



Putting our steak in the ground

The Scottish Red Meat Industry
Net Zero and Nature Restoration Position

The Climate and Nature Emergencies are very real, and without urgent action, the point when we can make changes that result in positive impact diminishes.

Over the last few years initiatives led by government have given us the starting point, however it is now imperative that we come together as an industry and consider how we best align the opportunity to become world leaders in climate and nature friendly red meat production, alongside delivering against net zero and nature restoration agendas.

The Scottish Red Meat Resilience Group was formed in 2019 to bring together the voices from every corner of the industry.

With the insights gained from this collaborative discussion over the last two years, we have committed to five pledges and tangible actions to support the red meat sector on the journey to net zero, working together to build long-term sustainability into businesses of every size and geography, not only for the environment, but also for financial and social prosperity which is vital to the future of our industry.

This paper is not the conclusion of our journey, it is only the beginning.

This is our steak in the ground.

- Kate Rowell – QMS and Scottish Red Meat Resilience Group Chair
- Jen Craig – National Sheep Association Scotland Chair
- Donald Young – Institute of Auctioneers and Appraisers Scotland President
- David Barron – Scottish Beef Association Chair
- Martin Kennedy – National Farmers Union Scotland President
- Alistair Brunton – Scottish Association of Young Farmers Clubs Agri and Rural Affairs Chair
- Alan McNaughton – Scottish Association of Meat Wholesalers President
- Tom Courts – Scottish Craft Butchers President
- Marion McCormick – Pig Industry Leadership Group Chair
- Alan Clarke – QMS Chief Executive





Scotland has the potential to produce the most environmentally friendly red meat in the world

We have a strong and unique starting point with over two-thirds of our land mass boasting a natural propensity to grow grass, yet unfit for cropping, and plentiful rainfall.

Ruminants such as cattle and sheep are the only species able to transform marginal grasslands, with few alternative uses, into food for the population; their manure enriches the soils for crops while grazing creates carbon sinks, enhances biodiversity and maintains landscapes, all of which contribute to a healthier environment.

The Global Warming Potential of Scottish pig farms is down by almost **40% over the last 20 years**. This remarkable progress has been achieved as a by-product of farm and industry efforts to improve efficiency and reduce costs of production.

Climate change is happening. No-one knows this better than our primary producers who, as guardians of the land, see the changes in real time. The whole sector recognises the very legitimate and urgent concerns of society and that these must be taken seriously.

As an industry, we've not stood still to mitigate climate change. We've invested millions of pounds into research and development to identify how we can produce healthy, nutritious food in the most responsible and sustainable way.

From identifying the breeding genetics for lower emissions to sustainable feed sources and green energy, across the supply chain small steps as well as major transitions are cumulatively reducing the impact of Scotland's red meat on the environment.

We need to create a better understanding around the temporary impact of methane from livestock in the atmosphere and that, even if we stopped livestock farming overnight, it would be a short-term fix, overshadowed by the much greater environmental gains that can be made elsewhere.

Mixed farming, for example, improves soil health and vastly reduces nitrous oxide emissions from nitrogen fertiliser, which is a serious global issue.

There is also a positive story to tell about the carbon sequestration available through grazing pastures. We are only just beginning to understand how significant that contribution. We need to identify an accounting tool and labelling system to give increasingly conscious consumers the means to buy with confidence.

Livestock farming, regardless of how and where it is produced, has often been singled out. We need to communicate the difference between sustainable, grass-fed, rain-watered Scottish red meat production, and that which is produced less sustainably in other parts of the world. There is still misunderstanding around this and we need to demonstrate that Scottish red meat production is more than ready to be part of the solution.

With the headwinds of Brexit and Covid-19 continuing to put pressure on the UK economy and adding costs for both consumers and producers, there is a paradox for our sector and the wider food system to meet sustainable goals at a price that consumers are able to pay.

The supply chain is stepping up to deliver through sustainable systems but we also need Government to support us so that our population is not priced out of buying healthy, nutritious protein such as lamb, beef and pork.

“The Scottish Pig Industry has demonstrated how they can collectively use the power of data to reduce emissions—befitting the entire supply chain. Now we have a benchmark, many of the Scottish producers are determined to do more”

Marion McCormick, Scottish Pig Industry Leadership Group



Our steak in the ground

‘The Scottish red meat supply chain utilises our natural assets to create nutritious, healthy food for consumers to enjoy. The steps we take now to reduce emissions will demonstrate to our consumers how serious we are about meeting the climate challenge’

Alan McNaughton, Scottish Association of Meat Wholesalers

Scotland’s red meat sector is different from many others. It encompasses thousands of enterprises, mostly SMEs, with skills and drivers specific to their trade, in diverse geographical areas of rural Scotland.

The Red Meat Resilience Group has a privileged position working across the supply chain from producer to auctioneer, butcher and processor and as we map out the route to net zero, we will not lose sight of the commercial realities we are working in.

Research and development combined with industry insights will be maximised to identify where businesses can invest gainfully and confidently meet market demands.

We will support businesses with quick wins, such as tools and efficiencies that are easy to implement, as well as tackle the greater challenges such as standardising carbon accounting so the value is retained by those creating it.

We do not underestimate that to make the industry net zero by 2045, there is much that can and must be done.

We cannot do it alone though.

A sustainable food system must be a collaboration of producers, processors, distributors, retailers and consumers, alongside local and national government.

We need to take a holistic view, to work together across and outside the red meat supply chain, and across the world to have real, long-term effect. We need everyone in the sector to regularly share best practice thus enabling everyone to do things better. The impact of this will be enormous.

Our Steak in the Ground is a starting point to provide a shared lens for the red meat industry to proactively, and collaboratively, take on the challenges and opportunities. We certainly don’t have all the answers and the road to net zero will be an evolving journey, which will develop as we go with new learning, technologies and consumer behaviours.

What we do have is the people in our sector to make this happen. We hope you’ll join us on the journey to reach **Net Zero by 2045**, and to create actions that enhance our natural environment too.

Where our sector can make a difference

Our industry is broad and varied. We have hill farms, crofts, lowland farms, pig units and mixed farms, some very advanced, some traditional, some experimenting with new regenerative or nature-friendly practices. We have auction marts, haulage companies, transporters, butchers and processors.

Each has different challenges and opportunities to meet Net Zero targets, but even small actions from every individual and every business will cumulate to have impact, which will be so much greater than the sum of its parts.

There are areas where we can focus in particular to reduce the sector’s environmental impact including farming and primary production, promoting biodiversity and nature, managing water, packaging and transport:



‘Climate change is a challenge that will affect all farmers and crofters, however by working collaboratively throughout the supply chain we will seize the opportunity to showcase our industry as being part of the solution’

Martin Kennedy, NFU Scotland

Primary production



Soil health



Genetics



Grassland and land management



Feed conversion efficiency



Animal health and welfare

The environmental crisis is about more than just climate change. It is also biodiversity loss and land degradation, which are inextricably inter linked, and grazing livestock is integral to them all.

Sustainable livestock systems can help tackle and eliminate these problems.

As well as carbon, climate change is caused by emissions from methane, released by ruminants, and nitrous oxide from nitrogen fertilisers.

New technologies and more evidence-based data are making it easier for primary producers to make breeding and management decisions to reduce methane emissions from their livestock, while livestock manure plays an important role in arable farming and horticulture, improving soil quality reducing the use of nitrogen fertilisers.

Grazing is also significant in stimulating the sequestration of carbon in soil.

‘Completing a carbon footprint gave another way for the farm to look at business performance and point towards areas where there may be scope to reduce emissions and improve efficiencies’

Kate Rowell



‘As a hill sheep farmer, we can use low impact, extensive grazing to create habitats that benefit nature- whilst also producing products such as Scotch Lamb PGI and wool- a natural, biodegradable fibre’

Jennifer Craig, NSA Scotland

Nature and Biodiversity



Peatland restoration



Ecology-led approaches



Agroforestry and silvopastoral systems



Habitat preservation

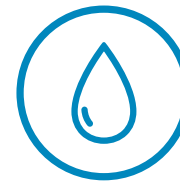


Grassland and land management

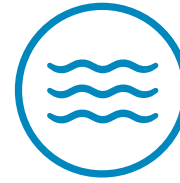
Farmers and crofters rely on good biology for their own productivity and their activity plays an intrinsic role in the health of our biodiversity, natural ecosystems and landscapes. Grazing livestock, when managed properly can develop and maintain critical habitats that support a wide range of biodiversity, including key species that depend on well managed farmland. Healthy soils developed by mixed farming systems are abundant in nutrients, organic matter and invertebrate life which promote thousands of vital farmland species. Farming does not compete with ecology, farming is ecology. Well managed grazing land provides protection from flooding, management of the water table and can help maintain the quality of our water supply. Sensitively restored and managed peatlands, moorlands, and wetlands can safeguard natural habitats and can provide one of the mean methods of carbon storage and sequestration that is possible in the UK.



Water



Rainwater use



Drainage and runoff management



Diffuse pollution management

Scottish red meat production utilises one of our greatest natural assets in this country – rainwater. As well as for grass growth, water is used throughout the production cycle, from animals’ drinking water, to cleaning out auction markets and processing units. Run off of phosphates and nitrates into water courses causes eutrophication, and costs our public purse to clean up. This excess of nutrients promotes algae growth which diminishes the oxygen in the water and can affect the quality and aquatic life. Working with other public sector bodies such as SEPA and Zero Waste Scotland is critical to ensure we take an aligned approach to water quality.

2027

Packaging



Elimination of single use plastic



Circular economy opportunities



Compostable packaging

Over **90% of products** within the red meat supply chain are sold in packaging for food safety and hygiene, as well as preserving shelf life, which plays an important role in reducing food waste. Minimising the use of single-use plastics is a high priority. There have been huge advances in innovation in recyclable, biodegradable and resource-lite packing, including some made with agricultural materials, but currently they are still largely prohibitively expensive. Exploring options to create a circular economy within the sector through alternatives such as potato starch and cold insulation with wool bring opportunities, and will be explored over the coming years.

‘ We have trialled the use of a hydrogen electrolyser, meaning farm machinery can now run on a combination of diesel and hydrogen. This has reduced fossil fuel use by 20% overnight, a considerable saving to our field operations’

David Barron, Scottish Beef Association

Transport



Optimised logistics



Alternatives to fossil fuel

The nature of the red meat industry in Scotland means that movements of products both as animals and meat are necessary to best utilise the natural resources available to us. We recognise that developing resource efficient logistics processes, shorting supply chains, and consuming products locally are important factors in reducing emissions from transport, and we will work with partners from other food and drink sectors in Scotland to realise this and to build in the specific requirements of transporting animals as the road haulage sector transitions away from fossil fuels.



Pledges

We are committed to supporting the industry to reach net zero through collaboration, innovation and collective vision. Sustainability will underpin our strategy and guide our decisions and activity, while always keeping the diversity of the sector and its communities, and the commercial and consumer landscape front of mind.

As an industry, we commit to bringing forward a full science-backed route map to Net Zero by the end of 2023, working with our Scottish scientific and research institutes to detail how as an industry we will reach our legislative goal of net zero by 2045.

Whilst this work is developed, we wont stand still. In the intervening two years we make the following pledges to turbo charge our journey and lay the foundations for future work.

‘Our generation will be living with the impact of decisions we take as leaders today- so by acting proactively, we can ensure those decisions benefit our businesses and our environment for generations to come’

Alistair Brunton, SAYFC

PLEDGE #1

We will drive **COLLABORATION** across the wider Food and Drink industry

We will work across the industry to create mutual strength and greater speed towards net zero, using shared learnings and realising untapped opportunities. By working collectively, we can maximise the resources and tools available and avoid duplication for greater efficiency and deliver the greatest environmental benefits.

With the insights of the Scottish Red Meat Resilience Group members combined with ongoing conversation with Government and stakeholders, we will identify and prioritise areas for investment to enable businesses to deliver on their sustainable goals. We will also look at creating a more active circular economy, for example refining production methods to minimise waste.

ACTIONS:

- Work alongside the wider Scotland Food and Drink Partnership Board to implement and align actions from the Food and Drink Net Zero action plan
- Create opportunities to build face-to-face relationships and engagement with decision makers, building on the pre-COP on-farm visits
- Work proactively with bodies including SEPA to develop sector strategies, for example as part of their One Planet Prosperity work, to ensure that our sector's impact on water quality is improved, reducing diffuse pollution, and increasing the quality of Scotland's water courses
- Work with Nature Scot to develop outcome-based pathways to increase biodiversity on our farms and croftlands
- Work with partners to establish routes for agroforestry and integrating trees alongside productive livestock businesses, and for peatland restoration on our active hill and crofting units
- Collaborate with other farming sectors to utilise livestock as a method of increasing soil health

PLEDGE #2

We will instigate **CHANGE** by supporting all businesses in the red meat sector to transition with ease and impact

Our sector is made up of thousands of businesses, from farmers to processors, and allied industries in between; all with different roles and resources, needs and priorities. We know that there are not one-size solutions and that it can be a challenge to navigate the options and market demands and, importantly, where to spend time and money.

We will give businesses of every type and size the information they need to make the small changes that really count, such as producing more of their own feeds, earlier slaughter dates or greener logistics, as well inform their decisions on the bigger, such as transitioning to 100% green fuel or deploying new waste technology.

By sharing useful resources and insights, we aim to give business owners the evidence base and confidence to make sound management and investment decisions.

ACTIONS:

- Work with Scottish Government to implement a new post-CAP support scheme to enable our primary production businesses to transition to low carbon production practices
- Undertake Life Cycle Analysis across a number of representative production systems, working from field through to fork to assess how products impact on the environment to guide producer activity across Scotland
- Work with Government and SRUC to further refine AgRECALC for use by primary producers to support farmers and crofters to measure their carbon footprint to identify where they can reduce it
- Signpost to resources, funding, support and examples of good practice, sharing successes and demonstrating what works to create a culture of achievement
- Signpost to finance and funding for green activity, such the Farm Advisory Service business resilience funding, or other Scottish Enterprise and Scotland Food and Drink resources

PLEDGE #3

We will utilise **INNOVATION, TECHNOLOGY & DATA** for businesses to capture the full value of being sustainable

When we want to make change in the red meat sector, we are not looking at a three-second process in a widget factory. Livestock production is reliant on breeding cycles. This means that changes are cumulative and take time to demonstrate impact.

Research and Development has given us strong indicators but the science and data is still young. Increased investment in science, in key areas such as genetics, feed conversion efficiency and animal health will pay dividends for years to come. We will work across Government and industry to better quantify and qualify the data used within our red meat supply chains, ensuring it is robust and accounts for sequestration activities taking place on Scotland's farmlands and croft lands.

ACTIONS:

- Ask Scottish and UK Governments to secure a baseline emissions measurement and develop data capture and supply chain communication systems
- Join the Sustainable Food Trust's Global Farm Metric coalition
- Support the work of global and domestic research and innovation centres on solutions such as alternative feeds and genetics to make the jump to net zero
- Undertake a review from field to fork of the use of plastics and benchmarking alternative products and encourage innovation of affordable biodegradable and resource-lite packaging sources.
- Support Research and Development to create the tools the industry needs, that works for Scottish businesses
- Develop capacity within Livestock Health Scotland to provide leadership on animal **health** mitigations that have the biggest emissions abatement

PLEDGE #4

We will prioritise **RESKILLING AND UPSKILLING** to accelerate the journey to Net Zero

Even if you are already on the road, treading this new path takes a change in mindset and can be a job in itself.

We will work Government and key partners to expand relevant qualifications, recognised by the industry, and increase opportunities for employment, personal and career growth in the sector.

ACTIONS:

- Work with Governments and industry to design a Net Zero Skills Map to highlight where we need to build capacity within our skills, training and education offer
- Working with educators and Government to champion affordable and accessible training relevant to, and to keep people in, the sector
- Bring young people together as part of the Scottish Red Meat Resilience Group to share knowledge and become future ambassadors and leaders for our red meat industry
- Increase opportunities for employment, personal and career growth, and collaborative mentoring among the scottish red meat supply chain
- Support for all those involved in a Just Transition, including affordable housing in rural places, ensuring none of our communities are left behind
- Increase the number of apprenticeships available both on farm and within the food and drink supply chains

PLEDGE #5

We will build **BRAND IMAGE** to sustain and build the positive narrative

We urgently need to demonstrate to consumers and other stakeholders our commitment to addressing global challenges including climate change, biodiversity loss and resource depletion.

We know that there is work to be done to make red meat greener and we will tell the story as it progresses so that consumers recognise the inherent value of red meat production in protecting and promoting our landscapes and the climate, giving them the confidence to consciously buy and cook beef, lamb and pork.

ACTIONS:

- Educate and inform, for example QMS' TV adverts, Sustainability Game and education videos; Butchers' Club promotional materials; Good Food Champions; podcasts; lamb for St Andrew's Day and Veganuary and Myth Busting toolkits and QMS Health and Education activity offer
- Investigate point of sale labelling for the conscious consumer.
- Encouraging responsible public procurement and partnering with organisations to showcase red meat – for example donations made to the Lamb Bank for schools to cook and eat on St Andrew's Day
- Traceability initiatives for consumers to make informed, fact-based purchasing choices across all points of consumption, whether that be retail, or food service
- To align with Scotland Food & Drink and Scottish Government work to develop the Sustainably Scottish brand strategy



‘Aligning the future skills needs of the red meat industry to our net zero pathway will ensure our people have the tools and skills they need to take our businesses to our net zero future’

Tom Courts, Scottish Craft Butchers

Ask of others

None of this is possible without industry-wide commitment and the support of the Government and consumers to make it happen. We therefore call upon everyone who has a role in the industry to help accelerate us along the road to Net Zero.

‘Auction markets will remain critical to those who value fair, transparent trade with willing sellers and buyers participating. Markets are also more than a sales arena. As critical rural hubs, they provide opportunities for knowledge exchange and collaboration which ensures auctioneers have a unique place in helping inform the future direction of our livestock sector.’

Donald Young, Institute of Auctioneers and Appraisers Scotland

2045

Scottish Red Meat Sector is fully net zero and has met nature restoration goals

We ask Scottish and UK Government to

- Re-shape agricultural support to enable transition to a net zero world, whilst maintaining our capacity as a high health & welfare, food producing nation
- Implement the Farmer-Led Group (FLG) recommendations to support producers pragmatically to become more sustainable
- Develop a Net Zero skills action plan for the red meat sector
- Refuse to undermine the environmental measures and work of Scotland's producers when making international trade deals, nor offshore our environmental issues
- Review how biogenic methane emissions are calculated to give an accurate and standardised GWP* measure for the whole industry and wider stakeholders
- Deliver the Just Transition bill to protect vulnerable rural communities and ensure we don't leave any one, or any part of our sector behind

We ask producers and businesses

- To accept that each and every one of us has a role to play
- To make the most of the support available to help businesses reach Net Zero
- To work with other members of the supply chain to seek collaborative solutions to shared challenges
- To seek the commercial opportunities in being greener
- To share their needs and ambitions as well as their successes and solutions

We ask consumers to

- To buy consciously from sustainable sources
- To make informed choices, going beyond the media headlines to explore and research the different stories behind food production
- To celebrate the industry's steps to be more sustainable, and integrate their own small changes into their everyday lives
- To reduce food waste when eating in and out of homes



Putting our steak in the ground



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