

## **Edukasi Hemat Energi melalui Instagram untuk Peningkatan Kesadaran di Kalangan Kawula Muda**

### **Energy Saving Education through Instagram to Raise Generation-Z Awareness**

**Yuni Damayanti Nainggolan<sup>1</sup>, Amanda Natania Gracia<sup>1</sup>, Oktavia Rahmi Wulandari<sup>1</sup>, Marvin Horale Pasaribu<sup>1</sup>, Tety Wahyuningsih Manurung<sup>1</sup>, Rokiy Alfanaar<sup>1</sup>, Utami Irawati<sup>2</sup>, Djihan Ryn Pratiwi<sup>3</sup>, Mokhamat Ariefin<sup>1\*</sup>**

<sup>1</sup> Program Studi Kimia, Fakultas Matematika Ilmu Pengetahuan Alam, Universitas Palangka Raya

<sup>2</sup> Program Studi Kimia, Fakultas Matematika Ilmu Pengetahuan Alam Universitas Lambung Mangkurat

<sup>3</sup> Jurusan Kimia Fakultas Matematika Ilmu Pengetahuan Alam, Universitas Mulawarman

\*Correspondent Email: [mokhamatariefin@mipa.upr.ac.id](mailto:mokhamatariefin@mipa.upr.ac.id)

**Submitted:** 14-06-2024

**Revised:** 01-07-2024

**Accepted:** 22-07-2024

---

#### **Abstrak**

*Krisis energi global dan ketergantungan pada sumber energi fosil menimbulkan ancaman serius bagi lingkungan dan kesehatan manusia. Program edukasi hemat energi melalui Instagram bertujuan untuk meningkatkan kesadaran dan mengubah perilaku konsumsi energi di kalangan generasi muda. Video kampanye yang mencakup lima poin utama - ketergantungan energi tidak terbarukan, dampak negatif batu bara dan minyak bumi, solusi energi terbarukan, tips praktis hemat energi, dan pola hidup hemat energi - diunggah melalui fitur Reels. Hasil menunjukkan video ditonton 5.175 kali, menerima 301 likes, dan mendapatkan 72 komentar, dengan lebih dari 90% komentar berasal dari kawula muda. Analisis komentar mengungkapkan bahwa mayoritas tanggapan adalah positif, menunjukkan bahwa pesan kampanye berhasil mencapai target audiens utama. Generasi muda merasa terinspirasi dan terdorong untuk mengadopsi praktik hemat energi dalam kehidupan sehari-hari mereka. Kampanye ini tidak hanya meningkatkan kesadaran tetapi juga mendorong tindakan nyata, menunjukkan bahwa media sosial efektif sebagai alat edukasi dan mendukung tujuan pembangunan berkelanjutan serta ekonomi hijau. Hasil ini mempertegas pentingnya strategi komunikasi yang inovatif dalam upaya mengatasi krisis energi global.*

**Kata kunci:** media sosial; hemat energi; kawulamuda; krisis energi

#### **Abstract**

*Dependence on fossil fuels and the global energy crises are major threats to human health and the environment. The younger generation's energy usage habits are to be altered and awareness raised through the Instagram energy-saving education initiative. Through the Reels feature, campaign movies addressing five main topics were published. These included dependence on non-renewable energy, the drawbacks of coal and petroleum, renewable energy solutions, useful energy-saving advice, and an energy-efficient lifestyle. The video gained 5,175 views, 301 likes, and 72 comments, the majority of which were left by young people (almost 90%). The bulk of the comments, according to an analysis of the remarks, were favorable, showing that the campaign's message had effectively reached the main target group. The younger generation was motivated and inspired to incorporate energy-saving habits into their everyday life. In addition to increasing awareness, the campaign sparked action, proving social media's efficacy as a teaching tool and its support for the green economy and sustainable development goals. These findings highlight the value of creative communication techniques in the fight against the world energy crisis.*

**Keywords:** social media; energy saving; youth; energy crisis

© 2024 Nawasena: Journal of Community Service. This work is licensed under a [CC BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/)

---

## **1. INTRODUCTION**

The globe is currently experiencing a severe energy crisis as a result of rising

energy consumption and the depletion of fossil fuels like coal, oil, and gas. Reliance on fossil fuels not only increases the risk of

energy scarcity but also increases greenhouse gas emissions, which in turn causes environmental issues like climate change [1], [2]. This scenario is made worse by inefficient energy use, so optimizing the utilization of currently available energy is necessary. The environment is negatively impacted by inefficient energy use. Burning fossil fuels releases greenhouse gases, including carbon dioxide (CO<sub>2</sub>), which are linked to climate change and global warming. Furthermore, energy waste harms ecosystems, puts human health in danger, and promotes pollution of the air and water [3]. Thus, lowering these detrimental effects on the environment and fostering the sustainability of the earth's ecosystem depend heavily on energy conservation initiatives.

In order to promote and put energy-efficient techniques into practice, the younger generation must play a significant role [4]. They are change agents with the power to significantly influence society through their daily deeds and consumer decisions. The younger generation may play a significant role in fostering an ecologically conscious and sustainable energy-saving culture if they receive the right education and knowledge [5], [6]. The energy consumption habits and lifestyles of young individuals are typically highly technologically focused and dynamic. They frequently employ energy-intensive technological equipment and digital accessories. But, with the correct information, individuals can be encouraged to utilize more energy-efficient technologies and develop energy-saving behaviors, such turning off unused electronics, switching to energy-efficient

lighting, and buying ecologically friendly goods [7].

For the younger generation, social media has become a daily necessity. Among them, social media sites like Facebook, Instagram, TikTok, and Twitter are highly well-liked and are utilized for informational and educational purposes in addition to enjoyment.

## **2. METHODS**

Concept and Planning is the first phase of an Instagram teaching campaign about energy conservation. The team will decide on the campaign's primary goal, which is to alter younger people's energy use habits and increase awareness. To learn more about the youth's fundamental beliefs and knowledge regarding energy conservation, preliminary study was carried out. The team created the main messages to be delivered based on the findings of this study. Topics, scripts, and production timelines were all covered in the creation of a video production plan. The target market and Instagram marketing tactics were part of this approach.

The production team shoots the video in the second step, called "Video Creation," using the assembled screenplays as a guide. Choosing locations, shooting, and utilizing the right video equipment are all part of this process. Information about the value of energy conservation, doable strategies for cutting back on energy use, and the advantages of energy-saving behavior should all be covered in the film. In order to effectively communicate the message in the video, influencers and prominent people with significant sway over the younger generation are also participating. Following

creation, the video was edited, sound effects were added, and good video quality was ensured during the editing and post-production stages.

In order to reach a larger audience, the completed video will then be shared via Instagram Reels during the Distribution and Evaluation phase. In order to boost the video's visibility, the team also works with

influencers and employs pertinent hashtags. To promote more conversation and involvement, there will be interactions with followers via direct messages and comments. Video performance data, like the quantity of views, likes, comments, and shares, were tracked in order to evaluate the campaign and make necessary improvements going forward.

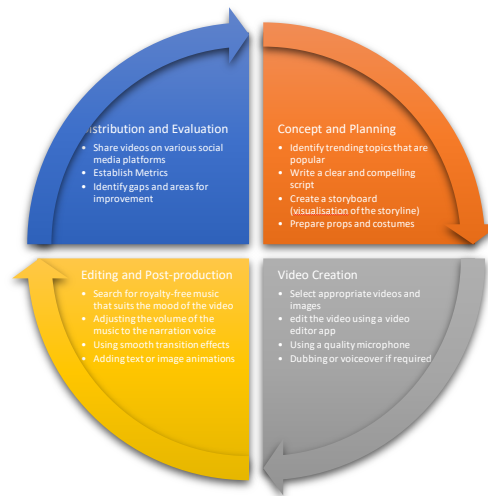


figure 1. Scheme of activity implementation procedure

### 3. RESULT AND DISCUSSION

The socialization exercise for energy-saving education on Instagram that made use of the Reels function yielded incredibly positive outcomes. Five pertinent and educational major themes made up the concept of the promotional video. The first item emphasizes how heavily non-renewable energy sources like coal and petroleum are used. This is a crucial issue because it illustrates how dependent on these finite resources we will become in the event of an energy crisis. The audience is helped to understand this message through the use of powerful images and unambiguous statistics.

The second point of the video discusses the negative impacts of coal and petroleum use on the environment and human health. The video explains how the burning of fossil fuels results in climate change, environmental degradation and degradation of human health. Visualizations of air pollution, habitat destruction and pollution-related health problems help clarify the urgency of the issue. The information is conveyed in an easy-to-understand and attention-grabbing way, especially for the younger generation who tend to care about environmental issues.

The film then presents renewable energy sources as a viable substitute and provides a solution. The various forms of renewable

energy, including solar, wind, and water energy, are explained in this third point along with how they can be used to address the current energy dilemma. The film effectively conveys a hopeful and motivational vision of a more environmentally friendly and sustainable energy future through the use of real-world instances of renewable energy utilization.

The fourth point offers helpful advice on how individuals can help solve the environmental and energy crises. Simple daily measures that can be implemented include using energy-efficient lights, minimizing the usage of motor vehicles, and turning off electrical appliances when not in use. It is simpler for audiences to incorporate energy-saving practices into their daily lives when these suggestions are presented in an engaging and useful manner.

The final segment of the video talks on the way of living and mindset needed to conserve energy. The significance of both individual and group awareness in bringing about significant change is emphasized. The film also emphasizes the virtues that must be exhibited, such as a dedication to supporting green projects and an understanding of how every activity affects the environment. The inspirational delivery of the message inspires youth to take on the role of change agents in their communities.

After being shared on Instagram Reels, the video was viewed 39,100 times and garnered 52 comments in addition to 440 likes. These figures show that the audience was quite engaged and gave a positive feedback. The comments gathered indicate that most of the reactions were favorable, with over 90% of the remarks coming from

accounts belonging to young people. The tone and manner of speaking in these responses demonstrate that the campaign's primary target—young internet users—was well reached.

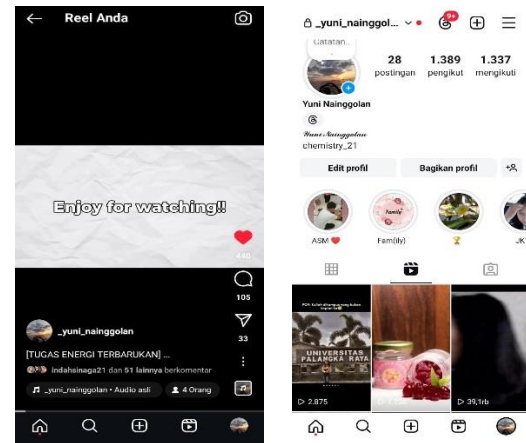


figure 2. Campaign videos posted on intagram

An examination of the comments in greater detail revealed that many young people were motivated and inspired to incorporate energy-saving habits into their daily life. While some comments expressed gratitude for the information provided, others discussed how they personally helped reduce energy use. This demonstrates that the campaign film was effective in inspiring younger people to take action in addition to increasing awareness.



figure 3. Video comment on intagram

All things considered, this socialization exercise was successful in accomplishing its goals of increasing awareness and modifying the younger generation's energy-consuming habits. The campaign was successful in getting its point across and inspiring young people to help address the energy problem and safeguard the environment, as evidenced by the favorable response and high level of engagement. Additionally, the program shows how social media can be used to great success as a teaching tool and social campaign, ultimately promoting the green economy and the Sustainable Development Goals (SDG).

#### 4. CONCLUSION

The younger generation's energy consumption habits have been successfully changed and awareness has been raised by

Instagram's energy-saving education program, which makes use of the Reels function. The marketing film has garnered 5,175 views, 301 likes, and 72 comments. It emphasizes reliance on non-renewable energy sources, the drawbacks of coal and oil, alternatives via renewable energy, useful energy-saving advice, and energy-saving lifestyles. More than 90% of the comments, according to an analysis of the data, were from young accounts, suggesting that the campaign's major aim was effectively reached. The younger generation is inspired and encouraged to incorporate energy-saving methods into their daily life, as evidenced by this positive response. This result suggests that social media, particularly Instagram, can be placed to good use as a teaching tool and in social campaigns that promote the green economy and sustainable development objectives.

#### 5. REFERENCE

- [1] Ishika Shyamkishore, Saket Mundra, and Ramesh Bhande, "Alternative Transportation Fuels," *World Journal of Advanced Engineering Technology and Sciences*, vol. 7, no. 2, pp. 044–053, Nov. 2022, doi: 10.30574/wjaets.2022.7.2.0123.
- [2] J. Wang and W. Azam, "Natural resource scarcity, fossil fuel energy consumption, and total greenhouse gas emissions in top emitting countries," *Geoscience Frontiers*, vol. 15, no. 2, p. 101757, Mar. 2024, doi: 10.1016/j.gsf.2023.101757.
- [3] F. Perera, "Pollution from Fossil-Fuel Combustion is the Leading Environmental Threat to Global Pediatric Health and Equity: Solutions Exist," *Int J Environ Res Public Health*, vol. 15, no. 1, p. 16, Dec. 2017, doi: 10.3390/ijerph15010016.
- [4] N. Batechko, O. Shelimanova, and S. Shostak, "ENERGY EFFICIENCY IN UKRAINE IN THE CONTEXT OF EUROPEAN PRACTICES: EDUCATIONAL ASPECT," *The Modern Higher Education Review*, no. 4, pp. 50–56, 2019, doi: 10.28925/2518-7635.2019.4.6.
- [5] A. Vuorio, "Young adults and sustainable entrepreneurship: the role of culture and demographic factors," *J. for International*

- 
- Business and Entrepreneurship Development*, vol. 10, no. 3, p. 209, 2017, doi: 10.1504/JIBED.2017.10006535.
- [6] M. S. Reinhardt, B. L. Flores Ríos, C. P. Tello, F. F. González Navarro, and H. E. Campbell Ramírez, “A knowledge management approach to promote an energy culture in higher education,” *Knowledge Management Research & Practice*, vol. 18, no. 4, pp. 424–438, Oct. 2020, doi: 10.1080/14778238.2019.1701962.
- [7] G. Valerio-Ureña and R. Rogers, “Characteristics of the Digital Content about Energy-Saving in Different Countries around the World,” *Sustainability*, vol. 11, no. 17, p. 4704, Aug. 2019, doi: 10.3390/su11174704.