

Agenda – Y Pwyllgor Newid Hinsawdd, Amgylchedd a Materion Gwledig

Lleoliad:	I gael rhagor o wybodaeth cysylltwch a:
Ystafell Bwyllgora 1 – Y Senedd	Marc Wyn Jones
Dyddiad: Dydd Mercher, 26 Chwefror 2020	Clerc y Pwyllgor 0300 200 6363
Amser: 09.15	SeneddNHAMG@cynulliad.cymru

Rhag-gyfarfod (09.15– 09.30) – Sesiwn friffio gyfreithiol ar y Memorandwm Cydsyniad Deddfwriaethol mewn perthynas â Bil Amaethyddiaeth y DU – PREIFAT

1 Cyflwyniad, ymddiheuriadau, dirprwyon a datgan buddiannau (09.30)

2 Memorandwm Cydsyniad Deddfwriaethol mewn perthynas â Bil Amaethyddiaeth y DU– sesiwn dystiolaeth 1

(9.30–10.45)

(Tudalennau 1 – 60)

Haydn Evans, Cadeirydd – Fforwm Organig Cymru

Roger Kerr, Prif Swyddog Gweithredol – Ffermwyr a Thyfwyr Organig

Christopher Stopes, Swyddog Polisi – Ffermwyr a Thyfwyr Organig

Dogfennau atodol:

Briff Ymchwil

Nodyn cyfreithiol (Saesneg yn unig)

Papur – Fforwm Organig Cymru (Saesneg yn unig)

Papur – Ffermwyr a Thyfwyr Organig (Saesneg yn unig)



3 Papurau i'w nodi

3.1 Gohebiaeth gan Nest – Tlodi Tanwydd

(Tudalennau 61 – 64)

Dogfennau atodol:

Papur (Saesneg yn unig)

4 Cynnig o dan Reol Sefydlog 17.42 (vi) i benderfynu gwahardd y cyhoedd o weddill y cyfarfod heddiw

PREIFAT (10:45 – 11.15)

5 Trafod tystiolaeth a gafwyd o dan eitem 2; a thrafodaeth ar ddull gweithredu'r Pwyllgor ar gyfer gwaith yn y dyfodol mewn perthynas â materion llifogydd yn dilyn Storm Ciara a Storm Dennis.

Mae cyfyngiadau ar y ddogfen hon

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Cynulliad Cenedlaethol Cymru
Y Pwyllgor Newid Hinsawdd,
Amgylchedd a Materion Gwledig
MCD mewn perthynas â Bil
Amaethyddiaeth y DU
NHAMG (5) AB02
Ymateb gan Fforwm Organig Cymru

National Assembly for Wales
Climate Change, Environment and
Rural Affairs Committee
LCM in relation to UK Agriculture Bill

CCERA(5) AB02
Evidence from Welsh Organic Forum

INTRODUCTION

The Welsh Organic Forum welcomes the inquiry alongside the recent publication of the Agriculture Bill. Whilst being asked to comment on specific parts and clauses of the bill. It should be remembered that the success of the sector will be integrated with the successful completion of requisite trade negotiations, and other overall aspects such as legislative tariffs. The regulatory equivalence will be fundamentally important to the organic sector now that the UK has left the E.U.

Wales is unique to the other devolved nations having 4.9% of the total land area in Wales registered organic (2018 DEFRA stats). With some 600 certified organic producers and 128 processors in Wales.

FOOD SECURITY – PART 2 (CLAUSE 17)

This relates to the whole of the UK but obliges the DEFRA SOS to report to Parliament on food security every 5 years.

This report will also contain an analysis of statistical data relating to food security in the UK and that includes data around food availability, supply services, supply chain resilience, household expenditure on food, food safety and customer confidence.

The Welsh Organic Forum welcomes this development which was not in the previous bill.

However, once every 5 years is a distant horizon from inception, particularly through a transition period that could prove to be challenging. Perhaps a shorter timespan of annual or bi annual would allow a review to be undertaken of the impacts of what could be radical change.

The Welsh Organic Forum would also point out that there is no obligation on Ministers to take any action in response to the findings of the report.

It would also welcome a wider definition around epochal events e.g. animal or plant disease, geopolitical instability, climate change that triggers the SOS on food security.

PART 4 CLAUSES 31/32/ FERTILISERS

This deals with the definition of fertilisers together with some amendments (from the Agricultural Act 1970).

The intention is to incorporate a number of modern fertilisers within the parameters of the Act.

Specifically, Clause 32 allows the SOS to set up a body to collect, manage and make available information regarding the identification, movement and health of animals or the means of identifying animals.

The Welsh Organic Forum would like to point out the following: -

- i) Animal disease does not respect geographical boundaries e.g. TB in cattle.
- ii) A large number of animals move between England and Wales. If different data bands are used, they must communicate and exchange with each other e.g. Wales and England have different data bands for sheep.

Solutions should be mutually agreed between DEFRA and Welsh Government.

The Welsh Organic Forum would like to pass comment on Clause 33 and the repatriation of levy for Welsh red meat back to Wales. This is most welcome by producers, although there is no mention of how the levy on organic red meat can be directly used to promote organic food.

PART 4 AGRICULTURAL TENNANCIES SCHEDULE 3

Principally this makes a number of amendments to the Agricultural Holdings Act 1986; -

- i) Third party arbitrations/determination of rent
- ii) The appointment of arbitrators
- iii) Tenants may refer a request for landlords' consent or variation of the term of the tenancy to arbitration in certain circumstances. Succession on death, or retirement, and conditions relating to the occupation of a commercial unit and suitability.

The Welsh Organic Forum welcomes their proposed changes with such a review long overdue. However, the Forum has previously expressed its concern on such matters as diversification of tenants' income, when landlord's approval has been immediately followed by rent increases. Such areas of wind, solar, tourism have been valuable sources of farm income, but negated by rent rises.

Key to the success of the Arbiter for rent will be the criteria they work to.

A principal concern to the Forum is the lack of detail of how it will integrate with new agricultural policy i.e. public payment for public goods.

Landlords will frequently apply to the Agricultural Tribunal for a certificate of bad husbandry. The Tribunal will work to a set of principles to determine its outcome as promulgated under section 2 of the Agricultural Act 1947. This defines good husbandry as; -

- i) Having regard to the character and situation of the unit
- ii) The standard of management thereof by the owner and relevant circumstances.
- iii) The Occupier is maintaining a reasonable standard of efficient production. The evaluation process then goes further to ask.
 - a) Is permanent pasture properly mowed, grazed, maintained in a good state of fertility.
 - b) Is the unit stocked at the correct stocking rate?

The Welsh Organic Forum has fundamental concerns that these principles could collide with future land policy and be a potential source of conflict.

PART 5 – ORGANIC PRODUCTS

Section 36 provides the Secretary of State and where applicable Devolved Ministers to make provision for organic certification including input and export of organic products.

The Welsh Organic Forum notes that there is no mention of who inspects the certification bodies. Such clarification would be welcome together with its status i.e. would there be an overarching body or devolved bodies.

We would also like to put on record our concern regarding how the existing framework of legislation will be incorporated into future legal framework on the 1st January 2021.

New EU organic regulation (848/2018) requires that third countries are compliant with E.U Regulation via a trade agreement. Historically equivalence was acceptable.

320 (5) sets out the circumstances within which restrictions or prohibitions on the input of organic products may be made. It includes where inputs are recognised as compliant or equivalent with organic standards OR where a trade agreement is in place.

In view of the recent US Executive Order around trade deals (sound science), this would appear to take prevalence with potential conflicts around such areas as hydroponics, access to pasture and GM labelling.

PART 7 CLAUSES 43/44 SCHEDULE 5 WALES

Whilst appreciating that the committee has already taken evidence in this area, the Welsh Organic Forum would comment as follows: -

Whilst section 5 confers less powers on Welsh Minister, then section 3 in the previous agricultural bill we note that it is Welsh Governments intention to legislate.

However, we are pleased to note that schedule 5 does provide powers for Welsh Ministers to simplify BPS legislation and to continue with BPS payments beyond 2020 including the ability to amend rural development scheme in order to simplify them.

We are also pleased to note that Welsh Ministers also have powers in relation to exceptional market conditions (as per clauses 18/19 and 20 for England).

It is important that there is consistency and comparability with other devolved nations in order not to distort markets.

We also note that the words around exceptional market conditions and that the powers are discretionary. Wording like Welsh Ministers may are prevalent. Whereas a duty to act would be more inclined to have wording such as Welsh Ministers must.

Cynulliad Cenedlaethol Cymru
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MCD mewn perthynas â Bil
Amaethyddiaeth y DU
NHAMG (5) AB04
Ymateb gan Organic Farmers and
Growers

National Assembly for Wales
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Rural Affairs Committee
LCM in relation to UK Agriculture Bill

CCERA(5) AB04
Evidence from Organic Farmers and
Growers

1. Introduction

- (1) OF&G welcomes the inquiry alongside the recent publication of the Agriculture Bill, Environment Bill and launch of new National Food Strategy (NFS), and the ambition it shows for sustainable food and farming.
- (2) As stated by Defra, the NFS emphasises the need for “resilient, sustainable and humane agriculture” and food and farming that “restores and enhances the natural environment for the next generation in this country.”
- (3) Organic food and farming provides a well-evidenced and proven component to meeting these aspirations. Organic is built on a verified, system-based approach to food production that is proven to be successful for the environment and in the marketplace.
- (4) With 85% of the population currently buying some organic food and drink annually, recent Kantar data provided by the Organic Trade Board (OTB) shows UK sales value growth in organic food and drink of around 6.5% on the previous year with improving performance toward the end of last year. This is against a backdrop of overall UK food and drink sales up 1.4% over the same period.
- (5) OTB consumer research also shows that just over a quarter of the total UK population strongly consider buying organic food and drink, with around a third of younger consumers and households with young children also strongly considering buying.
- (6) Currently, almost 85,000 hectares are under organic land management in Wales representing 4.9% of the total agricultural land area in Wales (this compares with 2.7% of the total agricultural land area in UK). Farmed by over 600 certified organic producers and marketed by 128 processors in Wales, overall numbers increased by 1.1% on the previous year. Compared with Scotland, England and N. Ireland, Wales is the only devolved nation in the UK to see an increase. Wales has at its heart long-standing organic farms some having been farmed organically for over 70 years - organic clearly works.

- (7) Organic systems are based on principles of health, ecology, fairness and care, proven to simultaneously and consistently deliver on multiple public goods. These principles increasingly mirror concerns regarding climate change mitigation, animal welfare, and protection of biodiversity and the environment. Organic systems provide increased resilience in the face of severe climate events, as well as providing a well-evidenced approach to conserving finite resources.
- (8) By working within defined constraints focused on resource use, health and ethical challenges that are now clearly a priority for all farming, the organic sector has been a test-bed for systems, techniques and technology that are being adopted more widely in agriculture and horticulture. Organic is a source of systems innovation, rather than simply an incremental improvement in efficiency. Such innovation is crucial. Within these constraints, legally defined in organic standards and independently audited, organic food is enabling consumers wanting to support 'the change'.
- (9) There is mention in the Agriculture Bill of Agroecology in terms of a "better understanding of agroecology". The implication of this as an "inclusive" approach suggests a whole new suite of policies which already exist (to an extent) for organic. Duplication of schemes would not be helpful either. Organic certification is the certification scheme for agroecology and development of this would therefore be constructive. The creation of a parallel market label for 'agroecology' would undoubtedly cause confusion in the minds of the consumer as market research has shown.

2. Trade issues - maintaining organic standards, enabling fair trade

- (1) The United States is the leading market of £34 billion, followed by Germany (£8.5 billion), France (£6.7 billion), and China (£6.5 billion). In 2017, many major markets continued to show double-digit growth rates, and the French organic market grew by 18%. The Swiss spent the most on organic food (288 Euros per capita in 2017). Denmark had the highest organic market share (13.3% of the total food market)¹.
- (2) The global organic market is predicted to grow from \$124b in 2017 to \$323B by 2024¹.
- (3) In 2016 UK exports of organic food were estimated to be 8.5% of total UK organic market value (with 5% of total UK organic market value destined for the EU) - in the same year 19% of total UK food and drink value was exported.

¹ <https://www.fibl.org/en/info-centre/news/global-organic-area-continues-to-grow-over-71-5-million-hectares-of-farmland-are-organic.html>

- (4) While opportunities exist across the globe it is important to recognise that the EU still represents our most significant export market with around 60% of food, feed and rinks exports destined for the EU.
- (5) With regard to future trade arrangements the ideal scenario would be that the current organic trade arrangements are maintained via bilateral mutual recognition (equivalency) agreements between the UK and the EU, the US and other third countries (South Korea, Chile, Switzerland, etc) respectively.
- (6) On the 1st January 2021 the EU will implement a new organic regulation (848/2018) however the final implementing and delegating acts have yet to be published so we (OF&G) don't have a final document identifying the changes yet. We have looked at the differences but until it is all settled, we cannot confirm the position.
- (7) The new organic regulation (848/2018) however does require that third countries have to be recognised under a trade agreement as having a system of production meeting the same objectives and principles by applying rules which ensure the same level of assurance of conformity as those of the Union.
- (8) In other words 848/2018 precludes bilateral mutual recognition agreements and requires that third countries are compliant (not equivalent) with the EU regulation via a trade agreement. All current third country equivalency arrangements will expire on 31st December 2025
- (9) From a domestic perspective we will have mutual recognition agreements in place from 1st January 2021 with the US and others. Whether these are superseded by future trade agreements remains to be seen. With 848/2018 coming into force however on the 1st January 2021 (the end of the transition period) whether the EU will agree a UK/EU bilateral mutual recognition agreement in place on 1st January 2021 remains unclear.
- (10) If a bilateral mutual recognition agreement with the EU is not possible then UK Organic Control Bodies' will need to apply for recognition as equivalent to the EU COM under Annex IV of 1235/2008 in which case pretty much the whole UK supply chain will need to be certified to 848/2018 to allow export to the EU. In this scenario we could well find ourselves with a UK organic standard (Defra have indicated they will not accept 848/2018 preferring to take the best of the existing EU regulation and EU Reg 848 plus some UK specific elements) plus the new EU organic standard (effectively a private standard in the UK) and any additional requirements from third country equivalencies (like antibiotic free milk required with the US/UK equivalency agreement).
- (11) Defra has said from the outset that they will accept organic imports from third countries but what that actually looks like we have still to see. We assume they will not just accept anything from anywhere on the basis that the documentation says its 'organic' so this needs to be confirmed and there is of course the thorny issue of tariffs.

- (12) There is as a consequence various implications to the Welsh operators
- There could well be two organic regulations being widely used with additional associated costs and complexity
 - Opportunities to export organic goods could be complex with additional associated costs and complexity
 - Imports could be produced to lower standards and at a significantly higher scale placing operators at a commercial disadvantage.
- (13) Following the implementation of 848/2018 within the EU this will be followed undoubtedly by a period of consolidation which will require numerous changes to the regulation as written. The EU will also enter into trade discussions as the current EU/US equivalency arrangements will need to be negotiated as a consequence of this legislation. Alongside this, the UK will be developing our own organic standards and regulatory framework requirements. All this will mean that the organic standards and regulatory environment will remain very fluid in the coming years.
- (14) With regard to Trade within the Agriculture Bill there is a focus on Section 36, clause 6 (c) in relation to organic imports. While the Bill states in clause 6 (b) that “imported organic products are produced in an overseas country which is recognised in accordance with the regulations as controlling or enforcing standards relating to organic products equivalent to those applicable in the United Kingdom;” It then goes on to state in Clause (c) that “imported organic products comply with conditions specified in an international trade agreement.” The implication of this is that depending on the terms of a trade agreement organic products may enter the UK at a standard that financially disadvantage UK operators or undermines consumer confidence.
- (15) To ensure that UK organic regulations remain fit for purpose by maintaining trade flow, ensuring domestic and export market growth and ‘public good’ potential is realised, as foreseen in the Agriculture Bill, any trade agreement:
- must not financially disadvantage UK organic producers, manufacturers and traders,
 - must not undermine consumer confidence in organic by allowing products that fail to meet current UK organic standards,
 - must ensure the continuance of the core principles of organic production that underwrite the simultaneous delivery of multiple public goods,
 - must ensure mutual recognition with current and anticipated future organic regulations in our largest trading partners (namely the EU and US).
- (16) Areas of concerns include:
- GM labelling and content,
 - Organic Hydroponics,
 - Pre-stunning at slaughter,
 - Access to pasture and ranging,

- Fortification of organic foods.

(17) Consequently, the UK organic sector proposes that any organic mutual recognition arrangements with third countries are separated from broader trade negotiations. This would allow subsequent changes within respective legal standards and regulatory requirements to be addressed in a timely way and independent of any wider trade agreement (with the consequential challenges this would create for the organic sector).

3. Agriculture Bill

- (1) We welcome the addition of soil to Part 1, Chapter 1 (1)(j), the reference to 'agroecology' in clause 5, and the inclusion of specific provisions relating to organic production in Part 5(36-37). These were not in the previous Bill, they substantially strengthen the Bill.
- (2) Organic production is in line with the objectives of the Agriculture Bill – multi-functional, with well evidenced outcomes and consumer confidence.
- (3) The mention of agroecology in Clause 5 is limited to the clarification that “better understanding of the environment” includes better understanding of agroecology. This fails to recognise that there is already a very good understanding of agroecology, although there is no single definition of the term. Agroecology can cover a wide range of approaches. Organic production is a leading example of an agroecological system.
- (4) There is thus an opportunity for the implementation of clear policies in support of specifically organic systems. Organic production is well established and well-regulated in the UK, in Europe and around the world. The well-defined standard, enforced through regulation is implemented by farmers on 0.5 million hectares in the UK, with a market value of £2.2Bn in the UK and \$105 billion (€97 billion) worldwide².

3.1 Organic production – Part 5 (36, 37)

- (1) Provisions for organic production are included in the Part 5, Clauses 36 and 37. Issues relating to maintaining organic standards and enabling fair trade are outlined in section 2 of this submission.

² <https://www.fibl.org/en/info-centre/news/global-organic-area-continues-to-grow-over-71-5-million-hectares-of-farmland-are-organic.html>

- (2) Clause 36, paragraph (3) outlines the purposes of organic production, specifying a list, (a) to (h), of the 'public good' objectives and outcomes and outcomes expected from organic production. These include reference to climate change, natural resource use, biodiversity, human health, health and welfare of livestock, health of plants, quality of soil, landscape. It is welcome that the Bill acknowledges these public good outcomes of organic production. However, protecting or improving water quality is not included in this list. Due to the restriction of pesticide and fertiliser use, this is a significant benefit of organic production. The Bill is inconsistent in that Part 1, Chapter 1, relating to the new financial assistance powers includes reference to water.
- (3) The explanatory note (Paragraph 319) makes it clear that (a) to (h) is a non-exhaustive list, and that provisions may be made in relation to the organic certification of organic producers from the point of view of the objectives, principles and standards of organic production. This offers scope for legislation to be introduced that can enable the area of organic production to increase for public good purposes.
- (4) Payment to reward organic farmers for the provision of these public goods should preferably be based on their value rather than on income foregone by the organic farmer, as is the case in the current agri-environment scheme.
- (5) Further provisions relating to organic production are specified in (i), (j) and (k) of paragraph 3, Clause 36. These include scope for promoting organic production; as well as innovation and research; securing the maintenance of the principles of organic production; and, maintaining consumer confidence in organic products.
- (6) Consequently, there is scope for action by government, working in partnership with the sector, including businesses and organisations, to increase the area of organic production and respond to both domestic and export organic markets (for example in Europe and North America).

3.2 Organic system thinking and land sharing

- (1) Farm businesses face increasing financial pressure as gross margins are constricted by market economics. Threats to biological diversity and extreme weather events are taking their toll, leading to crucial debate around the best way to manage the countryside, tackle climate change and produce sustainable food supplies and health promoting diets.
- (2) OF&G believes government policy must focus on 'land sharing' rather than 'land sparing' as a solution to our future agricultural production needs. Organic is a 'system-based' approach providing many linked benefits – it enables ecosystem functionality within the constraints imposed by planetary boundaries. This is not

reflected in the Agriculture Bill, and will inevitably limit the scope for a transition to Net Zero Carbon.

- (3) OF&G have produced two images of the same landscape (see Annex). One integrating a land sharing approach with its resultant multiple positive impacts and one integrating a land sparing approach. Beyond the economics of food production and discussions around the quantification of biodiversity gains and CO₂ equivalents, we also have to consider the human element. Spending time enjoying our natural environment is empowering. So, ask yourself: if you wanted to go for a country walk this weekend – which landscape would you prefer?
- (4) Land sparing seeks to intensify production on higher quality agricultural land while lower quality land is ‘spared’ for nature. The thinking behind this approach is based on experience from the Global South where agricultural production negatively impacts natural landscapes and consequently there needs to be a clear separation between the two. Virgin landscapes do not however exist in the UK any longer, our entire landscape having been shaped by human activity over last two millennia and more.
- (5) What is recognised now is that biodiversity in species type and abundance has declined significantly relatively recently with the development of ‘modern’ farming practises. To halt and reverse this decline it is being suggested that large sections of UK agricultural land are reverted to natural habitats. This is bold thinking but suggesting that the resultant lost agricultural production could be made up by utilising input-intensive systems is not credible.
- (6) This land sparing model is predicated on achieving much higher yields on the land remaining in agricultural production through a further increase in intensification. Consequently, there will be continued soil degradation, similar or increased GHG emissions through the use of artificial fertilisers and a continuing decline in biodiversity in these areas (including pollinators). The consequence of this is the on-going degradation of our most productive agricultural land through the continuation, in essence, of current techniques. The manufacture of artificial nitrogen alone emits just under 4kg CO₂e for every kilo of N produced. Combine this with the field losses, including those directly attributable to fertiliser use, then for every Kilo of N applied around 10kg of CO₂ are emitted.
- (7) A sustainable business model needs to consider its financial position from the perspective of the whole balance sheet, through protecting and improving natural assets and limiting future liabilities, rather than focusing solely on ‘efficiency’ within the farm gate, this simply encourages the externalisation of the environmental and health costs, analysis by the Sustainable Food Trust suggests that these costs exceed the value of the agricultural economy by some margin.
- (8) Land sharing comprises the integration of agricultural production with more environmentally friendly techniques, bringing nature into the field rather than displacing it somewhere else. Agroecological and organic farming techniques,

and interrelated activities across the food supply network, seek to provide food while simultaneously delivering multiple environmental benefits.

- (9) Stacking a diverse range of benefits within a complex systems-based approach in this way is proven to be far more resilient in the face of both climatic and economic shocks.
- (10) None of this however can be achieved without consideration of our diet. Wales is renowned for the quality of its red meat. However, the importance of healthy and sustainable eating patterns, with only moderate amounts of meat and dairy, is increasingly being recognised in national dietary guidelines, including the UK's EatWell Guide. In the UK meat consumption is more than twice the global average³, if this high consumption continues, it is likely that meat and livestock products (both ruminant and non-ruminant), will continue to be imported from lower cost countries, with poor environmental and animal welfare conditions. At the same time, it will result in off-shoring of the environmental impact (including GHG emissions, biodiversity loss and pollution).
- (11) It is critical therefore that that there is recognition of the benefits and value of extensive red meat production. A transition to less and better meat and dairy will bring a host of benefits from reducing greenhouse gas emissions, freeing up land to support biodiversity and carbon sequestration, improve animal welfare and reduce antibiotic use.
- (12) It is interesting to consider what "better" means in this context but some suggest it means choosing meat and dairy from well-managed production systems that enable natural behaviour, support good health and have a diet based around local food sources and home-grown feedstuffs, using for example European native legumes and also by choosing meat and dairy from smaller-scale, higher standard domestic producers. Choosing meat and dairy with a known provenance can reconnect producers and their customers such as through farm shops, box schemes, farmers markets and independent bakers, butchers and grocers.
- (13) Currently, there is no label that delivers neatly across all the requirements outlined for meat and dairy, although organic comes closest.

³ <http://www.fao.org/faostat/en/#data/CL>

ANNEX

Organic farming and growing delivers public goods by 'land sharing'



1 Diversity and crop rotations

6 Hedges and field margins for wildlife

2 Recycling nutrients, soil health and fertility,
and building soil carbon

7 Reduced pollution and GHG emissions per
acre

3 Grass-based animal production

8 Trees and permanent crops

4 High animal welfare

9 Connecting consumers with their food

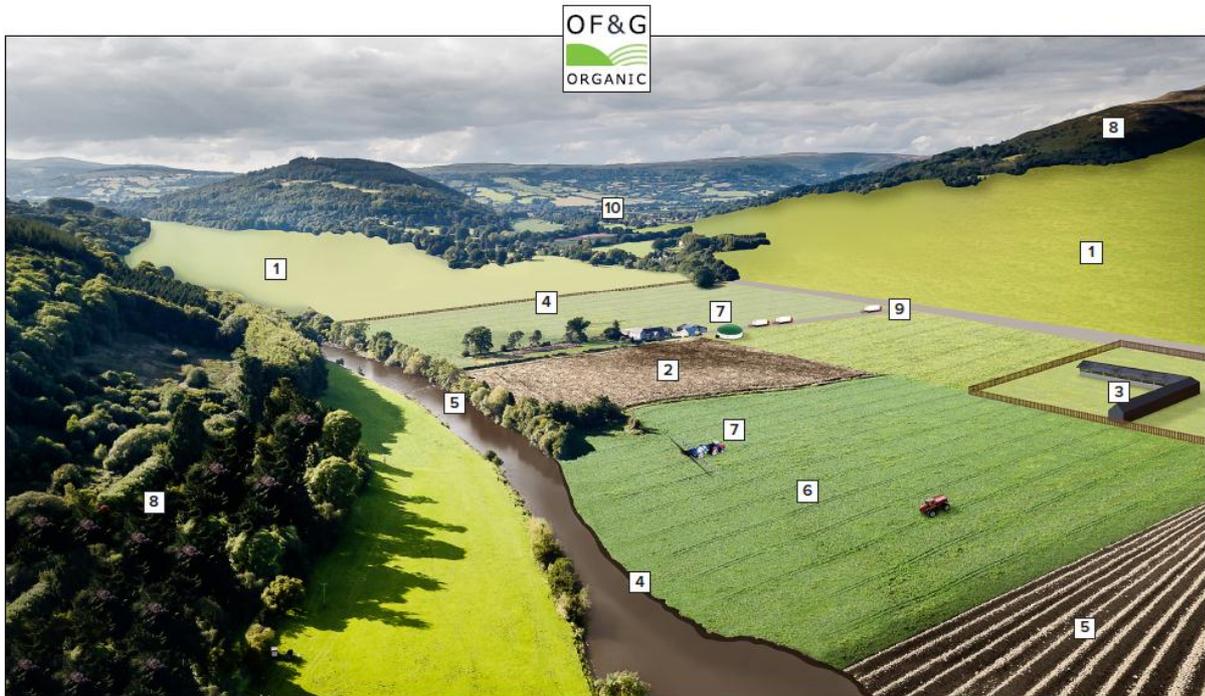
5 Unimproved grassland

10 Increased employment and vibrant rural
communities

Organic farming and growing delivers public goods by 'land sharing'

Key	Elements	Outcomes
1. Diversity and crop rotations	<ul style="list-style-type: none"> • Varied crop rotations including legumes, vegetables and pulses • Greater productive capacity and significant yield potential • More genetic diversity and greater resilience 	<p>Approach based on a whole farm 'system' delivering multiple outcomes simultaneously with a resultant enhanced cumulative impact.</p> <p>Simultaneous outcomes are:</p> <ul style="list-style-type: none"> • Building productive capacity and resilience through utilisation of complex natural systems • More biodiversity • Reduced nutrient and pesticide pollution and its negative effects on the environment and human health • Improved soil health and fertility • Increased carbon sequestration • Reduced GHG emissions • Avoidance of GM hazards • Increased food crop diversity • High animal welfare • Limited use of antibiotics and other veterinary interventions • Reduced antimicrobial resistance risk • Reduced imported animal feed • Less but better meat and balanced diets • Increased public access, heritage and culture • Connected wildlife corridors and more abundant and diverse habitats created and protected • More trees to stabilise local and overall climate • Managed and minimised flooding risk • Landscape diversity • Connecting consumers with their food and environment • Diverse and abundant landscapes easily accessible for all to enjoy
2. Recycling nutrients, soil health and fertility, and building soil carbon	<ul style="list-style-type: none"> • Recycling of animal manures • Careful composting • Building soil fertility and health 	
3. Grass-based animal production	<ul style="list-style-type: none"> • Grass-based livestock rearing for ruminant meat, dairy and egg production • Increased carbon sequestration • Increased quality of life and welfare for livestock 	
4. High animal welfare	<ul style="list-style-type: none"> • Livestock feeding and housing that maximises welfare and aims for positive health • Outdoor access for pigs, chickens, cows and sheep 	
5. Unimproved grassland	<ul style="list-style-type: none"> • Increased carbon sequestration • Greater biodiversity 	
6. Hedges and field management for wildlife	<ul style="list-style-type: none"> • Increased diversity and abundance of natural flora and fauna • Uncropped areas and woodland • Increased pollinators and natural predators 	
7. Reduced pollution and GHG emissions per hectare	<ul style="list-style-type: none"> • Lakes and water courses protected from pollution • Landscape water management • Minimal or no use of synthetic fertilisers and agro-chemicals 	
8. Trees and permanent crops	<ul style="list-style-type: none"> • Agroforestry – combining food and biomass perennial cropping with crop and livestock production 	
9. Connecting consumers with their food	<ul style="list-style-type: none"> • Innovative and low carbon models for distribution that engage consumers with their food, health and wider environment 	
10. Increased employment and vibrant rural communities	<ul style="list-style-type: none"> • Reduced climate change effects and GHG emissions • More biodiversity • Shorter supply chains/direct supply 	

—— Non-organic farming and growing does not deliver public goods by 'land sparing' ——



- | | |
|---|--|
| 1 Uniformity and monoculture | 6 Use of fossil fuel based inputs |
| 2 Open nutrient cycle | 7 Increased pollution and GHG emissions per acre |
| 3 Intensive livestock production | 8 Poorer land marginalised 'for nature' |
| 4 Less hedgerows and wildlife corridors | 9 Increased transport |
| 5 Soil erosion | 10 Low employment |

Non-organic farming and growing does not deliver public goods by 'land sparing'

Key	Elements	Outcomes
1. Uniformity and monoculture	<ul style="list-style-type: none"> • Mono-cropping – less crop variation in a simple rotation • Bioenergy crops 	<p>Approach based on simple linear 'output less input' whole farm model delivering single outcomes in isolation through 'score card' approach.</p> <p>The resultant outcomes are:</p> <ul style="list-style-type: none"> • Loss of diversity found in natural systems • Loss of resilience • Reduced availability of fresh local food • Link between consumer and producer severed
2. Open nutrient cycle	<ul style="list-style-type: none"> • Reliance on synthetic inputs • Loss of nutrients through the soil profile and to the atmosphere 	<ul style="list-style-type: none"> • Chronic depletion of organic matter and reduced soil health
3. Intensive livestock production	<ul style="list-style-type: none"> • Minimal or no livestock access to pasture • Reliance on veterinary medicines and interventions • Reliance on imported feed 	<ul style="list-style-type: none"> • Poorer quality of life for animals and lower welfare • Higher reliance on antibiotics with negative implications to human health
4. Less hedgerows and wildlife corridors	<ul style="list-style-type: none"> • Larger fields with almost no naturally occurring vegetation • Loss of natural web with farming and nature separated 	<ul style="list-style-type: none"> • Biodiversity loss • Loss of pollinators • Loss of complex and rich ecosystems • Loss of resilience
5. Poor soil quality	<ul style="list-style-type: none"> • High soil erosion • Poor soil health • Poor carbon sequestration 	<ul style="list-style-type: none"> • Loss of productive capacity • Estimated only 100 harvests remaining • All life depends on healthy, vibrant soils
6. Use of fossil fuel based inputs	<ul style="list-style-type: none"> • Agro-chemical inputs required to enable mono-cropping • Reliance on agro-chemicals and artificial fertilisers from energy intensive manufacturing process 	<ul style="list-style-type: none"> • High GHG emissions from synthetic fertiliser and agro-chemical manufacture and use • Environmental pollution • Human and wildlife health risk
7. Increased pollution and GHG emissions	<ul style="list-style-type: none"> • More field operations • Biofuels reliant on energy intensive inputs 	<ul style="list-style-type: none"> • Negative impacts on environment overall
8. Poorer land marginalised for nature	<ul style="list-style-type: none"> • Loss of natural web with farming and nature separated 	<ul style="list-style-type: none"> • Areas separated rather than nature being integrated into a broader vibrant landscape, all can access easily
9. Increased transport	<ul style="list-style-type: none"> • Transport of farm inputs, crops and livestock in larger quantities • Transport of biofuel inputs 	<ul style="list-style-type: none"> • Greater fuel consumption • Indirect increase in GHG emissions embedded in vehicles and fuel

	and outputs	
10. Low employment	<ul style="list-style-type: none"> • Simplified systems requiring minimal labour and maximal mechanisation 	<ul style="list-style-type: none"> • Reduced rural employment opportunities • Population drift to towns and rural decline • Loss of meaningful work and skills in rural areas

Nest response to Fuel Poverty Inquiry – Nest operations Manager, British Gas

1. The summary of responses to a consultation on Nest in 2016 said the Welsh Government had decided to introduce in-home advice as part of the scheme. Does Nest currently offer any in-home advice? If not, should this be introduced?
 - Following the commencement of the Nest 2 Scheme in April 2018, Nest offers customers advice at several stages throughout the Nest journey. Energy Savings Trust (who complete the marketing service and initial customer contact on behalf of British Gas) provide a minimum of 15k pieces of energy advice to customers over the telephone at the initial stage of the journey, to any customer that apply but doesn't qualify for the Nest scheme. For every customer who pass the initial assessment and progress to the Whole House Assessment, a surveyor will attend the customers property to complete the assessment and determine what measures are suitable (if any). As part of the assessment at the customers house, they will provide the customer with energy advice on how to save money on energy appliances and fuel sources. During this visit advice is also given towards signposting customers to third parties that will benefit the customer. Some examples of third parties that we provide signposting and support to customers are Benefit and Tax checks, Welsh Water, Care & Repair, Warm Home Discount, Simply Switch, Money Advice Service, Fire Service, Age Cymru, Cantref, Welsh Water, Care & Repair, Energy Supplier Trust Fund. Each of the Surveyors on the Nest scheme have undertaken a four-day Energy Advice Course (Energy Awareness – 6281) which has provided them with the relevant skills to provide accurate energy advice to meet individual customer unique needs.
 - For any customers that have measures installed we will also provide advice at the installation stage on the use of the systems, giving them indications on the best way to use their appliances and save money. The final stage of the customer journey will be the inspection stage, which normally takes place within 5 working days of the installation being completed. At this stage the Inspector will review the installation and will provide advice on any circumstances that they identify as part of the visit.

2. The 2018-2019 annual report for Nest reports a decrease in the number of houses in fuel poverty following installation of home energy efficiency measures

from 43.3% to 21%. What more could the Welsh Government do to ensure more households accessing Nest move out of fuel poverty?

- Increase the Means Tested Benefit threshold levels
- Widen the SAP rating bandings from E, F & G to include D rated properties
- Changing the rule from completing only like for like installations (e.g. electricity to electricity)
- Expand the benefits to include - PIP, Attendance allowance
- Review the opportunity to actively target landlord properties that are living in fuel poverty. Approximately 20% of households in privately rented properties are living in fuel poverty as opposed to 11% in the owner occupier bracket
- To align with ECO benefits we could also include War Pensions Mobility Supplement, Armed Forces Independence Payment, War Disablement Pension, Persons receiving ongoing payments under the Armed Forces Compensation Scheme
- Increase Warm Home Schemes budget to deliver more measures in customers properties

3. The Committee has heard that most of the interventions in Nest are boiler replacements. This was contrasted with recent ECO interventions, which included “24% cavity wall insulation” and “17% loft insulation”. Why is there a high level of boiler replacements under the Nest scheme, compared with ECO? Is this compatible with the Welsh Government’s declaration of a climate emergency?

- By installing a new A rated boiler at customers properties, this gives us the highest fuel cost saving and increase in SAP rating performance against other measures. We will always look at additional opportunities (installing secondary measures) where possible to improve each customers energy efficiency, these measures will include cavity, external, loft and draught proofing insulation. Each survey will take into consideration the cap thresholds that are set in place by the Welsh Government. Up to 80% of properties in Wales are within an exposed area to the weather and not sheltered or protected from the weather elements, meaning that CWI may not be completed unless it passes the CASS (Cavity Assessment Surveillance scheme) survey. Where customers have an efficient working boiler at their property, we would still look at the alternative measures (mentioned above) which will increase the energy efficiency performance in the property.

4. Explain how the type of intervention is determined and the role of British Gas in the Nest scheme?
 - ⊖ The Nest Scheme has been managed on behalf of the Welsh Government by British Gas since 2011. The intervention is determined by the Surveyor at the point of the Whole House Assessment. The surveyor will determine what measures are suitable (if any), and in agreement with the customer.

5. Views on the extent to which the spending caps are a barrier to helping households who are eligible for support out of fuel poverty?
 - The main barrier for measures relating to the spending cap which impact the volume of customers that are eligible for support would be in relation to External Wall Insulation or high cost renewable technologies as these often exceed the agreed spending cap limits captured within the contract. All other measures that Nest currently install will fall within the agreed spending cap levels

6. How many households that received energy improvements through Nest are not able to get up to EPC C rating because of spending caps?
 - Spending Caps do not necessarily impact the increase of SAP ratings to an EPC rating of C. Depending on the measure installed (that is determined as part of the Whole House Assessment) against the initial survey EPR stage, this will determine the overall increase in SAP performance points at each property. The table below summarises the start / end SAP rating for 4k+ measures that were installed between 1st April 2018 and 31st March 2019, and clearly demonstrates that most properties have seen an increase in SAP rating performance as a result of measures installed through the Nest scheme

Starting SAP G		
End SAP	Total	%
G	2	1%
F	83	3%
E	833	25%
D	1717	69%
C	59	2%
Total	2494	100%

Starting SAP F		
End SAP	Total	%
F	12	1%
E	88	7%
D	586	47%
C	554	45%
Total	1240	100%

Starting SAP E		
End SAP	Total	%
E	24	8%
D	112	38%
C	156	54%
Total	292	100%