

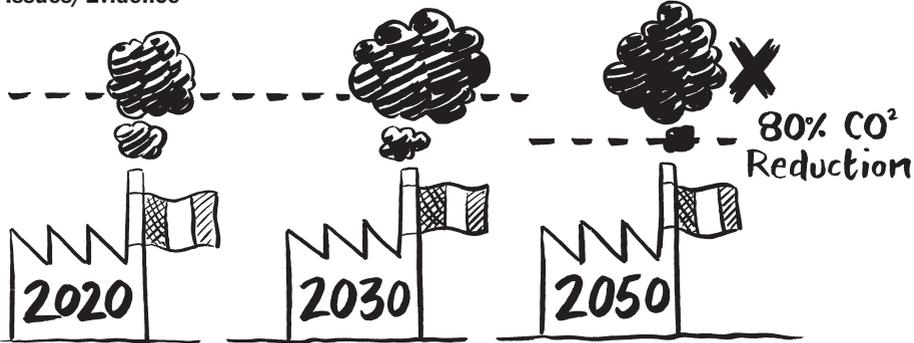
**Chapter 11**  
Sustainability

**Core Policy Objective:**

To ensure that all development is socially, economically and environmentally sustainable.



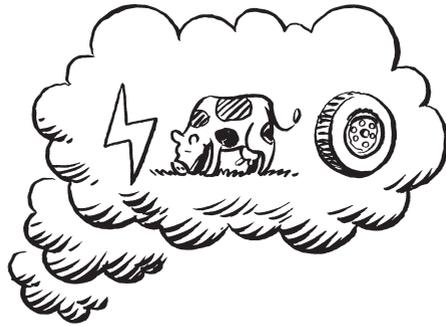
**Key Issues/Evidence**



Ireland is on track to overshoot our 2020 emissions targets and it looks likely that we will not meet our 2030 targets.

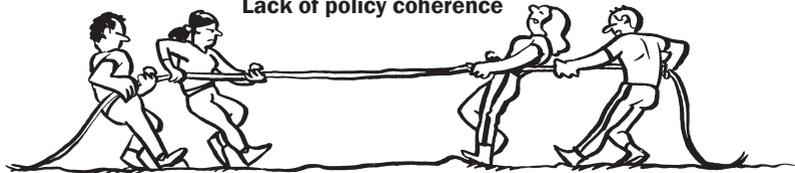
Ireland is headed in the wrong direction to meet our national 2050 goal to reduce CO2 emissions by 80 per cent

Ireland's greenhouse gas emissions continue to increase in line with economic and employment growth in the energy industries, agriculture and transport sectors.



Our emissions are dominated by agriculture, transport and energy.

**Lack of policy coherence**



agricultural expansion and economic expansion policies

commitments in the Sustainable Development Goals on climate action and protecting our environment

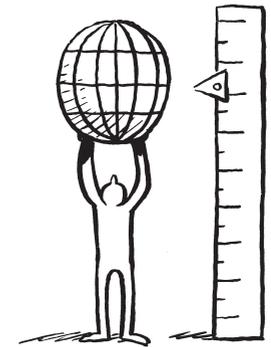
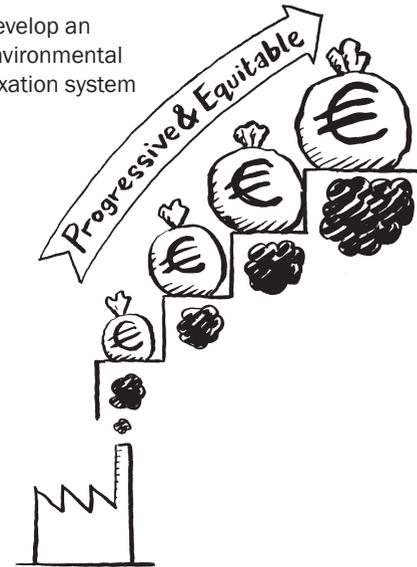
**Policy Solutions**

Set ambitious emissions reduction targets for 2030 and ensure sufficient resources to support implementation of these targets



Ensure our climate mitigation plans support implementation of ambitious emissions reduction targets

Develop an environmental taxation system



Adopt targets and a reporting system for each of the Sustainable Development Goals



Assign natural capital and ecosystems value in our national accounting systems



Set out a mitigation and transition strategy to prepare communities and people for changes that adapting to meet our climate targets will bring.

# 11.

## SUSTAINABILITY

### CORE POLICY OBJECTIVE: SUSTAINABILITY

**To ensure that all development is socially, economically and environmentally sustainable**

Sustainable development is defined as ‘development which meets the needs of the present, without compromising the ability of future generations to meet their needs’ (World Commission on Environment and Development, 1987). It encompasses three pillars; environment, society and economy. A sustainable development framework integrates these three pillars in a balanced manner with consideration for the needs of future generations. Maintaining this balance is crucial to the long-term development of a sustainable resource-efficient future for Ireland. While growth and economic competitiveness are important, they should be considered in the context of sustainability, using a framework for sustainable development which gives equal consideration to the environmental, social and economic pillars.

Ireland has signed up to achieve the Sustainable Development Goals by 2030 (United Nations, 2015) and is committed to legally binding climate commitments in 2020 and 2030 and a national commitment to be carbon neutral by 2050. Ensuring development is sustainable socially, economically and environmentally will be key to achieving our environmental and sustainability targets.

To achieve this sustainable development in the years ahead, *Social Justice Ireland* believes that policy should:

- Set ambitious emissions reduction targets for 2030 and ensure sufficient resources to support implementation of these targets;
- Adopt targets and a reporting system for each of the Sustainable Development Goals;
- Introduce a strategy for Ireland that includes the principles of the circular economy and cradle to cradle development;

- Introduce shadow national accounts, and assign natural capital and ecosystems value in our national accounting systems;
- Develop a comprehensive mitigation and transition programme to support communities and people in the transition to a low carbon society;
- Develop a progressive and equitable environmental taxation system.

## 11.1 Key Evidence

### Climate Change

The international commitments that Ireland has signed up to with COP21<sup>1</sup> mean that clear commitments are required to ensure that Ireland meets its emission reduction targets. However Ireland is the worst performing EU country on climate change according to the most recent Climate Change Performance Index (Burck et al, 2018). The report notes that Ireland has not introduced the essential policy measures necessary to put Ireland on a pathway to meeting our COP21 targets and playing out part in reducing emissions in order to keep global warming below 2 °C, and our national policy performance is rated as very low.

The Climate Change Framework was published in 2012, and with the passing of the Climate Action and Low Carbon Development Act, 2015, Government committed to adopting a national adaptation framework which was published in January 2018 (DCCEA, 2018). The seven Government Departments identified as having a role within the framework will be required to submit their sectoral adaptation plans by August 2019.<sup>2</sup> Sectoral adaptation plans covering the areas of Flood Risk Management, Agriculture and Forestry, Transport, and Electricity and Gas have been published and are viewed as a ‘step towards the statutory requirement to develop sectoral plans in accordance with the...Act’ (2018:41). First steps are not enough, and Ireland has a significant distance to travel to meet climate change commitments.

The increased incidence of flooding and other severe weather events highlights the impact that climate change and changing weather patterns is having on Ireland, and has exposed how vulnerable many of our services, communities and utilities are to disruption (Climate Change Advisory Council, 2018). In Ireland, six of the ten warmest years on record have occurred since 1990.<sup>3</sup> Among the predicted adverse impacts of climate change are sea level rise, more intense storms, increased likelihood and magnitude of river and coastal flooding, adverse impacts on water quality, decrease in rainfall in spring and summer, an increase in intensity of storms, and changes in distribution of plant and animal species (EPA, 2015). The present

<sup>1</sup> <https://www.gouvernement.fr/en/cop21>

<sup>2</sup> <https://www.dccae.gov.ie/en-ie/climate-action/topics/adapting-to-climate-change/national-adaptation-framework/Pages/Sectoral.aspx>

<sup>3</sup> <http://www.epa.ie/climate/communicatingclimatescience/whatisclimatechange/whatimpactwillclimatechangehaveforireland/>

rate of climate change demands a more urgent response if Ireland is to safeguard its resources, society and economy from its impacts.

### **Emissions**

As a member of the European Union Ireland has committed to legally binding emissions reduction targets in 2020 and 2030. We have committed to a 20 per cent reduction on 2005 emission levels by 2020, and a 30 per cent reduction of emissions compared to 2005 levels by 2030.

Ireland will not meet the 2020 target. At present we are projected to achieve an abysmal 1 per cent reduction on 2005 emission levels (EPA, 2018a). Our greenhouse gas emissions are nearly 3 million tonnes over the pathway required to meet our 2020 targets and we are on track to overshoot these targets significantly (EPA, 2018b). In fact, we are completely off course in terms of achieving our 2030 emissions reduction targets as well (Climate Change Advisory Council, 2018). This has very serious implications for our environment, our society and our economy.

The latest report on our greenhouse gas emissions shows that they decreased very slightly in 2017 due to ‘circumstantial’ issues, but emissions from agriculture increased by almost 3 per cent (EPA, 2018b). This increase is primarily due to the expansion of the dairy herd and increase in milk production. Emissions from agriculture have increased annually since 2012 as a result of the Foodwise 2025 agriculture policy and the removal of milk quotas in 2015. This increase is entirely at odds with environmental policy since 2012, the Climate Change Framework, the Climate Action and Low Carbon Development Act, and our national and international commitments. Such policy incoherence at national level is unacceptable, particularly when agriculture accounts for one third of Ireland’s total greenhouse gas emissions.

The EPA points out that Ireland’s greenhouse gas emissions continue to increase in line with economic and employment growth in the energy industries, agriculture and transport sectors and that Ireland is headed in the wrong direction to meet our national climate policy goal to reduce CO<sub>2</sub> emissions by 80 per cent by 2050. In 2016, the EPA recommended that Government implement measures to decarbonise the transport and energy sectors and ensure policy coherence between agricultural output targets and environmental ones (EPA, 2016). Government has clearly not taken heed of these recommendations.

While the environmental implications of not meeting our emissions targets are obvious, there are also significant economic implications as a result of not meeting our EU 2020 targets. As outlined earlier Ireland is projected to miss the 2020 targets by a large margin. This means that Ireland will have to make ‘statistical transfers’ at an estimated cost of between €65 million and €130 million per percentage point below the overall 16 per cent target (DCCA, 2017:37). A bulletin published in March 2016 assessing Ireland’s progress towards achieving emission reduction

targets set under EU Effort Sharing Decision No 406/2009/EU for 2013-2020 suggests that Ireland's non-ETS emissions are projected to be 11 per cent below 2005 levels in 2020 (EPA, 2016). The target is 20 per cent.

Table 11.1 shows potential costs if we remain on this course – as well as variations on that scenario – assuming the two extremes noted above (€65m and €130m per percentage shortfall), as well as a mid-point. If Ireland remains on its current course, a best-case scenario looks like a fine in the region of €715m, but this could potentially be closer to €1.4 billion.

**Table 11.1: Projection of Possible Environmental Fines for Ireland in 2020 (€m)**

Various scenarios	Fine per percentage point shortfall		
	€65m	€97.5m	€130m
EPA's projected scenario is met (11% below 2005 levels)	€715	€1,072	€1,430
20% above EPA projection	€858	€1,287	€1,716
20% below EPA projection	€572	€858	€1,144
40% above EPA projection	€1,001	€1,501	€2,002
40% below EPA projection	€429	€643	€858

Source: *Social Justice Ireland* calculation based on EPA projections.

### Global Context

Increased levels of greenhouse gases, such as CO<sub>2</sub>, increase the amount of energy trapped in the atmosphere which leads to global effects such as increased temperatures, melting of snow and ice, and raised global average sea-level. If these issues are not addressed with urgency the projected effects of climate change present a serious risk of dangerous and irreversible climate impacts at national and global levels (IPCC, 2014). Food production and ecosystems are particularly vulnerable. The latest research from the World Meteorological Organisation has ranked 2016 as the hottest year on record, followed by 2015 and 2017 (WMO, 2017), and finds that sixteen of the seventeen hottest years ever recorded have been in this century. Underlining the long-term trend, 2013-17 was the warmest five-year period on record.

At the Paris climate conference (COP21) in December 2015, 195 countries adopted the first ever legally binding global climate deal. This agreement is due to enter into force by 2020 with the aim to keep global warming below 2°C by 2100. Countries agreed:

- a long-term goal of keeping the increase in global average temperature to well below 2°C above pre-industrial levels;

- to aim to limit the increase to 1.5°C, since this would significantly reduce risks and the impacts of climate change;
- to come together every five years to set more ambitious targets as required by science;
- to provide continued and enhanced international support for adaptation to developing countries.

The recent conference on climate change held in Katowice in Poland (COP24) has been widely reported. Although heralded as a ‘global rulebook’ for emissions reporting at international level, its conclusions fall far short of what is required if the world is to address the major climate threats to in the decades ahead. Many issues remain outstanding, including the issue of climate finance and agreement on voluntary market mechanisms. The latest Emission Gap Report from the United Nations (UN) (UNEP, 2018) finds that current national commitments for emissions reductions are insufficient to ensure global warming stays below 2°C by 2030. If countries do not commit to more ambitious emission reduction targets then global warming cannot be contained below 1.5°C as recommended by the Intergovernmental Panel on Climate Change (IPCC) in 2018. In 2017 global CO<sub>2</sub> emissions increased. Countries need to triple their level of ambition to stay below 2°C warming and increase fivefold to stay below 1.5°C. The most recent IPCC report published to coincide with the COP24 climate conference contained the most stark findings yet that the Earth is well on its way to exceeding the 1.5°C increase in warming. The report states that emissions in 2030 need to be 45 per cent below what they were in 2010 in order to limit global warming to 1.5°C. This requires an enormous and concerted global effort over the next 11 years.

### **Renewable Energy**

Ireland’s fuel mix for electricity generation is dominated by carbon-based fossil fuels, with 90 per cent of all energy used in Ireland coming from fossil fuels in 2017 (SEAI, 2018). The latest SEAI report notes that although Ireland has reduced its dependence on imported energy, the increase in our domestic energy generation is primarily from natural gas which is a fossil fuel. This runs contrary to our targets of reducing emissions, increasing renewable energy and eliminating our dependence on fossil fuels. Overall in 2017 renewables made up 10.6 per cent of final energy consumption, and our 2020 target is 16 per cent. Ireland needs to do significantly more in terms of producing renewable energy in order to meet our 2020 target.

The *White Paper on Energy* (DCENR, 2015) envisages Ireland reducing emissions from energy systems by up to 95 per cent (based on 1990 levels) by 2050 and zero by 2100. Ireland’s target is part of the overall headline target pledged by the European Union of at least a 40 per cent reduction in domestic greenhouse gas emissions by 2030 compared to 1990. Ireland’s individual country target is set at a headline rate of 30 per cent but this has yet to be agreed. The White Paper states that Ireland will make a technically feasible, cost-effective and equitable contribution to the overall EU target. While overall the White Paper contains some very positive aspirations, it

is short on detail as to how we are going to achieve these aspirations. *Social Justice Ireland* believes Ireland should be ambitious in setting our individual 2030 target and think of the longer-term outcomes and benefits rather than the short-term benefit for cost-effectiveness. Chapter 3 of the National Mitigation Plan sets out in more detail the ambition for Ireland in decarbonising electricity generation, with a stated aim of moving from a fossil fuel-based electricity system to a low carbon power system by 2050. However, the actions put forward concentrate again on feasibility studies, further action and research, without any real pathway to how this might be achieved. At present there is a consultation process underway until February 2019 on Ireland's National Energy and Climate Plan 2021-2030. The implementation of ambitious targets and innovative policies are essential if Ireland is to meet our national goals.

### **Sustainable Development Goals**

The Global Goals for Sustainable Development were adopted at the UN General Assembly on 25th September 2015 and came into effect on 1<sup>st</sup> January 2016. These goals make up the 2030 Sustainable Development Agenda which is defined as a 'plan of action for people, planet and prosperity'.<sup>4</sup> This Agenda builds on the Millennium Development Goals and commits to completing what they did not achieve. It recognises the urgency behind the need to shift the world onto a more sustainable path.

World leaders have committed to seventeen Global Goals (also known as SDGs) containing 169 targets to achieve three distinct aims: to end poverty, fight inequality and tackle climate change over the next fifteen years. The seventeen goals are outlined in chart 11.1.

The emphasis is on national ownership of the goals, with each Government setting its own national targets to be supported by national development strategies and financing frameworks (UN, 2015). This will require ambitious national targets matched by adequate resources<sup>5</sup>.

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<sup>4</sup> <https://sustainabledevelopment.un.org/post2015/transformingourworld>

<sup>5</sup> The scale of the implementation challenge for the SDGs is immense with UNCTAD calculating that the annual investment gap for implementing the SDGs is in the region of \$2.5 trillion

**Chart 11.1: Sustainable Development Goals**



Source: United Nations.

The link between sustainable development and economic, social and environmental policies is highlighted by the UN, as is the need to support the most vulnerable countries that face particular challenges in achieving sustainable development (UN, 2015:35). These countries also face the greatest risk of the consequences of climate change. The SDGs commit countries to achieving sustainable development in its three dimensions – economic, social and environmental – in a balanced and integrated manner. To ensure these three dimensions are valued equally, new measures of progress will be required to ensure that economic progress does not come at the price of social or environmental progress.

### **Sustainable Development**

Ireland published the Sustainable Development Goals National Implementation Plan 2018-2020 in April 2018. Four strategic priorities have been identified to guide the implementation plan. These are awareness, participation, support and policy alignment. The publication of the plan is welcome, however new and ambitious policy measure are required if Ireland is to achieve the SDG's by 2030. It is important that the CSO Sustainable Development Indicators are aligned with the National Implementation Plan so that Ireland has a comprehensive set of data to measure progress.

## Sustainable Progress Index

*Social Justice Ireland* monitors Ireland's performance towards achieving the SDGs through the Sustainable Progress Index (Clark et al., 2018). Ireland's first *Sustainable Progress Index*, published in 2017, argued against GDP as the main barometer of a country's wellbeing and success and compared Ireland's performance across all 17 SDGs with those of the remaining EU 15 countries. Using this system Ireland ranked 11<sup>th</sup> out of the EU15 countries in 2017, and we had improved one place to 10<sup>th</sup> in 2018 (see table 11.2). The Sustainable Progress Index allocates each of the 17 SDGs into three separate indexes; the Economy SDG Index (SDGs 8 and 9), the Society SDG Index (SDGs 1,2,3,4,5,10,16,17) and the Environment SDG Index (SDGs 6,7,11,12,13,14,15). These indexes are then combined to give the overall Sustainable Progress Index for each of the EU 15.

The purpose of the Sustainable Progress Index is to provide a clear and simple picture of how Ireland is performing on the SDGs relative to countries with similar economic development experience. It provides a comprehensive overview on how Ireland is performing on each of the 17 SDGs and a summary of Ireland's strengths and weaknesses. The Index tracks Ireland's performance over time and compared to our EU15 peers to provide an indication of progress, to help raise awareness of the SDGs and to encourage policy action and provides an annual contribution to the strategic priorities outlined in the National Implementation Plan for the SDGs.

### *Economy Index – SDG 8 and 9*

It is acknowledged that GDP is not an ideal, or even accurate, measure of progress. The problem with using GDP as a measure of progress was particularly evident in the spike in GDP growth in 2015, caused by multinational corporations shifting profits to Ireland to take advantage of our low corporate tax rate. It is, however, an important tool for public policy, as it allows for comparative analysis of market activity. In *Social Justice Ireland's* Sustainable Progress Index, the Economy Index uses household consumption as a more accurate measure of real economic growth.

The Index also looks at unemployment and long-term unemployment. Both have been falling since 2012, having risen significantly since 2008. However the move towards higher employment rates must be viewed alongside the increasing instance of low pay and precarious working practices, as well as wage stagnation.

In looking at 'industry, innovation and infrastructure' (SDG9), the Index considers expenditure on Research & Development (R&D) and internet access and notes a decline in the rate of expenditure on R&D, which may be attributed at least in part to the issues with GDP mentioned earlier.

Overall, the Index ranks Ireland 10th out of the EU15 on Economy in 2018.

*Society Index – SDG 1, 2, 3, 4, 5, 10, 16, 17*

In considering SDG 1, the elimination of poverty, the Index points out that Ireland has a ‘structural poverty problem that will not be fixed by economic growth alone’ (Clark et al, 2018:27), and again underlines the point made earlier about the inadequacy of GDP as a measure of progress, where even the GDP spike in 2015 did not significantly reduce the poverty level. Ireland does better on the goal of ending hunger, though our obesity rate (4.1 per cent higher than the EU average) remains a concern. Ireland’s performance in respect of health and wellbeing is also good, with longer life expectancy and better levels of health perception than previous years.

Ireland has made moderate progress in the areas of education quality, reducing inequalities (within the country, our progress on reducing global inequality is stated as being ‘minimal’) and improvements to our score on the Social Justice Index<sup>6</sup>. There is more to be done within each area, however, with falling rates of adult literacy, persistent household debt compensating for income inequality, and much ground to be made in respect of Ireland’s ranking on the Social Justice Index with comparison to its placement in 2008.

Ireland’s performance under SDG 16, peace, justice and strong institutions, is mixed, with fluctuations in homicide rates from 2000 to 2014 and the slight reversal of the upward trend in Ireland’s Corruption Perception Index in 2016.

Finally under the Society Index, our progress under SDG 17, partnership for the goals, it is important to acknowledge the increase in official development assistance and financing to developing countries announced as part of Budget 2019.

Overall, the Index ranks Ireland 10th out of the EU15 on Society.

*Environment Index – SDG 6, 7, 11, 12, 13, 14, 15*

Ireland has performed well on some of the indicators under this index, with Irish water and sanitation being among the best in Europe, good air quality relative to other European countries and a reduction, albeit small in the context of the rate of increase between 1960 and 2001, in CO2 emissions. However, Ireland still has work to do to increase the proportion of renewable energy consumed and forestry coverage, reduce the amount of municipal waste generated, and meet the requirements of the EU Habitats Directive to meet the challenges of marine conservation.

Overall, the Index ranks Ireland 13th out of the EU15 on Environment.

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<sup>6</sup> The Social Justice Index is designed to measure progress (or decline) on various social justice indicators. It is composed of 28 quantitative and 8 qualitative indicators in six dimensions of social justice. [https://www.bertelsmann-stiftung.de/fileadmin/files/BSt/Publikationen/GrauePublikationen/NW\\_EU\\_Social\\_Justice\\_Index\\_2017.pdf](https://www.bertelsmann-stiftung.de/fileadmin/files/BSt/Publikationen/GrauePublikationen/NW_EU_Social_Justice_Index_2017.pdf)

The results of the Sustainable Progress Index strongly suggest that Ireland faces significant challenges in meeting the development objectives enshrined in the SDGs. Focussing exclusively on GDP will divert policy-makers attention from action that must be taken to close the gaps in order to achieve the SDGs.

**Table 11.2: Sustainable Progress Index 2018**

Country	Index Score	Country Rank
Sweden	78.96	1
Denmark	74.81	2
Finland	65.76	3
Netherlands	54.98	4
Germany	54.82	5
Austria	53.67	6
United Kingdom	50.96	7
France	50.71	8
Belgium	49.62	9
Ireland	44.25	10
Luxembourg	43.75	11
Spain	40.53	12
Portugal	39.76	13
Italy	35.74	14
Greece	22.92	15

Source: *Social Justice Ireland Sustainable Progress Index 2018.*

## 11.2 Key Policies and Reforms

Despite recent announcements on options to meet environmental targets Ireland has made little tangible progress on implementing the policies required to transition Ireland towards a carbon neutral future<sup>7</sup>. There is a small window of opportunity to introduce these policies, which will require significant upfront investment and a strong implementation effort. Ireland has the capacity to develop ambitious policy, as the Fossil Fuel Divestment Bill and the Citizen’s Assembly report on climate change attest to. These policies may be difficult politically to ‘sell’, but if we do not implement them now future generations will pay an enormous cost.

<sup>7</sup> <https://www.dcae.gov.ie/en-ie/news-and-media/press-releases/Pages/Minister-Bruton-Announces-Government-will-Lead-the-Way-in-Reducing-Single-Use-Plastics-.aspx>

A key starting point to move towards a sustainable model of development which protects the environment and enhances our natural capital is the assessment of Ireland's environment by the Environmental Protection Agency:

Essentially we have to rethink, and redesign what we mean by social and economic 'prosperity' in order to deliver the resilience essential for us to prevail. We must all learn to live, produce and consume within the physical and biological limits of the planet. To achieve this will require integrated and enduring governance, including brave social and economic measures (EPA, 2016:159).

### **Emissions reductions**

Ireland must make firm commitments to reduce total emissions outputs from agriculture, transport and energy. These commitments must be underpinned by ambitious and substantive policies which must be implemented fully. These policies will require sufficient resourcing and an all-of-Government approach to ensure that we meet our domestic and international environmental targets. In a paper presented at *Social Justice Ireland's 2018 Annual Policy Conference*, Dr. Cara Augustenborg pointed out that one 'advantage' of Ireland's poor climate performance is the myriad of ways to reduce greenhouse gas emissions when starting from such a low base (Augustenborg, 2018). Dr. Augustenborg also noted that in order to lead in climate smart agriculture Ireland needs to reduce absolute emission from agriculture. This will require a step change in agricultural policy, and an end to incoherence of pursuing strategies that lead to an annual increase in agricultural emissions whilst simultaneously setting emissions reductions targets. Ireland should focus on developing alternative agricultural models and move away from extensive livestock farming.

Support for sustainable agricultural practice is important to ensure the long-term viability of the sector and consideration must also be given to how the projected increase in agricultural emissions can be offset. It is important that the agriculture sector be at the forefront of developing and implementing sustainable farming practices and be innovative in reducing emissions (Curtin and Arnold, 2016). In terms of our national and international climate commitments it must be asked what agricultural policy will be best-placed to ensure Ireland meets its national and international targets: Is it a policy of agricultural expansion and increased emissions to reach additional markets or is it a policy of ensuring Ireland produces the food required to meet our population needs and supports the agricultural sector in the developing world to ensure they can provide the food required to meet their own population needs? Progress towards changing farm practices has been limited and incentives to reduce on-farm greenhouse emissions have not been delivered on a wide scale (Curtin & Hanrahan 2012: 9). The agriculture and food sector must build on its scientific and technical knowledge base to meet the emissions challenge.

Reducing emissions requires the implementation policy decisions being made in the interest of a sustainable future rather than short-term sectoral interests. While

this implementation may be difficult in the initial stages, it will lead to reduced emissions and benefits for all. This is where our Government and all members of the Oireachtas must show leadership and act in the national interest. Ireland has a window of opportunity to implement ambitious emission reduction policies that will ensure a sustainable future for us all. This requires immediate policy action.

### **Fossil fuels and renewable energies**

The Fossil Fuel Divestment Bill 2018, sponsored by Thomas Pringle T.D., was passed by the Houses of the Oireachtas in 2018<sup>8</sup>. This Bill made Ireland the first country in the world to commit to withdrawing public funds that are invested in fossil fuels and makes us world leaders in terms of developing a national divestment strategy. The passing of the Bill and the cross party support it received in the Dáil and the Seanad are to be welcomed. Ireland has set a deadline of five years to divest of all investments in fossil fuels on the passing of the Bill.

The passing of the Fossil Fuel Divestment Bill is an achievement Ireland can be proud of, and it could signal a step change in climate policy. Despite the passing of this bill, and the cross party acknowledgement that fossil fuels are major contributors to emissions (particularly from energy generation), Ireland continues to subsidise climate damaging fossil fuels via the public service obligation (PSO) levy<sup>9</sup>. The policy of subsidising of damaging fossil fuels by the Exchequer is completely at odds with the Fossil Fuel Divestment bill and is another example of policy incoherence when it comes to climate policy.

The PSO levy for peat generation and gas supply and other fossil fuel subsidies which are damaging to the environment should be immediately removed and the subsequent savings invested in renewable energy. By eliminating these harmful subsidies and investing in renewable energy and schemes to address energy poverty Ireland will be in a much better place to meet our energy targets. This is a policy that Government can begin to implement immediately and would be an important component of a national mitigation and transition programme. Peat-fired electricity pollutes the environment and costly to consumers. This is an issue that *Social Justice Ireland* has been consistently highlighting to Government for the past number of years, and so we welcome the retraction of PSO support from electricity generated from fossil fuels in power stations at Edenderry and Lough Ree. If Government is really serious about Ireland transitioning to a low carbon economy all subsidies for fossil fuels should be removed in 2019 and the savings invested in renewable energy.

The national target of converting peat-burning plants to sustainable low-carbon technologies by 2030 is unambitious. Ireland must make immediate changes to reduce our energy emissions. Peat extraction is one of the most polluting forms

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<sup>8</sup> <https://www.oireachtas.ie/en/bills/bill/2016/103/>

<sup>9</sup> <https://www.dcae.gov.ie/en-ie/energy/topics/Electricity/electricity-prices-and-costs/Pages/Pubic-Service-Obligation.aspx>

of electricity generation and an area where Ireland can make real progress if the correct policies are pursued. Eliminating peat extraction and developing retraining and employment strategies for the communities that will be affected by this policy should be part of a national mitigation and transition plan designed to support communities and people to move to a low carbon future.

In terms of overall public expenditure systematic reviews should be carried out and published on the sustainability impacts and implications of all public subsidies and other relevant public expenditure and tax differentials. Subsidies which encourage activity that is damaging to natural, environmental and social resources should be abolished.

### **Energy efficiency**

One of the most cost-effective measures to promote sustainable development is to increase building energy efficiency. Increasing building energy efficiency (through retrofitting, for example), along with reducing food waste are two of the most effective means to increase sustainability and meet international environmental targets (McKinsey Global Institute, 2011). The Sustainable Energy Authority of Ireland (SEAI) are currently supporting a deep retrofitting pilot, at an anticipated spend of €21.2 million to 2019. The SEAI estimate that €35 billion would be needed over the coming 35 years to make Ireland's existing housing stock low carbon by 2050.

*Social Justice Ireland* welcomes the progress made in increasing energy efficiency in modern construction. The SEAI pilot should be closely monitored and if it is successful, Government should reduce the timeframe for the deep retrofit of the entire existing housing stock from 35 years to a more ambitious 10 year timeframe.

### **Taxation**

Any programme for sustainable development has implications for public spending. In addressing this issue, it needs to be understood that public expenditure programmes and taxes provide a framework which help to shape market prices, reward certain activities and penalise others. A key aspect of this could be to broaden the tax base through environmental taxation. Eco-taxes, which put a price on the full costs of resource extraction and pollution, would help with the transition towards a resource efficient, low carbon green economy. The taxation system should reflect the environmental costs of goods and services. A carbon tax will play a key part in this regard.

The Climate Change Advisory Council recommends that Government ensure that the level of Ireland's carbon tax be sufficiently high to reflect the cost of achieving the 2050 targets, rising to €80 per tonne by 2030. The Council also proposes that Government design a strategy to remove fossil fuel subsidies, including the accelerated removal of price supports for peat generation and the introduction of a carbon price floor. *Social Justice Ireland* has consistently proposed that revenues

from carbon taxes are used to support households in energy poverty to improve energy efficiency and in low carbon technologies to improve the energy efficiency of the housing stock. A well-designed carbon policy which can reduce the cost of transition will make the necessary reforms more acceptable. It is vital that any carbon tax is well-designed and accompanied by the necessary measures to assist people and communities to transition to a low carbon economy and society.

When considering environmental taxation measures to support sustainable development and the environment, and to broaden the tax base, the Government should ensure that such taxes are structured in ways that are equitable and effective and do not place a disproportionate burden on rural communities or lower socio-economic groups. The European Commission has recommended the use of economic instruments such as taxation to ensure that product prices better reflect environmental costs. *Social Justice Ireland* believes that there is merit in developing a tax package which places less emphasis on taxing people and organisations on what they earn by their own useful work and enterprise, or on the value they add or on what they contribute to the common good. Rather, the taxes that people and organisations should be required to pay should be based more on the value they subtract by their use of common resources.

Environmental taxation enforcing the polluter pays principle and encouraging waste prevention can help to decouple growth from the use of resources and support the shift towards a low carbon economy. In order to promote sustainable development, it will be necessary to develop the economic system to reward activities that are socially and environmentally benign. This, in turn, would make it easier for people and organisations to make choices that are socially and environmentally responsible. Incorporating social and environmental costs in regulating and pricing both goods and services, combined with promoting those goods and services which are sustainable, should become part of sustainable development policy.

## **Transport**

Transport emissions have increased in recent years in line with economic growth, and any improvements made during the recessions have been undone. Significant investment is needed to develop a public transport network powered by electricity and renewable energy. To encourage electric car usage the national charging infrastructure should be upgraded and the tax on electric cars should be reduced to make them an affordable option.

In terms of public transport, the initial investment will be substantial, but the long-term social, environmental and economic benefits of such a change outweigh the cost. It is vital that the upgrade to the public transport network also encompasses connectivity to ensure that people travelling from rural or regional areas to urban centres are encouraged to do so by public transport. Government policy must also examine how to discourage private car use, particularly in urban areas in conjunction, with the provision of accessible and quality public transport and a

good cycling network all forming part of a transition to a low-carbon transport system.

### **Circular Economy**

A sustainable economy would involve transformative change and policies. The ‘circular economy’ theory is based on the understanding that it is the reuse of vast amounts of material reclaimed from end of life products, rather than the extraction of new resources, that is the foundation of economic growth (Wijkman and Rockstrom, 2012:166). Furthermore, the shift to a circular economy is labour intensive, focussing on repair, recycling, research and development, regenerating natural capital, and preserving and enhancing land, oceans, forests and wetlands. The business case to move towards a circular economy and decouple economic growth from resource consumption has been outlined by McKinsey in 2014 which shows that such a move could add \$1 trillion dollars to the global economy by 2025 and that the EU manufacturing sector could generate savings of up to \$360 billion per annum by 2025. A wider benefit of the circular economy is the reduction in carbon dioxide emissions.

In December 2015 the European Commission published an action plan which describes the circular economy as ‘where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimised’ (European Commission, 2015:2). This action plan is essential to the European Union’s efforts to develop a sustainable, low carbon, and resource efficient economy. It is explicitly linked to the EU’s SDG commitments.

The 2018 Circular Economy Package (European Commission, 2018) includes a Europe-wide Strategy for Plastics in the Circular Economy; a communication on options to address the interface between chemical, product and waste legislation; a Monitoring Framework on progress towards a circular economy; and a Report on Critical Raw Materials and the circular economy. The Monitoring Framework is particularly instructive in that it ‘puts forward a set of key, meaningful indicators which capture the main elements of the circular economy’. Changing from a linear economy to a circular one presents a challenge across all sectors, but bears rewards from an economic, environmental and social standpoint. The monitoring framework attempts to deal with this systemic challenge through the development of these key indicators which take a cross-sectoral view of progress, grouping the ten indicators into four aspects of the circular economy: production and consumption, waste management, secondary and raw materials, and competitiveness and innovation. The monitoring framework goes on to provide examples of each of the indicators and the EU levers, where possible (2018:4).

Finland (which ranks 3<sup>rd</sup> in the Sustainable Progress Index) published their roadmap to a circular economy in 2016 (Sitra, 2016) which aims to achieve a circular economy by 2025, concentrating on economic, environmental and social growth and benefits. They will initially concentrate their circular economic growth on five areas: sustainable food systems; forest-based loops; technical loops; transport and

logistics; and common action. Were Ireland to adopt this model, it would need the support of the agricultural sector to engage in more sustainable practices in food production to minimise emissions; a concerted effort to increase forestry (and other natural resources); a commitment to R&D that focuses on longevity and sustainable production; greater incentives to use clean fuels in transport; and recognition of the relationships and interconnectivity between the economy, environment and society. Ireland should be at the forefront of rethinking and redeveloping the use of plastics in the global supply chain. An innovative and sustainable plastics industry, where all elements fully respect the circular economy principles would help to create jobs and reduce greenhouse gas emissions.

Ensuring that product design, development and delivery is based on the principles of reusability, reparability and recyclability, and that materials for these products are sourced using sustainable methods, should be at the forefront of any R&D initiatives supported by Government. An expansion of the principles of the Ecodesign Directive (European Council, 2009), which was transposed into Irish law in December 2015 and provides for design specifications for energy products and products on which energy savings could be made, would greatly aid Ireland's progression of a circular economy.

The concept of 'cradle to cradle development' involves reviewing the processes of production to not only minimise waste but eliminate it altogether. Ireland has often been lauded as a hub of innovation. Our environment, and consequently our economy and society, would benefit greatly from the adoption of 'cradle to cradle' design principles<sup>10</sup>.

It is important that Ireland now moves to embrace the circular economy and to implement the monitoring framework provided in 2018 Circular Economy Package. A reduction in waste and consumption will help prevent waste of our finite natural resources and aid Ireland in meeting environmental targets. It will also positively impact our economy by eliminating harmful subsidies and implementing more of the 'polluter pays' principle.

### **Mitigation and Transition - supporting communities and people**

A comprehensive mitigation and transition strategy is required to ensure there is public support for our domestic and international environmental and sustainable development goals. This strategy must pre-empt some of the challenges we face as we move to a more sustainable form of development. *Social Justice Ireland* proposes that the strategy should contain as a minimum:

- retraining and support for those communities who will be most impacted by the loss of employment related to the move away from fossil fuels;

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<sup>10</sup> <http://www.mcdonough.com/cradle-to-cradle/>

- support and investment in the circular economy with regional strategies and targets;
- investment in the deep retrofitting of homes and community facilities;
- investment in community energy advisors and community energy programmes;
- investment in renewable energy schemes;
- policies to eliminate energy poverty;
- investment in a quality, accessible and well-connected public transport network.

The development of a national mitigation and transition strategy is a matter of priority if there is to be public support for the significant and fundamental changes required in the years ahead.

### **Stakeholder engagement**

One of the key indicators of sustainability is how a country runs stakeholder involvement. In order to facilitate a move towards a sustainable future for all, stakeholders from all arenas must be involved in the process.

Sustainable local development should be a key policy issue on the local government agenda, and the Public Participation Networks are a forum where sustainable development issues at a local level can become part of local policy making. Sustainable Development Councils (SDCs) are a model for multi-stakeholder bodies comprising members of all major groups – public, private, community, civil society and academic – engaged in evidence-based discussion. The EU-wide experience has been that SDCs are crucial to maintaining a medium and long-term vision for a sustainable future whilst concurrently working to ensure that sustainable development policies are embedded into socio-economic strategies and budgetary processes. The Local Community Development Committees have the potential to fulfil an SDC role in Ireland at local level, and indeed there is a requirement for local authorities to integrate sustainable development principles in the Local Economic and Community Plan and for such plans to contain a statement which may include objectives for the sustainable development of the area concerned.

The Citizen’s Assembly when considering ‘How the State can Make Ireland a Leader in Tackling Climate Change’ made a series of recommendations on tackling climate change and proposed some innovative solutions for addressing emissions from the Agriculture, Energy and Transport sectors<sup>11</sup>. *Social Justice Ireland* supports the recommendations of the Citizens Assembly which is an example of positive

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<sup>11</sup> <https://www.citizensassembly.ie/en/How-the-State-can-make-Ireland-a-leader-in-tackling-climate-change/Final-Report-on-how-the-State-can-make-Ireland-a-leader-in-tackling-climate-change/Climate-Change-Reference-Report-Final.pdf>

stakeholder engagement and involvement in addressing a major public policy challenge.

### **New measurements of progress**

Moving towards an economy and society built on sustainable development principles requires that we develop a new metric to measure what is happening in society, to our natural resources, to the environment and in the economy.

As noted earlier, it is widely acknowledged that GDP is an inadequate metric to gauge wellbeing over time, particularly in its environmental, and social dimensions, some aspects of which are often referred to as sustainability (Stiglitz Commission 2009: 8). The OECD recently held its World Forum on Statistics, Knowledge and Policy to discuss what must be measured beyond GDP to assess a country's social and economic performance and to better reflect what constitutes wellbeing<sup>12</sup>.

The forum coincided with the publication of the report of the High Level Expert Group on the Measurement of Economic Performance and Social Progress '*Beyond GDP: Measuring What counts for Economic and Social Performance*'. The report shows how focussing solely on GDP can lead to the implementation of inappropriate policies and points to the need to examine a variety of economic, social and environmental indicators to have a true picture of what constitutes progress and improved wellbeing.

As Stiglitz (2019) recently pointed out:

*“What we measure affects what we do, and if we measure the wrong thing, we will do the wrong thing. If we focus only on material wellbeing – on, say, the production of goods, rather than on health, education, and the environment – we become distorted in the same way that these measures are distorted.”*

This reinforces the assumptions underpinning the Sustainable Progress Index and should inform Government policy on the SDGs.

The United Nations High Level Panel on Global Sustainability recommends that the international community measure development beyond GDP and that national accounts should measure and cost social exclusion, unemployment and social inequality and the environmental costs of growth and market failures. Some governments and international agencies have picked up on these issues, especially in the environmental area and have begun to develop 'satellite' or 'shadow' national accounts that include items not traditionally measured. *Social Justice Ireland's* 2009 publication *Beyond GDP: What is prosperity and how should it be measured?* explored many of these new developments. It included contributions from the OECD, the New Economics Foundation, and other informed bodies, and

<sup>12</sup> <http://www.oecd.org/publications/beyond-gdp-9789264307292-en.htm>

proposed a series of policy developments which would assist in achieving similar progress in Ireland.

In December 2017, the Environmental Protection Agency (EPA, 2017(c)) published its report on the state of knowledge of climate change impacts in Ireland. It found that while there was sufficient information available to support the integration of environmental protection principles into economic and social policy making, there remained areas on which a number of 'important knowledge gaps' remain, such as coastal and marine, critical infrastructure, emergency planning and human health (2017:31).

The report indicates that climate change potentially impacts all economic sectors, with adaptation measures made difficult by a lack of certainty of the severity of the risks and the subsequent impact on the insurance sector, and makes a number of key recommendations including advancing the knowledge base; developing sectoral risk and vulnerability assessments; developing and assessing adaptation options which would include cost-benefit analysis; and developing and implementing governance structures. The Irish Government needs to take on board these recommendations to mitigate the costs of climate change on our economy, while having the benefit of providing jobs in implementing these measures. At a practical level the CSO should be fully resourced to implement the System for Environmental-Economic Accounts (SEEA) and the future compilation of natural capital accounts. These datasets will be vital to measure progress on environmental issues and the SDGs.

Climate change also has an impact on biodiversity in Ireland. The 2017 report repeats earlier assertions that the economic value of our ecosystem services is €2.6 billion (EPA, 2017:24) but the rate of habitat degradation and loss of biodiversity is accelerating across Europe, including in Ireland. Ireland needs to improve its data collection methods when it comes to biodiversity and to monitor the impact of climate change in this context to protect both our natural resources and our economy. In a sustainable economy our natural capital and ecosystems would be assigned value in our national accounting systems.

Development of 'satellite' or 'shadow' accounts for Ireland should be a key initiative to adequately reflect the economic value of Ireland and support the development of more robust economic, social and environmental policies. The metrics referred to in the *Social Justice Ireland* Sustainable Progress Index, which are widely available and used internationally, could be a baseline for a more cohesive set of national accounts.

### **Policy Coherence**

At a national level there appears to be a strong degree of policy incoherence in pursuing policies such as Food Harvest 2020 and Food Wise 2025, and the increase

in emissions that this will yield, whilst simultaneously committing to international targets for sustainable development and emission reduction.

The increased emissions from both agriculture and transport mean that Ireland will be subject to fines for not meeting our European targets. In addition to the immediate financial costs of missing our 2020 targets, the potential social, economic and environmental impacts of climate change are immense, and their cost must also be taken into account.

These include an increase of heavy rainfall events in winter and autumn and an increase in the intensity of storms and the risk of damage from storms. Government's commitment to green budgeting and the publication of all Exchequer climate related expenditure is an important part of the policy coherence process and incorporating climate change and the SDGs into the budget process. This should be fully resourced and expedited in 2019.

In order to improve policy coherence the SDGs should be placed at the centre of policy making in Ireland. Government should, as a matter of priority, outline a five year plan containing the following:

- how the CSO will be supported to develop Ireland's System of Environmental-Economic Accounts (SEEA) and how SEEA will be incorporated into the National Development Plan;
- all proposed environmental taxation changes over the period;
- the energy efficiency and renewable energy projects that this revenue will fund over the period to support our low carbon transition;
- a circular economy strategy for Ireland;
- a mitigation and transition programme.

This plan should be overseen and monitored by an Oireachtas committee.

### 11.3 Key Policy Priorities

A successful transition to sustainability requires a vision of a viable future societal model and the ability to overcome obstacles such as vested economic interests, political power struggles and the lack of open social dialogue (Hämäläinen, 2013). Ireland is at the cusp of this transition and *Social Justice Ireland* believes that the following policy positions should be adopted in responding to sustainability and environmental challenges:

- Set ambitious emissions reduction targets for 2030 and ensure sufficient resources to support implementation of these targets;

- Adopt targets and a reporting system for each of the Sustainable Development Goals;
- Introduce a strategy for Ireland that includes the principles of the circular economy and cradle to cradle development;
- Introduce shadow national accounts, and assign value to natural capital and ecosystems in our national accounting systems;
- Develop a comprehensive mitigation and transition programme to support communities and people in the transition to a low carbon society;
- Develop a progressive and equitable environmental taxation system.

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