



Secretariat Covid-19 Working Paper Series

Progressing Sustainability in the Context of Covid-19: Grasping the Opportunity

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NOTE: The NESC Secretariat Covid-19 Working Paper Series is to provide timely, concise analysis for policy-makers and other stakeholders. This research work, in normal circumstances, would be used to produce NESC reports, which would be published following detailed deliberation by the Council. The Council has members appointed by the Taoiseach, comprising representatives of business and employers' organisations, trade unions, agricultural and farming organisations, community and voluntary organisations, and environmental organisations; as well as heads of Government Departments and independent experts. By putting it in the public domain earlier, it is hoped this research can help those now working on Ireland's response to Covid-19. It will also inform Ireland's discussion of its recovery from the Covid-19 crisis. These papers are un-refereed material and are a work-in-progress by members of the Secretariat. The authors are solely responsible for the content and any views expressed therein, and welcome any comment on these papers (email info@nesc.ie). Working papers may be downloaded for personal use only. Given the nature of the crisis, these working papers are likely to be updated on a regular basis. This will be done in as timely as manner as possible.

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1.1 Introduction

Despite international agreement that climate change represents an existential threat to humanity, and wide acknowledgement around the world of the risks posed to nature and humans by biodiversity and habitat loss, global efforts to counter these remain grossly insufficient (c.f. UNEP, 2019).¹ The scale of the transformative change required and the need to move away from business as usual have hindered adoption of the necessary, radical approach.

Covid-19 has shown that it is possible to change and to change radically; it resulted in a critical economic stop and a virtual cessation in the movement of people. The status quo or business as usual which seemed so inimical to change and so detrimental to climate and environment, was disrupted.

This disruption presents enormous challenges for businesses, workers and the unemployed, service providers, both private and public, and for the public finances. While uncertainty remains about the medical and epidemiological course of the Covid-19 pandemic, the key policy focus is how to bring about a recovery and to address these challenges.

This paper provides a short 'state of play' of sustainability challenges and opportunities in the context of Covid-19. It outlines that responding to Covid-19 and the work on the recovery that follows require an understanding of the interdependencies between nature, society and the economy. The core argument made in the paper is that urgent environmental sustainability measures such as climate action and protecting biodiversity are both necessary and can and must drive the recovery, and that an alignment of policy measures is required. They can be catalysts for recovery and a means of re-imagining our economy and society, and crucially the relationship between them and our natural environment.

Further, resilience capacities will be required to face this crisis and these pressing environmental challenges. In facing this pandemic, Ireland has not shied away from radical action and this experience of facing extreme challenges will help equip us to develop resilience and adaptability going forward. History points to the economic and societal impacts of pandemics such as the 1918 influenza across Europe (WEF,

UNEP (2019) If we rely only on the current climate commitments of the Paris Agreement, temperatures can be expected to rise to 3.2°C this century. Emissions Gap Report 2019
https://www.unenvironment.org/interactive/emissions-gap-report/2019/

2020).² Responding to Covid-19 can deliver transformative change necessary for our wellbeing—a balanced economy, society and environment.

As Ireland and other countries first locked-down and now take careful steps to increase everyday economic and societal activity, observers have noted an apparent openness to change and willingness to consider doing things differently. There is an opportunity to maximise the long-term benefits of the response to change arising from the pandemic to enhance planetary health and environmental, social and economic sustainability.

A key question will this openness result in a meaningful shift in policies and practices, or will there be a return to business as usual? This working paper by the NESC Secretariat considers key aspects of this question.

First, in Section 1.2 it outlines the renewed understanding of the ways in which Covid-19 has highlighted the interdependency between public health, society and the economy and the critical challenges that require action.

Second, in Section 1.3 it considers the degree to which there is an openness to change, in society, at EU level, within the Irish policy and the new Programme for Government; and wider Irish stakeholders. The openness to change is presenting key opportunities.

Third, Section 1.4 examines the potential to shift from opportunity to solutions. It is clear that delivering sustainability will require more than navigation but will necessitate concrete innovative and collaborative systemic action on multiple fronts including governance, finance, business and technological innovation and a just transition. The last part of this paper suggests four concrete strategies for building-in sustainability with a focus on ways to deepen resilience and sustainability in practice are possible and outlines a few potential areas.

Further work by the Secretariat will develop some of these more fully.

WEF (30/4/20) A science journalist explains how the Spanish flu changed the world, World Economic Forum https://www.weforum.org/agenda/2020/04/covid-19-how-spanish-flu-changed-world/

1.2 Critical Challenges to Environmental Sustainability

Covid-19's arrival is a severe disruptive event that has cast light on the resilience or otherwise of our global economic, societal and environmental systems to cope and adapt. It has further called into view the multiple critical challenges to our economic, environmental and social sustainability, if Ireland and humanity are to thrive into the future.

Some of the challenges are outlined here:

First, globally it has provided a stark example of how the interdependencies between the natural world, health, economy and society bind our natural, social and economic systems (Medium, 2020).³ The Covid-19 pandemic demonstrates how much we depend on one another—one humanity living on one planet—for our health systems as well as for our food systems and supply chains (WEF, 2020).⁴ We are in fact part of a complex system of environmental, socio-political and economic systems that we are constantly reconfiguring and that are constantly affecting us (Hynes *et al.*, 2020).⁵ A wide range of studies underline how our economy and wellbeing are wholly dependent on stable climate and natural systems (Juniper and Howard-Boyd, 2020).⁶

Increasing understanding as to how these linkages and connections impact on our wellbeing will be vital, for example in cross-species virus transmission (Medium, 2020).⁷ The ongoing destruction of nature is identified as the fundamental driver of diseases that cross from wildlife into humans (Dasgupta and Andersen, 2020).⁸ What

Medium (2020) Covid-19 and the circular economy: opportunities and reflections https://medium.com/circleeconomy/covid-19-and-the-circular-economy-opportunities-and-reflections-7c2a7db70900

WEF (2020) The COVID-19 pandemic is not a break for nature—let's make sure there is one after the crisis, World Economic Forum https://www.weforum.org/agenda/2020/05/covid-19-coronavirus-pandemic-nature-environment-green-stimulus-biodiversity/

Hynes, W. (2020) A systemic resilience approach to dealing with Covid-19 and future shocks, OECD Policy Responses to Coronavirus (COVID-19) http://www.oecd.org/coronavirus/policy-responses/a-systemic-resilience-approach-to-dealing-with-covid-19-and-future-shocks-36a5bdfb/

Juniper, T. and Howard-Boyd, E. (2020) Now is the time to really put the 'green' into the green recovery https://greenallianceblog.org.uk/2020/06/26/now-is-the-time-to-really-put-the-green-into-the-green-recovery/

In 'wet markets' across the globe, live and dead animals — including many wildlife species — are sold for human consumption and this increases the extent of zoonotic diseases (that spread to humans from animals) Medium (2020) Emerging Zoonoses and the Risk Posed by Wildlife Markets https://medium.com/@WCS/emerging-zoonoses-and-the-risk-posed-by-wildlife-markets-5689b7ba7ee2

Dasgupta, P. and Andersen, I. (2020) Coronavirus is an 'SOS signal for the human enterprise' The Independent, 5/6/20 https://www.independent.co.uk/news/business/analysis-and-features/biodiversity-economy-coronavirus-covid-19-dasgupta-review-a9550156.html#gsc.tab=0

we do to the natural world can have a negative impact on human health and well-being (An Taisce, 2020).9

Another health and environmental relationship highlighted by the crisis is the relationship between good air quality and health. Poor air quality is a major health risk, causing lung diseases, cardiovascular diseases, and cancer (DCCAE, 2019). 10 It has also emerged as risk factor in the severity of Covid-19 infection (The Guardian, 13/07/2020). 11 Improved air quality has been reported in cities in the UK (OECD, 2020; Helm, 2020). 1213 In Ireland, key contributors to our pollution levels have fallen dramatically with decreases of up to 50 per cent in nitrogen-dioxide (NO2) reported by the EPA from its air quality stations around the country (EPA, 2020). 14 Returning to previous pollution levels will have a detrimental health and economic impact.

Second, more attention is being drawn to the economic, political, social, health and climate contexts which remain in flux globally with multiple known (and as yet unknown) risks, a potential threat. Most notably, climate breakdown is expected to bring catastrophic environmental, economic, social, and health impacts, and further unpredictable impacts are likely. There are further associated risks such as famine and drought, and the political unrest and migration that would follow (WHO, 2020).¹⁵

Third, while measures taken to protect lives have also limited economic activity and therefore reduced carbon emissions, this is likely to be temporary without policy intervention. Global warming is unrelenting in its progress to a hotter planet and despite an expected 8 per cent reduction in emissions globally in 2020. The rebound from our economies could see emission levels catch up quickly to previous levels. Economic growth and emissions are still tied, so our economic recovery will

An Taisce (2020) Treasuring Ireland: Covid-19 & Why Biodiversity Matters!

https://www.antaisce.org/articles/treasuring-ireland-covid-19-why-biodiversity-matters

DCCAE (2020) Air Quality Overview https://www.dccae.gov.ie/en-ie/environment/topics/air-quality/pages/air-quality-overview.aspx

¹¹ The Guardian (13/07/2020) 'Compelling' evidence air pollution worsens coronavirus – study https://www.theguardian.com/world/2020/jul/13/compelling-evidence-air-pollution-worsens-coronavirus-study?CMP=Share iOSApp Other

OECD (2020) Environmental health and strengthening resilience to pandemics https://read.oecd-ilibrary.org/view/?ref=129 129937-jm4ul2jun9&title=Environmental-health-and-strengthening-resilience-to-pandemics

Helm, D. (2020) The Environmental Impacts of the Coronavirus, Environmental and Resource Economics (2020) 76:21–38 https://link.springer.com/content/pdf/10.1007/s10640-020-00426-z.pdf

¹⁴ EPA (2020) Recent Trends in Air Pollution in Ireland https://www.epa.ie/newsandevents/news/name,68631,en.html

WHO (2020) Global Report on Food Crises highlights famine risks in Yemen, the Democratic Republic of the Congo, Afghanistan, Venezuela, Ethiopia, South Sudan, Sudan, Syria, Nigeria and Haiti. https://www.wfp.org/publications/2020-global-report-food-crises

negatively impact on the climate. Ireland is on course to reduce its carbon emissions this year. One estimate is a reduction of 5 per cent or 3 million tonnes this year (MaREI, 2020) with another more recent estimate of 9.5 per cent by the Economic and Social Research Institute (ESRI). ¹⁶ The IEA argue that globally, it will require ambitious and purposive policy action to avoid the rebound that business as usual would bring (IEA, 2020). ¹⁷ The urgency for action is articulated by Time magazine that describes 2020 as 'Our Last, Best Chance to Save the Planet' drawing on evidence to point to the fading opportunity to reduce emissions in an orderly way through thoughtful reconfiguring of economies. ¹⁸

Significantly, lessons are being drawn from Covid-19 to prepare for the response to climate change (KPMG, 2020). ¹⁹ This crisis and climate change each represent a global catastrophe that will require unprecedented global coordination where economic considerations become of secondary importance to existential ones. This may revitalise the COP and UN efforts on climate action or may lead to new approaches. However it is important to recognise that transitioning to a low carbon and digital economy and society is neither solely a technical or economic challenge but a deeply social one, now more than ever (NESC, 2020). ²⁰

Fourth, the crisis has cast light on the potential frailty of business as usual. For example, global value chains have been severely disrupted as the flow stopped of materials and goods necessary for the current model of manufacturing production (IAP, 2020).²¹ Countries such as Germany, are reflecting on how value chains could be shortened in the production of system-critical goods. Irish pharma businesses are

MaREI (2020) First full picture of Covid-19 restrictions on Ireland's pollution levels revealed https://www.marei.ie/marei-covid-19-analysis/; ESRI (2020) The environmental and economic impacts of the COVID-19 crisis on the Irish economy: An application of the I3E model https://www.esri.ie/news/emissions-reductions-due-to-covid-19-business-interruptions-will-be-short-lived-and-will-not

¹⁷ IEA (2020) Global Energy Review 2020 https://www.iea.org/reports/global-energy-review-2020; https://www.iea.org/reports/global-energy-review-2020;

Time (9/7/2020) 2020 is Our Last, Best Chance to Save the Planet, https://time.com/5864692/climate-change-defining-moment/?utm source=twitter&utm medium=social&utm campaign=editorial&utm term= &linkId=9334 6302

KPMG (2020) Covid-19 and Sustainability https://home.kpmg/ie/en/home/insights/2020/04/covid-19-what-does-it-mean-for-the-climate-change-agenda-renewables-sustainability.html

NESC (2020) Addressing Employment Vulnerability as Part of a Just Transition in Ireland. The National Economic and Social Council.

²¹ IAP (2020) Managing COVID-19: How the pandemic disrupts global value chains Industrial Analytics Platform, UNIDO, https://iap.unido.org/articles/managing-covid-19-how-pandemic-disrupts-global-value-chains#fn-154-1

also considering this in relation to the supply of personal protective equipment (Irish Times, 8/5/20).²²

A renewed emphasis on resilience spurred by the pandemic shines a light on existing frailties in Ireland's enterprise model, such as the domination of our goods exports by a small number of firms and the growing relative importance of specific taxation revenue streams (NCC, 2020).²³ While the probability of a shock appears low, the impact would be significant, making these issues a risk worth considering today. For Ireland, it will be particularly important to reflect on what the crisis has revealed in relation to the potential vulnerability of global food systems.

Fifth, our response to the crisis has been strengthened through international cooperation. However, tensions were apparent in, for example, the sourcing of suddenly scarce resources such as personal protective equipment with countries competing in a pressurised market.

Sixth, the present crisis has starkly revealed the inadequacies in healthcare, wages, job quality and social safety net systems, and raised societal concerns about inequality (WEF, 2020).²⁴ The impacts of Covid-19 have been more severe in disadvantaged communities, reported in the UK and the USA in terms of a higher risk of exposure to the virus and existing poor health increases their risks. Lockdown, social distancing and cancellations to routine care are reportedly exacting a heavier social and economic price on those already experiencing inequality (The Health Foundation, 2020).²⁵

Over longer timeframes, Covid-19 may have serious physical and mental health consequences through its effect on the global economy, on global and regional food systems, and on available resources for disaster response and social protection (We

²² Irish Times (2020) How the Private Sector Answered Ireland's Call for Help on Coronavirus, 8/5/20 https://www.irishtimes.com/business/health-pharma/how-the-private-sector-answered-ireland-s-call-for-help-on-coronavirus-testing-1.4247370

NCC, 2020. Ireland's Competitiveness Scorecard 2020 May 2020 National Competitiveness Council. Chart 3.1.6
http://www.competitiveness.ie/publications/2020/ireland%20s%20competitiveness%20scorecard%202020
.pdf

²⁴ WEF (2020) Emerging Priorities and Principles for Managing the Global Economic Impact of COVID-19. World Economic Forum.

https://www.health.org.uk/publications/long-reads/will-covid-19-be-a-watershed-moment-for-health-inequalities; https://www.bbc.com/future/article/20200420-coronavirus-why-some-racial-groups-are-more-vulnerable

Mean Business Coalition, 2020).²⁶ The poorest and the most vulnerable people are affected disproportionally by the pandemic, including women, children, older persons, persons with disabilities, migrants and refugees and informal sector workers. The Report of the UN Secretary General on progress towards the 17 SDGs points to the impact of Covid-19 as likely to push tens of millions of people back into extreme poverty and hunger (UN, 2020).²⁷

Despite some progress in addressing certain SDGs, to date progress in environmental sustainability has been slow in Ireland. Our record on responding to the climate and biodiversity emergencies and sustainable development goals has been poor overall (Social Justice Ireland, 2020). 28 The Sustainable Progress Index 2020 reports low relative ranking of Ireland's response to SDG 7 'Affordable and clean energy', SDG12, 'Responsible consumption and production', SDG13, 'Climate action', and SDG14, 'Life below water' to other countries included (Social Justice Ireland, 2020). Biodiversity loss is not being adequately addressed as indicated that the Aichi Biodiversity targets in the Strategic Plan for Biodiversity were not met by many countries, including Ireland (IUCN, 2020). 29

These multiple challenges are profound, complex and many are in flux with differentiated impacts for countries across the world. There is a growing consensus that responding to these effectively will require more than incremental steps but a systemic change in energy, heating, food and mobility practices. The policy response here and in the EU will require both an openness to change and a heightened focus on building resilience. Going forward, governments will need to monitor and assess sustainability risks, for example, deepening the work already carried out for the National Risks Assessment. How this analysis is then used by the policy system should also be carefully considered.

We Mean Business Coalition (2020) The Covid-19 Recovery can be the Vaccine for Climate Change https://www.wemeanbusinesscoalition.org/blog/the-covid-19-recovery-can-be-the-vaccine-for-climate-change/

UN (2020) Report of the Secretary General, Economic and Social Council, UN https://sustainabledevelopment.un.org/content/documents/26158Final SG SDG Progress Report 14052
020 ndf

Social Justice Ireland (2020) Measuring Progress: The Sustainable Progress Index 2020 https://static.rasset.ie/documents/news/2020/02/un-sustainable-development-goals-social-justice-ireland.pdf

²⁹ IUCN (2020) Aichi Targets. International Union for Conservation of Nature https://www.iucn.org/theme/species/our-work/influencing-policy/convention-biological-diversitycbd/aichi-targets

1.3 Openness to Change

Our experience in lockdown, and the responses to the crisis, have signalled new ways of working and living. Opportunities are becoming apparent that could shape how sustainable and green progress might be delivered. Moving forward out of the crisis to rebuild the economy provides the potential for an opening to change (Good Governance Institute, 2020).³⁰ The opportunities for reform have been described as presenting a 'once in a century moment' to reset our economy towards a low carbon and resilient economy (Mountford, 2020).³¹

This openness to change can be found across key sectors (mobility, food, finance, technology, community response) and particular approaches (circular economy, restoring nature). Seven areas where this openness to change is bringing opportunities are outlined below.

Active Mobility

Perhaps one of the most pervasive and visible shift and opportunity in cities is in relation to mobility planning, particularly in terms of providing more segregated cycling and walking paths and routes. Dublin and Cork have increased the number of pedestrianised streets and adding dedicated cycle lanes in response to the crisis and the need for social distancing.³² Cities including Milan, Paris and Melbourne are bringing in more sustainable changes for the future. The Mayoral election in Paris has focused attention on candidate Anne Hildago's support for the idea of Ville Du Quart DHeure—the 15-minute city—reachable by walking or cycling (Rfi, 2020).³³

Good Governance Institute (2020) Stewardship https://www.good-governance.org.uk/blog-post/stewardship/

³¹ Contribution by Helen Mountford, Vice President for Climate and Economics, World Resources Institute Grantham in LSE discussion http://www.lse.ac.uk/granthaminstitute/events/strong-sustainable-and-resilient-recovery-the-evidence-and-a-pathway-to-action/

A joint National Transport Authority (NTA) and Dublin City Council Covid-19 'mobility intervention programme' seeks to turn the heart of Dublin city from St. Stephen's Green to Mountjoy Square, and the Custom House to Stoneybatter into a 'pedestrian, cyclist, public transport priority zone' (Irish Times, 20/5/20 and 21/5/20) Cork City set to Pedestrianise Streets and Increase Cycle Paths, https://www.irishtimes.com/news/ireland/irish-news/cork-city-set-to-pedestrianise-streets-and-increase-cycle-paths-1.4258038;; Irish Times (21/5/20) Dublin and Covid-19: Car restrictions, more space for bikes, bus restrictions in the offing https://www.irishtimes.com/news/environment/dublin-and-covid-19-car-restrictions-more-space-for-bikes-bus-restrictions-in-the-offing-1.4259642

Rfi (2020) Can Paris become a '15 minute' City? http://www.rfi.fr/en/france/20200228-can-paris-become-15-minute-city

The opportunity to reconfigure mobility in cities will require a rapid policy response. However, indications from cities emerging from lockdown suggest that car usage is returning to normal and in some cases increasing. Dublin has seen a 75 per cent return to traffic levels before the crisis (Irish Times 25/6/20).³⁴

Designing Fiscal Measures

Green fiscal recovery packages can work to reduce GHG emissions, create growth and reduce existing welfare inequalities. A number of studies, including by the Oxford Smith School identify areas in which both the economy and climate gain, including: clean physical infrastructure investment; building efficiency renovations and retrofits; investment in education and training; natural capital investment for ecosystem resilience: and clean R&D spending (Hepburn *et al.*, 2020).³⁵ Green investment can also bring jobs—Joseph Stiglitz argues that 'well-directed public spending, particularly investments in the green transition, can be timely and labour-intensive (Stiglitz, 2020).³⁶ The substantial potential for employment as a result of decarbonisation is outlined in a report by the Environmental Justice Commission (2020).³⁷ Others focus on the jobs potential from investments in sustainable public transport (ILO, 2020).³⁸

Investing now, rather than later, in environmental sustainability, and notably climate and biodiversity measures, makes sense on many levels. Existing evidence suggests that benefits are likely to significantly outweigh costs. Without immediate action, the social and economic costs of biodiversity loss and the loss of ecosystem services will be felt at an accelerating rate in the future and will limit growth and stability. Investments made now will reduce resource requirements in the future (Environmental Pillar, 2020).³⁹

Irish Times (25/6/20) Dublin city traffic back to 75% of pre-Covid levels via The Irish Times https://www.irishtimes.com/news/environment/dublin-city-traffic-back-to-75-of-pre-covid-levels-1.4287729

Hepburn, C., O'Callaghan, B., Stern, N., Stiglitz, J., and Zenghelis, D. (2020), 'Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?', Smith School Working Paper 20-02.

Stiglitz, J. (2020) https://www.project-syndicate.org/commentary/covid-2020-recession-how-to-respond-by-joseph-e-stiglitz-2020-06

Environmental Justice Commission (2020) Faster, Further, Fairer: Putting People at the Heart of Tackling the Climate and Nature Emergency. https://www.ippr.org/files/2020-05/faster-further-fairer-ejc-interim-may20.pdf

³⁸ ILO (2020) Jobs in Green and Healthy Transport. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms 745151.pdf

³⁹ Environmental Pillar (30/6/20) Correspondence to NESC; and Convention on Biological Diversity (2012) Report of the High Level Panel on Global Assessment of Resources for Implementing the Strategic Plan for Biodiversity 2011-2020 https://www.cbd.int/doc/meetings/cop/cop-11/information/cop-11-inf-20-en.pdf

Restoring nature

While in lockdown, there was a heightened appreciation for the benefits of nature for wellbeing and health (Lettice, 2020). Improvements in air quality have been recorded, while other more anecdotal reports identified more wildlife in urban areas (BBC, 26/04/20). Other accounts point to a rise in threats to nature around the world through increases in deforestation, illegal mining and poaching while governments are focused on addressing Covid-19 (WEF, 2020). There are opportunities to re-wild and restore nature that provide multiple benefits in ecosystem services and natural capital. For example, UK researchers call for the conservation of nature to be at the centre of the economic recovery (BBC, 21/5/20). Investment in 'natural capital' (land, sea, habitats and biodiversity) can deliver significant co-benefits for sustainable development and societal wellbeing.

Responding to threats

System and structural change is possible when facing urgent and existential threats. The national responses to the pandemic in health, social welfare, housing, transport have demonstrated that when the threat is extreme, governments are willing and able to make changes there were considered unthinkable or too complex in the past. The digital transition, now accelerated, has been a key enabler of some of the changes. Professor Jane Stout argues that 'the coronavirus pandemic has shown us that governments can implement socially unpopular policies in the interest of public good and to the detriment of the economy' (Eos, 2020).⁴⁴ This is relevant in relation to responding to emergencies such as climate and biodiversity loss.

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Lettice, E. (26/5/20) Opinion: our reaction to the pandemic has changed how we view, value and utilise urban green spaces https://www.rte.ie/brainstorm/2020/0526/1142602-nature-green-spaces-trees-parks-lockdown-pandemic/

BBC (26/04/20) Coronavirus: How Nature is Reacting to the Lockdown, Cecilia Daly, NI BBC https://www.bbc.com/news/uk-northern-ireland-52382956

WEF (2020) The COVID-19 pandemic is not a break for nature—let's make sure there is one after the crisis, https://www.weforum.org/agenda/2020/05/covid-19-coronavirus-pandemic-nature-environment-green-stimulus-biodiversity/

⁴³ BBC (21/5/20) Covid recovery could 'tip the balance' for nature, https://www.bbc.com/news/science-environment-52754281

Stout, J. (2020) Contribution as part of a webinar hosted by Trinity College Dublin (TCD) in Ireland cited in 7 April Eos (2020) Eight Lessons from COVID-19 to Guide Our Climate Response https://eos.org/articles/eight-lessons-from-covid-19-to-guide-our-climate-response

Deploying technology for communication

New technologies are enabling ways to connect, conduct business and inform us in ways that are empowering, exciting and constantly evolving. The HSE and the education sector both relied on digital technology to deliver services in ways that were unprecedented. Working from home is likely to continue to a greater extent than before—however, a careful review of practices will be needed to ensure everyone can benefit (Irish Times 19/5/20).⁴⁵ A survey by researchers from the Whitaker Institute at NUI Galway and the Western Development Commission (WDC) indicates that 87 per cent of those surveyed across all counties in Ireland in April and May 2020 were working remotely because of Covid-19.The majority of the 7,241 respondents (83 per cent) said they would be interested in continuing to work remotely. However, some faced difficult challenges including childcare and lack of a suitable space at home (NUIG & WDC, 2020).⁴⁶ While digital technologies can be an enabler there are barriers in the lack of digital access, broadband and skills for some service users.

Adopting circular bioeconomy practices

Circular economy practices are gaining momentum given disruption of long supply chains of components in manufacturing during the crisis (European Bank for Reconstruction and Development, 2020).⁴⁷ Debate has begun in the EU on how value chains may be restructured in a fair and sustainable way.⁴⁸ A paper by the OECD points out that investments to support repairability, reusability, remanufacturing and recycling can help support value creation and economic resilience. These developments offer new impetus and possibilities for greening the Covid-19 recovery (OECD, 2020).⁴⁹ For example, technologies such as 3D printing are making a resurgence in supporting the transition to domestic production to shorten supply

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⁴⁵ Irish Times (19/5/20) Remote working: Why has it taken so long? https://www.irishtimes.com/business/technology/remote-working-why-has-it-taken-so-long-1.4205012

This was a NUIG/WDC national survey of 7,241 individuals across a wide range of industries and sectors over a one-week week period in April-May 2020. NUIG & WDC (2020) https://www.nuigalway.ie/about-us/news-and-events/news-archive/2020/may/survey-shows-83-want-to-continue-to-work-remotely-after-covid-19-crisis.html

European Bank for Reconstruction and Development (2020) How to Stop the Coronavirus Pandemic Preventing a Green Future https://www.ebrd.com/news/2020/how-to-stop-the-coronavirus-pandemic-disrupting-a-green-future.html

^{48 &}lt;a href="https://www.euractiv.com/section/economy-jobs/news/is-the-covid19-crisis-an-opportunity-for-fairer-global-trade/">https://www.euractiv.com/section/economy-jobs/news/is-the-covid19-crisis-an-opportunity-for-fairer-global-trade/

⁴⁹ OECD (2020) A systemic resilience approach to dealing with Covid-19 and future shocks, OECD Policy Responses to Coronavirus (COVID-19) http://www.oecd.org/coronavirus/policy-responses/a-systemic-resilience-approach-to-dealing-with-covid-19-and-future-shocks-36a5bdfb/

chains (Forbes, 2020).⁵⁰ Previous NESC work outlined the value and potential of a circular economy as a key means of working towards more long-term sustainable economic, social and environmental development (NESC, 2017).⁵¹

Given the potential risks to global supply chains, Ireland's food production and consumption system is under pressure to be resilient, reduce greenhouse gas emissions and work to enhance biodiversity and soil health. What would a resilient circular vision for food that helped to rejuvenate local and regional food systems look like? (Clapp, 2020).⁵² Opportunities exist to bring circular practices to food through Ireland's National Policy Statement on the Bioeconomy, the EU's new Circular Economy Action Plan (CEAP) and the reform of the Common Agricultural Policy (Government of Ireland, 2018).⁵³

Building local resilience

There is an opportunity build on the key role of the community and voluntary sector, relied upon in the crisis, to help build local resilience (for example, the Government's plan to support the community response to protect older and vulnerable neighbours (Department of Rural and Community Development, 2020).⁵⁴ Cooperatives and social enterprises so active in the crisis can also help to co-build local economies (ILO, 2020; CLES, 2020).⁵⁵

The following section examines ways in which this openness to change is manifested in the current developments at the EU level in relation to the Green Deal, followed by a short outline of significant Programme for Government plans and key Irish stakeholders contributions on a green recovery.

Clapp, J. (2020) Spoiled Milk, Rotten Vegetables and a Very Broken Food System, New York Times Opinion Piece, https://www.nytimes.com/2020/05/08/opinion/coronavirus-global-food-supply.html?smid=tw-share;

Department of Rural and Community Development (2020) Government Action Plan to Support the Community Response https://drive.google.com/file/d/1cggXTGcgufY vDF928v7 G xP48GAScI/view

⁵⁵ ILO (2020) Cooperatives and wider SSE enterprises respond to COVID-19 disruptions, and government

Forbes (2020) Ten Lessons the Coronavirus has Taught Us about the Planet https://www.forbes.com/sites/nishandegnarain/2020/04/13/ten-lessons-the-coronavirus-has-taught-us-about-the-planet/#1944c14c6f2f

⁵¹ NESC (2017) Moving Towards the Circular Economy in Ireland. Council Report No. 144.

Government of Ireland (2018) National Policy Statement on the Bioeconomy. https://www.dccae.gov.ie/documents/20180312-Bioeconomy%20-%20National%20Policy%20Statement.pdf

measures are being put in place,
https://www.ilo.org/global/topics/cooperatives/news/WCMS_740254/lang--en/index.htm; CLES (2020)

Owning the Future, the National Organisation for Local Economies.

https://cles.org.uk/publications/owning-the-future/

1.3.1 Opportunities in the Green Deal: Developments at EU Level

The European Commission is progressing its policy programme, outlined prior to Covid-19, including the Green Deal (See Appendix 1 for a short summary) and the Just Transition Mechanism, but with the additional and necessary shift to providing a stimulus package for recovery.

A key part of the debate in Europe currently has been on how much to align the Green Deal with the stimulus package for Europe's recovery. Among those arguing for greater alignment, leading environmental NGOs across the EU petitioned the European Commission for a green and just recovery (Greenpeace, 2020; Green 10 (2020).⁵⁶

There are many calls for green investment beyond environmental groups. Campaigns have focused on boosting efforts for a green recovery by leaders of the G20 and in the European Green Deal (Healthy Recovery Campaign, 2020).⁵⁷ There is a considerable banking, investor and finance push to greening the recovery. Many international investors, such as those represented by the Global Investor Coalition on Climate Change, are lobbying for funds to be channelled into the development of 'new sustainable and climate-adaptation assets' (The Irish Times 28/6/20).⁵⁸

The IMF point out that as governments look to recovery, the scope and need for broad-based fiscal stimulus will increase, especially for green measures that both boost aggregate demand and employment (IMF, 2020). 59 The European Environment Agency outlines that 'the investments we will make to mitigate the economic

Greenpeace has produced a detailed manifesto for a green recovery. It argues that the Covid-19 crisis and the resulting economic downturn demonstrate the profound need for a social and economic transition to be both just and green, enabling societies to be resilient in the face of crisis. Greenpeace (2020) A Green Recovery—How We Get There https://www.greenpeace.org.uk/wp-content/uploads/2020/06/A-green-recovery-how-we-get-there-Greenpeace-UK.pdf; Greenpeace (2020) Ten European Governments call for Green Recovery Plan https://www.greenpeace.org/eu-unit/issues/climate-energy/2708/ten-european-governments-call-for-green-recovery-plan/; Green 10 (2020) https://green10.org/wp-content/uploads/2020/05/G10-letter-to-VDL-MFF-2021-27-and-EU-recovery-fund-May20.pdf

⁵⁷ Healthy Recovery Campaign (2020) https://healthyrecovery.net/

The Irish Times (28/6/20) Covid-19 crisis could mark turning point in progress on climate change https://www.irishtimes.com/life-and-style/covid-19-crisis-could-mark-turning-point-in-progress-on-climate-change-1.4268507

IMF (2020) Greening the Recovery—Special Series on Fiscal Policies to respond to COVID-19 https://www.imf.org/~/media/Files/Publications/covid19-special-notes/en-special-series-on-covid-19-greening-the-recovery.ashx

impacts of this [Covid-19] crisis should be, and can be, fully aligned with our long-term sustainability goals' (EEA, 2020).60

A paper by the OECD (2020) argues that ensuring that environmental aspects are incorporated into a fiscal stimulus is not only viable but could also have major cobenefits. Introducing environmental aspects into the packages allows governments to make progress towards long-term environmental objectives, such as the transition to a low-carbon and resource efficient economy, while also providing a boost to economic activity in the shorter term.⁶¹

There are pragmatic reasons for accelerating the low carbon and digital transitions via recovery investments to avoid paying twice. EU Commission Executive Vice President Hans Timmermans outlined on launching the Just Transition Mechanism:

As we rebuild our economies and our societies, we will have to resist falling into the trap of rebuilding old structures. We simply cannot afford paying to go back to business as usual and then paying again to transform (EC, 2020).⁶²

It would seem that the principle of embedding green investment into recovery plans has been broadly accepted. The European Parliament recently adopted a resolution in which the importance of the Green Deal for the EU's recovery after Covid19 was also underlined (Euractiv, 14/4/20) ⁶³ Ireland and 16 other climate and environment ministers in EU now back a call to put the European Green Deal at the heart of a post-coronavirus recovery. In their joint letter, they argue that the Green Deal, an EU blueprint to reach net zero emissions of greenhouse gases by 2050, should be central to any resilient recovery. Ireland's National Competitiveness Council too has noted this 'mounting support within EU institutions for the idea of linking economic recovery strategies to the goals of the EU Green Deal'.

At the end of May, the European Commission proposed a €1.85th recovery package for member states whose economies have suffered as a result of the coronavirus pandemic. This is a new recovery instrument, called Next Generation EU, within a revamped long-term EU budget. In total, this European recovery plan will put €1.85th

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EEA (2020) Reflecting on climate-neutrality ambitions in Europe in times of Covid-19 https://www.eea.europa.eu/articles/reflecting-on-climate-neutrality-ambitions

⁶¹ OECD (2020) ibid.

EC (2020) Speech by EVP Timmermans. European Commission https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_20_1220

Euractiv (14/4/20) Green Recovery Alliance brings 79 MEPs from across the political spectrum, civil society groups, including 37 CEOs, 28 business associations, the European trade union confederation, 7 NGOs and 6 think tanks. https://www.euractiv.com/section/energy-environment/news/green-recovery-alliance-launched-in-european-parliament/

to help kick-start economies and ensure Europe 'bounces forward'. A key pillar of the instrument is a new Recovery and Resilience Facility of €560bn which will offer financial support for investments and reforms, including in relation to the green and digital transitions and the resilience of national economies, linking these to the EU priorities (EC, 2020d). ⁶⁴ Negotiations on the European Recovery Package and the Multi Annual Financial Framework (MMF) are underway with meetings of the European Parliament taking place over the summer. In addition, the Just Transition Mechanism, as part of the Green Deal, has an expected funding allocation of €40bn, considerably higher than the €7.5bn initially mooted. ⁶⁵

This debate is likely to intensify however as the economic impacts of the lockdown become clearer with pressures to support economic growth and jobs. The social benefits of any investment have to also be considered. A paper by the OECD points out that green stimulus measures are required but that these have to be adapted to current social priorities such as the environment-health nexus, concerns about a 'just transition', as well reflect shifts in social preferences (Agrawala *et al.*, 2020).⁶⁶

Beyond investment and jobs, a key focus in the debate at EU level and internationally is that 'recovery has to be green but also it has to be a path to a better economy, to better health and wellbeing, to inclusion and a just transition, and with respect for planetary boundaries' (Bhattacharya and Stern, 2020). A term frequently applied to Covid-19 and economic recovery is the term 'Building Back Better' (WRI, 2020; We Mean Business Coalition, 2020; OECD, 2020). It outlines the need for a peoplecentred recovery that focuses on well-being, improves inclusiveness and reduces inequality. The OECD outline that it should involve aligning with net-zero GHG emissions, strengthening climate resilience, reducing biodiversity loss, innovation

⁶⁴ EC (2020d) Europe's moment: Repair and prepare for the next generation https://ec.europa.eu/commission/presscorner/detail/en/ip 20 940

EC (2020) The overall budget of the Just Transition Fund will be increased to €40bn and the just transition scheme under InvestEU will be reinforced. https://ec.europa.eu/commission/presscorner/detail/en/ganda 20 931

Agrawala, S., Dussaux, D. and Monti, N. (2020) What Policies for greening the Crisis Response and Economic Recovery? Lessons Learned from Past Green Stimulus Measures and Implications for the Covid-19 Crisis. Environment Working Paper N°164 https://www.oecd-ilibrary.org/docserver/c50f186f-en.pdf?expires=1592230491&id=id&accname=guest&checksum=EA86283AC0C52185603FFD1A98F2ABD9

Bhattacharya, A. and Stern, N. (2020) From rescue to recovery, to transformation and growth: building a better world after COVID-19, LSE. http://www.lse.ac.uk/GranthamInstitute/news/from-rescue-to-recovery-to-transformation-and-growth-building-a-better-world-after-covid-19/

WRI (2020), Coronavirus Recovery | Build Back Better, https://www.wri.org/coronavirus-recovery; We Mean Business Coalition (2020), Build Back Better, https://www.wemeanbusinesscoalition.org/build-back-better; OECD (2020) Building Back Better: A Sustainable Resilient Recovery after Covid-19 http://www.oecd.org/coronavirus/policy-responses/building-back-better-a-sustainable-resilient-recovery-after-covid-19-52b869f5/

building on behaviour changes, improving supply chain resilience and circularity to bring about wellbeing and inclusiveness. A civil society-led campaign to 'build back better' focuses a settlement that will protect vital public services, repair inequalities, create secure and rewarding jobs, and prepare us for the climate and environmental emergency (Build Back Better, 2020).⁶⁹

Positive signals are coming from the EU in relation to the Green Deal and a sustainable recovery, but the debate continues. However, proposals from the European Commission on the Green Deal and Just Transition Mechanism alongside contributions from business, societal and environmental stakeholders, represent a new push to deliver a sustainable and inclusive future. This points to strong intent and no shortage of funding at a European level. As well, while still early on in this crisis, there seems to be political will to design a sustainable recovery from Covid-19 and to emerge from the crisis onto a pathway that is more sustainable (Fetting, 2020). As was the case during the economic crisis post-2008, a key task is to ensure these programmes translate to concrete national level actions that deliver the change desired. The funds and programmes must help policymakers plan for sustainable mobility, deploy new technology, restore habitats, adopt circular practices, and build community wealth etc., if they are to be successful.

1.3.2 Towards a Sustainable Recovery—Programme for Government

The Irish Government has outlined its commitment to a sustainable future and recovery in the new Programme for Government, 'Our Shared Future'. It recognises there is an opportunity for doing things differently.

The pandemic has acted as a catalyst, enabling us to implement radical policies that were considered impossible before; it will not and must not be used an excuse for failure to take immediate action to deliver on all that is needed to build a better society and a secure future for all living things (Government of Ireland, 2020).⁷¹

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⁶⁹ https://www.buildbackbetter.org.uk/about.html

Fetting, C. (2020) Achieving the SDGs Through a Sustainable and Just Transition: Challenges and Responses to Covid-19, ESDN, https://www.sd-network.eu/pdf/doc_workshops/2020%20romania/18th%20ESDN%20Workshop%20Discussion%20Paper.p df

⁷¹ Government of Ireland (2020) *ibid*.

It makes a commitment to 'build a stronger, fairer and more sustainable economy prepared for the next phase of disruptive technologies and on a pathway to a low-carbon future'. It seeks to 'create economic opportunity through climate action and establish bottom up mechanisms to ensure local and national policy making addresses community needs to ensure that nobody is left behind'. Further, it will seek to 'put sustainability at the heart of our fiscal, enterprise, innovation and environment policies'. It sees this recovery as an opportunity to embed structural shifts that will benefit our economy and people, the adoption of technology and innovation, the pursuit of climate resilience both sectorally and nationally.'

In its introduction, the Government outlines that it intends to focus on reaching ecological and social wellbeing. It will seek to deliver a better quality of life for all, equality within society and a deeper sense of connection to the natural world around us, and each other. It outlines the importance of reaching ecological harmony and economic equity, recover in a way that is fair and balanced, leaves no one behind, and is futureproofed against shocks. As part of this approach, wellbeing that goes beyond the narrow confines of economic growth will be pursued.⁷²

The Programme for Government has a strong focus in the form of a central mission to achieve 'A Green New Deal' with particular actions on emissions reductions, climate governance, renewable energy, retrofitting, a just transition, natural heritage and biodiversity and water. Notably, the Government is committed to an average 7 per cent per annum reduction in overall greenhouse gas emissions from 2021 to 2030 (a 51 per cent reduction over the decade) and to achieving net zero emissions by 2050. The 2050 target will be set in law by the Climate Action Bill which will be introduced in the Dáil within the first 100 days of government alongside a newly established Climate Action Council. Every minister will make climate action a core pillar of their new departmental strategies.

There is also a commitment to work to achieve a broad political and societal consensus on a just transition to a sustainable future for all communities. Other commitment is to develop a new model of engagement with citizens, sectors and regions as an early priority for government, building on the learning of recent years.

A full examination of sustainable and green measures is not possible in this paper but it is useful to note that other sustainable development priorities are outlined across land use, agriculture, and related to transport. This includes a commitment to make active travel and public transport better and more accessible. The Government's

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⁷² Government of Ireland (2020) Programme for Government: Our Shared Future.

commitment to cycling and pedestrian projects will be set at 20 per cent of the 2020 capital budget (€360m) per year and is committed to a 2:1 ratio of expenditure between new public transport infrastructure and new roads over its lifetime.

While work to deliver on these commitments begins, it is useful to note that there is broad support among key societal actors for such a sustainable and inclusive approach to recovery.

1.3.3 Wider Irish Support for a Sustainable Recovery

Representative bodies such as the Irish Congress of Trade Unions and Ibec have emphasised sustainable action as part of what they see as necessary for recovery. The Irish Congress of Trade Unions outline that there is 'No Going Back' and call for three key elements in relation to sustainability: a 'green new deal' stimulus and inclusive plan; 'Green proofed' public procurement and a 'Just Transition' for workers and communities. They outline the need for a green investment stimulus to include retrofitting, public transport and renewable energy infrastructure coupled with higher levels of investment in areas like childcare, and a massive increase in spending on public housing (ICTU, 2020).⁷³

Ibec argue in their Reboot and Reimagine strategy that sustainability must be firmly built into our economic recovery. Ireland requires 'a complete transformation in how we travel, use energy, design products, run factories, manage logistics, build communities, and interact with our living environment. It will also mean a major step-up in investment' (Ibec, 2020).⁷⁴

The National Competitiveness Council has argued that 'early action on initiatives in Ireland's Climate Action Plan, and linking economic stimulus measures with environmental objectives can be an engine for growth and innovation. There is significant potential for existing enterprise, agricultural and sustainability initiatives to be reframed and expanded in order to provide a stimulus for sustainable growth, and spur a transition in our economy and society toward low carbon activities' (NCC, 2020).75

⁷⁴ Ibec (2020) Reboot and Reimagine https://www.ibec.ie/influencing-for-business/ibec-campaigns/reboot-and-reimagine

⁷³ ICTU (2020) No Going Back. Irish Congress of Trade Unions https://www.ictu.ie/download/pdf/no going back final document may 2020.pdf

NCC (2020) Ireland's Competitiveness Scorecard 2020. Irish Competitiveness Council http://www.competitiveness.ie/publications/2020/ireland%20s%20competitiveness%20scorecard%202020_pdf

Embedding sustainability in a deep and meaningful way requires aligning key actors on the same course, guiding, enabling and leading all on the journey. There will be differences in view and approach as to how best to deliver a resilience and sustainable recovery that also brings about carbon emission reductions and sustains nature. This will require sufficient resources, dialogue and focused implementation to have impact. To be effective, concrete collaborative action on multiple fronts is required and this will require a shift towards sustainability as a goal to embedding it in concrete ways.

1.4 From Opportunity to Solutions: Four Approaches to Building-In Sustainability

This paper has outlined some of the emerging opportunities to do things differently arising from Covid-19. Some solutions are waiting in the wings to address these, while others are emergent or will require collaborative innovation to develop. The remainder of this paper turns to strategies and approaches that could be useful to embed sustainable development. We know from previous NESC work that transitions require systemic change. That does not mean the steps to change are too difficult to take and wait and see, but rather, there is a tailwind and opportunity now to move quickly and dramatically through investment and policy intervention.

While the ambition to deliver climate action and other key areas of environmental sustainability as part of Ireland's recovery has been outlined in the Programme for Government, there yet remains a complex governance challenge to deliver change. A key challenge is setting out how to bring sustainability and environmental priorities into the heart of Ireland's economic and societal revitalisation. The urgent imperative to act on the global climate change and biodiversity emergencies is ever-present. While there may be a temporary boost to some emission-reductions and nature in cities through our economic shutdown, this will not be sustainable without focused action. There is also the growing understanding that humanity is vulnerable but that we have options in how we live our lives—a new normal can rejuvenate Ireland on multiple fronts. It is an opportunity to examine how to reinvigorate our economy, society and environment in ways that build-in sustainability.

What could a mission-oriented approach bring?

The Irish Government has referred to missions in relation to delivering its policy ambitions. For missions to be effective as tools, they require different actors (both public and private) and different sectors to innovate (going to the moon required

innovation in aeronautics, robotics, textiles, and nutrition). However, they also have to enable bottom-up experimentation and learning.76

Missions are about setting concrete directions and need to be clearly defined. To achieve them, they need to include a portfolio of projects and experimentation; and should result in investment across different sectors with different actors. They require joined-up policy making with well-defined responsibilities for coordination and monitoring; and command broad and continuous political support Mazzacuto draws attention to the mechanisms and actions required to deliver missions—and a significant point is that missions cannot happen without new 'tool kits' for their delivery (Mazzucato, 2018; Mazzucato and Penna (2016).77

This final section examines potential strategies that might be useful in this new 'toolkit' for delivering a sustainable and green mission. These complement the climate policy governance approaches such as those referred to in previous NESC work, Climate Policy: Getting the Process Right (NESC, 2019).78 In that report, the Council argues that it is necessary, and possible, to combine a high-level mission and the guiding strategy, on the one hand, with the creation and application of mitigation actions by government, business and civil society, on the other. It further outlined that while missions create some certainty in setting the direction, they provide little insight into how to get there.

Mission-oriented action is key to support and deliver progress. To be effective, the 'nuts and bolts' of governance—including collaborative policy design and implementation—require attention. The *doing* of sustainable development is where ambition becomes everyday practice. This will require exceptional expertise, innovation, collaboration and experimentation across business, academia, the public sector and civil society to achieve.

In thinking about ways to deepen sustainability in practice, and in addition to the policy momentum arising from the European Green Deal and the new Programme for Government, the following four approaches are briefly outlined here which would be worthy of further exploration by the policy system.

⁷⁶ Mazzucato, M. (2018)

⁷⁷ Mazzucato, M. (2018) Mission-oriented innovation policies: challenges and opportunities, Industrial and Corporate Change, Volume 27, Issue 5, October 2018, Pages 803-815, https://doi.org/10.1093/icc/dty034

NESC (2019) Climate Change Policy: Getting the Process Right. Council Report No. 147 http://files.nesc.ie/nesc_reports/en/147_Climate_Change_Policy.pdf

- Supportive Sustainability and Wellbeing Frameworks
- Green Investment and Conditionality
- Sustainability: Building Resilience in Cities, Communities and Governance
- Applying a Just Transition Approach in Practice

1.4.1 Supportive Sustainability and Wellbeing Frameworks: 'What Gets Measured Gets Done'

A more comprehensive and holistic way of thinking could be applied to improve government and business decision-making through policy balancing frameworks for sustainability. This include overarching frameworks, such as the doughnut model; providing national accounts in wellbeing and sustainable development; a circular Bioeconomy wellbeing framework; and accounting for nature through 'natural capital' and ecosystems services.

Over the past few years, a number of sustainability frameworks have emerged for finance including the United Nations Principles for Responsible Investment and the Irish Sovereign Green Bond Framework. The EU is currently reviewing its sustainable finance strategy to provide a roadmap to guide the EU in new actions to increase private investment in environmental, social and governmental ('ESG') projects and activities. The past few years, a number of sustainability frameworks have emerged for finance including the United Nations Principles for Responsible Investment and the Irish Sovereign Green Bond Framework. The EU is currently reviewing its sustainable finance strategy to provide a roadmap to guide the EU in new actions to increase private investment in environmental, social and governmental ('ESG') projects and activities.

When applying strong sustainability to policy decisions, balancing frameworks may also have value. If there is a recognition that there are critical thresholds (in terms of safe planetary boundaries such as emissions and biodiversity) that need to be safeguarded, it is helpful to consider how best to apply this to governance. This is the idea of operating with safe operating spaces for our economies and society to thrive. 82 Examples of tools useful for balancing economic, social and environmental priorities include new economic frameworks, wellbeing budgets and approaches to incorporating considerations of nature.

https://www.pgionline.com/wp-content/uploads/2020/04/A-PGI-Think-Piece-Why-Is-It-so-Difficult-to-Make-Progress-on-Climate-Change-January-2020.pdf

https://firstforsustainability.org/sustainability/external-initiatives/sustainability-frameworks/; https://www.ntma.ie/uploads/general/Irish-Sovereign-Green-Bond-Framework.pdf

^{81 &}lt;a href="https://maples.com/en/Knowledge-Centre/Industry-Updates/2020/05/Recent-Sustainable-Finance-Developments">https://maples.com/en/Knowledge-Centre/Industry-Updates/2020/05/Recent-Sustainable-Finance-Developments

https://www.coronavirusandtheeconomy.com/question/does-environmental-damage-increase-risk-pandemics

Doughnut Economics

Frameworks such as the 'doughnut model' developed by Kate Raworth from Oxford University's Environmental Change Institute are being explored in practice. This sets out the planetary and social boundaries that we need to live within and identifies the hole in the middle as the proportion of people falling short on life's essentials (Raworth, 2020; Monbiot, 2017).83

The doughnut (see Figure 1) 'sets a vision for an equitable and sustainable future, but is silent on the possible pathways for getting there, and so the doughnut acts as a convening space for debating alternative pathways forward'. Such a convening space will be critical for the development of Irish climate and biodiversity policy.

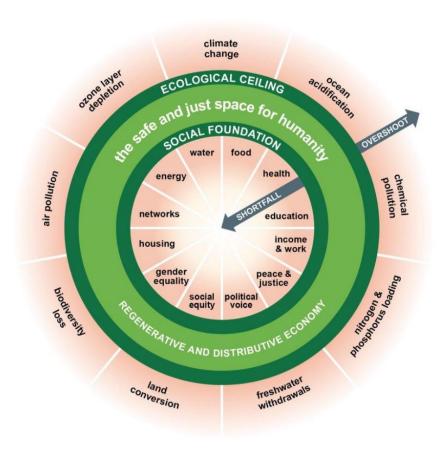


Figure 1: Doughnut Economics

Source: https://www.kateraworth.com

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Raworth, K. (2020) https://www.kateraworth.com/; Monbiot, G. (2017) Finally, a breakthrough alternative to growth economics—the doughnut The Guardian (12/4/2017)

Amsterdam is adopting the 'doughnut model' to focus economic recovery. It has been scaled down to provide Amsterdam with a 'city portrait' showing where basic needs are not being met and 'planetary boundaries' overshot. It displays how the issues are interlinked (The Guardian, 8/04/2020).⁸⁴

Progress and Wellbeing

Measuring progress beyond GDP is another approach, for example, through a greater focus on wellbeing (Carnegie Trust, 2019).85

With increasing emphasis on how governments monitor progress more broadly, initiatives are emerging which work to embed wellbeing at the centre of policy-making. For example, a wellbeing budget has been adopted in New Zealand. While other countries have measured wellbeing for a number of years, New Zealand has made an explicit commitment to measure the success of its budget, and more importantly structure its budget allocations according to its' national wellbeing indicators (The Lancet, 2019; New Zealand Treasury, 2019). The wellbeing budget has multiple priorities, including tackling mental health issues, improving child wellbeing, supporting marginalised populations, fostering an environmentally sustainable economy, and improving employment. It will be monitored through data from the Treasury's Living Standards Framework, which includes indicators across a series of domains, such as health, environment, cultural identity, social connections, and subjective wellbeing. The government is working to ensure that the legislative framework, and agency planning, reporting and accountability arrangements, shift to support a focus on wellbeing outcomes (Robertston, 2019).

It is the case often that what gets measured gets done. Further work is needed to identify which frameworks, measurements and mechanisms for their application will be most useful for Ireland. The Government acknowledges the need to supplement existing economic measurements. It intends to use 'wellbeing indicators as well as

⁸⁴ The Guardian (08/04/2020) Amsterdam to embrace 'doughnut' model to mend post-coronavirus economy https://www.theguardian.com/world/2020/apr/08/amsterdam-doughnut-model-mend-post-coronavirus-economy

⁸⁵ Carnegie Trust (2019) Wellbeing around the World https://www.carnegieuktrust.org.uk/publications/wellbeing-around-the-world/

The Lancet (2019) Beyond gross domestic product for New Zealand's wellbeing budget https://www.thelancet.com/action/showPdf?pii=S2468-2667%2819%2930109-4; New Zealand Treasury (2019) Wellbeing Budget 2019 https://treasury.govt.nz/publications/wellbeing-budget/wellbeing-budget-2019-html

Robertson, G. (2019) Putting Wellbeing at the Heart of Government, Carnegie Trust https://www.carnegieuktrust.org.uk/blog/putting-wellbeing-at-the-heart-of-government/

economic indicators to point out inequalities and help ensure that policies are driven by a desire to do better by people' (Government of Ireland, 2020).88

Accounting for Nature

As NESC has previously outlined, the benefits and impacts on nature remain invisible in most economies' measures of progress (GDP) but other measures are emerging that recognise the value of natural capital and how to measure it (NESC, 2017).89

Natural capital is one approach to considering biodiversity and ecosystem services in policy and takes into account the contribution and intrinsic and extrinsic value of nature and the ecosystem services it provides. The loss of species and habitats has an economic cost as well as environmental and social impacts. Biodiversity is important in its own right but it is also important for our wellbeing and for the raw material of much of our economy (through for example forestry or fisheries).90 There is also a need to incorporate indicators that measure the actual state of threats to biodiversity as existing monitoring may not be sufficient.91 The Convention on Biological Diversity outlined that the 'benefits of investments in biodiversity are likely to significantly outweigh costs. Without immediate action, the social and economic costs of biodiversity loss and the loss of ecosystem services will be felt at an accelerating rate in the future and will limit growth and stability. Investments made now will reduce resource requirements in the future' (UNEP, 2012).92 One example of this which can be valuable in decision making is illustrated by an initiative led by Derry City and Strabane District Council. It assigns a value to their parks and green spaces in the District by creating a Natural Capital Account. For every £1 the Council spends on its green spaces, it returns more than £22 to society. This equates to £500 of benefit per adult resident per year. This has helped the Council to make more informed decisions and develop new policies, pollinator plans, greenspace management plans, and capital development projects (Doherty, 2020).93

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⁸⁸ Government of Ireland (2020) ibid.

⁸⁹ NESC (2017) ibid.

⁹⁰ Birdwatch Ireland (2020) Correspondence

⁹¹ Zeng, Y., Maxwell, S., Runting, R.K. *et al.* Environmental destruction not avoided with the Sustainable Development Goals. *Nat Sustain* (2020). https://doi.org/10.1038/s41893-020-0555-0

UNEP (2012) Convention on Biological Diversity: Report of the High Level Panel on Global Assessment of Resources for Implementing the Strategic Plan for Biodiversity 2011-2020 https://www.cbd.int/doc/meetings/cop/cop-11/information/cop-11-inf-20-en.pdf

Doherty, C. (2020) Taking Full Account of How Coronavirus Connects People to Nature, Irish Forum on Natural Capital https://www.naturalcapitalireland.com/post/guest-blog-taking-full-account-of-how-coronavirus-connects-people-to-nature

Further work is required to explore how best to transform policies and governance to address the loss of nature (UN IPBES, 2019). There has been little national focus to date on the policy impacts on biodiversity in Ireland and its ecosystem services. Work by the Irish Forum of Natural Capital on natural capital accounting has highlighted the potential for nature based accounting and integrating biodiversity into policy more directly. Accounting for nature or natural capital accounting uses a standardised method to assess nature's stocks and flows, and will allow decision makers to better understand how the environment impacts our economy—and vice versa. The In-Case Project provides a useful example of how this can be utilised further in Ireland (InCase Project, 2020). 55

Further work on natural capital accounting for Irish policy in practice is needed to examine the financing and application of policy measures such as payments of ecosystem services (PES), conservation agreements, green fiscal policies and carbon offsetting.

Circular Bioeconomy Framework

Other significant conceptual frameworks that can support balancing economic, social and environmental sustainability include a circular bioeconomy. This uses renewable natural capital to holistically transform and manage land, food, health and industrial systems with the goal of achieving sustainable wellbeing in harmony with nature. Figure 2 illustrates the flows that underpin a circular bioeconomy which relies on healthy biodiverse and resilient ecosystems. Integrating circular thinking and practice widely into industrial, waste and business policy frameworks for example, can bring both economic and ecological benefits.

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⁹⁴ UN IPBES (2019) Global Assessment Report on Biodiversity and Ecosystem Services, The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).

InCase Project (2020) The Irish Natural Capital for Sustainable Environments (INCASE) project applies Natural Capital Accounting principles to a suite of ecosystem and geosystem services at river catchment scale across Ireland. It will recommend a framework to operationalise Natural Capital Accounting in Ireland. https://www.incaseproject.com/about-the-project

Palahí, M., Pantsar, M., Costanza, R., Kubiszewski, I., Potočnik, J., Stuchtey, M., Nasi, R., Lovins, H., Giovannini, E., Fioramonti, L., Dixson-Declève, S., McGlade, J. Pickett, K., Wilkinson, R., Holmgren, J., Wallis, S., Ramage, R., Berndes, G., Akinnifesi, F., Safonov, G., Nobre, G., Nobre, C., Muys, B., Trebeck, K., Vala Ragnarsdóttir, K., Ibañez, D., Wijkman, D., Snape, J., Bas, L. (2020) Investing in Nature to Transform the Post COVID-19 Economy: A 10-point Action Plan to create a circular bioeconomy devoted to sustainable wellbeing, The Solutions Journal, Volume 11, Issue 2, May 2020, https://www.thesolutionsjournal.com/article/investing-nature-transform-post-covid-19-economy-10-point-action-plan-create-circular-bioeconomy-devoted-sustainable-wellbeing/

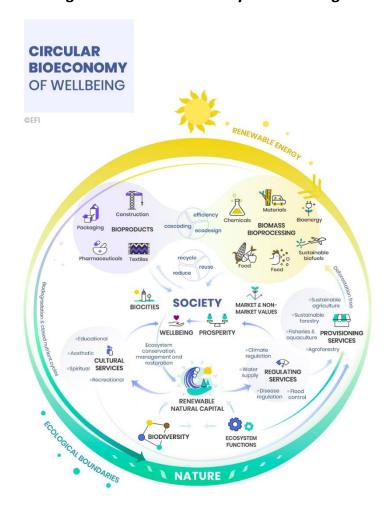


Figure 2: Circular Economy of Wellbeing

Source: European Forest Institute.

1.4.2 Green Investment and Conditionality

Ireland's pre-crisis commitments on energy and climate implied the need for a substantial increase in investment and a modification of the existing pattern of investment. During the period of economic recovery it makes sense to make progress towards the higher level of green investment required, including switching planned conventional investment to greener options (for example, replacing an aging oil boiler with a heat pump).

There is an opportunity for Ireland to be a leader in many areas including net zero housing, renewable energy generation and balancing the grid, light rail and trains, cycling and walking infrastructure, and green business investments. Transformation of energy, housing and transport systems are the kind of stimulus that could make

communities more resilient to future emergencies and reduce unemployment at the same time and contribute to a cleaner, greener and more just economy (Roberts, 2020). While the pandemic is a catalyst for change, it is also the case that sustainable and green measures and investments are also a catalyst for recovery.

A paper by Stiglitz, Stern and others (Hepburn et al., 2020) make the case for conditionality and that rather than business as usual-

An alternative way to restore confidence is to steer investment towards a productive and balanced portfolio of sustainable physical capital, human capital, social capital, intangible capital, and natural capital assets (Zenghelis *et al.*, 2020), consistent with global goals on climate change. Finally, any recovery package, including climate-friendly recovery, is unlikely to be implemented unless it also addresses existing societal and political concerns—such as poverty alleviation, inequality, and social inclusion—which vary from country to country (Hepburn *et al.*, 2020).⁹⁸

A sustainable proactive and fair response from the State could be supported by attaching conditions to rescue measures that provide developmental outcomes for the public good. That means delivering immediate solutions, but designing them in such a way as to serve the public interest over the long term. (Mazzucato, 2020).⁹⁹ The OECD also advise that sector-specific financial support measures should be made conditional on environmental improvements where possible. The IMF also suggest that brown development activities could be supported conditional on making progress on climate (IMF, 2020).

Other facets of conditionality include green public procurement, in which the state seeks to source goods, services or works with a reduced environmental impact. The Government is committed to developing and implementing a sustainable procurement policy and this builds on efforts by the EPA, DCCAE, the EU the OGP to progress Green Public Procurement which has taken time to shift procurement

Hepburn, C., O'Callaghan, B., Stern, N., Stiglitz, J. and Zenghelis, D. (2020) Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change? Oxford Smith School of Enterprise and the Environment | Working Paper No. 20-02 ISSN 2732-4214 (Online) https://www.smithschool.ox.ac.uk/publications/wpapers/workingpaper20-02.pdf; Zenghelis, D., M. Agarwala, D. Coyle, M. Felici, S. Lu, and J. Wdowin (2020), 'Valuing Wealth, Building Prosperity,' No. Wealth Economy Project first year report to LetterOne., Bennett Institute for Public Policy, Cambridge.

Roberts, D. (2020) A just and sustainable economic response to coronavirus, explained, Vox, 25/3/20 https://www.vox.com/energy-and-environment/2020/3/25/21180248/just-sustainable-economic-response-coronavirus-explained

Mazzucato, M. (2020) IIPP Director Mariana Mazzucato writes about the triple crisis in capitalism for Project Syndicate, https://www.ucl.ac.uk/bartlett/public-purpose/news/2020/apr/iipp-director-mariana-mazzucato-writes-about-triple-crisis-capitalism-project

practices (DCCAE, 2020).¹⁰⁰ A recent Interreg Project, GPP 4 Growth provides momentum and brings together partners from nine countries, to exchange experiences and practices and improve their capacities on implementing resource efficiency policies that promote eco-innovation and green growth through Green Public Procurement (GPP) (GPP4 GROWTH, 2020).¹⁰¹

Further exploration of the practical application of green conditionality to State support in relation to the recovery would be useful.

1.4.3 Sustainability: Building Resilience

While resilience is frequently mentioned in the discussion on economic and societal recovery, it is not always defined or applied in a way that has policy impact. However, there is little doubt that communities, cities, regions, food and energy systems will need a capacity to better withstand future shocks. Resilience acknowledges that massive disruptions can and will happen. What does it mean to build-in resilience to adapt and cope with future shocks in all aspects of our economy, society and environment?

There is a body of work on resilience from a range of fields, including research on disaster relief and climate adaptation; in relation to debates on sustainable and resilient cities, designing infrastructure; and in considering ways of limiting vulnerability of food and energy systems (Wilson, 2020).¹⁰²¹⁰³

Previous NESC Secretariat work outlined what resilience might mean for climate action...

in order—'to make Ireland a more resilient country—that is, to ensure the ability of the system and its component parts to anticipate, absorb, accommodate or recover from the effects of climate change in a timely and efficient manner, including through ensuring the preservation, restoration or improvement of its essential basic structures and function (FitzGerald, 2019).¹⁰⁴

Fitzgerald, C. (2019) The Framing of Climate Action in Ireland: Strategic Considerations. Secretariat Paper No. 17.

DCCAE (2020) Green Public Procurement https://www.dccae.gov.ie/en-ie/environment/topics/sustainable-development/green-public-procurement/Pages/default.aspx

GPP4 Growth (2020) https://www.dccae.gov.ie/en-ie/environment/topics/sustainable-development/green-public-procurement/Pages/GPP4-Growth.aspx

Wilson, A. (2020) Let's Bounce Forward from the Covid-19 Pandemic https://www.buildinggreen.com/oped/let-s-bounce-forward-covid-19-pandemic

¹⁰³ http://www.ifiad.ie/covid-19-and-agrifood-systems-resilience-web-portal/

Core systems need to have the capacity for recovery and adaptation to ensure their survival into the future, and even take advantage of new or revealed opportunities following the crises to improve the system through broader systemic changes. This is sometimes characterised as not just bouncing back, but 'bouncing forward' (Hynes, 2020). ¹⁰⁵ This is not a reactive response, but provides a forward-looking focus to recovery efforts. This term has recently been adopted by the European Commission in outlining their stimulus package, 'relaunching the economy does not mean going back to the status quo before the crisis, but bouncing forward' (EC, 2020b). ¹⁰⁶

A number of key areas warrant further exploration in relation to resilience including a focus on cities, communities and governance.

Resilient cities

Cities around the world are working together towards becoming more resilient with initiatives supported by the EU and from public and private institutions. Irish cities have shown initiative, through for example being included in the EC's Green Leaf Initiative (Limerick and Galway) and shortlisted in the Climathon Award (Dublin).¹⁰⁷

Cities can gain enormously from international networks which bring peer learning, underpinned by private and public funds, including the Rockefeller Foundation, the World Economic Forum and the World Bank. A network of cities—100 Resilient Cities—was established by the Rockefeller Foundation. Supports included financing for the establishment of a Chief Resilience Officer, to lead the city's resilience efforts. Through being included in that network, Belfast established a key role of the Commissioner for Resilience at Belfast City Council. Belfast City Council has also produce a Smart Belfast Framework working with Future Cities Catapult, engaged with local stakeholders whilst drawing from the expertise and practice of other

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¹⁰⁵ Hynes (2020) *ibid*.

¹⁰⁶ EC (2020b) Europe's Moment: Repair and Prepare for the Next Generation https://ec.europa.eu/commission/presscorner/detail/en/ip 20 940

https://www.limerick.ie/european-green-leaf-city/about/green-city;
https://galwayconventionbureau.com/whygalwayforsustainability/;
https://dublinclimatechange.codema.ie/news/dublin-city-council-shortlisted-at-global-climathon-awards/

Rockefeller Foundation (2013) 100 Resilient Cities https://www.rockefellerfoundation.org/100-resilient-cities/. This network is no longer funded by the Foundation but still exists in the form of the Resilient Cities Catalyst (RCC) and the Global Resilient Cities Network (GRCN). https://cities-today.com/100-resilient-cities-relaunches-as-an-independent-network/; https://climatelondon.org/wp-content/uploads/2019/07/Grainia-Long-Belfast.pdf

¹⁰⁹ The Commissioner is responsible for mobilising partners across diverse sectors including community, education, energy, health, housing and transport to create an urban resilience strategy and implementation plan. Belfast City Council (2018) https://www.belfastcity.gov.uk/News-90415.aspx

places.¹¹⁰ Dublin and other Irish cities could gain by being actively part of this or similar networks such as C40 cities or the Global Covenant of Mayors.¹¹¹ Further work to identify barriers and opportunities for networking Irish cities would be useful given their considerable potential for finance, sharing good practice and collaboration.

Local Community Resilience

Reconfiguring systems could help communities to be more resilient to future emergencies for example through promoting a shift towards more sustainable tourism or shortening supply chains to support local food producers (EC, 2020c). 112 Building resilience in communities includes climate and energy, food and energy systems, community development, tourism and many other elements for different context. Community led or co-building local communities can be developed through 'community wealth building' and community led local development (CLLD). CLLD is an integrated and place-based mechanism to foster economic, social and territorial cohesion and could serve as a catalyst for, local wealth development as an enabler of a just transition by ensuring prospective local wealth building initiatives could be sustained and scaled (TASC, 2020). 113 TASC notes that Ireland has a successful track record of implementing community-led local development through the LEADER programme, which has been active since 1991. A key tool of CLLD is to focus on shortening supply chains and prioritising local business. This could leverage local and national government procurement to drive the development of cooperatives, local and community business and social enterprise. Cooperatives have a strong role to play with a strong track record in food and renewable energy in Ireland. 114 Other countries have 'food belts' with local economies including cooperatives that point to their wider economic and well as social value (Hopkins, 2020). 115

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Belfast City Council (2018) Smart Cities Framework https://smartbelfast.city/wp-content/uploads/2018/04/Smart-Cities-Framework.pdf

https://www.c40.org/; https://www.globalcovenantofmayors.org/

EC (2020c) Time for transformative resilience: the COVID-19 emergency; https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/time-transformative-resilience-covid-19-emergency

¹¹³ TASC (2020) ibid.

Previous work by NESC on community engagement and wind energy demonstrated the enormous potential for locally-led renewable energy projects as drivers of local responses and resilience-building. NESC (2014) Wind Energy in Ireland: Building Community Engagement and Social Support. NESC Report.

Ceinture Aliment-Terre Liégeoise ('The Liége Food Belt') started with the question 'what if, in a generation's time, the majority of food eaten in Liège came from the land closest to Liège?' In the past 5 years, they have created 21 new cooperatives and raised €5 million from local people. They have created

Supporting locally-led economy building for resilience has similarities with the European Commission's 'smart specialization' agenda. How might this be progressed in Ireland, building on our strengths in community and voluntary participation? What kind of bottom-up process might be of value that involves diverse stakeholders sharing knowledge with one another (European Commission 2018; Hausmann and Rodrik 2002)?¹¹⁶

Governance resilience capacity

Emergence and resilience as functions of governance require further exploration for an Irish context. Bourgon (2014) outlines that both an emergence function to anticipate likely scenarios and a resilience function to build enduring capacity are core functions of an adaptive government that can contribute to the government's resilience. The OECD has a body of work providing guidance on building resilience (OECD, 2013) The OECD is reflecting on how we can build-in capabilities, mechanisms and processes of resilience, agility and adaptation into all levels of our governance, business and societal systems? (OECD, 2020). Further work in Ireland would be valuable to increase resilience capacity and expertise.

1.4.4 Applying a Just Transition Approach

NESC's work to date has highlighted the critical role of a just transition approach as part of a low carbon transition—one that is fair, participative and place-based both in process and in outcome (NESC, 2020).¹¹⁹ This is even more important in the context

vineyards, shops, distribution networks, a local currency, popular city centre shops. Hopkins, R. (2020) Maybe there is an alternative after all? Nature Public Health Emergency Collection; also Bousbaine, A. (2016) The Food-Belt (Ceinture Aliment-Terre), an innovative system for feeding the population https://orbi.uliege.be/handle/2268/212976

- European Commission (2018). Smart Specialisation. European Commission. https://ec.europa.eu/regional_policy/sources/docgener/ guides/smart_spec/strength_innov_regions_en.pdf; Hausmann, R. and Rodrik, D. (2002). Economic Development as Self Discovery. 8952. National Bureau of Economic Research. DOI: 10.3386/w8952 cited in Atteridge, A. and Strombo, C. (2020) Seven principles to realize a just transition to a low-carbon economy, Stockholm Environment Institute https://www.sei.org/wp-content/uploads/2020/06/seven-principles-for-a-just-transition.pdf
- Bourgon, J. (2014) Governments Fit for the Future: Lessons in Building Resilience http://press-files.anu.edu.au/downloads/press/p283571/pdf/4.-Governments-Fit-for-the-Future-Lessons-in-building-resilience.pdf
- ${}^{118} \hspace{0.1cm} \textbf{OECD (} \underline{\text{https://www.oecd.org/dac/conflict-fragility-resilience/from-good-idea-to-good-practice.htm} \\$
- NESC (2020) Addressing Employment Vulnerability as Part of a Just Transition in Ireland http://files.nesc.ie/nesc_reports/en/149_Transition.pdf; Moore, J. (2020) Approaches to Transition. NESC

of a post-Covid-19 recovery with its likely impacts on economic and social development as recognised by President Higgins recently. ¹²⁰ A central strategy to deliver sustainable development will be a focus on a fair and just process and outcome with managing change and uncertainty. Social dialogue is one of the key elements in a just transition approach, as documented in the international case study work undertaken for NESC (Mercier, 2020). ¹²¹ Deliberative engagement also provides a valuable and necessary tool for collaborative problem solving for complex policy solutions (c.f. Fung, 2005). ¹²²

The Just Transition Commissioner in the Midlands, Kieran Mulvey has produced a report with recommendations for the Midlands. Government plans to establish the Commission as a statutory office and do develop a Just Transition Plan. 'The plan will identify and prepare for challenges which will arise in a number of sectors and regions, recognising that there will be a variety of different transitions, and that it is clear that there will be no simple one-size fits all approach' (Government of Ireland, 2020).¹²³

As Hans Bruyninckx, Director of the European Environment Agency outlined, 'a socially just transition planned and implemented over a long term is the only way forward to build a resilient society with a strong and sustainable economy. Moreover, the investments we will make to mitigate the economic impacts of this [Covid-19] crisis should be, and can be, fully aligned with our long-term sustainability goals' (EEA, 2020).¹²⁴

The EU's considerable investment in coal-intensive regions including the Midlands through the Just Transition Mechanism is a strong signal that this approach is going to be underpinned by action and resources (EC, 2020).¹²⁵ The knowledge and shared experience documented by the START programme supporting the Platform for Coal-Intensive Regions, of which the Midlands is part of, will provide another important

Secretariat Paper No. 20.

http://files.nesc.ie/nesc secretariat papers/No 20 Approaches to Transition.pdf

¹²⁰ Higgins, M.D. (2020) ref

Mercier, S. (2020) Four Case Studies on Just Transition. NESC Research Series http://files.nesc.ie/nesc research series/Research Series Paper 15 TTCaseStudies.pdf

Fung, A. 2005. 'Deliberation before the Revolution: Towards and Ethics of Deliberative Democracy in an Unjust World.' Political Theory 33 (3): 397–419.

¹²³ Government of Ireland (2020) Programme for Government

EEA (2020) Reflecting on climate-neutrality ambitions in Europe in times of Covid-19 https://www.eea.europa.eu/articles/reflecting-on-climate-neutrality-ambitions

¹²⁵ EC (2020) https://ec.europa.eu/energy/topics/oil-gas-and-coal/eu-coal-regions_en

lens and guide through which an Irish approach to a just transition will continue to be developed. NESC and the European Network of Advisory Councils on Environment and Sustainable are hosting an international conference online in October on 'Delivering a Just Transition for All'(NESC, 2020).¹²⁶

Other countries are also turning to how to turn the principles of a just transition into reality. The Swedish Environment Institute outlines key ways and argues that the justness of transition comes from pursuing all of these principles and objectives simultaneously (Atteridge and Strambo, 2020). 127 In practice, the mission is beyond what any one institution can do alone. It will require cooperation across many different stakeholders, levels of government, and, sometimes, between countries. This is an important insight for Ireland which now has the positive context, with key actors engaged, coupled with national and EU resources, to apply, test and review just transition approaches in the Midlands and nationally and build expertise going forward.

1.5 Conclusion

Governments are increasingly recognising the environmental, social and economic opportunities to do things differently as part of recovery from Covid-19. As Ireland works to rebuild, it is important to reflect on how we can configure and align policy responses in ways that successfully drive and deliver sustainable low carbon development and practices that sustain our lives and surroundings, and provide protection against the challenges we face. Positive action on climate and biodiversity can bring multiple benefits to society and nature and help to drive the recovery.

In broad terms, the direction of travel outlined across new EU strategies is to deliver economies that are low to zero carbon, with nature restored, more resilient rural and agricultural economies, with circular business and industry using closed loops for materials and products. However, the details of how to deliver this transformation in a job-intensive way sooner rather than later as part of the recovery from Covid-19 is being actively debated in many countries and at EU level. A key issue is ensuring a fair, just and inclusive transition in terms of outcome and process.

Atteridge, A. and Strambo, C. (2020) Seven principles to realize a just transition to a low-carbon economy, Stockholm Environment Institute. https://www.sei.org/wp-content/uploads/2020/06/seven-principles-for-a-just-transition.pdf

NESC (2020) 28th Annual EEAC Conference—A just Transition for All https://www.nesc.ie/news-events/nesc-to-host-the-28th-eeac-annual-conference-delivering-a-just-transition-for-all-online-27-to-29-october-2020/

As argued in this paper, urgent environmental sustainability measures require action, but they can also drive the recovery. The task is considerable but achievable but requires an alignment of policy objectives and implementation. Investing in nature and in reducing emissions will create jobs and at the same time become a means of re-imagining our economy and society, and crucially the relationship between them and our natural environment.

To deliver a coordinated and purposeful response will require collaborative and imaginative reflection but also a grounded analysis of the sustainability challenges, risks and opportunities, as well as the 'nuts and bolts' of delivering mission-oriented actions. There are a number of potential approaches that can help embed sustainability into policy and practice that have been outlined in this paper which focus on frameworks, investment, resilience and a just transition. Further work by NESC will examine several of these in more detail and in doing so, help to identify key tools to help build-in sustainable policies, practices and processes.

Appendix 1: Brief Outline of European Policies and the Green Deal¹²⁸

From a European perspective, the Green Deal is the fundamental package of policy, regulation and finance under development. It is a strategy of the European Commission published in December 2019 'for making the EU's economy sustainable by turning climate and environmental challenges into opportunities across all policy areas and making the transition just and inclusive for all' (EC, 2019). This strategy proposes the goal that the EU become climate neutral by 2050 and that this be incorporated into legislation. By summer 2020, the Commission will present a plan to increase the EU's greenhouse gas emission reductions target for 2030 to 50 to 55 per cent relative to 1990. By 2021, it will review all climate-related policy instruments including the Emissions Trading System (ETS) and Member State targets to reduce emissions outside the ETS.

The European Commission estimates that the achievement of the current 2030 climate and energy targets will require €260bn of additional annual investment, representing 1.5 per cent of 2018 GDP. This does not include investment for climate adaptation or investment needed for other environmental priorities such as biodiversity. Most of this investment will be undertaken by governments, households and companies. However to support the Green Deal, the European Commission has developed a Green Deal Investment Plan aimed at mobilising a cumulative investment of €1 trillion over the decade to 2030 as a contribution towards the Green Deal.

The European Commission proposes a direct allocation of €7.5bn to the Just Transition Fund from the EU budget and this will be supplemented with money from other EU funds. When combined with national co-financing the Commission expects that the funding will between €30 and €50bn over the period 2021-2027. This Mechanism is seeking a regional approach to social equity and fairness. This provide a principled basis from broader EU action to guide recovery plans. The European Commission has noted that the Just Transition Fund for the period 2021-2027 could help Ireland to address some of the challenges posed by the transition to a climate neutral economy.

¹²⁸ Thanks to NESC's Noel Cahill for his contribution to this section.

EC (2019) The European Green Deal https://ec.europa.eu/commission/presscorner/detail/e%20n/ip 19 6691

Climate and energy policy are central to the European Deal but there are wider dimensions. As part of the Green Deal the European Commission has also recently published a new EU Biodiversity Strategy and an EU Farm to Fork Strategy for sustainable food.

The new Farm to Fork Strategy aims to enable the transition to a sustainable EU food system that safeguards food security and ensures access to healthy diets sourced from a healthy planet. It will seek to reduce the environmental and climate footprint of the EU food system and strengthen its resilience, protecting citizens' health and ensuring the livelihoods of economic operators. Food security, food practices, sustainable production and consumption and reducing food waste are key elements of the strategy (EC, 2020e).¹³⁰

The Biodiversity Strategy 2020 aims to put Europe's biodiversity on the path to recovery by 2030. To that end, the strategy sets out new ways to implement existing legislation more effectively and introduces new commitments. The Commission proposes to improve and widen the network of protected areas and to develop an ambitious EU Nature Restoration Plan (EC, 2020).¹³¹ It outlines that protecting and restoring biodiversity and well-functioning ecosystems is key to boost our resilience and prevent the emergence and spread of future diseases (EC, 2020a).¹³²

The EU Nature Restoration Plan would have legally binding EU nature restoration targets in 2021 to restore degraded ecosystems, in particular those with the most potential to capture and store carbon and to prevent and reduce the impact of natural disasters. It also proposed targets for increasing pollinators, reducing chemical pesticides, increasing land under organic farm management and planting three billion new trees.

The European Commission argues that investing in nature protection and restoration will also be critical for Europe's economic recovery from the Covid-19 crisis (EC, 2020a).¹³³ It outlines how natural capital investment, including restoration of carbonrich habitats and climate-friendly agriculture, is recognised to be among the five

EC (2020e) Farm to Fork Strategy https://ec.europa.eu/info/sites/info/files/communication-annex-farm-fork-green-deal-en.pdf

EC (2020a) Biodiversity Strategy for 2030 https://ec.europa.eu/info/sites/info/files/communication-annex-eu-biodiversity-strategy-2030 en.pdf

EC (2020a) EU Biodiversity Strategy for 2030 Bringing nature back into our lives https://ec.europa.eu/info/sites/info/files/communication-annex-eu-biodiversity-strategy-2030_en.pdf

EC (2020a) Biodiversity Strategy for 2030 Bringing nature back into our lives https://ec.europa.eu/info/sites/info/files/communication-annex-eu-biodiversity-strategy-2030 en.pdf

most important fiscal recovery policies, which offer high economic multipliers and positive climate impacts (Hepburn *et al.*, 2020).¹³⁴

Another key EU plan is the Circular Economy Action Plan which provides a future-oriented agenda for achieving a cleaner and more competitive Europe in co-creation with economic actors, consumers, citizens and civil society organisations. The European Commission outlines this aims to accelerate the transformational change required by the European Green Deal, while building on circular economy actions implemented since 2015 (EC, 2020f). 135 It aims also at ensuring that the circular economy works for people, regions and cities, fully contributes to climate neutrality and harnesses the potential of research, innovation and digitalisation. It foresees the further development of a sound monitoring framework contributing to measuring well-being beyond GDP.

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Hepburn *et al..*, (2020), Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change? Smith School Working Paper 20-02.

¹³⁵ EC (2020f) A New Circular Economy Action Plan https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0098&from=EN