

Scottish Enterprise
Megatrends shaping
economic change

Trends shaping future change

The importance of taking the long view

Scottish Enterprise's purpose is to enable businesses to innovate and scale to transform the economy. Our futures work helps us take a long view of the opportunities that will drive transformational change over the 2020s and beyond. We are focused on delivering the vision and outcomes of the Scottish Government's ten-year National Strategy for Economic Transformation (NSET), drawing on the trends identified in NSET and supporting policy documents.

Our Strategic Ambition describes our role in identifying and maximising transformational opportunities that will improve our country's economy and support the delivery of the NSET vision. We know that Scottish Enterprise delivers the greatest impact where we apply our core capabilities in innovation, investment and international markets in tandem to support ambitious companies and talented entrepreneurs to grow.

We are focusing on delivering three areas of economic opportunity matched to Scotland's competitive strengths – our 'missions'. These aim to accelerate the energy transition, scale innovation and entrepreneurship to grow future industries, and increase productivity through investment. By aligning our innovation, internationalisation and investment support to target these global and societal challenges our missions aim to rebalance Scotland's economy so that it is fit for the future. By collaborating with companies, partners and investors we aim to achieve a greener, more successful wellbeing economy for people and communities right across Scotland.

This report takes a forward look at the megatrends – major trends or movements – which are shaping Scotland's current and future economy. Megatrends are recognisable forces of change that are already happening and are likely to continue in future. This report maps these against Scottish Enterprise's Strategic Ambition and the broader NSET goal of creating a fairer, greener and wealthier economy.

We want to support the transformation of Scotland's economy and ensure that increased prosperity is distributed fairly and sustainably. Scottish Enterprise will help achieve this by delivering impactful, integrated support that will result in significant, long-term and systemic change for Scotland's people, businesses and places.

We use our horizon scanning, foresighting and scenario planning activities to help identify the emerging market opportunities that align with NSET priorities. We are focused on not only unlocking the distinctive opportunities that can help to transform Scotland's economy, but also on tackling the structural weaknesses that have held back Scotland's potential.

Balancing change over the short- and long-term

Scotland's competitiveness relies on its ability to respond to current challenges and on its strategic preparedness in addressing longer-term shifts and disruptive events. By helping businesses address immediate pressures (including high energy and input costs, skills shortages and slow consumer demand at home and overseas) we are supporting them to embrace longer-term opportunities.

For example, investing in modern capital equipment and technologies not only releases employees from low-value tasks but provides the foundation for future innovation, productivity growth and higher-value jobs.

The next page summarises the connections between today's pressures, the fundamental drivers of change, the Scottish Government's national outcomes and the global outcomes we're aiming to contribute to, the <u>United Nation's Sustainable Development Goals</u>.

Scottish Enterprise's role is to help transform Scotland's future economy – anticipating, influencing and managing change so that our economy is more resilient and adaptive to opportunities and risks.

The fundamental drivers of economic change

SHORT TERM PRESSURES

FUNDAMENTAL DRIVERS OF CHANGE

NATIONAL OUTCOMES (SCOTTISH GOVERNMENT)

UN SDGS

7 AFFORDABLE AND CLEAN ENERGY

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

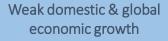
Emissions reduction & climate change adaptation



Net zero transition: an environmental and economic imperative driving comparative advantage and economic transformation Climate change adaptation & increased economic resilience



We value, enjoy, protect and enhance our environment



High energy, input costs and

interest rates

Worker shortage & recruitment

difficulties



Growing global population and incomes – global market growth **Increased urbanisation –** global market opportunities



Are open, connected and make a positive contribution internationally





demand, nature-positive solutions, shift to renewables and negative emissions technologies e.g. CCUS

Net zero transition: reduced emissions and energy/resource

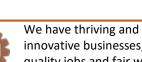
Increased global competition for energy, raw materials & natural **resources:** greater food/energy/material security



We have a globally competitive, entrepreneurial, inclusive and sustainable economy



Drive to increase productivity via capital investment, skills and management capabilities and digital/technology adoption Demographic shifts: ageing UK/EU populations, a shrinking Scottish population after 2027, talent attraction to Scotland





innovative businesses, with quality jobs and fair work for everyone



10 REDUCED INEQUALITIES

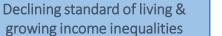
3 GOOD HEALTH AND WELL-BEING



Public spending constraints



Requirement to repay the significant UK debt burden via economic growth, higher taxes and lower/more efficient public spending





Strong Scottish policy commitment to a fairer Scotland and just, net zero transition

Increased adoption of responsible business practices



We tackle poverty by sharing opportunities, wealth and power more equally

SE is well placed, based on its economic development experience to alleviate short-term pressures while also developing the economic solutions to meet fundamental societal challenges in Scotland and the world

Using megatrends to shape our strategic approach

Megatrends driving future change

The 2020s are bringing complex, fast-paced and volatile change. We're a smaller world, connected as never before. Innovation and economic shocks spread quickly, and change is often disruptive and unpredictable.

The current environment is particularly influenced by the consequences of the Russia/Ukraine war, post-Brexit/Covid skills constraints and the rising cost of doing business. Businesses need to work hard to adapt to these powerful changes and to remain competitive.

But beyond these 'acute' issues, what are the deeper, chronic forces that are almost imperceptibly driving transformative change over the longer-term? On the next page we highlight our current assessment of the five megatrends driving change over the 2020s and beyond:

- Shifting global power
- Societal shifts
- Hyperconnectivity
- A changing climate
- · An economy reinvented.

Some megatrends are already determined, including climate change, an ageing population and the blurring between our physical and virtual worlds. But what are the surprises and tipping points that might challenge other assumptions we hold? Could geopolitical tensions lead to wars between major nations, severely disrupting supply chains and access to raw materials? Might economic protectionism lead some countries to 'weaponise' supplies of scarce rare earths and other raw materials, halting progress of our tech-driven, green economy? Could another pandemic up-end our world once again? Could climate-induced extreme weather events spur mass migrations of global populations?

We collectively need to anticipate and adapt to a wide range of potential futures. This is not about predicting the future but developing an economy and business models that are forward-looking, resilient and adaptive.

An economy fit for the future

This report shows how Scottish Enterprise's strategic priorities directly address Scotland's economic strategy and in turn, many of the powerful megatrends driving global change.

We have used <u>our evidence</u> and futures analysis to identify three missions. They address opportunities shaped by the five powerful megatrends and also help to tackle the deep-seated structural weaknesses that have held Scotland back for many years.

Our mission-based approach will help Scotland to develop a fairer, greener and wealthier economic model. In line with NSET, our vision is of a Scottish economy where:

- Abundant, affordable and secure clean energy powers a just transition to net zero across all sectors, and where Scotland is a global leader in providing net zero solutions
- Businesses actively invest in innovation, new equipment and technologies, workforce skills and international growth to become more productive and competitive
- Our thriving innovation system supports a critical mass of businesses who invent as well as adopt new products, processes and technologies, enabling them to grow and create industries of the future matched to Scotland's strengths
- Businesses substitute routine tasks with smart technologies to help create highervalue jobs and businesses
- Entrepreneurs and scaling companies create strong capabilities and value chains in Scotland, anchoring greater wealth for our people and businesses
- Companies see the commercial value in adopting a strong business purpose, where they make a positive impact on economic prosperity, social wellbeing and environmental sustainability.

Five megatrends driving change to 2030



Shifting global power

- Fragmented globalisation
- Growing resource pressures & economic nationalism
- Relocalisation
- The rise of powerful media organisations, megacities & corporations
- Volatile global <u>risks</u> and security landscape



Societal shifts

- Growing poverty & inequalities
- Demographic shifts at home and overseas
- Shifting values driving new consumer demands
- Health challenges (obesity, pandemics, age-related diseases, mental health)
- Erosion of social cohesion

Inter-dependent change



Hyperconnectivity

- Accelerating digital transformation
- Technological advances
- Blurring of physical and digital worlds
- o Digital ethics & inequalities
- Cybersecurity
- New space race



A changing climate

- Climate and biodiversity crises
- Green capital reallocation
- Net zero market opportunities
- A just transition
- Tensions over the climate action 'say/do' gap



An economy reinvented

- Tackling inequalities through fairer income distribution
- Business purpose as competitive advantage
- Changing world of work
- Circular and regenerative models
- o Building business resilience

Megatrends driving opportunities for Scotland

The role of Scottish Enterprise is to help transform Scotland's future economy – anticipating, influencing and managing change so that our economy is more resilient and adaptive to opportunities and risks. These longer-term drivers of change have informed our new, mission-based focus.

SE-IDENTIFIED MEGATRENDS AND DRIVERS OF CHANGE

OPPORTUNITIES FOR SCOTLAND

connecting the NHS, academia and industry

transform health and care

MISSIONS



Shifting global power

Growing resource pressures & economic nationalism; Volatile global risks

Nurturing an outward-focused, international mindset among Scottish companies

Building Scottish capabilities to increase economic resilience and strengthen energy, food, material and technological security

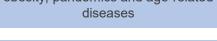
Building a world leading health and care innovation ecosystem

Embracing Scotland's strengths in digital technologies and data to



Societal shifts

Health challenges - including obesity, pandemics and age-related



Accelerating digital and data

e.g. Al

Climate and biodiversity crises;

A just, energy transition

Strengthening innovative, high-value 'industries of the future', supported by a dynamic, outward-focused innovation system

• Growing business innovation investment and R&D-intensive companies

transformation; Technological advances

- Growing high-value jobs and businesses in green energy supply chains
- Addressing enormous net zero market opportunities at home and

globally related to the energy transition and climate adaptation

Hyperconnectivity

Business purpose as competitive advantage; Environmental, social & governance (ESG) drivers; Circular and regenerative models

More companies adopting progressive and sustainable businesses practices, helping them become more competitive, productive and better able to attract employees and investment

A changing climate



An economy reinvented

Productivity growth

Scaling innovation

Energy transition

Energy Transition:

Creating an internationally-competitive green energy industry in Scotland

KEY: Shifting global power | Societal shifts | Hyperconnectivity | A changing climate | An economy reinvented

EXTERNAL TRENDS Shifting values driving new Accelerating digital transformation customer demands A just transition Volatile global risks and **NSET PRIORITIES** security landscape Realise Scotland's potential to be a Grow private Grow net zero leading net zero nation Net zero market investment in Growing resource supply chains opportunities pressures and economic Scotland nationalism Tackle poverty **Energy** Grow domestic Green capital through fairer and international **Transition** Relocalisation reallocation pay & conditions market opportunities Climate & biodiversity Transform how support is Business purpose as Realise the crises delivered to people and potential of competitive advantage Scotland's regions businesses across Scotland Tensions over the climate action 'say/do' gap Tackling inequalities through fairer Circular and regenerative models income distribution

What's driving change?

The twin climate and biodiversity crises are changing how we live, work, do business and travel, helping to deliver a nature-positive, just transition to net zero. War in Ukraine and geopolitical tensions over access to raw materials have led to an energy price shock and rising concern over energy security. In spite of global volatility, strong consumer and business demand is driving enormous growth in clean energy and net zero markets at home and overseas. For example, £29bn investment in Scotland's offshore wind industry is forecast by 2030, part of a £69bn global market. Scotland is well placed to become a global leader, given its strengths in green energy and wider net zero markets.

Why has SE identified this mission?

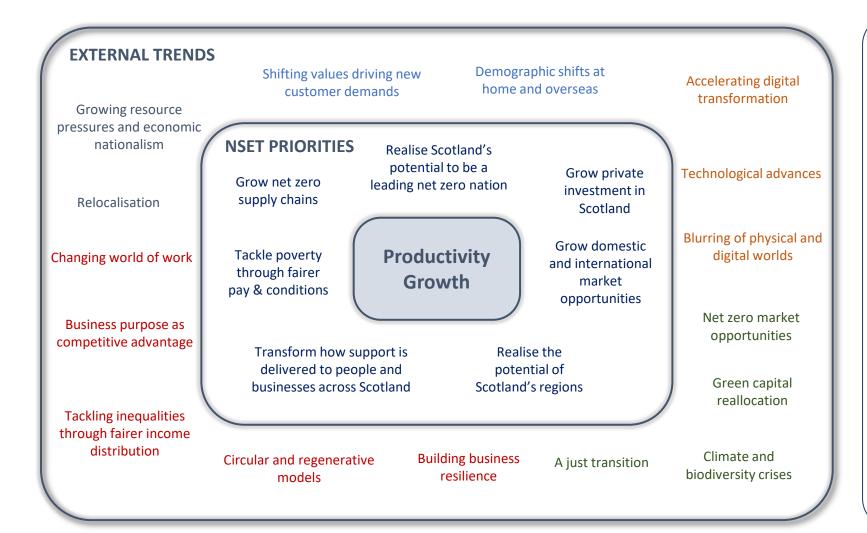
A clean energy system will deliver affordable and secure energy, creating high-value jobs and companies and enabling a just transition to net zero. It is also an essential catalyst to decarbonising Scotland's wider economy. Distributed energy generation can tackle regional inequality by allowing Scotland's mainland and island communities to benefit from abundant, affordable energy.

A focus on building Scotland's economic strengths in green energy will help address structural challenges as well as emerging opportunities. This includes stimulating business investment in capital equipment, innovation and skills; growing new supply chains; boosting exports; and rebalancing the economy away from fossil fuels.

Capital investment to drive productivity:

Driving capital investment to deliver a step-change in Scotland's productivity

KEY: Shifting global power | Societal shifts | Hyperconnectivity | A changing climate | An economy reinvented



What's driving change?

Productivity growth is essential for businesses to remain competitive and to be resilient in the face of skills shortages and resource pressures. Scotland's workforce is ageing and shrinking, and new technologies and circular business models offer the potential to increase output while minimising routine, low-value tasks and the extraction of virgin materials. Diverse and inclusive workplaces reflect changing societal structures and expectations, and evidence shows diversity leads to better decision-making. Resource-efficient business models not only help address climate change and biodiversity loss but help to decouple emissions from growth and meet values-led consumer demands.

Why has SE identified this mission?

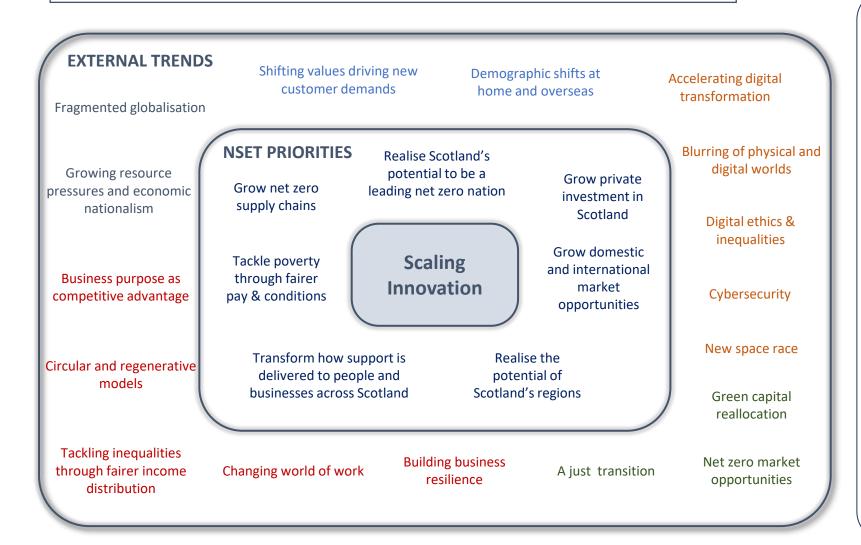
Productivity matters greatly for the wellbeing of every business in Scotland. It is key to supporting well paid, high quality and rewarding jobs. Scotland has low unemployment, but employee skills are under-utilised and the working-age population is shrinking. This means that productivity growth is essential to generate future increases in incomes and living standards. Unlocking Scotland's productivity potential will help build a stronger, more resilient economy that delivers inclusive and sustainable growth.

Evidence shows that Scotland's businesses have historically under-invested relative to other OECD countries, 40% of Scottish SMEs could be described as "permanent non-borrowers" and management quality is relatively low, resulting in a high concentration of small, lower-productivity businesses.

Scaling innovation:

Scaling the impact of Scotland's innovation strengths into the high growth industries of the future

KEY: Shifting global power | Societal shifts | Hyperconnectivity | A changing climate | An economy reinvented



What's driving change?

Technological advances, digital transformation and the blurring of physical and virtual worlds are generating new economic opportunities and driving global consumer demand. Scotland needs more companies able to deliver solutions to global challenges, who will help to grow world-leading industries of the future. A more dynamic, outward-focused innovation system and business base in Scotland will support this. Growing new, value-creating industries and businesses will drive investment, internationalisation, innovation and productivity growth, generating high-value jobs and tackling inequalities through rising prosperity in all parts of Scotland.

Why has SE identified this mission?

Innovation helps to drive competitive advantage and innovative products can be traded internationally at healthy margins. Innovative, profitable companies generate wealth and share that prosperity with highly skilled workers.

This mission aims to develop and scale existing and new clusters in emerging industries matched to Scotland's global competitive strengths. This will drive innovation, productivity growth, collaboration and the formation of world-class businesses. It will also help address Scotland's structural weaknesses including the limited transfer of university research to companies, low business investment in innovation and a low appetite to scale R&D-intensive companies.

Scaling businesses represent less than 1% of UK businesses but 50% of total SME turnover, so are a key driver of job creation and growth. They tend to be active innovators and exporters, and significantly more productive than other SMEs.

Futures sources and resources

This report has taken a forward look at the megatrends which are shaping Scotland's current and future economy. Scottish Enterprise will continue to look up and out to refresh our analysis of the megatrends and anticipate the overall direction of change. This will support our ambition to build an economy and businesses that are forward-looking, resilient and adaptive to future opportunities and risks.

The documents below provide further information about the strategic context and evidence base for our priority areas.







Scotland's National
Strategy for Economic
Transformation



National Innovation Strategy 2023-2033

The analysis set out in this report has been produced by Scottish Enterprise. For further information on sources and resources from organisations that publish futures intelligence, click on the logos below:





















