Universidad Nacional del Comahue

Research Report

INFORMATION AND AWARENESS CAMPAIGN ON ENERGY EFFICIENCY AT FaEA

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Abstract

The purpose of this work is to promote awareness and knowledge about energy efficiency among students of the Faculty of Economics and Administration (FaEA) of the National University of Comahue. Based on an informative campaign on social media, complemented with surveys and a focus group, the aim was to gather perceptions, habits, and knowledge levels related to responsible energy use within the university environment. The results showed that, although there is the practice of certain saving behaviors—such as maximizing natural light or turning off unnecessary lights—a limited understanding of energy efficiency and its environmental impact persists. Solar energy was identified as the most viable renewable alternative for the institution, both for its technical feasibility and its educational value. Although low participation restricted the quantitative scope of the study, the qualitative analysis allowed for the recognition of an incipient environmental awareness and a growing interest in sustainability. It is concluded that it is necessary to strengthen university energy education through comprehensive strategies that articulate communication, training, and institutional management, in line with Sustainable Development Goal No. 7: Affordable and Clean Energy.

Keywords: Energy; Awareness; Sustainability

1. INTRODUCTION

Energy efficiency and the transition towards the use of renewable energy are issues of increasing relevance today. This interest is reflected in both socio-political spheres and in small and medium-sized communities, due to their direct impact on climate change and daily life. In the university context, numerous institutions globally have assumed an active role in training students—and thus, citizens—committed to the responsible use of resources. Examples include Cornell University (USA), which developed the Energy Smackdown project to reduce energy consumption on campuses; North Carolina State University, with the Think Smart, Save Energy campaign, focused on promoting small habit changes; and the Student Switch Off initiative in the United Kingdom, which promotes energy efficiency through friendly competitions among university groups. These international experiences align with the proposals of Dragomir (2025), who argues that the transition towards renewable energy requires not only technological changes, but also sustainable business models (SBMs) that integrate environmental, social, and educational objectives within organizations, promoting transparency, resource efficiency, and the creation of social value. In turn, Romsdahl (2021) emphasizes the importance of strengthening public understanding of energy infrastructure and its role in mitigating climate change, highlighting the need for education and communication to generate citizen engagement. However, at the National

University of Comahue, there are still few studies and actions that measure or promote awareness of efficient energy consumption among students. For this reason, the present project seeks to evaluate and promote knowledge and good practices of energy efficiency at the Faculty of Economics and Administration through an informative campaign on social media, surveys, and focus groups.

2. METHODOLOGY

DATA TO BE COLLECTED: The necessary data for this research is organized into three complementary phases. The first phase seeks to identify the level of knowledge that the Faculty's students possess about efficient consumption and the use of renewable energy. The second phase is aimed at collecting secondary information linked to the selected Sustainable Development Goal (SDG) and our academic texts related to the topic, with the purpose of preparing quality educational material to serve as the basis for the digital campaign. Finally, the third phase consists of conducting a new measurement—or mapping—of students' knowledge, with the objective of evaluating the impact generated by the implemented campaign.

SAMPLE/STUDY PARTICIPANTS: The data comes from a non-probabilistic sample consisting of university students who participated voluntarily, motivated by their interest in the topic. These students belong to the Faculty of Economics and Administration of the National University of Comahue, and thus include young people from the city of Neuquén as well as nearby localities, such as Cipolletti or General Roca. The age range was not taken into account nor was distinction made between different degree programs, considering only that they were from FaEA.

DATA COLLECTION METHODS:

GOOGLE FORMS: Survey sent via FaEA WhatsApp groups. - Quantitative Method -

BIBLIOGRAPHIC SEARCH: Part of the information shared through social media was with the help of AI and other sources.

FOCUS GROUP: Finally, a focus group was conducted to obtain richer answers in terms of information and opinions about what was learned through the campaign. - Qualitative Method -

Question: 'After reading the information posted on Instagram, how did your thinking about renewable energy and efficient energy consumption change? Do you have any specific ideas that could be applied to the faculty? Your answer.'

PROCEDURE: ACTIVITY SCHEDULE

Activity	AUG. 2025	SEPT. 2025	OCT. 2025	NOV. 2025
PRE-CAMPAIGN KNOWLEDGE SURVEY	X			
PUBLICATION OF INFOGRAPHICS AND RELATED NEWS		X	X	
FOCUS GROUP			X	
RESULTS ANALYSIS				X
FINAL REPORT				X

3. RESULTS

The survey mentioned in the methodology section was administered between September 27 and 28, 2025, with a final update on October 15, 2025. A total of 10 responses were obtained from members of the university community. Saving practices at home and while studying: The majority of participants indicated that they 'almost always' or 'always' turn off the lights when leaving a room.

Regarding the type of lighting, LED and low-consumption bulbs were the most used. However, 60% of respondents mentioned that, although they turn off electrical equipment, they usually leave them plugged in, which represents an opportunity for improvement in daily habits. Use of natural light: 70% of participants stated that they frequently use natural light to study or work, either at home or in university spaces. Saving practices at the university: The most mentioned actions were 'turning off lights when leaving an empty classroom' and 'maximizing natural light in hallways and classrooms,' followed by 'unplugging unused equipment'. Knowledge about renewable energy: 60% of respondents indicated having a medium level of knowledge, while 30% recognized a low level and the rest a high level. Most feasible renewable energy: Unanimously, participants pointed to solar energy (photovoltaic panels) as the most viable source to implement at the university. Identified limitations: The main barriers mentioned were high initial cost, lack of information and training, reduced physical space, and lack of institutional or regulatory support. Expected positive impacts: The most valued effects were reduction of electricity costs, decrease in carbon footprint, and energy independence. Participation in initiatives: The majority expressed willingness to participate in workshops or campaigns as long as the schedule permitted. Regarding renewable energy projects, 60% indicated they would participate in related academic or research activities. Despite the findings, the low participation (n=10) evidenced limited initial involvement of the university community. This led the team to complement data collection with a focus group of five participants, who provided deeper insights by reflecting on the Instagram content and sharing improvement ideas for the faculty.

4. DISCUSSION

Based on the results obtained, it is observed that, although the sample was small, it was composed of a varied group of students from different degree programs within the same faculty. In general, a low conceptual awareness of the topic was evident, although accompanied by good daily saving habits, such as turning off lights or maximizing natural light. This pattern aligns with international studies indicating that many people adopt basic sustainable behaviors but lack a deep understanding of the relationship between those habits and global climate mitigation challenges. Solar energy was unanimously identified as the most viable option for implementation at the university. The content disseminated on the project's Instagram account—composed of infographics, findings, and news about experiences from other universities—served a dual purpose: to raise awareness locally and provide comparative data. The success of energy efficiency strategies depends not only on communication but also on sustainable organizational models (SBMs). In contrast, the local university environment is still in an early awareness stage, closer to consciousness-building than policy implementation. Given the low participation, the team replaced the second survey with a focus group, which provided a richer, contextualized analysis. This participatory approach aligns with community-centered sustainability methods, where change is driven through co-created knowledge and local engagement.

5. CONCLUSION

Although the research was not quantitatively significant due to low participation, it was significant in the qualitative aspect, by showing that students possess certain knowledge and energy-saving habits that do not come from a deep understanding of the subject, but from isolated practices. This finding emphasizes the importance of promoting a more comprehensive energy education within the university environment. It is recommended that the university move towards implementing an energy management system that combines education, communication, and action, referencing the experiences of other national and international universities, and in accordance with SDG 7: Affordable and Clean Energy. Future research could expand the sample and evaluate the long-term impact of this type of campaign on university behaviors and policies.

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