



Genetics and productivity - as means of reduce greenhouse gas emissions in pig productions



# SUSTAINABILITY Balanced pig breeding for improved global sustainability

Aiming to achieve genetic gain to <u>produce more</u> while using <u>fewer resources</u> is key to achieving a more sustainable production of pork in future, and contributing to this goal is a fundamental premise for DanBred's balanced pig breeding program.



#### SUSTAINABILITY Balanced pig breeding for improved global sustainability

Genetic selection is a tool perfectly suited to improving sustainability. Firstly, because the key breeding goal of DanBred's breeding program is to produce more using fewer resources, and secondly because any genetic improvements made are cumulative and mostly permanent.

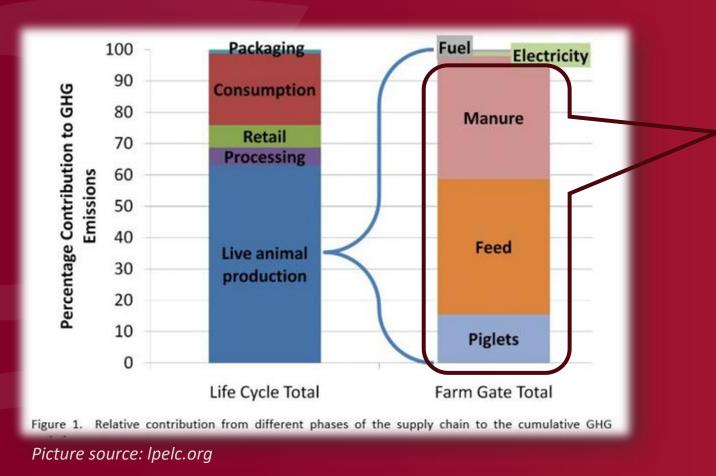
Given current growth rates of DanBred finishers, each improvement of 0.1 kg feed/kg growth in feed conversion is estimated to reduce CO2 emissions by approximately 10 kg per pig.

When litter size is increased, the number of sows needed to produce the same number of piglets is reduced. This reduces the need for sow feed, with effects similar to those described for feed conversion and growth.

Genetic selection for survival leads to similar benefits, as it also reduces the number of sows needed to produce the same number of piglets, while also reducing feed waste. 1% improvement on survival reduces CO2 emissions by 0.5 kg per pig.

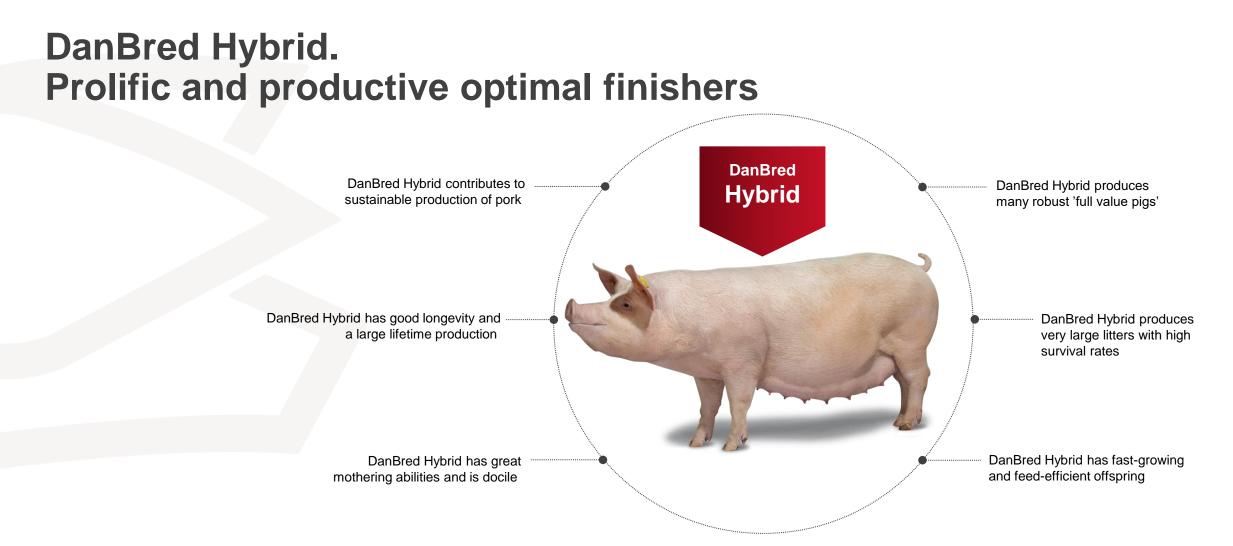
These are all examples of how DanBred indirectly selects for sustainability, and the efficiency and productivity of the DanBred Hybrid and DanBred Duroc are tangible testaments to the success of the DanBred breeding program.





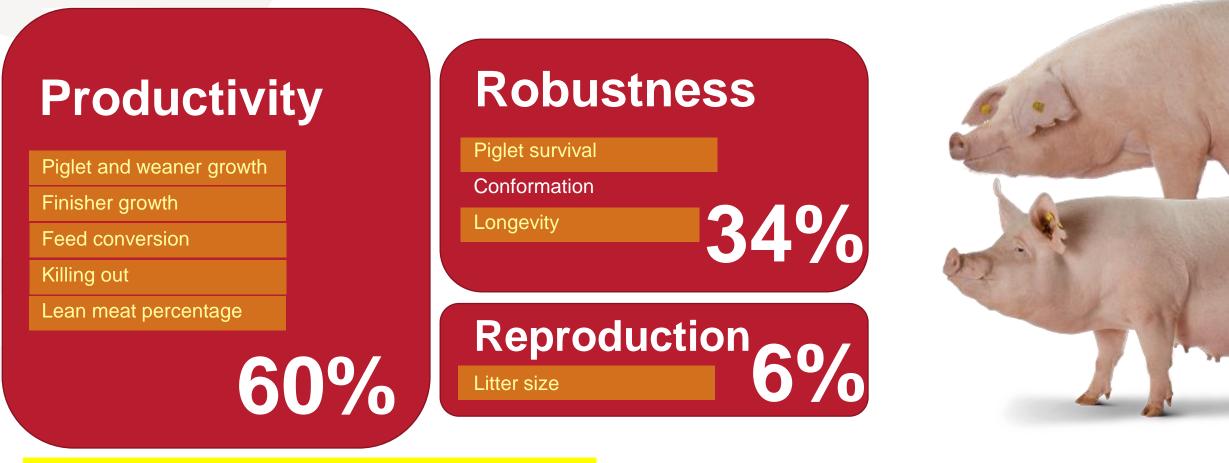
The part that's influenced directly through genetics and productivity







DanBred Landrace & Yorkshire Breeding Goal (2022-)



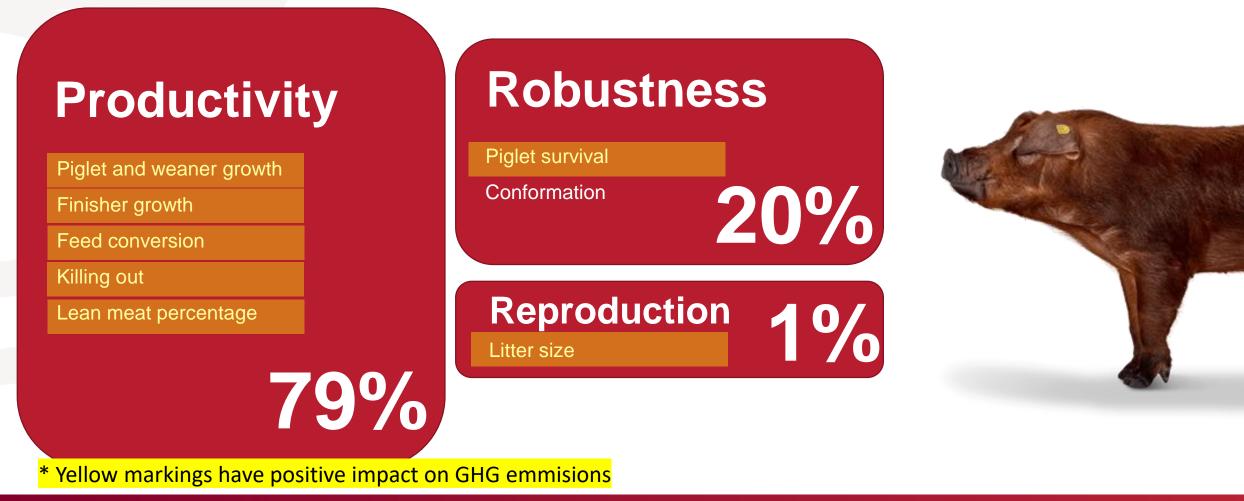
\* Yellow markings have positive impact on GHG emmisions



#### DanBred Duroc. More pork for fewer costs DanBred Duroc finisher carcasses DanBred Duroc progeny are robust DanBred and have uniform growth rates from have exceptional meat quality: Duroc birth to slaughter pH, colour and IMF DanBred Duroc is continuously selected for high lean meat percentage, matching the trend for increasingly DanBred Duroc progeny are easy heavier finishers to handle and highly social, leading to higher animal welfare DanBred Duroc is the world's most profitable and environmentally-efficient efficient terminal boar line DanBred Duroc produce litters with high survival rates and vigorous DanBred Duroc progeny have superior daily gain from piglets birth to slaughter and the best feed efficiency

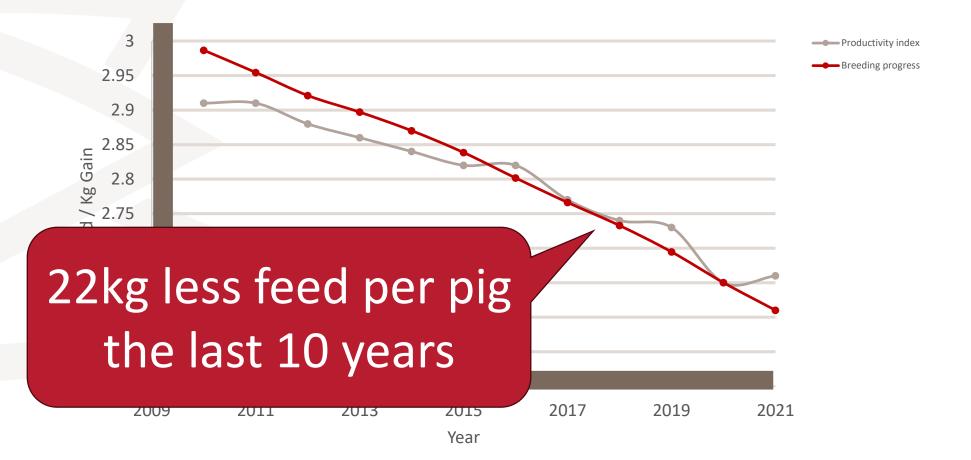


## **DanBred Duroc Breeding Goal (2022-)**



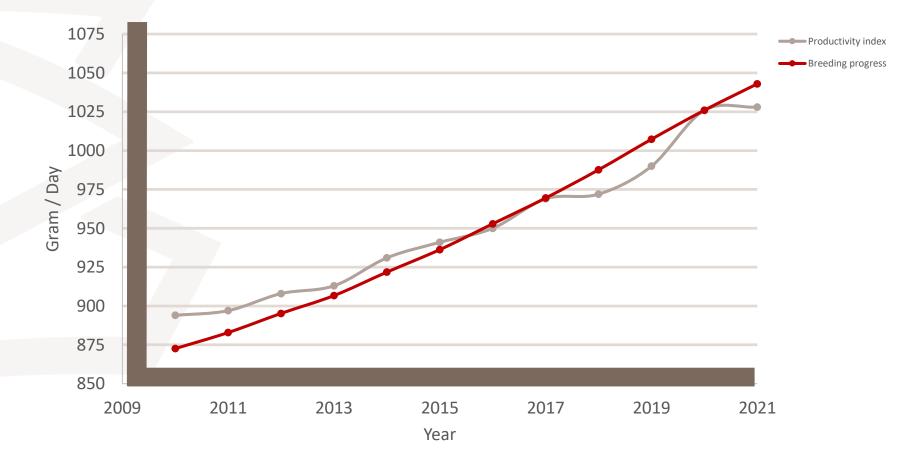


#### Feed Conversion Ratio (FCR), 30-115 kg





### Documented Results. Average Daily Gain, 30 kg - slaughter





## **Global reach**

Leverage the DanBred potential anywhere