

# NTU ULT Freezer Challenge 2017 Record Sheet

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## INSTRUCTIONS

### PART I : Applicant & ULT Basic Information

- Particulars are extracted from the application form, if there is any changes to be made please send email to [EcoCampus@ntu.edu.sg](mailto:EcoCampus@ntu.edu.sg)

### PART II : Baseline

- The record of the power usage will be recorded by organiser.
- The average power usage [kWh/day] will be shared to the individual applicant subsequently after the start of the practices implementation.

### PART III : Adopted practices

1. With reference to the score sheet issued to you (the applicant), please read and select one of the recommended practices (refer to the score sheet) which you want to start with. Then fill in the necessary information and proceed with the needed actions in order to obtain the point(s) for the practice.
2. For those practices which require photos to be sent via Email. Do forward the photos to [EcoCampus@ntu.edu.sg](mailto:EcoCampus@ntu.edu.sg). Ensure that the display is in clear resolution for verification purpose. After sending the image, please tick in the [Check<sup>1</sup>] column.
3. After that, select another practice which you want to adopt and then again repeat 1, 2 and so on.
4. From time to time, reps from ERI@N may visit you and make request for access to the freezer location to check on the recording order.
5. Please ensure that the power meter is not powered off unless there is a necessity to do so due to the practice like defrosting.
6. At the end of this practice exercise, the organiser will liaise with you on the date and time to retrieve the meter and collect the written record sheet. Please do not power off or remove the power meter until the organiser has recorded the necessary information.
7. For any clarification or problems encountered during the period, please send email to [EcoCampus@ntu.edu.sg](mailto:EcoCampus@ntu.edu.sg)

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<b>PART I : Applicant &amp; ULT Basic Information</b>				<b>Meter Tag no:</b>	ERI@N-M01
Applicant Name:	Akid			Room Unit No:	tyt-08-08
Brand:	Sanyo	Model:	MDF-0808	Serial No:	708495823

<b>PART II : Baseline [To be recorded by organiser]</b>				Set point Temperature (Current):	<input type="text"/> °C
Start Date & Time (24hr)		End Date & Time (24hr)		Power Display	Photo record <sup>1</sup>
[dd/mm/yy]	[hh:mm]	[dd/mm/yy]	[hh:mm]		
				kWh	<input type="checkbox"/>

S/N	Practice	For Applicant recording and actions		Check <sup>1</sup>	By Organiser
1	Defrost & remove dust from intake or coils (2pts)	Start Date & Time [dd/mm/yy], [hh:mm]	Completed Date & Time [dd/mm/yy], [hh:mm]	<input type="checkbox"/>	
		<ul style="list-style-type: none"> <li>Photo(s) of the internal ULT compartment before and after defrost exercise shall be sent via Email for verification.</li> </ul>			
2	ULT Clean out (1pt)	Approx. Total disposal capacity:	m <sup>3</sup>	<input type="checkbox"/>	
		<ul style="list-style-type: none"> <li>Photo of the discarded items to be sent via Email</li> </ul>		<input type="checkbox"/>	
		<ul style="list-style-type: none"> <li>Photo(s) of the internal ULT compartment before and after clean out exercise shall be sent via Email for verification.</li> </ul>		<input type="checkbox"/>	
		Oldest Sample discarded:			
		From year: (mm/yyyy)	Photo of the sample to be sent via Email.	<input type="checkbox"/>	
3	Sample Inventory (1pt)	<ul style="list-style-type: none"> <li>Provide researcher, sample, sample date, experiment information on paper or file which have to be updated to the most recent sample additions and removal (@ least 90% complete inventory)</li> </ul>		<input type="checkbox"/>	<input type="checkbox"/>
4	Inventory barcoded (3pt)	<ul style="list-style-type: none"> <li>Photos of the barcoded storage containers, or display during collection of the power meter.</li> </ul>		<input type="checkbox"/>	<input type="checkbox"/>
5	Sharing (per additional PI) (2pts, Capped max 8 pts)	<ul style="list-style-type: none"> <li>Photo(s) illustrating the demarcation of the shared ULT shall be sent via Email for verification. Photo of the ULT with names of the PI are also acceptable.</li> </ul>		<input type="checkbox"/>	
6	Chill Up! (per 10°C) (3pts)	Start Date & Time [dd/mm/yy], [hh:mm]			
		Power (on the meter display) @ the start of this practice		kWh	
		The photo of the power value display (of the above) on the power meter to be sent via Email (refer to Annex B).		<input type="checkbox"/>	
7	DNA @ -20°C (3pts)	<ul style="list-style-type: none"> <li>Photos of the DNA in the -20°C freezer, or display during collection of the power meter.</li> </ul>		<input type="checkbox"/>	<input type="checkbox"/>

<sup>1</sup> Tick after the photo(s) are sent via Email as it is for record and verification (when necessary)

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S/N	Practice	For Applicant recording and actions	Check <sup>1</sup>	By Organiser	
8	Retire and upgrade to an existing and better energy efficient ULT (4pts)	<ul style="list-style-type: none"> <li>Photos of the existing replaced ULT, or display during collection of the power meter.</li> </ul> <p>Following information can be found on the nameplate at the side of the equipment:</p>	<input type="checkbox"/>	<input type="checkbox"/>	
		Brand: <input type="text"/> Model: <input type="text"/>			<input type="checkbox"/>
		Serial No: <input type="text"/> Capacity: <input type="text"/> Litres			
		Power: <input type="text"/> kWh/day Age: <input type="text"/> year(s)			
9	Retire and upgrade to an existing and better energy efficient ULT (6pts)	<ul style="list-style-type: none"> <li>Photos of the existing replaced ULT, or display during collection of the power meter.</li> </ul> <p>Following information can be found on the nameplate at the side of the equipment:</p>	<input type="checkbox"/>	<input type="checkbox"/>	
		Brand: <input type="text"/> Model: <input type="text"/>			<input type="checkbox"/>
		Serial No: <input type="text"/> Capacity: <input type="text"/> Litres			
		Power: <input type="text"/> kWh/day			
10	Operating space temperature of $\leq 25^{\circ}\text{C}$ (1pt)	<ul style="list-style-type: none"> <li>Verified by ERI@N reps.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
11	Store ULT in well ventilated space and away from heat sources (1pt)	<ul style="list-style-type: none"> <li>Verified by ERI@N reps.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
12	No item(s) stored on top off or around the ULT. (1pt)	<ul style="list-style-type: none"> <li>Verified by ERI@N reps.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	

Collection of the power meter (To be filled by organiser)		Date & Time:	
Current operating ULT temperature:	<input type="text"/> °C	Current set point ULT temperature:	<input type="text"/> °C
Power [kWh]:	<input type="text"/>	Time [00:00]	<input type="text"/>
Day [no]	<input type="text"/>		
Photo of the power meter display <sup>1</sup> :	<input type="checkbox"/>		

<sup>1</sup> Tick after the photo(s) are sent via Email as it is for record and verification (when necessary)