

Sustainable Activation of The Bioeconomy

14th February 2023

BY

Opinions
Job Ref: 22160

CONTACT

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What We Did & Why?

This project was undertaken to provide a mandate and catalyst to the co-operative sector and wider industry so that primary producers may become engaged with the *bioeconomy*, resulting in **more sustainable, resilient and successful businesses at primary-producer level.**

Our approach comprised of two elements;

1. 2 x 1 hour focus groups (n=6) per group with primary producers with varying awareness, attitudes and engagement with the **bioeconomy** and sustainability.

Fieldwork: November 2022

2. A quantitative survey amongst n=118 primary producers.

Fieldwork: December 2022- January 2023



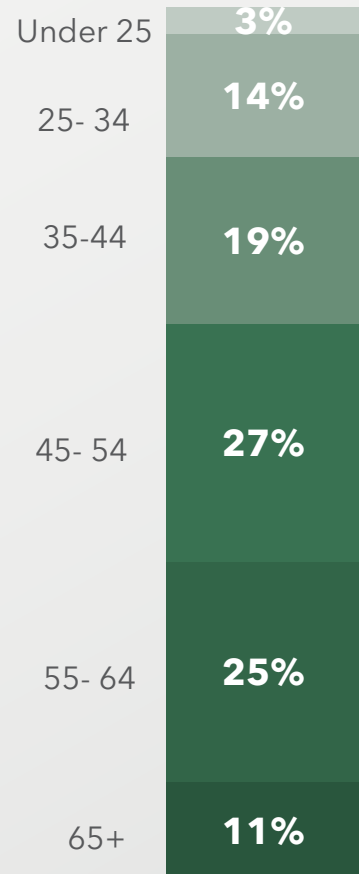


Who We Spoke To

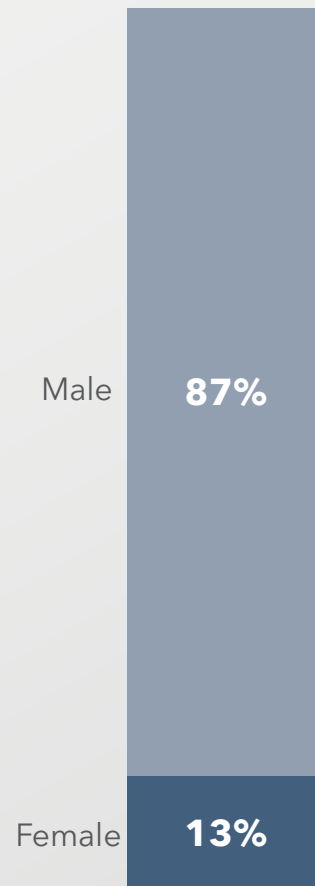
Who we spoke to? *Individual Farmer Profile*

(Base: All Farmers (n=118))

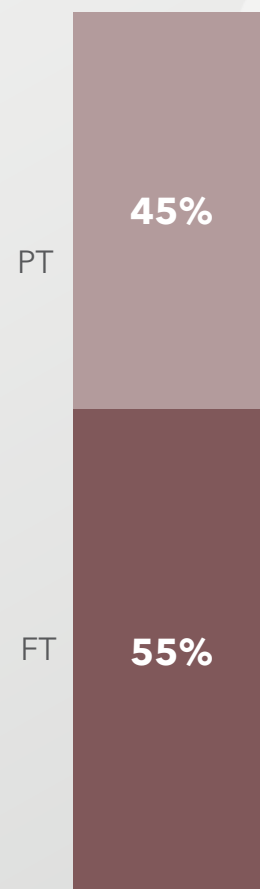
Age



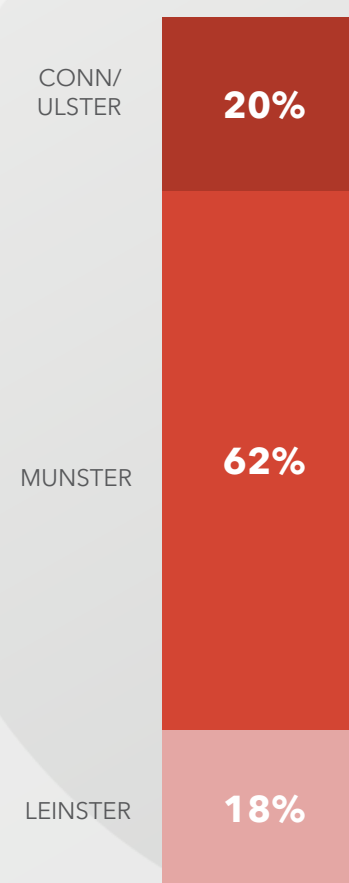
Gender



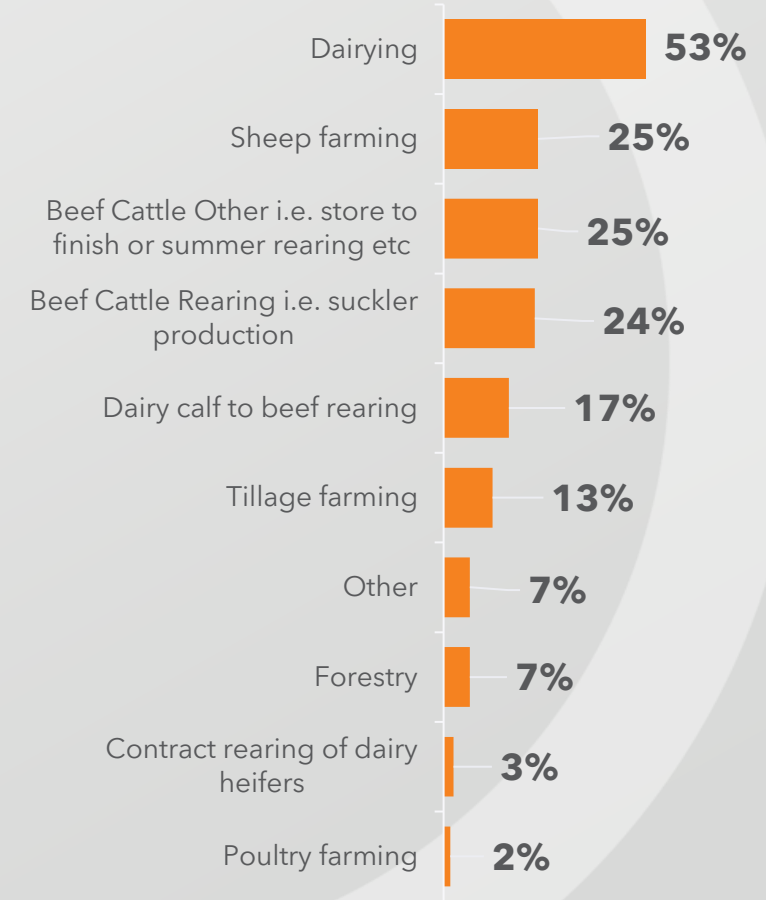
Part time/ fulltime



Region



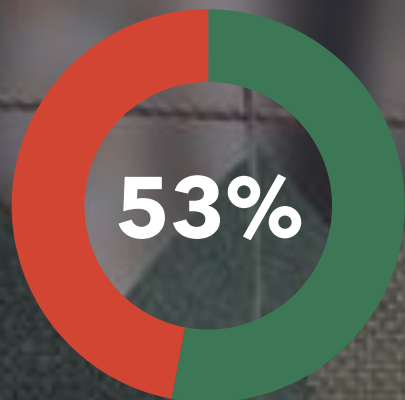
Enterprise





In Summary...

Farmer Optimism Varies by Sector



Just over half (53%) of farmers feel optimistic about the future of farming of farming in Ireland

3 in 10 (30%) agree that they would not recommend farming as a lifestyle to their family or friends

1 in 4 (26%) say they are likely to change/ diversify enterprise type to combat rising costs of inputs on their farm

% Optimism by Sector 😊



Dairy

61%



Sheep*

41%



Tillage*

80%



Beef*

47%

Duality Across Sectors?

Average incomes rise for dairy, tillage farmers in 2022 - Teagasc

Updated / Thursday, 15 Dec 2022 14:04



The report says 2023 will be another year of high a

'Sheep farming not viable is the message to government' - TD



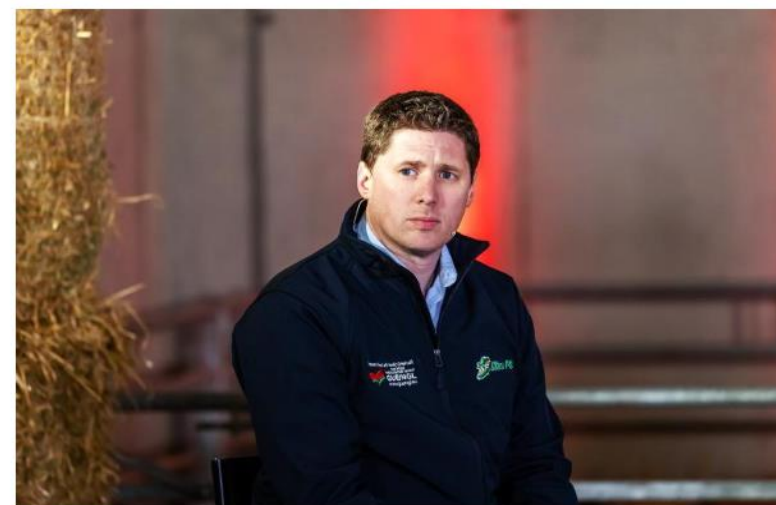
Michael Geary

February 14, 2023 2:00 pm



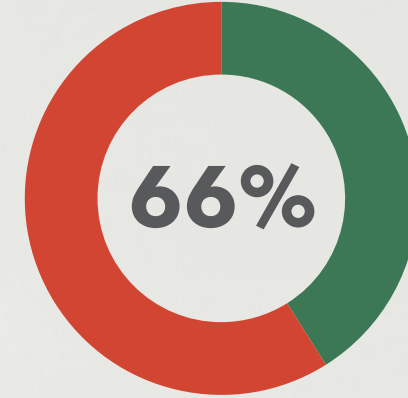
Mercosur 'making a mockery' of Ireland's sustainable beef - Sinn Féin

Sinn Féin has called on the Government to inform the European Commission that it will veto the Mercosur trade deal.



Sinn Féin spokesperson on agriculture Matt Carthy TD. \ Philip Doyle

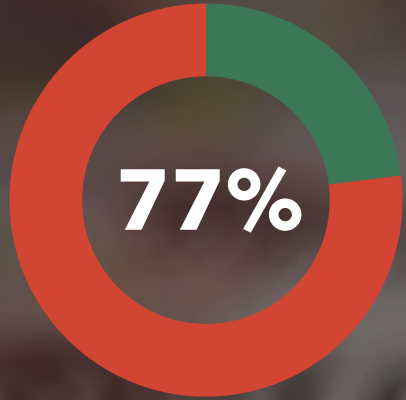
The Green Agenda is Having a Perceived Negative Impact on Farms



2 in 3 (66%) agree that the Green Agenda will negatively impact the viability of their farms

And **6 in 10 (58%)** state that the commitment from the Irish Government to a 25% in gas emissions from agriculture by 2030 will have a negative impact on their farm

Rising Costs are also Damaging the Viability of Farms



Almost 8 in 10 (77%) say that rising input costs are damaging the viability of their farms

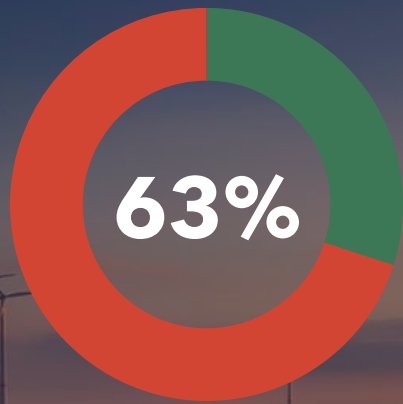
The 3 Fs- **Fuel, Fertiliser** and **Feed** are having the biggest negative impact on viability



"Our biggest priorities this year have been cutting costs, mainly feed and fertiliser"
Dairy farmer, Cork

And **1 in 4 (26%)** of farmers report that they are likely to change/diversify enterprise type to combat the rising cost of inputs

The Cost and Competition for Land

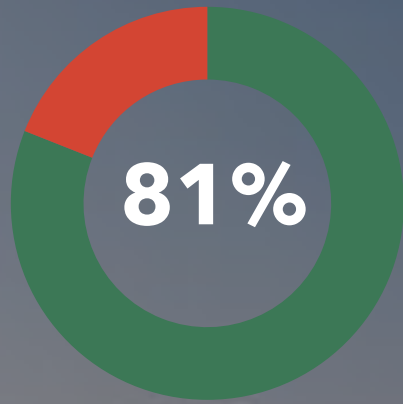


Over 6 in 10 (63%) of farmers agree that lack of availability of land is a barrier to growth for their farming enterprise (73% among dairy farmers)

Over half (54%) of farmers agree that the cost of land is negatively impacting the viability of their farms (63% among dairy farmers)

3 in 4 (75%) of farmers agree that they would prefer to trial a new enterprise on their farm than rent my land to somebody else

There are High Levels of Openness to Diversification into Alternative Enterprises



Over 8 in 10 (81%) of farmers agree that they would be open to trying out new enterprises or ideas on their farm

And **6 in 10 (61%)** agree that farmers should diversify their on-farm enterprises to protect themselves for the future



"I would be open to trying any new ideas as long as it made sense from a business perspective and there was clear roadmap for a commercial return"

Beef farmer, Leitrim

Younger Farmers Are More Open to Diversification

86% of farmers aged under 45 would be open to trying out new enterprises or ideas on their farm **Vs** **77% of farmers aged over 45**

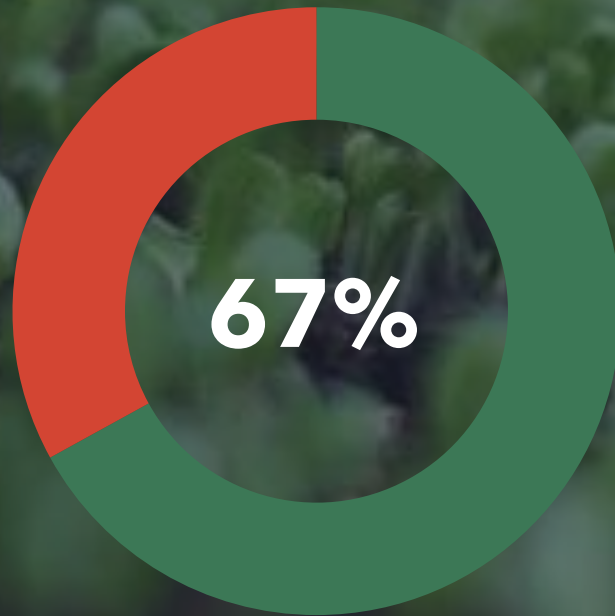
84% of farmers aged under 45 would prefer to trial a new enterprise on their farm than rent my land to somebody else **Vs** **71% of farmers aged over 45**



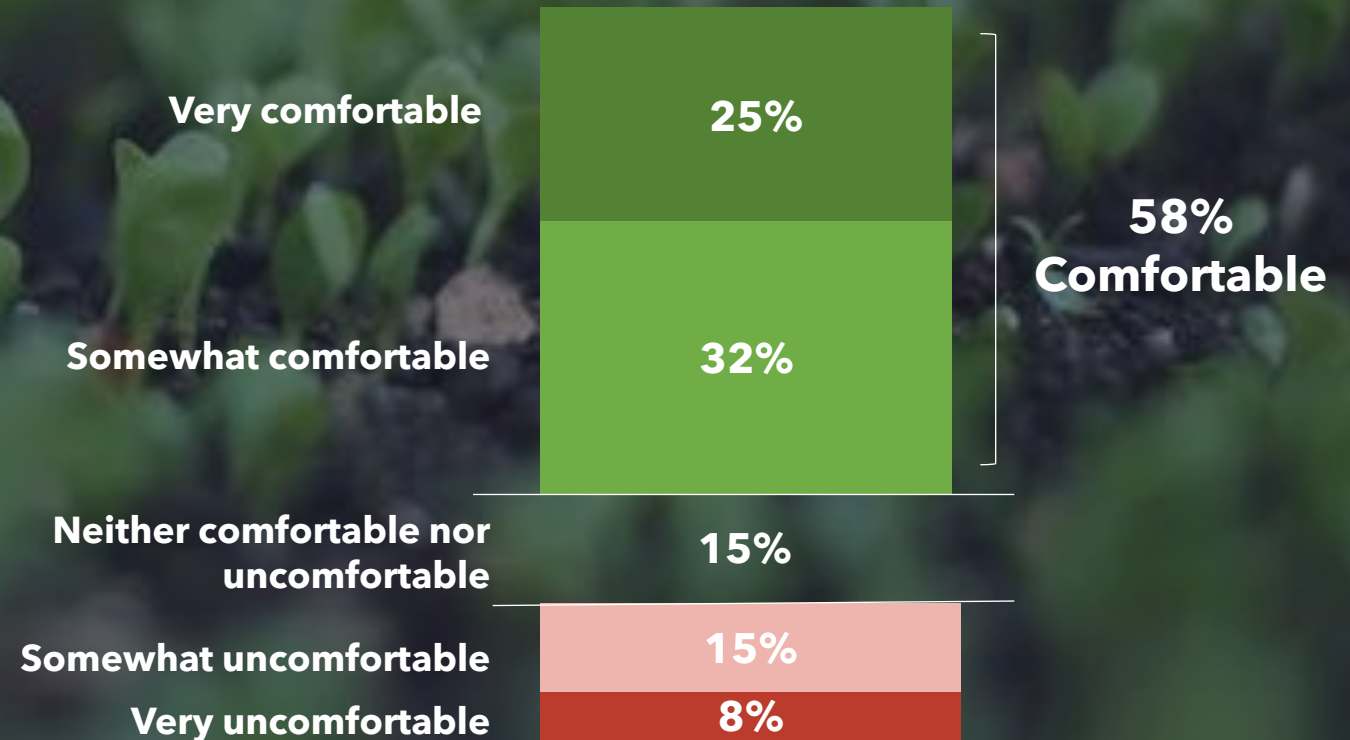
Younger farmers could be targeted to create '**Bioeconomy advocates**' that will influence other farmers to get involved in The Bioeconomy

There is High Levels of Awareness and Comfort in Understanding the term 'The Bioeconomy'

Awareness



Comfort in understanding the term 'The Bioeconomy'



Enterprises in *The Bioeconomy*

Before testing the concepts, we presented participants with a list of enterprises that are currently part of the bioeconomy to gauge their **awareness, perception of positivity** and **openness to trial**.

Enterprises included:

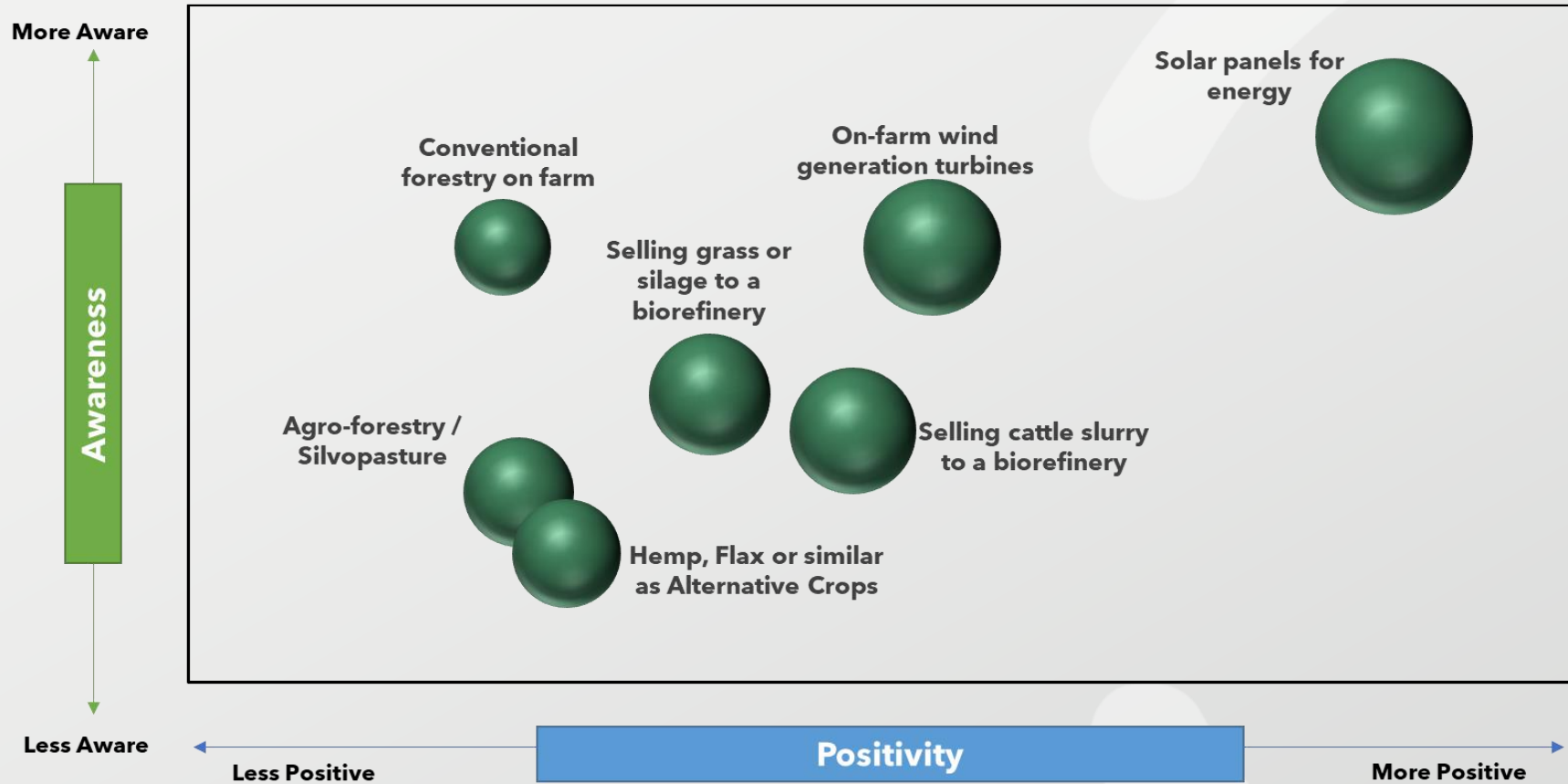
- ✓ Solar Panels
- ✓ Wind generation turbines
- ✓ Selling grass or silage to a biorefinery
- ✓ Selling cattle slurry to a biorefinery
- ✓ Conventional forestry
- ✓ Hemp, flax, or similar as alternative crops
- ✓ Agro-forestry/Silvo-pasture

Details of their performance are included on the next slide.



Awareness, Positivity and Openness to Trial

(Base: Total Sample, n=118)



Interpreting this graph

- **Y Axis:** Awareness
- **X Axis:** Positivity
- **Bubble size:** Openness to trial

Across Enterprises that are part of *The Bioeconomy*, **Solar Panels** and **Wind Turbines** Have The Highest levels of **Awareness, Positivity** and **Openness to Trial** Overall

However across the Stimuli Tested, **Anaerobic Digester** and **Bioprocessing Grass** Score **Highest Across all Metrics**



Widespread adoption potential



Appeal



Likelihood to trial

Concept Rank:

Anaerobic Digester	1	1	1
Hemp	3	3	3
Forestry	4	4	4
Bioprocessing Grass	2	2	2

Anaerobic Digester

Overview

Anaerobic digestion means the production of biogas by different groups of microbes in the absence of oxygen.

The main gas produced in anaerobic digestion is methane. This methane can be injected into the biogas grid (when it has been processed to remove trace gases) where it can be used in all cases where conventional biogas is used, or as a transport fuel.

Anaerobic digestors can be designed to take a number of inputs, however those that use grass silage and cattle slurry could be well suited to an Irish system.

What Does this Mean for Farmers?

Anaerobic digestors could ease the pressure of slurry on Irish farms at peak times of the year as well as delivering an additional revenue stream through the sale of the biomethane produced.



Forestry

Overview

The Irish Government has announced a new €1.3bn forestry fund. Existing establishment grants and annual payments to farmers will increase by between 46%- 66% and annual payments will be paid for 20 years rather than 15 years.

The rates have increased for all 12 categories of forests, with the grant payment for native forests increasing to €6,744/ha, the broadleaf payment increasing to €4,314/ha and the agroforestry payment increasing to €8,555/ha.

What Does this Mean for Farmers?

For a farmer who wanting to plant 5 hectares over a 20 year period of time, the farmer could expect in excess of €100,000 which is tax free.



Hemp

Overview

The cultivation of industrial hemp as a crop by farmers in Ireland has been increasing in popularity in recent years.

Industrial hemp is pretty much the same as cannabis, but without the narcotic effects of the active ingredient – tetrahydrocannabinol (THC).

What Does this Mean for Farmers?

Hemp is touted as a desirable crop for cultivation for farmers for a number of reasons:

- Suitability for cultivation in the Irish climate
- Carbon sequestration ability (10- 15T/ acre depending on species)
- Wide range of developing end use markets including fibre, food and feed
- Can be grown using conventional farm machinery
- Improves soil structure
- Increases yield of following crop



Biorefinery Glas

Overview

Biorefinery Glas is a European Innovation Partnership (EIP) Operational Group funded by Department of Agriculture, Food and the Marine under the Rural Development Programme.

Biorefinery Glas is a first demonstration of small-scale biorefinery in Ireland, supporting the development of new business models and assisting in farmer diversification into the circular bioeconomy from suppliers of biomass to producers of finished and semi-finished products.

Approach

Through biorefining, grass is fractionated into a variety of new products in a process which improves the protein efficiency, value and sustainability of our grasslands.

The biorefinery approach converts freshly harvested grass into a range of products, including: an optimised cattle feed fibre, a non-GMO protein concentrate feed for monogastrics, a high-value sugar stream of fructo-oligosaccharides and a grass whey for fertiliser or bioenergy applications.



Forestry

Forestry performs least well in terms of positivity amongst the list of enterprises listed that are part of the bioeconomy and it also performs well across all metrics tested across stimuli

Loss of productive **'food producing land'** and land being **'locked into a particular type of land use'** are the most common reasons expressed by farmers for lack of positivity surrounding this enterprise



""Once it's been in forestry, the land is never allowed to go back to agricultural production land again. Ever!""

Two thirds of farmers shy away from forestry

Findings from an Irish Farmers Journal survey suggest that beef and sheep farmers have the greatest interest in planting forestry.

Barry Murphy
MORE > FORESTRY
4 January 2023



Coillte 'land grab' will cull suckler herd - Harkin

Proposals which could see foreign investment funds purchase 50,000ha of land for planting have been slammed by farm organisations and politicians.



90% drop in afforestation licences issued by DAFM in January

Aisling O'Brien
February 10, 2023 3:15 pm



And reports in the media also echo perceptions of negativity surrounding this enterprise

And These Concepts Perform Strongest in a Head to Head Scenario

(Base: Total Sample, n=118)

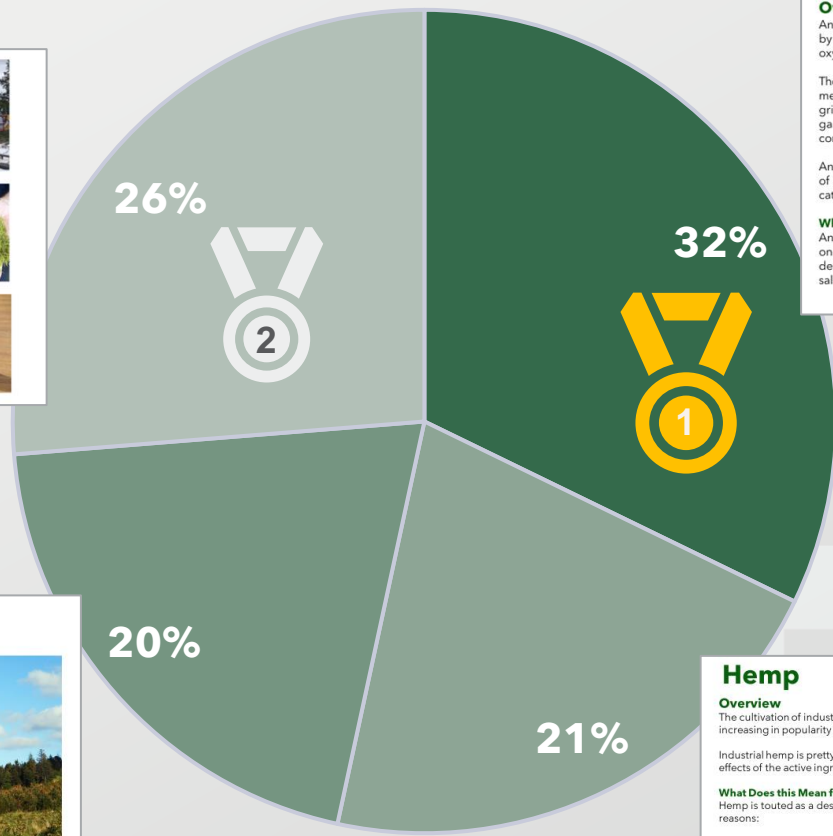
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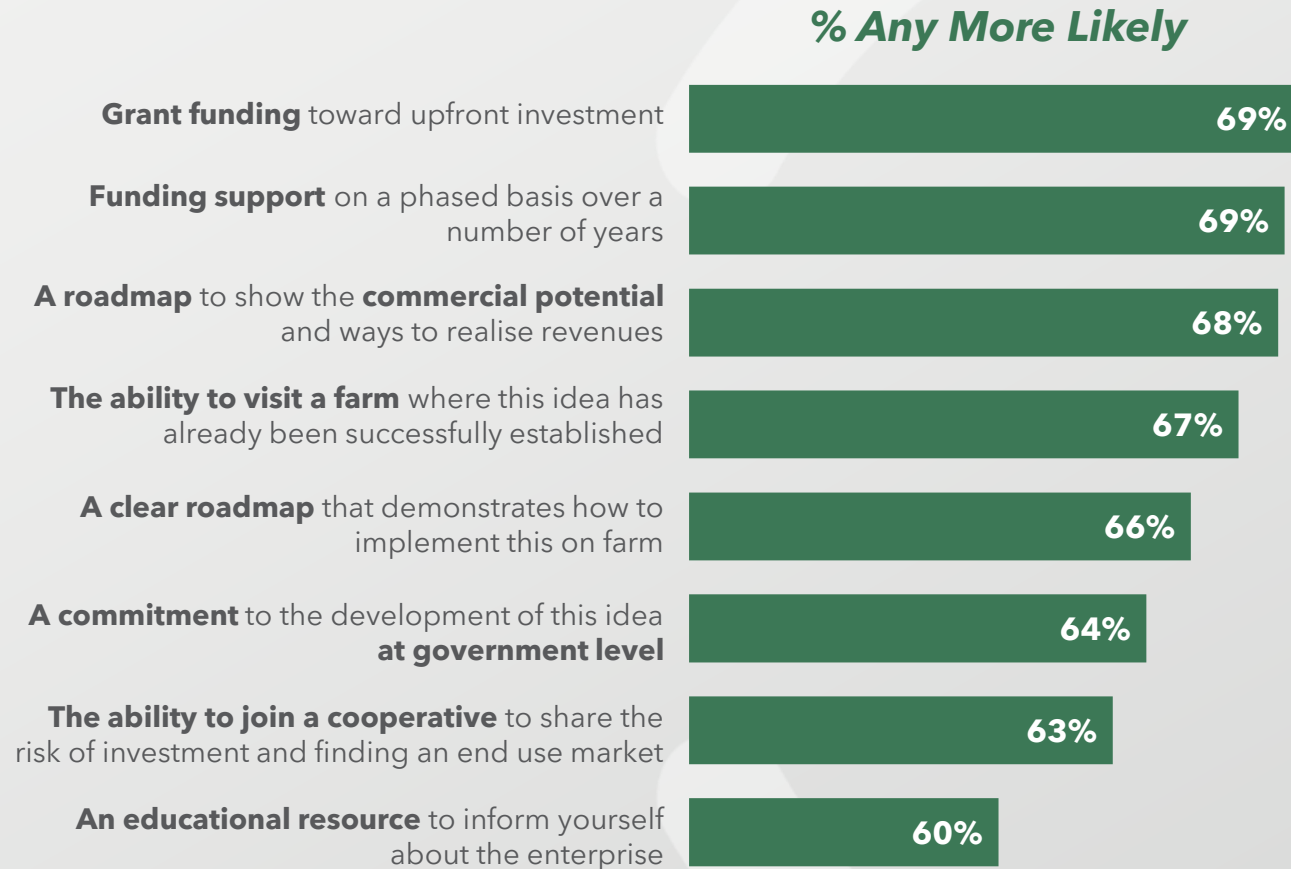
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- Improves soil structure
- Increases yield of following crop



And looking again at these examples of alternative enterprises/ revenue streams that you have seen in this survey, which one is the one you would be most likely to trial/ implement on your farm?

Top Conditions that would Encourage Trial of New Enterprises

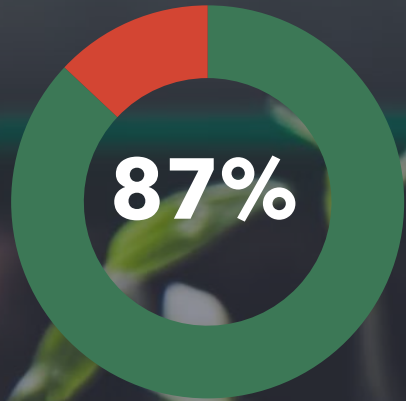
(Base: Total sample, n=118)



Funding, demonstration and a roadmap for commercialisation are the top conditions that would **encourage trial of new enterprises.**

O P I N I O N S

Viewing Demonstration Sites and Speaking with Peers is Crucial for Reassurance and Knowledge Transfer



Almost 9 in 10 (87%) of farmers agree that when doing something new or different they look to other farmers who have done it successfully and learn from their experience

7 in 10 (69%) of farmers say they speak to other farmers they know to stay informed of farming and agricultural matters

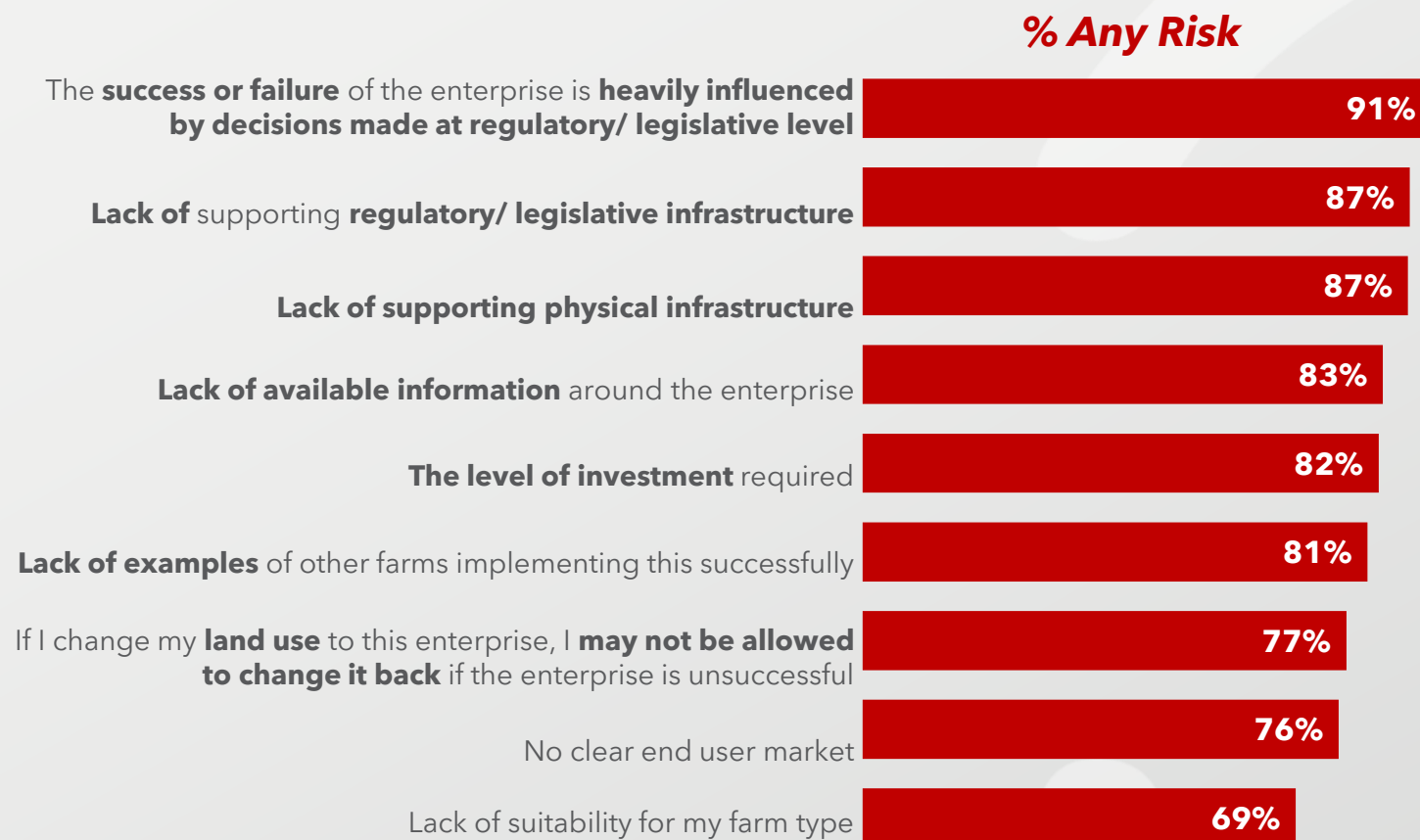


"I would really need to see an enterprise working on another farm so I could make an informed decision"

Dairy farmer, Laois

The Top Risks associated with New Enterprises

(Base: Total sample, n=118)



"All it takes is a decision at government or European level and that could dictate the success or failure of a new business. Farmers don't need that risk"
Beef farmer, Kerry

The **influence of regulatory/ legislative decisions** and **lack of supporting infrastructure** are the **top risks** associated with new enterprises.

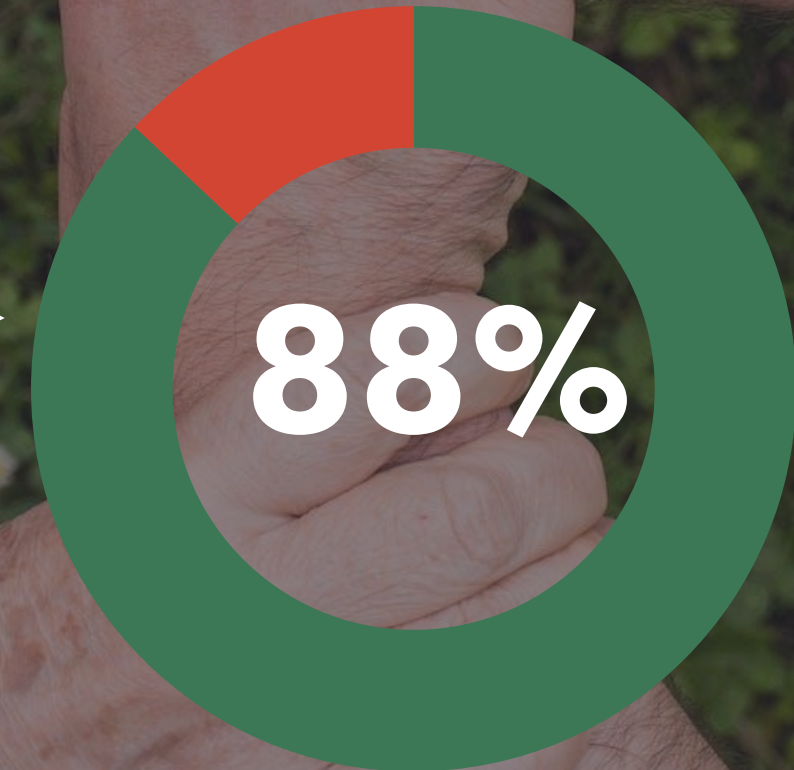
C7 The following are potential problems/ risks that others have identified with ideas such as the one shown above. Please state the extent to which you feel that each of the following is a potential problem/ risk.

There are High Levels of Interest and Openness in Becoming a Member of a Cooperative

Interest



Openness in Paying a Fee to Become a Member



Of those interested in becoming a member
n=94

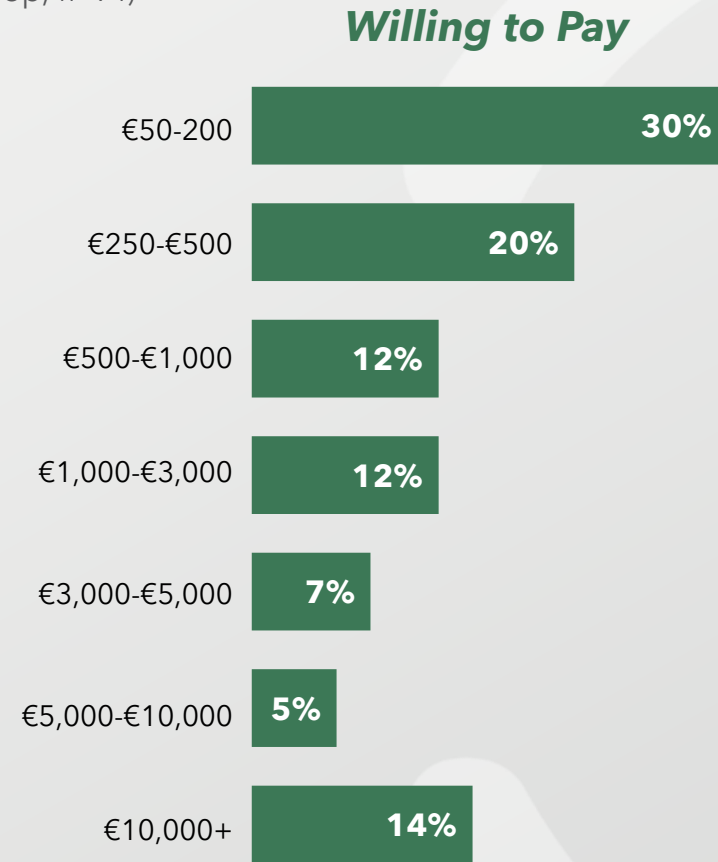


QCOOP1 If a cooperative was established with the aim of pooling investment for processing of raw materials, establishing end use markets, and lobbying regulators to create/ maintain an environment that was favourable for trading for an enterprise within the bioeconomy, how interested would you be in becoming a member of this cooperative? (Assuming membership resulted in an additional income source for your farm)

QCOOP2 You say that you would be interested in becoming a member of a cooperative such as this. How open would you be to investing in/ paying fee for membership in a cooperative such as this? (Assuming membership resulted in an additional income source for your farm)

The Majority would we willing to Pay €50-€200 to Become a Member of a Coop

(Base: those interested in becoming a member of a coop, n=94)



The majority would we willing to pay €50-€200 to become a member of a coop however we see that a significant proportion would be willing to pay more.

QCOOP3 You say that you would be open to investing in/ paying a fee to become a member of a cooperative such as the one above. How much would you be willing to pay as a once off payment to become a member of this cooperative? (Assuming membership resulted in an additional income source for your farm)


Key Recommendations to Accelerate the Activation of the Bioeconomy

 **Drive awareness** of *The Bioeconomy* and the enterprises within it

 **Lobby government** for **funding support** of new enterprises

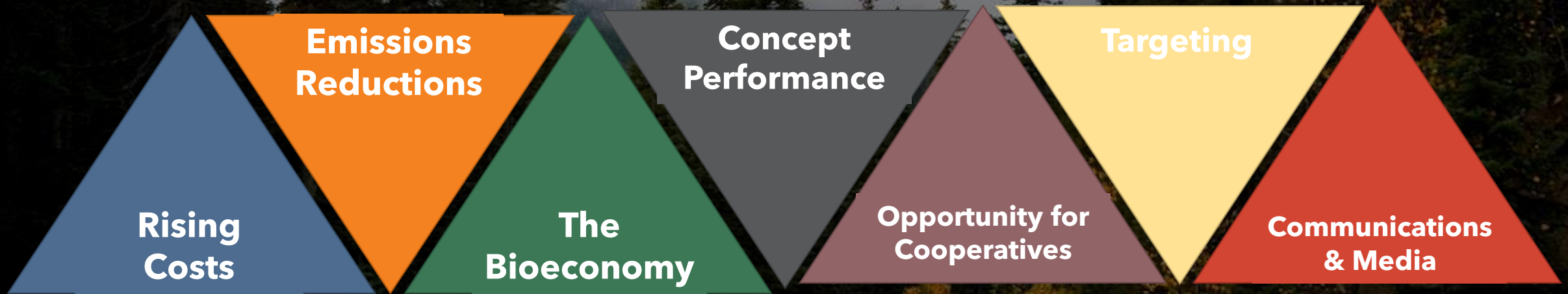
 **Lobby government** for **commitment for clarity** around the **regulation** of new enterprises

 **Develop a roadmap for implementation** and **commercialisation** of new enterprises

 **Create demonstration sites** where farmers can see new enterprises being **demonstrated successfully** and **learn from their peers**

 **Target younger farmers** and create '**Bioeconomy advocates**' that will influence other farmers to get involved in *The Bioeconomy*

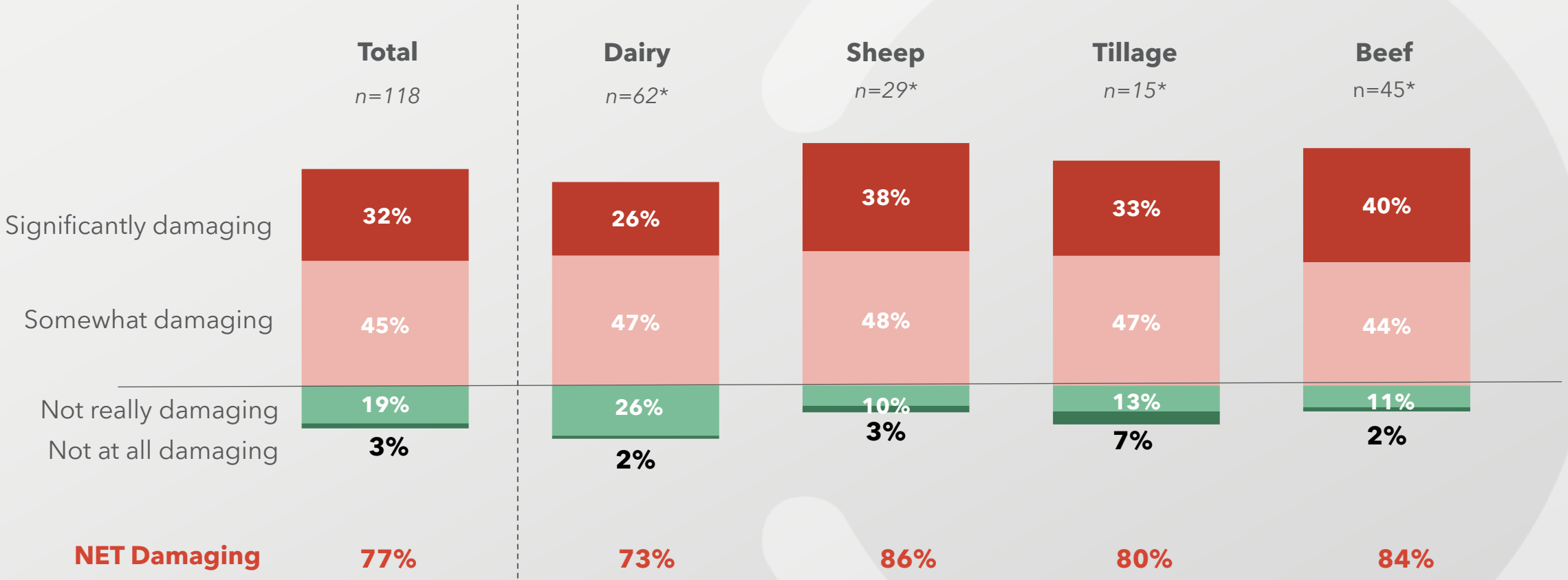
Navigating The Report



COSTS

Rising Input Costs are Negatively Impacting Viability

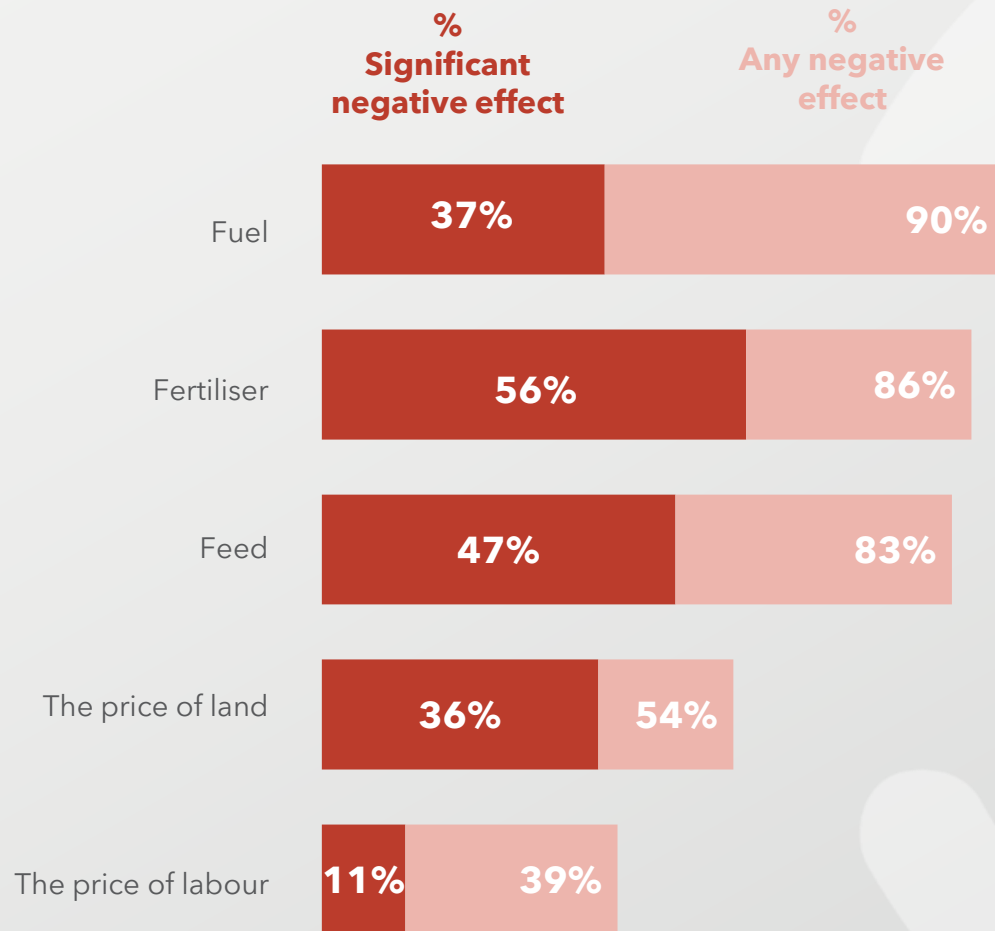
(Base: Total Sample, n=118)



Almost **8 in 10** famers claim that rising input costs are negatively impacting the viability of their farms, highest among sheep and beef farmers

Input Costs Impacting Viability

(Base: Total sample, n=118)



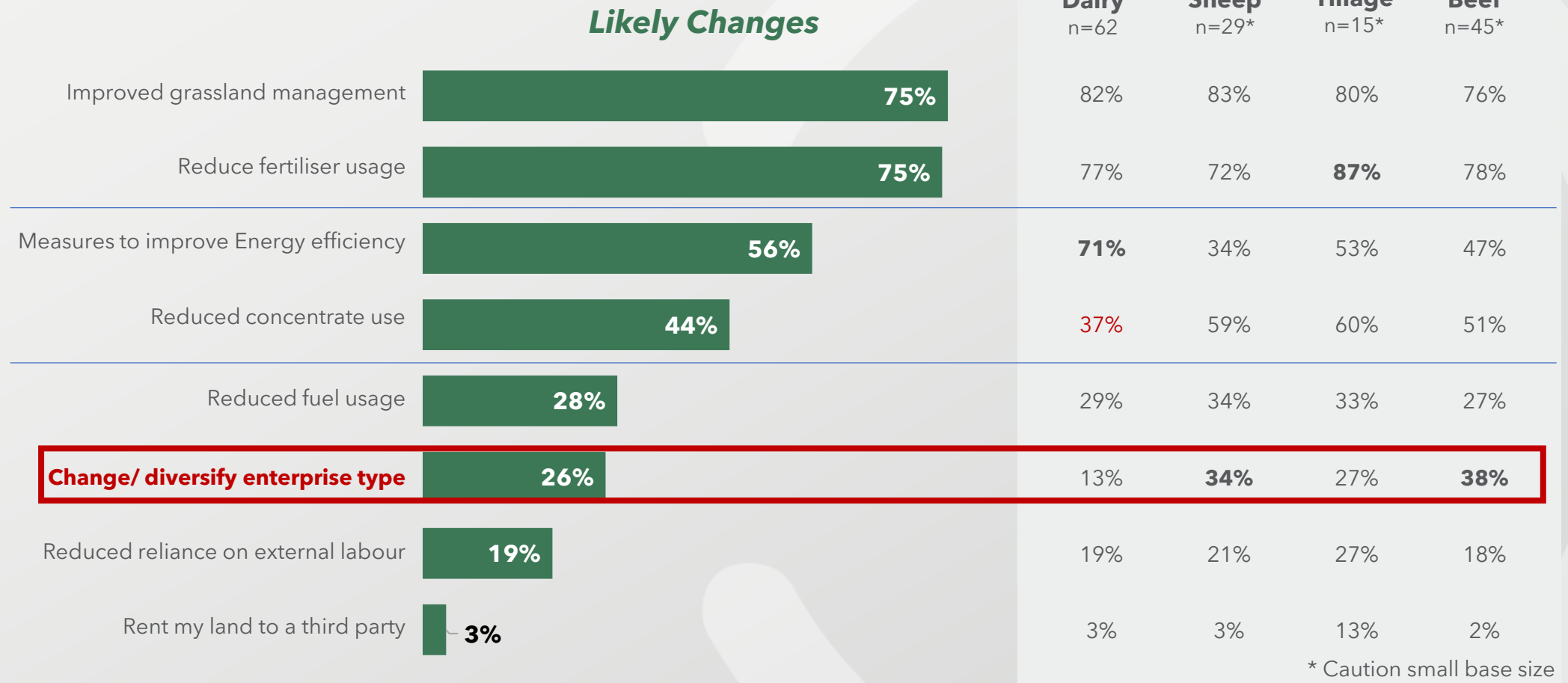
	Dairy n=62	Sheep n=29*	Tillage n=15*	Beef n=45*
Fuel	92%	90%	93%	91%
Fertiliser	94%	90%	87%	82%
Feed	84%	93%	67%	89%
The price of land	63%	38%	53%	56%
The price of labour	55%	24%	40%	29%

The 3 Fs- **Fuel, fertiliser and feed** are having the **biggest negative impact on viability** with the **price of land** having a **more negative** effect on **dairy farmers**, relative to other enterprises



Changes to Combat Rising Input Costs

(Base: Total sample, n=118)



Improved grassland management and reduced fertiliser usage are the top changes that farmers are likely to make to combat rising costs on farm. **1 in 4 say that they are likely to change / diversify enterprise type, highest among beef and sheep**

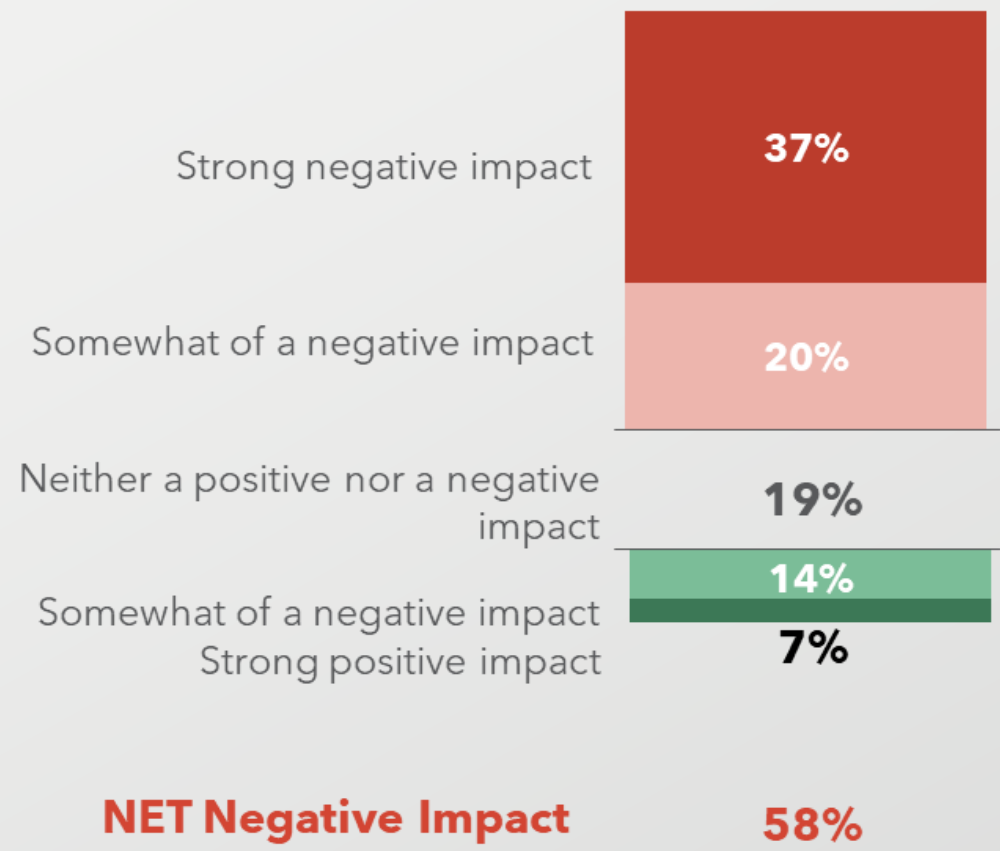
EMISSIONS



Emissions Reduction Targets

(Base: Total Sample, n=118)

Impact of Emissions Reductions Targets

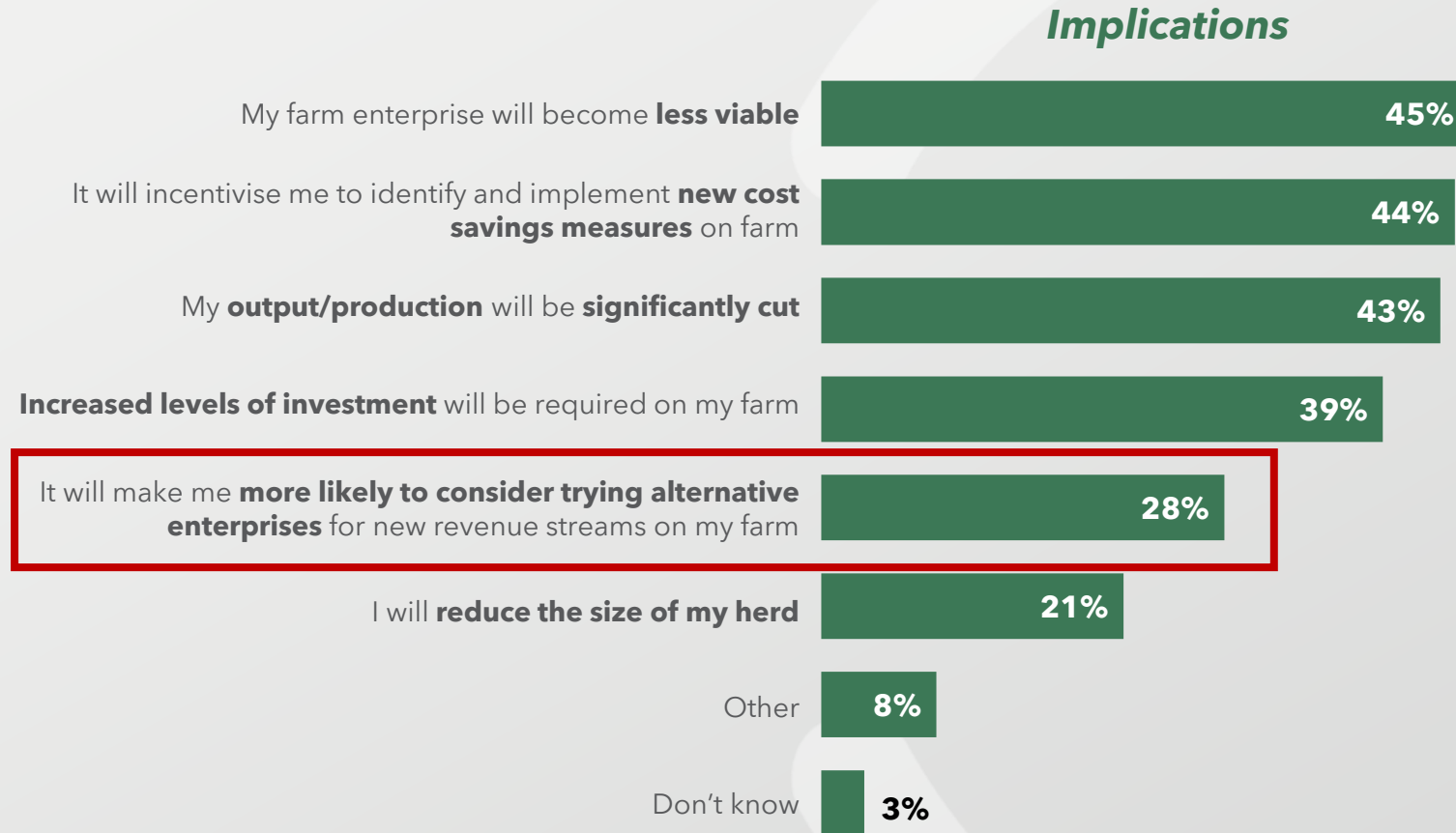


6 in 10 farmers claim that the emissions reductions targets will have a negative impact on their business

QEM The Irish government has committed to a 25% cut in greenhouse gas emissions from agriculture by 2030. To what extent do you think that this commitment will have a positive or negative effect on you and your livelihood?

Implications of Emissions Reductions Targets

(Base: Total sample, n=118)

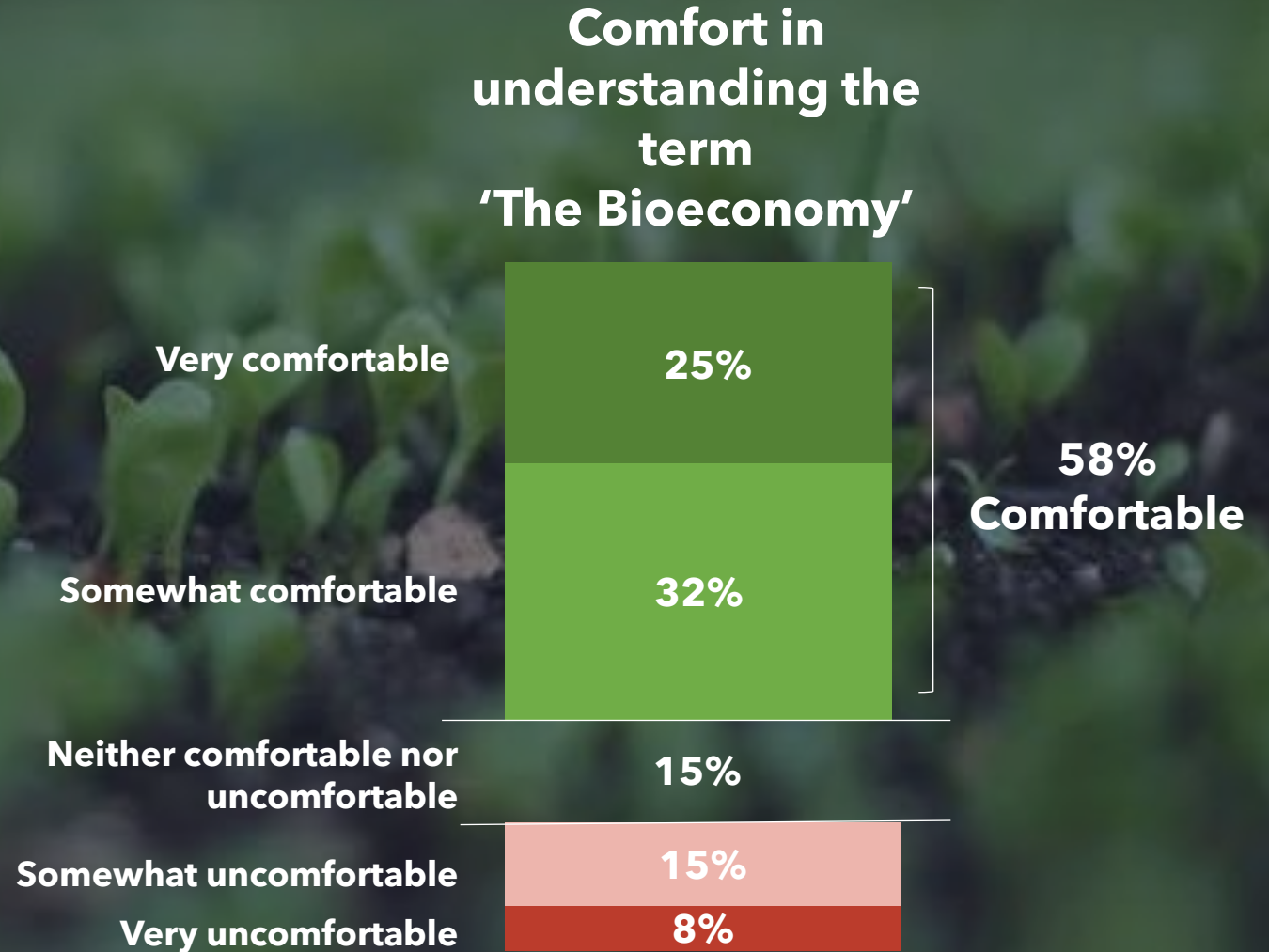
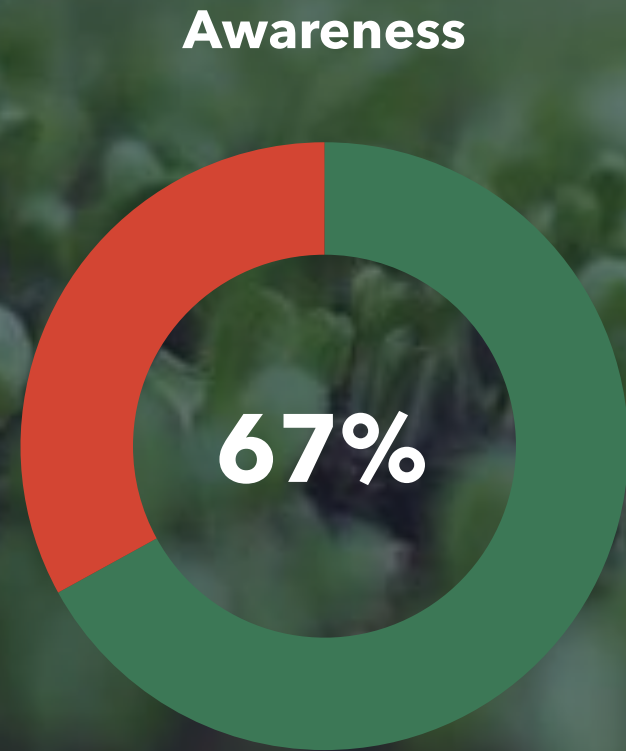


Decreased farm viability and **implementation of cost saving measures** are the most likely implications of the emissions reductions targets. **Almost 1 in 3** farmers claim it will make them **more likely to consider trying alternative enterprises on their farm**



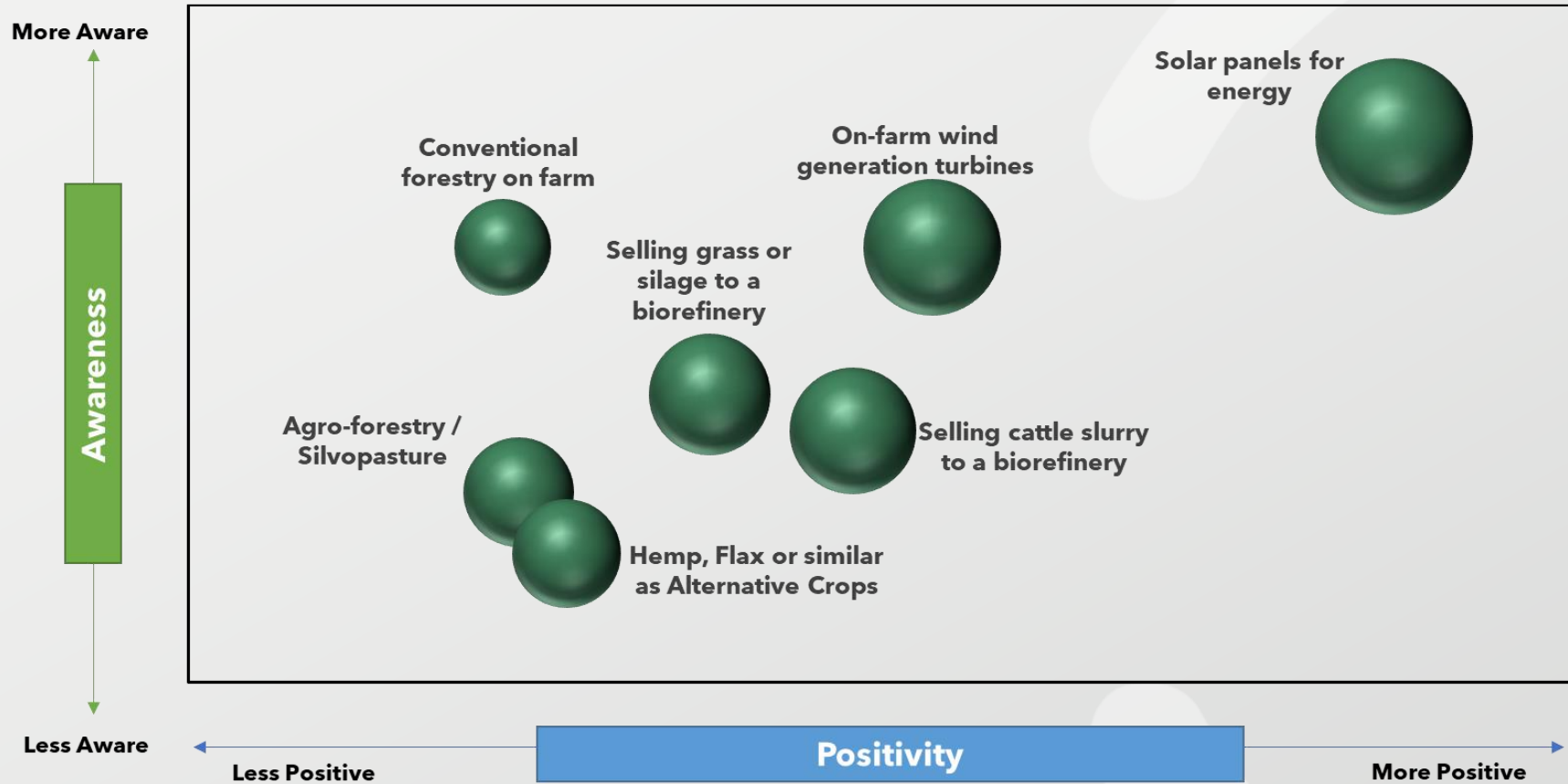
THE BIOECONOMY

High Levels of Awareness and Comfort in Understanding the term 'The Bioeconomy'



Awareness, Positivity and Openness to Trial

(Base: Total Sample, n=118)



Interpreting this graph

- **Y Axis:** Awareness
- **X Axis:** Positivity
- **Bubble size:** Openness to trial

Across Enterprises that are part of *The Bioeconomy*, **Solar Panels** and **Wind Turbines** Have The Highest levels of **Awareness, Positivity** and **Openness to Trial** Overall

CONCEPT PERFORMANCE



Concepts Tested

Anaerobic Digester

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Mass Adoption Potential of Concepts

(Base: Total sample, n=118)

Looks like the next big thing

14%

It could go mainstream

30%

8%

15%

3%

15%

4%

23%

Anaerobic Digestion
n=57

Hemp
n=52

Forestry
n=61

Bioprocessing of grass
n=56

Top 2 NET:

Total: 44%

23%

18%

27%

Dairy:* 35%

21%

18%

21%

Beef:* 52%

22%

14%

28%

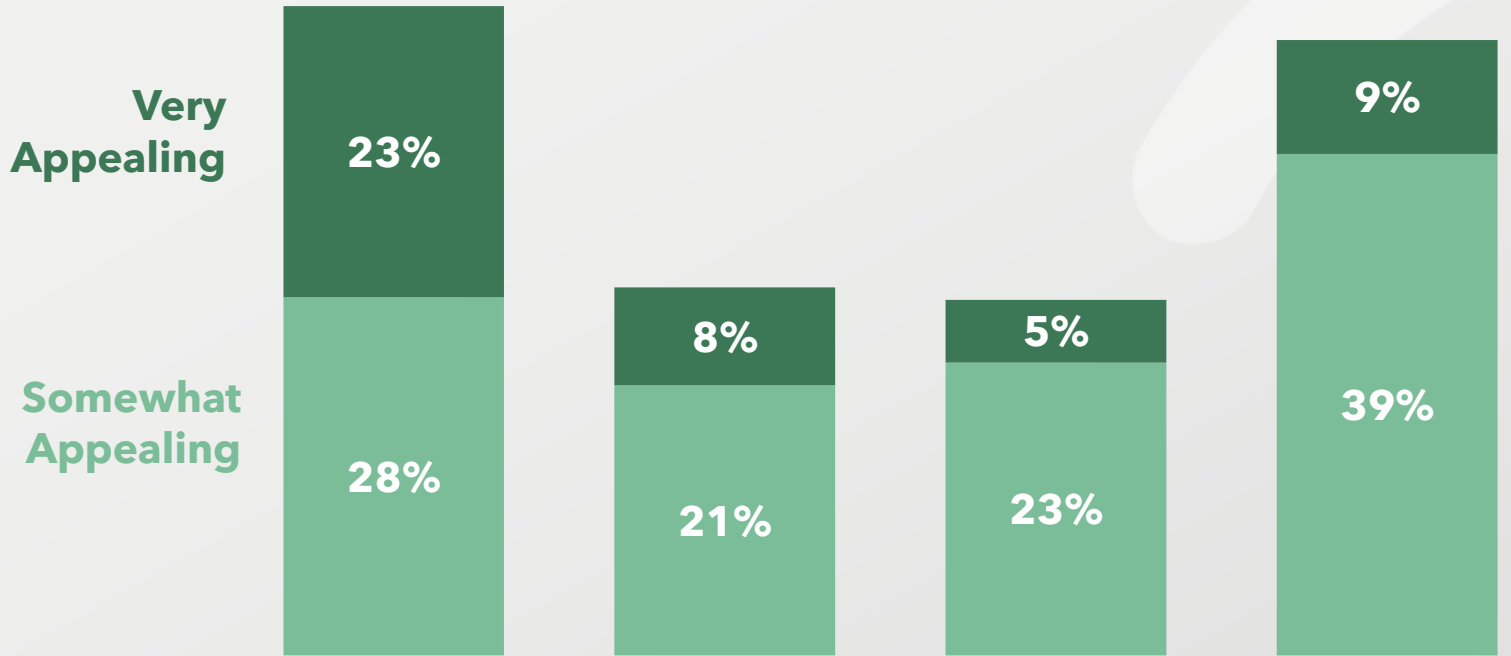
Anaerobic Digestion and Bioprocessing Grass have the highest levels of **mass adoption potential**, both scoring higher among **beef farmers**.

* Caution small base size

C1 Please rate the potential that you think this concept has for widespread adoption/ implementation on farms like yours.

Appeal of the Concepts

(Base: Total sample, n=118)



And we see a similar pattern with regard to appeal

Top 2 NET:	Anaerobic Digestion n=57	Hemp n=52	Forestry n=61	Bioprocessing of grass n=56
Total:	51%	29%	28%	48%
Dairy:*	44%	24%	21%	43%
Beef:*	52%	28%	23%	52%

* Caution small base size

Verbatims: ANAEROBIC DIGESTION

Appealing: 51%

- ✓ Outlet for **excess slurry**
- ✓ **Create renewable energy** which would be valuable for some farms
- ✓ The ability to **receive nutrients** when they are needed

Anaerobic Digester

Overview

Anaerobic digestion means the production of biogas by different groups of microbes in the absence of oxygen.

The main gas produced in anaerobic digestion is methane. This methane can be injected into the biogas grid (when it has been processed to remove trace gases) where it can be used in all cases where conventional biogas is used, or as a transport fuel.

Anaerobic digestors can be designed to take a number of inputs, however those that use grass silage and cattle slurry could be well suited to an Irish system.

What Does this Mean for Farmers?

Anaerobic digestors could ease the pressure of slurry on Irish farms at peak times of the year as well as delivering an additional revenue stream through the sale of the biomethane produced.



Not appealing: 46%

- ✓ **Farm size** not big enough
- ✓ **Grass** on farm is **needed for feed**
- ✓ **Cost of investment**
- ✓ **Lack of space**
- ✓ Lack of **system suitability**
- ✓ **Lack of knowledge**

"If they could collect our slurry at key dates and return the nutrients when we need it we would be more open to trialling it." Dairy famer, Cork

'The scale that is needed to make Anaerobic digestion viable is massive' Beef farmer, Donegal

'I would not consider this as grass silage is not comparable nutritionally comparable to grass as a feed for cows' Dairy famer, Cork

Verbatims: HEMP

Appealing: 29%

- ✓ Would be a good **crop to use as part of a rotation**
- ✓ **Existing machinery can be used to sow and harvest it**
- ✓ **Carbon sequestration** ability
- ✓ **Low inputs** required
- ✓ Potential **high value outputs**

"Hemp has the potential for high value outputs which could be back to the grower through a co-op processor model"


Hemp

Overview
The cultivation of industrial hemp as a crop by farmers in Ireland has been increasing in popularity in recent years.

Industrial hemp is pretty much the same as cannabis, but without the narcotic effects of the active ingredient – tetrahydrocannabinol (THC).

What Does this Mean for Farmers?
Hemp is touted as a desirable crop for cultivation for farmers for a number of reasons:

- Suitability for cultivation in the Irish climate
- Carbon sequestration ability (10- 15T/ acre depending on species)
- Wide range of developing end use markets including fibre, food and feed
- Can be grown using conventional farm machinery
- Improves soil structure
- Increases yield of following crop



"All it takes is a decision at government or European level and that could dictate the success or failure of it. Farmers Don't need that risk" Beef farmer, Leitrim

Not appealing: 69%

- ✓ **Farm size** not big enough
- ✓ **Lack of space**
- ✓ Lack of **system suitability**
- ✓ **Lack of knowledge**
- ✓ **Lack of processing facilities/ infrastructure**

"It's something that I have looked into but there is a lack of processing facilities and there doesn't seem to be a market for it" Poultry Farmer, Monaghan

O P | N | O N S

Verbatims: FORESTRY

Appealing: 28%

- ✓ Additional **revenue stream**
- ✓ **Suitable** for **marginal land**
- ✓ **Easily managed**
- ✓ Good **carbon sequestration** potential
- ✓ **Good financial returns**

Forestry Overview

The Irish Government has announced a new €1.3bn forestry fund. Existing establishment grants and annual payments to farmers will increase by between 46%- 66% and annual payments will be paid for 20 years rather than 15 years.

The rates have increased for all 12 categories of forests, with the grant payment for native forests increasing to €6,744/ha, the broadleaf payment increasing to €4,314/ha and the agroforestry payment increasing to €8,555/ha.

What Does this Mean for Farmers?

For a farmer who wanting to plant 5 hectares over a 20 year period of time, the farmer could expect in excess of €100,000 which is tax free.



Not appealing: 70%

- ✓ You are **locked into a particular type of land use**
- ✓ **Lack of suitability** for farm
- ✓ **Land will be devalued**
- ✓ **Too much risk** with disease of trees
- ✓ Forestry would **reduce size of grazing platform**
- ✓ It takes **too long to get a return**

"I find it very appealing as I have some bad land that really is only suitable for planting and I will be getting involved with this in the very near future"

"It would take productive food producing land that will be needed in the future"

"Once it's been in forestry, the land is never allowed to go back to agricultural production land again. Ever!"

Verbatims: BIOPROCESSING GRASS

Appealing: 48%

- ✓ Higher value return for grass
- ✓ Does not affect stocking rate on farm
- ✓ Existing expertise in growing grass
- ✓ Reduced fertiliser reliance

Biorefinery Glas

Overview
Biorefinery Glas is a European Innovation Partnership (EIP) Operational Group funded by Department of Agriculture, Food and the Marine under the Rural Development Programme.

Biorefinery Glas is a first demonstration of small-scale biorefinery in Ireland, supporting the development of new business models and assisting in farmer diversification into the circular bioeconomy from suppliers of biomass to producers of finished and semi-finished products.

Approach
Through biorefining, grass is fractionated into a variety of new products in a process which improves the protein efficiency, value and sustainability of our grasslands.

The biorefinery approach converts freshly harvested grass into a range of products, including; an optimised cattle feed fibre, a non-GMO protein concentrate feed for monogastrics, a high-value sugar stream of fructo-oligosaccharides and a grass whey for fertiliser or bioenergy applications.



Not appealing: 50%

- ✓ It looks complicated
- ✓ Farm size is too small
- ✓ Grass is needed for feed
- ✓ Significant investment needed with no guarantee of financial returns
- ✓ It would reduce the feed value of grass

'It would allow non-dairy farmers to produce a product that would be valuable for dairy farmers' Dairy farmer, Laois

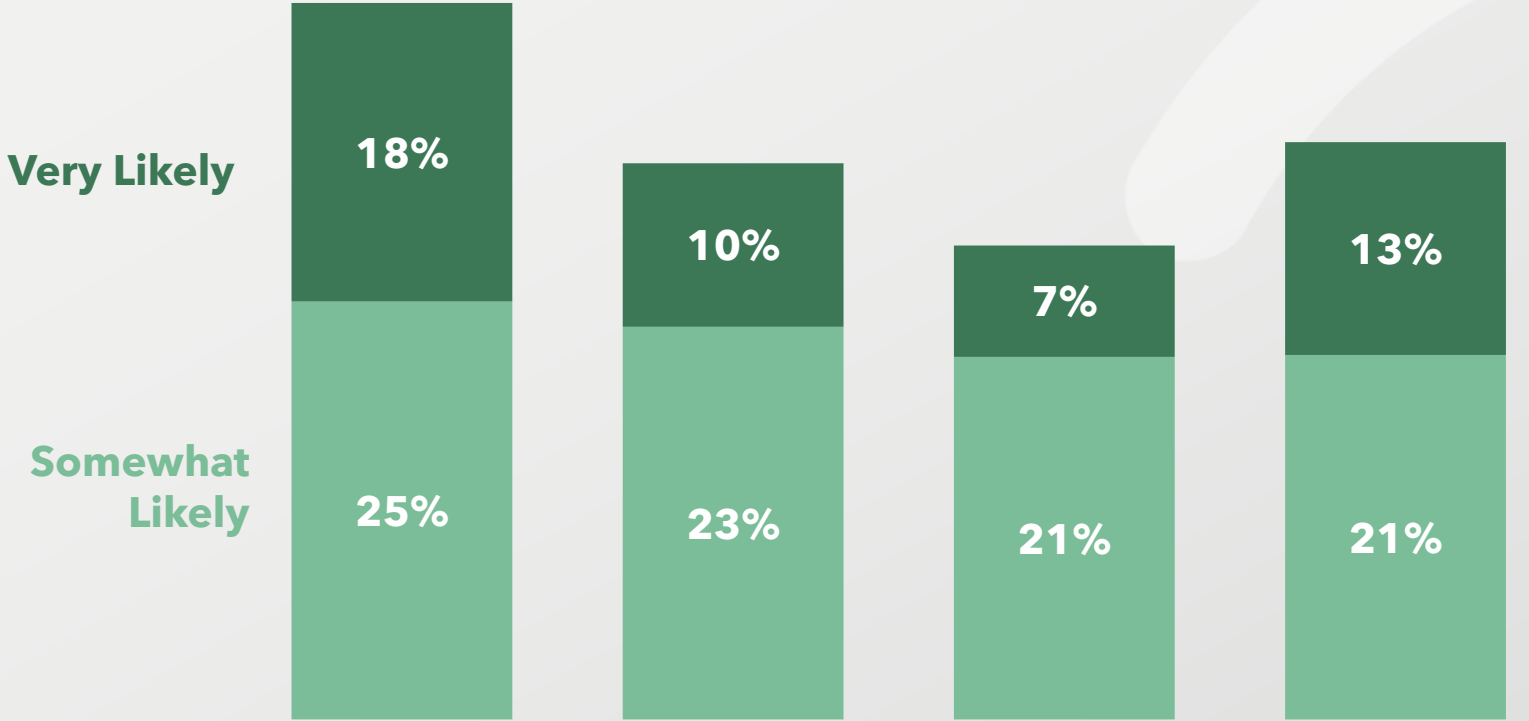
'We are good at growing grass so why not make full use of it'

"Adding complexity to a simple system is in no way attractive to me."

'I would not consider this as grass silage is not comparable nutritionally comparable to grass as a feed for cows' Dairy farmer, Cork

Likelihood to Trial

(Base: Total sample, n=118)



We see a similar pattern with regard to likelihood to trial on farm however beef farmers would be far more likely to trial Bioprocessing Grass Vs dairy farmers

Top 2 NET:

Anaerobic Digestion n=57	Hemp n=52	Forestry n=61	Bioprocessing of grass n=56
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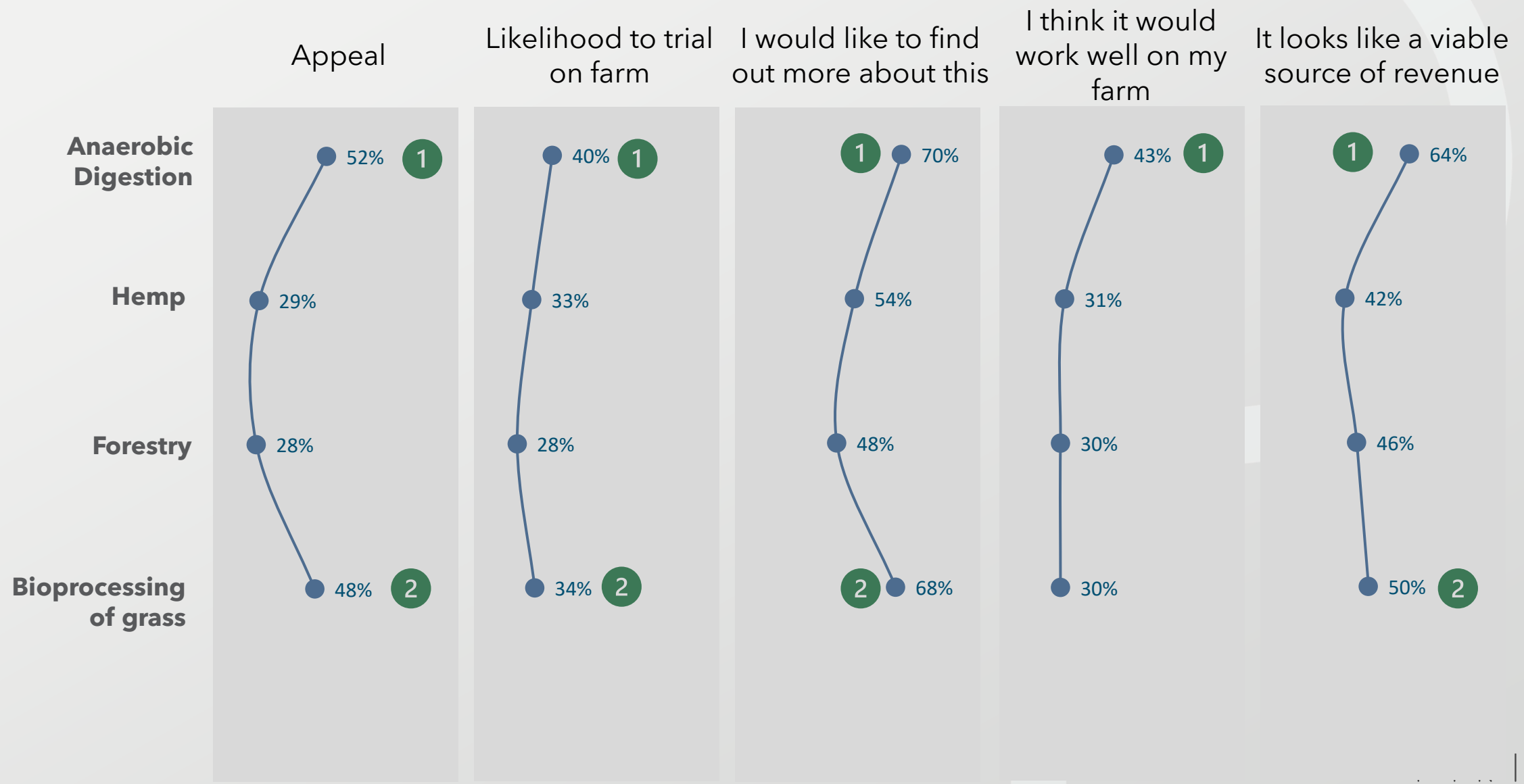
Total:	42%	33%	28%	34%
Dairy:*	41%	24%	18%	29%
Beef:*	40%	33%	32%	44%

* Caution small base size

Concept Performance

1 Rank 1
2 Rank 2

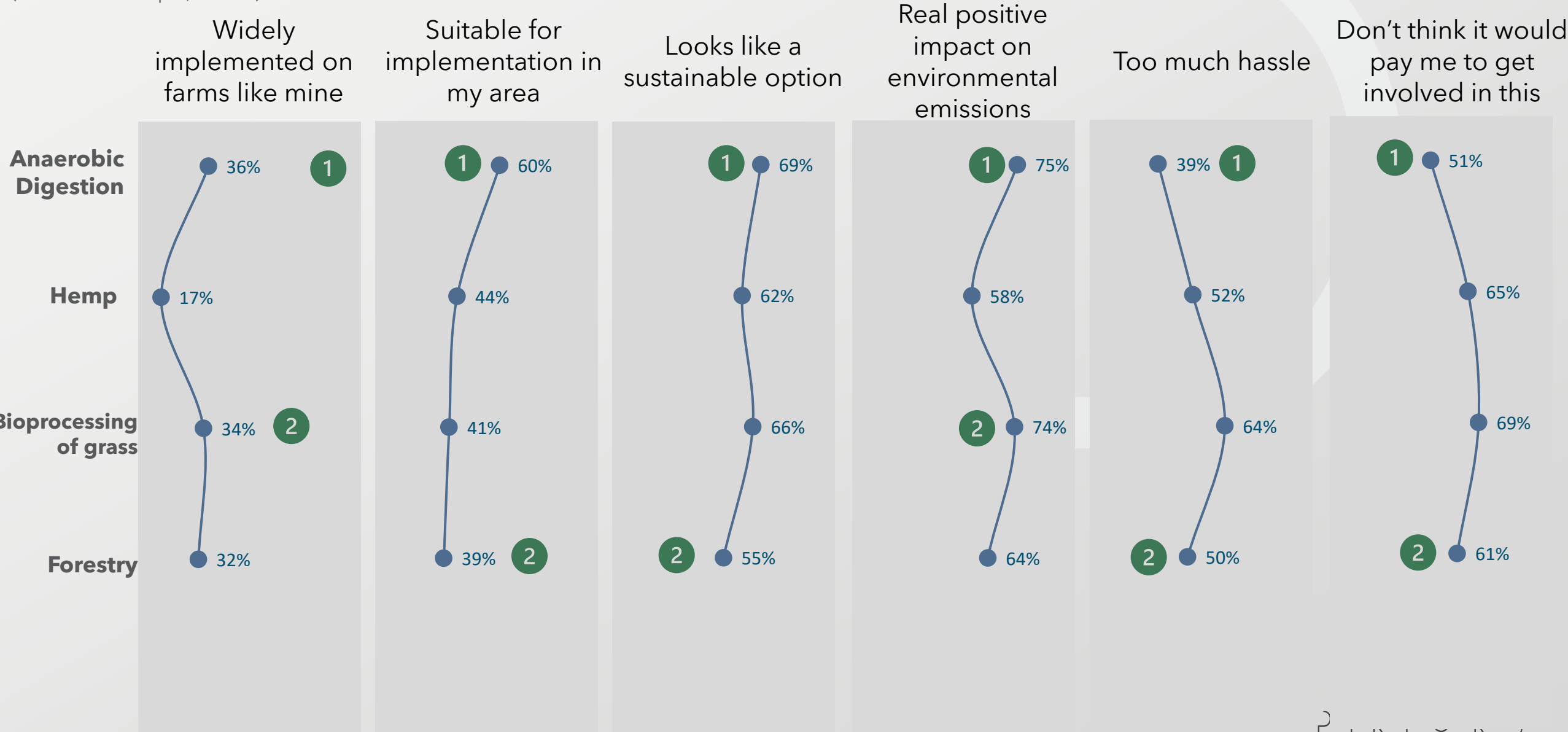
(Base: Total Sample, n=118)



Concept Performance

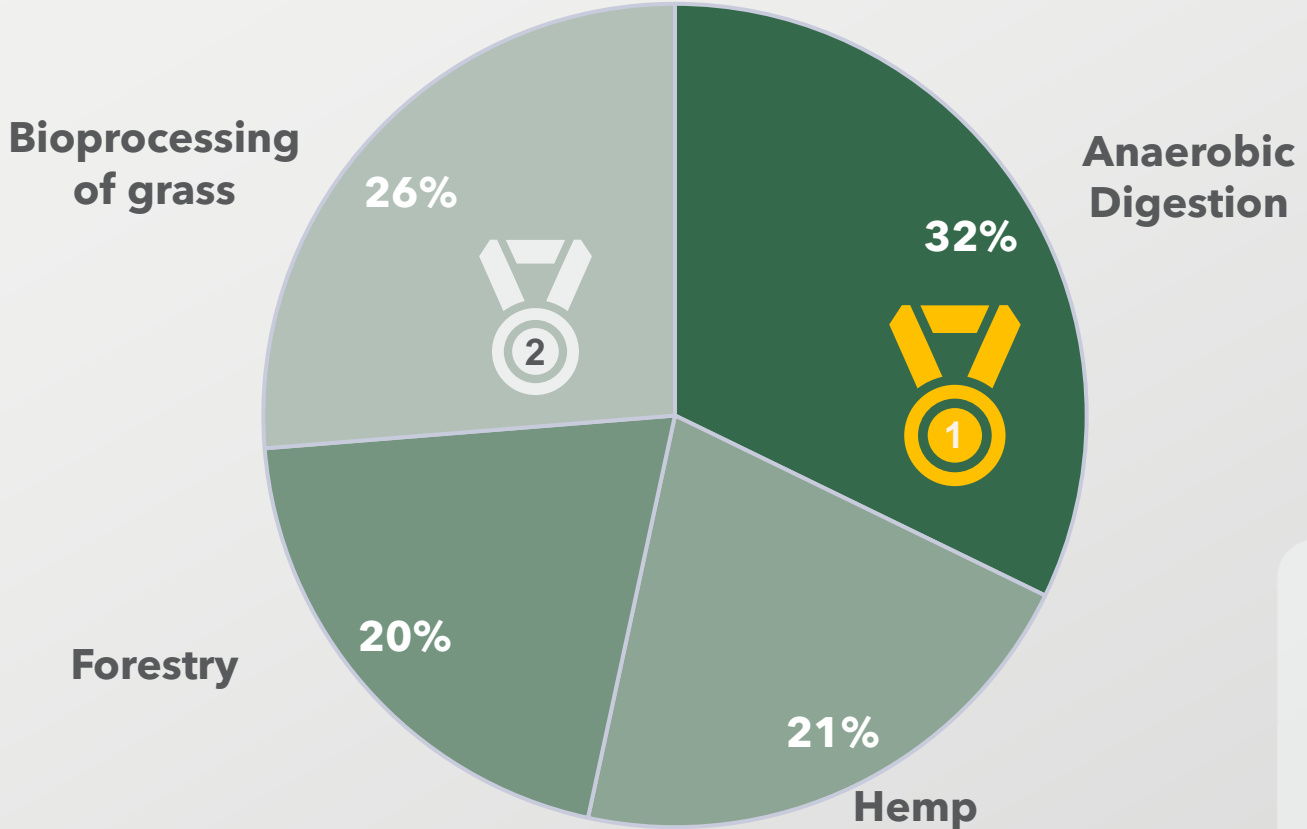
1 Rank 1
2 Rank 2

(Base: Total Sample, n=118)



Head to Head

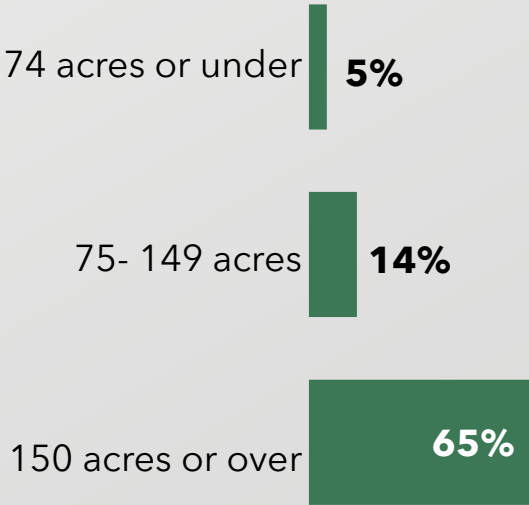
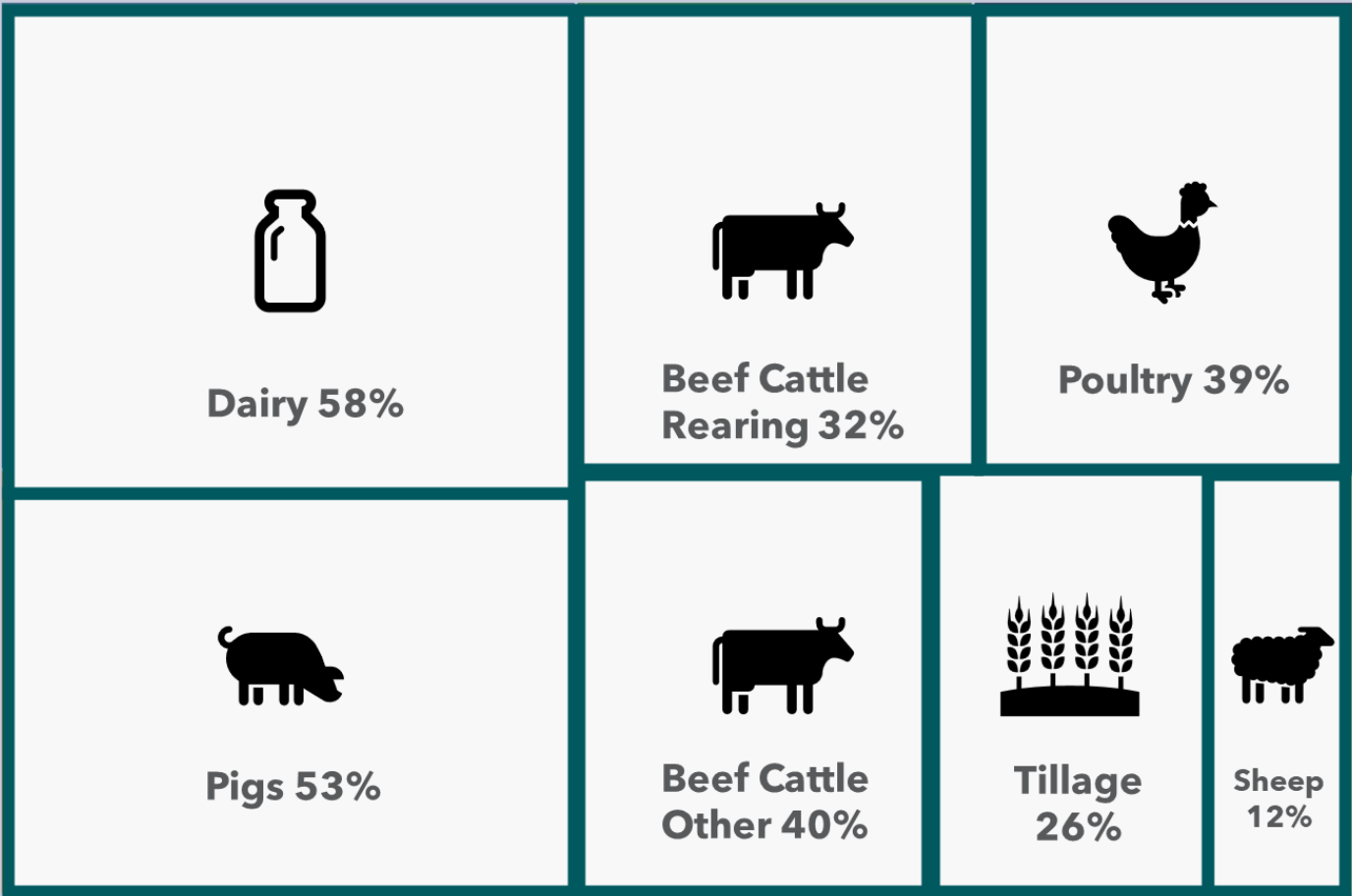
(Base: Total Sample, n=118)



Unsurprisingly, **Anaerobic Digestion** and **Bioprocessing of Grass** emerge as the winners in a head to head scenario

And looking again at these examples of alternative enterprises/ revenue streams that you have seen in this survey, which one is the one you would be most likely to trial/ implement on your farm?

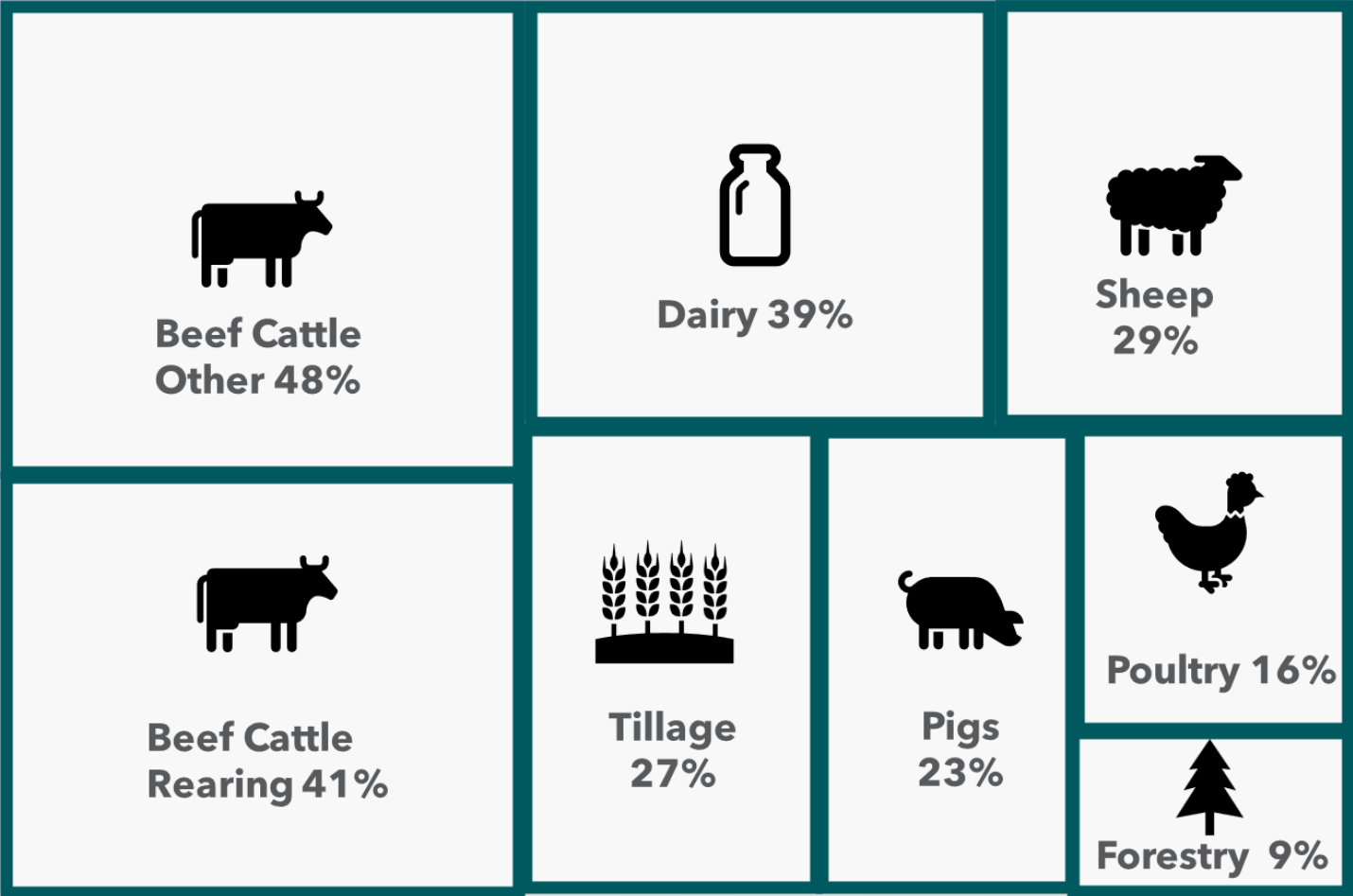
Enterprise Suitability- Anaerobic Digester



C4 Please select which farm enterprise types, if any, would you think that this idea would be suitable for trialling/ implementing on. Please select all that apply.

C4 Please select the farm size in below that you think this idea would be most suitable for trialling/ implementing on in the box below.

Enterprise Suitability- Bioprocessing of Grass

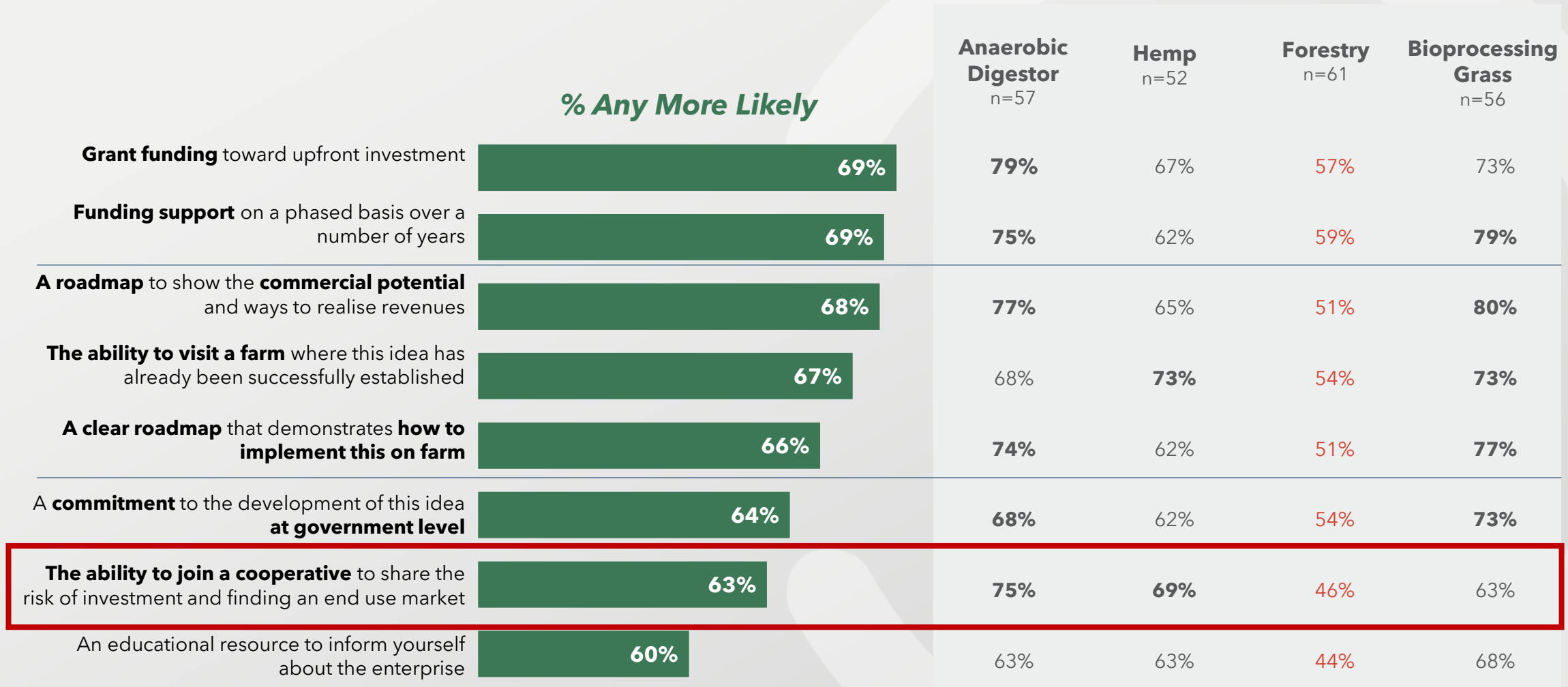


C4 Please select which farm enterprise types, if any, would you think that this idea would be suitable for trialling/ implementing on. Please select all that apply.

C4 Please select the farm size in below that you think this idea would be most suitable for trialling/ implementing on in the box below.

Conditions That Would Encourage Trial

(Base: Total sample, n=118)



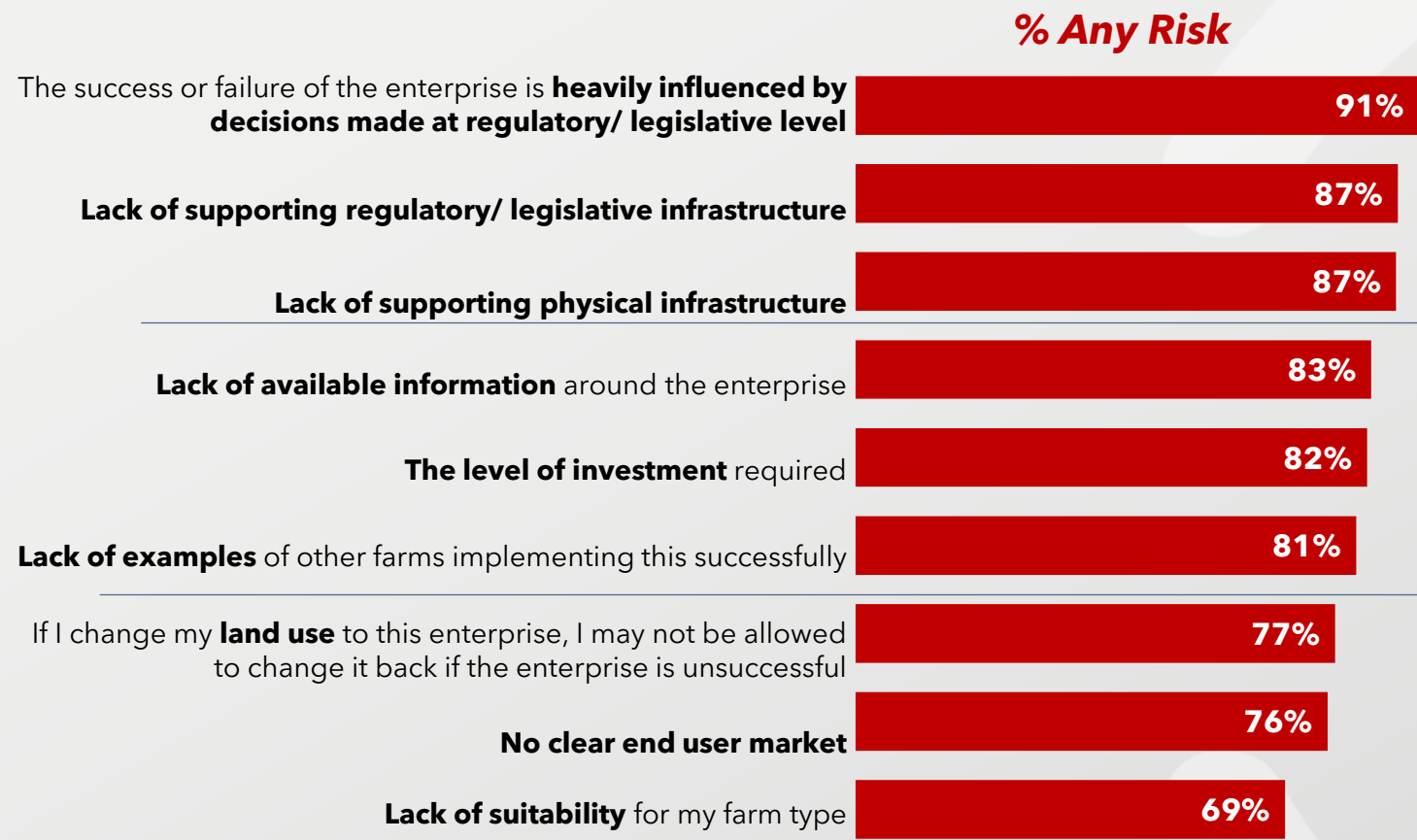
Funding and demonstration are the top conditions types that would encourage trial, especially for anaerobic digester and bioprocessing of grass. **6 in 10 would be more likely to consider trialling an enterprise if there was ability to join a cooperative**

OPINIONS

C6 For each of the following conditions below, would they make you more or less likely to consider trialling/ implementing this enterprise on your farm?

Risks Associated with Concepts

(Base: Total sample, n=118)



	Anaerobic Digester n=57	Hemp n=52	Forestry n=61	Bioprocessing Grass n=56
The success or failure of the enterprise is heavily influenced by decisions made at regulatory/ legislative level	96%	92%	85%	89%
Lack of supporting regulatory/ legislative infrastructure	93%	90%	77%	89%
Lack of supporting physical infrastructure	93%	94%	74%	88%
Lack of available information around the enterprise	82%	87%	69%	95%
The level of investment required	95%	77%	69%	89%
Lack of examples of other farms implementing this successfully	77%	90%	62%	93%
If I change my land use to this enterprise, I may not be allowed to change it back if the enterprise is unsuccessful	67%	83%	90%	70%
No clear end user market	63%	87%	69%	86%
Lack of suitability for my farm type	60%	75%	67%	75%

The **influence of regulatory/ legislative decisions** in affecting the success or failure of the business and **lack of supporting infrastructure** are the top problems/ risks associated with the enterprise types. This is followed by lack of information, level of investment required and lack of examples.

C7 The following are potential problems/ risks that others have identified with ideas such as the one shown above. Please state the extent to which you feel that each of the following is a potential problem/ risk.



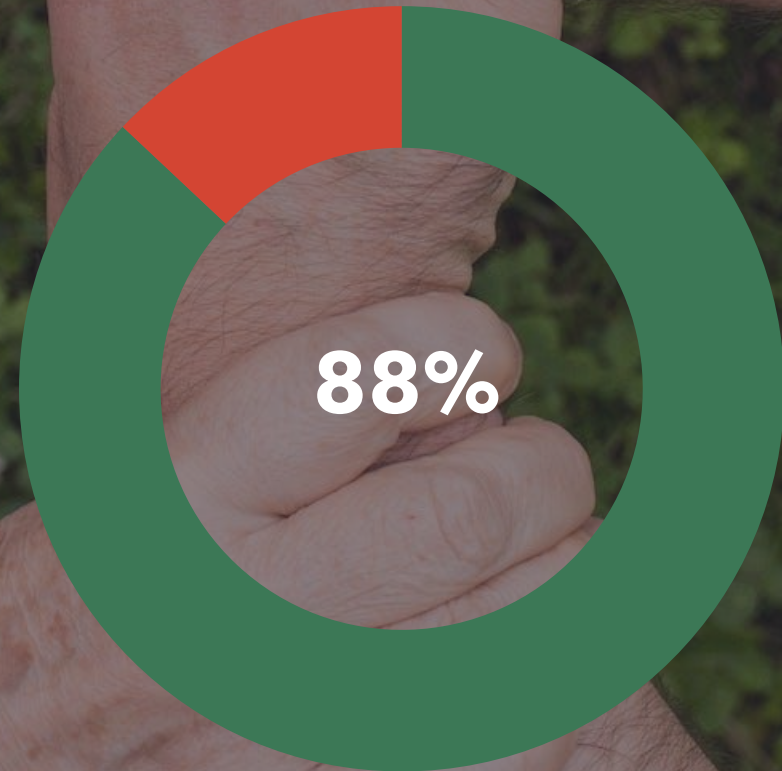
**THE OPPORTUNITY FOR
COOPERATIVES**

There are High Levels of Interest and Openness in Becoming a Member of a Cooperative

Interest



Openness in Paying a Fee to Become a Member



Of those interested in becoming a member

n=94

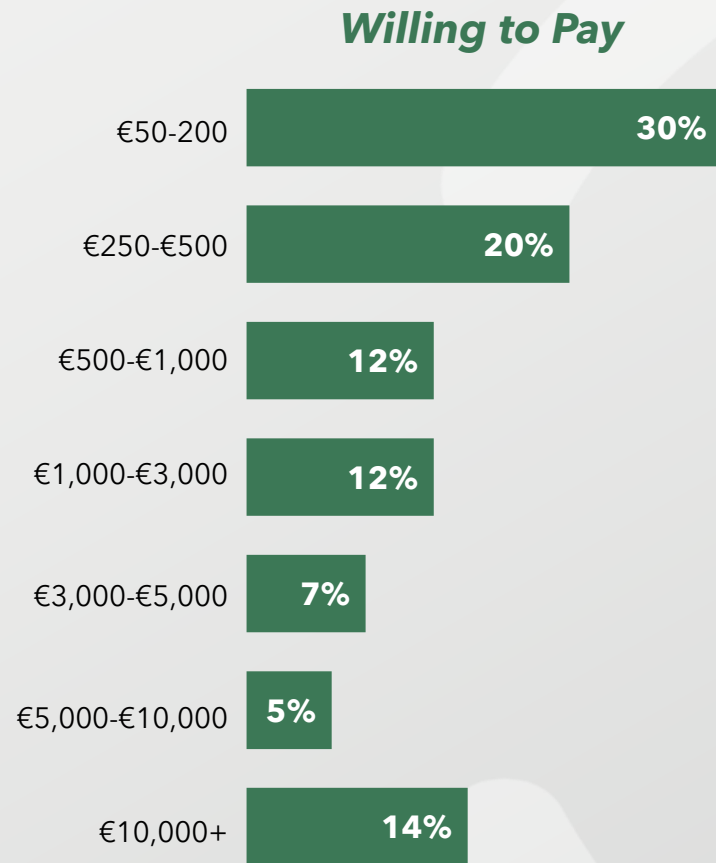


QCOOP1 If a cooperative was established with the aim of pooling investment for processing of raw materials, establishing end use markets, and lobbying regulators to create/ maintain an environment that was favourable for trading for an enterprise within the bioeconomy, how interested would you be in becoming a member of this cooperative? (Assuming membership resulted in an additional income source for your farm)

QCOOP2 You say that you would be interested in becoming a member of a cooperative such as this. How open would you be to investing in/ paying fee for membership in a cooperative such as this? (Assuming membership resulted in an additional income source for your farm)

The Majority would we willing to Pay €50-€200 to Become a Member of a Coop

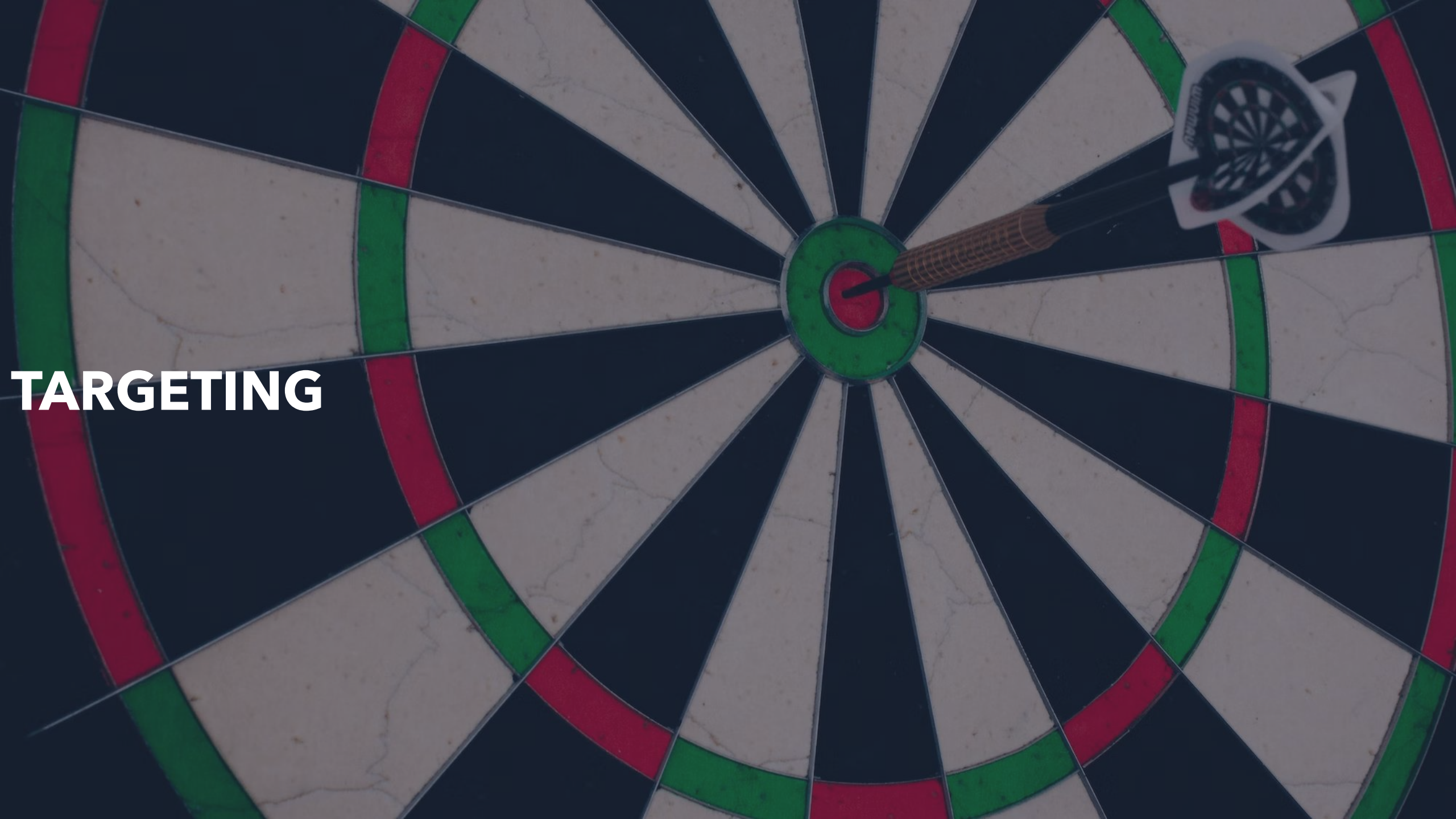
(Base: those interested in becoming a member of a coop, n=94)



The majority would we willing to pay €50-€200 to become a member of a coop however we see that a significant proportion would be willing to pay more.

QCOOP3 You say that you would be open to investing in/ paying a fee to become a member of a cooperative such as the one above. How much would you be willing to pay as a once off payment to become a member of this cooperative? (Assuming membership resulted in an additional income source for your farm)

TARGETING



Younger Farmers Are More Open to Diversification and to becoming members of a Cooperative

86% of farmers aged under 45 would be open to trying out new enterprises or ideas on their farm **Vs 77% of farmers aged over 45**

84% of farmers aged under 45 say they would be interested in joining a cooperative **Vs 77% of farmers aged over 45**

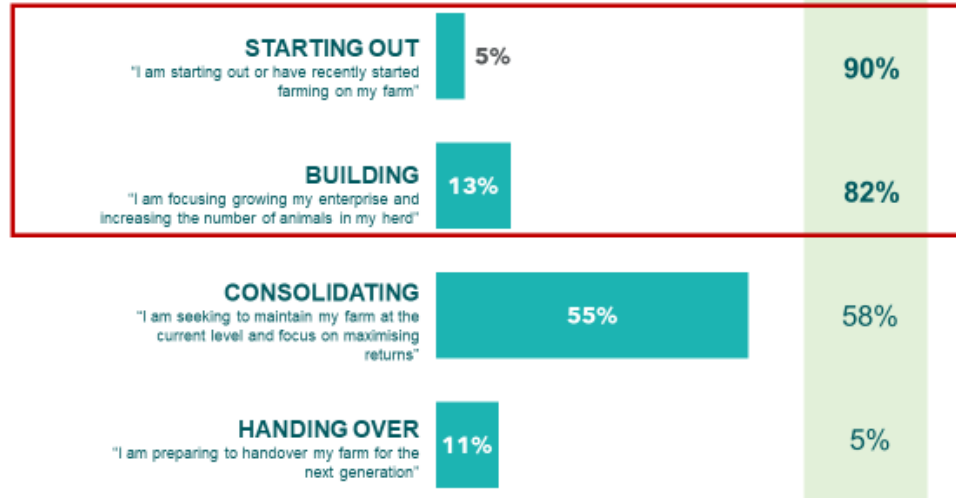


Younger farmers could be targeted to create '**Bioeconomy advocates**' that will influence other farmers to get involved in The Bioeconomy

Young Farmers More Willing to Make Changes..

Farm Life Stage

(Base: All Farmers; n=1,218)

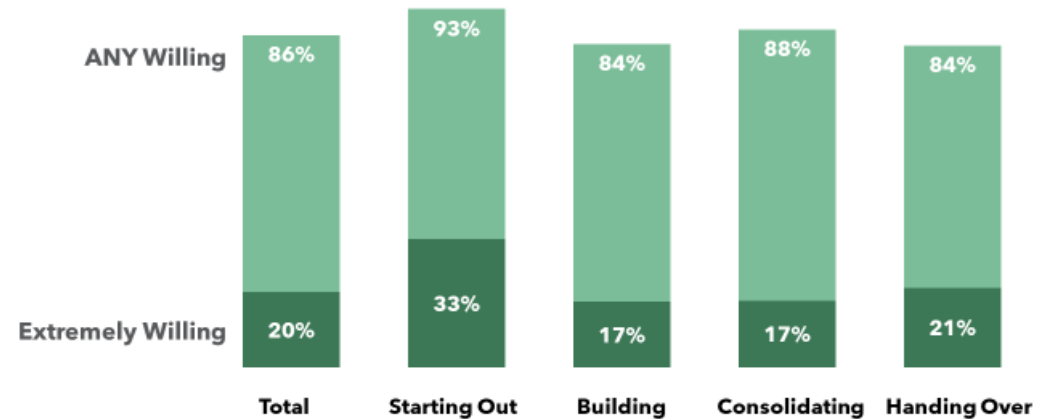


QL7 - Please select the statement below that is most applicable to your farm enterprise currently.

Research conducted on behalf of Bord Bia on Farmer Engagement highlights that those **starting out in their farming career tend to be younger** farmers and **are more willing to make changes in the future**

Willingness to Make Changes in Future

(Base: all Farmers, n=1,218)



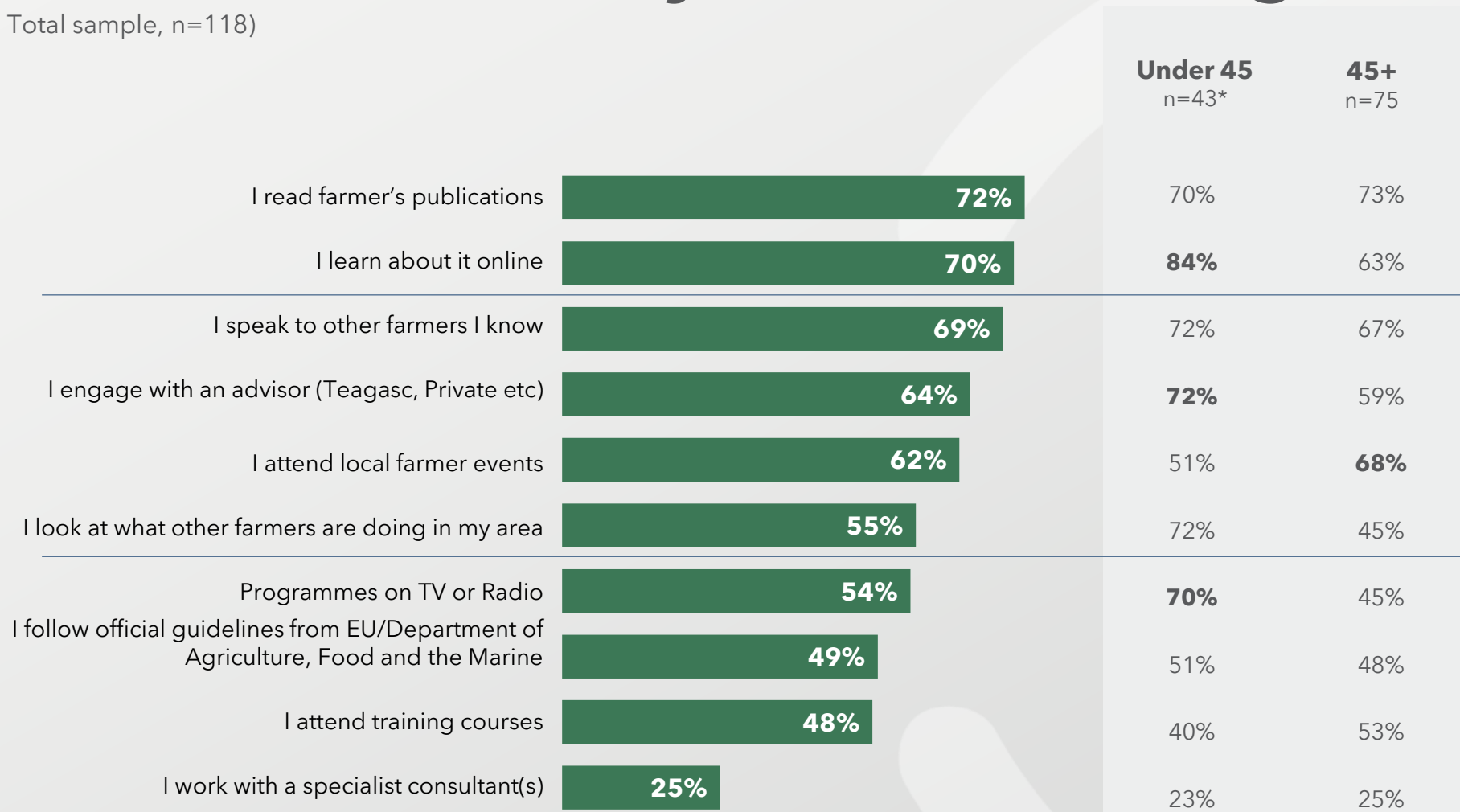
QS6 And to what extent are you willing to implement further changes in future on your farm to meet reduction in emissions in line with this target?

The image features two vintage telephone handsets, one on the left and one on the right, both with their characteristic coiled cords. The handsets are dark in color, possibly black or dark grey, and are positioned against a solid, dark grey background. The text "COMMUNICATIONS AND MEDIA" is overlaid in the center in a bold, white, sans-serif font.

COMMUNICATIONS AND MEDIA

Sources Used to Stay Informed of Agricultural Matters

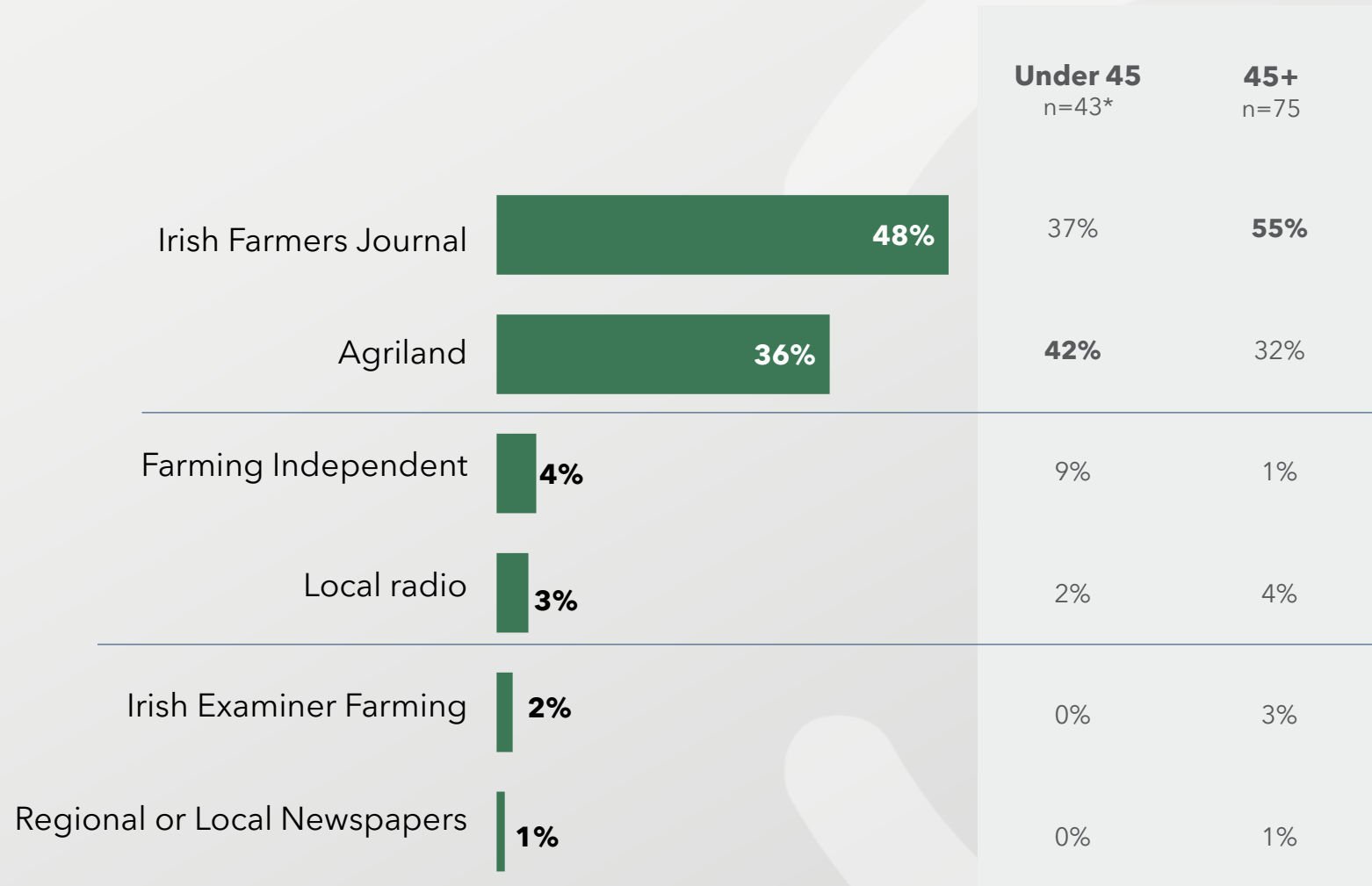
(Base: Total sample, n=118)



Reading farmer's publications, learning online, and speaking to other farmers are the most common ways that farmers **stay informed** of farming and agricultural matters. **Learning online is more widely used by younger farmers** Vs older farmers.

Most Useful Sources of Media

(Base: Total sample, n=118)



The Irish Farmers Journal and **Agriland** are **the top publications** used to stay informed of agricultural matters. The Irish Farmers Journal is more widely used by older farmers Vs Agriland which is more widely used by younger farmers

OPINIONS

QM Which of these do you do or use to stay informed of farming and agricultural matters, if any?

* Caution small base size

Key Recommendations to Accelerate the Activation of the Bioeconomy

 **Drive awareness** of *The Bioeconomy* and the enterprises within it

 **Lobby government** for **funding support** of new enterprises

 **Lobby government** for **commitment for clarity** around the **regulation** of new enterprises

 **Develop a roadmap for implementation** and **commercialisation** of new enterprises

 **Create demonstration sites** where farmers can see new enterprises being **demonstrated successfully** and **learn from their peers**

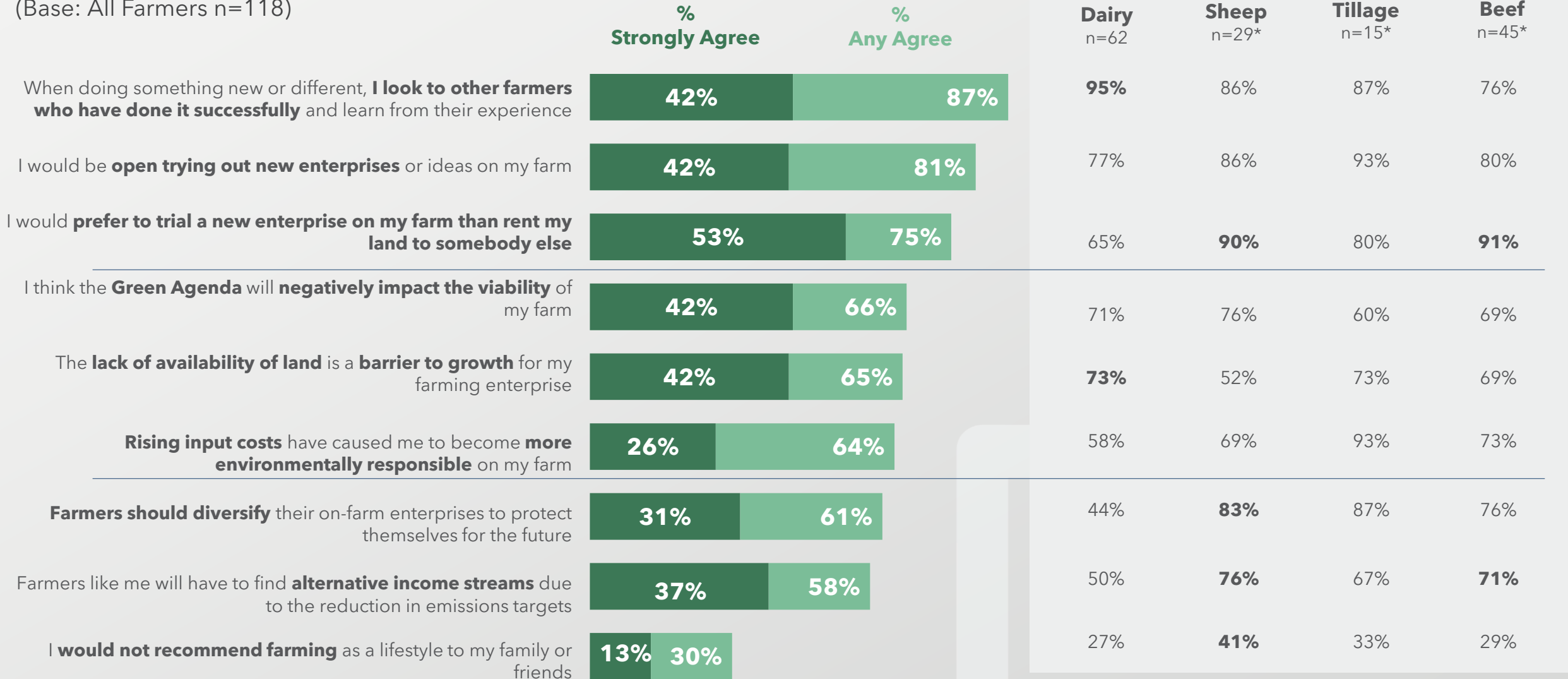
 **Target younger farmers** and create '**Bioeconomy advocates**' that will influence other farmers to get involved in *The Bioeconomy*

APPENDIX

OPINIONS

Broad Attitudes

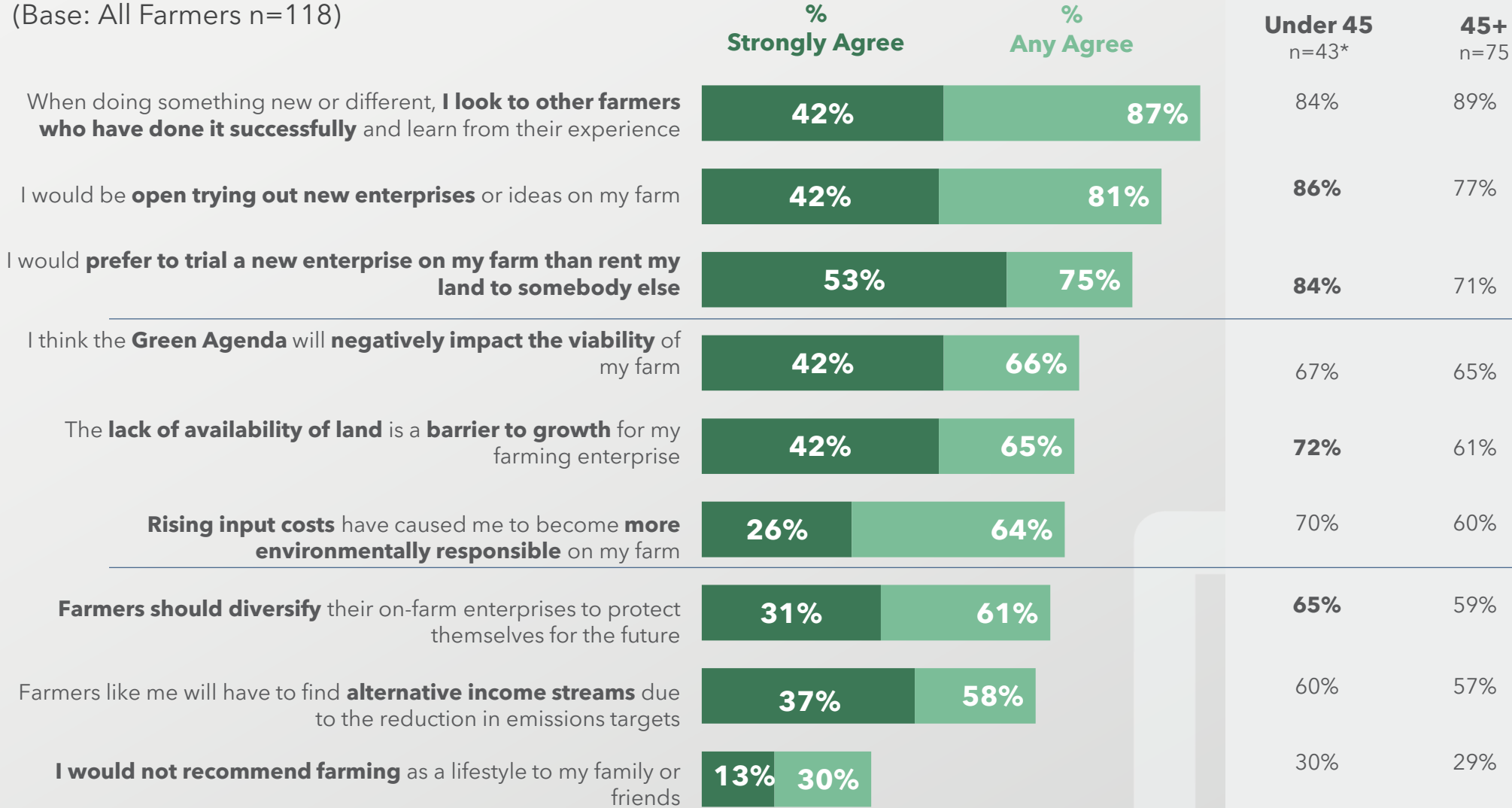
(Base: All Farmers n=118)



* Caution small base size
O P | N | O N S

Broad Attitudes

(Base: All Farmers n=118)



* Caution small base size

