# Bradford District Sustainable Development Partnership

# Leadership Areas

# **Citizen Participation**

- Co-development
- Decision-making
- Behaviour Change

Greener Jobs and Better Lives

# **Responsible Consumption**

- Consumer goods/ services
- B2B goods/ services
- Food & Beverage
- Tourism & Aviation
- Data storage

# Circular Economy

- Redesign for lifetime extension and re-use
- Repair/ re-use
- Recyclate as resource
- Product as service

# Decision-making

- Life on land
- Rivers, streams, lakes, wetlands

**Natural Environment** 

- Soil and Peatland
- Urban nature
- Ecosystem services

#### **Local Resilience**

- Flood management
- Connectivity
- Warm/ cool homes and workplaces
- Food supply chains
- Water resilience

#### **Net Zero Carbon**

- Transport
- Buildings
- Industry
- Agriculture
- Land use
- Waste

# **Clean Energy**

- Geo-thermal
- Wind power
- Solar and Hydro power
- Energy storage
- Green hydrogen
- Biomass

#### 1. Infrastructure for Net Zero Carbon

Investing in net zero infrastructure is a once in a century set of interrelated decisions. This needs to be backed up by revenue models, underpinned by business cases, delivering sustainable energy solutions for transport, utilities, business, industry and neighbourhoods. This initiative would deliver a shared understanding across all Partners in Bradford District and a systematic approach to solution delivery, knowledge sharing, collaboration and innovation, catalysing the Clean Growth Strategy. 'No regrets' market opportunities for infrastructure investment will be prioritised that contribute towards Bradford District's place-based approach to achieving sustainable outcomes. Business cases will be produced so that we understand how much it will cost to deliver the gaps in the infrastructure required for net zero. Investors such as the Green Infrastructure Bank will be approached with our prioritised requirements and fundable proposals. Once definition is achieved, we will work with Skills and Employment to underpin creation of Green Jobs from the business case which links to Bradford District Economic Recovery Strategy promise. By a proactive approach making use of the District's many assets, the ambition is that homes and businesses across the District will benefit from lowest cost renewable energy and utilities.

#### 2. Bradford 'Business Green Hub'

Awareness and understanding of sustainability - its challenges and opportunities - is currently low amongst most local businesses and sustainability is a priority for very few. This workstream will create opportunities for businesses in the Bradford District benefit from an inclusive transition to Net Zero and contribute to wider social and environmental good across the District. The Chamber of Commerce initiative 'Green Business Hub' is targeting businesses which have not yet started on their sustainability journey, or unaware of the need or related opportunities. Anchor Organisations will have a key role as 'Procurers in Chief' in the local economy, offering their supply-chain support and the incentive of revenue growth for SMEs adopting green business models.

#### 3. Circular Economy Industrial Test-bed

Based at Yorkshire Water, Esholt Site, this is a unique opportunity to create a circular economy flag ship development on a mixture of brownfield and greenfield site in a new and innovative way. Ambition for the site includes a sustainable housing development, a state of the art Yorkshire Water learning facility, and industry spaces which could benefit from the heat, power and water generated by the treatment works. Through demonstrating circular economy principles, Esholt will create synergies with other businesses across the supply chain with various innovative uses of by-products from the water treatment processes including biogas conversion into hydrogen, anaerobic digestion and nutrient recovery.

#### 4. Sustainable Food Supply System

Sustainable Food Supply System is one of four core themes within the draft Bradford District Good Food Strategy (2022) which the SDP has played a key role in developing. The food economy is an under-stated but important sector of the local economy with great potential for transformation. The strategy proposes several key deliverables including Establishing a Food Partnership, forming an Anchor Organisation Procurement Network, undertaking feasibility studies for urban farming and halal lamb Farm-to-Fork, codeveloping a sustainable fast-food offering, and hosting a collaborative 'City of Food' event.

#### 5. Hydrogen Mobility Test-bed

Hydrogen electric vehicles (EVs) have a key role to play complementing battery EVs. This workstream seeks to outline optimum relationships between sourcing, transportation, keystone users and future growth paths. It must then convene actors to secure 'inprinciple sign-up' from key transport operations, fuel and vehicle suppliers, and investors. This would create the basis for a viable and fundable 'Test-Bed'. Key potential partners within the District include Anchor Organisations to commit to partnership working and fleet transition, Yorkshire Water as an opportunity for hydrogen storage and production, and and Bradford Council to include and enable this work through its Clean Growth Strategy, Clean Air Zone funding, and planned Advanced Fuel Centre at Bowling Back Lane.

## 6. Neighbourhood Retrofit for Sustainable Lifestyles

85% of the building stock that will exist in 2050 is already here, and a long way from being zero carbon which the statutory targets require. Energy costs, particularly gas costs, are increasing dramatically. Energy efficiency (demand reduction) is the only way to improve the situation for most home owners, followed by fuel switching for residual demand. The current focus is on 'retrofit' at a property-level. Neighbourhood retrofit means tackling energy demand, fuel supply and carbon emissions across all properties in an area, covering a variety of building types, functions and tenure. Some properties will still need property-specific interventions, while others will benefit from a shared heat distribution system. A neighbourhood retrofit approach will also involve considering the options for low carbon energy generation within the neighbourhood. The goal is for community participation in deciding the changes that are needed to enable sustainable lifestyles within their 'place'.

# 7. Improving Natural Capital and Ecosystem Services

The District has a lack of biodiversity and green spaces, and has proved vulnerable to flooding issues. Nationally, there are initiatives to understand how a systems approach can be adopted in to preventing flooding of properties, businesses and valuable land utilising natural flood management. The aim of the work is to reduce costs and, largely, embodied carbon in solutions delivery. The project seeks to develop the potential to link this national work with local imperatives utilising low value agricultural or underutilised/redundant land to be "soft engineered" to provide a sacrificial, water attenuation function but also be managed for biodiversity, public amenity (wellbeing), biomass production informing multiple outputs of reduced impacts of flooding, societal/quality of life benefits, renewable fuels, enhanced subsidy 'free' agricultural and rural revenues, delivering 6 Capitals value.

# 8. Manufacturing Futures

Manufacturing has been at the heart of Bradford's success but now faces unprecedented uncertainty through the need to adapt to Net Zero. A progressive, supportive and collaborative approach to addressing Net Zero will bring about a sustainable, thriving Manufacturing Base for the coming decades. In order to encourage company involvement, the SDP initially wants to facilitate collaborative and practical solutions that start to bring immediate benefits. There will be programmes to engage local manufacturers in practical forums to share ideas and best practice to bring early benefits and accelerate net zero. Subsequently, a blueprint of infrastructure requirements for Bradford would be developed that recognises the needs of the district's diverse manufacturing base, along with an outline of fundable investments. In addition, local businesses will be supported in adapting their business plans to build resilience during this period of unprecedented change.

# 9. Smart Technologies for Sustainable Lifestyles

Smart Technology has potential to transform any aspect of economic activity and human life. Tech innovation will play a key role in Bradford District's sustainable future given its ability to optimise demand management, connect people to worlds beyond their immediate reach, and to create new opportunities for local entrepreneurs to engage with. This initiative could deliver big data opportunities to make sustainable choices easier in the District, such as geo-mapping of 'on-the-go' service, health and life-style choices, and demand-led transport management. Bradford has strong USPs including the Long Range Wide Area Network built into the Smart Street Lighting installed across the District, an under-development Digital Strategy, expertise in the University of Bradford our enterprising digital entrepreneurs in business and our up-and-coming Digital Makers.

# 10. Energy-integrated Data Centres

This workstream will explore place-based opportunities around new data centre investment, driven by the ever growing scale of the internet and cloud based storage solutions. 'The cloud' has a large footprint and Data Centres are often built remote from urban centres. The data servers produce a lot of waste heat through their routine operation which requires cooling and consumes large amounts of power. By attracting these companies to build their data-centres in the District we aim to integrate these facilities by connecting their waste heat to a District Heating network which warms houses and commercial buildings, thus reducing energy costs both industrially and domestically as well as reducing the environmental footprint of 'the cloud'.

# 11. Circular Economy Retail Test-bed – 'Green Street'

Supported by BEIS and British Retail Consortium, Bradford has been selected as a pilot for the Green Street initiative. Green Street is guide to helping smaller retailers and hospitality businesses work together to slash their carbon footprint and become more sustainable. It's Planet Friendly Guide has 30 practical actions which businesses can take, grouped under six key principles: Save energy and switch to renewables, minimise packaging, Recycle and reuse, offer greener choices, Work together, share what you learn. Pioneering retailers and hospitality businesses will be taken on a journey together where they undertake a range of practical changes that promote sustainability but are also good for business. Green Street branding will recognise the efforts made by these pioneering businesses by attracting more ethical consumers whilst also increasing visibility and awareness to broader consumer groups.

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