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### **Designing and Implementing Policy for a Just Transition**

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## Introduction

Transitioning to a low-carbon society will be challenging. A key challenge will be ensuring that the transition is just. This will require a systems approach to responding to climate change, as the impacts are diverse, compounded and, critically, there may be unanticipated impacts. A systems approach requires considering problems and solutions holistically, as the whole is greater than its parts. By applying a systems approach to designing policy, responses will not be narrowly defined but consider the broader implications of the response beyond the immediate problem.

It is well acknowledged that people working in the fossil fuel sector (this includes peat and coal generation) will be adversely affected by the sharply reduced demand for fossil fuels. They will be faced with uncertainty, non-transferable skills and the prospect of unemployment. In the Irish context, the focus has been on peat workers and will soon turn to workers based at Moneypoint, a coal fired plant. The first progress report by the Just Transition Commissioner, Kieran Mulvey, released in May 2020, has driven home the challenge ahead to transition out of peat and more broadly to transition Ireland to a low-carbon future (Mulvey, 2020). The impacts of the transition are not limited to workers, but also the communities and individuals dependent on carbon-based industries, and land-use intensive sectors. As such, while the recent focus has been on the immediate impact in the peat sector, the transition will result in changes in activities across all sectors including agriculture, construction, transport and so on. It is important to learn from the lived experience of communities currently impacted by transition to enable improved implementation of transition in the future. Particularly as, in Ireland, policies in the agriculture sector will have impacts on rural livelihoods. The transition will have knock on effects, the nature of which will be positive or negative depending on the policy responses. Avoiding or reducing the negative effects is an objective of a just transition. The challenge lies in designing, developing and implementing policies that are just. This will demand that time is taken to carefully consider and deliberate on the potential impacts of policy, actions and measures beyond their cost-effectiveness, and efficiency (Routledge, Cumbers and Derickson, 2018). This may seem counterintuitive due to the urgency of addressing climate change. However, a just transition calls for an in-depth understanding of the distributional impacts, coherence and relevance of policy actions and measures, alongside a policy development and implementation process that is inclusive and fair.

It is within this context that this working paper explores some aspects of the changes needed to achieve a just transition for all in the Republic of Ireland. To begin, this paper presents the current policy context at EU and national levels. Chapter 2 delves into definitions and terms relevant to a just transition; the objective of this chapter is to highlight the need for a systems approach in designing policy that is just. Chapter 3 considers climate change policies implemented by the Irish Government, specifically, their impacts in terms of their distributional effects, coherence and relevance. Chapter 4 considers the international and historical lessons for a just transition and the emerging immediate lessons from the response to the coronavirus, which has brought to the fore the interconnectedness of issues. Chapter 5 proposes how a just transition may be achieved in the Irish context based on the previous chapters.

### 1.1 Policy Context

#### *EU Policy*

The European Union's Green Deal, which sets a target for the EU to be carbon neutral by 2050, gives prominence to the importance of a just transition:

[The Green Deal] also aims to protect, conserve and enhance the EU's natural capital, and protect the health and well-being of citizens from environment-related

risks and impacts. At the same time, this transition must be just and inclusive. It must put people first, and pay attention to the regions, industries and workers who will face the greatest challenges. Since it will bring substantial change, active public participation and confidence in the transition is paramount if policies are to work and be accepted. A new pact is needed to bring together citizens in all their diversity, with national, regional, local authorities, civil society and industry working closely with the EU's institutions and consultative bodies.

The EU Green Deal includes a proposal for the Just Transition Mechanism (JTM) which “will provide targeted support to regions and sectors that are most affected by the transition towards the green economy” (European Commission, 2020). The JTM aims to mobilise €150 billion through various financial support mechanisms such as a Just Transition Fund initially valued at €10 billion, a new public sector loan facility managed by the European Investment Bank, and an InvestEU “Just Transition” scheme. Technical assistance will be provided to EU Member States and regions through a Just Transition Platform. While all member states can avail of the JTM the focus is primarily on regions of the EU that are fossil fuel dependent or carbon intensive. The midlands in Ireland are included in this. Further to this under the EU Green Deal, Ireland will be required to develop a Territorial Just Transition Plan, that will provide an overall strategic framework for investments of funding being received from the EU (Mulvey, 2020).

#### *Irish Policy*

At present, the debates and discussion on the just transition in Ireland and globally are focused on the fossil fuel sector (Fuller and McCauley, 2016; Jenkins *et al.*, 2016; McCauley and Heffron, 2018; Whyte, 2018). It is well recognised that the transition from fossil fuels to clean and renewable energy sources will see many jobs disappear. Consequently, policies have focused on offering fossil fuel workers retraining opportunities, compensation, and redundancy packages (Stevis and Felli, 2014). While the focus of policy has primarily been on individual workers, literature argues that a broader focus is needed. The communities around individual workers may also be considered dependent on the fossil fuel industry and therefore the impacts on the broader community needs to be considered.

Ireland has already recognised the importance of a just transition in the fossil fuel sector. To complement existing commitments in the Climate Action Plan to move away from peat and coal, policies have been introduced to transition peat workers as peat stations close. The Irish Government in Budget 2020 committed €6 million to a just transition fund for the Midlands. In addition to this €5 million is to be dedicated to bog restoration and rehabilitation, and €20 million for group housing upgrades in the Midlands. Beyond finance, the Government has appointed a Just Transition Commissioner, who will engage with key stakeholders in the Midlands and created a just transition task force. Currently, the discussion is focused on support for Bord na Mona workers and ensuring that they receive supports and incentives to transition out of peat industry. However, it is necessary to ensure that all climate change policies, not only those related directly to energy production, are designed and implemented to align with a just transition. Evidence of this comes from the literature on just transitions globally (Fuller and McCauley, 2016; Jenkins *et al.*, 2016; McCauley and Heffron, 2018; Whyte, 2018).

Also, important, in the Irish context, are the challenges faced by agriculture, a key part of rural Ireland. Climate policy to date has primarily focused on farm-level responses to climate change and predominantly consists of mitigation action which is anticipated by many to have implications for the viability of individual farms. However, recent events in Ireland, particularly protests by farmers, highlight that agricultural policy will need to broaden its scope to consider the communities that depend on the agriculture sector. As such, rural Ireland presents a unique policy case for achieving a

just transition, and possibly serves a critical policy test from which other governments can learn. This will not be without challenges, particularly in relation to financing the transition to a low-carbon future and to engagement with stakeholders.

Just transition in the literature calls for policies to acknowledge and address issues of gender, race and equity, in summary; broader societal issues (Whyte, 2018). The narrow focus of policy is potentially detrimental economically, socially and environmentally. Serious consideration of a just transition must consider the interconnectedness of the world in which we live and how climate change will impact livelihoods.

### *Finance for Just Transitions*

In terms of financing a just transition there are two sources of finance: government funding and private sector finance. These are often interconnected and drive each other. Revenues raised through carbon taxes or carbon prices have been deployed by governments to incentivise the shift away from fossil fuels. The revenues generated from carbon taxes are intended to fund projects and programmes to mitigate the impacts of climate change. Some governments have faced backlash for the carbon tax, such as France with the gilet jaune movement, and others, such as the Canadian Government, have had to rebrand the carbon tax as a carbon price and a return of revenues to families adversely impacted by as “cheque in the post” to garner support. Imposition of new taxes or other pricing mechanisms to achieve behavioural change is almost always controversial. Greater public acceptance of such measures is achieved when there is clear line of sight between the revenues raised and the consequent fiscal support of actions to achieve public good.

Placing a price on carbon is needed. Its implementation, and the suite of policies that are implemented in conjunction with it, need to align with a just transition. Success and acceptance of carbon taxes or carbon prices are tied to understandings of their intended purpose; opposition is strong if there is a perception that the tax will affect an individual’s cost of living and acceptance is increased when there is knowledge of climate change and recognition of the effectiveness of the carbon tax to mitigate climate risk (Douenne and Fabre, 2020). Therefore, ringfencing carbon revenue, for climate related projects or a “cheque in the post” primarily for households that would be adversely affected by a carbon tax, greatly increases public acceptance. While the “cheque in the post” could be viewed as addressing the distributional impacts of climate action, it does not bring additional long term climate benefits as households will probably not use the money to take climate action at the household level. Whether revenues are ring-fenced or returned to households, there is a need for policies that will enable climate action at the individual level and the societal level.

Private sector finance has a role in climate action and in the achievement of a just transition. LSE’s Grantham Institute has developed a guide for the finance sector that strives to inform investors and financial institutions on how to enable a just transition (Robins, Brunsting and Wood, 2018). The guide presents five reasons for embedding just transition principles in investment (Robins, Brunsting and Wood, 2018):

1. Understanding systemic risks
2. Reinvigorating fiduciary duty
3. Recognising material value drivers
4. Uncovering investment opportunities
5. Contributing to societal goals

At the core of this is the recognition that a just transition is an opportunity to not only take action on climate change, a key risk, but to achieve inclusive and resilient growth. In the absence of a just

transition the guide highlights that the risk and result is “not only ‘stranded assets’ but also ‘stranded workers’ and ‘stranded communities’” (Robins, Brunsting and Wood, 2018). There is a need for coherence in government policy to send clear signals to the financial sector, and for the financial sector to be ready with investment opportunities and financial products that enable all people to take action, for example green mortgages, energy efficiency mortgages, and renewable energy shares to support community renewable energy projects.

Literature also highlights that a just transition calls for collaboration in policy design. Collaboration requires consideration of the past and the need for building relationships with stakeholders. As such, a just transition presents an opportunity for restorative justice (Whyte, 2018). This is viewed as an important step to achieving progress with policies and to avoid policy failures.

## 2. Defining a Just Transition

The absence of justice has risks. Imposing solutions without consultation or building trust with stakeholders may exacerbate problems within communities and result in U-turns on essential climate policies (Walker and Bulkeley, 2006; Whyte, 2018). Consideration of the underlying causes of individuals’ and communities’ risk and vulnerability to climate change as well as the impacts of proposed actions is needed in policy development.

This chapter discusses the evolution of the understandings of what a just transition is, alongside the terms that comprise a just transition. A just transition is a framework for designing and implementing policies that respond to the multi-dimensional impacts of climate change; it is a process. Given this, a just transition requires understanding how addressing climate change will impact individuals and communities with differing needs and wants due to a range of factors. It requires a process where policy makers collaborate with stakeholders and communities to design and implement policies that address the hopes and concerns of affected individuals and communities.

The earliest references to what is now called just transition in an environmental context trace back to the 1980s in the US and Canada when new regulations were introduced to stop air and water pollution by industries (Newell and Mulvaney, 2013; Stevis and Felli, 2014). Workers in affected industries, namely energy and chemicals, faced the loss of jobs for the sake of the environment (Newell and Mulvaney, 2013; Stevis and Felli, 2014; Evans and Phelan, 2016). Some unions recognised that environmental protection did not have to come at the expense of jobs but that there were opportunities to transition workers out of environmentally damaging industries (Newell and Mulvaney, 2013; Stevis and Felli, 2014).

In the 1990s, unions became more involved in global environmental negotiations due to the focus on sustainable development (Stevis and Felli, 2014). The result of this was a “Superfund for workers” and the recognition that jobs could be created in an environmentally friendly economy (Newell and Mulvaney, 2013). This has seen the rise in the focus on ‘green jobs’ to achieve a low-carbon future and the call to enable workers to reskill and transition from jobs in fossil fuels to low-carbon sectors (Newell & Mulvaney, 2013; Stevis & Felli, 2014). More recently, literature has seen a shift from the narrow focus on energy sector workers to a broader focus with questions of ‘who benefits and who is harmed’ by the transition (Mayer, 2018). As such the just transition is now much broader, in part due to the impacts of climate change affecting every facet of life. Table 1 summarises definitions of justice in the literature. It is evident that a just transition is multifaceted and complex. Critically it calls for governments to take a leadership role and to be accountable and transparent in their actions. Further, it demands that government consider distributional impacts, relevance and coherence of policy; and argues that a focus on cost-effectiveness in the short term is not feasible in the context of climate change when the impacts reach far into the future.

**Table 1. 1 Terms related to a Just Transition**

<b>Justice</b>	<b>Definition</b>
<b>Environmental Justice</b>	Equity is at the core of environmental justice. This is concerned with the inclusion of citizens in the development, implementation and enforcement of environmental legislation and policy. Importantly, justice is considered not merely as an outcome of policy, but within the policy process itself (Jenkins <i>et. al.</i> , 2016; Whyte, 2018).
<b>Climate Justice</b>	Science informs climate justice, which in turn responds to scientific information within the context of human rights (MRF CJ, 2018). As such, human rights and development are linked, to achieve a human-centred approach, ensuring the rights of the most vulnerable and sharing the burdens and benefits of climate change and its resolution equitably (MRF CJ, 2018).
<b>Energy Justice</b>	Energy justice addresses the energy lifecycle in the context of human rights. Ensuring that people have access to energy to maintain a decent quality of life is central to energy justice. Further, production and distribution of energy is conducted in a manner that causes no harm, environmentally or socially (Jenkins <i>et. al.</i> , 2016).
<b>Restorative Justice</b>	Restorative justice considers the need for consent and reconciliation to have an equitable distribution of the burdens and opportunities in responding to climate change (Bulkeley <i>et al.</i> , 2014; Heffron & McCauley, 2018; Whyte, 2018). As such, key to achieving a just transition is dialogue that is deliberate, considerate, and respectful, and strives to understand the hopes and concerns of individuals and communities, for the longevity of climate action (Bulkeley <i>et al.</i> , 2014; Dekker, 2018; Heffron & McCauley, 2018; Whyte, 2018).
<b>Distributive Justice</b>	In the literature on distributive justice there are five key principles that comprise it: causal responsibility, preferential treatment based on need, equal entitlements, equal burdens and procedural justice (Klinsky and Dowlatabadi, 2009; Svenningsen, 2019). It is concerned with the distribution of environmental ‘goods and bads’ (Klinsky and Dowlatabadi, 2009; Preston, 2015)
<b>Procedural Justice</b>	This is related to the distributive elements of climate justice, specifically the justness of the process of distribution and is concerned with the representation of all who have a stake in the policy outcomes (Klinsky and Dowlatabadi, 2009; Preston, 2015)
<b>Intergenerational Justice</b>	Intergenerational justice concerns the extent and the character of moral relations among different generations. A theory of intergenerational justice attempts to show why particular moral responsibilities and obligations apply. (Duckworth, 2013)

Today, the focus is not solely on workers in polluting industries but society as a whole. A just transition brings together climate justice, environmental justice, energy justice, restorative justice, distributive justice, procedural justice and intergenerational justice into debates to understand how the transition to a low-carbon society can be achieved in a manner that is equitable and strives to cause no harm

that would result in individuals and communities being worse off (McCauley & Heffron, 2018). Having roots in the environmental justice movement means that a just transition is concerned with questions of who benefits and who is harmed by changes (Mayer, 2018). Policy must attempt to answer these questions in a manner that addresses the main problem whilst achieving co-benefits where possible.

### **Box 2.1 Rawlsian Justice**

In considering responses to climate change that are just, it is worth considering what justice itself means. In developing the idea of “Justice as Fairness”, John Rawls developed two principles of justice (Jabbari et al., 2019):

- 1) Each person has the same inalienable claim to a fully adequate scheme of basic liberties, this scheme is compatible with the same scheme of liberties for all; and in this scheme the equal political liberties, and only those liberties, are to be guaranteed their fair value.
- 2) Social and economic inequalities are to satisfy two conditions:
  - a) They are to be attached to offices and positions open to all under conditions of a fair equality of opportunity; i.e. no individual or community is forced into inequality;
  - b) They are to be to the greatest benefit of the least-advantaged members of society (the difference principle).

A just transition moves beyond protecting rights, to understanding causes of vulnerability and seeing the responses to climate change as an opportunity to engage in a collaborative process with individuals and communities (McCauley & Heffron, 2018). Fortunately, there are lessons for how to achieve this in practice from coal transitions in Appalachia, Australia, and Germany, as well as policies that have supported transitions more generally, that can be adapted to the Irish context.

### 2.1 Considerations for a Just Transition in Practice

The debate around distributional justice brings to the fore a challenge with achieving a just transition; specifically, what it means to share the burdens and opportunities of responding to climate change (Sachs, 2014; Preston, 2015; Routledge, Cumbers and Derickson, 2018). Some may call for policies that redistribute the benefits, while others warn against this. There is a risk of conflating climate action as a means to creating an equal society, particularly, as the equitable sharing of the burdens and opportunities. The responsibility of responding to climate change is society’s as a whole, not segments of society. While there are those that may contribute to climate change more than others due to their varying circumstances, this should not serve as a cause to exclude or exempt individuals or community from taking action. A just transition is inclusive by design; this is where distributional justice and procedural justice meet.

For the equitable distribution of the benefits and responsibility of climate action to be achieved, the process of developing responses must be inclusive. Echoing the NESC report, the process needs to apply social dialogue and to be deliberative (NESC, 2020). Policy makers will need to consider who, when and how they engage individuals and communities in the process of developing viable policies. Exclusionary policies will not work, climate action must be a collective effort and must be seen and experienced that way.

Recognising this means policy makers will need to reconsider how policy is designed and implemented, key will be a shift in public participation. Public engagement and consultation cannot be tokenistic, the Citizens’ Assembly and the National Dialogue on Climate Action are positive moves towards active public participation in the policy development process. While the public consultation

process is transparent it is not always accessible or inclusive. There is a need to actively include relevant stakeholders to insure the acceptance of climate policy at all stages of policy development; as policies that neglect to consider the hopes and concerns of those impacted by policies and their ability to afford to engage with policies may result in policies not being accepted. There is a recognition that climate change will impact all people irrespective of socio-economic status, as such policies must be designed to respond and adapt to these differences. An additional aspect of inclusive engagement is the increased communication and appreciation of the policy design to optimise the common interest while reflecting basic interest of the individual. In other words, the distributional impacts of policies cannot unilaterally benefit or adversely affect specific individuals and communities.

### 3. Evaluating the Impact of Policy

This chapter considers select actions and measures implemented by the Irish Government to mitigate and adapt to the effects of climate change based on research undertaken via an EPA funded project – Irish Climate Policy Evaluation (ICPE). The ICPE conducted an ex-post evaluation of climate policy using six criteria: effectiveness, efficiency, coherence, relevance, governance and distributional impacts. The latter, distributional impacts, is of value to understanding what is needed for policies to align with a just transition in the Irish context. It is also the most challenging to assess, as it requires qualitative assessment to tell the story of the quantitative aspects of policy.

In assessing the distributional impacts of policies, the ICPE considered work undertaken by ESRI specifically in relation to energy retrofit programmes, analysed relevant and available data, and conducted workshops and interviews with key stakeholders to understand the impacts of policy. What has emerged and is reflected in the literature is the importance of the understanding of the problem of climate change by individuals and communities who may be impacted by policy (Klinsky and Dowlatabadi, 2009; Sachs, 2014). Further to this, is the coherence and relevance of policy to individuals and communities; do policies maintain or improve quality of life, and are the purported measures feasible for individuals and communities (Klinsky and Dowlatabadi, 2009; Forsyth, 2013; Preston, 2015). The latter is particularly evident in retrofit programmes such as the Better Energy Homes programme, discussed below. Finally, a key finding was the importance of engaging individuals and communities in the process of policy development (Klinsky and Dowlatabadi, 2009; Preston, 2015; Whyte, 2018). This was particularly evident in discussions on rural development with key stakeholders in the agriculture sector.

The next two sections of this chapter discuss the distributional impact of two policies that are critical in responding to climate change: housing retrofit policy and rural development.

#### 3.1 Housing Retrofits

The Better Energy Homes (BEH) programme was introduced in 2009. Administered by the SEAI, the programme aims to reduce energy household consumption (SEAI, 2018; Collins and Curtis, 2016; Collins and Curtis 2017). Owners of homes built before 2006 may apply for grants to undertake 4 types energy efficiency measures: roof or attic insulation, wall insulation, boiler upgrades and solar collector installation.<sup>1</sup> The value of the cash grants range from €300 to €6,000. If awarded grant aid, applicants must complete works within 6 months of receiving approval. SEAI also provides a list of approved contractors, technical advisors, BER assessors, and suppliers of products that homeowners must follow to ensure that works are completed according to the technical requirements.

To assess the ex-post impact of the BEH programme, the researchers used publicly available data on the program from the SEAI. A study by the ESRI to assess the programme's impact from March 2009

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<sup>1</sup> Heat pumps were added in April 2018. Solar PV was added in 2019

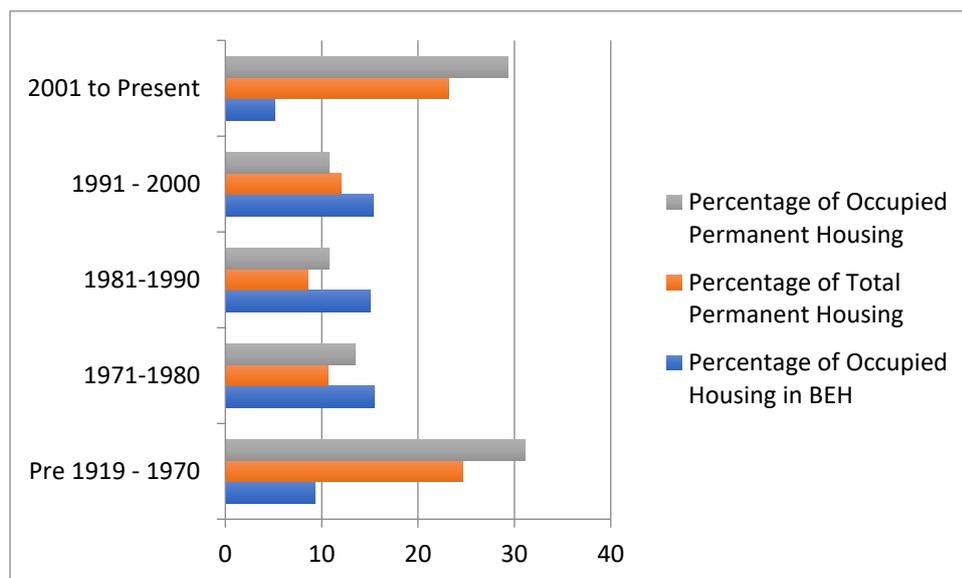
to October 2015, which sought to understand householder decision making, scheme engagement, funding efficiency, and incentive design provided valuable insight on the distributional impacts of the programme when considered with additional data from SEAI, CSO and OECD.

### *Distributional Impacts*

The BEH programme is open to all homeowners and renters across the country. In their study of the BEH programme, Collins and Curtis (2016 and 2017) analysed the data from the programme. The majority of participating households are houses (98%), and the majority of households have undertaken simple retrofits of one (32.7%) or two (62.6%) measures. In terms of the physical distribution across geographical classifications (Greater Dublin Area, County with city, Border Midlands West and South & East), the majority of upgrades have been undertaken in counties with cities (33.2%). Data accessed from the CSO in August 2018 combined with SEAI data show that approximately 20.5% of all upgrades were in Dublin and amounted to 26.3% of total value of the grants issued.

Approximately 72.3% of the applications are for houses built between 1970 and 2006 (houses built between 1970 and 2000 represent 35.1% of Ireland’s housing stock). Collins and Curtis (2017) noted that older houses perhaps find it challenging to research the energy efficiency targets in the application as a possible reason for their low uptake. This is critical, as approximately 31.1% of Ireland’s housing stock was built before 1970. These make up 27.7% of BEH applications.

**Figure 3.1: Percentage of Occupied Permanent Housing and BEH by Period of Build**



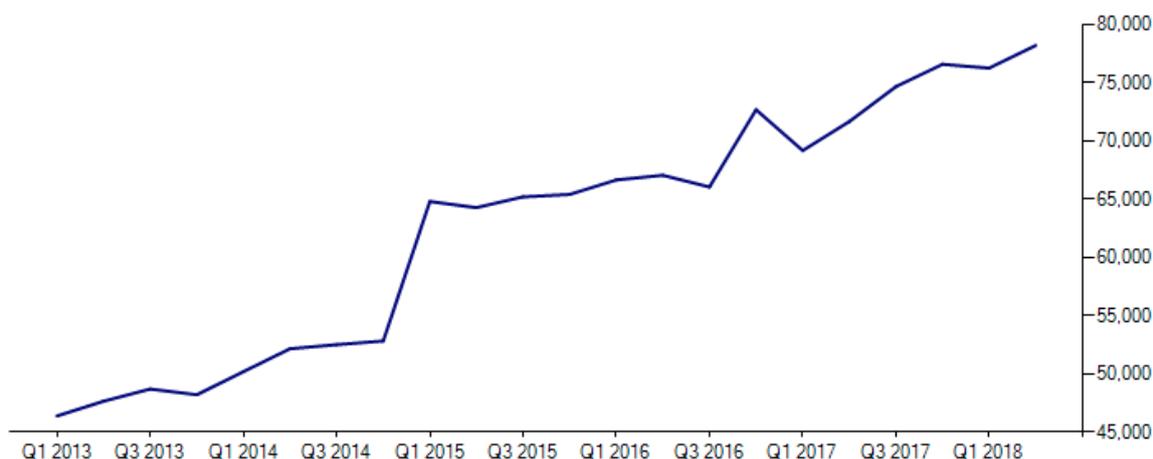
**Source:** CSO (2017) and SEAI (2018)

Beyond geographical distribution, there are questions with regard to the socio-economic distribution of the programme. While Ireland’s economy started to recover from the recession in 2012, the number of applicants to the BEH programme has been declining. Collins and Curtis (2018) investigated willingness to pay for retrofits, which provides some insights into who is availing of grants. It is clear from the study that households in higher socio-economic groups are availing of grants and would probably undertake retrofits in the absence of grants. Approximately 7% and an additional 8% would have participated with lower grant amounts. In order to receive the grant, households must pay for the full upfront costs of the retrofits, which may be out of reach for households with less disposable income or little savings (Collins and Curtis, 2018). Recent OECD (2018) statistics for Ireland show that

private household debt, calculated as a percentage of net disposable income, is 170.5%, while household disposable income is growing at 2.9% annually.

Recent OECD (2018) reports show that GDP has increased by 9.1% between 2017 and 2018, making Ireland the fastest growing economy in Europe (Figure 3.2).

**Figure 3.2: Ireland's GDP (Constant prices, SA), €m**



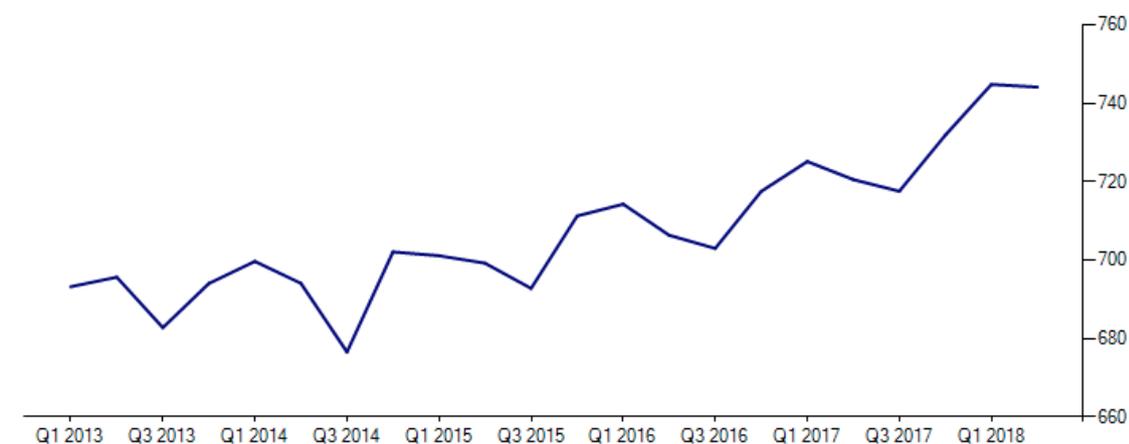
	2013	2014	2015	2016	2017	2018
Q1	46,410	50,211	64,808	66,657	69,181	76,257
Q2	47,679	52,180	64,285	67,061	71,666	78,200
Q3	48,720	52,529	65,210	66,059	74,666	
Q4	48,232	52,841	65,416	72,687	76,582	

**Source:** CSO (2018)

Average weekly earnings have increased by approximately €50 between Q1 of 2013 and Q2 of 2018. Average annual earnings are approximately €35,000/year (Figure 3.3). Housing and rent prices have increased much more rapidly. According to a Daft report from 2018, the asking price for rent increased on average by 75% and house prices by 56%, relative to their lowest levels in 2012 (Daft, 2018). It is evident that affordability affects participation in the BEH programme. This in itself is complex. While wealth is increasing, its distribution is uneven. In depth research is needed to understand the relationship between these variables and the propensity of people (householders and renters) to participate in the BEH and other energy efficiency retrofit programmes.

In recent years, wages have not increased in line with the rising costs of living which include housing, utilities, transportation and food. Consequently, individuals who would be purchasing homes and undertaking retrofits are either not entering the market or entering the market and saving for future upgrades. For example, to be eligible for a mortgage in Dublin, a single person needs an average annual salary of €81,000 (Reddan, 2018) which leaves a large cohort of the population in the rental sector. In the cohort that are renting, saving for a mortgage is challenging and whilst they may be able to suggest upgrades to landlords, they face risks of increased rent, and the possibility of losing their housing if they cannot afford the increased rent. This is an area in need of further research, particularly in the context of future policy being proposed to support landlords in undertaking upgrades. It will need careful consideration in the broader context of housing affordability and the absence of legislation that provides adequate protection to tenants.

**Figure 3.3: Average weekly earnings**



	2013	2014	2015	2016	2017	2018
Q1	693.21	699.67	701.11	714.26	725.12	744.76
Q2	695.65	694.08	699.22	706.33	720.52	744.08
Q3	682.79	676.58	692.79	702.97	717.55	
Q4	694.03	702.07	711.23	717.52	731.86	

**Source:** [CSO website](#)

In designing and implementing retrofit programmes that align with a just transition, policy makers will need to give consideration to all aspects of the retrofit programme, not solely the target of implementing cost effective retrofits. Central to this, is data collection. Anecdotal evidence suggests that for home owners engaging in the BEH programme, the financial costs, while an initial factor in choosing to undertake retrofits, became secondary to new found comfort of their homes. Presenting this information may incentivise retrofits more so than a grant.

Discussed with relevant stakeholders engaged in retrofitting of both local authority housing and private dwellings is the need for trusted partners and a one stop shop. A concern, and an unknown identified in the ICPE research, is the number of households that have undertaken retrofits outside government financed programmes. These households may have engaged individuals not certified to undertake certain works. This brings to the fore several interrelated issues that are relevant for a just transition. One is the costs, not only of finance, but of time, in particular administration in relation to the grants, are a barrier to participation in retrofit programmes. Second is the quality of the works, which is linked to credibility of the individuals or groups undertaking the work. While there is a list of accredited individuals, this does not ensure or guarantee that households implement the retrofits suited to their needs. There is a need for a one-stop-shop approach to better inform households, however this must be done in conjunction with changes to the programme. In particular the time frame in which the projects must be completed is restrictive and the technology choices limit what can be done. There needs to be more flexibility within the programme to ensure that households implement energy efficiency measures, even the simple ones like draught proofing.

There is an opportunity to reskill workers for the green economy. This will require training programmes to ensure that the number of retrofits needed are undertaken and that future buildings meet building regulations that are climate proofed. Until the COVID 19 crisis, Ireland was at full employment and there was a struggle to find workers to undertake works. With the need to transition workers in peat and coal into the clean low-carbon economy, there is an opportunity to retrain these individuals and to implement a licence and compliance system to better ensure the quality of the

works and to track what has been done. This will have multiple benefits, ensuring that Ireland's residential housing stock is climate proofed for the future, that households have access to reliable and trusted experts, and retraining opportunities for workers in the peat and coal sectors and future opportunities for the next generation. Additionally, accreditation adds value to the skills acquired and may provide individuals with lifelong learning opportunities.

#### **Box 3.1 Lessons from the BEH Scheme**

- Provision of grants that are tied to a capital investment may benefit more wealthy cohorts of society
- Those in the rental sector may have limited disposable income and limited control on their home environment and therefore different measures will be required to reach them
- Where grants are going towards households with more disposable income, their added value is unclear if those households could be persuaded to invest for other reasons such as health and comfort benefits
- Housing retrofit programmes need to be inclusive and equitable. This will be achieved by introducing flexibility into timelines and the financing mechanism.

### 3.2 Rural Development

The Action Plan for Rural Development is a holistic vision for rural Ireland. Consequently, the breadth and depth of the actions put forward consider issues beyond agriculture. To evaluate the impacts of the Action Plan for Rural Development and to understand what is need for a just transition in Rural Ireland, semi-structured interviews were conducted with stakeholders in academia, industry and farming. The interviewees were asked if past and present policies enabled them to respond to the need to mitigate emissions and contribute to climate action. Furthermore, interviewees were asked for their insights on challenges posed by existing policies, and how policy can address climate change while contributing to the revitalisation of rural Ireland.

#### *Distributional Impacts*

The Cork 2.0 European Conference on Rural Development held in Cork in September 2016 brought together key stakeholders to discuss rural development policy and create a vision for rural Ireland (ECRD, 2016). This resulted in the Cork Declaration, which stated that:

Rural and agricultural policies should build on the identity and dynamism of rural areas through the implementation of integrated strategies and multi-sectorial approaches. They should promote diversification and foster entrepreneurship, investment, innovation and employment. (ENCRD, 2016)

Due to the nature of policy assessment in Ireland, existing policies have focused on the economic costs of climate action. While the above excerpt acknowledges the cultural and social elements of rural livelihoods, it is challenging to capture these aspects in the design of policies as they are of a qualitative nature. Furthermore, there is an assumption that financial incentives are the primary policy instrument to achieve the changes needed in agriculture, rather than the recognition by farmers themselves that climate change is impacting their farm management practices.<sup>2</sup>

When asked about responding to the impacts of climate change on farm management, it was reported by interviewees that the responses of key decision makers were developed in a top-down manner,

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<sup>2</sup> It is important to note that the sectoral adaptation plan has acknowledged this and includes an action to support raising awareness of the impacts of climate change.

and that measures were developed because as one interviewee stated, 'they sounded like a good idea'. There was a notable frustration among farmers interviewed because of policy actions and measures that, they reported, had not been thought through and, more critically, had been designed without consideration to what is happening on farms.

An additional complication is that policy has been focused on reduction of greenhouse gas emissions, specifically methane, from farm activities rather than a holistic approach, giving consideration to the interactions between, for example, land management, water management, soil health, and fertiliser use. This leads to missed opportunities to capture co-benefits from adaptation measures. This was evident in one interviewee's account of a recent knowledge transfer event they attended on the subject of biodiversity and soil. They reported finding the event useful to addressing the challenges they were experiencing on their farm due to climate change. They understood the value of hedgerows and grassland, not just for carbon sequestration but for soil health and water management. The interviewees also suggested that certain policies and their subsequent iterations (e.g. REPS) had contradicted these benefits, possibly due to policies initially not having a climate focus that encompasses both mitigation and adaptation responses. For example, the perception of farmers was that they are asked to protect hedgerows, then advised through other programmes to cut or remove them, and subsequently were asked to protect them again. There is a need for greater policy coherence to achieve the co-benefits associated with climate action.

Another issue raised was that policy does not take into consideration variance in agricultural land across the country. Due to variation in agricultural land quality there are marked differences in population density, which may contribute to a number of challenges. With certain parts of the country focused on single farm activities and others diverse farm activities, the risks to health and well-being posed by isolation and loneliness were evident. In some areas of the country, it was observed that, in instances where tillage farms were adjacent to dairy farms and cattle rearing farms, an informal circular economy operated where manure was provided to the tillage farmer, alongside a strong network of social supports. In contrast to this, in areas dominated by a single type of farming such as animal rearing, farmers did not have the benefit of being able to trade resources with their neighbours as they were experiencing the same demands. Furthermore, these farmers faced additional economic costs in terms of removing animal waste from their farm.

Isolation and loneliness were also apparent from the interviews. This is a growing concern, acknowledged by Teagasc, who have taken steps to address the mental health and well-being of farmers in Ireland. A pro-active approach that is welcomed when considered in the context of the coal transition in Appalachia, which is discussed in chapter 4. In this context, a perception that farmers or agriculture are being 'blamed' for climate change can be felt deeply and therefore care needs to be taken in national level discussion not to enter a narrative of blame.

Interviewees were also concerned by the long hours that have resulted from a high demand placed on quantity of production as opposed to quality. The demands placed on farmers' physical and mental health due to managing large dairy herds, for example, require immediate attention. Long hours (up to 18-hour days, 7 days a week for 12 weeks, equivalent to approximately 40 weeks of full-time hours) increase the risk of physical injury and poor mental health. This raises several questions one of which is whether this is fair and equitable? As well, does this model put into question the sustainable image of Irish produce? Suggested climate mitigation or adaptation measures need to take into account the associated time-cost to farmers as this can have a big impact on up-take rates.

It is evident that choosing to be a farmer is about more than income. Yet, when asked whether they would want their children to carry on, some interviewees were hesitant. All interviewees highlighted

that farming 'is not an easy profession'. Even in areas of the country where an outside labour force is available, the future of that labour force is in question. Being a competitive employer is a concern for the interviewees. For these farmers and agri-businesses, transportation and housing are policy concerns as they impact on their operations. Public transport networks in rural Ireland are effectively non-existent and the amenities found in urban areas are not available in villages and towns. Further, commuting for work has been highlighted in the Just Transition Commissioner's first report as an issue that needs to be addressed via the creation of employment opportunities in Rural Ireland (Mulvey, 2020; NES, 2020). Rural Ireland needs to be spatially planned such that people can live decent lives, utilising their skills and training in their place of residence, achieving the objectives of National Planning Framework for rural areas (Department of Housing Planning and Local Government, 2018). Coherence across all policy sectors is needed and a just transition framework will bring to the fore hopes and concerns of people.

#### **Box 3.2 Lessons from APRD**

- Financial incentives are not the only, and may not be the best, motivator for climate action. Pride in the role of caretaker of the land and maintaining land productivity for future generations may play an important role in encouraging climate action
- Coherence in policy and implementation is important especially where farmers receive competing messages on increasing productivity versus nature protection versus climate action. This could improve the cost-effectiveness of measures by allowing co-benefits to be maximised
- Farmers are time poor and therefore the time-cost or complexity of climate measures may inhibit uptake
- The liveability of rural areas should not be neglected
- Farmers are not a homogenous population – measures need to be tailored for large farms with employees versus small farms, tillage versus livestock etc. A one size fits all approach is not appropriate
- In a sector facing challenges of mental health and isolation, national discussions focussed on a dialogue of blame are not helpful to encouraging positive engagement in climate action.

### 3.3 Lessons for Policy

- The population is not homogenous even within sectors. Varying incomes, savings levels and capacity to engage need to be taken in to account in designing policies and measures
- Entering a dialogue of 'blame' for climate change is not productive. The national discussion should be forward looking and focus on how different groups can play a positive role going forward
- Financial incentives are not the only way to encourage action, other factors may be more useful to drive action.
- Policy coherence is crucial to support cost-effective up-take of measures

From the above assessment of the case studies, it is evident that policy needs to be designed applying a systems approach. The focus of policies has been singular, in other words one problem, one solution without due consideration to the context in which the problem being address is situated. There is no onsize fits all response. There are complex interactions that are not being accounted for in current policies. As such vital co-benefits in policy responses are being missed due to a narrow focus. These

would be captured in ex-ante evaluation of the problems and proposed solutions if engagement with stakeholders is undertaken. As will be discussed in chapter 5, it is important that in designing policy that is just, policy makers should consider questions of who, how, when, why, and where - as place has a role in policy.

## 4. Lessons for Designing and Implementing Just Climate Change Policies

Throughout history societies have had to transition, what is constant is that transitions take time, planning, and leadership. This chapter considers the international and historical lessons for the just transition, as well as the emerging lessons from COVID-19.

### 4.1 Coal Transitions

Cheap energy is the engine of industrial economies and the foundation of consumer culture. As Bradshaw (2010, 276) notes, 'The fabric of our economy and some would argue our political system ('carbon democracy') is dependent upon the plentiful and relatively inexpensive supply of fossil fuels.' Yet people and place unevenly experience the costs and benefits of energy extraction, generation, financing, distribution and consumption. Inequality is most evident where nations export vast energy riches yet remain mired in energy poverty. - (Newell and Mulvaney, 2013)

The transition of coal regions has featured prominently in the literature discussing the just transition. The use of coal has not only spurred economic growth, it has supported the growth of coal mining communities, where individuals and families take pride in being from a miner or mining family. As with farming and peat harvesting in Ireland, being a miner is part of one's identity and shapes their values and their role in communities (Mayer, 2018; Elshurafa, Farag and Hobbs, 2019). As such, shifting away from coal (and other fossil fuels) is more than changing the source of energy, it will require long term planning.

The Ruhr Valley in Germany, Hazelwood in Australia and the Appalachia region in the US, provide lessons for achieving a just transition away from fossil fuels (Evans and Phelan, 2016; Mayer, 2018; Elshurafa, Farag and Hobbs, 2019). The management of the transition by regional and national governments in Germany and their cooperation and collaboration with unions to manage the transition, highlights the importance of long-term planning and finance to move away from coal in a just manner (Mayer, 2018; Snyder, 2018; Elshurafa, Farag and Hobbs, 2019). Australia's transition is illustrative of the need to engage more broadly with the communities that are dependent on the mining sector for their livelihood. A just transition's foundations are engagement and participation of all sectors which is central to the legitimacy of the process. Transition is a process that requires ongoing collaboration (Evans and Phelan, 2016; Goddard and Farrelly, 2018).

The Appalachia region spans several states in the US, and throughout this region there is a growing epidemic – opioid addiction. The origins of the opioid crisis are complicated, yet research focused on rural areas in Kentucky and West Virginia shows a correlation between the decline in coal and an increase in opioid prescriptions and addiction (Snyder, 2018; Florida, 2019). The growing crisis in Appalachia highlights the risks associated with a narrowly defined focus for the transition, specifically, compensation without opportunities. The transition away from coal mining in the region was already happening due to changes in global energy markets and changes to the economy. As such, Appalachia highlights the importance of a diverse economy that provides opportunities for those employed in sectors that will be affected by the transition to a low-carbon future. The absence of opportunities to

retrain results in a transition that does not support the resilience of individuals and communities. Diversification needs to be at the fore, as it is central to building resilience.

## 4.2 Historical Lessons

Past experience of deindustrialisation in many parts of the world highlights the importance of looking beyond the direct employment impacts to understand the wider ecosystem of prosperity in affected regions. (Robins, Brunsting and Wood, 2018)

Transitions are not novel. Throughout history societies have experienced periods of significant change that have required government leadership, cross governmental collaboration and engagement with communities with the purpose of improving livelihoods. Post WWII called for the rebuilding of societies and economies ravaged by war, which demanded cooperation by governments.

A key example of this is the European Coal and Steel Community (ECSC), which was created with the signing of the Treaty of Paris in 1951 by France, Italy, Belgium, the Netherlands, Luxembourg and West Germany. The purpose of the ECSC was to integrate the coal and steel industries of Europe under a central authority. The common objective of the signatories was to prevent war via regulation of the production of materials needed for weapons into a common market. The market would also serve to “contribute to the expansion of the economy, the development of employment and the improvement of the standard of living”. As the world’s first supranational institution the ECSC is a demonstration of the capacity of governments to work towards a common goal.

A second example is the Servicemen’s Readjustment Act of 1944 or more commonly known as the G.I. Bill. Initiated by the American Legion, the G.I. Bill is focused on transitioning war veterans into civilian life after service. Post WWII benefits included: low-cost mortgages, low-interest loans to start a business or farm, one year of unemployment compensations, and tuition plus housing allowance and book allowance while attending high school, college or vocational school. Over time the Bill has evolved and post 9/11 now includes full costs of any public college in a war veteran’s state of residence. The G.I Bill also ensures that veterans receive health care, pensions, life insurance and career counselling. Its development and evolution to respond to changing times and needs is a demonstration of the systems approach need in designing just policies that embed dignity and respect by acknowledging the contribution of individuals to society.

## 4.3 COVID -19

There are policy lessons in the experience of COVID 19 for achieving a just transition, particularly with regards to the needs, hopes and concerns of individuals and communities who will be impacted by climate change and the responses. As the Government’s response to COVID 19 unfolded, the impacts of the closure of businesses and places that provide non-essential services brought to the fore issues that have long been concerns but unaddressed; namely housing, employment (particularly, in the gig economy), and health care. The interconnected nature of health, housing, employment, transport, and education became evident as individuals lost jobs and faced the risk of eviction and others were forced to place their and their family’s health at risk due to the essential nature of their work. The response by government to implement emergency measures; from financial supports for the self-employed and those who lost jobs as a result of COVID 19, to restrictions on rent increases, and making private hospitals public; while not without criticism, has shown that there is capacity to develop and implement policies that follow a systems-based approach and address inequity.

Internationally, the response has seen intra- and inter- governmental cooperation at a scale that is needed for climate action. The global experience illustrated the importance of trust in experts and institutions, and leadership by governments to act in the best interests of citizens. One lesson for the just transition is how the World Health Organisation (WHO) has communicated information about the virus and facilitated global collaboration. The communication of the problem and the actions by the WHO has demonstrated that people understand science, data, and risk. The narrative around mitigating the spread of the disease has been simple, “we are in this together” and enabled widespread adoption of measures in a short period of time. The message has been inclusive, while recognising that not all governments have the capacity to respond, namely in developing countries.

Perhaps the most critical lesson is the importance of preventative action. Asian nations learned from the experience of SARS (severe acute respiratory syndrome) in 2003, this is particularly reflected in the responses of Singapore, South Korea and Taiwan. As the disease spread, others were complacent even to the emerging lessons from Italy. It is evident that the costs of inaction were higher than the costs of prevention would have been. Globally, the discussion of the impacts of the pandemic has evolved well beyond to the direct costs to the health systems to the indirect costs for society, the environment and the economy (Karlner, 2020). The discussion has highlighted the interconnected nature of issues and knock-on effects. For example, the loss of jobs due to closure of retail outlets, restaurants which in turn placed individuals and families living pay-cheque to pay-cheque at risk of homelessness, this placed the spot light on the rental market and the need for government intervention. There is an acute awareness of the far-reaching costs of inaction and that a return to pre-COVID life is not possible.

COVID 19 is drawing attention to the determinants of health, particularly living environments such as cities and towns, and how they are designed to support the health and well-being of people. For example, social distancing measures are having an impact on how public realm, public spaces and access to recreation sites are viewed and is bringing to the fore questions around the allocation of space to pedestrians, cyclists, public transport and cars (Florida, 2020), in other words raising issues of equity and access to good quality spaces. Public spaces, especially in cities, have the potential to support and improve health and well-being of citizens while adapting the urban environment to climate change. While the costs of improving the public realm may be high now, the costs of not doing so could be higher.

In the Irish context, this is also an opportunity for rural Ireland. Throughout this crisis it is evident that remote working is achievable. Understanding how remote working will impact on emissions and lend itself to climate action is on-going, but it is an action that employers can take now.

Ultimately, there is an opportunity as we move forward from the pandemic to implement solutions to the problems that came to fore in the midst of the pandemic and achieve a just transition to a low-carbon future.

## 5. Recommendations for a Just Transition in Ireland

to address climate goals requires that we ‘build a new system—one that delivers sustainable investment flows’. Mark Carney, Governor of the Bank of England and Chair of the Financial Stability Board: (Zadek, 2019)

This chapter provides recommendations for enabling a low-carbon transition that is just and realises the opportunities inherent in responding to climate change in Ireland based on the previous chapters. To understand the changes needed in policy development and implementation, the chapter begins with a short discussion on the policy process in Ireland and highlights the need for reform of the public

consultation process. As COVID 19 is demonstrating a just transition is more than employment, it is about social cohesion, trust in government and building resilience.

### 5.1 Policy Formation in Ireland

Before commencing a discussion on the process for designing just policies, it is necessary to briefly discuss policy formation in Ireland.

Developing and implementing policy in Ireland is not without its faults, as with many nations. While there is a formal process for designing policies that includes mechanisms for public consultation there are inherent challenges in this process. Typically the process begins with a Green Paper, though it may not be called that (Ferris, 2015). A Green Paper is put forth by a minister to discuss a policy problem and its potential solutions via a public consultation process. Following this a White Paper, again which may not be called this, sets out the government's intended response based on the responses from the public consultation on the Green Paper. Once the White Paper is approved it may be implemented via legislation or institutional reforms.

The initiation of the policy development process commences with government ministers responsible for the various departments (Ferris, 2015). Government may request policy research on a given topic be undertaken by various independent bodies such as IFAC, ESRI, NESC, NERI, IPA, IIEA or TASC, to ensure that policy is developed with the best available evidence.

The policy development process is not without challenges, particularly monitoring and evaluation, both of which are critical to not only the review of implemented policies but the formation of new policies. In an effort to improve ex-ante and ex-post evaluation of policy, the Irish Government Economic and Evaluation Service (IGEES) was established in 2012 as a cross-government service. The focus of IGEES' work is "the role of economics and value for money in public policy making". While this focus at first glance appears narrow, IGEES' work has brought attention to the need to use more diverse policy analysis tools in the development of policy for example via its focused policy assessments.

A critical aspect of developing policy that is just, is public participation. As discussed, public consultation is an important feature of policy making in Ireland, as the policy process is intended to be transparent to ensure accountability of government. However, it is in need of reform. Public consultation creates the perception of transparency, but transparency and accessibility are not one and the same. Public consultation is designed for those who know about it, not necessarily for those who need to be consulted and heard.

Transparency does not necessarily translate into participation, as there are challenges with regards to accessibility to information (notably, not everyone has access to the internet and consequently, not everyone is able to access and participate in public consultation processes). In other words, whilst Ireland may have transparent governance, it is not accessible to everyone, but is primarily accessible to those who understand the system.

In the context of achieving a just transition this raises the question of how should government increase participation and engagement in the policy process if the information, as transparent as it is, remains inaccessible to the citizens from whom government needs to receive input?

### 5.2 Proposed Process

"Solutions should be produced only after the problem has been defined, the options evaluated, consultation undertaken and a course of action identified"  
(Ferris, 2015)

It is clear, especially in the experience of COVID-19 that policy development needs to evolve. There is a need for the process, particularly public engagement to be deliberate and considerate, in order to achieve a just transition to a low-carbon future. Critically that the process is adapted to the unique needs, hopes and concerns of the place, community and individuals it intends to impact. This section discusses a proposed process for ensuring a just transition.

Box 5.1 serves to highlight the interconnected nature of vulnerability and climate change. A key characteristic of policies for a just transition is that they are developed employing a systems approach, such that the resulting policies are coherent and relevant, and their distributional impacts are equitable.

#### **Box 5.1 Cities: Vulnerable Groups and Climate Change**

The complexity of the impacts of climate change demonstrates the need for policies that are comprehensive and integrated to help build resilience and not be limited to the physical environment of the city. The conditions of the social and physical environments in which people live plays a significant role in their health and well-being outcomes (Lee and Moudon, 2004; Galvão *et al.*, 2009; Mikkonen and Raphael, 2010; Rydin, 2012; Rydin *et al.*, 2012). Local governments are tasked with providing high quality living environments that include housing and economic and social opportunities for citizens (Rees and Wackernagel, 1996; Botkin and Beveridge, 1997; Rees, 1997; Barton, 2009). It is this capacity that has played a role in cities being viewed as the appropriate level of government that should address climate change, since they are able to address the day-to-day activities of publics that contribute to climate change (Betsill and Bulkeley, 2007; Rosenzweig *et al.*, 2010; Romero Lankao and Qin, 2011). More importantly, it is at this level where it is possible to maximise co-benefits that arise from applying a systems approach to climate action.

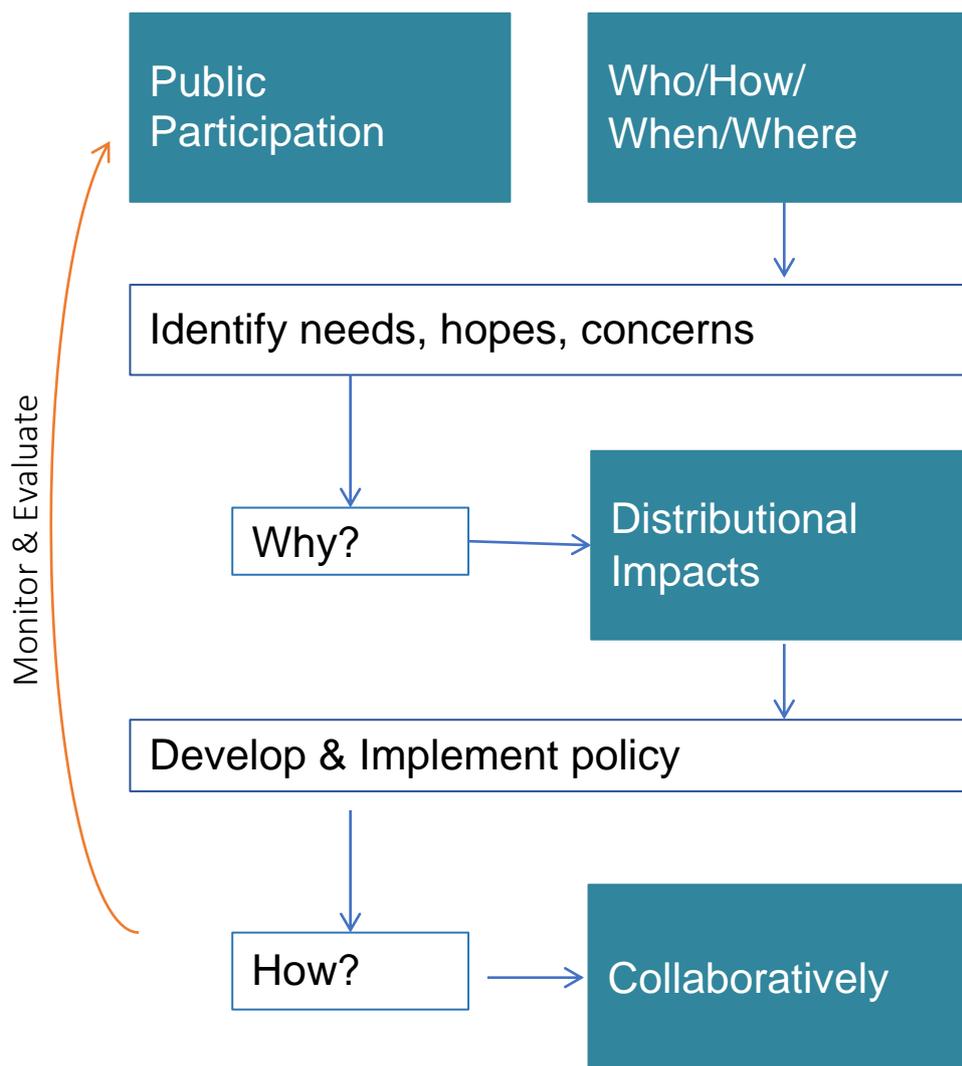
Addressing poverty is a challenge that is faced by cities globally and requires consideration in responses to climate change. The causes and mechanisms of poverty interact with each other and feed into the 'cycle of poverty' that traps individuals. However, it is primarily constituted as an issue of access to stable employment, affordable and safe housing, education, food and water, and healthcare (Ansari *et al.*, 2003; Barton, 2009; Rydin *et al.*, 2012). The level of access to these basic needs depends of course on where one lives. For example, the urban poor in Mumbai face different challenges from the urban poor of New York. However, in both cities, those with precarious incomes face the risk of falling into a cycle of poverty and vulnerability (Ansari *et al.*, 2003; Rydin, 2012; Castán Broto, Oballa and Junior, 2013). This cycle is further perpetuated when climate change impacts are considered, especially in cities. Climate change is exacerbating these issues and while policy is actively addressing the physical impacts of climate on the city, policies need to also achieve more depth and a targeted approach (Campbell and Jovchelovitch, 2000; Galvão *et al.*, 2009).

Low and precarious incomes and poverty hinder access to opportunities to improve quality of life via purchasing power, forcing the prioritization of income expenditure; in other words dictating how household incomes are spent (Lee and Moudon, 2004; Galvão *et al.*, 2009; Mikkonen and Raphael, 2010). This in turn compounds the ability of families and individuals to access basic needs, such as housing (Ansari *et al.*, 2003; Lee and Moudon, 2004; Galvão *et al.*, 2009; Mikkonen and Raphael, 2010). Access to stable housing plays a key role in livelihood outcomes by reducing vulnerability to numerous risks associated with living outside or precarious housing (Ansari *et al.*, 2003). The solution to this problem is often high-density affordable social housing. Ultimately, climate change perpetuates the vulnerability of an already vulnerable population. Thus, the development of policy needs to give primary consideration to the impact it has on vulnerable groups and mitigate against such increased risks.

[A] just transition is also a way to manage intergenerational equity, by ensuring that an inclusive transition to a low-carbon economy fairly allocates risk and cost over time as well as among contemporary stakeholders. (Robins, Brunsting and Wood, 2018)

It is evident that public participation is central to developing policies for a just transition. However, participation does not begin and end with public consultation on a government document, it is ongoing and throughout the whole process (Figure 5.1 and Table 5.1). This may be challenging, but it is essential. Policies will have impacts that policy makers may not anticipate, if active and ongoing engagement with a diverse range of stakeholders is not undertaken at all phases of the policy development cycle. For example, gender and intergenerational justice issues have not been discussed in a robust manner in this paper. This does not mean that Ireland’s transition will not face these issues: they exist but they have not come to the fore of policy debates. Ongoing research in the transport sector suggests that there are gender related issues that will have impacts on modal shift, particularly towards active travel. Active efforts by policy makers to engage individuals and communities to understand their hopes and concerns will discover if there are gender and intergenerational justice issues that have yet to be addressed. Further, continuous dialogue with the public will also build trust and ownership of the responses to climate change.

**Figure 5.1 Process for Just Policy Development**



**Table 5.1 Resilience Process (Source: (Dekker, 2018))**

<b>Resilience Process</b>	
<b>Pre-Conditions</b>	Recognition of a threat Perceptions of: <ul style="list-style-type: none"> <li>- Vulnerability created by threat</li> <li>- Risks stemming from threat</li> </ul> Knowledge of: <ul style="list-style-type: none"> <li>- Threat</li> <li>- Causal pathways</li> </ul> Mechanisms Desire to DO SOMETHING
<b>Agreement of Threat</b>	Action to become RESILIENT
<b>Resilience Process</b>	Analysis of Threats: Risks Assessment of impacts Knowledge exchange (i.e. information about threat outcomes) Collaboration/ Collective action Integrated action Debate on Action: Assessment of possible actions Assessment of risk associated with actions Role clarification (stakeholders and their agendas) Options: short and long run Visioning of state of being resilient Implementation Monitoring and evaluation Resilience achieved as an endpoint or an ongoing process

The process will be iterative and ongoing. Understanding progress towards a just transition will require monitoring and evaluation.

*Indicators: Monitoring Just Transitions*

Monitoring the ongoing progress towards a just low-carbon transition will require a diverse set of indicators. There is no single indicator that will adequately capture the impacts of policy or more specifically the distributional impacts. From the analysis earlier in this paper it should be evident that a range of indicators will be needed to understand as fully as possible the impacts of policy. In short indicators to monitor progress will need to include both qualitative and quantitative. The indicators do not necessarily need to be re-invented, as there are several measurement tools that currently exist. Some indicators that may be considered and applied to the Irish context include:

- Human Development Index
- OECD Better Life Initiative
- QoL Index
- Gallup Health
- Well-being Index
- Gross National Happiness
- Happy Planet Index

- Social Progress Index
- Decent living standard
- Carbon Gini Index
- Carbon Lorenz Curve

There is also an opportunity to develop localised indicators to assess place specific challenges. For example, Glasgow City Council is using volunteering rates as a means to measure whether people's needs are being met. The assumption is that people feel that they have the time and capacity to help others once their own needs are fully met (Dekker, 2018). A key consideration for indicators is the ability to triangulate information obtained from them to develop a more in depth understanding of the impacts of policy.

### 5.3 Going Forward, More than Jobs

[A] just transition builds on well established global frameworks in terms of climate change, human rights, labour standards and inclusive growth. It focuses attention on the need to anticipate the social implications of the shift to a low-carbon economy and the increasing physical impacts of climate change. (Robins, Brunsting and Wood, 2018)

The first chapter of this working paper highlighted that a just transition provides an opportunity to realise multiple co benefits. Policy to date has focused on employment, specifically the loss of jobs in the fossil fuel sector and responding with severance packages, and new training opportunities. An example of this is New York City's Climate Jobs Initiative which is focused on workforce development and training for a clean energy economy. Consideration though is needed with regards to how green/low-carbon jobs and the green/low-carbon economy are defined (i.e. clean technology, green building design and construction, sustainability consulting, and education, recycling and composting, local food, green transportation, finance). As is identifying the policies and programmes that will support growth and innovation. In Ireland, the Skillnet programme is an existing programme that can be used to spur growth towards a low-carbon future, while supporting local communities.

While policy that supports job creation is essential and as highlighted in Stevis and Felli, (2014) the debate around jobs and green jobs can unify the debate around what is a just transition and how it is achieved. Yet, the scope of the debate needs to move beyond jobs, to consider the impact of job losses on the communities in which the jobs exist and depend. This will require policies to be designed with a systems approach as communities are not individual jobs but relationships between individuals who share values, culture, and ideas. A systems approach will demand collaboration: 1. between government departments, 2. across levels of government, and 3. between government and private sector, academia, and NGOs. Most, critically a systems approach demands collaboration between policy makers and individuals, and communities to fully understand the implications of policies on livelihoods.

Financing of climate action was discussed in the first chapter. Carbon taxes have a predominantly negative image, but they are a necessary policy tool to drive climate action and investment in the future, and the livelihoods of future generations. Government will need to be transparent and accountable to how the revenues are being used to fund the transition to a low-carbon future. Revenues from carbon taxes or prices must be deployed in an equitable and inclusive manner. For example, should government choose to provide a "cheque in the post" to households there will be a need for the private sector and government to collaborate to provide opportunities for people to invest in financial products that are divested from fossil fuels, or use monies to undertake retrofits of

their housing. Similarly, should revenues be ring-fenced for climate projects, there should be opportunities for individuals and communities to benefit, i.e. invest, in the projects.

#### *Ireland's Role in the Global Just Transition*

“A just transition with inclusive climate action, can play a strong role in transforming gender norms and furthering gender equality, while ensuring women have the opportunity to participate as actors in combating climate change and spurring green growth. Greater engagement with the issue of gender, labour and climate change is critical for addressing existing and emerging inequalities and vulnerabilities, securing and protecting fundamental rights at work, and advancing women’s empowerment.” - (ILO, 2015)

Achieving a just transition is a global challenge. As such Ireland has a role in its achievement. There are primarily two aspects to this. One is ensuring that Ireland reduces its emissions that contribute to climate change. The second is through supporting developing nations’ development and implementation of their responses to climate change.

Financial aid is the primary means by which the Irish Government can support developing nations. The *A Better World – Ireland’s Policy for International Development* commits 0.7% of GNI to official development assistance, with a specific focus on gender equality, reducing humanitarian need, climate action, and strengthening governance. Critically there is a recognition that climate change poses a threat to progress that has been made in reducing poverty, stimulating economic growth, promoting gender equality and improving food security. To this end, an objective of Ireland’s foreign policy has been to foster peace and friendly cooperation between nations, thus demonstrating the principles of a just transition.

#### *Conclusions*

The Irish population is not a homogenous unit and there is considerable variety in the lived experience even within sectors and communities. A just transition needs to respect these differences and support the resilience of the population to better achieve the low-carbon transition. As has been stated, a just transition to a low-carbon future is a process. It is about learning and constantly adapting to the new challenges that arise. Ireland is not alone in this transition, it is one of global scale. Yet Ireland has the potential to take on a leadership role. Recent events demonstrate high levels of social cohesion, a capacity to address issues of public concern with imagination and innovation, and a widespread appreciation of the importance of the social contract and social licence. However, this is not to underestimate the challenge and the need for reform in approach to policy development. To become a leader, Ireland will need to apply a systems approach to policy making and consider the impact of policy from a perspective of equity. Responding to climate change is not about short-term quick fixes, it is a life long process. As such, sustaining the good will of citizens to actively participate in taking action for our collective future will require that the transformation is just.

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