



MEASURING SUCCESS

10X METRICS TO ACHIEVE A 10X ECONOMY

BASELINE REPORT 2022

OCTOBER 2022



NORTHERN IRELAND'S DECADE OF INNOVATION

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1. Introduction

In May 2021 the Department for the Economy (DfE) published its new economic vision, “10X Economy: Northern Ireland’s Decade of Innovation¹. The ambition set out in the economic vision is that a decade of innovation will encourage greater collaboration and innovation to deliver a ten times better economy with benefits for our businesses, our people and places across Northern Ireland. The 10X Vision aims to make a ‘generational change’. This means a Northern Ireland that has better jobs with better wages for all of our people, with a more flexible working environment and a better overall quality of life.

“Innovation is at the centre of our vision as it will unlock a higher number of better jobs. Innovation can mean different things to different people. Some may view it as the outcome of research; others as new technology. In its most basic form, innovation simply means the development of creative ideas and methods into new products or services. Innovation not only brings economic growth but it can transform ways of living by providing security online, improved medical treatments or reducing pollution. It can be harnessed to keep Northern Ireland relevant to the generational challenges we face today.

We want to give all our people the opportunity to participate in the changes that are being driven by innovation. In education and the workplace this means giving our people the necessary training, reskilling and upskilling in order to do so, both within existing and future growth sectors.”

Measuring progress on the delivery of this ambitious vision will be vital to success. We need to continually improve how we do things in order to deliver a stronger economy; one which provides opportunity for every person, from every background in every community across Northern Ireland. This Baseline Report establishes a coherent set of metrics that have been identified to chart our 10X journey. The Department has drawn from these metrics to establish a number of high level 10X objectives and targets. Those targets, alongside the comprehensive suite of metrics identified in this report, provide the basis for a new performance measurement framework which will shape all Departmental activities, the activities of our Arms Length Bodies (ALBs) and those of wider delivery partners. As we move forward to the next stage of delivery, this approach will be central to agreeing wider priorities and activities, including business plans.

¹ [10X Economy - an economic vision for a decade of innovation | Department for the Economy \(economy-ni.gov.uk\)](https://www.economy-ni.gov.uk/10x-economy-an-economic-vision-for-a-decade-of-innovation)

1.1 Measuring Northern Ireland's Performance on an International Stage

It is possible to make improvements in terms of economic performance, but still be 'left behind' if others improve faster. Therefore, in order to measure progress and achievement of the 10X Vision fully, we need to understand how Northern Ireland compares to the best in class small advanced economies from around the world.

A key objective of this Baseline Report is to show how Northern Ireland positions when compared to a group of 16 other small advanced economies, across a number of globally recognised metrics. These Tier 1 International 10X Metrics are underpinned by more granular Tier 2 Metrics as well as Tier 3 Programme-Level / Policy Metrics and KPIs.

The Baseline Report also tracks results over time, charting performance over a number of years (10+), to understand key trends, as well as progress made to date, in key areas.

This Baseline Report will be used as a reference point in subsequent years to measure outcomes resulting from delivery of the 10X Vision. It identifies any gaps in economic performance relative to others and will provide a foundation for policy areas to learn key lessons and make informed policy decisions while we are moving towards achievement of the 10X Vision.

2. Approach to Measurement

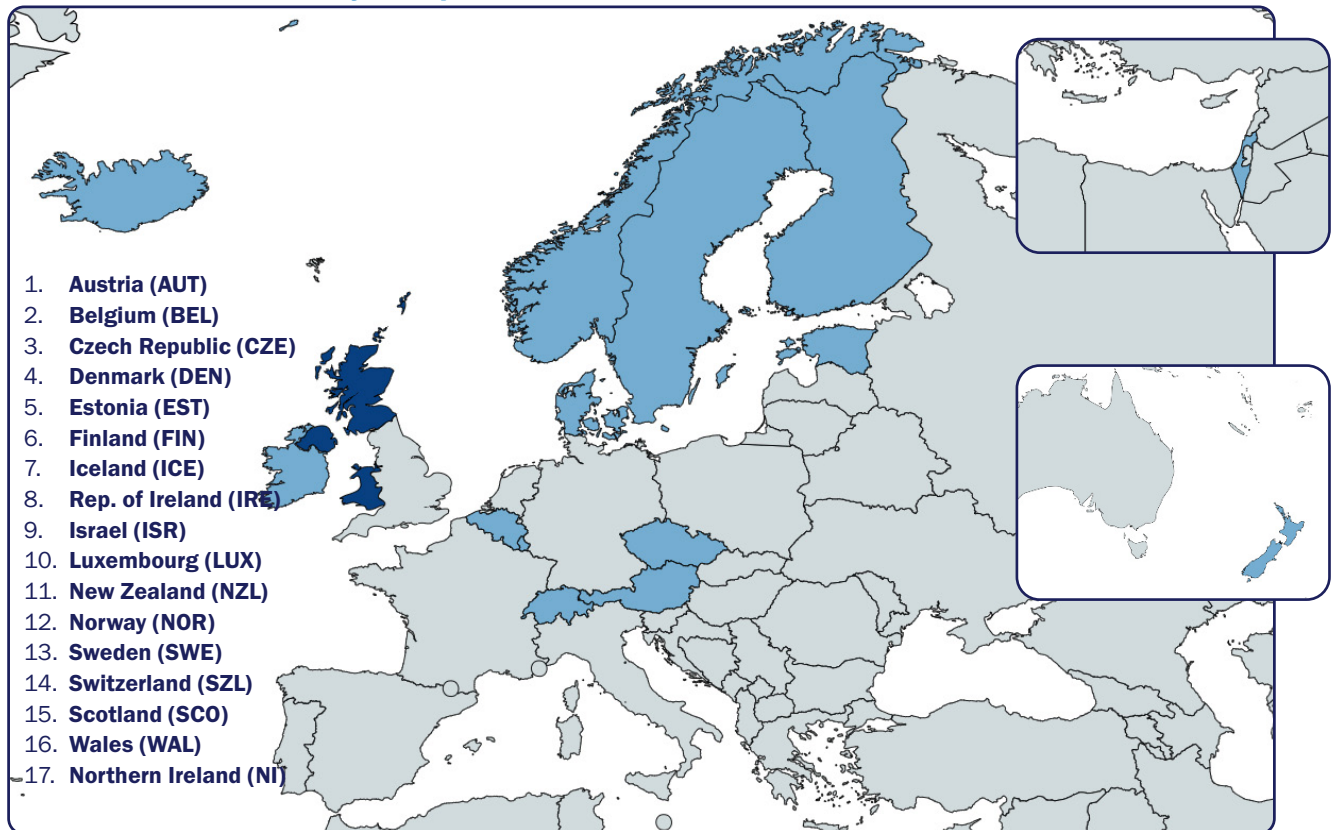
2.1 Small Advanced Economy Selection

In order to select economies for the small, advanced economy group, all 35 OECD economies were considered and a two-stage selection process was used to identify which economies could best act as benchmarks for Northern Ireland.

- 1. Size:** Northern Ireland has a relatively small population of 1.9 million. Therefore, in order to make reasonable comparisons, economies with a population greater than 15 million have been excluded as potential comparators. Using this eliminating factor 20 economies were then taken forward for consideration.
- 2. Competitiveness ranking:** a review of the two main competitiveness reports were carried out, the Global Competitiveness Index and IMD Competitiveness Yearbook. Whilst these both measure the level of competitiveness, the differences in methodology causes their rankings to vary. Therefore to overcome this, the rankings for both measures have been averaged to give a single ranking for each economy. Economies with an average rank of 35+ were then eliminated.

Applying this process brings the 35 OECD economies down to 14 small advanced economies which were taken forward for further consideration. There was merit in looking at the remaining UK regional economies as potential comparators. Scotland and Wales share many parallels to Northern Ireland such as working within a devolved administration and working with similar policy levers. Therefore, both these regions have also been brought forward for comparison. This gives 16 economies, against which Northern Ireland can be compared, thus giving 17 small advanced economies in total.

Small Advanced Economy Group

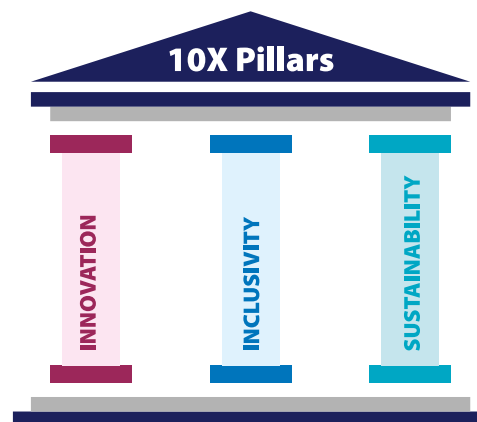


These high performing economies are characterised by active international engagement; strong, sustained investment in knowledge, innovation and human capital; as well as strong policy foundations that provide the support for economic success. These economies are also recognising that inclusive growth is fundamental to development and are taking steps that support innovation that is relevant to societal and environmental wellbeing.

Consideration was given to economies outside of the OECD centre (e.g. Singapore). However, it has not been possible to deliver directly comparable statistics which would permit inclusion in the analysis at this stage. The Department will work proactively to seek to include Singapore or indeed other relevant small advanced economies within the analysis as delivery of the 10X Vision progresses. The potential to include other regional (non-national) economies outside of the UK which have similar devolved powers or characteristics will also be kept under review. Of course, in terms of learning from other successful economies and applying this to Northern Ireland, we should not limit our horizons to this important group alone.

2.2 10X Vision Pillars

Innovation is essential for economic growth, resulting in the improved economic and social well-being of those living in Northern Ireland. However, research is showing that the benefits and opportunities resulting from greater innovation are poorly distributed across society. We must ensure we are taking the necessary steps that support innovation that will drive better social outcomes and promote opportunity for all.



Three separate pillars have been identified that capture the 10X Vision for Northern Ireland, covering innovation led, inclusive and sustainable growth.

2.3 Approach to Selecting International Metrics

We were cognisant and aware of approaches taken elsewhere. This included NESTA, the Brookfield Institute for Innovation, the Global Competitiveness Index, IMD World Competitiveness Rankings, EU Innovation Scorecard, University of Ulster Economic Policy Centre², WIPO Global Innovation Index and Landfall Strategy Group. A number of these organisations illustrated how Inclusive Innovation is being measured elsewhere and how other economies are ensuring new policies and programmes are delivering positive environmental outcomes across all of society.

We sought advice and guidance from experts in this field. In his research for the Department for the Economy, Dr David Skilling from Landfall Strategy Group examined a number of case studies of small advanced economies that implemented strategies to improve their economic competitiveness. There are some common characteristics, but they tended to vary around:

- Quantitative vs qualitative focus;
- High level vs detailed measures;
- Active vs passive metrics.

Dedicating policies and resources can involve tough decisions. The research finds that specifying metrics around priority areas can help to make the policy trade-offs clearer. However, the link between inputs and outcomes is directional rather than precise. Some care should be taken not to 'over-engineer' these metrics.³

² [Competitiveness-Scorecard-for-NI.pdf \(ulster.ac.uk\)](#)

³ [Research Bulletin 22/1 - Learning from Small Advanced Economies, to Drive 10X Performance \(economy-ni.gov.uk\)](#)

International benchmarking can be challenging, especially as we are comparing Northern Ireland, a regional economy, with different national and regional economies across the world. Therefore, when selecting metrics, we were mindful of our sources and ideally should meet the following criteria. Our Tier 1 International Metrics should be:

1. **Robust** and be able to withstand independent scrutiny;
2. **Accessible** so that stakeholders can understand what they reveal about performance;
3. **Creating a clear line of sight** so it is clear how our programmes and policies will move the dial;
4. **Timely** so that they can drive behaviours and tweak programmes/policies;
5. **Coherent** so they map well with other metrics of performance including those established via future Programmes for Government;
6. **Internationally comparable** so that we can understand our performance on an international stage.

We have given careful consideration to the data we have drawn upon, basing our findings on the best available data for the small advanced economy group, but international benchmarking can be complex, and such comparisons should be interpreted with some level of caution. The following are some common issues relating to data used in international benchmarking:

- Difficulty in achieving availability of comparable data across a wide range of countries;
- Difficulty in measurement using a common methodology across statistical authorities in different countries - even when economic data are organised by internationally agreed statistical standards, it should be noted that their implementation at national level can vary⁴;
- Figures for each indicator can fluctuate year-on-year due to a variety of reasons (and we should therefore not be overly concerned about short-term variability in some cases);
- Different areas of the world may experience different timings of economic cycles; and
- Issues relating to timeliness and lags in reported data – the latest data may be available for Northern Ireland before other countries, or vice versa.

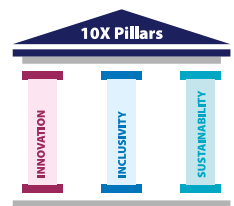
Covid-19 has also impacted the availability of data across selected metrics, with the most recent data for some indicators being the year 2018. However, while the timeliness of international comparisons might act as a constraint, we will continue to monitor the most up-to-date data on these indicators and indeed seek alternative sources where possible.

4 [WDI - Economy \(worldbank.org\)](https://data.worldbank.org/indicators)

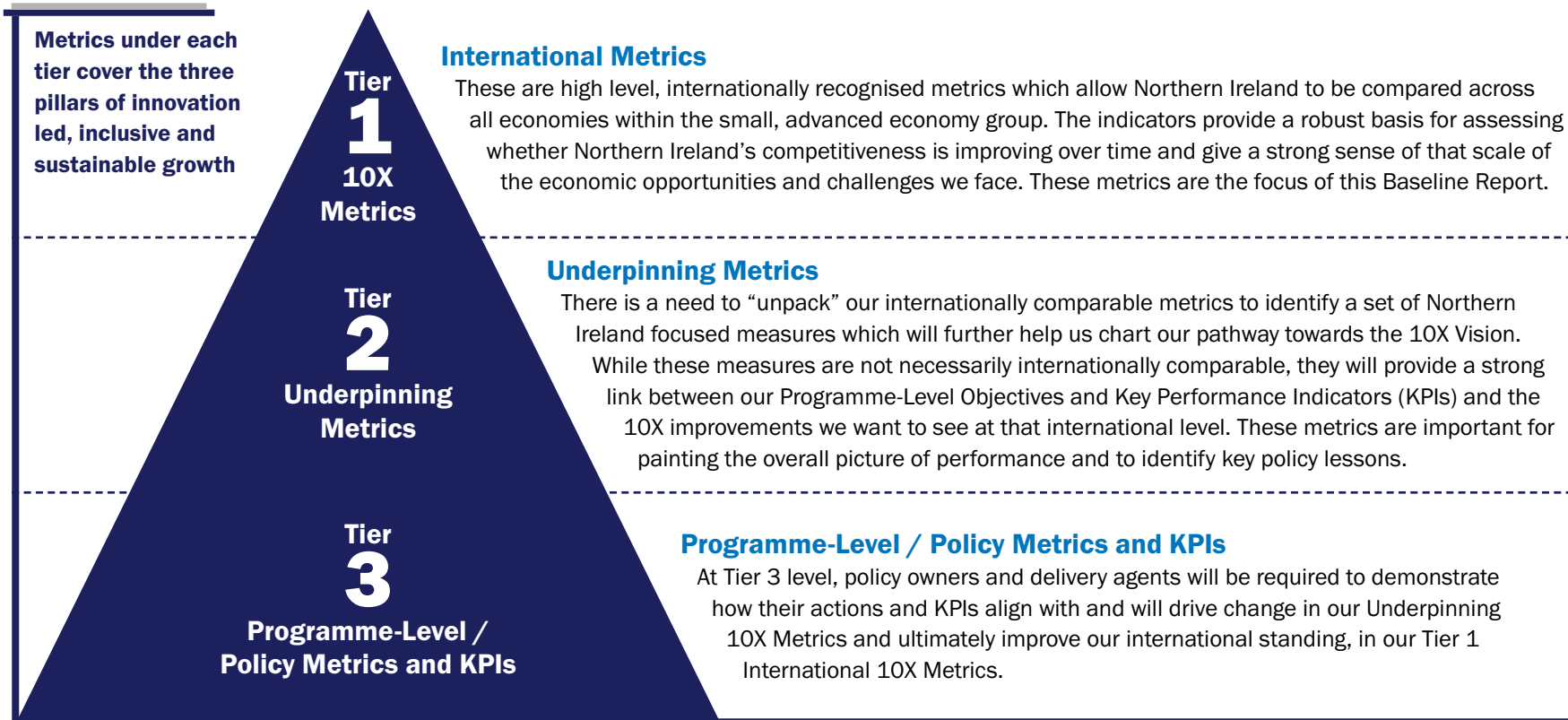
Our international benchmarking measures Northern Ireland's performance across a range of metrics and involves two primary methods. Firstly, we chart Northern Ireland's historic and current performance, tracking this over time (i.e. baselining) and in future years when more outturn data becomes available. Secondly, we compare Northern Ireland to the 16 small advanced economies highlighted above, measuring any performance gaps to other countries and establishing relative rankings (i.e. benchmarking).

2.4 Overview of Three-Tiered Approach to Measurement

The three 10X pillars have been used to steer the focus of the metrics selected. The metrics we choose will be critical for guiding our actions. It is important that they are framed in a context where there is sufficient clarity about policy priorities and what those policies are seeking to achieve. Similarly, they must facilitate sufficiently clear lines of sight between what our policies/programmes are seeking to achieve and how securing those achievements will turn the dial on our high level 10X Metrics. There are three tiers of metrics in our approach, which is illustrated below.



Three-Tiered Approach to 10X Measurement



The Department has drawn from these metrics to establish a number of high level 10X objectives and targets. Those targets, alongside the comprehensive set of metrics identified in this report, provide the basis for a new performance measurement framework which will shape all Departmental activities, the activities of our Arm’s Length Bodies (ALBs) and those of wider delivery partners. As we move forward to the next stage of delivery, this approach will be central to agreeing priorities and activities, including future business plans.

3. Tier 1 International 10X Metrics

The illustration below shows the ten indicators that have been included in our Tier 1 International Metrics. Each measure is important and links to the aims of the Department for the Economy. The 10X Vision states:

“There is genuine opportunity presented here to reshape the economy for the benefit of all of our people in a way that we have never before been able to achieve...

.....Achieving this aim will require us to tackle the deep and stubborn structural weaknesses that have held us back. There are too few higher paying jobs, we have relatively low levels of investment in research and development and challenging levels of economic inactivity. Northern Ireland also has longstanding low levels of productivity in comparison to the rest of the UK. This vision marks a change in understanding of how productivity improvements need to be delivered.”

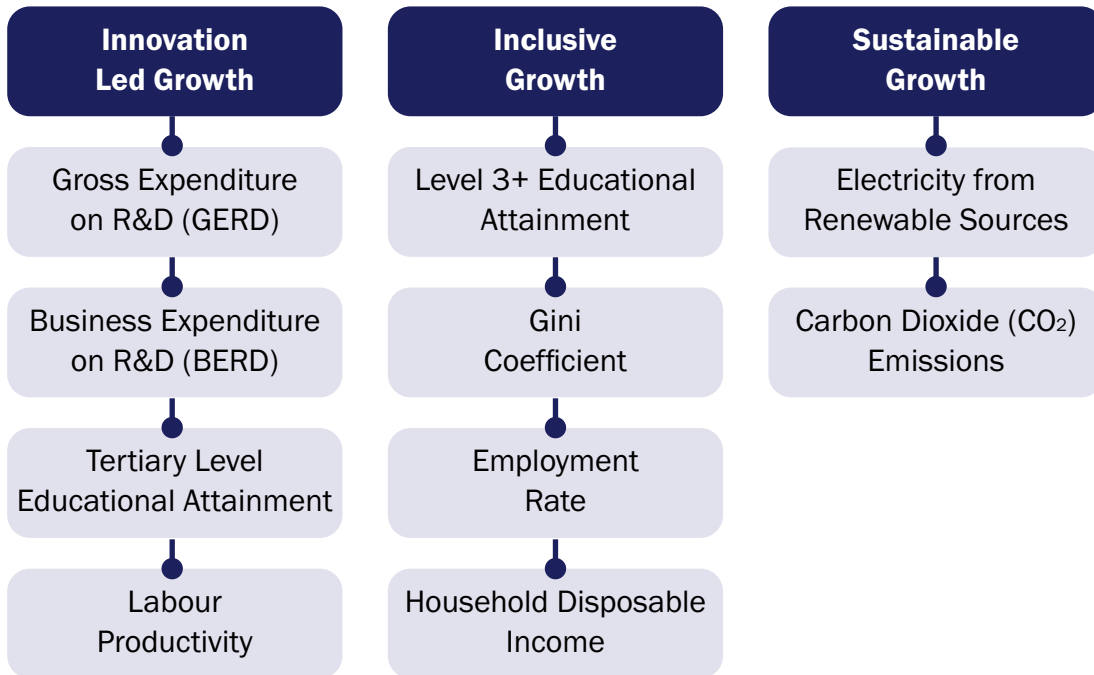
Narrow advancements on each of these indicators should not be at the expense of our wider aims. For example, we would not want a situation where we improve our innovation performance (say measured by R&D and productivity), but also experience a deterioration in our inclusivity or sustainability metrics (such as employment rate or CO₂ emissions). The metrics will act as a ‘dashboard’, alerting us to how Northern Ireland is performing across a suite of measures. This is especially important as the 10X Vision is one of a holistic improvement in people’s lives:

“A thriving and sustainable economy will have a positive impact on everything around it. Northern Ireland becoming internationally recognised as a thriving economy, will ultimately attract more visitors, and investors and encourage more of our talented people to stay here. A prosperous economy will, as a result, have positive spillover effects providing more opportunities for all our people. Success will not only be visible through economic growth, but this growth meaning something to all people and places in Northern Ireland, with positive impacts on wider societal and environmental wellbeing.”

When selecting these indicators, we have consciously avoided establishing one overall indicator or a composite indicator which seeks to distil these further. Often, for example, other economic strategies have chosen a top level indicator such as Output (Gross Value Added) per head to assess overall economic performance. Our concern is that, were we to go down that path, we would lose the focus of our triple bottom line reporting which seeks a balance between the three key 10X pillars of performance.

It should be noted that in future iterations of this work we plan to include at least one further tier 1 sustainability indicator which will capture the strategic ambitions of the Department in relation to the circular economy. Work is ongoing to ensure that, whatever additional measure is chosen, it is possible to compare our performance on an international stage.

Selected Tier 1 International 10X Metrics



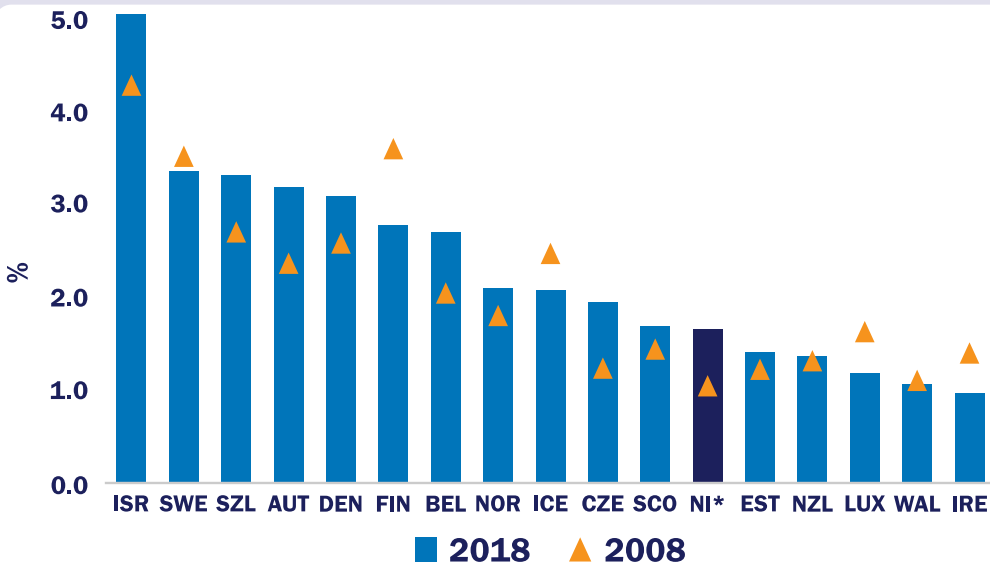
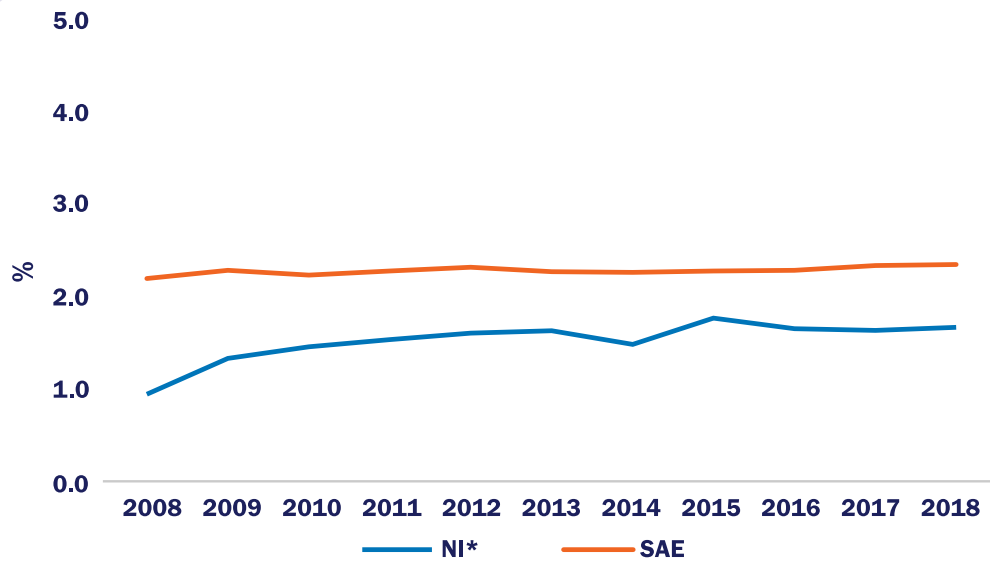
3.1 Innovation Led Growth Metrics

It has been recently announced that Business R&D (BERD) spending for UK regions, including for Northern Ireland, has been revised by ONS with the interim methodological improvements suggesting BERD is much higher than originally estimated. It should be noted however that this new upwardly revised data has not been incorporated into this Baseline Report because the Department wishes to better understand the interim improvements and impact this has had on Gross Expenditure on R&D (GERD), BERD and on Northern Ireland GDP figures. **The following analysis of GERD and BERD is therefore subject to revision in future.**

Gross Expenditure on R&D as a Percentage of GDP

Gross Expenditure of R&D typically totals the R&D spend across businesses, higher education and by government. Northern Ireland has improved since 2008 on this indicator. Northern Ireland outperforms economies such as Estonia, New Zealand, Luxembourg, Wales and the Republic of Ireland, but it should be noted that the Republic of Ireland is somewhat disadvantaged on this metric with its relatively high GDP levels (due to the presence of large multinationals and their impact on the output figures). Across the small advanced economy group, Israel, Sweden and Switzerland had the highest levels of Gross Expenditure on R&D as a percentage of GDP in 2018.

Gross Expenditure on R&D as % of GDP

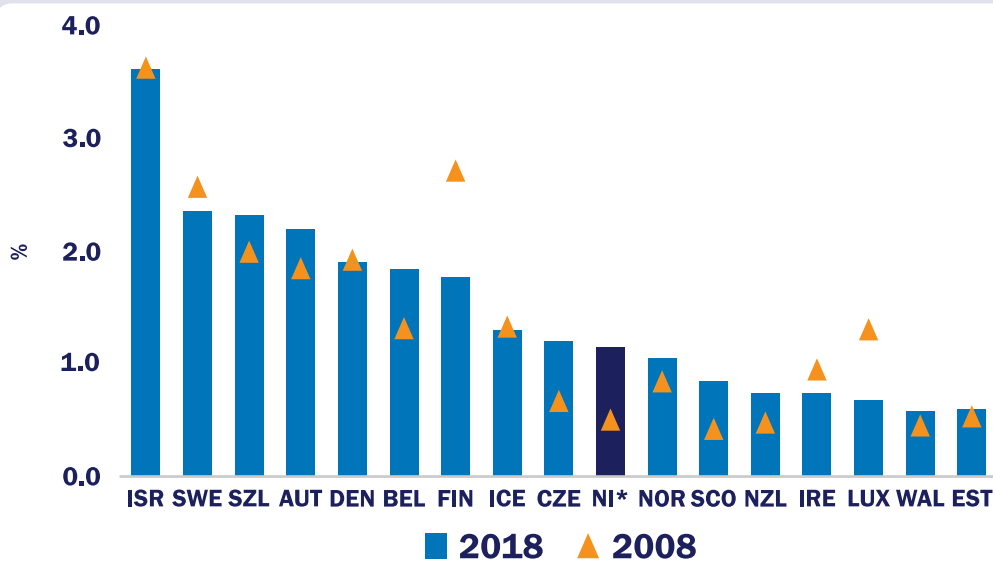
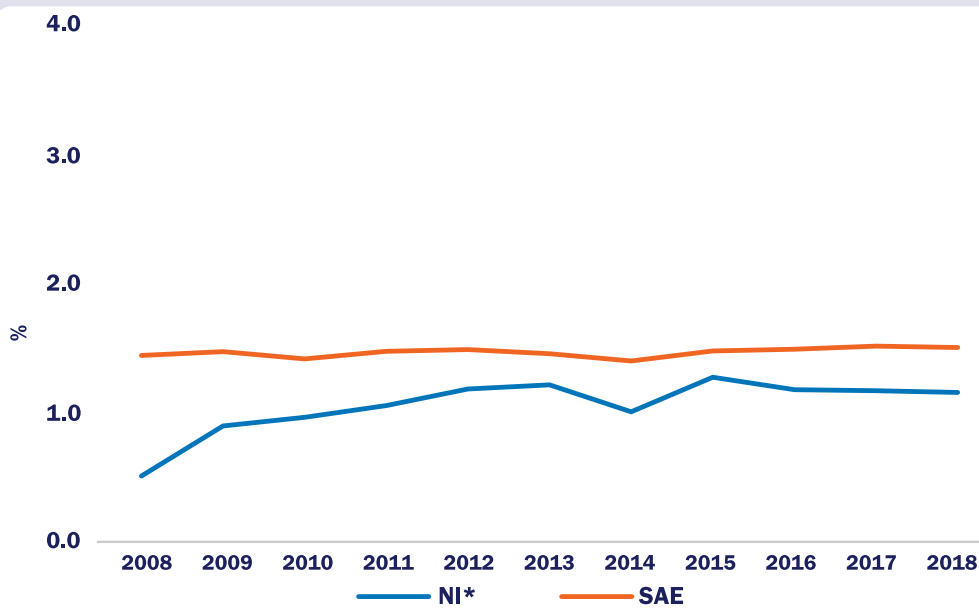


Source: OECD, WorldBank, *NISRA

Business Expenditure on R&D as a Percentage of GDP

Around 70% of Gross Expenditure on R&D spend in Northern Ireland comes from the business sector. In 2018 Northern Ireland ranked 10th out of the 17 economies on Business Expenditure on R&D as a % of GDP. Northern Ireland outperforms economies such as Norway, New Zealand and Wales. Israel leads the small advanced economy group by a substantial margin, having the highest BERD percentage in 2018 followed by Sweden and Switzerland.

Business Expenditure on R&D as % of GDP



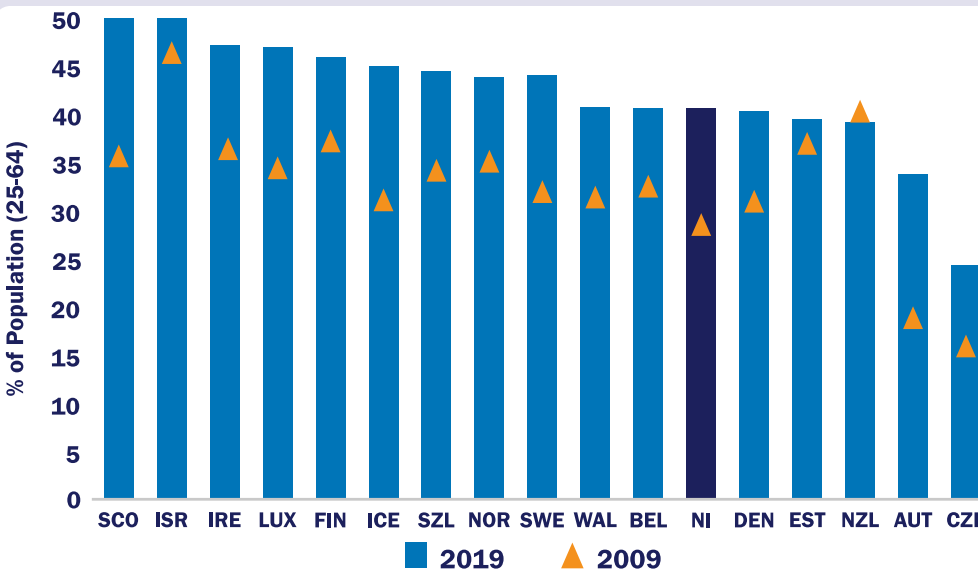
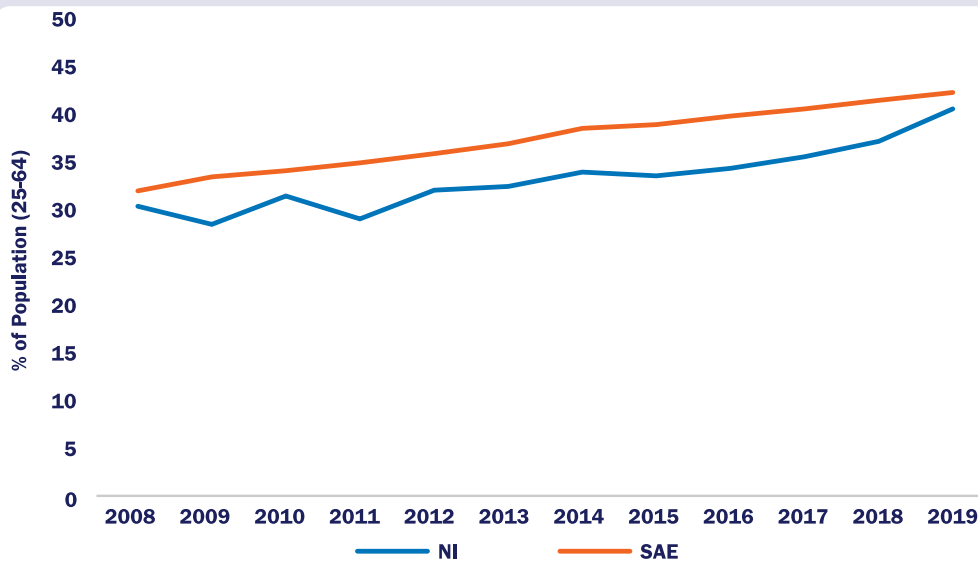
Source: OECD, WorldBank, *NISRA

Tertiary Educational Attainment Levels

Tertiary education tends to comprise attainment of level 5 (short-cycle tertiary education), level 6 (bachelor’s or equivalent level), level 7 (master’s or equivalent) or level 8 (doctoral or equivalent). The percentage of the population with tertiary education attainment levels in Northern Ireland, increased from 28.5% in 2009, to 40.6% in 2019. However, although there has been much improvement, Northern Ireland still ranks lower than most small advanced economies, placing 12th out of the 17 economies examined.

Northern Ireland performs better than Denmark, Estonia, New Zealand, Austria and the Czech Republic. Scotland, Israel and the Republic of Ireland have the highest tertiary education attainment levels, with approximately 50% of their populations (aged 25-64) attaining education at this level. Most economies analysed witnessed growth in tertiary education levels over the last ten years (2009-2019).

Percentage of Population (25-64) with Tertiary Level Education (Level 5-8)



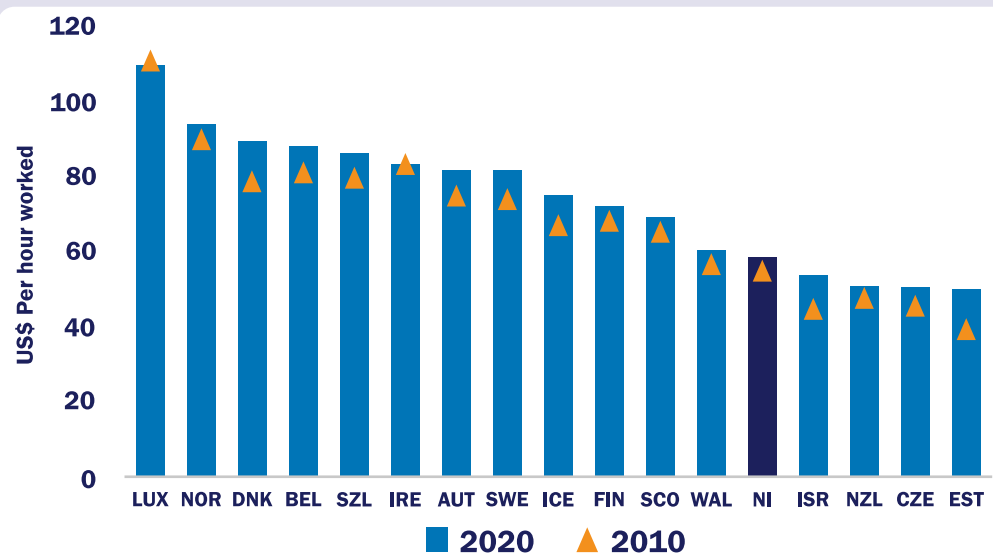
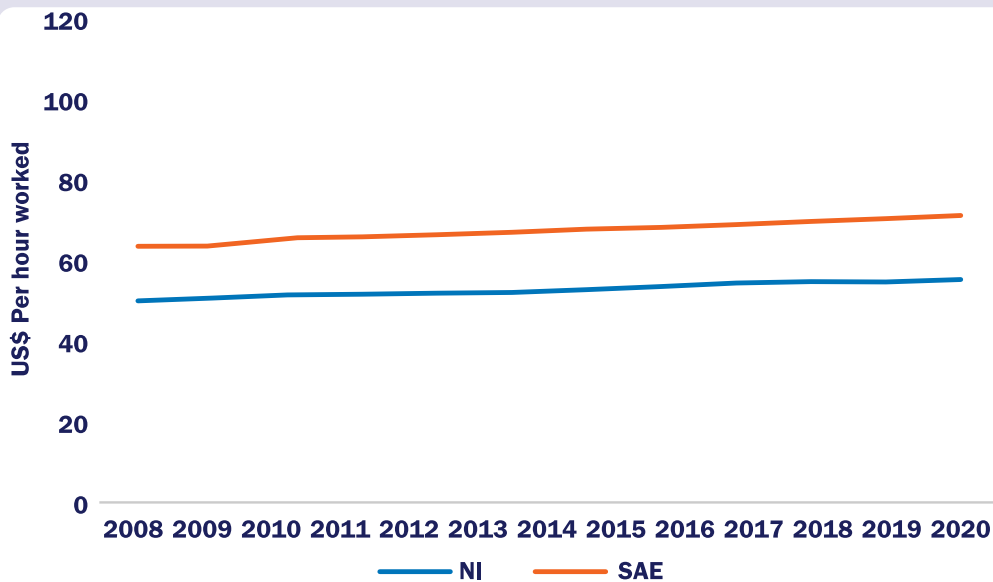
Source: Eurostat, OECD

Labour Productivity

Over the period 2010 – 2020, productivity per hour worked in Northern Ireland has followed a consistent and steady trend below the small advanced economy group; with Northern Ireland’s productivity 78% of the average in 2020, a similar gap seen in 2010 (79%).

Comparing Northern Ireland against the top performers, per hour worked productivity is some 88% higher in Luxembourg, 60% higher in Norway and 53% higher in Denmark. Northern Ireland ranks within the five least productive small advanced economies, above just Israel, New Zealand, Czech Republic and Estonia.

Labour Productivity



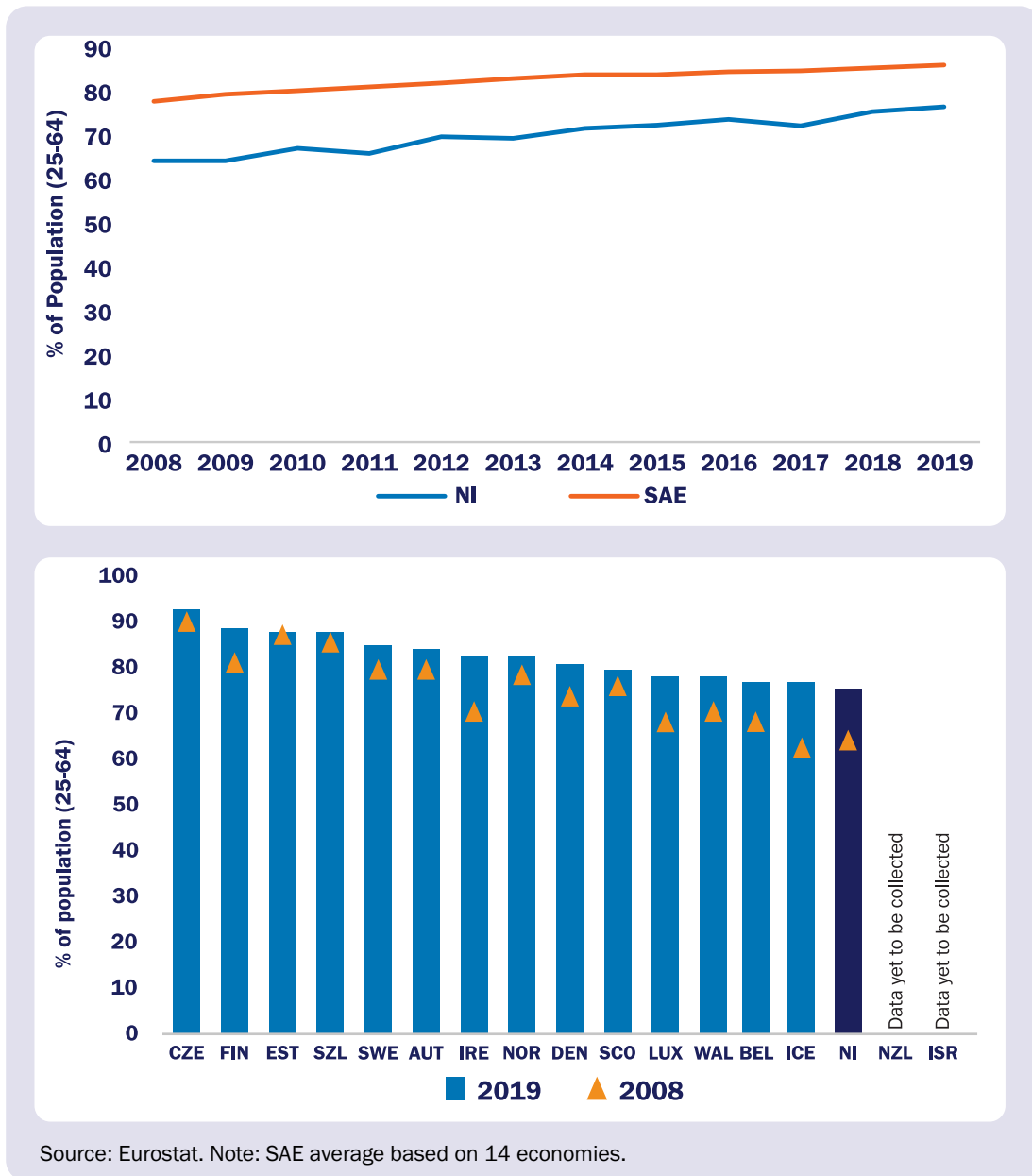
Source: Conference Board, ONS

3.2 Inclusive Growth Metrics

Percentage of the Population (25-64) with Level 3+ Education

The percentage of the population (aged 25-64) with at least upper secondary, post secondary or tertiary education (level 3-8) has increased in Northern Ireland, from 65.9% in 2009, to 76.2% in 2019. Figures for New Zealand and Israel are yet to be collated, but it is clear that the small advanced economy group outperforms Northern Ireland on this metric. The Czech Republic, Finland, Estonia and Switzerland all have educational attainment levels for level 3-8 at around 90% of the population (aged 25-64).

Level 3-8 Educational Attainment Levels



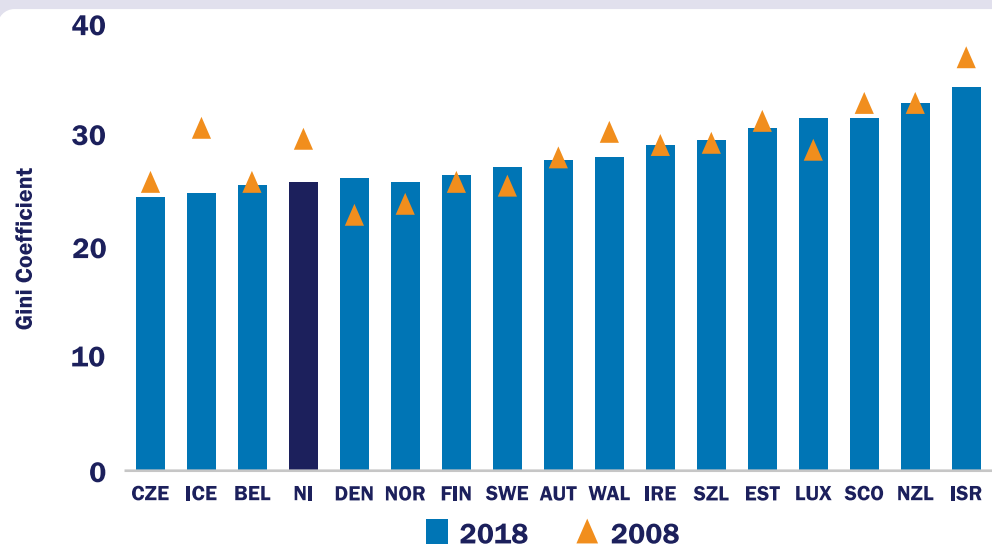
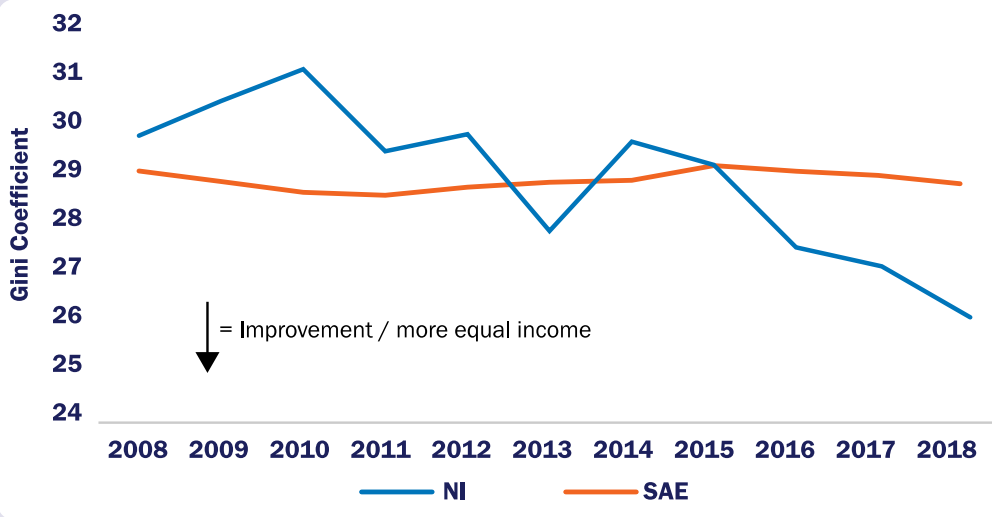
Source: Eurostat. Note: SAE average based on 14 economies.

Gini Coefficient

The Gini Coefficient is the most well-established measure of income inequality. A Gini Coefficient of zero means there is an equal distribution of income, whereas a number closer to one hundred indicates greater inequality. Therefore the lower the Gini Coefficient, the more equal that income distribution is considered to be.

Over the last ten years (of available comparable data), Northern Ireland’s Gini Coefficient has lowered (i.e. improved), from 29.8 in 2008, to 26.0 in 2018. We can see that Northern Ireland performs relatively well on this metric, ranking fourth in 2018, out of the 17 economies analysed. Only Czech Republic, Iceland and Belgium had a better / lower score. Over the last decade, Northern Ireland had the second largest fall (i.e. a move towards a more equal distribution of income) in the Gini Coefficient, just behind Iceland.

Gini Coefficient



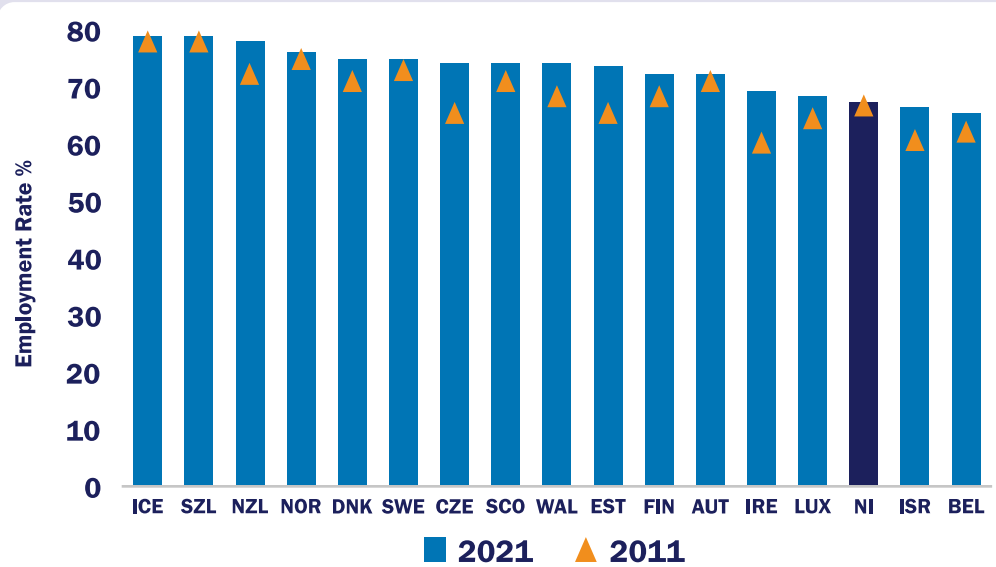
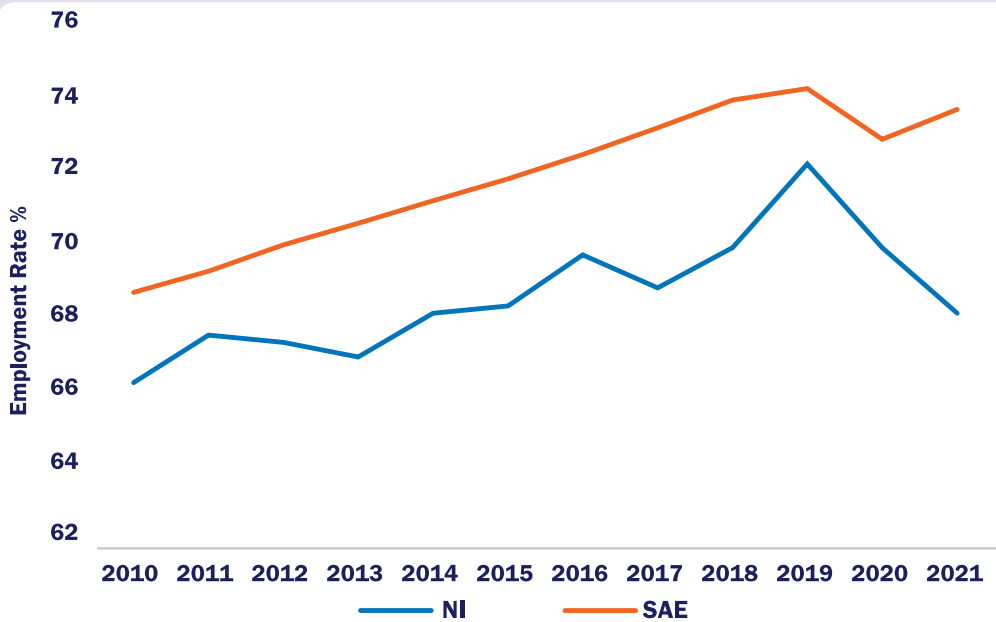
Source: OECD, DWP, DfC, IFS

Employment Rate

Northern Ireland has seen its employment rate increase, from 66.1% in 2010, to 72.1% in 2019, before declining to 68.4% in 2021. Overall, the percentage of the working age population in employment in Northern Ireland has lagged behind the small advanced economy average throughout the past decade.

Northern Ireland ranked 15th out of the 17 small advanced economies for 2021, with a higher employment rate than Israel and Belgium. Iceland and Switzerland lead on this metric, with their employment rates over 10 percentage points higher than Northern Ireland.

Employment Rate



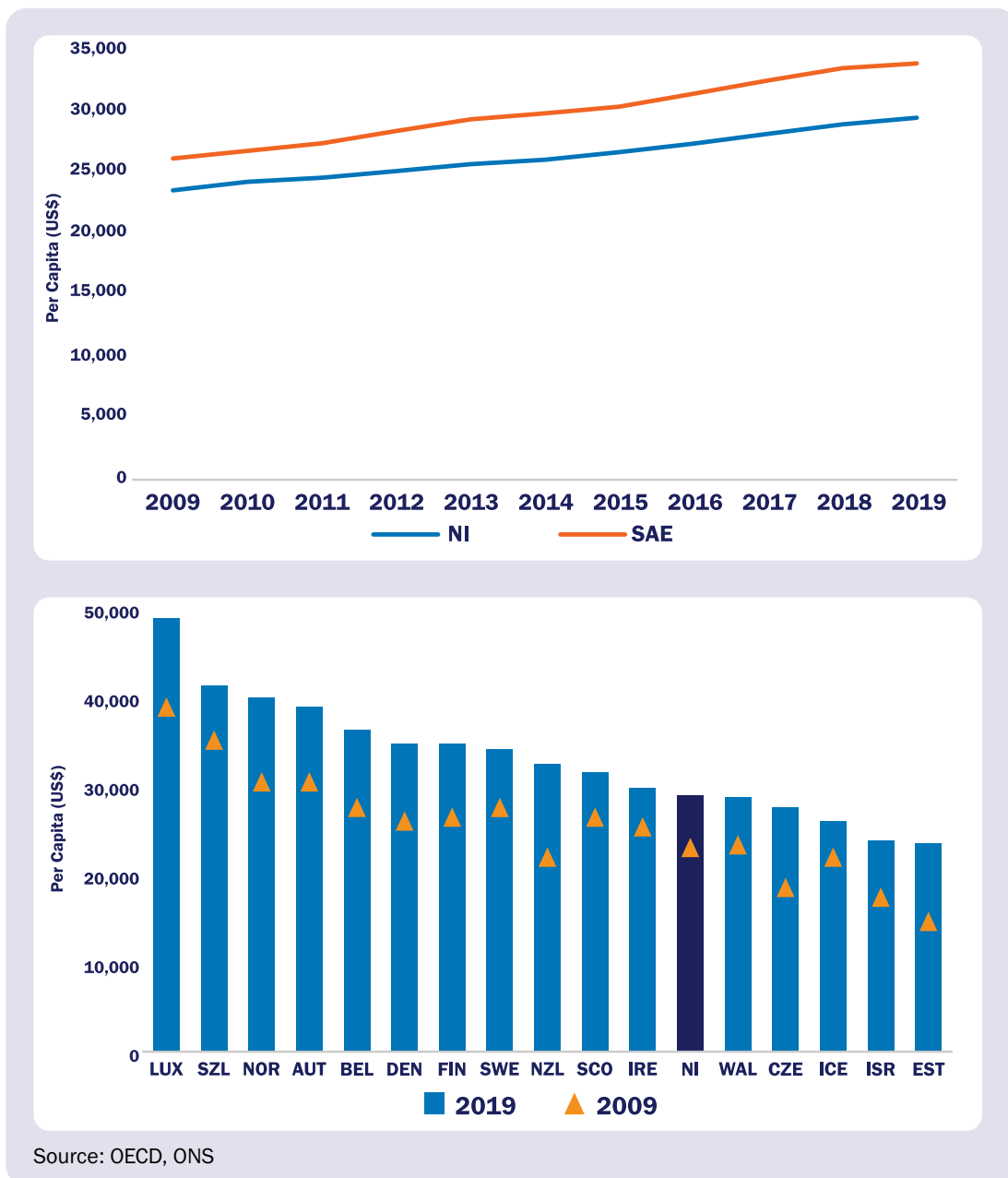
Source: OECD, ONS

Household Disposable Income

Household disposable income, per capita, in Northern Ireland has been consistently below the small advanced economy average over the period 2009-2019, with the latest year seeing Northern Ireland being 87% of the small advanced economy average. However, whilst noting this, it is still the case that since 2009 the Northern Ireland economy still saw an increase in household disposable income year-on-year.

Northern Ireland places 12th out of the 17 small advanced economies for 2018, outperforming Wales, Czech Republic, Iceland, Israel and Estonia on this metric and one rank lower than Republic of Ireland. Luxembourg, Switzerland and Norway rank within the top three economies on this metric.

Household Disposable Income



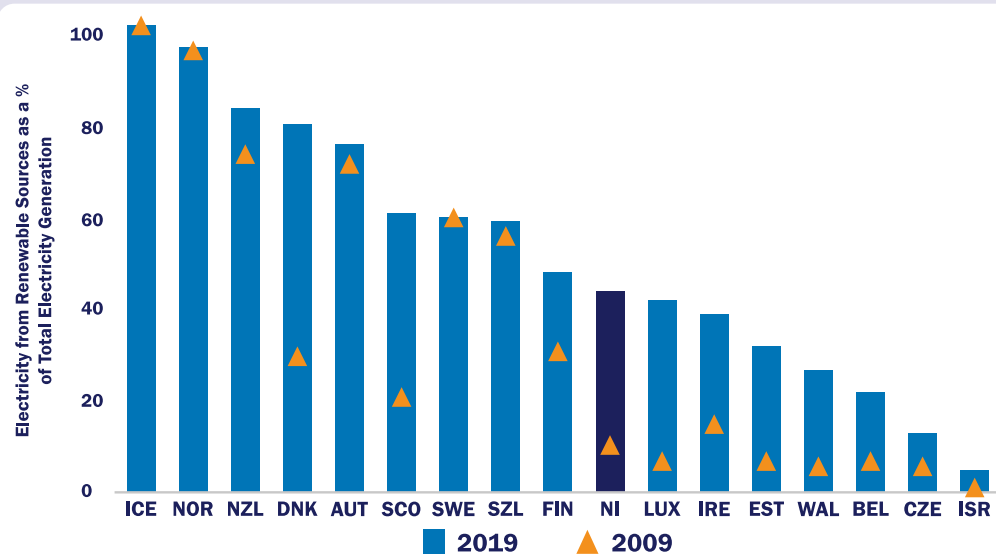
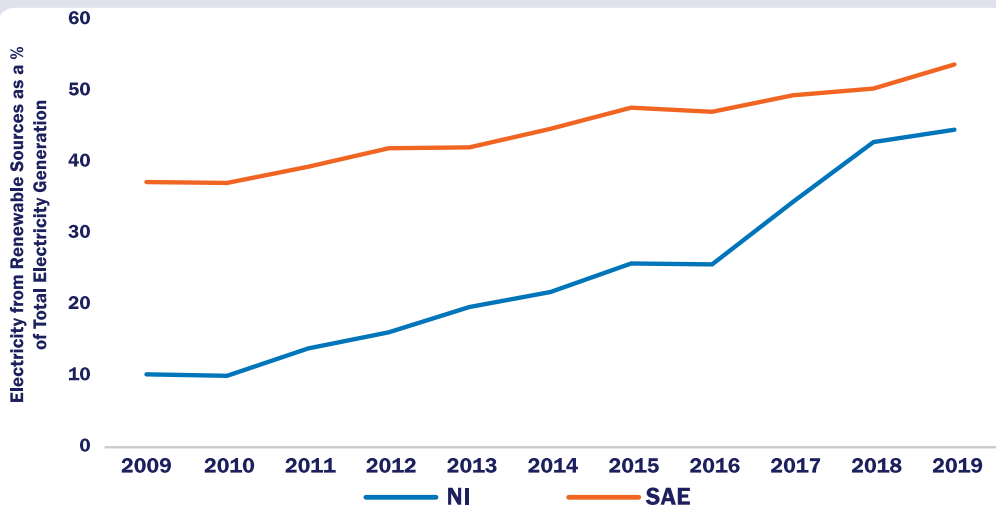
Source: OECD, ONS

3.3 Sustainable Growth Metrics

Electricity Generated from Renewable Sources

Northern Ireland has made significant progress on electricity from renewable sources as a percentage of total electricity generation over the years 2009-2019. In 2009 the Northern Ireland electricity generation from renewable sources was only around 10% of total electricity generation, but this increased to 44% in 2019. Northern Ireland ranked 10th out of the 17 small advanced economies in 2019, which placed it ahead of economies like Wales and Israel. Iceland and Norway place as top performers, with approximately 100% of electricity from renewable sources as a percentage of total electricity generation.

Electricity Generated from Renewable Sources



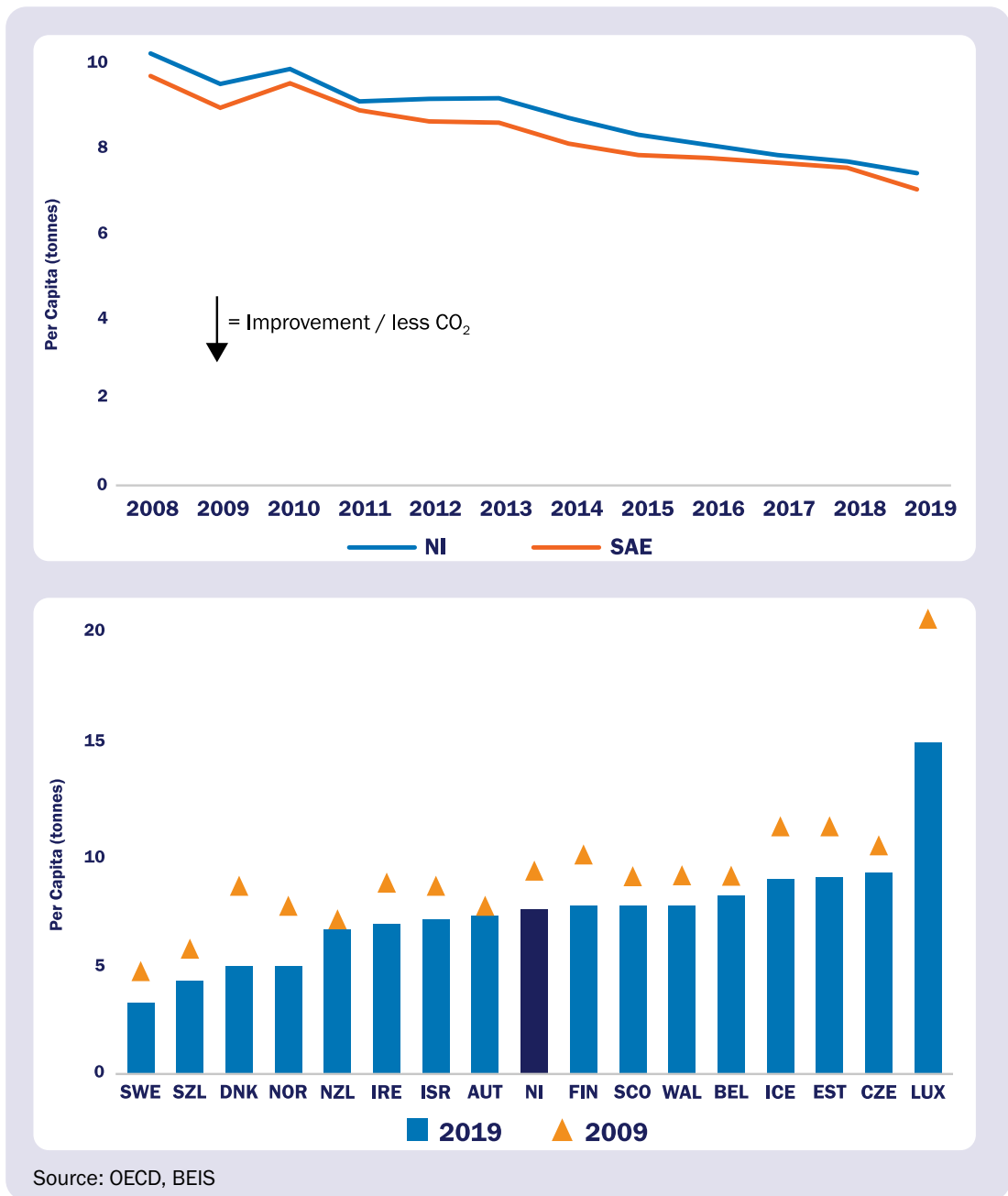
Source: IRENA, OECD, BEIS

Carbon Dioxide (CO₂) Emissions

Carbon Dioxide (CO₂) emissions, measured as tonnes per capita, have trended downwards over the years 2009-2019, for Northern Ireland and the other small advanced economies.

Northern Ireland performs relatively well in terms of the level of CO₂ emissions, ranking 9th out of the 17 Small Advanced Economies for 2019. Sweden, Switzerland and Denmark lead on this metric, although it should be noted that all the economies saw reductions in CO₂ emissions when compared to their 2009 levels.

Carbon Dioxide (CO₂) Emissions



Source: OECD, BEIS

4. Tier 2 Underpinning 10X Metrics

To move towards achievement of innovation led, inclusive and sustainable growth, the Department will measure performance on a global stage via our Tier 1 International 10X Metrics. However, we also need a number of Underpinning 10X Metrics to further help us chart our pathway towards the 10X Vision. While these metrics may not be internationally comparable, they will provide a strong link between our programme level objectives / Key Performance Indicators (KPIs).

Set out below is a list of provisional metrics under each of the 10X Pillars:, Innovation; Inclusiveness; and Sustainability. DfE now plans to undertake a period of consultation where views on the proposed metrics can be expressed. Evidence gathered from the consultation will be used to further streamline these to ensure we are selecting the most robust metrics that represent the 10X Vision.

As we assess our performance on an international stage we will also monitor our performance against these metrics to ensure the benefits of improvements are being felt across the board.

4.1 Proposed Tier 2 Metrics for Innovation Led Growth

Pillar	Tier 2 Metric	Rationale for Selection
INNOVATION LED GROWTH	Government R&D	Forms Part of GERD
	Higher Education R&D	Forms Part of GERD
	BERD by Geographical Location, Sector & Company Size	Help to inform the degree of comprehensive innovation
	Number of R&D Companies	Provides indication of whether more companies are engaging in R&D
	R&D Companies by (employee) size, ownership, location, sector.	Help to inform changes in R&D activity throughout the economy
	FTE of R&D workforce (Business)	Would indicate changes in business expenditure/priority of R&D
	Number of Innovation Driven Enterprises (IDEs) (subject to data availability)	Although difficulties persist in capturing this data - IDEs recognised as being important for future economic performance
	HE Income from Collaborative Research	Offers an insight into the health of ability of HE sector to pursue funding and probability of having better innovation outcomes
	HE Income from Business Interaction	Offers insight into the health of HE engagement with private sector
	HE Income from Community/ Other sources	Offers insight into the extent of continuing professional development, regeneration and development as well as Intellectual Property
	STEM Graduates	Offers an insight into the provision of skills that will assist in meeting the 10X Vision
	Median wage by skill level	Provides a breakdown of headline productivity data
	Labour Productivity by sector	Provides a breakdown of headline productivity data
	Number of Innovative Active Firms	Provides an indication of whether firms are actively seeking to increase productivity
	Innovation Accreditation	The Innovation Accreditation is designed to help companies who are not innovating to become innovation active and for those who are to assess their innovation capacity and to build on that up to the development and exploitation of R&D
	Entrepreneurship	Business start-ups and entrepreneurship levels important for growth
	High Growth Businesses	Monitoring the extent to which NI has high growth businesses will be an indicator of whether improvements in innovation and R&D are driving growth in our business base
	Exports	Growth in the value of sales, by local businesses, made outside the UK
FDI	Support externally-owned companies to invest in NI for the first time	

4.2 Proposed Tier 2 Metrics for Inclusive Growth

Pillar	Tier 2 Metric	Rationale for Selection						
INCLUSIVE GROWTH	Employment rate/ Gap by gender, age, disability, geography, MDM	<p>Inclusive growth is growth that is distributed fairly across society for people and place and creates opportunities for all.⁵ Ensuring more people in NI achieve qualifications at Level 2/3 and above and receive lifelong learning will help increase the employment rate and reduce the inactivity rate.</p> <p>The Department’s aim is to help people from underrepresented groups and places to:</p> <ul style="list-style-type: none"> - Skill up - Indicators 2 and 7 - Secure employment - Indicators 1 and 5 - Ensure they are equitably paid when in employment - Indicator 6 - Have ‘good quality’ work - Indicators 4 and 8 - Experience a fairer distribution of wealth - Indicator 3 						
	Proportion of the working age population with qualifications at Level 2 and above or Level 3 and above. Broken down by gender, age, disability, geography, MDM							
	Household disposable income by area, MDM	<p>It is proposed that the Tier 2 Indicators are analysed by sex, with / without a disability and by Deprivation quintile. This is due to the difference in employment rates that exist within these groups i.e.:</p>						
	Career progression by age, gender, disability, geography, MDM							
	Economic inactivity by gender, age, disability, MDM	<table border="1"> <thead> <tr> <th>Male Employment Rate (2020)</th> <th>Female Employment Rate (2020)</th> <th>Difference</th> </tr> </thead> <tbody> <tr> <td>75.3%</td> <td>66.6%</td> <td>8.7 p.p.</td> </tr> </tbody> </table>	Male Employment Rate (2020)	Female Employment Rate (2020)	Difference	75.3%	66.6%	8.7 p.p.
	Male Employment Rate (2020)	Female Employment Rate (2020)	Difference					
	75.3%	66.6%	8.7 p.p.					
	Disability and gender pay gap	<table border="1"> <thead> <tr> <th>Employment Rate – has disability (2019)</th> <th>Employment Rate – no disability (2019)</th> <th>Difference</th> </tr> </thead> <tbody> <tr> <td>37.3%</td> <td>81.0%</td> <td>43.7 p.p.</td> </tr> </tbody> </table>	Employment Rate – has disability (2019)	Employment Rate – no disability (2019)	Difference	37.3%	81.0%	43.7 p.p.
Employment Rate – has disability (2019)	Employment Rate – no disability (2019)	Difference						
37.3%	81.0%	43.7 p.p.						
Proportion of population aged 25+ who have engaged in education or training in the last 13 weeks. Broken down by gender, age, disability, geography, MDM	<table border="1"> <thead> <tr> <th>Employment Rate – most deprived (2019)</th> <th>Employment Rate – least deprived (2019)</th> <th>Difference</th> </tr> </thead> <tbody> <tr> <td>58.7%</td> <td>80.2%</td> <td>21.5 p.p.</td> </tr> </tbody> </table>	Employment Rate – most deprived (2019)	Employment Rate – least deprived (2019)	Difference	58.7%	80.2%	21.5 p.p.	
Employment Rate – most deprived (2019)	Employment Rate – least deprived (2019)	Difference						
58.7%	80.2%	21.5 p.p.						
Work quality Indicators for a ‘Good jobs’ metric	<p>To ensure that inclusive economic growth occurs across Northern Ireland, we will look at economic performance at a sub-regional level.</p>							

4.3 Proposed Tier 2 Metrics for Sustainable Growth

Pillar	Tier 2 Metrics	Rationale for Selection
SUSTAINABLE GROWTH	Energy-related greenhouse gas emissions	An indication of the environmental cost of supplying energy. Could be developed to include residential / business / public / transport / industrial.
	Household energy expenditure relative to all expenditure	Will provide a picture of how household pressures are changing. A newly created monitoring metric for the energy strategy which is not target-based, rather a measure to reflect how energy expenditure pressures on households are changing.
	Households in fuel poverty	Can be affected by changes in fuel prices or changes in income but it is useful for gauging the sustainability of the economy. A change in global fuel prices such as experienced recently or an increase in income levels will affect this.
	Business energy purchases relative to turnover	Will provide a picture of how business pressures are changing. A newly created monitoring metric for the energy strategy which is not target-based, rather a measure to reflect how energy expenditure pressures on businesses are changing.
	Employment in low carbon and renewable energy economy	Target in the Energy Strategy.
	Turnover in low carbon and renewable energy economy	Target in the Energy Strategy.
	Domestic / Industrial and commercial prices	Gives a picture of the performance of the NI economy with regards to electricity and gas prices.
	Energy efficiency indicators	A starting point to develop a metric for NI that would show energy use as a function of economic output.

Note that the following metrics have also been highlighted for the sustainable growth pillar, but are not shortlisted at this stage:

- Total amount of waste produced by sectors - household; commerce and industry; and construction and demolition;
- Amount of waste produced by sectors per unit of GVA;
- Carbon impact of waste - the whole-life impacts of waste including the benefits of prevention and recycling;
- Carbon emissions per £ of economic value;
- Waste arisings per capita;
- Household spending on product repair and maintenance;
- Patents delivered in circular economy products and services;
- Water efficiency per £GDP;
- Circular employment opportunities.

5. Next Steps

5.1 Future Monitoring of International Performance

This report sets out Northern Ireland's baseline position on the International 10X Metrics. Going forward, we plan to use outturn data each year to track Northern Ireland's performance. This will be used to inform policy and measure the success of the 10X Vision. This information, together with supplemental information from the Tier 2 and Tier 3 Metrics will arm policy areas and our delivery partners with strong evidence to ensure we have shaped our activities to drive the change in our performance that is necessary.

5.2 Way Forward for Tier 2 and Tier 3 Metrics

The proposed set of metrics at Tier 2 level underpin the Tier 1 International 10x Metrics and are also focused on innovation-led, inclusive and sustainable growth. The metrics will be discussed with a broad range of key stakeholders. The aim is to ensure DfE develops a suite of Northern Ireland focused metrics that fully capture and will support the policy decisions needed to help achieve the 10X Vision.

The Tier 3 Metrics have yet to be developed and determined. As a next step it will be important for our ALBs/delivery partners to set out the logic of how their work, business plans and the KPIs they set align with and will deliver the step change we want to see on our Tier 1 and Tier 2 metrics. This will be right at the heart of the Department's new 10X overall performance measurement framework which is discussed earlier.

To make forward on this front, we will conduct a pilot of our approach with Invest NI. As a major economic development delivery agent in Northern Ireland, Invest NI will play a pivotal role in the realisation of the 10X Economic Vision - helping to position Northern Ireland amongst the top small, advanced economies in the world. Invest NI works closely with local businesses and oversea investors to support business growth, promote job creation, and attract inward investment. This activity can undoubtedly drive performance across the three 10X pillars and it is therefore important to demonstrate that Invest NI programmes/policies and associated KPIs align closely with our 10X Vision and the metrics which underpin its performance.

This pilot approach will benefit the 10X workstream by allowing us to identify lessons learned which will support other policy areas / delivery agents as they also then align their metrics / targets to drive 10X performance

5.3 Further Research

Monitoring of performance on an international stage will highlight those countries who are outperforming Northern Ireland on different metrics. It is these economies where we can learn key lessons and practices. Therefore, in line with the 10X Research Programme for 2022-23 and Beyond⁶, DfE we will facilitate research into these countries to identify what lessons can be learned and how these can be tailored to Northern Ireland.

6 [Research Programme | Department for the Economy \(economy-ni.gov.uk\)](#)