Grain Market update & Selling strategies

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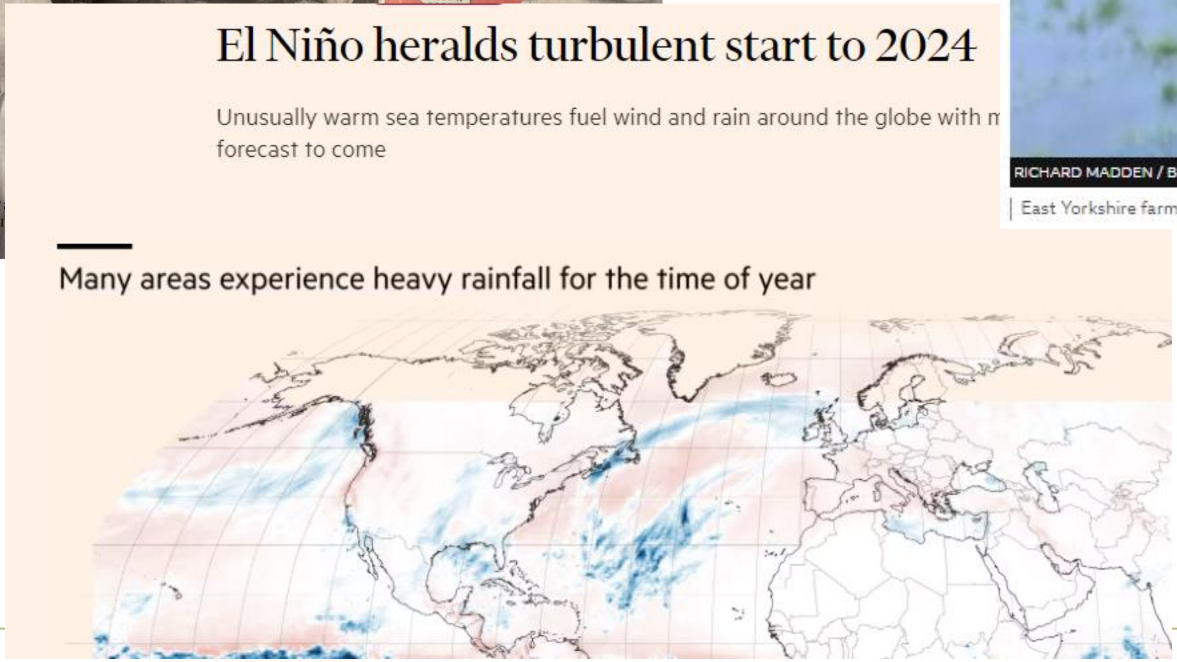
A quiet year ahead?


Ten events that could derail the global economy in 2024

At the start of 2023, economists were predicting a full-scale meltdown, which didn't materialise. Bu[t] does the threat loom as large? By *Matthew Lynn*


El Niño heralds turbulent start to 2024

Unusually warm sea temperatures fuel wind and rain around the globe with m[ore] forecast to come

Many areas experience heavy rainfall for the time of year

BBC – East Yorkshire Farmer 75% of land underwater

East Yorkshire farmer Fiona Wilson said 75% of her land was underwater

Sources: Telegraph, Financial Times, BBC

Farm Advisory Service SRUC AHDB

What is your sales strategy in 2023/24?

Put your hand up if you are A, B, C or D.

A	B	C	D
In The Shed Sell All AFTER Harvest	**Go Early** Sell All BEFORE harvest	**Little & Often** Sell 1/3 BEFORE & 2/3 AFTER harvest	**50:50** Sell 50:50 BEFORE / AFTER harvest

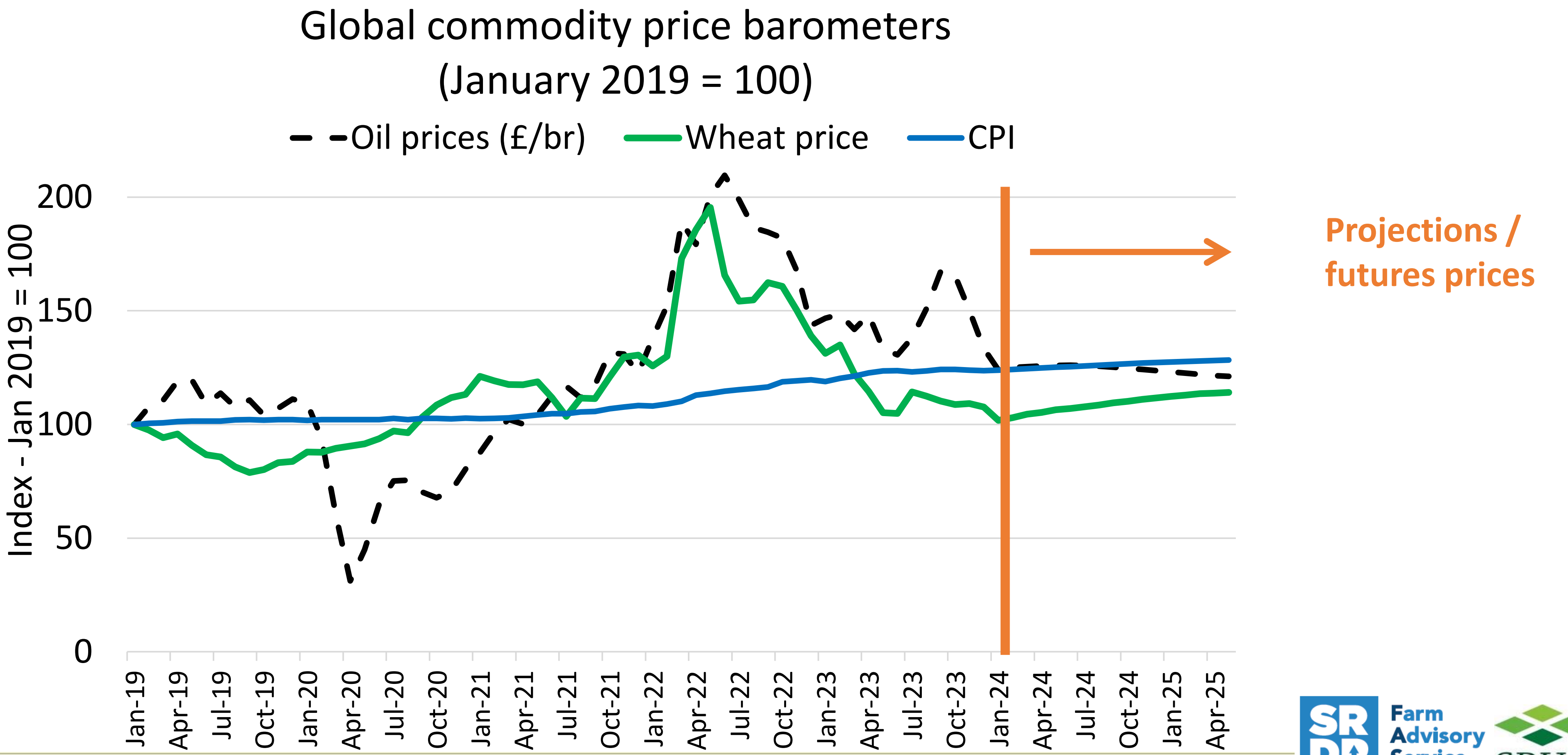
Cereal market outlook

1) What is the current market situation

2) What factors may be important in the year(s) ahead?

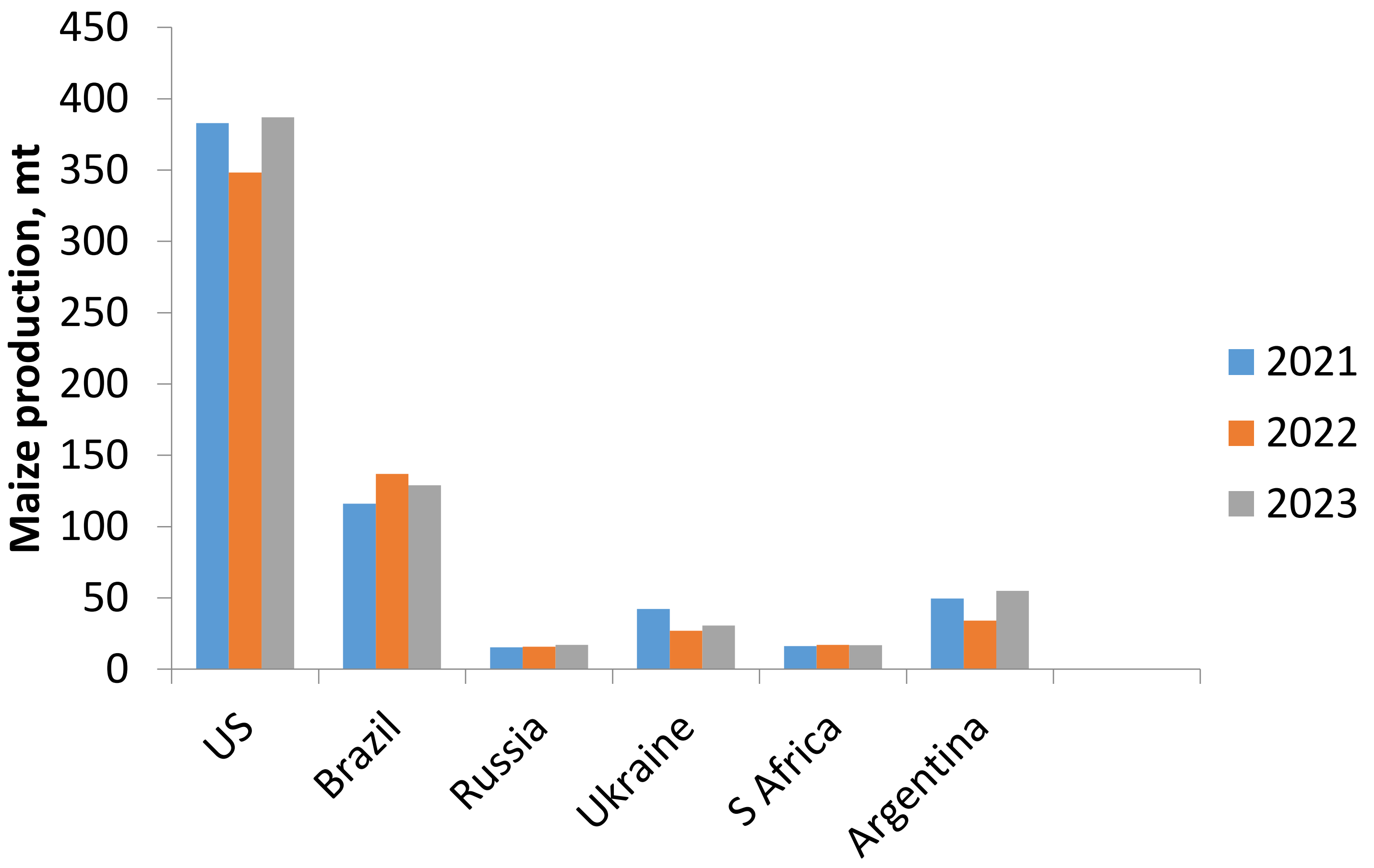
2) How do different Sales strategies affect returns?

World inflationary pressures easing – energy and grains – interest rates to fall too



Sources: AHDB, UK Statistics, Various * (Consumer Price Index)

Maize Exporters - production up +56mt led by US +39mt, Arg +21mt, Braz -8mt



UP

US, Argentina, Ukraine, Russia,

DOWN

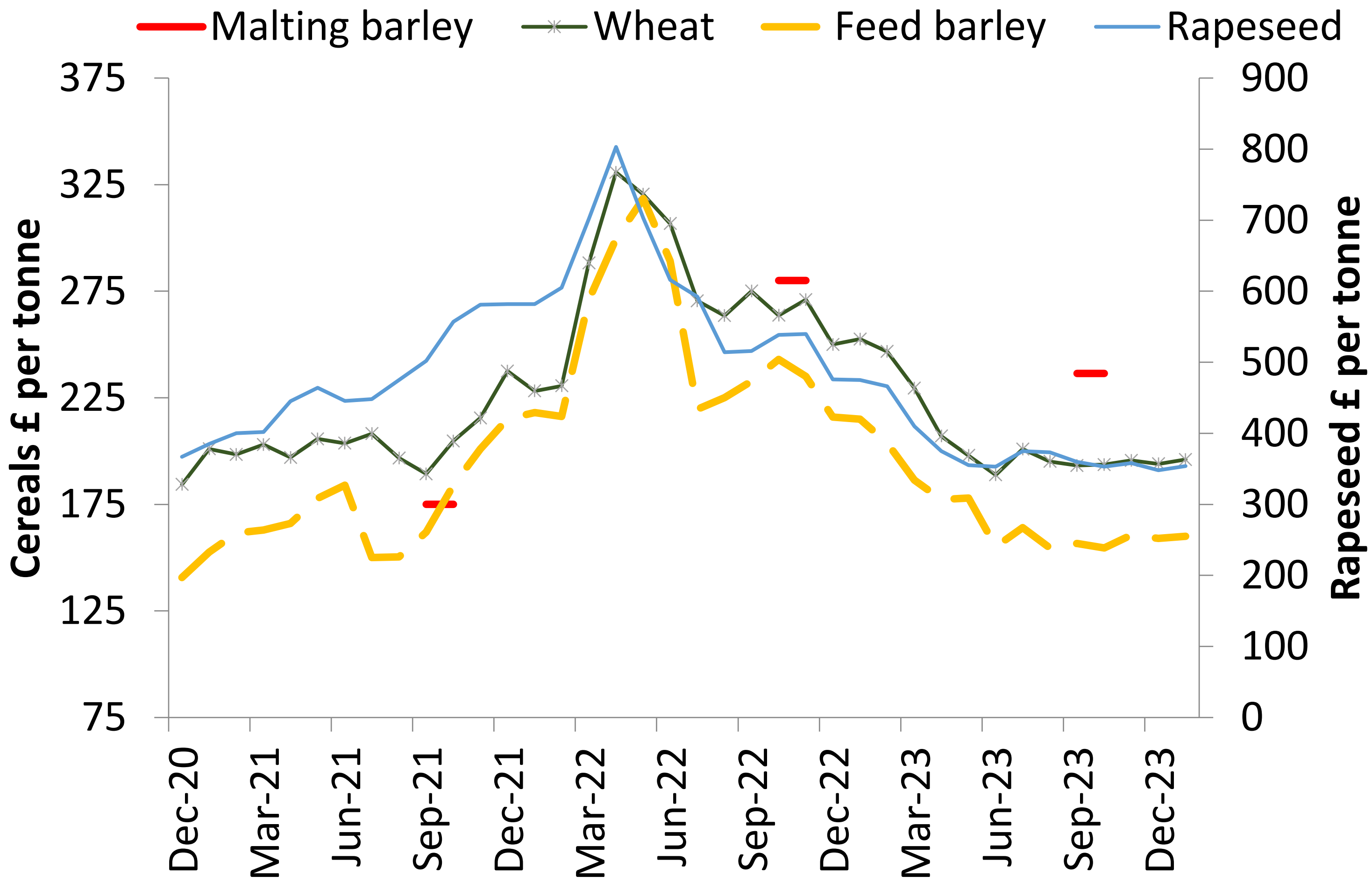
Brazil, S. Africa,

Source: USDA

World maize prices down -£75/t (-34%) in last year – sets floor for world cereal market

Source: AHDB

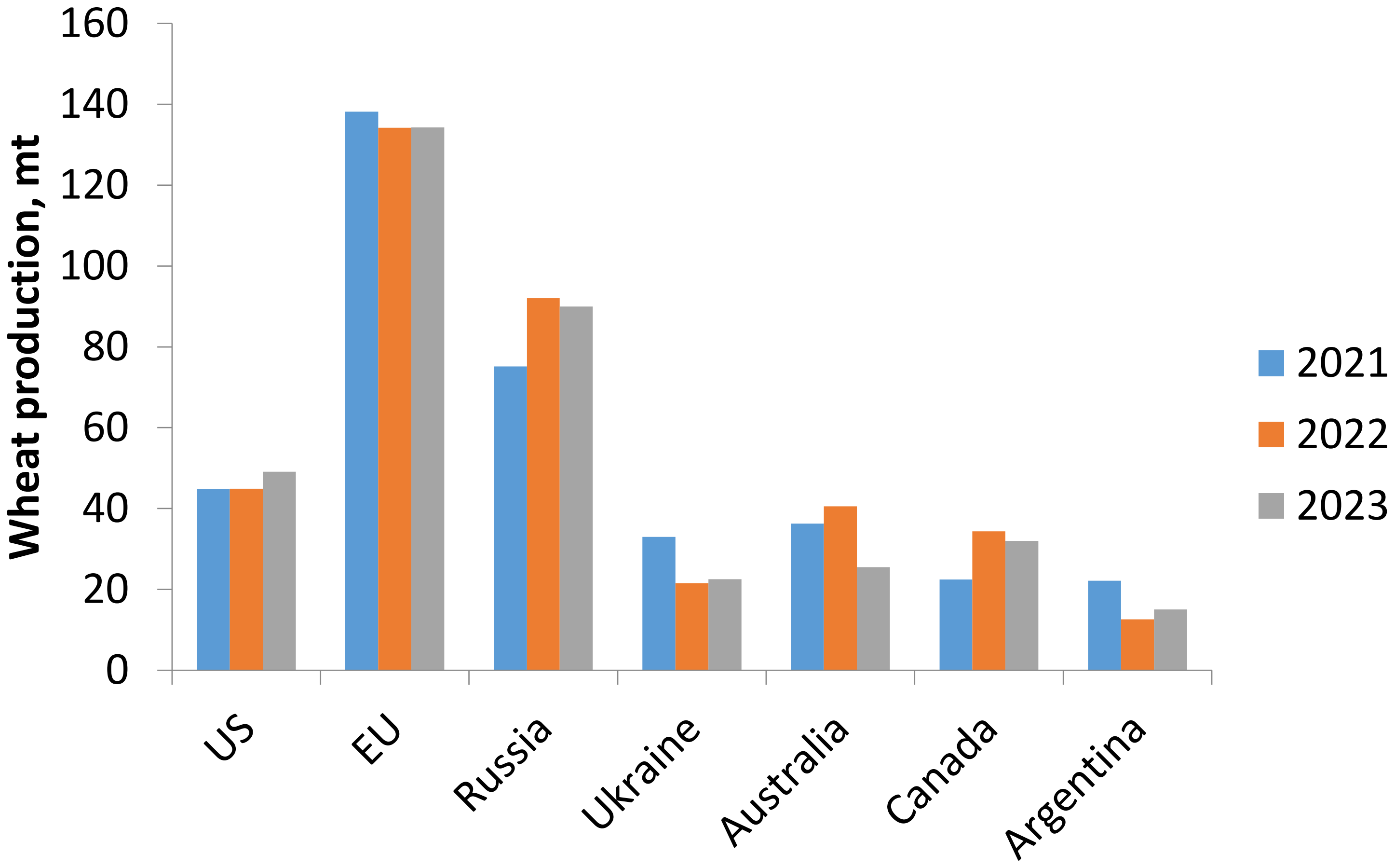
Scottish grain and oilseed spot prices in last year – down -16% (malt barley) to -23% (feed barley)



Price changes Jan 23 - Jan 24

- wheat
-£56/t, -21%
- rapeseed
-£121/t, -22%
- feed barley
-£55/t, -23%
- malting barley (hvst px)
–£42/t, -16%

Wheat Exporters - production down -11.7mt
Led by Oz –15mt, Can -2.4mt, US +4.2mt, Arg +2.5mt



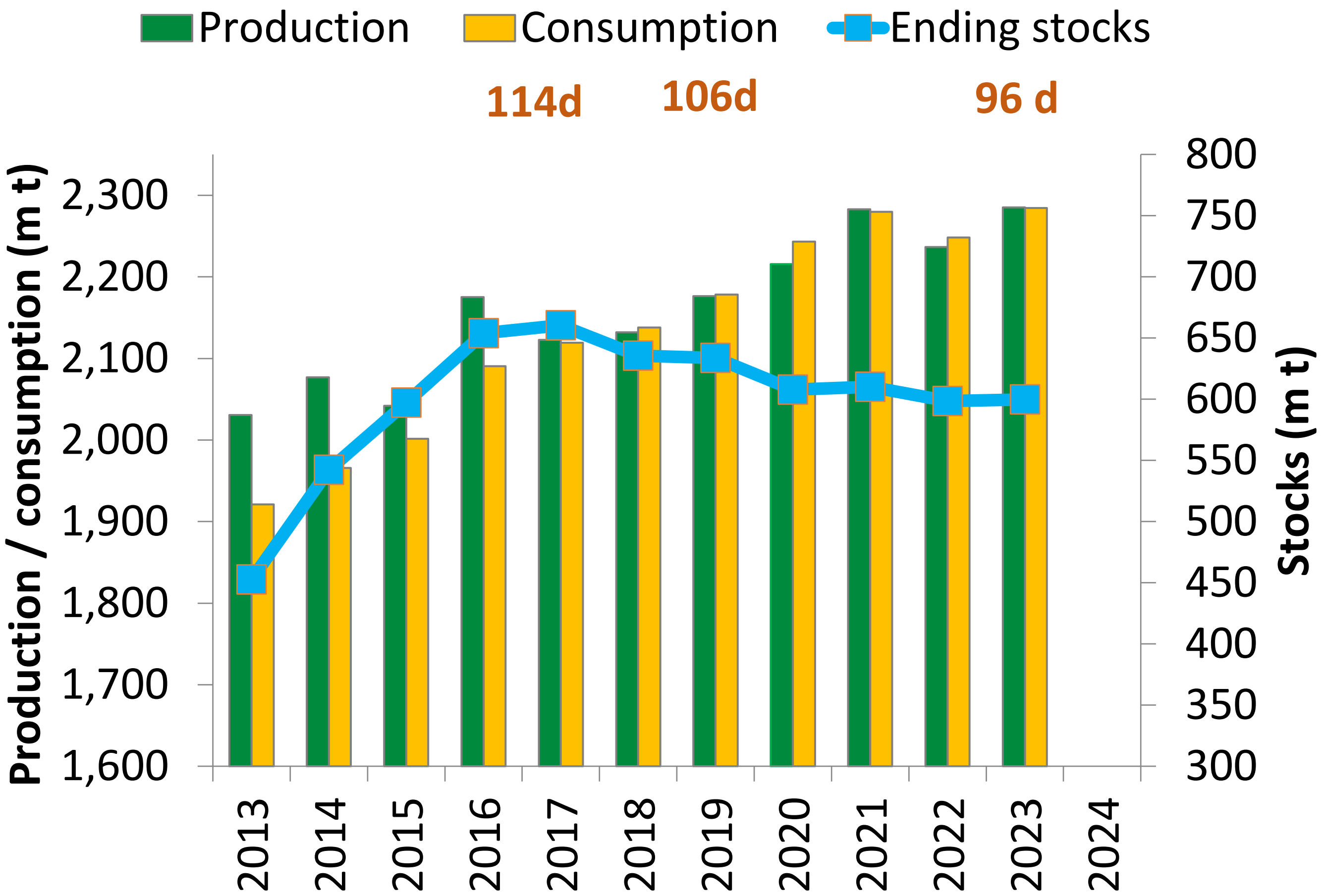
UP
US, Argentina, Ukraine

DOWN
Russia, Australia, Canada

Source: USDA

World grain S&D 2023 – crop +48mt (vs +82mt projected in June), stock-to-use -1.4 days

China holds **44%** of world's grain stocks 263mt/ 599mt



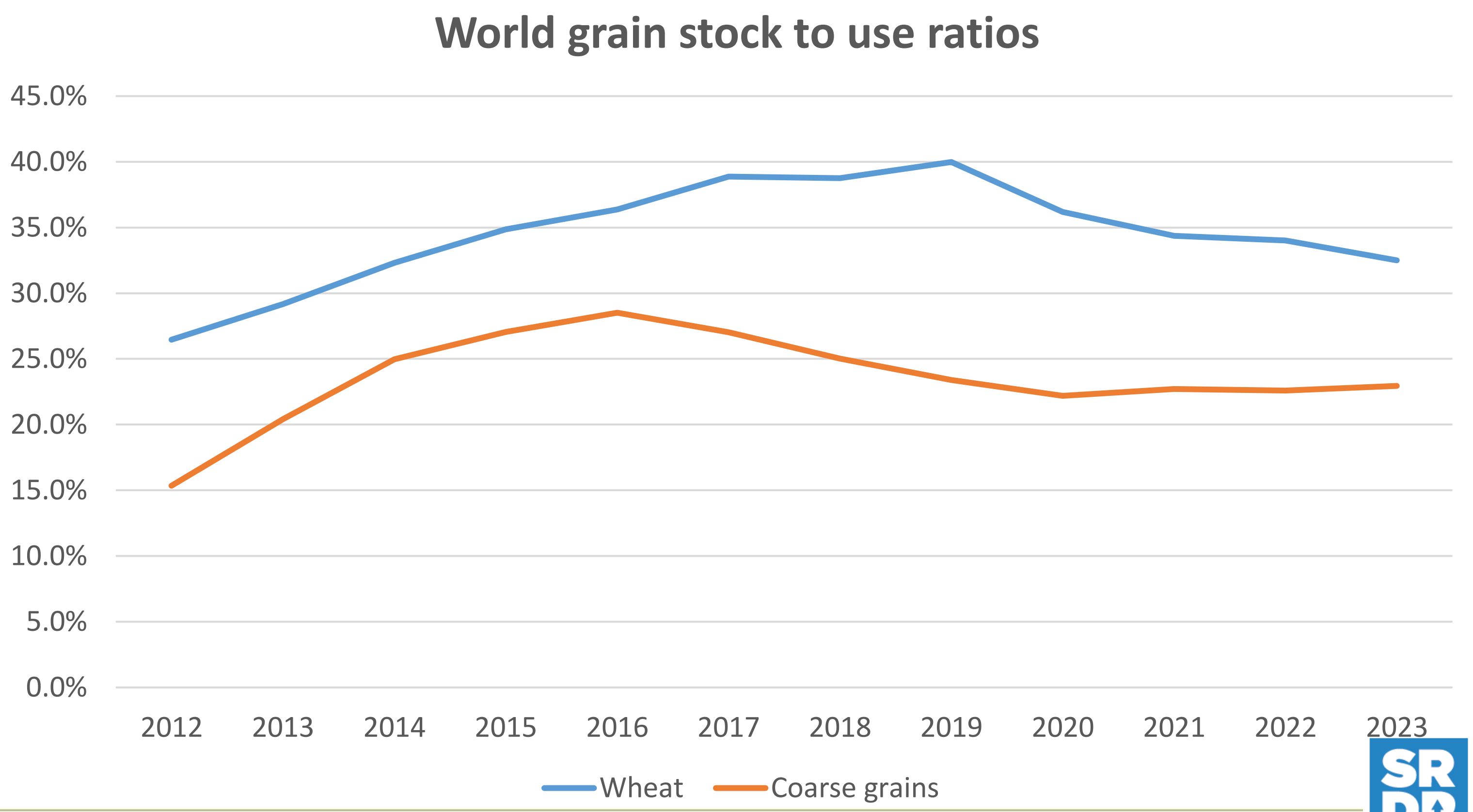
2023-24 DECEMBER
Crop +48mt
Demand +36mt
Stocks +1mt
Stock to use -1.4 days

2023-24 JUNE
Crop +82mt
Demand +46mt
Stocks +19mt
Stock to use +1.1 days

Source: USDA

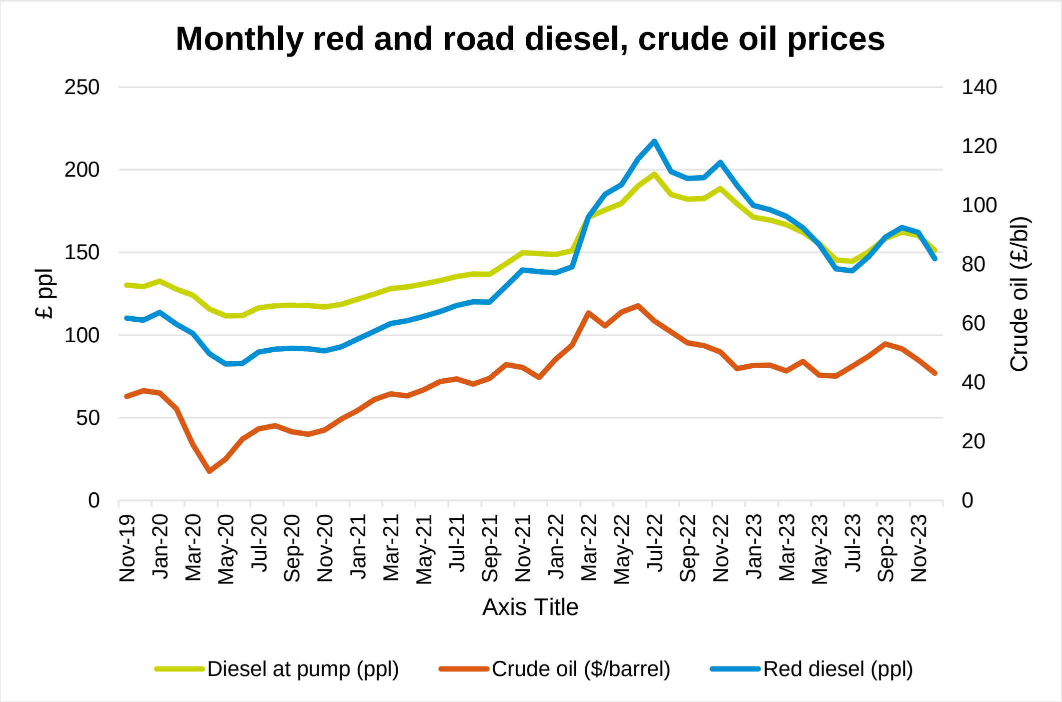
Grain stocks to use

Wheat = lowest in 9yrs,
Feed grain = highest in 4yrs – only just!

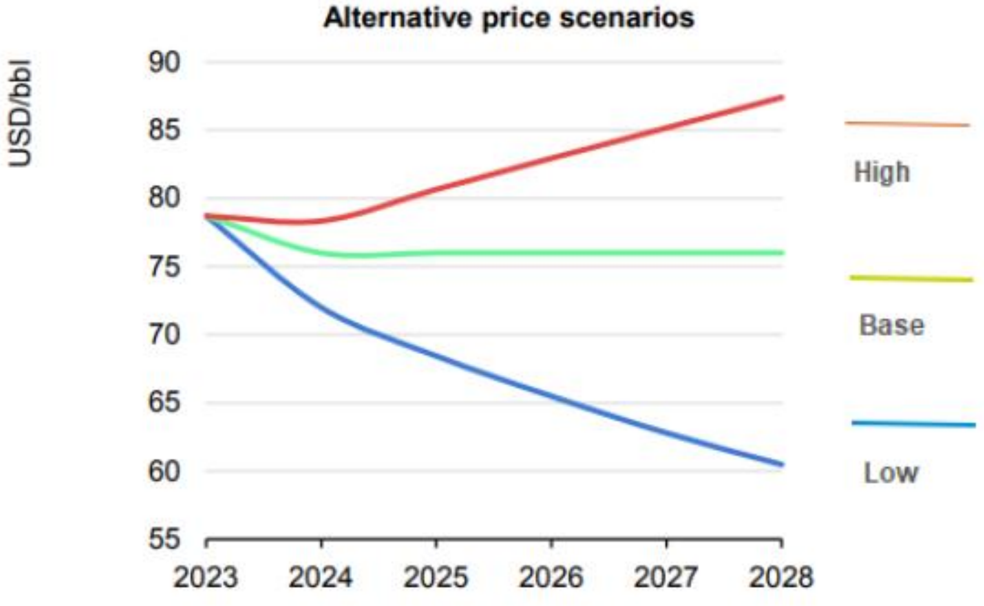


Source: USDA

Crude oil is trending down – as US, Brazilian and Guyana output surges, OPEC loses its stranglehold. **Energy transition** – renewables, efficiency, EV's, batteries - could mean peak oil demand by 2025



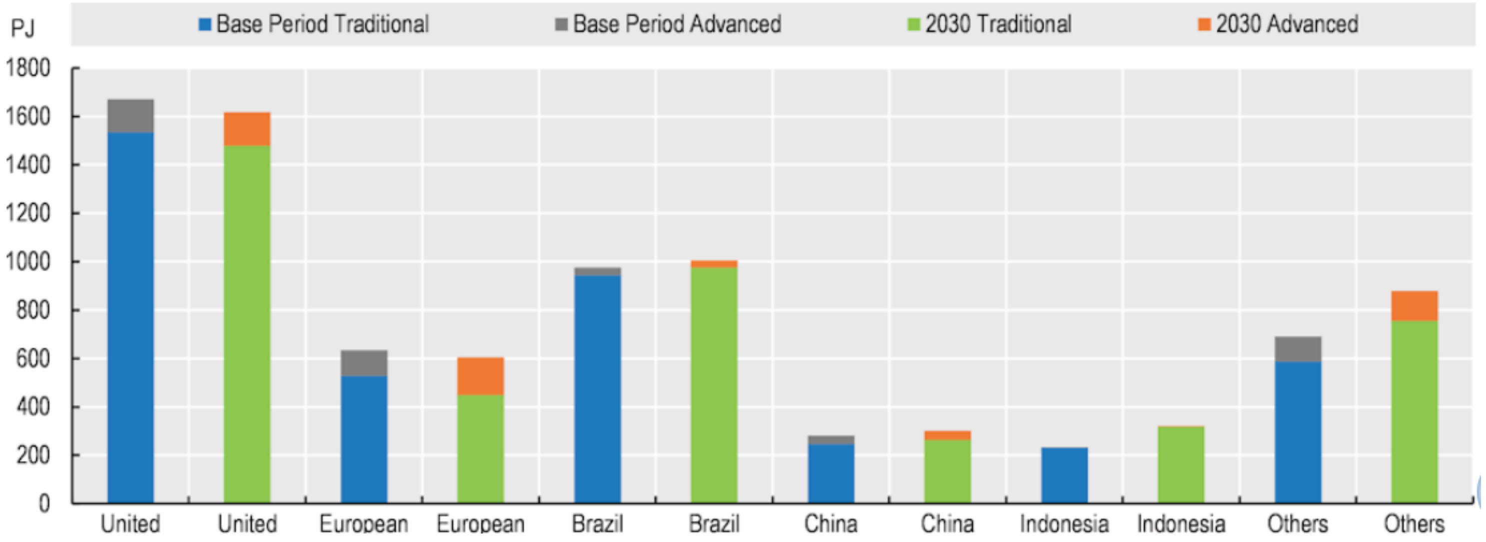
Source: AHDB



Source: IEA, Oil 2023

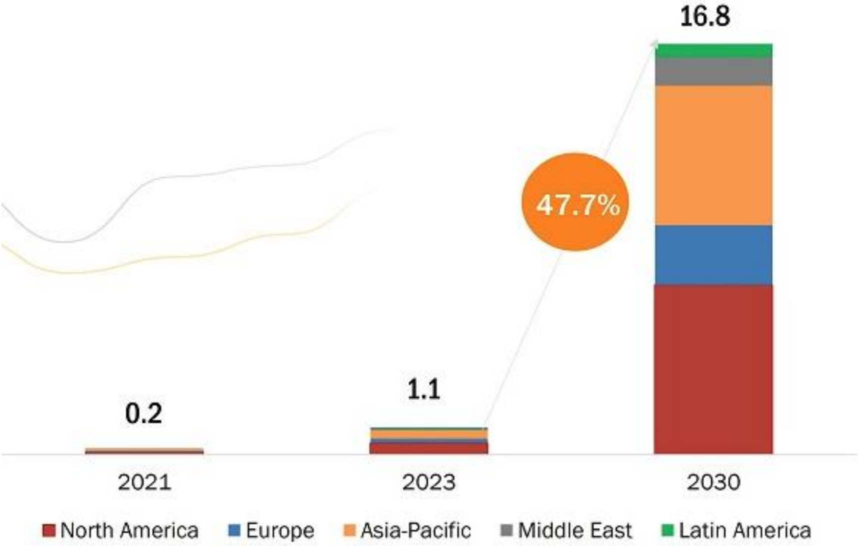
Biofuels – stable to modest growth to 2030
Shift away - from food crops - to other crops / waste & Sustainable Aviation Fuel – but they still need land!

Figure 9.3. **World biofuel production from traditional and advanced feedstock**



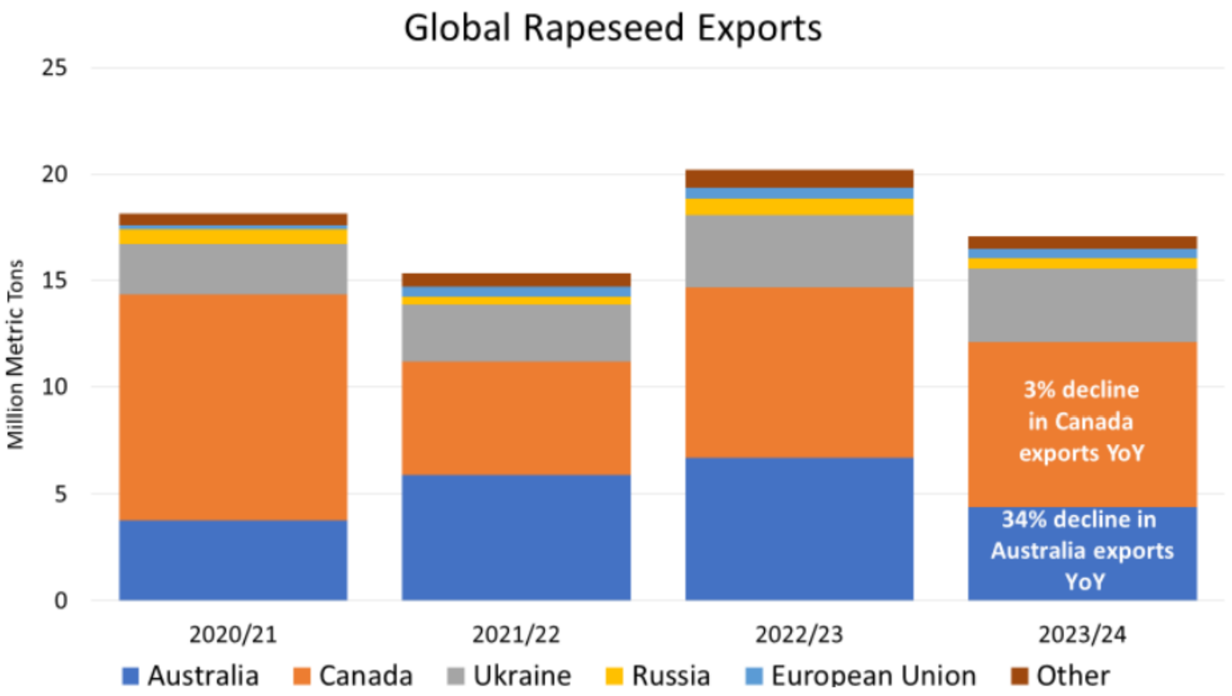
Source: OECD

Sustainable Aviation Fuel Market $Bn



Source: Markets and Markets

Record soyabean production – tempered by El Nino in Brazil – brings prices down, but rapeseed sees lower export competition, price premium to soya

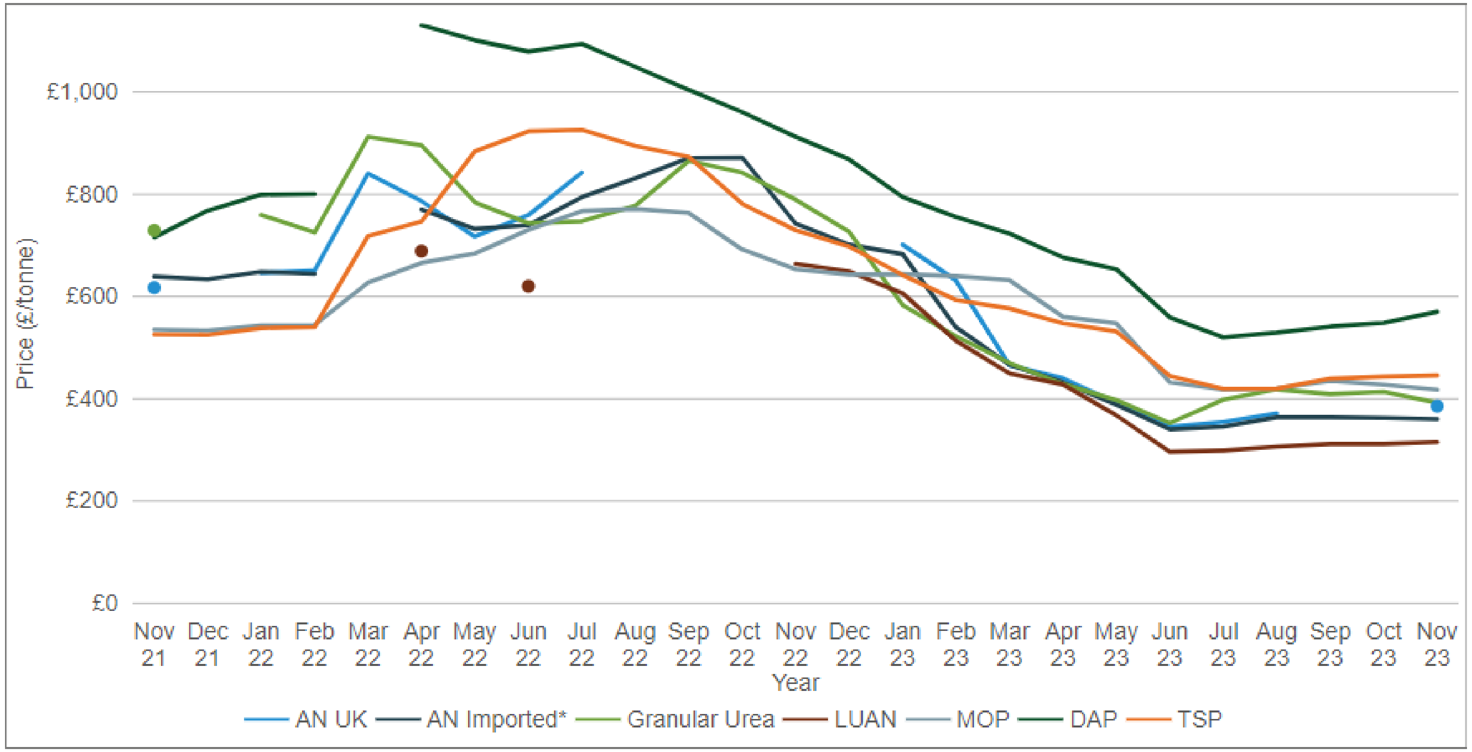


Source: USDA

-ve - World oilseed prices fall as crude oil / biofuel prices weaken and US struggles to export soyabeans against large Brazil crop.
-ve - Low US maize prices to drive higher soyabean sowings in 2024
+ve - La Nina drought pares Brazil crop back a little
+ve – US sees strong biofuel demand, low soya stocks
+ve - Small UK oilseed rape crop in 2023, even smaller in 2024 – UK to remain at import parity.

SRDP Farm Advisory Service SRUC AHDB

Fertiliser prices down 50% in a year – linked to wider energy prices



Source: AHDB

AHDB Early Bird Survey - UK – wet autumn sinks winter sowings for 2024 – more spring barley

UK - AHDB Early Bird Crop Area Survey

	2023 harvest ('000's ha)	2024 harvest ('000's ha)	Change ('000's ha)	Change (%)
Wheat	1,720	1,660	-60	-3%
Winter barley	455	423	-32	-7%
Spring barley	682	756	74	11%
Oats	167	180	13	8%
OSR	391	317	-74	-19%
Fallow	311	388	77	25%
All arable crops	4,828	4,809	**-19**	-0.4%

Source: AHDB

AHDB Early Bird Survey - Scotland – less wheat, more spring barley

Scotland - AHDB - crop area estimates

	2023 harvest ('000's ha)	2024 harvest ('000's ha)	Change ('000's ha)	Change (%)
Wheat	107	99	-8.0	-7%
Winter barley	46	49	3.0	7%
Spring barley	249	259	10.0	4%
Oats	26	23	-3.0	-12%
OSR	41	36	-5.0	-12%
Total	**469**	**466**	**-3**	**-1%**

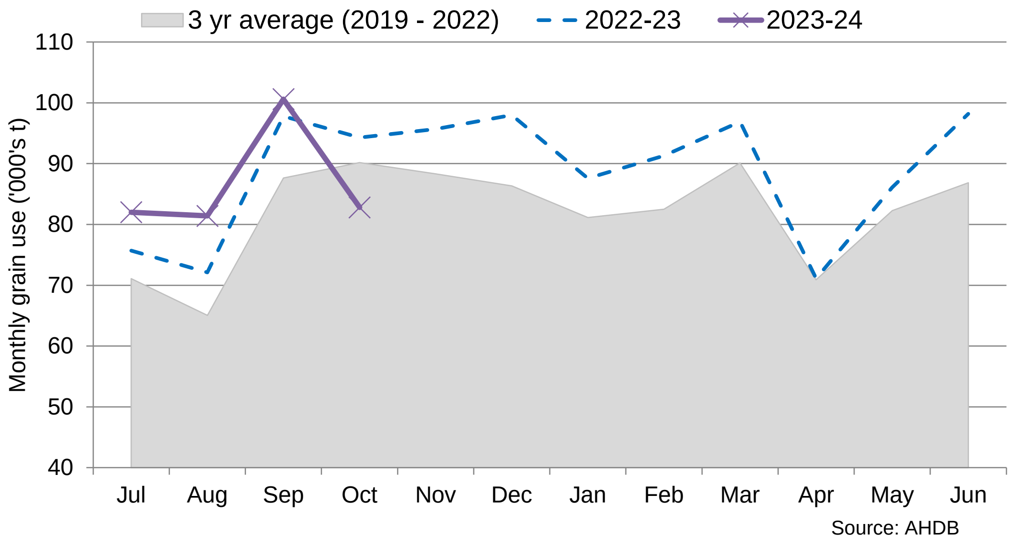
Source: AHDB

UK 2023 wheat crop ~ 14mt (-1.5mt below early estimates), higher opening stocks/ rise demand mean small surplus ~0.5mt? Quality down. **2024 harvest** – small crop, large net importer?

UK wheat balance sheet				
000's t	**2021/22**	**2022/23**	**2023/24**	**2024/25***
Open stock	1,413	1,788	1,953	1,854
Production	**13,988**	**15,540**	**14,055**	**12,000**
Imports	1,994	1,346	1,425	2,000
Available	17,394	18,674	17,433	15,854
Domestic use	**14,748**	**14,590**	**14,985**	**13,500**
Exports / avail	858	2,131	594*	500
End stocks	1,788	1,953	1,854*	1,854
Net trade	**-1,136**	**785**	**-831***	**-1,500**

*Source: AHDB, * SAC Consulting*

Lower imported maize prices – Scottish wheat falls to stay competitive for distilling.



Distilling wheat use UP 10% in 1st 3 months of 2023/24 but weaker lately

Scottish wheat less competitive vs imported maize, Scottish wheat Premium over English

Average

- **2019/20 = + £5.00**
- **2020/21 = - £2.00**
- **2021/22 = + £12.00**
- **2022/23 Jun = + £17.00**
- **2023/24 Dec = +£12.00**

Scottish wheat prices under pressure from imported maize pressure.

Delivery date	Aug'21	Jan '22	June '23	Jan '24
Wheat – delivered	205.0	228.00	215.00	205-210.00
French Maize delivered	260.00	260.00	225.00	220.00
Scottish wheat vs Imported	**- 55.0**	**- 32.0**	**- 15.0**	**-10 to-15**

Source: AHDB, SAC Consulting

SRDP Farm Advisory Service SRUC AHDB

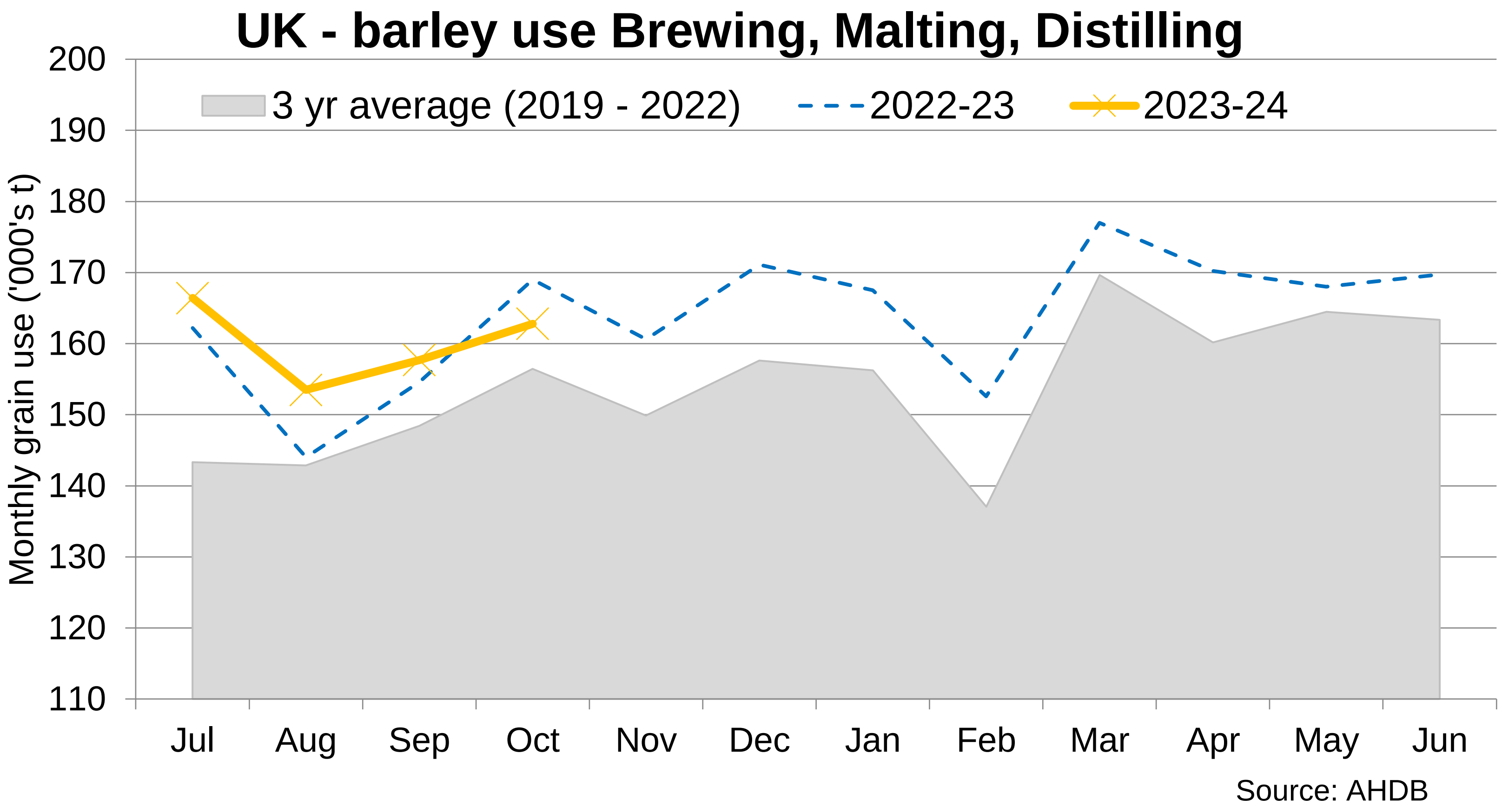
Scotland wheat crop - 0.985mt in 2023, potential -140kt - 15% drop next year

Wheat - Scotland			
	Area (ha)	Yield (t/ha)	Output ('000's t)
2015	109	9.07	989
2016	110	9.30	1,019
2017	110	8.45	926
2018	109	8.12	889
2019	100	6.82	681
2020	107	8.72	937
2021	94	8.57	802
2022	105	9.18	960
2023	107	9.20	985
2024*	99	8.50	842
Ch	*-8*	*-0.7*	*-143*
Ch %	*-7%*	*-8%*	*-15%*

*Source: Scottish Govt, * SAC Consulting*

SRDP Farm Advisory Service SRUC AHDB

UK malting use up 2% in first 4 months of 2023/24



*Source: AHDB, * SAC Consulting*

Scotland spring barley crop - 1.58mt in 2023, potential **+100kt +7%** rise in 2024

Spring barley - Scotland			
	Area (ha)	Yield (t/ha)	Output ('000's t)
2015	256	5.94	1,521
2016	239	5.43	1,296
2017	244	5.88	1,433
2018	250	5.54	1,388
2019	242	6.38	1,544
2020	259	6.85	1,772
2021	249	6.35	1,581
2022	236	6.81	1,605
2023	249	6.30	1,579
2024	259	6.50	1,683
Ch	*+10*	*+0.2*	*+104*
Ch %	*+4%*	*+3%*	*+7%*

*Source: Scottish Govt, * SAC Consulting*

Malting barley use in Scotland – tight in 2023

Lower output, small EU crop, premium UP
Higher area and output in 2024? But stocks low, demand up?

	Scottish / Berwick malting Spring barley purchases ('000's t)	Scottish Spring Barley Crop ('000's t)	Est. Malting varieties (%)	Est. Malting varieties ('000's t)	Scottish malting purchases as % of malting var	Malting premium over feed £/t
2018	**810**	1,338	72%	963	84%	47
2019	**840**	1,543	72%	1,111	76%	17
2020	**873**	1,772	72%	1,275	68%	0-4
2021	**930**	1,451	72%	1,045	89%	0-13
2022	**1,000**	1,605	72%	1,123	89%	50
2023	**1,000**	1,579	72%	1,137	88%	80
2024	**1,000**	1,683	72%	1,212	83%	50

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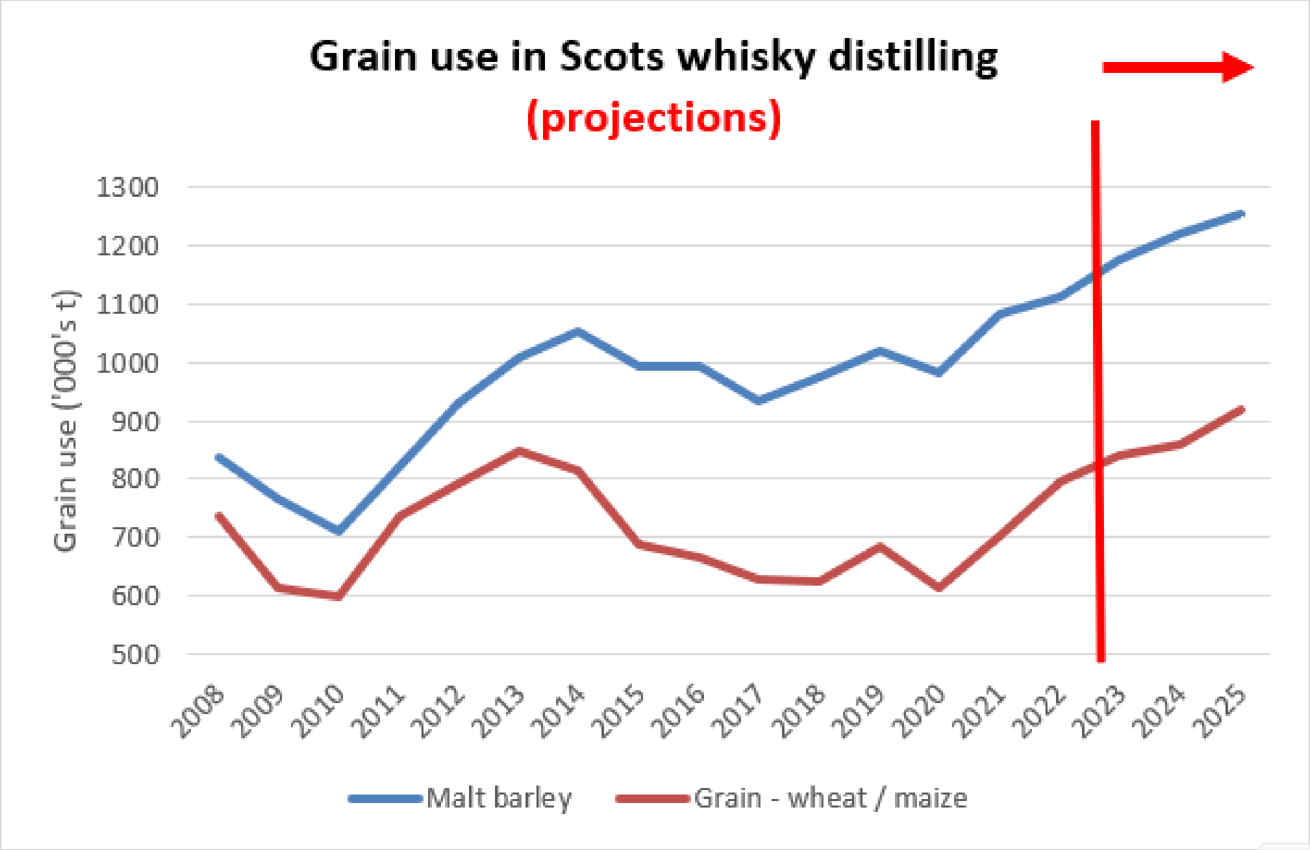
Scotland use of grain in distilling
Forecast to rise 2022 to 2025

+13% (+144kt) for malting barley,
+15% (+122kt) for wheat/ maize,



*Source: Scotch Whisky Industry Review, * SAC Consulting*

Estimated Gross margins – sharp fall in 2023 as high input costs meet falling grain prices - * depending on how much sold forward. Better prospects in 2024 based on forward prices

Wheat

Harvest	Yield (t/ha)	Price (£/t)	Output (£/ha)	VC (£/ha)	GM (£/ha)	*YoT (%)*
2021	9.18	214	2,210	461	1,749	*43%*
2022	9.34	240	2,530	589	1,941	*11%*
2023	9.14	205	2,125	1,015	1,110	*-43%*
2024	8.20	205	1,937	655	1,282	*16%*

Spring malting barley

Harvest	Yield (t/ha)	Price (£/t)	Output (£/ha)	VC (£/ha)	GM (£/ha)	*YoT (%)*
2021	6.35	192	1,407	288	1,119	*24%*
2022	6.81	256	1,960	383	1,577	*41%*
2023	6.30	245	1,730	678	1,052	*-33%*
2024	6.50	223	1,638	422	1,216	*16%*

Source: SAC Consulting, AHDB

Estimated Net Profit – 2 strong years for wheat, 1 for sp. Malting barley, BPS still essential

Wheat

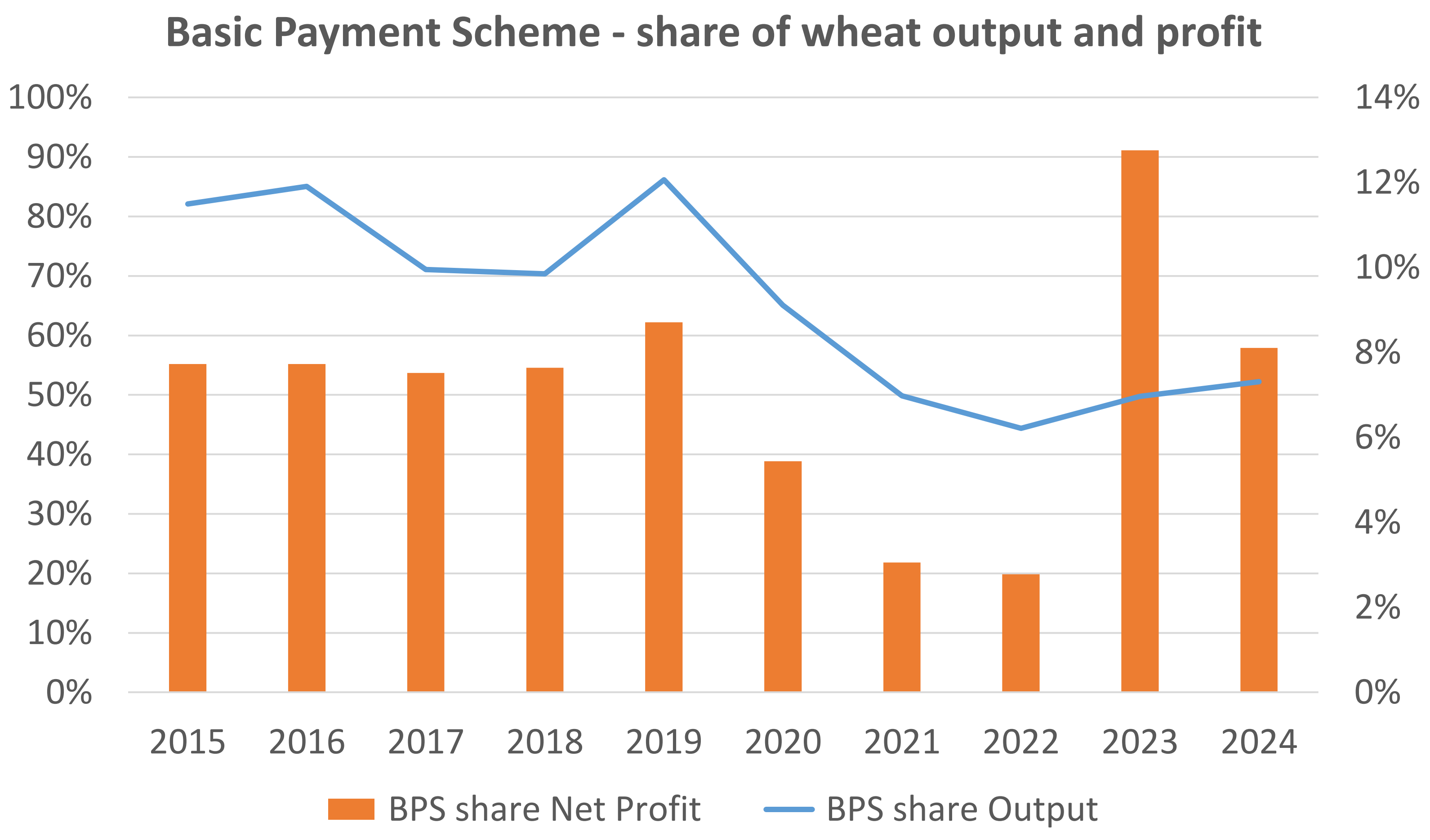
Harvest	GM (£/ha)	FC (£/ha)	**NPI (£/ha)**	BPS (£/ha)	**NPI + BPS (£/ha)**
2021	1,749	959	**790**	221	**1,012**
2022	1,941	1,045	**896**	222	**1,118**
2023	1,110	1,087	**23**	224	**246**
2024	1,282	1,120	**163**	224	**386**

Spring malting barley

Harvest (£/ha)	GM (£/ha)	FC (£/ha)	**NPI (£/ha)**	BPS (£/ha)	**NPI + BPS (£/ha)**
2021	1,119	959	**160**	221	**382**
2022	1,577	1,045	**531**	222	**754**
2023	1,052	1,087	**-36**	224	**188**
2024	1,216	1,120	**97**	224	**320**

Source: SAC Consulting, AHDB

Subsidies (BPS) – declining share of output BUT vital to maintain profitability in a poor year



Source: SAC Consulting, AHDB

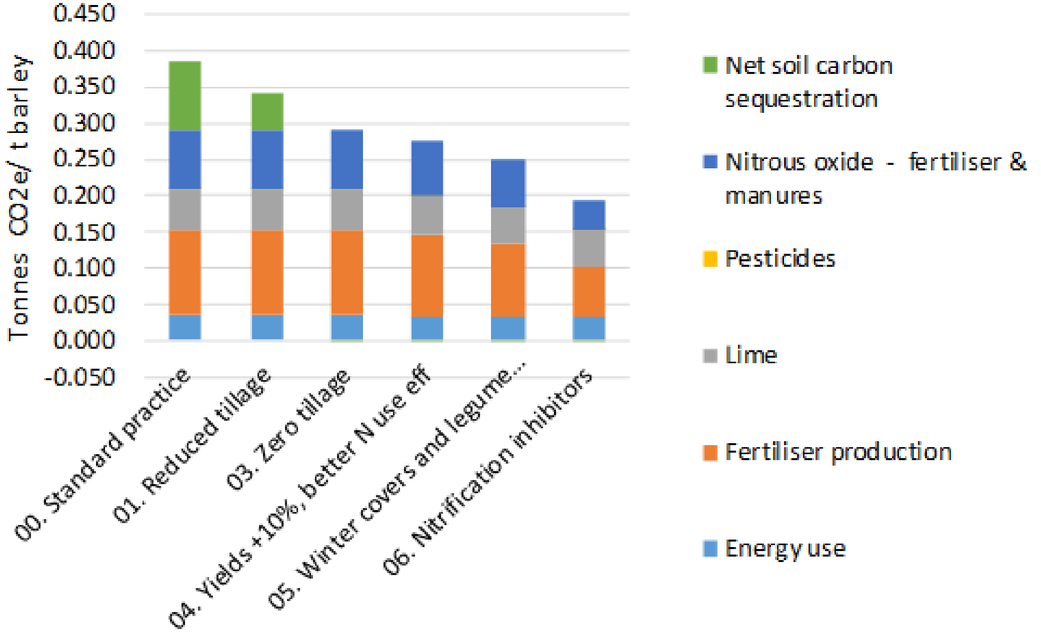
Governments and buyers both seek low carbon grain

Distillers to reduce Scope 3 emissions – premium / differentiation

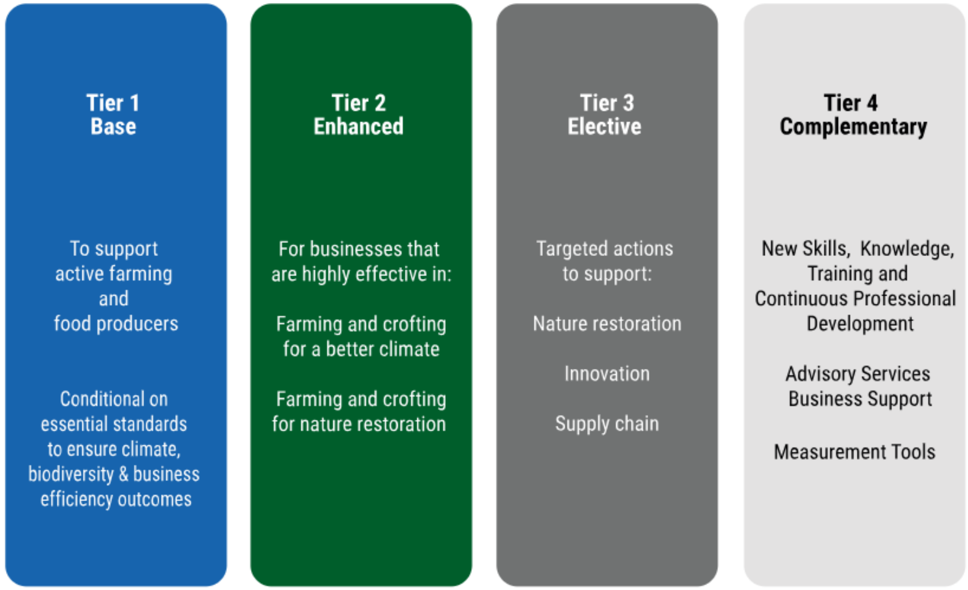
(Carbon per tonne ($kgCO_2e/t$): UK wheat 432, Fr mz 465,Braz mz 1054)

Scottish Govt payments – carbon reduction ~50% of payments?

Low carbon malting spring barley

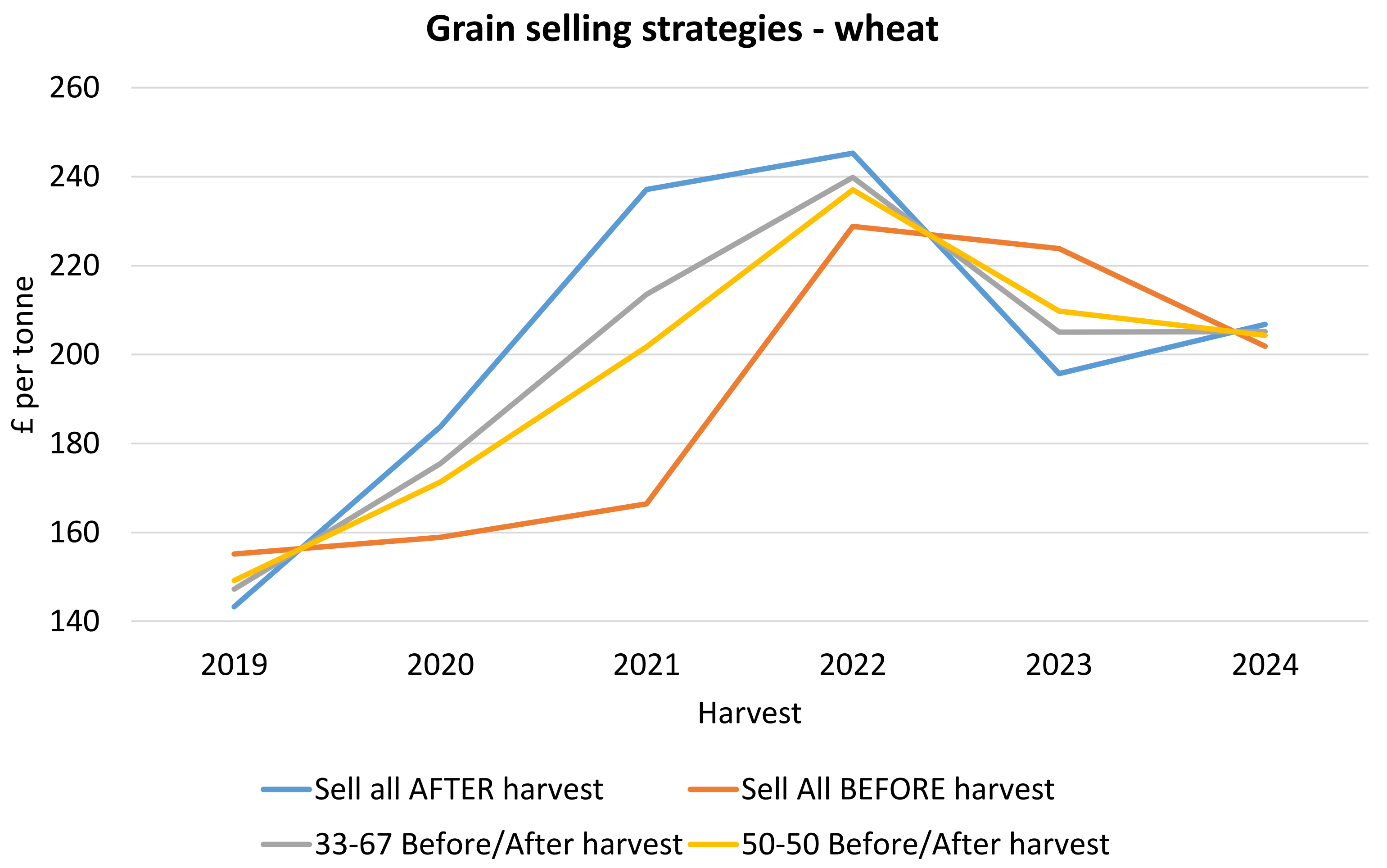


Agriculture Support Package Beyond 2025



Source: SAC Consulting, AHDB

Grain Selling strategies*



Note - * 2023 and 2024 harvest markets are still in play

Source: SAC Consulting, AHDB

Grain Selling strategies* Results

Selling after harvest – Highest price – Lowest price! Low weather Risk
Selling 1/3 before harvest, 2/3 after looks a good balance

2019-2024 TO DATE	A **In The Shed** Sell all AFTER harvest	B **Go Early** Sell All BEFORE harvest	C **Little & Often** Sell 1/3 BEFORE & 2/3 AFTER harvest	D **50:50** Sell 50-50 Before/After harvest
Average price	**202.00**	**189.16**	**197.72**	**195.58**
Diff from A	(£/t)	-12.84	-4.28	-6.42
	(%)	-6%	-2%	-3%
	A	B	C	D
Lowest price	**143.30**	**155.14**	**147.25**	**149.22**
Diff from A	(£/t)	11.84	3.95	1.97
	(%)	8%	3%	1%
	A	B	C	D
Highest price	**245.30**	**228.81**	**239.80**	**237.06**
Diff from A	(£/t)	-16.49	-5.50	-8.25
	(%)	-7%	-2%	-3%
Variation (£/t)	102.00	73.67	92.56	87.84
(%)	50%	39%	47%	45%
Per ha (@10t/ha)	**1020**	**737**	**926**	**878**

Note - * 2023 and 2024 harvest markets are still in play

Source: SAC Consulting, AHDB

New crop forward grain prices – if spot prices rise look at forward prices too
Cost of Prodn Est ‘24 Wheat £216/t , Malt B £237/t

Harvest	2021	2022	2023	2024	*Jan-Nov 24*
	Season	Season	Jan-24	Nov-24	*Change*
	(£/t)	(£/t)	(£/t)	(£/t)	*(£/t)*
Wheat (ex-f)	237	245	196	212	***+£16***
Feed barley (ex-f)	150	215	160	160	-
Malt. B (distil) Sco	192+	256*	245#	230@	***-£15?***
Malt. B (brew) Eng*	170	170	240	220	***-£20?***
OSR (ex-f)	~528	~515	£344	£356	***+£12***

~NB
+ 50% at harvest £198 - 50% at forward prices of £186
‘* 50% at harvest £254 - 50% at forward prices of £259
50% at harvest £236 - 50% at forward prices of £254,
@ £20-30/t over wheat futures, ~ 1/3 sold forward, excluding oil bonus

SRUC AHDB CEREALS & OILSEEDS

Summary - big crop factored in, weather/politics to drive now

1) Why have grain prices fallen recently?

- World cereal crop +48mt higher - led by US Maize but much less than first forecast
- World wheat and feed grain stocks-to-use still FALLING
- EU/ UK / Scottish – weather hit UK cereal sowing, crop lower, poorer quality, lower value
- Oil (biofuel) and input costs falling

2) What factors may be important in the year ahead?

-ve / +ve World economic growth slows / BUT inflation easing, growth should pick up

-ve Russia / Ukraine wheat exports rise

-ve Scot's wheat use in distilling faces cheaper maize

+ve El Nino threatens soya / cereals in Americas / Oz / East Asia

+ve UK wheat crop to shrink, stocks low – move to import parity

-ve / +ve Spr distilling barley – higher area to boost supply in '24 but demand good.

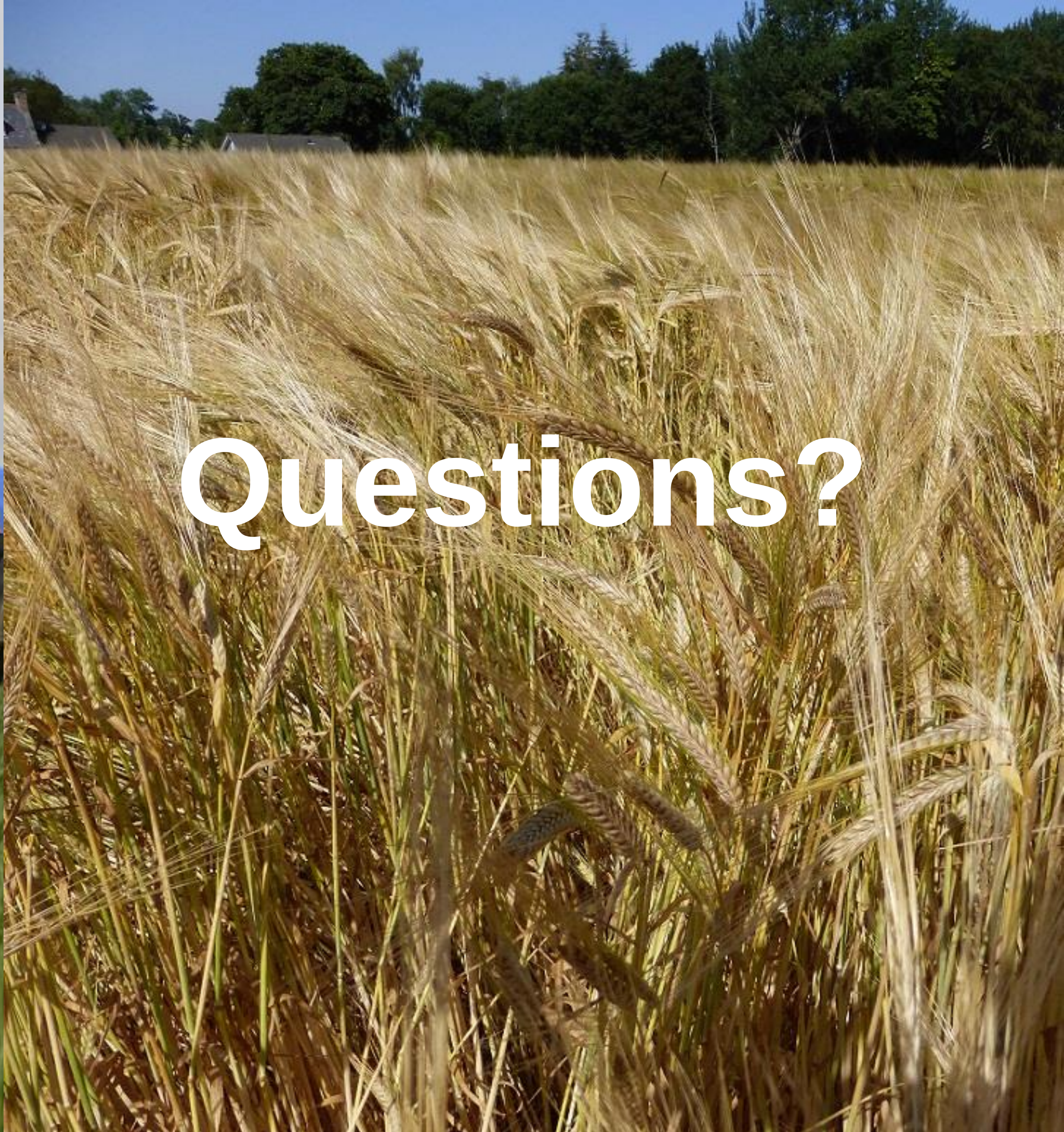
SRDP Farm Advisory Service SRUC AHDB

Take aways – top three

1) **Keep looking ahead for opportunities to sell** – large world maize crop factored in - stocks to use still falling - remains vulnerable to weather – keep a close eye on South America and US spring plantings. UK stocks low / 2024 harvest much smaller

1) **Carbon will increasingly influence markets and subsidies -** both Governments and Distillers seeks low carbon cereals, biofuel / Sustainable Aviation Fuel demand will continue to grow

1) **Pick a marketing strategy that suits your appetite for risk –** selling after harvest delivers the highest price on average BUT can also deliver the lowest in poor year – find **your** strategy, **write it down** and **stick it to a wall!**



Questions?

AHDB Winter Roadshow
Policy Update

Eleanor Kay
Senior Policy Adviser (Agriculture & Climate Change)

What will be covered today?

Agricultural Reform Programme

Agricultural Reform Route Map

Climate Change Plan

Future Policy

Questions

Agricultural Reform Programme

- Introduced in 2022
- Has 4 Parts
    - Route Map
    - List of Measures
    - Glossary of Terms
    - Preparing for Sustainable Farming Guidance

- Most detail on the transition to 2026

- Less detail on what happens from 2026
- Still being developed

Agricultural Reform Route Map

- A phased approach, with “no cliff edge”

- New 4 Tier System is the end result
- 2025 – New Enhanced Conditionality
- 2026 – New Enhanced Support (Tier 2)

- 2027 – Elective and Complementary Support

Agriculture Support Package Beyond 2025

Tier 1
Base

To support
active farming
and
food producers

Conditional on
essential standards
to ensure climate,
biodiversity & business
efficiency outcomes

Tier 2
Enhanced

For businesses that
are highly effective in:

Farming and crofting
for a better climate

Farming and crofting
for nature restoration

Tier 3
Elective

Targeted actions
to support:

Nature restoration

Innovation

Supply chain

Tier 4
Complementary

New Skills, Knowledge,
Training and
Continuous Professional
Development

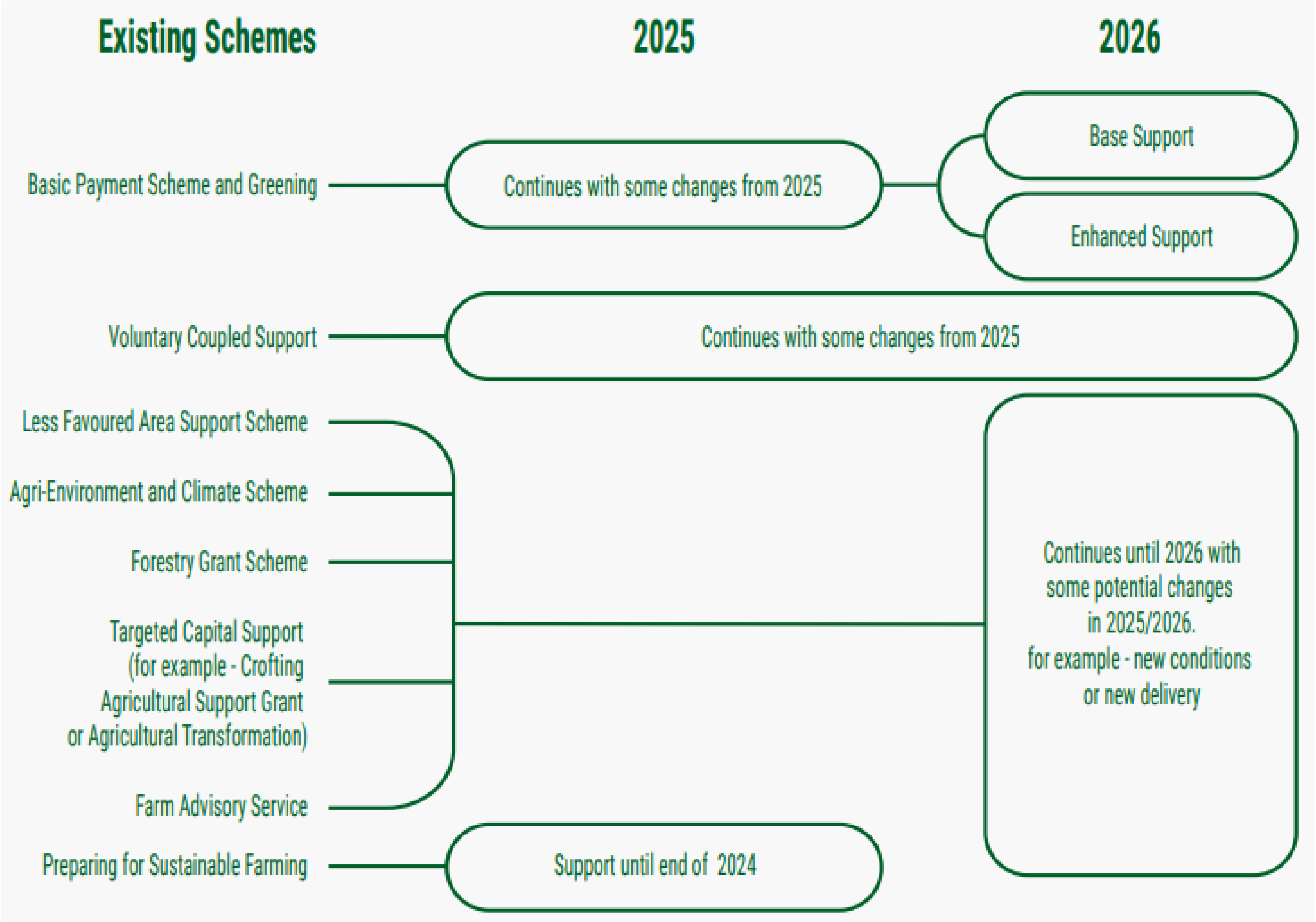
Advisory Services
Business Support

Measurement Tools

Future Support Framework: a phased approach

2025 New Conditionality Introduced	2026 New Enhanced Support Launched	2027 Additional Support Elements Added
New conditionality will be introduced for the 2025 Single Application Form calendar year, delivering upon our commitment to integrate **enhanced conditionality on half of all funding by 2025** Consideration will be given to where further conditions can be applied to existing schemes	Powers from the new Agriculture Bills will be used to launch the new Enhanced Support The Enhanced Support (Tier 2 of the new framework) will directly link the enhanced support to the contribution farmers and crofters make in delivering our climate and nature objectives and allows for those pioneering best practice now to be recognised and rewarded. Co-development of this element will be prioritised through 'Testing for Sustainable Farming'	Once the Enhanced mechanism is in place, further elements of the Future Support Framework will be introduced - including Elective and Complementary support such as future encarnations of agri-environment and Farm Advisory Services

The present payment regions will be kept as they are in the early part of the transition. The current three region model will be reviewed to ensure the Tier One 'Base' payment is fit for purpose for the future.


Existing Schemes
2025
2026
Basic Payment Scheme and Greening
Continues with some changes from 2025
Base Support
Enhanced Support
Voluntary Coupled Support
Continues with some changes from 2025
Less Favoured Area Support Scheme
Agri-Environment and Climate Scheme
Forestry Grant Scheme
Targeted Capital Support (for example - Crofting Agricultural Support Grant or Agricultural Transformation)
Farm Advisory Service
Continues until 2026 with some potential changes in 2025/2026. for example - new conditions or new delivery
Preparing for Sustainable Farming
Support until end of 2024

When will I get more information to help me plan?

		Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec
2023	**What information/ guidance will be available**	ARP routemap List of measures being considered Guidance for available support e.g. PSF	Information on the new conditions for BPS 2025 Information on the new conditions for VCS 2025 Agriculture Bill Consultation report	Participation Plan Published PSF Claims for Animal Health and Welfare Interventions Open	
2024	**What information/ guidance will be available**	Detailed conditionality for BPS in 2025 Detailed conditionality for VCS in 2025 What Elective Support will be available in 2025	Payment strategy for 2025-27 – payment windows and budget setting process Guidance for 2025 BPS & VCS Guidance for other Schemes running in 2025 e.g. AECS, FGS, KTIF, CAGS Information on any new support that will be introduced in 2026 - including Enhanced Information on any anticipated changes to existing support in 2026	Guidance on Complementary Support in 2025	Budget for Support in 2025
2025	**What information/ guidance will be available**	Detailed conditionality for Enhanced Support What Elective Support will be available in 2026	Guidance for all support available in 2026 Information on any new support that will be introduced in 2027 Information on any anticipated changes to existing support in 2027	Guidance on Complementary Support in 2026	Budget for Support in 2026

Agricultural Reform Route Map – Next Detail

Q1 2024 - detail on the funding allocation between tiers, detail on the Whole Farm Plan, detail on conditionality for BPS and VCS (primarily in the context of the beef support scheme), and what elective support will be available in 2025.

Q2 2024 - details on the payment strategy for 2025-27 and guidance for BPS, VCS and other schemes available in 2025

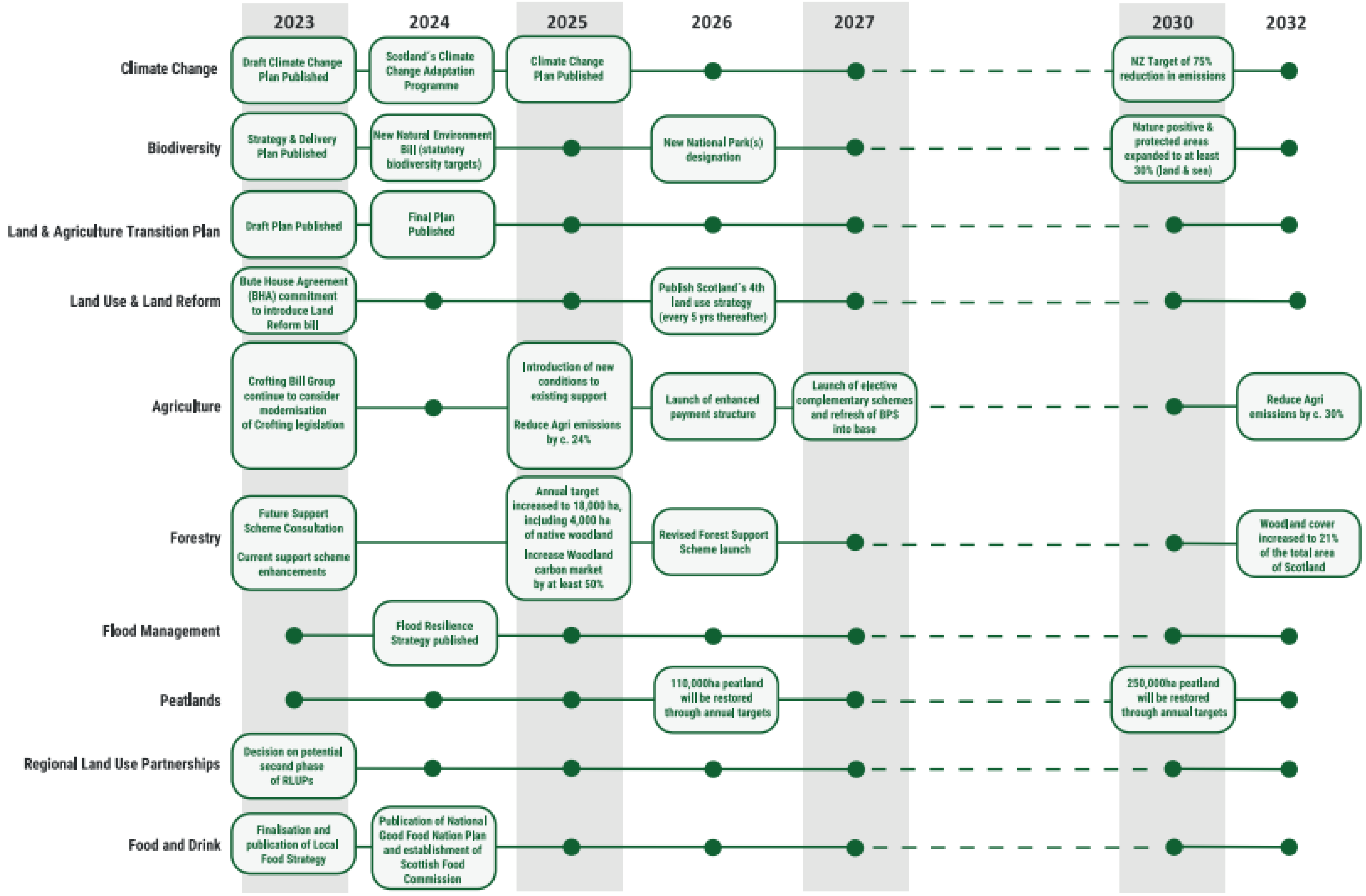
Making the most of the transition time

- Preparing for Sustainable Farming programme
- Support from the Farm Advisory Service
- Take time to plan
- Be prepared for the arrival of new schemes or other market opportunities

Future Policy Development

- Agriculture & Rural Communities Bill – Stage 1
- Land Reform Bill – Delayed
- Climate Change Plan – Delayed
- Good Food Nation Secondary Legislation
- Just Transition Sector Plans

The wider land and agriculture change plan for Scotland



Agriculture Bill - When will it pass?

Introduced – September 28, 2023

Currently in Stage 1 – Until March

RAI Committee is taking evidence

Stage 1 Debate – expected in February

Scottish Government want it to pass by Summer, Autumn is more likely.

What is in the Bill?

Framework Bill

Divided in to 5 parts

Part 1 sets out the key objectives of agricultural and rural policy

Part 2 confers the power on the Scottish Ministers to provide support for the purposes

Part 3 enables the Scottish Ministers to amend and adjust retained CAP rules

Part 4 contains a variety of measures relating to agriculture

Part 5 contains general provisions that apply to the whole Bill

How can I get involved?

Provide feedback when you get surveys

Engage in the two Scottish Government backed engagement projects

As new policy is developed attend government workshops

Share your thoughts with organisations like SLE, especially those relating to current policy interactions. This is our best opportunity to influence things

Scottish Land&Estates

Questions?

Scottish Land&Estates

Thank you

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@ScotLandEstates

Agroecology Workshop

Arable Roadshows: January 2024

Dr Lorna Cole

Senior Ecologist: SAC Consulting

University Innovation Fund

Alice Walker

NERC E4 DTP

SRUC/University of Edinburgh

Three pillars of sustainability

SOCIAL **ECONOMIC** **ENVIRONMENTAL**

Vision for Scottish Agriculture: become a global leader in sustainable and regenerative agriculture

What is regenerative agriculture?

Promote diversity

Integrate livestock

SRDP Farm Advisory Service SRUC AHDB CEREALS & OILSEEDS

COP 15 Global Biodiversity Targets: Transnational businesses must reduce biodiversity-related risk and promote sustainable production

DANONE
ONE PLANET. ONE HEALTH

Source 30% of key ingredients from farms transitioning to **regenerative agriculture** by 2025

General Mills

Produce 100% of wheat for European production through **regenerative agriculture** by 2030

Nestlé

50% of its key ingredients through **regenerative agriculture** by 2030

Walmart

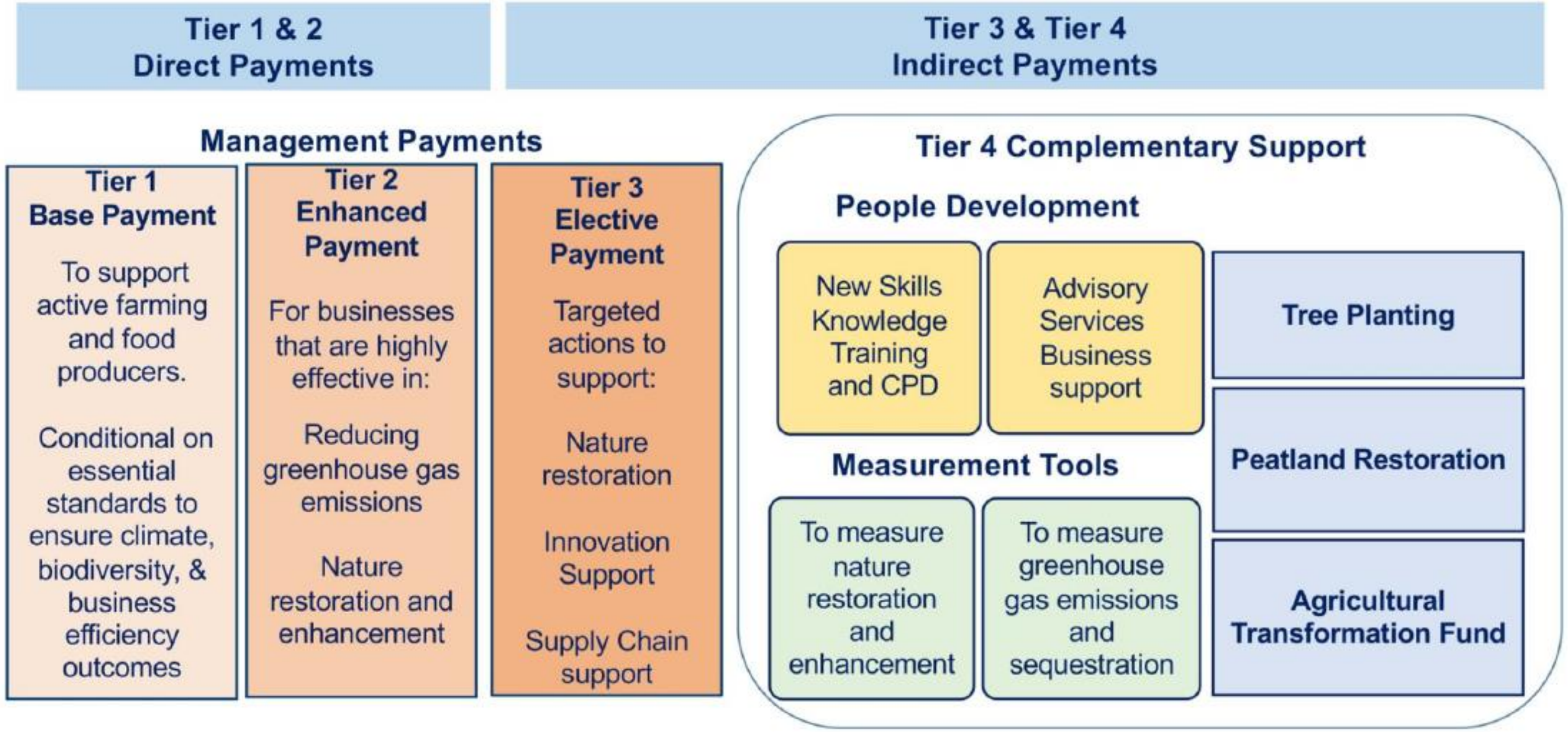
Collaborating with PepsiCo: spread **regenerative farming** across 2 million acres

Policy

Agriculture and Rural Communities (Scotland) Bill

*The adoption and use of **sustainable and regenerative agricultural** practice*

- 50% of direct payments into Tier 2 Agriculture Reform Programme
- List of measures introduced 2026
  - Improving efficiency and welfare
  - Actions to benefit nature, environment and climate



Workshop Aim: Make sure that the List of Measures are viable for Scottish Famers

- We want to sense check viability of measures
- Recommend refinements to Scottish Government

Workshop

Part 1: Viability of measures

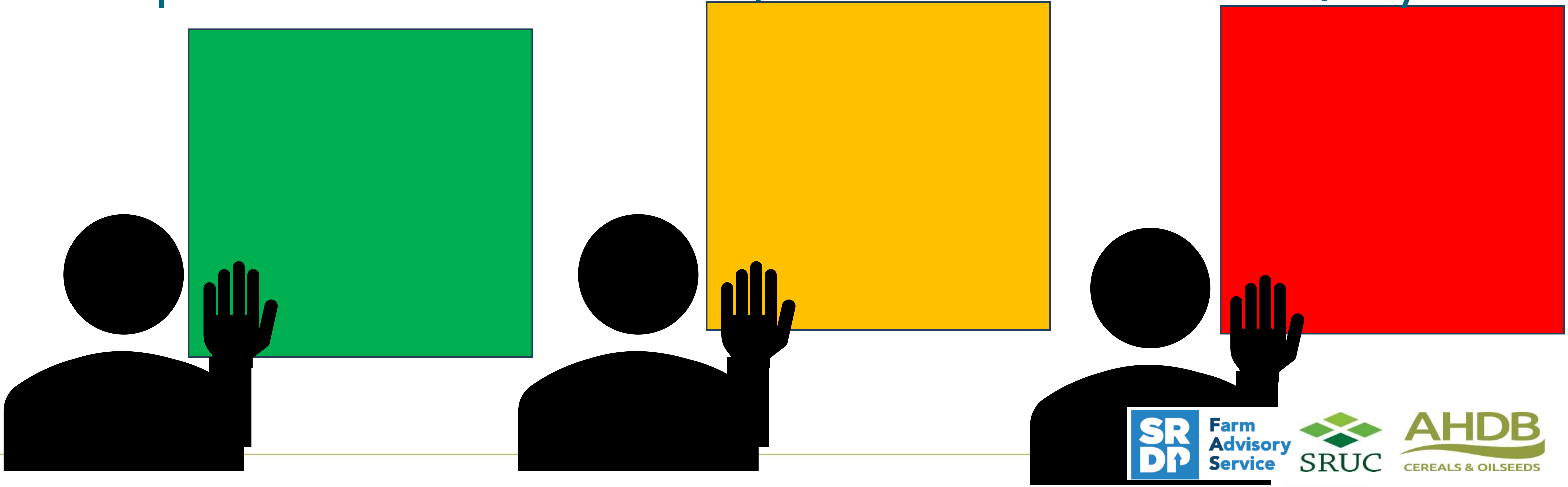
Part 2: Barriers and Solutions

Diversify crop rotation and break crop rotation period: Use a number of different crops in the rotation. Leave a longer break between soil damaging root crops(e.g. potatoes) to improve soil recovery.

I am already doing this practice

I am willing to consider this option

This option is not for me/my farm



SRDP Farm Advisory Service

SRUC

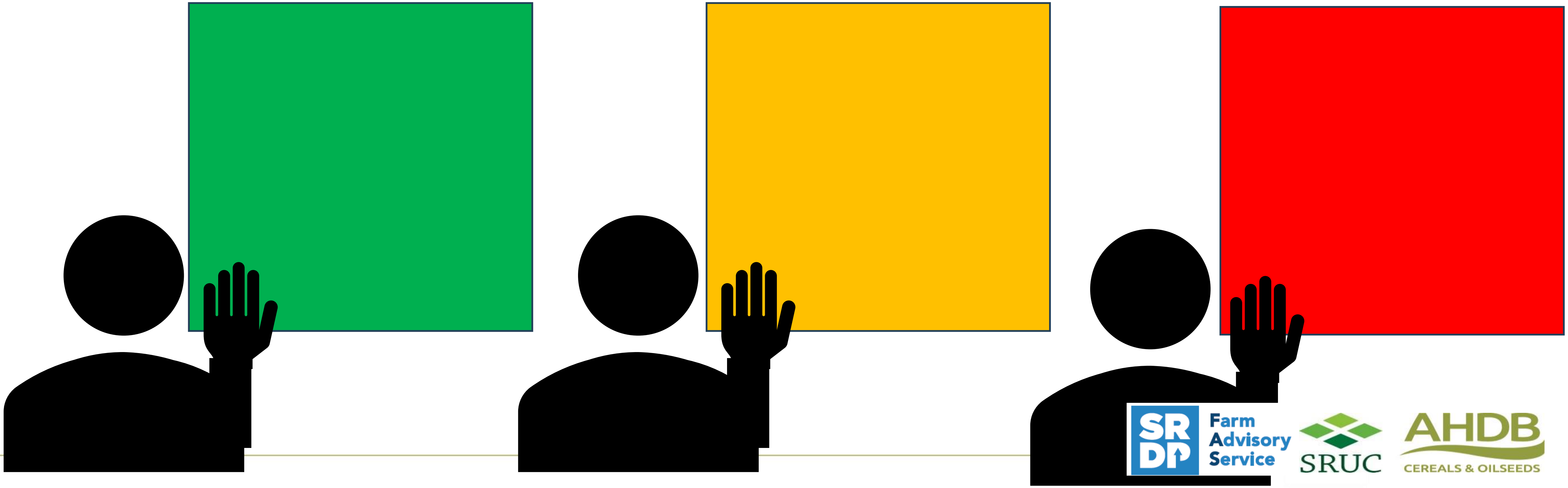
AHDB CEREALS & OILSEEDS

Enhance existing Hedgerows: Allow hedge to grow to minimum 1.5m height and width, plant gaps and leave some trees to reach maturity.

I am already doing this practice

I am willing to consider this option

This option is not for me/my farm



Winter cover: retain stubble over winter and leave undisturbed until 1st March. Could be extended to include cover crops.

I am already doing this practice

I am willing to consider this option

This option is not for me/my farm

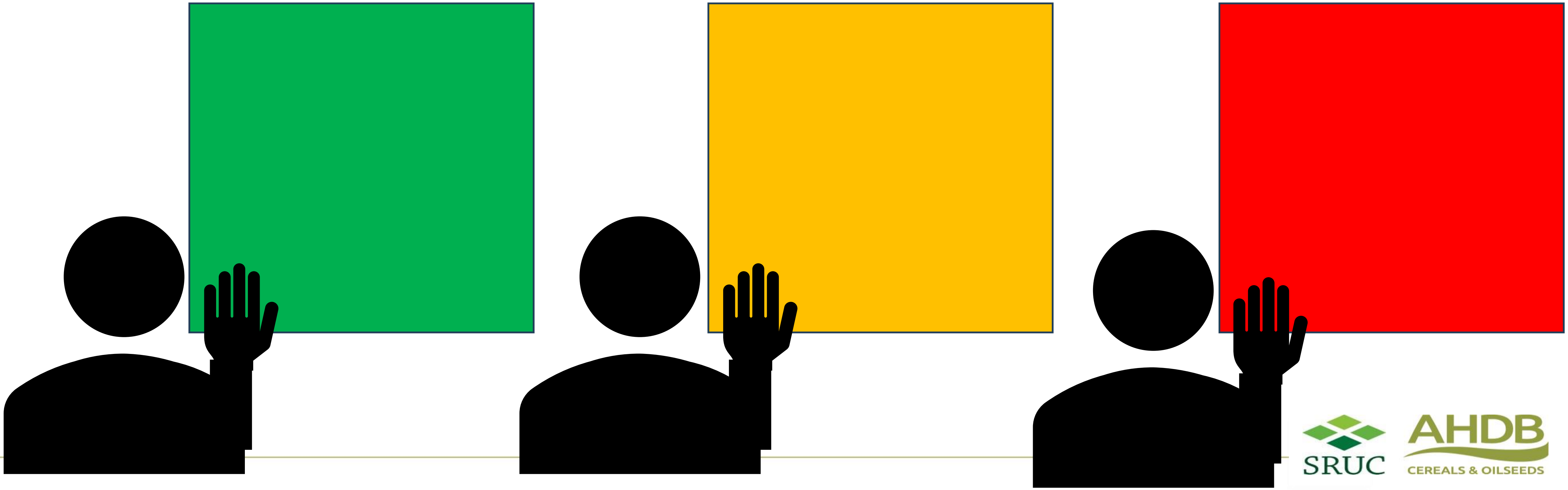
SAC CONSULTING

Minimum/No Tillage: Minimise soil disturbance, avoid inversion/deep ploughing e.g. using direct drilling. Unless issues with compaction or large weed burden.

I am already doing this practice

I am willing to consider this option

This option is not for me/my farm



SRUC

AHDB CEREALS & OILSEEDS

Use of N fixing crops: Include legumes such as peas or field beans into the cropping rotation, and other appropriate catch/green manures.

I am already doing this practice

I am willing to consider this option

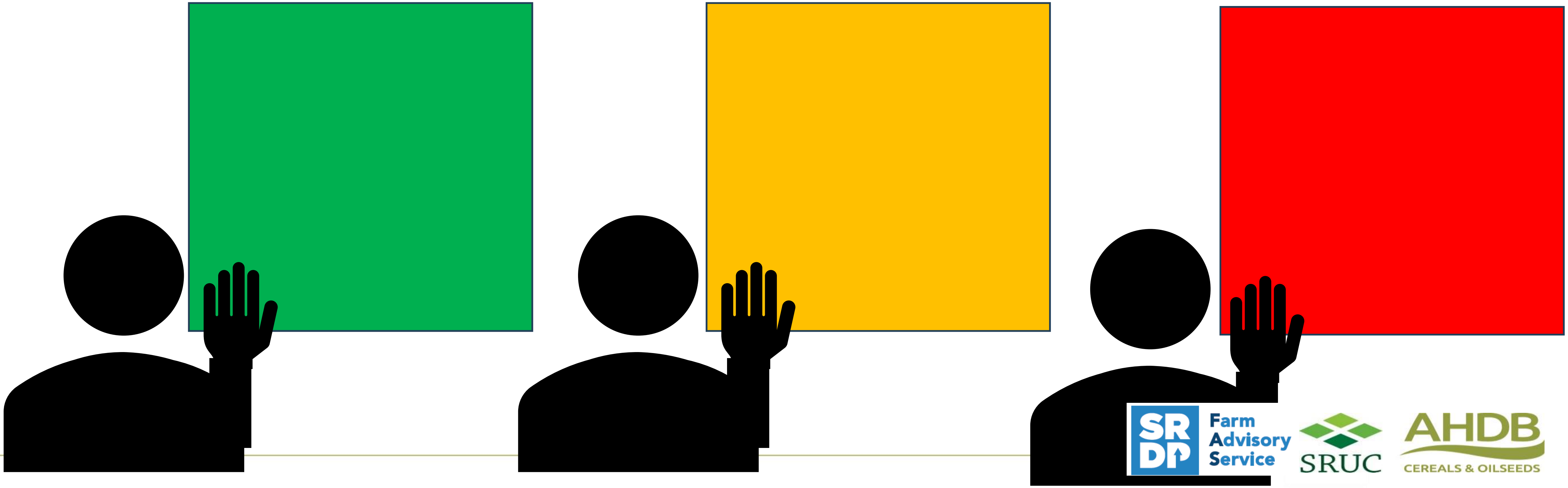
This option is not for me/my farm

Pollinator strips and margins: Within-field strips and margins specifically planted to provide nectar and pollen for beneficial invertebrates.

I am already doing this practice

I am willing to consider this option

This option is not for me/my farm



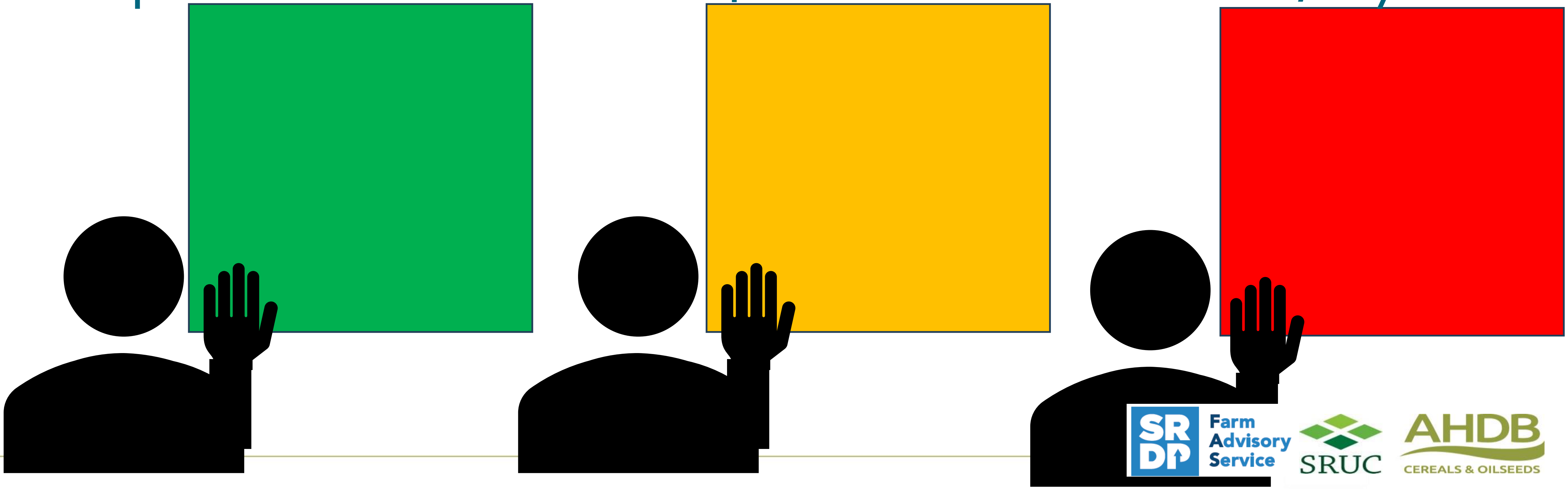
SAC CONSULTING

Arable/ley rotations: Add grass or fodder crops into the cropping rotation and graze animals on arable land. Can also livestock grazing of winter cereals.

I am already doing this practice

I am willing to consider this option

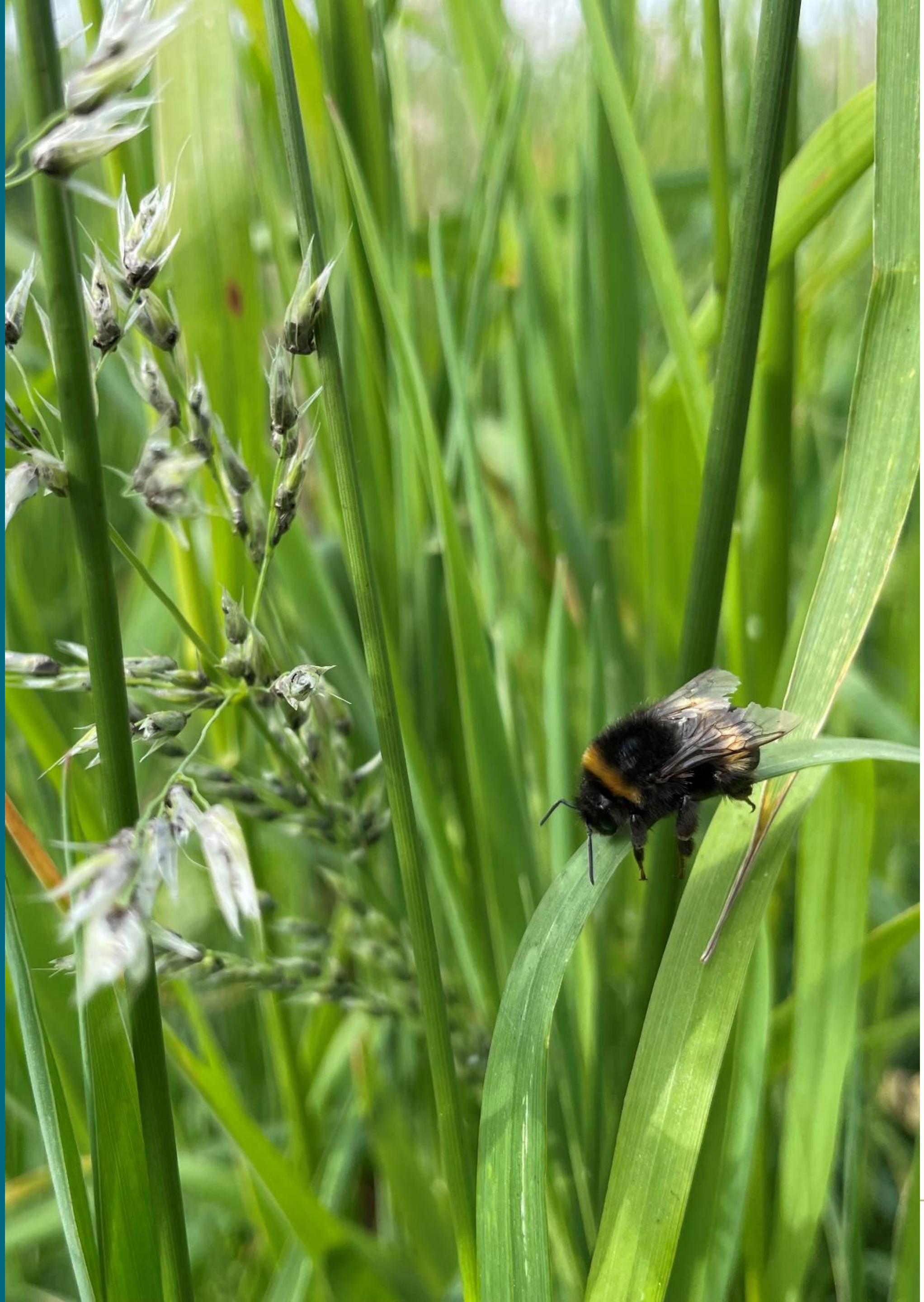
This option is not for me/my farm



SRDP Farm Advisory Service SRUC AHDB CEREALS & OILSEEDS

Real – World approach to Pollinator Conservation measures within Scottish Farmland

Alice Walker



What is the importance?

Interest in agri-environmental measures

Evidence from scientific studies

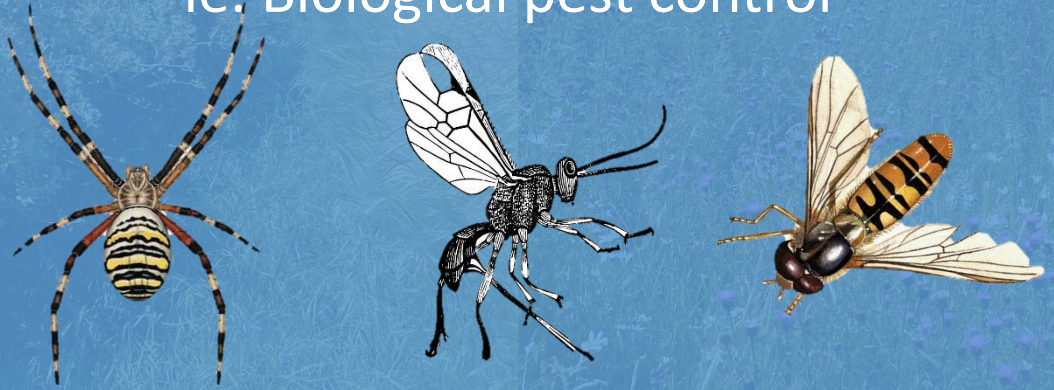
Real-world approach

- To consider other **environmental**, **social** and **economical barriers** which could impact the outcome or prevent the uptake of a measure

Why were these measures chosen?

- Relative cost effectiveness
- Known impact on wild insect pollinator communities
- Potential to support other biodiversity impacts and crop regulating effects

ie. Biological pest control



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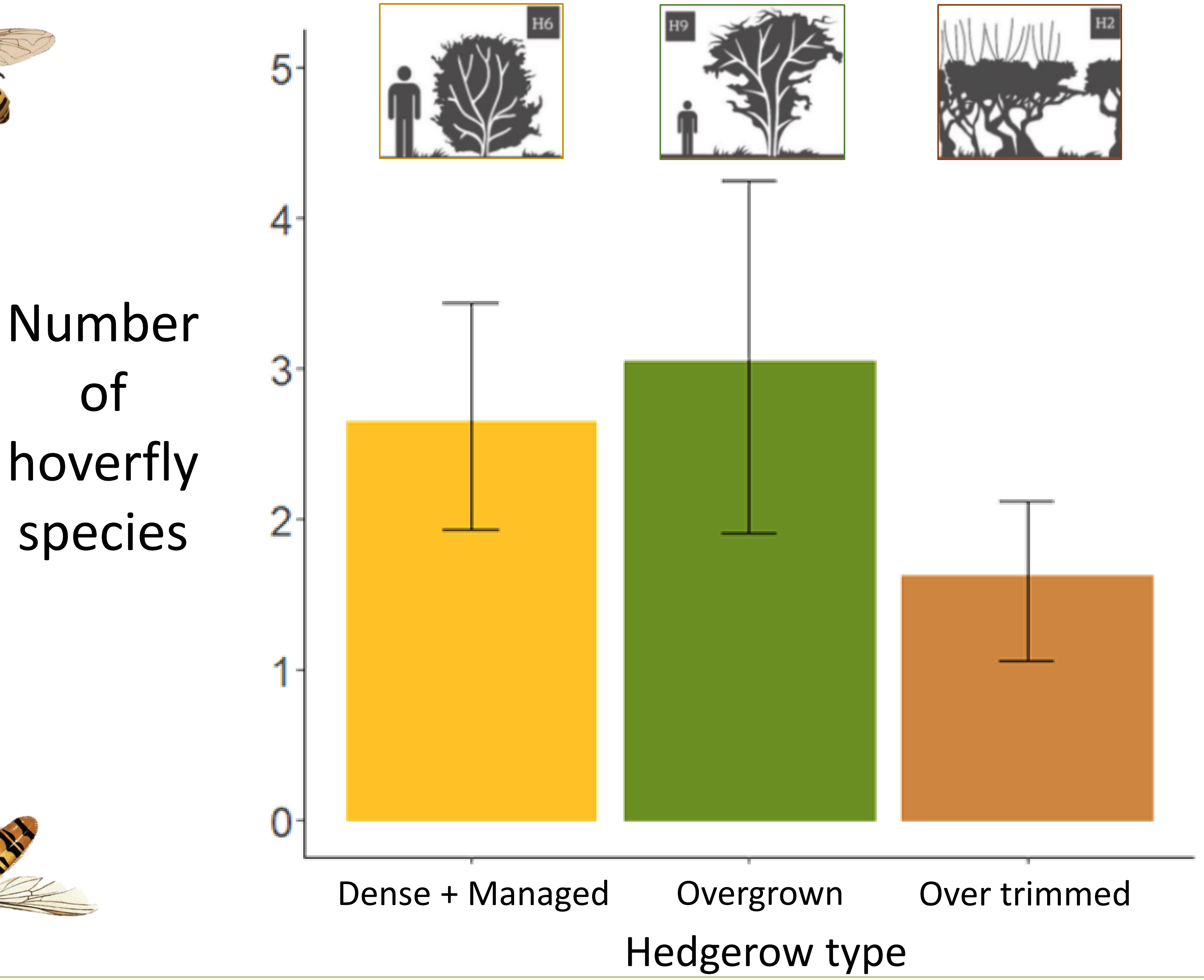
CONSULTING



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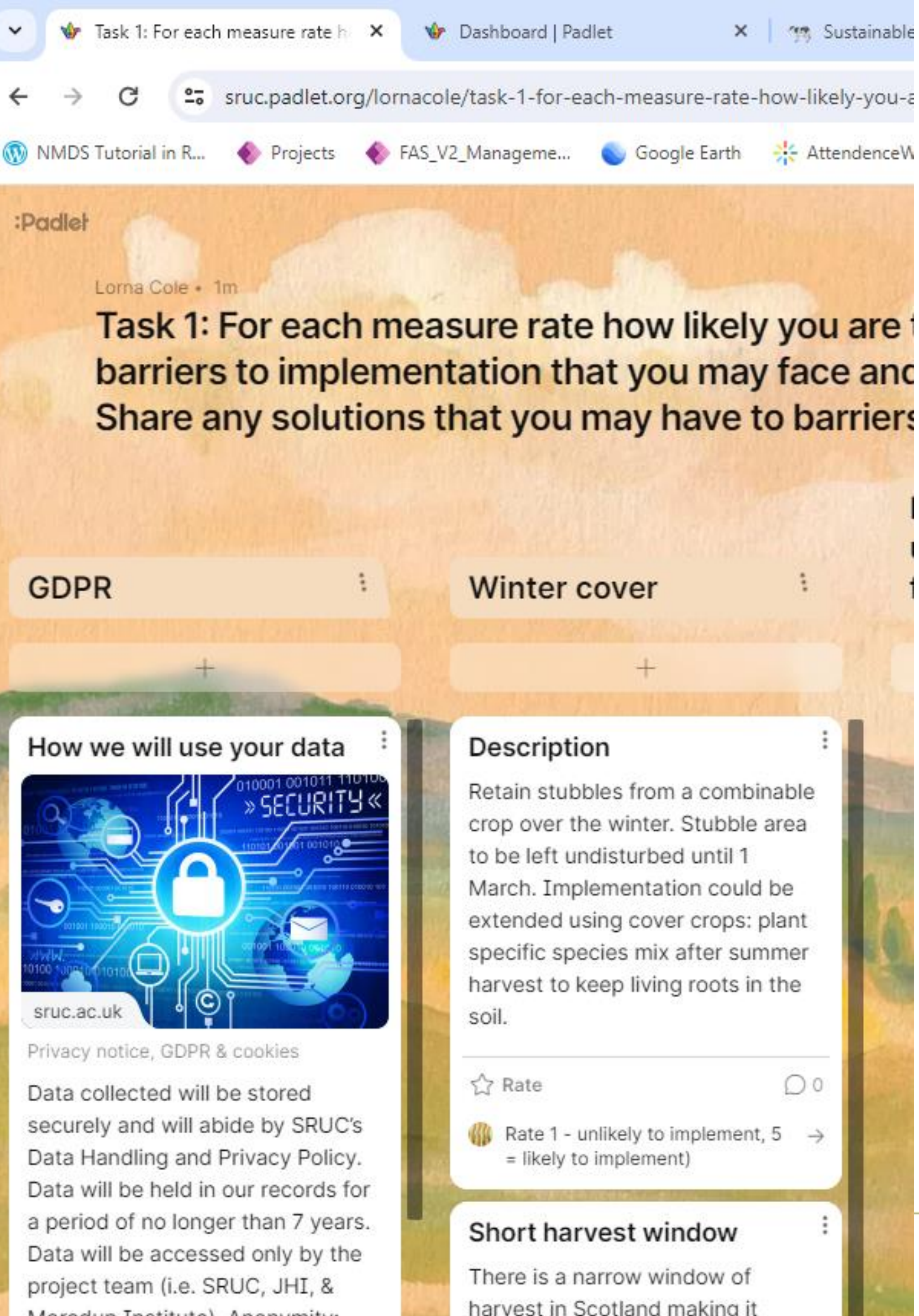


Workshop Part 2: Focus on hedgerows and field margins

Opportunity to feed into a wider range of options online via our online think tank

SRDP Farm Advisory Service

SRUC

AHDB CEREALS & OILSEEDS

SAC CONSULTING

Barriers and solutions to the Scottish government's key list of measures - Farmer Questionnaire

Participant information sheet and Consent statement: 09/01/2024

During this 30-minute long AHDB roadshow workshop, you are being invited to participate in a discussion (20 mins) and a questionnaire (10 mins). Participation is on a voluntary basis and you are free to withdraw your participation at any time and without explanation.

The purpose of this study is to identify the main barriers farmers may face when implementing management actions outlined in the Scottish government's list of measures. We are particularly interested in **pollinator field margins** and **enhancing hedgerows**. We would also like to learn of any potential solutions and encourage the sharing of this knowledge during the workshop.

The findings of this study will be communicated back to the Scottish Government to **help ensure future policy is fit for purpose in the real-world**. The findings will be published in a peer-reviewed academic journal, which we will endeavour to make openly available. This study is funded by the SRUC program and NERC, and has been designed, administered and will be analysed by SRUC and the University of Edinburgh (UK).

Please note all information gained within this workshop/ questionnaire will be kept strictly confidential and none of the questions will allow you to be identified in any way. Should you wish to withdraw your answers from this survey at any time prior to the publication of results please contact Alice Walker by phone 07881998540 or by email afwalker@sruc.ac.uk, and quote the code at the top of this questionnaire. This code is linked to your responses **but has no personal details connected to it**. Your response will be held in our records for a period of no longer than 5 years and will not be passed on to any third parties. Data collected will be stored securely and will abide by SRUC's data handling and privacy policy. By participating you are consenting to these terms of data storage and use which have been approved by the SRUC's Ethics Committee.

Please tick here to show that you are willing to participate in this study with the knowledge that you are free to opt out at any time: ☐

Barriers and Solutions to the Scottish Government's key list of measures - Questionnaire

Please enter a unique code into this box. This will allow us to identify your data if you wish it to be removed from the study at a later stage. ☐

1. What is your background?

- ☐ Farmer
- ☐ Agricultural retailer and/ or food/ drink processor
- ☐ Researcher
- ☐ Other *please specify* ____________
- ☐ Advisor
- ☐ Agricultural supplier (agrochemicals, seed, machinery, etc)
- ☐ Student

If you have **ticked Farmer, please answer the next 4 questions**, if not then please move directly to question 6.

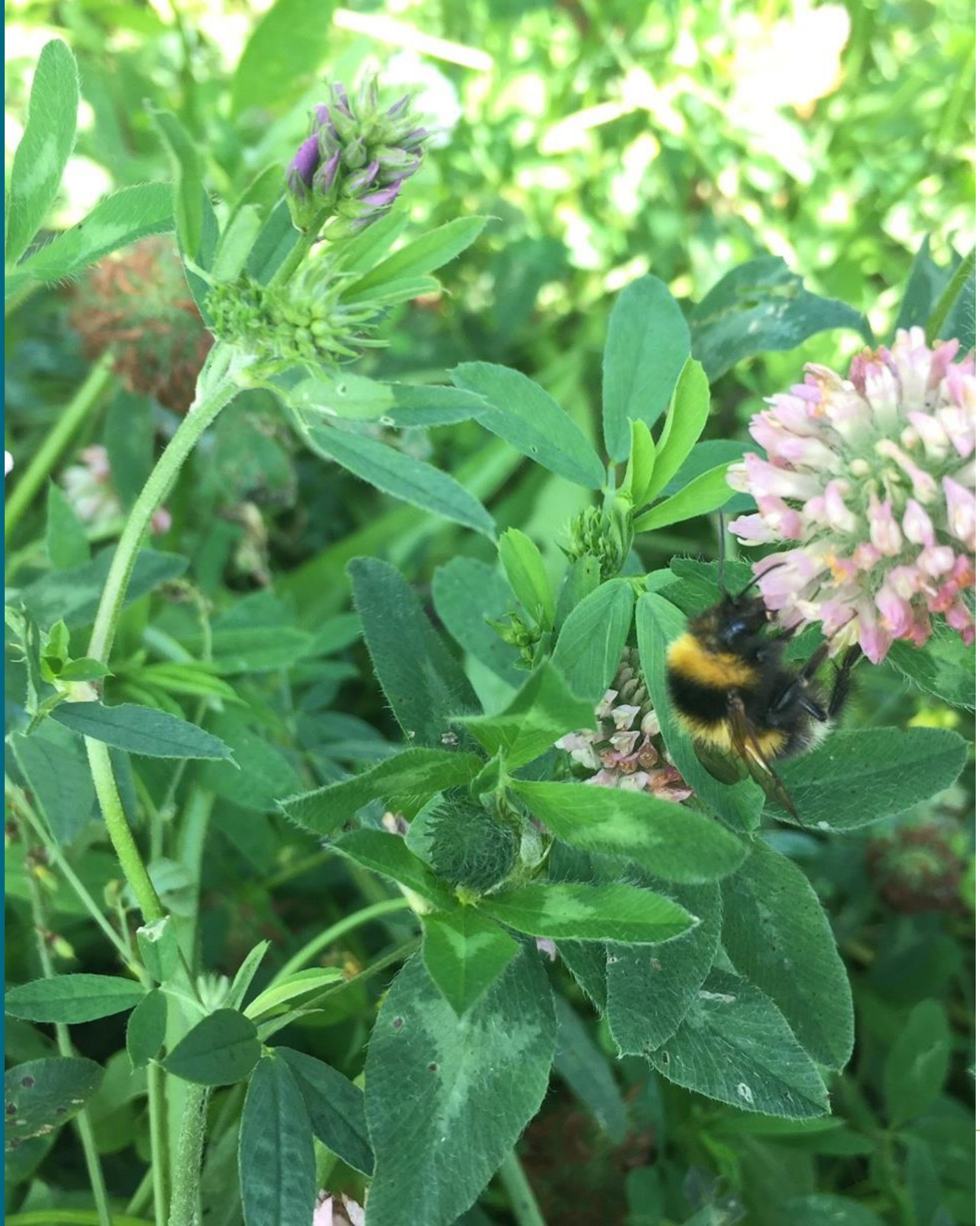
Workshop Discussion:

- Identify top 3 barriers to implementation
- Identify potential solutions
  - What have you trailed?
  - Success or Failure?

Measure	Barrier	Severity of barrier	Potential solution to each barrier
Retain and enhance pollinator field margins	1.	1 2 3 4 5	
	2.	1 2 3 4 5	
	3.	1 2 3 4 5	
Enhancing hedgerows	1.	1 2 3 4 5	
	2.	1 2 3 4 5	
	3.	1 2 3 4 5	

What is your top barrier to establishing pollinator strips

1) They provide a source of pests, weeds, diseases
2) Loss of productive area
3) They fail to establish or deteriorate too quickly
4) Cost, time or machinery to establish them
5) They don't fit my farm infrastructure
6) More evidence is needed that benefits outweigh costs
7) I don't know what species to plant or how to manage them
8) Other barrier



Solutions for pollinator strips and margins

Policy

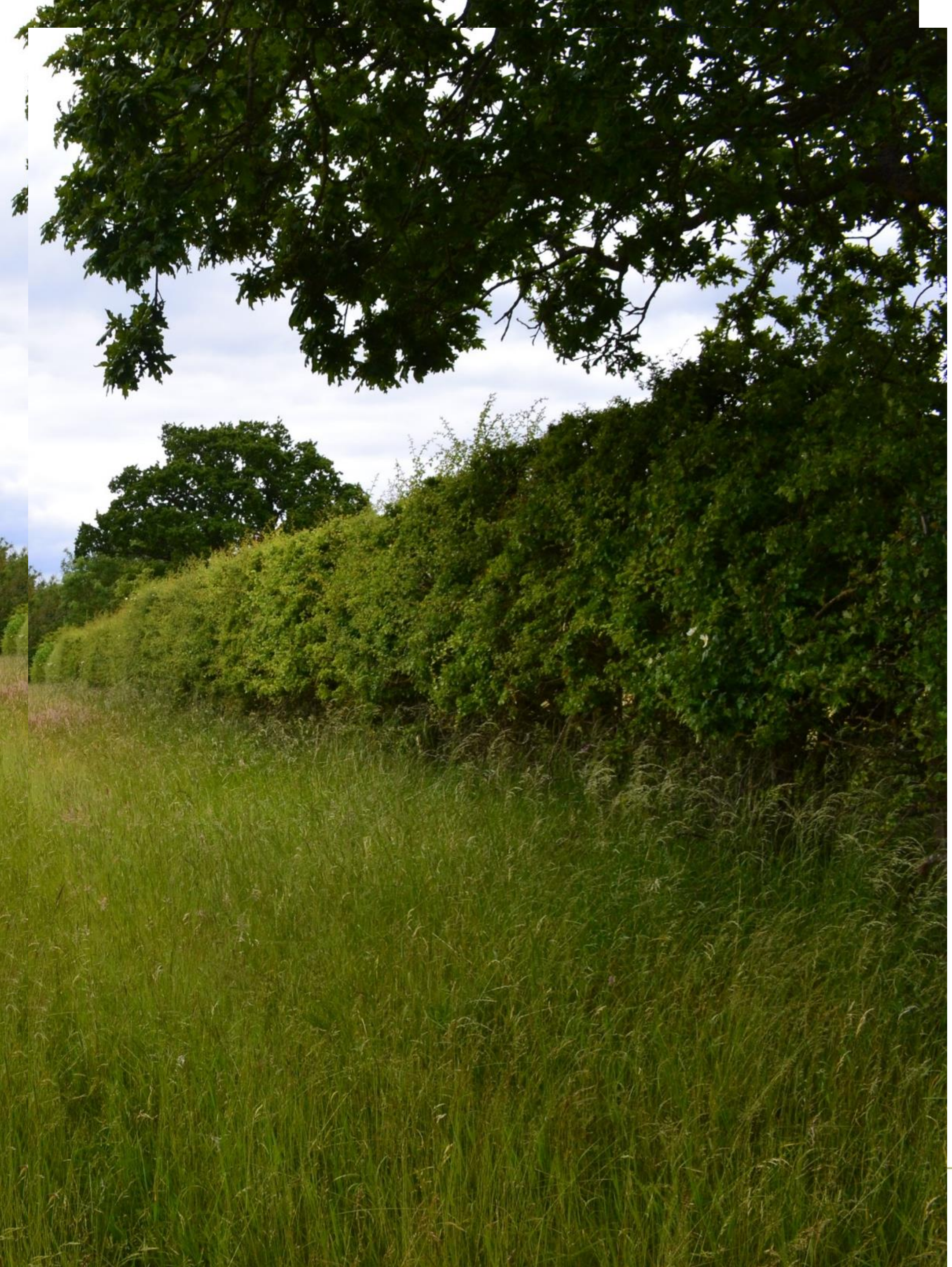
On Farm

Training

Peer to peer

Funding

Research



1) I currently don’t have hedgerows
2) I don’t have the time, money, labour or machinery to improve them
3) I find overgrown hedgerows messy
4) My current fencing structure
5) Risk of pests/weeds/disease or encroachment into the field
6) I don’t have the knowledge or skills to improve quality
7) More evidence is needed that benefits outweigh costs
8) Other barrier

Solutions for enhancing existing hedgerows

Policy

On Farm

Training

Peer to peer

Funding

Research

National Advice Hub
T: 0300 323 0161
E: advice@fas.scot
W: www.fas.scot

Thank you!