from hemp insulation to solar panels, passive heating to green roofs.

For a video in which householders and visitors explain why Bristol Green Doors is such a great way to spread the low-carbon refurbishment message see

www.cse.org.uk/news/view/2345.



Bristol Green Doors is part of Futureproof (futureproof.uk.net).



Wondering where the staff list is? Well, we've grown so much (we're now 70 people) that it was getting a little long. To see who works for us and who our trustees are, go to www.cse.org.uk/staff.

A record year – CSE publishes Annual Report for 2018-19

Our Annual Report and financial statements for the year ended 31 March 2019 show what was probably the busiest year in our 40 year history, with a record level of turnover, up 35% on the previous year (2017-18). The charity also returned a healthy surplus in the year, replenishing reserves for investment in future

projects and subsidising our free energy advice service.

Anne Obey OBE, Chair of CSE's Board of Trustees, said: "It's great to see CSE growing its impact so significantly in 2018-19 and demonstrating our ability to secure funding for the charity's important work."

www.cse.org.uk/annual-review



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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