

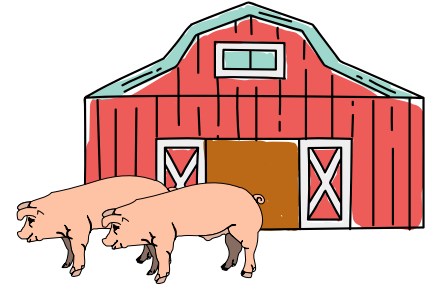
PIG FARMS IN FRANCE

PRESENTATION OF THE SECTOR



Distribution:

- Share of Total Production:
 - o Brittany (57%)
 - o Loire Valley (12%)
- Livestock:
 - o 22 000 farms in total
 - o In average, 190 sows/farm giving birth to 23 piglets each
 - o 5700 farms own 98% of sows



Total Herd (in 2020):

950 000 sows

ENERGY NEEDS

Average Energy Consumption:

- **Total needs:**
 - 900 kWh/year/place (Maternity)
 - 85 kWh/year/place (Post Weaning)
 - (46% of total operating costs)

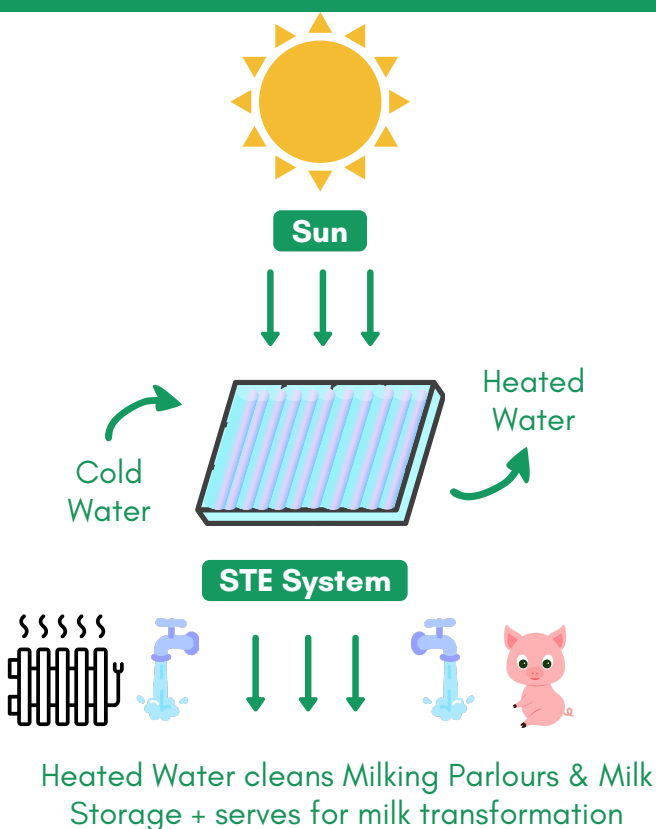


- **Heating:**
 - 729 kWh/year/place (Maternity)
 - 67 kWh/year/place (Post Weaning)
 - (80% of total consumption)



- **Water Supply:** 2 095 L/sow/year
=> 500L Maternity & Post-Weaning
+ 1095L Fattening

MODELISATION OF FUNCTIONING



POTENTIAL FOR SOLAR THERMAL ENERGY (STE)

Hot Water in Pig farms:

- Daily needs & 1st Electric Consumption
- 2 phases during Maternity
 - Two 1st weeks at 34°C
 - Two last weeks at 25°C

Relevant Cases: 5 700 holdings, with 1083 farms even more enticing

- Farm producing at least **4 370 piglets** (from **190 sows**)
- 1/3 of pig farms are equipped with generators / 1083 with fire-boilers

Example: Typical Pig Farm (Maternity)

- 190 sows giving each 23 piglets
- Warming sows (incl. babies) ≈ 34°
- 729 kWh/sows => 138 510 kWh/year

Sources: Market Analysis I4F: www.nweurope.eu/icare4farms