

Scotland's Food Future



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Foreword

For Scotland's food producers, the coming years are set to present a range of challenges. Our farmers and crofters eagerly await a new framework to replace the EU Common Agriculture Policy, whilst Scotland's fishing fleet grapples with spatial pressures exacerbated by a radical policy agenda set out in the Bute House Agreement.

Meanwhile, consumers across the world are being hit with hikes in the price of food as a result of inflation. This is putting real pressure on household budgets here in Scotland.

The SNP may have a new leader, but their track record on ignoring the needs of food producers in rural Scotland continues.

Their plans are forcing Scotland to import more food from abroad, driving food prices higher without any benefit to farmers.

Their Agriculture Bill proposals would make it harder for us to reach net zero and tackle the climate crisis. All the while, their constitutional grievances continue to create barriers for Scotland within the UK internal market, which is even more bad news for our food producers.

Never before has the need for a fresh approach been greater. When farmers descended upon Holyrood in their hundreds as part of the NFUS' 'Food Needs a Farmer' campaign, the message from the industry was clear, decision making cannot ignore the needs of Scotland's food producers.

Food Future is a policy package that is centred around this message. It would support Scotland's rural communities to secure jobs, livelihoods, and a viable future for farmers, crofters and fishermen.

It would place food production at the heart of the new Agriculture Bill, whilst investing in producers to keep food prices affordable for consumers.

It would allow farmers to produce more top-quality food right here in Scotland whilst bringing in more local jobs for processing and transport.

It would bolster support for technology and innovation to help improve the UK's world leading standards on health, the environment and animal welfare.

Food Future delivers an alternative to the SNP's approach to Scotland's food system that puts food security and the needs of rural communities that rely upon the industry first.

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Rachael Hamilton MSP Shadow Cabinet Secretary for Rural Affairs & Islands

Executive summary

Food production and resilience

Supporting local food production is vital so that when we go to the shops, we can all choose from a wide range of local, Scottish, high-quality food instead of costly foreign food flown in from abroad. **Our plan for food production and security would rethink the Scottish Government's approach to the new Agriculture Bill.** It would **ring-fence funding from the Rural Affairs and Islands budget** for the support package to give farmers and crofters peace of mind, whilst placing a greater emphasis on using the right land for the right purposes. We would also **ensure farmers and crofters are closely involved in the design of the future support framework.**

We have listened to the concerns of Scotland's fishermen and coastal communities in relation to the Scottish Government's plans for highly protected marine areas. It is clear that these pose an implicit threat to Scotland's fishing industry, which contributes significantly to our food resilience and security. That is why we would scrap these plans, and go back to the drawing board, working with fishermen and using their knowledge to help us protect our marine environment.

Technology and innovation in agriculture

By helping farmers to innovate, we can keep food prices affordable and produce even more top-quality food here in Scotland. Innovation and technology will play a significant role in helping Scotland's agricultural industry meet the challenges of the future. The UK Government recently took an important step in the right direction by introducing the **Genetic Technology (Precision Breeding) Bill** earlier this year. **We would introduce a similar bill here in Scotland** to allow our farmers to take advantage of this technology to improve yields, reduce water and nitrogen input, and protect crops from pests and diseases.

Allowing Scottish farmers to use genetic technology for their crops would allow them to compete with their peers across the UK on an even footing. Moreover, the reduction of input costs that would result from this would help farmers offset the rising costs the industry faces due to the war in Ukraine, and even pass savings on to the consumer.

We will also **commit to a study of other technological advances in agriculture** in conjunction with Scotland's world leading research centres at the Roslin and James Hutton institutes. We would consider areas including – but by no means limited to - vertical farming, slurry storage alternatives and agroforestry.

Food processing and rural development

Processing food locally helps to cut food miles and means provenance is truly local. However, due to lack of investment Scotland's processing capacity has taken a severe blow in recent years and is now no longer fit for purpose. This has forced farmers and crofters to transport their produce hundreds of miles to be processed.

The Scottish Conservatives would change this by **creating a rural development arm of the Scottish National Investment Bank** to fund the reconstruction of Scotland's processing capabilities. Access to funding has been identified as a key hurdle to our dwindling numbers of abattoirs. hurdle to our dwindling numbers of abattoirs. With a £72 million underspend in the Rural Affairs Budget over the last year, instead of allowing this funding to disappear, we would ring-fence it for rural development projects such as bolstering fixed and mobile food processing capabilities in rural areas.

Local procurement

Buying more food locally supports jobs, grows our economy and will help to tackle climate change. The Scottish Conservatives would make it easier for local authorities to source food locally by **amending the Scottish Government's framework Bill for their Good Food Nation plans** to include provisions to improve local procurement targets.

We would introduce a 60/60 target, supporting local authorities to source 60% of the food they procure from within 60 miles of the authority region. For example, pupils at Glasgow schools can enjoy fresh produce from farms in Perthshire.

We recognise that this won't always be achievable, particularly in more remote communities, that is why we would tailor support to ensure the priority would be to procure as much food as possible from Scotland and the United Kingdom instead of importing food from abroad.

This would not only cut food miles and reduce emissions from transport and production, but it would also prioritise jobs for Scottish producers, suppliers and hauliers. It would support our food and drinks industry and maintain the viability of local businesses.

Net zero

We will only meet climate change targets by reducing our reliance on foreign food which is not environmentallyfriendly and by supporting Scotland's farmers to grow even more top-quality local food. One of the common threads in each of the proposals outlined in this paper is the contribution Scotland's food system can make to reaching net zero. We strongly believe that our food producers can be a vital part of the solution to the climate crisis, and we can support them to achieve this.

Our plans would **implement the findings from the Suckler Beef Climate Scheme report** and help farmers to implement carbon neutral measures.

A joined-up approach

Before taking a closer look at our proposals for the future of food in Scotland, it is worth underlining the common thread between each of the aspects that will be discussed. Without production, we cannot process. Without processing, we cannot get food on market shelves and prepared for our dinner plates. Joined up thinking is required to ensure our food policies stand up to scrutiny. And that is why all of these aspects have been included in this paper

Food production and resilience

Background

A food system is generally considered to be made up of a complex web of activities involving production, processing, and consumption¹.

The production aspect of the system underpins our food resilience which, in the wake of Putin's invasion of Ukraine, has been an issue that has gathered significant interest from the media and the public.

In Scotland, less than 3% of our population is responsible for 100% of domestic food production². It is right that they are supported in delivering Scotland's food resilience. The Scottish Government's proposals for a new subsidy scheme fails to do this and poses a threat to our producers' ability to deliver on these responsibilities.

The proposed 4 tier system fails to promote appropriate use of land. Food producers should be rewarded for doing their job; using their land to produce high quality food whilst bolstering Scotland's food resilience. However, beyond 2025, the Scottish Government have indicated they would prefer to support the use of productive land for tree planting and rewilding.

Meanwhile, fishermen landing sustainable catches off Scotland's coasts are facing a spatial squeeze that is driving them out of business. Pushed from all angles, Scotland's fishing industry is facing an existential threat from radical policy decisions being made by an out of touch Government as a result of the Bute House Agreement between the SNP and Green Party.

Proposals to designate 10% of Scotland's waters as Highly Protected Marine Areas (HPMAs) could be the final straw for much of Scotland's fishing industry.

Landings from Scottish fishermen provide consumers with a high-quality source of protein. Their practices are sustainable and low emission. Yet, little consideration is given to the industry in decision making, with small rural communities facing collapse as a result.



Our solution

The Scottish Conservatives would ensure that the Scottish Government is committed to ring-fencing funding for the support package. This would provide the agricultural industry with peace of mind that their funding is secure, and that they will not be short-changed by underspends on their support.

We would then **replace the specifications within the conditionality of tiered funding to place an emphasis on using the right land for the right purposes.**

Productive land should be used to produce food. It is nonsensical to create a subsidy scheme that rewards the conversion of this land into nature restoration projects or planting of non-native woodland.

That is why we would **reward farmers for planting the right crops in the right place** and using land appropriately.

No one is better placed to make the judgement about the appropriateness of land use than farmers themselves. We would consult them through every step of the process in formulating new conditionalities for access to tiers of support.

We would also draw upon the Macauley Institute's work on land capability for agriculture (LCA) in Scotland³ to augment the Scottish Government's ability to assess appropriate use of land in tandem with the agriculture industry.

The result of this would see farmers rewarded for producing food on productive land, whether planting crops or grazing livestock, and using less productive land for nature restoration and carbon capture where appropriate. This would promote food resilience by ensuring productive land is not lost as a result of a government making producing food less viable than planting trees.

Added to this alternative proposal for future agricultural support, we would also **accelerate the timetable for delivering the Agriculture Bill**, giving farmers the clarity they need at the earliest possible opportunity, allowing them to plan for the long term.

To address the challenges being faced by fishermen, we would scrap the Scottish Government's HPMA plans and go back to the drawing board.

Our approach to protecting our marine environment would involve fishermen and local communities whose knowledge of our seas would be an invaluable asset.

Most importantly, any future proposals for marine protection would take the needs of fishing communities in to account and ensure that their businesses and the food they provide for us here in Scotland are protected.

Technology and innovation in agriculture

Background

The UK Government has recently allowed farmers in England and Wales to take advantage of our EU exit by passing legislation on genetic technology. This would enable farmers to use gene editing (GE) technology to improve crop yields, protect them from disease and enhance their nutritional value through accelerating natural processes⁴; not to be confused with genetic modification (GM), which is an unnatural process.

Gene editing will offer the majority of the United Kingdom the chance to gain the benefit from a more streamlined regulatory approach. The SNP have chosen to align with the EU and reject this new opportunity to improve the environment, health and reduce costs for farmers and consumers.

A consequence that has already been highlighted by Scottish farmers would be the creation of a two-tier supply chain in the UK, with Scotland playing second fiddle to the rest of the country⁵. Another consequence has been noted by Professor Helen Sang from the Roslin Institute who said that 'adopting a more proportionate and enabling approach to regulation will open up increased opportunities for international research collaboration, inward investment, and technology-based exports, bringing a major boost for UK science'.⁶

The issue has become a political pawn. Rather than following the scientific advice and updating our regulatory system the SNP has dogmatically said they will shadow the EU's regulations. This seems particularly short sighted when the EU has already acknowledged the inadequacy of its current regulatory regime regarding gene editing.⁷

Despite the SNP's anti-science approach to agricultural policy, there is an abundance of opportunities for technology and innovation in the industry. Genetic technology is just one example of this. The Scottish Conservatives will continue to look at ways of allowing food producers in Scotland to harness the potential of innovation and technology to allow the industry to overcome the issues of today and adapt to the challenges of the future.

Our Solution

The Scottish Conservative would introduce a Bill to the Scottish Parliament that mirrors the Genetic Technology (Precision Breeding) Act passed in Westminster. The provisions of the bill would grant powers to create new regulatory framework which would allow Gene Edited products to be created and marketed in Scotland.

Introducing such a law in Scotland would allow farmers to produce crops and livestock that would be more resistant to disease and pests, better for the environment and yield greater returns in terms of volume and nutritional value.^{8,9}

The introduction of mirror image legislation for Scotland would also avoid the issue of two-tier supply chain issues arising between England and Scotland and dispense with constitutional grievance pedalled over the effect of genetic technology on the Internal Market Act. It would mean Scottish farmers are not held back compared to those south of the border, allowing them to compete on a level playing field for business.

An example of the tangible benefits of GE technology could be found in tackling recent outbreaks of Avian Influenza. Scientists, from a Scottish research institute, have discovered a gene that could make chickens resistant to Avian Influenza.¹⁰ Over the course of the last wave 7.5 million birds were culled across the United Kingdom.¹¹ If we were able to protect our poultry stocks, this could have a dramatic effect on the spread of the disease across the country and protect farmers from losing stock.

GE would help farmers reduce their environmental impact too. A regulatory gene has recently been discovered for some crops that would allow these crops to be grown with much reduced water and nitrogen inputs, and no loss to yield. Reducing the amount of nitrogen needed to grow crops would reduce the amount of runoff into the streams which is often cited as an environmental concern about the farming industry.

With the cost-of-living crisis still gripping Scotland, GE presents an opportunity to help farmers lower input costs, which would help them to keep Scottish produce affordable for consumers with no impact on their margins. These lower input costs would also help farmers tackle the inflationary pressures that have been squeezing the industry since the outbreak of the war in Ukraine.

Beyond Gene Editing, we would **commit to a study of other technological advances in agriculture in conjunction with Scotland's world leading research centres at the Roslin and James Hutton institutes.** We would consider areas including – but by no means limited to - vertical farming, slurry storage alternatives and agroforestry.



Food processing and rural development

Background

A key element to creating a sustainable food future includes the ability to process our produce locally, here in Scotland. That is why it is vital that Scotland's food producers have access to processing facilities closer to home. This brings many benefits including the ability to market their products as being truly local; reduce emissions and costs from transportation; and support their own local economies by using local processing businesses.

The abattoir sector in Scotland is in a parlous state, with two thirds of small abattoirs expecting to close before 2026.¹² Despite the situation the industry now finds itself in, a recent freedom of information request found that the Scottish Government had given just £4,500 in funding to the Scottish abattoirs in 2022-2023, down from £500,000 in 2020-2021.¹³

When Orkney lost its abattoir in Kirkwall the local famers and crofters were no longer able to market their meat with the 'Orkney gold' mark of provenance; a badge of honour and something these producers took great pride in.¹⁴

Fostering a thriving local market for food in Scotland requires a concrete plan to ensure food produced locally can be processed locally. In Scotland, we have a situation where it can be more economically viable to process animals in England because of the shortage of facilities here in Scotland.¹⁵

Beyond these issues, the wider drawback of being unable to process food locally relates to Scotland's food security and resilience. Local supply chains can insulate regional economies from difficulties faced elsewhere in the world, such as the grain crisis that resulted from the war in Ukraine.

Our Solution

The Scottish Conservatives would **create a specific arm** of the Scottish National Investment Bank (SNIB) that focusses on supporting rural development. Although the benefits of this would reach much further than the renewal of Scotland's ability to process food more locally, the immediate impact of this would give food processors like abattoirs access to the cash they need to create sustainable businesses in rural areas that lack these facilities.

Last year, Audit Scotland reported a £72 million underspend in the Rural Affairs and Islands' Budget. Rather than ringfencing this for rural development, these funds were reallocated to other portfolios.¹⁶ The Scottish Conservatives would **ensure that the Scottish Rural Affairs and Islands Budget was ringfenced**, and any underspend would be reinvested into rural development schemes that would strengthen our processing capabilities, alongside other schemes.

This would include establishing fixed and mobile abattoirs for livestock farmers of any size to access, alongside training schemes to ensure the skills to run these abattoirs are developed and sustained. With many of Scotland's existing abattoirs facing the prospect of closure within years, it is clear that this industry requires support.¹⁷ This policy would provide the industry with reassurance that they can access support if they need it.

Mobile abattoirs have received wide support from rural stakeholders as a solution to Scotland's food processing issues.¹⁸ This would be a boon for farmers because it could allow many areas to benefit from the ability to market their produce as local without the need for creating many fixed site abattoirs, which would have access to lower livestock numbers than one fixed abattoir could provide for.

The creation of the rural arm of SNIB would operate on a similar basis to the USA where they have the USDA Rural Development, which offers loans, grants and loan guarantees to support economic development across rural areas.¹⁹

This is key because it would act in a way complementary to our plan for the future of agricultural policy. It would help farmers and crofters invest in new machinery but also it would crucially fund other parts of the agricultural economy up and downstream. In this way it would provide an additional source of funding for processors, who play a vital part in the symbiotic relationship with farmers, boosting our rural economy at every level.



Local procurement

Background

Despite Scotland's exceptional capacity for production, it is no secret that we still import a lot of our food.

Having choice is important, however, to invigorate Scotland's rural economy and protect the environment. We want consumers to be able to access healthy, nutritious food grown locally.

The Scottish Government and our local authorities should be leading by example when it comes to making that choice. Unfortunately, research undertaken by the Scottish Conservatives has found that when it comes to public sector food procurement, this has not been the case. As it stands, poorly thought-out rural policy from the SNP is forcing food prices higher without any benefit to Scottish farmers.

Local Authority	Food sourced within 50 miles	Food sourced within Scotland
Aberdeen City Council	Unrecorded	Unrecorded
Aberdeenshire Council	10%	20%
Angus Council	Separate contract	Separate contract
Argyll and Bute Council	96.25%	100%
City of Edinburgh Council	Unknown	53%
Clackmannanshire Council	All fresh produce	100%
Comhairle nan Eilean Siar	0%	38.5%
Dumfries and Galloway Council	18.3%	19.9%
Dundee City Council	Separate contract	Separate contract
East Ayrshire Council	75%	100%
East Dunbartonshire Council	Unknown	41%
East Lothian Council	Unknown	>50%
East Renfrewshire Council	Unknown	17.8%
Falkirk Council	All fresh food	7% (frozen only)
Fife Council	Separate contract	Separate contract
Glasgow City Council	100% for primary education, rest unknown	65%+
Inverclyde Council	100% (schools only)	100% (schools only)
Midlothian Council	Unrecorded	Unrecorded
North Ayrshire Council	22%	52%
North Lanarkshire Council	Unrecorded	Unrecorded
Orkney Islands Council	Unrecorded	Unrecorded
Perth and Kinross Council	Separate contract	Separate contract
Renfrewshire Council	Unrecorded	Unrecorded
Scottish Borders Council	40%	75%
Shetland Islands Council	meat, bread and vegatables	unrecorded
South Ayrshire Council	Unrecorded	40%
South Lanarkshire Council	Unrecorded	41.5%

Figure 1. Local authority food procurement sources. This illustrates the extent to which local authorities procure food from within their local area and within Scotland. This identifies two clear findings: Firstly, that it is possible for local authorities to source a large proportion of the food they buy from close by; and secondly, that many local authorities rely heavily on food imported from outside of Scotland.

On average, around 50% of the food sourced by local authorities was produced in Scotland. However, significant gaps in the data exist.

This policy paper has already discussed the challenges Scotland faces in improving food resilience and farming for the future.

Improving local procurement mechanisms and reducing the reliance of local authorities on imports can play an important role in supporting Scotland's transition to a more sustainable food future.

Scotland Excel, the public procurement organisation, has made steps towards encouraging the buying of local produce on larger scales, but additional work is needed to

help persuade local authorities of the benefits of buying locally sourced food.

Prioritising local procurement would have a two-fold advantage. Firstly, it would allow local authorities to support Scottish producers. Secondly, it would reduce food miles - a significant contributor to global carbon emissions²⁰ - and support Scotland's transition to Net-Zero.

Added to the reduction in emissions from import food miles, a 2020 report from the UK Government's Committee on Climate Change found that greenhouse gas emissions from beef reared in the UK is about half the global average.²¹ Further studies would suggest the gap is even wider, with the carbon footprint for a kilo of British beef estimated at 17.12kg CO2e²² compared to a global average of 46kg CO2e.²³

UK livestock on the whole produces less emissions than international comparisons. It is clear that sourcing meat locally is better for our environment than looking elsewhere.

Our Solution

The Scottish Conservatives would make it easier for local authorities to source food from nearby.

We would do so by amending the Scottish Government's framework Bill for their Good Food Nation plans to include provisions around local procurement targets. This would take the form of a "60/60 target".

The 60/60 target would **support local authorities to source 60% of the food they procure from within 60 miles of the authority region.** This would be achieved through a restructuring of the central Excel contracts, pulling on expertise from local authorities such as Argyll & Bute, and East Ayrshire, who have already reached these targets.

We recognise that this won't always be achievable – particularly in remote communities like the Northern and Western Isles. That is why we would tailor support to ensure that where it is not possible to meet the 60/60 target, the priority would be to procure as much food as possible from within Scotland and the United Kingdom instead.

We would **work closely with producers, local authorities, and Scotland Excel** to improve the way they interact and bring smaller local producers and suppliers into the fold.

This would not only cut food miles and reduce emissions from transport and production, but it would also prioritise jobs for Scottish producers, suppliers, and hauliers.

It would **support our food and drinks industry** and keep local businesses at the heart of the Scottish Government's thinking around food.

Net zero

Background

Scotland's net zero target is set for 2045. This is an ambitious project that Scotland is not yet on the path to achieving.²⁴ But it can be done.

In order to reach this target, many aspects of our society will need to go beyond carbon neutrality to balance out the country's emissions. The creation of greenhouse gas emissions in food production is an inevitability, but that does not mean our agricultural sector cannot achieve net-zero.

Scotland's farmers have already taken great strides towards reducing their emissions, but there is still much to be done. Between 1990 and 2019 the sector cut almost 15% of its emissions.²⁵ However, we must be conscious that climate change is not just an issue that Scotland faces; it is one that the whole world is facing.

Our **Food Future** is a policy document that **would ensure that the contribution of our food system to tackling the climate emergency does not merely offshore the problem,** as so many other proposals would. Every policy within this document considers how we might enable food producers, processors, and consumers to lower their carbon footprint without passing it on to someone, or somewhere else.

We have discussed how using the right land for the right purpose can help create food resilience in Scotland whilst prioritising land use for both food production and carbon capture. We have proposed local procurement and processing policies which would help to cut food miles²⁶, a problem which is sevenfold higher than was previously thought.

Taken together, this policy document has **placed tackling the climate emergency at its heart.** It has shown that this can be done with no detriment to our farmers, crofters, and fishermen. In fact, it can be done in tandem with growing our rural economy and bolstering our food resilience.

Our solution

Solutions are needed to maximise efficiency in every area of Scottish agriculture. As we have discussed, beef is often cited as the worst offender for emissions, at least in terms of food production.

However, international examples from countries such as Australia have demonstrated that it is entirely possible to produce carbon neutral beef for sale in supermarkets across the country.²⁷ We can achieve this in Scotland too, without the need to resort to a wholesale reduction in our beef herd. Such reductions have caused deep concern among farmers in the Netherlands and Ireland.

To achieve this, the Scottish Conservatives would **make use** of the Suckler Beef Climate Scheme report.²⁸ We would implement the report's findings to enable farmers to breed low emissions cattle and using technology to measure the feed required by livestock.

This plan had been quietly shelved by the Scottish Government after the report was published. However, a similar scheme has been launched in Ireland. We would closely monitor the effects of the scheme there to help shape our approach²⁹, and begin conducting work to extend the scheme to all livestock.

This would, of course, be a long-term project. It will take several years to work through generations of cattle, and even longer to undertake the research to extend the scheme to all livestock. However, the longer we wait, the louder the calls will be from certain groups to cut Scotland's livestock numbers. This scheme would yield a reduction in emissions that would offset concerns around the environmental impact of livestock farming, helping livestock farmers to contribute even more towards Scotland's Net Zero targets.



References

¹ Tendall, D.M. et al. 2015. Food System Resilience Defining the Concept. Global Food Security, 6, 17-23

² The Scottish Government. 2021. Scotland's Labour Market: People, Places and Regions – Protected Characteristics. Statistics from the Annual Population Survey 2021.

- ³ <u>lca_leaflet_hutton</u>
- ⁴ <u>https://www.legislation.gov.uk/ukpga/2023/6/contents/enacted</u>
- ⁵ https://www.scotsman.com/country-and-farming/differences-on-gene-editing-could-disrupt-uk-farming-trade-3170851
- ⁶ <u>https://www.ed.ac.uk/roslin/news-events/latest-news/scientists-back-plans-to-progress-gene-editing-reg</u>
- ⁷https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13119-Legislation-for-plants-produced-by-certain-new-genomic-techniques_en
- ⁸ Fields of research that's now more vital than ever | The James Hutton Institute
- ⁹ Scotland and UK governments split over gene-edited food BBC News
- ¹⁰ https://www.thetimes.co.uk/article/gene-edited-chickens-to-beat-bird-flu-hx0dcsn9k
- ¹¹ https://www.walesonline.co.uk/news/uk-news/7-million-birds-died-amid-26022846
- ¹² https://www.thescottishfarmer.co.uk/news/19476879.local-abattoirs-crisis/
- ¹³ FOI available on request
- ¹⁴ https://www.thescottishfarmer.co.uk/news/18319327.strong-support-mobile-abattoirs/
- ¹⁵ https://www.appetiteforangus.com/2022/09/15/we-need-to-keep-talking-about-scotlands-local-abattoir-network/
- ¹⁶ Scotland's Budget Documents: The 2022-23 Autumn Budget Revision (www.gov.scot)
- ¹⁷ https://www.appetiteforangus.com/2022/09/15/we-need-to-keep-talking-about-scotlands-local-abattoir-network/
- ¹⁸ https://www.thescottishfarmer.co.uk/news/18319327.strong-support-mobile-abattoirs/
- ¹⁹ US Department of Agriculture, Accessed 30 September 2022
- ²⁰ https://www.nature.com/articles/s43016-022-00531-w
- ²¹ https://www.theccc.org.uk/wp-content/uploads/2020/01/Land-use-Policies-for-a-Net-Zero-UK.pdf
- ²² https://ahdb.org.uk/roadmap-1-change-in-the-air
- ²³-<u>https://www.fao.org/3/i3437e/i3437e.pdf</u>
- ²⁴ Scottish Emission Targets & Progress in reducing emissions in Scotland 2022 Report to Parliament Climate Change Committee (theccc.org.uk)
- ²⁵https://www.climatexchange.org.uk/research/projects/greenhouse-gas-emissions-from-scottish-farming-an-exploratory-analysis-of-the-scottish-farmbusiness-survey-and-agrecalc/
- ²⁶ Nature Food, 2 May 2022
- ²⁷ https://www.parliament.scot/api/sitecore/CustomMedia/OfficialReport?meetingId=14180
- ²⁸ Suckler Beef Climate Scheme: final report
- ²⁹ https://www.parliament.scot/api/sitecore/CustomMedia/OfficialReport?meetingId=14180



