



Sira

# Milk Chiller Presentation

# Hybrid Power Solution for Milk Chillers

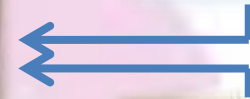
Existing power system at Kot Momin Farm



Milk Chiller 500 Lt



National Grid



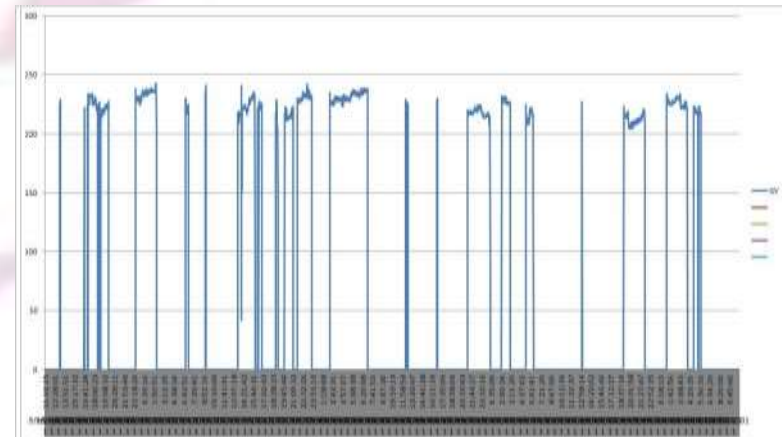
Load is made by:

- Compressor/condenser of the milk chiller and mixer.
- Water pump for washing the milk chiller.
- Milk transfer pump (located onboard the truck).
- Gerber machine for milk analysis.

Power of the condenser/compressor/mixer is about 3 KW and it runs for approximately 3 - 5 hours per day (2 milking per day), to reduce the milk temperature from room temperature to 4 °C as required by International Food Safety standards.

After this phase the chiller starts to cycle ON/OFF to mix the milk (basically the chiller will need power for 15 minutes every 2 hours).

Unstable national grid or offgrid situation

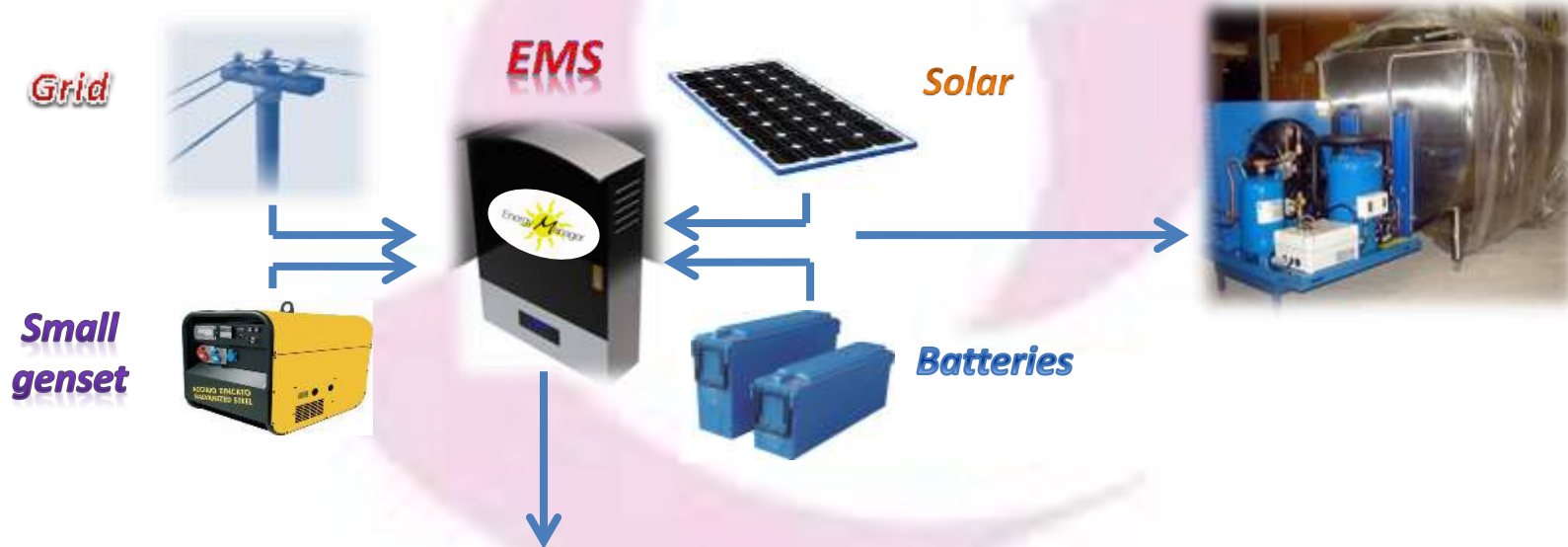


# Sira Power Management Solution: EMS

EMS System / Inverter and Alarm Bell



PV Panels, 48 Volt system configuration



Architecture				Gen10		12-200FT	
⚠	📡	📡	📡	📡	📡	📡	📡
KDM P320 (kW)	Gen10 (kW)	12-200FT	VE 5000 (kW)	Hours	Fuel (L)	Autonomy (hr)	
5.76	10.0	12	5.00	114	137	37	

EMS Performances



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*Thank You*

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