How well is Eastbourne doing to meet the climate emergency challenge?

Friends of the Earth has analysed how different local authority areas across England and Wales are taking action to cut greenhouse gases. We've also compared your local authority areas with similar local authority areas[1].

In this area 44% of emissions come from housing, 26% from transport, and 30% are industrial and commercial emissions[2].

Summary assessment

The Eastbourne area's performance on climate change is average compared to other local authority areas. All local authorities, even the best performing, need to do much more if climate catastrophe is to be averted. Eastbourne particularly needs to do much better on increasing public transport use, increasing renewable energy, and increasing tree cover.

There are different estimates of how fast the UK should reduce greenhouse gas emissions if it's to do its fair share in combatting climate change, ranging from around 7% to over 25% per year[3]. Researchers at the Tyndall Centre in Manchester University say that Eastbourne should reduce emissions by 12% per year[4].

What can local authorities do?

All local authorities, even the best performing, need to do much more if climate catastrophe is to be averted. The government needs to provide them with the powers and resources to do so, and it needs to do much more itself. **All local authorities should adopt an ambitious local climate action plan** . And they should join with Friends of the Earth and others in urging more government action. Each local authority should declare a climate emergency as a sign of political intent.

The people most vulnerable to climate change are often those on lower incomes, despite having done the least to cause it because of their lower levels of consumption compared to wealthier people. For example, people with lower incomes are less able to replace and repair damage from flooding or insure against it. This inequality is called climate injustice. Researchers have identified over 10,000 neighbourhoods across the UK where people are particularly vulnerable to flooding due to their location and factors such as income[5]. Eastbourne has 24 neighbourhoods which have particularly high social flood risk for surface flooding, taking account a range of vulnerability factors. The local authority needs to target these areas for support in order to help people living there prepare for extreme weather and respond and recover when it occurs.

Below we identify how well the Eastbourne area performs on a range of climate change actions and what we think it should be aiming for.

Housing

Only 40% of homes are well insulated in Eastbourne[6]. This represents a shocking waste of energy, high greenhouse gas emissions and unnecessarily high energy bills. 9% of

households in the area are in fuel poverty, which means they can't afford to heat their homes properly[7]. Poor insulation contributes to this problem.

Upgrading the insulation of 2,929 homes per year within the Eastbourne area will ensure all homes are properly insulated by 2030, lifting as many people as possible out of fuel poverty.

We also need to switch from gas central heating, which is a major source of greenhouse gases, to eco-heating (such as heat pumps), which doesn't burn fossil fuels. The government provides grants for installing eco-heating, there are only 14 government funded eco-heating systems in the Eastbourne area, yet the UK needs to fit around 1 million per year. A fair share for Eastbourne would be fitting 1,812 eco-heating systems every year[8].

Transport

Transport is the biggest source of greenhouse gases in the UK, and emissions continue to grow. Research suggests that to deliver the greenhouse gas reductions needed will require car use to be reduced by between 20% and 60%, depending on factors such as the speed of the switch to electric vehicles[9]. This means that the UK should more than double the proportion of journeys by public transport, cycling and walking[10].

In Eastbourne only 13% of people commute by public transport, 3% cycle, and 16% walk. In the best performing similar local authority area, the proportions are 27%, 12% and 25% respectively[11].

Much more is possible. Research shows that 32% of commuter journeys in Eastbourne could be by bike (assuming good cycling infrastructure, such as segregated cycleways and the uptake of E-bikes)[12]; better walking routes can encourage more journeys on foot and improve health; and 6 in 10 drivers would shift to public transport if its quality improved[13].

Friends of the Earth suggests Eastbourne has a target of 70% of people commuting by public transport, cycling, and walking by 2030[14].

When cars are needed, they should be electric and shared as much as possible. Only 10% of commuters share their car when commuting in the Eastbourne area[15]. According to social enterprise Liftshare, best in class employers have 40% of their staff sharing journeys to work.

According to research published in April, the Eastbourne area has 11 electric vehicle charging points (EV chargers)[16]. The Committee on Climate Change, which advises the government, says there should be 1 EV charger for every thousand cars by 2030. This suggests that in Eastbourne there should be at least 47 EV chargers[17]. But we need a much faster transition to electric cars, which means many more EV chargers than this.

Energy

The proportion of our electricity produced by renewable energy has increased massively over the last ten years to around a third, and the cost of solar panels and wind farms has plummeted. But we need to produce up to 8 times more renewable electricity if the UK is to wean itself off climate-wrecking oil and gas, including for our transport and heating. Much of the additional renewable energy will come from offshore wind. But there's also a need to significantly increase onshore wind and solar power.

Currently the Eastbourne area has 5 MW of renewable power[18]. If the Eastbourne area matched the best of similar local authority areas it would have 33 MW[19]. This is a minimum target to be achieved rapidly, and all local authorities should look to exceed it.

To give an indication of what this means in practice, the average onshore wind turbine in Europe is 2.7 MW and a 25-acre solar farm will produce about 5 MW of electricity. On average 1 MW of renewable power produces enough energy for around 125 homes[20].

Trees

Trees play an important role in sucking the main greenhouse gas carbon dioxide from the atmosphere and storing it as carbon. They also provide a home for nature, clean up air pollution and reduce flood risk.

5% of the Eastbourne area has tree cover. The highest proportion in similar areas is 19%[21].

All areas should aim to double tree cover as soon as possible. Those areas with very little tree cover (less than 10%) should make an additional commitment to increase tree cover to 20%.

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For those few areas with already high levels of tree cover (30% or more) it may not be feasible to double tree cover. However, even in these areas some more tree planting will be possible[22].

Waste

Making the stuff we buy, using it, and throwing it away all contribute to climate change. Buying less stuff is an important step in cutting greenhouse gases.

For the stuff we do buy, we should reuse, recycle or compost it. Eastbourne reuses, recycles and composts 39% of its household waste[23]. This compares to the best figure of 58% in similar local authorities, while Wales has set its local authorities a target of 70% by 2025. English local authorities should aspire to the same figure. And all local authorities must aim even higher on a path to achieve zero waste (e.g, aiming for zero waste by 2030).

Divestment

Local authorities across the UK invest billions of pounds in fossil fuel companies, the very companies that have caused the climate emergency. Working out which local authority has what investments is not straightforward, because local authorities often pool funds. An analysis of UK local authority pension funds suggests that on average local authorities invest many millions of pounds in fossil fuels[24]. Along with many others, Friends of the Earth is calling on local authorities to stop investing in fossil fuels.

Summary of targets for the Eastbourne area

- Cease supporting or promoting new high carbon infrastructure, such as roads or airports.
- Annual emissions reductions – 12%
- Homes to insulate per year – 2,929
- Number of eco-heating systems, such as heat pumps, to fit each year – 1,812
- Proportion of commuters walking, cycling or using public transport by 2030 – 70%

- Increase lift-sharing – major employers aim to have 40% of their staff who travel to work by car doing so by lift-sharing.
- Electric vehicle charging stations by 2030 – at least 47
- Renewable energy –33 MW
- Trees – 20% tree cover
- Household waste reuse, recycling and composting by 2025 – 70% (on path to reach zero waste as soon as possible)
- Divestment – zero investment in fossil fuel companies as soon as possible.

Data compiled by Chris Gordon-Smith and Mike Childs, Friends of the Earth Policy & Insight Unit. September 2019

Notes

1. To ensure these comparisons are fair, they're based on the Office of National Statistics' grouping of similar local authorities. Local authority grouping can be seen on the "Clusters by local authority" tab of this ONS data sheet. The ONS has a pen-portrait of the groups.
2. The government publishes data on local authority emissions. It excludes motorways, aviation, and large industrial processes, because the local authority has no influence on these.
3. The lower estimates assume much higher potentials for future action to remove greenhouse gases from the atmosphere and also tend to exclude consideration of historical emissions (for example, see Equal Cumulative Per Capita), whereas higher estimates assume very limited drawdown and take some account of historical emissions and also sometimes embedded carbon in imports (e.g, here).
4. Researchers at Tyndall Manchester have developed an online tool to help local areas set their own climate change targets, aligned with the UN Paris Climate Agreement based on the latest science. The emission reduction rates are based on the grandfathering principle (recent emissions data from 2011 to 2016) which captures most of the socio-techno-economic factors of the area considered. Reduction rates should be considered as the minimum effort for the area's fair contribution towards meeting the Paris objectives. Hence more ambitious targets are compatible with Paris Agreement. The targets apply to CO_2 emissions from the energy system (power, heat, cooling, surface transport and industry) only. Emissions from aviation, shipping, cement process emissions, and land use, land use change and forestry are excluded. A full dataset on climate change targets for local authorities, combined authorities, city regions and county regions is available at the website.
5. They have identified 12,705 neighbourhoods in England Wales where there is very high, acute or extreme social flood risk to surface flooding and 437 to coastal or river flooding. These neighbourhoods are identified by assessing potential flood exposure with 12 factors representing social vulnerability, such as income, heath, age and housing tenure and using geographical areas identified by the Office of National Statistics (LSOA areas) with average population size of 1600 people. Further information is available at Sayers, P.B., Horritt, M., Penning Rowsell, E., and Fieth, J. (2017) Present and future flood vulnerability, risk and disadvantage: A UK scale assessment. A report for the Joseph Rowntree Foundation published by Sayers and Partners LLP and the Climate Just website (www.climatejust.org.uk).
6. Well insulated means having an Energy Performance Certificate (EPC) rating of A, B or C. The data for all properties is published regularly by the government. Our estimates are based on the proportion of properties with A, B, or C ratings and the proportion with lower. The number of EPCs is now so large in every local authority area that robust estimates are possible.
7. The government publishes data on fuel poverty in England. For Wales, figures were provided to Friends of the Earth by National Energy Action. Note that the definition of fuel poverty is different in England and Wales.
8. The data on numbers of domestic eco-heating systems installed (supported by government grants) by local authorities is from the government, see tab 2.4, here. For 12 local authorities – Halton, Blackpool, Plymouth, Isles of Scilly, Cannock Chase, Tamworth, Newham, Redbridge, Tower Hamlets, Waltham Forest, Blaenau Gwent, and Torfaen – Ofgem doesn't give the exact figure, but provides data to enable an average number to be calculated. We have used this in this small number of cases. The Committee on Climate Change has said the UK needs to fit 10 million heat pumps by 2035. Because climate change is a result of cumulative greenhouse gases, the earlier action is taken the less warming there is. We are

therefore calling for an average of 1 million a year to be fitted each year over the next 10 years. Only 22,000 were fitted in 2017.

9. Sloman and Hopkinson, More than electric cars, Friends of the Earth (2019).
10. Doubling public transport, cycling and walking would reduce car journeys by approximately 40%.
11. Data is calculated from the Office of National Statistics 2011 Census, the most comprehensive data available. It's possible that figures for public transport use for commuting may have fallen, due to savage cuts in bus services.
12. Figures come from Propensity to Cycle, a tool funded by the government and others, which takes into account issues such as geography to identify possible cycling rates for various scenarios. We use the E-bike scenario, which assumes a similar infrastructure to Dutch levels and the use of E-bikes.
13. RAC, 6-in-10 drivers would switch to public transport (2018).
14. Targets are set by ONS category (see footnote 1) with the data as follows: Country living, 40% (current best 21%); English and Welsh countryside 40% (22%); Remoter country living, 40% (27%), Thriving rural, 50% (36%), Town living, 50% (26%), Services, manufacturing and mining legacy, 50% (29%), Rural-urban fringe, 60% (58%), Suburban traits, 60% (44%), Manufacturing traits, 60% (21%), Larger towns and cities, 80% (55%), University towns and cities, 80% (55%), Ethnically diverse metropolitan living, 80% (74%), London cosmopolitan, 90% (82%). Together these increases would approximately double public transport use, cycling and walking. The areas with the lowest targets have lower population densities.
15. Data provided by Social Enterprise Liftshare, based on an analysis of ONS 2011 Census Data.
16. An analysis by Open Charge Map for the BBC.
17. Based on the proportion of licenced cars in the area.
18. Based on the latest government figures. Our calculations data exclude biomass burning and incineration, because the former has high carbon emissions and the latter involves burning fossil fuel derivatives (plastics). We also exclude offshore wind and other marine renewable energy, because its inclusion would make comparison between local authorities invalid as many do not have coastlines.
19. The data is calculated as MW of renewable energy per square kilometre. This allows a fair comparison between local authorities identified in ONS groups as similar in terms of economy, demographics and geography, but which are very different sizes.
20. Based on government figures on renewable energy capacity and production for 2018, excluding marine renewables, biomass, and energy from waste (table 6.4) and Ofgem typical values for household energy consumption (using medium consumption values).
21. Calculated from the National Forest Inventory map, and using the ONS groups of similar local authorities.
22. The government body Forest Research says that urban areas should have 20% tree cover.
23. Government data from WasteDataFlow is used for English local authorities, and from StatsWales for Welsh local authorities.
24. Calculated from data from GoFossilFree.