



## 2022 ABUAD ENERGY CONSERVATION AND WASTAGE MANAGEMENT

In 2022, the Energy Audit was conducted by the Directorate of Works and Services. There was a 30% increase in the quantum of energy through the University Independent Power Project (Renewable Natural Gas and Hydro) and Solar thereby making it a total of 4.68 gigajoules of energy. Against the high consumption of energy in the University in January 2021 whereby the University consumed almost 100% of the 3.6 gigajoules (2.599 gigajoules) due to the use of high-powered and energy-consuming bulbs and fluorescent lights, incessant usage of electrical and electronics appliances by students and staff, improper management and use of high-powered and energy-consuming fans and air conditioners during non-classes (off lecture) hours in the classroom and other laboratories, utilization of high powered electrical devices that consume much power and switching on of electrical appliances and lightings during the day time even when the sunlight has illuminated the rooms well. All these energy accumulations lead to wastage and undue GHG emissions. However, the full implementation of the Energy Conservation Policy of the University wherein it was stated that existing buildings' lighting should be changed to LED lighting with low power and emissions while new builds should make use of LED lighting, engaging the use of energy control devices and proper awareness and sensitization of energy conservation has reduced ABUAD's energy wastage and conservation thereby increasing the 50% energy reduction in December 2021 to about 78% in December 2022. This has provided more opportunities to redirect the energy to power more neighboring local communities.

It should be noted that the source of the highest energy wastage, which is the use of traditional bulbs and high-powered electrical devices which accounted for about 65% of the wastage as of December 2021 has been reduced to the barest minimum if there is any more available in December 2022.

*Table 1: below shows ABUAD's energy sources in 2022 while Table 2: shows ABUAD's Total Energy usage and conservation (wastage management) in 2022. Fig 1. Shows a bar chart showing the relationship between Total Energy and its usage while Fig 2. Shows a Bar Chart showing ABUAD's Total Energy about its usage and conservation from January 2022 to December 2022 via Energy Audit*

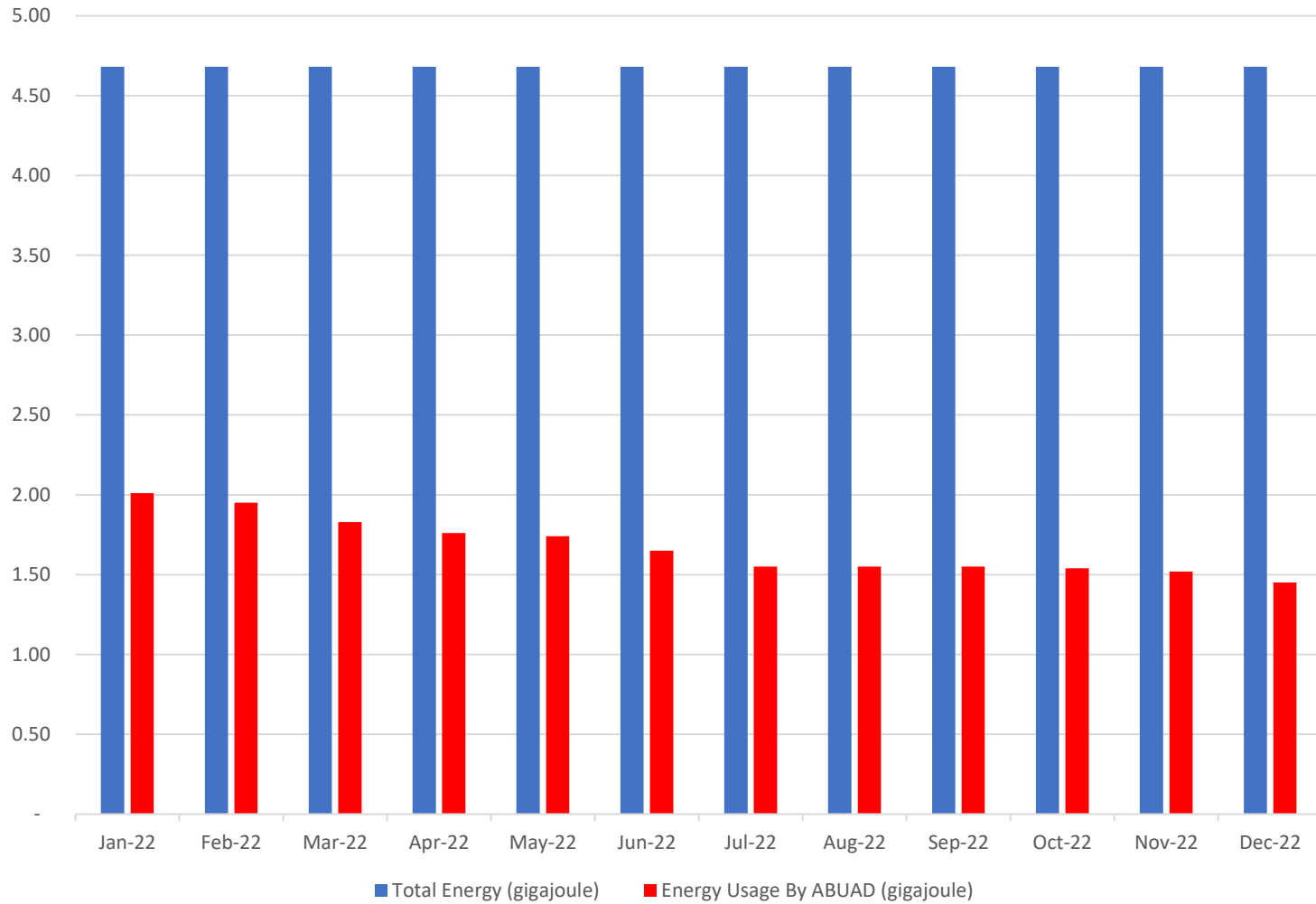
**Table 1: ABUAD Energy Sources**

Source	Energy (gigajoules)
<b>A. Independent Power Project</b>	<b>2.90</b>
i. Renewable Natural Gas	0.68
ii. Hydro	
<b>B. Solar</b>	<b>1.10</b>
<b>Total Energy</b>	<b>4.68</b>

**Table 2: ABUAD Total Energy, Energy Usage, and Energy Conserve (Wastage Management) from January 2022 to December 2022**

Month	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
<b>Total Energy (gigajoule)</b>	4.68	4.68	4.68	4.68	4.68	4.68	4.68	4.68	4.68	4.68	4.68	4.68
<b>Energy Usage By ABUAD (gigajoule)</b>	2.01	1.95	1.83	1.76	1.74	1.65	1.55	1.55	1.55	1.54	1.52	1.45
<b>Energy Conserved for Local Communities (gigajoule)</b>	2.67	2.73	2.85	2.92	2.94	3.03	3.13	3.13	3.13	3.14	3.16	3.23

ABUAD Total Energy and Energy Usage From January 2022 to December 2022



**ABUAD Total Energy, Energy Usage and Conservation (Wastage Management) From January 2022 to December 2022**

