1. What do you see as the main economic opportunities and challenges associated with meeting Scotland’s climate change targets?

Our response relates to food, which encompasses a range of sectors including agriculture, transport, waste, industry, and energy. The transition to a sustainable food system goes hand in hand with a healthier and fairer food system, repurposing the food system to ‘nourish everyone while restoring nature’ provides a triple win. Food system transition is indispensable to achieving our nature and climate goals and is a tool to integrate the economic hardships in the food economy that are currently not reflected in the race for cheap food.

2. What do you think are the wider social (health, community, etc.) opportunities and challenges associated with meeting Scotland’s climate change targets?

The main opportunities of meeting and going beyond Scotland’s climate change targets are cleaner air, cleaner water, healthier ecosystems and healthier people. Achieving these goals will ensure Scotland is better able to withstand the shocks and stresses of climate change that are already at play and will get worse due to the GHGs we have already emitted. Closer communities, that can be brought together around food, mean the potential for better mental health and less loneliness in both urban and rural situations.

The challenges associated with meeting the targets is doing enough, fast enough, while ensuring all sectors of society are part of the transition.

3. What would a successful transition to net-zero emissions look like for your sector/community?

A successful transition to net-zero emissions would mean
A healthy, nourished population
The Right to Food is incorporated in Scots Law making good food accessible and affordable to all
A growing and vibrant local organic/agroecology market with:
- a diversity of produce amongst the types of foods and varieties within those types,
- a diversity of farmers and growers across age, gender, race and ability
- a diversity of farm types (micro to large) and
- a diversity in size and range of local processors
A true recognition of the trade-offs required to get to net-zero
A Scotland resilient to the shocks and stresses of climate change
The existence of a true circular economy - where nutrient cycling, rather than food waste is the norm and the health of our soils across Scotland are recognised for the multiple benefits
Our national carbon sinks are restored and protected on land and in the seas
4. What actions do you think the Scottish Government should take to manage the opportunities and challenges referenced above?

We believe Scottish Government needs to start thinking in a systems fashion, to design policy for the connections between things not just for the delineated sectors. This could begin with an Integrated Food Policy - something that we still hope the Good Food Nation bill will lay the foundations for.

Estimates suggest food contributes to over $\frac{1}{3}$ of our carbon emissions in terms of production and consumption. Yet this doesn't take into account the carbon (and other) implications of poor health stemming from malnutrition in terms of both food insecurity and obesity and a lack of intake of micro and macronutrients. If food is thought of in policy, it is in the context of "Food and Drink" and its marketing and export potential, rather than as an intrinsic part of our daily lives. Yet COVID-19 has made the risks and injustices of our current food system very clear. As such we are calling for a National Food Plan (as part of the Scottish Agriculture Bill) to start to address these concerns.

Referencing our vision in question 3, we would recommend the following elements to be part of an integrated food policy:

1. A healthy nourished population

   Change the narrative on food. Stop the meat versus vegan argument because it isn’t doing anyone any favours. For example, while the number of people signing up to Veganuary increased by 1639.1% over the last five years, sales of vegetables in January actually declined by 6.5% during the same period. The lack of vegetables in our diets is causing almost 21000 premature deaths in the UK every year. If the narrative was about healthy food and sustainable diets, our health would be at the core of policy across the board.

   Just transition to net-zero should see the Scottish Government lead by example in public kitchens (schools, hospitals, care homes and other) by prioritising local and organic sources and promoting healthy, sustainable eating habits.

   This also means switching our marketing efforts. If we are serious about transition, we should be spending public money to promote fruit, veg and whole grain consumption rather than meat and dairy consumption. In 2019 the food industry spent over £1billion in on advertising, with only 2.5% of that on fruit and veg. As Scotland leaves the EU, any future government funded marketing campaigns to replace the EU's Agricultural Promotion fund should focus on fruit, veg and whole grains. Reducing domestic meat consumption to globally sustainable levels (about 50% of current consumption in Scotland) should be a policy objective across all departments.

2. The Right to Food is incorporated in Scots Law

   A healthy and nourished population in a net-zero Scotland would need us to address our current hierarchical food system, where only some can afford to eat a healthy and sustainable diet, and where those who can’t are blamed for ‘bad choices’. A successful and just transition means a shared understanding of ‘good food’ as food that is ‘good for our health, good for the environment, good for the local economy and good for the people who work in the food systems both in Scotland and abroad’. Good food must be accessible to all as a human right.

   Climate change disproportionately affects marginalised and under-prioritised groups. The same groups are also more vulnerable to be left behind or adversely impacted as we transition to net-zero emissions, such as rising relative food prices or loss of livelihoods.
Therefore, enshrining the Right to Food in Scots Law is needed to effectively tackle the inequalities in the food system. The right to food provides a framework to ensure that law and policy respects and promotes the ability of all to access nutritious, sustainable and culturally appropriate food. This includes the rights of food producers and others working in the food system to secure livelihoods that support their access to food. At the same time, the right to food requires food is produced and consumed sustainably to protect access to food for both present and future generations, and thereby provides a framework for joining up efforts along food chains in a holistic manner.

The procedural aspect of the right to food is relevant to a just transition as it warrants a human rights-based approach to policy areas that affect food and food producers. That means non-discrimination and prioritisation of those who face the biggest barriers to realising their rights; monitoring of the human rights impact of law and policy ensuring accountability, for example under an Independent Food Commission as called for by the Scottish Food Coalition; and empowerment and participation of those affected by decision-making, which would provide an opportunity for marginalised voices to be included in the social dialogue required for just transition. The Rural Land Use Partnerships could further provide this necessary participation.

3. A growing and vibrant local organic/agroecology market
Enabling agroecology principles to be the basis of Scotland’s farming is important for a just transition to net-zero. Success would see a default understanding and valuing of the role of Scotland’s land-owners, farmers and fishers as stewards of the environment. Agroecological and organic farming support soil health, which sequesters and stores carbon, reduces nitrogen waste and methane emissions, and protects and promotes biodiversity. Diversity in the produce grown, the people growing it and where it is grown makes farmers and their land more resilient to climate change and promotes more varied, healthy diets. Land reform, along with community supported agriculture and changes to farm payments can lead to growth in small agroecological farms, everywhere from remote islands to cities. This can result in greater diversity in farm types and diversity among farmers, promoting rural regeneration and inclusion. A focus on stability in harvests rather than year on year harvest maximisation is key to this long term resilience.

This transition to agroecological farming and lower GHG emissions would be supported by the government paying for organic certification costs and fully supporting the development of the organic supply chain. The WWF Scotland report “Delivering on Net Zero” (WWF Scotland, 2020) shows that a systems change to organic farming in Scotland has the most potential for reducing GHG emissions. Simultaneously it will also provide better habitats, reduced antibiotic use and pesticide use, better animal welfare and reduced nutrient overload, which means healthier air and water. In 2019 the area farmed organically in Scotland was 1.6% of total agricultural land.

4. A true recognition of the trade-offs required to get to net-zero
Just transition requires an honest recognition of the trade-offs of achieving net-zero emissions and an open dialogue with those they affect. As demand for meat falls and subsidies change, upland livestock farmers in Scotland cannot immediately switch to growing more of the vegetables, legumes or nuts our local and global diet needs. Abattoirs and feed merchants will lose business. Changes to diets through choice editing or nudging policies also has an impact on food cultures; conversations around reducing the carbon footprint of what we eat can be very sensitive in cultural settings where it is part of people’s culture to eat meat or foods from all over the world. Furthermore, people from cultural, religious and other minorities are often excluded from decision-making around our food system.
Within Scotland there must be a guarantee that no one is left behind. This could be central to a new deal for farming support, which supports farmers through the transition to a new business model/livelihood. With adequate support and funding the Regional Land Use Partnerships are very useful here, as the vulnerability of those needing to transition will vary between regions and sectors, and over time.

While we look at net-zero in Scotland, we also need a transparent understanding of how our emissions impact other nations and the real costs of our emissions outside Scotland as well as the impacts on the people and ecosystems producing the food we import. More work needs to be done in this area to ensure actions in Scotland are not at the disadvantage of people and ecosystems outside our borders.

5. A Scotland resilient to the shocks and stresses of climate change

The COVID-19 pandemic has shown us clearly how important local food networks are for our resilience as a community in both cities and in rural spaces. Investment in our local growers, processors and retailers and underlining the utility of ‘small’ is important to a just transition, as it helps to ensure secure livelihoods and healthy, sustainable diets. The nub of local is the heightened element of relationship. Good relationships are the basis of trust and so many of the issues with our current food system are about a lack of trust because everything has become so big. This refers as much to the relationships between producer and food citizen on one continent as those between feed producer and livestock farmer across hemispheres. This breakdown in trust across the food system has the potential to further disintegrate if our food and farming systems are seen as mere pawns in international trade deals.

At the moment Scottish agriculture as an industry is all about getting bigger, chasing economies of scale, a focus on exponential growth: more product, needing more customers, chasing more turnover because they have been consistently told that farming is just another business. And yet farming and food and land stewardship is about so much more than turnover. Scotland's big land mass compared to its population size with a focus on turnover means a focus on export, both nationally and internationally. (England is included as export simply because it is under a different agricultural policy). Our communities' reactions to the pandemic have revealed the unfairness and inherent risk in these long complex supply chains, and the significant potential to invest in local resilience. Our Covid-19 legacy could be a strengthened and resourced trust in those relationships that have blossomed during lockdown from the small veg producer, to the corner shop.

We need a system in Scotland that doesn’t determine success in terms of scale but instead stimulates smaller processing facilities, smaller machinery, smaller farms, smaller shops and collaboration to create strong relationships and trust across the system.

To support this we would recommend:
- The removal of the minimum 3ha farm size outside crofting areas. This will be more inclusive of those who don’t have access to large tracts of land, inclusive of urban and peri urban growing, and inclusive of diversity from the crops being grown to the people growing them. That means more women, more young people and more people of colour being a recognised part of the system.
- The creation of a Local Food Fund to support both urban and rural local food businesses to work collaboratively and improve the wide range of skills needed to operate a small successful business.
- Relying on market pressures alone will not achieve this, particularly outside the EU. Other countries and substate actors have shown that public procurement is a great stimulus for environmentally-responsible food and livelihoods.
6. The creation of a true circular economy

Changes in climate mean both shocks and stresses will continue to put pressure on our food system and thus the availability of food. Part of a systemic view of the issue is to look at where the food goes, rather than just where it is grown. In 2019, an estimated 987,890 tonnes of food and drink in Scotland was wasted, over 60% of which was from households. The injustice of this waste on ecosystems, the people who grew it, and to those who have little access to food is untenable. The circular economy bill must come back to the table with measures to reduce food waste at source and otherwise divert unavoidable waste towards more environmentally beneficial methods of processing.

Food waste / surplus at a commercial level should mostly be driven by the market and bottom lines although mandatory waste reporting would also help drive this reduction. Reporting should be developed with special attention paid to ‘waste’ generated by price-wars and loss-leaders that is then diverted to food banks, further institutionalising the model.

Food waste in the home has by far the biggest impact but we need a new paradigm to address this. There needs to be a radical rethink around messaging and how to communicate with householders. Bringing together a diverse range of stakeholders from across the food landscape, including nurses, landlords, planners, teachers, architects, etc., would help explore new ways of thinking. Where unavoidable food waste exists there should be mandatory recycling including greater powers to challenge and ultimately fine residents for non-compliance. In the rental sector, landlords should also share responsibilities for ensuring tenants understand and comply with recycling requirements.

A true circular economy would also include soils at it’s very heart. Soils are one of the most important resources we have, not just in terms of food production but also for carbon sequestration and climate regulation, ability to manage flooding and drought, and to support the large and diverse biological communities essential for life on earth. These are key elements of the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. Soils are a renewable resource that need careful stewardship and management, underpinned by a regulatory framework.

7. Our national land and marine carbon sinks are restored and protected

As well as the points raised above on soils, some of our soils have a particularly special role to play in reaching net-zero. Scotland’s peat soils cover more than 20 % of the country and store around 1600 million tonnes of carbon, but it is estimated that over 80 % of our peatlands are degraded. Landowners and tenants must be stopped from degrading peatlands and water courses affecting our marine habitats.

Scottish agricultural land is seen as the ideal ‘nature-based solution’ in terms of carbon sequestration and storage. It is true that the planting of trees will massively assist in reaching net-zero. Yet, we must argue that this should not be at the expense of rural communities nor biodiversity, nor used as a method of off-setting avoidable emissions elsewhere. The push for leveraging private money has, in many instances, allowed other industries and businesses to carry on as before, when in fact the climate emergency requires CO2 to be completely removed from the atmosphere.

This means that sequestration needs a long term strategy - not just for cheap wood to be converted into firewood in 30 years or even woodchip for burning in a couple of years. Rather, the solutions need to be multifaceted in addition to sequestration: create high quality timber for furniture and substitute steel in building in the long term, integrate agroforestry and hedging into our farmland and farming businesses, producing multiple products such as nuts, natural medicines, tree fodder and fruit in the medium term and biochar, habitats, improved resilience to drought and flooding and better animal welfare in the short term. The
most sustainable returns will be when communities are supported to interact with and perhaps even own these nature-based solutions and the resulting harvests. This greater interaction would involve the creation of local good jobs, with small scale sawmills and furniture production, adventure providers using the trees as their classrooms, local joinery and building services, local food and fibre networks, and great spaces for exercise and play. This potential is currently removed by the tendency for large tracts of land to be sold for monoculture forestry as additions to investment portfolios either by distant individuals or pension funds.

The Rural Landuse Partnerships have the potential to be key to ensuring these trade-offs are balanced and local voices are heard.

5. Are there specific groups or communities that may be, or feel that they may be, adversely affected by a transition to a net-zero carbon economy? What steps can be taken to address their concerns?

People living in poverty and household food insecurity will be adversely affected by increases in prices of basic needs such as food and fuel for heating and transport. Approximately 25% of households in Scotland experience fuel poverty. In 2018, 9% of adults and 25% of single parents in Scotland reported worrying about being able to afford food, leading to significantly worse physical and mental wellbeing. These numbers have spiked during the Covid-19 pandemic. It is also critical to acknowledge that Poverty in Scotland disproportionately affects families and ethnic minority groups (38% of black/mixed and 29% of asian people live in relative poverty compared to 18% white British people).

Food poverty is intrinsically linked to fuel poverty for low-income households, as increases in the price of basic necessities adversely impacts the ability to afford a decent standard of living, including a healthy diet. Many are already required to choose between basic necessities such as fuel and food. Shocks to income and insecure livelihoods are also a main driver of food insecurity. These potential negative impacts of job loss and price increases and associated risk of entrenching inequalities must be considered and mitigated as part of a just transition to net-zero.

Research from the Food Foundation shows that the UK government’s recommended Eatwell diet is unaffordable to many households, particularly families with children. The affordability of not only a healthy diet but also of the (welcomed) dietary changes called for in the Interim Report (para 5.16) must be taken into account in order to avoid widening food inequality.

A human rights-based approach to just transition grounded in the right to food will provide a framework to ensure that the ability to afford a decent standard of living is respected as Scotland transitions to net-zero. The principles of non-discrimination, participation and accountability are particularly important.

Another group that may be adversely affected are those involved in the Scottish livestock sector as they see the transition to a net-zero economy as a threat to their culture and livelihood. This includes those who serve the livestock sector, from land agents to landlords, feed producers and agents, meat processors and butchers. Livestock in Scotland can contribute economically, culturally and environmentally, if maintained in numbers that both reflect the carrying capacity of Scotland’s land and the changing demand from our local population. It is in large numbers, fed with imported untraceable feed, destined for non-local markets, that it compromises us reaching a net-zero target.
Methane is an important but a very different gas to nitrous oxide and to carbon dioxide. If these three principal agricultural greenhouse gases and ammonia were looked at individually, with targets for the reduction of each relative to their length of life and impact on the atmosphere, farmers may feel like they have more agency over their futures. There are management options available to reduce all of these, with several co-benefits for farmer’s pockets, water and air quality and ecosystems. Over use of nitrogen is one example that could be easily and quickly tackled before reducing anyone’s herd numbers but only once there is a much wider understanding that everyone needs to be part of the solution.

Linked to the our response under question 4 about changing the narrative - farmers may feel less adversely affected and more able to make a positive difference if campaigns directed at ‘consumers’ to eat healthy and sustainable diets were joined up with efforts to support farmers to transition. For example ,by establishing connections through public procurement and public kitchens as well as private catering firms.

There are several examples around the world of this being put into practice. In Denmark, their narrative around food has become one of gastronomy as they seek to find the joy in their food. This has not come about by accident, but through a linked up determination led by government and informed by chefs, farmers and food citizens. At the local level Copenhagen Municipality have joined up diet and health, the rural/urban connection, sustainability and food culture in their strategy for meals in public kitchens. This includes working to establish strong local partnerships with food operators and producers in the Copenhagen hinterland and in the city so as to support a sustainable transition in Danish food production with farmers on supply reliability for the seasonal and locally produced raw products required for sustainable meals. The point is this isn’t just for fancy restaurants but everyone.

6. Please provide here any other information, evidence, or research you consider relevant to the work of the Commission.

Affordability of the UK's Eatwell Guide
Food systems must change by 2021. Here's how
Fuel Poverty Overview
Scottish Health Survey 2018 published - gov.scot
Food banks report record spike in need as coalition of charities call for lifeline
https://www.gov.scot/publications/poverty-income-inequality-scotland-2015-18/pages/8/#:~:text=Ethnicity%20and%20poverty,-Chart%2015.&text=The%20poverty%20rate%20was%2038,or%20Asian%20British%20ethnic%20group
THE CITY OF COPENHAGEN'S
Scottish Health Survey 2018 published - gov.scot
The rising cost of living will hit low-income households hard in 2018
EU Farm to Fork Strategy (2020)  https://ec.europa.eu/food/farm2fork_en
How Much Food is Wasted in Scotland?