Manufacturing 2023 Insights and 2024 Outlook

January 2024

Bank of Ireland

2023 - A year of contraction, lower inflation, economies defying gravity, strong employment, growing conflicts, complex geopolitics, the hottest year on record, a growing realisation that ESG carbon targets are under serious threat and Artificial Intelligence.

Contraction: Irish Manufacturing started 2023 on an asymmetric mix of optimism and caution. Optimism on the back of record performance in 2022, but caution as global demand slowed. EU manufacturing has been a full year in contraction, with sluggish demand and new orders, while Irish Manufacturing has fared much better with only moderate contraction coming off a record 2022 performance.

Lower Inflation: Interest rate hikes have had the desired effect with inflation falling back. The reality is though that input prices remain elevated and Manufacturing must have a laser focus on cost and margin improvement.

Economies Defying Gravity: Most commentators forecasted a global recession in 2023. Yet GDP growth was 3% (The Economist 17.12.23). Yes some economies like Germany did go into recession. However somehow US with high interest rates, defied the economic logic of high inflation reduces demand, which in turn increases unemployment. The opposite has been true.

Strong Employment: Employment has remained strong in 2023 in Ireland and US. However this is a lagging indicator and signs are that without a material upturn in demand, Manufacturing including Ireland will cut capacity. November 2023 EU PMI report[1] noted that "Employment falls for first time in almost three years as eurozone downturn continues"

World Conflicts: Ongoing conflicts in Ukraine and The Middle East with no clear pathway to resolution create huge uncertainty and trigger a slowdown in consumption and demand for goods. The Middle East crisis has opened a whole new supply chain uncertainty for manufacturing with container ships rerouting away from the Red Sea adding significant time and cost to manufacturing inputs.

Complex Geopolitics: 2023 saw an increase in the risks and uncertainties for manufacturing associated with geopolitics. A growing move away from globalisation to protectionism because "business trust" is broken, creates tension between trading partners. VUCA - Volatility, Uncertainty, Complexity, Ambiguity, is the new norm.

ESG and Climate Change: 2023 will go down has the hottest year on record. The urgency of the crisis is not matched by the pace of change. Carbon Targets are not on track and Intent to address is not matched by action.

Artificial Intelligence: ChatGPT, Generative AI and Large Language Models entered our collective minds in 2023.

Despite the challenges above, Irish Manufacturing has delivered a solid performance in 2023:

- 2023 Value of Irish exports are down YOY by 5% but up on 2021 by 21%[2]
- Corporation tax receipts totalled €23.8BN overall, up 5.3% YOY[3] with ca. €10BN attributable to Manufacturing
- MNC Employment stayed above 300K with 248 new investments[4]
- SME/Enterprise Ireland Employment grew 3% to 225K[5]
- Employment in Manufacturing stands at 271K+ up from 230K in 2018[6]
- Manufacturing are embracing the Green Agenda driven by MNC demands, and strategic imperative
- SMEs proven to be the engine of MNCs and Manufacturing growth

The optimistic view, sentiment and ambition is that Manufacturing contraction has hit a turning point and that 2024 will see a return to at best moderate growth. However the turning point is recent, weak and vulnerable to ever more risky geopolitics. A prolonged contraction, may trigger capacity reductions and a drop in employment levels cannot be ruled out.

Summary of Key Impacts

- **Geopolitics, Rise in Protectionism, Strategic Autonomy, Democracy:** This will continue as a complex picture of economies moving away from mutual benefit of globalisation to national gain of protectionism. It is impossible to predict how it will play out. 2024 will test democracy as an estimated 4 billion people in more than 50 nations - 50% of the world's population - will vote in national elections.[7] The outcomes are likely to shape global politics for years to come. Irish manufacturing is in a strong position to navigate the potential impacts of above given the deep roots of both the MNC and SME manufacturing community.
- **Brexit:** Exposed Irish Manufacturing has adjusted and there is no negative noise from enterprises specifically in connection with Brexit. The dominating narrative now is the impasse in NI and the "buyer's remorse" wider acknowledgment that Brexit has not worked and according a report from Cambridge Econometrics has cost the UK economy £140Bn so far. According to a Dec. 2023 NCSR (National Centre for Social Research) poll a majority are now in favour of re-joining the EU.[8]
- **Russia Ukraine & Middle East Conflicts:** Sadly both conflicts show no sign of resolution. Supply Chain logistics has been disrupted again with the effective closure of the Red Sea route(Table 1). This accounts for 15% of global trade will add 10- 15 days to shipping routes cost driving up manufacturing input costs.[9]

Table 1. Source: CNN Jan 2024

- **Factory Operations:** With the headwinds of energy inflation and labour shortages, Manufacturing response has been twofold. Behavioural and shift pattern changes to optimise energy usage (see more under ESG section) and an acceleration of the digital agenda and higher levels of automation.

1 PMI Releases (spglobal.com) Jan 2024
2 Goods Exports and Imports - CSO - Central Statistics Office Jan 2024
3 gov.ie - Exchequer surplus of €1.2 billion in 2023; tax revenue in line with expectations; Ministers McGrath & Donohoe (www.gov.ie) Jan 2024
4 IDA Ireland reports strong annual results for 2023 | IDA Ireland Dec 2023
5 Employment in Enterprise Ireland supported companies increases to a record 225,495 | Enterprise Ireland (enterprise-ireland.com) Jan 2024
6 Business Demography - CSO - Central Statistics Office Aug 2023
7 Half the World to Vote in 2024, With Global Ramifications (voanews.com) Jan 2024
8 Renatus Private Equity Weekly M&A Newsletter - 14/01/2024
9 How the Red Sea crisis could clobber the global economy | CNN Business Jan 2024

- **Predictable Unpredicability** has become the new normal.
- **Supply Chain Resilience** continues a top priority for manufacturing to maintain business continuity and protect reputation. The bittersweet news is that supply chain constraints are easing with Global Supply Chain Volatility Index GSCVI[10] at -0.44 down from peak "bottleneck" values in 2021 of >6. As noted above the latest body blow now playing out is the Red Sea blockage.
- **Inflation has eased from high of 7.5% to 2.5% in November 2023 but back to 3.2% in December11[11]:**
  - Pressure on SMEs to reverse earlier price increases
  - Consumers are justifiably pausing consumption as some big ticket items like EVs are falling in price
- **2023 Irish GDP Forecasts** ranged from widely optimistic to more data driven results as commentators repeatedly downgraded their outlook. In 2022 Irish Manufacturing delivered export growth of 26% and close to 40% of total GDP. Ireland delivered 9.4% GDP growth in 2022 of which Manufacturing contributed about 4%. Given the above dependency of the economy on Manufacturing combined with 5% lower exports, it is likely that the 2023 year-end outcome will be in the red zone (Table 2).
- **Purchasing Managers Index (PMI) data:** 2023 has been a year of contraction with latest December PMI at 48.9 driven by falling orders and lower production output. Higher risk adversity, tighter spending, elevated interest rates and muted business confidence all serve to amplify fears of an economic downturn in 2024.

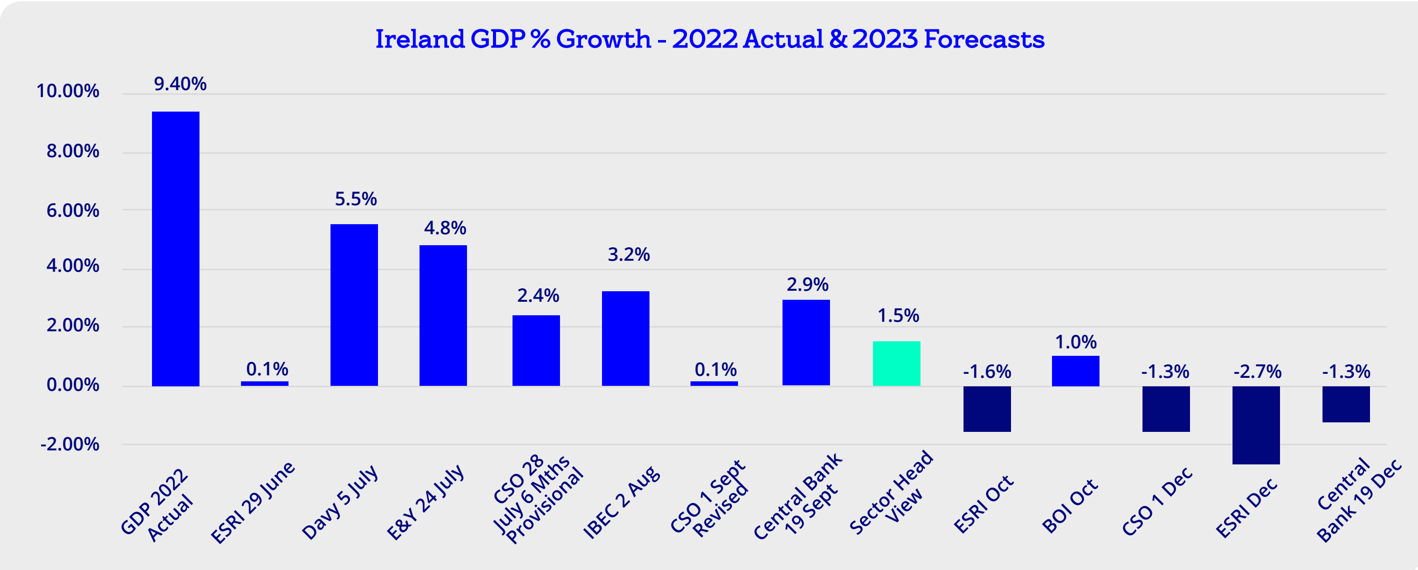

Table 2: Sources: CSO, ESRI, Davy, EY, IBEC, Bank of Ireland, Central Bank

- **Labour market shortages:** Economy is at full employment and shortages of key technical skillsets are still the case. These are being partly addressed with increased levels of automation, and in-house employee networks. Availability of affordable accommodation remains a key barrier to attracting talent and some business owners have become landlords. The "abundance" of manufacturing activity is not matched by infrastructure needs of housing, transport, grid capacity.
- **ESG, Digital and AI agendas gain momentum in 2023.** All driven by a combination of digital transformation, supply chain reconfiguration, ESG metrics, regulatory compliance and higher fuel costs improving payback periods for electrification and renewable sources.
- **Artificial Intelligence went mainstream in 2023:** ChatGPT, Generative AI and Large Language Models entered our collective minds and lexicons in 2023. It is the dominant theme of the 2024 World Economic Forum Annual Meeting at Davos. Global CEOs are excited about 20%+ productivity improvements, but that comes with heightened concerns around job losses, existential risk to humans and the pervasive increase in disinformation. The reality is that nobody can keep up with the pace of change but manufacturing must find ways of navigating the opportunities that AI presents which in the end are human centric and deliver Amplified Intelligence to their business.

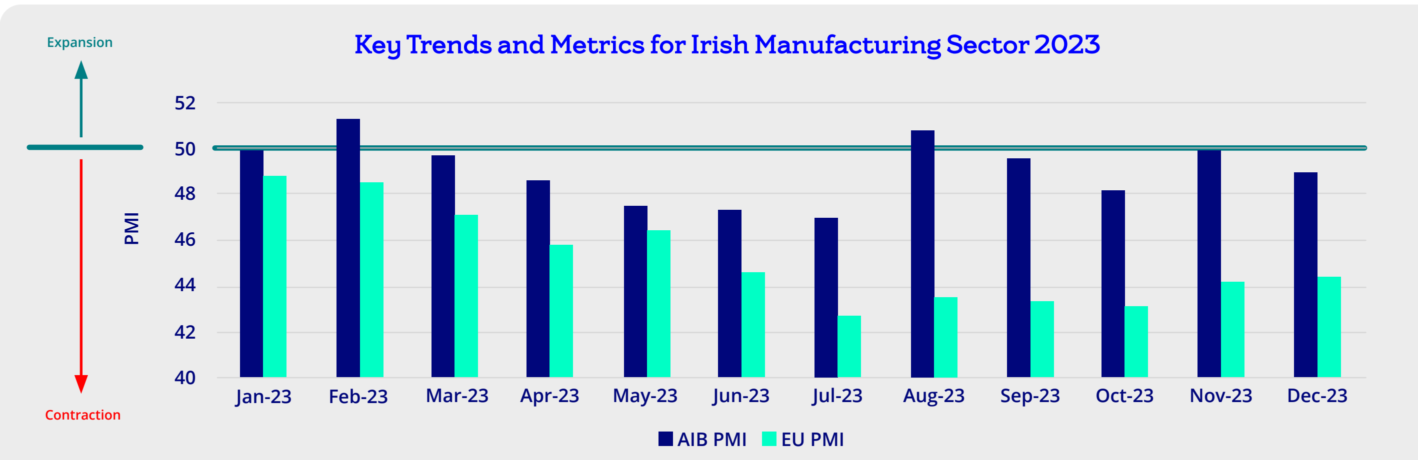

Table 3: Sources: PMI S&P Global Jan 2024

[10] Global Supply Chain Volatility Index | GEP Jan 2024
[11] Consumer Price Index - CSO - Central Statistics Office Jan 2024

Irish Manufacturing PMI

PMI is a survey of 250 manufacturing companies. A result greater than 50 represents expansion. Ireland has spent most of 2023 in mild contraction with an average score of 49. By comparison, our biggest market, the EU, has averaged much lower at 45 with significant new order decline and weaker demand. Latest data suggests a fragile upward turning point but this needs to be sustained into H1 2024 to avoid capacity adjustments and employment impacts (Table 3).

Global Supply Chain Volatility Index (GSCVI) (Table 4)

The GEP Global Supply Chain Volatility Index, based on data derived from a monthly survey of 27,000 businesses, has fallen from the dizzy heights of 6 to -0.44, or, its lowest level since May 2020.

This dramatic fall points to:

- Weaker **demand** for raw materials, commodities and components
- A lower **inventory** requirement to buffer above
- Reduced **material shortages**
- Easing of **labour** demands and risk of unemployment in sector rising
- **Transport costs** return to normal
- Downward **price** pressure

In summary the latest data signals persistent weakness in the global economy with recessionary conditions prevailing in Europe. While sentiment going into 2024 may be positive as data indicators slowly improve, it continues to be overshadowed by geopolitical shocks which show no sign of abating.

Imports and Exports, Industrial Output and Turnover [2,12]

Imports and exports performance are summarised in graphic (Table 5) for period Jan – Nov 2023. In totality imports were YOY unchanged while exports are down by 5%. Given that 2022 was an exceptional year driven by volume, inflation and spill over from 2021, this exports performance is actually very strong. It is up 21% when compared to 2021. The drop is concentrated in the Pharma sectors down 5% and Machinery down 14%. Markets impacted are US down 15% and China down 35%.

A similar picture emerges for Manufacturing production and turnover (Table 6). Total annual comparison January to November is negative reflecting the export profile. However traditional production output performed better than modern (including Pharma) at +5% production growth YOY.

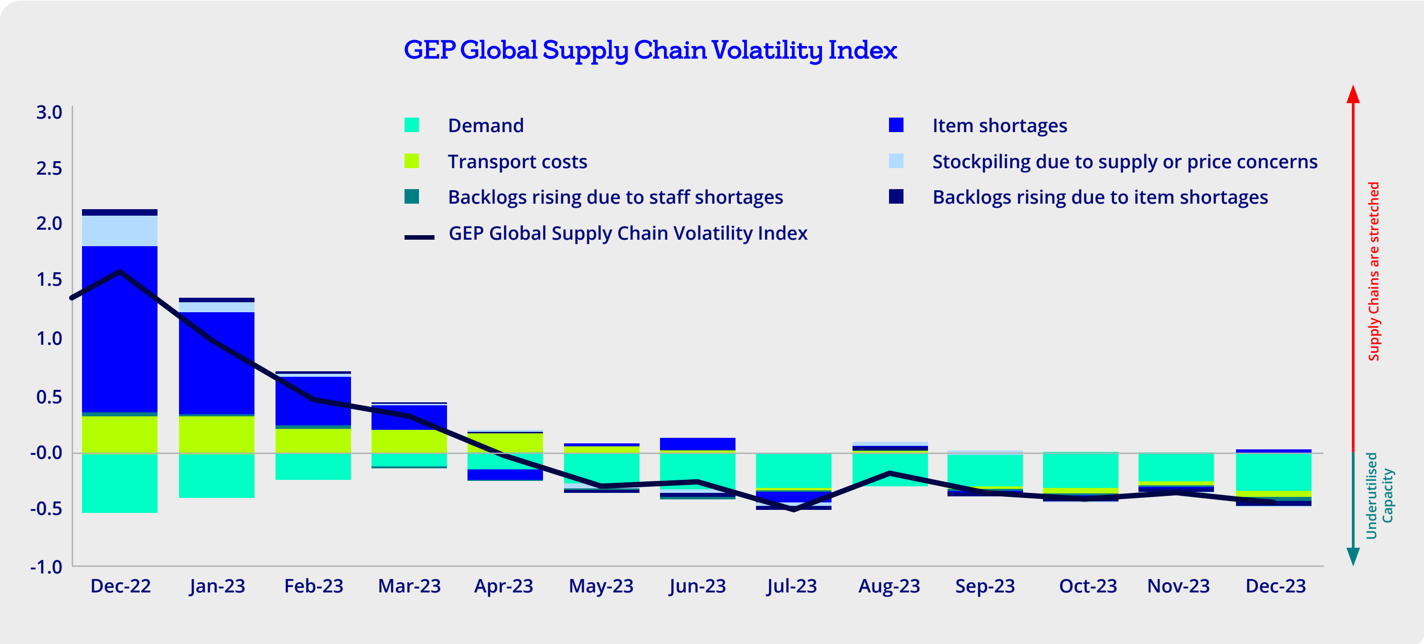

Table 4: Sources: GEP, S&P Global Jan 2024

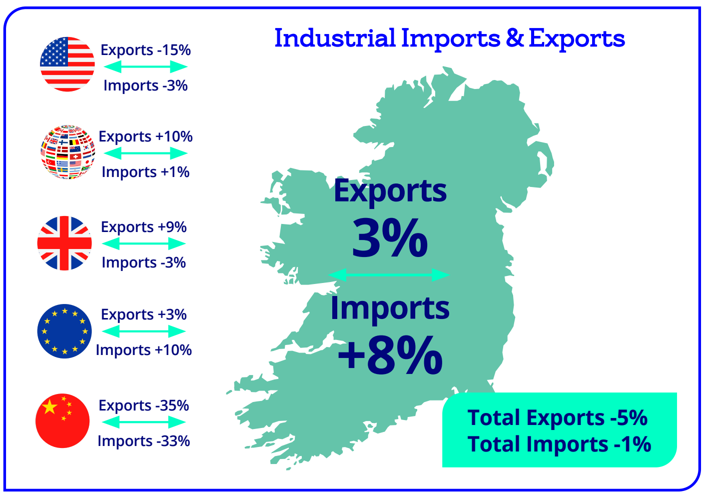

Table 5. Source : CSO

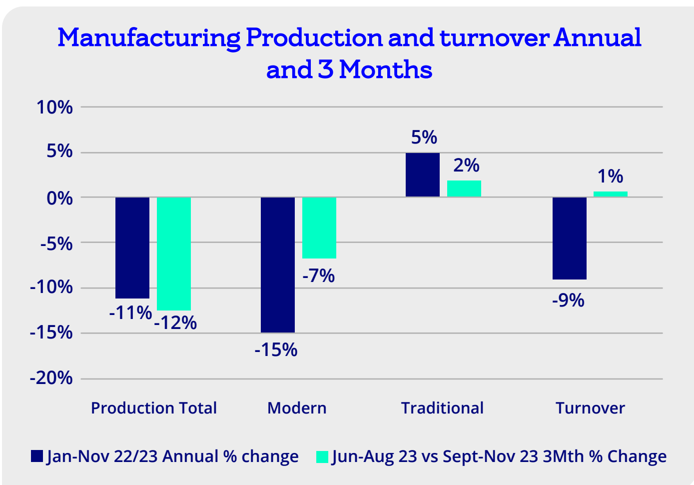

Table 6: Source: CSO Jan 2024

[12] Industrial Production and Turnover November 2023 - CSO - Central Statistics Office Jan 2024

Manufacturing Input Price Inflation [13,14]

Inflation (HICP) has eased in 2023 from 7.5% in January down to 2.5% in November but reversing upwards to 3.2% in December. While this is good news, the reality is that manufacturing input prices continue elevated when compared to pre Covid-19 levels. See tables 7 and 8 below.

Lithium pricing drop is welcome and driven by EVs gaining volume. Natural gas is still double pre Covid 19 levels. Freight has spiked again in January due to Red Sea closure and there will be renewed upward pressure on oil which uses this route. Wage inflation is likely to continue in the short term given shortages and some of the 2024 tax reliefs taking effect may slow further downside in inflation. The implication of these softening of inputs costs is that SME customers, MNCs and OEMs will exert pressure to crawl back some of the earlier pricing increases given.

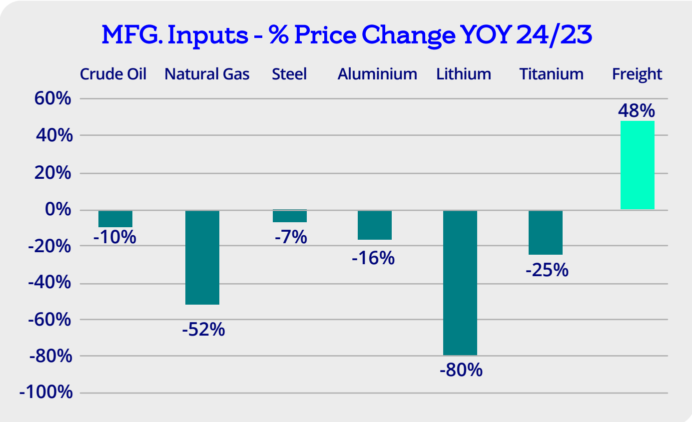

Table 7. Source: Tradingeconomics Jan 2024

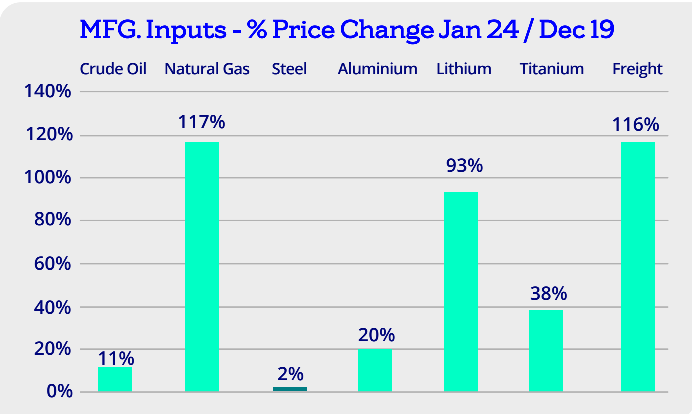

Table 8. Source: Tradingeconomics Jan 2024

ESG - 2023 the year when Carbon targets are mandated for Ireland - Intent needs Action

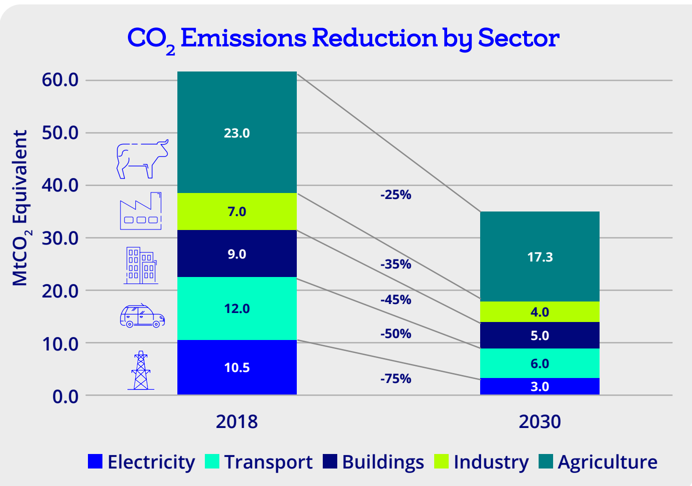

Table 9. Source: gov.ie press release Nov 2022

2023 was the year when compliance with carbon targets was no longer optional as it became a legal and regulatory requirement.

Carbon targets published on 28th July 2022 for Ireland are shown in Table 9. Manufacturing accounts for about 12% or 7 $MtC0_2e$ (Million Tons Carbon Dioxide Equivalent) of total emissions and the 2030 target is a reduction of 35% to 4 $MtC0_2e$.[15]

The reality is that progress in Ireland has followed a similar pattern to the global one and so it is imperative that intent now turns to action as the 2030 target hill to climb will only get steeper and more expensive as 2030 draws closer.

Key Actions to reduce Carbon Footprint in Manufacturing

Carbon Neutral Energy Sources	Electrification & Logistics
• Heat pumps, SolarPV, Biomass • Grants support upto €162,600 from SEAI • Energy Management Systems • Process heat recovery systems for energy intensive processes • Renewable Electricity to increase from 40% to 80%	• EVs for logistics internal and external • Localise suppliers • Bulk and consolidated transport • Maximise transport utilisation with no empty routes
Supply Chain Scope 3 Emissions	**Energy Efficient, Digital and Automation Capex Program**
• Pareto suppliers by carbon impact • Transparent supply chains in accordance with code of conduct	• Upgrade assets to Best available technology (BAT) • Automation • SMART and data driven process steps • Artificial Intelligence
Waste Mgt. and Circular Economy	**People Power**
• Mindset of zero waste • Zero polluting emissions • Migrate from linear business models to circular ones across product portfolio • Design intent for circularity • Circularity to increase 2% to 10%	• ESG is embedded in DNA and Strategy of organisation • Power of green behaviour • Like safety ESG is everyone's responsibility • Measure, track, communicate progress with clear KPIs

[13] Commodities - Live Quote Price Trading Data (tradingeconomics.com) Jan 2024
[14] Drewry - Service Expertise - World Container Index - 18 Jan Jan 2024
[15] gov.ie - Government announces sectoral emissions ceilings, setting Ireland on a pathway to turn the tide on climate change (www.gov.ie) Nov 2022

In its recent publication, "Climate Action – A Toolkit for Business"[16], IBEC together with Accenture have provided a practical Climate Action Toolkit which outlines five steps:

1. Calculate Carbon Footprint
2. Mobilise and prioritise actions
3. Commit and set targets
4. Implement
5. Measure and Communicate

Step 1 involves the identification of Scope 1, 2 and 3 emissions shown in table 10.[17] The requires a number of key steps:

1. Choose a **base year**
2. Set the **business boundaries**
3. **Categorise** the emissions
4. **Data** collection
5. Apply **Emission factors** (SEAI)
6. Calculate **GHG emissions**

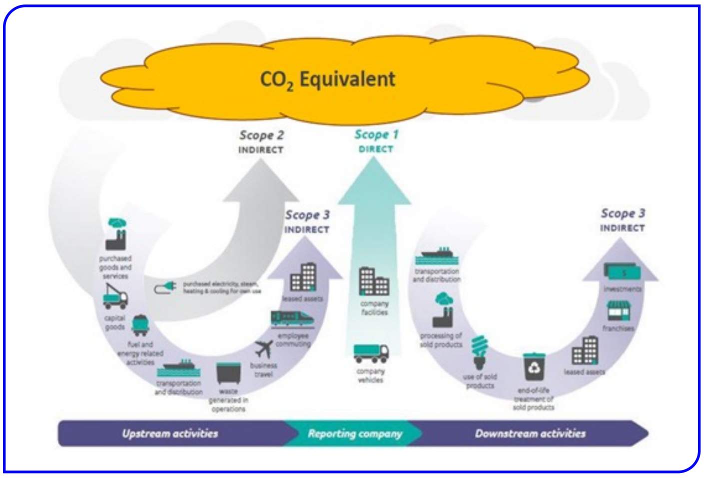

Table 10. Source: EUSME Centre Jun 2023

In addition to above, a key opportunity for Irish Manufacturing to reduce its carbon footprint, is to maximise their circularity. Move from the linear take, make waste to embracing the 9R's as per table 11 which shows that maximum Green benefit is achieved when material is designed out of a product while minimum benefit is achieved from recycle and recover, as carbon effort for both is high, relative to the gain.[18]

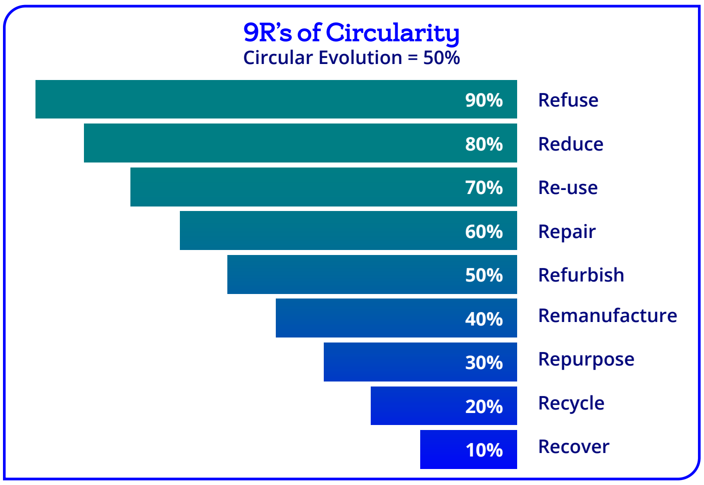

Table 11. Source 9Rs of Circular Economy Aug 2019

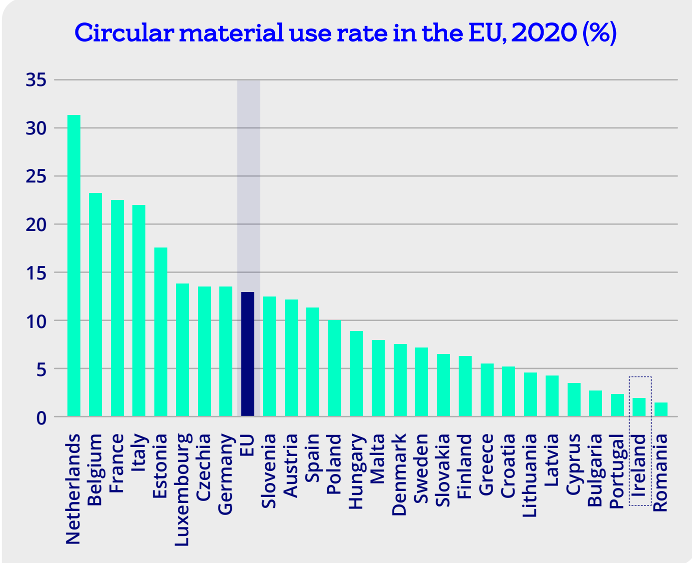

Table 12. Source dataset: Statistics | Eurostat (europa.eu) Nov 2023

Table 12 shows that Circular Economy in Ireland accounts for less than 2% of materials consumed getting a second life when compared with the EU average of 12%.[19] So the only way is up and represents a huge opportunity for Irish Manufacturing to pivot away from linear models. Currently at a global level the value of circular business is less than 10% of a typical linear business model. According to research paper "Financing in an inclusive circular economy", Schröder & Raes, Chatham House, the value of the electronics industry is estimated at $2,000BN, whereas the E-waste market is valued at $42BN or just 2% of the linear model.[20]

There are many challenges to transition to circular economy, including awareness of benefits, funding availability, return convenience at end of first life and perhaps what feels like "self-cannibalisation" of existing linear models. The good news is that Irish Circular Economy Act became law in July 2022 providing for the development of a Circular Economy (CE) strategy, a Fund, targets to increase current level sixfold and a levy on certain single use items e.g. Paper Coffee Cups.

As awareness grows and consumers vote with their wallets, more and more players will become active and raise their profile in this space. Apple offer trade in for older devices and Nokia have just offered a new smart phone with a repair kit as per table 13.[21] In addition to all of above Manufacturing should also consider independent accreditation to validate their green credentials. Options include the B Corporation ESG standard[22] or Excellence in Energy Efficiency Design (EXEED) certification in process with SEAI.[23]

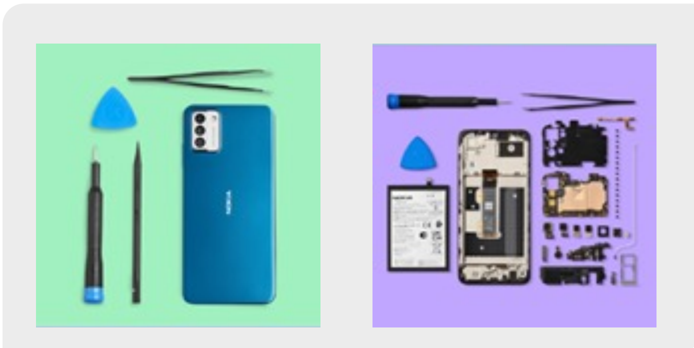

Table 13. Nokia Repair Kit Dec 2023

16 Climate Action A Toolkit for Business - IBEC Jun 2023
17 Carbon Footprint Reduction and Energy Efficiency for SMEs in China | EU SME Centre: China Market Research, Training, Advice | Get Ready for China Jun 2023
18 How Can One Achieve Sustainability By Embracing 9R's Of Circularity? | by Shweta Singh | Medium Aug 2019
19 Statistics | Eurostat (europa.eu) Nov 2023
20 Financing an inclusive circular economy | Chatham House – International Affairs Think Tank Jul 2021
21 Making self-repair simpler (nokia.com) Dec. 2023
22 Evolving and adapting the B Corp Certification performance requirements based on stakeholder and community feedback (bcorporation.net) Dec 2023
23 EXEED Certified Program | Business & Public Sector | SEAI Dec 2023

ESG Compliance Reporting Overview

ESG Compliance reporting kicks into gear in 2024. The main directives are summarised below with links for more detailed information, which companies should review to determine scope and timing for reporting.

Directive	Purpose	Timing	More Information
Corporate Sustainability Reporting Directive (CSRD)[24]	Enhance disclosure of environmental data	January 2024	Corporate Sustainability Reporting - DETE (enterprise.gov.ie)
Carbon Border Adjustment Mechanism (CBAM)[25]	Avoidance of Carbon Leakage and to regulate import of carbon intensive materials	October 2023	Carbon Border Adjustment Mechanism - European Commission (europa.eu)
Due Diligence Directive (CSDDD)[26]	Due diligence of supply chains for environmental and human rights issues	Under review in EU	Corporate sustainability due diligence - European Commission (europa.eu)
German Supply Chain Due Diligence Act (GSCDD)[27]	Due Diligence specific for companies with significant presence in Germany	January 2024	German Supply Chain Due Diligence Act (SCDDA) explained - IBM Blog

Reasons to be Optimistic about a Greener Future in Manufacturing

- Over 6970 Companies including BOI are signed up to the Science Based Targets Initiative (SBTi)[28]
- The economics of renewable energy fuels continues to improve with grants for Solar conversion recently increased to upto €162,500 for businesses.[29]
- Wind energy electricity accounted for 35% of needs in 2022, a saving of €2Bn for gas and will continue to scale subject to planning and grid constraints.[30]
- Ireland has experienced over 45% growth for EVs YOY.[31]
- Triggered in part by energy inflation and security of supply, 2023 has seen a noticeable uptick in Manufacturing embracing the Green Agenda:
  - Behavioural Changes – shift planning, switching off, energy cost awareness
  - CapEx projects in renewable energy sources – heat pumps and solar panels
  - Avail of Government supports
  - Marketing their "Green credentials" with customers

In summary, while the targets remain daunting and challenging, and pace is still too slow, a lot is happening to move the needle. More and more businesses recognise ESG as a strategic imperative for value creation and survival. Under the new Corporate Sustainability Reporting Directive (CSRD) obligated companies must disclose detailed information annually. While this kicks in from 2026 for SMEs, many will bring this forward to meet the demands of their customers and to be "report ready" when legally required.

[24] Corporate Sustainability Reporting - DETE (enterprise.gov.ie) Dec 2023
[25] Carbon Border Adjustment Mechanism (europa.eu) Dec 2023
[26] Corporate sustainability due diligence (europa.eu) Dec 2023
[27] German Supply Chain Due Diligence Act (SCDDA) explained - IBM Blog Dec 2023
[28] Target dashboard - Science Based Targets Dec 2023
[29] Business Grants & Supports | Business & Public Sector | SEAI Dec 2023
[30] Wind farms supplied 35% of electricity in 2023 (rte.ie) Jan 2024

Funding Activity in the Sector

- Bank of Ireland Business Banking 2023 drawdowns are marginally behind level of 2022 reflecting:
  - Caution in the sector given the uncertain macro-economic environment and ongoing geopolitical risks
  - High and significantly increased deposit balances YOY
  - High interest rate environment
  - Relief from higher working capital needs given improved supply chain dynamics
  - Demand for funding continues to fall and is down 4 points (20% to 16% of firms) YOY according to last credit survey of 1,500 SMEs that was released in September 2022.[32]
  - M&A deal volumes are down 7% YOY overall from 453 to 419.
- Funding was dominated by terms loans, asset finance, green capex, followed by M&A and MBO transactions.
- There is a wait and see element on interest rates and for funding options which offer lower fixed rates and are green related.

Survey Roundup - Business Sentiment is higher for 2024 than 2023

Despite the complex and high risk geopolitical backdrop as we start 2024, many surveys show that CEOs and businesses are surprisingly more positive than this time last year. Perhaps a function of survey timing - before Middle East crisis and Red Sea blockage – shocks are never far away but here are four highlights:

KPMG 2023 CEO Survey:[33] High Optimism

Table 14: Source: KPMG Nov 2023

PWC 2024 27th CEO Survey:[34] "CEOs are twice as likely to expect the global economy to improve this year compared to last year"

IBEC Manufacturing Survey:[35] "Manufacturers are cautiously optimistic about the current business environment compared to last year"

2024 Eurochambres Survey:[36] Business Confidence up on 2023

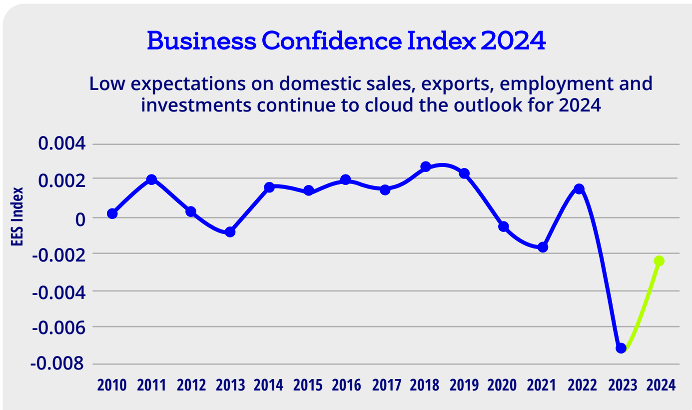

Table 15: Source: Eurochambres Nov 2023

[31] Ireland improves in the drive to EV adoption | Carzone News Jan 2024
[32] gov.ie - Credit Demand Survey April 2022 - September 2022 (www.gov.ie) Jan 2023
[33] CEO Outlook 2023 - Survey of business leaders - KPMG Ireland Nov 2023
[34] Thriving in an age of continuous reinvention | PwC Jan 2024
[35] Manufacturing Report - Ibec Nov 2023
[36] Eurochambres Economic Survey 2024: persistent challenges and economic climate set to limit business growth next year - Eurochambres Nov 2023

Manufacturing 2024 Outlook and Beyond - Optimism despite growing cloud of Geopolitics with a laser focus on costs and margins.

Tailwinds 2024

- Irish Manufacturing is hugely resilient with enormous positive dividends gained by shocks of COVID-19, Brexit and Ukraine serving it well to navigate the uncertainties of 2024.
- SMEs continue to benefit from MNCs reconfiguring their supply chains to local and more secure partners
- SMEs have benefited from vertical integration changes in response to supply chain headwinds.
- The shocks of energy inflation and shortages are accelerating conversion to Greener alternatives.
- Latest PMI data indicates a fragile trend in direction of growth.
- Inflation impacts are receding but customers are seeking to reverse increases.
- FDI activity remains buoyant and will support growth.
- Manufacturing is embracing ESG and rate of adoption is increasing as funding grants increase

Headwinds 2024

- PMI, Exports, Industrial output and GDP data all point to slower demand and recessionary caution.
- The risks pf geopolitics complexity and 2024 election results will overshadow the macro-economic landscape.
- Supply chain pain is back on the agenda with logistic cost spiking upwards as a consequence of Red Sea blockage.
- Rising input costs, including materials, minimum wage, social costs will weaken competitive profile and must be countered with a laser focus on business costs and margins.
- Labour shortages and competition for certain talent in a tight market continues.
- Interest rates reduction forecasts for 2024 may be over optimistic, thereby stymying investment appetite.
- There may be capacity adjustments in certain sectors depending on how macroeconomics plays out.
- Infrastructure of transport, housing, utility grids need to match Manufacturing ambitions and not be a barrier to growth.

The fundamentals of Irish Manufacturing continue strong. The optimistic view, is that Manufacturing contraction here and in EU has hit a turning point and that 2024 will see a return to moderate growth. However the turning point is recent, weak and vulnerable to ever more risky geopolitics. Manufacturing may indeed find itself navigating a downward adjustment in capacity and employment levels until customer orders start to rise in the medium term. The short term will be sharp focus on cost and margin management.

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Conor joined Bank of Ireland in 2021. He is an accomplished senior executive and brings with him significant business and manufacturing experience gained both In Ireland and internationally. He has a strong track record of business plan delivery, scaling and turnaround and is an expert practitioner in Lean thinking, supply chain best practice and cost management in the Manufacturing sector.

Conor held various senior positions in Cargotec, a global manufacturer of Industrial Equipment for Cargo handling and transport having worked in Ireland, China and Finland.

Prior to Cargotec, Conor worked in the automotive sector with Iralco Automotive and Magna Donnelly in Ireland and Opel AG in Germany. He holds an MBA from Michael Smurfit School of Business, a Mechanical Engineering Degree from UCD, and a Diploma in Business Coaching from Smurfit Executive Development.

Sources: CSO, Gov.ie, IBEC, Bank of Ireland, The Economist, S&P Global, Irish Times, Guardian, Europa.eu, statista, SBTi, tradingeconomics, ACEA, ECB, ESRI, SEAI, IDA, IMD, DETE, PWC, KPMG, E&Y, GEP, CNN, Renatus, Enterprise Ireland, Irish Manufacturing Research, Circuléire