## Sectoral Emissions Ceilings

Q4: What do you view as the key actions required to ensure the emission reduction targets set out in the Sectoral Emission Ceilings are met?

## Irish Apple Growers Association:

Agriculture: All actions already identified in Teagasc MACC. Additional actions will also likely be needed

Q5: What do you view as the main challenges/obstacles to the Sectoral Emission Ceilings being met?

, Irish Apple Growers Association:

Agriculture:

Failure to engage all participants.

Missed opportunities in, for example, apple production, which is the only net carbon-sequestering food crop grown in Ireland (11.2t CO2 per ha per year).

# Carbon Pricing & Cross-Cutting Policies

Q6: Are there any unintended barriers within the planning system that should be addressed at national policy level in order to deliver our climate ambitions?



Irish Apple Growers Association:

Agriculture and land use:

Forestry.

Non-consideration of emissions implications of planning decisions is also problematic.

Q7: What further opportunities exist within our taxation system, beyond measures already implemented and planned, to promote emissions reductions, either on an economy-wide basis, or in specific sectors?

## Irish Apple Growers Association:

#### Agriculture:

Tax efficient investments by, for example, the pension industry, in major new orchard projects, are not unusual in other countries. Ireland, as a net importer of 97% of the apples consumed here, has the opportunity to displace imports, with the orchards growing those fruits simultaneously sequestering carbon, as well as being an alternative land use to emissions-generating agriculture.

1000 ha of apple orchard, which would bring Ireland's apple self-sufficiency to about 30%, would sequester 11.2 million kg of CO2 annually.

Q8: Further to recent reforms to Ireland's green budgeting and public procurement policies, are there any additional measures that could be taken to integrate climate considerations into these policy frameworks?

#### Irish Apple Growers Association:

The tendering processes for supply of fruit and vegetables to public authorities and related organisations, such as hospitals etc are totally unsuitable for local and smaller-scale producers. This results in large companies filling the tenders at inflated prices (lack of true competition), while simultaneously increasing the likelihood of unsustainable (long-distance) supply chains, often with produce which is unnecessarily imported.

Q10: Are there any other cross-cutting issues that should be considered in the development of the 2023 Climate Action Pan?

## Irish Apple Growers Association:

According to a number of our members who attempted to get SEAI assistance for SolarPV projects, they were extremely unhelpful. They charged for energy audits and refused grant assistance on the basis of spurious findings, which no obvious way to appeal their pronouncements.

# **Public Sector**

Q73: What opportunities exist for the public sector to step up its climate ambition?

Irish Apple Growers Association:

Local sourcing of fruits and vegetables, without an arduous tendering process.

Q74: What sort of practical changes would you expect the public sector to make in leading and delivering Ireland's climate ambition?

## , Irish Apple Growers Association:

Delegation of power and responsibility to appropriate level for making the decision.

## Renewable Gases

Q13: What role does renewable gas have in the power generation sector?

## Irish Apple Growers Association:

Very limited, as growing grass for gas is very nutrient (especially nitrogen) dependent, which means on an LCA basis, it is barely sustainable.

## Electricity

Q11: What options are available to increase the penetration of renewable electricity beyond the up to 80% committed to in Climate Action Plan 2023?

# Irish Apple Growers Association:

At the moment, in most European countries, research is being undertaken on the compatability of solar PV with food production (especially fruits which generally do not require large field-scale equipment). Such research is absent in Ireland.

Q13: What role does renewable gas have in the power generation sector?

## Irish Apple Growers Association:

Very limited, as growing grass for gas is very nutrient (especially nitrogen) dependent, which means on an LCA basis, it is barely sustainable.

Q14: What role could carbon, capture and storage have in decarbonising our power sector?

Irish Apple Growers Association:

That appears to be a theoretical technology at this point.

Q15: What other opportunities exist to support the decarbonisation of the electricity sector?

Irish Apple Growers Association:

Demand management

Q16: What measures might be taken to improve the resilience of the electricity system to the impacts of climate change?

, Irish Apple Growers Association:

Under-grounding portions of the distribution network.

Larger and more numerous inter-connectors (the celtic interconnector being built is not anywhere near adequate).

Q17: What role do you see for electricity storage and demand-side response in providing flexibility to a system comprised of high renewable penetration and in supporting the decarbonisation of the electricity sector?

Irish Apple Growers Association:

This is under-utilised at the moment.

The price of grid connection for small scale commercial enterprises needs to come down.

Q18: What financial incentives are needed to increase renewable generation capacity?

- a. To incentivise commercial scale production.
- b. To incentivise microgeneration.

## Irish Apple Growers Association:

Whatever they are, for those involved in agriculture, who may, for example, wish to put solarPV on shed roofs, in no way should the SEAI be involved in the administering of grants, or decisions on suitability of applicants.

Q19: What are the regulatory challenges for reaching the renewable energy share targets?

### Irish Apple Growers Association:

Planning regulations on placement of panels on farm shed roofs are very unhelpful.

## Agriculture & LULUCF

Q61: What are the opportunities to increase take-up of measures identified in AgClimatise and encourage adoption of other practices which reduce emissions?

## Irish Apple Growers Association:

Land use change from bovines to non-bovines.

Q62: What policies and measures would be needed to support farmers diversify their farm activities to include opportunities such as bioenergy, vegetable growth, forestry, organic farming, etc.?

#### Irish Apple Growers Association:

Apple production is the only net carbon-sequestering food crop grown in Ireland, with a sequestration rate of 11.2t CO2/ha/yr, validated by research.

Depending on what % of the €100 million worth of apples imported into Ireland would be considered desirable to grow here, there is the opportunity for 1000 to several thousand ha to be planted. 1000 ha, would result in net annual sequestration of 11.2 million kg of CO2 per year, as well as likely leading to less emissions from whatever land use the orchards replaced. Such a conversion wold require more support than is currently given to apple producers via the (already helpful and appreciated) DAFM scheme for investment in commercial horticulture.

All data centres, as a condition of their planning, should power district heating with their waste heat, or have co-located greenhouse-complexes available to rent for growers of heated greenhouse crops such as tomatoes, peppers, cucumbers etc.

Q63: What can be done to maximise the use of manure and silage as feedstock for biomethane generation in closed digesters and inject into the gas grid to offset natural gas?

## Irish Apple Growers Association:

Silage (with the possible exception of old waste silage from previous seasons) should not be used as a biomethane feedstock, as it is too energy-dependent and nutrient dependent to produce for such use.

Q67: What opportunities exist for increased use of cover crops, incorporating straw into tillage and for the application of regenerative agriculture practices? How can farmers be supported to take up these practices?

#### Irish Apple Growers Association:

Unfortunately the newly designed ACRES scheme (an environmental scheme for farmers) is completely useless for apple producers utilising regenerative methods, and many producers of horticultural crops. Specific schemes will need to be developed to support these sectors, or higher market prices will be needed for the products, so that the sectors can operate profitably without need for supports.

Q70: What specific measures can be taken in agriculture, forestry and land use to adapt to climate change?

## , Irish Apple Growers Association:

In apple growing, damage caused by late spring frosts and summer hailstorms is now much more commonplace due to climate change. Specific measures such as frost protection, hail protection, and possibly integrating Solar PV with apple production as a crop-protecting mitigation device (as is being done experimentally in some countries now) will be required.

## Research & Innovation

Q91: Are the required research and innovation programmes and structures in place to support our climate ambitions; including the provision of the evidence needed to underpin policy in a timely manner?

## Irish Apple Growers Association:

Not in the agricultural realm. Much of the finance directed at Teagasc seems to be food-processing related rather than production related. This was appropriate when only small changes were happening in production agriculture (and horticulture). This is no longer the case.

Q92: Have you identified any research and innovation gaps which need to be addressed? If so, how can these gaps best be addressed?

## Irish Apple Growers Association:

Research in apple production in Ireland ceased in the 1970's. The industry reliant on the output of that research has contracted as a consequence. There is a major need for a recruitment drive to hire 4 or 5 researchers in the apple sector alone. This is probably mirrored in other sectors of horticulture.

Q93: Are there important areas of research and innovation, where Ireland currently does not have sufficient capability, that need to be developed? If so, what are these areas?

Irish Apple Growers Association:

see Q.92