

# An Evaluation of International Pandemic Recovery Strategies and Identification of Good Practice Relevant to Scotland: Appendices

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## Appendix 1: Systematic review of published academic literature on COVID recovery policies and plans - Supplementary Methods

### Supplementary Table 1.1 - Search strategy

Database searches covered three concept areas: Covid-19, recovery policy, and OECD countries. We used the NICE OECD countries' geographic search filter (Ayiku et al., 2021) for Medline and Embase, and simpler OECD country name searches in WHO Covid Literature and Web of Science databases. Search results were exported in bulk to EndNote for record management. Deduplication was handled principally using the SR Accelerator's Deduplicator (Clark et al., 2020) before records were uploaded to Covidence for screening.

Database	Search strategy	Notes
WHO Covid-19 Global literature on coronavirus disease	((ti:(recovery AND ((strateg*) OR (plan*) OR (campaign*)))) OR (ab:(recovery AND ((strateg*) OR (plan*) OR (campaign*)))) AND (tw:(australasia) OR (australia) OR (austria) OR (baltic) OR (belgium) OR (canada) OR (chile) OR (Colombia) OR (Costa Rica) OR (czech republic) OR (Denmark) OR (estonia) OR (europe*) OR (finland) OR (france) OR (germany) OR (greece) OR (hungary) OR (iceland) OR (ireland) OR (israel) OR (italy) OR (japan) OR (korea) OR (latvia) OR (lithuania) OR (luxembourg) OR (mexico) OR (netherlands) OR (new zealand) OR (north america) OR (norway) OR (poland) OR (portugal) OR (republic of korea) OR (scandinavia*) OR (nordic) OR (slovakia) OR (slovenia) OR (spain) OR (sweden) OR (switzerland) OR (turkey) OR (united kingdom) OR (united states)) AND ((barrier*) OR (inequalit*) OR (equitable) OR (economic AND ((impact*) OR (imbalan*))) OR ((social AND (impact*) OR (imbalan*))) OR (recession) OR (renewable) OR (education*) OR (determinant*)))	12 July 2022 (400 results)
Ovid MEDLINE(R) and In-Process, In-Data-Review & Other Non-Indexed Citations <1946 to July 13, 2022>	1 COVID-19/ or SARS-CoV-2/ or (COVID-19* or Coronavirus disease 2019* or Coronavirus 2019 or COVID-2019* or SARS-CoV-2 or SARS CoV 2 or SARS-CoV-2019).ti,ab. 247720 2 ((Strateg* or Plan* or Campaign*) adj3 Recovery).ti,ab. 3532 3 afghanistan/ or africa/ or africa, northern/ or africa, central/ or africa, eastern/ or "africa south of the sahara"/ or africa, southern/ or africa, western/ or albania/ or algeria/ or andorra/ or angola/ or "antigua and barbuda"/ or argentina/ or armenia/ or azerbaijan/ or bahamas/ or bahrain/ or bangladesh/ or barbados/ or belize/ or benin/ or bhutan/ or bolivia/ or borneo/ or "bosnia and herzegovina"/ or botswana/ or brazil/ or brunei/ or bulgaria/ or burkina faso/ or burundi/ or cabo verde/ or cambodia/ or cameroon/ or central african republic/ or chad/ or exp china/ or comoros/ or congo/ or cote d'ivoire/ or croatia/ or cuba/ or "democratic republic of the congo"/ or cyprus/ or djibouti/ or dominica/ or dominican republic/ or ecuador/ or egypt/ or el salvador/ or equatorial guinea/ or eritrea/ or eswatini/ or ethiopia/ or fiji/ or gabon/ or gambia/ or "georgia (republic)"/ or ghana/ or grenada/ or guatemala/ or guinea/ or guinea-bissau/ or guyana/ or haiti/ or honduras/ or independent state of samoa/ or exp india/ or indian ocean islands/ or indochina/ or indonesia/ or iran/ or iraq/ or jamaica/ or jordan/ or kazakhstan/ or kenya/ or kosovo/ or kuwait/ or kyrgyzstan/ or laos/ or lebanon/ or liechtenstein/ or lesotho/ or liberia/ or libya/ or madagascar/ or malaysia/ or malawi/ or mali/ or malta/ or mauritania/ or mauritius/ or mekong valley/ or melanesia/ or micronesia/ or monaco/ or mongolia/ or montenegro/ or morocco/ or mozambique/ or myanmar/ or namibia/ or nepal/ or nicaragua/ or niger/ or nigeria/ or oman/ or pakistan/ or palau/ or exp panama/ or papua new guinea/ or paraguay/ or peru/ or philippines/ or qatar/ or "republic	13 July 2022 (164 results)

Database	Search strategy	Notes
	<p>of belarus"/ or "republic of north macedonia"/ or romania/ or exp russia/ or rwanda/ or "saint kitts and nevis"/ or saint lucia/ or "saint vincent and the grenadines"/ or "sao tome and principe"/ or saudi arabia/ or serbia/ or sierra leone/ or senegal/ or seychelles/ or singapore/ or somalia/ or south africa/ or south sudan/ or sri lanka/ or sudan/ or suriname/ or syria/ or taiwan/ or tajikistan/ or tanzania/ or thailand/ or timor-leste/ or togo/ or tonga/ or "trinidad and tobago"/ or tunisia/ or turkmenistan/ or uganda/ or ukraine/ or united arab emirates/ or uruguay/ or uzbekistan/ or vanuatu/ or venezuela/ or vietnam/ or west indies/ or yemen/ or zambia/ or zimbabwe/ 1232321</p> <p>4 "Organisation for Economic Co-Operation and Development"/448</p> <p>5 australasia/ or exp australia/ or austria/ or baltic states/ or belgium/ or exp canada/ or chile/ or colombia/ or costa rica/ or czech republic/ or exp denmark/ or estonia/ or europe/ or finland/ or exp france/ or exp germany/ or greece/ or hungary/ or iceland/ or ireland/ or israel/ or exp italy/ or exp japan/ or korea/ or latvia/ or lithuania/ or luxembourg/ or mexico/ or netherlands/ or new zealand/ or north america/ or exp norway/ or poland/ or portugal/ or exp "republic of korea"/ or "scandinavian and nordic countries"/ or slovakia/ or slovenia/ or spain/ or sweden/ or switzerland/ or turkey/ or exp united kingdom/ or exp united states/ 3422917</p> <p>6 European Union/ 17296</p> <p>7 Developed Countries/ 21176</p> <p>8 4 or 5 or 6 or 7 3438390</p> <p>9 3 not 8 1144530</p> <p>10 1 and 2 178</p> <p>11 10 not 9 164</p>	
Embase <1980 to 2022 Week 27>	<p>1 afghanistan/ or africa/ or "africa south of the sahara"/ or albania/ or algeria/ or andorra/ or angola/ or argentina/ or "antigua and barbuda"/ or armenia/ or exp azerbaijan/ or bahamas/ or bahrain/ or bangladesh/ or barbados/ or belarus/ or belize/ or benin/ or bhutan/ or bolivia/ or borneo/ or exp "bosnia and herzegovina"/ or botswana/ or exp brazil/ or brunei darussalam/ or bulgaria/ or burkina faso/ or burundi/ or cambodia/ or cameroon/ or cape verde/ or central africa/ or central african republic/ or chad/ or exp china/ or comoros/ or congo/ or cook islands/ or cote d'ivoire/ or croatia/ or cuba/ or cyprus/ or democratic republic congo/ or djibouti/ or dominica/ or dominican republic/ or ecuador/ or el salvador/ or egypt/ or equatorial guinea/ or eritrea/ or eswatini/ or ethiopia/ or exp "federated states of micronesia"/ or fiji/ or gabon/ or gambia/ or exp "georgia (republic)"/ or ghana/ or grenada/ or guatemala/ or guinea/ or guinea-bissau/ or guyana/ or haiti/ or honduras/ or exp india/ or exp indonesia/ or iran/ or exp iraq/ or jamaica/ or jordan/ or kazakhstan/ or kenya/ or kiribati/ or kosovo/ or kuwait/ or kyrgyzstan/ or laos/ or lebanon/ or liechtenstein/ or lesotho/ or liberia/ or libyan arab jamahiriya/ or madagascar/ or malawi/ or exp malaysia/ or maldives/ or mali/ or malta/ or mauritania/ or mauritius/ or melanesia/ or moldova/ or monaco/ or mongolia/ or "montenegro (republic)"/ or morocco/ or mozambique/ or myanmar/ or namibia/ or nauru/ or nepal/ or nicaragua/ or niger/ or nigeria/ or niue/ or north africa/ or oman/ or exp pakistan/ or palau/ or palestine/ or panama/ or papua new guinea/ or paraguay/ or peru/ or philippines/ or polynesia/ or qatar/ or "republic of north macedonia"/ or romania/ or exp russian federation/ or rwanda/ or sahel/ or "saint kitts and nevis"/ or "saint lucia"/ or "saint vincent and the grenadines"/ or saudi arabia/ or senegal/ or exp serbia/ or seychelles/ or sierra leone/ or singapore/ or "sao tome and principe"/ or solomon islands/ or exp</p>	12 July 2022 168 results

Database	Search strategy	Notes
	<p>somalia/ or south africa/ or south asia/ or south sudan/ or exp southeast asia/ or sri lanka/ or sudan/ or suriname/ or syrian arab republic/ or taiwan/ or tajikistan/ or tanzania/ or thailand/ or timor-leste/ or togo/ or tonga/ or "trinidad and tobago"/ or tunisia/ or turkmenistan/ or tuvalu/ or uganda/ or exp ukraine/ or exp united arab emirates/ or uruguay/ or exp uzbekistan/ or vanuatu/ or venezuela/ or viet nam/ or western sahara/ or yemen/ or zambia/ or zimbabwe/ 1524662</p> <p>2 "Organisation for Economic Co-operation and Development"/ 2078</p> <p>3 European Union/ 29367</p> <p>4 developed country/ 32833</p> <p>5 exp australia/ or "australia and new zealand"/ or austria/ or baltic states/ or exp belgium/ or exp canada/ or chile/ or colombia/ or costa rica/ or czech republic/ or denmark/ or estonia/ or europe/ or exp finland/ or exp france/ or exp germany/ or greece/ or hungary/ or iceland/ or ireland/ or israel/ or exp italy/ or japan/ or korea/ or latvia/ or lithuania/ or luxembourg/ or exp mexico/ or netherlands/ or new zealand/ or north america/ or exp norway/ or poland/ or exp portugal/ or scandinavia/ or sweden/ or slovakia/ or slovenia/ or south korea/ or exp spain/ or switzerland/ or "turkey (republic)"/ or exp united kingdom/ or exp united states/ or western europe/ 3462296</p> <p>6 2 or 3 or 4 or 5 3493378</p> <p>7 1 not 6 1385486</p> <p>8 coronavirus disease 2019/ 233175</p> <p>9 Severe acute respiratory syndrome coronavirus 2/ 66173</p> <p>10 (COVID-19* or Coronavirus disease 2019* or Coronavirus 2019 or COVID-2019* or SARS-CoV-2 or SARS CoV 2 or SARS-CoV-2019).ti,ab. 268872</p> <p>11 8 or 9 or 10 296296</p> <p>12 ((Strateg* or Plan* or Campaign*) adj3 Recovery).ti,ab. 4036</p> <p>13 11 and 12 185</p> <p>14 13 not 7 168</p>	
Web of Science Core Collection (Editions = A&HCI, BKCI-SSH, BKCI-S, CCR-EXPANDED, ESCI, IC, CPCI-SSH, CPCI-S, SCI-EXPANDED, SSCI)	covid-19 (Topic) and ((Strateg* OR Plan* OR Campaign*) NEAR/3 Recovery) (Topic) and australasia OR australia OR austria OR baltic OR belgium OR canada OR chile OR colombia OR "costa rica" OR "czech republic" OR denmark OR estonia OR europe* OR finland OR france OR germany OR greece OR hungary OR iceland OR ireland OR israel OR italy OR japan OR korea OR latvia OR lithuania OR luxembourg OR mexico OR netherlands OR "new zealand" OR "north america" OR norway OR poland OR portugal OR "republic of korea" OR scandinavia* OR nordic OR slovakia OR slovenia OR spain OR sweden OR switzerland OR turkey OR "united kingdom" OR "united states" (Topic)	12 July 2022 125 results

Ayiku, L., et al. (2021). The NICE OECD countries' geographic search filters: Part 2-validation of the MEDLINE and Embase (Ovid) filters. *J Med Libr Assoc*, 109(4), 583-589. <https://doi.org/10.5195/jmla.2021.1224>

Clark, J., et al. (2020). A full systematic review was completed in 2 weeks using automation tools: a case study. *J Clin Epidemiol*, 121, 81-90. <https://doi.org/10.1016/j.jclinepi.2020.01.008>

Supplementary Table 1.2 - Screening criteria for article selection

	<b>Inclusion</b>	<b>Exclusion</b>	<b>Further information</b>
<b>Focus of paper</b>	COVID recovery policies and plans	<p>Policies/policy proposals not linked to pandemic recovery.</p> <p>Policies/policy proposals which focus on responding to the pandemic, rather than post-pandemic recovery.</p>	<p><i>COVID recovery plans or policies include:</i></p> <p><i>New policies/policy proposals created explicitly to drive social and economic recovery from the pandemic.</i></p> <p><i>Pre-existing policies/policy proposals extended, amended or repurposed in order to drive social and economic recovery from the pandemic.</i></p>
<b>Level of detail</b>	Paper includes a detailed analysis of at least one policy or policy proposal.	Minimal or no analysis of specific policies or policy proposals.	<i>Paper reports analysis of some/all of: policy development, policy motivation, values, impact on inequalities, comparison with other policy options, engagement with stakeholders, trade-offs with alternative policy options, policy windows, etc.</i>
<b>Policy ownership</b>	Policies proposed or enacted by governments	Policies proposed by non-governmental actors (e.g. activists, non-governmental organisations, candidates for political office).	
<b>Jurisdiction</b>	Policies proposed or enacted at national level or below	Policies proposed or enacted at supra-national level (e.g. EU)	
<b>Study methodology</b>	Policy analyses based on empirical data (qualitative and/or quantitative)	Statistical modelling studies based on multiple assumptions	

### Supplementary Table 1.3 - Data extraction and critical appraisal proforma

This data extraction table was developed using the sources in the right-hand column (see references below).

Item	Detail	Example	Source (based on or adapted from)
<b>BASICS</b>			
Country:			
Year:			
Policy title / description:	<i>Either an official title, or our working name for it</i>		
Document(s) describing the policy:			
<b>PROBLEM STATEMENT</b>			
How is the <b>problem</b> described / framed in this policy?	What is the dominant narrative? How does the policy define the problem it wants to tackle?	<i>e.g. "too many people claiming unemployment benefits"</i>	(Roe, 1994)
What <b>alternative frames</b> might we want to bring into consideration?	This is a question which would require us to draw on outside knowledge/expertise. Leave this to the end and (if there is time) do some (non-systematic) literature searching to flesh this out.		
<b>INTERVENTION</b>			
What <b>intervention(s)</b> does the policy propose in order to address the problem it defines?		<i>e.g. "apprenticeships for unemployed young people"</i>	

Item	Detail	Example	Source (based on or adapted from)
What <b>actor(s) / organisation(s)</b> are involved/expected to be involved in <b>delivering this intervention</b> ?			(Walt & Gilson, 1994) (policy triangle – content, context, process, actors)
What is the projected <b>cost</b> of this intervention to the population? Consider: <ul style="list-style-type: none"> <li>• Lifetime cost / savings</li> <li>• Annual cost / savings</li> <li>• Who bears the cost? (Individuals / State / etc)</li> <li>• Cost per head of population ('per capita')</li> </ul>			(Rodriguez-Garcia, 2000, p. 16) (efficiency is one of 5 evaluative criteria)
What other <b>factors</b> (e.g. infrastructure, personnel, prior projects) are identified as essential for the <b>effective implementation</b> of this intervention?			(Rodriguez-Garcia, 2000, p. 16) (effectiveness is one of 5 evaluative criteria)
<b>THEORY OF CHANGE</b>			
What does the policy say about <b>cause and effect</b> (how the intervention will address the problem)?	What theories, expectations, rationales and rationalisations (implicit and explicit) are there for why the intervention might work?		(Pawson et al., 2005)
<b>OUTCOMES</b>			
What does the policy say about <b>expected benefits</b> of the intervention in terms of <b>outcomes</b> ? Particularly: <ul style="list-style-type: none"> <li>• How many people will be affected?</li> </ul>			(Rodriguez-Garcia, 2000, p. 16) (effectiveness and impact are 2 of 5 evaluative criteria)  (Bardach, 2000, pp. 2-42)

Item	Detail	Example	Source (based on or adapted from)
<ul style="list-style-type: none"> <li>Who? (e.g., particular population groups?)</li> <li>Over what timeframe?</li> </ul>			<p>(step 7 of practical guide focuses on weighing the outcomes.</p> <p>Also support tools)</p>
<b>ETHICS</b>			
Does the policy identify any known or potential <b>burdens</b> or <b>unintended harmful consequences</b> of the intervention?		This might include: curtailment of individual liberties, restriction of opportunities, risks to privacy or confidentiality.	(Kass, 2001)
Does the policy state the <b>people/groups likely to be impacted by the benefits and harms</b> identified?	Are risks and benefits likely to be borne disproportionately between different groups?		
What <b>other sources of evidence</b> do we have for the potential impact of the proposed intervention?	This is a question which would require us to draw on outside knowledge/expertise. Leave this to the end and (if there is time) do some (non-systematic) literature searching to flesh this out.		
<b>EQUITY IMPACTS</b>			
What inequalities exist in relation to the <b>problem</b> ?			(Signal, 2008)
Who is <b>advantaged</b> and who is <b>disadvantaged</b> ?	The reason for asking who is advantaged (and not just who is disadvantaged) is to identify unfair structural inequalities, as		

Item	Detail	Example	Source (based on or adapted from)
	opposed to assuming that those who are disadvantaged are responsible for their disadvantage.		
<p>What are the reasons for this disadvantage? Consider:</p> <ul style="list-style-type: none"> <li>• socioeconomic factors</li> <li>• social and cultural factors</li> <li>• environmental factors</li> <li>• availability of or access to services</li> <li>• individual/behavioural factors</li> <li>• geographical factors</li> <li>• biological/health factors</li> </ul>			
Is it likely that the intervention will be less effective or accessible for different population groups?			(SURE Collaboration, 2011) . (Adapted from Worksheet for taking equity into consideration)
<b>TRANSFERABILITY TO SCOTLAND</b>			
How <b>relevant</b> is the <b>problem</b> (as defined by the policy) to the Scottish context?	Have we sufficiently addressed these questions through our choice of countries?		(Rodriguez-Garcia, 2000, p. 16)  (relevance is one of 5 evaluative criteria)
How <b>relevant</b> are the <b>intended outcomes</b> of the intervention to the Scottish context?			
Is the <b>magnitude of the problem</b> in Scotland comparable?			(Buffett et al., 2007)
Is the <b>target population</b> in Scotland comparable? Will any differences in characteristics (e.g.			

Item	Detail	Example	Source (based on or adapted from)
ethnicity, socio-demographic variables, numbers affected) impact intervention effectiveness locally?			
<b>Political acceptability or leverage:</b> will the intervention be allowed or supported in the Scottish political context?	We may not be able to answer this		
<b>Social acceptability:</b> Is the Scottish population likely to accept, support and be interested in the intervention?	We may not be able to answer this		
Is the intervention <b>feasible</b> in terms of <b>essential resources</b> (personnel and financial)? Consider: <ul style="list-style-type: none"> <li>• What resources are essential for implementation of the intervention?</li> <li>• Are sufficient resources available?</li> </ul>	We may not be able to answer this		
Is the intervention <b>feasible</b> in terms of Scottish Government <b>capacity and strategic priorities</b> ? To what extent does it overlap with existing programmes/policies? Are there any organisational or structural barriers?	We have addressed the strategic priorities aspect, as we are focusing only on SG priority policies. We may not be able to address the capacity aspect.		
<b>ALTERNATIVES</b>			
Does the policy include any information about <b>alternative interventions</b> that have been dismissed (or previously tried) to make way for this one?			
<b>RIGOUR</b>			

Item	Detail	Example	Source (based on or adapted from)
What information is included about the <b>evidence</b> that was used to develop the policy?	Consider both the robustness/quality of the evidence and the expected impact (effect size) of the policy or intervention.		(Kass, 2001)
What information is included about the <b>processes</b> used to develop the policy (e.g. public consultations, engagement with key stakeholders, other political groupings, etc)?			(Dalglish et al., 2021) (Corresponds to the data analysis stage of the READ approach)
Are there any <b>internal contradictions</b> evident within the policy?			
Are there any concerns about the <b>credibility</b> of the policy document (e.g. accuracy, good faith, balance, selective reasoning, etc.)?			

Bardach, E. (2000). *A practical guide for policy analysis: the eightfold path to more effective problem solving*. Chatham House Publishers, Seven Bridges Press.

Buffett, C., et al. (2007). *Can I use this evidence in my program decision? Assessing the applicability and transferability of evidence*. National Collaborating Centre for Methods and Tools. [http://www.nccmt.ca/pubs/2007\\_12\\_AT\\_tool\\_v\\_nov2007\\_ENG.pdf](http://www.nccmt.ca/pubs/2007_12_AT_tool_v_nov2007_ENG.pdf)

Dalglish, S. L., et al. (2021). Document analysis in health policy research: the READ approach. *Health Policy and Planning*, 35(10), 1424-1431. <https://doi.org/10.1093/heapol/czaa064>

Kass, N. E. (2001). An ethics framework for public health. *American Journal of Public Health*, 91(11), 1776-1782. <https://doi.org/10.2105/AJPH.91.11.1776>

Pawson, R., et al. (2005). Realist review - a new method of systematic review designed for complex policy interventions. *Journal of Health Services Research & Policy*, 10(1\_suppl), 21-34. <https://doi.org/10.1258/1355819054308530>

Rodriguez-Garcia, R. (2000). *Health policy analysis in a nutshell*. The George Washington University Center for Global Health.

Roe, E. (1994). *Narrative policy analysis: theory and practice*. Duke University Press.

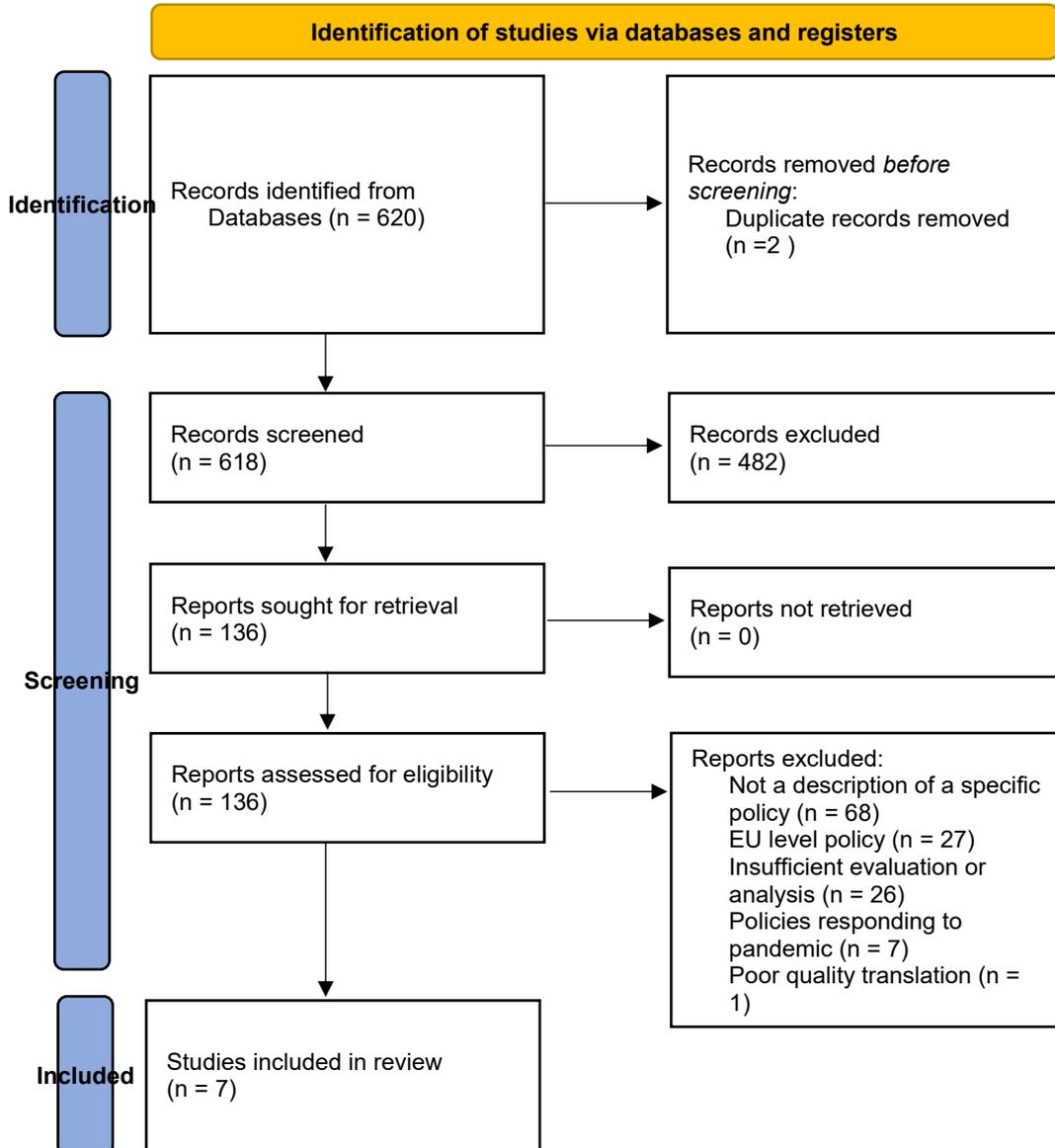
Signal, L. (2008). *The health equity assessment tool: a user's guide*. Ministry of Health.

SURE Collaboration. (2011). *SURE Guides for Preparing and Using Evidence-Based Policy Briefs Version 2.1 [updated November 2011]*. The SURE Collaboration. [www.evipnet.org/sure](http://www.evipnet.org/sure)

Walt, G., & Gilson, L. (1994). Reforming the health sector in developing countries: the central role of policy analysis. *Health Policy and Planning*, 9(4), 353-370.  
<https://doi.org/10.1093/heapol/9.4.353>

## Appendix 2: Systematic review of published academic literature on COVID recovery policies and plans - Supplementary Results

Supplementary Figure 2.1 - Screening and selection of studies



Supplementary Table 2.1 - List of excluded studies, with reasons for exclusion

Reference	Exclusion reason
Adams, E. A., et al. (2021). "It's been up and down"-perspectives on living through COVID-19 for individuals who experience homelessness: a qualitative study. <i>The Lancet</i> , 398(Supplement 2), S6. <a href="https://doi.org/https://dx.doi.org/10.1016/S0140-6736%2821%2902549-6">https://doi.org/https://dx.doi.org/10.1016/S0140-6736%2821%2902549-6</a>	Not a description of a specific policy
Alam, K., et al. (2022). Digital Transformation among SMEs: Does Gender Matter? <i>Sustainability</i> , 14(1), 20. <a href="https://doi.org/10.3390/su14010535">https://doi.org/10.3390/su14010535</a>	Not a description of a specific policy
Aloui, N., et al. (2021). Challenges of Renewable Energy to Sustainable Development: Post-Coronavirus' Economic Recovery Plan. <i>Lecture Notes in Energy</i> , 82, 37-56. <a href="https://doi.org/10.1007/978-3-030-71403-1_3">https://doi.org/10.1007/978-3-030-71403-1_3</a>	Not a description of a specific policy
Álvarez, J. F., et al. (2022). Economía Social y covid-19: Una mirada internacional. <i>CIRIEC-España, revista de economía pública, social y cooperativa</i> , 104(104), 203-231. <a href="https://doi.org/10.7203/ciriec-e.104.21855">https://doi.org/10.7203/ciriec-e.104.21855</a>	Not a description of a specific policy
Androniceanu, A. (2020). Major structural changes in the EU policies due to the problems and risks caused by COVID-19. <i>Administratie si Management Public</i> , 34(34), 137-149. <a href="https://doi.org/10.24818/amp/2020.34-08">https://doi.org/10.24818/amp/2020.34-08</a>	EU related policy
Anonymous. (2020). Education at the core of jobs-led virus recovery. <i>Education</i> , 1-2. <a href="https://search.bvsalud.org/global-literature-on-novel-coronavirus-2019-ncov/resource/en/covidwho-950528">https://search.bvsalud.org/global-literature-on-novel-coronavirus-2019-ncov/resource/en/covidwho-950528</a>	Not a description of a specific policy
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Sharifi, A., & Khavarian-Garmsir, A. R. (2020). The COVID-19 pandemic: Impacts on cities and major lessons for urban planning, design, and management. <i>Sci Total Environ</i> , 749, 142391. <a href="https://doi.org/10.1016/j.scitotenv.2020.142391">https://doi.org/10.1016/j.scitotenv.2020.142391</a>	EU related policy
Sharma, R., et al. (2021). The role of digital technologies to unleash a green recovery: pathways and pitfalls to achieve the European Green Deal. <i>Journal of Enterprise Information Management</i> , 35(1), 266-294. <a href="https://doi.org/10.1108/jeim-07-2021-0293">https://doi.org/10.1108/jeim-07-2021-0293</a>	Not a description of a specific policy
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Soerjomataram, I., et al. (2022). COVID-19 and Cancer Global Modelling Consortium (CCGMC): A global reference to inform national recovery strategies. <i>J Cancer Policy</i> , 32, 100328. <a href="https://doi.org/10.1016/j.jcpc.2022.100328">https://doi.org/10.1016/j.jcpc.2022.100328</a>	Not a description of a specific policy
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Yang, L., et al. (2021). American Rescue Plan and the Effects of Stimulus Checks - New York City. <i>Preprint</i> . <a href="https://doi.org/10.2139/ssrn.3921162">https://doi.org/10.2139/ssrn.3921162</a>	No evaluation
Yap, O. F. (2020). A New Normal or Business-as-Usual? Lessons for COVID-19 from Financial Crises in East and Southeast Asia. <i>Eur J Dev Res</i> , 1-31. <a href="https://doi.org/10.1057/s41287-020-00327-3">https://doi.org/10.1057/s41287-020-00327-3</a>	No evaluation

Supplementary Table 2.2 - Summary analysis of green recovery policies

Policy [reference]	Aims	Implementation	Costs & Financing	Evidence for Effectiveness	Reducing Inequities	Critical Antecedents	Theory of Change
<b>Recognizing the duty of the Federal Government to implement an agenda to Transform, Heal, and Renew by Investing in a Vibrant Economy (“THRIVE”)</b> <i>[Boyle et al (2021)]</i>	To respond holistically to racial injustice, unemployment, the COVID-19 pandemic, and climate change. Specific goals include: achieve carbon free electricity by 2035; investment in clean energy infrastructure and jobs (renewable energy, housing, transportation, agriculture); address environmental justice and equity; support policies for transparent and fair wages	Broad-based policy proposals at federal level. Limited information on climate and energy or jobs and infrastructure. More detailed plans on equity: prioritises focused investment in disadvantaged communities to address environmental justice and equity, through investing in infrastructure and jobs for frontline communities that have been historically marginalised in areas of both worse environmental quality and less access to decent work.	<b>Budget:</b> No information. <b>Financing:</b> No information.	No information (policy proposal, not enacted).	40% of investments focused on economic opportunity and environmental quality in marginalised communities.	<b>Pre-existing concerns:</b> Increased societal attention on systemic inequality and racial violence in 2020 followed multiple highly visible murders of Black people by police in the US. This focused attention on broader issues of environmental injustice: historically marginalised communities have greater exposure to the environmental and health harms associated with fossil fuel production and use.	Current disparities in economic and health outcomes are inextricably linked to the fossil fuel economy. By taking a holistic approach to multiple challenges, a society with greater racial, economic, and gender justice; dignified work; healthy communities; and a stable climate can be achieved.
<b>California COVID-19 Recovery Deal</b> <i>[Boyle et al (2021)]</i>	To take climate action and address inequities.	No specific implementation plans or quantitative targets.	<b>Budget:</b> No information. <b>Financing:</b> No information.	No information	Prioritised investment in communities with underinvestment and disproportionate burden (pollution from	<b>Pre-existing concerns:</b> Increased societal attention on systemic inequality and racial violence in 2020 followed multiple highly visible murders of Black people by police in the US. This focused	Current disparities in economic and health outcomes are inextricably linked to the fossil fuel economy. By taking a holistic approach to multiple challenges, a society with greater racial,

					the production and use of fossil fuels). Labour rights - supporting policies for transparent and fair wages.	attention on broader issues of environmental injustice: historically marginalised communities have greater exposure to the environmental and health harms associated with fossil fuel production and use.	economic, and gender justice; dignified work; healthy communities; and a stable climate can be achieved.
<b>Relaunch France</b> (National COVID Recovery Plan)  [Geels et al, 2022]	To stimulate climate mitigation, green transition and job creation and to restore GDP to pre-COVID levels by 2022. The plan has three pillars: green transition; competitiveness and resilience of the economy; and skills, social, and territorial cohesion.	Investment is focused on existing, well-established sectors with immediate potential for job creation (e.g. railways, buildings retrofits to improve energy efficiency). Longer term, there is investment in new technologies and sectors (e.g. electric vehicles, hydrogen).	<b>Budget:</b> Green transition (EUR 30 billion), Competitiveness and resilience of the economy (EUR 34 billion) Skills, social, and territorial cohesion (EUR 36 billion). <b>Breakdown of EUR 30 billion green recovery spending:</b> railway infrastructure – 15.5%; electric vehicles - 11.1%; building energy retrofits - 22.1%; hydrogen - 6.6%; green transition - 19.4%; air and maritime transport - 6.9%; environmental rehabilitation and protection 10.4%; urban commuting and mobility - 3.9%; agriculture,	No information provided.	Plans address social and regional inequalities by focusing on job creation and by spreading investment across many sectors, social groups and constituencies (e.g. investment in railways and housing is spread across the country).	<b>Pre-existing concerns:</b> Policy choices reflect France’s pre-existing concerns about industrial stagnation, high unemployment and inequalities. <b>Pre-existing plans:</b> Plans build on pre-existing commitments (Net Zero by 2050). <b>Political considerations:</b> Policy choices reflect Macron’s rebranding as a green reformer ahead of 2022 presidential elections. EU conditionality: to secure EU RRF funding, plans have to align with EU priorities – green new deal, digital transformation, social investment.	Implicit assumptions: Investing in job creation will reduce high unemployment. Making social issues prominent in recovery plans will avoid repetition of the 2018 gilet jaune protests. Spreading investment across many industries and regions will address social and regional inequalities. Acting quickly will result in discernible impacts by the time of the 2022 Presidential elections.

			<p>aquaculture, food and animals - 3.5 %; nuclear - 0.7%.</p> <p><b>Financing:</b> Plans are aligned with EU Recovery and Resilience Facility (RRF), allowing France to fund 40% of costs through EU contributions.</p>				
<p><b>Economic Crisis Management Package (ECMP) and Future Package (FP)</b> (part of broader German COVID economic recovery plan)</p> <p><b>[Geels et al, 2022]</b></p>	<p>ECMP: short term economic recovery.</p> <p>FP: Longer term plan to return Germany to economic growth and prosperity.</p> <p>Both plans invest in green recovery, to be spent in 2 years. Focus of green recovery investment is export-oriented economic growth. Few measures are linked to climate targets.</p>	<p>Plans focus on long-term industrial modernisation, through becoming a world leader in new, low-carbon technologies (electrolysers, hydrogen manufacturing, electric vehicle (EV) manufacturing). Transport : significant investment in railways, both to reduce GHG emissions and to support heavy industry; investment in EV demand and charging infrastructure.</p> <p>Interventionist approach: government involvement in seeding new industries and buying stakes in companies.</p>	<p><b>Budget:</b> Germany has invested a total of EUR 130 billion in its economic recovery packages (ECMP – EUR 77 billion; FP – EUR 50 billion). A total of 27.5 billion (21.2% of the total package) is for green recovery. The investment in green recovery represents 0.80% of GDP.</p> <p><b>Breakdown of EUR 27.5 billion green recovery spending:</b></p> <p>railway infrastructure - 18.2%; EVs 25.1%; building energy retrofits - 7.3%; hydrogen - 32.7%; green transition 1.5%; air and maritime transport - 11.6 %; environmental</p>	No information provided.	<p>ECMP: short term plan to boost the economy, preserve jobs, limit hardship and support federal states and municipalities, and young people and families.</p>	<p><b>Pre-existing concerns:</b></p> <p>Policy choices reflect Germany’s concerns about its global competitiveness. Export-oriented manufacturing industry is an economic priority, representing 38% of GDP in 2019, but stagnating since 2012, due to increasing competition from China/emerging economies.</p> <p><b>Pre-existing plans:</b></p> <p>Germany’s plans supplement and accelerate pre-existing climate and industrial investment.</p> <p>EU conditionality: to secure EU RRF funding, plans have to align with EU priorities – green new deal, digital</p>	<p>Key assumptions: targeting investment in a small number of new industries (EV and hydrogen) will result in Germany gaining competitive advantage and reversing previously stagnating exports in globally competitive markets; building on pre-existing strategies will be more effective than embarking on entirely new initiatives.</p> <p>Critics say that a more balanced approach (as taken by France) is less risky (a market for hydrogen may not emerge).</p>

			rehabilitation and protection - 2.5%; agriculture, aquaculture, food, animals - 1.1 %. <b>Financing:</b> The short term plan (ECMP) is partially funded via a six-month 3% VAT reduction. Plans are aligned with the EU RRF, from which the German government hopes to receive EUR 29.3 billion.			transformation, social investment.	
<b>Plan for Jobs (PfJ) and Ten Point Plan for a Green Industrial Revolution (TPP)</b> <b>[Geels et al, 2022]</b>	PfJ aims to sustain employment and create new jobs over the short term. TPP aims to support green recovery, whilst stimulating economic growth, increasing productivity and modernising industry over the longer term. The aim is that this will result in reduced GHG emissions, new job creation and reduced	Across both packages, over 50% of green recovery investment is allocated to a few, mostly existing industries and sectors: railway infrastructure and construction industry (improving the energy efficiency of buildings through retrofitting). There is also investment in new industries and technologies, building on pre-COVID strategies: e.g. EV manufacturing and recharging infrastructure.	<b>Budget:</b> PfJ - £30 billion, split between sustaining employment (£17.7 billion) and creating new jobs (£12.5 billion). TPP - £10.2 - 12 billion (amount unclear). Total investment in green recovery across both packages - £15.45 billion, representing 0.69 % of GDP. <b>Breakdown of £15.45 billion green recovery spending:</b> railway infrastructure - 27.2%; EVs 18.7%; building energy retrofits –	Critics describe the UK's green recovery package as a vision rather than a plan because there is little detail about implementation or about long-term funding. It has also been criticised for focusing on large-scale technologies and infrastructures	Railway and construction industries are geographically dispersed, enabling investment to be dispersed to economically disadvantaged regions.	<b>Pre-existing concerns:</b> policy choices reflect UK's concerns about labour market, industrial decline, and regional inequalities. <b>Pre-existing plans:</b> UK was able to leverage pre-existing climate commitments and plans, although spread unevenly across sectors. <b>Political considerations:</b> policy choices may have been influenced by UK's wish to demonstrate climate leadership, as hosts of COP-26 in 2021.	Key assumptions: Initiatives which build on pre-existing strengths and strategies are likely to be more effective than embarking on completely new initiatives. R&D-driven investment in new technologies, infrastructure and industries has potential to revitalize disadvantaged regions and stimulate economic growth and exports, making the UK a global leader in green technologies. However

	regional inequalities.		26.5%; hydrogen – 1.6%; air and maritime transport - 0.6 %; environmental rehabilitation and protection – 7.6%; urban commuting and mobility – 12.9%; nuclear – 3.9%; renewables - 1%. <b>Financing:</b> Unclear, although UK has leveraged pre-existing climate plans. Investment is spread over a longer time period than France and Germany (up to 2030).	(nuclear power, carbon-capture-and-storage, hydrogen) without compelling evidence that this is likely to be effective.			, no detail provided on how this technological transformation is to be achieved.
<b>Plan de Recuperación, Transformación y Resiliencia</b> (Spanish National Recovery and Resilience Plan) <b>[Vaquero et al, 2021]</b>	Plan comprises ten “lever” policies: 1. Urban and rural development. 2. Resilient infrastructures and ecosystems 3. Inclusive energy transition 4. Modernisation of public admin 5. Modernisation and digitalisation of industry and business 6. Promotion of science and	Each of the ten lever policies is broken down into components and plans. Levers 1 – 3 have significant green components (paper does not go into detail on non-green-focused lever policies): 1 Urban transport, housing and green/digital transformation of agri-food and fisheries plans. 2 Ecosystem conservation and restoration, coastal and water preservation, transport plans.	<b>Budget:</b> Spanish Recovery Plan aims to spend EUR 140 billion by 2026. Green transition – 40.29% of investment. Digital transformation – 29.58%. <b>Financing:</b> First phase (2021 – 23) partially funded by EUR 69.52 billion from EU RRF (of which 53% is for green initiatives). Plans are in line with EU recommendations.	Paper estimates that investment plans could create 356,000 new green jobs from 2021-23. However, this is dependent on updating workforce skills. The Spanish workforce ranks below OECD average in basic	Spanish Plan links economic recovery and regional development, with an emphasis on supporting less developed regions, through aiming to create more jobs and develop new economic activities in these regions.	<b>Pre-existing concerns:</b> Concern about uneven regional development <b>Pre-existing plans:</b> EU conditionality: to secure EU RRF funding, plans have to align with EU priorities – green new deal, digital transformation, social investment.	Investment in green industries, technologies and sectors, dispersed geographically and across multiple sectors, will create a wide range of diverse new green jobs, which will stimulate economic growth and boost regional development.

	<p>innovation and strengthening of the NHS</p> <p>7. Education and capacity building</p> <p>8. The new care economy and employment policies</p> <p>9. Culture and sport</p> <p>10. Modernisation of the tax system</p>	<p>3 Renewable energy, electricity infrastructure/ storage, hydrogen, fair transition plans.</p>		<p>cognitive skills, complex problem-solving, critical thinking and innovative capacity. A further challenge is that the plan has multiple components, with a wide diversity of different jobs and skills requirements.</p>			
<p><b>Green Energy and Reduction of Energy Consumption (Pillar 2); Green and Intelligent Mobility (Pillar 5)</b> (Draft Recovery and Resilience Plan, Poland)</p> <p><b>[Dumitrescu 2021]</b></p>	<p>Recovery and Resilience Plan has two over-arching goals: rebuilding and restoring the resilience of the economy; and preparing for unforeseen circumstances. The plan has five pillars:</p> <p>1. Resilience and competitiveness of the economy;</p> <p>2. Green energy and reduction of energy consumption;</p>	<p>No detail provided. Plan was in draft form at time of paper publication.</p>	<p><b>Budget:</b> EUR 6.4 billion (Pillar 2); EUR 6.1 billion (Pillar 5). Breakdown of spending plan for clean energy component of plan (total EUR 5.74 billion): Housing sector energy efficiency (58.5%); Developing hydrogen and other alternative fuels (14.6%); Offshore wind generation (8.0%); Heating sector modernisation (7.1%); Power grid expansion for renewables integration (6.0%);</p>	<p>No information</p>	<p>No information</p>	<p><b>Pre-existing concerns:</b></p> <p>There is an urgent need to decarbonise Poland's economy (currently heavily dependent on coal power generation) in order to remain economically competitive.</p> <p><b>Pre-existing plans:</b> EU conditionality: to secure EU RRF funding, plans have to align with EU priorities – green new deal, digital transformation, social investment.</p>	<p>Investment in green recovery will drive a paradigm shift, which will decarbonise the economy and, together with digital transformation, set Poland on a different, more sustainable, just and inclusive economic trajectory.</p>

	<p>3. Digital transformation;  4. Effectiveness, accessibility and quality of the healthcare system;  5. Green and intelligent mobility.</p>		<p>Improving energy efficiency of schools (3.5%); Local renewable energy initiatives (1.8%); Boosting companies' energy savings and renewables use (0.5%).  <b>Financing:</b> Poland will receive EUR 58.1 billion in grants (EUR 23.9 billion, of which 38% will be spent on climate-linked activities) and loans (EUR 34.2 billion) from the EU RRF to support its Recovery and Resilience Plan, to be spent by 2026.</p>				
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Supplementary Table 2.3 - Summary analysis of social and economic recovery policies

Policy	Aims	Implementation	Costs & Financing	Evidence for Effectiveness	Reducing Inequities	Critical Antecedents	Theory of Change
<p><b>First Right - Housing Access Support Programme (FR)</b> (Portugal) [Jorge, 2022]</p>	<p>To mitigate the economic and social impact of the pandemic, through public investment in housing. Focus is on addressing housing precarity and vulnerability, through integration with other policies aimed at the most vulnerable groups, including Roma communities and people experiencing homelessness. Policy establishes citizens' right to housing, specifies minimum standards of housing and establishes a framework for financial support.</p>	<p>Municipal authorities are responsible for drawing up plans to respond to local housing needs and monitoring implementation. FR grants non-refundable financial support to municipal authorities and other organisations to provide housing units, through a flexible range of options (construction, rehabilitation, building acquisition, etc). FR also grants financial support directly to vulnerable households.</p>	<p><b>Budget:</b> No figures provided on budget. Plan includes a framework of reference values, expenses and budgetary ceilings, on the basis of which financial support is calculated. Policy is designed to respond to at least 26,000 Portuguese households in a situation of precarity by 2026, although it recognises that this number is an under-estimate of need. <b>Financing:</b> No information provided.</p>	<p>Many municipalities lack capacity (e.g. technical skills, mediation skills between stakeholders, political and executive leadership, access to social security data (for the identification of eligible recipients), cross-sectoral coordination) or resources to implement policy effectively (resources insufficient for magnitude of the problem). Plans are supposed to be developed using participatory approaches to involve disadvantaged groups in identifying housing solutions; however, this does not always happen.</p>	<p>Policy explicitly targets people experiencing homelessness; people living in sub-standard or overcrowded housing; people living in housing that does not meet their needs (e.g. people with disabilities); people with specific vulnerabilities, precarity or disadvantage. However, study suggests that such groups are often excluded from the process for a variety of reasons: racism and discrimination (Roma communities); officials' lack of knowledge and failure to coordinate with other agencies (victims of domestic violence). None of the municipalities analysed in this study included international protection in their consultative exercises, despite this population being explicitly recognised as a vulnerable group.</p>	<p><b>Pre-existing concerns:</b> Political and media focus on housing pre-dates the pandemic (increasing scarcity of decent, affordable housing, especially in cities, driven by gentrification, tourism and the economic strength of real estate). These problems were sharply exacerbated by the pandemic: house prices did not fall, whilst lockdowns self-isolation highlighted problems of overcrowding and lack of basic infrastructure (such as running</p>	<p>Implicit assumption: municipalities are best placed to understand housing problems and to bring relevant stakeholders together identify solutions. A flexible framework allows responses to be tailored to local needs. Municipalities have the motivation, empowerment and capacity to work with relevant stakeholders to identify and enact appropriate solutions. Sufficient funding is available to meet identified needs. Coordination mechanisms across governmental agencies are sufficient to facilitate the flow of information (e.g. social security).</p>

						water). <b>Pre-existing plans:</b> FR is a pre-existing policy, dating from 2018, and then incorporated into Portuguese Recovery and Resilience Plan.	
<b>Proximity networks, structures and telemedicine for territorial healthcare assistance</b>  <b>(Strategy within the National Recovery and Resilience Plan)</b> (Italy)  <b>[Filippini and Vinceti (2021)]</b>	Improvement of home care, telemedicine, and e-health services; Decrease of disparities in accessing healthcare services and benefitting from them.	This particular strategy of the National Recovery and Resilience Plan is not implemented yet.	<b>Budget/Financing:</b> The budget allocated for the whole National Recovery and Resilience plan is 191.5 billion euros in grants and loans. This will be from the NextGenerationEU (NGEU) plan for the years 2021-2027.	The paper assumes that there will be an increase in quality and easing access to healthcare and also in somewhat a cost reduction; Management and follow-up of several chronic diseases, including cancer, tele-psychiatry, nonurgent conditions will be improved; The use of telemedicine is that a great proportion of outpatient visits of subjects with nonurgent conditions could be effectively managed with no reduction of quality of care through telemedicine facilities, e.g. e-health or mobile-health services.	Disparities in accessing healthcare services and benefitting from them, especially due to the current inadequate integration between hospital-based and community-based healthcare services; Despite the implementation of several healthcare management protocols (PDTA), particularly for rare and chronic diseases, their structure and application are still highly heterogeneous across the Italian regions, especially when National Plans outlining the main framework are missing.	<b>Pre-existing concerns:</b> Problems with inadequate integration between hospital-based and community-based healthcare services; an effort must be made to achieve more homogeneous and equal healthcare across the country and the different Regions. <b>Pre-existing plans:</b> With regard to the integration of	Developed under the pressure of the COVID-19 crisis, the 'Health' NRRP component aims at changing the structure of the healthcare services by substantially strengthening preventive medicine interventions and efficacy. The effort is envisaged through the implementation of new public healthcare laws, full digitisation of the health systems, and substantial improvement of the equity in access to care.

						<p>hospital and community, new models of healthcare were already identified and structured before the pandemic in the Italian National Health System, e.g. the so called diagnostic, therapeutic and healthcare management protocols (PDTA). The COVID-19 pandemic and the prolonged lockdowns have strongly boosted the implementation of telemedicine programs in the most recent months; Implementation of logistics as well as better personnel training has been pointed out.</p> <p><b><u>Political considerations:</u></b> No information</p>	
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						The reform of territorial and primary care has already generated a heated debate between the Italian Regions and primary care physicians. Bridging public law and public health is thus a major imperative for the implementation of the National Recovery and Resilience Plan and its strategies.	
<b><i>Innovation, research and digitisation of the National Health System (Strategy within the National Recovery and Resilience Plan)</i></b> (Italy)	To nourish scientific research and foster technology transfer, and to enhance staff training; To develop public health services capable of strengthening skills and human capital and to enhance	This particular strategy of the National Recovery and Resilience Plan is not implemented yet, apart from the milestone “Digital update of hospitals’ technological equipment”, which is described as ongoing.	<b><u>Budget/Financing:</u></b> The budget allocated for the whole National Recovery and Resilience plan is 191.5 billion euros in grants and loans. This will be from the NextGenerationEU (NGEU) plan for	The implementation of Personal Electronic Health Records already showed to have positive impact on immunization program through the increase of vaccine uptake, although mediating factors as well as digital improvements of such tools are still to be identified.	The need to address at national levels the disparities in the provision of healthcare services, the lack of integration between hospital-based and community-based care as well as social services, the issue of a too long waiting time for critical interventions in many areas of the country.	<b><u>Pre-existing concerns:</u></b> The strengthening of intensive and semi-intensive care units is of particularly relevance since the lack of such structures became apparent during the most critical phases of the COVID-19	No information

<b>[Filippini and Vinceti (2021)]</b>	investments for digital, structural and technological resources; To increase biomedical research, and to promote the renewal and modernization of the existing technological and digital healthcare structures; To complete and systematic use the Personal Electronic Health Record (PEHR), and to better deliver and monitor capacity of the Essential Levels of Assistance (LEA) through more effective information technology tools and systems.		the years 2021-2027.			pandemic, when temporary hospitals had to be built up in Italy.  The need to address at national levels the disparities in the provision of healthcare services, the lack of integration between hospital-based and community-based care as well as social services, the issue of a too long waiting time for critical interventions in many areas of the country, and eventually the limited capacity to address environmental and climate change-related health risks.	
<b>National Recovery and Resilience Plan</b>	The aim of this policy is to implement Social	The following are plans, but not yet implemented.	<b>Budget:</b> Total RRP budget: EUR 191.5 billion, with 55	No information because plans not yet implemented. Rebalancing investment	Policies include interventions targeted at working families,	<b>Pre-existing concerns:</b> COVID hit Italy during a	Recalibration of welfare policies to invest in human

<p><b>(RRP) - Social Investment element</b> (Italy)</p> <p><b>[Guillen et al, 2022]</b></p>	<p>Investment Reforms in Italy. Italy's RRP has 6 main missions:</p> <ol style="list-style-type: none"> <li>1. Digitalisation</li> <li>2. Green revolution</li> <li>3. Infrastructures for sustainable mobility</li> <li>4. Education and Research</li> <li>5. Inclusion and Cohesion</li> <li>6. Healthcare</li> </ol>	<p><b>Education and Early Childhood Education and Care (ECEC):</b></p> <ol style="list-style-type: none"> <li>1. 228,000 new nursery places (almost doubling current provision); investment in tertiary vocational education and training.</li> <li>2. Improvement in teacher recruitment and training</li> <li>3. Investment in digital skills and infrastructures</li> <li>4. Strengthening PhD programmes.</li> <li>5. Ultra-broadband and 5G internet connections for all schools.</li> </ol> <p><b>Health and social care:</b></p> <ol style="list-style-type: none"> <li>1. Strengthening health and social care (expenditure equivalent to 11 % of current annual NHS expenditure in Italy).</li> <li>2. Innovation, digitalisation and research in the NHS.</li> </ol> <p><b>Labour market policies:</b></p>	<p>billion allocated to welfare state and education:</p> <p>Education and ECEC - 10.2 %;</p> <p>Health and social care – 8.2 %;</p> <p>Labour market policies – 3.1 %;</p> <p>Other social policies – 6.6 %.</p> <p><b>Financing:</b> no information</p>	<p>from traditional welfare policies, including pensions, to focus on younger generations may prove challenging in an ageing society. EU funding is for investment: member states need to find recurring funding to support these policies, which may be challenging. Macroeconomic conditions do not leave much room for manoeuvre for expansionary social investment policies.</p>	<p>children and young people, people with disabilities. Policies also target social exclusion, regional inequalities, housing and urban renewal.</p> <p>Recalibration of social protections because they were too oriented towards older generations, fostering stronger support to younger generations and women.</p>	<p>period when the welfare system was in a state of stress, after a decade of austerity. The welfare system had shrunk to focus on traditional compensatory policies (i.e. policies that focus solely on helping citizens cope with loss of income because of age, redundancy or illness).</p> <p>After a decade of austerity, public opinion favours investment in public services and there is little appetite for further austerity.</p> <p><b>Pre-existing plans:</b> Italian state budget bill, 2021, focused more on traditional, compensatory</p>	<p>capital, by focusing on social investment in education, healthcare, childcare, family services, long-term care, lifelong learning and active labour market policies (ALMPs) will equip people to better respond to the new social risks of a competitive, knowledge economy. This is contrasted with traditional, compensatory welfare policies, which have a narrower focus of helping citizens cope with loss of income because of age, redundancy or illness.</p>
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		<p>Active labour market policies (ALMPs) and employment support.</p> <p><b><u>Other social policies:</u></b></p> <ol style="list-style-type: none"> <li>1. Social services, disability and fighting social exclusion</li> <li>2. Social housing and urban renewal</li> <li>3. Sport and social inclusion</li> <li>4. Interventions for ensuring territorial cohesion</li> </ol>				<p>welfare policies than on social investment policies.</p> <p><b><u>Political considerations:</u></b></p> <p>EU conditionality: to secure EU RRF funding, member states' recovery plans have to align with EU priorities (green new deal, digital transformation, social investment). Social investment policies are welfare policies that are recalibrated to invest in human capital (education, healthcare, childcare, family services, long term care, lifelong learning and ALMPs (as opposed to traditional, compensatory welfare policies). Author</p>	
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						s suggest that EU RRF has been an effective mechanism for persuading member states to reform their welfare systems in a social investment direction. Other political considerations include government stability; party competition and attitudes to EU, public opinion about EU.	
<b>National Recovery and Resilience Plan (RRP) - Social Investment element (Spain)</b>  <b>[Guillen et al, 2022]</b>	The aim of this policy is to implement Social Investment Reforms in Spain. Spain's RRP has 4 axes: 1. Ecological Transition 2. Digital Transformation 3. Social and Territorial Cohesion 4. Gender Equality	The following are plans, but not yet implemented. <b>Education and ECEC:</b> 1. National Plan for Digital skills 2. Strategic plan for Vocational training 3. Modernisation and digitalisation of the education system, including early education from age 0 to 3 (Goal: 65.000 places)	<b>Budget:</b> Total RRP budget: 69.5 billion for the entire plan, half of which to be spent by 2023, with 20.6 billion allocated to welfare state and education (29.7 %): Education and ECEC – 10.5 % of total budget; Health and social care – 4.6 %; Labour market policies – 3.4 %;	No information because plans not yet implemented. Rebalancing investment from traditional welfare policies, including pensions, to focus on younger generations may prove challenging in an ageing society. EU funding is for investment: member states need to find recurring funding to support these policies, which may be challenging. Macroeconomic conditions do not leave much room for manoeuvre	Policies include interventions targeted at children and young people, women, working families, people in long-term care, regional inequalities. Policies also target housing and urban renewal. Recalibration of social protections because they were too oriented towards older generations, fostering stronger support to	<b>Pre-existing concerns:</b> COVID hit Spain during a period when the welfare system was in a state of stress, after a decade of austerity. The welfare system had shrunk to focus on traditional compensatory policies (i.e. policies that	Recalibration of welfare policies to invest in human capital, by focusing on social investment in education, healthcare, childcare, family services, long-term care, lifelong learning and active labour market policies (ALMPs) will equip people to better respond to the new social risks of a competitive,

		<p><b><u>Health and social care:</u></b>  1. Renewal and expansion of the capacities of the NHS—including strengthening of Primary and Community Care  2. Long-term care and support plan: deinstitutionalisation, equipment and technology.</p> <p><b><u>Labour market policies:</u></b>  ALMPs targeting employed, unemployed and furloughed workers: youth employment, gender equality, rebalancing employment regionally, training to boost green and digital employment skills and competencies.</p> <p><b><u>Other social policies:</u></b>  1. Social service modernisation (technological transformation, innovation, training</p>	<p>Other social policies – 15.5 %.  <b>Financing:</b> EUR 69.52 billion from EU RRF</p>	<p>for expansionary social investment policies.</p>	<p>younger generations and women.</p>	<p>focus solely on helping citizens cope with loss of income because of age, redundancy or illness). After a decade of austerity, public opinion favours investment in public services and there is little appetite for further austerity.</p> <p><b><u>Pre-existing plans:</u></b> Spain’s state budget bill, 2021, focused more on traditional, compensatory welfare policies than on social investment policies.</p> <p><b><u>Political considerations:</u></b> EU conditionality: to secure EU RRF funding, member states’ recovery plans have to align with EU priorities (green new deal, digital</p>	<p>knowledge economy. This is contrasted with traditional, compensatory welfare policies, which have a narrower focus of helping citizens cope with loss of income because of age, redundancy or illness.</p>
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		<p>and reinforcement of childcare)</p> <p>2. Housing rehabilitation and urban renewal plan</p> <p>3. Plan 'Spain protects you against sexist violence'</p> <p>4. Sustainability of the public pension system</p>				<p>transformation, social investment). Social investment policies are welfare policies that are recalibrated to invest in human capital (education, healthcare, childcare, family services, long term care, lifelong learning and ALMPs (as opposed to traditional, compensatory welfare policies). Authors suggest that EU RRF has been an effective mechanism for persuading member states to reform their welfare systems in a social investment direction. Other political considerations include</p>	
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						government stability; party competition and attitudes to EU, public opinion about EU.	
<p><b>Resilience and competitiveness of the economy; Digital transformation; Health system reform (Pillars 1, 3 and 4)</b> (Draft Recovery and Resilience Plan, Poland)</p> <p><b>[Dumitrescu 2021]*</b></p>	<p>Recovery and Resilience Plan has two over-arching goals: rebuilding and restoring the resilience of the economy; and preparing for unforeseen circumstances. The plan has five pillars: 1. Resilience and competitiveness of the economy; 2. Green energy and reduction of energy consumption; 3. Digital transformation; 4. Effectiveness, accessibility and quality of the healthcare system; 5. Green and intelligent mobility.</p>	<p>No detail provided. Plan was in draft form at time of paper publication.</p>	<p><b>Budget:</b> 4.1 billion euros (Pillar 1); 3.0 billion euros (Pillar 3); 4.3 billion euros (Pillar 4).</p> <p><b>Financing:</b> Poland will receive EUR 58.1 billion in grants (EUR 23.9 billion) and loans (EUR 34.2 billion) from the EU RRF to support its Recovery and Resilience Plan, to be spent by 2026.</p>	<p>No information</p>	<p>No information</p>	<p><b>Pre-existing concerns:</b> Reforming and reconstructing socio-economic resilience</p> <p><b>Pre-existing plans:</b> Some economic reforms have already been initiated, such as the Łukasiewicz Research Network.</p>	<p>The author states that the most important impact of the current Pandemic Covid-19 crisis will be the “paradigm shift” that will reshape the future of all member states economies, including Poland’s, and the EU as a whole.</p> <p>In addition, the green transition will be a great opportunity for the modernization of the economy and the growth of Polish companies, and together with the digital transformation will accelerate the Fourth Industrial Revolution’s pace of change and broad impact.</p>

							<p>The other shift of paradigm is linked with the fact that we are witnessing a change from an economic model in which services had an important weight, in favour of a model based on the development of productive, processing, industrial and agricultural sectors, which can provide the products necessary for the strategic autonomy of the European community space.</p>
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\* There is very limited information, but we included this paper in case it is of interest and will help in identifying future research.

## Appendix 3: Comparative analysis of COVID recovery plans of countries and regions relevant to Scotland - Supplementary Methods

### Supplementary Table 3.1 – Selection of countries (Financial security for low income households)

#### A: First stage of country selection

	Indicators			
	GNI per capita (USD) 2020	GINI	HDI 2022	Adjusted gross disposable household income per capita (USD)
<b>OECD countries</b>				
Scotland (UK)	45,870	0.366	0.932	33,049
Australia	52,230	0.325	0.938	37,433
Austria	55,620	0.274	0.914	37,001
Belgium	53,650	0.262	0.919	34,884
Brazil		0.489		12,924
Canada	46,050	0.301	0.922	34,421
Chile	24,020	0.46	0.847	18,477
Colombia	14,640		0.761	10,961
Costa Rica	20,860	0.497	0.794	16,517
Czech Republic	40,160	0.248	0.891	26,664
Denmark	62,260	0.263	0.93	33,774
Estonia	37,570	0.305	0.882	23,784
Finland	51,410	0.269	0.925	33,471
France	47,730	0.292	0.891	34,375
Germany	56,370	0.289	0.939	38,971
Greece	27,830	0.308	0.872	20,791
Hungary	32,190	0.286	0.845	21,026
Iceland	52,030	0.25	0.938	37,549
Ireland	71,040	0.292	0.942	29,488
Israel	39,090	0.348	0.906	27,001
Italy	42,420	0.33	0.883	29,431
Japan	43,130	0.334	0.915	28,872
Latvia	31,470	0.344	0.854	19,783
Lithuania	37,760	0.357	0.869	8,274
Luxembourg	83,230	0.305	0.909	44,773
Mexico	17,810	0.418	0.767	16,269
Netherlands	58,240	0.296	0.933	34,984
New Zealand	43,030		0.921	39,024
Norway	65,500	0.261	0.954	39,144
Poland	33,040	0.281	0.872	23,675
Portugal	33,640	0.301	0.85	24,877
Russian Federation		0.353		19,546
Slovakia	31,000	0.22	0.857	21,149
Slovenia	39,420	0.246	0.902	25,250
South Africa		0.63		9,338
South Korea	45,570	0.345	0.906	24,590
Spain	37,980	0.32	0.893	27,155
Sweden	56,740	0.28	0.937	33,730
Switzerland	69,170	0.311	0.946	39,697
Turkey	26,900	0.397	0.806	19,482
United Kingdom	45,870	0.366	0.932	33,049
United States	64,210	0.395	0.92	51,147

#### B: Second stage of country selection

Countries selected for HDI, GNI and GHDI	Gini coefficient
Scotland (UK)	0.366
Australia	0.325
Switzerland	0.311
Luxembourg	0.305
Canada	0.301
Netherlands	0.296
France	0.292
Germany	0.289
Sweden	0.28
Austria	0.274
Finland	0.269
Denmark	0.263
Belgium	0.262
Norway	0.261
Iceland	0.25

**Key:** Green colour indicates:

- GNI per capita- equal or above UK
- GINI- same as UK or lower
- HDI- has a score of 0.9
- GHDI- above UK

**Sources:**

Adjusted Gross Household income per capita: <https://www.oecdbetterlifeindex.org/topics/income/>

GNI 2020: GNI per capita, PPP (current international \$) - OECD members | Data (worldbank.org)

HDI 2022: <https://worldpopulationreview.com/country-rankings/hdi-by-country>

Cross ref: ILO | Social Protection Platform (social-protection.org)

Supplementary Table 3.2 – Selection of countries (Good green jobs and fair work)

Countries/Regions selected	Basis of selection (based on inclusion criteria and indicators)
Ireland	<p>Countries with a level of socioeconomic reliance on carbon fuels (i.e. oil, gas, coal and peat) that is comparable to Scotland's that are making efforts to decarbonise</p> <p>Countries implementing interventions that Scotland is considering and therefore judged to be relevant to Scotland(e.g., just transition in especially vulnerable region)</p>
Canada	<p>Countries with a level of socioeconomic reliance on carbon fuels (i.e. oil, gas, coal and peat) that is comparable to Scotland's that are making efforts to decarbonise</p> <p>Regions with a climate comparable to Scotland's.</p> <p>Countries that have both federal and devolved political systems</p>
Norway	<p>Countries with a level of socioeconomic reliance on carbon fuels (i.e. oil, gas, coal and peat) that is comparable to Scotland's that are making efforts to decarbonise</p>
Germany	<p>Countries with a level of socioeconomic reliance on carbon fuels (i.e. oil, gas, coal and peat) that is comparable to Scotland's that are making efforts to decarbonise.</p> <p>Countries that have both federal and devolved political systems</p>
The United States	<p>Countries with a level of socioeconomic reliance on carbon fuels (i.e. oil, gas, coal and peat) that is comparable to Scotland's that are making efforts to decarbonise</p> <p>States implementing interventions that Scotland is considering and therefore judged to be relevant to Scotland (e.g., electric vehicle uptake)</p> <p>States with coastlines and cold climate comparable to Scotland's.</p> <p>Countries that have both federal and devolved political systems.</p>

### Supplementary Table 3.3 – Selection of countries (Wellbeing of children and young people)

Our approach to country selection was based on five indicators of children and young people’s well-being as identified in the **2013 UNICEF report card** (Adamson, 2013). Specifically, we looked at the child poverty rate, infant mortality rate, adolescent mortality rate, early childhood education enrolment rate for 3 and 4-year-olds, and the not in education, employment or training rate (NEET) for young people. We compared the indicators of OECD countries with Scotland and selected five top countries that are comparable to or doing better than Scotland. It is important to note that while some countries have better indicators than Scotland, a key inclusion criterion was that the country must have specific policies focusing on children and young people’s well-being in their social and economic COVID-19 recovery plan.

	Indicators					
OECD Countries	Child Poverty Rate (%)	Infant Mortality Rate	Adolescent Mortality Rate (10-19 years)	Participation Rate: Early Childhood Education Enrolment rate (OECD) - 3 year-olds	Participation Rate: Early Childhood Education Enrolment rate (OECD) - 4 year-olds	NEET Rate (% age 15-19 not in Education, Employment, or Training)
<b>Scotland</b>	<b>24</b>	<b>3.9</b>	<b>2.4</b>	<b>97</b>	<b>97</b>	<b>10.2</b>
<b>Australia</b>	11	3.1	2.03	65.877	90.206	7.356
Austria	7.5	2.9	1.7	77.815	84.264	5.71
<b>Belgium</b>	10.2	3.44	1.4	97.867	98.272	4.215
Canada	14	4.3	2.1	N/A	N/A	9.051
Chile	20	5.7	2.7	57.457	85.017	11.725
Columbia	17	11.3	5.5	56.9	85.017	22.868
Costa Rica	34.1	6.7	3.58	5.695	49.639	13.625
Czech Republic	9.8	2.3	1.8	77.633	87.082	2.383
Denmark	6	3.1	1.2	96.504	98.129	4.423
Estonia	12	1.6	2.2	88.184	92.276	4.007
<b>Finland</b>	4	1.8	2.3	80.423	85.009	3.833
<b>France</b>	9.7	3.4	1.42	100	100	6.559
<b>Germany</b>	9.7	3.1	1.45	90.447	94.927	2.805
Greece	15	3.5	1.52	34.903	75.957	7.668
Hungary	19	3.3	1.8	87.175	96.159	6.654
Iceland	6.5	1.5	1.6	96.337	97.015	5.388
Ireland	9	2.6	1.1	99.179	100	6.188
Israel	29.6	2.9	1.5	100	97.374	8.942

Italy	17	2.4	1.32	92.214	95.44	10.887
Japan	14.9	1.8	1.37	85.228	98.953	N/A
Korea, Rep.	7.1	2.5	1.5	95.723	91.461	N/A
Latvia	20.2	3.4	3.1	89.092	89.092	2.588
Lithuania	17.5	2.6	2.9	84.475	88.106	2.312
Luxembourg	12	2.2	1	68.983	97.749	1.489
Mexico	52.6	11.7	5.7	46.295	89.118	14.741
Netherlands	6	3.5	1.3	76.885	95.416	3.914
New Zealand	11.5	3.9	2.2	83.861	88.609	7.202
Norway	6.5	1.7	1.6	96.383	97.244	3.037
Poland	14	3.7	2.3	77.607	89.187	2.767
Portugal	15	2.7	1.5	83.678	95.415	3.355
Slovak Republic	10.9	4.6	2.4	68.33	79.422	5.697
Slovenia	7	1.7	1.48	89.085	92.529	3.305
Spain	19.5	2.7	1.1	96.125	97.543	8.125
Sweden	7	2.1	1.6	93.386	94.585	2.877
Switzerland	9.8	3.5	1.5	2.368	48.735	5.271
Turkey	32	8.1	2.8	10.691	39.467	17.049
United Kingdom	10	3.6	1.7	100	100	9.159
United States	24.5	5.4	3.1	N/A	N/A	7.699

OECD Countries	Indicators					
	Child Poverty Rate (%)	Infant Mortality Rate	Adolescent Mortality Rate (10-19 years)	Participation Rate: Early Childhood Education Enrolment rate (OECD) - 3-year-olds	Participation Rate: Early Childhood Education Enrolment rate (OECD) - 4-year-olds	NEET Rate (% age 15-19 not in Education, Employment, or Training)
Scotland	24	3.9	2.4	97	97	10.2
Australia	11	3.1	2.03	65.877	90.206	7.356
Belgium	10.2	3.44	1.4	97.867	98.272	4.215
Finland	4	1.8	2.3	80.423	85.009	3.833
France	9.7	3.4	1.42	100	100	6.559
Germany	9.7	3.1	1.45	90.447	94.927	2.805

Adamson, P. (2013). *Child Well-being in Rich Countries: A comparative overview* (Innocenti Report Card, Issue 11).

Supplementary Table 3.4 – Search strategies

Topic	Search terms	Databases searched
Financial security for low-income households	<p>Government budget documents within the predetermined Covid recovery period for the following search terms;</p> <p>‘Covid recovery’, ‘benefits’, ‘low-income’, ‘employment’, ‘job loss’, ‘income loss’, ‘families’, ‘inequalities’, and ‘households</p>	Government websites of comparator countries only
Good green jobs and fair work	<p>We searched by country name in each database where green recovery policy documents were indexed. Full documents were then retrieved from various government websites or through google.</p> <p>For Google searches, the following search terms were used:  “post covid green recovery”, “post covid recovery”, “just transition”, green jobs, “fair work and green jobs”, “good green jobs”, “green recovery from covid”, “climate action plan”, each preceded by the name of one of the five countries selected for review.</p>	<p><a href="https://platform2020redesign.org/">https://platform2020redesign.org/</a></p> <p><a href="https://www.carbonbrief.org/coronavirus-tracking-how-the-worlds-green-recovery-plans-aim-to-cut-emissions/">https://www.carbonbrief.org/coronavirus-tracking-how-the-worlds-green-recovery-plans-aim-to-cut-emissions/</a></p> <p><a href="https://recovery.smithschool.ox.ac.uk/tracking/">https://recovery.smithschool.ox.ac.uk/tracking/</a></p> <p><a href="https://www.greenrecoverytracker.org/">https://www.greenrecoverytracker.org/</a></p> <p><a href="https://www.energypolicytracker.org/">https://www.energypolicytracker.org/</a></p> <p><a href="https://www.oecd.org/coronavirus/en/themes/green-recovery">https://www.oecd.org/coronavirus/en/themes/green-recovery</a></p>
Wellbeing of children and young people	<p>We searched by country name in the OECD and European Commission databases where COVID Recovery Plans were indexed along with conducting Google searches and looking at Budget documents within the predetermined COVID recovery period using following search terms- “Covid recovery”, “Covid recovery plan”, “Covid</p>	OECD and European Commission databases and Government websites of comparator countries only

	recovery policy”, “covid-19 recovery+ programs”, “Covid recovery+ children”, “Covid-19 recovery policy + youth”, “ Covid recovery+ young people”, “school”, “Covid recovery+ education”, “economic recovery Covid-19 plan”, “social recovery+ post covid plan”, Covid recovery and resilience plan+ employment”, “jobs”, “training”, “digitalization”	
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Supplementary Table 3.5 - GIRFEC principles and values (Scottish Government, 2022) and SHANARI Wellbeing Indicators (Scottish Government, n.d.)

<p>GIRFEC Principles and Values</p>	<ul style="list-style-type: none"> <li>- Placing the child or young person and their family at the heart, and promoting choice, with full participation in decisions that affect them</li> <li>- Working together with families to enable a rights respecting, strengths based, inclusive approach</li> <li>- Understanding wellbeing as being about all areas of life including family, community and society</li> <li>- Valuing difference and ensuring everyone is treated fairly</li> <li>- Considering and addressing inequalities</li> <li>- Providing support for children, young people and families when they need it, until things get better, to help them to reach their full potential</li> <li>- Everyone working together in local areas and across Scotland to improve outcomes for children, young people and their families</li> </ul>
<p>SHANARI Wellbeing Indicators</p>	<p>Safe – growing up in an environment where a child or young person feels secure, nurtured, listened to and enabled to develop to their full potential. This includes freedom from abuse or neglect.</p> <p>Healthy – having the highest attainable standards of physical and mental health, access to suitable healthcare, and support in learning to make healthy and safe choices.</p> <p>Achieving – being supported and guided in learning and in the development of skills, confidence and self-esteem, at home, in school and in the community.</p> <p>Nurtured – growing, developing and being cared for in an environment which provides the physical and emotional security, compassion and warmth necessary for healthy growth and to develop resilience and a positive identity.</p> <p>Active – having opportunities to take part in activities such as play, recreation and sport, which contribute to healthy growth and development, at home, in school and in the community.</p> <p>Respected – being involved in and having their voices heard in decisions that affect their life, with support where appropriate.</p> <p>Responsible – having opportunities and encouragement to play active and responsible roles at home, in school and in the community, and where necessary, having appropriate guidance and supervision.</p> <p>Included – having help to overcome inequalities and being accepted as part of their family, school and community.</p>

## Appendix 4: Comparative analysis of COVID recovery plans of countries and regions relevant to Scotland – Supplementary Results

Supplementary Table 4.1 – Policy themes present in comparator countries (Financial security for low-income households)

FSLIH themes	Theme is present in the comparator country				
	Australia	Switzerland	Canada	Luxembourg	Netherlands
<b>Theme 1: Measures for loss of jobs or unemployment</b>					
<b>Assistance in matching jobseekers to employers</b>				x	
<b>Support for recruitment in jobs with labour shortages</b>	x		x		
<b>Training- Reskilling/Upskilling</b>	x			x	
<b>Theme 2: Income specific policy</b>					
<b>Income tax rebates</b>	x				
<b>Federal minimum wage</b>			x		
<b>Workers benefit and employment insurance</b>			x		
<b>Theme 3: Affordable housing policy</b>					
<b>Construction of affordable houses for rent/sale</b>			x	x	
<b>Special funds for housing development/ more social housing or housing benefit</b>	x		x		
<b>Rent relief</b>					
<b>Loans for affordable purchase of new properties/resale</b>	x				
<b>Protecting buyers and renters</b>			x		
<b>Theme 4: Family specific policy</b>					
<b>Additional funding or cheaper childcare and creche facilities</b>	x	x			
<b>Reforms in taxation for married couples and families</b>					
<b>Additional economic support for low- income households</b>	x		x		x
<b>Theme 5: Policy for people with disabilities</b>					
<b>Increase in disability insurance</b>	x	x	x	x	
<b>Additional early support for children and young with developmental disability</b>	x				
<b>Increased investment home support and staff for disabled people</b>	x		x	x	
<b>Additional funding for employment</b>				x	
<b>Theme 6: Vulnerable populations financial security</b>					
<b>Supporting ethnic minorities</b>	x		x		
<b>Supporting this at risk of homelessness/PEH</b>	x				
<b>Theme 7: Social benefits or welfare</b>					
<b>Unemployment benefits</b>		x			x
<b>Increase in social benefits or welfare</b>		x			
<b>Theme 8: Cost of living specific interventions for low income families</b>					
<b>One off support payments</b>	x			x	
<b>Fuel and energy support</b>	x				

Supplementary Table 4.2 – Policy themes profoundly present in comparator countries’ key action plans (Good green jobs and fair work)

Green Recovery Theme	Is theme profoundly present in the Country's Action plans?			
	Germany	Norway	Canada	Ireland
<b>Theme 1: Decarbonisation and clean energy</b>				
Electric road, rail and water vehicle Infrastructure Investment as a method to lower emissions, recover from Covid-19 economic downturn and create green jobs	Yes	Yes	Yes	Yes
Hydrogen Strategy	Yes	Yes	Yes	Yes
Closing orphan wells or rehabilitating peatlands	Yes	Yes	Yes	Yes
Clean infrastructure investment i.e., clean power/renewable energy	Yes	Yes	Yes	Yes
Just transition for regions affected by decarbonisation efforts				Yes
<b>Theme 2: investments in innovation and R&amp;D</b>				
Investing in greening key manufacturing industries	Yes	Yes	Yes	Yes
Net Zero Accelerator			Yes	
Acceleration of investment approval processes	Yes	Yes		Yes
<b>Theme 3: Energy Efficient Retrofits &amp; Renovations</b>	Yes	Yes	Yes	Yes
<b>Theme 4: Energy sector transition - support existing workers to transition</b>				
Creation of seed funding programs	Yes	Yes	Yes	Yes
Reskilling support	Yes	Yes	Yes	Yes
Green Jobs and Growth Funding - support the transition to a green economy through skilling and reskilling the workforce		Yes	Yes	Yes
<b>Theme 5: Digital Economy</b>	Yes	Yes	Yes	Yes
Connecting homes/businesses/schools to digital infrastructure	Yes	Yes	Yes	Yes
Education Digitalisation	Yes			
Digitalisation and technological research in industry	Yes	Yes	Yes	Yes
<b>Theme 6: Nature-based solutions</b>				
Sustainable agriculture support, research and development		Yes	Yes	Yes
Tree planting		Yes	Yes	Yes
Protecting peatlands, wetlands and grasslands		Yes	Yes	Yes
Withholding grant funding to projects that harm biodiversity or nature		Yes		

Supplementary Table 4.3 – Policy themes present in comparator countries’ COVID recovery plans

Themes and sub-themes	Australia	Belgium	Germany	France	Finland
<b>Theme 1: Childcare</b>					
More affordable child care	x		x		
Paid Parental leave expansion	x				
Day-care infrastructure			x		
Removal of the annual cap on the Child Care Subsidy and increased subsidies for second and subsequent children.	x				
<b>Theme 2: Education</b>					
Supporting students’ education by improving student mental health and wellbeing	x				
Digitisation of education		x	x	x	x
Digital service package					x
Starts at universities					x
Digital education initiative			x		
Teacher devices			x		
Development of a national education platform			x		
Creation of centres of excellence for digital and digitally supported teaching			x		
Modernisation of Bundeswehr education and training facilities			x		
Flemish Community Program		x			
French- and German-speaking communities Scheme		x			
Digisprong		x			
Funding for progress in higher education		x			
Personalised support in educational settings aka Reform to approach to tackling educational disengagement		x			
Digital strategy for higher education and education for social mobility		x			
Digital technology (computers) for Brussels schools		x			
Digitisation of schools in German-speaking communities		x			
<b>Theme 3: Employment and Upskilling</b>					
Trainee support			x		
Promo 16-18, the road to possibilities				x	
Intensive Youth Support (AIJ)				x	
Sesame towards Employment for Sport and Animation in the Management Professions (SESAME)				x	

Themes and sub-themes	Australia	Belgium	Germany	France	Finland
Youth Guarantee Program				x	
Exceptional support measures for cultural dissemination and image education				x	
Job creation for young people in sports				x	
Integration through Youth Economic Activity (IAE Youth)				x	
"emploi franc +" scheme				x	
Cordées de la Réussite-Ropes of success				x	
Skills Investment Plan				x	
Remuneration of vocational training trainees				x	
Support to employers for hiring of persons with disabilities				x	
1 young person - 1 mentor policy				x	
Wallonia community Scheme		x			
Brussels Program		x			
1 young person – 1 solution				x	
Enhancing multi-professional services for young people under the Youth Guarantee programme					x