

Make Innovation HAPPEN

**MIH Knowledge Article:
Skills to Tills - A New Climate for Careers**



Scotland
A LAND OF
food and drink

SCOTLAND
IT'S TIME TO INSPIRE



How climate change will transform business and the workforce in the food and drink industry

Following the First Minister's declaration of a global climate emergency in April 2019, the Scottish Government announced it was setting a net-zero emissions target for 2045. In line with the Paris Agreement 2015, in which 195 countries committed to reduce their carbon footprint by limiting global warming to below 2°C, Scotland is moving towards a competitive low carbon economy.

New skills and professionals are required to tackle climate change in the food and drink sector. Sustainability sits firmly at the heart of Scotland's food and drink industry strategy 'Ambition 2030', recognising that growing responsibly and reducing environmental impact must be a priority. What contribution can the Scottish food and drink sector make to the development of a green economy?

Green skills required in every sector

Climate change is most commonly associated with environmental consequences, such as increasing temperature, melting glaciers and rising sea levels. However, the environmental damage and challenges we'll face will have a major impact on the workforce and career as well. Investing in environmental-friendly technologies and organisational practices are already disrupting the labour market in terms of know-how and competencies. To overcome future skills gaps, every business needs to understand how climate change will affect the food and drink sector and their business model specifically.

All businesses will need the knowledge to respond effectively to the shift towards greener business practices. The movement is seen in almost every sector, ranging from farmers, architects, electricians, plumbers, heating engineers to strategic management, administration, manufacturing, warehousing and transportation. Eco-building and renewable energy will call for environmental engineers and technicians to have specific skills. To support green activities, supply chain and operation managers will need to be proficient in innovative life-cycle management, production processes and cooperation with external stakeholders.

The food and drink sector is increasingly automated and more highly skilled people are required to operate new and resource-efficient technologies. For example, waste minimisation mechanisms that are used in anaerobic digestion, a process increasingly being adopted by the industry. Consequently, people with specialised qualifications such as food scientists, technologists and engineers are forecast to be in high demand in the near future.

Scottish manufacturers are tackling climate change

Food and drink manufacturers in Scotland are already moving towards a sustainable and environmental-friendly business model, tackling climate change from various angles; reducing carbon emissions, diminishing waste or investing in biodegradable packaging.

Ice cream manufacturer Mackie's of Scotland has set itself the target of becoming the greenest business in the UK. It recently installed a new eco-friendly refrigeration system, with low-carbon, power-efficient units run on ammonia. The new system will cool its ice cream with heat from a biomass boiler, powered by a sustainable energy source. The company is currently using more than 70% renewable energy generated from their farm's wind turbines and solar panels and is aiming to make it to 100% renewable energy.

The shortbread company Paterson Arran has won several sustainability awards. The company has its own

Environmental Committee who help drive environmental targets throughout the business. The company removed palm oil from their oatcakes range in 2002. Between 2006 and 2018 the company reduced water use by 24% shrank the amount of general waste 59%, with none of it going to landfill. All general waste is recycled, and food waste is being recycled for animal feed.

Growth opportunities

Climate change is a major challenge for the growing food and drink industry in Scotland. More efficient and environmentally friendly technologies are being used more frequently on production sites, requiring a highly-specific new skillset. Up-skilling the workforce and attracting new talent qualified and flexible enough to adapt to new ways of working is key to be competitive and to support the security of the future's food and drink industry.