



# A novel breeding program to improve Beef bulls for use ON Dairy cows (BonD)

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# The future production is BxD calves

- The shift to crossbreed calves leads to significant changes
  - New breeding system
  - % beef x dairy inseminations in DK Sep. 2025
    - Holstein 34%
    - RDC 37%
    - Jersey 38%
- Breeding goal and breeding plan – important links
- BonD build on previous projects
- Four years project: 2024 → 2028
- Five work packs



VB Turbo – new bull with birth index

## Purpose of BonD

*The goal is to produce high-quality veal with improved production economics and reduced climate impact.*

*This is achieved by maximizing the genetic progress per year through optimization of breeding goal and all parts of the breeding program*



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## **Breeding goal**

*Identify the animal traits that should be improved*  
*Include production, ethical and welfare aspects*

## **Breeding plan**

*Identify the structure of the breeding system*  
*Selection of animals*  
*Use of technical solutions*

## Work packs

WP1: Prospective production systems and consumer preferences

Objective: Predict future trends expected in the beef value chain within a timeframe of 10 years, regarding both production systems and consumer perception.

WP2: Genomic prediction models and genetic parameters

Objective: Estimate genetic parameters, and further develop methods for prediction of genetic merit of BonD animals.

WP3: Definition of breeding goals and their environmental footprint

Objective: Define BGs for different production systems and their expected environmental impacts

## Work packs

WP4: Optimization of breeding schemes

Objective: Design breeding schemes to optimize return on investment using stochastic simulations with the ADAM software.

WP5: Implementation in BonD breeding program

Objective: Developing a new breeding program for BonD beef breeds (e.g. Danish Blue, Charolais, Angus) at VG using tools and recommendations obtained in the different WPs.

# Large expected effects on sector level in Denmark



## Reduction after ten years

- 2,500 tons CO<sub>2</sub>-emission
  - 17,000 tons feed
  - 340 tons nitrogen
  - 40 tons phosphor
- 4,000 still born cross breeding calves



## Economy effect

- Breeding progress → 2.65 mil. Euro over 3 years
- 50,000 more cross breeding calves → 3.67 mil. Euro
- Slaughterhouses + breeding companies → 1.73 mil. Euro