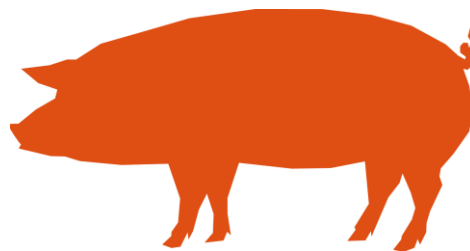




**CODE EFABAR**  
the commitment to responsible breeding

**Species Specific Template**  
**Code EFABAR**  
**PIGS**



**Code EFABAR 2017**

**Company:** \_\_\_\_\_



## PIGS

### 1. Impact and structure of breeding in pig industry in EU

During the twentieth century pig breeding moved from purebred breeding to crossbreeding of purebred lines. Crossbreeding creates heterosis (hybrid vigour) and allows different selection strategies to be applied to male and female lines. Pig breeding companies once focused on traits with high heritability, such as overall growth and body leanness. Nowadays by using computer technology, they are focusing more on challenging traits with lower heritability, e.g. litter size and survival traits. Furthermore, genomic selection enables breeding companies to establish genetic improvements in traits today that would have been very difficult with the traditional breeding methods.

At research level, new technologies, such as ‘gene editing’ (genotyping the animal's DNA followed by a correction of one or more of the base pairs) and other techniques as cisgenesis and transgenesis will become available in the future. Such new technologies have the potential to speed up the improvement of breeding stock considerably to meet societal demands better and faster.

### 2. Introduction

*Give a brief description of the governance policy of the breeding company regarding the societal challenges as mentioned in the Code EFABAR General Document. Besides the 6 pillars of the Code EFABAR, take also Food Security into consideration.*

### 3. Sustainability and Technologies

#### PART 1 SUSTAINABILITY

##### A. Food Safety and Public Health

Breeding Element	Has the BC implemented this element in its breeding program, directly or indirectly? Yes/No	If yes, how has the BC implemented this element in its breeding program? If no, does the BC plan to address this element in its breeding program in the next 3 years? If no, why?
Reduction of antimicrobial usage by selecting more disease resistant and robust animals	<i>To be filled by the company</i>	<i>To be filled in by the company</i>
Vigorous piglets (reduce use of antimicrobials)		
Meat safety (e.g. minimizing the spread of diseases through meat)		

Management Element	Yes/No	If yes, give a short explanation If no, explain why not
Has the Breeding Company a biosecurity policy on its own premises (to avoid spreading zoonoses) and is it implemented?		
Has the Breeding Company an antimicrobial policy on its own premises and is it implemented?		

## B. Product Quality

Breeding Element	Has the BC implemented this element in its breeding program, directly or indirectly? Yes/No	If yes, how has the BC implemented this element in its breeding program? If no, does the BC plan to address this element in its breeding program in the next 3 years? If no, why?
Carcass quality (carcass composition - lean to fat ratio)		
Meat quality (nutritious value and taste/flavour)		
Reduction of boar taint in meat		
Specific products for specific consumers (if there are any)		

## C. Genetic diversity

Breeding Element	Has the BC implemented this element in its breeding program, directly or indirectly? Yes/No	If yes, how has the BC implemented this element in its breeding program? If no, does the BC plan to address this element in its breeding program in the next 3 years? If no, why?
Genetic diversity within purebred lines		
Conservation of genes of purebred lines (in situ or ex situ)		
Preventing inbreeding (balancing rate of inbreeding with rate of genetic change)		
Conservation of genes of rare and threatened breeds		

Management Element	Yes/No	If yes, give a short explanation If no, explain why not
Does the BC have or contribute to a gene bank for commercial pig breeds?		
Does the BC contribute to the conservation of genes of rare and threatened pig breeds?		



#### D. Resource Efficiency

Breeding Element	Has the BC implemented this element in its breeding program, directly or indirectly? Yes/No	If yes, how has the BC implemented this element in its breeding program? If no, does the BC plan to address this element in its breeding program in the next 3 years? If no, why?
Longevity of sow		
Fertility		
Survival of piglets - at birth - at rearing		
Growth rate		
Breeding of pigs that could be fed with alternative feed materials		
Feed efficiency		
Energy efficiency		

Management Element	Yes/No	If yes, give a short explanation If no, explain why not
Has the Breeding Company a resource efficiency policy on its own premises and is it implemented?		

#### E. Environment

Breeding Element	Has the BC implemented this element in its breeding program, directly or indirectly? Yes/No	If yes, how has the BC implemented this element in its breeding program? If no, does the BC plan to address this element in its breeding program in the next 3 years? If no, why?
Reduction of N and P emission (considering the reusability of these elements in the manure)		
Reduction in Green House Gas (GHG) CO <sub>2</sub> emission		
Reduction NH <sub>3</sub> emission		
Adaptation of pigs to different environments including climate change		

Management Element	Yes/No	If yes, give a short explanation If no, explain why not
Has the Breeding Company an environment policy on its own premises and is it implemented?		

## F. Animal Health and Welfare

Breeding Element	Has the BC implemented this element in its breeding program, directly or indirectly? Yes/No	If yes, how has the BC implemented this element in its breeding program? If no, does the BC plan to address this element in its breeding program in the next 3 years? If no, why?
Fertility		
Maternal ability		
Teat number & quality (related to piglet health & welfare)		
Decrease of Congenital defects with a genetic component (like Atresia Ani, Cryptorchidism, Splayleg, Hermaphrodism and Hernia)		
Disease resistance		
Leg problems		
Castration of piglets		
Tail docking		
Elimination of stress susceptibility		

Management Element	Yes/No	If yes, give a short explanation If no, explain why not
Has the Breeding Company a biosecurity policy on its own premises (to avoid diseases and the spreading of diseases to other premises) and is it implemented?		
Has the Breeding Company a welfare policy on its own premises and is it implemented?		



## PART II TECHNOLOGIES

### A. Breeding technologies

Element	Is the BC using these breeding technologies in its breeding practices? Yes/no; why, why not?
Genomics	
Challenge tests (health & welfare)	
Transgenesis	
Cisgenesis	
Biopsy (fat sampling boars for evaluating boar taint – product quality, health & welfare)	
Ultrasound scan (product quality purpose)	
Computer Tomographic scan (bone quality and defects, muscle distribution for breeding program)	
Gene editing	

### B. Reproduction Technologies

Element	Is the BC using these reproduction technologies in its reproduction practices? Yes/no; why, why not?
Artificial Insemination	
Sexing of semen	
Embryo production by superovulation stimulation followed by flushing of the embryos/	
Embryo transfer (ET) (attention for welfare)	
Cloning (ENCT and SNCT)	

#### 4. Certification

We herewith declare that the content of this template expresses the breeding and reproduction policy of the company

Place:

Date:

Name and signature:

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European Forum of Farm Animal Breeders (EFFAB)

We herewith state that this template complies with the CODE EFABAR Version 2017

Place: Brussels

Period of validity:

J. (Jan) G.B. Venneman, EFFAB, Director