Suckler Beef Climate Scheme: summary of evidence & further questions

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(leaning on colleagues in SRUC and elsewhere)

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Leading the way in Agriculture and Rural Research, Education and Consulting

Mitigation possibilities & analysis

- Catalogue of current and emerging best management practices

- Need to balance different policy objectives

- SBCG seeking lower emissions with retention of beef production

- Scientific evidence base, incorporated into analytical tools

- Proxy emission indicators: individual actions vs. summary metrics

Mitigation estimates

- CTS data analysis (herd metrics)
  - scope to improve national rates of calving (c.80%) and on-farm mortality (>c.6%)
  - scope to improve national breeding replacement cycle and slaughter age
  - significant variation between farms (complexity and diversity)

- AgreCalc, farm-level 'rearer-finisher' case study
  - up to 38% reduction in emissions-intensity
  - cumulative effect of improving herd metrics, plus adopting new technologies

- Smart Inventory
  - up to 39% reduction in national aggregate emissions
  - cumulative effect of improving key national herd metrics, plus new technologies
  - requires non-replacement of unproductive cows to avoid rebound/backfire effects

Smart Inventory

- Basis for <u>domestic production</u> emission-reduction targets
  - models different breeds, animal 'roles' & age, farm type and management
  - will reflect changes in herd metrics and (in principle) new technologies
  - better incorporation of Scottish-specific data would be desirable

- c.2.6 Mt CO2e attributed to beef cattle (c.7.5 Mt CO2e to agriculture)
  - enteric methane plus manure methane & nitrous oxide
  - excludes dairy cattle, and emissions from feed & fodder production

- Upper-bound of 39% mitigation is <u>unattainable in practice</u>
  - but e.g. 20% mitigation (c.0.5 Mt) achievable via various permutations
  - removal of up to c.181k unproductive cows and their replacements (out of c.568k)

Further questions (how wide, far & fast?)

- ## Basis for payments
  - actions, CTS metrics, biodiversity; monitoring

- ## Payment rates
  - budgets, targeting, eligibility; (rebound/WTO) constraints

- ## Databases
  - hosting, sharing, interactions

- ## Advice & comms
  - accreditation, inspections, industry role

Suckler Beef Climate Change

Implementation Project Mobilisation

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SG Project Approach Principles

- We must apply these proportionate to cost, risk and impact.

- Includes:-

    - Business Case Development and Management – costs and benefits.

    - Clear Roles and Responsibilities.

    - Managed Plan (key milestones, decisions and dependencies).

    - Resource Management.

    - Risk Management.

    - Transition To "Live".

    - Lessons Review.

- Independent "Gate" Review - form is based on cost, risk and impact levels.

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SG Service Design Principles

- Establish Target Service Model and Target Operating Model, by:-

    - Exploring and defining the problem before we design the solution.

    - Designing service journeys around people and business and not around how the public sector is organised.

    - Seeking citizen (stakeholder) participation in our projects from day one.

    - Using inclusive and accessible research and design methods so citizens (stakeholders) can participate fully and meaningfully.

    - Using the core set of tools and methods of the Scottish Approach to Service Design.

    - Sharing and reusing user research insights, service patterns, and components wherever possible.

    - Contributing to continually building the Scottish Approach to Service Design methods, tools, and community.

Mobilising the Project - Initial Steps

- Agree Project Scope.

- Appoint SRO.

- Appoint Project Manager.

- Agree Project Delivery Roles and Responsibilities.

- Resource the Project with the right skill sets.

- Commence Service Design approach – Initial Discovery

  (**Report provides a flying start**).

- Prepare Outline Business Case and agree budget allocation and any contracted services.

Key Challenges

- Maintaining momentum whilst delivering Business As Usual.

- Having dedicated resource to complete project actions.

- Freeing up time of appropriate subject experts

- Balancing demand of delivering multiple projects/activities and responding to exceptional demands (eg EU Exit consequences).

- Integrating with current business processes and IT systems.

- Addressing current service (IT) complexity (identifying what can be built upon or repurposed as opposed building new)

- Establishing Data Standards and Data Sharing Arrangements.

- Integration of other farmer led group findings.

Key Opportunities

- A key step (pilot) in the transition to a new holistic operational delivery approach that supports land use for food production, environment management (climate change) and biodiversity.

- Incrementally build a digital platform that enables data to be captured at source (perhaps born digital through increasingly pervasive sensor technologies), analysed dynamically and shared and used by farmers, land managers, communities, policy makers, researchers and regulators alike.

- Our objectives and organisational delivery approach have been to a great extent dictated by EU CAP. **We have much greater opportunity to design services around Scottish outcomes.**

- **This work represents the first significant step along that path.**

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