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An exploration of how financial inequality prevents the success of Scotland's climate change aims

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In the wake of COP26, targets to slow climate change have been set across the world. As the host of the climate conference, Scotland has set the ambitious target of reaching net zero emissions by 2045 (Sturgeon, 2021). Scotland aims to reduce emissions in areas such as transport and housing with numerous initiatives set for the coming years. However, are these targets inclusive for everyone in Scotland? How financial inequality excludes lower income households from reducing their emissions and accessing government support to do so will be explored.

The transport sector creates significant carbon emissions causing climate change (Apostolicas, 2019). This has driven the innovation of electric vehicles. In order to reach net zero, the target for Scotland (and the rest of Britain) is to stop the sale of new petrol/diesel cars after 2035 (Burch, Gilchrist, 2018). A higher uptake of electric cars within society will be beneficial for reaching climate change targets, however, considering all members of society, this is not realistic. Electric cars have a significantly higher upfront costs and therefore an individual could buy a larger petrol/diesel car for the price of a smaller electric vehicle (Mehta, 2021). Due to these drawbacks, financial incentives are needed to convince a lot of the public to opt for an electric car (Rotaris, Giansoldati, Scorrano, 2021). In Scotland there is financial support to aid individuals buying an electric car. Interest free loans up to £28,000 paid back in up to 6 years for new electric cars and up to £20,000 paid back in up to 5 years for used electric cars are available (Net Zero Nation, 2021). The cheapest used electric car that can currently be purchased costs from £9,675 however, numerous used petrol/diesel cars can be purchased for below £5000 (Buyacar, 2021). Therefore, interest-free loans are not enough to make electric cars accessible/desirable to low-income households.

Grants could be provided to low-income households to facilitate the purchase of an electric car and even the playing field of choice between electric and petrol/diesel vehicles. Alternatively, government intervention into reducing the costs of electric cars would make them more accessible. The Scottish government should look to partner with electric car manufacturers such as Nissan to fund innovation and reduce tax on production of electric vehicles. With a significant reduction in the price of electric cars to match the price of petrol/diesel cars the

financial barrier of purchasing would be removed and uptake across Scotland would increase, hence reducing transport emissions.

One of the benefits of owning an electric vehicle is their low running cost. Charging points have been installed across Scotland which initiatives to increase accessibility set. However, electric cars are mainly charged by a charging point which is installed at the owner's home. The installation of a home charging point costs around £800 (DriveElectric, 2020). Grants of up to 75% of the cost of installing home charge points are available (Gov, 2021). As of April 2022, this will only be available to homeowners living in flats and people in rented accommodation. This change demonstrates governments aim to aid lower income households more in purchasing an electric vehicle. Nevertheless, even with a grant of the maximum, 75% of an £800 would still leave a £200 installation cost, which is significant in particular to individuals in rented accommodation. Can people be expected to invest this much into installing a charge point into a home that is not theirs?

In 2018 there were 2.48 million households in Scotland, 14% were in the private rented sector, 22 – 25% in the social rented sector and 61-62% in the owner-occupied sector (Gov, 2019). A large proportion of people in Scotland do not live in a property they own. Arguably, households in rented accommodation are excluded from accessing means to reduce emissions. In particular low-income households. Some individuals in Scotland have enough disposable income to invest in an electric vehicle and charging point with/without government loans and grants dependent on their eligibility. However, for those without sufficient disposable income available, loans and grants are not enough, excluding a large portion of society from reducing their emissions. But transport is not the only area where financial inequality is prevalent and hinders Scotland's climate change aims. The Scottish government has been working to "*promote home upgrades*" to meet the net zero target (Sturgeon, 2021). Across the UK people's homes contribute 22% of emissions (Sustainable Energy Association, 2019). However, as seen in the transport sector, sufficient support is not provided to lower income households.

As mentioned, over a 3rd of households in Scotland in 2018 were private or social rented (Gov, 2019). The Future Homes Standard will be introduced in 2025 which will increase efficiency requirements of new homes being built (Gov, 2025). People who buy, rent or build their own new home are rarely low income. Targets for existing property have also been set to increase efficiency and reduce emissions. The Scottish governments Housing to 2040 plan sets out

objectives for increasing home efficiency. It states "*To lead by example, we will aim for all new homes delivered by Registered Social Landlords and local authorities to be zero emissions homes by 2026*" (Gov, 2021). The objective is there but the execution is not. In 2018 it was found that 1 in 3 homes in Scotland did not meet the living home standard (Shelter Scotland, 2018). The government is failing to improve energy efficiency in social houses. In Scotland, 38,046 social housing properties failed to meet minimum standards and 25,564 were exempt from meeting the standard (Campbell, 2021). This is detrimental to the reduction of emissions within the housing sector but also highlights the issue of fuel poverty within Scotland. Moodie argues *"the hardest to fix homes are being left until last"* and as lots of social housing is old and inefficient, this is widening the gap between those in energy efficient housing and those in fuel poverty (from Campbell, 2021). Moodie further argues, support that is available to homeowners and private tenants is not available to those in social housing (from Campbell, 2021). Therefore, financial inequality is evident in the housing sector in hindering the provision of energy efficient housing.

As with purchasing an electric car, government financial support is available to make homes more energy efficient. Interest free loans are available to cover costs of installing various renewables systems (Gov, 2021). Furthermore, households can receive a maximum of 40% cashback (with a maximum of £6000) for certain energy efficient improvements (Gov, 2021). This is an incentive for homeowners with sufficient disposable income to invest in making their home more efficient, especially due to increasing energy prices which are predicted to soar for years to come, yet a large proportion of society cannot afford to make these changes despite loans available (Jack, 2022). The possibility of receiving cashback for efficiency improvements is not a sure enough return for many individuals who cannot afford to invest in upgrading their home. For those living in private rented accommodation, this issue is amplified as individuals will not invest thousands of their own income in improving the efficiency of a home that is not theirs. If they have to move, they have lost this investment therefore government support available is not appealing enough. Hence, those who cannot afford to improve their homes energy efficiency will suffer more as costs rise as well as their emissions remaining high. To tackle issues of incentivising home energy efficiency and installation of charge points in rental property, landlords must be encouraged as oppose to tenants. A reduction of tax on landlord's rental income for properties based on energy efficiency level and presence of an electric vehicle charge point would encourage improvements. Furthermore,

moving into a rental property with a charge point makes purchasing an electric vehicle more accessible.

To conclude, the negative impact of financial inequality on Scotland's aim to reach net zero by 2045 is evident in the transport and housing sector. First Minister Nicola Sturgeon states *"that focus on justice and fairness will be central to Scotland's whole approach to COP26"* (Sturgeon, 2021). However, is there justice and fairness in the support available for the Scottish public to reduce their emissions? With only zero interest loans available to aid the purchase electric vehicles, high upfront costs still prevent lower income households from accessing them. Similarly, with interest free loans and cashback available to increase home energy efficiency, households with enough disposable income have incentive to upgrade homes however, support is not sufficient in aiding those with lower incomes. The large proportion of the public who rent property are not incentivised to make improvements and as energy prices soar, the issue of fuel poverty increases with the government's claims to upgrade the energy efficiency of social housing failing. Scotland's target of reaching net zero emissions is not attainable by 2045 which current inequality. It is clear that the if changes are not made, financial inequality within Scotland will prevent Scotland from meeting its net zero goal and tackling the climate crisis.

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References

Sturgeon, N., 2021, COP26 - Scotland's priorities: First Minister's speech, https://www.gov.scot/publications/first-ministers-speech-scotlands-priorities-cop26/ Accessed: 01/01/2022

APOSTOLICAS, P., 2019. ECO-FRIENDLY BUT UNFAIR. *Harvard International Review*, *40*(3), pp.24-27.

Burch, I. and Gilchrist, J., 2018. Survey of global activity to phase out internal combustion engine vehicles. *Center of Climate Protection: Santa Rosa, CA, USA*.

Mehta, R., 2021, Should you buy an electric car? Comparison with other fuel cars, pros and cons, Economic Times, https://economictimes.indiatimes.com/wealth/spend/should-you-buy-an-electric-car-comparison-with-other-fuel-cars-pros-and-cons/articleshow/88088750.cms Accessed: 01/01/2022

Rotaris, L., Giansoldati, M. and Scorrano, M., 2021. The slow uptake of electric cars in Italy and Slovenia. Evidence from a stated-preference survey and the role of knowledge and environmental awareness. *Transportation Research Part A: Policy and Practice*, *144*, pp.1-18.

Net zero nation, 2021, https://www.netzeronation.scot/take-action/electric-vehicles/funding-electric-vehicles Accessed: 01/01/2022

Gov, 2018, Annual Survey of Hours and Earnings – Scotland Analysis https://www.gov.scot/binaries/content/documents/govscot/publications/statistics/2018/11/summary-of-earnings-statistics-2018/documents/annual-survey-of-hours-and-earnings-2018-slides/annual-survey-of-hours-and-earnings-2018-slides/govscot%3Adocument/ASHE-slides-2018.pdf Accessed: 01/01/2022

Buyacar, 2021, Cheapest used electric cars, https://www.buyacar.co.uk/cars/economical-cars/electric-cars/623/cheapest-used-electric-cars Accessed: 01/01/2022

DriveElectric, 2020, How much does it cost to get an electric charger installed at home? https://www.drive-electric.co.uk/how-much-does-it-cost-to-get-an-electric-charger-installed-at-home/ Accessed: 01/01/2022

Gov, 2021, Grant schemes for electric vehicle charging infrastructure, https://www.gov.uk/government/collections/government-grants-for-low-emission-vehicles Accessed: 01/01/2022

Sustainable energy association, 2019, https://www.sustainableenergyassociation.com Accessed: 01/01/2022

Gov, 2019 https://www.gov.scot/publications/scotlands-people-annual-report-results-2018-scottish-household-survey/pages/3/ Accessed: 07/01/2022

Gov, 2021, Housing to 2040, https://www.gov.scot/publications/housing-2040-2/ Accessed: 07/01/2022

Shelter Scotland, 2018, The Living Home Standard https://scotland.shelter.org.uk/50/living_home_standard Accessed: 07/01/2022

Campbell, 2021, TENS of thousands of social housing properties in Scotland are failing to meet the government's minimum standards for energy efficiency, new data has revealed, https://www.thenational.scot/news/19605521.fears-looming-crisis-social-housing-fails-meet-energy-efficiency-goals/ Accessed: 07/01/2022

Jack, S., 2022, British Gas owner Centrica warns high energy bills to last two years, https://www.bbc.co.uk/news/business-59957716 Accessed: 12/01/2022