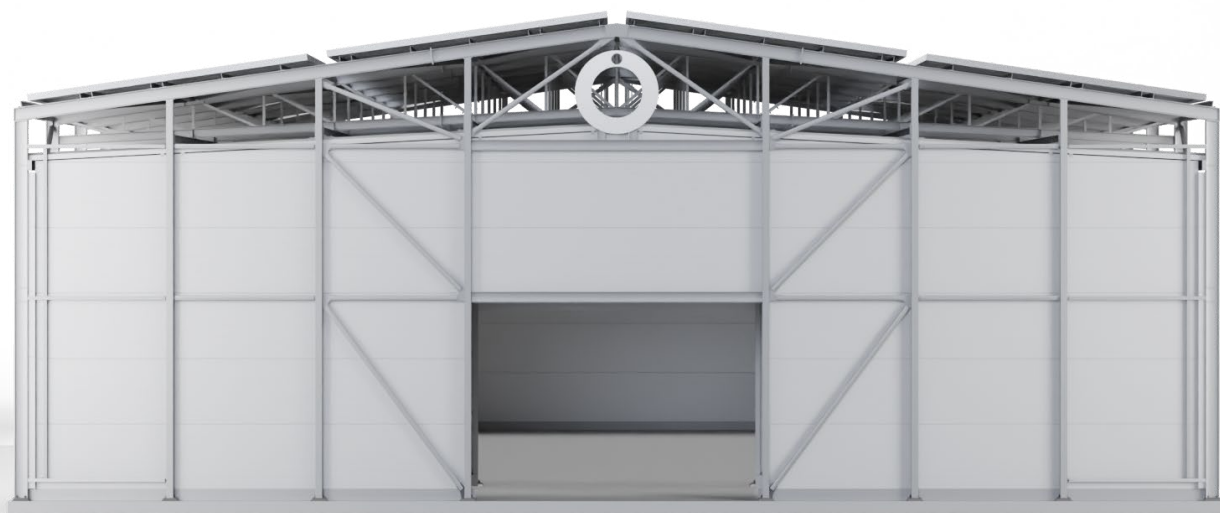


Much Cooler.

**Fully off-grid cooling hall.
Nutrition security. Food quality.
Price stability. Global Impact.**

Operated on renewables
Combats post-harvest loss
On-/ Offline Optimised Control And Monitoring



Much Cooler.

Much Cooler.

Nutrition security. Food quality. Price stability.

The Off-Grid Europe Much Cooler, an insulated cooling hall, embodies our commitment to sustainable agriculture, combating post-harvest loss, reducing carbon footprint, and ensuring long-term food sovereignty.



Turnkey & Scalable Infrastructure

Delivered pre-assembled with integrated cooling, battery, PV-ready frame, and software. Much Cooler is quick to install and easy to scale. The patented exoskeletal metal structure simplifies transport and setup while supporting PV panels and extreme weather durability—making it ideal for fast deployment anywhere.



Fully Off-Grid & Solar Powered

Much Cooler operates completely off-grid using integrated photovoltaics and battery storage (Ohms Box by Off-Grid Europe). This ensures reliable, round-the-clock cooling powered by renewable energy. The system minimizes operating costs, eliminates diesel dependency, and performs even in weak-grid or remote locations with no power infrastructure.



Designed for Local Impact

It is built to support rural jobs and local value creation. It's easy to service with minimal tools, includes optional office space, and allows local teams to manage operations, processing, and maintenance - promoting sustainability and long-term ownership within the community.



Combating Post-Harvest Loss

Much Cooler tackles one of agriculture's biggest challenges in developing economies - post-harvest loss. By providing stable, off-grid cold storage near farms, it prevents spoilage and waste during storage, transport, and market delays. This preserves quality, boosts farmer income, and strengthens local food systems from the ground up.

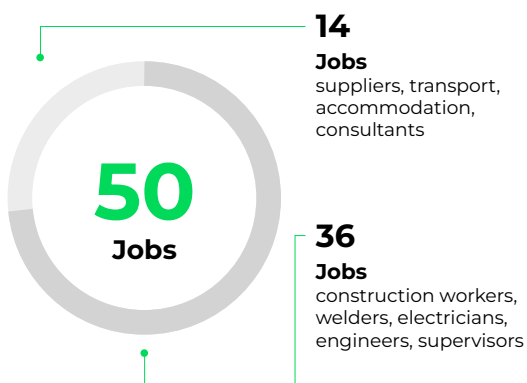
Datasheet.

Cooling Section	Operation temperature	1 °C to + 35 °C (34 °F to +95 °F)
	Ambient external temperature	-10 °C to +50 °C (14 °F to +122 °F)
	Humidity	5 % – 90 %
	Maximum installation altitude (above sea level)	2000 m
Cold Store Hardware	Storage capacity 300t to 5000t vegetables and fruit (scalable by modular approach beyond 5000t)	
	R32 based cooling stack engineered for extreme environments (Ozone depletion potential, ODP)	
Grid/Genset/ Off-Grid options	Grid power export when battery is full and excess solar production	
	Grid stabilization mode for remote areas to push/pull power	
	Genset option for areas where solar penetration is not optimal	
Interface	User interface Ethernet (Modbus TCP / UDP, Web Server)	2 x RJ-45 (switched)
	System interface (module connection, backplane)	RS-485 (RJ-45)
	Optional: cloud based server	
Software	MuchCooler WMS	
	Cold Storage Warehouse Management System	
	OffGridController Power Management software	
	Much Cooler Environmental Local Management software	
Additional options	Electric forklift 2.5t	
	1 st floor Mezzanine office area	
	Stackable Storage boxes for optimal use of space	
Standards	EU directives (CE)	
	Electromagnetic compatibility directive	2014/30/EU
	EN 62040-2 2006/AC:	2006 class 1
	EN 62109-1 2010	
	Safety (C, US)	
	CSA C22.2	No. 107.1 – 16
	UL 1741 / 62109-1	Second Edition / National Differences
	IEC 62109-1	First Edition

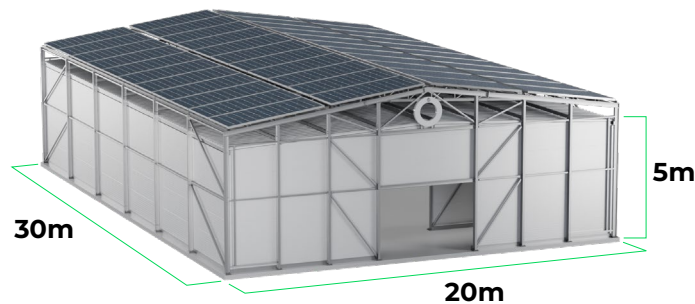
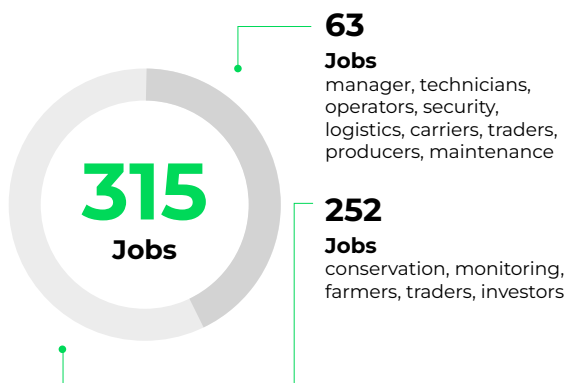
Impact.

The Much Cooler Post-Harvest Cooling System not only reduces food waste but also creates local job opportunities by enabling small-scale farmers to manage and operate sustainable cooling facilities.

PROJECT DURATION



LONG-TERM



Empowering Communities Through Technology

The Off-Grid Europe Much Cooler system provides reliable, solar-powered refrigeration that helps reduce food losses and sustain local agriculture. By supporting food security and creating new opportunities, it enables communities to strengthen their livelihoods and shape a sustainable future on their own terms.

Unlock the Potential of Renewable Energy and Knowledge

Let's make the future of off-grid living smarter, more connected, and sustainable.

Off-Grid Europe GmbH

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