



Communications and engagement plan for CREDS 2022 to 2023

November 2021

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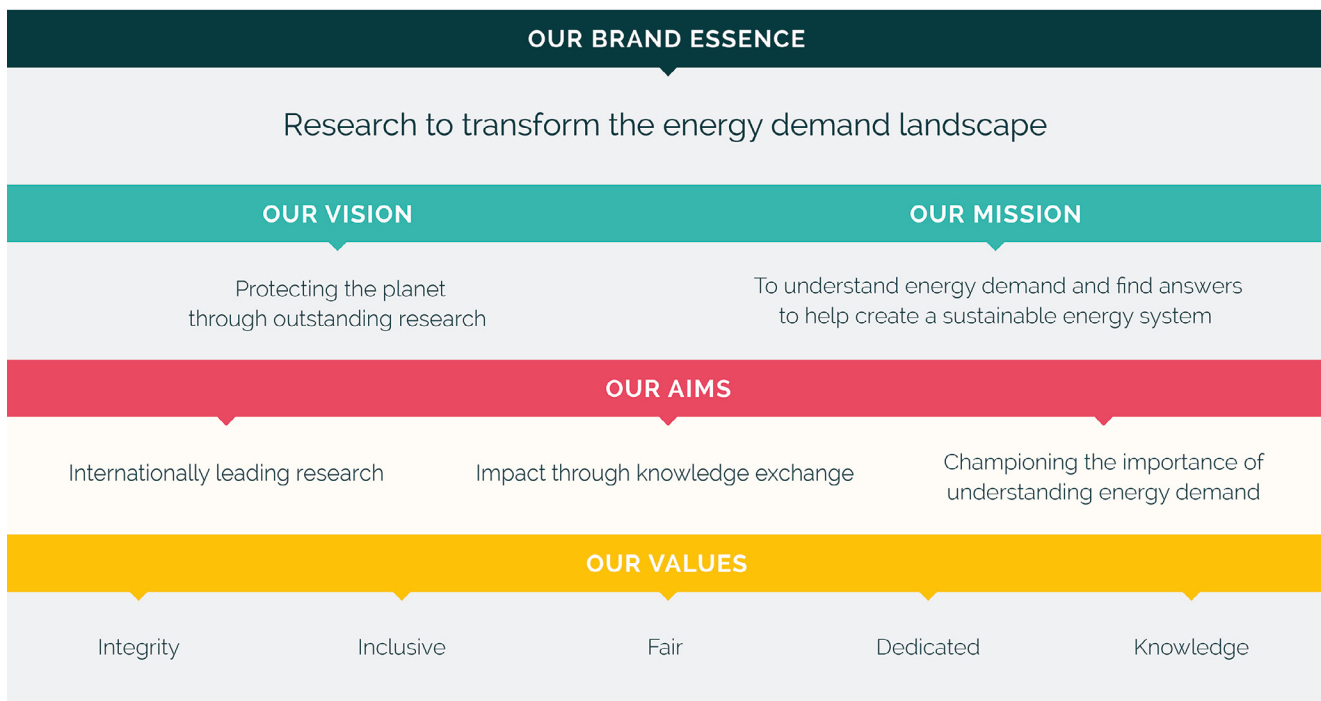
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1. Introduction and strategic aims

This is the third Communications and Engagement Strategy and Plan for CREDS. Communications and engagement have been important activities within CREDS from the start of the programme with the strategic direction set out in the Communications and Engagement Strategy published in November 2018.

The strategic framework for the programme is summarised in table 1 below and we consider that our three aims of internationally-leading research, generating impact and championing energy demand remain valid. This update addresses the new strategic directions arising from the CREDS Mid-Term Review and includes the plan for 2022 until the end of CREDS in March 2023.

Our brand framework



We consider that everyone in the consortium has a responsibility to contribute to all three of the aims of CREDS to a greater or lesser extent. The core communications and knowledge exchange team has an overarching strategic role that includes co-ordination, facilitation and guidance for these activities and a particular role for engaging with non-academic audiences. We see the particular role of researchers as engaging, often on a one-to-one basis for an in-depth theme, or project specific discussion with particular stakeholders to fulfill the 'impact' and 'championing' aims of CREDS. We will work together (core team and research themes) to generate content and materials that meet the needs of all of our audiences.

1.1 Priority audiences for CREDS

The five priority audiences that we have identified for CREDS are:

- Internal CREDS consortium
- Researchers interested in energy demand issues (EDRN) e.g. UKERC, energy sector. Also as a result of the Mid-Term Review (MTR) we have now included the International research community within this audience
- Policy e.g. local, devolved and national government
- Innovative and important businesses e.g. high energy-use sectors, energy sector and energy equipment supply chains
- Intermediaries – those who will pass on information to others e.g. media, trade press, consultancies, trade associations and professional bodies.

We are not aiming to work directly with non-innovative businesses outside the energy sector or the general public.

A promotion plan is developed for each activity and the sub-audience (preferably individuals) defined. An activity could be the promotion of a single academic paper or, multiple outputs or, synthesis of messages across themes. CREDS has developed the engagement funnel (Annex 1) based on an adapted version of the AIDA concept as a helpful way of framing communications activities. AIDA stands for Awareness, Interest, Desire and Action and defines deepening levels of engagement as audiences are moved through the funnel. This is one of many marketing assessment tools (Jobber D. 1995) that describes the stages that people go through in a decision-making process, which can therefore be used to frame engagement activities. This is not an instant, single step process. It involves multiple interactions in an ongoing series of activities over time, to move people through the funnel. The reason we want to move people through the funnel is to meet the programme goal of impact via action. We use a wide range of marketing communications tools (in addition to academic papers) that are chosen to meet the needs of the audience, depending on where they are within the funnel, including social media, e-newsletters, blogs, news posts, webinars, workshops, policy briefs and case studies. There are now 17 impact case studies.

We continually measure the success of the strategy and plan by monitoring and evaluating how each activity went with the intention of continuously improving our communications during the life of the programme. Examples of the type of techniques we use are: user behaviour on the website (Google Analytics) and user journey analysis, feedback forms at events, selected follow-up telephone interviews (recorded) after key events/meetings, quarterly reporting, tables for updating ResearchFish and regular theme liaison meetings. We have developed a central repository to record impact (Impact recording spreadsheet).

1.2 Recommendations from the Mid-Term Review

Following the Mid-Term Review there were a number of recommendations from the panel that we promised to address within the Communications and Engagement Plan 2022 to 2023. Here we have listed the recommendations and explained what we have done to address each one to date. Further progress is defined within Section 2 on 'Future activities'.

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- 1. Panel recommendation on stakeholder engagement: Develop a broader and more meaningful engagement strategy across the whole system both in the UK and internationally. This should enable CREDS to evaluate their current stakeholder network identifying where there are gaps.**

The CREDS knowledge exchange managers are working with the research themes to review our stakeholder networks, including in business (AE), local authorities (KJ) and the energy demand research community (SH). Through this process, we will expand our networks and therefore the scope of our interactions and identify any critical gaps. Our work with Local Authorities has expanded this year with the webinar launch of the [Place-Based Carbon Calculator](#) that was attended by over 200 Local Authorities.

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- 2. Panel recommendation: Include plans for engaging with non-receptive stakeholders as well as receptive stakeholders as resources allow.**

We will continue to disseminate our findings through the media and other intermediaries to reach new audiences who would not proactively seek out our outputs.

We draw a distinction between those with the power to affect the use of our research results and mass audiences with limited interest and agency. We use resources strategically to focus on key stakeholders/teams rather than applying a scatter gun approach. In the former case, for example UK Government departments still resistant to the case for stronger action on energy demand, making progress will be important and difficult. We propose to work with others, including key agencies, NGOs and proactive businesses, to maximise the impact of our research. This work has already begun with the Climate Change Committee and using existing contacts to reach new groups. More activity is planned – see section 2.

Our work with businesses continues to build our network within these receptiveness-based priorities. Energy sector companies (retail and networks) and the supply chains for energy-using equipment are potentially key actors in changing energy demand. Innovative businesses include those offering energy and mobility services, energy efficiency, demand response and materials efficiency.

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- 3. Panel recommendation: enable CREDS to critically investigate how lessons can be learned via **international** engagement and how these might be applicable and subsequently implemented in the UK.**

We have reviewed our international work in the light of the MTR and are developing activities to enhance it. Although our Visitors International Programme (VIPs) was severely disrupted by Covid, we have continued to work remotely this year developing many joint papers with our VIPs. As well as hosting many international webinars, we also had a strong profile at the major European energy efficiency conference (ecccc), in June and gave 13 presentations showcasing CREDS work. International engagement has been reviewed and plans are in place. The changes in communications we have observed during the pandemic mean that we can extend our research audience internationally, largely by using the same tools we use for the UK research audience, i.e. papers, conferences and webinars.

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- 4. Panel recommendation: Develop a solutions-focused impact strategy to ensure the Centre maximises its potential for **impact**. This should shift engagement with stakeholders to more solutions-focused discussions and recommendations.**

We are already moving our efforts in this direction. Many consortium members have advisory roles with BEIS, DfT, Defra, Scottish Government and Ofgem and we have worked directly with the CCC and LGA at their request to provide solution-orientated advice. We make submissions to Parliamentary Select Committees and Departmental consultations where we can add value, and have made 10 written submissions this year.

We have also developed strategic collaborations with key policy teams in BEIS (business, retrofit, product policy and clean heat). As part of this we also held a Covid spotlight this year specifically for policy-makers to discuss the lessons for net-zero that could be learned from the pandemic, based on research evidence such as the economic impacts of the recovery package. Further spotlight campaigns are planned, as well as targeted work with BEIS and CCC in particular, looking at solutions-focused recommendations arising from major policies such as, the Net Zero and Heat and Buildings Strategies.

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- 5. Panel recommendation: identify **fast-track routes** for implementation of solutions so there are no missed opportunities.**

Our strategy for taking advantage of opportunities is twofold. First, we need to continue to build strong networks so we can reach key decision makers and influencers, directly and quickly and this happens through our Government Affairs manager and the theme leads. Secondly, we will continue to allocate some of the Flexible Fund resource to 'rapid response' activities.

2. Planned engagement activities – October 2021 to March 2023

The activities within this section are what we plan to do in the future and cover the period October 2021-March 2023 (until the end of the CREDS contract). They follow the AIDA strategic framing logic in that they start with the broad awareness raising activities via the digital marketing tools and website and move through the funnel where content is generated from research outputs and promoted to spark 'interest' with our priority audiences. Promotion of single academic papers can lead to workshop type meetings that enable wider discussions about synthesized messages from multiple outputs generating 'desire' to use CREDS' research findings by our priority audiences. Plans then move on to the individual research themes where they are engaging with specific teams and individuals by generating solutions-focused materials. This has potential future impact for CREDS because it influences policy or business.

2.1 Planned engagement activities: Theme 00 Knowledge Exchange

Digital marketing and web content

- We will continue to encourage blogs from consortium members to enhance CREDS' reputation as the go-to place for the latest research and opinion pieces on energy demand.
- We will enhance the research resources content on the website, (mainly for our research audience but included on the website because there may be wider audiences that could benefit from the information) ensuring findability and usability of content. (MTR)
- We will continue to maintain and, where possible, expand the accessibility of the site to accommodate users of assistive technology, as well as the needs of neuro-diverse readers.

Promotion of research outputs

- We will be developing a number of promotion plans e.g. for the 'Energy demand in the economic recovery package' report, the [knowledge exchange research paper](#) and the [Adding another layer](#) clothing project.
- Promotion of the [Coco Hybrid](#) project is planned for January/February 2022 with George Bennett (now at BEIS) and the Buildings theme. A joint workshop between CREDS and Heating and Hot water Industry Council (HHIC) is to be planned. A strong business and policy audience is expected.
- The [Future use of ICT](#) project (Digital theme) will deliver stakeholder workshops on trends in energy demand resulting from use of ICT in January and July, 2022.

- Core team will coordinate the promotion of any new research papers that arise during the year, where appropriate.

Responding to external events

- Responses are expected to be made on COP26; UK Government's Net Zero Strategy and Heat and Buildings Strategy.
- Responses will be made to other events as they arise, as appropriate.

Influencing policy

- Undertake a gap analysis for policy stakeholders especially Local Authorities.
- Policy Knowledge Exchange Manager and Government Affairs Manager to collaborate to address 'hard to reach' teams in BEIS, MHCLG and Treasury (MTR).
- As part of [CREDS final project](#) (Energy use in a net-zero UK – lessons from lockdown) we are organising an online workshop in collaboration with BEIS (19 November, 2021) with selected BEIS invitees to gather their input on research questions and outputs.
- The synthesis work within the [Energy use in a net-zero UK – lessons from lockdown project](#) is developing a set of 'key messages' drawing on work across the consortium, to provide a set of high levels messages.
- We will be reactive to opportunities for engagement e.g. from publications of policy documents.

Influencing business (MTR)

- Undertake a gap analysis for business stakeholders to identify priority sub-sectors and intermediaries for CREDS, consistent with the strategic priorities described above.
- Establish an informal CREDS business working group to draw on knowledge and contacts across the themes.
- Follow-up 'quick win/warm' contacts (e.g. CIBSE, FMB, WRAP, ADE) to identify topics from CREDS' portfolio that resonate with business.
- Understand and develop the CREDS offering and sub-divide our evidence to provide a differentiated offering to different business sub-sectors – topics identified so far are retrofit, [positive low energy futures](#), time of use tariffs within flexibility, decarbonisation of heating, industry, transport & shipping and resource efficiency.

Influencing energy demand research community (EDRN)

- We will review our international collaborator and stakeholder networks, including outside the EU, taking into consideration a range of approaches, such as collaborations, online events and speaking opportunities.

- Each theme is planning an international webinar joining together elements of its CREDS research with related research internationally to enable world leading influence, for example we plan to engage the energy demand modelling community via IPCC and also through the EDITS network by sharing knowledge on the [positive low energy futures work](#).
- All this will build on the extensive international engagement, collaboration and research already undertaken at theme level – see section 2.
- The data and research quality project aims to engage the CREDS consortium and wider EDRN (Energy Demand Research Network) and promote processes that produce transparent, reproducible, high quality data and research. It will map existing data to improve its organization, storage and accessibility, and to establish gaps and integrate the findings into CREDS and the EDRN.
- To mark National Anti-Bullying and Harassment week in November 2021, we will be holding two webinars on equality, diversity and inclusion. The first is about creating a positive work culture which we at CREDS consider is vital to allow people to contribute their best work. The event features voices from both within and outside of energy research to discuss the promotion of healthy working cultures – [Inclusive leadership and positive cultures](#) on 15 November. The second is about how science and research thrive when different backgrounds and experiences are brought into the mix and we will hear about some personal experiences of working and building careers in this area from colleagues from different backgrounds – [Diverse Voices: Fitting in and standing out](#) on 18 November. (MTR spotlights).

Internal CREDS Consortium

- We will be running an impact training course for all our researchers, piloted with Theme 3 in December 2021, with revision of materials and roll out to rest of the themes in 2022/23. (MTR)
- The next WCM8 will be virtual and is planned for 7–9 December, 2021 and there will be a final WCM in September 2022.
- The internal newsletter (Consortium Update) will continue approximately every 2 weeks within term time.

2.2 Planned engagement activities: Theme 1 Buildings

- The extensive engagement work with the policy audience will continue as this is already an established way of working for this theme. For instance, a workshop is arranged with BEIS for November, 2021 via George Bennett to present on several papers of interest – positive low energy futures, Covid, comfort and health.
- New projects have come online – [DeVIZ](#) on visualising cold bridging using thermal cameras during the construction phase and will be promoted as one of the ECR projects. The Data and Research Quality Project (DRQP) is a cross-CREDS project collating and publicising data being used in CREDS and promoting transparency in research methods. DRQP has an active engagement strategy both within CREDS and outside.

- Involvement in the [Energy use in a net-zero UK – lessons from lockdown project](#) will include a significant element of synthesis of research findings, engagement and promotion work.
- The [3D stock model](#) has extensive potential for further engagement once the modelling of England (BEIS funded) and Wales (ABC funded) is complete. The 3D stock model may also be an opportunity to feed into the national housing model (offering an enormous improvement on the current model, which is based on archetypal buildings) and building passports.
- International work includes an ongoing contribution to the Lancet Countdown work. The work was launched pre-COP26 with policy briefings in many parts of the world. Additional work that will feed into future Countdowns is being undertaken to assess when the world will move from heating dominated to cooling dominated. This appears to be driven more by population growth in hot countries than climate change.
- Following attendance at the Mission Innovation in The Netherlands, further funding from EPSRC has led to a research project to contribute to the IEA Annex on affordable heating and cooling- PR (Smart, Data driven solutions for high performance buildings No.81).
- Continued work leading the IEA Annex 71 (on the thermal characterisation of occupied dwellings), a collaboration of 12 different countries, which has engagement activities such as webinars and quarterly meetings.

2.3 Planned engagement activities: Theme 2 Transport and mobility

- Further data findings from [Covid-19 TRANSAS](#) (Covid-19 Transport, Travel and Social Adaptation Study) will provide on-going communications and engagement opportunities, similar to those already used to promote the mini-site, via social media. Further work (waves 4 and 5) are funded by the [Energy use in a net-zero UK – lessons from lockdown project](#).
- The next Commission on Travel Demand (CTD) will relate to travel demand and transport system implications of Covid-19. The Commissioners will be invited/ appointed in late 2021, and the call for evidence and report is expected in 2022. This timing should allow post-pandemic travel patterns to settle and with it the chance to consider longer-term implications. Regular updates continue with eight stakeholders in England and Scotland, and this CTD will aim to extend this reach. There will be engagement opportunities at each phase. CTD work is largely stakeholder-facing so it will be an opportunity to engage existing and new audiences. It is also complementary to the Covid-19 TRANSAS project.
- The Excess project will be producing more outputs, including four briefings for a non-academic audience. There is also potential for a stakeholder-facing event in 2022.

2.4 Planned engagement activities: Theme 3 Materials and products

- The research element of the Materials and products theme is mainly complete and the time left in CREDS is focused on maximising impact and promoting research findings.
- The theme is planning to continue working with BEIS and Defra to implement resource efficiency strategies, identify policies and modelling future emissions. This work will follow on from the [WRAP report](#) and also the ongoing contract with Defra to support them.
- Decarbonisation of the UK steel industry – as a result of outputs during 2021 the academic paper on steel emissions mitigation options that was presented at eceee Industrial Efficiency is now being turned into a policy brief on steel scenarios. Work with the core team is planned to promote this widely once the paper is published and policy brief ready.
- The theme will be working with Cambridge Econometrics and Defra to look at the macro-economic effects of industry energy efficiency and resource efficiency.
- The [positive low energy futures](#) report was launched on 6 October, 2021 and more than 340 people attended the webinar, which included a presentation from John Barrett and a panel discussion with Caterina Brandmayr – Head of Climate Policy at Green Alliance, Chris Stark – CEO at Climate Change Committee and Becky Willis – Professor in Practice at Lancaster University Environment Centre.
- Significant interest took place on social media on the launch day and more than 450 users visited the website in the week after it went live. Several media outlets covered the launch, including New Scientist, The Times and BBC News.
- The linked, low energy demand scenarios, Nature Energy paper will be completed, and is focused more on an international audience. Once published, there will be further promotions in collaboration with the core team.
- There will be significant additional follow-on work on positive low energy futures – e.g. macro-economic effects (Cambridge Econometrics), Distribution impacts and inequality, Consumption based emissions.
- Six to ten papers are in the pipeline around the work with WRAP and Defra.

2.5 Planned engagement activities: Theme 4 Flexibility

- The theme will be working with a data visualisation expert from Italy to artistically illustrate key findings around the topic of timing of energy demand and everyday life.
- A gallery that showcases the findings of the research using novel communications types such as photo essays is planned that represents and connects various arguments and positions from the Flexibility work to online audiences.
- Meetings with Distribution system operators (DSOs) are planned to discuss the ongoing modelling work.

- Ongoing advisory and policy roles will continue: Ofgem Academic Panel, BEIS Alternative Energy Market independent advisory board, Centre for Sustainable Energy Smart and Fair project advisory board and Defra expert group on resource efficiency targets.

International engagement includes:

- A provoke and respond series is being developed with academics both within CREDS and more widely and includes the CREDS VIPs Selin Yilmaz (Switzerland) and Yohei Yamaguchi (Japan).
- Further significant funding has been applied for (to fund Yohei Yamaguchi) and a possible PhD student to extend the work undertaken within the CREDS VIP activity.

2.6 Planned engagement activities: Theme 5 Digital society

- The theme's communications strategy will continue to inform their outreach work.
- Further Innovation Forums are planned for 2022/23. They involved regional stakeholders, including local authorities from across Sussex and Kent, and businesses such as Scottish and Southern Energy and Ricardo.
- The team will partner with the Greater Brighton Council for the Green New Deal, part of [Energy use in a net-zero UK – lessons from lockdown project](#) and participate in the climate summit for local businesses (12th October 2021).
- There will be continued engagement with policy and industry through the ongoing Sussex Energy Group Advisory Board.
- The [User acceptance of smart homes](#) project engaged directly with business such as Npower, Amazon and Microsoft, and we intend to continue this process engaging with tech businesses in the Future of Energy Consumption by ICTs project next year.
- Members of the team will participate in COP26 through involvement in a [series of webinars](#) being led by the Sussex Energy Group in the lead up.

International engagement:

- Benjamin Sovacool is a lead author of the IPCC's Sixth Assessment Report (AR6), due to be published in 2022, and an Advisor on Energy to the European Commission's Directorate General for Research and Innovation in Brussels, Belgium.
- Tim Foxon is on the organising committee for the influential [International Society for Ecological Economics](#) (ISEE) conference in 2022.

2.7 Planned engagement activities: Theme 6 Policy and governance

- Work with the Federation of Master Builders is ongoing. Meetings in October, 2021 will help to determine CREDS' capacity/strategy for this for the future. The main audience is policy makers but there is scope to reach businesses more via FMB and other sector intermediaries (UKGBC, Construction Leadership Council, RICS, RIBA, CIOB, CIBSE).
- Work around retrofit in CREDS takes place in both the policy and buildings themes, but up to now there has been little co-ordination. An initial CREDS-level meeting is being organised by the core team to enable sharing and exchange.
- Following the City Deals report, co-branded with LGiU, regular informal engagement with Kim Fellows at LGiU has begun. This gives opportunities for reaching into the wider local government community in the UK and internationally.
- The [clothing, comfort and energy use project](#) has received further funding to continue as part of CREDS final project. The findings will continue to be promoted e.g. with an interactive online talk to help the audience reflect on the clothes in their wardrobe as part of the ESRC Festival of Social Science in November, 2021. It is about how fashion and clothing affect energy use within buildings, and how they might play a more positive role in reducing carbon emissions.
- Many members of the team provide ongoing advisory roles within policy and standards committees – e.g. with [EnergyTAG](#) (standard for hourly energy certificates), Infrastructure Commission, Scottish Government Heat and Energy Efficiency Team, Scottish Science Advisory Council, Scottish Power Energy Networks (SPEN) RIIO-ED2 Customer Engagement Group, Energy Consumers Commission, PAS 2035 Annex for domestic buildings and non-domestic buildings standard, PAS 2038.
- The retrofit supply chain work is likely to continue its engagement work with follow-on from the Buildings and Cities webinar and this has potential to go beyond academic impact.
- The theme is collaborating with the CCC on their policy and governance work leading up to their 2022 Report to Parliament. This is likely to involve coordinating input from multiple CREDS themes (1, 2, 5 & 6) on: local and regional structures, transport, our work with trade bodies, institutional aspects of government and how to define net-zero.
- The theme plans to bring together findings from component projects by highlighting novel policy options arising across this theme's activities – from peer-to-peer trading to salary sacrifice for retrofit schemes. The audience is likely to be policymakers (in Whitehall and the devolved governments) primarily, but also scope to bring in NGOs, think tanks, professional and representative organisations.
- In 2022, the theme is going to begin new research on governance of UK energy, which will both develop new thinking and bring together strands of existing work, at multiple levels of governance. The audience for this would be UK national and devolved governments, and the Climate Change Committee (with whom we are already in discussion on this topic).

International work includes:

- Work on personal carbon allowances has the potential for engagement with local and national UK government policy audiences (although PCAs are not prominent in UK policy thinking currently) via a temporary research assistant. We will aim to promote the Nature Sustainability paper and contribute to an international report on the 1.5C target to an international audience.
- Colin Nolden's work on [policy asymmetry](#) has secured additional funding for a series of expert interviews with stakeholders in Germany and the Netherlands.

2.8 Planned engagement activities: Theme 7 Heat decarbonisation

- As the work is mostly complete within the theme, the main focus is on finishing journal papers from all work packages and disseminating them.
- Outreach and engagement activities will be carried out as opportunities arise.
- Contact has been made with Bruce Cameron of MIT, a key figure in the System Architecture community, looking at future collaboration and this will be extended to other contacts in the future.
- Preparation has begun on an overarching Theme Report summarising the findings of the Heat themes' work and reviewing the strategic implications so that engagement messages can be tailored to audience sub-groups.
- Tiziano Cassarino has moved from the Heat theme to BEIS and presented at an internal BEIS meeting in October 2021.
- Mark Barrett presented on zero emission scenarios with a heat focus at the POWEREX conference London on 6th October, 2021.

2.9 Planned engagement activities: Theme 8 FAIR

- Energy Savings Trust (EST) and Green Alliance will meet on a regular basis to discuss engagement opportunities as research findings are created (part of the project-wide engagement strategy).
- Promotion of findings that show which socio-demographic groups are vulnerable to energy poverty and transport poverty, has begun via a [news post](#), CREDS EDRN list and newsletter. A policy brief and academic paper will be completed and further promotion undertaken during winter 2021/22.
- A stakeholder workshop to disseminate findings from WP2 household interviews is planned for early 2022.
- Targeted meetings with key policy makers (BEIS, DFT, devolved nations policy makers) are planned – early 2022; EST and Green Alliance.
- Targeted meetings with 3rd sector organisations are planned for spring 2022.

- The fuel and transport poverty metrics will be reviewed and mapped to reveal the distributional impacts on different social groups across the UK and the findings promoted – spring 2022.
- The findings from research projects underway will enable the development of recommendations of pro-poor and energy just policy options that will be tested with policy-makers in all four devolved nations via focus groups – results are due late in 2022. The policy options will be promoted widely both nationally and internationally.

Ongoing activities

- UK: Continuing discussion with BEIS Fuel Poverty Team, Members of Transform Cymru (multistakeholder group focused on sustainable transport in Wales chaired by Sustrans Cymru).
- International: engagement with IEA, C40 Cities and member of EU Task Force, Fair Energy Transition for All. European Commission- members of reference group for EU research on transport poverty feeding into European research agenda.

2.10 Planned engagement activities: Theme 9 Steel decarbonisation

- The forthcoming journal paper on policy options available to drive deep decarbonisation of the UK iron and steel sector has potential for good engagement. It considers how policy interventions might encourage greater secondary steel production and drive the adoption of green steelmaking technologies such as CCS and hydrogen.
- The impact of current the gas price crisis on the theme's research work and the steel industry has changed significantly so we are considering using a sensitivity analysis or, set of scenarios to investigate the effects of high gas and emissions prices on the levelised cost of steel from the most promising options for green steel production.
- A combined promotion strategy of the theme's work to date (i.e. hydrogen-based steelmaking and the policy options paper) is being planned, including multiple blogs.
- Stakeholder activities will be revived once the researcher on maternity leave returns and will aim to investigate what it takes to get people to actually do these things.
- International comparison work – the theme plans to research the UK in a more global context looking at China and an emerging market economy (potentially Thailand) alongside the UK. Asking how the policy proposals in the upcoming paper might apply in these countries, and how the UK might work with other such nations to encourage industrial decarbonisation.

3. Engagement activities for the past year – October 2020 to September 2021

This section describes the engagement activities (including to both academic and non-academic audiences) that each theme has undertaken over the past year.

3.1 Engagement activities: Theme 00 Knowledge Exchange

Digital marketing

- There has been an excellent increase in Twitter followers. At end of September, 2021, there were 2,245 followers, almost 1000 new followers over the year. All new content on the CREDS site (blogs, reports, papers etc.) is shared via social media.
- There are now 732 subscribers to the CREDS newsletter. A change was instigated in May 2021 to send more regular, shorter newsletters (one a month, rather than one per quarter) and this has resulted in a noticeable increase in sign-ups. New registrants also now receive a welcome email providing them with introductory content to read about CREDS (what is energy demand page of website and link to positive low energy futures report).

Web content

- The CREDS website has become, by design, a predominantly blog focused site with regular requests for blogs sent to CREDS members. 31 blogs were published this year and 20 news posts averaging almost one new blog or news post per week. Five blogs made it into the top 20 most popular pages of the year (two last year). The blog about the Place-Based Carbon Calculator received 283 views on the day it was launched and has received over 1.5k views to date in total. During this year 35,534 unique users visited the site – 8.5k more than last year which saw 10k growth compared to 2018–2019 which is an excellent result.
- There was another marked increase in users arriving on the site using organic search during the year which is a welcome finding. Almost 50% of users arrived on the site using search engines. The [What is energy demand](#) page remains very popular, and is ranked high on Google search when users search for 'energy demand'. Last year, this page was enhanced as a result of this discovery.
- Shifting the focus report remains very popular, being downloaded a further 210 times during the year (2,862 total to date).

Promotion of individual research papers and projects

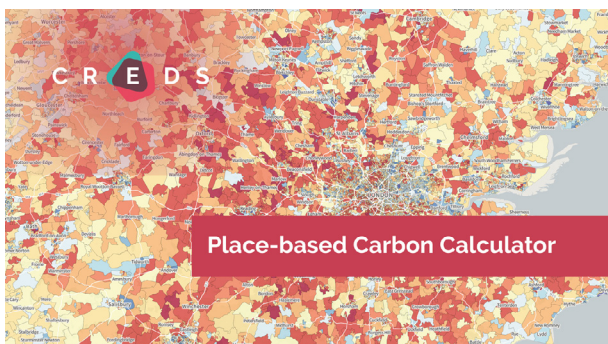
An internal guidance document was created during the year ([Guidance note – Promoting CREDS research](#)) to advise members how the core team can support the promotion of research (development of promotion toolkit developed alongside). Where new research papers or projects have a strong message for one of our audience groups and when they are focused on the CREDS key messages, we endeavour to promote them in collaboration with research authors.

During the year, promotion of the following research projects was supported or led by the core team:

- **Self-build housing research: September to November 2020 – policy audience.** Core team activities: supporting author with writing a summary brief; stakeholder mapping; key findings email summary; social media.
- **Industrial decarbonisation policy analysis for the CCC (6th carbon budget): November to December 2020 – business & policy audiences.** Core team activities: supporting authors writing a [briefing paper](#); secured blog coverage and interview with [Business Green](#) (subscription required); report and image design; social media campaign.
- **COVID-19 Transport, Travel and Social Adaptation Study: February to April 2021 – policy audience.** Core team activities: design and build of a [microsite](#); report and briefing design; news release and dissemination (coverage in Energy World); social media campaign; sharing to House of Lords committee. A further report commissioned by DfT was designed and added to the site in September 2021.



- **Report on resource efficiency:** [Resource efficiency scenarios for the UK: A technical report](#) (launched on 26 March, 2021). An accompanying report entitled [Net zero: why resource efficiency holds the answers](#) was produced and promoted by WRAP. WRAP led the promotion, supported by CREDS on social media. There was coverage in a selection of media, including the Radio 4 Today programme, [Business Green](#) (subscription required), [Drapers Online](#), [MRW Magazine](#), [Resource Magazine](#), and [Sustainable Packaging News](#). This is a good example of collaborative working with the WRAP team and good connections made for future working.
- **Demand response research paper: May 2021 – policy and energy company audiences.** Core team activities: supported author with [policy brief](#); covering email of key messages for policy contacts.
- **City Deals research paper: June 2021 – policy audience.** Core team activities: supported researchers to create an [accessible report](#) (with e-book option also created) and [summary briefing](#); social media promotion; sharing of report with bespoke policy stakeholders. The report prompted discussion between the CREDS author and Scottish Government. Discussion is underway with LGIU on opportunities for further collaborative work.
- **Distributional effects of time of use tariffs: June to July 2021 – policy audience.** Core team activities: workshop co-organised by Reading and supported by core team, 6 July 2021. Strong attendance from BEIS, OFGEM, Scottish Government and the research community. [Blog reflecting on webinar](#) published in August 2021. Blog for The Conversation in September 2021: [Electricity prices have reached record highs and the poor could suffer most](#).



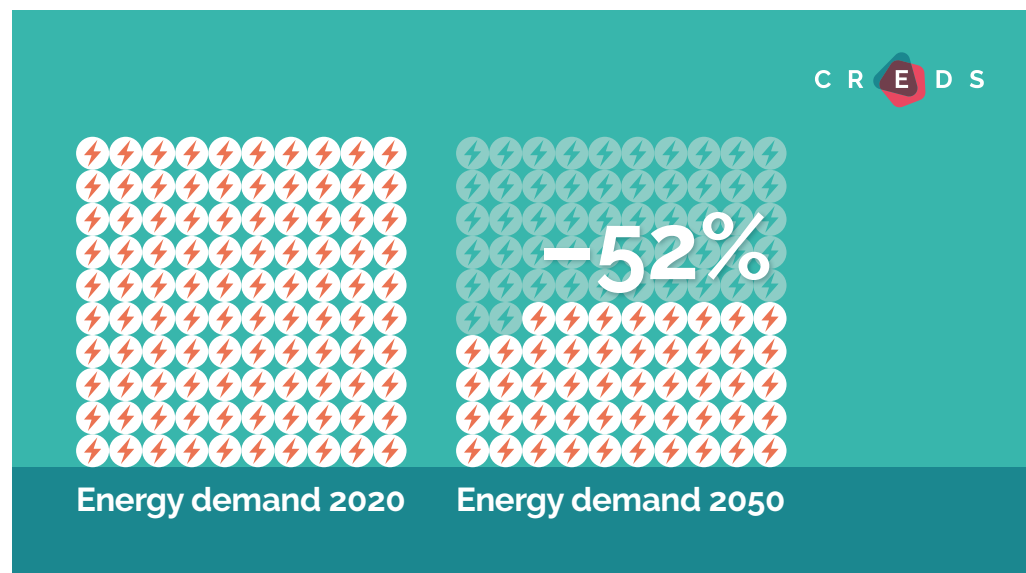
- **Place-based carbon-calculator (PBCC): February to August 2021 – policy audience.** Core team activities: usability and interface support on the [carbon.place](#) site; webinar organisation; stakeholder mapping; [news release development](#) and dissemination; blog coordination; social media campaign. A survey was also developed to gather feedback on the tool. A bespoke webinar was arranged for 6 July for a cross-Whitehall group of civil servants who all work on net-zero and local governance-related issues. It was organised by DfT in collaboration with

MHCLG. Lead researcher and developer of the tool was interviewed on BBC Look East on 23 August, 2021. 4,000 people visited the carbon.place site that day setting a new daily record. Usually there are about 200–300 people per day. A [case study](#) was developed by the lead researcher in September 2021.

- **Federation of Master Builders collaboration report (Building on our Strengths) about retrofit: March to July 2021 – policy and business audience.** Core team activities: [supported authors with the report](#) and running of a workshop with FMB's members; social media promotion of the report. The workshop on 18 June with FMB members tested an ideas paper written by the research team. Excellent feedback was received for the workshop and valuable views and opinions from builders shaped the final research report. Further activities include participation at COP26 in the UK Green Building Council's Virtual Pavilion event.

- **Positive low energy futures project: January to October 2021 – policy audience.**

Core team activities: A comprehensive promotion plan was delivered including the completion of a [short animation](#); social media campaign (including gifs and imagery) and [blogs](#) to encourage webinar sign up. Planning, design and delivery of a [microsite](#) to house the report and accompanying content (policy brief, blogs, explainers, data and animation). Planning and coordination to secure a high-profile panel for the webinar launch event of Caterina Brandmayr (Green Alliance), Chris Stark (CEO of The Climate Change Committee) and Rebecca Willis (Lancaster University) on 6 October, 2021. A Q&A document was developed to help authors respond to potential media questions. Extensive media relations were carried out, including issuing a news release and supporting materials. Coverage included an article in the [New Scientist](#) and lead author involvement in a BBC news story on 2 November, 2021 on national 6pm news.



Responding to external events/Government plans

- Statements developed and published on our website responding to:
 - » The Government's [ten-point plan](#) (blog) and [statement](#).
 - » The [transport decarbonisation plan](#).
 - » The Committee on Climate Change's recommendations for the [UK's sixth carbon budget](#).
- A short blog series responding to the ten-point plan was initiated in November 2020 to address some of the less talked about issues – decarbonisation of shipping and aviation.

Influencing policy

- CREDS has responded to 10 consultations on the topics of heat pumps, decarbonising heat in both homes and commercial buildings, zero emission vehicles, impact of the pandemic, diversity and inclusion in STEM and decarbonising aviation and shipping. More than 21 members of CREDS wrote the responses, demonstrating the breadth and depth of commitment to sharing findings from research with those outside of academia and for championing energy demand.
- The core team has established more strategic, collaborative relationships with two key energy demand teams in BEIS – housing retrofit and business energy use. This gives us early insights into the policy development process and puts researchers at the heart of the policy process, for example by contributing directly to Ministerial briefings and influencing consultation papers before they are released. We are discussing similar relationships with the CCC and the BEIS clean heat team for 2022 and will be considering how our overall relationship with government can best develop to benefit the programme.
- A Covid spotlight (our spotlights involve multiple activities which focus on an issue, rather than an individual research paper) involved two events in May 2021 – on the 26 May for a policy audience and 27 May for a research audience. The Covid spotlight for policy-makers – Energy demand reduction is critical if UK is to reach net-zero looked at the question: How might CREDS and policymakers/ researchers like you convey this message more powerfully in future?

Influencing business

- The business audience was researched, prioritised and initial contact was made with business stakeholders to raise their awareness of CREDS and its work.
- Most business work this year has focused on promotion of results from specific projects (see above).
- Production of a briefing report about Decarbonisation of the UK steel industry working with the Materials & Products and the Decarbonisation of Steel themes.

Influencing energy demand research community

- The Core team hosted nine webinars this year for the energy demand research community. Topics ranged from decarbonising heat and how to deliver impact through to a webinar on Making government policy: what does a policy professional do?
- To support researchers practically in undertaking knowledge exchange, the core team published a systematic literature review of knowledge exchange. It revealed 11 factors for effective knowledge exchange that are applicable across many fields. A blog is being prepared to accompany the publication of the paper as well as a promotion plan.

- The [ecccc conference](#) ran from 7-11 June, 2021. CREDS presented 13 papers that were well received and our high rate of participation in both the papers and during the conference was very welcome by the organisers and panel convenors. There was also significant Twitter activity around the conference.
- We jointly hosted a roundtable with the Runnymede Trust on 28th July, 2021 for energy justice researchers and experts in racial justice to explore the intersection of these two important issues.

Internal engagement

- WCM7 was held from Tuesday 23rd – Thursday 25 March 2021 from 09.00-13.00 each day. There was an interim WCM7i held on 7 October.
- 18 consortium updates (internal newsletter) were sent during the year keeping members up to date with events, news and funding opportunities. There have been 55 updates since the start of CREDS.

3.2 Engagement activities: Theme 1 Buildings

- Significant amounts of time (TO up to 50%) have been spent working with BEIS and other government departments engaged in formal and informal (but frequent) advising of various staff in charge of millions of pounds worth of refurbishment investment (see impact spreadsheet for over 20 examples from the team).
- George Bennett's secondment to BEIS has led to employment, which further strengthens this collaboration. A couple of areas of work will plug directly into policy because of this move. The analysis of 100K boilers (data from Bosch) disaggregates the amount of gas used for heating and hot water (the first time this has been done at any scale) suggests that actual use is very different from the assumptions made by current models. This will impact on SAP, all assumptions for models, and would have implications for the advantageousness of using low flow devices. His work for the positive low energy futures project (modelling for the buildings theme) will feed directly into BEIS.
- Cliff Ewell has been engaging with BEIS on how to implement SMETERS for policymaking, the specification of a new national validation system for in-use thermal efficiency rating methods and the performance gap for SAP 11. CE, TO and FH have regular contact with BEIS (calls and emails) regarding the use of devices and algorithms to estimate the thermal performance of occupied dwellings, and how these could support effective policymaking.
- The theme met with the Green Construction Board in February, 2021. A summary report was produced and sent to government.
- The Lancet Countdown work led to work to provide advice to the NHS on achieving net-zero. The modelling work has been done and a paper has been published (doi:10.1016/S2542-5196(20)30271-0). The NHS is the 5th largest employer in the world, other companies follow what they do globally and they exert a big influence on their supply chain. Work with the NHS will continue by modelling the NHS estate using the 3D stock model.

3.3 Engagement activities: Theme 2 Transport and mobility

- A number of webinars to support the [roll-out of seven briefings](#) commissioned by the Local Government Association and written by CREDS and DeCarbon8 researchers ran from September to December, 2020. A total of over 1,000 participants registered for the webinars with the most popular events being Growing Cycle Use, Climate Smart Parking Policies, and Accelerating uptake of EVs. The briefing notes were download almost 2,000 times, with the most popular ones being Accelerating uptake of EVs, Getting the Carbon Ambition Right, and Travelling less and the role of online opportunities.
- The [Place-based Carbon Calculator](#) was launched at the end of June 2021. It was widely trailed on social media and via 'teaser' blogs on the CREDS website, targeting a public sector audience. Over 200 people attended the online launch event; with local government attendees being the single largest group. Central government officials, businesses and other academics were also at the launch. Since then the website has seen 13,000 site visits and 1.75m requests for 73Gb of data. Project lead Dr Malcolm Morgan was interviewed on BBC Look East and there was extensive interest on social media: the CREDS main tweet had over 40,000 impressions and 61 retweets. Post launch, Dr Morgan has received funding from the Department for Transport (DfT) to further develop the tool, and he delivered a webinar to officials from the Ministry of Housing, Communities and Local Government. Work to launch the Place-based Carbon Calculator was funded via a CREDS IAA and has been written up as a [case study](#).
- The [Covid-19 TRANSAS project](#) (changes in travel behaviour before, during and after the pandemic lockdowns) is partly funded by CREDS. New segmentation analysis of recent data will be shared with the DfT Chief Scientific Advisor, who requested earliest possible sight of this information. Results of the survey, including blogs and news are produced on the dedicated website.
- The mobility team contributed to CREDS' positive low energy futures report with input into modelling, report writing and a [teaser blog](#) to support the launch event.
- Christian Brand's [active travel work](#) which has been associated with his CREDS time extension will become an ESRC Impact Case Study (draft in preparation by the ESRC).

3.4 Engagement activities: Theme 3 Materials and products

- An independent CREDS report on [Industrial decarbonisation policy](#) was published (December, 2020) to coincide with the CCC's 6th carbon budget recommendations. Alice Garvey was on secondment to the CCC to complete this piece of work. A policy brief and downloadable 'Industrial decarbonisation policy' dataset were also published alongside the report. Two blogs were written for the CREDS website, and Business Green and published in December 2020. Engagement has been planned with representatives from BEIS to discuss the report.

- The theme provided the quantification for the CCC's resource efficiency scenarios in the 6th carbon budget report. It involved extensive engagement with the CCC, industry and policy stakeholders at CCC steering group workshops (July, August, September 2020). Contribution fully referenced in the 6th carbon budget report. This work has been written up as a [case study](#).
- A new [report about Resource efficiency](#) from the Materials & Products theme, which was produced in collaboration with environmental charity WRAP, was launched on 26 March, 2021. Through eight complementary strategies, the report sets out how changing the way we use materials as well as energy could deliver an additional 100 million tonnes (Mt) CO₂e reduction in territorial emissions between 2023 and 2032, boosting savings from the UK government's Ten Point Plan for a green industrial revolution by over 50%. It could also contribute over 10% (8g MtCO₂e) of the reductions required from the 5th to the 6th recommended Carbon Budgets. The report attracted a lot of activity on Twitter and coverage in a selection of media, including the Radio 4 Today programme, [Business Green](#) (subscription required), [Drapers Online](#), [MRW Magazine](#), [Resource Magazine](#), and [Sustainable Packaging News](#).
- A Paper published on nutrition – Towards net-zero nutrition: The contribution of demand-side change to mitigating UK food emissions was followed up with an article for The Conversation, Alice Garvey, 13 September 2021: [The carbon footprint of a full English breakfast – and how to reduce it](#). She also talked about low-carbon diets on BBC Radio 5 Live, and on the BBC News Channel. Also contributed to a [BBC 5 Live blog](#) on the subject.
- John Barrett, project managed a cross-consortium team of 17 researchers to develop four low energy demand scenarios for the UK. This important CREDS project ([positive low energy futures](#)) involved a significant amount of engagement activities from a number of the theme's members and was officially launched on 6 October 2021:
 - » All modelling activity was completed in this period and presented to Government departments (including BEIS) in advance of publishing the report.
 - » Extensive input from eight University of Leeds researchers on various topics.
 - » Collaboration with the core team to design and implement the promotion and launch of the report, including an animation, microsite, design of the report and launch event.
- The team contribute to a Cross-departmental Government working group (to discuss monitoring energy / resources and economic implications, policy assessment and analysis) involving monthly meetings to discuss the team's research and how to incorporate into Government policy decisions. Further information is in the [case study](#).
- There has been engagement with the International Institute for Applied Systems Analysis (IIASA) in Vienna, who led the original global energy demand paper and with Charlie Wilson who was seconded to IIASA and worked on the global energy demand assessments.

3.5 Engagement activities: Theme 4 Flexibility

- There has been extensive engagement activities with Ofgem in relation to their Full chain flexibility strategic change programme and Consumer behaviour and demand response evidence review and significant citation of paper Torriti, J., & Yunusov, T. (2020) in Ofgem's Market-wide half-hourly settlement: final impact assessment (Case study – [Winners and losers in energy policy reform](#)) and a policy brief is being prepared.
- The theme have a strong research engagement focus, working with academic collaborators in innovative ways, including [five online reading rooms](#): The temporal aspects of demand, Seasonality, Forms of adaptation and their limits, Flexibility capital and justice, Space, time and infrastructure. Their theoretical approach is outlined in the CREDS blog, [Conceptualising demand: A distinctive approach to consumption and practice](#) and [The fixity of flexibility](#), and increasingly informs policy.
- DEePRED Webinar workshop. Panel comprising Alan Whitehead MP, Shadow Minister for Green New Deal and Energy, Stephen Perry (Ofgem), Rachel Mills (Citizens Advice), Luca Lo Schiavo (ARERA), Kailin Graham (ADE). 173 registered, 92 participants (strong attendance from BEIS, OFGEM, Scottish Government and the research community. Blog on CREDS website, [Who needs flexibility anyway?](#) from Ben Anderson and Tom Rushby. Blog for The Conversation from Timur: [Electricity prices have reached record highs and the poor could suffer most](#).
- Policy advice was provided to BEIS on the set-up of their Alternative Energy Market programme and a webinar on the distributional effects of Time of use tariffs; and to Defra on options and methodologies for setting targets in the area of Resource efficiency and waste reduction as specified in the Environment Bill.
- Expert advice was provided to the Science Museum, London on a future exhibition on energy including issues of flexibility and for a Parliamentary Office for Science and Technology note on [consumption behaviours](#).
- Ongoing advisory roles: Ofgem Academic Panel, BEIS Alternative Energy Market independent advisory board and Centre for Sustainable Energy Smart and Fair? project Advisory Board and Defra expert group on resource efficiency targets.
- Presentations at various international events and conferences – [Science for Policy podcast](#) produced by SAPEA on Science advice for energy policy, International network for Government Science Advice, Pentilateral Energy Forum (Pentaforum) Workshop, European Sociological Association Barcelona 2021, 5th Energy and Society Conference, University of Trento (held virtually), Second International Temporal Belongings Conference.
- Activities from the CREDS VIPs – Max Kleinebrahm (Germany) paper published and book chapter in submitted. Selin Yilmaz (Switzerland) and Yohei Yamaguchi (Japan) paper in preparation on spatial variation of demand flexibility and involved in reading rooms and further activities are planned.

3.6 Engagement activities: Theme 5 Digital society

- Three Innovation Forums have been completed (with support from the University of Sussex Business Engagement team) and more are planned. They involved regional stakeholders, including local authorities from across Sussex and Kent, and businesses such as Scottish and Southern Energy and Ricardo.
- The team had two meetings with Council leaders from the [Greater Brighton Economic Board](#). As a result, they have been invited to a climate summit for local businesses (12 October 2021) and will partner with the Council for their final project on the Green New Deal and place-based business models.
- There has been engagement with policy and industry through the ongoing Sussex Energy Group Advisory Board (which includes representatives from BEIS, NGOs, business and consultancies).
- The theme responded to consultations and calls for evidence (such as the [BEIS Committee decarbonising heat in homes enquiry](#)), and contributed to a recent POSTnote on [Energy sector digitalisation](#).
- The User acceptance of smart homes project engaged directly with business such as Npower, Amazon and Microsoft, a process which we intend to continue in projects such as the Future of Energy Consumption by ICTs.

The theme has also written a new Communications strategy of their own, in which they focus on three main 'stories' (ongoing):

- **Teleworking:** Their paper on [economy-wide rebounds](#) has received good publicity. This has included blogs in [Carbon Brief](#) and [New Scientist](#), citation in the [EU Climate Action Policy](#) and coverage in 41 media articles including [the Financial Times](#) (subscription required). They engaged with research and policy audiences through the CREDS COVID spotlight. Work on rebounds and the energy use of green tech is continuing.
- **Smart technologies:** the story of current and emerging smart technologies, such as smart homes, automated vehicles and 5G technology. It will look at how these technologies have impacted energy consumption to date and outline strategies for mitigating energy consumption by smart technologies in the future. Papers in the last period have included one on the [gendered nature of smart technologies](#), a paper on [policy mixes for sustainable smart homes](#), and a comparative analysis of the [implementation issues involved in rolling out smart meters in the Netherlands, UK, Norway, and Portugal](#).
- **The Past, present and future of energy consumption by ICTs:** Looking at how ICTs have affected energy consumption to date, their potential future impacts and how these can be mitigated, and what opportunities ICTs provide to actively reduce energy consumption.
- **Public engagement** has seen Benjamin Sovacool on the [academic panel](#) for Climate Assembly UK, and Tim Foxon in a similar role for the [Adur & Worthing Climate Assembly](#).

- In terms of international engagement, Benjamin Sovacool is a lead author of the IPCC's Sixth Assessment Report (AR6), due to be published in 2022, and an Advisor on Energy to the European Commission's Directorate General for Research and Innovation in Brussels, Belgium.
- Charlotte Johnston, their ECR funded by CREDS, has contributed to a cross-theme paper with the Buildings and Policy themes, on re-evaluating flexibility based on two UK field trials.

3.7 Engagement activities: Theme 6 Policy and governance

- A report commissioned by the Federation of Master Builders (FMB) 'Building on our Strengths', was launched in July. It calls on the UK Government to work with builders, their supply chains and other groups to transform the £29bn per year home improvements market so that energy retrofit, the means to cut a building's energy consumption, is integrated into every appropriate project. This received extensive coverage in the sector media and in 'The Times'. This builds on existing links with the sector and has prompted an ongoing link with CREDS which will develop from 2021 onwards.
- Theme members submitted ideas to MHCLG for its academic seminar series and were invited to deliver a joint presentation, focusing on appropriate scales (local, national) for action on energy demand reduction. There were around 30 participants from MHCLG and OGDs including BEIS. The CREDS team answered an interesting set of questions including: 'who pays' for decarbonisation of homes, impact of C-19 on demand profiles, feasibility of reaching net-zero by 2050, individual attitudes to demand reduction and most challenging sector to decarbonise. This was also an opportunity to establish contact with the office of MHCLG's Chief Scientific Advisor, and a subsequent meeting and further contacts were made.
- A briefing paper on City Deals and climate action was an opportunity to work with the Local Government Information Unit (LGiU) to present this work to wider local authority audience, including internationally. Feedback from LGiU suggested that this work was significant because other countries are looking at measures such as City Deals as a model, and this research was able to highlight shortcomings/ solutions arising from UK approach.
- Researchers from this theme contributed to five of CREDS written responses to government and parliamentary calls for evidence, drawing on their research expertise. Three responses were on different aspects of decarbonising domestic heating (1 x Scottish Government, 2 x House of Commons Select Committees), one on net-zero governance (Select Committee), and one on energy-using products (BEIS).
- The theme provided five blogs for the CREDS website – a mix of presenting research outputs in a more user-friendly way (P2P energy trading, City Deal and climate action, self-building, evaluation) plus a reflection on UK policy on climate change over the past 30 years.

- Membership of the theme continued to contribute to various working groups and advisory bodies engaging with government and business, as listed in section 2.7.

3.8 Engagement activities: Theme 7 Heat decarbonisation

- Eleven stakeholder interviews were carried out as part of the study with representation from across the energy system including a high-level policy maker, Transmission System Operator (TSO), Distribution Network Operator (DNO), two heat technology industrialists (supply/demand-side), heat network operator, industrialist in retrofit, senior scientist in non-governmental organisation, governance specialist, experienced academic in energy demand and an energy consultant.
- Member of the Advisory Board of the Energy Networks Association's [Gas goes green programme](#) (Daniel Scamman) during 2020 and 2021, contributing to the cross-fertilisation of information between ENA and the Heat Challenge.
- The theme hosted a webinar, Strategic directions for decarbonising UK heat: A system architecture perspective, in collaboration with the core team, on 6 July, with 76 participants, including six colleagues from BEIS.
- Submission of responses to the Environmental Audit Committee Consultation: technological innovations & climate change – heat pumps and written and verbal evidence to (April) BEIS Select Committee inquiry – decarbonising heat in homes.
- A student has been successfully recruited for an ERBE PhD, co-funded by BEIS, with the working title Deployment pathways, technological options, and potential impacts of increasing demand for cooling in UK dwellings.
- Published a blog reflecting on the CREDS webinar [Decarbonising heat demand: a Scottish case study](#). This highlighted a number of useful insights for the Heat Challenge, such as the unintended consequences of interim targets on future heat decarbonisation pathways .
- Presented at a range of workshops and seminars including: Delivering Net Zero, British Institute of Energy Economics Conference, Growing the UK heat networks market: Joint workshop by IEA TCP, ESO RIIO-2 Stakeholder Group comparative system costs of heat decarbonisation pathways to colleagues from the BEIS Clean Heat Directorate and Heat decarbonisation from an energy system architecture perspective to the BEIS Energy Team.

3.9 Engagement activities: Theme 8 FAIR

- The theme hosted a CREDS Webinar Identifying the vulnerable: energy and transport poverty and beyond, 1 December 2020 which was attended by over 119 participants. Introduction to project Mari Martiskainen (MM), Delivery of seminar: Neil Simcock (NS) and Kirsten Jenkins (KJ).

- Engagement of the four UK nations and wider stakeholders continues with Energy Savings Trust (EST) in ongoing dialogue with e.g. Sustrans Cymru and Scotland, NEA, Community Transport UK, local authority representatives, and the Bevan Foundation. The team engaged in the early stages of the Welsh Government's planning for the future iteration of the flagship Warm Homes Programme feeding in lessons from FAIR and encouraging a holistic view of poverty alleviation. This follows on from the first stakeholder engagement event in September 2020 that included representatives from each of the four UK governments and introduced them to the project and its themes, laying the groundwork for future interaction.
- The theme responded to several consultation responses including: Fuel poverty plan (Wales), Transport strategy/Llwybr Newydd (Wales), Climate Change Bill (Northern Ireland), Treasury interim net-zero report (UK). Some of these have now published their responses. These have not gone as far as we would have liked, but there has been positive movement in this direction particularly in the Welsh Transport Strategy and in the Scottish Government's response to the findings of the Just transition commission which will now be extended.
- A detailed response was submitted to the Northern Ireland Energy Strategy Options consultation. One area of particular interest is the Department for the Economy's proposal to create a one-stop-shop for advice and support that would include both transport and home energy efficiency and heating. Energy Saving Trust has now recruited a NI policy officer who will be able to provide greater reach in NI.
- The project's national Engagement Strategy is ongoing. Green Alliance has started conversations with civil servants and some MPs who have shown interest in the project. For example – in March 2021 met the BEIS Fuel Poverty Team, involving Pam Wynne and Kirsten Horten supported by the CREDS Government Affairs manager PM. Green Alliance have published blogs on Inside Track. We have formulated a communications plan together with CREDS core team and have made changes accordingly due to Covid.
- Members of the team have been speakers, invited experts and panel representatives at a number of events during the year. The FAIR team organised a session at the Fuel Poverty Research Network online conference on 2nd March 2021, participated in the Delivering Net Zero Workshop run by John Barrett, University of Leeds; and acted as panel member in Sep 2020 at National Energy Action Warm Homes Week panel on Fuel Poverty and Climate Change. This was after a Ministerial Address Fuel poverty and climate change: How can we hardwire fairness and equity into the next-zero journey?
- In May 2020, two members of the theme acted as reference group experts for a European Commission project Systematic review on transport poverty, by Unit C.7: Knowledge for the Energy Union, Directorate C: Energy, Transport & Climate, European Commission. They were invited to advise the project on transport poverty. The team had follow-up meetings which resulted in Mari Martiskainen being invited to present FAIR at European Week of Regions in October 2021.

3.10 Engagement activities: Theme 9 Steel decarbonisation

- A series of eight stakeholder interviews have been carried out covering three main issues relevant to the steel decarbonisation process i) general issues affecting the steel industry in the UK as well as the decarbonisation process, ii) technology issues, iii) policy issues. The content of the interviews covered conditions and assumptions about other actors and how they may behave and strategic action in response to market/regulatory pressures, other issues also emerged through the interviews. The sample included representatives from: a manufacturing organisation; two structural steelwork companies; a national trade body; an international trade organisation; two government officials; and an environmental NGO.
- Further stakeholder engagement has included a wide range of meetings and project presentations, the majority of which are ongoing contacts. These include: ArcelorMittal; Tata Steel; UK Steel; BEIS; the IEA; Rio Tinto; Aldersgate Group; Jon Bolton Consulting; the Industrial Decarbonisation Research & Innovation Centre; C-Capture, the Materials Processing Institute; and ITM Power.
- A [CREDS blog](#) has been written on the proposed new coking coal mine in Cumbria in March.
- Interview on low-carbon steelmaking for article on low-carbon steelmaking for the EU-funded BAMBOO project blog: [The steel industry's quest for an emissions-free future](#), by David Jolley in April.
- Members of the theme were interviewed on the topic of low-carbon steelmaking for the Yorkshire Post: Region's renewable energy could power a steel industry revolution, by Rob Parsons in April.
- The theme delivered presentations at various conferences and meetings: 12th European Electric Steelmaking Conference (EEC), TFI Resource Efficiency and Circular Economy conference, meetings at Brunel University and the University of Liverpool.

Annex I

AIDA

To meet the CREDS objectives we would like to move users through a process known as AIDA, that stands for Awareness, Interest, Desire and Action. This is one of many marketing assessment tools to help analyse the decision-making process that people go through when they buy things and it applies to both goods and services. We consider that the knowledge generated from research is a 'service'. The image below (Figure 1) shows how users can be moved from 'not being aware' of the information about energy demand to 'action' taking up the information and using it – but this is not an instant, single step process. It involves multiple interactions over time to move people between each of the stages of AIDA a. unaware to aware b. aware to interest c. interest to desire and d. desire to action. The users start at the top and the main messages are broad and appeal to a wide audience and are designed to 'raise awareness'. The messages become progressively more tailored to the individual as they move through the stages until the final interaction that tends to be a one-to-one interaction that convinces the user to take up the information and 'action' it in their work or home. The bullets on the right hand side give some ideas about the different types of marketing communications tools and channels (online, face-to-face) that can be used at each stage and we will use combinations of these marketing communication tools (Marcomms) to generate our activity plan.

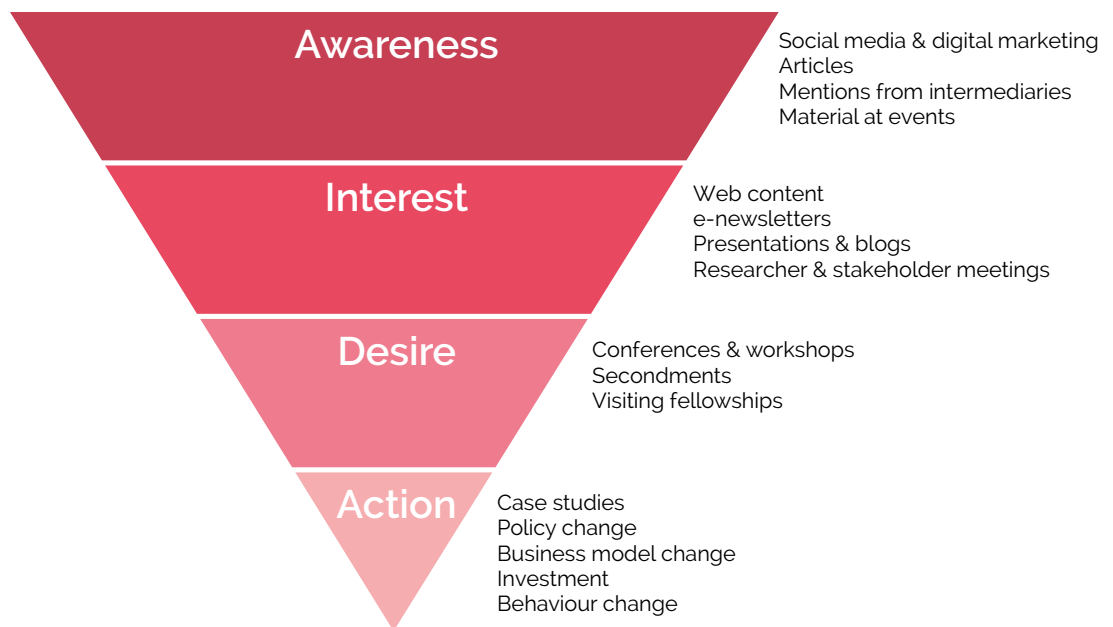


Figure 1 AIDA stages

The marketing communications tools listed on the side of Figure 1 can be displayed graphically in terms of effectiveness against the stages of AIDA (Figure 2). The graph shows that many of the Marcomms tools overlap multiple stages of AIDA, demonstrating that many tools can be used at many stages but that some tools are more effective at certain stages.

We will use this graph to help plan which tools to use at which stage to generate many interactions (at least four) that are needed.

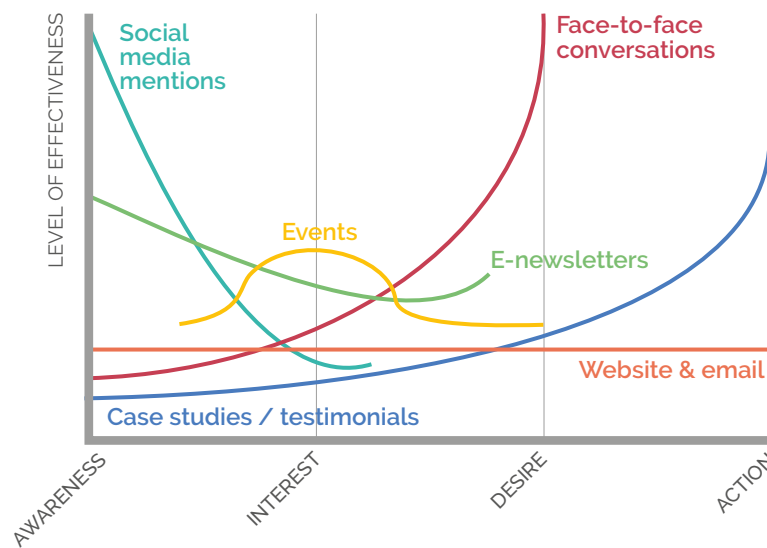


Figure 2

Social media mentions and searches: Google/Twitter/LinkedIn. A way of reaching many people in new audience types. Generates INBOUND traffic to the website to find out more, a way of increasing the audience numbers (Wikipedia/referring sites).

E-newsletter: creating awareness of new information (research results) or events – e.g. printed media- newspapers, journals, magazines, e.g. traditional media – television; radio e.g. digital media e.g. online blogs, email, website links.

Face-to-face conversations: this used to be 'door-to-door' type selling but is now mainly online via emails, mobile, Twitter, Facebook – things where the seller has personal information about their customers and can target their sales to fit the individual. This is also individual meetings that engage in dialogue with stakeholders with the purpose of moving them through the funnel towards action i.e. CREDS Knowledge Exchange managers, and Executive Board (e.g. regular theme lead meetings with BEIS) and consortium members.

CREDS website and individual emails: these can be used at all stages and content targeted accordingly from general to specific. Increasing numbers of people use a mobile to access content and we have designed the website to be mobile responsive.

Case studies and testimonials: these are examples that shows others that are considering taking actions that these activities really work and its worth joining in. For example, it is planned to have co-creation between researchers and stakeholders within CREDS projects and this interaction is likely to generate these kinds of tools.



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