



freezer
challenge.

Name

PI Name Lab

2021 Completed Scoresheet

5 January 2021

Sponsored By:

eppendorf



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systems

Estimated kWh/day saved: *

*This is based on questions where the energy savings was automatically calculated. Some questions will be manually calculated and this value may change based on how you answered those questions.

Lab Information

Your Name: Name

PI Name or Lab Name: PI Name

Organization (University, Company, etc.): Your Organization

Department: Your Department

City/State/Province: Your City/State/Province

Country: Your Country

Email Address: Your Email Address

Our organization is best characterized as: Academic Institution

Our labgroup is best characterizes as: A laboratory with fewer than 10 lab members.,na

Good Management Practices

Identify the number of refrigeration units in each category that you have defrosted.

UULT freezers (anything colder than -96°C):

ULT freezers (between -40°C and -96°C):

-30°C and/or -40°C freezers:

-20°C freezers:

4°C refrigerators:

Identify the number of refrigeration units in each category from which you have removed the dust from the intake or coils.

UULT freezers (anything colder than -96°C):

ULT freezers (between -40°C and -96°C):

-30°C and/or -40°C freezers:

-20°C freezers:

4°C refrigerators:

Identify the number of cold storage units for which you have created new sample inventories or updated existing inventories since August 2020.

UULT freezers (anything colder than -96°C):

ULT freezers (between -40°C and -96°C):

-30°C and/or -40°C freezers:

-20°C freezers:

4°C refrigerators:

Identify the number of refrigeration units from which you have cleaned out or removed samples/other items since August 2020.

UULT freezers (anything colder than -96°C):

ULT freezers (between -40°C and -96°C):

-30°C and/or -40°C freezers:

-20°C freezers:

4°C refrigerators:

Approximately how many samples have you discarded in total (since August 1, 2020), across all the cold storage units you cleaned out samples from? Provide your best estimate; select a single answer.

If you know the number of samples you discarded, please describe here. This question will not be scored...the previous question will. But if you have this information and wish to share it with us or your organization's site coordinator, please include it here.

Estimate the number of full, standard freezer boxes that your lab has replaced with high density format freezer boxes.

Temperature Tuning

Identify the number of ULT freezers whose set points have been adjusted from -80°C to -70°C or warmer. Please indicate the number of freezers whose set points were adjusted to -70°C prior to the 2021 Freezer Challenge (before August 2020) and during this Freezer Challenge (after August 2020).

Number of ULT freezers set at -70°C or above prior to 1 August 2020:

Number of ULT freezers set at -70°C or above after 1 August 2020:

Identify the total quantity of samples or other items that you moved from a colder storage temperature to a warmer storage temperature, across all the cold storage units you did this for. Some examples of how you could do this are, a) moving samples out of a colder unit into a slightly warmer one such as -70 C to -20 C, or b) changing the set point of a cold storage unit to a warmer temperature such as warming a -40 C unit to -20 C. Do not count warming an ultra-low to -70 C for this question though, as this was captured in question 1 on this page.

Retirements and Upgrades

Identify the number of cold storage units that you retired as a result of them being empty or no longer needed. (In other words, retirement without replacement. Your answer to this question SHOULD NOT be identical to the answers you give for the next question on energy efficient upgrades).

UULT freezers (anything colder than -96°C):

ULT freezers (between -40°C and -96°C):

-30°C and/or -40°C freezers:

-20°C freezers:

4°C refrigerators:

Identify the number of cold storage units that you upgraded to a more energy-efficient model.

UULT freezers (anything colder than -96°C):

ULT freezers (between -40°C and -96°C):

-30°C and/or -40°C freezers:

-20°C freezers:

°C refrigerators:

If you have upgraded to a more energy-efficient cold storage unit, please indicate the energy consumption differential between the old unit and the new unit, in kWh/day. If you have upgraded more than one unit per category please indicate the total kWh/day savings in the box below. If you do not know the energy consumption difference please indicate the freezer models or upload the specification sheets below.

UULT freezers (anything colder than -96°C):

ULT freezers (between -40°C and -96°C):

-30°C and/or -40°C freezers:

-20°C freezers:

4°C refrigerators:

Sharing and Room Temperature Sample Storage

Identify the number of research groups that share cold storage space with your lab in each of the categories below.

UULT freezers (anything colder than -96°C):

ULT freezers (between -40°C and -96°C):

-30°C and/or -40°C freezers:

-20°C freezers:

4°C refrigerators:

Identify the number of refrigeration units that contain barcoded inventory.

UULT freezers (anything colder than -96°C):

ULT freezers (between -40°C and -96°C):

-30°C and/or -40°C freezers:

-20°C freezers:

4°C refrigerators:

Please indicate the number of times you have tried room temperature sample storage (RTSS) for well plates and/or sets of 25 tubes.

Well Plate:

Set of 25 Tubes:

Please indicate the number of reagents or kits THAT USED TO BE STORED AT 4 C OR COLDER that are now stored at room temperature.

Reagents:

Kits:

If you have adopted room temperature sample storage, please select the total number of well plates, sets of 25 tubes or vials, round bottom flasks, and/or 2" boxes that are currently being stored at room temperature that had previously been stored in refrigerators or freezers. Select a single answer.

Additional Information

Please describe any additional actions your lab has taken to improve sample management or reduce the environmental impact of cold storage. Do not restate other answers you provided in the scoresheet. Only include different actions that the scoresheet did not cover.

Please indicate the number of refrigeration units in your lab for each category.

UULT freezers (anything colder than -96°C): 0

ULT freezers (between -40°C and -96°C): 0

-30°C and/or -40°C freezers: 0

-20°C freezers: 0

4°C refrigerators: 0