Date: 21/07/2025

Data Summary: Modelled data demonstrating the projected socio-economic impacts of net-zero actions recommended by the CCC in the UK's Seventh Carbon Budget. Outputs cover 32 local authorities and totals across Scotland.

Suggested Citation: Sudmant, A., Higgins-Lavery, R. (2025). The Co-Benefits of Reaching Net-Zero in Scotland. UK Co-Benefits Atlas, Edinburgh Climate Change Institute, School of Geosciences, University of Edinburgh.

Data information:

All values in £, millions unless explicitly referenced as per capita

£ values base year of 2025

Values discounted via health and non-health rates

Values are net present values (i.e. negative values represent net costs)

While population forecasts have been used throughout the modelling to account for projected per capita changes, the per capita values in this workbook use population estimates from present-day estimates.

Glossary:

Air quality: The value of cleaner air, caused by a reduction in carbon-intensive activities like driving private cars or using gas boilers. This value is modelled through health improvements and reduced building damages.

Congestion: The impact of reduced or increased congestion from projected changes to road usage due to decreasedor increased vehicle travel.

Dampness: The value of living in damp-free homes, resulting in improved health outcomes and quality of life.

Diet change: The value of health improvements from shifting to plant-based diets.

Excess cold: The value of sufficiently warm homes from fabric improvements and more efficient heating systems. The avoided damages of dangerously cold homes are valued through improved health outcomes and quality of life improvements.

Excess heat: The value of reduced overheating in homes from improved ventilation. The avoided damages of dangerously warm homes are valued through improvements in health outcomes and quality of life.

Longer travel times: The costs associated with longer journey times due to shifts away from private vehicle usage.

Noise: The value of reduced noise pollution from reduced vehicle use and quieter vehicle types like EVs. The benefits are modelled from improvements in health and amenity plus reductions in sleep disturbance.

Physical activity: The value gained from increased levels of exercise resulting from shifts to active travel. Increased cycling and walking lead to improved health outcomes and increased longevity.

Road repairs: The value of avoided road maintenance requirements through reduced 'wear and tear.' Negative values represent increased need for repairs due to factors like greater road usage via rebound effects.

Road safety: The value of avoided road collisions and improved safety through reduced road traffic. Negative values represent decreases in road safety due to factors like increased road usage via rebound effects.

For further information and methodologies:

www.ukcobenefitsatlas.net/

For technical queries:

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