

Chapter 9

Environment and the Economy: Overview



Importance of the Environment to the Economy

Introduction

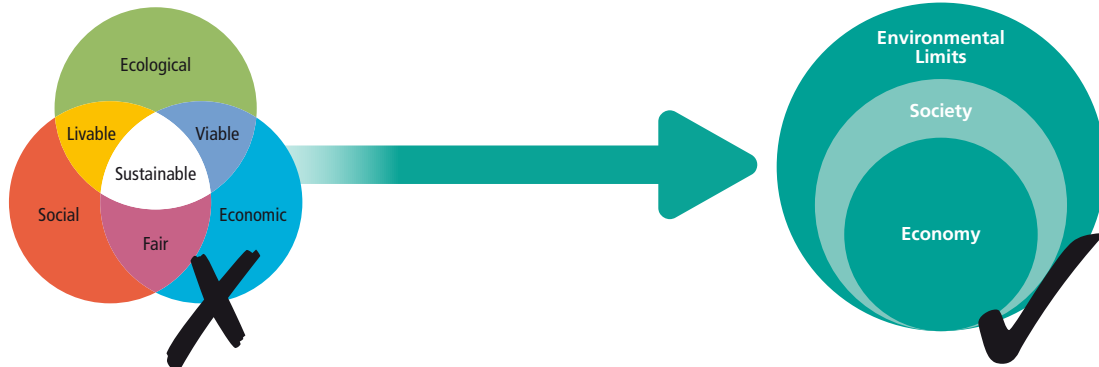
Ireland's economic and social wellbeing is intimately associated with the condition of the environment.

The economic resilience of Ireland is intimately linked to environmental quality and to the supporting role of our ecosystems and natural resource services. However, we have designed and evolved our governance structures, our society and our economy in ways that are not always suitably considerate, or protective, of ourselves or of our environment. Moreover, as individuals and as part of our national and global community, we continue to make consumption and production choices that are unsustainable.

The environment will thrive in the absence of an economy or a society, but the opposite does not hold. Economic and social wellbeing are intimately associated with the condition of the environment and its ability to sustain us. In general, what is good for the environment is good for the economy in the long term.



Figure 9.1 Sustainable Development Paradigm



Global Sustainability Models

Both the economy and the society that hosts it can only exist within the confines of the environmental and resource boundaries available.

One of the main frailties of the global sustainability model up to recent years was the incorrect perception that the social, economic and environmental pillars of the sustainable development paradigm were equally weighted, as represented in the classic sustainability Venn diagram (Figure 9.1).

In fact, the relationship is less equal and, at the same time, more complex. Our economy can only expand within society's ability to support it. Both the economy and the society that hosts it can only exist within the confines of the environmental and resource boundaries available. The nested dependencies featured in Figure 9.1 are a better representation of this understanding of the sustainable development paradigm. Infinite economic expansion without regard to environmental constraints is illogical, immoral and, ultimately, impossible.

Economic Cost of Not Protecting our Environment

The proposed economic cost of climate change impacts for the EU – in the absence of adaptation actions – is in the order of tens of billions of euros per year.

Insufficient protection and preservation of our environment has a significant economic cost. The World Economic Forum comments that "... the undesirable environmental consequences of human activity are leading to a less habitable world" (World Economic Forum, 2014). The World Health Organization (WHO) estimated that the overall annual economic cost of health impacts and mortality from air pollution, including estimates for morbidity costs, amounts to €1.45 trillion (WHO Regional Office for Europe, 2015). Another significant economic and social cost resulting from environmental impact derives from climate change.

A recent European Union (EU) study on climate change impacts proposed that the economic cost – in the absence of adaptation actions – for the EU was in order of tens of billions of euros per year (Ciscar *et al.*, 2014). The economic costs-avoided imperative is recognised in the intergovernmental agreement reached following the Climate Change COP21 meeting in Paris in December 2015, one of the recitals to which emphasises the "enduring benefits of ambitious and early action (on climate change), including major reductions in the cost of future mitigation and adaptation efforts".

The World Economic Forum notes that social and environmental sustainability issues increasingly influence economic policy decisions and can have an impact on economic performance (World Economic Forum, 2014). Our future economic and social stability and resilience requires accelerated and sustained action to reimagine and decarbonise our society and move to an enduring state of carbon neutrality.

National "Environomic" Performance

The challenge is to maintain the recent good environmental performance in a recovering economy.

There is some evidence of the need to decouple economic activity and growth from environmental impact. In recent years, Ireland has moved from a position of being one of the most resource-inefficient economies in the EU (our rate of material consumption was growing faster than the population) to greatly improve its efficiency in terms of raw material consumption per capita (Figure 9.2). The reduction in personal consumption and building programmes over this period (associated with the economic downturn) has – we believe – largely contributed to this trend. This reduction in building has induced social challenges (e.g. housing availability), suggesting that the scale of reduction was too severe and poorly managed. Better integration and coherence between environmental, economic and social policy needs could act to mitigate these shock swings.

Figure 9.2 Ireland: Resource Efficiency (Source: CSO)

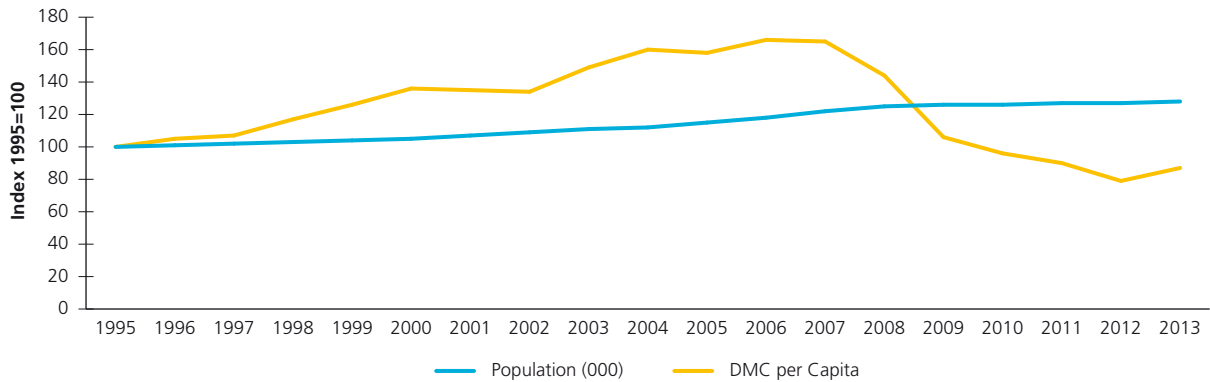


Figure 9.3 Ireland: Resource Productivity (Source: CSO)



In addition, in relation to the productivity of resources consumed as measured by gross domestic product (GDP) (Figure 9.3) Ireland has significantly improved its financial return (in terms of GDP) per tonne of resources consumed. This is a crude measure of the economic efficiency of resources consumed and masks significant sectoral variation. The main challenge over the longer term is to ensure that the productivity curve grows at a rate in excess of the DMC curve (decoupling).

Domestic material consumption (DMC) measures the total amount of materials directly used by an economy and is defined as the annual quantity of raw materials extracted from the domestic territory, plus all physical imports minus all physical exports.

(Source: EuroStat).

International and National Policy Context

Living Well, Within the Limits of our Planet

EU action programme that sets out the long-term vision on the environment.

Successive EU Environmental Action Programmes (EAPs) have, since 1973, been the foundation stones of all EU environmental policy development and are used specifically to foster policy action and integration for identified environmental and sustainability issues. EU policies for the green economy, resource efficiency, circular economy, industrial and product regulation etc., can, in some way, trace their lineage to the Action Programmes. In its 7th EAP, *Living Well, Within the Limits of our Planet*, the EU has renewed its commitment to stimulate the transition to a green economy and to strive towards an absolute decoupling of economic growth and environmental degradation. This, it states, will “ease pressure on the environment and bring increased competitiveness and new sources of growth and jobs through cost savings from improved efficiency, the

commercialisation of innovations and better management of resources over their whole life cycle". The Programme adds that all sectors of the economy have to contribute to tackling climate change. Two of the nine priority objectives stated in the 7th EAP relate specifically to economic competitiveness, namely:

- to protect, conserve and enhance the Union's natural capital
- to turn the EU into a resource-efficient, green and competitive low-carbon economy.



(Source: European Commission)

The full and even implementation of environment legislation throughout the EU is seen as a sound investment for the environment and human health, as well as for the economy. Implementation can act to drive sustainable 'greener' economic growth, bringing with it opportunities in innovation and employment. In a recent EU Commission publication, *Green Growth for Jobs and Prosperity in the EU* (EC, 2016), the competitive advantage of green growth is set out, but some key obstacles to this opportunity are also articulated, including regulatory obsolescence and contradictory or unintegrated sectoral policy. The 7th EAP prioritises actions that aim to deliver environmental and economic benefits through legislative implementation, as well as actions to improve environmental policy integration and coherence.

Resilient People, Resilient Planet: The UN Policy to Promote Sustainability

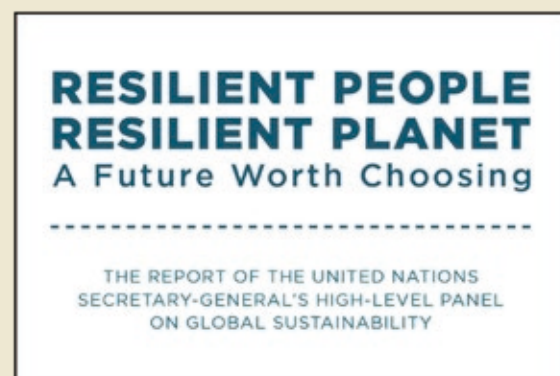
The United Nations (UN) *Resilient People, Resilient Planet* policy document (UN, 2012) states that there are forceful drivers that are challenging the sustainability paradigm, such as current production and consumption patterns and resource scarcity, investment expectations, demographic change, changes in the global economy, growing inequality, changing political dynamics and urbanisation. The UN set out a number of priorities that have strong economic solutions/interventions:

- advancing education for sustainable development
- enabling consumers to make sustainable choices and advance responsible behaviour individually and collectively
- incorporating social and environmental costs in regulating and pricing of goods and services, as well as addressing market failures

- creating an incentive roadmap that increasingly values long-term sustainable development in investment and financial transactions
- increasing finance for sustainable development, including public and private funding and partnerships to mobilise large volumes of new financing
- expanding how we measure progress in sustainable development by creating a sustainable development index or set of indicators.

Resilient People, Resilient Planet

(Source: UN, 2012)



The UN policy document *Resilient People, Resilient Planet: A Future Worth Choosing* (UN, 2012) states compellingly that "Sustainable development is not a destination, but a dynamic process of adaptation, learning and action. ... The world is not yet on this path. Progress has been made, but it has been neither fast nor deep enough, and the need for further-reaching action is growing ever more urgent."

United Nations Sustainable Development Goals

17 goals and 169 key global environmental targets that aim to shape our future.

September 2015 saw the globally significant intergovernmental meeting convened by the UN to agree a plan of action for *People, Planet & Prosperity*.¹ Seventeen Sustainable Development Goals with 169 targets were agreed (Figure 9.4). The signatories to the resolution² envisage a world in which nations can enjoy inclusive and sustainable economic growth, with decent work for all, and where consumption and production patterns, as well as the use of all natural resources, are sustainable. This, the resolution attests, will deliver sustained and inclusive economic growth, social development and environmental protection. These aspects of the resolution identify two core concepts for sustainability. The first is the need for appropriate (realistic and rational) production and consumption; the second is the balancing of social, economic and environmental needs.

1 sustainabledevelopment.un.org/

2 www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E

Figure 9.4 Global Goals for Sustainable Development (Source: UN)



Strategies for a Resource-efficient and Low-carbon Europe

The Europe 2020 Strategy³ reaffirms a collective determination to shift towards a resource-efficient and low-carbon economy and the European Commission has committed to using a range of financing and economic instruments to achieve this objective. These include mobilising EU financial instruments; enhancing the framework for the use of market-based instruments (e.g. emissions trading, revision of energy taxation, state aid framework, encouraging wider use of green public procurement); and promoting a comprehensive programme of resource efficiency leading to changes in consumption and production patterns.

In 2011, the EU Commission published what was then, and still is, considered one of its most significant policy statements for many years. This visionary document, *A Roadmap to a Resource Efficient Europe*,⁴ articulates ambitions for European society, economy and environment that seek to address the challenges of environmental damage, resource depletion and climate change.

A 2014 review of progress under⁵ the roadmap concluded, inter alia, that the majority of the actions announced in the roadmap have been launched; however, “the full impacts of the actions launched under the roadmap are yet to unfold.” The progress report added that the

2020 milestones and the overall objective of decoupling economic growth from resource use and its environmental impacts are not likely to be fully achieved unless efforts are stepped up. As a means to measure progress, a Resource Efficiency Scoreboard has been published by Eurostat since 2013, with the caveat that there is a significant time-lag for many of the statistics around material flows in the economy. The midterm review stated that “action on the side of national, regional and local governments is important, since in many cases the most effective policy instruments to promote efficient resource use and implement sustainability in practice are in their hands – for instance in the areas of waste and water management, urban planning, or public procurement.”

Harmful Environmental Subsidies

Elimination of environmentally harmful subsidies and taxation systems will come into stronger focus internationally and in national economic and finance policy in the coming years.

Internationally, through the Organisation for Economic Co-operation and Development (OECD), the UN, the EU and the Group of Twenty (G20), the subject of environmentally harmful subsidies has been put on the agenda for discussion and resolution (Oosterhuis and ten Brink, 2014). Subsidies do lead to lock-in of unsustainable technologies and infrastructure, as well as poor decision making. The EU 7th EAP and *A Roadmap to a Resource Efficient Europe* call for urgent attention to be applied to the phasing-out of environmentally harmful subsidies at the national level. The roadmap estimates that the scale of subsidies with potential negative impacts on the

³ www.ec.europa.eu/europe2020/index_en.htm

⁴ www.ec.europa.eu/environment/resource_efficiency/about/roadmap/index_en.htm

⁵ www.ec.europa.eu/environment/circular-economy/pdf/Progress-report-roadmap.pdf

environment, notably in the areas of fossil fuels, transport and water, are worth €1 trillion per year. Environmentally harmful subsidies lead to higher levels of waste, polluting emissions (including climate change gases), inefficient resource extraction and negative impacts on biodiversity. They can lock in inefficient practices and hinder businesses from investing in green (more sustainable) technologies. The EU roadmap notes that environmental externalities are not always reflected in the price of goods and services and advocates that new policies should aim to correct prices of resources and natural capital that are considered not appropriately valued on the market, such as water, clean air, ecosystems, biodiversity and marine resources. The EU Commission sees environmental taxation as an essential market mechanism to address any pricing market failures.

Environmentally harmful subsidies through for example, investment write-off or other relief, can lead to long term lock-in in relation to unsustainable technologies. Moreover, vested interests – generally those with most to lose or gain – will invest in lobbying to protect their particular sectoral or group interests which may not be aligned to the public interest.

Elimination of environmentally harmful subsidies and taxation systems will come into stronger focus internationally and in national economic and finance policy in the coming years. The State on its own, or as a consequence of European action, will need to undertake a review of environmentally harmful subsidies that may be operating within its finance/taxation system and set about eliminating them; examples include subsidised peat extraction, low CO₂ vehicle tax (causing rise in diesel use and particulate air emissions) and green diesel VAT relief. There has been little work on this area of policy conflict to date and it is not clear whether regulatory impact assessments for new legislative policy adequately address such externalities.

It should be noted that Ireland has achieved considerable behavioural change success in relation to employing taxation based measures to address certain environmental harms, e.g. the plastic bag tax, the landfill levy, and the carbon tax.



A Roadmap to a Resource Efficient Europe (2011) presents a policy ambition milestone that states:

“By 2020, market and policy incentives that reward business investments in efficiency are in place. These incentives have stimulated new innovations in resource efficient production methods that are widely used. All companies, and their investors, can measure and benchmark their lifecycle resource efficiency. Economic growth and wellbeing is decoupled from resource inputs and come primarily from increases in the value of products and associated services.”



(Source: EEA)

Raw Material Use in the Economy

Securing a sustainable supply of raw materials for the EU, and nationally, is a key priority.

In late 2013, the European Commission established the EU Raw Materials Initiative with a view to securing a sustainable supply of raw materials for the EU as a key priority. Raw materials, such as metals and minerals or forest-based materials, are essential to the EU's economy, growth and competitiveness. The EU reports that more than 30 million jobs and many key economic sectors, such as automotive, aerospace and renewable energy, are dependent on a sustainable supply of raw materials. The associated strategy has three stated aims, which are to ensure the following:

- fair and sustainable supply of raw materials from global markets
- sustainable supply of raw materials within the EU
- resource efficiency and supply of secondary raw materials through recycling.

The EU subsequently published an assessment of raw materials deemed critical to the EU economy (EC, 2011). The EPA, through its national environmental research programme, is funding projects that aim to advance knowledge and innovation in the critical raw materials area.



Ireland – Our Sustainable Future

International policy ambitions inform Ireland's sustainability strategy.

International policy ambitions have informed, and will continue to inform, a raft of recent EU market interventions, and many of them resonate with national ambitions articulated in Ireland's sustainability strategy *Our Sustainable Future* (DECLG, 2012).

The aims of this government policy are to provide for the integration of sustainable development into key areas of policy, to put in place effective implementation mechanisms, and to deliver concrete measures to progress sustainable development. A progress report on actions under the national sustainability plan was published in 2014,⁶ and, in 2015, the Central Statistics Office published an updated set of national sustainable development indicators that address national performance and also consider performance with respect to other EU Member States.⁷ The progress report concluded that Ireland continues to move in the right direction generally across the spectrum of Sustainable Development Goals, while recognising the role of the economic downturn in reduced emissions and consumption. The report also concluded that it will be important to maintain our focus on sustainability through the period of economic recovery and growth. In its 2014 Climate Change Policy Position document, the Irish Government articulated a vision to 2050 that integrates the climate and sustainability imperatives in stating that it aims "as a fundamental national objective, to achieve transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050" (Government of Ireland, 2014).

6 www.housing.gov.ie/sites/default/files/publications/files/our_sustainable_future_progress_2014.pdf

7 www.cso.ie/en/media/csoie/releasespublications/documents/environment/2015/sdi_2015.pdf

Our Sustainable Future (DECLG, 2012) states that "decoupling environmental degradation and resource consumption from economic and social development is an enduring challenge in Ireland as elsewhere and requires a paradigm shift in our approach to future development. The 'business-as-usual' approach will not suffice; we require a major reorientation of public and private investment, ... We need a more developed 'green economy' focus, achieving a more mutually supportive interface between environmental protection and economic development, ..."

Key Current and Emerging Policy Trends

Circular Economy

A model for sustainable production and consumption.

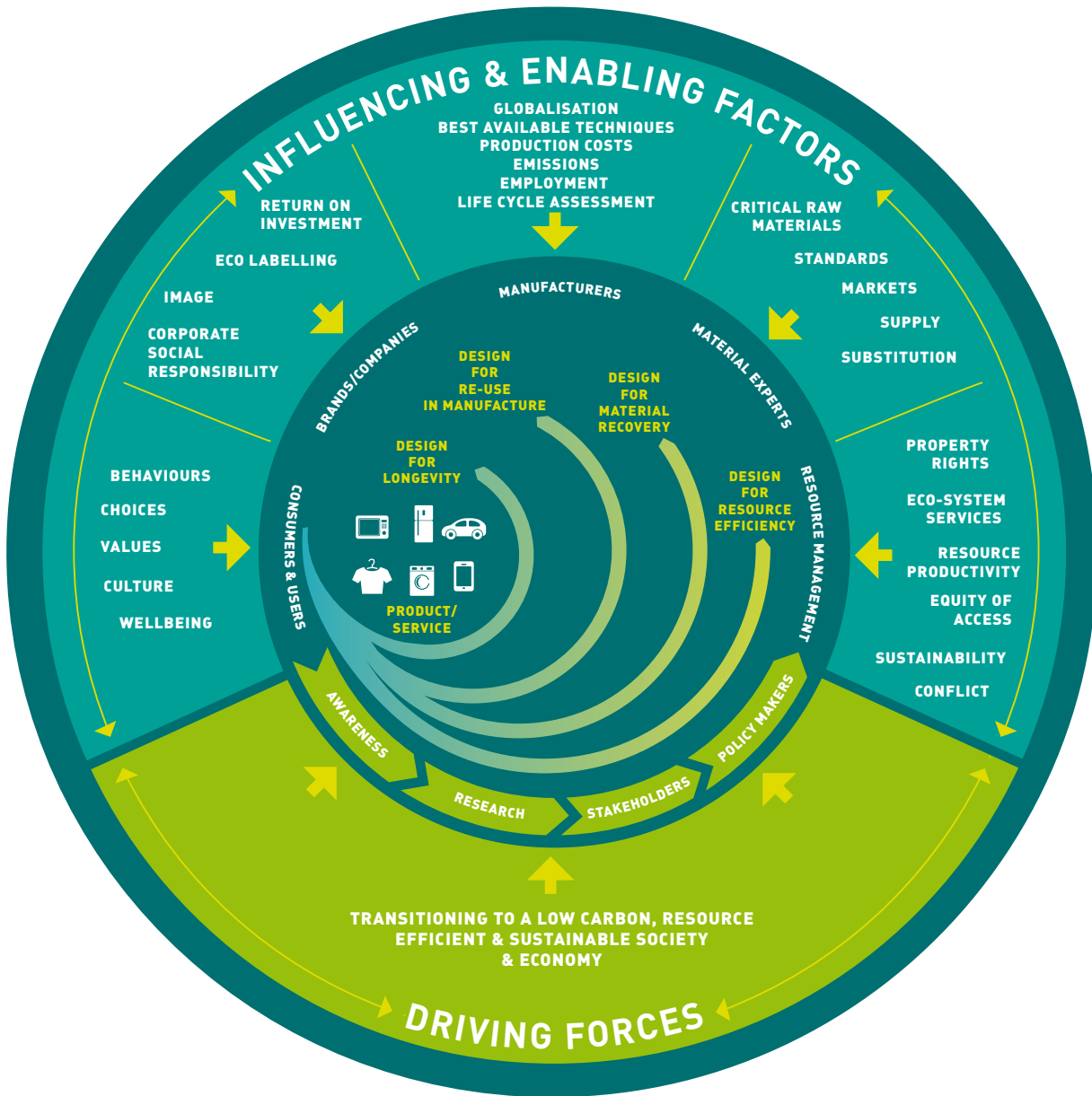
The coming years will need to see much greater effort – at an institutional and commercial level – to secure the supply, from sustainable sources, of the primary and secondary raw materials necessary to sustain our economies and our wellbeing. The recognition of the limitation of critical raw materials, allied to the ambition of resource efficiency and life cycle assessment for goods and services, has evolved and coalesced into the concept of the circular economy (EEA, 2016).

Circular Economy

While most discussion of the subject deals with the "material flow" dimension of the circular economy model, it must be understood that true economic circularity is far more complex and involves matters such as property rights, equity of access, valuing of ecosystem services, resource productivity, fair and safe social and employment structures, wellbeing and resilience, clean technology, etc. It is, in fact, sustainable development, but in recognition of the dominance of the economic drivers, is repackaged in more tangible economic models and production/consumption cycles and enabling conditions (Figure 9.5).

This model of sustainability (Figure 9.5) or, more accurately, a model of sustainable production and consumption, looks at the materials flowing through the economy (biological and technical) and imagines the sustainable draw-down and maximum utility of these resources/materials. It sees the material or product value chain moving from a take–make–use–dispose linear model to a closed loop that seeks to minimise – if not eliminate – wastefulness at every stage from resourcing, to design, manufacture, distribution, use and post-consumption stages. The EU Raw Materials

Figure 9.5 Circular Economy – Material Flow Aspects (Source: EPA, EEA, 2016)



Initiative discussed previously is also strongly integrated with the EU circular economy policy area.

The enabling conditions needed to move to a circular economy require wide-ranging integrated market interventions such as eco-design, eco-labelling, life cycle assessment, secondary materials standards, recycling, durability, consumption awareness and education, clean production, repair and reuse, green public procurement, elimination of harmful chemicals, renewable energy, carbon neutrality, etc. Most of these policies and concepts will require major intervention over the coming years if they are to become the reality and norm. Also of key importance are appropriate price signals and research into more efficient products and services. There are, of course, huge challenges, not least of which is that

Ireland is an island nation and our economy depends on imported raw materials sourced on the global market. Significant opportunities also flow through, for example, green goods and services design and delivery. From a social and values perspective, the circular economy can assist in driving an appreciation of sufficiency as regards consumption behaviours. Advancing circular economy ambitions – even on the limited material flow dimension – is hugely challenging in terms of world trade agreements, complexity of issues and influencing factors and cost; it is undoubtedly a classically “wicked problem”.⁸ Ireland will be able to tackle many of these issues only as part of the EU, by negotiating internal and international trading

8 *Financial Times* lexicon lexicon.ft.com/Term?term=wicked-problem

standards and agreements. However, at the core of the circular economy paradigm is consumption, and the State can, working through its citizens and value systems, educate and promote a reimagining and realisation of what sustainable consumption should be. What it should not be is the vulgar conspicuous and inefficient consumption we have seen in the past.

Emerging Environmental Governance trends

There has been a rapid expansion of business-led, and government-fostered, sustainability programming.

The last few years has seen a significant growth of business and municipality led environmental governance initiatives, that involve the voluntary making of environmental commitments and reporting of progress. Initiatives include such schemes as ISO Standards, green accounting and green investments, carbon disclosure, etc., which here we will cluster as corporate social responsibility (CSR) programmes. Many of these programmes were originally intended to be carried out at a multinational level, but more recently appear throughout the value chain, and many civil society groups, municipalities and large cities are also getting involved. It is not a new idea, but it might be one whose time has come as a result of a convergence of social, marketplace and governance expectations. Corporate social responsibility is a concept whereby enterprises integrate their social and environmental responsibilities into their mainstream business operations, and business decisions are made with reference to wider sustainability issues. This is a rapidly expanding area of business-led, and government-fostered, sustainability programming, and needs, over the coming years, to expand from the sphere of multinationals to the wider business and public service community.

The UN Global Compact⁹ is a call to companies to align strategies and operations with universal principles on environmental protection, along with wider human rights, labour issues, etc., and take actions that advance societal goals. It involves over 8,000 companies operating in over 160 countries worldwide. Twenty-two businesses are registered under Ireland, and have submitted pledges. These companies operate in a variety of fields including services, distribution, engineering, academic and manufacturing. It is a voluntary initiative based on company commitments to implement universal sustainability principles and to take steps to support UN goals. Further supporting resources are available on the World Business Council for Sustainable Development website.¹⁰

In 2013, the EU adopted a proposal for a Directive on Non-Financial Reporting,¹¹ which aims to have large companies report CSR-type metrics on an annual basis. The UN-fostered and multinational-supported Global Reporting Initiative (GRI)¹² helps companies to be transparent about their sustainability goals, performance and impacts. Its Sustainability Reporting Guidelines (known as G4)¹³ are the most widely used comprehensive sustainability reporting standards in the world; there are currently over 23,000 reports recorded in the GRI database, and this number is still growing. Transparent sustainability reporting is a key element of CSR.

The recent Climate Change Council of the Parties meeting in Paris involved a large group of companies, cities, regions, civil society organisations and investors which have made non-regulatory-demanded climate change-related pledges collectively known as the UN-moderated Climate Action Agenda NAZCA pledges.¹⁴ These coalitions of actors are intended to accelerate activity to deliver the necessary systemic changes. This follows the commencement of the non-state sector pledge platform at the Council of the Parties meeting in Lima in 2014, and, to date, the programme includes over 11,000 pledges. Only a limited number of Irish organisations have registered pledges so far.

Ireland's National Plan for Corporate Social Responsibility 2014-2016

Promoting environmental practices that enhance a company's profile and competitiveness.

Ireland's National Plan for Corporate Social Responsibility 2014-2016 is a very significant government policy intervention (DJEI, 2014). The policy observes that CSR practices that are embedded as a genuine part of a company's values and operations can help enhance the company's profile and competitiveness; CSR is good for business and good for the community. The national policy presents a model of five CSR pillars, with each pillar including a number of elements of activity/action (Figure 9.6), and establishes five key objectives for the National Plan. There are good examples and more information of business-led CSR activities in Ireland on the Business in the Community website.¹⁵

CSR goes beyond mere compliance with legislation to promoting mutually supported shared value-resilient businesses and resilient communities.

9 www.unglobalcompact.org

10 www.wbcsd.org

11 www.eur-lex.europa.eu/homepage.html

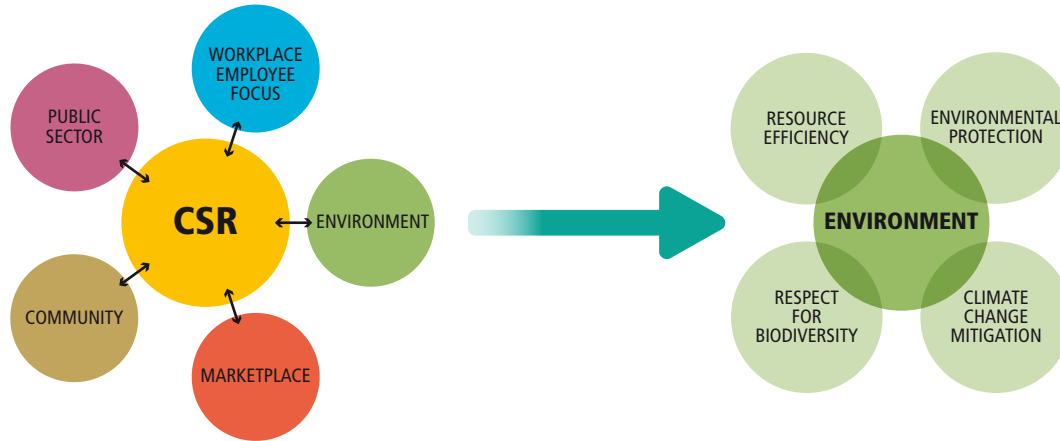
12 www.globalreporting.org

13 www.globalreporting.org/Pages/default.aspx

14 climateaction.unfccc.int

15 www.bitc.ie

Figure 9.6 Five Pillars of CSR, and Four Key Elements of the Environment Pillar (Source: DJEI, 2014)



Assessing the Life Cycle of Goods and Services

Making information available to allow consumers to make informed choices.

In the coming decade, businesses will increasingly be required through regulatory approaches to undertake life cycle assessment for their goods and services and to adopt eco-label standards. The latter are essential to support informed consumption choices. Goods and services that currently incorporate environmentally harmful substances/practices will be required by future EU-driven product policy to be eliminated or replaced. In Ireland, the significant role expected for agricultural and food production and tourism in national economic recovery and future growth will require ambitious and monitored sectoral development plans to ensure that this growth can be achieved through carbon neutrality and sustainable production/service processes. The national food sector development plan, Food Wise 2025, includes a monitoring and implementation plan that seeks to track and measure implementation of initiatives and actions, in particular those dealing with the environmentally sustainable expansion of the sector.¹⁶

Sector Plans and Policy Context

Economic Sector Plans for Sustainability

Regular public reporting on the environmental performance of economic sector plans will be important for increased accountability and transparency during implementation.

National plans and programmes also contribute to progressing decoupling. Bord Bia, through its very successful Origin Green Programme, has identified the competitive advantage of marketing sustainable low-carbon produce to a national and international audience (Figure 9.7).

Figure 9.7 Origin Green (Source: Bord Bia)



Bord Bia has developed a suite of programmes for its client primary producers and processors to progress certified resource-efficient sustainable food production practices. Major producers, retailers and service providers are also progressing greener credentials as part of their commercial strategy (e.g. Green Hospitality, the Musgrave Group's Environmental & Social Accountability Policy, Marks & Spencer's Plan A, Glanbia's Performance System, Intel's CSR Climate Change & Environmental Policies, Unilever's 5 Levers of Change). The need for sustainability is strongly reflected in a number of national sectoral policies and economic development strategies (e.g. Food Harvest 2020, Food Wise 2025, Our Ocean Wealth, Education Strategy for Sustainable Development, National Energy Efficiency and Renewable Energy Action Plans, Ireland's Transition to a Low Carbon Energy Future and the National Plan on Corporate Social Responsibility).

Figure 9.8 Musgrave Group Sustainability Commitment

MUSGRAVE
GROUP

What does sustainability mean to us?

“Our long term approach to relationships and business means that we place great emphasis on the core responsibilities that any good business should have: to look after its people and customers, to minimise its environmental impact and to produce sustainable wealth for the benefit of all stakeholders in the long term – not just for short term financial gain.”

Musgrave focuses on embedding sustainability in its operations and brands, concentrating on 9 of 17 UN Sustainable Development Goals that are relevant to the retail sector.

These fall into four broad categories:

- minimising environmental and climate change impacts;
- driving sustainable sourcing and consumption;
- leading in health and wellbeing;
- taking an active leadership role in the community.

Aligning our sustainability strategy with the UN's Sustainable Development Goals



6 11 13

Minimising environmental & climate change impacts

- Carbon management
- Packaging & waste
- Food waste
- Water conservation

2 12 14 15

Driving sustainable sourcing and consumption

- Ethical sourcing
- Human rights
- Sustainable consumption
- Animal welfare & biodiversity

3

Leading in health & wellbeing

- Nutrition & healthy eating
- Education & awareness
- Active living

8 11

Taking an active leadership role in the community

- Being a good neighbour
- Vibrant communities
- Employment & opportunities

Many economic sectors have strategies in place for growth or change. Implementation of these strategies can come with potential environmental risks and challenges. It is now recognised that it is necessary to ensure that growth strategies are sustainable in the long term. Strategies should include a commitment to report publicly and regularly on their environmental performance against relevant environmental indicators. This will make the strategies more robust and provide for increased environmental accountability and transparency during implementation. A strategy review mechanism should kick in if the performance monitoring demonstrates an unfavourable situation for Ireland's sustainability and its legal obligations to meet environmental targets. The implementation plan established for tracking the performance of Food Wise 2025 is an example of good practice in this area.

Strategies to Deliver More Efficient Businesses

Waste prevention projects have demonstrated what is achievable.

Since its inception in 2004, Ireland's National Waste Prevention Programme has successfully delivered solutions for individuals and organisations that recognise the economic and reputational costs of wasteful consumption (both excess purchasing and final disposal charges). The programme, which is overseen by the EPA, has evolved beyond an initial focus on preventing generation of solid wastes to a broader view of preventing wastage across materials, energy and water; this is primarily because of the integrated nature of relationships between them. The latest strategy 'Towards a Resource Efficient Ireland' (EPA, 2014a) with its vision of living better, using less,

reflects this broad approach and highlights the key role for the programme in delivering on national priorities on competitiveness and green growth. Over the years, through successive annual reports,¹⁷ the EPA has demonstrated that businesses, the public sector and households can achieve significant financial benefits, and, in case of businesses, competitive advantage, by implementing resource-efficient practices, with participant enterprises achieving average savings of more than €12 million per annum.¹⁸ An EPA research report published in 2013 identified that a modest national target of 2% efficiency in material consumption has the potential to yield a saving to the national economy of approximately €1 billion (EPA, 2013).

Green Procurement

Green procurement can deliver more sustainable and more competitive goods and services.

The Irish Government, through its policy on green procurement, and the subsequent national guidance published by the EPA, set out to push the delivery of more sustainable goods and services through public tendering contracts (DPER, 2012; EPA, 2014b). The purchasing power of the State (10–12% of Ireland's GDP; approximately €25 billion) and of large businesses (through their supply chain) can be used very effectively to deliver more sustainable and more competitive goods and services.

Economic Value of the Environment

We need a better appreciation of the economic value of a protected environment and its wider services to society.

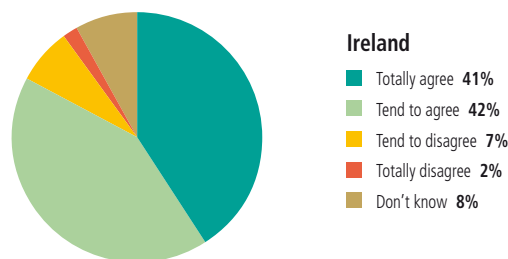
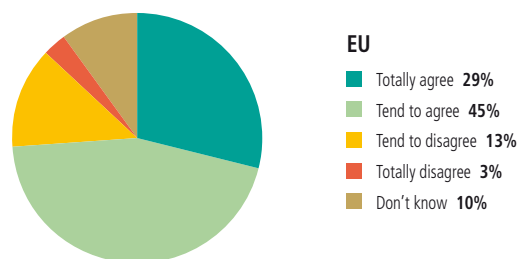
Not only is there evidence of decarbonisation, resource efficiency and green growth, but there is also evidence that the economic contribution of a valued and protected environment (and its services) is becoming widely appreciated at business and policy level (e.g. Origin Green, eco-labelling, green tourism). This realisation is strong at the general public level, also, as indicated by the results of a 2014 EU survey of environmental attitudes, which found that Irish people's appreciation of the economic value of the environment significantly exceeds the EU average (Figure 9.9).

From a national growth perspective the coming years will need to see a broader range of metrics and indicators developed for national economic performance that take into account matters such as wellbeing, environmental health, ecosystem services and natural capital.

Figure 9.9 Environment and Economic Growth Survey 2014 (Source: Eurostat)

To what extent do you agree or disagree with the following statement?

The protection of the environment can boost economic growth in the EU



Ecosystem Services – The Value of Being Clean and Green

The rapid growth in economic valuation activity in the field of ecosystem services also attests to this realisation (e.g. DECLG, 2008; Bullock and Hawe, 2014; EPA, 2014c); this includes the establishment of a national working forum. This commitment to valuing our natural capital is also reflected in the government policy *Delivering our Green Potential*, in which it is stated that we must “ensure that the value of ecosystem services and biodiversity to the economy is captured and monitored so as to ensure sustainable drawdown and protection of (our) natural assets. The protection of the environment and the development of the green economy are integrally connected” (DJEI, 2012). Tourism was worth in excess of €6.5 billion to the Irish economy in 2014, and Ireland hosted over seven million international visitors.¹⁹ Environmental attributes were two of the top five reasons cited for successful tourism visits (i.e. scenery and nature), and this is expected to grow with the success of the marketing of the Wild Atlantic Way.²⁰ Irish food and drink exports are worth €10.6 billion to the Irish economy²¹ and the Origin Green dimension of marketing for these

17 www.epa.ie/waste/nwpp/reports/#.VuFjKBivlok

18 www.begreen.ie

19 www.failteireland.ie/Research-Insights/Tourism-Facts-and-Figures.aspx

20 Wild Atlantic Way Operational Programme 2015 www.failteireland.ie/Wild-Atlantic-Way/The-Wild-Atlantic-Way-Operational-Programme/Environmental-Surveying-and-Monitoring-Programme.aspx

21 www.bordbia.ie/industry/buyers/industryinfo/agri/pages/default.aspx

exports is intimately linked to environmental quality and sustainability. National economic growth and success is inextricably linked to environmental sustainability and we have to strive for carbon neutrality to remain sustainably competitive.

Conclusions and Outlook

Sustainable competitiveness should be at the heart of thinking about sustainability. This is because competitive economies tend to be more innovative, more resilient and better able to respond to external shocks and, therefore, maintain high levels of prosperity into the future. A 2015 report by a group of experts convened by the EU Commission provides advice in the form of a roadmap for systemic eco-innovation to achieve a low-carbon circular economy; the report concluded that the economic challenges currently facing Europe are not cyclical, but of a structural nature (EC, 2015). The report added that European production and consumption practices and expectations are not equipped to face a global climate of slow demand growth and resource volatility, commenting that “without change the EU will become inevitably less competitive, less attractive, and less economically viable”.

Growing population, the competition for diminishing resources, the appropriate recognition of ecosystem services and natural capital, as well as the adaptive challenges arising from our changing climate and our national climate change commitments will, over the next 30 years, require ambitious social and economic interventions and responses. The emerging consensus is now focusing around the need to put economies on a more sustainable footing, resulting in a resource-efficient, carbon-neutral, circular economy. This will require an all-of-society response: 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. Ireland’s economy needs to strive for sustainable competitiveness, which the World Economic Forum defines as the set of institutions, policies and factors that make a nation productive over the longer term while ensuring social and environmental sustainability. We cannot necessarily wait for regulatory intervention to change; non-state actors are already leading and coalescing around goals and ideals to progress climate change and sustainability agendas.

The EU Commission’s 2016 winter forecast bulletin notes that the European economy is now entering its fourth year of recovery, and growth continues at a moderate rate, driven mainly by private consumption. In Ireland this growth is predicted to be between 3% and 4% in 2016 and 2017. Without market-wide eco-labelling and life cycle analysis for consumer products and services, it is not possible to determine the sustainability of this growth. We know from previous national statistics that excessive consumption can lead to significant wastefulness and other environmental burdens. The EU’s Eurobarometer survey of environmental attitudes notes that 94% of Irish people rate protection of the environment as fairly or very important, and 96% agree that they can play a role in protecting the environment.²² The governance challenge is to realise these declared intentions in displayed behaviours. The State must consider market interventions and other policy instruments that correct market failures, and also both direct and where possible “nudge” (through elective and, in time, normalised value-based decisions) consumption and production behaviours towards a more sustainable outcome.

Our conventional measures of prosperity (e.g. gross national product, GDP, value added) are of limited use in that they do not factor in elements such as environmental quality, social wellbeing, ecosystem services and drawdown of natural capital into any measure of economic and social progress and sustainability.

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22 www.ec.europa.eu/public_opinion/archives/ebs/ebs_416_fact_ie_en.pdf

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