

SCOTLAND 2025

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COMMISSIONED BY:



Background

In 2020, the Buchanan Institute was commissioned by the Scottish Policy Foundation (SPF), alongside IPPR Scotland and Reform Scotland to come up with '10 Big Ideas for Scotland 2025'. 10 young researchers from Buchanan worked together to come up with 10 innovative and unique policy proposals that envision and explore how Scotland can become a better place to live and a leader in innovative policy-making.

About the Buchanan Institute

The Buchanan Institute is Scotland's first and only student-led think tank. The Institute was founded in 2014, named after the Scottish historian George Buchanan. Our founders were motivated by his doctrine, as outlined in De Jure Regni apud Scotos, that the source of all political power is with the people. Our aim is to provide a space where all students could come together to engage in the policy-making process in order to inspire and enact change. Students acquire policy-making skills through the Institute's research process, facilitated through streamlined training sessions, also known as our Weekly Workspaces. We explore qualitative and quantitative methods currently being used to understand and tackle policy issues across all sectors. More information at: https://www.buchananinst.org/

About the Scottish Policy Foundation

Quoted from website: "The Scottish Policy Foundation is an independent, apolitical grant-making charitable foundation. We are working to promote objective policy research in order to inform public debate. The Scottish Policy Foundation co-funds policy research by think tanks, charities and other organisations across the political spectrum on core policy issues." (https://www.scottishpolicyfoundation.org/)

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Table of Contents

BAG	CKGROUND	2
TAE	BLE OF CONTENTS	3
EXE	ECUTIVE SUMMARY	4
LIS	ST OF POLICY RECOMMENDATIONS	5
AU [.]	JTHORS	7
1.	Demystifying Railways	8
2.	4-Day Work Week	17
3.	Cultural Education for Communities: Glocalisation	25
4.	Data Literacy in Schools	35
5.	Homelessness and Housing	43
6.	Promoting High-Quality Asylum Claim Processing	50
7.	Tackling Health Inequalities	60
8.	Mental Health	66
9.	A Push Towards Agroforestry	75
10.	Renewable Energy	84
ACI	KNOWI FDGFMFNTS.	89

Executive Summary

Tasked by the Scottish Policy Foundation, we, as ten members of Scotland's only student-led think-tank The Buchanan Institute, have created '10 Big Ideas For Scotland 2025'. We are informed by our unique position as students from varied backgrounds and subject areas, bolstered by our investment and belief in Scotland as a place for innovative and bold policy moves. As such, below we delineate our 10 recommendations which cover a broad range of policy areas, both emphasising the significance of current legislation and highlighting legislative gaps that could be addressed. Recurring throughout our recommendations are themes relevant to all proposals, namely the aims of: closing the urban/rural divide in Scotland, supporting the objective of Net Zero 2045, and education reform.

Our recommendations are in the following areas:

- 1. Demystifying Railways
- 2. 4-Day Work Week
- 3. Cultural Education for Communities
- 4. Data literacy in schools
- 5. Homelessness and Housing
- 6. Promoting high-quality asylum claim processing
- 7. Tackling health inequalities
- 8. Mental health
- 9. A push towards agroforestry
- 10. Renewable Energy

List of Policy Recommendations

1. Demystifying Railways

- a. Improve transparency with better disclosure of policies by publishing detailed project delivery frameworks and regular updates.
- b. Clarify the motivation and goals of projects to show alignment with values set out in the National Transport Strategy.

2. 4-Day Work Week

a. Scotland should begin the transition to a 4-day work week.

3. Cultural Education for Communities: Glocalisation

- a. Maintenance of and better diversity monitoring
- b. Addition of community cohesion goals to the Race Equality Framework
- c. Greater attention to 'glocalising' rural areas

4. Data literacy in schools

- a. Commit to implementing data education as part of the curriculum across Scotland.
- b. Increase support for computing science teachers through increase investment in CPD and industry support schemes

5. Homelessness and Housing

- a. Strengthen commitment to, and increase, funding and building of affordable housing.
- b. Increase transparency and accountability in the bureaucracy surrounding homeless applications.

6. Promoting high-quality asylum claim processing

a. The Home Office should address its culture of disbelief by increasing training for case owners as well as hold case owners who consistently fail to properly follow UKVI guidance responsible.

b. The Scottish Government should commit to the continuation and expansion of the New Scots Strategy.

7. Tackling health inequalities

- a. The Scottish Government should maintain and uphold their commitment to tackling health inequality by positioning it as the primary guiding principle to health policymaking.
- b. The Scottish Government should also adopt a participatory budgeting strategy to public health.

8. Mental health

- a. The Scottish Government should endorse See Me's Declaration of Rights for Mental Health in Scotland to ensure greater protections in the workplace for people with mental health conditions.
- b. The Scottish Government should support workplaces to introduce and act upon SAMH's *Components for an Effective Workplace Programme for Mental Health*. They should support workplaces in the adoption of this guidance for improving the culture surrounding mental health in the workplace.

9. A push towards agroforestry

a. Create a centralised working group on agroforestry in order to understand how agroforestry can best be applied in Scotland.

10.Renewable Energy

a. Prioritise Scotland's off-shore wind energy opportunities in order to meet current energy targets.

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1. Demystifying Railways

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1.0 Executive Summary

Scottish Railway operations are rated poorly in comparison to many other European countries (Bloss, 2017). Compared to other parts of the UK, services in Scotland have lower levels of connectivity due to long travel times, frequent delays and high rail fares. The system is complex, fragmented and highly subsidised by taxpayers. Private operators do not face market competition and so high rail fares and poor punctuality can go largely unchallenged as passengers have few travel alternatives.

The current SNP government has committed £8 billion to rail infrastructure (SNP, 2020), whilst also outlining four National Transport Strategy goals to create a transport system that helps:

- 1. Reduce inequalities
- 2. Take climate action
- 3. Help deliver Economic Growth
- 4. Improve health and wellbeing (Transport Scotland, 2020)

These goals seem very innovative and are framed to improve connectivity and boost regional opportunities. However, it is not clear if active projects align directly with these policy values.

It is beyond the scope of this policy brief to comment on the national structuring and financing of the railway services. Our recommendations consider how to improve public relations and the customer experience of passengers within the current framework.

Our policy recommendations are, therefore:

- 1. Improve transparency with better disclosure of policies by publishing detailed project delivery frameworks and frequent updates.
- 2. Clarify the motivation and goals of projects to show alignment with values set out in the National Transport Strategy.

1.1 Background

The current model for railway provisions is a hybrid of private and public ownership. Network Rail manages the track infrastructure. The UK Secretary of State manages Network Rail and so the organisation is accountable to the UK government (Harris & Payne, 2016). This

structure becomes more fragmented, however, as the Scottish Government funds some Network Rail projects, yet do not reserve any powers of accountability.

Passenger train contracts are awarded under a franchise agreement to the winning private bidder. Currently, ScotRail is run by Abellio – a company owned by Dutch State operator Nederlandse Spoorwegen (Bloss, 2017). Franchise agreements last ten years, with a possible reconsideration after seven if the provider has failed to meet all contractual requirements. Abellio's current contract will run until 2025, with a possible re-evaluation in 2022 (Bloss, 2017). Due to the high maintenance costs and uneven passenger demand across peak and off-peak times, private passenger rail companies are highly subsidised (Chick, 2021). In 2015-16, Abellio received £293 million in government subsidies which amounted to 45.6% of their total income (Bloss, 2017).

The railway industry is difficult to manage and organise for several reasons. These include the natural monopoly of the service, the high sunk costs of maintaining the track and the rolling stock, and the uneven demand pattern due specific peak travel times (Chick, 2021). Nevertheless, managing the UK rail system is particularly complex due to different levels of devolution and the fragmented framework. This mismatch in management means that transparency and accountability are limited.

This current system is highly bureaucratic, fragmented and somewhat inefficient. As a result, passenger satisfaction is decreasing. In 2018, rail passenger satisfaction was 81%, compared to 89% 10 years previous (Transport Scotland, 2020d). Public opinion is falling with concerns about punctuality, comfort, cleanliness and value for money. In 2008, 89% of passengers were satisfied with the punctuality and reliability of trains. By 2018 this had fallen to 74%. Satisfaction with value for money fell from 59% to 52% (Transport Scotland, 2020d). In 2018/19, 87.4% of ScotRail trains arrived within 10 minutes of the scheduled time, down from 90.6% in 2015/16 (Transport Scotland, 2020d). Passengers are suffering from poorer quality and low value-for-money rail services.

2008	^ ^	2018
	(% satisfied)	
89%	Overall opinion	81%
89%	Punctuality/reliability	74%
82%	Frequency	78%
79%	Train cleanliness	73%
76%	Comfort of seats	69%
74%	Station environment	77%
59%	Value for money	52%

Figure 1: Scottish Transport Stats No 38 2019 edition

These frustrations have led to calls for a restructuring of the service. A 2014 YouGov poll found that 60% of the British public supported rail nationalisation. More recent polling shows that this trend in support for nationalisation has continued. A YouGov tracking poll asks "Should train operating companies be brought back into public ownership?". The most recent results from 28th December 2020 show that in Scotland 35% and 34% of the public "strongly" or "tend to support" nationalisation. Whilst only a combined 10% said they were somewhat opposed to nationalisation (YouGov, 2020). The public is frustrated with the performance of our public railways. There is a clear desire for more affordable, efficient and accountable service.

Should train operating companise be brought back into public ownership?

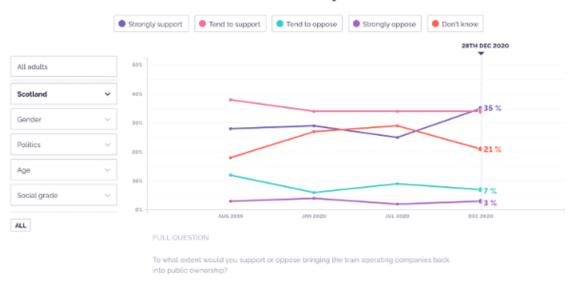


Figure 2: YouGov Poll 2020

The arguments for rail nationalisation are complex and implicate many political, economic and social issues. This report is not directly considering the issue of nationalisation. However, it is important to acknowledge trends in consumer perceptions. The extensive support for rail nationalisation indicates that the current framework and running of ScotRail and Network Rail are unpopular, and changes need to be made.

The Scottish Government recognises the importance of efficient public transport options in its National Transport Strategy Delivery Plan. Cabinet Secretary for Transport, Infrastructure and Connectivity Michael Matheson comments that:

'We must continue to put in place the measures that will create a transport system that works for everybody, regardless of their needs, and encourages people to live, study, work and invest in Scotland.' (p. 3)

Affordable and accessible public transport is essential to ensure all communities have consistent connectivity and that opportunities are dispersed across the country. Currently, public transport use is disproportionately split amongst socio-economic groups. Wealthier people are more likely to drive or take the train and less likely to walk or take the bus (Transport Scotland, 2020c). Additionally, 30% of Scottish households do not have a car (Bloss, 2017). These figures show that the transport system does not currently fit the criteria of 'working for everyone' as access to transport options is still influenced by socioeconomic status.

The Scottish railway system currently has lower levels of connectivity compared to other parts of the UK. Journey times in Scotland are considerably longer on average than equivalent distances in England. For example, the 125-mile distance from Edinburgh to Aberdeen takes 2 hours 17 minutes on the fastest service, whilst the similar distance journey from London to Birmingham only takes 1 hour 22 minutes (Harris & Payne, 2016). If the Scottish Government is truly committed to ensuring transport is inclusive and accessible, public transport routes must be extended to be more accessible, whilst fares are made more affordable.

1.2 National Transport Strategy

The Scottish Government published a National Transport Strategy Delivery Plan in December 2020 to outline the future vision of Transport for Scotland and the actions intended to pursue this plan. The vision is described as

'A sustainable, inclusive, safe and accessible transport system, helping deliver a healthier, fairer and more prosperous Scotland for communities, businesses and visitors' (p.8)

The National Transport Strategy policies are as follows:



The policies are described as 'high-level statements' and outline a framework of a more inclusive and accessible transport system (Transport Scotland, 2020a). This paper feels that these strategies and policies successfully outline an idealistic future for Scottish Transport. However, they do not outline a detailed enough Road Map to indicate how we materialise these ambitions.

1.3 Current Development Projects

The Scottish Government currently has four rail development projects underway: the Highland Mainline Improvements, the Electrification programme, the Edinburgh-Glasgow Improvement Programme and Aberdeen-Inverness improvements.

1.3.1 Highland Mainline_

The Highland mainline runs from Perth to Inverness and aims to improve connectivity between the Highlands and Central Belt area. This project has been split into two phases. Phase one was completed in 2012 which increased services from 9 to 11 trains a day and reduced journey times by an average of 6 minutes (Transport Scotland, 2020). The project is now in phase 2 and aims to:

'Have an hourly service between Perth-Inverness extended to Glasgow or Edinburgh, An average journey time improvement of around 10 minutes and more efficient freight operations.' (Transport Scotland, 2020a)

Improved connectivity was a clear aim of this project as it intends to decrease journey time and increase the service frequency. This adequately aligns with the aim to "help deliver inclusive economic growth". However, the affordability of rail fares typically decreases as the distance from the central belt increases. Bloss interestingly notes that "the cheapest walk-on day single available for a journey between Dundee and Perth costs around two-thirds the price of the equivalent ticket between Glasgow and Edinburgh, despite taking less than half the amount of time" (2017, p.20). Therefore, this project does not encompass all four aspects of the National Transport Strategy Vision because limited efforts have been made to reduce rail fares.

Additionally, it must be noted that the progress of the project is unclear as the Transport for Scotland website has not offered a project update since 2019.

1.3.2 Electrification

Currently, only 25.3% of Scotland's 2776km rail track is electrified (Transport Scotland, 2020b). The Scottish Government aims to completely decarbonise Scottish Railways by 2035 (Transport Scotland, 2020b). However, there is no road map to explain how the electrification of the remaining 2000km of track will be achieved on this timeline. A large-scale electrification project would be a massive investment and infrastructure project which requires detailed forward-planning. The National Transport Strategy describes itself as a 20-year vision (Transport

Scotland, 2020a). However, specific details about further electrification to meet the 2035 decarbonisation target are not available.

1.3.3 Edinburgh-Glasgow improvements programme

The Edinburgh-Glasgow improvements programme (EGIP) aims to reduce journey times, electrify some of the services and refurbish some train stations (EGIP, 2020). The EGIP organisation outlines the potential benefits to Scotland as

- 'FASTER, LONGER AND MORE RELIABLE TRAINS: providing a railway capable of meeting passenger needs now and in the future
- MORE SUSTAINABLE, CLEANER, QUIETER AND MORE ENERGY EFFICIENT TRAINS: this will contribute to a better environment
- RAIL IS THE LOWEST CARBON MODE OF MASS TRANSPORT: this is an essential part of a future low carbon economy
- STIMULATES GROWTH AND UNLOCKS INVESTMENT OPPORTUNITIES: benefiting the communities the route serves
- FASTER AND MORE FREQUENT RAIL LINKS BETWEEN OUR TOWNS AND CITIES: this will mean more job opportunities for more people'

This project clearly encompasses most aspects of the National Transport Strategy. Investments have been made in cleaner energy, better connectivity and larger capacity.

1.3.4 Aberdeen-Inverness Improvement Project

The Aberdeen-Inverness Improvement Project includes platform extensions at two train stations, a re-doubling of certain parts of the track, signalling and infrastructure improvements. A second part of the project is scheduled to commence in the summer of 2021 with the construction of a train station at Inverness airport (Transport Scotland, 2020).

These four active projects will certainly bring benefits to their surrounding communities. However, it is disappointing that Transport for Scotland does not have a more extensive framework for future developments.

1.4 Inconsistencies

The existing projects do align with some of the values and policies set out by the National Transport Strategy. However, there are some obvious inconsistencies with the Government's policies and investments. One key inconsistency is the tension between high investment in road infrastructure and long-term climate goals.

1.4.1 Disconnect between climate-goals and road improvement investment'?

The majority of active infrastructure projects are road improvements. This paper does not deny the benefits of good road conditions for local connectivity. However, it is not clear if these

projects align with the Scottish Transport Vision outlined previously. The Scottish Government has put a huge emphasis on reducing emissions, however, their transport projects do not directly reflect these goals. Rail travel is indeed a low-carbon transport option. It was accountable for 1.2% of transport emissions in 2017 (Transport Scotland, 2020b). However, rail travel accounts for a very small number of journeys. In 2019 only 2.3% of journeys were made by rail. In the same year, 53% of journeys were made by car (Transport Scotland, 2020d). Efforts must be made to change travel behaviour. Improving the accessibility and affordability of rail travel will help shift these trends. The 2021/22 budget shows that the rail services budget is increasing to £1314.9 million. However, £638.9 million is allocated to the rail franchise and only £2 million is committed to Rail Development (Scottish Government, 2021). The Covid-19 pandemic has had a huge impact on the transport industry and it is unclear what the long-term consequences will be. However, if the Scottish Government is to meet the decarbonisation goal by 2035, more thoughtful and long-term planning is necessary.

1.5 Recommendations

The Scottish railway system is fragmented and highly subsidised with high fares and poor connectivity in comparison to neighbouring countries. To address all the issues within the industry, a full force re-structuring of the system would be necessary. Some argue for a return to nationalisation, whilst others demand more significant investment in rail technology and infrastructure. This policy brief acknowledges the arguments for structural change, however, they are beyond the scope of this research. We are recommending smaller measures which aim to reduce the bureaucratic disorder of Scottish railways and refine the long-term policies of Scottish Transport to match the well-defined National Transport Strategy Vision.

Therefore, our recommendations are as follows:

1.5.1 Recommendation 1: Improve transparency with better disclosure of policies by publishing detailed project delivery frameworks and regular updates.

The National Transport Strategy has outlined efforts to increase accountability:

'To ensure accountability on progress, we have committed to publishing a monitoring and evaluation report covering the period out to end-March 2022, followed by annual monitoring and evaluation reports from March 2022, as well as reporting three-yearly, to Parliament, as required by the Transport (Scotland) Act 2019.' (Transport Scotland, 2020a)

This report supports the introduction of annual evaluation reports and believes that this is an important step to improving the transparency of projects. Regular publications will also be useful in holding the Government accountable to policies to ensure that they stick to timelines. Currently, there are gaps in the information and plans shared with the public. For example, exact evaluations and updates on the progress and specific components of the electrification programme are unclear.

1.5.2 Recommendation 2: Clarify the motivation and goals of projects to show alignment with values set out in the National Transport Strategy.

The Scottish Government has formulated a very aspirational strategy for the future of transport. The goals address several different social and economic values and create a very clear vision for the future of Scotland. This vision is not considered in all active infrastructure projects. Therefore, this report recommends that future project proposals and updates are evaluated in compliance with the National Transport Strategy to ensure that policies meet the outlined vision.

1.6 Conclusion

The structure of Scottish railways is currently complex and fragmented. Network Rail management is reserved solely to the centralised UK government whilst some forms of funding come from the Scottish Government. The franchise system for passenger rail then adds another layer of complexity. This complicated and somewhat rigid structure has led to a decreasing quality of service, bureaucratic exhaustion and limited foresight. Our recommendations outline a more transparent, simplified and intentional structure that will help transform Scottish Transport to be more aligned to the aspirational values set out in their National Transport Strategy.

1.7 References

Bloss, L. (2017) *A Public Future for Scotland's Railways*. Available at: https://commonweal.scot/policy-library/public-future-scotlands-railways [Accessed 13th January 2021]

Chick, M. (2021) Interview concerning Economics of Nationalisation. 28th January.

Edinburgh-Glasgow Improvement Programme (2020). *EGIP Project Overview*. Available at: http://www.egip.info/

Harris, T. & Payne, A. (2016) *Track to the Future.* Available at: https://reformscotland.com/wp-content/uploads/2016/11/Track-to-the-future.pdf [Accessed 15th January 2021]

McNulty, R. (2011) Realising the Potential of GB rail: Report of the Rail Value for Money Study. Available

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_dat a/file/4203/realising-the-potential-of-gb-rail-summary.pdf [Accessed 2nd February 2021]

Scottish Government. (2021) *Scottish Budget: 2021-22.* Available at: https://www.gov.scot/publications/scottish-budget-2021-22/pages/11/

Shaw, N. (2016) *The future shape and financing of Network Rail.* Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_dat a/file/510179/shaw-report-the-future-shape-and-financing-of-network-rail.pdf [Accessed February 1st 2021]

SNP. (2020) Policy Area: Transport. https://www.snp.org/policy-area/transport/

Transport Scotland. (2019) *Scotland's Railways (Control Period 6: 2019 – 2024).* Available at: https://www.transport.gov.scot/media/44516/scotland-s-railway-control-period-6-2019-2024.pdf

Transport Scotland. (2020a) *National Transport Strategy Delivery Plan 2020 – 2022.* Available at: https://www.transport.gov.scot/media/48839/nts-delivery-plan-2020-2022.pdf

Transport Scotland. (2020b) *Rail Services Decarbonisation Action Plan.* Available at: https://www.transport.gov.scot/media/47906/rail-services-decarbonisation-action-plan.pdf

Transport Scotland. (2020c) *Transport and Travel in Scotland 2019: Results from the Scottish Household*Survey. Available at: https://www.transport.gov.scot/media/48317/sct09201490081.pdf

Transport Scotland. (2020d) *Scottish Transport Statistics, No. 38, 2019 Edition.* Available at: https://www.transport.gov.scot/media/47300/scottish-transport-statistics-2019.pdf

Transport Scotland. (2021) *Transport Scotland Projects*. Available at: https://www.transport.gov.scot/projects/

YouGov. (2014) 'Why the Public want to Nationalise the Railways' Available at: https://yougov.co.uk/topics/politics/articles-reports/2014/05/11/why-do-people-support-rail-nationalisation

YouGov. (2020) 'Should Train Operating Companies be Brought Back into Public Ownership' Available at: https://yougov.co.uk/topics/politics/trackers/should-train-operating-companise-be-brought-back-into-public-ownership

2. 4-Day Work Week

Jessica Smith, Lauren Del Fabbro

2.0 Executive Summary

The following COVID-19 UK recovery policy seeks to reshape socioeconomic structures within our work-life culture by transitioning into a 4-day work week. This proposal will mitigate unemployment levels, and use this opportunity to support and invest in the UK workforce towards a healthier and sustainable society, with better considerations for mental health, both during and outside of work. This "Big Idea" delineates why a 4-day work week is needed, how this policy would benefit Scotland, and explores steps that could be taken to implement the policy.

We recommend:

1. Scotland should begin the transition to a 4-day work week.

2.1 Background: Current Issues

2.1.1 Workplace Wellbeing

Within Scotland, the key factors causing work-related poor mental health include:

- A. Pressure:
- B. Workload affecting ability to leave (Leavism);
- C. Poorly handled organisational change.

Business in the Community conducted research assessing workplace mental health in Scotland in 2019, finding that 2 in 5 employees (39%) have experienced poor mental health as a result of *workload*. This suggests an organizational failure to assess and manage workload and pressure in a healthy and sustainable way.

Moreover, the Scottish Association for Mental Health (SAMH) found one in six Scottish workers experience common mental health problems, such as depression and anxiety, however do not feel they can tell their employees owing to fear of losing their job. This leads to "presenteeism", a condition where workers will be present at work but are unable to function properly due to physical or mental illness (SAMH, 2011). To compensate, workers often stay additional hours to make up for time lost fuelling a cycle of pressure, exhaustion and unhealthy working habits (Hemp, 2004).

As a result of workplace pressure and worker burnout, productivity has seen a massive hit, with one in four sick days lost due to work-related stress, amounting to 17.9 million working days lost throughout the UK (Health and Safety Executive, 2020). Industries affected the most have been within the public sector, specifically public administration, and health services. These absences cost UK businesses many millions of pounds.

A 4-day work week would provide workers the necessary recovery and rest time to reenergize and detach from work pressures. Sonnentag et al. (2008) found a lack of detachment from workload pressures can drain an individual's energy sources, preventing the body from reenergizing. As such, workers experience higher levels of fatigue, sleep complaints, and additional symptoms of poor well-being. As such, Sonnentag et al. (2008) claim the process of psychologically detaching, i.e. disengaging mentally from work, creates a greater psychological balance, protecting employees' well-being.

Ultimately, investing time in greater recovery and rest periods pay it forward to a healthier and more energized workforce allowing more meaningful engagement and stress management.

This policy goes in tandem with the importance of better protection of mental health concerns for employees, which can be read in Policy Eight.

2.1.2 Carbon footprint

A study in 2017 found the average worker spends 27 working days a year commuting, prior to coronavirus (TUC, 2017). This not only extends the working day, draining workers even further, but contributes to greater traffic congestion, air pollution and carbon emissions.

Recommendations made by Autonomy (2019) outline the effects of a shorter week directly affecting consumer behaviour and sustainable living. Research suggests with reduced hours households will have additional time to sustain healthier living styles, cooking food that is less energy intensive and subscribe to exercise activities such as walking or cycling as compared to driving. Effectively, a shorter work week acts as an investment in social welfare. By providing workers more time you are encouraging healthier lifestyles which in turn benefit the environment and the mental wellbeing of the worker.

Transitioning into a 4-day work week would lead Scotland on the path of meeting the net-zero 2050 pledge. Research has suggested a strong relationship between working hours and carbon emissions from corporate level energy consumptions to individual energy-intensive consumption patterns building a working and living environment that is unsustainable and damaging (Autonomy, 2019).

As such, shortening the working week is not only psychologically and operationally relevant but ecologically beneficial as well. Ultimately, this is an investment in a sustainable society; what we get back is a happier, stronger, and ecologically safer environment.

2.1.3 Unemployment

Unemployment prior to the coronavirus pandemic was particularly notable in certain sectors. A "crisis" in retail saw the closure of numerous large retailers leading to 143,000 job losses in Scotland 2019 alone (Centre for Retail Research, 2020). This often leads to further damage to remaining shops in high streets, when large department stores cease to trade: the closure of big businesses discourages visits to town centres from those living outside them, thereby reducing the money spent by consumers in other small businesses nearby. Data from PwC shows that Scotland experienced a net fall in shop closures in the first half of 2019, with an average of five stores closing per week between January and June (PWC, 2020).

Retail and hospitality jobs, volatile at the best of times, continue to be threatened by the increased turn to online shopping, prompting shop closures in Scotland by declining retail giants: Frasers in Edinburgh, or Debenhams and Topshop nationwide. This 'retail apocalypse' and consequent job instability highlights a trend in unemployment that is only on the up, and that trend directly impacts Scotland.

Such a trend has only been worsened by the coronavirus crisis. The closure, temporary or otherwise, of many retail and hospitality outlets has left many people on the furlough scheme, or permanently unemployed. Unemployment in Scotland is now higher than in the rest of the UK, where despite the high numbers on furlough, the unemployment rate has risen to 4.3% compared to 3.9% in England (Crichton, 2020).

Moreover, over 700,000 in Scotland are on the UK government's Job Retention Scheme. When that financial support is eventually rescinded, and businesses once again have to pay their employees' wages in full, it is expected that far more jobs will be cut as a consequence. Autonomy (2020) foresee that these cuts will be felt most keenly once again in retail and hospitality, where reopening has not been entirely possible for businesses and profits have not returned to pre-Covid-19 levels. Higher rates of unemployment are therefore extremely likely come the end of this measure.

2.2 Benefits

2.2.1 Boosting employment

A reduction in the hours of current workers will create more working hours for the unemployed to fill. Crucially, as further discussed in Section 2.4, wages must stay the same despite the reduction in working hours per head.

This proposal endorses and echoes the idea of Autonomy (2020), which suggests the replacement of furlough with a system they call the Shorter Working Time Subsidy Scheme. This

would see employers in the aforementioned threatened industries, largely hospitality, retail, and the arts, offered a government subsidy in return for shortening working hours by one day each week. This subsidy would be used by employers to pay for the fifth day of wages, so neither the employer nor the employee is impacted financially. Fewer jobs would therefore be threatened post-furlough, and more jobs could even be created as employers recruit new workers for the hours employees used to work.

Moreover, Autonomy gives an estimate in Table 1 below of exactly how many jobs may be created through the subsidy, if 1/8 of the subsidy was used for job creation. As the table shows, both maintaining jobs and creating new ones is possible under this scheme.

INDUSTRY	GOVERNMENT SUBSIDIES IN TERMS OF POTENTIAL FTE ROLES
Retail	400,412
Food and accommodation	304,400
Arts and recreation	115,600

Table 1: Potential number of jobs created (Autonomy, 2020)

Concurrently, with more leisure time and the same quantity of disposable income, arts and leisure sectors are likely to experience a rise in demand similar to pre-coronavirus levels. This is key in further maintaining employment and potentially creating more jobs in volatile sectors once the furlough scheme ends.

2.2.2 Lessening inequalities

It is also worth identifying the impact a 4-day week could have on issues of equality in Scotland. Specifically, a 4-day week could lessen levels of gender inequality. With the bulk of unpaid domestic labour still undertaken by women, and women overrepresented in the care work industry, women are in general doing more work for less total pay. Women therefore have less free time and, importantly, the care work they are doing is often difficult and less enjoyable (Autonomy, 2019). This will negatively impact their wellbeing economically but also potentially mentally.

Once again echoing the sentiments of Autonomy (2019), we recognise that women whose capacity to work (in the sense of paid labour) is curtailed by caring responsibilities could benefit from a 4-day week. By reducing hours for all employees across the board, as already mentioned

a great number of new jobs would be created, some of which would be part-time. Women who cannot commit to full-time jobs could take on these shorter hours. Moreover, with reduced hours overall, men in full-time paid work would be more able to take on caring responsibilities outside of work during their newly available free time.

2.3 Case studies

2.3.1 Microsoft Japan

A four-day work week was piloted at Microsoft Japan in 2019, reducing working hours from eight to six and ultimately giving workers five Fridays off while maintaining the same pay (Paul, 2019). After one month, the researchers found reduced hours led to a 40% increase in productivity, and 23% reduced electricity consumption. As such, the reduction in working hours is an ecological and financial investment for private and public sector organizations, saving unnecessary expenses and reducing the organization's carbon footprint.

2.3.2 Henely Business School

A study by Henley Business School conducted interviews and two quantitative online surveys to investigate the impact of changing working practices. The sample consisted of 505 C-suite business leaders and owners across the United Kingdom, comprising a mix of small, medium and large companies. 2,063 UK workers were involved in the study and were asked to estimate how a four day work week would impact their commuting habits. The study found that a 4-day work week would reduce the number of miles driven by employees for work by 558 million each week, reducing car mileage by 9%.

This highlights how transitioning to a 4 day work week would lessen length of commutes and travel, resulting in environmental and health benefits. A collective decrease in travel will decrease pollution levels, potentially improving physical health, releasing strain on services such as the NHS.

2.4. Implementation

In order to ensure effective and successful implementation of a 4 day work week, a series of regulatory frameworks need to be outlined to ensure the benefits of a shorter work week are properly felt. The following regulatory measures are aligning and supporting those outlined by Autonomy in *The Shorter Work Week; A Radical and Pragmatic Proposal*.

2.4.1 Commissioned Workforce

The execution of a shorter work week will vary significantly depending on sector and specific business model. As recommended by Autonomy (2019) and adopted by the Buchanan Institute, the institution of commissioned teams, Sectoral Employment Commissions, is advised. These would operate within organizations and sectors to independently discuss working hour

contexts that best suit that sector. Whether that may be six hour working days or a four day work week, the commissioned team, made up of workers from every department, will allow employees to deploy their knowledge and experiences in order to devise a considerate working model that maximises the benefits of a shorter work week.

It is important workers themselves are consulted, as they know their work best. Employees must be engaged in the process to ensure a smooth transition, with regular consultations necessary.

2.4.2 Sectoral Transition and Public Support

It could be advisable to start a transition to a 4-day work week in the near future for some industries, largely those mentioned in section 2.2.1, owing to the eventual end of the furlough scheme and the subsequent unemployment likely to follow.

With a YouGov poll finding businesses and consumers alike supportive of the 4-day week, a rapid transition could be possible. In 2019, 64% of businesses supported the adoption of a 4-day week, and it seems likely this number will have only increased through the coronavirus pandemic (YouGov, 2019). Moreover, 71% of citizens surveyed by YouGov believed a four-day week "would make the nation happier" (ibid), supporting the recent Scottish declaration of the need for an economy based on wellbeing.

The transition for industries such as entertainment and retail could therefore be overseen quickly, as public support for the four-day week continues to increase (Autonomy, 2020).

Outwith these sectors, a target limit of within the next five years to transition private sector and public sector institutions into a 4-day work week should be set. This would allow for a steadier ease into operational changes, allowing close observations of issues that may occur and immediate interventions. This would further allow enough time for businesses to collect data and devise effective protocols that suit them, and their workers.

2.4.3 Minimum Wage

As working hours decrease but pay remains the same, a new living wage will need to be calculated to protect workers and ensure a sustainable and secure living condition for all. Partnering with Autonomy and Living Wage Foundation to ensure a smooth transition is key to implement a 4-day work week successfully.

Living-Wage accreditation could function as an incentive, with small businesses paying a fair wage rewarded with tax breaks and other recompenses.

2.5 COVID-19 lockdown impact

Throughout the COVID-19 lockdown measures, it has been reported that pollution levels and carbon emissions have declined significantly. Across the globe countries have seen a drastic change in air quality. In India, roughly 40-50% of the air quality improved within four days of lockdown (Mahato, Pal & Ghosh, 2020). In China, carbon emissions declined by a quarter between January and mid-February, however, as China's workforce reintegrated back to normal working measures, emissions and pollution levels have returned to normal. As such, it is evident that a drastic change in the way we work is critical if we wish to see an honest attempt at meeting net-zero.

2.6 Conclusion

Though undeniably ambitious, advocating for a policy that places wellbeing for the planet and workers at the centre is a necessity as we approach a post-covid society. An opportunity to rethink the economic structures we live in is rare, but when the last time working hours were adjusted was in the previous century, now is the time to be ambitious. A 4-day week is necessary because it prioritises mental health and environmental protection, with the benefit of reinvigorating the post-covid Scottish economy in an innovative and progressive way.

2.7 References

Autonomy (2019) *The Shorter Working Week: A Radical And Pragmatic Proposal* (Report). Available at: http://autonomy.work/wp-content/uploads/2019/03/Shorter-working-week-docV6.pdf [Accessed 22/01/2021]

Autonomy (2020) Time For Change: the four-day week as a strategy for unemployment (Report) Available at: https://autonomy.work/portfolio/timeforchange/ [Accessed 20/01/2021]

Business in the Community (2019) *Mental Health at Work 2019: Time to Take Ownership* (Report). Available at: https://www.bitc.org.uk/report/mental-health-at-work-2019-time-to -take-ownership/ [Accessed 22/01/2021]

Centre for Retail Research (2020) 'The Crisis in Retailing: Closures and Job Losses,' *Retailresearch.org.* Available at: https://www.retailresearch.org/retail-crisis.html [Accessed 02/07/2020]

Crichton, T. (2020) 'Unemployment in Scotland rises faster than rest of UK to 120,000 as thousands lose their jobs during lockdown,' *Daily Record*. Available at: https://www.dailyrecord.co.uk/news/politics/unemployment-in-scotland-lockdown-uk-22364087 [Accessed 16/07/2020]

Hemp, P. (2004) 'Presenteeism: At Work—But Out of It,' *Harvard Business Review* (online) Available at: https://hbr.org/2004/10/presenteeism-at-work-but-out-of-it [Accessed 06/02/2021]

Henley Business School (2019) Four Better or Four Worse? A White Paper from Henley Business School. Available at: https://assets.henley.ac.uk/defaultUploads/Four-Better -Four-Worse-Henley-Business-School.pdf?mtime=20190701093655 [Accessed 07/02/2021]

Mahato, S., Pal, S., and Ghosh, KG (2020). 'Effect of lockdown amid COVID-19 pandemic on air quality of the megacity Delhi, India', *The Science of the Total Environment*, 730.

Paul, K. (2019) 'Microsoft Japan tested a four-day work week and productivity jumped by 40%', *The Guardian* (online) Available at: https://www.theguardian.com/technology/2019/nov/04/microsoft-japan-four-day-work-week-productivity [Accessed 02/01/2021]

PWC (2020) 'Store Openings and Closures' (online) Available at: https://www.pwc.co.uk/industries/retail-consumer/insights/store-openings-and-closures.html [Accessed 01/07/2020]

Scottish Association for Mental Health (2011) What's it worth now? The social and economic costs of mental health problems in Scotland (Report) https://www.samh.org.uk/documents/what%C3%ADs it worth now.pdf [Accessed 07/02/2021]

Sonnetag, S., Mojza, E., Binneweis, C., and Scholl, A. (2008) 'Being engaged at work and detached at home: A week-level study on work engagement, psychological detachment, and affect,' *Work And Stress*, Vol 22: 3. Available at: https://www.researchgate.net/publication/30014055_Being_engaged_at_work_and_detached_at_home_A_week-level_study_on_work_engagement_psychological_detachment_and_affect [Accessed 07/02/2021]

TUC (2017) 'Average worker now spends 27 working days a year commuting, finds TUC' *TUC News* https://www.tuc.org.uk/news/average-worker-now-spends-27-working-days-year-commuting-finds-tuc [Accessed 07/02/2021]

YouGov (2019) 'Business backs a four day working week' (online) Available at: https://yougov.co.uk/topics/finance/articles-reports/2019/09/23/business-backs-four-day-working-week [accessed 07/02/2021]

3. Cultural Education for Communities: Glocalisation

Lynn Stevenson Hatayama

3.0 Executive Summary

There is sparse literature on the impact of globalisation within Scotland, but it is clear that its cultural landscape is quickly diversifying. While there are a wide range of socio-economic issues (e.g. workplace, health) that minority ethnic people in Scotland face, this policy will assess and focus on the informational and educational aspects that include the accessibility and expansion of cultural exchange and learning within local communities across Scotland, specifically amongst those who identify as white. This can be seen as a vital prerequisite to ensuring the smooth adoption and longevity of more sweeping policies as aligned with the Race Equality Framework for Scotland 2016-2030.

The following proposal seeks to soften the impact of cultural globalization and unify the public sphere in an increasingly diversified world through a government-endorsed publicity campaign for cultural exchange. This aims to increase wider understanding to foster a "glocalised" mindset within the public. This culminates in the idea of social "glocalisation," which represents a challenge to simplistic conceptions of globalization processes as linear expansions of territorial scales (Robertson 1997). Glocalisation indicates that the growing importance of continental and global levels is occurring together with the increasing salience of local and regional levels, and therefore deserves focused attention from the government.

Implementing such a programme will mitigate existing levels of socio-ethnic conflicts and hate crimes while simultaneously building a foundation for successful and flexible community, health, and business networks within a rapidly diversifying and globally integrated society.

Our recommendations are as follows:

- 1. Maintenance of and better diversity monitoring
- 2. Addition of community cohesion goals to the Race Equality Framework
- 3. Greater attention to 'glocalising' rural areas

3.1 Globalisation and Diversity in Scotland

Globalisation is generally defined as the increased movement of capital, people, ideas, and technology across borders and the permeation of international information and society within another (UNESCO 2007). It is well-known that globalisation has immense social, political,

and economic implications for any society, but this is especially pronounced and relevant within the Scottish context.

The most recent Scottish Government Census (2011) is somewhat dated, yet it offers valuable insight into the changing nature of Scotland's growing ethnic diversity. About 16% (850,000) of the Scottish population identified as an ethnic minority, with about half of those describing themselves as 'White: Other British' (417,000). Polish, Irish, Pakistani, Chinese, Indian and African ethnic groups each numbered between 30,000 and 61,000. It is also worth noting that the number of people with mixed ethnicity increased by 7,000 from 2001; their proportion in wards outside areas where mixed ethnicity is the most common increased rapidly, suggesting the wider and deeper integration of diversity in Scotland. (CoDE, 2011)

However, the relative dispersal of these groups across Scotland has been uneven, and no local authority in Scotland is very diverse. Edinburgh is the most diverse (7.2/100 out of the CoDE diversity scoring system) and the overall average only increased from 2.1 to 3.1 between 2001 and 2011, according to the Centre on Dynamics of Ethnicity (2011). While Scotland became more diverse between 2001-2011, and is likely to continue on this upwards trajectory to present, it is still a reality that a large majority of the population are some variation of White-identifying individuals. This limits everyday exposure to cultures outside of the UK and European cultural spheres regardless of how inclusive legislation may be.

3.2 Current Policy

The Scottish Government (2016) has published the Race Equality Framework for Scotland 2016-2030, with the following key goals:

- 1. An accountable approach to support and drive forward the implementation of the Race Equality Framework is established.
- 2. Strategic work within Scotland's public sector better addresses race equality, including through more effective practice linked to the Scottish Specific Public Sector Equality Duties.
- 3. Scotland's public sector has improved capacity to tackle racial inequality and meet the needs of minority ethnic people.
- 4. Policy processes in Scotland are based on a robust range of data on ethnicity.
- 5. Scotland's minority ethnic voluntary sector is stronger, more effective and sustainable.

These centre around four identified priority areas of Community Cohesion and Safety, Participation and Representation, Education and Lifelong Learning, Employment, Employability, and Income, and Health and Home (Scottish Government 2016). The first area aligns most closely with what is being investigated by this report and so shall be the focus of assessment. Community Cohesion and Safety broadly concerns the sense of belonging, appreciation of diversity, equality of opportunity, and strong relationships within communities.

However there are immediate problems with the marked lack of publication of ethnicity data, one of the supposed key goals. Individuals were asked if they felt that 'creative and our vibrant and diverse cultures are expressed and enjoyed widely' with indicators such as

'attendance at cultural events or places of culture', 'participation in a cultural activity', having ethnicity data (and thus being able to demonstrate lack of current inequality) but no data on the 'growth in cultural economy' and 'people working in arts and culture' (Scottish Housing Survey 2019). CRER notes that 'previous evidence has suggested an inequality in cultural participation for minority ethnic people, including within the historic environment, arts and creative industries' (2020).

While cohesion and thus inclusion of different ethno-cultural experiences within this category is important, it may be detrimental to the better understanding and long-term integration of minority ethnic groups. While the Scottish Government has pursued extensive and wide-reaching legal reforms aimed at leveling the inequality minority ethnic peoples face systemically, such as detailed in the Race Equality Action Plan. However, these are mainly systemic, concentrating on areas such as education, employment, health, housing, and poverty, but with limited foresight into how to tackle more common, everyday instances of microagressions and racism. The commitment of the Scottish Government to ensuring racial equality under wider human rights and equality reforms is commendable but requires a deeper understanding of the socio-cultural contexts that are often required to support and sustain such reform.

3.3 Barriers to Cultural Education and Cohesion

3.3.1 'Scottishness' and Racialisation

Scotland, as a devolved and unique nation itself, is no stranger to multiculturalism and the challenges it brings; 'the structural problems for a metropolis assimilating migrants parallel, yet ultimately differ from those between the UK government and its devolved nations.' (Rex, 2007) While the strength of Scottish identity is justifiably a source of pride, it also has the effect of excluding anyone who does not fit into this definition. Robert Putnam's survey of 30,000 individuals in forty-two separate US communities, found that trust and cooperation are highest in the most homogeneous neighbourhoods (Economist 2004). Bonding between "people like us" is markedly stronger than bridging with "people around here," and the more diverse a society is, the more unequal it is (Gillespie 2007). This implies that the homogeneity of Scotland can serve as a serious barrier to effective cohesion between individuals of different ethnicities and consequently hamper equality policy in the long run.

Peterson (2020) also provides a detailed account of how the lived realities of minority ethnic individuals are often different to popular assumptions that frame Scottishness as a more inclusive and civic national identity; these risk silencing relations of race, relation, and inclusion in Scottish nationhood. Furthermore, after talking to various minority ethnic individuals living in Glasgow, Peterson found that the victims of racialisations and discriminations in public and semi-formal settings tended to minimize and make light of their experiences.

Professor Nasar Meer also points out that the issue of multiculturalism does not seem to be about alienation but instead more about BME groups living with and negotiating everyday racism. This suggests that whilst the political rhetoric is broadly inclusive, there is a disconnect between elite visions of Scotland and popular opinion on this (Meer 2020). Acknowledging the

pervasiveness of racialisation and problematic prejudices of "Scottishness" while still recognising that Scotland has been supporting and taking anti-racist stances are not mutually exclusive. Acknowledgement would be an important initial step towards bettering community relations and increasing the effectiveness of current policy in this area.

3.3.2 Rural-Urban Divides and Minority Dispersion

While the problem of the rural-urban divide is well-documented, it is especially notable in the context of bettering race relations across Scotland. Even though Scotland has become more diverse, such as in the Edinburgh and Glasgow (which together comprise 44% of non-white minorities in Scotland) there is still a marked lack of interaction between white and minority ethnic individuals, as seen in Figure 1.

Contact with different groups of people: Anyone who is from a different racial or ethnic background, 2010

	Anyone who is from a different racial or ethnic background
No, does not know anyone with this characteristic	19%
Yes – a family member	8%
Yes – a friend	36%
Yes – someone they know very well	19%
Yes – someone at work	18%
Yes – someone else	15%
Not sure	4%

Source: Scottish Social Attitudes Survey 2010

Figure 1

It stands that not only are minority ethnic people in more rural areas of Scotland subject to existing location-based socioeconomic inequalities as their white peers, but must deal with more isolated microaggressions and racialisation (Peterson, 2020). These are likely to negatively impact their mental health. The Scottish Government's Equality Evidence Finder (2020) shows that minority ethnic respondents were slightly more likely to report loneliness than white respondents (23% vs. 21%) in 2018. Howe et. al (2019) observed that ethnic minority individuals in the UK were more likely to experience mental health issues as a result of their ethnicity and subsequent discrimination, as seen in Figure 2.

Table 5. Psychological wellbeing as a function of ethnic group: mean scores in waves 1 and 4 (SD in brackets).

Wave 1						
Ethnic group	Self-esteem	Anxiety	Depression			
Pakistani	38.50 (5.72)	7.70 (3.46)	4.39 (2.65)			
Indian	39.21 (6.08)	8.28 (3.49)	4.05 (2.50)			
Chinese	35.89 (6.56)	8.69 (2.53)	4.41 (2.45)			
Other non-white	40.38 (6.94)	8.75 (4.14)	3.19 (2.79)			
White	38.20 (5.28)	8.01 (2.50)	4.04 (2.48)			
F (4, 266)	1.95, ns	0.81, ns	0.88, ns			
Wave 4						
Ethnic group	Self-esteem	Anxiety	Depression			
Pakistani	40.98 (12.60)	7.51 (3.43)	4.98 _a (2.99)			
Indian	38.67 (13.76)	8.33 (3.75)	4.28 _{ab} (3.07)			
Chinese	38.00 (13.94)	8.74 (3.03)	4.32 _{ab} (3.01)			
Other non-white	41.00 (15.39)	8.00 (5.24)	4.00 _{ab} (3.43)			
White	37.17 (13.02)	7.38 (3.79)	3.25 _b (3.07)			
F (4, 146)	0.66, ns	2.10, ns (p < .1)	4.00, p < .01			

Note: When subscripts differ within columns, scores are significantly different (Bonferroni, $p \le .01$)

Figure 2, Howe et. al (2019)

The lack of diversity in rural Scotland can be attributed to a number of factors, the most prominent being the fact that international migrant populations are clustered in the most

affordable and culturally similar areas which limits migration and movement outside of these areas (CoDE 2011). While this is not within the scope of this policy, a more comprehensive review and promotion of immigration and movement between these areas aimed at ethnic minorities may help the diversification of more rural areas of Scotland. Another factor that plays into this lies in the urban-rural digital literacy divide; rural areas have been, and continue to be, unable to take advantage of technological advances (Philip et. al 2015). This contributes to a lack of understanding and awareness about the world and makes it easier for individuals to harbor prejudices such as blaming immigrants for the decline in Scotland's manufacturing and industrial economies that was instead a result of wider globalization (Brown 2015). This leads to everyday instances of racialism that make minorities hesitant to move to less-diverse areas.

3.3.3 COVID-19

While the effects of COVID-19 are far-reaching with especially concerning implications about race, health, and poverty, there are also personal safety concerns. There has been a slight increase in racially aggravated offences as recorded by Police Scotland through the national lockdown in 2020 compared to the previous year.

	Monthly figures (Official Statistics)													
	2019							2020						
	Apr	May	Jun	Jul	Aug	Sep	Total	Apr	May	Jun	Jul	Aug	Sep	Total
Racially aggravated offences	161	140	147	149	164	168	929	122	147	171	168	189	154	951
Racially aggravated harassment	9	10	9	3	9	9	49	5	10	11	5	8	4	43
Racially aggravated conduct	152	130	138	146	155	159	880	117	137	160	163	181	150	908

Figure 3, Scottish Government (2020)

While again, the more specific racial demographics of these offences are unclear, there have been noted cases of racial aggravation and discrimination against Asian minorities through racist association with China, where COVID-19 first originated (Yeung 2020). Poor language provisions, disproportionate numbers of minority ethnic individuals working in front-line industries, and the fact that they are more likely to have pre-existing symptoms (e.g. diabetes, cardiovascular disease) that may lead to death upon contraction of the disease (Quershi et al 2020) mean that COVID-19 has been of greater detriment to minority ethnic people. A national information campaign of cultural exchange and understanding to address the racist prejudices would be the minimum required to address the more serious issues being experienced by racial and ethnic minorities during the pandemic.

3.4 Benefits of Promoting Cultural Exchange and Glocalization

While the nature of societally-embedded racism has and will be difficult to identify and target through policy reform (which makes this issue all the more pressing), research suggests that extensive and meaningful engagement with cultures, especially from an early stage, can help.

Despite our increasingly globalized and interdependent world, the risk of becoming marginalised and remote from the forces which influence our day-to-day lives is a reality, as seen above in the rapid yet uneven dispersion of minorities in Scotland. Figure 4 displays how the use of cultural exchanges and open discussion around diversity can aid one's ongoing development as a globally-conscious individual.

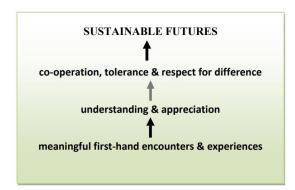


Figure 4, Youth Exchanges (2012)

The possibility of encounters to hear other people's 'experiences of the world' also suggests an agency that can 'quietly' push back against dominant discourses and narratives in politics and media, enabling people with different trajectories to carve out alternative urbanisms (Peterson 2020). Promoting good relations and positive experiences with people of different cultures is key to fostering community cohesion.

3.4.1 United Nations

UNESCO (2007) outlines a number of 'soft policies' that seek to embrace multiculturalism, specifically through the avenues of public 'recognition', education, culturally sensitive practices, cultural legal exceptions, public materials, religious accommodation, provision of prescribed food, and monitoring of media. However, they also warn against the ease of governments and communities to fall into the 'ethnization of cultural values' that overemphasises the cultural identity at the expense of overcoming inequality (UNESCO 2007). The need to address inequality is part of the UN's Sustainable Development Goals; in order to fulfil Scotland (and the wider UK)'s commitment to this factor, there needs to be sufficient grass-roots and localised support.

3.4.2 Good Relations

CRER (2016) suggests that "fostering good relations is sometimes seen as a positive addon in comparison to the more pressing issues of eliminating discrimination and advancing equality of opportunity." The failure to foster good relations can result in community tensions such as forms of extremism and violence. Intercultural competence among Scottish individuals needs to be built in order to interact positively with ethnic minorities, which include but are not limited to attitudes of respect and tolerance, critical thinking and multiperspectivity skills, and world knowledge (CRER 2016). A focus on and recognition of the simple need for localised, meaningful, and good relations amongst members of a community creates an environment in which ethnic minorities can feel more confident in their ability to contribute positively.

3.4.3 Case Study: Promoting Community Cohesion in Edinburgh

As a result of the Equality Framework set forth by the Scottish Government, the Edinburgh Council (2016) outlined an approach to promoting good community cohesion by identifying two inter-relating workstreams:

1. Promoting good community cohesion—Including activity to tackle prejudice and promote understanding between communities in Edinburgh.

This includes managing responses to Brexit, neighbourhood partnerships, interfaith relations, responsible citizenship, LGBT+ equality and rights, race relations, and intergenerational relations.

2. Preventing or addressing the effects of poor community cohesion –Including activities to safeguard vulnerable individuals, raise awareness of potential vulnerabilities and other impacts arising from poor community cohesion.

This area of work also includes capacity building to prevent, address and develop multiagency protocols and responses for a range of issues, for example, radicalisation and religiously motivated hate crime. Examples include a City Wide Hate Crime Community Improvement Partnership established in response to the rise in reported Islamophobic incidents by Edinburgh Council in 2016.

While there were no performance metrics to measure the success of these measures, it is important to note that the implementation of cultural exchange and educational programmes rests largely on local councils, and their ability and knowledge of how to best direct funding and support in their areas. While this applies to achieving general equality, this is especially important in eliminating racial discrimination due to its geopolitical and highly intersectional nature. There needs to be more oversight and monitoring of what local councils are doing to alleviate racial tensions across Scotland, including how to adapt them to each unique locality.

3.5 Implementation and Policy Proposals

In conclusion, we recommend that in order to support the expansion and smooth implementation of wider racial equality reform across Scotland, there needs to be a parallel public education campaign endorsed and supported by the Scottish Government. This should address the correction and eradication of 'everyday' and casual racism within communities and encourage multicultural and international understanding through local avenues and media, as well as stricter diversity monitoring.

The need to implement locally-focused 'soft' education and reform surrounding multiculturalism and ethnic diversity in Scotland has not only been recognised by experts, but also by lawmakers such as Labour MSP Anas Sarwar. Sarwar stated that "Why have we not had, and why are we not having, a full race disparity audit in Scotland? I welcome more disaggregated data, but we can be bolder than that. How do we get proper, full data around hate crime? How do we also recognise that the vast <u>majority</u> of racism is not criminal; it is not something that we can report to the police or that someone can be prosecuted for" (Scottish Parliament Report, Sep. 2020). Failure to do so will result in what Gillespie calls a form of "repressive liberalism" with more emphasis on obligation rather than rights (Gillespie, 2007).

Our key recommendations are:

- 1. Maintenance, monitoring of diversity This includes keeping more rigorous and comprehensive track of ethnicity-based data and making it available in census results, while also recognising the limits of identifying smaller instances of racial discrimination and the intersectionality of racial and socioeconomic inequality.
- 2. Addition of community cohesion goals to the Race Equality Framework these would follow something along what is suggested in CRER's 2016 report on Good Relations, which include strong leadership commitment, pro-active press and media, promoting a sense of belonging for all, breaking down 'parallel lives', developing citizenship, and tackling performance management through local places.
- 3. Greater attention to 'glocalising' rural areas The above recommendations should be applied with special attention to the needs of rural communities. This includes not only better resources and monitoring of equality and diversity in these areas, but dedicated campaigns that educate the public on globalization and foster connections between people of different ethnic backgrounds. An example of this would be the addition of anecdotal evidence from a more diverse range of people (such as those from rural areas or second-generation immigrants) to the One Scotland campaign (https://onescotland.org/).

By emphasising how micro connections exist alongside micro aggressions and racialisation, this critically holds on to experiences of exclusion and injustice, while simultaneously shining a light on stories of hope, possibility and progressive change (Peterson, 2020). This will directly aid equality and human rights programs aimed at the disparity in healthcare access. Income cannot only help soften the impact of increasing globalisation in Scotland, but serve to support and sustain Scotland's commitment as a leader in human rights and racial equality to create a better-educated, "glocally"-minded communities across the nation.

3.6 References

Brown, G. (2015) Scotland's Quarrel Is With Globalization, Not the UK. New Perspectives Quarterly, 32(1), pp.71–75.

Coalition for Racial Equality and Rights (CRER) (2016) *Promoting Good Relations: New Approaches, New Solutions*. Accessed from: 7ec2e5_7455e4727ac34607941f62af6de748eb.pdf (filesusr.com)

Coalition for Racial Equality and Rights (CRER) (2020) *Scotland's National Performance Framework: Measuring outcomes for minority ethnic communities*. Accessed from: b0353f_88e80a91c2e14803a4e21ea537f92c98.pdf (filesusr.com)

Corporate Policy and Strategy Committee (2016) *Promoting community cohesion in Edinburgh*. Accessed

https://democracy.edinburgh.gov.uk/Data/Corporate%20Policy%20and%20Strategy%20Committee/20161206/Agenda/item_71_-_promoting_community_cohesion_in_edinburgh.pdf

Gillespie, P. (2007) CONCLUSION: MANAGING DIVERSITY IN A POST-NATIONALIST WORLD. In Managing Diversity: Practices of Citizenship, edited by Brown Nicholas and Cardinal Linda, 185-208. Ottawa: University of Ottawa Press.

Howe, C., Heim, D. and O'Connor, R. (2014) Racism, identity and psychological well-being: a longitudinal perspective on politically embattled relations. In *Ethnic and Racial Studies* 37:13, pp.2457-2474. Routledge.

Peterson, M. (2020) Micro Aggressions and Connections in the Context of National Multiculturalism: Everyday Geographies of Racialisation and Resistance in Contemporary Scotland. In *Antipode 52:5* pp. 1393-1412, John Wiley and Sons.

Qureshi, K., Meer, N., Kasstan, M., Hill S. and Hill, E. (2020) *Submission of Evidence on the Disproportionate Impact of COVID-19 on Ethnic Minorities in Scotland*. Global Health Policy Unit, University of Edinburgh. Online. Accessed from: https://ghpu.sps.ed.ac.uk/wp-content/uploads/2020/05/14-May-SCOTLAND-COVID19-and-ethnic-minorities-FINAL.pdf

Rex, J. (1997) The problematic of multinational and multicultural societies, *Ethnic and Racial Studies*, 20:3, pp. 455-473. Routledge.

Robertson, R. (1995) Glocalization: Time-Space and Homogeneity-Heterogeneity. In: Featherstone, M., Lash, S. and Robertson, R., Eds., *Global Modernities pp.* 25-44. , Sage Publications. Accessed from:

https://warwick.ac.uk/fac/arts/history/students/modules/hi31v/syllabus/week18/robertson-1995.pdf

Scottish Parliament (2020) Parliamentary Business Report: Minority Ethnic People and Communities.

Accessed from:

https://www.parliament.scot/parliamentarybusiness/report.aspx?r=12835&mode=html#iob_1 16043

Scottish Government (2020) *Statistics regarding crimes of racial discrimination during COVID-19 pandemic: FOI release.* Accessed from: https://www.gov.scot/publications/foi-202000091498/

Simpson, L. (2014). How has ethnic diversity changed in Scotland? The Dynamics of Diversity: evidence from the 2011 Census. ESRC Centre on Dynamics of Ethnicity (CoDE), University of Manchester. Accessed from: www.bemis.org.uk/docs/code-census-briefing-scotland v2.pdf

Smith, S., Rigby, P. and Reaney, J. (2012) *Youth Exchanges: Method and Resource Handbook for Youth Practitioners in Wales*. Youth Work Wales. Accessed from: Cultural Exchanges and Experiences (youthworkwales.org.uk)

UNESCO (2009) *Investing in Cultural Diversity and Intercultural Dialogue*. UNESCO World Report. Accessed from: Investing in Cultural Diversity and Intercultural Dialogue: UNESCO World Report | Intercultural Dialogue

Walsh, D., Buchanan, D., Douglas, A., Erdman, J., Fischbacher, C., McCartney, G., Norman, P. and Whyte, B. (2018) Increasingly Diverse: the Changing Ethnic Profiles of Scotland and Glasgow and

the Implications for Population Health. *Applied Spatial Analysis and Policy vol.12.* pp. 983-1009. Springer.

Yeung, P. (2020) Race Hate Crimes Against East And Southeast Asian People Have Quadrupled In Wake Of Coronavirus. Huffington Post. Accessed from: https://www.huffingtonpost.co.uk/entry/racist-hate-crime-asian-communities-quadruples-coronavirus_uk_5ec53356c5b6d5f53f85f4f1?guccounter=1

4. Data Literacy in Schools

Flora Brown

4.0 Executive Summary

Scotland is leading the way in data innovation, but data collection has positive and negative aspects. It creates opportunities for improved industrial productivity, public services, and drives forward innovation, but there are also causes for concern related to personal privacy, corporate use of algorithms, increasing polarisation, and the spread of misinformation. Meanwhile, only 2% of primary and secondary school children in the UK are able to identify false information online (National Literacy Trust, 2018). While the Scottish curriculum has potential, more support is required for teachers to ensure every child has access to high quality learning in digital skills, data literacy and computing science across Scotland. Children and young people need to be equipped with the data knowledge and skills necessary for engaging with the online world critically and to allow them to participate in the growing digital economy.

We propose that the Scottish Government:

- 1. Works towards implementing data education as a form of critical digital literacy, across Scotland.
- Increases support for professional learning about computing science and data literacy for teachers through increased investment in continued professional development and industry support schemes.

4.1 Background Information

Increased awareness and knowledge of data is necessary for Scotland's future economic and democratic prosperity. Digital skills, data literacy and computing science (CS) are three crucial, interlinking aspects which this report will focus on when addressing Scotland's economic and democratic needs. Increased knowledge in data literacy and CS is required to meet sector demand for data scientists and engineers, and as part of a move towards a data literate society which uses data innovation for good. Computing and digital literacy skills are essential for having a technical understanding of the challenges and benefits of big data. CS graduates are in high demand across the private and public sector. This report argues that data literacy begins with education, and explains the economic and democratic need for data literacy.

4.1.1 Economic Context - Scotland's Digital Revolution

Scotland recognises the importance of data in economic productivity, social change and public services. High-powered data analytics can provide valuable insights for organisations to

develop or improve products and services, grow business, or improve efficiency (Data Education in Schools, 2019). Scotland's digital sector is growing rapidly, employing 82,200 people and contributing £5.126 billion (GVA) to the Scottish economy (Skills Development Scotland, 2021). However, there is a digital skills gap and half of digital employers report shortages in recruitment. This partly involves a shortage of data scientists, who are increasingly in demand to perform data analysis on the growing data assets of companies and organisations (The Royal Society, 2019). Skills in data literacy and CS are required to meet the long-term demand of the increasingly digital economy.

4.1.2 Potential societal implications of data collection

Data is being created and interacted with on a daily basis, but data in its own right has little value. The act of interpreting, preparing and communicating data is undertaken by different groups like journalists, advertisers, political parties and community groups and used in a variety of different ways. The citizen is a reader of this data, and makes decisions such as what to buy and who to vote for based on the information presented to them by others (Wolff *et al*, 2016). To be data literate is to understand potential biases, make critical judgments, and be better informed on the following challenges and opportunities of data use.

4.1.2.1 Challenges

The exponential growth of data within the context of 'surveillance capitalism' brings many challenges. Surveillance capitalism is a term coined by Shoshanna Zuboff to describe large-scale surveillance of human behaviour for profit (Zuboff, 2019). Personal data is gathered by companies such as Google and Facebook and is algorithmically analysed to spot patterns in behaviour and predict and influence user behaviour, in order to drive up online engagement (Cobbe, 2019). This engagement creates certainty for businesses who want to sell a product, whether that is through targeted advertising, or building user profiles to sell. The technologies and business models used strive for maximum user engagement, and this has many wider societal consequences.

The profit-maximising algorithms cause misinformation to spread quickly because 'fake news' receives more engagement. False news stories are 70% more likely to be retweeted, and misinformation spreads six times faster than true information (Vosoughi et al, 2018). Misinformation, driven by unregulated corporate use of data, severely impacts democratic processes and civic engagement, as lack of ability to discern between real news and fake has led to a huge decrease in public trust of journalism and of evidence-based governance (National Literacy Trust, 2018; Polizzi, 2020a). These algorithms also lead to 'filter bubbles', where users increasingly see content they agree with, leading to polarisation and differing versions of reality. Increasing polarisation poses a threat to democracy. We have seen the impacts of unregulated algorithms and filter bubbles in contributing to the insurrection of the US Capitol (Marantz, 2021). This algorithmic technology has also been used for political power, which can be seen in the Cambridge Analytica scandal involving the 2016 US presidential election and the Vote Leave

Brexit campaign, where data was used to create highly detailed profiles of users which was then used to micro target campaign adverts. (Cadwalladr & Graham-Harrison, 2018). These examples point to a need for greater regulation of the spread of online content and the need for more people to be educated in data literacy, to increase awareness of the implications of data usage.

4.1.2.2 Data for Good

It is important to understand that data is a tool that can be used for good and in an ethical way. For younger generations, 'big data' has connotations of unethical social media and corporate use, but it is also used for tools such as weather prediction, disease outbreak, urban planning, traffic, and intelligence in areas of fraud detection and translation. One example of using data for good is the Usher Institute's DataLoch project. This aims to create a repository of health and social care data from Edinburgh and South East Scotland to help find solutions to current health and social care challenges, which have been exacerbated by the Coronavirus pandemic. The project will bring data-driven approaches to improving healthcare functions, and reduce health inequalities (The University of Edinburgh, 2020). Data literate citizens are sensitive to privacy and ethical use of data, increasing opportunities to use data for good. Being ahead of the curve with data innovation allows people in Scotland's digital sector to pay attention to the wider regulatory, social and ethical implications of the field.

4.2 Education Context and Practices

The Scottish Government and Scottish Curriculum for Excellence (CfE) has a number of frameworks, and strategies surrounding digital learning which aim to incorporate digital literacy and CS. However, the term 'digital literacy' is used very broadly, and tends to refer to practical and functional digital skills. Data literacy could provide the missing analytical and ethical gap, but it is only being implemented in the Edinburgh region. CS education presents a framework to provide children with relevant skills for the digital economy, but there is a lack of support for teachers in this area.

4.2.1 Digital literacy

The Scottish Government's 2016 Digital Learning and Teaching Strategy for Scotland includes guidelines for the Technologies section of CfE and places a specific focus on digital literacy, defining it broadly as "the skills to use technology to engage in learning through managing information, communicating and collaborating, problem-solving and being creative, and the appropriate and responsible use of technology (Scottish Government, 2017:33). Digital Literacy includes covering the use of tools and programmes, finding information online, and ways to stay safe online, and incorporates computing science.

In practice, this broad definition may include the functional skills of digital literacy, but does not specify or give guidance to local authorities or educators on teaching the critical aspect

of digital literacy, which goes past learning about online safety to learning about the advantages and limitations of data collection and the challenges of surveillance capitalism. Gianfranco Polizzi (2020b) explains that effective digital literacy education is two-tier. It has the functional dimension, which includes practical skills of how to nativage the internet safely, evaluate the trustworthiness of content and identify potential bias, and it has the critical dimension, which incorporates fostering a broader understanding of the digital environment as embedded in power structures. This includes understanding how personal data is used, how corporate business models influence the version of reality we see on our screens, and the socio-economic issues underpinning how information is produced and shared (Buckingham et al., 2005; Buckingham, 2007). This second, critical dimension of digital literacy can be incorporated more specifically in 'data literacy'. This is an important part of equipping young people with the skills and knowledge to make their own decisions about personal data in the wider societal context, and to critically interpret data published in the media and in public data sets.

4.2.2 Data Literacy

Data literacy includes the knowledge and skills required for working with data in a real-world context. Wolff *et al.* (2016) sought to interpret existing definitions of data literacy and differentiate it from statistical analysis. They came up with a working definition of data literacy:

Data literacy is the ability to ask and answer real-world questions from large and small data sets through an inquiry process, with consideration of ethical use of data...

(Wolff et al, 2016:27).

One example of relevant and future-focused curriculum development is the Data Education in Schools programme that is being developed by the Centre for Research in Digital Education as part of Edinburgh's DDI skills gateway. The Data Education in Schools programme aims to "increase data literacy in the children and young people in South East Scotland so that they are equipped with the knowledge and skills needed to understand the data driven world around them" (Data Education in Schools, 2019). Data education covers the functional aspect of data and digital literacy, while also putting an emphasis on the wider ethics of data, understanding data, having confidence in data, and ideas of how we can use data for good. This is a highly relevant, forward-thinking framework, and is being implemented as part of the Edinburgh and South East Scotland City Regional Deal with the goal of making Edinburgh the data capital of Europe. In order to present equal opportunities to young people across Scotland, and not exacerbate inequalities in digital participation or access to the digital sector, this type of framework should be implemented nationally. Data literacy would empower young people as individuals while providing the growing digital economy with data-skilled citizens.

4.2.3 Computing Science

As jobs are increasingly becoming reliant on technology, the demand for pupils with computing science expertise is growing. Children need to learn the practical digital and

computing skills to navigate *and* shape the digital world. In addition to learning digital skills to prepare them for the job market, young people will also be more empowered to shape the digital landscape ethically in the future. The Technologies area of CfE includes CS, and all children take this subject to level 3. CS covers concepts such as algorithms and repetition which students then learn how to apply on computers, before applying these skills to their own creations. While CS is well-established in the Scottish curriculum and promising in theory, there remain issues in the implementation and delivery of this curriculum, leaving many children without proper computing science education.

Firstly, there are not enough computing science teachers in Scotland. The number of teachers has decreased by 25% since 2005 (The Royal Society, 2017). There are around 5000 computing graduates in Scotland each year, and we only need 50-60 more CS teachers per year to provide young people with the high quality CS learning they need to participate in Scotland's digital economy (Robertson, 2019). However, teaching is not an appealing option to many computing graduates due to concerns about pay, flexibility, and opportunities for continuous professional development (CPD) highlighting the need for intervention to change how teaching is viewed as a vocation, at the same time as increasing the flexibility of pathways into CS teaching (Robertson, 2019).

A second issue with implementation is that CS is a rapidly evolving subject, meaning that teachers require comprehensive CPD and support in order to teach children skills that are relevant to the digital sector. The Royal Society's 2017 report on computing education in UK schools found that many teachers only felt confident in teaching the first part of the computing curriculum, but 26% of secondary school teachers surveyed said they had not underdone computing-related professional development in the last year (The Royal Society, 2017). The 2017 GTCT report on teacher workforce planning found that insufficient support for professional learning was a major factor influencing teachers in general to leave their position (Scottish Parliament, 2017).

4.3 Policy Recommendations

The inclusion of digital literacy and CS in the curriculum is a good foundation to work with, but use of data and technology is rapidly growing and evolving, bringing societal implications and a digital skills gap. To begin to tackle this, we propose the following solutions:

4.3.1 Commit to implementing data education as part of the curriculum across Scotland.

The Scottish Government knows that the 'data revolution' presents opportunities to improve the economy, our communities, and democracy by upskilling the workforce to use data productively and ethically. The Data Education in Schools programme presents a great opportunity for young people in the Edinburgh region to learn about the digital sector, the benefits and concerns of data use, and applicable data skills. However, this education needs to be available for all young people, not just in Edinburgh and the South East, to avoid a wider gap in national digital participation and education quality.

4.3.2 Increase support for computing science teachers through increase investment in CPD and industry support schemes

Scotland needs more CS teachers and more support in delivering a relevant and up-to-date CS curriculum to students. As mentioned, lack of CPD is a major concern for CS graduates considering a career in teaching, as most graduates want to stay committed to keeping their technical knowledge up-to-date and challenging themselves throughout their careers (Robertson, 2019).

The Scottish Government has said its priority is to support local authorities and educational establishments in implementing this new Technologies curriculum guidance on digital literacy and in incorporating digital technologies in their teaching (Scottish Government, 2016). However, teachers are not provided with adequate support. This is an issue for the job satisfaction of current CS teachers, the quality of education being provided to students, and also impacts the appeal of becoming a CS teacher.

Support for teachers could involve investing more in CPD programmes, or through structurally increasing opportunities for industry experts to work alongside and support teachers. Increasing this support will serve existing computing teachers in adapting to continuous curriculum developments, and will also contribute to making a career in teaching computing science more appealing to CS graduates by guaranteeing skill development and CPD. Improving the standards of education in digital skills is an important base for having a society that is well-informed and participating digitally and ethically.

4.4 Conclusion

In acknowledging the need for data and digital skills for the economy, education needs to be a starting point. Digital literacy and CS in CfE provide this, especially in terms of technical and analytical skills, but do not place enough focus on enabling children to become 'data citizens' on a critical level (Robertson & Tisdall, 2020). CfE should be equipping young people with the knowledge of the wider context of the corporate and public data world, which is underpinning the online world that many young people are so familiar with. Teaching children and young people digital skills as well as the benefits and limitations that arise from the current digital, economic and political system is crucial to empower the next generation to make necessary change. Neglecting the opportunity to act on improving data and computing education would risk increasing the digital skills gap, increasing political polarisation, and would risk Scotland's economic prosperity.

4.5 References

Buckingham, D., Banaji, S., Carr, D., Cranmer, S. and Willett, R. (2005) The media literacy of children and young people: A review of the research literature. Accessed via: https://discovery.ucl.ac.uk/id/eprint/10000145/1/Buckinghammedialiteracy.pdf

Buckingham, D. (2007) 'Digital Media Literacies: Rethinking Media Education in the Age of the Internet', Research in Comparative and International Education, 2(1), pp. 43–55.

Graham-Harrison, E. and Cadwalladr, C. (2018) *Revealed: 50 million Facebook profiles harvested for Cambridge Analytica in major data breach*. [online] the Guardian. Available at: https://www.theguardian.com/news/2018/mar/17/cambridge-analytica-facebook-influence-us-election [Accessed 25 January 2021].

Cobbe, J. (2019) Why a focus on "fake news" and Facebook misses the internet's real problems - and solutions. [online] openDemocracy. Available at: https://www.opendemocracyu.net/en/opendemocracyuk/why-focus-on-fake-news-and-facebook-misses-internets-real-problems-and-solutions/ [Accessed 18 January 2021].

Data Education in Schools (2021) What is data? and why should we learn about it - Data Education in Schools. [online] Available at: https://dataschools.education/about-data-literacy/what-is-data/ [Accessed 17 January 2021].

The University of Edinburgh (2020) *DataLoch*. [online] Available at: https://www.ed.ac.uk/usher/dataloch> [Accessed 2 February 2021].

DDI (2021) Data capital of Europe - DDI. [online] Available at: https://ddi.ac.uk/about-us-data-innovation/data-capital-of-europe/ [Accessed 8 February 2021].

Skills Development Scotland (2021) Digital Current and Future Skills Demand, Sectoral Skills Assessment February 2021, Accessed via: https://www.skillsdevelopmentscotland.co.uk/media/47420/digital-ssa.pdf

Marantz, A. (2021) How Social Media Made the Trump Insurrection a Reality. [online] The New Yorker. Available at: https://www.newyorker.com/news/daily-comment/how-social-media-made-the-trump-insurrection-a-reality [Accessed 8 January 2021].

National Literacy Trust (2018) Fake news and critical literacy: The final report of the Commission on Fake News and the Teaching of Critical Literacy in Schools, Accessed via: https://cdn.literacytrust.org.uk/media/documents/Fake_news_and_critical_literacy_- final report.pdf

Polizzi, G. (2020a) Information Literacy in the Digital Age: Why Critical Digital Literacy Matters for Democracy. *Informed Societies*, pp.1-24.

Polizzi, G. (2020b) Digital literacy and the national curriculum for England: Learning from how the experts engage with and evaluate online content. *Computers & Education*, 152, p.103859.

Robertson, J. (2019) *Towards a sustainable solution for the shortage of computing teachers in Scotland.* The Centre for Research in Digital Education.

Robertson, J., & Tisdall, K. E. M. (2020). The importance of consulting children and young people about data literacy. *Journal of Media Literacy Education*, 12(3), 58-74.

Scottish Government (2016) Enhancing Learning and Teaching Through the use of Digital Technology: A Digital Learning and Teaching Strategy for Scotland, Accessed via: https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2016/09/enhancing-learning-teaching-through-use-digital-technology/documents/00505855-pdf/00505855-pdf/govscot%3Adocument/00505855.pdf

Scottish Government (2017) Internet safety for children and young people: national action plan, Accessed via: https://www.gov.scot/publications/national-action-plan-internet-safety-children-young-people

Scottish Parliament (2017) Teacher Workforce Planning for Scotland's Schools, SP Paper 186, 10th Report, 2017 (Session 5), Accessed via: https://sp-bpr-en-prod-cdnep.azureedge.net/published/ES/2017/9/1/Teacher-Workforce-Planning-for-Scotland-s-Schools/10th%20Report,%202017.pdf.

The Royal Society (2017) After the reboot: computing education in UK schools.

The Royal Society (2019) Dynamics of data science skills: How can all sectors benefit from data science talent?

Williamson, P. (2016) 'Take the time and effort to correct misinformation', Nature, 540(7632).

Wolff, Annika; Gooch, Daniel; Cavero Montaner, Jose J.; Rashid, Umar and Kortuem, Gerd (2016). Creating an Understanding of Data Literacy for a Data-driven Society. *Journal of Community Informatics*, 12(3) pp. 9–26.

Vosoughi, S., Roy, D. and Aral, S. (2018) The spread of true and false news online. *Science*, 359(6380), pp.1146-1151.

Zuboff, S. (2019) The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power. New York: PublicAffairs.

5. Homelessness and Housing

Jessica Smith, Lauren Del Fabbro

5.0 Executive summary

The homelessness crisis in Scotland, while recognised politically, continues to threaten the lives and livelihoods of many vulnerable individuals. A difficult and multi-faceted problem to resolve, it necessitates comprehensive funding and care. Impacted by rising rents and multiple complex needs, numerous individuals are driven to apply for homelessness, only to be denied the help they need by their local council. A two-fold approach is thus needed: helping people into affordable housing by continuing to build/fund it, and ensuring that homeless people are *able* to access this housing by increasing transparency within the bureaucracy that dictates who is entitled to this help.

Our policy recommendations to the Scottish Government are, therefore, as follows:

- 1. Strengthen commitment to, and increase, funding and building of affordable housing.
- 2. Increase transparency and accountability in the bureaucracy surrounding homeless applications.

5.1 Background

Homelessness has been an ongoing, debilitating social issue persisting throughout Scotland, rendering individuals' lives unsafe and ignored. Scotland recorded the highest rate of homeless fatalities in the UK in 2018 with 195 deaths, an increase of 19% from 2017 (National Records of Scotland, 2020).

Individuals are trapped into homelessness for a range of complex and deeply rooted social and economic reasons that, unfortunately, cannot be resolved from single policies. For example, in 2019-20, almost half of homelessness applications were due to disputes within a household/relationship breakdown, and individuals being asked to leave (Scottish Government, 2020). Other reasons include fleeing domestic violence, overcrowding, and discharge from prison or care. Overcrowding is a profound issue; in 2019, roughly 51,000 households were classified as overcrowded, drastically reducing the quality of life of people in such dwellings (Directorate for Housing and Social Justice, 2020). It is clear that the reasons for homelessness

are multifaceted. Therefore, more must be done by the government to both improve housing quality, and help those who are homeless to find a secure and **affordable** place to live.

The cost of housing in Scotland has risen dramatically through the century with the average weekly rent set by local authorities increasing by 67% from 2005 to 2019 (Statista, 2019). Minimum wage has increased by less than half that amount. As such, vulnerable people face a series of issues prompted by complex social and economic instability. These staggering numbers and conditions are not only devastating but point to greater issues that persist within Scotland and need to be mediated immediately. Policy needs to tackle both issues that lead people to instability and provide housing that is inexpensive, protecting citizens from crises such as that we have seen this year with coronavirus greatly impacting peoples' ability to generate an income.

The Housing (Scotland) Act 1987 stipulates that a person is potentially homeless (threatened with homelessness) if it is likely that he/she will become homeless within two months. A person is intentionally homeless if he/she deliberately did or failed to do anything which led to the loss of accommodation which it was reasonable for him/her to continue to occupy.

It is critical to note that this definition can be interpreted in a way that overlooks individuals, as what is ostensibly "intentional" homelessness may be more complicated owing to multiple complex needs. This can leave vulnerable people without supportive services or temporary accommodation. Official government guidelines give local councils responsibility to determine whether an individual is intentionally or unintentionally homeless, and thereafter determine the appropriate measures of support and accommodation. In principle, this seems an ideal way to prioritize individual needs, however, in practice this has been taken advantage of, whereby councils have not given help to those in need.

5.2 Current Policies

In 2015, the government invested £3.3 billion into building 50,000 new affordable homes by 2021, of which £35,000 will be used for social housing (Audit Scotland, 2020). Moreover, the government has committed to a £50 million "Ending Homelessness Together" fund, with £21 million directed to support the "Rapid Rehousing" approach, instigated by the Homelessness and Rough Sleeping Action Group (HARSAG) and approved by government (Dunn, 2020). This strategy aims to lessen the amount of time people are in temporary accommodation, improve the quality of temporary accommodation and reduce the transition period between temporary and permanent housing (ibid). This does not mean temporary accommodation will be dismantled, as it will always be a necessity, however, it merely encourages a quicker transition and priority to ensure preventative methods are implemented and to reduce the amount of time individuals are between properties and unsettled. Additional strategies, such as Housing First, have been endorsed and implemented to cater to individuals with multiple complex mental health issues,

physical issues, or sleeping rough, and require additional resources to remain healthy, safe, and supported.

These policies have been recognized as moving in the right direction, however, they are incredibly ambitious and require effective implementation. Achieving this may be more challenging than expected. To start, if the temporary to permanent housing transition is to be sped up, permanent social housing needs to be made available. Although the government has identified this issue and is in the process of building additional social houses this will not be enough to support the increasing rate of homeless households (Chartered Institute of Housing, 2018). Recent changes to housing law require a 7-day restriction on use of unsuitable temporary accommodation for pregnant women and families. This is to be extended under the Rapid Rehousing approach to all groups of homeless people (Scottish Government, 2019). This is ideal in theory, however, implementing this extension is difficult, and the resources needed to successfully move people into permanent accommodation are severely lacking. The current endowment for social housing will not be enough to support the homeless population and therefore requires more consistent funding and attention.

5.3 Gatekeeping

Although policies implemented seek to support individuals, additional obstacles arise, preventing households from receiving the help they need. This is referred to as "Gatekeeping" and is the practice of denying households of their statutory rights, enshrined in the 1987 Housing Act. Gatekeeping occurs when councils tell households that they are not allowed to apply for homelessness, intimidating them or illegally exercising their authority. Additionally, councils may accept applications but will not provide households with accommodation due to lack of resources. Government records have shown that councils lack sufficient accommodation and may resort to paying for private leases which may not be as effective nor cost-efficient.

Records are still uncertain: a lack of empirical data obscures the true numbers of applications made for homelessness, and subsequently the numbers that were refused help.

This is the result of a series of issues:

- a. Lack of council regulation and accountability;
- b. Lack of housing and resources;
- c. Lack of data and effective means of measuring gatekeeping.

As such, it is recommended that **councils remain accountable and provide weekly records of application details** to maintain records of homelessness status in Scotland, allowing a

better understanding of the housing needs of councils and match these needs with necessary resources.

5.3.1 Case Study: The People vs. Glasgow City Council

This was evidenced in The People vs. Glasgow City Council (ongoing), a campaign whereby over 3000 vulnerable, potentially homeless people were affected by gatekeeping 2014-2019 (Shelter Scotland, 2019). In 2019, Shelter Scotland took Glasgow City Council to court on accounts of excessive misuse of power, preventing and dismissing households from applying for homelessness and receiving support. It was revealed in 2019 that Glasgow City Council had not fulfilled 3,365 applications for temporary accommodation with a year prior facing 3,055 unfilled applications. Since 2001, the Scottish parliament has declared it critical to provide temporary accommodation, advice, and assistance to anyone who applies for homelessness as the bare minimum (Brooks, 2019). This prime example of gatekeeping was breaking the law, and led the director of Shelter Scotland to claim legal action was necessary as these problems had been occurring for many years, and Shelter's concerns had not been taken seriously. Brown, director of Shelter Scotland, claims Glasgow City Council exercised their powers unlawfully, denying "hundreds, perhaps even thousands" of people the right to claim homelessness (BBC News, 2019).

Shelter underscored the need to enforce the delivery of services and challenge councils that refuse to do so. The Scottish Housing Regulator (SHR) declared that they would investigate and hold Glasgow City Council accountable, committing to a fair and legal system to protect vulnerable citizens of Glasgow.

5.4 Policy recommendations

An interview with Jessica Husbands, Policy Researcher at Shelter Scotland, refined some of the unanswered questions and the ongoing issues surrounding homelessness. Although the government has just invested into social housing this is far from a fixed solution. Husbands claims, "They [the government] feel like they've done housing and they need to do something else"; move on to a more politically salient issue. Due to the complex nature causing people to become homeless, this attitude is dangerous and will make the funding used now redundant. In order to eradicate homelessness for good, it is crucial the government continue with current strategies and continue funding.

5.4.1 Recommendation 1: Strengthen commitment to, and increase, funding and building of affordable housing.

We recommend, following Shelter's insights and proposals, that the Government continues funding the construction and distribution of social housing. It is critical that these housing blocks are developed within cities or reach of cities to avoid social and labour isolation. Homelessness applications have continued to rise, with latest figures suggesting 132,000 households are on a waiting list throughout Scotland followed by 11,665 households in temporary accommodation for over six months (Scottish Government, 2020).

Recent Shelter Campaign, *Build Scotland's Future*, proposes a minimum commitment of building 37,100 homes for social rent between 2021-2026 to reflect a level that will allow the reduction of housing needs in Scotland (Shelter Scotland, 2020). Recent pledges have been record breaking, however, following the Shelter report, *Affordable Housing Need in Scotland Post-2021*, it is critical, now more than ever, to continue investing especially amidst a public health crisis.

As housing needs are not finite, it is critical to assess and invest in social housing programmes to take into account social and economic changes and assess the needs that come with it. Increasing the housing pledge from 50,000 to 53,000 affordable homes would target the housing needs exacerbated by Brexit and the pandemic (Dunning et al, 2020).

Shelter Scotland suggests the current Affordable Housing Supply Programme was an investment not only for homeless households but for economic and social growth, sourcing 10,000 to 12,000 jobs in the construction and operational development industry, leveraging an economic output of £1.4 billion per year. As such, this new programme and updated investment would contribute to rebuilding the Scottish economy; creating more jobs, engaging communities and supporting vulnerable households (ibid).

5.4.2 Increase transparency and accountability in the bureaucracy surrounding homeless applications.

In order to prevent gatekeeping, we recommend regular interventions and moderators to enquire and investigate the proceedings at different councils.

Additionally, we recommend stricter protocols and recording measures to oversee homeless applications. With commissioned teams to investigate and monitor council homelessness application activities, we can assess and record more meaningful data to give a better understanding of ongoing progress or strain. This will not only provide greater insight into homelessness in Scotland but will keep track of applications in a more reliable and sustained manner. Failure to comply should result in serious repercussions for those involved, so to hold the council accountable.

Furthermore, lack of resources will need to be recorded and mandated to higher bodies to maintain constant communication and insight into housing changes and resources available. This will include more detailed protocol for councils to follow if housing is not available, encouraging more transparent processing of applications.

5.5 Conclusion

By strengthening accountability and transparency, and renewing a commitment to building good quality, affordable housing, fewer vulnerable people will be neglected by their community. Instead, these people will be protected by mechanisms that ensure that their situation is recorded properly, they are helped quickly, and that they are ultimately given a safe place to live.

5.6 References

Audit Scotland (2020) *Affordable Housing* (Report). Available at: https://www.audit-scotland.gov.uk/report/affordable-housing [Accessed 07/02/2021]

BBC News (2019) 'Homelessness: Glasgow City Council faces legal action from Shelter Scotland', *BBC News [online]*. Available at: https://www.bbc.co.uk/news/uk-scotland-glasgow-west-49896758 [Accessed 06/02/2021]

Brooks, L. (2019) 'Glasgow council facing court action over lack of housing for homeless people', *The Guardian* [online]. Available at: https://www.theguardian.com/society/2019/oct/02/glasgow-council-facing-court-action-over-lack-of-housing-for-homeless-people [Accessed 07/01/2021]

Chartered Institute of Housing (2018) 'Tackling homelessness through Rapid Rehousing' (Blog). Available at: https://www.cih.org/blogs-and-articles/tackling-homelessness-through-rapid-rehousing [Accessed 05/02/2021]

Directorate for Housing and Social Justice (2020). 'Scottish House Condition Survey: 2019 Key Findings', Scottish Government (Report). Available at: <a href="https://www.gov.scot/binaries/content/documents/govscot/publications/statistics/2020/12/scottish-house-condition-survey-2019-key-findings/documents/scottish-house-condition-survey-2019-key-findings/scottish-house-condition-survey-2019-key-findings/govscot%3Adocument/scottish-house-condition-survey-2019-key-findings.pdf
[Accessed 07/02/2021]

Dunn, L. (2020) 'Rapid rehousing transition plans: A Scottish overview', Crisis Scotland (Report). Available at: https://www.crisis.org.uk/media/241640/crisis_rapid-rehousing - report_web_spreads_v2.pdf [Accessed 03/02/2021]

Dunning, R., Ferrari, E., Hoolachan, J., Keskin, B., Moore, T., O'Brien, P., and Powell, R. (2020) 'Affordable housing need in Scotland post-2021' *Shelter Scotland* (Report. Available at: https://scotland.shelter.org.uk/__data/assets/pdf_file/0010/1925668/Affordable_ Housing_Need_in_Scotland_Post-21_final_report.pdf/_nocache [Accessed 06/02/2021]

National Records of Scotland (2020) 'Homeless Deaths 2017 and 2018' (Report). Available at: https://www.nrscotland.gov.uk/files//statistics/homeless-deaths/17-18/homeless-deaths- 17-and-18-publication.pdf [Accessed 06/02/2021]

Scottish Government (2019) 'Improving temporary accommodation standards: consultation' (Report). Available at: https://www.gov.scot/publications/consultation-improving-temporary - accommodation-standards/pages/2/ [Accessed 07/02/2021]

Scottish Government (2020) 'Homelessness in Scotland: 2019 to 2020' (Report). Available at: https://www.gov.scot/publications/homelessness-scotland-2019-2020/pages/5/ [Accessed 05/02/2021]

Shelter Scotland (2019) 'The People vs Glasgow City Council' (Press release). Available at: https://scotland.shelter.org.uk/media/press releases/the people vs glasgow city council [Accessed 06/02/2021]

Shelter Scotland (2020) 'Shelter Scotland Briefing Paper: Build Scotland's Future' (Report) https://scotland.shelter.org.uk/ data/assets/pdf file/0003/1937541/Social Housing Campaig n Policy Paper 2020.pdf/ nocache [Accessed 07/02/2021]

Statista (2019) 'Average weekly local authority rent rate in Scotland from 2004/2005 to 2018/2019'. Available at: https://www.statista.com/statistics/525721/average-weekly-local-authority-rent-in-scotland/ [Accessed 06/02/2021].

6. Promoting High-Quality Asylum Claim Processing

Grace Shook

6.0 Executive summary

In the United Kingdom, decisions on whether to grant someone asylum are initially decided on by civil servants in the Home Office. If denied, applicants can then appeal to the immigration courts. For asylum applications made in the UK from 2016 to 2018, the grant rate rose from 36 percent at initial decision to 54 percent after the appeal stage (Walsh, 2020). Research has demonstrated that the discrepancy between grant rates at the initial decision and at the appeal stage is often because the UK Visas and Immigration (UKVI) case owner made a negative assessment of the applicant's credibility and failed to follow UKVI's own policy on assessing credibility (Kaye and Shaw, 2013). The Home Office's failure to make accurate assessments at the initial decision stage is problematic for the following reasons:

- It causes a backlog of cases in the asylum tribunals.
- It creates unnecessary government spending on administrative and support costs.
- It depletes resources from third-sector organisations.
- It places asylum seekers in a stressful legal limbo.

Our policy recommendations are as follows:

- 1. The Home Office should address its culture of disbelief¹ by increasing training for case owners as well as hold case owners who consistently fail to properly follow UKVI guidance responsible.
- The Scottish Government should commit to the continuation and expansion of the New Scots Strategy.

6.1 Background

6.1.1 Definitions

Asylum is a form of international protection granted by a country to someone who has fled their own country due to a fear of persecution (UNHCR, 2019). The 1951 United Nations Convention relating to the Status of Refugees and the 1967 Protocol (the Refugee Convention) as well as the European Convention on Human Rights (the ECHR) constitute the core legal basis

¹ The culture of disbelief is a well-established idea within academic and third-sector research that asserts that the Home Office has a strong tendency to automatically disbelieve and reject the claims of asylum seekers on the basis that their claim is bogus or fraudulent without actual investigation into the claim. For more on the culture of disbelief see Amnesty International UK, 2004; Gibson, 2013; Independent Asylum Commission, 2008; Jubany, 2011; Souter, 2011; and Tsangarides and Williams, 2019.

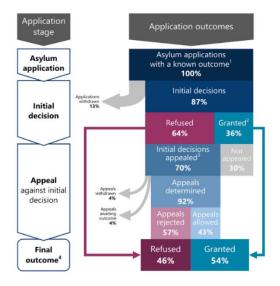
for the UK's international legal obligations towards asylum seekers and refugees. Under the Refugee Convention, a refugee is a person who is unable or unwilling to return to their country of origin owing to a well-founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group,² or political opinion.

It is important to clarify what is specifically meant by "asylum seeker" and "refugee" as these denote separate groups at different stages of the asylum process and as a result have different needs. An asylum seeker is a person who has left their country of origin and formally applied for asylum in another country, but whose application has not yet been decided on. In the UK, a person becomes a refugee when the government agrees that the person who has applied for asylum meets the definition under the Refugee Convention thereby granting that person refugee status. People granted refugee status in the UK are typically given leave to remain for and after this five vears period may apply settle to permanently.

Figure 1: application outcomes for main applicants for applications submitted from 2016 to 2018 with a known outcome as of May 2020 Source: The Migration Observatory at the University of Oxford

What share of asylum applications are ultimately successful?

Main applicants, excluding dependants; for applications submitted in 2016 to 2018 inclusive with a known outcome as at May 2020, excluding withdrawn applications



6.1.2 The Asylum Process

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² There is no specific list of what constitutes a "particular social group" under the Refugee Convention. The UNHCR (2002, p.2) has said that this phrase "should be read in an evolutionary manner open to the diverse and changing nature of groups in various societies and evolving international human rights norms." In the UK, it has been used for claims based on sexual orientation, gender identity, and women experiencing violence or women of certain nationalities. For example, the landmark House of Lords ruling in *Islam* and *Shah* found that "women in Pakistan" constitute a particular social group under the Refugee Convention.

Figure 1 outlines the asylum application process as well as provides the percentage of applicants whose claim is rejected or granted at a given stage. In the UK, initial decisions on asylum applications are made by UKVI case owners who are civil servants within the Home Office trained in immigration matters. If a case is rejected at the initial decision stage, the applicant may appeal that decision. The case is then heard at an immigration tribunal and decided on by a judge.

According to government statistics (Home Office, 2019), for asylum applications made in the UK from 2016 to 2018, the grant rate rose from 36 percent at initial decision, to 54 percent after the appeal stage. These numbers are significant and point to an issue at the initial decision-making stage.

There are a number of reasons that an asylum claim rejected at the point of initial decision may be overturned on appeal. For instance, new evidence such as updated country of origin information, medico-legal reports, or expert testimony may be submitted at the appeal stage which strengthens the applicant's claim. However, research indicates that a significant number of rejected claims are overturned at the appeal stage due to the Home Office failing to apply their own policy when assessing the credibility of applicants. Research carried out by Amnesty International and Still Human Still Here found that in 42 out of 50 cases analysed, the immigration judge stated that the primary reason for the initial decision being overturned at appeal was that the case owner had falsely made a negative assessment of the applicant's credibility (Kaye and Shaw, 2013).

6.1.3 Ramifications

Poor initial decision-making for asylum claims at the Home Office creates a myriad of issues for everyone involved. First, under the Refugee Convention, one of the UK's fundamental responsibilities is to properly consider and produce well-reasoned decisions on asylum claims. Failing to do so calls into question the UK's ability to fulfil this international obligation. Secondly, it creates more administrative costs for the government due to expenditure in Legal Aid and tribunal services. Thirdly, this issue creates a backlog of cases in the tribunals which means asylum seekers are left to wait months or even years for a decision (JUSTICE, 2018). As Figure 2 indicates, the proportion of asylum applicants receiving initial decisions within six months has fallen sharply from 87 percent in 2014 to just 20 percent in 2019. While this decrease can be attributed to a number of factors, the high number of cases that go to appeal only worsen this situation. The Home Office's failure to provide decisions in a timely manner, as well as to reject noncomplex asylum claims, puts applicants in a legal limbo where it becomes difficult to plan for the future or integrate into the community.

Governmental support for applicants is minimal during the application process. Applicants are given £37.75 per week to pay for things like food, clothing and toiletries (GOV.UK, 2021). Additionally, most asylum seekers are unable to work while their claim is processed which only heightens an applicant's financial insecurity. As a result, many asylum seekers rely on

the already stressed charity sector to fulfil basic needs. Poor initial decision-making by the Home Office prolongs the asylum process and diverts scarce resources provided by the charity sector to applicants who would otherwise be granted asylum if it were not for the Home Office's culture of disbelief.

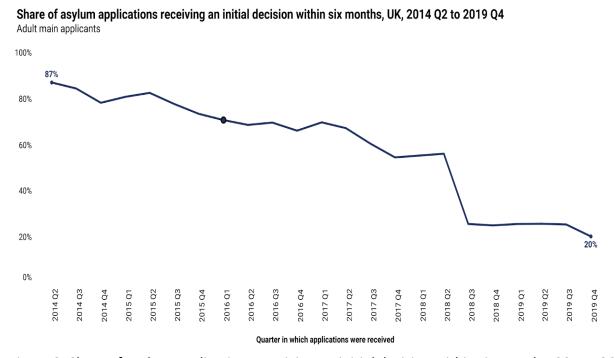


Figure 2: Share of asylum applications receiving an initial decision within six months, 2014 Q2 to 2019 Q4 Source: The Migration Observatory at the University of Oxford

While immigration, including asylum matters, are a reserved matter for Westminster, Scotland is still very much affected by the Home Office's decision-making issues. Scotland receives a disproportionate amount of asylum seekers through the UK asylum dispersal scheme. In fact, the local authority with the most dispersed asylum seekers in June of 2020 was Glasgow with 59 asylum seekers per 10,000 residents (Sturge, 2020, p.14).³ Data from Oxford's Migration Observatory suggests that in the year to June 2019, more than 150 parts of the UK did not house a single asylum seeker while Glasgow took in more than 4,000 (Shaw, 2019). Twenty local authorities, most of which are in Scotland and the north of England, host as many claimants as the remaining 362 council areas combined (ibid). This is not to say that Scotland hosting a comparatively high number of asylum seekers is an undesirable policy. However, the Home Office's poor decision making does put Scottish charities who support asylum seekers under unnecessary pressure and diverts essential resources away from those who most need it. Recently, the ramifications of the UK's harsh asylum system coupled with the COVID-19 crisis

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³ For comparison, Birmingham is the local authority with the second highest number of dispersed asylum seekers with 14 asylum seekers per 10,000 residents (Shaw, 2019).

came to a head in Scotland following the death of Mercy Baguma, an asylum seeker from Uganda who was found dead in a Glasgow flat (Brooks, 2020). In response to Baguma's death, a spokesperson from the charity Positive Action in Housing has stated that "the circumstances surrounding this tragedy are indicative of wider systemic issues where refugees and migrants are left vulnerable by the state" (Positive Action in Housing, 2020).

This issue also strains the Scottish legal aid system. According to the Scottish Legal Aid Board (SLAB), from 2019 to 2020, immigration and asylum represented 21 percent, or £11.3 million of their total civil legal assistance expenditure. SLAB (2020) also notes that "credibility has been the primary reason for the Home Office refusing leave to remain in the UK" which has had a major impact on costs as firms have had to dedicate additional time to compiling evidential information and presenting this as accurately as possible in the initial application.

6.2 Assessing Credibility

This section seeks to identify areas where the Home Office fails to implement its own policies on assessing credibility of asylum seekers that contribute to its culture of disbelief. The Home Office draws its guidance on these matters from their Asylum Policy Instruction: Assessing credibility and refugee status which has been informed more broadly by the UNHCR's Handbook on Procedures and Criteria for Determining Refugee Status under the 1951 Convention and the 1967 Protocol relating to the Status of Refugees. While there are a myriad of issues that could be discussed, this brief will focus on the standard of proof and the impact of lies and inconsistencies.

6.2.1 Standard of Proof

For asylum cases, the standard of proof is a "reasonable degree of likelihood," which is significantly lower than the standards of proofs seen in other areas of law (Home Office, 2015; UNHCR, 2019). For example, it is much lower than the criminal standard of beyond reasonable doubt and the civil standard of the balance of probabilities. This relatively low standard of proof is due to the high stakes nature of returning a person to a country where they may face persecution. This is reiterated in the Home Office handbook (p.12) to mean that "a caseworker does not need to be 'certain', 'convinced', or even 'satisfied' of the truth of the account – that sets too high a standard of proof. It is enough that it can be 'accepted'." However, decision-makers frequently hold applicants to too high of a standard of proof often in the hope of identifying "bogus" asylum claims. The hyper-suspicious culture within the Home Office results in denied claims for asylum seekers with noncomplex claims who would have otherwise been granted asylum if it was not for decision-makers applying an inappropriate standard of proof.

6.2.2 Impact of Lies and Inconsistencies

⁴ This has also been established in case law. See *Karanakaran v. Secretary of State for the Home Department,* [2000] EWCA Civ. 11, United Kingdom: Court of Appeal (England and Wales), 25 January 2000

According to Home Office guidance and case law,⁵ decision makers are supposed to take into account the significance of lies and inconsistencies in an asylum claim on a case-by-case basis and should not reject a claim solely on the fact that an applicant has lied. If a lie or inconsistency pertains to a central issue of the claim then the claim can be rejected, but smaller lies and inconsistencies not central to the case are to be dismissed without consequence. However, in practice, decision-makers often use small lies and inconsistencies in an asylum seeker's narrative to undermine an entire claim (Schuster, 2020; Souter, 2011). There is a wealth of academic literature that demonstrates that people who have suffered from traumatic experiences, sexual assault, mental illness, or torture have difficulties in recollection and consistency when sharing these experiences with others.⁶ The Home Office should better incorporate these findings into its training curriculum so that decision-makers are more aware of why lies or inconsistencies may arise in an asylum case.

6.3 Policy Recommendations

This brief recommends two policies for the Scottish government to implement that address not only the negative assessment of credibility at the initial stage of the asylum process, but also attempts a wider institutional shift away from the culture of disbelief that exists within the Home Office. It should be noted that as immigration and asylum are reserved matters for Westminster, the Scottish Government is limited in what it can actually legislate on. Thus, Policy One recommends that relevant Scottish Cabinet Secretaries and Ministers⁷ exert pressure on Westminster to act.

6.3.1 Policy One: Improved Training on Credibility Assessments and Holding Decision-Makers Accountable

As civil servants, most decision-makers for asylum claims in the Home Office do not have formal legal training and are not familiar with asylum rules before taking on the position. Thus, the quality of training decision-makers receive by the Home Office will have major ramifications on how they decide on cases. According to a Freedom of Information request,⁸ the Foundation Training Programme that the UKVI uses for training new caseworkers as of 2019 dedicates just two days of the 25-day programme on assessing credibility in asylum cases.⁹ Given the extensive academic and third-sector research that indicate issues surrounding credibility assessment in the Home Office's initial decision-making stage, it is essential that the Home Office dedicate

https://www.whatdotheyknow.com/request/684171/response/1635275/attach/6/Annex%201%20FTP%20 Schedule%2059906%20Z%20Gardner.pdf?cookie_passthrough=1

⁵ See MA (Somalia) v Secretary of State for the Home Department [2010] UKSC 49 (24 November 2010)

⁶ See Baillot, Cowen, and Monro, 2012; Herlihy, Scragg, and Turner, 2002; Holland, 2018; Jubany, 2011; and Souter, 2011.

⁷ Relevant Scottish Cabinet Secretaries and Ministers may include the Cabinet Secretary for Justice, Cabinet Secretary for the Constitution, Europe and External Affairs, Minister for Europe and International Development and the Equalities Secretary.

⁸ Available at:

One session is dedicated to the basics of credibility and a second session deals with assessing credibility in the interview setting.

additional time and resources to ensuring caseworkers understand the rules about credibility. The quality of training could also be improved through more collaboration with specialised groups like the UNHCR, Still Human Still Here, and Amnesty International.

It can also be questioned if the 25-day programme for inductees is adequate in ensuring caseworkers are equipped with the knowledge to navigate a complex body of law like asylum law. For instance, after completing a degree, immigration lawyers undertake an additional four years of training in order to practice (Taylor, 2016). While it is not essential that Home Office decision-makers have as thorough of an understanding of the law as immigration lawyers, it is questionable that their 25-day programme is adequate in ensuring that caseworkers grasp the intricacies of asylum cases. A longer and more thorough training programme would be of great benefit to the Home Office.

The Home Office must monitor the performance of individual case owners specifically for high overturn rates on appeal and identify case owners who consistently fail to follow Home Office guidance in assessing credibility (Kaye and Shaw, 2013). This policy is especially important to address the institutional culture of disbelief within the Home Office. These case owners should be targeted for additional training and support from more senior staff members and terminated if issues persist. Currently, it is not clear how effectively senior staff members are mentoring new decision-makers. For example, the Home Office claimed that asylum decisions are always checked by a senior member of staff after a scandal arose when it was found that gap-year students were being hired as case workers on temporary contracts (Taylor, 2016). However, the application pack for the positions stated that the students must "make decisions using a complex set of rules often within tight deadlines and with little or no supervision" (Taylor, emphasis added). Whatever the case may be, decision-makers must be held accountable to their mistakes by the Home Office.

6.3.2 Policy Two: A Continuation and Expansion of the New Scots Strategy

The New Scots integration strategy was first adopted in 2014 and is currently in its second iteration running from 2018-2022. The New Scots Strategy has four policy outcome goals that focus on upholding the rights of refugees and asylum seekers as well as strengthening their integration into Scottish society (Scottish Government, 2018).

The New Scots integration strategy is an effective step towards a more welcoming Scotland that addresses the needs of asylum seekers and refugees. This brief takes the position that the Scottish Government should continue the strategy beyond 2022. Besides addressing the needs of asylum seekers and refugees, the strategy also helps perpetuate the notion that Scotland actively welcomes these groups and views them as a benefit to Scottish society. This commitment to promoting equality and justice aids in creating a positive discourse on asylum which has the potential to help change the culture of disbelief within the Home Office and negative views towards asylum seekers and refugees within the wider British public.

6.4 Conclusion

International law dictates that people have a fundamental right to seek asylum.¹⁰ This process must be fair, humane, and reasonable. The Home Office's culture of disbelief delays asylum seekers with reasonable asylum claims from receiving refugee status in a timely manner, which strains the courts, government resources, and charity sector as well as add unnecessary stress for asylum seekers themselves. Reaching correct decisions at the initial decision stage is in every party's best interest. Poor quality decisions could be avoided if decision-makers followed the Home Office's own guidance on establishing credibility. To do this, the Home Office must produce a higher-quality and more in-depth training programme as well as hold decision-makers accountable for their mistakes. The continuation and expansion of the New Scots integration strategy is also vital in supporting asylum seekers affected by the Home Office's decision-making issues. While these are not quick fixes for the institutional issues within the Home Office, they do provide a clear pathway for positive change.

6.5 References

Amnesty International UK (2004) *Get It Right. How Home Office Decision-Making Fails Refugees*. AIUK: London.

Baillot, H., Cowan, S., and Munro, V.E. (2014) Reason to Disbelieve: Evaluating the Rape Claims of Women Seeking Asylum in the UK. *International Journal of Law in Context*. 10, 1, p. 105-39

Brooks, L. (2020) 'She was a rainbow': Friends paint fuller picture of Mercy Baguma. The Guardian. Available at: https://www.theguardian.com/uk-news/2020/aug/28/friends-paint-fuller-picture-of-mercy-baguma-she-was-a-rainbow

Gibson, S. (2013) Testimony in a Culture of Disbelief: Asylum Hearings and the Impossibility of Bearing Witness. *Journal for Cultural Research*, 17:1, 1-20

GOV.UK (2021) Asylum support: What You'll Get. Available at: https://www.gov.uk/asylum-support/what-youll-get

Herlihy, J., Scragg, P., and Turner, S. (2002) Discrepancies in autobiographical memories-implications for the assessment of asylum seekers: repeated interview study. *British Medical Journal* 324 (7333) pp. 324-327

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¹⁰ In the UK context, this has been established in Article 14(1) of the Universal Declaration of Human Rights, the Convention relating to the Status of Refugees, the Optional Protocol relating to the Status of Refugees, the European Convention on Human Rights (Articles 2, 3, and 5), the Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (Article 3), and the Convention on the Rights of the Child (Article 22).

Holland, M. (2018) Stories for Asylum: Narrative and Credibility in the United States Political Asylum Application. *Refuge* Vol 34, Number 2.

Home Office (2019) National Statistics: How many people do we grant asylum or protection To? Available at: https://www.gov.uk/government/publications/immigration-statistics-year-ending-june-2019/how-many-people-do-we-grant-asylum-or-protection-to

Home Office (2015) Asylum Policy Instruction: Assessing Credibility and Refugee Status. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/397778/ASSESSING_CREDIBILITY_AND_REFUGEE_STATUS_V9_0.pdf

Independent Asylum Commission (2008) Fit For Purpose Yet? The Independent Asylum Commission's Interim Findings, IAC, London.

Islam v. Secretary of State for the Home Department Immigration Appeal Tribunal and Another, Ex Parte Shah, R v. [1999] UKHL 20; [1999] 2 AC 629; [1999] 2 All ER 545 (25th March, 1999)

Jubany, O. (2011) Constructing truths in a culture of disbelief: Understanding asylum screening from within. *International Sociology* 26(1): 74-94.

JUSTICE (2018) *Immigration and Asylum Appeals – a Fresh Look*. Available at: https://justice.org.uk/wp-content/uploads/2018/06/JUSTICE-Immigration-and-Asylum-Appeals-Report.pdf

Karanakaran v. Secretary of State for the Home Department, [2000] EWCA Civ. 11, United Kingdom: Court of Appeal (England and Wales), 25 January 2000

Kaye, M. and Shaw, J. (2013) A question of credibility: Why so many initial asylum decisions are overturned on appeal in the UK? Amnesty International and Still Human Still Here. Available at: https://www.amnesty.org.uk/files/a question of credibility final 0.pdf

MA (Somalia) v Secretary of State for the Home Department [2010] UKSC 49 (24 November 2010).

Positive Action in Housing (2020) *Home Office to be investigated over death of Mercy.* Available at: https://www.paih.org/home-office-to-be-investigated-over-death-of-mercy-baguma/

Schuster, L. (2020) Fatal flaws in the UK asylum decision-making system: an analysis of Home Office refusal letters, *Journal of Ethnic and Migration Studies*, 46:7, 1371-1387.

Scottish Government (2018) *New Scots: refugee integration strategy 2018 to 2022.* Available At: https://www.gov.scot/publications/new-scots-refugee-integration-strategy-2018-2022/

Scottish Legal Aid Board (2020) *Annual Report and Accounts for the year ended 31 March 2020*. Available at: https://www.slab.org.uk/app/uploads/2020/11/2019-20-SLAB-Annual-Report-and-Accounts.pdf

Shaw, D. (2019) *Asylum seekers: Home Office taking 'substantially longer' on claims.* BBC News. Available at: https://www.bbc.co.uk/news/uk-50336157

Souter, J. (2011) A Culture of Disbelief or Denial? Critiquing Refugee Status Determination in the UK. *Oxford Forced Migration Monitor* 1 (1) pp.48-59.

Sturge, G. (2020) *Asylum Statistics*. House of Commons Library Briefing Paper Number SN01403. Available at: https://commonslibrary.parliament.uk/research-briefings/sn01403/

Taylor, D. (2016) *Gap-year students deciding asylum claims*. The Guardian. Available at: https://www.theguardian.com/uk-news/2016/feb/27/gap-year-students-deciding-asylum-claims

Tsangarides, N. and Williams, L. (2019) Lessons not Learned: The failures of asylum decision-making in the UK. Freedom from Torture. Available at: https://www.freedomfromtorture.org/sites/default/files/2019-09/FFT_LessonsNotLear ned Report A4 FINAL LOWRES 1.pdf

UK Visas & Immigration (2019) *Foundation Training Programme*. Asylum Learning & Development Team. Available at: https://www.whatdotheyknow.com/request/684171/response/1635275/attach/6/Annex %201%20FTP%20Schedule%2059906%20Z%20Gardner.pdf?cookie_passthrough=1

UN High Commissioner for Refugees (2019) Handbook and Guidelines on Procedures and Criteria for Determining Refugee Status under the 1951 Convention and the 1967 Protocol Relating to the Status of Refugees, HCR/1P/4/ENG/REV. 4. Available at: https://www.refworld.org/docid/5cb474b27.html

UN High Commissioner for Refugees (2002) GUIDELINES ON INTERNATIONAL PROTECTION: "Membership of a particular social group" within the context of Article 1A(2) of the 1951 Convention and/or its 1967 Protocol relating to the Status of Refugees, HCR/GIP/02/02. Available at: https://www.unhcr.org/3d58de2da.pdf

Walsh, P.W. (2020) Asylum and refugee resettlement in the UK. The Migration Observatory at the University of Oxford. Available at: https://migrationobservatory.ox.ac.uk/resources/briefings/migration-to-the-uk-asylum/

7. Tackling Health Inequalities

Emma Mathews

7.0 Executive Summary

Health inequality is a significant issue in Scotland. While the health gap has narrowed between the most and least deprived areas from the early 2000s, in 2017, the premature mortality rate in the most deprived areas of Scotland was four times higher than the rate in the least deprived areas (Scottish Government, 2018a). In a 2018 report on Scotland's public health priorities, the Scottish Government named reducing health inequalities as "the primary objective" of public health action (Scottish Government, 2018b, p.45). However, health inequalities still persist and have been illustrated clearly through the disproportionate effects of the COVID-19 pandemic which has been more deadly for those from more socio-economically disadvantaged backgrounds (Scottish Government, 2020c). Current and previous efforts to tackle health inequality have been limited in their success due to a disconnect between policy and need, which is worsened for women, those in poverty, and people from Black and minority ethnic backgrounds.

We suggest that:

- 1. The Scottish Government should maintain and uphold their commitment to tackling health inequality by positioning it as the primary guiding principle to health policymaking
- 2. The Scottish Government should also adopt a participatory budgeting strategy to public health.

7.1 Landscape of Health Inequality in Scotland

The link between poverty and poor health in the UK is clear. The British Medical Association (2017) suggests that the negative health effects associated with poverty are wide ranging and start at birth with a lower birth weight, shorter life expectancy, and a higher risk of death in the first year for children born into poverty. Poverty can also affect cognitive development. Those living in poverty are three times more likely to experience mental health problems, and the prevalence of most long-term conditions are more than twice as common in those from more deprived socio-economic groups (BMA, 2017). A failure to reduce health inequality in Scotland has real consequences for those in poverty and is a matter of urgency.

Inequalities of health are only becoming more significant for socio-economically disadvantaged communities in Scotland. The most recent Scottish Government Report on the Long-term Monitoring of Health Inequalities found that "significant health inequalities persist for each indicator covered in the report" except for the healthy birth weight indicator (Scottish Government, 2018a, p.2). These include coronary heart disease mortality, drug and alcohol related hospital admissions, and general premature mortality for which the gap between the rate

for the most and least deprived areas has recently reached its highest point since 2008 (Scottish Government, 2018a).

Health inequalities are a result not only of socioeconomic position, but also of location and marginality. A study of residents of an Edinburgh area with relatively high levels of deprivation found that differences in health values, communication barriers, and frustration between health-need and the services provided affected the uptake of resources available (Kapilashrami and Marsden, 2018). This was particularly pertinent for those from Black and minority ethnic backgrounds who also felt that institutional racism affected their access to healthcare services.

"Health issues in our community are really hidden. No one wants to share information, even to the doctor, especially the older generation."

"The biggest thing for me is that they do not seem to have understood the difference between British Asians and Immigrants. We are not immigrants. We are the children/grandchildren of immigrants. We took our kids to school. We could speak English no problem [...] [the problem is] making assumptions; someone running away to find an interpreter without even speaking to you, just on the way you're dressed."

(Participants from study, Kapilashrami and Marsden, 2018, p.9)

The barriers of access to healthcare experienced by Black and other minority populations in Scotland is especially significant when considering that minority ethnic groups are less likely to report long term health conditions. This can be due to a lack of accessible health information, previous poor health care experiences, and possible language barriers (Evandrou et al., 2016). Minority ethnic women in particular report poorer health to a greater degree (Scottish Government, 2016). Specificities and health contexts of different groups should be taken into account in order to make health policy that works for everyone.

In tackling health inequalities, it is also important to consider how women and girls in Scotland are disproportionately affected. Decisions made concerning public health, health and social care services have a significant impact on women for a variety of reasons; women tend to have more particular health needs and experiences, make up a majority of unpaid carers, and of the elderly population in Scotland (Engender, 2017). These specificites and the complex health needs of women in Scotland are not accounted for in current policy. Recommendations from the Scotlish Government and the Convention of Scotlish Local Authorities' (COSLA) 'Equally Well' framework do not specifically target women's issues besides domestic abuse and NHS Health Scotland's 2017-2022 framework for reducing health inequalities is gender-blind (Engender, 2017). This suggests that health policy in Scotland needs to be made in a more inclusive way to represent the needs and interests of women and girls.

The ongoing health inequalities in Scotland illustrate a disconnect between current policy and the needs of those in poverty and marginalisation. Moving forward, the voices of those who

have been negatively affected by health inequality should be included to create policies that work for everyone.

7.2 Impact of COVID-19

The recent and ongoing COVID-19 pandemic has only served to exacerbate inequality in Scotland for those who are already marginalised. Aside from the direct unequal impact on those who contract the virus, people in Scotland already experiencing socio-economic disadvantage are more vulnerable to poorer physical wellbeing, mental health and loneliness that are likely to worsen with economic downturn due to COVID-19 (Scottish Government, 2020c).

For those from socio-economically disadvantaged backgrounds, COVID-19 is significantly detrimental. In the UK, age-standard death rates for people living in the 20% most-deprived areas have been twice as high for those living in the 20% least-deprived areas (Scottish Government, 2020c).

Across the UK, Black and minority ethnic people are being disproportionately affected by COVID-19. In England, people of Bangladeshi ethnicity had twice the risk of death compared to people of White British ethnicity and for people of Chinese, Indian, Pakistani, Other Asian, Black Caribbean and Other Black ethnicity the risk of death was between 10 and 50% higher when compared to White British (Public Health England 2020). While figures are assumed to be similar in Scotland, data has been slow to emerge about the risks for minority ethnic groups of COVID-19 in Scotland (Scottish Government, 2020b). The pandemic has brought to light a concerning lack of data about the health needs of different minority groups. The Scottish Government Expert Reference Group on COVID-19 and Ethnicity has consequently recommended that action is taken to improve "...ethnicity coding through improved data infrastructure" (Scottish Government, 2020b, p.5). Importantly, this recommendation includes participation by minority ethnic people and communities to advance data collection initiatives to make the policies worthwhile and foster greater understanding (Scottish Government, 2020b). This reinforces the notion that increased participation of marginalised groups should be implemented to aid the reduction of health inequality.

The impact of COVID-19 has also had a disproportionate effect on the wellbeing of women. This is due to numerous factors including women being more likely to experience domestic abuse during lockdown. Women are also more likely to be lone parents with a greater degree of financial vulnerability (Scottish Government, 2020c). Without policy change that takes into consideration the experiences of those who have been negatively affected, it seems likely that the detrimental consequences of COVID-19 will contribute to longer term inequalities, and inequality of health outcomes in Scotland.

7.3 Policy Recommendation: Adopting participatory budgeting to reduce inequality

This paper recommends that the Scottish Government adopts more participatory budgeting in its approach to public health. Participatory budgeting involves shared-decision

making within communities to determine how public funding is allocated. Participatory budgeting signals a significant commitment and trust in the ability of communities to produce better-informed and fairer decisions about health priorities (McKenzie, 2014).

The process of participatory budgeting starts with the brainstorming of ideas within a community. Then, one of the ideas is developed into a proposal or project that can be voted on by the community (Health and Social Care Academy, 2017). This has previously been used in Scotland to decide health and social care priorities, albeit on a small scale. In 2017 in North Ayrshire, a participatory budgeting event, Mental Health and Wellbeing, Your Money, You Decide was facilitated by the North Ayrshire Health and Social Care Partnership, NHS Public and Health, and some third sector actors. £50,000 was available for projects with a maximum of £1,250 each. A community group reviewed applications and a wider group voted to fund 41 projects; these projects were then asked for feedback after six months about their progress and impact (Health and Social Care Academy, 2017). This suggests that participatory budgeting is feasible in a health context in Scotland.

Participatory budgeting has been shown to improve psychological empowerment of those involved in the process, strengthen alliances in the civil sector, and redistribute resources to those in greatest need (Hagelskamp et al., 2018). These goals fit within the Scottish Government's broader aim of reducing inequality as a primary priority in public health. The key to maximising the redistributive and health equality potential of participatory budgeting is to create a "new normal" in the funding arrangements of Scottish public health initiatives. The success of participatory budgeting is limited by only being used for the funding of individual projects rather than for mainstream budgetary decisions (Health and Social Care Academy, 2017).

There have been some recent attempts at Participatory Budgeting in Scotland. In 2018 to 2019, the Community Choice Fund made £750,000 of funding available for applications from community organisations and community councils for projects across policing, health and social care, transport, and education (Scottish Government, 2020a). This is a very small amount when compared to Scottish Government total spending in the same year of £42.3 billion (Scottish Government, 2019). To maximise the equalising effects of participatory budgeting, it should be introduced on a larger scale to include all areas of Scotland to some extent.

In a 2018 joint report by the Scottish Government and COSLA, reducing health inequalities was named as "the primary objective of our collaborative action" and to guide all other public health priorities (Scottish Government, 2018b, p.45). This priority should remain as a guiding principle to maximise the potential of all public health policy to further social justice and reduce health inequality in order to improve health outcomes of all people in Scotland. Implementing participatory budgeting while maintaining the reduction of health inequality as a guiding principle will allow collaborative community decision making to produce fairer health policy decisions.

To ensure success in using a participatory budgeting approach to public health, the decision-making process should be responsive to the local community. As previously mentioned, socioeconomic inequality is a significant problem in Scotland and the inequality of health outcomes is exacerbated for those from Black and ethnic minority backgrounds. To allow participatory budgeting to succeed, there must be "...diversity of engagement across protected characteristics..." (Health and Social Care Academy, 2017, p.9). In order to ensure that a diverse group from the community is able to participate in the process, the government should make arrangements for childcare, and expense allowances for those taking part. This makes it more likely that those from more deprived backgrounds are able to participate without an increased financial burden. The participatory budgeting process could also be made more accessible by making information available in a clear and easy-to-read format. Information about the process and possible funding options should also be available in different languages with translators attending meetings.

7.4 Conclusion

By ensuring that all public health policy is created and implemented through the lens and goal of reducing inequality, health outcomes can improve for all in Scotland. Participatory budgeting has the potential to directly involve the communities most impacted by health inequality in decisions being made. By being implemented more broadly across Scotland and in a responsive manner based on context, participatory budgeting can be a strong solution to growing health inequality.

7.5 References

British Medical Association (2017) *Health at a price: Reducing the impact of poverty.*Available at: https://www.bma.org.uk/media/2084/health-at-a-price-2017.pdf (Accessed: 17 January 2021).

Evandrou, M., Falkingham, J., Feng, Z., and Vlachantoni, A. (2016) 'Ethnic inequalities in limiting health and self-reported health in later life revisited'. *Health Inequalities*, 70(7), pp.653-662.

Hagelskamp, C., Schleifer, D., Rinehart, C., and Silliman, R. (2018) 'Participatory budgeting: could It diminish health disparities in the United States?'. *J Urban Health*, 95, pp. 766–771.Available at: https://doi-org.ezproxy.is.ed.ac.uk/10.1007/s11524-018-0249-3 (Accessed: 22 January 2021).

Health and Social Care Academy (2017) *Ceding power: participatory budgeting.* Available at: https://www.alliance-scotland.org.uk/wp-content/uploads/2017/10/Participatory_Budgeting - Health and Social Care Academy Insight Paper.pdf (Accessed: 22 January 2021).

Kapilashrami, A. and Marsden, S. (2018) 'Examining intersectional inequalities in access to

health (enabling) resources in disadvantaged communities in Scotland: Advancing the participatory paradigm'. *International Journal for Equity in Health*, 17(1), p. 83.

McKenzie, K. (2014) 'Using participatory budgeting to improve mental capital at the local level' in Pickett et al. *Nine local actions to reduce health inequalities*. London: British Academy, pp. 71-81. Available at: https://www.thebritishacademy.ac.uk/documents/290/local-actions-to-reduce-health-inequalities.pdf (Accessed: 21 January 2021).

Public Health England (2020) *Disparities in the risk and outcomes of COVID-19.* Available at :https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attac hment_data/file/908434/Disparities_in_the_risk_and_outcomes_of_COVID_August_2020_upd ate.pdf (Accessed: 18 January 2021).

Scottish Government (2018a) *Long-term monitoring of health inequalities: December 2018 report.* Available at: https://www.gov.scot/publications/long-term-monitoring-health-inequalities-december-2018-report/ (Accessed: 22 January 2021).

Scottish Government (2018b) *Public health priorities for Scotland* [online]. Available at: https://www.gov.scot/publications/scotlands-public-health-priorities/pages/10/ (Accessed: 19 January 2021).

Scottish Government (2019) Final outturn report for the Scottish budget: 2018-2019.

Available at: https://www.gov.scot/publications/final-outturn-report-scottish-budget-year-ended-31-mar ch-2019/ (Accessed: 21 January 2021).

Scottish Government (2020a) *Community empowerment: Participatory budgeting.* Available At: https://www.gov.scot/policies/community-empowerment/participatory-budgeting/ (Accessed: 21 January 2021).

Scottish Government (2020b) Improving data and evidence on ethnic inequalities in health: Initial advice and recommendations from the expert reference group on COVID-19 and ethnicity [online]. Available at: https://www.gov.scot/groups/expert-reference-group-on-covid-19-and-ethnicity

(Accessed: 22 January 2021).

Scottish Government (2020c) *The impacts of COVID-19 on equality in Scotland* [online]. Available

https://www.gov.scot/binaries/content/documents/govscot/publications/research-and-analysis/2020/09/the-impacts-of-covid-19-on-equality-in-scotland/documents/full-report/govscot%3Adocument/Covid%2Band%2BInequalities%2BFinal%2BReport%2BFor'%2BPu blication%2B-%2BPDF.pdf (Accessed: 20 January 2021).

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8. Mental Health

Ailie Ross-Oliver

8.0 Executive Summary

Mental health in the workplace remains a pressing issue in Scotland. The current legislation in place through the Equality Act 2010 provides protection against some discrimination in the workplace, however, the cultural norms and practices surrounding mental health in the workplace means that harsh stigmatisation and harassment persists. As such, specific and comprehensive recommendations designed to tackle all forms of mental health discrimination, stigmatisation and harassment in the workplace will be outlined in this paper and three methods for implementation will be evaluated.

We propose that the Scottish Government:

- 1. Endorse See Me's Declaration of Rights for Mental Health in Scotland to ensure greater protections in the workplace for people with mental health conditions.
- Support workplaces to introduce and act upon SAMH's Components for an Effective Workplace Programme for Mental Health. The Government should support workplaces in the adoption of this guidance for improving the culture surrounding mental health in the workplace.

8.1 Background

Mental ill health is the dominant health problem amongst those of working age (SAMH, 2011). See Me Scotland research indicates that 48% of Scottish workers think their colleagues would be unlikely to admit they have a mental health condition out of fear of losing their job (Bradstreet, et al., 2015). Furthermore, poor mental health is estimated to cost Scottish employers more than £2 billion a year (Mental Health Foundation, 2018) through costs relating to presenteeism¹¹ – as well as sickness absence and job turnover (ibid).

Anti-discrimination legislation in Scotland was clarified under the UK Equality Act 2010, which provides workplace protection for people with mental health conditions against all forms of discrimination and harassment. However, whilst this legislation provides the necessary formal legislation, the cultural norms and practices surrounding mental health in the workplace have lagged behind. The formal laws in place have not changed the culture relating to mental health (Bradstreet, et al., 2015). As such, Scottish workers are not currently afforded adequate protections against stigmatisation, discrimination, and harassment in the workplace (ibid).

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¹¹ Presenteeism is a term coined to explain when employees feel forced to turn up to work despite feeling unable to cope with poor mental health.

The Scottish Government report: A Connected Scotland, highlights that tackling stigma is a key step in improving the culture surrounding mental health in Scotland. The report indicates that the Scottish Government plans to work with relevant actors and key stakeholders including See Me (Scottish Government, 2018). As such, this research offers two recommendations that adhere to these aims and priorities set by the Scottish Government in the Connected Scotland 2018 report.

8.2 Discussion

8.2.1 Mental health in Scotland pre-COVID-19

The Scottish Health Survey 2019 provides key insights into mental health in Scotland before the beginning of the pandemic. Across the population, mental health is categorised as low average on the Warwick-Edinburgh Mental Wellbeing Scale (Population Health Directorate, 2020a). The report also highlights that in 2018/19, the reported rates of depression, anxiety, attempted suicide, and self-harm were at their highest levels since the annualization of the report in 2008 (ibid).

This evidence on the state of mental health in Scotland before the pandemic provides a basis for analysing how mental health in Scotland has changed during the COVID-19 pandemic, and further provides evidence of the necessity to take to improve mental health across Scotland.

8.2.2 Impact of COVID-19 on mental health¹²

A quarter of young people admit that they have felt "unable to cope with life" since the start of the pandemic, with this figure rising to half amongst those not in work, education or training (NEETs) (The Prince's Trust, 2021). A key part of improving the wellbeing of young people is ensuring support for poor mental health in the workplace, in order to improve and stabilise the wellbeing of young people, particularly those in the NEET category who may be trying to enter the workforce.

8.2.3 Impact of lockdown and remote working on mental health

The Office for National Statistics indicates that in April 2020, almost half of workers were working from home (ONS, 2020), with this figure closer to 60% in London (ibid). 80% of Britons feel that working from home is having a negative impact on their mental health (Nuffield Health, 2020).

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¹² It is important to note that as COVID-19 is an ever-evolving situation, there is not yet a broad or comprehensive academic or professional literature on the impact that COVID-19 has had on mental health in Scotland. There is a larger literary base relating to mental health across the UK in the context of COVID-19, so some of this research will be used, where Scottish-specific data cannot be found.

Guidance from Nuffield Health and leading mental health NGOs such as Mind, MentalHealth.org and WorkInMind.org largely centres on providing employers with guidance for assisting their employees with their mental health during lockdown.

As previously highlighted, the vast majority feel that their mental health has deteriorated since they began home working. This could suggest that the message of employer responsibility that is being pushed by leading mental health charities has not taken hold with employers or guidance from employers has been largely unhelpful. However, the 2020 Edelman Trust barometer, which examines levels of public trust in different institutions, ranks individuals' relationships with their employers as the most trusted relationship for people across the UK (Edelman, 2020). Therefore, despite poor levels of mental health related to home working, relationships between employees and their employers remain strong. This highlights the potential for employers to facilitate more comprehensive support for mental health and to improve mental health on a national level.

8.3 Current legislation

The Equality Act 2010 is the current legislation that offers protections in the workplace for people with mental health conditions. This law combined numerous anti-discrimination law in order to improve clarity and update the existing guidance.

This legislation protects people from discrimination based on any part of their nationality, citizenship, or identity (Equality Act, 2010). This includes religion and belief, as well as gender, sexual orientation, age, and disability. Under law, this means that employers have a duty to make reasonable adjustments to their workplace in order to support people overcome the barriers they experience.

However, the Equality Act is criticised for trying to tackle discrimination without tackling stigmatisation. See Me Scotland's Time to Talk campaign highlights that mental health remains tied to feelings of shame, leading those that are suffering with mental health conditions to conceal their experiences which breeds discrimination and stigmatisation (See Me Scotland, 2021). Transgender people (Hibbert, et al., 2018., Backmann & Gooch, 2018., Verbeek, et al., 2020), refugees and migrants (Murray & Azzudin, 2016), people with a history of substance abuse (Liddell, 2020) and people who are homeless (Watts, 2014) all also experience high levels of stigma in the workplace. This is evidently a systemic problem with the Equality Act, in that it attempts to end discrimination without addressing stigmation.

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When presented with a list of institutions and asked "For each one, please indicate how much you trust that institution to do what is right. 9-point scale; top 4 box, trust. "Your employer" asked of those who are an employee (Q43/1)" as part of the Edelman Trust Barometer 2020 survey. The other categories presented were NGOs, Business leaders, Government, and Media. 77% Trust their employer which is an increase of six points on the year previous and is 29 percentage points higher than trust in NGOs which is the next most trustworthy category.

8.4 Next Steps

8.4.1 Proposal 1 - See Me Scotland Rights for Mental Health

The Declaration of Rights for Mental Health in Scotland was developed and published by See Me Scotland, the Scotlish Recovery Network (SRN) and Voices of experience (VOX) in 2016. The declaration sets out the rights that people in Scotland with mental health conditions are calling for (See Me, SRN and VOX, 2016).

The declaration was developed during the Rights for Life event 2015 which was led by these organisations and focused on mental health recovery (Rights for Life, 2015). A steering group emerged from this event that organised widespread consultation. Using this consultation, a comprehensive declaration of rights for people with mental health conditions in Scotland was delivered which builds on the Universal Declaration of Human Rights as well the Convention on the Rights of Persons with Disabilities.

8.4.2 The Declaration of Rights for Mental Health in Scotland¹⁴

People affected by mental health conditions have the following rights:

- 1. The right to be treated with dignity and respect and be free from discrimination on any grounds.
- 2. The right to the highest attainable standard of physical and mental health.
- 3. The right to free, meaningful and active participation in decisions at all levels using coproduction as standard and independent support if required.
- 4. The right to information that is provided in a clear and accessible format tailored to the requirements of each person.
- 5. The right to hold duty bearers to account, provide feedback and impunity and access to justice when rights are infringed.
- 6. The right to independent advocacy, both individual and collective.
- 7. The right to equal treatment and recognition by the law and to its equal protection and benefit.
- 8. The right to enjoy the full range of economic, social, cultural, civil and political rights.

¹⁴ This list adapts and summarises the Declaration of Rights for Mental Health in Scotland which is available through See Me Scotland – see reference list.

8.4.3 Rights for Life The Change Agenda¹⁵

The change agenda sets out key steps to meeting the rights in the declaration. The key points in The Change Agenda are;

- 1. A modern and accessible mental health system with focus on prevention and early intervention.
- 2. A commitment from the Scottish Government to embedding *a rights-based and recovery focus* across mental health.
- 3. A shift in the balance of power so to recognise people with mental health conditions as *equal partners* with *training in soft skills* like safe disclosure, active listening, empowering approaches, coaching, mentoring and facilitation skills
- 4. New mental health legislation to be developed in line with the UN Convention on the Rights of Persons with Disabilities focus on building accountability and a shift in policy and practice towards *supported decision making* in all circumstances.

The Declaration of Rights for Mental Health in Scotland and the Rights for Life Change Agenda provide a substantial framework for improving the rights on people with mental health so to protect from discrimination and stigmatisation, including in the workplace context (Bradstreet, et al., 2015).

Examining the Change Agenda in more depth, the Scottish Government has already committed to ensuring a rights-based and recovery focused approach in mental health (Community Health and Social Care Directorate, Scottish Government, 2018). In part of improving and modernising the mental health system, mandated training in soft skills should be endorsed and prioritised by the Scottish Government, as this can comprehensively address mental health stigmatisation across society. The policy of mandating training will be explored further in the second policy recommendation, along with examining other potential processes of practical introduction.

The ideas within both the Declaration and Change Agenda are not new but instead should be recognised as a building and strengthening of the rights set up in existing international human rights treaties which are already recognised in the UK (Bradstreet, et al., 2015). These rights provide a foundation for changing the culture towards mental health in the workplace and wider society. In turn, this agenda will enable significant change to reduce discrimination and stigmatisation of mental health in the workplace.

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¹⁵ This list adapts and summarises the Rights for Life Change Agenda and the Rights for Life section of Scotland's National Action Plan for Human Rights as part of The Scottish Independent Advocacy Alliance Magazine –see reference list.

8.4.4 Proposal 2 - Components for an Effective Workplace Programme for Mental Health

SAMH has identified six key components of an effective programme for mental health in the workplace. ¹⁶ These components are:

- 1. Recognition
- 2. Prevention
- 3. Early identification
- 4. Awareness training
- 5. Better access to professional help
- 6. Effective rehabilitation

These components have been modelled on an Australian early identification model, which has been shown to be hugely successful in improving workplace productivity (SAMH, 2011).

SAMH's proposal highlights that through ensuring that workplaces follow these key steps towards improving mental health workplace programmes, job retention rates can become much higher as the longer a person is off sick, the lower their chances of a strong return to the workplace (ibid). Through early identification, de-escalation of the mental health condition can happen, which is better for employees and their health, job position and financial situation, as well as the employer and business.

In terms of how the components for an effective programme for mental health in the workplace can be introduced and made mandatory, this paper offers and evaluates three options.

8.4.5 Mandated mental health training

Mandated training for all employees could be used to introduce and implement these components. Modelling mandated training on alcohol licensing training or food hygiene would ensure this could effectively become part of the mandatory training in every workplace. This would ensure that all employees know how to recognise the signs of mental health conditions and understand what their role within their workplace is in relation to mental health and tackling stigma.

8.4.6 Expanding the role of risk officer

A second option for introducing the components for an effective programme for mental health could be through expanding the role of the risk officer. In the UK, every employer is bound by the Health and Safety at Work Act 1974. In this act, workplaces have to ensure that they are not putting their employees' health at risk, and as such this policy option would build on this.

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¹⁶ This list is adapted from SAMH's components for an effective workplace programme within their What it's Worth Now report on the social and economic costs of mental health problems in Scotland. See reference list for details.

8.4.7 Mental health first-aiders

The third option for improving and acting upon the components for an effective programme for mental health is through making it mandatory for every workplace to have a mental health first aider for X number of members of staff. Scotland's mental health first aid (SMHFA) offers programmes that are supported by NHS Scotland and can be taken through any sponsoring organisation (SMHFA, 2021).

Through making it mandatory for all workplaces to have a mental health first aider, discrimination towards those with mental health conditions may be reduced as support becomes more readily available. Further, the presence of a mental health first aider should destigmatise mental health in the workplace. However, it should be noted that this is more of a crisis point intervention and more comprehensive and interventionist policies are also needed.

8.4.8 Summary of components for an Effective Workplace Programme for Mental Health

A combination of these options, most likely mandatory training for all employees as well as the introduction of mental health first aiders is the most effective method for introducing and enforcing these components. Ultimately, when combined with the ideas of the Declaration of Mental Health in the workplace and Rights for Life Change Agenda through which much of the responsibility rests with employers, stigmatisation and discrimination in the workplace in relation to mental health can be reduced.

8.5 Conclusion

This report has highlighted the need for action so to improve protections against mental health discrimination and stigmatisation in the workplace. It offers two clear recommendations – firstly, endorse The Declaration of Rights for Mental Health in Scotland and protect these rights through the Rights for Life Change Agenda. Secondly, support employers in the introduction of The Components for an Effective Workplace Programme for Mental Health and ensure this guidance is followed through mandating mental health training for all employees and introduction of mental health first aiders in workplaces.

8.6 References

Backmann, C. L. & Gooch, B. (2018) LGBT in Britain: Trans Report, London: Stonewall and YouGov.

Bradstreet, S., Robertson, J. & Johnston, G. (2015) *Achieving Human Rights in Mental Health, A Declaration for Change.* [Online] Available at: https://www.seemescotland.org/media/7391/150812-rights-for-life.pdf [Accessed 8 January 2021].

Community Health and Social Care Directorate, Scottish Government (2018) *National health and wellbeing outcomes framework.* [Online] Available at: https://www.gov.scot/publications/national-health-wellbeing-outcomes-framework/pages/9/[Accessed 25 January 2021].

Edelman (2020) Edelman Trust Barometer 2020 UK Supplement, London: Edelman.

Equality Act (2010) Equality Act 2010, London: UK Public General Act.

Hibbert, M., Wolton, A., Crenna-Jennings, W., Benton, L., Kirwan, P., Lut, I., Okala, S., Ross, M., Furegato, M., Nambiar, K., Douglas, N., Roche, J., Jeffries, J., Reeves, I., Nelson, M., Weerawardhana, C., Jamal, Z., Hudson, A. and Delpeh, V. (2018) UK study highlights discrimination against trans people living with HIV. *Psychological and Socio-medical aspects of AIDS/HIV*, 30(7), pp. 836-843.

Liddell, D. (2020) *Stigma and substance use.* [Online] Available at: http://www.sdf.org.uk/policy/stigma-and-substance-use/ [Accessed 23 January 2021].

Mental Health Foundation (2018) *Mental Health in the Workplace Seminar Report,* Glasgow: Mental Health Foundation, University of Edinburgh Academy of Government and Healthcare Improvement Scotland.

Miller, B. (2018) 4 ways to revitalise mandatory training through engaging learning. [Online] Available at: https://leolearning.com/blog/learning-content/revitalise-mandatory-training-engaging-learning/ [Accessed 24 January 2021].

Mind (2019) *Disability discrimination*. [Online] Available at: https://www.mind.org.uk/information-support/legal-rights/disability-discrimination/disability/ {Accessed 24 January 2021].

Murray, N. & Azzudin, A. (2016) *Refugees, mental health and stigma in Scotland,* s.l.: See Me, Mental Health Foundation and Scottish Refugee Council.

Nuffield Health (2020) Working from home taking its toll on the mental health & relationships of the nation. [Online] Available at: https://www.nuffieldhealth.com/article/working-from-home-taking-its-toll-on-the-mental-health-relationships-of-the-nation [Accessed 2021 January 2021].

ONS (2020) *Coronavirus and homeworking in the UK: April 2020.* [Online] Available at: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemploy eetypes/bulletins/coronavirusandhomeworkingintheuk/april2020 [Accessed 24 January 2021].

ONS (2021) Coronavirus and the social impacts on Great Britain: 15 January 2021. [Online]
Available
https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandwellb

eing/bulletins/coronavirusandthesocialimpactsongreatbritain/15january2021#personal-wellbeing [Accessed 24 January 2021].

Population Health Directorate (2020a) *Scottish Health Survey 2019: summary report,* Edinburgh: Scottish Government.

Population Health Directorate (2020b) *Scottish Health Survey 2019 - volume 1: main report,* Edinburgh: Scottish Government.

Rights for Life (2015) Rights for Life Change Agenda, Glasgow: Rights for Life.

SAMH (2011) What's it worth now? The Social and Economic Costs of Mental Health Problems in Scotland, Glasgow: SAMH | Centre for Mental Health.

SAMH (2021) Know Your Rights - Employment. [Online] Available at: https://www.samh.org.uk/about-mental-health/know-your-rights/employment [Accessed 8 January 2021].

Scottish Government (2018) A Connected Scotland: our strategy for tackling social isolation and loneliness and building stronger social connections, Edinburgh: Local Government and Communities Directorate.

See Me Scotland (2021) *Time to Talk Day 2021*. [Online] Available at: https://www.seemescotland.org/movement-for-change/campaigns/time-to-talk/time-to-talk-day-2021/ [Accessed 23 January 2021].

See Me, SRN and VOX (2016) *Rights for Life A Declaration of Rights for Mental Health in Scotland,* Glasgow: See Me, Scottish Recovery Network and Voices of experience.

SMHFA (2021) Scotland's Mental Health First Aid Becoming an Instructor. [Online] Available at: http://www.smhfa.com/become-instructor/how-to-become-instructor.aspx [Accessed 26 January 2021].

The Prince's Trust (2021) *The Prince's Trust Tesco Youth Index 2021,* London: Prince's Trust, Tesco and YouGov.

Verbeek, M.J.A., Hommes, M.A., Stutterheim, S.E., van Lankveld, J.D.M. and Bos, A.E.R. (2020) Experiences with stigmatization among transgender individuals after transition: A qualitative study in the Netherlands. *International Journal of Transgender Health*, 21(2), pp. 220-233.

Watts, B. (2014) Rights, Needs and Stigma: A Comparison of Homelessness Policy in Scotland and Ireland. *Journal of Social Policy*, 43(4), pp. 793-810.

A Push Towards Agroforestry

Juliette Briey

9.0 Executive Summary

As a result of the urgency of the climate change crisis, governments around the world have set themselves targets in order to help reduce their contribution to global greenhouse gas emissions. This has translated into national climate change policies such as Scotland's net-zero greenhouse gas emission target for 2050. Many strategies and approaches can be used by the Scottish Government in order to reach this goal, but we would like to propose further development in the field of agroforestry.

Agriculture contributes heavily to climate change, it has even been identified as the second largest contributor to Scottish greenhouse gas emissions (Ecosulis and Farmlytics, 2019, p.4). However, climate change also impacts agriculture, as Scottish farmers are already experiencing the negative impacts of climate change through livestock losses and lower crop yields. Indeed, studies have estimated that the extreme weather events of 2017-2018 cost Scottish farmers up to £161 million (Ecosulis and Farmlytics, 2019, p.13).

In light of this, we propose that the Scottish Government:

1. Create a centralised working group on agroforestry in order to understand how agroforestry can best be applied in Scotland.

9.1 Background Information

9.1.1 What is Agroforestry?

Agroforestry is a farming system that combines forestry and agriculture in the same plot of land (Alavalapati et al., 2006, p.1). This system has gained traction in recent years as an innovative and sustainable strategy to tackle climate change, as research emphasises the socia,l economic, and environmental benefits through this adapted land-management system (Saleh et al., 2013, p 302).

There are many different strategies that can be used when introducing agroforestry to a specific area. These include, but are not limited to: "shelterbelts, wide spaced trees, groups of trees, hedgerows and woodland grazing" (Perks et al., 2018, p.1). Some researchers have narrowed down the field of agroforestry into two categories: silvopasture and silvoarable. Silvopasture is a specific type of agroforestry, which concentrates on the integration of trees

within grazed pastures (ibid). Silvoarable requires for trees to be placed in rows with alleys for cultivating crops (ibid).

The following chart, made by the researchers behind the ClimateXChange *Agroforestry in Scotland – potential benefits in a changing climate* report, illustrates the different options that could be implemented in Scotland. They have identified 3 different silvoarable options and 5 different silvopastoral options:

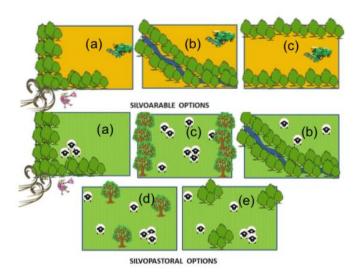


FIGURE 1: Agroforestry Options identified for Scotland: a) windbreaks, b) riparian buffer strips, c) rows, d) single tree, e) tree clusters.

It is important to note that this wide diversity of means to implement agroforestry in agriculture signifies that there is not one standardised system model. However, our proposal for a strategy of implementation will hopefully allow for this diversity not to be problematic in practice.

9.1.2 Benefits of Agroforestry

Agroforestry presents many benefits for Scotland, especially with regards to reaching the Climate Change Act goals through methods of mitigation and adaptation.

9.1.2.1 Mitigation

First and foremost, agroforestry provides a sustainable and natural way to reduce emissions. The increased presence of woodlands helps mitigate climate change through increased carbon sequestration (Ibrahim et al., 2010, p.189). Carbon sequestration is the act of removing carbon from the atmosphere and storing it into long-term storage facilities (Soussana et al., 2010, p.334). In agriculture, carbon storage varies according to several factors including the soil type, the types of crops grown and the management practices (Soussana et al., 2010, p.336). Several researchers have found that agroforestry would allow for an optimal carbon

sequestration due to the variety of trees, plants and crops present in a single area (Kay et al., 2019, p.582). Indeed, forests can be identified as carbon sinks as they can "store large amounts of carbon in their vegetation and root systems" for extended periods of time (Schahczenski and Hill, 2009, p.5). According to research conducted by ClimateXChange (2018), agroforestry in Scotland would lead to an increase in carbon sequestration, thereby a reduction in GHG emissions. The following table developed by ClimateXChange for their research entitled Agroforestry in Scotland: potential benefits in a changing climate is illustrative of this occurrence.

LAND YIELD & PRODUCTIVITY	AGRICULTUTRAL LAND TYPE AGROFORESTRY TYPE [LCA CLASS]	PREDOMINANT AGROFORESTRY MANAGEMENT OPTION	LAND POTENTIAL TREE PRODUCTIVIT Y	CARBON SEQUESTRATION POTENTIAL (C Stock @ Year 40) [t C ha-1]	ADAPTATION POTENTIAL	PREDOMINANT MANAGEMENT FOCUS
LOW	Lowest Quality Rough Grazing Silvopastoral: "Sheep & Trees" [LCA 7.0]	Upland wood pasture (single trees or clusters) Native Scots pine woodland & Low productivity native broadleaf (AFMA 1) (AFMA2)	Extensive upland Poor Do not plant peat>50cm deep	Negative to Moderate [-6.2 to 45.6] Negative C stocks possible with organo-mineral soils	Diversification of low value (LFA) land. Flood amelioration. Improve soil quality. Forage. Improve husbandry.	Low intervention, long retention. Favour assisted natural colonisation & regeneration.
	Poor Quality Upland Silvopastoral: Rough Grazing "Sheep & Trees" [LCA 6.1 – 6.3]	Lowland wood pasture (single trees or clusters) Multipurpose Broadleaf & Multipurpose Conifer (AFMA 3) (AFMA4/5/7)	Extensive upland Moderate-Good	Negative to Moderate [-6.2 to 51.5] Negative C stocks possible with organo-mineral soils	Forage. Improve husbandry and animal welfare. Long-term managed woodland with woodfuel (bdlv) and timber element.	Long retention. Low impact silviculture. Planted woodland. Favour assisted broadleaf regeneration.
	Improved Grassland Silvopastoral: "Livestock & Trees" [LCA 5.1 – 5.3]	Shelter Belts for Livestock: Multipurpose Broadleaf & Productive Conifer (AFMA 3) (AFMA 7/8)	Intensive upland Moderate-Very Good	Low to Moderate [1.1 to 62.5]	Forage. Improve husbandry and animal welfare. Long-term managed woodland with woodfuel & quality timber element.	Long retention. Low impact silviculture Planted woodland. High quality hardwood.
	Mixed agriculture Silvopastoral: "Livestock & Trees" [LCA 3.2 – 4.2]	Buffer Strips or Shelter Belts for Livestock: Productive Broadleaf & Productive Conifer (AFMA 3/9) (AFMA 6/7)	Lowland Very Good – Excellent	Good [12.8 to 77.5]	Improve water quality, reduce run-off. Improved forage and animal welfare. Long-term woodland capable of growing quality timber.	Variable retention planted woodland Coppice, woodfuel, structural timber High quality hardwoods.
HIGH	Arable agriculture Silvoarable: "Crops & Trees" [LCA 2.0 – 3.1]	Rows and buffer strips for Arable Short Rotation Forestry, Productive conifer and broadleaves, silvo-arable planting (AFMA 9) (AFMA 7)	Lowland Very Good - Excellent	Good [12.8 to 77.5]	Reduced soil erosion. Reduced runoff. Potential N-addition with species like Alder. Resource capture (water, putrients)	Short retention hardwood or conifer biomass. Mixed agriculture options (LCA 3.2-4.2) apply

TABLE 2. Typical Agroforestry Management Alternatives (AFMAs) that could be deployed with key Land Capability for Agriculture (LCA) classes in Scotland, for the purpose of C-sequestration and climate adaptation. The AFMAs are not exclusive, as some species and management types will be suitable for more than one LCA class, but are indicative.

This chart clearly states that according to the type of agricultural land and agroforestry land management technique used, you can see a potential for carbon sequestration. For example, using mixed agriculture and silvopastoral agroforestry, a farmer could achieve good levels of carbon sequestration (between 12.8 to 77.5 t C ha-1).

Silvopastoral agroforestry would also help reduce greenhouse gas emissions through additional sources of fodder for grazing animals, as well as a reduction of nitrogen and ammonia emissions from animal production facilities (Cardona et al., 2014, p.78). Agroforestry could therefore have a key role in reducing Scottish agricultural greenhouse gas emissions to meet their own national goal. Moreover, the World Agroforestry Centre underlines the benefits of promoting agroforestry for the completion of UN Sustainable Development Goals (SDGs). Should Scotland take part in this growing international push towards agroforestry, it could contribute towards the achievement of SDGs.

One of the goals set in the Climate Change (Scotland) Act of 2009 was to increase Scottish woodland cover "from around 18% to 21% of the Scottish Land Area" (Climate Change (Scotland)

Act, 2009, p.18). Moving towards agroforestry would allow the Scottish Government to reach that goal and even go beyond it.

9.1.2.2 Adaptation

Agroforestry can also be used as a method of adaptation with regards to climate change, as well as environmental circumstances. As mentioned above, agroforestry can be used as a means of windbreaker in order to protect the crops and the livestock. Research led by Ecosulis and Farmlytics found that, as a result of climate change, farmers were facing increased loss of livestock due to hypothermia, as well as a loss of pasture to graze their animals due to a stunted grass growth as a result of high temperatures in summer (Ecosulis and Farmlytics, 2019 p.5). Using trees in order to form a protective barrier around the crops and livestock would provide some protection against the wind and reduce the number of deaths by hypothermia for the livestock, adding a layer of protection for their crops should they choose this approach.

Moreover, the practice of integrating woodlands into an area with crops and livestock has shown to improve the resilience of the farmed landscape (Perks et al., 2018). This general characteristic of agroforestry has been identified by many researchers, including in the report commissioned by ClimateXChange. The latter found that both silvopastoral and silvoarable types of agroforestry provided a form of resilience through reduced flood and drought-risk, as well as increased farm biodiversity (ibid, p.9). Indeed, the flood risk is reduced through the use of woodlands by creating run-offs, and they can also reduce soil erosion in wet areas.

9.2 Existing Policies and Necessary Research

There is a lack of knowledge on the actual capacity of a transition towards agroforestry in Scotland. In order to achieve the full potential of benefits derived from agroforestry, the Scottish Government would have to conduct further research in this field. Agroforestry farms already exist in Scotland and have gradually integrated agricultural practices over the past couple of decades. This has allowed researchers to unearth the potential for a greater development in the field. Agroforestry is currently not very common in Scotland and is usually present in old wood pastures that are no longer actively managed, but some exceptions can be found.

Glensaugh Farm was established as an outdoor laboratory in 1943 for agricultural and land use research. Within this capacity, it was established as an agroforestry farm in the 1980s as an experiment to establish the efficiency and productivity of such a farm. Due to a lack of funding, the farm could no longer be managed in the early 2000s, but despite this obstacle, the managing team found that agroforestry was very beneficial. They established that agroforestry can add "value to your livestock [...] can produce high quality timber, and [...] raise the biodiversity and amenity interest and value of your farm" (The Macaulay Institute, 2008, p.2). For a more personal approach to the integration of agroforestry in farmland, Kate Holl, a woodland specialist, shared her experience in her smallholding in an entry on the Scottish Natural Heritage website. She speaks of the benefits of agroforestry through the increased productivity up to 40% higher than a monoculture system, as well as her sheep enjoying the "leaf hay cut from surrounding

hedgerows at the end of summer" (NatureScot, 2019). This scientific research and personal stories therefore illustrate the potential benefits of establishing agroforestry farms in Scotland.

The big question remains: how can agroforestry be applied to Scotland? Farmers currently have access to various types of funding for agroforestry, which can mostly be found under the Scottish Rural Development Programme (SRDP). The main objective under the SRDP is to create sustainable economic growth in Scottish rural areas. The priorities of this programme include "supporting agricultural and forestry businesses" as well as "addressing the impact to climate change" (Scottish Government, [n.d.], Agricultural payments: Common Agricultural Policy), under which agroforestry falls. One of the grants farmers have access to is the Forestry Grant Scheme, which helps farmers create areas of agroforestry within sheep-grazed pasture land or on arable land. This land must be permanent grassland pasture, temporary grassland or arable land. Silvoarable agroforestry will only be funded if the livestock are sheep due to the limited funding and high costs associated with other grazing animals and cattle. This scheme has been used by the Scottish Government to support the implementation of agroforestry into existing pastures. However, the lack of knowledge on the benefits of agroforestry, alongside costs associated with the required training and supplies for this system of farming, has not allowed for its increased implementation in farms across the country.

Moreover, the current grants allocated to farmers wishing to pursue agroforestry, such as the Forestry Grant Scheme, are currently planned to end in December 2020 (Scottish Forestry, 2020) and therefore requires renewal. Farmers require further funding in order to obtain the required training to start implementing agroforestry in their pastures, as well as to cover the initial costs (including a short-term loss of productivity) and the estimated costs of long-term management. As mentioned above, the grants available to farmers for agroforestry are soon coming to an end, and as the Scottish Government establishes new programmes and funds, it should take into consideration the following propositions.

9.3 Proposed Policies

9.3.1 A Working Group on Agroforestry

Organisations such as the government-endorsed Farming for a Better Climate, which is run by Scotland's Rural College on behalf of the Scottish Government, have created workshops and conferences to share knowledge and benefits on agroforestry. However, further incentives are required for farmers to learn the specific skills required. Although Scotland has numerous different organisations and organisms involved in establishing agroforestry this can often be confusing due to the rural and isolated nature of the work, the support provided needs to be decentralised.

We are suggesting a government-based system for all programmes with regards to sustainable farming through a specific working group for agroforestry. This working group will establish the required research needed in Scotland to determine the areas that would benefit most from it. This research will have to be conducted by a team of scientific and agricultural

experts and could be done alongside research institutes such as the James Hutton Institute. Further to this task, this working group would establish different degrees of funding according to the stages at which the farmers are. The group could create guidelines and invite guests who are experts in the field to teach interested parties and give them advice. This working group will work in collaboration with rural organisations in the areas that have been deemed to benefit most from this type of land management rather than creating further offices. These groups include The Scottish Rural Network and Scottish Rural Action.

This system would be **centralised** for the research that would be conducted, as well as for establishing the system for grant allocation. The reasoning behind the working group creating this system, rather than any other agency, is due to the research they would have conducted, and the fact that they will be working alongside rural organisations who have a deeper understanding of the Scottish rural system, as well as deeper ties. The outreach to farmers will be **de-centralised** and will rely on testimonies and workshops organised by experts in the field and farmers who can share their own personal experiences with switching to agroforestry. This would allow for a more personal approach and will be locally-driven. In that respect, these workshops will have to be organised all across Scotland, not merely in metropolitan areas. Moreover, in light of recent events with regards to COVID-19, social distancing measures will have to be implemented during these workshops.

9.3.2 Funding

In order for this working group to be effective, it will require further public and private funding. The existing funding available through the SRDP is due a renewal in the next year, and we recommend that a greater emphasis be placed on agroforestry due to the high productivity it allows for and the low maintenance it requires in the long run. The current requirements for funding should be reduced in order to reach a higher number of farmers. The minimum density that needs to be required is 200-400 trees per hectare, which could potentially lead to agriculture being completely removed from the farmer's land (Lampkin, Smith, and Padel, 2019). In order for the promotion of agroforestry to be successful in aiding the government to reach its woodlands goal, the farmers' needs and reliability on agriculture must be taken into account. According to the WWF's research, agroforestry can lead to a 10% margin reduction in crop and livestock in the short-term (Lampkin, Smith, and Padel, 2019, p.46). The loss of initial profit will only be temporary but must be compensated for in order for this type of land management to be more attractive. In order to understand the burdens associated with a shift towards agroforestry land management, we have enacted a narrow timeline of what costs are to be expected. This timeline is not in any way extensive and is prone to changes due to the new COVID-19 governmental guidelines, as well as advancements in the field. As such, the estimated establishment costs of a shift towards agroforestry in Scotland are currently at GBP4000/ha over 30 years.

Direct funding for farmers would be extremely important to make this type of land management more popular. However, in line with the Scottish Government's Scottish Agricultural Young Farmers Training Scheme, funding could also be provided for new and young farmers. This could be done through a traineeship or apprenticeship scheme for young people to

be introduced to the concept of agroforestry. It would allow young farmers to learn the skills necessary for this type of land management, as well as provide farmers with the needed manpower to make the transition towards agroforestry.

9.4 Conclusion

Agroforestry is a field that cannot be overlooked in the Scottish Government's climate change action plan due to the potential social, economic and environmental benefits that could increase societal welfare. However, this type of land management will require direct support from the government for the initial costs of transition, as well as for the establishment of a working group.

9.5 References

Alavalapati J. R. R., Mercer E. and Montambault J. R. (2006) Valuing Agroforestry Systems: Methods and Applications. Edited by Alavalapati J. R. R., Mercer E. Springer Science and Business Media.

Cardona C. A. C., Naranjo J. F., Morales A. M. T., Restrepo E. M., Orozco J. D. C., Ku-Vera J. C., Solorio F., Estrada M. X. F., Sanchez B. S., Rosales R. B. (2014) Contribution of intensive silvopastoral systems to animal performance and to adaptation and mitigation of climate change. Revista Colombiana de Ciencias Pecuarias. 27. 76-94. Available at: https://www.researchgate.net/publication/262183837_Contribution_of_intensive_silvopastoral_systems_to_animal_performance_and_to_adaptation_and_mitigation_of_climate_change

Ecosulis and Farmlytics (2019) *The Economic Impact of Extreme Weather on Scottish Agriculture.* Available at: https://www.wwf.org.uk/sites/default/files/2019-04/Impact%20of%20extreme%20weat her%20on%20Scottish%20Farmers%202018%20FINAL.pdf

Ibrahim. M, Guerra, L., Casasola, F., Neely, C. (2010) Importance of silvopastoral systems for mitigation of climate change and harnessing of environmental benefits In: FAO. Grassland carbon sequestration: management, policy and economics. Proceedings of the Workshop on the role of grassland carbon sequestration in the mitigation of climate change. FAO, Rome. Integrated Crop Management; 11:189-196.

Kay S., Rega C., Moreno G., Herder M., Palma J. H. N., Borek R., Crous-Duran J., Freese D., Giannitsopoulos M., Graves A., Jäger M., Lamersdorf N., Memedemin D., Mosquera-Losada R., Pantera A., Paracchini M. L., Paris P., Roces-Díaz J. S., Rolo V., Rosati A., Sandor M., Smith J., Szerencsits E., Varga A., Viaud V., Wawer R., Burgess P. J., and Herzog F. (2019) Agroforestry creates carbon sinks whilst enhancing the environment in

agricultural landscapes in Europe. Available at: https://www.sciencedirect.com/science/article/pii/S0264837718310470

Lampkin, N., Smith, L., Padel, K. (2019) Delivering on Net Zero: Scottish Agriculture. WWF.

Available at: https://www.wwf.org.uk/sites/default/files/201912/WWF%20Net%20Zero%20and%20Farming.pdf

NatureScot (2019) Agroforestry in Scotland? Forestry Grant Scheme funding still available until December 2020. Available at: https://scotlandsnature.blog/2019/02/26/agroforestry-in-scotland-forestry-grant-sche me-funding-still-available-until-december-2020/

Perks, M., Khomik, M., Bathgate, S., Chapman, S., Slee, B., Yeluripati, J., Roberts, D., Morison, J. (2018) Agroforestry in Scotland – potential benefits in a changing climate. ClimateXChange. Available at: https://www.climatexchange.org.uk/media/3312/agroforestry-in-scotland-potential-be Nefits-in-a-changing-climate.pdf

Salleh M. A. & Harun N. Z. (2013). The Environmental Benefits of Agroforestry Systems in relation to Social Sustainability. Available at: https://www.researchgate.net/publication/304259524_The_Environmental_Benefits_of_A groforestry_Systems_in_relation_to_Social_Sustainability

Schahczenski, J. and Hill, H. (2009) Agriculture, Climate Change and Carbon Sequestration. ATTRA. Available at: https://attra.ncat.org/attra-pub-summaries/?pub=297

Scottish Forestry. [n.d.] Forestry Grant Scheme. Available at https://forestry.gov.scot/support-regulations/forestry-grants

Scottish Government, [n.d.] Agricultural Payments: Common Agricultural Policy. Available at: https://www.gov.scot/policies/agriculture-payments/scottish-rural-development-programme-srdp/>

Scottish Government (2009) Climate Change (Scotland) Act: third report on proposals and policies 2018-2023. Available at: https://www.gov.scot/publications/scottish-governments-climate-change-plan-third-report-proposals-policies-2018/pages/15/>

Scottish Rural Network. [n.d.] Scottish Rural Development Programme. Available at: https://www.ruralnetwork.scot/funding/scottish-rural-development-programme#:~:text =The%20Scottish%20Rural%20Development%20Programme%20(SRDP)%202014 %2D2020%20funds,Commission%20and%20the%20Scottish%20Government.&text=Supporting%20agricultural%20and%20forestry%20businesses

Soussana J. F., Tallec T., Blanfort V., (2010) Mitigating the greenhouse gas balance of

ruminant production systems through carbon sequestration in grasslands. Available at: https://www.sciencedirect.com/science/article/pii/S1751731109990784?via%3Dihub

The Macaulay Institute (2008) Glensaugh Agroforestry Demonstration. Available at: https://www.hutton.ac.uk/sites/default/files/files/glensaugh_infosheet.pdf

World Agroforestry. [n.d.] What is Agroforestry? Available at: https://www.worldagroforestry.org/about/agroforestry

10. Renewable Energy

Arpan Sircar

10.0 Executive Summary

The Scottish Government recognises the need to transition to a low-carbon economy. Current targets aim for the near-complete decarbonisation of Scottish energy by the year 2050 (Scottish Government, 2017b). Renewable energy sources are a vital component of this plan and sufficient investment is needed to ensure adequate supplies of renewable energy are available to accommodate this transition.

The Government has outlined specific targets to facilitate the shift towards decarbonisation. *The Scottish Energy System Strategy* states that renewable sources will supply at least 50% of heat, transport and electricity consumption by 2030 (Scottish Government, 2017b). An initial target was set in 2009 for 30% of heat, transport and electricity to come from renewable sources by 2020 (Scottish Government, 2009).

There was a slight reduction in energy consumption in the decade from 2009 to 2019 (Scottish Renewables, 2020) meaning that the current targets for transitioning to renewable energy sources are achievable. In order to meet these goals, it is important that the Scottish Government continues to prioritise off-shore wind energy opportunities, taking advantage of Scotland's natural conditions which are prime for the installation of wind turbines (Nield, 2019).

Therefore, this paper recommends the following to the Scottish Government:

1. Prioritise Scotland's off-shore wind energy opportunities in order to meet current energy targets.

10.1 Background

Scotland uniquely offers an abundance of viable renewable energy sources from different technologies such as hydroelectric, marine and both off-shore and on-shore wind. Additionally, Scotland has 25% of Europe's off-shore wind and tidal resources (Scottish Development International, 2019) and over 60% of the UK's onshore wind capacity (ibid) which allows for a wide scope of solutions to meet the energy target.

Reaching 50% of total renewable energy supply by 2030 is an ambitious goal and may become more challenging given the current uncertain market conditions in the context of the UK's exit from the EU. The energy risks associated with Brexit include the threat of the UK '...adopting a radical deregulatory approach' that could significantly damage climate change progress (Gaventa, 2017, p.5). There is now greater uncertainty around the future of UK energy policy, and it is more difficult to ensure a steady supply, while also prioritising renewables.

The COVID-19 pandemic also has important consequences for the future of renewables. While COVID-19 has drastically reduced demand for energy temporarily because of reduced demand for transport and electricity, it has been noted that the recovery from the pandemic could be a useful opportunity to "build back better." Taking this into account, the pandemic could be a catalyst to dramatically increase the use of renewable energy and low carbon infrastructure (Khanna, 2020). This suggests that the next 5 years mark a period of urgency for promoting renewable energy.

Several policy areas with relevance to the energy sector are not under devolved administration control such as energy efficiency and fuel poverty initiatives. This report will explore viable options and solutions for Scotland to reach its targets.

Continuing to build Scotland's renewable energy capacity will enable the establishment of stable domestic industries, with the potential to export such technologies afar. This suggests that a move to renewables can be of benefit to the Scottish economy. In 2017, 17,700 people were employed full-time in renewable energy in Scotland (Scottish Renewables, 2021). With capacity to grow, it is clear that investing in renewables has significant economic potential for Scotland.

10.2 Existing Policies

Firstly, Scotland has taken a holistic approach in meeting its renewable energy targets, with existing strategic priorities covering a wide range of approaches in fuel poverty, consumer engagement and industrial and domestic energy efficiency. These priorities have been in line with Scotland's commitment to the UN Sustainable Development Goals (Scottish Government, 2020b).

These strategic priorities on renewable energy targets will have to remain flexible in order to respond to changes in individual technologies and wider market developments. The nature of the UK's exit from the EU is likely to have considerable impact on the UK's ability to meet its Clean Growth Strategy, as it tries to manage growth losses from leaving the EU (Bank of England, 2019). Whilst the UK government has noted that leaving the EU presents an opportunity for the UK to move to a greener growth strategy (UK Government, 2017), the full effects of Brexit have not yet taken affect and as such may present difficulties in meeting the goals set in the Growth Strategy, and indeed Scotland's goals set by the Scottish Government in *The Scottish Energy System Strategy*. International efforts to deliver the Paris Climate Agreement may also have a powerful bearing on progress.

However, in the realm of renewable and low carbon energy solutions, amongst a few initiatives, there is one primary policy in place, established in 2012 and known as the Renewable Energy Investment Fund (REIF) (Scottish Government, 2012). This fund provides significant capital

finance to support renewable energy projects at all stages in its development from academic research, to testing, prototyping and post-launch stages in product development. In five years, the Fund has invested £60 million and supported over 20 projects (Scottish Enterprise, 2019).

Additionally, the Low Carbon Infrastructure Transition Programme (LCITP) was launched in March 2015 (Scottish Government, 2020a). This programme was created in order to increase the commercial attractiveness of Scotland for investors looking to fund 'low carbon infrastructure progress.'

10.3 Proposed Policies

10.3.1 Prioritising the off-shore wind energy opportunity

Data from Scottish Renewables highlights that onshore wind makes up the largest proportion of capacity from installed renewable technologies and renewable electricity output in Scotland (Scottish Renewables, 2020). Onshore wind technology makes up 71% of current installed capacity from renewable technologies and 63% of electricity output from renewable technologies (ibid). However, off-shore wind technologies account for only 7% of installed capacity and 10% of electricity output from renewable technologies (ibid). In order to meet Scotland's ambitious targets for renewable electricity sources, this imbalance in renewable energy sources should be addressed.

In terms of development, off-shore wind is now substantially cheaper than new nuclear electricity generation. Renewable technology is only growing in popularity worldwide, meaning it is likely total spending on wind will climb to £210 billion within the next ten years (Scottish Government, n.d.). Furthermore, it is expected the price of wind turbines will decrease significantly by 2025 due to their increased popularity, lessening the price per unit of the resource (IEA, 2020). As such, investment in renewables has never been more cost-efficient.

Innovative and environmentally beneficial technological developments have also taken place in ways that are sure to benefit Scotland in the future. The advent of floating foundation technology has begun. These foundations allow access to deeper water as well as mitigate some of the issues associated with the initial installation of turbines as they do not have to be anchored to the seabed (International Renewable Energy Agency, 2016). This, again, reduces overall cost. Scotland was in fact the first country to experiment with this new technology; it is imperative that momentum is not lost and Scotland continues to utilise the natural resources at its disposal in a trailblazing yet responsible and sustainable fashion.

Off-shore wind energy production provides a unique opportunity for Scotland to meet its renewable energy targets. Over the past forty years, the Scottish energy sector has had success and gained extensive experience in off-shore energy production through oil and gas ventures (Scottish Development International, 2021). This has given Scotland an experienced off-shore

labour force and the port and off-shore infrastructure necessary for the development of off-shore wind technology (ibid). It is already well understood that Scotland has appealing natural conditions for off-shore wind expansion (Scottish Government, 2017a). Expansion of off-shore wind energy technologies should be prioritised, in order to meet Scotland's targets for renewable energy.

10.4 Conclusion

In order to reach its ambitious renewable energy goals, policymakers in Scotland must continue to invest in renewable technologies and diversify energy sources. Opportunities to invest in off-shore wind energy options in Scotland should be taken advantage of as these energy sources are well-suited to Scotland's existing industry knowledge and expertise, as well as our natural landscape. The prioritisation of Scotland's off-shore wind energy opportunities, whilst maintaining progress in other renewable energy technology developments, will put Scotland on a path to meet current renewable energy targets.

10.5 References

Bank of England (2019) Monetary Policy Report - November 2019, s.l.: Bank of England.

Gaventa, J. (2017) 'Brexit and the EU Energy Union: Keeping Europe's energy and climate transition on track' *E3G*, April, 2017: 1-15.

IEA (2020) Offshore Wind (Report). Available at: https://www.iea.org/reports/offshore-wind [Accessed 12/02/2021]

International Renewable Energy Agency (2016) *Floating Foundations: A Game Changer for Offshore Wind Power* (Report). Available at: https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2016/IRENA_Offshore_Wind_Floating_Foundations_2 016.pdf [Accessed 12/02/2021]

Khanna, M. (2020) COVID-19: A Cloud with a Silver Lining for Renewable Energy? *Applied economic perspectives and policy*, Volume 43, number 1, pp. 73–85.

Nield, D. (2019) *Scotland Is Now Generating So Much Wind Energy, It Could Power Two Scotlands*. Science Alert Environment.

Power Technology (2021) *Torness Nuclear Power Station*. [Online] Available at: https://www.power-technology.com/projects/torness-nuclear-power-station/__[Accessed 11 February 2021].

Scottish Development International (2019) *RENEWABLE ENERGY AND LOW CARBON,* s.l.: Scottish Development International with Scotland Is Now.

Scottish Development International (2021) 7 reasons to invest. [Online] Available at: https://www.sdi.co.uk/key-sectors/oil-and-gas_[Accessed 11 February 2021].

Scottish Enterprise (2019) Low Carbon and Sustainability Statement 2018/19, s.l.: Scottish Enterprise.

Scottish Government (2009) *Renewable and low carbon energy,* Edinburgh: Minister for Energy, Connectivity and the Islands.

Scottish Government (2011) *Scotland's Marine Atlas: Information for The National Marine Plan,* s.l.: Marine and Fisheries.

Scottish Government (2012) *Renewable and low carbon energy,* s.l.: Energy and Climate Change Directorate.

Scottish Government (2017a) Marine renewable energy, s.l.: Marine Scotland Directorate.

Scottish Government (2017b) *The future of energy in Scotland: Scottish energy strategy,* Edinburgh: Energy and Climate Change Directorate.

Scottish Government (2020a) *Green Recovery: Low Carbon Energy Project Capital Funding: form and guidance,* s.l.: Energy and Climate Change Directorate.

Scottish Government (2020b) *Scotland and the sustainable development goals: a national review to drive action, s.l.*: Performance and Strategic Outcomes Directorate.

Scottish Renewables (2020) *STATISTICS Energy Consumption by Sector,* Edinburgh: Scottish Renewables.

UK Government (2017) *The Clean Growth Strategy Leading the way to a low carbon future,* s.l.: Department for Business, Energy and Industrial Strategy.

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