

Sustainability initiatives

The world has become more conscientious of the environment with: widespread recycling, manufacturing restrictions on harmful components, and natural resource conservation. Energy is not free and there is a finite amount of energy in the world. In order for today's cold storage products to meet the standards of the sustainable world we live in, the products had to change. The Thermo Scientific™ TSX Ultra-Low Temperature Freezers and STP Ultra-Low Temperature platforms are among the leaders in the industry's green movement.

Key takeaways/benefits/separating features

- In recent years, the requirement for sustainable ("green") products has grown drastically.
 - This has been driven by programs such as EPA Energy Star® and other governmental directives towards green alternatives to items such as refrigerants and insulation.
 - The US EPA and the DOE have been lead agencies in driving for more sustainable products in the market.
 - Additionally, sustainability efforts globally have been supported through United Nations efforts (The Montreal Accords and the Kigali Amendment to the accords).
 - Many states and/or organizations now have sustainability programs in place that can provide financial benefit to a customer who purchases a product considered "sustainable".
 - In many cases, these programs supersede other purchasing criteria and specifications.
 - These programs can take the form of rebates back to a lab or reduced up-front cost and are often managed by 3rd party companies on the behalf of energy companies or universities.
- These programs are more and more pervasive, especially in the western US and the northeastern US—correlating to areas of high electrical grid stress.
 - Customers are increasingly asking for the following types of information: kW-hr/day, estimates for yearly energy consumption, estimates for life time energy usage, cost per vial, cost per footprint.
 - Calculating the overall cost of usage, including door openings and standard usage, to get more realistic estimates of consumption.
 - We have tools designed to assist with these calculations.

In review

Efficient components, water-blown insulation, and clean hydrocarbon refrigerants are what set Thermo Scientific's Ultra-Low Temperature (ULT) Freezers among the leaders in the market today. ULT freezers used to consume as much energy as a house, and we now offer freezers that use under 10kW-hr/day. ENERGY STAR® recognizes the importance of the efficiency of these products and that is why the EPA is now certifying laboratory refrigerators, freezers and ultra-low temperature freezers under the ENERGY STAR program. All of the TSX ULT Freezers bear this certification. While Thermo Fisher Scientific is continually innovating and improving its products, the ULT freezer portfolio has been at the forefront of the sustainability curve and we strive to maintaining our presence as a leader in making the world healthier, cleaner, and safer.

Find out more at thermofisher.com/ult

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