

Project Developer
Tree_Sea.mals

Tree_Sea.mals is a local, women-led company that utilises renewable energy solutions to link communal markets and agribusiness processors to cold chain.



SOLAR POWERED COMMUNAL REFRIGERATION



Total Project Budget
EUR 290 000

EEP Africa Financing
EUR 200 000

Project Partners
Wings of Empowering Pastoralists, Accent Cooling, Knights Energy, VE Energy, Kenya Meat Commission, TLO Law, Nairobi City Council

Type
Pilot project
Stand-alone

Project Code
KEN16152


Technology
Solar PV

Location
Kenya

This project will pilot solar-powered cold storage in the livestock value chain. Using a B2B model, Tree_Sea.mals will target Nairobi meat markets that source from low-income pastoralist groups in Northern Kenya. The pilot will be the Burma market, which trades over 2,500 carcasses per week and is the main retail outlet for butcheries handling 93% of household meat purchases. The project will set up PAYG units with 15 kWp and the capacity to cool 864 tonnes of meat per year. These will provide the anchor load for a solar PV mini-grid and reduce post-slaughter food loss by about 288 tonnes per year. EEP Africa financing will cover capex costs, enabling this start-up to develop and prove its innovative business model.



Outcome and Impact

Three cold storage units will serve up to 156 meat traders at the market. The switch from current cold storage technologies to a shared solar-powered cooling solution is expected to reduce energy costs by EUR 23,750 per year. The project also aims to reduce emissions by over 77 tonnes of CO₂e per year and create 36 new jobs.