



# ANNUAL REPORT

## 2018

A national focus for green finance, linking businesses and organisations across sectors, driving evidence-based engagement and making Leeds the leading city in the north for Green Great Britain Week ... Leeds Climate Commission is demonstrating its 'can do' spirit in its first full year

Find out more:

<http://leeds.candocities.org>

# Annual Report 2018

## HIGHLIGHTS: UNLOCKING POTENTIAL IN LEEDS

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### **Measurable contributions and adding value**

**Ambition:** Make a clear and discernible contribution to the delivery of climate compatible development in Leeds.

Progress and achievements:

- A networking event in May 2018 bringing together over 100 representatives of private, public and investment companies, financial services, consultancies and organisations.
- Following this, a programme of project development workshops has been fully planned to support medium sized enterprises (commencing February 2019). These will be practically focused, with the emphasis placed on developing real projects and taking them through to a point where they can secure finance and move to delivery.
- Leeds' proactive stance on project development led to it being identified as a leading city in the field by the Department for Business Energy and Industrial Strategy, which invited Leeds to host a national conference on Green Finance with UK100 (postponed by BEIS from November 2018 to January 2019)

- £40k funding has been secured for developing the business case for a crowd-funded solar project on Council buildings.

## **Fostering collaboration and bringing groups together**

**Ambition: Continue to develop awareness, positivity and shared ownership of climate issues**

Progress and achievements:

- The Commission is collaborating with Citu to plan work on a climate/energy knowledge sharing/networking platform for the city
- We are connecting Leeds' universities, organisations and businesses to deliver projects through student research
- Contributing to Culture 21 Self Assessment for Leeds to encourage a pilot on environmental standards for events
- Collaborating with cultural organisations (Opera North) and production companies (ITV) to start new sustainability networks prioritising carbon reduction
- Celebrating local examples of cutting carbon projects across the city delivered by a range of private, public and third sector partners on line and through social media
- Livestreaming two public events on climate change in city centre locations

## **Enabling positive choices**

**Ambition: Raise capacities to act on positive opportunities for climate action**

Progress and achievements:

- Evaluating a Carbon Literacy project with employees at ITV and a Carbon Conversations project with employees of Citu to develop an evidence base for effective public engagement on climate change
- Completed and actioned a city-wide survey of communication and engagement activity
- Supported, promoted and co-ordinated local events and activities, including: visioning a zero carbon future for Leeds (September); a climate change survey at Leeds Station, slideshow on Leeds Big Screen and social media campaign linked to digital art installation on Platform building, all for Green GB Week (15-19 October)

## An independent voice giving evidence based advice

**Ambition:** Chart progress and provide commentary on climate aspects of development

Progress and achievements:

- A three year ESRC funded Research Fellow on the Economics of Climate Resilient Cities and Infrastructure, with ARUP as the main industrial partner, assessing climate risk/vulnerability of Leeds, the economic costs of damages and the financing and business model options. The fellowship aims to bring together a unified framework for climate resilience, which could be replicated across cities.
- Plans for a 'roadmap' (by March 2019) to deliver city wide carbon reduction targets and bring forward proposals for city level carbon budgets consistent with the roadmap. This will be on the basis that any revised citywide carbon reduction targets should be grounded in evidence and are accompanied by a realistic delivery plan that is attractive to investors.
- Exploring wider potential for Leeds to tackle consumption emissions from goods and services beyond Leeds (not included in existing carbon reduction targets). Carrying out this analysis at the city scale will open up opportunities for further carbon-reducing benefits and allow them to be more accurately accounted for. A workshop on food waste, held in November, commenced this process.
- Several student placement projects including the preparation of the evidence base for position papers on the climate implications and opportunities for Hydrogen, South Bank and Food Waste (below).





## MEASURABLE CONTRIBUTIONS AND ADDING VALUE

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### Project Development & Finance Initiative

Analysis by Leeds Climate Commission has shown that by 2030 Leeds can save over £277 million annually or £348 a year for everyone in the city if it exploited all of the profitable measures for energy efficiency and low carbon development. A priority for the Commission in 2018 has been to work on a strategy to unlock this potential low carbon investment in the city.

This commenced with a [networking event](#) on 1 May 2018 at Cloth Hall Court in Leeds, bringing together over 100 representatives of private, public and investment companies, financial services, consultancies and organisations.

Feedback was gathered and used to shape a programme of tailored workshops to dig deeper into the process and provide guidance for the initial stages of realising low carbon projects. The programme will start in 2019 with a launch event and a Directors' Briefing (29 January), designed to ensure that the energy, environment or project managers who come on the programme have board level support and are empowered to develop real energy and carbon saving projects.

The programme will then run four Project Development workshops. These will be practically focused, with the emphasis placed on developing real projects and taking them through to a point where they can secure finance and move to delivery. Sessions on the programme will be run by people with expertise in:

- project identification and evaluation
- business case development and risk review
- understanding financing options and business models for delivery.
- securing board level support and investor buy-in

Throughout the programme, participants will review real case-studies of innovative projects and of different approaches to project development and financing. Engaging, interactive sessions will enable participants from different organisations to benefit from peer-to-peer learning, joint problem solving and the transfer of best practice.

The Commission is also setting up an online forum for businesses to exchange knowledge and ideas as part of the support package.

### UK100 Green Finance Conference

The success of the Leeds Climate Commission project development and finance networking event led to Leeds being seen as a leading city in this field. Following the May event, the Department for Business, Energy and Industrial Strategy (BEIS) asked Leeds to be the venue for a National Conference on Green Finance for Green Great Britain Week.

The conference, originally planned for 16 October but rescheduled to 31 January 2019, will bring together developers, investors and local authorities to break down the barriers and identify opportunities to invest in low carbon projects and create a pipeline of fundable projects.

Planning for this event is at an advanced stage and will be aimed at:

- local authority finance, regeneration or environment portfolio holders interested in developing low-risk cost-effective projects that can deliver long term financial benefits
- investors looking for attractive clean energy investment opportunities in the UK
- providers of professional services who can offer local authorities the support they need to implement integrated local clean energy projects.

### Crowd Funding Solar PV project

Leeds City Council received £40k from the Department of Culture, Media and Sport Financing for Society grant fund (administered by University of Leeds) to work with Abundance and Public Power Solutions to explore the use of crowd-funding as a means of financing a solar PV project on a Council building. The Low Carbon Working Group of the Climate Commission has been advising on the project. The Council is focused on ensuring the economic benefits of low carbon transformation are captured locally and that the residents of Leeds participate in the transformation. Crowdfunding has the potential to help deliver on both of these goals, while also offering a platform to communicate the Council's low carbon ambitions, hopefully stimulating broader citizen and business engagement. Early results from the project are encouraging and it is hoped to complete the development work during early 2019.



*Better Homes Yorkshire has been working on a variety of corporate buildings within the Leeds region, fitting them with photovoltaic panels (PVs). Now we are looking to crowd-fund solar PV on a council building*

## FOSTERING COLLABORATION AND BRINGING GROUPS TOGETHER

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### Case studies

There is an incredible range of innovative action taking place across sectors in Leeds. The Commission's website shares a selection of [success stories](#) from Climate Commission businesses and organisations to inspire and inform, including:

- Action by [Royal Mail](#) to improve the carbon performance of the Leeds Mail Centre through installation of LED lighting; introducing a temperature 'dead-band' in the Air Handling Units (AHUs) that ensure they stop operating when not needed; an 'amnesty' on the use of unauthorised electrical equipment; desk top fans and heaters and their removal; turning lights off in rooms when leaving; keeping doors closed when air-con/heating is active; turning off non-essential electrical equipment, such as desktop computers and printers. In 2016/17 this led to a 15.5% reduction in total energy consumption at Leeds Mail Centre and a 21.11% reduction in the associated carbon footprint compared to the previous year.
- [Harewood House](#) is one of the few stately homes in the country that can claim to be heated by renewable energy using a biomass plant powered by thinning from the estate's woodlands. The biomass plant is providing cost and carbon savings, as well as other benefits. It cost over £2 million to install. The Renewable Heat Incentive payments help to offset this over a 20 year period and a fixed rate service charge to commercial and residential tenants has provided a new income stream for the estate. Overall the project is estimated to give in the region of a 5% annual return. In terms of carbon savings, it has been estimated that running the current system via oil boilers rather than biomass would produce an additional 441 tonnes of CO<sub>2</sub> each year. Previously, timber from woodland thinnings was taken to Newark or Durham for processing. Now this is used as woodchip to power the biomass plant. It has been estimated that across the 20 year cycle of the estate's woodland strategy this will save approximately 840 wagon movements and around 126,000 total road miles, with all the attendant emissions – approximately 195 tonnes of CO<sub>2</sub> in transport alone.
- Over [100 churches](#) in the Leeds area have joined the "Green Journey", a supply switching and energy efficiency service provided by a consultancy in partnership with the Anglican Diocese of Leeds. On average each church that has switched supplier, to renewably generated electricity or carbon neutral gas, has cut their annual carbon emissions by 1.6 tonnes. Church House, the Diocesan office in Leeds, and all vacant vicarages have been switched to renewable electricity and the Green Journey provides a domestic price comparison site for clergy, congregations or anyone who wishes to move on to a renewable supply.

- Social Business Brokers aim to come up with creative, collaborative solutions to complex social problems and are best known for their work on housing. They helped to set up Leeds Community Homes, which aims to take a “community-led” approach to creating 1000 permanently affordable homes in Leeds over the next ten years. A community share offer in 2016 raised over £360,000 from 275 people to invest in the creation of 16 [“People Powered Homes”](#). These homes will be part of Citu's Climate Innovation District development in the South Bank.



*Social Business Brokers have set up Leeds Community Homes at Citu's Climate Innovation District*

## Leeds Cultural sector and Climate Change

As part of an [international cultural project](#), Leeds has been assessed against 9 Commitments (Culture & Cultural Rights; Equality & Social Inclusion; Urban Planning & Public Space; Heritage, Diversity & Creativity; Economy; Governance; Education, Environment; Information & Knowledge). Three areas for focus include Environment, Economy; Urban Planning & Public Space and a number of new projects in these areas are being developed which will respond to the research and support the future cultural development of the city. These projects will form part of the [Culture Strategy delivery plan](#) over the next six years and the Commission has championed a pilot for environmental standards for events. This has been positively received and we hope the pilot will be approved and ultimately adopted in time for [Leeds 2023](#).



Inspired by the potential from collaborations between creatives and climate scientists at the University of Leeds, the Commission has also hosted a lunch at the University of Leeds for cultural leaders, communications professionals and academics. A number of ideas came out of this, including the formation of a Leeds based arts sustainability team (along the lines of [MAST](#) in Manchester), which could be aligned to the Climate Commission and report on its carbon savings as part of the overall city project. This is being further considered by those involved in Leeds cultural organisations.

## Media engagement

The Climate Commission has formed particularly strong relationships with ITV through the Emmerdale production team at Kirkstall Road studios and with Opera North through their Green Team representative. As a result of this, ITV's representative has joined the Commission's low carbon working group and Opera North is hosting students to do research projects and engaging staff with scientists at the University of Leeds.

We are now collaborating with them as they seek to set up their own sustainability network in Leeds for the broadcast media and TV production companies. The industry's carbon footprint calculator, Albert (operated by BAFTA), which is now compulsory for all new productions, has given this momentum and, in tandem with the Carbon Literacy Project, has generated involvement in carbon cutting across levels. With Leeds becoming a magnet for TV production companies and Channel 4 moving to the city in 2019, the Commission is excited about the potential for messaging and wider engagement this offers. We are pleased to be holding our December 2018 strategy group meeting and a networking event for all those on Climate Commission working groups at ITV studios, where these discussions will continue.

## Livestreamed public events

The Commission has worked the [Priestley International Centre for Climate](#) at the University of Leeds to put on a programme of events about climate change for Green GB Week (15-19 October), including two ambitious public events. Both were livestreamed, in response to the findings of our engagement survey in January. One of these, [Climate Question Time](#), was held at Leeds Civic Hall and was attended by 120 people. Cllr James Lewis, the Deputy Leader of Leeds City Council, who is also Deputy Chair of Leeds Climate Commission, joined a panel of climate scientists from across the north of England to answer questions gathered from members of the public. The other event, *Unfrozen: Reports from the Ice*, was held at the Howard Assembly Room (thanks to our burgeoning connection with Opera North – see above) and featured talks by University of Leeds scientists working in Greenland and the Arctic, plus a live link up with scientists in Antarctica. Read more about our action packed Green GB Week programme [here](#).



*Cllr James Lewis (right) on the panel of Climate Question Time at Leeds Civic Hall (16 October 2018) with Dr Sarah Mander, left, and climate journalist Mat Hope*

## Climate and energy knowledge sharing/networking platform

One of the strongest findings from our climate mitigation actions and communications survey in January 2018 was the need for a go-to place or platform where people could find practical information and compare experiences (see our write up [here](#) and read the report in the downloads [here](#)). The Commission's Engagement and Communications working group has been looking in to this with commission members [Citu](#), and they have offered to build, host and maintain a virtual platform/hub that will be separate from, but linked to both the [Leeds Climate Commission's website](#) and [Leeds City Council's website](#).

A working party from the Commission has been set up to co-create the website and a date has been set in early February 2019 to progress the project, which is being funded by Citu. This truly represents the 'Can Do' spirit of business, the Council and the University coming together to find ways of moving the carbon reduction agenda forward and addressing the public need for information.

Citu is also planning to build a 'Climate Experience Centre' at the [Climate Innovation District](#) in Leeds' South Bank in 2019, which the Commission will be able to collaborate with them on to host exhibitions, talks, events, meetings and more, offering face to face engagement.

## ENABLING POSITIVE CHOICES

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### Carbon Literacy evaluation project

It is clear that technical responses to climate change are only one part of the solution and that influencing people's behaviour in how they heat their homes, travel, shop, manage their waste will be critical. But if the organisations in Leeds are going to spend precious resources trying to change the behaviour of their employees, their students, members of their families or friends in their communities, we need to know what the evidence is for successful and effective behaviour change programmes. The Leeds Climate Commission has helped the University of Leeds to secure £15k funding from the [ESRC](#) to look at the effectiveness of two programmes that have been running locally: [The Carbon Literacy Project](#) and [Carbon Conversations](#). CITU and ITV will be using these programmes for a year and there will be a dissemination event with Leeds Climate Commission at the end of the process.

### Carbon mitigation, communication and engagement survey

A survey commissioned by us and conducted by University of Leeds student Andrew Jones on climate change mitigation and engagement found that people in Leeds lack time, information, resources and a platform to share information, highlighting the value of a central source of information and the need for wider sharing of [success stories](#). Read the survey report in downloads [here](#) and our [news story](#) on it and [follow up piece](#). As described in the above sections on case studies, livestreamed events and the climate platform we have actioned key findings.

### Leeds Climate Commission "Vision"

Another significant finding from the survey was the need for the Commission to articulate a clear vision for climate action in Leeds. Work has been undertaken to address this with a session led by Commission member Philip Marken of [Open Source Arts](#). Ultimately the aim is to be able to encapsulate the Commission's vision in a short and snappy way that will describe our mission clearly and excite and engage the people of Leeds. Work to date has produced useful concepts, which now need further refinement. Once this is done, we will look to launch a promotional campaign with lamp-post banners to tie in with the launch of the climate/energy hub, along with a promotional event.

We have also met with a representative from another new Commission member, [Grayling PR](#), which has provided valuable external feedback on the Commission's vision, as well as our image and website. Grayling has helped us compose our strapline: "Enabling climate action in a can-do city" which is now on the banner header on the [home page](#).

## Public engagement activities and stakeholder events

The Commission has supported, promoted and co-ordinated a range of local events and activities in the city, including:

- WWF's [Earth Hour](#) (24 March 2018) with Commission partners
- [Green Great Britain Week](#) (15-19 October): an initiative of the Dept of BEIS, the Leeds Climate Commission and Priestley Centre used this as an opportunity to have a city-wide conversation about climate solutions. We spoke to around 90 people at Leeds Station and linked up with other cities in the north (York, Newcastle and Manchester) to conduct a simultaneous public engagement survey ([read the results](#)); this was used to inform the livestreamed major event, [Climate Question Time](#). We also ran a slideshow on Leeds Big Screen all week as well as a [film](#) about communicating climate change with a YouTuber, ClimateAdam.



- Social media campaign. For Green GB Week we worked with artists Suzie Cross and Dave Lynch, collaborating on and co-promoting (with the Priestley International Centre for Climate) a [Twitter campaign](#). [#MyClimate](#) asked people what climate change meant to them (in nine characters) and ran the resulting messages in an illuminated digital installation using 2m high letters on the fifth floor of the Platform building, adjacent to the station (above). The campaign had over 150 engagements on Twitter and gathered plaudits online, with people suggested it should be rolled out nationally.



- Royal Academy of Engineering public outreach Ingenious Project: the [Art of a Sustainable Future](#) (24 September 2018). This was a stakeholder workshop with groups in Leeds, including schoolchildren, to co-create an optimistic vision of a zero carbon future. Environmental leader Jonathon Porritt and journalist and scientist Gaia Vince both attended (and gave radio interviews too). The competition will be launched in January 2019 and represents another great opportunity to engage the public on climate change
- Leeds Faith Leaders Climate Forum (26 November): we supported this event and our lead officer Tom Knowland gave an address about the Climate Commission, which you can hear in the podcast of the event [here](#).
- [Zero Carbon Yorkshire AGM](#) (8 June 2018): Engagement and Communications Officer Kate Lock gave a presentation on Leeds Climate Commission
- [Zero Carbon Ilkley](#) (5 December): our Chair, Prof Andy Gouldson, addressed the new Zero Carbon Ilkley group on [Tackling Climate Change at the Local Level](#).

## AN INDEPENDENT VOICE FOR EVIDENCE BASED ADVICE

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### Climate risk/vulnerability of Leeds: Climate Impact Profile

Leeds has been awarded a three-year ESRC funded Research Fellow on the Economics of Climate Resilient Cities and Infrastructure. This project will look at a unified framework for climate resilience across the city, with ARUP as the main industrial partner.

The Climate Resilience Working Group welcomed the addition of the UKRI Fellow, who will develop the economic case for investing in climate resilient solutions. These will decrease climate risks and improve employment, productivity, environmental quality and human well-being. With that support, the working group is advancing with concrete deliverables. It now has a second Leeds Climate Impacts Profile, which gathers the negative consequences of extreme weather events in Leeds from 2008 to mid-2018 that were reported by the media. This has informed the climate vulnerability assessment of Leeds which will be released next year, and which will help to identify investment opportunities.

The group has been identifying gaps in the local adaptation plans: for instance, it has been working with Leeds City Council to embed water efficiency into the future housing developments. We will contribute to the developing of the Adaptation Framework to make the City and the Region climate resilient.

## Climate resilience database

The project continues and completes a project started in 2017 to compile a database of information on climate resilience activity across the city and related resources (documents, strategies, policies etc at a variety of geographic scales) relevant to climate resilience. The documents were reviewed in October 2018 and an updated list is on the [Leeds Data Mill](#).

## Student projects: position papers

Leeds students have assisted the Climate Commission by preparing the evidence base for three Position Papers. The purpose of these Position Papers is to provide authoritative advice on steps towards a low carbon, climate resilient future so as to inform policies and shape the actions of local stakeholders and decision makers. The first three Position Papers will cover the [South Bank Regeneration Framework](#); [H21 \(Hydrogen\) Leeds City Gate](#) and food waste. ([Read more](#) about H21 hydrogen project and watch a video explainer on our website.)

Reducing food waste in the city has been identified as an ambition in the city as part of the [Leeds Food Partnership](#) target to achieve the national sustainable food cities partnership Bronze Ambition award. Students working with the Leeds Climate Commission have been gathering data on food waste in the city so that we can understand the scale of the challenge and the opportunity it represents to develop a more sustainable food system in Leeds that will also help to reduce carbon emissions.

## Green Building Council retrofit project

Leeds submitted a bid to develop an innovative financing platform to unlock investments in clean, inclusive growth within the Leeds City Region, demonstrating the wider benefits (social, health, safety etc) of holistic domestic energy retrofit at a community scale. Although we did not succeed this time around it led to other potential sources of funding being identified and these will be pursued.

## Embodied Carbon Project

A project led by the University of Leeds has set a long term plan: to establish standards for the city with regards to embodied carbon measurement and mitigation. The early work is using University of Leeds and other city developments to put together an evidence base on how this type of standard would work, what economic opportunities it would open for the development industry and how it would be monitored.





## European Covenant of Mayors twinning project

Leeds partnered with the city of Breda in the Netherlands for this twinning project, funded through European funds, hosting a visit in April 2018.

The visit highlighted issues shared between the two cities including a range of challenges on climate mitigation: District Heating; energy in spatial planning and district approach; municipal energy (White Rose Energy); domestic energy efficiency & fuel poverty; project development and financing; hydrogen (H21). There were also shared climate adaptation challenges: flood risk; extreme weather (hot and cold); air quality and health. Planning and partnership working were cross cutting mitigation and adaptation challenges.

Representatives from Leeds will be making a return visit in 2019 and will be interested in working on other shared experiences including tracking city carbon emissions effectively and accurately.

Read about the exchange visit in this [blog](#) on Leeds City Council's International Relations website and find out more in this [report](#) on Eurocities, which describes their interest in and excitement about the "holistic approach" to tackling climate mitigation and adaption adopted by Leeds Climate Commission.

LEEDS	BREDA
	
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Population: 751,500 Signatory of the Covenant since: 18/07/2012 CO <sub>2</sub> reduction target: 40% compared to 2005 Adaptation plan: yes	Population: 184,000 Signatory of the Covenant since: 05/02/2009 CO <sub>2</sub> reduction target: 45% compared to 2008 Adaptation plan: yes

## LOOKING AHEAD

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Leeds has an opportunity to demonstrate what local leadership and collaboration can do to deliver innovation in low carbon energy infrastructure that reduces greenhouse gas emissions, stimulates local economies and tackles fuel poverty.

As the democratically elected provider of the majority of local public services, a local authority can demonstrate and bring leadership to an issue such as local energy infrastructure. A local authority can use its influence to bring key stakeholders and partners together around a particular project proposal or strategic framework for local projects.

Local authorities have many existing roles and responsibilities that can be strategically deployed in pursuit of low carbon energy outcomes. However, this is a new area of competence for many local authorities that requires careful planning and consideration if it is to be delivered efficiently and effectively. This is a role that local authorities cannot manage alone and should instead draw on local expertise and work with other organisations to provide the environment where partnerships for innovation can flourish and provide solutions that can help to deliver the low carbon energy infrastructure of the future. This is the purpose of [Leeds Climate Commission](#).

### **Roadmap for city-wide carbon emissions reduction**

Leeds Climate Commission is strongly recommending that Leeds follows an evidence-based approach to reducing carbon emissions in the city. The Commission is proposing to prepare a 'roadmap' by March 2019 to deliver city wide carbon reduction targets and to bring forward proposals for city level carbon budgets consistent with the roadmap. This will be on the basis that any revised city-wide carbon reduction targets should be grounded in evidence and are accompanied by a realistic delivery plan that is attractive to investors.

It is estimated that the carbon footprint of some of the world's biggest cities is 60 per cent larger when all the products and services a city consumes are included. Other cities around the world are starting to take these consumption emissions into account. Paris is encouraging residents to change their diets from carbon-emission-heavy meats to vegetarian fare, while Stockholm has asked all of its developers to estimate their embodied emissions in construction materials. Both of these are areas that the Leeds Climate Commission has started to work on.

The University of Leeds has worked on a more complete model of the [UK's carbon emissions](#) on a global scale that takes into account the UK's responsibility for both territorial and international emissions. Carrying out this analysis at the city scale will open up opportunities for the carbon-reducing benefits of reducing food waste (for example) to be more accurately accounted for.