

ENERGY DAYS PROGRAMME

THE CARBON PAST WE INHERIT, THE GREEN JUST FUTURE WE BUILD

Redhills Durham Miners Hall, Durham City

MONDAY 3RD & TUESDAY 4TH NOVEMBER, 10AM - 5PM



Sponsored by



STEPHENSON MOHL



THE CARBON PAST WE INHERIT, THE GREEN JUST FUTURE WE BUILD

Redhills Durham Miners Hall, Durham City

MONDAY 3RD & TUESDAY 4TH NOVEMBER, 10AM - 5PM

DEI is a world leader on interdisciplinary research across the sciences, social sciences, humanities and engineering and was one of the first truly interdisciplinary energy research institutes in the UK.

DEI Energy Days 2025 celebrates 16 years of Durham Energy Institute bringing people together to think differently about energy.

Join us for a transformative exploration at the intersection of science, art, and community as we reimagine the Durham coalfield for a sustainable future.

The Durham coalfield once powered a nation. Today, it holds untapped potential in the form of geothermal energy from flooded mine workings and valuable minerals in mine-water. 2025 also marks four decades since the end of the 1984/85 miners' strike - a watershed moment that led to unprecedented deindustrialisation and community upheaval. We will acknowledge this difficult legacy while celebrating the resilience and pride that have sustained Durham's coalfield communities.

Over two days, we will bring together researchers, artists, community members, and industry leaders to harness our rich industrial heritage and forge innovative pathways toward a green, just future. We will showcase cutting-edge research, including up-to-the-minute knowledge on how underground assets can be repurposed to create clean energy solutions, making Durham a leader in the transition to a post-carbon economy. Together, we'll explore how the industrious character and collective spirit of our communities can drive regeneration and innovation.

Hosted at the newly-restored Redhills, the historic home of the Durham Miners Association, our conference takes place in a venue that embodies both our industrial heritage and our aspirations for renewal. Once the beating heart of the coalfield community, Redhills continues to be a place where futures are forged and where the voice of the people is heard.

Conference highlights include Keynote addresses from Fiona Hill, Senior Fellow at The Brookings Institution and Chancellor of Durham University, Chris Stark CBE, Head of UK's Mission for Clean Power, UK Department for Energy Security and Net Zero and Chris McDonald MP Labour Member of Parliament for Stockton North and Parliamentary Under Secretary of State (Department for Energy Security and Net Zero) as well as leading experts in renewable energy, just transition, and cultural heritage.

With special thanks to conference sponsor REG Power/Grupotec and drinks reception sponsor SMG.

Day One – Morning

Time	Session	Room
9.30 - 10.00	Refreshments & Registration	Banner Room
10.00 - 10.15	Welcome & Opening Remarks Professor Simone Abram, DEI Executive Director Ross Forbes, Former Programme Director	Pitman's Parliament
10.15 - 10.45	Plenary Keynote Speech – Chris McDonald MP, Under Secretary of State (Department for Energy Security and Net Zero) Chris McDonald is a British Labour Party politician, chemical engineer and former business executive, who has been Member of Parliament (MP) for Stockton North since 2024. Between 2014 and 2024, McDonald was the CEO of the Materials Processing Institute, after leading its divestment from Tata Steel. Chris also plays cornet in the Durham Miners' Association brass band!	Pitman's Parliament
10.45 - 11.30	Plenary Keynote Speech – Chris Stark, Head of UK's Mission for Clean Power, UK Department for Energy Security and Net Zero The Race to Electrify This session will explore global climate impacts, the response to climate change and what it means for achieving net zero. The talk also examines the market-driven shift toward electrification and clean technologies, the evolving costs of renewable power and consumer bills, and outlines the pathway to achieving clean power by 2030. Chris Stark leads the UK Government's mission to achieve Clean Power by 2030, heading 'Mission Control', the nerve centre of its delivery. He is tasked with defining Britain's path to clean power and ensuring policies and the key institutions are equipped to deliver it. Chris is a renowned climate and energy policy expert, speaking regularly about the urgency of confronting climate change and the opportunities of developing clean energy. As CEO of the UK's Climate Change Committee he was the UK's chief climate adviser, leading independent advice to put the world's first Net Zero target into law and developing detailed cross-economy pathways to its achievement under the UK Climate Change Act. Chris has also been CEO of the Carbon Trust, a global climate consultancy, and has held a number of senior roles in the UK and Scottish Governments over the last 20 years. Chris was lead expert for the UK Parliament's 'Net Zero UK' citizens' assembly. He has also featured in national and international news and media, alongside David Attenborough and other prominent commentators. Chris is a Fellow of the Royal Society of Edinburgh, an Honorary Professor at the University of Glasgow and serves on the Boards of V&A Dundee and the arts climate charity Murmur.	Pitman's Parliament
11.30 - 12.30	Lunch	Banner Room

Day One – Afternoon

Time	Session	Room
12.30 - 1.45	Breakout Session 1 – Intergenerational Session	
12.30 - 1.45	Breakout 1 – Supergrid Wind Turbine Workshop Rachel Moor, OASES, Alice Evans, OASES Pupils from Prince Bishops Primary School Supergrid Wind Turbine design workshop led by OASES and pupils from Prince Bishops Primary School. Teams will work to build the most efficient turbine and compete against each other to see which is able to generate the most renewable energy.	Room TBC
12.30 - 1.45	Breakout 2 – Visual workshop on Community Energy Dr Elaine Ford, Department of Anthropology, Durham University Fuel Stories uses a set of sixteen cards with captions that provide a set of prompts with which to structure a community engagement or consultation on the theme of energy. Facilitators may both gather energy ethnographic data, stimulate the appetite for community energy, and understand relevant constraints in under-represented areas.	Room TBC
12.30 - 1.45	Breakout 3 – Energy Justice Children's Book – Creative Workshop & Discussion Adam Cooper, Threads in the Ground We are working on an illustrated Children's Book, and we'd like your help! We want to explore "The past we inherit, the future we build" in the context of coal and climate change. Join us for a dynamic, hands-on and brains-on workshop to explore the potential for a Carbon Heritage children's book. What's involved: Facilitated discussion and creative storyboarding activity, exploring some of these questions: • How do we honour the carbon heritage of this county, whilst also honestly talking about climate change and energy justice? • How do you amplify the voices and lived experience of coal communities and families, particularly around climate change • What are some of the most compelling ideas we'd love to see explored through a text like this? The session is delivered by Adam Cooper, Director of Threads in the Ground – a creative climate hope organisation in the North East of England.	Room TBC

Day One – Afternoon

Time	Session	Room
12.30 - 1.45	Breakout 4 – After Coal Panel Chair: Ross Forbes, Former Programme Director, Panellists: Professor Joanna Berry DEI Co Director & DU Business School, Durham University Dr Lewis Mates, School of Government and International Affairs, Durham University Dr Talia Melic, Organisation for Economic Co-operation and Development Coal dominated the North East economy for over two hundred years. There was scant planning for its demise. This session aims to look at emergent thinking on new ways of defining economies. It will also explore the legacy of coal and what technological solutions, such as the exploitation of mine water heat, can do achieve in finding specific models of regeneration.	Room TBC
12.30 - 1.45	Breakout 5 – Creative Writing Workshop – Writing the Climate Crisis Sophie Yeo, Author Sophie will lead a workshop for writers, exploring creative responses to climate change. The session, will examine the lenses through which we approach the crisis – political, environmental, emotional – and how to set a vision on the page with clarity and purpose. The techniques explored will be useful to writers of both fiction and non-fiction, including complete beginners! Yeo has over a decade of experience as an environmental journalist. She is the author of <i>Nature's Ghosts</i> and the editor of <i>Inkcap Journal</i>. She is based in Durham.	Room TBC
1.45-3.15	Durham's Energy Heritage and Futures Panel Chair: Dr Simona Capisani, Department of Philosophy, Durham University Panellists: Heather Wood, Founder, National Women's Action for Positive Change (NWAPC) Helen Stockton, Head of Research Fuel poverty and Energy Vulnerability National Energy Action Professor Simon Pirani, Honorary Professor, School of Modern Languages and Culture, Durham University Professor Danny MacKinnon, Department of Geography, Newcastle University Professor Lucie Middlemiss, School of Earth and Environment, Leeds University The panel brings together researchers and community leaders in an interdisciplinary conversation about history, heritage, and energy legacies in the region and to reflect on key social, political, economic challenges and opportunities, as well as concerns about climate and energy justice that contextualize current institutional and community relations. The panel will also provide an opportunity to look into future possibilities that centre the identities of people and relations to place in the region.	Pitman's Parliament
3.15 - 3.45	Refreshment Break	Banner Room

Day One – Afternoon

Time	Session	Room
3.45 - 5.00	Plenary with alternatives Ancestral Reverb & Discussion Adam Cooper, Threads in the Ground Ancestral Reverb is an exploration of our Carbon Heritage, through sounds, words and pictures. The piece was made using music spanning over 100 years, and the words of coal community members whose ages ranged from age 5 to 94. It contains sounds captured in a coal mine, photos taken with a Victorian-era camera, and stories passed through generations. The records are embedded with fragments of coal, scavenged in big chunks from the beach at Blackhall Colliery. Each record is an heirloom, entrusted into the care of families and institutions who carry parts of our collective Carbon Heritage. We hope they care for them and hand them down with hope and pride. The project was commissioned by the Durham Miners Association, as part of the Redhills creative residency programme. Alternatives: Walking guided tours: Coal Stories is a walking tour of industrial Durham covering former coal mines and related industry - From the earliest period of the Industrial Revolution, developments in Durham City played a significant part in the economic and political transformation of North East England. Major changes in Durham occurred that dramatically altered its environment, social composition and the preoccupations of its inhabitants. 'Coal Stories' reprises this story through a walking tour designed to reflect the lives of Durham's expanding population, and the altered character of their city. The trail takes visitors around Durham City's historic landmarks, such as the Miners Association's Pitman's Parliament, as well as lesser known sites such as St Margaret's Allotments and nearby alleyways. The guide provides fascinating insights through stories connected to each location of how coal once shaped the lives of Durham's citizens and of its legacy in the present. A medieval walking tour of Durham covering the Bailey and bridges with Professor Giles Gasper covering Redhills to Framwellgate Bridge, then on to the Market Place, Elvet Bridge, Palace Green, South Bailey and Castle walls. 360 Million years of Durham is a geological walking tour of Durham Castle and Cathedral World Heritage Site - People have come together to learn and worship here for over 1,000 years. Yet the underlying geology dates back approximately 360 million Years. During this time, the area's landscape evolved from huge river deltas with tropical forests to deep incised meander bends of the River Wear we see today. The walking tour will discuss how coal is formed, why huge deltas flowed across North East England, how the River Wear became incised and the importance of the local geology for the cathedral and castle. Redhills building tour Opened in 1915, Redhills was paid for by the subscriptions of more than 150,000 Durham miners who were then members of the DMA. With the help of expert guides, visitors will be able to explore the building where elected delegates from each of Durham's collieries met for generations. The tour will also include the rooms and corridors of Redhills which serve as a living archive of labour movement history and culture. <i>Delegates will sign up to tours on the day at registration.</i>	Room TBC
5.00 - 6.00	Networking drinks reception	Room TBC

Day Two – Morning

Time	Session	Room
9.30 - 10.00	Refreshments & Registration	Banner Room
10.00-10.05	Welcome & Opening Remarks Professor Simone Abram, DEI Executive Director	Pitman's Parliament
10.05 - 10.45	Keynote Speech Fiona Hill Chancellor of Durham University & Senior Fellow at the Brookings Institution Dr Fiona Hill was born in Bishop Auckland, County Durham. The daughter of a coal miner and a midwife, she attended Bishop Barrington Comprehensive School, in Bishop Auckland, and showed thirst for learning from an early age. After school Fiona pursued degree studies at St Andrew's University, Scotland, graduating with a Master's in Russian and Modern History. She also holds a doctorate in History from Harvard University, USA, where she was a Frank Knox Fellow. Dr Hill has built a career as an acclaimed foreign affairs specialist and author, as well as a presidential advisor to three US Presidents: George W. Bush, Barack Obama and Donald Trump. Dr Hill is a senior fellow at the Brookings Institution, a non-profit public policy organisation based in Washington DC. It conducts in-depth research that leads to new ideas for solving problems facing society at the local, national and global level.	Pitman's Parliament
10.45-11.00	Refreshment break	Banner Room
11.00-12.15	Plenary North East Now Writers Talk Chair: Rachael Lennon, Writer and Author Panellists: Dr Louise Powell, Award-winning Author & Playwright Richard Benson, Author, Journalist and Critic An emerging genre of writing and cultural expression is building a regional voice based on the experiences of the people who live here. This session will examine how this cultural shift can make a difference and what we need to do to grow and support the movement.	Pitman's Parliament
12.15 - 1.15	Lunch	

Day Two – Afternoon

Time	Session	Room
1.15 - 2.15	Breakout Session 1 – The Future of Energy in the North East	
1.15 - 2.15	Breakout 1 – Clean Maritime Research Hub Professor Tony Roskilly, Department of Engineering, Durham University Maritime transport is the backbone of international trade with more than 80% of the world's goods transported by sea. With 3% of global greenhouse gas (GHG) emissions coming from the maritime sector, if left unchecked, current growth rates suggest that this could increase to 10% by 2050.	Room TBC
1.15 - 2.15	Breakout 2 – Minewater Geothermal Energy and its Potential Professor Jon Gluyas, Department of Earth Sciences, Durham University Dr Charlotte Adams, National Centre for Geothermal Energy Mine water geothermal energy has a huge potential in the UK in general and NE England in particular. But uptake has been slow. In this session, we will discuss the potential reasons why, and will address the technical, social, policy and regulatory challenges and potential solutions.	Room TBC
1.15 - 2.15	Breakout 3 – Progress on the Regional Hydrogen Innovation Project Professor Andy Smallbone, Department of Engineering, Durham University, Dr Elaine Ford, Department of Anthropology, Durham University Dr Mahdi Amanipour, Department of Engineering, Durham University The Research England Hydrogen Innovation Project is an £11m collaborative project between Teesside University and Durham University to support around twenty companies in the region to explore opportunities for trialling new hydrogen technology, services and business models. Multiple projects are on-going around industrial heat, transport, power and storage. The speakers will summarise on-going projects, their latest results and the on-going work.	Room TBC
1.15 - 2.15	Breakout 4 – Offshore wind development in the NE; opportunities and future challenges Emeritus Professor Simon Hogg, Department of Engineering, Durham University This session will provide an overview of offshore wind activity across the wider NE and how the region is gearing up to meet future opportunities. This activity will be set within the national and international context, looking at how the sector is expected to develop in the UK and some of the potential future challenges.	Room TBC

Day Two – Afternoon

Time	Session	Room
2.15 - 3.15	Breakout Session 2 – The Future of Energy in the North East	
2.15 - 3.15	Breakout 1 – The imperative of ‘just transition’ in international climate law and litigation Dr Katalin Sulyok, School of Law, Durham University The imperative of just transition has emerged as a key policy paradigm in international climate law relating to realizing a just energy transition to a net zero economy and society. The talk will discuss the recent important developments in defining the requisites of such a just transition, with a special focus on the recent advisory opinion of the International Court of Justice on state obligations in the context of climate change.	Room TBC
2.15 - 3.15	Breakout 2 – Decarbonising our Heritage Assets Professor Giles Gasper, Department of History Professor Janet Stewart, MLAC, Durham University This session will take the form of a discussion about the wider implications of managing heritage buildings and environments responsibly, with the particular examples of university estates, with examples drawn from Unlocking the Value of University Estates report from the Gleeds Consortium, and Durham Castle as a case-study and the holistic methodology of the university’s Heritage 360 platform. Universities hold very significant heritage estates though it is not possible to provide an exact number of listed buildings in the UK university sector. There is, for example, no central database that categorizes listed buildings by use. Historic England’s <i>Education Buildings</i> guide from 2017 is a good place to start and sets the longer history of educational facilities from the medieval period to the present-day. The use and care for heritage buildings often in circumstances far from their original intention and for numbers of people far exceeding those for whom they were built, is complex. The importance of an interdisciplinary and multi-agency framework for the management of these assets, bringing cultural expectation, material care, and educational benefit, is a key area for discussion. How to maintain and modernise heritage buildings sustainably, efficiently, and affordably, and for different user-groups are open questions.	Room TBC

Day Two – Afternoon

Time	Session	Room
2.15 - 3.15	Breakout 3 – Hopeful narratives for the future of post-industrial places Chair: Dr Talia Melic, Organisation for Economic Co-operation & Development Panellists: Professor Simone Abram, DEI Executive Director & Department of Anthropology, Durham University Dr Felix Ringel, Department of Anthropology, Durham University Transforming post-industrial places is not only about rebuilding economies or physical infrastructure – it is also about reimagining the “soft” infrastructure of place identities and belongings. The stories communities tell about the places they live shape how they relate to their past and what they believe is possible for the future. These “place narratives” are grounded in industrial legacies, local pride, and sometimes the pain of loss. Yet within them lie the seeds of renewal – stories of resilience, solidarity and industrious spirit. This session will explore the role of place identity and narratives in the transformation of post-industrial regions. It will consider international examples of co-creating narratives that diverse local stakeholders can see themselves in, and consider their potential for bringing communities together around a shared, hopeful future vision, coordinated action, and inclusive prosperity. It will then open into an interactive discussion on how storytelling and cultural heritage can be used as powerful tools for regeneration and collective transformation, with what challenges, and implications for local policymakers.	Room TBC
2.15 - 3.15	Breakout 4 – Collaborating for Sustainable Healthcare: Art, Energy, and the NHS Dr Sam Goss, NHS Dr Nora Wuttke, Department of Engineering, Durham University What happens when art practice lands in the middle of energy research at a hospital in the North East of England? What does academic / NHS collaboration bring to the table when thinking about sustainable healthcare? And how do the two come together? In this session, Sam, Sustainability Lead at County Durham and Darlington Foundation Trust, and Nora, a social anthropologist, energy researcher and artist, will explore these themes. They will be presenting a case study from Darlington Memorial Hospital, where Nora studied with a team of engineers the feasibility of a novel hydrogen-led energy hub concept in close partnership with the trust.	Room TBC

Day Two – Afternoon

Time	Session	Room
2.15 - 3.15	Breakout 5 – Farming Futures: Low Emissions Farming Thomas Alison, PhD Student, Engineering Department, Durham University Thomas will explore how agriculture can best approach its path to Net Zero, addressing UN Sustainable Development Goals, including zero hunger, climate change, as well as affordable and clean energy. The discussion will centre around one potential route to energy independence within agriculture, aiding in establishing a circular economy at the core of this sector, and considering the technical, economic and environmental impacts of such an approach.	Room TBC
3.15 - 3.45	Refreshment Break	Banner Room
3.45 - 4.15	Plenary – Citizens Council & Durham Manifesto Adam Cooper, Threads in the Ground Dr Elaine Forde, Department of Anthropology, Durham University Less than a century ago, Durham was a national centre of power. At Redhills, the Pitman's Parliament (known as 'Durham's Other Cathedral'), representatives from each colliery village would debate and shape the laws and systems that we have inherited today. Join us for a fascinating panel discussion with members of the newly formed Durham Energy Council, made up of 30 County Durham residents. Learn about their journey from laymen to energy experts, and have your own say in where our energy comes from and what we, collectively, wish to pass on to our descendants.	Pitman's Parliament
4.45 - 5.00	Closing Remarks Professor Joanna Berry, DEI Co Director & DU Business School, Durham University	Pitman's Parliament
5.00 - 6.00	Networking drinks reception	Banner Room

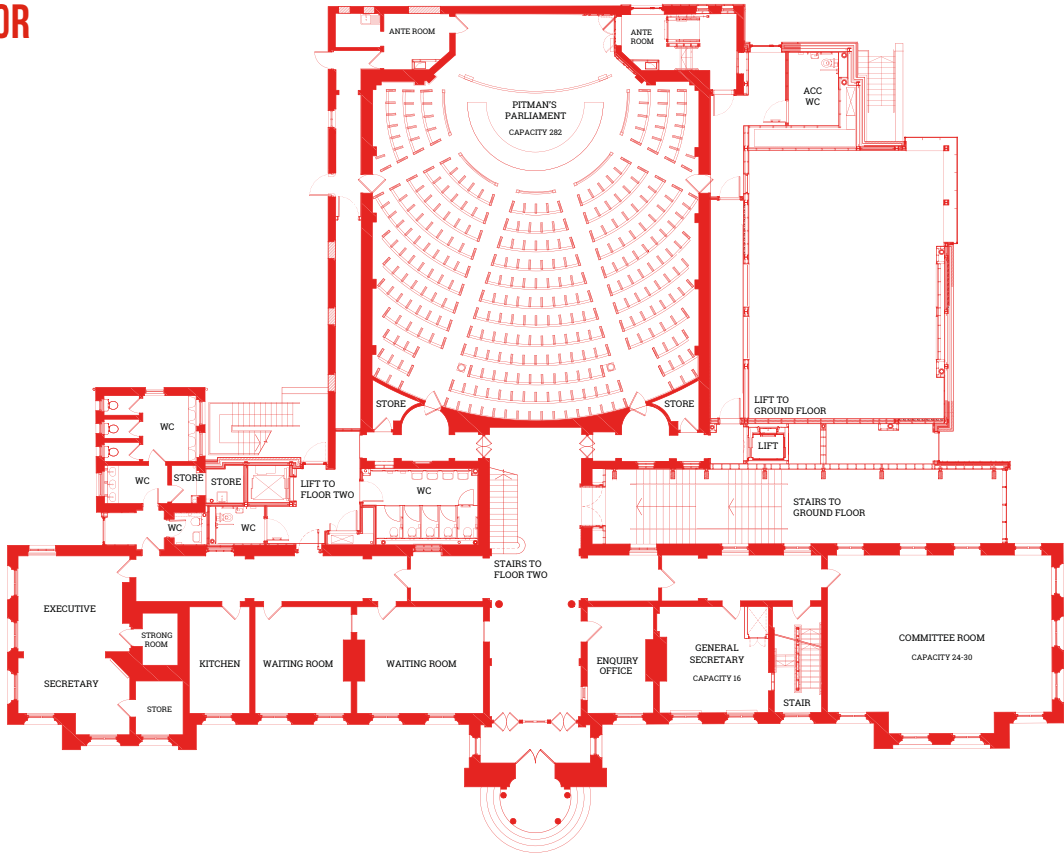
FLOOR PLANS



GROUND FLOOR



FIRST FLOOR



SPEAKERS & ORGANISERS

Scan the QR codes below to link to speakers and organisers profiles:

Adam Cooper



Alice Evans



Andy Smallbone



Charlotte Adams



Chris McDonald



Chris Stark



Danielle Johnson



Danny McKinnon



Lewis Mates



Louise Powell



Lucie Middlemiss



Lynn Gibson



Mahdi Amanipour



Nora Wuttke



Rachael Lennon



Rachel Moore



Elaine Forde



Felix Ringel



Fiona Hill



Giles Gasper



SPEAKERS & ORGANISERS

Scan the QR codes below to link to speakers and organisers profiles:

Heather Wood



Sandra Bell



Helen Stockton



Simon Hogg



Janet Stewart



Simon Pirani



Joanna Berry



Simona Capisani



Jon Gluyas



Simone Abram



Katalin Sulyok



Sophie Yeo



Kate Webb



Stuart Jones



Katie Daniels



Talia Melic



Richard Benson



Tony Roskillly



Sam Goss



Thomas Alison



DURHAM ENERGY INSTITUTE EVENTS

SEMINAR SERIES & PUBLIC LECTURES 2025/2026

Durham Energy Institute hosts a diverse seminar series that features both in-house, online and public events each academic term.

The in-house seminars bring in external speakers to share insights on cutting-edge energy research happening elsewhere, or important updates or information relevant to Durham research. These seminars are geared towards the Durham academic community, including faculty and students across various departments, and will normally be held in-person.

The online seminars, on the other hand, provide a platform for our own DEI researchers to showcase their recent and ongoing work. These virtual events cater to a wider audience, including local government representatives, industry professionals, and the general public interested in the latest developments in the energy field.

Through this seminar series, the Durham Energy Institute aims to foster interdisciplinary dialogue and knowledge-sharing around the multifaceted challenges and innovations in the energy sector. The in-person and online formats allow us to engage with different audiences and stakeholder groups and expand the reach of our research.

All seminars take place on the third Thursdays of each month during term time

To register for any of our events, please visit our [Website](#) and our [EventBrite page](#).



LOCATION

Redhills is located in the heart of Durham City, within 10 minutes' walk from Durham Train Station and Durham Bus Station.

By Car:

From the A1: Exit the A1 at J62 and follow the A690 to Durham City Centre. Cross the Millburngate Bridge and stay on the A690 heading towards the Durham Viaduct Roundabout. Turn right on the roundabout onto Durham Road, then immediately left onto Sutton Street before heading up towards Redhills on Flass Street. Redhills is at the top of Flass Street.

From the A167: Follow the A167 to Nevilles Cross and turn onto the A690 towards Durham City Centre. Follow the A690 to Sutton Street, turning off just before the Durham Viaduct (still Sutton Street), before turning left onto Flass Street. Redhills is at the top of Flass Street.



Durham Energy Institute

Durham University
South Road
Durham
DH1 3LE

0191 334 2649



Redhills Durham

Durham Miners Hall
Flass Street
Durham
DH1 4BE

REDHILLSDURHAM.ORG

admin@redhillsdurham.org

0191 323 3658

