

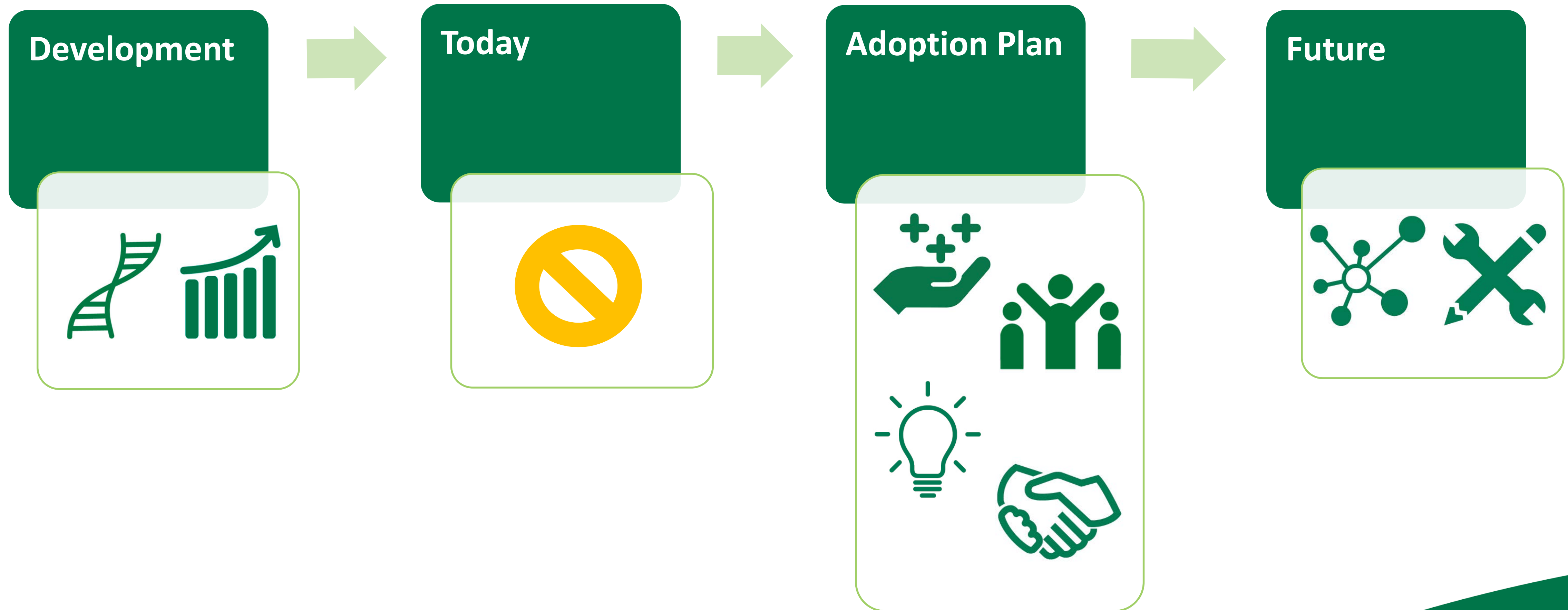


Genetics adoption strategy

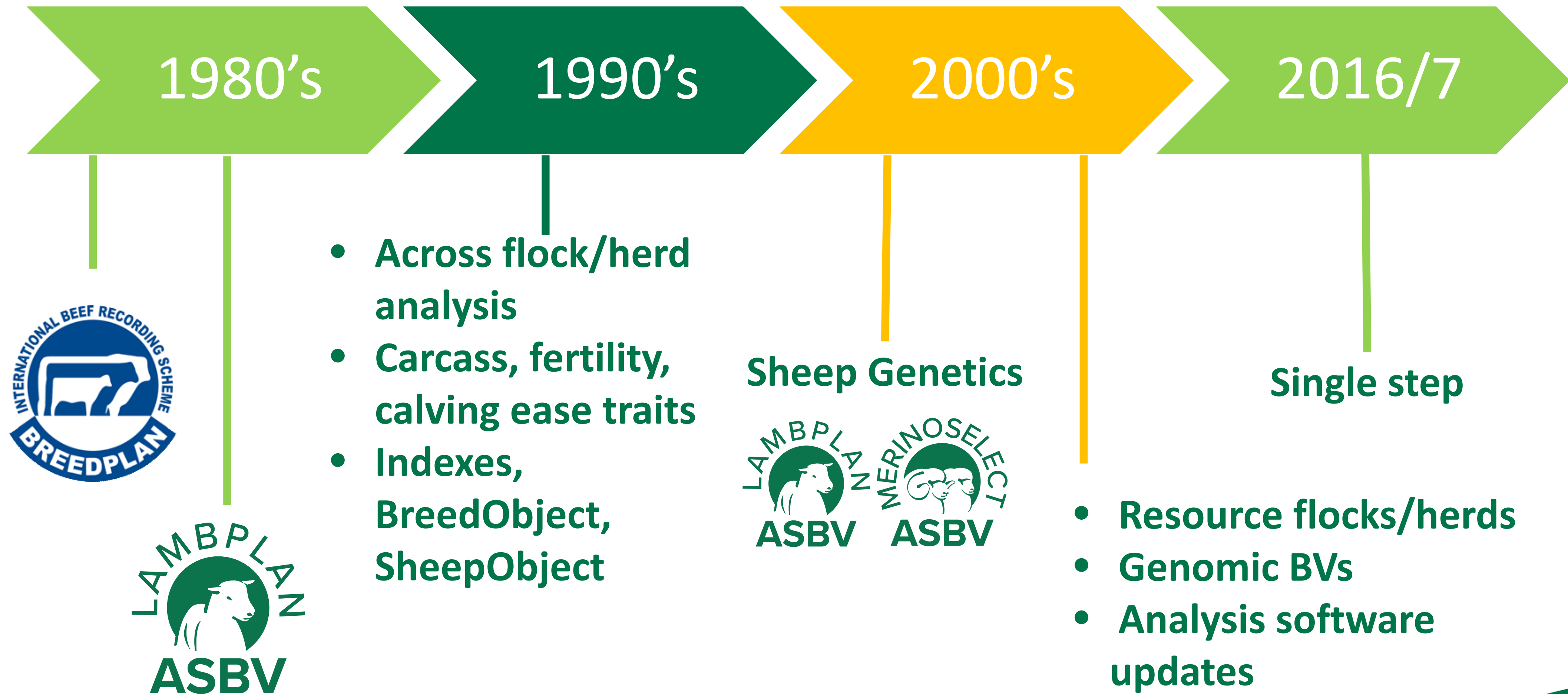
Livestock Breeding and Genetics Forum



Australian livestock genetics journey

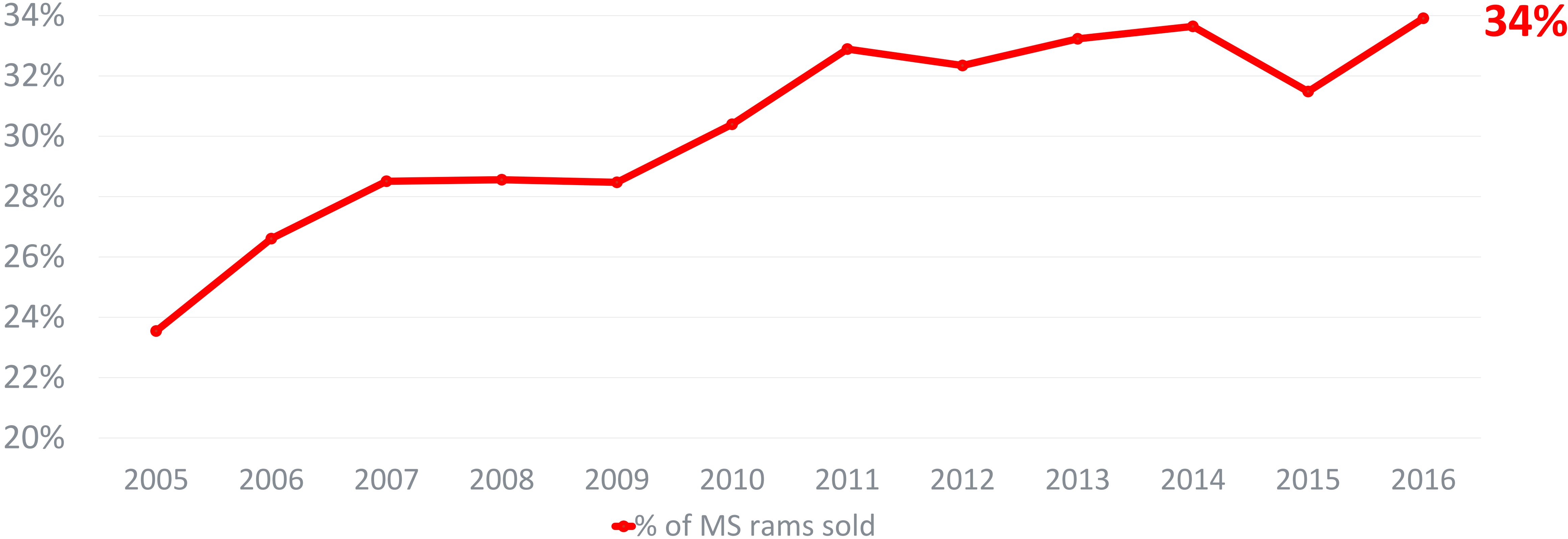


Genetic evaluation – AU development and growth



Today – Barriers and issues

Proportion of MERINOSELECT rams, of all rams sold (ASMBA)



Source: Sheep Genetics data on file, Australian stud merino Breeders association

Today – Barriers and issues

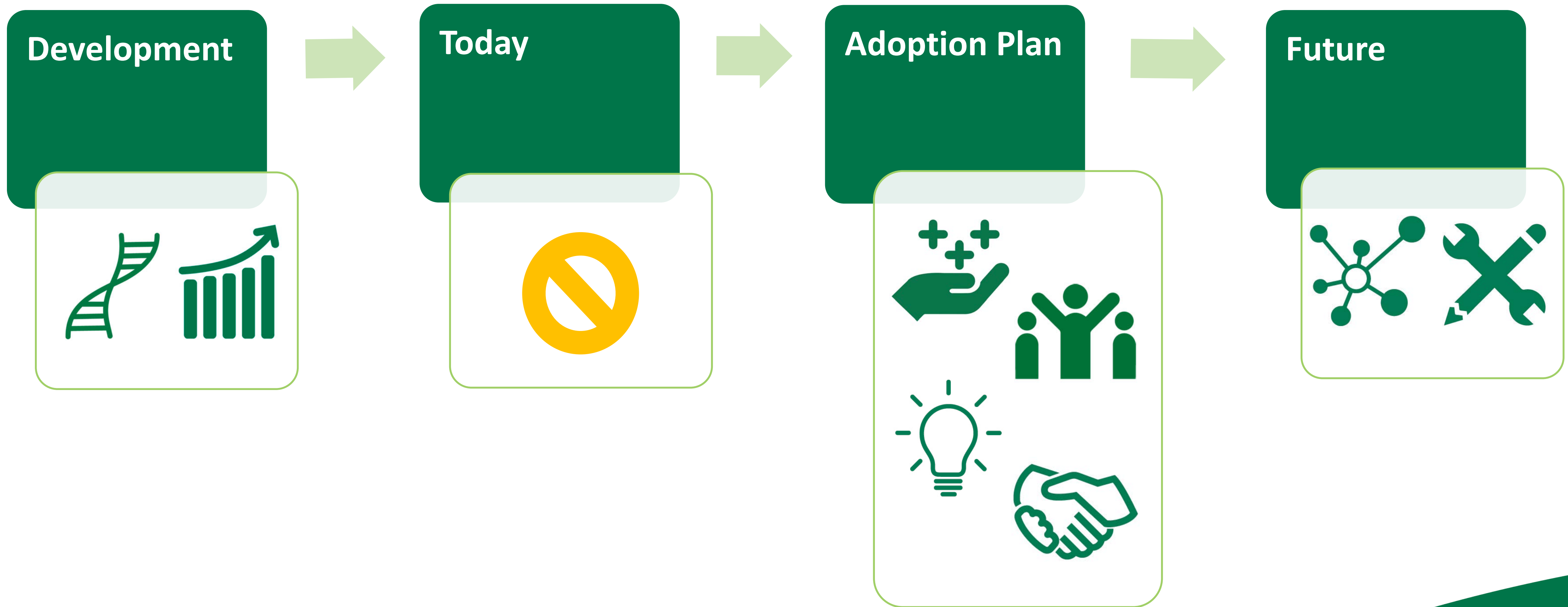
| Stud involvement | % of studs |
|---|------------|
| Never have recorded and submitted Breedplan data | 43 |
| Originally a member, but subsequently ceased recording / resigned | 14 |
| Currently record limited EBVs | 11 |
| Currently record all EBVs available in my breed | 4 |
| Only use EBVs as a marketing tool to sell bulls | 4 |
| Totally committed, recording and applying EBVs in my herd | 24 |

57%

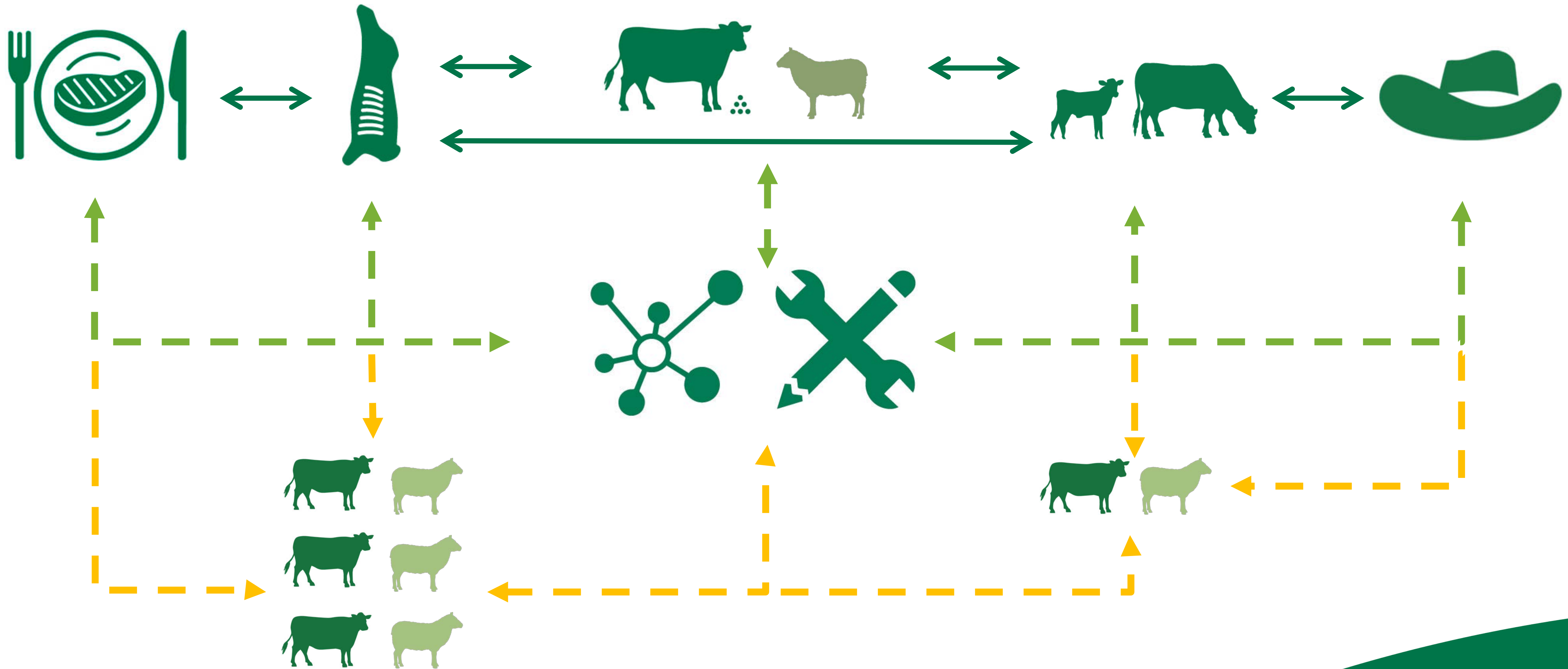
Today – Barriers and issues

| Lack of value proposition | Complex and difficult system /language | Resource and knowledge gap | Culture and lack of trust |
|--|--|--|--|
| <ul style="list-style-type: none"> • Studs selling animals • No demonstration of the value of genetics • No clear incentive to improve • No value/ROI seen in genomics | <ul style="list-style-type: none"> • Complex language > particularly for the commercial sector • The difficulty and time taken to record and submit phenotypic data | <ul style="list-style-type: none"> • Mixed messages across the industry • Widening gap of genetic knowledge • Lack of resources | <ul style="list-style-type: none"> • Lack of trust for data in and data out • Visual appraisal of animals considered superior/the only method • Heritability of wool traits • Fear of peer judgement |

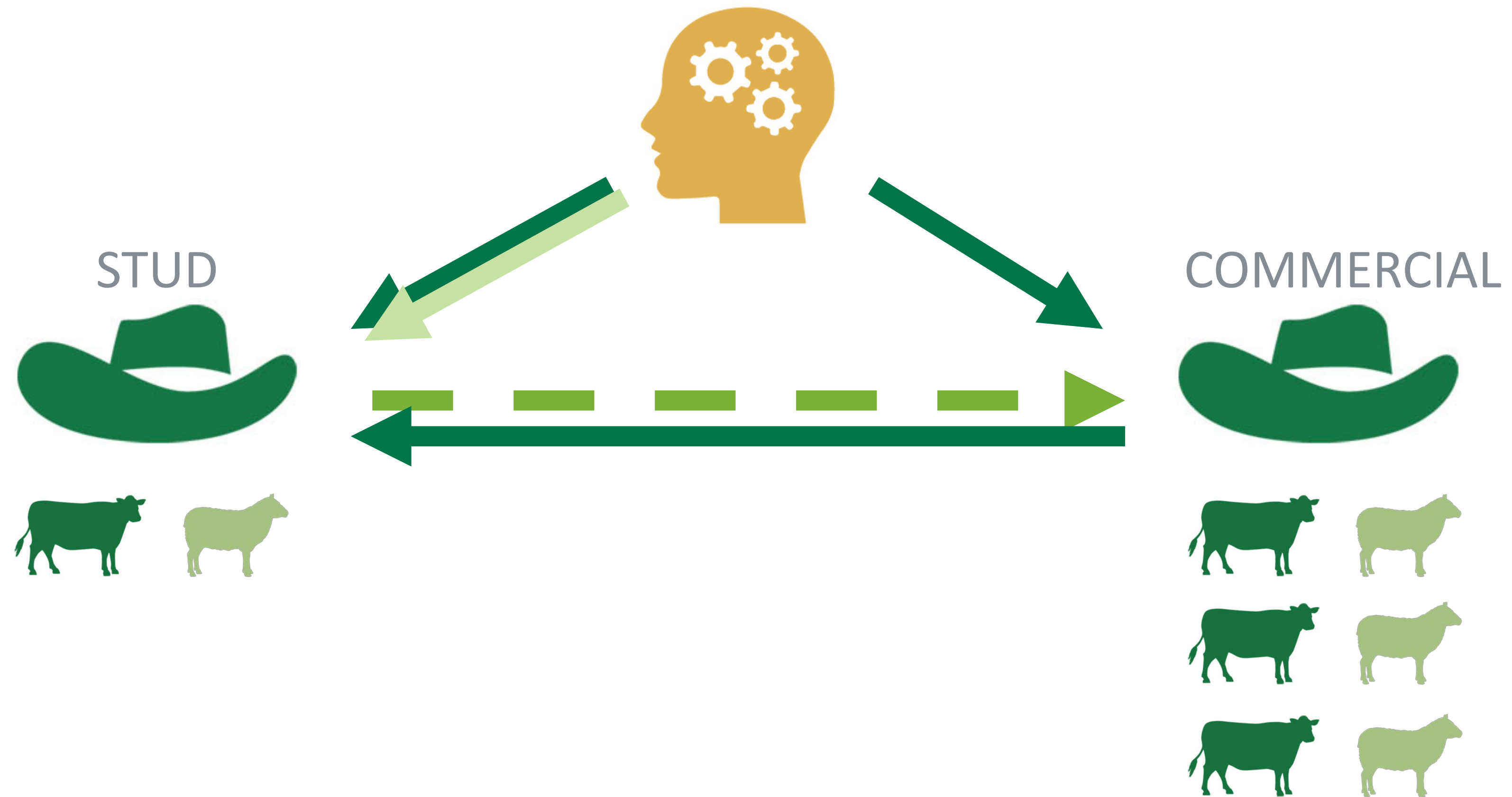
Australian livestock genetics journey



What does success look like?



Genetic adoption focus



What does *initial* success look like for commercial producers?

- Clear breeding goals
- Knowledge and capability to use the tools
- Demanding animals with breeding values
 - Drive change in the stud sector
- Positive \$Index * price correlation
- Using value chain feedback to make **genetic** and **whole of farm** decisions

Genetics Adoption Strategy

Demonstrate value and grow demand



Issues/ Barriers

- Lack of value proposition
- Trust of evaluations
- No incentive to improve



Key Tactics

- **Commercial producer case studies**
- **Genetics campaign**
 - Clear, consistent key messages
 - Delivered through the right platforms
- Leverage **current R&D** projects
- **Demonstration sites**
 - Stud and Commercial producers

- ✓ Productivity (kg meat/Ha, kg wool/Ha)
- ✓ Cost of production (\$/Kg)
- ✓ Turn off age/DOF
- ✓ Increase in weaning %
- ✓ MSA index
- ✓ Income per breeder
- ✓ ROI on genetic improvement

Demonstrate value and grow demand



Issues/ Barriers

- Lack of value proposition
- Trust of evaluations
- **No incentive to improve**



Key Tactics

- Connect genetics to **current incentives**
 - E.g. MSA
- **Grow the demand to value good genetics**
 - Develop value chain **partnerships**
 - Processors
 - Feedlots/finishers
 - Provide guidance and feedback to improve

Pathway to learning



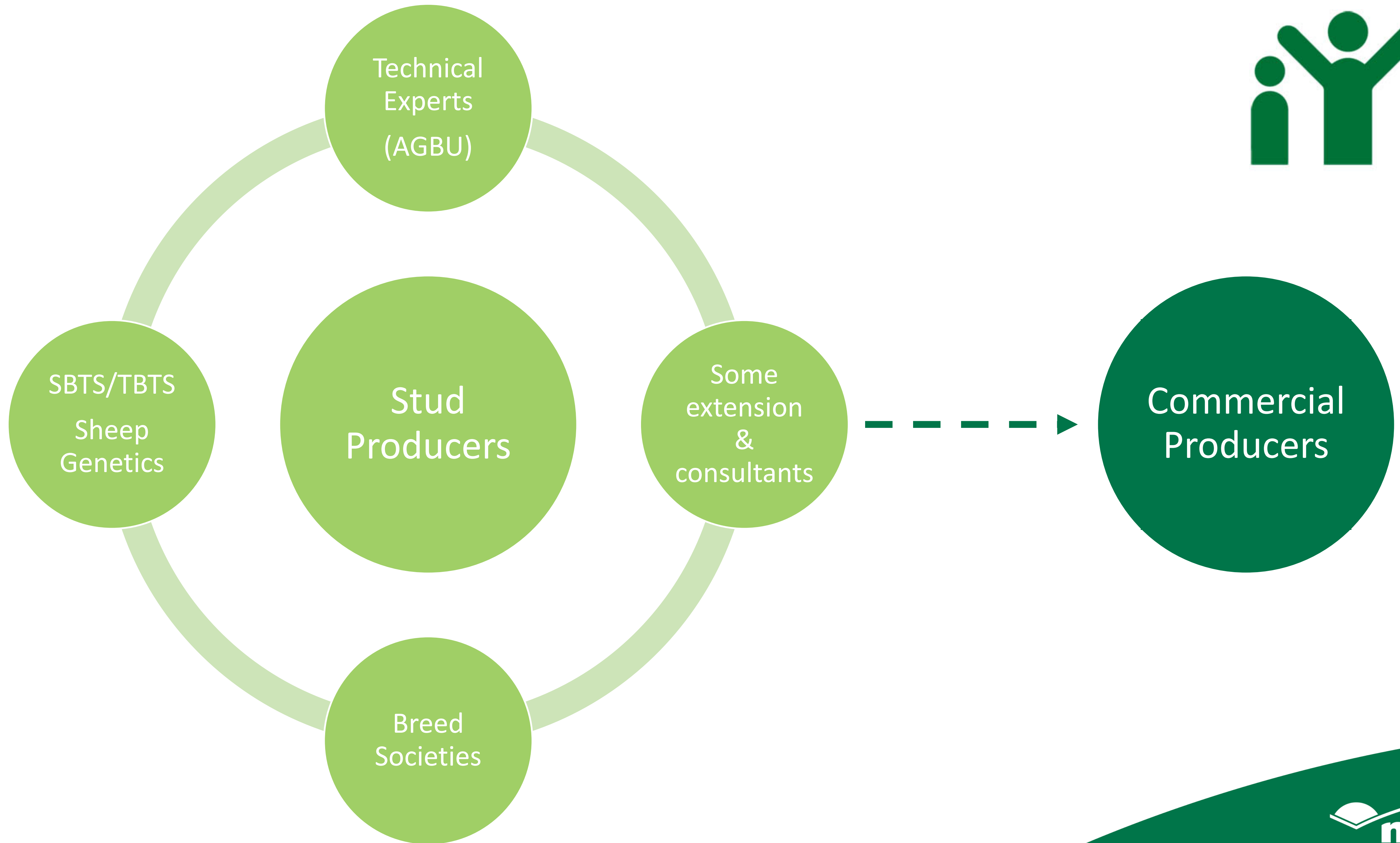
Issues/ Barriers

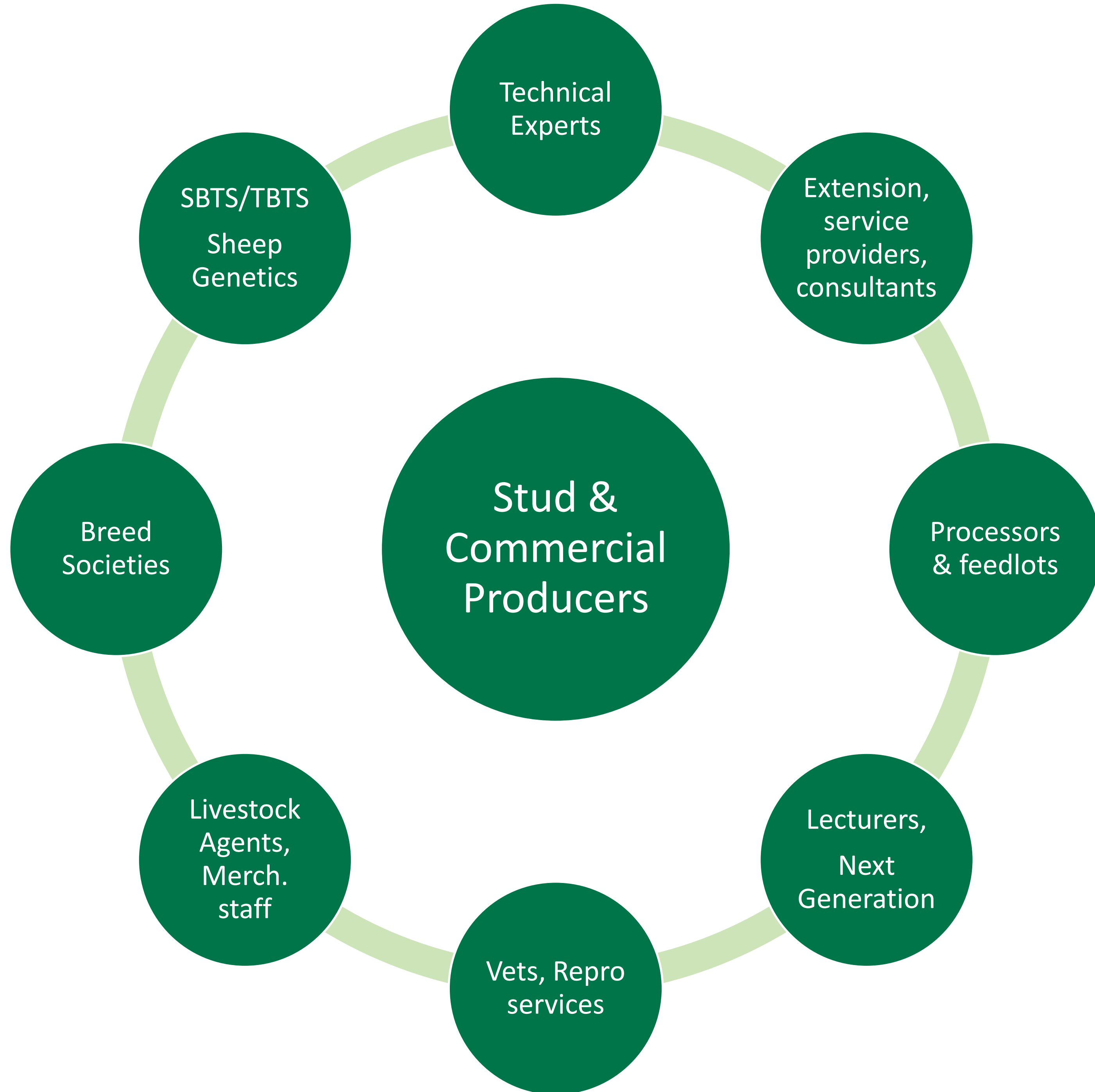
- Mixed messages
- Lack of resources
- Spectrum of knowledge



Key Tactics

- Develop a genetics network





Genetics Network

- Education, training and updates
- Alignment and coordination
- Feedback

Pathway to learning



Issues/ Barriers

- Mixed messages
- Lack of resources
- Spectrum of knowledge



Key Tactics

- **Develop a genetics network**
 - Annual conference
 - Regional forums, leverage existing networks
 - Train the trainer - **Align** current programs and extension network
 - Continue engagement momentum
- Identify gaps in resources and programs
- Deliver with whole farm/value chain approach

Simplify the language and tools



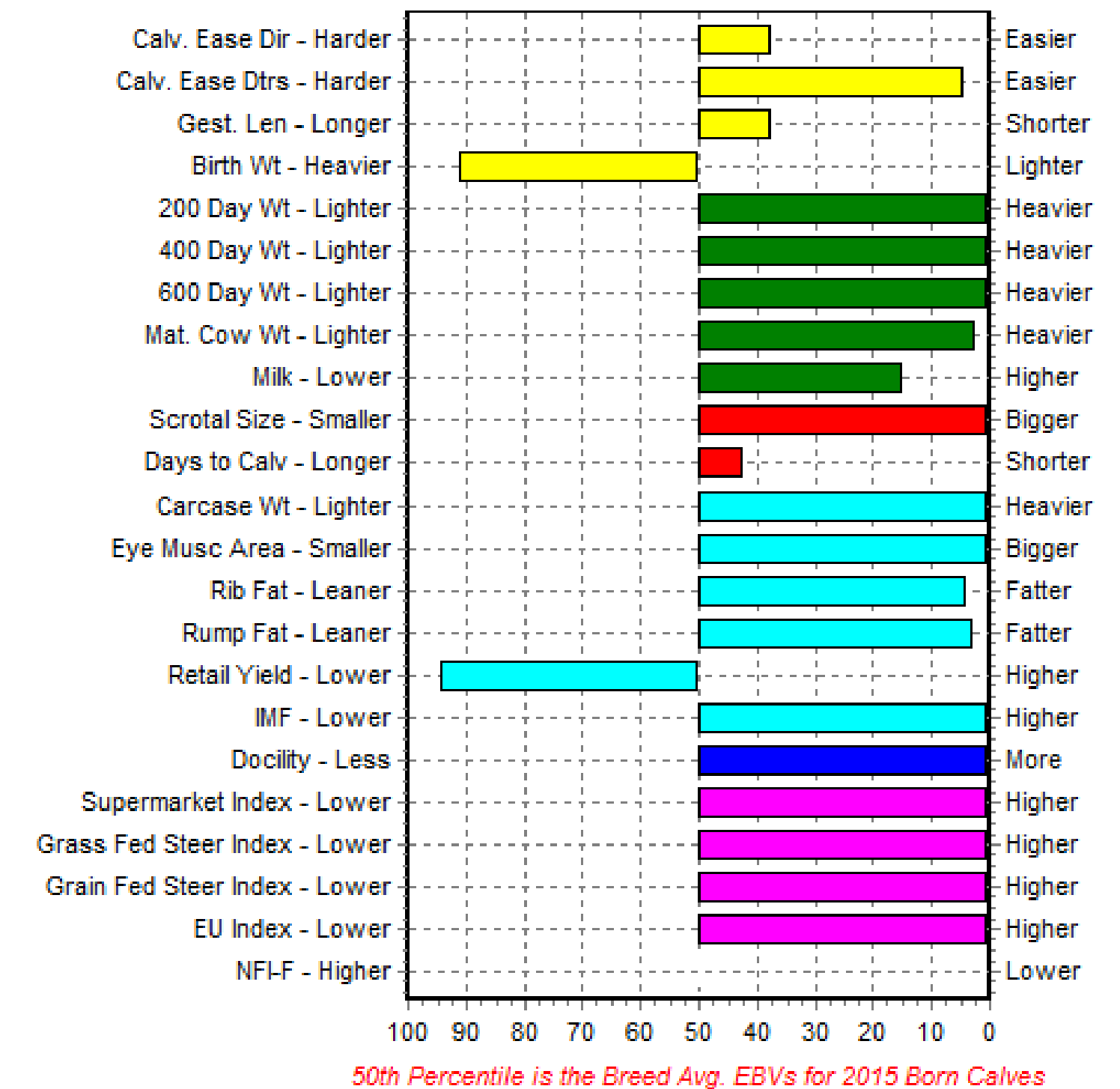
Issues/ Barriers

- Complex language, tools and platforms
- Particularly for commercial producers



Key Tactics

- **Simplify EBVs/ASBVs**
 - Trait grouping e.g. fertility, growth
 - Stars?
- **Increase \$index understanding/use**
- **Easy to use tools**
 - **Selection** + economics/value
 - **Benchmarking** e.g. Sheep CRC flock profile
- **Update the online platforms/websites**



Align adoption and R&D



Issues/ Barriers

- Difficulty/time recording
- No across breed evaluation
- Feedback on performance
- Hard to measure traits



Key Tactics

- Confirm R&D leads to adoption i.e. the **right** R&D

Maximise genetic gain

X

Adoption of the R&D

- **Clear adoption plan** at initiation of R&D
- Have clear **monitoring and evaluation** guidelines

- **Reduce timeline** from R&D to adoption

Monitor and evaluate the adoption plan

- Monitor and evaluate for success of the strategy
 - Market research
 - Feedback through the network
 - Forums, working groups
 - Maximise producer engagement
- Adjust as necessary

Summary



Demonstrate **value** and grow **demand**



Pathway to learning



Simplify the language and tools



Align adoption and R&D

Feedback on the direction

Genetics Adoption Plan

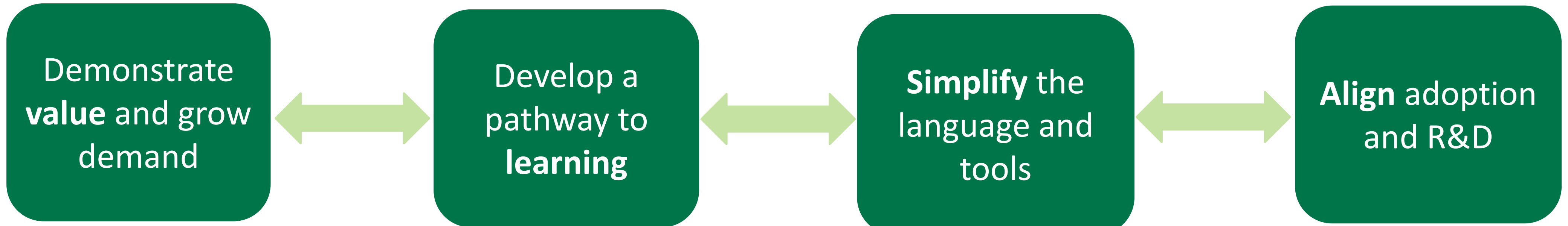
NLGC Goal By 2022, >\$400M of industry improvements across the value chain through doubling the rate of genetic gain

Barriers

- Lack of value proposition
- Trust of evaluations
- No incentive to improve
- Mixed messages
- Lack of resources
- Spectrum of knowledge
- Complex language, tools and platforms, particularly for commercial producers
- Difficulty/time recording
- No across breed evaluation
- Feedback on performance
- Hard to measure traits



Adoption strategic goals



Adoption tactics

- Commercial Case studies
- Genetics campaign
- Demonstration sites
- Connect genetics to consumer
- Grow value chain partnerships and demand
- Develop genetics network
- Platform for alignment, collaboration and education
- Resource for information
- Identify resource gaps
- Value chain approach to delivery and education
- Simplify EBVs/ASBVs
- Better clarification/use of \$indexes
- Develop selection tools incl. economics/value
- Update evaluation platforms
- Confirm R&D leads to adoption – the right R&D
- Clear adoption plan at initiation of R&D
- Have clear monitoring and evaluation guidelines

Continually monitor, evaluate and adjust based the success of the strategy goals