

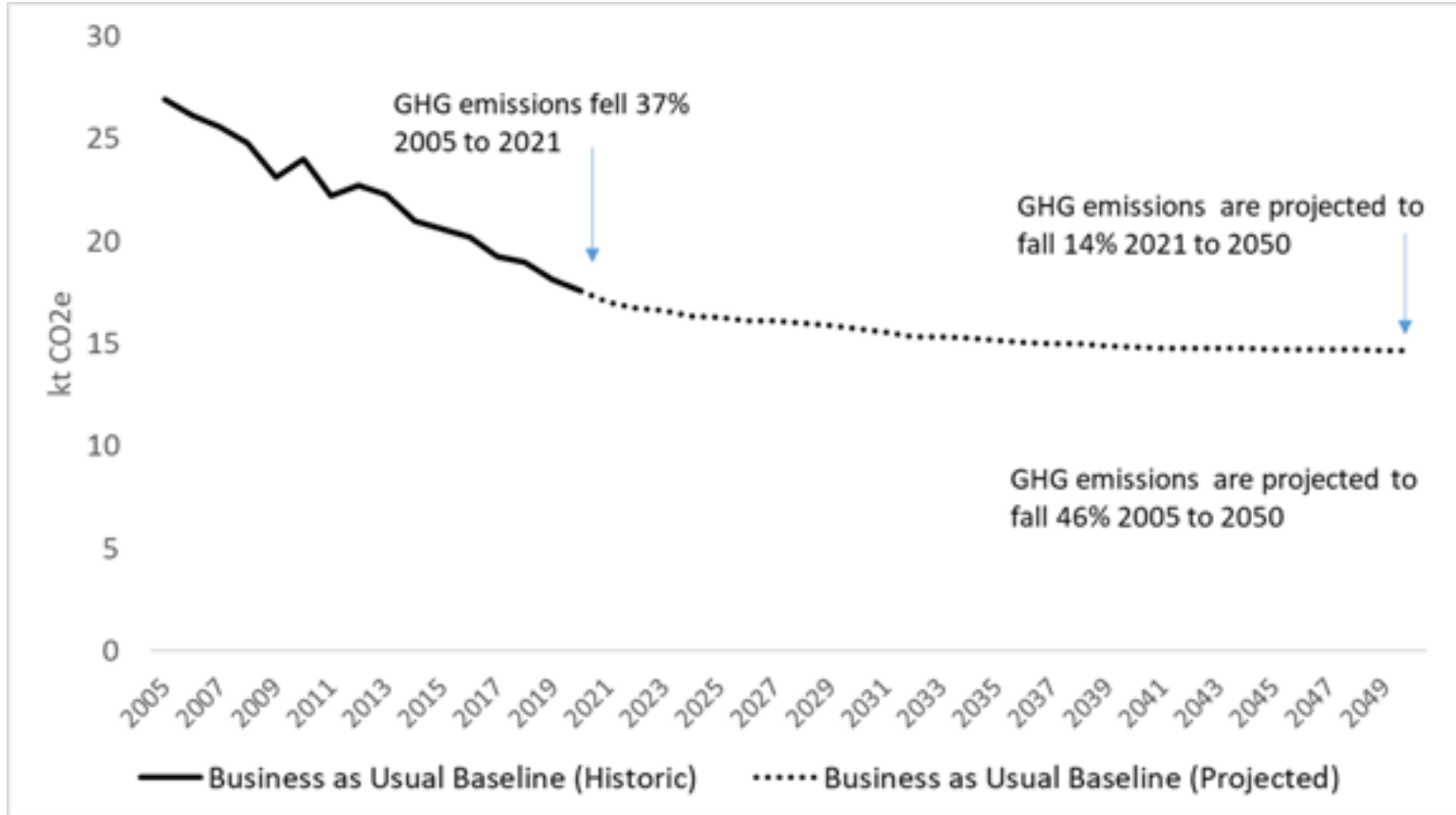


**PLACE-BASED
CLIMATE ACTION
NETWORK**

A summary carbon roadmap for Settle

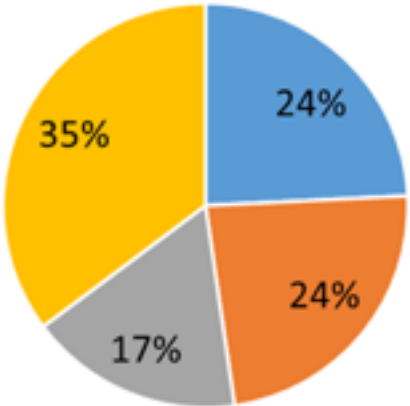


Past and future emission



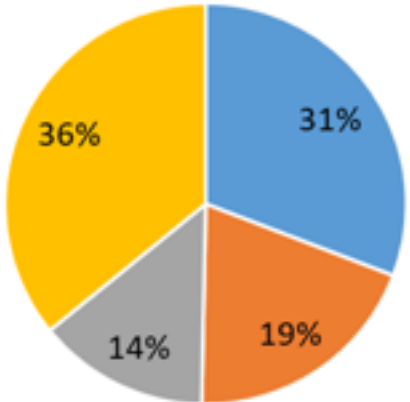
GHG emissions by source

2021 emissions by source



■ Domestic ■ Commercial ■ Industry ■ Transport

2050 emissions by source



■ Domestic ■ Commercial ■ Industry ■ Transport

Science-based targets

- Settles carbon budget is 91,384 tonnes CO₂e from 2021
- Currently emit c17,002 tonnes CO₂e
- Use budget in just over 5 years

To stay within the carbon budget Settle needs to reduce emissions on a 2005 baseline by:

63% by 2025

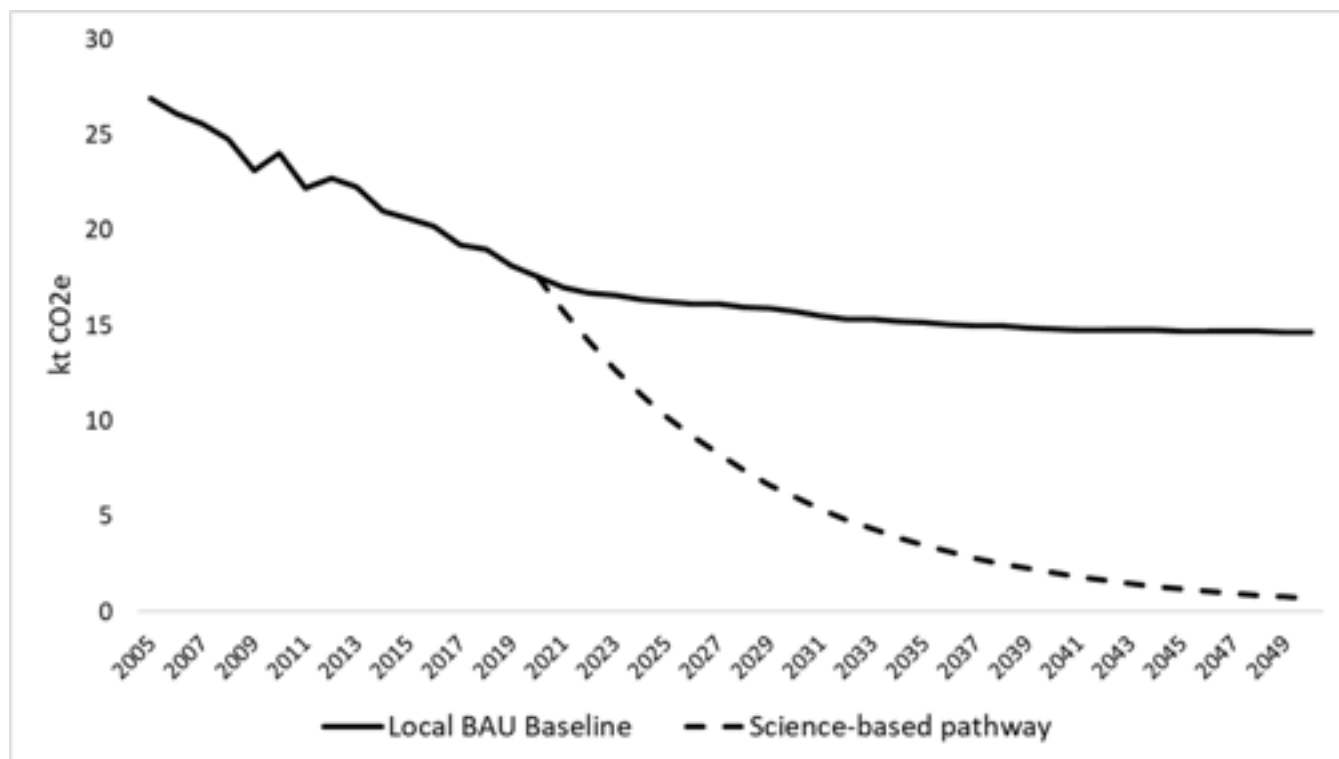
78% by 2030

87% by 2035

93% by 2040

96% by 2045

97% by 2050



What can we do?

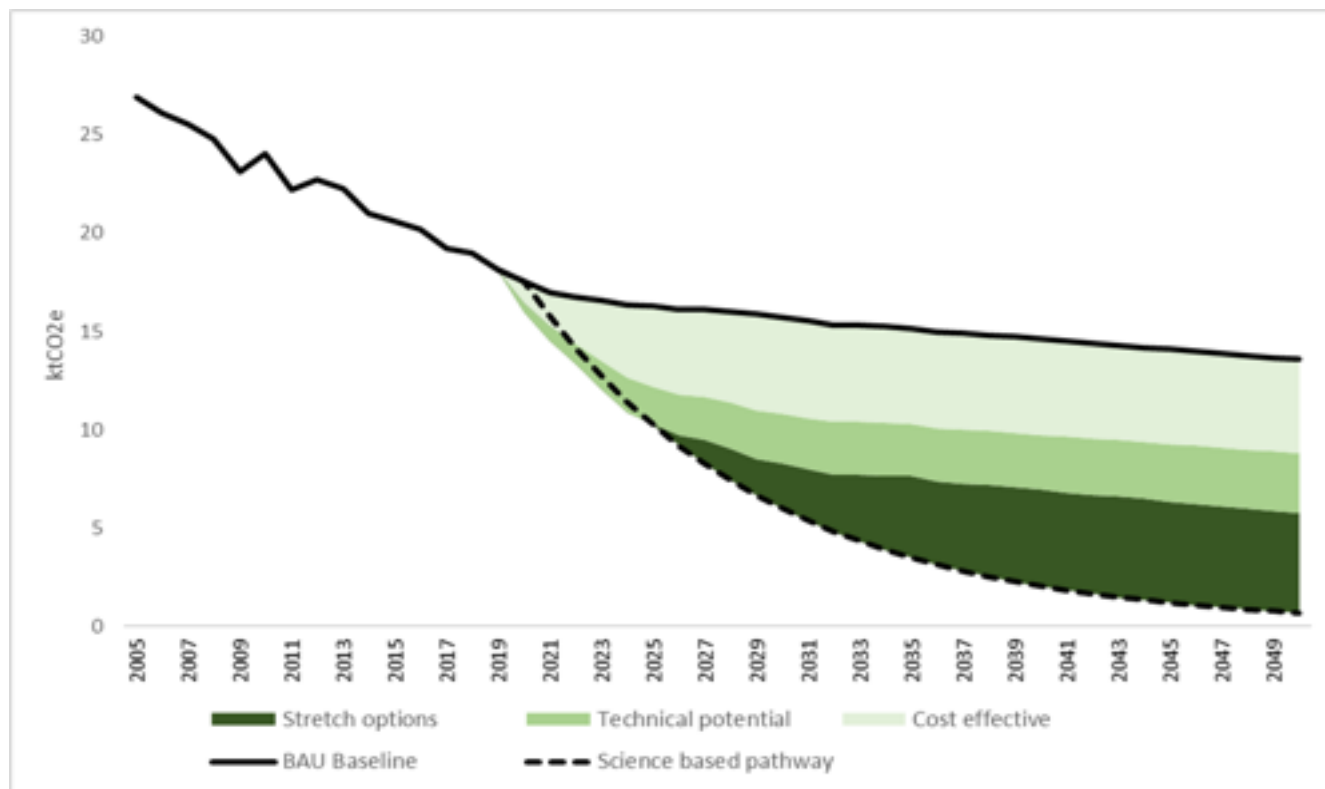
There are no silver bullets.... but there is silver buckshot...

- Households and other public/commercial buildings: Better insulation, improved heating, more efficient appliances, some small-scale renewables
- Transport: More walking and cycling, enhanced public transport, electric and more fuel-efficient vehicles
- Industry: Better lighting, improved process efficiencies and a wide range of other energy efficiency measures).

We develop scenarios:

Cost Effective	All of the things that generate financial returns at a market interest rate
Technical Potential	All (c.700) options, irrespective of their financial case
Stretch measures	Additional measures for which the financial case is still emerging (no costs are attached to this scenario)

Settle's Carbon Reduction Options



Cost-effective 37%

Technically viable 61%

Remaining 39%

Implementing cost-effective would reduce Settle's total energy bill by £30 million p.a and create 328 years of employment in the area.

What are the options that save the most carbon?



Carbon Effectiveness	Cumulative carbon savings over next decade	Measure	Sector
Highly effective	1 to 5 Mt CO ₂	Heating (<i>boilers, heat pumps, controls</i>)	Domestic
		Insulation (<i>cost-effective insulation: cavity, loft and floor</i>)	Domestic
		Cooling in retail buildings	Commercial
		Boilers and Steam Piping (<i>cost-effective measures</i>)	Industrial
		Demand reduction (<i>minor; heating, lighting and appliances</i>)	Domestic
Very effective	500 to 1000 kt CO ₂	Insulation (<i>cost-effective fabric improvements</i>)	Commercial
		Appliances (<i>refrigeration, cookers, TVs, washing machines</i>)	Domestic
		Lighting (<i>low energy</i>)	Domestic
		Pumps (<i>cost-effective measures</i>)	Industrial
Effective	100 to 500 ktCO ₂	Electric vehicles (<i>cars, goods vehicles and buses</i>)	Transport
		Compressed Air Systems (<i>cost-effective measures</i>)	Industrial

What are the options that generate the most in financial returns?



Cost Effectiveness	Total area cost savings over next decade	Measure	Sector
Highly effective	<i>£500 to £1000 million</i>	Cooling in retail buildings	Commercial
		Hybrid cars (diesel and petrol)	Transport
		Insulation (<i>cost-effective insulation: cavity, loft and floor</i>)	Domestic
Very effective	<i>£100 to £500 million</i>	Appliances (<i>refrigeration, cookers, TVs, washing machines</i>)	Domestic
		Demand reduction (<i>minor; heating, lighting and appliances</i>)	Domestic
		Heating (<i>boilers, heat pumps, controls</i>)	Domestic
		Lighting (<i>low energy</i>)	Domestic
Effective	<i>£50 to £100 million</i>	Pumps (<i>cost-effective measures</i>)	Industrial
		Compressed Air Systems (<i>cost-effective measures</i>)	Industrial
		Fans (<i>cost-effective measures</i>)	Industrial
		Boilers and Steam Piping (<i>cost-effective measures</i>)	Industrial

What does this all mean?



- Kirklees can close the emissions gap by **61%** through the adoption of options that **already available** but that may not pay for themselves directly through the energy they save. Many of these options would **generate indirect benefits**, for example relating to reduced congestion and air pollution and improved public health.
- However, Kirklees still has to identify other possibly more **innovative options** that **could deliver the last 39%** of the gap between its projected emissions in 2050 and a net zero target.

Next steps...

Next steps



- Declaring a climate emergency and **adopting 5 yearly carbon reduction targets;**
- Developing, consulting on and publishing a **climate action plan** that sets out the steps needed to meet those targets and that enables capacities to be built, key barriers to be identified and removed and progress to be tracked;
- Adopting an **independent climate commission** to act as a critical friend to the area, to draw actors together to share responsibilities, build capacities, coordinate actions, celebrate successes and collate evidence to guide and track the transition;
- **Developing leadership groups** for key activity areas in homes, public and commercial buildings, transport and industry, with plans for delivery of priority actions in each sector.
- **Encouraging all large organisations and businesses** in the area to match the broader carbon reduction commitments and to report back on progress;
- Ensuring that the **council itself leads the way** by integrating climate change into all of its activities and by requiring new planning applications or policy proposals to assess and communicate their contributions to/impacts on the carbon target;
- **Developing detailed engagements with all social groups** in the area to build a social license for transformative change and to ensure that people and places are not left behind.

Contact details

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