MACC Hub adaptation projects

1. **Project title:** Adapt-Ed: Climate adaptation through education
   Lead institution: Sheffield Hallam University
   Partners: The Green Estate, Sheffield City Council, Let's Go Zero

Speakers on the day:

- Lee Jowett, Climate Change and Sustainability Fellow, Sheffield Hallam University
- Alice Jones, Head of Green and Resilient Communities, The Green Estate

Adapt-Ed addresses a critical gap in UK climate action. While schools are expected to develop climate action plans, these largely focus on emissions reduction rather than preparing pupils for climate impacts. In Sheffield — where high surface-water flood risk and urban heat island effects disproportionately affect deprived communities — this challenge is particularly acute.

The project works with five primary schools in disadvantaged neighbourhoods to embed climate adaptation into everyday teaching and planning. Up to 300 pupils will participate in place-based learning on flooding, drought, overheating and nature-based solutions.

Using a mixed-methods, participatory approach, the project combines teacher CPD, curriculum development and immersive outdoor learning delivered with The Green Estate. Impact will be evaluated through pre- and post-intervention surveys (including the NEP Scale for Children), alongside focus groups and classroom observation.

Adapt-Ed will generate evidence on how adaptation education shapes ecological worldviews, pro-environmental attitudes and children's sense of agency, offering a scalable model for linking education, local policy and community resilience.

2. **Project title:** Co-designing climate adaptation for Anglesey with people with learning disabilities
   Lead institution: Cardiff University
   Partners: PlayDisrupt

Speakers on the day:

- Dr Satish BK, Senior Lecturer, Cardiff University
- Malcolm Hamilton, Creative Director, PlayDisrupt

Indoor overheating is an overlooked climate risk, particularly in newer energy-efficient housing. In Anglesey, this project focuses on people with learning disabilities, who often have limited control over their indoor environments and are underrepresented in climate planning.

Using a citizen science approach, the project combines environmental monitoring with creative, participatory methods to centre lived experience in adaptation research. Participants act as co-researchers alongside families, carers, and support workers. Co-designed home kits measure temperature, humidity and CO_2, while storytelling, activity mapping and workshops explore how overheating is experienced and managed in everyday life, including the role of gardens and communal spaces. Inclusive facilitation is supported by Mencap Môn.

The project will generate an integrated dataset linking sensor data with narrative insight, revealing hidden overheating risks and everyday adaptive practices. Findings will inform a co-created, open-access Citizens' Physics Adaptation Toolkit, offering practical guidance for housing providers, policymakers and support organisations.

By reframing adaptation as a socially embedded and justice-led process, the project provides a replicable model for embedding equity into housing design and climate policy.

3. **Project title:** Transforming dementia care through climate resilient built environment systems
   Lead institution: University of Reading
   Partner: Wokingham Borough Council (Adult Social Care)

Speaker on the day:

- Dr Amna Shibeika, Lecturer, Reading University

Overview:

This project addresses the heightened vulnerability of people with dementia to climate risks such as heatwaves, storms, and power outages, which are exacerbated by housing, neighbourhoods, and care facilities. In partnership with Wokingham ASC, the project will co-produce a Climate Vulnerability Assessment and Adaptation Toolkit for dementia care, providing practical guidance to identify risks, prioritise interventions, and embed built-environment and service adaptations into everyday practice.

Rationale and objectives:

Current care planning rarely accounts for climate hazards, leaving a critical gap. The project places carers and frontline staff at the centre of co-design to ensure solutions are locally relevant and scalable. Objectives include mapping vulnerabilities, piloting a dementia-friendly toolkit and producing open-access outputs for wider replication.

Methodology and impact:

The project uses participatory, co-design methods, including scenario-based workshops with carers and ASC staff. Visual mapping, storyboarding, and rapid prototyping will inform toolkit development. Outcomes include a piloted Climate Vulnerability Assessment, a vulnerability and risk map, staff training, and alignment with local policy. The open-access toolkit will provide a replicable model for other councils and care providers, shifting dementia care from reactive crisis management to anticipatory, resilience-focused planning.

4. **Project title:** Project: Preventing avoidable demand on the healthcare system during summer heatwaves
   Lead institution: King's College London
   Partner: Big Local North Brixton, London Borough of Lambeth

Speaker on the day:

- Dr Yijing Li, Senior Lecturer, King's College London

Climate change is increasing the frequency and intensity of summer heatwaves, placing acute pressure on urban healthcare systems. Older adults and people with pre-existing conditions are at highest risk, with spikes in GP visits, ambulance callouts and hospital admissions during extreme heat. Building on a successful 2025 pilot in Lambeth that provided low-cost cooling equipment and community support, this project develops a scalable, integrated prevention model.

Rather than creating new parallel services, the project maps how vulnerable residents move through care pathways during heat events, from community settings to GP, ambulance and hospital services, identifying points where early intervention could prevent escalation. Using an iterative, service-design approach and participatory engagement, the team will co-design targeted interventions with public health, social care and community partners. Healthcare data analysis will quantify the scale of preventable heat-related illness.

Key outputs include a practical implementation plan and a robust business case demonstrating potential reductions in healthcare demand and cost savings. The resulting model will provide a transferable framework for embedding preventative heat-health measures into existing urban care systems across the UK.

5. **Project title:** Act Together to Adapt: Scaling community-led adaptation through institutional change
   Lead institution: University of Bristol
   Partner: Somerset Wildlife Trust, Somerset Council

Speaker on the day:

- Steve Mewes, Local Nature Partnership Coordinator and Advocacy Manager, Somerset Wildlife Trust

Somerset is highly vulnerable to flooding, heat, and drought, disproportionately affecting elderly residents, low-income households, and rural communities. While eight communities have co-created place-specific adaptation plans through Somerset Wildlife Trust's "Act to Adapt" programme, these plans rarely gain traction in formal local governance due to institutional barriers such as capacity limits and complex planning processes.

This project bridges the gap by embedding community-led adaptation into council policies and procedures. Through co-production, staff secondments, walkshops and capacity-building workshops, the project develops practical mechanisms for Somerset Council to systematically recognise, support and integrate community adaptation measures.

Key activities include mapping barriers to integration, designing support pathways, co-developing decision-making flowcharts and toolkits and piloting policy integration processes. A national learning network will connect other councils and communities to share insights and best practices.

Outcomes include new council procedures, staff training protocols and accessible guidance enabling community adaptation plans to influence planning, budgeting and policy decisions. By institutionalising community participation, the project strengthens local resilience, fosters cultural change within governance, and creates a replicable model for councils nationwide, ensuring community knowledge and agency are central to climate adaptation.

6. **Project title:** Playgrounds of possibility: youth-led visions of transformational adaptation
   Lead institution: University of Leeds
   Partner: Yorkshire and Humber Climate Commission), Environment Agency, Grimes Dyke Primary School

Speakers on the day:

- Dr Milo Harries, Postdoctoral researcher, University of Manchester
- Louise Hill, Headteacher, Grimes Dyke Primary School

This project empowers children from a deprived area in Leeds to co-design safe, climate-resilient school playgrounds. Using creative, arts-based methods, it explores children's experiences of extreme weather and reimagines outdoor learning spaces to remain safe, engaging and educational in a changing climate.

The project centres children's voices, addressing a gap in adaptation planning and school climate action. Pupils collaborate with scientists, creative practitioners, and local partners to develop practical, child-approved solutions that enhance resilience to heat, flooding and storms.

Using the LEAF Method (Listening, Emergence, Action, Feedback), children engage with future weather scenarios informed by climate models and local flood risk projections. They create story-based outputs, project future play experiences and co-produce a catalogue of adaptation options.

Key outputs include a story-based toolkit for schools to initiate child-led adaptation dialogue, a co-produced catalogue of practical climate-resilient play solutions and implemented adaptive measures at Grimes Dyke Primary School documented as a public case study.

By combining scientific evidence, creative engagement and child agency, the project produces a scalable, transferable model for inclusive, playful and climate-resilient outdoor learning spaces across the UK.

7. **Project title:** Cultivating resilience: integrating food justice and mental wellbeing
   Lead institution: Royal Free London NHS Foundation Trust (host of Thrive LDN)
   Partner: Women's Environmental Network

Speakers on the day:

- Ben Rossington, Project Officer, Thrive LDN
- Zarina Ahmad, Co-Director, Women's Environment Network

This project strengthens community-led climate adaptation in Tower Hamlets by linking local food initiatives with peer-led mental health support, focusing on racialised and marginalised women. Working through the Limborough Community Food Hub, it integrates gardening, cooking workshops, and pantry services with co-designed mental health sessions, creating a virtuous cycle where improved wellbeing supports engagement in climate action and resilient local food systems reduce vulnerability to shocks like heatwaves or supply disruptions.

Using a participatory, mixed-methods approach, the project combines quantitative evaluation by the Climate Cares Centre with qualitative ethnographic research led by WEN. Co-production workshops, peer-led sessions and training for at least 20 community members ensure cultural relevance and sustainability. Key outcomes include strengthened psychosocial resilience, enhanced community connectedness and practical skills to adapt to climate-related challenges. Participants gain increased access to communal green spaces, improved mental wellbeing and leadership opportunities in local adaptation efforts.

Outputs include an evaluation report, co-produced tools and frameworks integrating mental health and climate-resilient food systems, a trained cohort of peer facilitators and an evidence-based adaptation blueprint for policymakers. Dissemination through WEN, Thrive LDN and Climate Cares Centre networks provides a scalable model for equitable, community-led transformational adaptation nationwide.

8. **Project title:** Adapting Together: Building local resilience through lived experience and partnership
   Lead Institution: University of Brighton
   Partner: West Sussex County Council
   Location: Crawley

Speakers on the day:

- Rebecca Elmhirst, Professor, University of Brighton
- David Sale, Climate Change Policy and Partnerships Manager, West Sussex County Council

This project enhances community resilience to extreme heat by placing lived experience at the centre of adaptation planning. Using West Sussex County Council's Climate Vulnerability Index (CVI) to identify high-risk neighbourhoods in Crawley, it engages under-represented residents through participatory mapping workshops in accessible local libraries. By combining quantitative data with residents' insights, the project co-designs a demonstrator adaptation project and develops a transferable engagement framework for inclusive climate action across the UK.

The project addresses limitations of top-down heatwave planning by empowering marginalised communities and linking data to real-life experiences. Workshops gather insights on heat stress, co-create adaptation ideas, and guide physical interventions such as cooling spaces, green infrastructure, or awareness campaigns. Iterative analysis ensures outputs reflect community priorities.

Key outcomes include a community-validated CVI, a replicable participatory mapping and engagement framework, and an implemented demonstrator project in Crawley. Strengthened partnerships between the university, council, and local communities build capacity for future climate action. Dissemination through webinars, case studies, and MACC networks provides a scalable model for equitable, co-created heat resilience nationwide.

9. **Project title:** Brink! Hedge School: Culture, history and place for local adaptation
   Lead institution: Queen's University Belfast
   Partners: Brink!, Grow NI, Quarto, Anaka Women's Collective, Bomoko NI, Extern, Waterworks Garden, Gairdin an Phobail

Brink! Hedge School is a community-led project supporting climate adaptation in Belfast through heritage, food growing, storytelling, and creative workshops. Building on the 2023 "A Growing Story" initiative, it repurposes underused urban sites into living laboratories for learning and resilience. The project engages residents, schools, and community groups, combining practical skills, cultural activities, and co-designed learning to foster greener, healthier, and more resilient communities while informing local and national adaptation strategies.

Rationale and objectives:

Using the historic Irish "hedge school" model, the project focuses on place-based, inclusive learning. It transforms vacant sites into community assets, centers the voices of groups most vulnerable to climate impacts and social exclusion, and generates evidence to inform policy and planning. Objectives include testing scalable, low-cost interventions, embedding culture and heritage into adaptation, strengthening collaboration between communities, social enterprises, researchers, and policymakers, and producing practical, transferable insights for national adaptation efforts.

Methodology and impact:

The project uses a participatory, practice-based approach, combining experimental action, co-research, and structured reflection. Accessible entry points such as food, storytelling, and crafts ensure adaptation is tangible and culturally relevant. Outcomes include transformed heritage gardens, co-designed workshops, community-led toolkits, digital resources documenting activities, strengthened local networks, and academic evaluation to inform inclusive, scalable approaches to adaptation.

10. **Project title:** Building Resilience, Building Community: Empowering Vulnerable Communities for Climate Action
    Lead institution: University of Strathclyde
    Partners: Together Reaching Higher

Overview:

This community-led project focuses on Govan, one of Glasgow's most climate-vulnerable neighbourhoods. It empowers low-income, homeless, and ethnic minority residents to address heat stress, poor housing, and related mental health challenges. Using a participatory action-research approach, local young people and residents are trained as Climate Resilience Champions to co-design and deliver adaptation workshops. Through storytelling, participatory mapping, and reflection, lived experiences inform locally relevant solutions that strengthen social cohesion and guide climate, housing, and health policy. The project also aims to develop a scalable model for other vulnerable urban communities.

Rationale and objectives:

Govan's residents face intersecting challenges of poverty, housing insecurity, and climate risk, yet are often excluded from planning. The project places those most affected at the centre, building local capacity and agency. Objectives include assessing community vulnerabilities, empowering residents as adaptation leaders, co-creating practical adaptation strategies, enhancing wellbeing, and generating evidence to inform wider climate resilience policies.

Methodology and impact:

The project combines training, co-design, and creative participatory approaches to foster community ownership. Outcomes include a co-produced climate risk profile for 100+ residents, 15 trained Climate Resilience Champions, piloted adaptation strategies, strengthened social cohesion, and a final toolkit and policy brief for replication. This work will provide practical, scalable insights for inclusive adaptation in other urban communities across the UK.