

Farming for the future

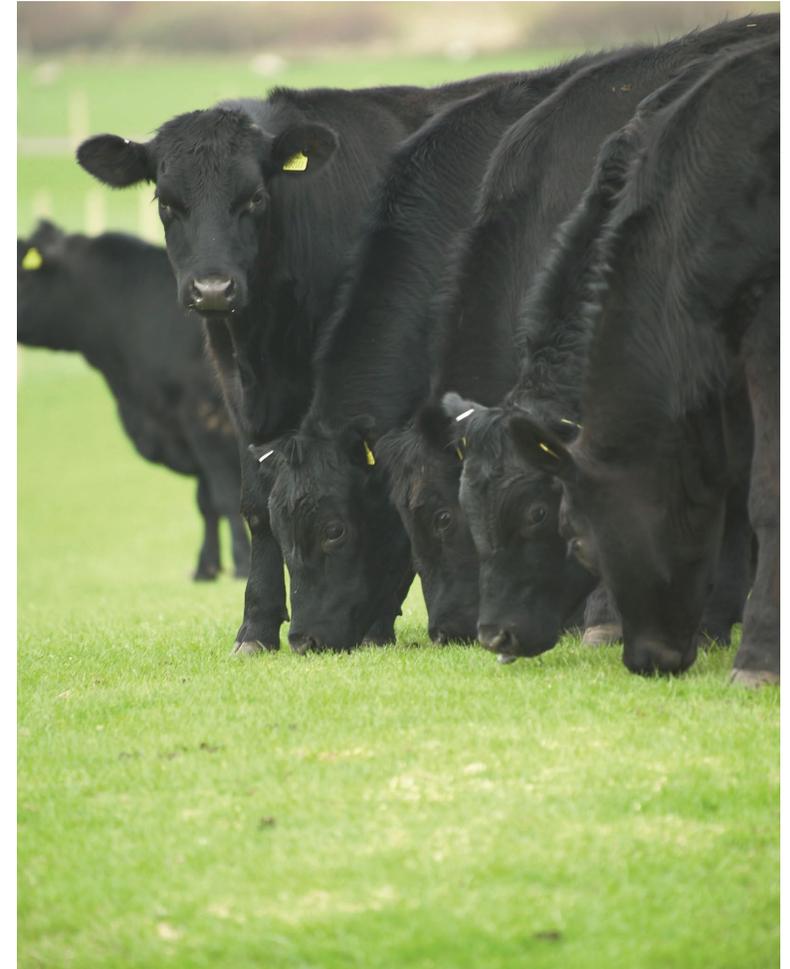


NFU Scotland

Lucy Sumsion, Argyll & the Islands Regional Manager

Farming at risk?

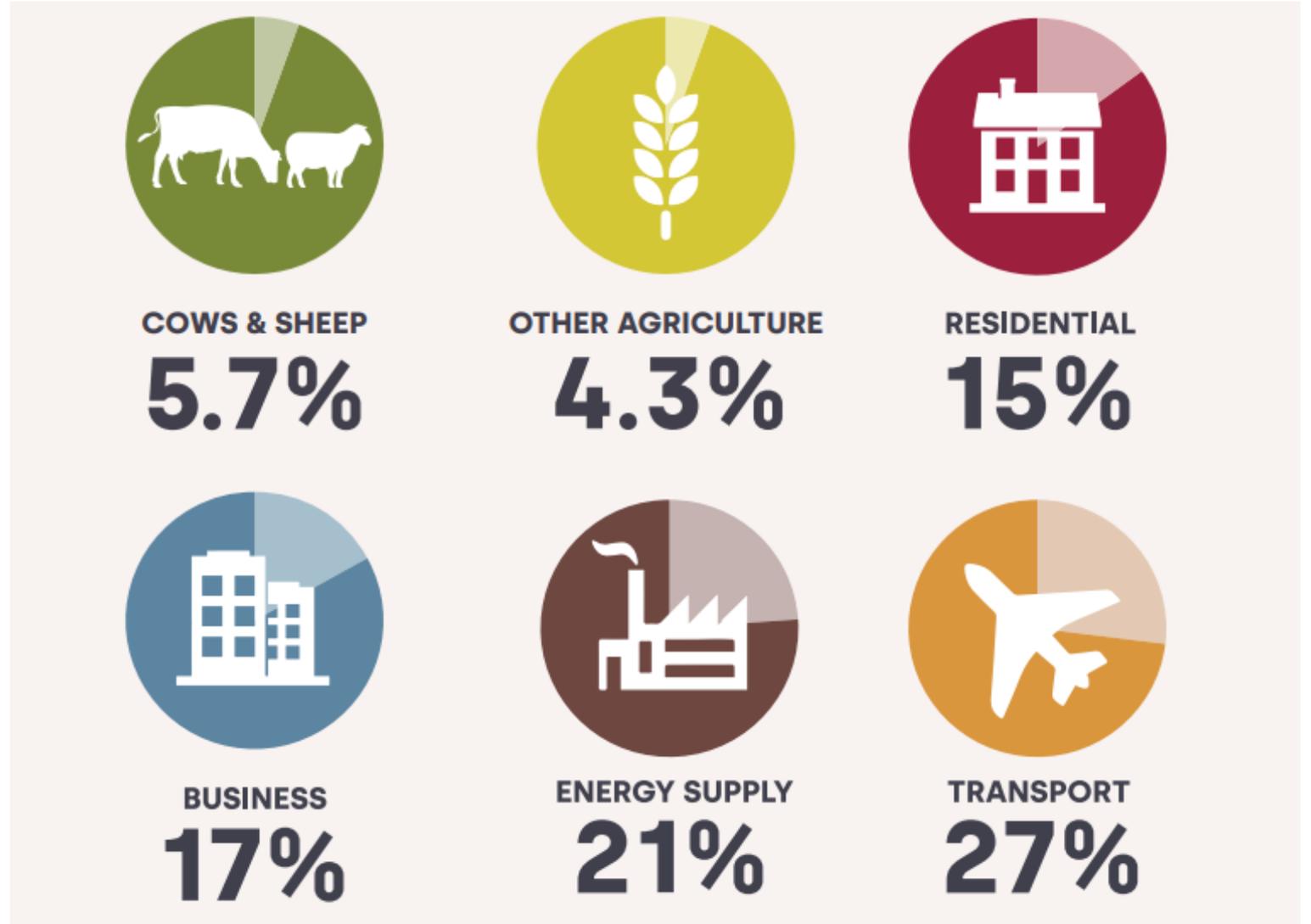
- In Scotland, agriculture:
 - accounts for 80% of Scotland's land use
 - total economic output worth £3.18bn [2019]
 - employs 67,000 people
- Agriculture is one of the economic sectors most at risk from the impacts of climate change
- However, farming is often blamed for climate change - why do we have a image problem?



GHGs in agriculture



A bit of myth busting...





Agriculture's Role

- Scottish farmers, crofters, and growers have a key role to play in reducing emissions to meet climate change goals.
- NFU Scotland recognises that Scottish agriculture must take significant steps if the sector is to achieve net zero greenhouse gas emissions by 2045 - the target set by the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019.
- This is alongside working to deliver many other public benefits such as increase biodiversity in the farmed landscape, mitigating against flood risk and not least producing food.

The Challenge Ahead

- Need to accept that due to natural processes, there will always be emissions associated with farming both from livestock and management of soil.
- The challenge is to **minimise** these emissions as much as possible and **maximise** sequestration opportunities.
- This is against the backdrop of a challenging and uncertain financial outlook for farming.



GHG emissions from farming

Total emissions - 7.5Mt CO₂ e

- CO₂ - 1.1mt
- Nitrous Oxide - 2.2mt
- Methane – 4.4mt (60%)

- Required to reduce emissions to 5.3Mt CO₂ e by 2032 (30%)



What do we need?

- Vital that agriculture policies are practical, holistic, properly funded and realistic
- Joined up policy – food, climate, land use framework, trade deals, cost accounting, data
- Clear route to reduce GHGs, improve environment and maintain food production and viable businesses



Policy priorities

Farming part of the solution

Food security

On farm carbon balance sheet
(Emissions + Sequestration)

GHG assessment methodologies
i.e GWP*, consumption emissions

System change
– but to what and how?

Agri Policy
Sooner – and properly funded

Environmental Conditionality
fund the right thing

Sequestration
(Not just trees & peat)

Benchmarking

Nature-based finance
Carbon credits and investment

Land use change conflicts

Food choice / Carbon labelling



On farm priorities

Farm efficiency ~ sustainability

Whole farm plan

Carbon Audits / Nutrient Assessments / Soil analysis

Farm system change

Regenerative / climate techniques

Sequestration on farm

(Hedgerows/ Trees on farm/ soils/ grassland)

Grass legume mix in pasture

Keeping PH at optimum for plant growth

Nutrient management / Precision fertilizer use

Livestock health / breeding

Skills and training
(and funding)

On farm energy

Nitrification inhibitors
(Increasing carbon in reducing nitrogen leak/ spreading)

Feed types

(inc additives for methane?)



Sequestration and land use





Sequestration and land use change

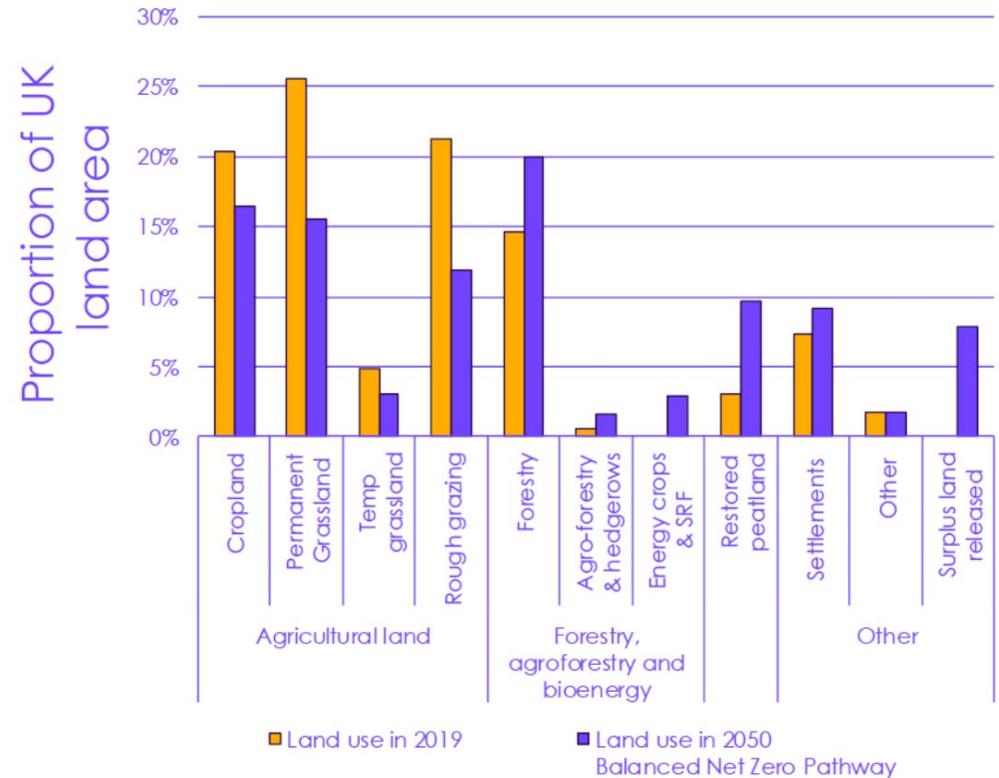
- Sequestration is permanently taking carbon out of the atmosphere
- Aim is to both sequester carbon and change energy supply
- Government policy to increase:
 - Trees
 - Restored peatlands
 - Energy crops
 - Agroforestry / hedgerows

Land use change

However, what we don't want

- Large-scale off-setting
- Carbon credits lost
- Competition between forestry/energy and food
- Loss of land suitable for food production – including cows and sheep

Significant land use change usually means the demand will pop up elsewhere (usually outside of the UK)

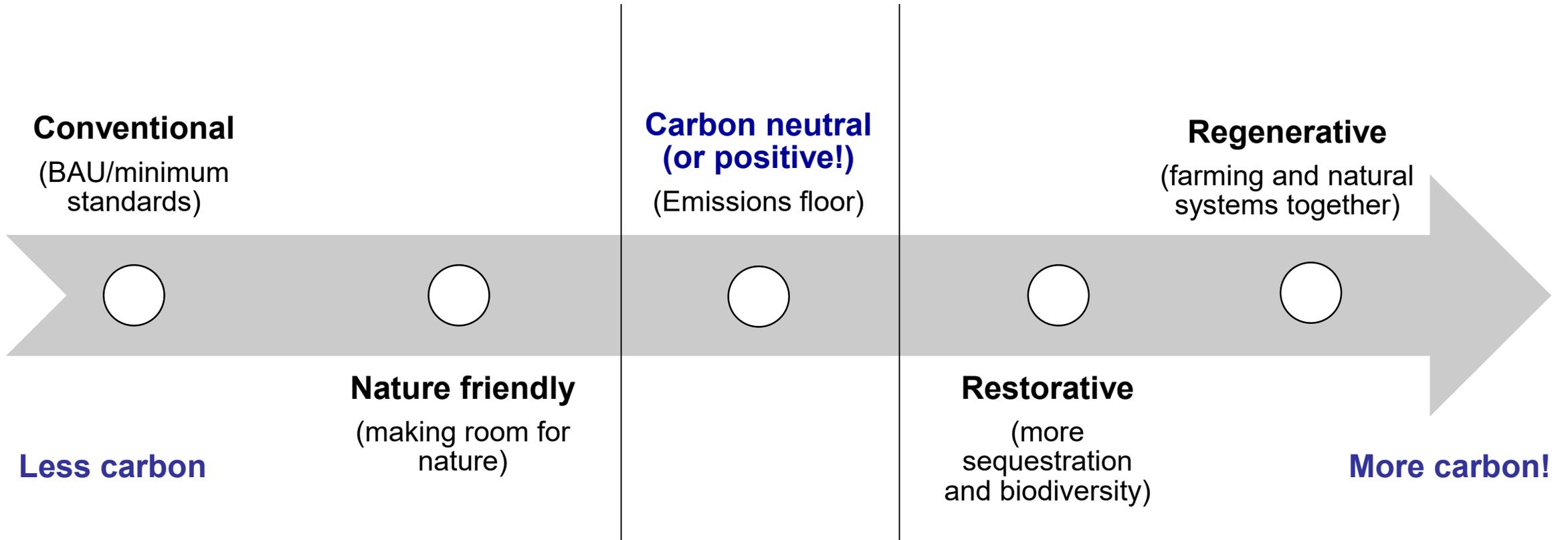


Soil and grasses

- Not just trees and peat
- Scottish soils hold 3,000 megatonnes of carbon
- Huge potential to increase carbon in soils/grazing land – and be rewarded
- Do we need a carbon balance sheet?
- Complex, depends on area, weather - makes it hard to analyse
- Data is coming!



Farm system change





Restorative /regenerative agriculture techniques

No till / inter cropping / continuous cropping

Diverse crop rotations

Rotating crops with livestock grazing inc pigs, poultry, cows

Mob grazing

Agroforestry, trees and hedgerows

Species-rich grasslands / legume grass mixtures

Using biochar

Pasture led

Inputs – such as soy free feed



Let's have a positive conversation

- Farming is part of the solution – but we are on a journey like everyone else
- We do have an impact – lets talk about it more, how do we move forward?
- Our food security is just as important as sustainability – don't offshore
- We need to have positive conversations about farming and food!
 - We produce fantastic food in Scotland – celebrate it
 - Do we focus on our end product enough?
 - 97% of UK still eats meat as part of their diet but people are questioning where their food is coming from
- Lots of opportunities ahead!



Thank you!



NFU Scotland

lucy.sumsion@nfus.org.uk