



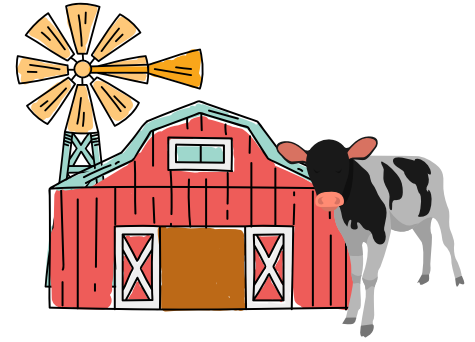
CALF FARMS IN FLANDERS

PRESENTATION OF THE SECTOR



Distribution:

- Livestock:
 - 1599 farms in total
 - => In average, 663 calves/farm
- Share of Total Production:
 - 31% of the whole European Production



Total Herd (in 2019): 1.061 Millions

Total Turnover: 1 Billion €

ENERGY NEEDS

Average Energy Consumption:



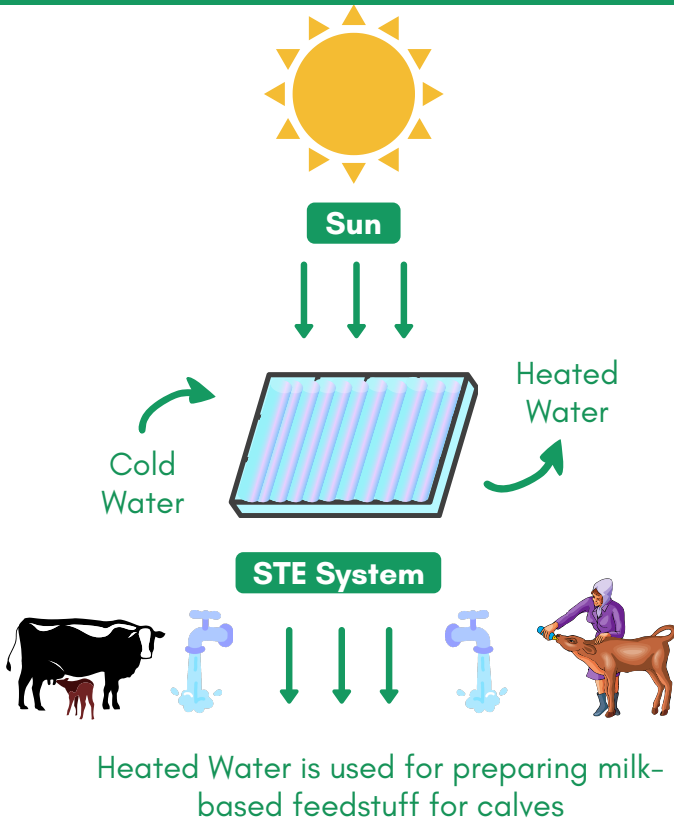
- **Total needs:** 152kWh/year/place (15% operating costs)
- **Feeding:** 38 kWh/year/place (25% of total consumption)



- **Water Supply:** 7L with 4L heated/day/calf
- **Energy:** gas/electricity (both 0,2PJ); 0.4 for all other united



MODELISATION OF FUNCTIONING



POTENTIAL FOR SOLAR THERMAL ENERGY (STE)

Hot Water in Dairy farms:

- Regular without depending on seasonality & Daily needs
- Decline of propane (66% vs RE 37%) & savings with STE up to 66%
cf. 5kg propane (STE) vs 11kg (Prior)

Relevant Cases:

- Farm rearing at least (average):
 - 185 calves during 6 months
cf. 2 lots/year
 - 164 calves over 8 months
cf. 1.5 lots/year-lot= 123 calves
- Energy needs: ≥ 20000 kWh/yea

Example: Typical Dutch Calf Farm

- 663 calves needing 4L (hot)/day
=> 2652L/day for all (heated drink)
- 967 980 L* at 50° / year (X lots)
* 888 420 L if 1 month of sanitary vacuum / only 11 months of activity
- 38kWh/place/y => 25 194 kWh/y