

# The European Animal Breeders' perspective on the role of Modern Animal Breeding

*Ana Granados- EFFAB/FABRE TP*



**EFFAB**

European Forum of  
Farm Animal Breeders

**FABRE • TP**

Farm Animal Breeding  
& Reproduction  
Technology Platform

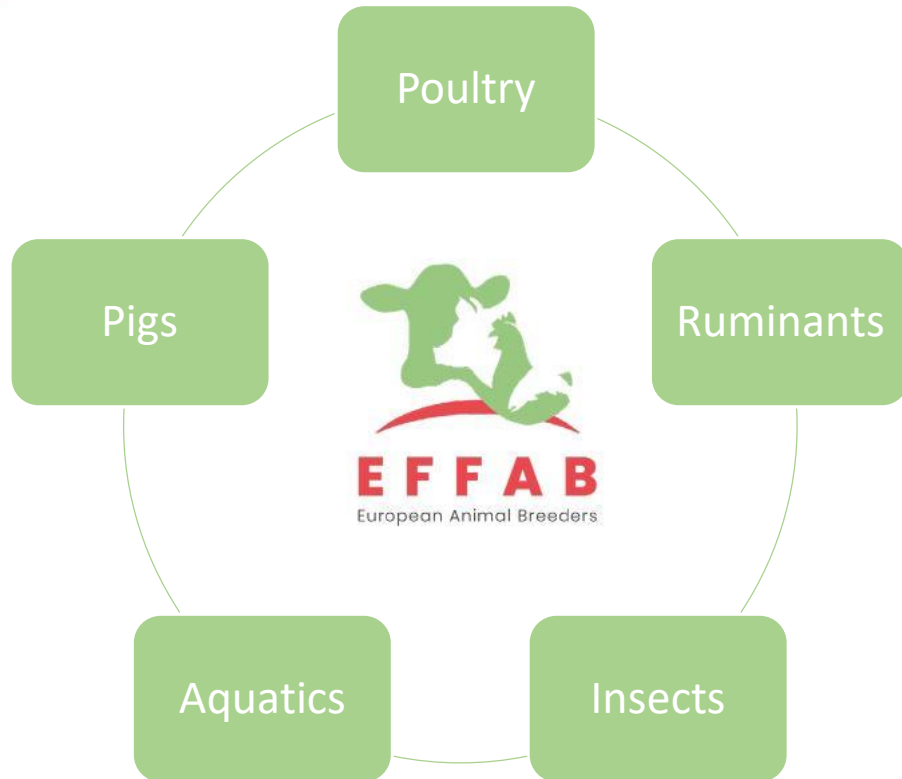




# Content

- Who we are
- **The European context for animal breeding and farming**
- Responsible, sustainable and balanced Breeding
- EFFAB members and animal biotechnologies
- Societal and ethical aspects of Gene Editing in Europe

# The voice of European Animal Breeders





# EFFA B

## Ensuring the representation of member interests, at the EU level

- European policy and legislation
- Supporting and promoting **responsible and balanced** breeding - **Code EFABAR**
- Engaging dialogue about the role of Animal Breeding and reproduction
- KI ... "translating" science



# FABRE TP



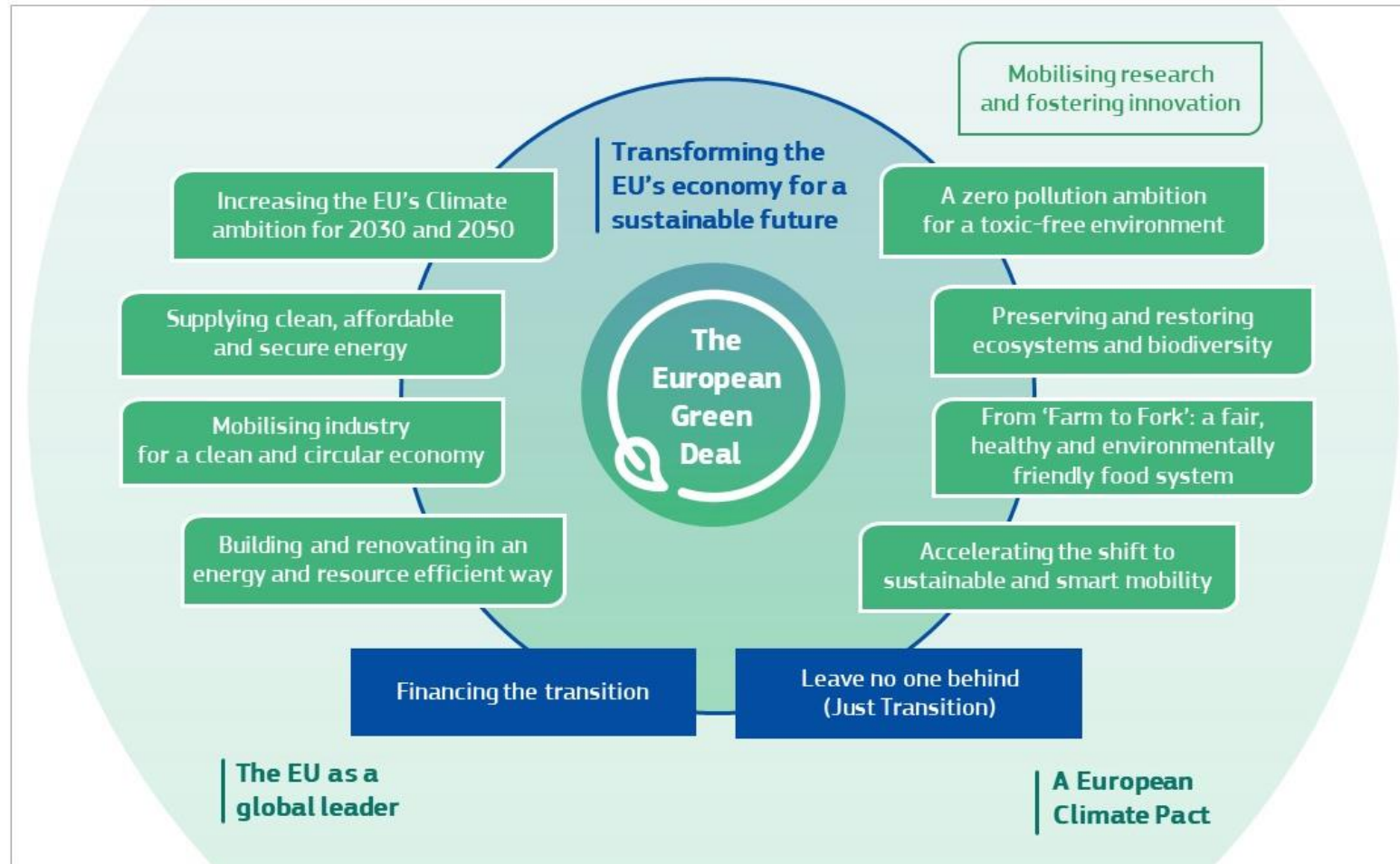
# FABRE TP



- Promotes and supports **research and innovation** in animal breeding
- Develop research and innovation agendas and set priorities
- Building bridges between the private and research sectors
- Knowledge provider → “translating” science



# Context and challenges in Europe

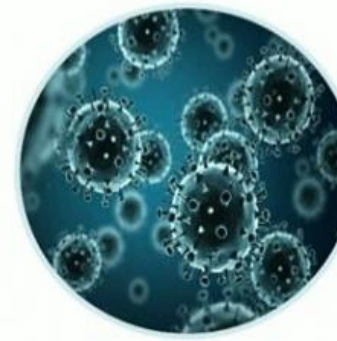




Reduce by 50% the overall use and risk of **chemical pesticides** and reduce use by 50% of more hazardous **pesticides**



Reduce **nutrient losses** by at least 50% while ensuring no deterioration in soil fertility; this will reduce use of **fertilisers** by at least 20 %



Reduce sales of **antimicrobials** for farmed animals by 50%



Achieve at least 25% of the EU's agricultural land under **organic farming** and a significant increase in **organic aquaculture**



**“Better animal welfare** improves animal health and food quality, reduces the need for medication and can help preserve biodiversity.”



# EU and biotechnologies



- GMO directive **is not fit for purpose** for some NGTs and products : Current risk assessment procedures are too **rigid** and difficult to adapt to new technologies
- It needs to be **adapted to scientific and technological progress**
- Consider an appropriate mechanism to **evaluate benefits** of NGT products
- NGTs can contribute to **sustainability** → EU Green Deal objectives BUT NGTs applications in the agricultural sector should not undermine other aspects of sustainable food production, e.g. as regards **organic agriculture**.
- **Knowledge gaps** identified in this study. More effort should be made to **inform and engage with the public** and assess their views.
- Safety data available for a number of techniques → policy action in plants
- For other organisms (**animals**) and other NGTs, **continue to build up the required scientific knowledge, in view of possible further policy actions**

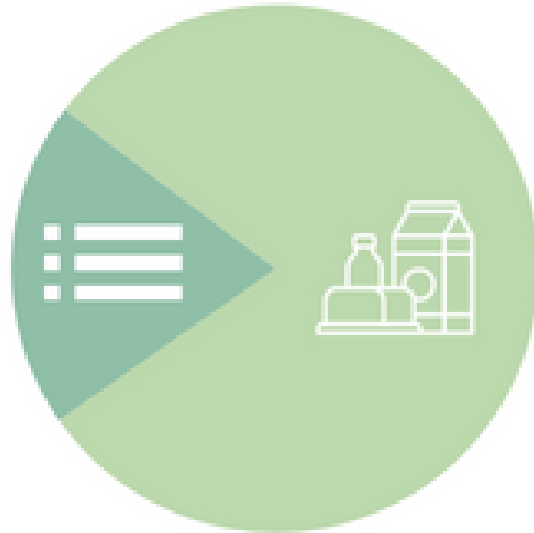
A breeding program = balanced and responsible combination of several traits



1970's - 1980's



Other traits



Production

2000's - Today

Improved animal health and welfare

Better production and quality of the products

Ensured food security

Better use of resources



Reduction of environmental impact

Keeping genetic diversity





# Responsible use of technology

- considering food safety and public health, animal health and welfare, the environment and biodiversity
- influence of the used technologies for the parent breeding stock as well as for the resulting descendance
- transparent about all animal breeding technologies used within their company

# EFFAB and FABRE TP concerns



Potential opportunities to improve some specific traits\*

Disease resistance



PRRS, Avian Influenza, ISAV, BTB, FMD...

Animal Welfare



Castration, Sexing in ovo, hornless cattle...

Biodiversity



Genetic diversity, sterility...

85% of EFFAB/FABRE TP members consider that we can use GE to improve Animal Health

48% of EFFAB/FABRE TP members consider that we can use GE to improve Animal Welfare

Research tool : To better understand animal genetics

# EFFAB and FABRE TP concerns



Potential opportunities to improve some specific traits\*

Increase knowledge of animal genetics

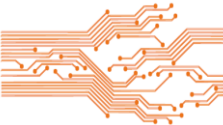
Disease resistance

Animal Welfare

Biodiversity

Research gaps

Safety data



PRRS, Avian Influenza, ISAV, BTB, FMD...

Castration, Sexing in ovo, hornless cattle...

Genetic diversity, sterility...

# EFFAB and FABRE TP concerns



Potential opportunities to improve some specific traits\*

Increase knowledge of animal genetics

Engage dialogue on animal breeding

Disease resistance

Animal Welfare

Biodiversity

Research gaps

Safety data

Ethical aspects

Increasing awareness



Transparency and traceability (detection methods/imports)

PRRS, Avian Influenza, ISAV, BTB, FMD...

Castration, Sexing in ovo, hornless cattle...

Genetic diversity, sterility...



\* Not possible to be achieved by CB or accelerating the process

EU Platform on Animal Welfare 10.11.2021

EUROGROUP  
FOR ANIMAL



# Bred to suffer: [ Broiler chickens ]

EU Platform on Animal Welfare 10.11.2021



# Bred to suffer: [ Dairy cows ]

EUROGROUP  
FOR ANIMALS

Unregulated genetic selection  
leads

orders (chronic  
dy

million dairy cows  
ected by  
egislation.

COMPASSION  
in world farming

DONATE NOW

ACT NOW

SIGN UP



NEWS

2022

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GENE EDITING BILL: SIGNIFICANT THREAT FOR FARMED ANIMALS



# GENE EDITING BILL: SIGNIFICANT THREAT FOR FARMED ANIMALS

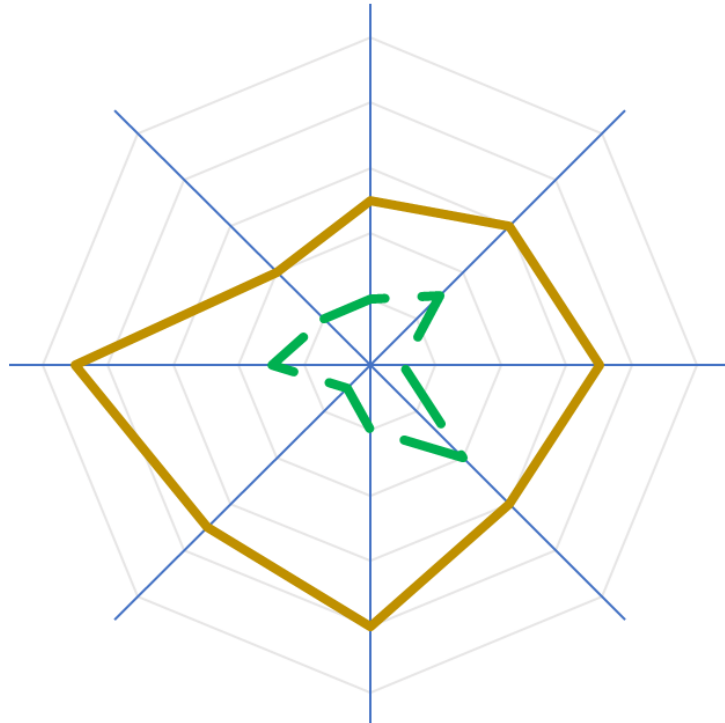


# CONVINCED

# OPPONENTS

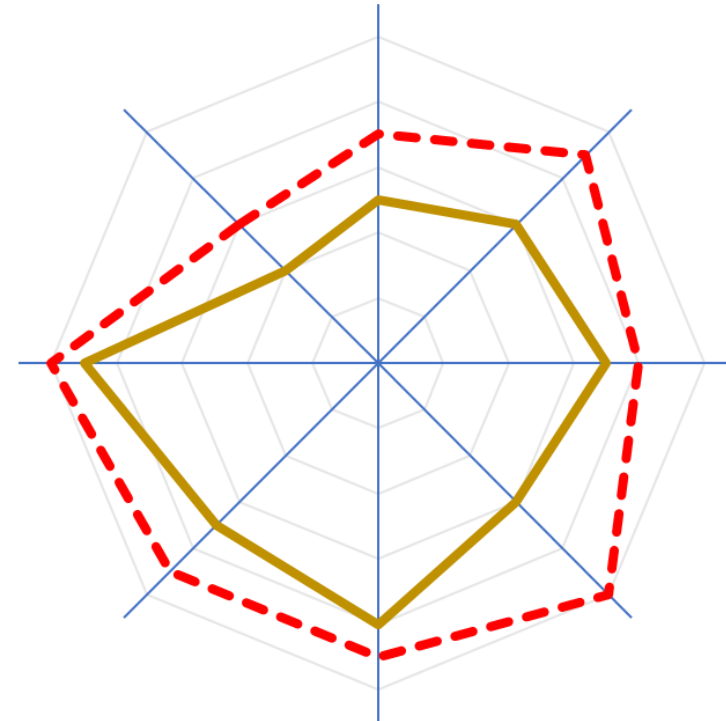
Specialists

— Boundary of room — Acceptable application



Un

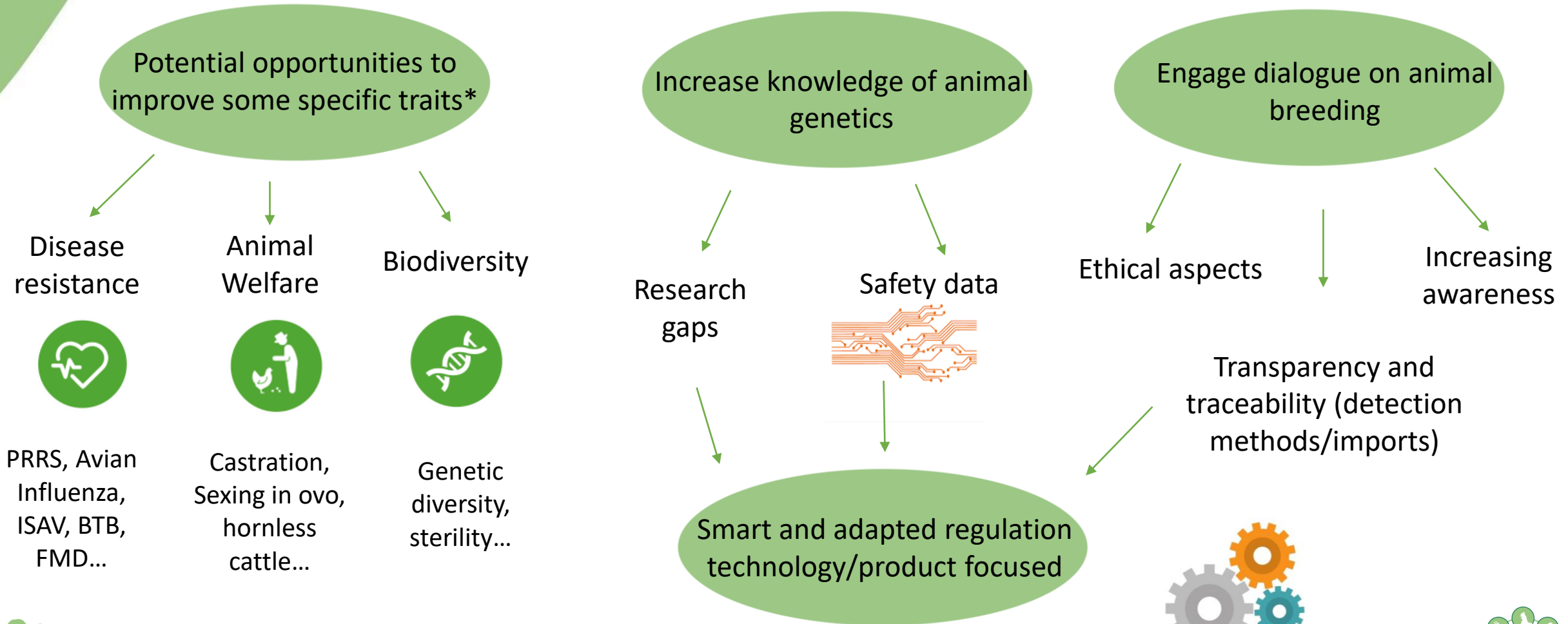
— Boundary of room - - - Unacceptable application



Layman



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Research gaps

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Smart and adapted regulation technology/product focused

Engage dialogue on animal breeding

Ethical aspects

Increasing awareness

Transparency and traceability (detection methods/imports)



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# Conclusions



- 68% of EFFAB members wish **new legislation** based on the product obtained instead of the technology used
  - Not applicable for animals
  - Long and costly risk assessment (while the technique is easy and could also be used by SMEs )
- If the EU is not taking action: weaker position for breeders and research
- Define what is ethically feasible and accepted by society
- More research to provide safety data
- **Should include a legal import framework, avoiding subsidiarity → traceability**



Clear, smart and safe regulations on GE are needed - with different criteria than GMO; including ethics - as it offers possibilities

**BUT**

the industry needs to do the research and innovations on GE within the framework of Responsible Research and Innovation (RRI)

**As acceptance from public sector, consumer and market is important**



# Thank you

## Questions?



Let's stay in touch



[ana.granados@effab.info](mailto:ana.granados@effab.info)

[www.effab.info](http://www.effab.info)

[www.fabretp.eu](http://www.fabretp.eu)

