

REFERENCES

- Aberdeenshire Council (2017) *Agriculture Statistics for Aberdeenshire: November 2017*. <https://www.aberdeenshire.gov.uk/media/21852/agriculture-statistics.pdf>
- Aether (2021) 'Progress towards UK local carbon neutral targets', data visualisation. <https://www.aether-uk.com/Resources/ClimateEmergencies>
- Agriculture Act (2020) *Agriculture Act 2020*, Legislation.gov.uk. <https://www.legislation.gov.uk/ukpga/2020/21/contents/enacted/data.htm>
- Aldred R, Verlinghieri E, Sharkey M and Itova I (2021) 'Equity in new active travel infrastructure: A spatial analysis of London's new low traffic neighbourhoods', SocArXiv. <https://osf.io/preprints/socarxiv/q87fu/>
- Allan L (2020) 'Call for UK to address EV skills shortage before 2030'. <https://www.autocar.co.uk/car-news/industry-news/call-uk-address-ev-skills-shortage-2030>
- African Ministers of Finance, Planning and Economic Development [AMFPED] (2021) *Communique of African Ministers of Finance, Planning and Economic Development on Covid-19 and the Economic Situation in Africa*, UN Economic Commission for Africa. <https://www.uneca.org/sites/default/files/com/2021/E2100446-29March-Eng-COMMUNIQUE.pdf>
- Anable J, Lokesh K, Marsden G, Walker R, McCulloch S, and Jenkinson K (2020) *Decarbonising transport: Accelerating the uptake of electric vehicles*, Local Government Association. <https://www.creds.ac.uk/publications/decarbonising-transport-accelerating-the-uptake-of-electric-vehicles/>
- The Association for Decentralised Energy [ADE] (2020) *Heat and energy efficiency zoning: a framework for net zero for new and existing buildings*, ADE. https://www.theade.co.uk/assets/docs/resources/Heat_and_Energy_Efficiency_Zoning_A_framework_for_netzero_for_new_and_existing_buildings-min.pdf
- B Lab (2021) 'About B Corps', webpage. <https://bcorporation.net/about-b-corps>
- Baldock D (2020) *Environmental standards for UK in a new trade policy framework*, Institute for European Environmental Policy. [https://ieep.eu/uploads/articles/attachments/e635600e-43e8-4fef-9f09-691fbae16f2d/Environmental%20standards%20for%20UK%20agriculture%20in%20a%20new%20trade%20policy%20framework%20\(IEEP%202020\).pdf?v=63780252022](https://ieep.eu/uploads/articles/attachments/e635600e-43e8-4fef-9f09-691fbae16f2d/Environmental%20standards%20for%20UK%20agriculture%20in%20a%20new%20trade%20policy%20framework%20(IEEP%202020).pdf?v=63780252022)
- Bank of England [BoE] (2021) 'Yield curves', dataset. <https://www.bankofengland.co.uk/statistics/yield-curves>
- Bataille C (2019) *Low and zero emissions in the steel and cement industries: Barriers, technologies and policies*, OECD. https://www.oecd.org/greengrowth/GGSD2019_Steel%20and%20Cemement_Final.pdf
- Bates J and Leibling D (2012) *Spaced out: perspectives on parking policy*, RAC Foundation. https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/Bates%20J%20and%20Leibling%20D%202012%20Spaced%20Out%20Perspectives%20on%20parking%20policy.pdf
- Bath and North East Somerset Council (2021) 'Green skills academy', webpage. <https://www.bathnes.gov.uk/services/environment/sustainability/green-skills-academy>
- Baxter D and Cox E (2017) *A northern energy strategy: The final report of the northern energy taskforce*, IPPR North. <https://www.ippr.org/publications/northern-energy-strategy#:~:text=This%20Northern%20Energy%20Strategy%2C%20the,of%20Energy%20for%20the%20North.>
- Bell R and Benaim E (2020) 'Carbon border adjustment: A powerful tool if paired with a just energy transition', article, OECD Development Matters. <https://oecd-development-matters.org/2020/10/27/carbon-border-adjustment-a-powerful-tool-if-paired-with-a-just-energy-transition/>

- Bellantoni A, Chwalisz C and Cesnulaityte I (2020) *Good Practice Principles for Deliberative Processes for Public Decision-making*, OECD. <https://www.oecd.org/gov/open-government/good-practice-principles-for-deliberative-processes-for-public-decision-making.pdf>
- Benton E, Belotti A, Lane L and Power A (2019) *Retrofit to the rescue: environmental upgrading of multi-storey estates*, Rockwool and LSE. <https://www.rockwool.com/uk/advice-and-inspiration/case-studies/wilmcote-house/>
- Benton T, Bieg C, Harwatt H, Pudasaini R and Wellesley L (2021) *Food system impacts on biodiversity loss: three levers for food system transformation in support of nature*, Chatham House. https://www.chathamhouse.org/sites/default/files/2021-02/2021-02-03-food-system-biodiversity-loss-benton-et-al_0.pdf
- Berry A (2019) *The distributional effects of a carbon tax and its impact on fuel poverty: A microsimulation study in the French context*, Energy Policy, Volume 124: 81–94. <https://www.sciencedirect.com/science/article/abs/pii/S0301421518306268?via%3Dihub>
- Bevan Foundation (2018) *Maintaining free bus travel for older people, disabled people and injured service veterans*. <https://www.bevanfoundation.org/wp-content/uploads/2018/01/Concessionary-Fares-response-160118.pdf>
- Bhamare D, Rathod M, Banerjee J (2019) 'Passive cooling techniques for building and their applicability in different climatic zones—The state of art', Energy and Buildings, Volume 198: 467–490. <https://www.sciencedirect.com/science/article/abs/pii/S0378778819300210#:~:text=Passive%20cooling%20techniques%20use%20ambient,building%20an%20internal%20heat%20gain.>
- Big Lunch (2021) 'The Big Impact', webpage. <https://www.edenprojectcommunities.com/the-big-impact>
- Birmingham City Council (2020) *Draft Birmingham Transport Plan*. https://www.birmingham.gov.uk/download/downloads/id/14861/draftbirmingham_transport_plan.pdf
- Blyth W (2018) *Rethinking Decarbonisation Incentives: Future Carbon Policy for Clean Growth*, Energy Systems Catapult. <https://es.catapult.org.uk/news/rethinking-decarbonisation-incentives-future-carbon-policy-for-clean-growth/>
- Boden T, Andres R and Marland G (2017) 'Global, Regional, and National Fossil-Fuel CO2 Emissions', dataset, Oak Ridge National Laboratory, US Department of Energy. http://cdiac.ess-dive.lbl.gov/trends/emis/overview_2014.html
- Bonfield P (2016) *Each home counts: An Independent Review of Consumer Advice, Protection, Standards and Enforcement for Energy Efficiency and Renewable Energy*, BEIS, MHCLG. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/578749/Each_Home_Counts__December_2016_.pdf
- Borrowman P, Singh R and Bulleid R (2020) *The local climate challenge: A new partnership approach*, Green Alliance. https://green-alliance.org.uk/resources/The_local_climate_challenge.pdf
- Bounds A and Parker G (2021) 'UK chancellor accused of playing politics with the 'levelling-up' fund', *Financial Times*. <https://www.ft.com/content/215ce50f-8bc1-455d-a3fb-5cfb33932b14>
- Bourn R (2012) *Transport and Poverty: A Literature Review*, Campaign for Better Transport. <https://bettertransport.org.uk/sites/default/files/research-files/transport-and-poverty-literature-review.pdf>
- Boyle M (2021) 'Savings statistics: Average savings in the UK: 2020', dataset. <https://www.finder.com/uk/saving-statistics>
- Brede G (2020) 'RSPB calls out UK's lost decade for nature as the UN reveals ten years of missed targets', press release, RSPB. <https://www.rspb.org.uk/about-the-rspb/about-us/media-centre/press-releases/review-our-world/>
- Bright S, Weatherall D and Willis R (2019) 'Exploring the Complexities of Energy Retrofit in Mixed Tenure Social Housing: A case study from England, UK', *Energy Efficiency*, 12: 157–174. <https://link.springer.com/article/10.1007/s12053-018-9676-y#citeas>
- Bristol Citizens' Assembly (2021) *How do we recover from COVID-19 and create a better future for all in Bristol?*, interim report. https://bristol.citizenspace.com/user_uploads/bristol-ca---interim-report.pdf

- British Retail Consortium [BRC] (2020) *Net zero roadmap for the retail industry*, BRC. <https://brc.org.uk/climate-roadmap/>
- British Retail Consortium [BRC] (2021) 'Discover BRC', webpage. <https://brc.org.uk/about/>
- Bromley J, McCarthy B and Shellswell C (2019) *Managing grassland road verges*, Plantlife. https://www.plantlife.org.uk/application/files/3315/7063/5411/Managing_grassland_road_verges_Singles.pdf
- Brown G (2021) 'Despite the grand words, this G7 falls devastatingly short on vaccines', *Guardian*. <https://www.theguardian.com/commentisfree/2021/jun/14/grand-words-g7-vaccines-summit-failure-gordon-brown>
- Brug J (2008) 'Determinants of healthy eating: motivation, abilities and environmental opportunities', *National Library of Medicine*, 25(1): 50–5. <https://pubmed.ncbi.nlm.nih.gov/18826991/>
- Budnitz H, Tranos E, Chapman L (2020) 'Telecommuting and other trips: an English case study', *Journal of Transport Geography*, Volume 85, 102713. <https://www.sciencedirect.com/science/article/abs/pii/S0966692319305472?via%3Dihub>
- Burke J, Byrnes R, Fankhauser S (2019) *How to price carbon to reach net zero emissions in the UK*, LSE. https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2019/05/GRI_POLICY-REPORT_How-to-price-carbon-to-reach-net-zero-emissions-in-the-UK.pdf
- Burke J, Fankhauser S, Kazaglis A, Kessler L, Khandelwal N, Bolk J, O'Boyle P, Owen A (2020) *Distributional impacts of a carbon tax in the UK: Report 2: Analysis by income decile*, LSE. https://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2020/03/Distributional-impacts-of-a-UK-carbon-tax_Report-2_analysis-by-income-decile.pdf
- Burke J, Sato M, Taylor C, Fangmin L (2021) *What does an EU Carbon Border Adjustment Mechanism mean for the UK?*, LSE. https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2021/04/What-does-an-EU-Carbon-Border-Adjustment-Mechanism-mean-for-the-UK_FULL-REPORT.pdf
- Butterly D (2019) 'Supporting the next generation of farmers: developing an agroecology training network', blog post, The A Team Foundation. <https://www.ateamfoundation.org/blog-1/2019/5/30/supporting-the-next-generation-of-farmers-developing-an-agroecology-training-network>
- Buyacar (2021) 'Britain's cheapest new cars 2021', article. <https://www.buyacar.co.uk/cars/cheap-cars/502/britains-cheapest-new-cars>
- Cabinet Office (2021a) 'Firms must commit to net zero to win major government contracts', news story. <https://www.gov.uk/government/news/firms-must-commit-to-net-zero-to-win-major-government-contracts>
- Cabinet Office (2021b) *Global Britain in a Competitive Age: the Integrated Review of Security, Defence, Development and Foreign Policy*. <https://www.gov.uk/government/publications/global-britain-in-a-competitive-age-the-integrated-review-of-security-defence-development-and-foreign-policy>
- Cambridge Econometrics (2017) *Future of UK employment in the offshore wind industry*, Aura. <https://aura-innovation.co.uk/wp-content/uploads/2020/04/Cambridge-Econometrics-Future-UK-Employment-in-Offshore-Wind-June-2017.pdf>
- Campaign to Protect Rural England [CPRE] (2018) *Next steps for LEPs: How greater transparency and accountability would help Local Enterprise Partnerships to support a thriving countryside*, CPRE. https://www.cpre.org.uk/wp-content/uploads/2019/11/LEPs_report_final.pdf
- Carbon Brief (2016) 'Countdown to 2025: Tracking the UK coal phase out', webpage. <https://www.carbonbrief.org/countdown-to-2025-tracking-the-uk-coal-phase-out>
- Carbon Brief (2019) 'Animation: The countries with the largest cumulative CO2 emissions since 1750', 23 April 2019, tweet. <https://twitter.com/carbonbrief/status/1120715988532629506>
- Carbuyer (2020) 'Cheapest electric cars', webpage. <https://www.carbuyer.co.uk/reviews/recommended/cheapest-electric-cars>
- Chamberlain D (2020) 'We'll fix Lee Green low traffic neighbourhood, Lewisham mayor says', 853. <https://853.london/2020/09/19/well-fix-lee-green-low-traffic-neighbourhood-lewisham-mayor-says/>

- Chambers R (2020) 'Government must legislate now to tackle the hidden footprint of supply chains', blog post, Green Alliance. <https://greenallianceblog.org.uk/2020/05/05/government-should-legislate-now-to-make-supply-chain-risks-clearer/>
- Chambers S (2020) *Transport for new homes*. <https://www.local.gov.uk/sites/default/files/documents/Steve%20Chambers%20WEB.pdf>
- Chapman A, Essex J, Sims P (2018) *Unlocking the jobs potential of zero carbon*, Green House. https://gef.eu/wp-content/uploads/2018/12/GEF_ClimateJobs-brochure-main-1.pdf
- Chapman A and Phagoora J (2021) *Escaping green deprivation*, New Economics Foundation. <https://neweconomics.org/2021/01/escaping-green-deprivation>
- Chatterjee K, Clark B, Nguyen A, Wishart R, Gallop K, Smith N and Tipping S (2019) *Access to transport and life opportunities*, DfT, NatCen, University of the West of England. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/831766/access_to_transport_report.pdf
- Chawla L (2020) *Childhood nature connection and constructive hope: A review of research on connecting with nature and coping with environmental loss*, *People and Nature*, 2(3): 619–642. <https://besjournals.onlinelibrary.wiley.com/doi/10.1002/pan3.10128>
- Civil Engineering Contractors Association [CECA] (2013) *Securing our economy: the case for infrastructure*, CECA. <https://www.ceca.co.uk/wp-content/uploads/2018/05/Securing-our-economy-The-Case-For-Infrastructure.pdf>
- Climate Assembly UK (2020) *The path to net zero*. <https://www.climateassembly.uk/report/>
- Climate Change Committee [CCC] (2017) *Energy prices and bills – impacts of meeting carbon budget*, CCC. <https://www.theccc.org.uk/wp-content/uploads/2017/03/Energy-Prices-and-Bills-Committee-on-Climate-Change-March-2017.pdf>
- Climate Change Committee [CCC] (2019a) *Net Zero: The UK's contribution to stopping global warming*, CCC. [file:///C:/Users/joshu/Downloads/Net zero-The-UKs-contribution-to-stopping-global-warming%20\(9\).pdf](file:///C:/Users/joshu/Downloads/Net%20zero-The-UKs-contribution-to-stopping-global-warming%20(9).pdf)
- Climate Change Committee [CCC] (2019b) *Net Zero – Technical Report*. <https://www.theccc.org.uk/publication/net-zero-technical-report/>
- Climate Change Committee [CCC] (2020a) *The Sixth Carbon Budget: The UK's path to Net Zero*, CCC. <https://www.theccc.org.uk/wp-content/uploads/2020/12/The-Sixth-Carbon-Budget-The-UKs-path-to-Net-zero.pdf>
- Climate Change Committee [CCC] (2020b) *Policies for the Sixth Carbon Budget and Net Zero*, CCC. <https://www.theccc.org.uk/wp-content/uploads/2020/12/Policies-for-the-Sixth-Carbon-Budget-and-Net-zero.pdf>
- Climate Change Committee [CCC] (2020c) *CCC Insights Briefing 2*, CCC. <https://www.theccc.org.uk/wp-content/uploads/2020/10/CCC-Insights-Briefing-2-The-Climate-Change-Committee.pdf>
- The Climate Coalition and Bond (2020) *The Glasgow Action Plan COP: 26 Asks to UK Government*. <https://static1.squarespace.com/static/58b40fe1be65940cc4889d33/t/5e5fb6d2fb61a745961d95e4/1583331080712/TCC+and+Bonds+Glasgow+Action+Plan+04%2F03%2F20>
- Climate Emergency Centre (2021) 'About us', webpage. <https://climateemergencycentre.co.uk/about/>
- Climate Group (2021) 'EV100 members', webpage. <https://www.theclimategroup.org/ev100-members>
- Coats D (2020) *A just transition? Managing the challenges of technology, trade, climate change and COVID-19*, Alex Ferry Foundation. <https://www.ferryfoundation.org.uk/Handlers/Download.ashx?IDMF=d3595d49-cb31-40c3-8a28-d6e7a4846866>
- Coe S and Finlay J (2020) *The Agriculture Act 2020*, House of Commons Library. <https://commonslibrary.parliament.uk/research-briefings/cbp-8702/>
- Coleman P, Nyman M, Murphy L, Oyebode O (2021) *Building a food system that works for everyone*, IPPR. <https://www.ippr.org/research/publications/building-a-food-system-that-works-for-everyone>
- Collier Beth (2020) 'The race factor in access to green space', blog post, Runnymede Trust. <https://www.runnymedetrust.org/blog/the-race-factor-in-access-to-green-space>

- Collinet J (2020) 'Due diligence: has France really laid the foundations to end corporate impunity?', *Equal Times*. <https://www.equaltimes.org/due-diligence-has-france-really?lang=en#YIAaSy9Q1QL>
- Commonwealth of Massachusetts (2021) 'An act creating a next-generation roadmap for Massachusetts climate policy', Mass. Acts Ch 8 and 9. <https://malegislature.gov/Laws/SessionLaws/Acts/2021/Chapter8>
- Community Empowerment (Scotland) Act 2015 (2015). <https://www.legislation.gov.uk/asp/2015/6/contents/enacted>
- Community Transport Association [CTA] (2018) 'What is community transport?'. <https://ctauk.org/about-cta/what-is-community-transport/>
- CoMoUK (2019) UK Mobility Hubs Guidance 2019/20 <https://como.org.uk/wp-content/uploads/2019/10/Mobility-Hub-Guide-241019-final.pdf>
- Confor (2019) *Forestry skills plan: 2019–2024*, Confor. <https://www.confor.org.uk/media/247374/forestry-skills-plan-2019-2024.pdf>
- Construction Industry Training Board [CITB] (2021) *Building Skills for Net Zero*, CITB. https://www.citb.co.uk/documents/research/building_skills_net_zero_uk_summary.pdf
- Crisp R, Ferrari E, Gore T, Green S, McCarthy L, Rae A, Reeve K and Stevens M (2018) *Tackling transport-related barriers to employment in low-income neighbourhoods*, JRF. <https://www.jrf.org.uk/report/tackling-transport-related-barriers-employment-low-income-neighbourhoods>
- Cunningham H (2019) *Anchor Towns*, Bevan Foundation. <https://www.bevanfoundation.org/wp-content/uploads/2019/11/Anchor-Towns-Final.pdf>
- Curtice J, Hudson N and Montagu I (2020) *British Social Attitudes: The 37th Report*, The National Centre for Social Research. https://www.bsa.natcen.ac.uk/media/39374/bsa37_political_consequences_brexit.pdf
- Dasgupta P (2021) *The Economics of Biodiversity: The Dasgupta Review*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/962785/The_Economics_of_Biodiversity_The_Dasgupta_Review_Full_Report.pdf
- Deben (2021) 'Letter: Deep Coal Mining in the UK', Climate Change Committee. <https://www.theccc.org.uk/publication/letter-deep-coal-mining-in-the-uk/>
- de Leeuw P, Kim S (2021) *UK offshore energy workforce transferability review*, Robert Gordon University. <http://www.rgu.ac.uk/wp-content/uploads/2021/05/workforce-transferability-report.pdf>
- Department for Business, Energy and Industrial Strategy [BEIS] (2019a) *Contracts for Difference Allocation Round 3 Results*, BEIS. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/915678/cfd-ar3-results-corrected-111019.pdf
- Department for Business, Energy & Industrial Strategy [BEIS] (2019b) 'Annual Fuel Poverty Statistics in England, 2019 (2017 data)', dataset. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/829006/Annual_Fuel_Poverty_Statistics_Report_2019_2017_data_.pdf
- Department for Business, Energy & Industrial Strategy [BEIS] (2019c) 'BEIS Public Attitudes Tracker', dataset. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/776657/BEIS_Public_Attitudes_Tracker_-_Wave_28_-_key_findings.pdf
- Department for Business, Energy & Industrial Strategy [BEIS] (2020a) 'Emissions of carbon dioxide for Local Authority areas', dataset. <https://data.gov.uk/dataset/723c243d-2f1a-4d27-8b61-cdb93e5b10ff/emissions-of-carbon-dioxide-for-local-authority-areas>
- Department for Business, Energy & Industrial Strategy [BEIS] (2020b) 'Future Support for Low Carbon Heat', dataset. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/970565/green-gas-levy-future-support-low-carbon-heat-govt-response.pdf
- Department for Business, Energy and Industrial Strategy [BEIS] (2020c) *Annual report and accounts 2019-20*, BEIS. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/922625/CCS0320287242-001_BEIS_Annual_Report-V11.pdf

- Department for Business, Energy and Industrial Strategy [BEIS] (2021) *North Sea Transition Deal*, BEIS, OGUK. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/972520/north-sea-transition-deal_A_FINAL.pdf
- Department for Business, Energy and Industrial Strategy [BEIS] and Department for Environment, Food & Rural Affairs [DEFRA] (2021) *G7 Climate and Environment: Ministers' Communiqué, London, 21 May 2021*. <https://www.gov.uk/government/publications/g7-climate-and-environment-ministers-meeting-may-2021-communicue/g7-climate-and-environment-ministers-communicue-london-21-may-2021>
- Department for Digital, Culture, Media and Sport [DCMS] (2020) *Influencing local decisions*. <https://www.ethnicity-facts-figures.service.gov.uk/culture-and-community/civic-participation/influencing-local-decisions/latest>
- Department of Defense [DoD] (2014) *Quadrennial Defense Review*, US Government. https://archive.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf
- Department for Education [DfE] (2020) 'National Skills Fund', webpage. <https://www.gov.uk/guidance/national-skills-fund>
- Department for Environment, Food & Rural Affairs [DEFRA] and Gove M (2017) 'The Unfrozen Moment - Delivering A Green Brexit', speech. <https://www.gov.uk/government/speeches/the-unfrozen-moment-delivering-a-green-brexite>
- Department for Environment, Food & Rural Affairs [DEFRA] (2018a) *Farming Statistics: Provisional crop areas, yields and livestock populations at June 2018 – United Kingdom*, DEFRA and National Statistics. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/747210/structure-jun2018prov-UK-11oct18.pdf
- Department for Environment, Food & Rural Affairs [DEFRA] (2018b) *25 Year Environment Plan*, policy paper. <https://www.gov.uk/government/publications/25-year-environment-plan>
- Department for Environment, Food & Rural Affairs [DEFRA] (2019) *Landscapes Review*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/833726/landscapes-review-final-report.pdf
- Department for Environment, Food & Rural Affairs [DEFRA] (2020) 'Food statistics in your pocket: Global and UK supply', dataset. <https://www.gov.uk/government/statistics/food-statistics-pocketbook/food-statisticsin-your-pocket-global-and-uk-supply>
- Department for Environment, Food & Rural Affairs [DEFRA] (2021) 'Environment Secretary to set out plans to restore nature and build back greener from the pandemic', press release. <https://www.gov.uk/government/news/environment-secretary-to-set-out-plans-to-restore-nature-and-build-back-greener-from-the-pandemic>
- Department for Transport [DfT] (2014) 'Disability and travel: 2007-2014', dataset. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/533345/disability-and-travel-factsheet.pdf
- Department for Transport [DfT] (2018) 'Road traffic forecasts 2018'. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/873929/road-traffic-forecasts-2018-document.pdf
- Department for Transport [DfT] (2020a) 'Annual bus statistics: year ending March 2020', dataset. <https://www.gov.uk/government/statistics/annual-bus-statistics-year-ending-march-2020>
- Department for Transport [DfT] (2020b) VEH0202: 'Licensed cars by keepership (private and company): Great Britain and United Kingdom', dataset. <https://www.gov.uk/government/statistical-data-sets/veh02-licensed-cars>
- Department for Transport [DfT] (2020c) 'Ethnicity facts and figures: Car or van ownership', webpage. <https://www.ethnicity-facts-figures.service.gov.uk/culture-and-community/transport/car-or-van-ownership/latest>
- Department for Transport [DfT] (2020d) 'Annual bus statistics: England 2019/20', dataset. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/929992/annual-bus-statistics-year-ending-march-2020.pdf
- Department for Transport [DfT] (2020e) 'Table NTS0705: travel by household income quintile and main mode / stage mode: England, from 2002', dataset. <https://www.gov.uk/government/statistical-data-sets/nts07-car-ownership-and-access>

- Department for Transport [DfT] (2021) *Bus back better: national bus strategy for England*, DfT. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/980227/DfT-Bus-Back-Better-national-bus-strategy-for-England.pdf
- Douglas E (2021) 'Forgive us our trespasses', article, BMC. <https://www.thebmc.co.uk/forgive-us-our-trespasses>
- Dromey J and McNeil C (2017) *Skills 2030: Why the adult skills system is failing to build an economy that works for everyone*, IPPR. <http://www.ippr.org/publications/skills-2030-why-the-adult-skills-system-is-failing>
- Durusut E, Baltac S, Assem D (2020) *Towards net zero: The implications of the transition to net zero emissions for the Engineering Construction Industry*, Element Energy, ECITB. <https://www.ecitb.org.uk/wp-content/uploads/2020/03/Net-zero-Report-Web.pdf>
- Duwe M, Evans N, Kreibich S, Oldenburg C, Hope E and Lopez D (2020) *Climate laws in Europe: good practices in net zero management*, Ecologic Institute and European Climate Foundation. <https://europeanclimate.org/wp-content/uploads/2020/02/04-02-2020-climate-laws-in-europe-full-report.pdf>
- E3G (2021) 'UK Budget 2021: Chancellor underpowers green industrial revolution', news article. <https://www.e3g.org/news/uk-budget-2021-chancellor-underpowers-green-industrial-revolution/>
- Eckstein D, Künzel V and Schäfer L (2021) *Global Climate Risk Index 2021*, Germanwatch. https://reliefweb.int/sites/reliefweb.int/files/resources/Global%20Climate%20Risk%20Index%202021_1_0.pdf
- Ecuity (2020) *Building the installer base for net zero heating*, Heat Pumps Association. https://www.heatpumps.org.uk/wp-content/uploads/2020/06/Building-the-Installer-Base-for-Net-zero-Heating_02.06.pdf
- Education & Skills Funding Agency [ESFA] (2021) *Apprenticeship funding rules and guidance for employers*, EFSA. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/975792/2021_Employer_Rules_Version_5v1.0_FINAL__002_.pdf
- Ekogen (2010) *Employment in sustainable transport*, Ekogen. https://bettertransport.org.uk/sites/default/files/research-files/employment_in_sustainable_transport.pdf
- Ellson A and Greenwood G (2021) 'Low traffic zones 'force cars into streets where poorer people live'', *The Times*. <https://www.thetimes.co.uk/article/low-traffic-zones-force-cars-into-streets-where-poorer-people-live-6svsbck3k>
- Emden J, Murphy L and Lloyd H (2018) *Beyond ECO: the future of fuel poverty support*, IPPR. <https://www.ippr.org/publications/beyond-eco>
- Emden J and Murphy L (2019) *A just transition: Realising the opportunities of decarbonisation in the north of England*, IPPR. <http://www.ippr.org/research/publications/a-just-transition>
- Emden J, Murphy L and Gunson R (2020) *Net zero North Sea: A managed transition for oil and gas in Scotland and the UK after Covid-19*, IPPR. <http://www.ippr.org/research/publications/net-zero-north-sea>
- Emery T, Thrift J (2021) *20-minute neighbourhoods: creating healthier, active, prosperous communities: an introduction for council planners in England*, TCPA. https://www.westberks.gov.uk/media/50612/CD18-18-Town-Country-Planning-Association-2021-20-Minute-Neighbourhoods-/pdf/CD18.18_Town__Country_Planning_Association_
- Engineering Construction Industry Training Board [ECITB] (2020) *Transfer of skilled workforce key to recovery of UK engineering*. <https://www.ecitb.org.uk/blog/2020/09/01/transfer-of-skilled-workforce-key-to-recovery-of-uk-engineering/>
- Energy & Climate Intelligence Unit [ECIU] (2021) 'Energy efficiency and decarbonising heat'. <https://eciu.net/analysis/briefings/low-carbon-heat/energy-efficiencys-role-in-heat-decarbonisation>
- Energy & Utility Skills Partnership [EUSP] (2020) *Workforce Renewal & Skills Strategy 2020-2025*, EUSP. <https://www.euskills.co.uk/download/workforce-renewal-skills-strategy-2020-2025/>

- Energy Saving Trust (2021) 'Low carbon travel; grants and loans', webpage. <https://energysavingtrust.org.uk/travel/financial-support/grants-and-loans/>
- Essex Wildlife Trust (2021) 'Our position on the Lower Thames Crossing', webpage access 19/04/21 <https://www.essexwt.org.uk/protecting-wildlife/policies-position-statements/lower-thames-crossing>
- European Commission [EC] (2011) *Green infrastructure and the transport sector*. https://ec.europa.eu/environment/nature/ecosystems/pdf/Green%20Infrastructure/GI_transport.pdf
- European Commission [EC] (2014) *Focus on automotive sector and clean vehicles*. https://skillspanorama.cedefop.europa.eu/sites/default/files/EUSP_AH_Automotive_0.pdf
- European Commission [EC] (2020) Bus service overhaul in Dunkirk includes free travel, webpage. https://ec.europa.eu/regional_policy/en/projects/France/bus-service-overhaul-in-dunkirk-includes-free-travel
- The European Consumer Organisation [BEUC] (2020) *One bite a time: consumers and the transition to sustainable food: analysis of a survey of European consumers on attitudes towards sustainable food*, BEUC. https://www.beuc.eu/publications/beuc-x-2020-042_consumers_and_the_transition_to_sustainable_food.pdf
- Eurostat (2021) 'Electricity price statistics', dataset. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Electricity_price_statistics#Electricity_prices_for_non-household_consumers
- Evans S (2019) 'Analysis: Record-low price for UK offshore wind cheaper than existing gas plants by 2023', analysis, Carbon Brief. <https://www.carbonbrief.org/analysis-record-low-uk-offshore-wind-cheaper-than-existing-gas-plants-by-2023>
- Evans L (2020) *Local Authorities and the Sixth Carbon Budget*, Climate Change Committee. <https://www.theccc.org.uk/wp-content/uploads/2020/12/Local-Authorities-and-the-Sixth-Carbon-Budget.pdf>
- Fecht D, Fischer P, Fortunato L, Hoek G, de Hoogh K, Marra M, Kruize H, Vienneau, D, Beelen R and Hansell A (2015) 'Associations between air pollution and socioeconomic characteristics, ethnicity and age profile of neighbourhoods in England and the Netherlands', *Environmental Pollution*, 198: 201-210. <https://www.sciencedirect.com/science/article/pii/S0269749114005144>
- Federation of Master Builders (2020) *A proposal for building back better and greener*, FMB. <https://www.fmb.org.uk/static/351216af-a4bd-476a-afea9fa46f396372/FMB-RICS-Cut-the-VAT-Mar1.pdf>
- Fenn T, Salado R, Padda G, Daly E, Clarke C, Miller J, Cary E, Anastasi G, Lochner L, Chandler W, Shapland I, Johnson M (2020) *The value of restored UK seas, final report for WWF*. <https://www.wwf.org.uk/sites/default/files/2021-01/WWF2009-01%20Value%20of%20restored%20UK%20seas%20report%20v6%20%28002%29.pdf>
- FleetNews (2020) 'Siemens UK reduces travel costs by 28% with employee car club', news article. <https://www.fleetnews.co.uk/news/latest-fleet-news/2020/01/09/siemens-uk-reduces-travel-costs-by-28-with-employee-car-club#:~:text=Siemens%20UK%20reduces%20travel%20costs%20by%2028%25%20with%20employee%20car%20club,-09%2F01%2F2020&text=Siemens%20has%20reduced%20its%20travel,business%20travel%20by%20a%20third.&text=The%20business%20has%20already%20seen,using%20the%20car%20club%20vehicles>
- Food Foundation (2020) 'New food foundation data: food insecurity and debt are the new reality under lockdown', data release. <https://foodfoundation.org.uk/new-food-foundation-data-food-insecurity-and-debt-are-the-new-reality-under-lockdown/>
- Foreign and Commonwealth Office [FCO] (2019) *#FCO2 – FCO sustainability: FCO sustainability report 2018/19*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/820793/FCO_Sustainability_Report201819.pdf
- Foreign, Commonwealth & Development Office [FCDO] (2019) *Leaving no one behind: Our promise*. <https://www.gov.uk/government/publications/leaving-no-one-behind-our-promise/leaving-no-one-behind-our-promise>

- Foreign, Commonwealth & Development Office [FCDO] (2021) 'Statistics on International Development: Final UK Aid Spend 2019', dataset. <https://www.gov.uk/government/statistics/statistics-on-international-development-final-uk-aid-spend-2019/statistics-on-international-development-final-uk-aid-spend-2019>
- Francis A and Clay J (2021) *WWF briefing on the UK's role in building environmental standards for trade and agriculture*, WWF. https://www.wwf.org.uk/sites/default/files/2021-03/WWF%20Parliamentary%20Briefing_twin%20track%20approach.pdf
- Francis S and Pearce K (2020) *Reimagining movement and the transport appraisal process through a Gender lens: a case study in the United Kingdom utilising a lifecycle approach*, Jacobs UK. [https://tps.org.uk/public/downloads/JFlFn/Reimagining movement and the transport appraisal through a gender lens_Francis_Pearce.pdf](https://tps.org.uk/public/downloads/JFlFn/Reimagining_movement_and_the_transport_appraisal_through_a_gender_lens_Francis_Pearce.pdf)
- Fraser D (2019) 'BiFab misses out on wind farm order, contractor confirms', BBC News. <https://www.bbc.co.uk/news/uk-scotland-scotland-business-47561886>
- Future of Rural Energy England (FREE) (2013) Working with Off-Gas Rural Fuel Poor Households, Calor, National Energy Action, Action with Communities in Rural England and Future of Rural Energy England. <http://www.nea.org.uk/wp-content/uploads/2015/08/Calor-Policy-Report-Year-3-Wales-final.pdf>
- Friends of the Earth [FoE] (2010) *More jobs, less waste – potential for job creation through higher rates of recycling in the UK and EU*, FoE. https://www.foeurope.org/sites/default/files/publications/foee_more_jobs_less_waste_0910.pdf
- Future Generations Commissioner for Wales (2019) 'Future Generations Commissioner for Wales welcomes "brave decision by First Minister on the M4 Relief Road"', news article. <https://www.futuregenerations.wales/news/future-generations-commissioner-for-wales-welcomes-brave-decision-by-first-minister-on-the-m4-relief-road/>
- Future Generations Commissioner for Wales (2021) *Well-being of Future Generations (Wales) Act 2015*. <https://www.futuregenerations.wales/about-us/future-generations-act/>
- Future Policy (2021) 'Japan's Top Runner Programme', webpage. <https://www.futurepolicy.org/climate-stability/japans-top-runner-programme/>
- Gallagher, K (2020) 'Spending review sees guaranteed cycling and walking budget slashed by 15%', blog post, Cycling UK. <https://www.cyclinguk.org/blog/spending-review-sees-guaranteed-cycling-and-walking-budget-slashed-15>
- Garman J (2021) 'The end of Britain's "invisible transition", blog post. <https://jossgarman.substack.com/p/the-end-of-britains-invisible-transition>
- Gibb K, Lawson L, Williams J, McLaughlin M (2020) *The impact of social housing: economic, social, health and wellbeing*, Housing Associations' Charitable Trust (HACT). <https://www.hact.org.uk/sites/default/files/uploads/The%20Impact%20of%20Social%20Housing%20Report.pdf>
- Gill R (2018) *Public Transport and Gender Briefing from the UK Women's Budget Group on public transport and gender*, Women's Budget Group <https://wbg.org.uk/wp-content/uploads/2018/10/Transport-October-2018-w-cover.pdf>
- Global Commission on Adaptation [GCA] (2019) *Adapt now: a global call for leadership on climate resilience*, Global Center on Adaptation. <https://gca.org/reports/adapt-now-a-global-call-for-leadership-on-climate-resilience/>
- Global Commission on Adaptation [GCA] (2020) *State and Trends in Adaptation Report 2020*, Global Center on Adaptation. <https://gca.org/reports/state-and-trends-in-adaptation-report-2020/>
- Global Witness (2020) 'YouGov poll finds majority of British public want the UK to lead world on tackling climate change', press release. <https://www.globalwitness.org/en/press-releases/yougov-poll-finds-majority-british-public-want-uk-lead-world-tackling-climate-change/>
- Gómez-Baggethun E, Gren Å, Barton D, Langemeyer J, McPhearson T, O'Farrell P, Andersson E, Hamstead Z and Kremer P (2013) 'Urban ecosystem services', in Elmquist T et al (eds) *Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities*. https://doi.org/10.1007/978-94-007-7088-1_11
- Good Things Foundation (2020) 'The digital divide', webpage. <https://www.goodthingsfoundation.org/the-digital-divide/>

- Grantham Research Institute on Climate Change and the Environment [GRI] (2021) 'What is climate change "Loss and Damage"?', webpage. <https://www.lse.ac.uk/granthaminstitute/explainers/what-is-climate-change-loss-and-damage/>
- Green Alliance (2021a) *The green light for change: What people think about environmental tax reforms*, Green Alliance. https://green-alliance.org.uk/resources/green_light_for_change.pdf
- Green Alliance (2021b) 'How to get from a cottage industry to a million heat pumps a year', blog post. <https://greenallianceblog.org.uk/2021/04/21/how-to-get-from-a-cottage-industry-to-a-million-heat-pumps-a-year/>
- Green Climate Fund [GCF] (2019) 'United Kingdom pledges to double contribution to Green Climate Fund', news article. <https://www.greenclimate.fund/news/united-kingdom-pledges-to-double-contribution-to-green-climate-fund>
- Green Finance Institute [GFI] (2020) *Financing energy efficiency buildings: the path to retrofit at scale*, GFI. <https://www.greenfinanceinstitute.co.uk/wp-content/uploads/2020/06/Financing-energy-efficient-buildings-the-path-to-retrofit-at-scale.pdf>
- Green Finance Taskforce [GFT] (2018) *Accelerating Green Finance*, GFT. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/703816/green-finance-taskforce-accelerating-green-finance-report.pdf
- Green Innovation Policy Commission [GIPC] (2019) *Innovation for a Green Recovery: Business and Government in Partnership: A Business Perspective on Public Policy and Governance of Green Innovation*, UCL. https://www.ucl.ac.uk/bartlett/sustainable/sites/bartlett/files/the_commissions_final_report.pdf
- Greenpeace (2019) *Government investment for a greener and fairer economy*, Greenpeace. <https://www.greenpeace.org.uk/wp-content/uploads/2019/08/Government-Investment-for-a-greener-and-fairer-economy-FINAL-30.08.19.pdf>
- Gunson R and Thomas R (2017) *Equipping Scotland for the future: Key challenges for the Scottish skills system*, IPPR. <http://www.ippr.org/publications/equipping-scotland-for-the-future>
- Hart J and Parkhurst G (2011) *Driven To Excess: Impacts of Motor Vehicles on the Quality of Life of Residents of Three Streets in Bristol UK*. <https://core.ac.uk/download/pdf/323897729.pdf>
- Harvey F (2019) 'Thousands of Britons invited to climate crisis citizens' assembly', *Guardian*. <https://www.theguardian.com/environment/2019/nov/02/thousands-britons-invited-take-part-climate-crisis-citizens-assembly>
- Harvey F, Helm T and Kirk A (2021) 'Share vaccines or climate deal will fail, rich countries are told', *Guardian*. <https://www.theguardian.com/society/2021/jun/05/share-vaccines-or-climate-deal-will-fail-rich-countries-are-told>
- Hasnain S, Ingram J and Zurek M (2020) *Mapping the UK Food System – a report for the UKRI Transforming UK Food Systems Programme*. <https://www.eci.ox.ac.uk/research/food/downloads/Mapping-the-UK-food-system-digital.pdf>
- Hattle A and Nordbo J (2021) *Hollow commitments: an analysis of developed countries' climate finance plans*, CARE. <https://care.dk/media/1966/hollow-commitments-care.pdf>
- Haubold H (2020) 'The European e-bike market is booming, latest industry figures show – and there is potential for more', news article, ECF. <https://ecf.com/news-and-events/news/european-e-bike-market-booming-latest-industry-figures-show-%E2%80%93-93-and-there>
- Hayhow D et al (2016) *State of Nature 2016*, The State of Nature Partnership. <https://www.rspb.org.uk/globalassets/downloads/documents/conservation-projects/state-of-nature/state-of-nature-uk-report-2016.pdf>
- Hayhow D et al (2019) *The state of nature 2019*, The State of Nature Partnership. <https://nbn.org.uk/wp-content/uploads/2019/09/State-of-Nature-2019-UK-full-report.pdf>
- Heat Pumps Association [HPA] (2019) *Delivering Net Zero: A roadmap for the role of heat pumps*. <https://www.heatpumps.org.uk/wp-content/uploads/2019/11/A-Roadmap-for-the-Role-of-Heat-Pumps.pdf>

- Higgins J, Honeyman R, Crichton S (2020) *Local green jobs – accelerating a sustainable economic recovery*, Ecuity. https://www.ecuity.com/wp-content/uploads/2020/06/Local-green-jobs-accelerating-a-sustainable-economic-recovery_final.pdf
- Highways England (2020) *Lower Thames Crossing: Environmental Impacts Update*, Highways England. https://highwaysengland.citizenspace.com/ltc/consultation-2020/supporting_documents/BED20%200013%20LTC%20Environmental%20impacts%20update%20%20digital1.pdf
- Hinchliff C and Taylor I (2021) *Every village, every hour: a comprehensive bus network for rural England*, Report for CPRE based on research and modelling by Transport for Quality of Life https://www.cpre.org.uk/wp-content/uploads/2021/03/CPRE_Every-village-every-hour_report.pdf
- Hira A (2020) 'The hollow core: breakdowns in global governance of CSR', *Global Affairs*, 6(4–5): 461–479. [10.1080/23340460.2020.1789430](https://doi.org/10.1080/23340460.2020.1789430)
- Hirsch D (2019) *A Minimum Income Standard for the United Kingdom in 2019*, JRF. <https://www.jrf.org.uk/report/minimum-income-standard-uk-2019>
- HM Government (2019a) *Industrial strategy: offshore wind sector deal*, BEIS. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/790950/BEIS_Offshore_Wind_Single_Pages_web_optimised.pdf
- HM Government (2019b) 'UK becomes first major economy to pass net zero emissions law', press statement, 27 June 2019. <https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law>
- HM Government (2021) *Global Britain in a competitive age: the integrated review of security, defence, development and foreign policy*, HM Government. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/975077/Global_Britain_in_a_Competitive_Age_the_Integrated_Review_of_Security_Defence_Development_and_Foreign_Policy.pdf
- HM Treasury [HMT] (2016) *Budget 2016*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/508193/HMT_Budget_2016_Web_Accessible.pdf
- Hochlaf D, Quilter-Pinner H and Kibasi T (2019) *Ending the blame game: the case for a new approach to public health and prevention*, IPPR. <https://www.ippr.org/research/publications/ending-the-blame-game>
- Hochlaf D and Quilter-Pinner H (2020) *Going further: The case for investing in Further Education and adult skills*, IPPR. <https://www.ippr.org/research/publications/going-further>
- Hochlaf D and Thomas C (2020) *The whole society approach: making a giant leap on childhood health*, IPPR. <https://www.ippr.org/files/2020-08/a-whole-society-approach-aug-2020.pdf>
- Holz C, Kemp-Benedict E, Athanasiou T and Kartha S (2019) 'The Climate Equity Reference Calculator', *Journal of Open Source Software*, 4(35), 1273. doi: [10.21105/joss.01273](https://doi.org/10.21105/joss.01273)
- Hopkinson L and Sloman L (2019a) *More than electric cars*, Friends of the Earth. <https://policy.friendsoftheearth.uk/print/pdf/node/17>
- Hopkinson L and Sloman L (2019b) *Planning for less car use*, Friends of the Earth. https://policy.friendsoftheearth.uk/sites/files/policy/documents/2019-01/Planning_for_less_car_use_final.pdf
- House of Commons Business, Energy, and Industrial Strategy Committee [HoC] (2019), *Industrial Strategy: Sector Deals*, House of Commons. <https://publications.parliament.uk/pa/cm201719/cmselect/cmbeis/663/663.pdf>
- Huq S (2021) 'Dealing with loss and damage in COP26', *Daily Star*. <https://www.thedailystar.net/opinion/politics-climate-change/news/dealing-loss-and-damage-cop26-2041965>
- Hutton G and Shalchi A (2021) *Financial Services: contribution to the UK economy*, House of Commons Library. <https://commonslibrary.parliament.uk/research-briefings/sn06193/>
- International Monetary Fund [IMF] (2019) '5. Report for Selected Countries and Subjects', dataset, World Economic Outlook database. <https://www.imf.org/en/Publications/WEO/weo-database/2020/October>

- Institution of Mechanical Engineers [IMECHE] (2013) *Global food: waste not, want not*, IMECHANICAL ENGINEERS. https://www.imeche.org/docs/default-source/news/Global_Food_Waste_Not_Want_Not.pdf?sfvrsn=7b0bfb7d_0
- International Energy Agency [IEA] (2014) 'Promotion of Renewable Energy Act', webpage. <https://www.iea.org/policies/4887-promotion-of-renewable-energy-act>
- International Energy Agency [IEA] (2021) *Net zero by 2050: a roadmap for the global energy sector*, IEA. <https://iea.blob.core.windows.net/assets/4482cac7-edd6-4c03-b6a2-8e79792d16d9/NetZeroBy2050-ARoadmapfortheGlobalEnergySector.pdf>
- International Labour Organization [ILO] (2021) 'Decent work', webpage. <https://www.ilo.org/global/topics/decent-work/lang--en/index.htm>
- Involve (2021) 'Citizens' assembly tracker', webpage. <https://www.involve.org.uk/citizens-assembly-tracker>
- IPPR (2020) *Faster, further, fairer: Putting people at the heart of tackling the climate and nature emergency*, interim report of the IPPR Environmental Justice Commission. <http://www.ippr.org/publications/faster-further-fairer>
- IPPR (2021a) *Tees Valley and County Durham climate and fairness panel: Briefing and juror recommendations*, IPPR. <https://ippr.org/research/publications/citizens-jury-tees-valley-county-durham>
- IPPR (2021b) *South Wales Valleys Climate and Fairness Panel: Briefing and juror recommendations*, IPPR. <https://ippr.org/research/publications/citizens-jury-south-wales-valleys>
- IPPR (2021c) *Thurrock climate and fairness panel: Briefing and juror recommendations*, IPPR. <https://www.ippr.org/research/publications/citizens-jury-thurrock>
- IPPR (2021d) *Aberdeenshire Climate and Fairness Panel: Briefing and juror recommendations*, IPPR. <http://www.ippr.org/research/publications/citizens-jury-aberdeenshire>
- IPPR Commission on Economic Justice (2018) *Prosperity and justice: A plan for the new economy - The final report of the IPPR Commission on Economic Justice*, IPPR. <https://www.ippr.org/research/publications/prosperity-and-justice>
- Jackson H (2020) *High and dry?: Preventing tomorrow's 'flood ghettos'*, Bright Blue. <http://www.brightblue.org.uk/high-and-dry-preventing-flood-ghettos/>
- Jacobs M, Hatfield I, King L, Raikes L and Stirling A (2017) *Industrial strategy: Steering structural change in the UK economy*, IPPR Commission on Economic Justice. <https://www.ippr.org/publications/industrial-strategy-steering-structural-change-in-the-uk-economy>
- Jeliazkov G, Morrison R and Evans M (2020) *Offshore: oil and gas workers' views on industry conditions and the energy transition*, Platform, Friends of the Earth Scotland and Greenpeace. <https://platformlondon.org/wp-content/uploads/2020/09/Oil-GasWorkers-Report.pdf>
- Johns M, Lockwood R, Longlands S, Qureshi A and Round A (2020) *State of the North 2020/21: Power up, level up, rise up*, IPPR North. <http://www.ippr.org/research/publications/state-of-the-north-2020-21>
- Joint Nature Conservation Committee [JNCC] (2020a) 'C4a. Status of UK priority species – relative abundance', dataset. <https://jncc.gov.uk/our-work/ukbi-c4a-species-abundance/>
- Joint Nature Conservation Committee [JNCC] (2020b) 'UK Biodiversity Indicators 2020. Indicator C4a – Status of UK priority species – Relative abundance 2020', dataset. <https://hub.jncc.gov.uk/assets/1f47d611-dbf4-421a-bc26-b019433306d1>
- Jones L, Turvey S, Massimino D and Papworth S (2020) *Investigating the implications of shifting baseline syndrome on conservation*, *People and Nature*, 2(4): 1131– 1144. <https://besjournals.onlinelibrary.wiley.com/doi/full/10.1002/pan3.10140>
- Jung C and Murphy L (2020) *Transforming the economy after Covid-19: a clean, fair and resilient recovery*, IPPR. <https://www.ippr.org/research/publications/transforming-the-economy-after-covid19>
- Jung C, Dibb G and Patel P (2021) *Boost it like Biden: Why the UK needs an economic stimulus four times the size currently planned*, IPPR. <https://www.ippr.org/research/publications/boost-it-like-biden>

- Katsikouli P, Ferraro P, Timoney D, Shorten R (2019) *On DICE-free Smart Cities, Particulate Matter, and Feedback-Enabled Access Control*. https://www.researchgate.net/publication/333994129_On_DICE-free_Smart_Cities_Part particulate_Matter_and_Feedback-Enabled_Access_Control
- Kaye S (2020) *Think big, act small: Elinor Ostrom's radical vision for community power*, New Local. <https://www.newlocal.org.uk/publications/ostrom/>
- Kearney J (2018) *The economic value of the adult social care sector – UK*, ICF Consulting Ltd. <https://www.skillsforcare.org.uk/Documents/About/sfcd/Economic-value-of-the-adult-social-care-sector-UK.pdf>
- Kreienkamp J and Vanhala L (2017) *Climate change loss and damage*, Global Governance Institute. <https://www.ucl.ac.uk/global-governance/sites/global-governance/files/policy-brief-loss-and-damage.pdf>
- Krznaric R (2020) 'Six ways to think long-term: a cognitive toolkit for good ancestors', *Medium*. <https://medium.com/the-long-now-foundation/six-ways-to-think-long-term-da373b3377a4>
- Kumar C (2019) *Going electric: how everyone can benefit sooner*, Green Alliance. https://green-alliance.org.uk/resources/going_electric_how_everyone_can_benefit_sooner.pdf
- Laffoley D, and Grimsditch G (eds) (2009) 'The management of natural coastal carbon sinks', IUCN. <https://www.iucn.org/lo/content/management-natural-coastal-carbon-sinks-2>
- Lang T (2020) *Feeding Britain: Our food problems and how to fix them*, Penguin UK
- Laville S (2021) 'Government plans to turn England homes green 'in chaos' with debt and job losses', *Guardian*. <https://www.theguardian.com/environment/2021/jan/26/government-plans-to-turn-england-homes-green-in-chaos-with-debt-and-job-losses>
- Laybourn-Langton L and Rankin L (2019) *Our Responsibility: A new model of international cooperation for the era of environmental breakdown*, IPPR. <http://www.ippr.org/research/publications/our-responsibility>
- Laybourn-Langton L, Rankin L and Baxter D (2019) *This is a crisis: Facing up to the age of environmental breakdown*, IPPR. <http://www.ippr.org/research/publications/age-of-environmental-breakdown>
- Laybourn-Langton L, Emden J and Hill T (2020) *We are not ready: Policymaking in the age of environmental breakdown, final report*, IPPR. <http://www.ippr.org/research/publications/we-are-not-ready>
- Le Quéré C et al (2018) 'Global Carbon Budget 2018', *Earth System Science Data*. <https://doi.org/10.5194/essd-10-2141-2018>
- Liao R (2021) 'Local citizens' assemblies in the UK: an early report card, Constitution Unit', webpage. <https://constitution-unit.com/2021/01/08/local-citizens-assemblies-in-the-uk-an-early-report-card/>
- Linton T, O'Reilly D, Humbert D and Burwell C (2021) *School Streets: Timed traffic restrictions, Toolkit for Professions 2021 Edition*, Hackney Council. <https://drive.google.com/file/d/1UVVmMxxgFBlKSgE-h9sZn3s4sP7wKWmC/view>
- Local Government Association [LGA] (2020) *Un sustainable development goals: A guide for councils*. https://30312f94-9adb-4918-80dd-708c590bada3.usfiles.com/ugd/30312f_79b08331d11e44bc888e1ee08c05474e.pdf
- Local Trust (2018) *Strong resourceful communities: The case for a community wealth fund*. https://localtrust.org.uk/wp-content/uploads/2019/03/local_trust_community_wealth_fund.pdf
- Lord T (2021) '£10,000 to increase your energy bill: making the economics of heat pumps stack up', commentary, Tony Blair Institute for Global Change. <https://institute.global/policy/ps10000-increase-your-energy-bill-making-economics-heat-pumps-stack>
- Louw A (2018) *Clean Energy Investment Trends 2017*, Bloomberg New Energy Finance. <https://data.bloomberglp.com/bnef/sites/14/2018/01/BNEF-Clean-Energy-InvestmentInvestment-Trends-2017.pdf>
- Lowe S (2021) *The EU's carbon border adjustment mechanism: How to make it work for developing countries*, Centre for European Reform. https://www.cer.eu/sites/default/files/pbrief_cbam_sl_21.4.21.pdf

- Lucas K, Stokes G, Bastiaanssen J and Burkinshaw J (2019) *Inequalities in mobility and access in the UK transport system*, Government Office for Science. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/784685/future_of_mobility_access.pdf
- MacBride-Stewart S (2020) 'Climate Fairness: Jobs and Industry', presentation to the South Wales Valleys Climate and Fairness Panel, 4 November 2020
- Martin B (2019) 'Green hearts and gilets jaunes', Green Economy Coalition. <https://www.greeneconomycoalition.org/news-and-resources/green-hearts-and-gilets-jaunes>
- Marmot (2015) 'The health gap: the challenge of an unequal world', *The Lancet*, 386(10011): 2442–2444. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(15\)00150-6/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)00150-6/fulltext)
- Marmot M, Allen J, Boyce T, Goldblatt P and Morrison J (2020) *Health Equity in England: The Marmot Review 10 Years On Executive Summary*, Institute of Health Equity. https://www.health.org.uk/sites/default/files/2020-03/Health%20Equity%20in%20England_The%20Marmot%20Review%2010%20Years%20On_executive%20summary_web.pdf
- Marsefield R (2020) 'New research reveals huge public support for putting nature at the heart of Coronavirus recovery plans', RSPB. <https://www.rspb.org.uk/about-the-rspb/about-us/media-centre/press-releases/nature-and-a-green-recovery-from-covid-19/>
- Matthews B, Hibberd D and Speakman K (2015) *The impact of street accessibility on travel and independence for disabled people*, 14th International Conference on Mobility and Transport for Elderly and Disabled Persons, 28–31 Jul 2015, Lisbon, Portugal (unpublished). <https://eprints.whiterose.ac.uk/101881/1/matthews%20hibberd%20and%20speakman%20final.pdf>
- Mayor of London (2020) 'Mayor invests £10m in Green New Deal to secure thousands of green jobs', press release. <https://www.london.gov.uk/press-releases/mayoral/mayor-invests-10m-in-green-new-deal-to-save-jobs>
- McGuigan C, Reynolds R, Wiedmer D (2002) *Poverty and climate change: assessing the impacts in developing countries and initiatives of the international community*, ODI. <https://cdn.odi.org/media/documents/3449.pdf>
- McEwen L and Jones O (2012) 'Building local/lay flood knowledges into community flood resilience planning after the July 2007 floods, Gloucestershire, UK', *Hydrology Research*, 43(5): 675–688. <https://iwaponline.com/hr/article/43/5/675/855/Building-local-lay-flood-knowledges-into-community>
- McEwen L, Holmes A, Quinn A and Cobbing P (2018) 'Learning for resilience': Developing community capital through flood action groups in urban flood risk settings with lower social capital', *International Journal of Disaster Risk Reduction*, 27: 329–342. <https://www.sciencedirect.com/science/article/abs/pii/S2212420917303138>
- McKie R (2020) 'Rampant destruction of forests "will unleash more pandemics"', *Guardian*. <https://www.theguardian.com/environment/2020/aug/30/rampant-destruction-of-forests-will-unleash-more-pandemics>
- McNicoll T (2018) "'End of the world" vs "end of the month": Macron walks tightrope amid fuel tax protests', *France 24*. <https://www.france24.com/en/20181127-france-climate-yellow-vests-macron-fuel-tax-protests-nuclear-melenchon-pen-faure>
- Mehmet S (2020) 'Luxembourg becomes first country to offer free public transport for all', *Intelligent Transport*. <https://www.intelligenttransport.com/transport-news/96473/luxembourg-becomes-first-country-to-offer-free-public-transport/>
- Met Office (2021) 'Effects of climate change', webpage. <https://www.metoffice.gov.uk/weather/climate-change/effects-of-climate-change>
- Miedzinski M, Dibb G, McDowall W, Ekins P (2021) *Innovation for a Green Recovery: Business and Government in Partnership*, UCL, London. https://www.ucl.ac.uk/bartlett/sustainable/sites/bartlett/files/the_commissions_final_report.pdf
- Ministry of Defence [MoD] (2018) *Global Strategic Trends: The future starts today*, Development, Concepts and Doctrine Centre, sixth edition. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/771309/Global_Strategic_Trends_-_The_Future_Starts_Today.pdf

- Ministry of Housing, Communities & Local Government [MHCLG] (2020) 'Energy Performance of Buildings Certificates in England and Wales: 2008 to December 2019', dataset. <https://www.gov.uk/government/statistics/energy-performance-of-buildings-certificates-in-england-and-wales-2008-to-december-2019>
- Ministry of Housing, Communities & Local Government [MHCLG] (2021a) 'Local authority revenue expenditure and financing England: 2019 to 2020 final outturn', dataset. <https://www.gov.uk/government/statistics/local-authority-revenue-expenditure-and-financing-england-2019-to-2020-final-outturn>
- Ministry of Housing, Communities & Local Government [MHCLG] (2021b) 'The Future Buildings Standard', consultation. <https://www.gov.uk/government/consultations/the-future-buildings-standard>
- Moss S (2012) *Natural childhood*, National Trust. <https://nt.global.ssl.fastly.net/documents/read-our-natural-childhood-report.pdf>
- Motherwell S (2018) "Are we nearly there yet?" *Exploring gender and active travel*, Sustrans <https://www.sustrans.org.uk/media/2879/2879.pdf>
- Murphy L (2018) *The Invisible Land: The hidden force driving the UK's unequal economy and broken housing market*, IPPR. <http://www.ippr.org/research/publications/the-invisible-land>
- National Audit Office [NAO] (2018) *Financial Sustainability of Local Authorities 2018*, NAO. <https://www.nao.org.uk/wp-content/uploads/2018/03/Financial-sustainability-of-local-authorities-2018.pdf>
- National Audit Office [NAO] (2020) *Improving local bus services in England outside London*, NAO. <https://www.nao.org.uk/wp-content/uploads/2020/10/Improving-local-bus-services-in-England-outside-London.pdf>
- National Audit Office [NAO] (2021) *UK Research and Innovation's management of the Industrial Strategy Challenge Fund*, NAO. <https://www.nao.org.uk/wp-content/uploads/2021/02/UK-Research-and-Innovations-management-of-the-Industrial-Strategy-Challenge-Fund.pdf>
- National Audit Office [NAO] (2021b) *Environmental tax measures*, NAO. <https://www.nao.org.uk/wp-content/uploads/2021/02/Environmental-Tax-Measures.pdf>
- National Grid (2020) *Building the net zero energy workforce*, National Grid. <https://www.nationalgrid.com/document/126256/download>
- Natural Capital Committee (2020) *Advice on using nature based interventions to reach net zero greenhouse gas emissions by 2050*, Natural Capital Committee. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/879797/ncc-nature-based-interventions.pdf
- Natural England (2021) *People's engagement with nature: reflecting on ten years of the Natural England MENE survey*, Defra. <https://defra.maps.arcgis.com/apps/Cascade/index.html?appid=d5fe6191e3fe400189a3756ab3a4057c>
- Natural History Museum [NHM] (2019) 'Leading scientists set out resource challenge of meeting net zero emissions in the UK by 2050', press release. <https://www.nhm.ac.uk/press-office/press-releases/leading-scientists-set-out-resource-challenge-of-meeting-net-zero.html>
- Nature Friendly Farming Network [NFFN] (2020) Written evidence submitted by The Nature Friendly Farming Network (NFFN) (ELM0021). <https://committees.parliament.uk/writtenevidence/21951/pdf/>
- Network for Greening the Financial System [NGFS] (2020) *NGFS Climate Scenarios for central banks and supervisors*. https://www.ngfs.net/sites/default/files/medias/documents/820184_ngfs_scenarios_final_version_v6.pdf
- Newcastle City Council (2020) *Net Zero Newcastle: 2030 Action Plan*. https://www.newcastle.gov.uk/sites/default/files/Climate%20Change/Net%20Zero/Net%20Zero%20Newcastle%20-%20202030%20Action%20Plan_0.pdf
- Newham Council (2021) 'Citizens' Assemblies', webpage. <https://www.newham.gov.uk/council/citizens-assemblies>
- Nicol S, Roys M and Garrett H (2015) *The Cost of Poor Housing to the NHS*, BRE. <https://www.bre.co.uk/filelibrary/pdf/87741-Cost-of-Poor-Housing-BriefingPaper-v3.pdf>

- Nottingham City Council (2021) 'Workplace Parking Levy', webpage. <http://www.nottinghamcity.gov.uk/wpl>
- Nyman M, Plummer A and Murphy L (2021) *A fair transition for farming*, IPPR. <https://www.ippr.org/research/publications/a-fair-transition-for-farming>
- O'Brien P, Coombes M, Dawley S, Evans L and Pike A (2017) *How to create great jobs: Towards a regional industrial strategy for Tees Valley*, Trades Union Congress, Newcastle University. <https://www.tuc.org.uk/research-analysis/reports/how-create-great-jobs-towards-regional-industrial-strategy-tees-valley>
- O'Neill D, Fanning A, Lamb W and Steinberger J (2018) 'A Good Life for all within Planetary Boundaries', *Nature Sustainability*. <https://www.nature.com/articles/s41893-018-0021-4>
- Office for Budget Responsibility [OBR] (2021) 'Inflation', forecast. <https://obr.uk/forecasts-in-depth/the-economy-forecast/inflation/>
- Office for National Statistics [ONS] (2019) 'Percentage of households with cars by income group, tenure and household composition: Table A47', dataset. <https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/expenditure/datasets/percentageofhouseholdswithcarsbyincomegrouptenureandhouseholdcompositionuktablea47>
- Office for National Statistics [ONS] (2020a) 'Low carbon and renewable energy economy (LCREE) survey direct and indirect estimates of employment, UK, 2014 to 2018', dataset. <https://www.ons.gov.uk/economy/environmentalaccounts/adhocs/11120lowcarbonandrenewableenergyeconomylcreesurveydirectandindirectestimatesofemploymentuk2014to2018>
- Office for National Statistics [ONS] (2020b) 'Earnings and hours worked, UK region by industry by two-digit SIC: ASHE Table 5', dataset. <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/regionbyindustry2digitsicshetable5>
- Office for National Statistics [ONS] (2021) 'Annual Population Survey', dataset, Nomis. <https://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=17>
- Organisation for Economic Co-operation and Development [OECD] (2008) *The cost and effectiveness of policies to reduce vehicle emissions*, OECD. <https://www.oecd-ilibrary.org/docserver/235407601737.pdf?expires=1623093972&id=id&accname=guest&checksum=D8A6602D91047F40B1330F22ECF90B4D>
- Owen A and Barrett J (2020) 'Reducing inequality resulting from UK low-carbon policy', *Climate Policy*. <https://www.tandfonline.com/doi/full/10.1080/14693062.2020.1773754>
- Oxford Economics (2018) *The true impact of UK manufacturing*, The Manufacturing Technologies Association. <https://www.mta.org.uk/system/files/resource/downloads/20180405%20MTA%20report%20-%20final%20v2.pdf>
- Papa E (2020) 'Would you ditch your car if pub transport was free? Here's what researchers have found', *The Conversation*. <https://theconversation.com/would-you-ditch-your-car-if-public-transport-was-free-heres-what-researchers-have-found-133001>
- Pauthier A and Cochran I (2020) *From aligning with Paris to the SDGs*, Institute for Climate Economics. https://www.i4ce.org/wp-core/wp-content/uploads/2020/11/From-Aligning-with-Paris-to-the-SDGs_VA.pdf
- Payscale (2021) Data from 'Jobs by Industry' as at 12th April 2021, dataset. <https://www.payscale.com/research/US/Job>
- Pennington A, Watkins M, Bagnall AM, South J and Corcoran R (2018) *A systematic review of evidence on the impacts of joint decision-making on community wellbeing*, What Works Centre for Wellbeing. <https://whatworkswellbeing.org/resources/joint-decision-making/>
- Phillips B, Bullock J, Osborne J and Gaston K (2021) *Spatial extent of road pollution: A national analysis*, *Science of The Total Environment*, 773, 145589. <https://www.sciencedirect.com/science/article/pii/S0048969721006574>
- Poncia A, Drummond P and Grubb M (2021) 'Guest post: Why the low carbon transition may be much cheaper than models predict', blog post, Carbon Brief. https://www.carbonbrief.org/guest-post-why-the-low-carbon-transition-may-be-much-cheaper-than-models-predict?utm_campaign=Carbon%20Brief%20Daily%20Briefing&utm_content=20210513&utm_medium=email&utm_source=Revue%20Daily

- Power M, Doherty B, Pybus K and Pickett K (2020) *How COVID-19 has exposed inequalities in the UK food system: The case of UK food and poverty*, Emerald Open Research, 2(11). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7219559/>
- Price L and Simpson M (2017) *The trouble with accessing the countryside in Northern Ireland: a comparison with Great Britain*, Environmental Law Review, 19(3): 183–200. https://pureadmin.qub.ac.uk/ws/files/137387329/ELR_Access_PURE_version.pdf
- Prime Minister's Office (2020) 'PM commits to protect 30% of UK land in boost for biodiversity', news article. <https://www.gov.uk/government/news/pm-commits-to-protect-30-of-uk-land-in-boost-for-biodiversity>
- Prime Minister's Office (2021) *The Queen's Speech 2021*, Prime Minister's Office. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/986770/Queen_s_Speech_2021_-_Background_Briefing_Notes..pdf
- PwC (2020) *Unlocking capital for Net Zero infrastructure*. <https://www.pwc.com/jg/en/events/document/pwc-unlocking-capital-for-net-zero-infrastructure.pdf>
- Raikes L (2020) *The devolution parliament: Devolving power to England's regions, towns and cities*, IPPR North. <http://www.ippr.org/research/publications/the-devolution-parliament>
- Richardson N (2021) 'Does the bus strategy "Bus Back Better"?', Passenger Transport, blog post. <http://www.passengertransport.co.uk/2021/04/does-the-strategy-bus-back-better/>
- Ritchie H and Roser M (2020) 'CO₂ and Greenhouse Gas Emissions', dataset, Our World in Data. <https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions>
- Roberts C, Blakeley G and Murphy L (2018) *A Wealth of Difference: Reforming the taxation of wealth*, IPPR. <http://www.ippr.org/research/publications/a-wealth-of-difference>
- Robins N, Gouldson A, Irwin W and Sudmant A (2019) *Investing in a just transition in the UK: How investors can integrate social impact and place-based financing into climate strategies*, Grantham Research Institute on Climate Change and the Environment. https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2019/02/Investing-in-a-just-transition-in-the-UK_Full-policy-report_40pp-2.pdf
- Robins N, Dikau S and Volz U (2021) *Net zero central banking: A new phase in greening the financial system*, LSE. <https://eprints.soas.ac.uk/34895/1/Net%20zero%20central%20banking%20Weds%2010%20March.pdf>
- Roser M and Ortiz-Ospina E (2019) 'Global extreme poverty', dataset, Our World in Data. <https://ourworldindata.org/extreme-poverty>
- Royal Society for Arts [RSA] (2019) *Our future in the land*, Food, Farming & Countryside Commission. <https://www.thersa.org/globalassets/reports/rsa-ffcc-our-future-in-the-land.pdf>
- Royal Society for the Protection of Birds [RSPB] (2020) *A lost decade for nature*, RSPB. http://www2.rspb.org.uk/Images/A%20LOST%20DECADE%20FOR%20NATURE_tcm9-481563.pdf
- Rural Services Network (2021) *A first review of the national bus strategy (March 2021) against the policy asks from the RSN's revitalising rural: realising the vision calls on government*. https://rsnonline.org.uk/images/RSN_First_Review_of_the_National.pdf
- Sandys L and Pownall T (2021) *Recosting energy: powering for the future*, Challenging Ideas. <http://www.challenging-ideas.com/wp-content/uploads/2021/02/FINAL-DOC-HR-1.pdf>
- Sartor O and Bataille C (2019), *Decarbonising basic materials in Europe: How Carbon Contracts-for-Difference could help bring breakthrough technologies to market*, IDDRI. https://www.iddri.org/sites/default/files/PDF/Publications/Catalogue%20Iddri/Etude/201910-ST0619-CCfDs_0.pdf
- Sarygulov A (2020) *Going greener? Public attitudes to net zero*, Bright Blue. <http://brightblue.org.uk/wp-content/uploads/2020/10/Going-Greener-FINAL.pdf>
- Schalatek L and Richards J (2017) *Financing Loss and Damage: A Look at Governance and Implementation Options*, Heinrich Boell Stiftung. https://www.boell.de/sites/default/files/loss_and_damage_finance_paper_update_16_may_2017.pdf

- Schneider-Petsinger (2020) *Reforming the World Trade Organization: prospects for transatlantic cooperation and the global trade system*, Chatham House. <https://www.chathamhouse.org/sites/default/files/publications/research/2020-09-11-reforming-wto-schneider-petsinger.pdf.pdf>
- Science and Technology Committee (2019) *Clean Growth: Technologies for meeting the UK's emissions reduction targets, Twentieth Report of Sessions 2017–19*, House of Commons <https://publications.parliament.uk/pa/cm201719/cmselect/cmsctech/1454/1454.pdf>
- Scottish Community Development Centre [SCDC] (2021) 'The 7 national standards for community engagement', webpage. <http://www.voicescotland.org.uk/Seven-NS/>
- Scottish Government (2020a) *Fourth national planning framework: position statement*. <https://www.gov.scot/publications/scotlands-fourth-national-planning-framework-position-statement/pages/5/>
- Scottish Government (2020b) *Scotland's third land use strategy: consultation*, Agriculture and Rural Economy Directorate. <https://www.gov.scot/publications/scotlands-third-land-use-strategy-consultation-draft-strategy/>
- Scottish Government (2021) 'Community empowerment: Participatory budgeting', webpage. <https://www.gov.scot/policies/community-empowerment/participatory-budgeting/>
- Secretariat of the Convention on Biological Diversity [SCBD] (2020) *Global Biodiversity Outlook 5*, UN Environment Programme and Convention on Biological Diversity. <https://www.cbd.int/gbo/gbo5/publication/gbo-5-en.pdf>
- Shale-Hester T (2020) 'Treasury eyes up road pricing to plug £30bn fuel-duty gap'. *Auto Express*. <https://www.autoexpress.co.uk/news/108123/treasury-eyes-road-pricing-plug-ps30bn-fuel-duty-gap>
- Shankleman J (2020) 'Rich Countries Missing the \$100 Billion Climate Finance Goal', *Bloomberg*. <https://www.bloomberg.com/news/articles/2020-11-06/rich-countries-are-missing-the-100-billion-climate-finance-goal>
- Shanks W, Dunant C, Drewniok M, Lupton R, Serrenho A, Allwood J (2018) *How much cement can we do without? Lessons from cement material flows in the UK*, University of Cambridge. https://www.repository.cam.ac.uk/bitstream/handle/1810/286972/main_r1.pdf?sequence=3&isAllowed=y
- Sharma A (2021) 'UN Climate Change Negotiations and Making Effective Progress at the June Session', letter to all Parties of the UNFCCC, 13 April 2021. <https://unfccc.int/news/un-climate-change-negotiations-and-making-effective-progress-at-the-june-session>
- Sharma D and Kaps F (2021) 'Human Rights Due Diligence Legislation in Europe – Implications for Supply Chains to India and South Asia', DLA Piper. <https://www.dlapiper.com/en/japan/insights/publications/2021/03/human-rights-due-diligence-legislation-in-europe/>
- Simon F and Taylor K (2021) 'The Green Brief: CBAM enters with a bang', *EURACTIV*. <https://www.euractiv.com/section/energy-environment/news/the-green-brief-cbam-enters-with-a-bang/>
- Slovan L and Hopkinson L (2019a) *Transforming public transport: Regulation, spending and free buses for under 30s*, Friends of the Earth and Transport for Quality of Life. <https://policy.friendsoftheearth.uk/sites/files/policy/documents/2019-02/free-buses-under-30s.pdf>
- Slovan L and Hopkinson L (2019b) *An eco levy for driving: cut carbon, clean up toxic air and make our towns and cities liveable*, Friends of the Earth and Transport for Quality of Life. <https://policy.friendsoftheearth.uk/print/pdf/node/142>
- Slovan, L and Hopkinson L (2019c) *Briefing: Transforming transport funding to meet our climate targets*, Friends of the Earth and Transport for Quality of Life. <https://www.transportforqualityoflife.com/u/files/7%20Transforming%20transport%20funding%20to%20meet%20our%20climate%20targets.pdf>
- Society of Motor Manufacturers and Traders [SMMT] (2020) 'Used car sales: Q4 2019', dataset. <https://www.smmmt.co.uk/2020/02/151790/>
- Society of Motor Manufacturers and Traders [SMMT] (2021) 'Car Registrations', dataset. <https://www.smmmt.co.uk/vehicle-data/car-registrations/>

- Sosenko F, Littlewood M, Bramley G, Fitzpatrick S, Blenkinsopp J and Wood J (2019) *State of Hunger: A study of poverty and food insecurity in the UK*, The Trussell Trust. <https://www.stateofhunger.org/wp-content/uploads/2019/11/State-of-Hunger-Report-November2019-Digital.pdf>
- Sow M and Razafimahefa I (2015) *Fiscal decentralization and the efficiency of public service delivery*, IMF working paper. <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Fiscal-Decentralization-and-the-Efficiency-of-Public-Service-Delivery-42789>
- Spencer B (2021) 'Hydrogen or heat pump? The battle of the boilers is hotting up', *The Times*. <https://www.thetimes.co.uk/article/hydrogen-or-heat-pump-the-battle-of-the-boilers-is-hotting-up-b09gcp0vq>
- Stait E and Calnan M (2016) 'Are differential consumption patterns in health-related behaviours an explanation for persistent and widening social inequalities in health in England?', *International Journal for Equity in Health*, 15: 171. <https://core.ac.uk/download/pdf/81554424.pdf>
- Statista (2021) 'Cumulative downloads of the NHS COVID-19 app in England and Wales as of December 2020', dataset. <https://www.statista.com/statistics/1190062/covid-19-app-downloads-uk/>
- Stern N (2006) *The Economics of Climate Change: The Stern Review*, HM Treasury. https://webarchive.nationalarchives.gov.uk/20100407172811/http://www.hm-treasury.gov.uk/stern_review_report.htm
- Sudmant A, Robins N, Gouldson A (2021) 'Tracking local employment in the green economy: The PCAN just transition jobs tracker', dataset. <https://pcancities.org.uk/tracking-local-employment-green-economy-pcan-just-transition-jobs-tracker>
- Sustrans (2019) *Bike Life Transforming Cities: The potential of everyday cycling*. <https://www.sustrans.org.uk/media/2940/2940.pdf>
- Sustrans (2020) *Bike Life 2019: Greater Manchester*. https://www.sustrans.org.uk/media/5950/bikelife19_greater-manchester_web.pdf
- Sweney M (2020) 'UK advertisers pulled more than £1.1bn spend during Covid lockdown', *Guardian*. <https://www.theguardian.com/media/2020/aug/04/uk-advertisers-spend-covid-lockdown-coronavirus>
- Teach the Future (2021) 'Current climate education is inadequate', webpage. <https://www.teachthefuture.uk>
- Tees Valley Combined Authority [TVCA] (2021) 'What is Tees Valley?', webpage. <https://teesvalley-ca.gov.uk/about/faqs/>
- Tennison, S (2017) *Teesside Collective case study: Creating one of Europe's first clean industrial zone*, Tees Valley Collective and Tees Valley Combined Authority. <https://www.ice.org.uk/knowledge-and-resources/case-studies/teesside-clean-industrial-zone>
- Thomas R and Gunson R (2017) *Scotland Skills 2030: the future of work and the skills system in Scotland*, IPPR Scotland. <https://www.ippr.org/publications/scotland-skills-2030>
- Thoren B (2020) *National Nature Service Overview and Plan*, Wildlife and Countryside Link. https://www.wcl.org.uk/assets/uploads/img/files/National_Nature_Service_Overview_and_Plan_23.09.2020_1.pdf
- Town and Country Planning Association [TCPA] (2018) *Planning 2020: Raynsford Review of Planning in England*, TCPA. <https://www.tcpa.org.uk/Handlers/Download.ashx?IDMF=30864427-d8dc-4b0b-88ed-c6e0f08c0edd>
- Trades Union Congress [TUC] (2008) *Principles of Cooperation between London 2012 and the TUC*. <https://www.tuc.org.uk/research-analysis/reports/principles-cooperation-between-london-2012-and-tuc>
- Transport East (2020) *Decarbonisation evidence Base and Strategic recommendations report*. https://www.transporteast.org.uk/wp-content/uploads/Transport-East-Decarbonisation-Evidence-Base-and-Strategic-Recommendations-Report_WEB.pdf
- Transport Scotland (2019) *Scottish Transport Statistics, No 38, 2019 Edition*, statistical release. <https://www.transport.gov.scot/media/47300/scottish-transport-statistics-2019.pdf>

- Treasury Committee (2021) 'Treasury Committee publishes "Net Zero and the Future of Green Finance" report', news article. <https://committees.parliament.uk/committee/158/treasury-committee/news/154672/treasury-committee-publishes-net-zero-and-the-future-of-green-finance-report>
- Twigger-Ross C, Brooks K, Papadopoulou L and Orr P (2015) *Community resilience to climate change: an evidence review*, Joseph Rowntree Foundation. https://www.researchgate.net/publication/301765645_Community_resilience_to_climate_change_an_evidence_review
- UK 100 (2020) *Leaders of biggest cities call for funding for Clean Air Zones to tackle pollution, and boost the economy*, UK 100. <https://www.uk100.org/sites/default/files/2020-12/Leaders-of-biggest-cities-call-for-funding-for-Clean-Air-Zones-to-tackle-pollution-and-boost-the-economy.pdf>
- UK Stakeholders for Sustainable Development [UKSSD] (2018) *Measuring up: How the UK is performing on the UN sustainable development goals*. https://7593a251-ce64-48ce-ada7-0d0b99945b7c.filesusr.com/ugd/30312f_61bb4e30058c4d849d644a8ff8cc039f.pdf
- United Nations [UN] (2019) *The sustainable development goals report 2019*, UN stats. <https://unstats.un.org/sdgs/report/2019/The-Sustainable-Development-Goals-Report-2019.pdf>
- United Nations Environment Programme [UNEP] (2021), UNEP DTU Partnership, and World Adaptation Science Programme *Adaptation Gap Report 2020*, UN. <https://www.unep.org/resources/adaptation-gap-report-2020>
- University of Cambridge Institute for Sustainability Leadership [CISL] (2018) *Resource productivity and the Circular Economy: The opportunities for the UK economy, Business in the Community*. <https://www.cisl.cam.ac.uk/resources/publication-pdfs/resource-productivity-and-the-circular.pdf>
- University of Leeds Sustainability Research Institute (2019) *data available on request*
- University of Leeds (2021) 'Country Comparisons'. <https://goodlife.leeds.ac.uk/countries/#UnitedKingdom>
- Unsworth S, Andres P, Cecchinato G, Mealy P, Taylor C, Valero A (2020) *Jobs for a strong and sustainable recover from Covid-19*, Centre for Economic Performance, Grantham Research Institute on Climate Change and the Environment, LSE, UKRI. https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2020/10/Jobs_for_a_strong_and_sustainable_recovery_from_Covid19.pdf
- Urban Forestry and Woodland Advisory Committee Network [UFWACN] (2016) *England's Urban Forests: Using tree canopy cover data to secure the benefits of the urban forest*, Woodland Trust. https://www.forestresearch.gov.uk/documents/2109/FR_FC_TreeCanopyData_leaflet.pdf
- van den Bosch (2021) 'Promoting health and wellbeing through urban forests – Introducing the 3-30-300 rule', article, IUCN Urban Alliance. <https://iucnurbanalliance.org/promoting-health-and-wellbeing-through-urban-forests-introducing-the-3-30-300-rule/>
- Vaughan A (2018) 'UK green energy investment halves after policy changes'. <https://www.theguardian.com/business/2018/jan/16/uk-green-energy-investmentplunges-after-policy-changes>
- Vivid Economics and Barton Willmore (2020) *Levelling up and building back better through urban green infrastructure: an investment options appraisal*, Greenkeeper. <https://www.vivideconomics.com/wp-content/uploads/2020/07/Greenkeeper-Report-for-FPA-Greening-Programme-July-2020.pdf>
- Waste & Resources Action Programme [WRAP] (2020) *Courtauld Commitment 2025: 2020 Annual Report*. https://wrap.org.uk/sites/default/files/2021-01/The-Courtauld-Commitment-2025-Annual_Report-2020.pdf
- Waste & Resources Action Programme [WRAP] (2021) 'Wasting food feeds climate change: food waste action week launches to help tackle climate emergency'. <https://wrap.org.uk/media-centre/press-releases/wasting-food-feeds-climate-change-food-waste-action-week-launches-help#>
- Watkins O and Hochlaf D (2021) *Skills for a green recovery: A call to action for the UK construction sector*, IPPR. <http://www.ippr.org/research/publications/skills-for-a-green-recovery>

- Webb J, Emden J and Murphy L (2020) *All hands to the pump: A home improvement plan for England*, IPPR. <http://www.ippr.org/research/publications/all-hands-to-the-pump>
- Webb J (2021) *Forging the future: A vision for the northern steel's net zero transformation*, IPPR North. <https://www.ippr.org/research/publications/forging-the-future>
- Webb J, Stone L, Murphy L and Hunter J (2021) *The climate commons: How communities can thrive in a climate changing world*, IPPR. <http://www.ippr.org/research/publications/the-climate-commons>
- Wellbeing Economic Alliance (2021) 'Wellbeing Economy Governments', webpage. <https://wellbeingeconomy.org/wego>
- Wellbeing of Future Generations (Wales) Act 2015, part 2. <https://www.legislation.gov.uk/anaw/2015/2/part/2/enacted>
- Wellesley L, Happer C and Froggatt A (2015) *Changing climate, changing diets: pathways to lower meat consumption*, Chatham House. https://www.chathamhouse.org/sites/default/files/publications/research/CHHJ3820%Diet%20and%20climate%20change%2018.11.15_WEB_NEW.pdf
- Welsh Government (2021a) 'Wales commits to net zero by 2050, but sets out ambitions to get there sooner', press release. <https://gov.wales/wales-commits-net-zero-2050-sets-out-ambitions-get-there-sooner>
- Welsh Government (2021b) *Written Statement: LLwybr Newydd – the Wales Transport Strategy 2021*. <https://gov.wales/written-statement-llwybr-newydd-wales-transport-strategy-2021>
- Wildlife and Countryside Link (2020) 'Official figures reveal not one river or lake in England is in good health', press release. <https://www.wcl.org.uk/not-one-river-in-england-in-good-health.asp>
- Wildlife Trust (2020) *Wildbelt: A briefing by the Wildlife Trusts*. <https://www.wildlifetrusts.org/sites/default/files/2020-09/Wildbelt%20briefing%20September%202020.pdf>
- Williams (2008) *The economic benefits of green infrastructure: The public and business case for investing in green infrastructure and a review of the underpinning evidence*, Natural Economy North West, ECOTEC. <https://www.forestresearch.gov.uk/documents/2519/nweconomicbenefitsofiiinvestigating.pdf>
- Wintour P and Stewart H (2021) 'Johnson defends G7 deal amid criticism of final communique', *Guardian*. <https://www.theguardian.com/world/2021/jun/13/johnsons-g7-after-all-the-hype-what-was-actually-achieved>
- Women into Science and Engineering [WISE] (2021) 'Women in STEM – Percentages of Women in STEM Statistics', blog post. <https://www.stemwomen.co.uk/blog/2021/01/women-in-stem-percentages-of-women-in-stem-statistics>
- World Wildlife Fund [WWF] (2020a) *WWF Comprehensive Spending Review Response*. https://www.wwf.org.uk/sites/default/files/2020-09/Final%20WWF%20CSR%20submission_.pdf
- World Wildlife Fund [WWF] (2020b) *Living planet report 2020: bending the curve of biodiversity loss*, WWF and ZSL. <https://www.zsl.org/sites/default/files/LPR%202020%20Full%20report.pdf>
- World Wildlife Fund [WWF] (2021) '5 ways to fight deforestation in our food', webpage. <https://www.wwf.org.uk/deforestation-free>
- World Wildlife Fund [WWF] and Greenpeace (2021) *The big smoke: the global emissions of the UK financial sector*, Greenpeace and WWF. https://www.wwf.org.uk/sites/default/files/2021-05/uk_financed_emissions_v11.pdf
- Zenghelis D and Rydge J (2020) *Rebuilding to last: How to design an inclusive, resilient and sustainable growth strategy after Covid-19*, Grantham Research Institute on Climate Change and the Environment. <https://www.aldersgategroup.org.uk/asset/1684>
- Zero Carbon Campaign (2020) *The zero carbon commission: how carbon pricing can help Britain achieve net zero by 2050*, Zero Carbon Campaign. <https://zerocarbon.publicfirst.co.uk/#:~:text=In%20the%20UK%2C%20LSE%20found,tCO2e%20in%202050.>

APPENDIX A

The investment and spending proposals proposed in this report and the projected associated costs are set out in the table below.

The vast majority of additional public spending proposed is investment spend. The additional investment and current spending proposed in this report could be funded through a mixture of re-allocating existing spending, borrowing and revenue raising measures.

The re-allocation of existing spending could include, for example, some or the majority of the UK government's £27 billion road programme or in agriculture, the re-allocation of farm payments through the ELMs scheme to support environmental objectives.

Revenue raising measures could include a reduction or abolition of tax reliefs and subsidies that support fossil fuel activities. For example, the NAO has identified five large tax reliefs which do not have environmental objectives but are likely to impact on the government's net zero greenhouse gas emissions target costing the Treasury £17 billion in 2019-20 (NAO 2021b).

The additional public investment proposed in chapter 4, does not include the proposals for free bus travel, free school meals, the Thriving Places Fund, the GreenGo ISA, the overseas development assistance or fair share target. These additional measures will be required to ensure the transition is fair.

TABLE A1: SPENDING PROPOSALS AND COST ESTIMATES

Priority project area	Theme	Project	Type of spending	Funding source	Public funding	Total public spend (annual in £bn)	Rationale	Source
Democracy and institutions	Climate and Nature Assembly	N/A	Current	Savings and taxation	Set-up and ongoing costs	£0.00	Climate Assembly UK cost was £520,000 for 110 people. We recommend membership being regularly refreshed, assumed here to be once every two months, hence 6 times a year.	Harvey 2019
	Nature Recovery Committee	N/A	Current	Savings and taxation	Set-up and ongoing costs	£0.00	Replicates the annual budget for the CCC.	IPPR analysis of CCC 2020c
	Net Zero and Fair Transition Delivery Body	N/A	Current	Savings and taxation	Set-up and ongoing costs	£0.02	Represents hypothetical cost of 200 person body accounting for staff costs, operating costs, start up costs and reduced productivity during the initial on-boarding. Costs are based on estimated costs for BEIS and scaled down for this body.	IPPR analysis of BEIS 2020c
Transport	Electric vehicles, car scrappage scheme, e-bikes and scooters	N/A	Investment	Borrowing and savings	Subsidies for take up purchase of e-bikes, mobility schemes and EVs	£1.50	Reflects calls from 15 English metro mayors for £1.5bn nationwide scrappage scheme.	Greenpeace 2019
	EV Charging Network	N/A	Investment	Borrowing and savings	Increase funding for EV infrastructure	£0.05	Figure derived from National Grid analysis.	Greenpeace 2019
	Public transport	Trams	Investment	Borrowing and savings	Increase funding for tram infrastructure	£1.00	Figure derived from Greenpeace paper.	Greenpeace 2019
		Rail	Investment	Borrowing and savings	Provide upfront funding for expansion of rail,	£5.52	Figure derived from NEF analysis.	NEF 2019
		Buses + coaches to electric	Investment	Borrowing and savings	Infrastructure	£0.19	Total cost of electrifying bus fleet divided by average lifetime (£2.8bn/15).	Greenpeace 2019
		Free bus travel	Current	Savings and taxation	To support free travel	£4.40	Bus travel: methodology based on usage and ticket revenue.	IPPR analysis of DFT 2020a
		Rural bus networks	Current	Savings and taxation	Running costs and infrastructure	£2.70	Rural Bus Networks: Based on Hinchcliff and Taylor.	Hinchliff and Taylor 2021
	Cycling and walking	N/A	Investment	Borrowing and savings	Implementation of urban strategies	£1.00	Based on Gallagher 2020.	Gallagher 2020

Industry	Circular economy	N/A	Investment	Borrowing and savings	Support private investment in the circular economy	£0.23	We base this figure off of the existing innovation funding for industry within the Industrial Strategy Challenge Fund (approx £700m) from 2017-2020 (three years).	NAO 2021
	Carbon Contracts for Difference	N/A	Investment	Borrowing and savings	Support industry to decarbonise	£2.50	No specific figure given but we indicate the CCC analysis suggests manufacturing industries alone would need £2-3bn per year.	CCC 2020b
	Zero interest business loans	N/A	Investment	Borrowing and savings	Support businesses decarbonise	£0.06	We assume extension of the BASEE innovation fund worth £6m/year combined with £0.5m to 2030 (£0.055m/year) for support with commercial heat pumps.	CCC 2020b
	Hydrogen & CCS infrastructure and supply chain	N/A	Investment	Borrowing and savings	Subsidies for CCS and hydrogen clusters. Upfront investment into infrastructure, could be recouped later from industry	£0.93	Based on IPPR analysis of government investment required.	IPPR analysis of CCC 2020a
Food	Free school meals	N/A	Current	Savings and taxation	Sustainable eating	£0.28	The anticipated cost of removing eligibility criteria within universal credit to enable these changes.	Hochlaf et al 2019
Nature restoration	ELMs	N/A	Investment	Current spend	For ELMs	£2.15	Based on report from RSPB assessing the cost of ELM.	Greenpeace 2019
	Nature protection	N/A	Current	Savings and taxation	Enforcement and regulation	£1.43	Replacing lost EU funding and increasing DEFRA budget by £1bn in part to bolster Natural England's resources.	Greenpeace 2019
	National nature service	N/A	Investment	Borrowing and savings	Natural infrastructure investment. To support creation of a national nature service	£0.74	Based on estimated cost of NNS in Thoren 2020.	Thoren 2020
	Marine protection, Blue Belt, seagrass and saltmarsh, and sustainable fisheries	N/A	Investment	Borrowing, savings and taxation	Natural infrastructure investment	£0.11	Based on management costs for marine protected areas, calculations from Great British Oceans coalition, replacing allocation of EU fisheries funding to UK increased by £5m to add cameras, monitoring and more vessels to boost enforcement.	Greenpeace 2019
	Water	N/A	Investment	Borrowing and savings	Natural infrastructure investment	£0.12	Extrapolation from Environment Agency 2014 calculations for consultation on river basin management plan.	Greenpeace 2019
	Domestic adaptation	N/A	Investment	Borrowing and savings	Adaptation and flooding measures	£1.00	Estimates from the National Infrastructure Commission of additional funding needs.	Greenpeace 2019

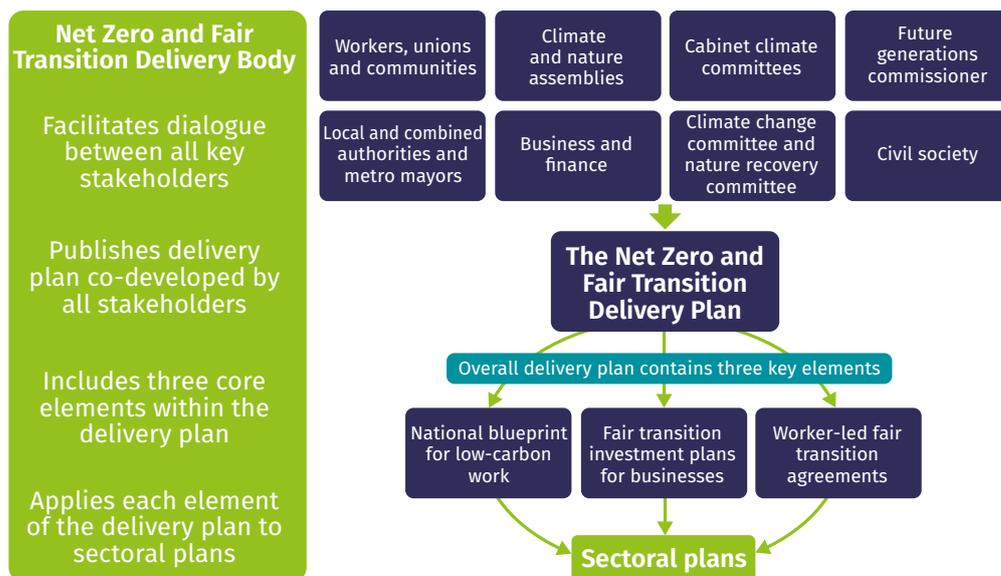
Zero carbon homes	VAT tax cut for retrofit	N/A	Investment	Borrowing and savings	Infrastructure	£0.55	Total cost estimated by Federation of Master Builders = £2.76bn over 5 years.	FMB 2020
	Energy efficiency, low carbon heat and social home building	N/A	Investment	Borrowing and savings	Subsidies and grants for incentivising uptake of insulation and low-carbon heating solutions. Grant subsidies to build social homes.	£7.00	Based on upper estimate of CCC figures; less the cost of heat networks (estimated at £4.9bn additional spend total through to 2030, ie £0.5bn/year) since households will not (£6 billion on heat pumps and EE, £0.5 billion on heat networks and £0.5 billion on social housing decarbonisation).	IPPR analysis of CCC 2020b
Fair transition	Green Training Fund	N/A	Investment	Borrowing and savings	Social Infrastructure	£1.06	Estimated on current government payments of £3,000 per apprentice and applied to the 3.2 million existing workers who will need to be retrained according to Unsworth 2020.	IPPR analysis
	Thriving Places Fund	N/A	Investment	Borrowing and savings	Social Infrastructure	£0.50	Our proposal sits between the amounts allocated to Big Local and Power to Change (£150 million) and the proposal for up to £5 billion for a Community Wealth Fund argued for by the Alliance for a Community Wealth Fund Alliance (Local Trust 2018). Such a fund could be provided with further funding after three years, linked to its ability to raise additional funds from the public as well as commercial and philanthropic investors.	Local Trust 2018
Other	GreenGO ISA	N/A	Current	Savings and taxation	Incentives to save for and purchase green goods and services	£0.80	Based on HMT calculations for its LifeTime ISA.	IPPR analysis of HMT 2016
International	Fair share target	N/A	Current	Savings and taxation	Overseas spend	£2.20	Based on fair share calculations from Climate Equity Reference Calculator.	Laybourn-Langton and Rankin 2019
	Overseas development assistance	N/A	Current	Savings and taxation	Overseas spend	£4.09	IPPR analysis of government figures for ODA in 2019.	IPPR analysis of FCDO 2021

Source: Authors' analysis

APPENDIX B

FIGURE B1: HOW THE INSTITUTIONS PROPOSED IN THIS REPORT WILL WORK TOGETHER

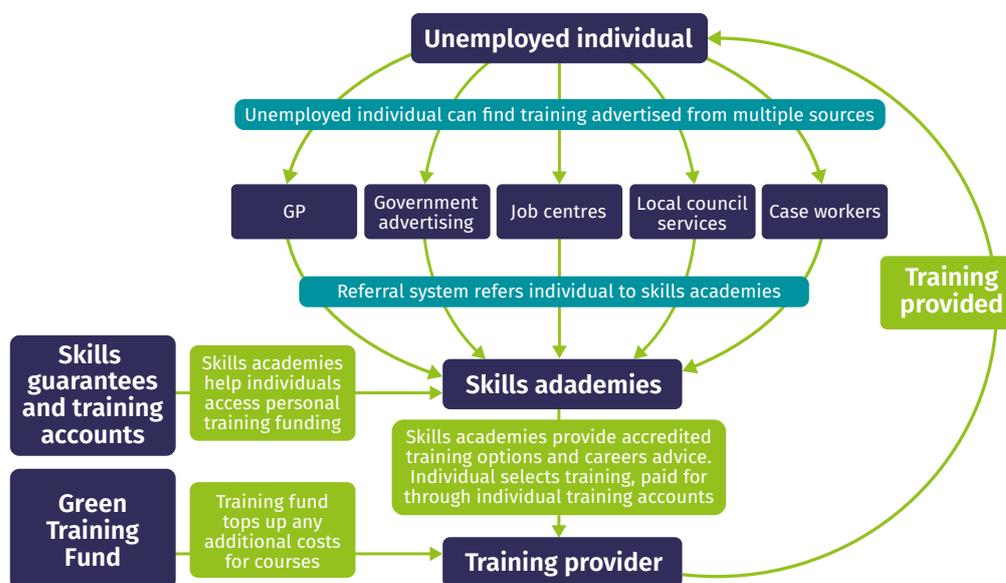
The institutions necessary for the transition



Source: Authors' analysis

FIGURE B2: SUPPORT FOR A WORKER IN THE TRANSITION

The pathway for a worker transitioning into a green job



Source: Authors' analysis

FIGURE B3: THE ACTIVITIES OF THE NET ZERO AND FAIR TRANSITION DELIVERY BODY

The role of the Net Zero and Fair Transition Delivery Body



Source: Authors' analysis

APPENDIX C:

FULL LIST OF THE ENVIRONMENTAL JUSTICE COMMISSION RECOMMENDATIONS

CHAPTER 3: SHARING POWER

To give people ownership over the actions taken, no climate and nature recovery plan should be created without public involvement

1. The UK and devolved governments should develop a new public communications plan for the climate and nature crises and the public policy response to them.
2. Local authorities, backed by central and devolved governments, should support 'one stop shops' for climate and nature action and provide the resources to make these a key part of the UK's approach to engaging with the public
3. All governments should include the climate and nature crises as a subject in the core curriculum.
4. New standards for public engagement and deliberation should be put in place across the UK, based on Scotland's National Standards for Community Engagement.
5. The government should establish a permanent UK Climate and Nature Assembly with a statutory right of consultation on climate and nature policy.
6. Establishing a permanent citizens' assembly at local or regional level would provide a way of engaging the public in both the response to the climate and nature crises and other local decisions.

To respond better to local needs and improve the relationship between decision makers and the public

7. All parts of the UK should replicate Scotland's commitment of a minimum of one per cent of local funding to be allocated through participatory budgeting
8. Governments should put in place a proactive requirement for the most disadvantaged communities to be supported to participate in decision-making on the response to the climate and nature crises

To root wellbeing and fairness at the heart of policymaking

9. The UK, Northern Ireland and Scotland governments should introduce their own Wellbeing of Future Generations Act and establish their own Wellbeing of Future Generations Commissioner or Commission.

So that nature restoration is treated with the same importance as the climate crisis

10. The UK government should define and adopt the environmental limits within which the economy must operate and provide statutory targets across a full range of environmental impacts.
11. The UK, devolved and local governments should adopt a new 'net zero and protection of nature rule' and embed this within all decisions on spending and investment.
12. Companies should change their governance structures to include new objectives and an approach to decision-making and monitoring performance that is in line with wider social goals, including increasing wellbeing and addressing the climate and nature crises.

All policy must be tailored to the different needs of local communities

13. UK and devolved governments should agree frameworks for developing action plans at a local level, including an agreed methodology to monitor and report on emissions.
14. A single point of contact should be created within the UK government focussed on local authority decarbonisation.
15. All local areas should be offered the powers and resources to play their part in achieving net zero and support nature to recover as part of a new devolution framework.

To empower communities to actively take part in the transition

16. The UK government should set a target to significantly increase the proportion of community-owned low-carbon assets.
17. New community rights legislation should be introduced by the UK government to include a new Community Right to Own or Manage
18. The UK government should create a single new, independent and permanent Thriving Places Fund that is endowed by the government, and the National Lottery, with at least £1.5 billion over the next three years.

CHAPTER 4: TRANSFORMING OUR ECONOMY

To effectively manage the transition across all sectors of the economy

19. We call for the establishment of Net Zero and Fair Transition Delivery Bodies (NZFT) by the UK government and the devolved nations.

To meet the scale of the climate and nature crisis

20. We call on the UK government to make a long-term commitment to investing for net zero and to restore nature, with a minimum additional public investment of £30 billion on an annual basis up until at least 2030.

To support businesses to decarbonise

21. We recommend that the UK Infrastructure Bank is appropriately capitalised, its mandate reflects the urgency of the climate and nature crisis and embraces opportunities to increase fairness and level up.
22. We propose that the UK government invest in more productive, lower impact businesses by earmarking an additional £700 million in its Industrial Decarbonisation Strategy for projects aiming to promote a circular economy.
23. The UK government should reform the R&D tax credit, along with the announcement of a super-deduction in the 2021 Budget, to only apply to investment that meets net zero and environmental impact criteria.
24. The UK government should offer zero-interest business loans, with a particular focus on SMEs.
25. UK Export Finance (UKEF) should expand the range of low-carbon projects it supports to focus on supply chain decarbonisation such as process efficiency and innovation.
26. The UK government should facilitate industrial energy 'big switches' that offer power purchasing agreements (PPAs) to multiple industries and green energy providers.
27. Following the example of the Contracts for Difference for the offshore wind industry, we recommend that the government should introduce Carbon Contracts for Difference (CCfDs).
28. The UK government and devolved nations should use public procurement to stimulate demand for low-carbon technologies.

29. The UK government, in partnership with the devolved nations, should develop accreditation marks for industrial products (such as green steel, concrete, or low-methane landfill) manufactured to a materially efficient, net zero and environmentally compatible standard.
30. The UK government, in partnership with the devolved nations, should introduce publicly and widely advertised labelling schemes for all retail and goods and food to stimulate demand for low emission and low environmental impact products.
31. The UK government in partnership with the devolved nations should ratchet up standards over time to ensure products are aligned with net zero targets and environmental impact budgets (see chapter 4) and adapt labelling schemes accordingly.
32. The UK government should provide a five-year warning, after which it should start to introduce carbon border adjustments – tariffs on imported goods that have a high carbon footprint.

To align their investments with net zero, the Paris Agreement and wider environmental targets

33. UK financial institutions should be legally required to set targets, including interim targets, to align their investments with net zero, the Paris Agreement, the wider environmental targets and the principles of a fair transition we propose in this report.
34. We recommend that the use of carbon pricing schemes should have to pass four key tests.
 - **Fair alignment:** any carbon pricing regime and wider taxation system should be aligned so that clean alternatives are subsidised, and polluting and environmentally destructive activities are penalised.
 - **Fair support and compensation:** support to invest in clean alternatives must be provided and compensation should be targeted and put in place before any significant price changes. In particular, any increase to heating and non-residential costs as a result of carbon pricing should not leave poorer households and affected businesses worse off. For businesses especially, carbon pricing must not lead to companies offshoring both their workforce and emissions.
 - **Fair timing and communication:** all compensation and pricing schemes should be designed and communicated so that they are clearly accessible and understandable to the public.
 - **Fair use:** the limitations of the use of carbon pricing schemes must be recognised and they must form part of a wider package of public investment, incentives and regulation in delivering net zero and restoring nature.

So that the public can use their pensions and investments to support the transition

35. We recommend that the UK government set a legal requirement for all ‘default’ defined contribution funds to be net zero aligned by 2030 at the very latest and to make it quicker and easier for consumers to switch in the meantime.
36. We recommend that the Financial Conduct Authority should create a mandatory climate and environmental impact labelling system for financial products to support transparency, prevent the proliferation of inconsistent voluntary schemes and encourage innovation.

To protect workers and harness their skills

37. The UK and devolved administrations should create a national blueprint for low-carbon work by the end of 2021 that demonstrates the government's commitment to a fair transition. Including:
- a funded right to retrain.
 - incorporate Fair Transition Agreements co-developed by workers and unions and facilitated by Net Zero and Fair Transition Bodies
 - government, unions, workers and local communities should develop a 'high-quality' clean jobs standard
 - make these criteria a legal requirement of future sectoral decarbonisation plans and a condition of all fair transition investment plans
 - comprehensive nationwide skills audits
 - set out a specific plan of action for diversity and inclusion, recognising the need to increase workforce diversity and overcome barriers, such as recruitment policies, that disproportionately disadvantage minority ethnic groups.
38. Make funding and support for low-carbon projects contingent on leveraging inward investment from industry into local communities.
39. Include local labour clauses in all contracts for climate and nature compatible projects.
40. Both the UK and devolved administrations should set up linked but separate skills academies across each nation for existing workers, unemployed individuals, and new entrants to the labour market, that draw together existing initiatives and build on them.
41. The UK government should allocate £1.1 billion per year to skills until 2030, with a comparative commitment by the devolved nations – including the Scottish government expanding the funding of their own Transition Training Fund.
42. The UK government should ensure that the recently announced lifetime skills guarantees explicitly only provide training for net zero, nature or climate compatible sectors.
43. The skills academies should also develop 'skills passports' for workers with existing transferable skills.
44. A referral system should be established that directs people to skills academies and how to access and use their training accounts.

To put workers at the heart of the transition

45. NZFTs should develop worker-led Fair Transition Agreements that would be included in the blueprint for a low-carbon workforce and the high-quality job standards.
46. All carbon-intensive businesses should immediately begin a collaborative process, working with communities, their own workforces, trade unions, skills academies and Net Zero and Fair Transition Delivery Bodies to develop 'fair transition investment' plans.

CHAPTER 5: HOW WE LIVE

To provide people with the information and support they need to make greener and healthier decisions

47. We recommend the creation of a new GreenGO scheme – a 'one stop shop' to provide people with the information and financial support they need to make cleaner and healthier decisions. GreenGO would have the following components.

- GreenGO grants and loans:
 - a GreenGO Warm scheme for England capitalised with £6 billion per year through to 2030 focussed on heat pumps and high energy efficiency upgrades.
 - a GreenGO Move scheme for England of at least at £1.5 billion per year through to 2030 in grants and loans to support people to repair existing cycles and buy new cycles, electric scooters or e-bikes, and electric vehicles where people need them.
- GreenGO ISAs.
- GreenGO and carbon pricing credits.

OUR HOMES

To ensure heat decarbonisation is tailored to the needs of individual communities and homes

48. We recommend that retrofit is led by local government but with coordination and support provided by the UK and devolved governments.
49. Resources should be allocated to carry out ‘heat zoning’ to determine the most appropriate heat technologies for different areas.

To tackle high energy bills and support the decarbonisation of the UK’s homes

50. The UK should revise the legal requirements for Minimum Energy Efficiency Standards (MEES) in socially rented and privately rented homes.
51. The UK government should set legal requirements to eliminate oil heating systems no later than 2028 and gas heating systems by 2033.
52. All new homes should be of ultra-high energy efficiency by 2023 at the latest and no new homes should connect to the gas grid by the same date.
53. High standards for energy efficiency should be mirrored by requirements that reduce overheating in new-build homes, including through the use of passive cooling measures.
54. In England, £0.5 billion should be committed to investment in heat networks and £0.5 billion should be committed to the Social Housing Decarbonisation Fund every year until 2030.
55. The UK and devolved governments should also consider making a range of taxation changes to encourage home improvements, including:
 - linking council tax rates to energy efficiency so that less efficient homes pay an added premium
 - variable stamp duty, with a higher rate charged for energy-inefficient properties and vice versa
 - cutting VAT on retrofit projects from 20 per cent to a maximum of 5 per cent

To accelerate heat decarbonisation and create future job opportunities

56. Supporting recruitment in energy efficiency retrofitting, heat pump and heat network installation must be a government priority.

To protect all existing and future homes against the impacts of the climate and nature crises

57. The UK government should consider extending the coverage of ‘Flood Re’, the affordable flood insurance scheme.
58. The National Planning Policy Framework in England should be strengthened so that no new homes are built in at-risk areas, except in exceptional

circumstances, and all new properties in Flooding Zones 2 and 3 have property-level flood resilience (PFR) measures as standard.

WHAT WE EAT

To support people to afford good food and end childhood hunger

59. The government must introduce a target to end household food insecurity and child food poverty in the UK.
60. To ensure that all households are able to achieve an acceptable standard of living, the UK government should make the current £20 per week uplift to universal credit permanent and the Department of Work and Pensions should set levels of universal credit for out of work households based on an objective assessment of material need and the cost of living for different household types.
61. The UK government should dedicate £275 million per year in England to provide every school child who lives in a household in receipt of universal credit with a free school meal.
62. The UK government, in partnership with the devolved nations, should introduce a 'non-essential' food levy on foods that contain excessive levels of sugar, fat, and salt, and use this revenue to reduce food insecurity.

To encourage healthier food choices and reduce greenhouse gas emissions

63. The governments of the UK should adopt the Eating Better recommended target and framework of a 50 per cent reduction in meat and dairy consumption by 2030.

To ensure the UK tackles global environmental destruction

64. The UK government should set clear targets to eliminate imported deforestation from the UK economy by 2030.

To enable locally-led improvements to the food system

65. The government and devolved nations should ensure that all areas of the UK are covered by a local food strategy.
66. The UK government should provide investment in local and sustainable food economies through the development of a dedicated tranche of the proposed UK Shared Prosperity Fund.

To create a fairer, and less wasteful, food supply chain

67. The UK government should fast-track the creation of codes of compliance for fair supply chain practice across agriculture and food manufacturing.
68. The government should urgently begin its planned consultation on mandatory company food waste reporting.

HOW WE TRAVEL

To deliver an affordable and clean public transport system for all

69. Transport decarbonisation plans must aim to make it possible to live a good life, wherever you are, without needing to own a car.
70. The UK should create a world-leading local public transport system that is free at the point of use by 2030.

To provide local access to the things people need

71. The principle of local access within a 20-minute walk, cycle, or public transport trip, should be included within the UK's Transport Decarbonisation Plan and the National Planning Policy Framework.

- 72. Planners need the power and backing of national governments to refuse planning applications that generate extra traffic and do not contribute to reducing car dependence.
- 73. To support the revitalisation of the country's high streets, the UK government and devolved nations should undertake the wholesale reform of business rates and as part of that review, the introduction of an online sales levy on large companies.

To ensure that the way we travel is cleaner and healthier

- 74. We propose that rail and transport authorities across the UK undertake feasibility studies for turning suitable urban train and bus stations into shared mobility hubs by 2025.
- 75. The transport appraisal guidance for all UK governments should emphasise increasing equity, improving health and wellbeing, addressing the climate emergency, and supporting a nature recovery.
- 76. The UK government should spend at least an additional £4 billion on walking and cycling by 2025.
- 77. There should be a rapid rollout of School Street schemes across the UK.
- 78. All UK cities and towns adopting local plans to increase urban tree cover and reallocate road space to cycling, walking and green space every year, as part of commitments to protect 30 per cent of land for nature.
- 79. Local transport planners should work with communities to create car-free areas in city and town centres by 2025, and aim for at least a 50 per cent cut in car use in town and city centres overall by 2030.

To support the shift to electric vehicles

- 80. All governments of the UK must set out a plan for a comprehensive public charging network, alongside the investment to deliver it.
- 81. We recommend a 2025 ban on the purchase of carbon emitting cars for public sector and commercial car fleets.

To involve the public in designing future transport charges

- 82. The governments of the UK should commit to implementing a national road user charging scheme, to tackle congestion and replace fuel duty, after deliberation with the public to ensure it is implemented in a way that is fair and leads to the desired environmental and social impact.

CHAPTER 6: OUR NATURAL WORLD

To give nature the space it needs to thrive

- 83. All governments of the UK need to work together to ensure that land protected for nature is in good ecological condition and that currently fragmented nature-rich sites are joined up by corridors which support movement and flourishing of wildlife.
- 84. All governments of the UK should work together to ensure that 30 per cent of both land and sea is protected for nature and in good ecological condition, by 2030.

To ensure progress on the nature crisis

- 85. We propose the UK government establishes a new Nature Recovery Committee, playing an equivalent role to the Climate Change Committee.

To build a new relationship with nature

86. We call for a new National Nature Service that covers all four nations of the UK to create new high-quality job opportunities and mobilise the workforce needed to restore nature.
87. The 'Right to Roam' should be expanded across the whole of the UK.

To support nature to thrive on our doorsteps

88. We support the recommendations of the Raynsford Review for legislation that creates a purpose for the planning system that in new developments will ensure an environment fit for future generations.
89. A new '3 x 30 x 300' rule for local planning should be introduced to ensure everyone has the chance to connect with nature.
90. Local authorities and public bodies are major greenbelt landowners and should seek to make improvements to their land that addresses the needs of nature and improves people's health and wellbeing.
91. We call for a UK-wide campaign to engage everyone who can and every organisation, from every sector, in making their land, buildings, homes, gardens, or whatever space they have, better for nature.

To support a fair transition to nature-friendly farming

92. England's new Environmental Land Management scheme(s) need to do more than fund business-as-usual or reduced harm, and promote genuinely environmentally beneficial activities.
93. We support the Nature-Friendly Farming Network's call for additional advice and funding to be made available for collaboration between farmers to produce landscape scale results, such as species recovery or improving water quality.
94. Investment in peer-to-peer networks and training from trusted and knowledgeable farm advisers must be part of the Environmental Land Management scheme.
95. We support the Food, Farming, and Countryside Commission (2020) proposal for a strategic land use framework in England to help make the best use of land, resolve conflicts and competition, and deliver on government priorities.

CHAPTER 7: OUR PLACE IN THE WORLD

To ensure all countries are protected against Covid-19

96. We back the asks of groups such as 'Crack the crises' that are calling for developed nations to pay their fair share: at least \$36 billion of the \$66 billion it will take to make vaccines, diagnostics, and therapeutics available in the poorest countries this year and next; to ramp up the number of vaccines shared; and to share the technology, patents and training needed to rapidly scale up manufacturing capacity around the world.

To ensure the UK recognises its fair contribution to repairing the environment

97. The UK government should adopt a fair share target to contribute to global emissions reductions.
98. The UK should take the first steps toward a comprehensive system of measuring, and a target to halve the UK's global environmental footprint by 2030.

To ensure the UK pays for its fair contribution to repairing the environment

99. The UK government should commit £2.2 billion a year in additional financial support to low-income countries to both reduce emissions and adapt to the changing climate, up to 2030.
100. The UK government should use the COP26 presidency to collaboratively develop and seek support for an explicit global loss and damage fund capitalised with at least US\$100 billion a year over and above the financing provided for mitigation and adaptation.
101. The UK should use organisations like UKEF to deliver strategic public investment to both lower the risk for investors and provide a clear direction for economic development.
102. The UK should immediately re-establish official development assistance (ODA) spending at the UN target of 0.7 per cent of gross national income.

To ensure the UK maximises its global economic and diplomatic influence to secure better environmental outcomes

103. The UK government should use its influence to ensure the policy frameworks of multilateral institutions are aligned with environmental imperatives and a fair transition.
104. A new due diligence law would require multinationals to audit their supply chains and ensure high standards in areas such as labour conditions, human rights, and climate and nature impacts, under the law of their home states.
105. We recommend that the UK government establishes an international equity and resilience office within the Foreign, Commonwealth and Development Office.

To ensure that the UK's environmental goals are embedded in its trade policy

106. We propose the provision of a comprehensive non-regression clause in UK environmental legislation that commits to maintaining at least current levels of environmental protection.
107. A trade policy framework should be adopted that supports an increase in core environmental standards over time.
108. The UK should seek to include provisions to conserve or sustainably manage forests and other international ecosystems in all new trade agreements.
109. To do this, the UK government should work in collaboration with the EU and other key partners to ensure developing economies are at the heart of international policy development for carbon border adjustment mechanisms and associated measures.