

DAIRY FARMS IN IRELAND

PRESENTATION OF THE SECTOR

Distribution:

- **Share of Total Production:**
 - ???
- **Livestock:**
 - 18 000 farms in total
 - XX holdings with on-farm processing
 - 11 milk processing & 13 purchasing cooperatives selling dairy products
 - In average, 90 cows/farm

Total Herd (in 2019): 1.55 Millions

Milk Production (in 2019):
7.9 Billions of tons

ENERGY NEEDS

Average Energy Consumption:

- **Total needs:** 884kWh/year/cow (12% operating costs)
- **Cleaning:** 144-338 kWh/year/cow (?23?% of total consumption)
- **Milk Processing:** 254kWh/year /litre of milk
- **Water Supply:** 200-500 L/day

Potential for Solar Thermal Energy (STE)

Hot Water in Dairy farms:

- Daily needs & 2nd Electric Consumption
- Regular without depending on seasonality

Relevant Cases:

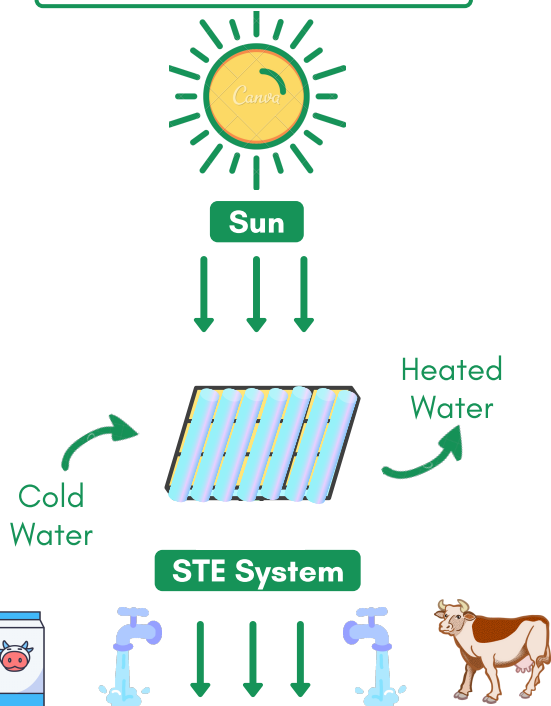
- Farm processing at least XX **L milk/year** (production of XX **cows**)
- Extra hot water requirements due to milk thermisation

=> **1L of hot water for 1L of milk**

Example: Typical Irish Dairy Farm

- XX cows producing XX L/y
- XX L at X-XX° for cheese
- XX kWh/L Milk => XX kWh/y

MODELISTATION OF FUNCTIONING



Heated Water cleans Milking Parlours & Milk Storage + serves for milk transformation