



Commodifying Renewable Energy Communication for Indonesia's National Resilience

Dian Nurdiansyah¹, Rizki Briandana², Muhammad Raqib Mohd Sofian³, Tantri Relatami⁴

¹ Fakultas Ilmu Komunikasi, Universitas Pancasila, Jakarta, Indonesian

² Universitas Mercu Buana, Jakarta, Indonesia

³ Faculty of Leadership and Management Universiti Islam Malaysia

⁴ Universitas Nasional, Jakarta, Indonesia

(*) Corresponding Author: diannurdiansyah@univpancasila.ac.id

Article Info:	Abstract
Keywords: Commodification; Digital Communication; National Resilience; Renewable Energy; Social Media.	Purpose: This study examines how the @kementerianpu Instagram account commodifies New and Renewable Energy (NRE) messages through verbal and visual representation and how this communication relates to national resilience. Methodology: A descriptive qualitative approach within an interpretive paradigm guided virtual observation and documentation of NRE-related Instagram content. Purposive sampling selected a floating solar power plant carousel as the primary analytical case, with visible audience responses as supplementary evidence. Data were analysed using Kress and van Leeuwen's multimodal discourse framework. Findings: The account transforms technical energy information into concise and visually organised content through simplified terminology, infrastructure photography, sustainability symbols, colour consistency, institutional branding, and carousel sequencing. These elements create attention value while constructing renewable energy policy meaning. Visible audience comments illustrate forms of response but do not represent broader public perception or communication effectiveness. From the Asta Gatra perspective, the communication relates most directly to political and socio-cultural resilience, while renewable energy content connects more directly with natural resource and economic resilience. Originality: The study integrates Mosco's media commodification perspective with Kress and van Leeuwen's multimodal discourse framework to explain how government institutions compete for digital attention while constructing renewable energy policy meaning within the broader framework of national resilience.
Article History: Received : 1-6-2025 Revised : 21-6-2025 Accepted : 30-6-2025	
Article DOI : 10.55960/jlri.v13i2.1246	
How to cite : Nurdiansyah, D., Briandana, R., Mohd Sofian, M.R., Relatami, T. (2025). Commodifying Renewable Energy Communication for Indonesia's National Resilience. Jurnal Lemhannas RI, 13 (2), 246-260. https://doi.org/10.55960/jlri.v13i2.1246	
 This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License . Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI © 2025 The Author(s).	

INTRODUCTION

The transition to New and Renewable Energy (NRE) has become a strategic component of the global development agenda because it supports climate mitigation, energy security, and long-term national resilience (Androniceanu & Sabie, 2022; Gan et al., 2023; Thompson, 2023). Indonesia faces a structural challenge in balancing short-term economic growth with long-term decarbonisation commitments while fossil fuels continue to dominate the national energy system (Nasir & Bengi, 2024; Rahman et al., 2023). Social, political, economic, and regulatory factors further shape this transition, making NRE adoption a multidimensional policy issue that requires coordinated technical, institutional, and public support. From the perspective of national resilience, renewable energy also relates to the sustainable use of natural resources, economic continuity, policy legitimacy, and socio-cultural support for long-term development.



Figure 1. Comparison of NRE Targets vs. Achievements in Indonesia
Data Source: Wuryandani (2025)

Indonesia initially targeted a 23% NRE share by 2025, while the renewable energy share reached 14.68% in 2024, remaining below the annual target and prompting adjustments to the national energy transition trajectory (Wuryandani, 2025). The gap between policy targets and implementation highlights the importance of effective public communication in supporting the energy transition. Government communication can explain policy objectives, strengthen public awareness, and encourage public participation alongside formal regulatory instruments (Ramadani, 2019). President Prabowo's administration positions energy self-sufficiency within the *Asta Cita* agenda and links it with renewable energy development (Simanjuntak & Hasjanah, 2025), reinforcing the importance of communicating national energy priorities clearly to the public.

Figure 2 presents the age and gender distribution of Instagram users in Indonesia in August 2024, providing demographic context for the platform's relevance to government communication.

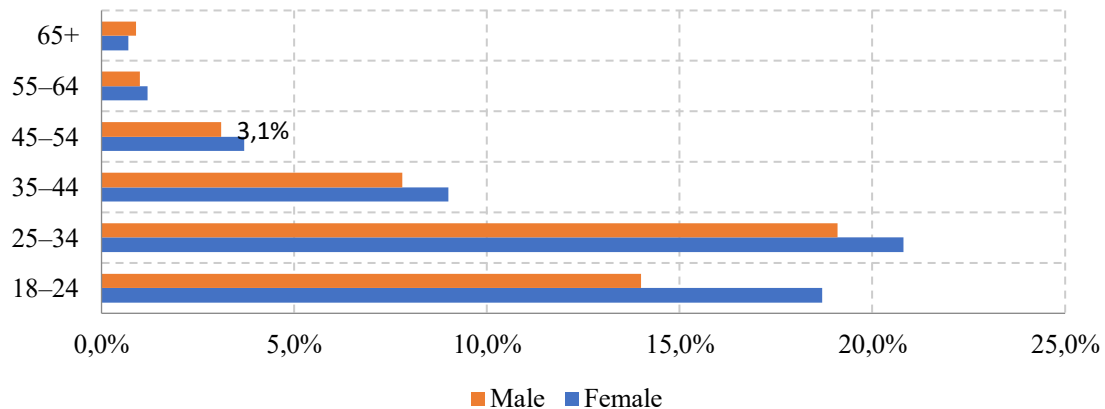


Figure 2. Instagram User Data in Indonesia

Source: Redrawn from the primary source: NapoleonCat.com (2024).

NapoleonCat (2024) reported approximately 90.04 million Instagram users in Indonesia, with women accounting for 54.2% of the total user population. Users aged 18 to 34 constitute the dominant age groups, indicating a strong concentration of Instagram use among younger adults. This demographic profile makes Instagram relevant for communicating sustainable development and renewable energy policies to a broad digital audience. Its visual and interactive features enable government institutions to organize public information through photographs, infographics, carousel posts, captions, and short-form videos, thereby improving the accessibility of policy communication on digital platforms (Sulistyo et al., 2024). The Ministry of Public Works uses the @kementerianpu account to communicate infrastructure programs, including renewable energy initiatives, through verbal and visual content.

Previous studies on energy communication in Indonesia have largely examined conventional media, while research on government social media has focused on institutional communication, public information, and digital engagement. These studies provide limited explanation of how government institutions transform technically complex NRE policies into visually accessible content that can compete for audience attention on digital platforms. Research also remains limited on how visual design, policy simplification, carousel composition, and visible audience responses contribute to the attention value of institutional messages and the communication of renewable energy policy.

Studies of social media governance and visual communication have established the importance of digital platforms for public communication, but they have not sufficiently integrated media commodification with multimodal representation in analyzing government renewable energy communication. This gap is significant because government institutions must communicate technical policy information while attracting digital attention and preserving substantive policy meaning. This study examines how the @kementerianpu Instagram account commodifies NRE messages through verbal and visual representation, how visible audience responses accompany these representations, and how digital energy communication relates to national resilience. The analysis integrates media commodification with multimodal discourse to explain how government institutions transform renewable energy policy into visual communication suitable for

digital platforms. Within the *Asta Gatra* perspective, the study subsequently considers how this communication relates to political and socio-cultural resilience, while renewable energy policy itself connects more directly with natural resource and economic resilience.

LITERATURE REVIEW

Theoretical Studies

Media commodification explains how capitalist platforms convert messages, audiences, labour, attention, and engagement into exchange value (Mosco, 2009; Fuchs, 2012; Ørmen & Gregersen, 2023). Government institutions operate within this logic when they package policy messages for digital platforms to gain public attention, increase visibility, and strengthen institutional legitimacy. Renewable energy communication reflects this process through the selection, simplification, and visual presentation of technical policy information for digital audiences. Media commodification therefore explains how institutional messages acquire attention value as they circulate within platform-based communication.

Multimodal discourse theory explains how verbal texts, visual symbols, colours, and spatial composition work together to construct meaning and shape public perception (Kress & van Leeuwen, 2006). This perspective enables the analysis of how government institutions represent renewable energy policies through coordinated verbal and visual elements. Mosco explains the political and economic logic that gives policy messages attention value, while Kress and van Leeuwen explain how those messages construct meaning through visual and textual representation. The two perspectives provide a complementary basis for examining how the @kementerianpu Instagram account packages New and Renewable Energy messages, how audiences respond to these representations, and how such communication relates to sustainability policy and the broader discourse on national resilience.

Empirical Studies

Commodification of Visual Messages

The commodification of visual messages explains how visual information acquires exchange value through its capacity to attract attention and encourage audience engagement on social media (Mosco, 2009). Digital platforms intensify competition for attention by encouraging institutions to present information in concise, visually appealing, and easily recognisable formats. This process places content quality, visual aesthetics, and audience response within the same communication process. Saputri (2024) identifies these three elements as central to visual commodification on Instagram, where the attractiveness of a message depends on the interaction between content presentation and audience reception.

Government institutions also adapt policy information to the communication characteristics of social media. Tulung et al. (2021) show that public agencies use Instagram to package institutional information into concise visual content that encourages interaction with digital audiences. This practice illustrates how government communication moves beyond the formal dissemination of information and increasingly responds to platform conventions that prioritise accessibility, immediacy, and audience attention. However, visual richness alone does not necessarily produce stronger

engagement. Liang et al. (2024), based on 1,022 posts from nine government social media accounts in Japan, found that the relevance of content concerning government actions and low-carbon practices contributed more consistently to engagement than media richness alone. These findings indicate that effective environmental communication requires an appropriate balance between visual appeal and substantive information.

Renewable energy communication presents a particularly relevant case because technical information must compete with diverse content on visually orientated platforms. Vespa et al. (2022) analysed 1,500 Instagram posts concerning renewable energy technologies and found distinct emotional and cognitive patterns across solar, wind, geothermal, biomass, and power infrastructure. Solar, wind, and geothermal content generated stronger positive emotional associations, while other technologies produced different cognitive responses. The findings show that social media representation can influence how audiences encounter and interpret different forms of renewable energy technology.

Schmid-Petri and Zehe (2024) similarly show that Instagram communication surrounding the energy transition tends to emphasise positive representations of renewable energy. Visual technologies, infographics, and concise textual information provide prominent elements of this communication and create favourable representations of the transition agenda. The pattern supports the argument that commodification operates through the conversion of complex energy information into content that carries attention value within platform-based communication. Visual commodification in government communication consequently depends on the interaction between policy substance, platform suitability, visual representation, and audience response rather than on aesthetic appeal alone.

New and Renewable Energy and Social Media Governance

Social media governance describes how government institutions manage public information and interaction through digital platforms. Indonesian public institutions increasingly use social media to disseminate policy information, communicate strategic programmes, and maintain direct contact with citizens (Avicenna & Fitria, 2021). Renewable energy communication extends this function because the energy transition requires institutions to explain technical policies, address public concerns and misinformation, provide reliable information, and encourage participation. Instagram supports these objectives through Reels, carousel posts, photographs, infographics, captions, and other interactive features that organise information for audiences with different levels of attention and knowledge (Sulistyo et al., 2024). Participatory communication on the @jabarprovgoid account strengthens institutional visibility and encourages public participation in sustainable development programmes, thereby linking information delivery with institutional credibility and public interaction (Sumarwan et al., 2024).

Effective renewable energy communication also depends on message substance and audience knowledge rather than visual format alone. Liang et al. (2024) found that different content themes produced different levels of public engagement with low-carbon practices, indicating that relevant and credible policy information can matter more than media richness itself. Viendyasari et al. (2022) likewise found varying levels of public understanding and perception of renewable energy in Indonesia, highlighting the need for

communication strategies that respond to existing knowledge gaps. Social media governance therefore supports the social dimensions of the energy transition by increasing policy visibility, facilitating public understanding, and creating opportunities for audiences to interpret, question, and respond to government programmes. These functions become increasingly important as energy self-sufficiency and renewable energy development form part of national strategic priorities.

Framing and Visual Representation

Framing directs attention to selected aspects of a policy and shapes how audiences interpret the meanings attached to them. Visual and multimodal framing further influences how audiences process and respond to mediated information through sensory, affective, cognitive, and behavioural dimensions (Geise & Xu, 2025). Visual representation therefore becomes an integral part of framing by organising images, colour, textual placement, and other symbolic elements into a coherent policy narrative (Bock, 2020; Kress & van Leeuwen, 2006). de-Lima-Santos et al. (2024) show that visual political communication on Instagram integrates images and text to construct interpretations of institutional and political messages, which makes visual selection an integral part of public policy communication. This function becomes particularly important in renewable energy communication because energy transition policies involve economic, technological, environmental, and social dimensions. Schmid-Petri and Zehe (2024) found that Instagram communication predominantly presents renewable energy through positive representations of energy technologies and graphic text, improving accessibility by linking energy transition with environmental benefits, technological progress, and practical solutions. However, repeated positive framing may reduce attention to policy trade-offs, implementation barriers, social resistance, and distributional consequences. Vespa et al. (2022) further demonstrate that different renewable energy technologies generate distinct emotional and cognitive associations on Instagram, with solar and wind energy producing stronger positive responses than several other technologies. These differences require visual strategies that recognise the specific characteristics of each energy technology rather than treating the energy transition as a homogeneous issue.

The Indonesian government applies visual framing through official social media accounts to communicate infrastructure development and environmental priorities. Symbols of solar energy, green landscapes, infrastructure, institutional identity, and sustainability connect individual programmes with broader narratives of environmental sustainability, technological modernisation, and national development Van Sluisveld et al. (2020) show that narrative approaches can simplify complex socio technical energy transition pathways, while Sareen and Haarstad (2018) emphasise the need to retain socio technical and justice considerations when interpreting sustainable energy transitions. Together, these perspectives support communication strategies that improve accessibility without reducing the substantive complexity of energy policy. Framing, therefore, explains how government institutions select, organise, and emphasise aspects of renewable energy policy for public consumption. At the same time, highly curated content can improve accessibility and attract attention but may reduce the substantive depth of energy transition debates. Government communication must therefore balance concise visual presentation with accurate and meaningful policy information, while visual

commodification and multimodal representation jointly manage attention value and policy meaning.

Renewable Energy Communication and National Resilience

The renewable energy transition involves social and political processes alongside technological and economic change. Public knowledge, acceptance, participation, and trust shape the environment in which energy policies operate. Viendyasari et al. (2022) demonstrate that Indonesian audiences have different levels of knowledge and perceptions of renewable energy, requiring communication strategies that respond to diverse information needs. Effective communication can strengthen policy awareness, reduce information gaps, and support social acceptance. Sekarintias et al. (2023) further show that Indonesia's energy transition faces interconnected challenges involving competing interests, regulatory inconsistencies, implementation capacity, inequality, and limited participation. Government communication, therefore, forms part of energy transition governance by clearly explaining policy objectives while recognizing community interests and concerns and connecting institutional priorities with public knowledge, participation, and policy acceptance.

The National Resilience Institute of the Republic of Indonesia (Lembaga Ketahanan Nasional Republik Indonesia, or Lemhannas RI, a state institution concerned with national resilience education and strategic studies) conceptualizes national resilience through the *Asta Gatra* approach, which integrates *Tri Gatra* and *Panca Gatra*. Renewable energy relates directly to natural resources through energy diversification and sustainable resource utilization and to the economic dimension through the continuity and security of energy supply for national development. Public communication links these material dimensions with political and socio-cultural resilience by supporting policy legitimacy, institutional trust, public understanding, and social participation, while its contribution to defense and security remains indirect through stronger energy security and reduced vulnerability to external energy pressures. Government communication through Instagram supports these relationships by translating technical energy information into visual narratives on infrastructure development, environmental sustainability, and national priorities. Visual communication therefore relates most directly to the political and socio-cultural dimensions of *Asta Gatra*, while renewable energy content connects with natural resource and economic resilience. Digital communication does not independently determine national resilience but can strengthen the communicative and social conditions that support energy policy implementation and long-term resilience.

Empirical Synthesis and Research Gap

Previous studies show that visual commodification creates attention value through presentation and audience response (Saputri, 2024), while government social media research explains how public institutions adapt policy information to platform characteristics and audience interaction (Tulung et al., 2021; Sulistyo et al., 2024; Liang et al., 2024). Research on renewable energy communication further demonstrates that different technologies and representational choices generate distinct cognitive, emotional, and framing patterns among social media audiences (Vespa et al., 2022; Schmid-Petri & Zehe, 2024), whereas studies in Indonesia highlight the importance of public knowledge, social acceptance, institutional coordination, and participation in renewable energy policy

implementation (Viendyasari et al., 2022; Sekaringtias et al., 2023). However, these areas remain largely separate, and limited empirical research explains how government institutions transform technically complex renewable energy policies into multimodal Instagram content, how visual representation creates attention value, and how visible audience responses accompany these representations. This study addresses that gap by integrating media commodification and multimodal discourse analysis to examine renewable energy communication on the @kementerianpu Instagram account, linking attention-orientated policy content with visual meaning, visible audience response, and public understanding of the national energy transition.

METHODS

This study adopts a descriptive qualitative approach within an interpretive paradigm to examine how government institutions construct and communicate New and Renewable Energy (NRE) messages through Instagram (Creswell & Creswell, 2017). The study focuses on the official @kementerianpu account, which communicates public infrastructure programmes that include renewable energy initiatives. Data were collected through virtual observation and documentation of NRE-related posts, covering verbal content, visual elements, institutional symbols, captions, and visible audience responses. The study uses purposive sampling to select content that explicitly communicates NRE programmes and contains sufficient verbal and visual elements for a multimodal analysis. The Floating Solar Power Plant carousel serves as the primary analytical case because it combines policy information, technical explanations, infrastructure imagery, sustainability symbols, and institutional branding. The unit of analysis centres on the verbal and visual components of the selected carousel, while visible audience responses provide supplementary evidence without representing the overall public perception.

Data analysis follows the social semiotic approach to multimodal discourse developed by Kress and van Leeuwen (2006). The analysis identifies verbal and visual elements and examines how textual information, images, colours, symbols, spatial composition, and institutional identity construct meaning. It then relates these features to media commodification by examining how technical energy policy information acquires attention value through simplification, visual organisation, and platform-appropriate presentation. This analytical sequence distinguishes the political and economic logic of message commodification from the multimodal processes that construct policy representation. The study also applies peer debriefing to review interpretations, assess consistency between the data and theoretical categories, and reduce potential interpretive bias. Comparison across virtual observation, documented visual material, and visible audience responses further supports interpretive consistency across different forms of digital evidence.

RESULT AND DISCUSSION

Result

NRE-Related Posts on the @kementerianpu Instagram Account

As an institutional actor, the Ministry of Public Works manages public communication on social media by adapting policy messages to the interactive and visually oriented characteristics of digital platforms. Social media governance therefore

extends beyond formal information dissemination to include the management of visual representations, policy narratives, and visible audience interactions concerning New and Renewable Energy (NRE).



Figure 3. Instagram Post by @kementerianpu Regarding NRE

Source: Instagram @kementerianpu (2023)

Virtual observation of Figure 3 shows that the visual presentation of NRE information is accompanied by visible audience responses in the comments section. These responses include appreciation from @pasaribubaringin, who stated, "Hopefully, the initiative expands to other regions. Congratulations, PUPR," and a collaboration proposal from @ads_design_and_build, who suggested, "Partner with @jasamargatollroadoperator, Admin, to set up solar power plants along toll roads." These comments illustrate different forms of audience interaction with renewable energy content but do not represent broader public opinion or establish communication effectiveness. Instead, they provide contextual evidence that visually presented policy information can create opportunities for audience response and discussion in the digital space

Multimodal Dynamics of @kementerianpu Posts

To examine how renewable energy policy messages are constructed through verbal and visual elements, Figure 4 presents a multimodal discourse analysis of a six-slide carousel post from the @kementerianpu Instagram account. The analysis identifies how textual information and visual representation work together to communicate floating solar photovoltaic (PV) infrastructure within a broader renewable energy policy narrative.



Figure 4. Multimodal Carousel Analysis of Floating Solar Photovoltaic Infrastructure on @kementerianpu Instagram

Source: Instagram @kementerianpu (2023), processed by the authors (2025)

The six-slide carousel constructs NRE communication through the integration of verbal explanation and visual representation. The opening slide establishes the Ministry of Public Works as the principal institutional actor through the headline “Facts on the Construction of Floating Solar Power Plants in Ministry of PUPR Estuary Reservoirs”, while the term “PLTS Terapung” presents the technology in concise and recognisable policy language. Subsequent slides connect infrastructure development with Sustainable Development Goal 7 on Affordable and Clean Energy, Sustainable Development Goal 13 on Climate Action, national emissions reduction targets, and net zero emissions commitments. This sequence places floating solar infrastructure within a broader environmental policy narrative while organising technical information into concise units suited to the sequential structure of Instagram carousels.

The visual dimension reinforces this policy narrative through aerial photography, infrastructure scale, colour consistency, institutional symbols, and regulatory references. Images of floating solar panels at *Waduk Muara Nusa Dua* display the physical scale of the infrastructure, while the G20 Indonesia 2022 floating monument connects the project with Indonesia’s international visibility. Blue and green colour palettes associate the content with water, environmental sustainability, and clean energy, while standardised headers and the institutional identity “PUPR Sigap Membangun Negeri” maintain visual continuity and source recognition. References to Ministerial Regulation No.

27/PRT/M/2015 concerning dam safety and reservoir surface limits provide a formal regulatory basis, allowing the carousel to integrate technical, legal, environmental, and institutional information within an accessible visual format.

From a multimodal perspective, the carousel constructs meaning through representational and compositional functions that connect floating solar infrastructure with renewable energy development and environmental sustainability. Headlines, photographs, policy information, colours, and institutional branding form a coherent sequence that directs attention and improves the accessibility of complex policy information. These elements also demonstrate visual commodification because the Ministry converts regulatory and technical information into concise and visually organised content that carries attention value on Instagram. Visual commodification operates through selection, simplification, visual salience, sequential presentation, and institutional branding. The findings do not establish that visual packaging automatically generates public support or behavioural change, but they demonstrate how the Ministry adapts renewable energy information to the visual characteristics and attention logic of Instagram.

Discussion

Government institutions transform technical renewable energy information into visually accessible content for social media. The @kementerianpu account combines concise explanations, infrastructure imagery, colour, institutional symbols, and carousel sequencing to adapt policy messages to the characteristics of Instagram. This practice reflects Mosco's (2009) concept of commodification because institutional messages acquire attention value through visibility, accessibility, and competition for audience attention rather than direct monetary exchange. The findings extend Saputri's (2024) discussion of visual commodification by showing how content, aesthetics, and audience response operate within public policy communication. Tulung et al. (2021) similarly show how government agencies transform formal information into concise and visually appealing Instagram content. Renewable energy messages consequently combine simplified technical information with regulatory references, sustainability objectives, infrastructure imagery, and institutional identity while retaining their institutional character.

Kress and van Leeuwen's (2006) multimodal perspective explains how verbal and visual elements construct policy meaning. Headlines establish institutional authority, aerial photographs display infrastructure scale, blue and green colour schemes signify environmental sustainability, and policy references connect individual projects with broader development objectives. Institutional branding further reinforces source recognition and visual consistency, collectively framing renewable energy as a modern, sustainable, and institutionally managed development agenda, consistent with de-Lima-Santos et al. (2024). However, visual commodification also creates tension between accessibility and policy depth because excessive simplification may reduce attention to regulatory complexity, implementation barriers, competing interests, and social consequences. Schmid-Petri and Zehe (2024) show that Instagram communication about the energy transition predominantly presents renewable energy in positive terms, highlighting the need to balance accessibility and visibility with accurate and substantive policy information.

Visible audience responses provide contextual support for this communication

process. Comments in Figure 3 illustrate appreciation and interest in collaboration, but they do not support broader conclusions about public opinion, policy acceptance, or behavioural change. The study therefore treats these responses as supplementary evidence rather than proof that visual commodification directly generates engagement. From the *Asta Gatra* perspective, renewable energy relates directly to natural resources through diversification and sustainable utilisation and to the economic dimension through the continuity and security of energy supply for national development. Public communication connects these dimensions with political and socio-cultural resilience by increasing policy visibility, supporting public understanding, strengthening institutional legitimacy, and encouraging participation, while its contribution to defence and security remains indirect through stronger energy security and reduced vulnerability to external pressures.

Digital communication therefore supports national resilience by connecting technical energy programmes with broader public meaning. The @kementerianpu account positions renewable energy within infrastructure development, environmental sustainability, and national policy, which can improve policy awareness and institutional visibility without independently determining energy sovereignty, economic security, or socio-ecological stability. These outcomes also depend on infrastructure, regulation, investment, technology, institutional coordination, and public acceptance. Mosco (2009) explains how institutional messages acquire attention value, while Kress and van Leeuwen (2006) explain how verbal and visual elements organise policy meaning. Their integration shows that government renewable energy communication combines competition for public attention with the construction of policy meaning and connects visual communication with the political and socio-cultural dimensions of *Asta Gatra*, while renewable energy content relates more directly to natural resource and economic resilience.

CONCLUSION

This study finds that the @kementerianpu Instagram account commodifies New and Renewable Energy (NRE) messages by transforming technical policy information into concise and visually organised content that corresponds with the attention logic of social media. Simplified terminology, infrastructure photography, sustainability symbols, colour consistency, institutional branding, and carousel composition improve the accessibility of renewable energy policy while linking it to infrastructure development and environmental sustainability. Visual commodification creates attention value, while multimodal representation constructs policy meaning through the interaction of verbal and visual elements. Visible audience comments illustrate forms of response but do not represent broader public perception or communication effectiveness. The integration of Mosco's commodification perspective with Kress and van Leeuwen's multimodal framework explains how government institutions compete for digital attention while constructing renewable energy policy meaning. From the *Asta Gatra* perspective, this communication relates most directly to political and socio-cultural resilience through policy visibility, public understanding, institutional legitimacy, and participation, while renewable energy relates more directly to natural resource and economic resilience through energy diversification, sustainable resource utilisation, secure energy supply, and support for national development.

Government institutions should balance visual attractiveness with accurate and substantive policy information, maintain consistent visual identity, explain technical and

regulatory issues clearly, and provide meaningful opportunities for public interaction. The study remains limited to one Instagram account, one selected multimodal case, and visible audience responses, which restrict broader conclusions about public perception, policy acceptance, behavioural change, and national resilience. Future studies should compare government institutions and digital platforms, apply longitudinal designs, examine post level engagement indicators, and use surveys, interviews, focus group discussions, or experiments to investigate how audiences interpret renewable energy communication. Further research should also assess more directly how digital public communication interacts with the natural resource, economic, political, and socio-cultural dimensions of *Asta Gatra* in supporting energy transition governance and national resilience.

REFERENCE

- Adhariani, D., & Sciulli, N. (2020). The future of integrated reporting in an emerging market: An analysis of the disclosure conformity level. *Asian Review of Accounting*, 28(4), 619–634. <https://doi.org/10.1108/ARA-02-2019-0045>
- Androniceanu, A., & Sabie, O. M. (2022). Overview of green energy as a real strategic option for sustainable development. *Energies*, 15(22), 8573. Androniceanu, A., & Sabie, O. M. (2022). Overview of green energy as a real strategic option for sustainable development. *Energies*, 15(22), 8573.
- Bock, M. A. (2020). Theorising visual framing: Contingency, materiality and ideology. *Visual Studies*, 35(1), 1-12. <https://doi.org/10.1080/1472586X.2020.1715244>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- de-Lima-Santos, M. F., Gonçalves, I., Quiles, M. G., Mesquita, L., Ceron, W., & Couto Lorena, M. C. (2024). Visual political communication on Instagram: A comparative study of Brazilian presidential elections. *EPJ Data Science*, 13(1), 72. <https://doi.org/10.1140/epjds/s13688-024-00502-0>
- Fuchs, C. (2012). Dallas Smythe Today-The Audience Commodity, the Digital Labour Debate, Marxist Political Economy and Critical Theory.: Prolegomena to a Digital Labour Theory of Value. *TripleC: Communication, Capitalism & Critique*. Open Access Journal for a Global Sustainable Information Society, 10(2), 692-740. <https://doi.org/10.31269/triplec.v10i2.443>
- Gan, K. E., Taikan, O., Gan, T. Y., Weis, T., Yamazaki, D., & Schüttrumpf, H. (2023). Enhancing renewable energy systems, contributing to Sustainable Development Goals of United Nation and building resilience against climate change impacts. *Energy Technology*, 11(11), 2300275. <https://doi.org/10.1002/ente.202300275>
- Geise, S., & Xu, Y. (2025). Effects of visual framing in multimodal media environments: A systematic review of studies between 1979 and 2023. *Journalism & Mass Communication Quarterly*, 102(3), 796-823. <https://doi.org/10.1177/10776990241257586>
- Kress, G., & van Leeuwen, T. (2006). *Reading images: The grammar of visual design*. Routledge.
- Liang, H., Jia, L., & Meng, Y. (2024). Impacts of government social media on public engagement in low-carbon practices focusing on Japan. *Environmental Research*, 263, 120019. <https://doi.org/10.1016/j.envres.2024.120019>

- Mosco, V. (2009). *The political economy of communication*. Sage Publications.
- Mosco, V. (2015). The political economy of communication: A living tradition. In L. A. Albornoz (Ed.), *Power, media, culture: Global transformations in media and communication research*. Palgrave Macmillan.
https://doi.org/10.1057/9781137540089_2
- Nasir, M. N., & Bengi, K. S. (2024). The energy mix dilemma in Indonesia in achieving net zero emissions by 2060. *ASEAN Natural Disaster Mitigation and Education Journal*, 2(1). <https://doi.org/10.61511/andmej.v2i1.2024.951>
- Ørmen, J., & Gregersen, A. (2023). Towards the engagement economy: Interconnected processes of commodification on YouTube. *Media, Culture & Society*, 45(2), 225-245. <https://doi.org/10.1177/01634437221111951>
- Peraturan Menteri Pekerjaan Umum dan Perumahan Rakyat Republik Indonesia Nomor 27/PRT/M/2015 tentang Bendungan. (2015).
<https://peraturan.bpk.go.id/Details/144525/permen-pupr-no-27prtm2015->
- Rahman, A., Richards, R., Dargusch, P., & Wadley, D. (2023). Pathways to reduce Indonesia's dependence on oil and achieve longer-term decarbonization. *Renewable Energy*, 202, 1305-1323. <https://doi.org/10.1016/j.renene.2022.11.051>
- Ramadani, T. (2019). Government communication through hashtag #Energiberkeadilan in the social media of the Ministry of Energy and Mineral Resources. *Jurnal Administrasi Negara*, 25(3), 229-245. <https://doi.org/10.33509/jan.v25i3.1046>
- Saputri, N. A. (2024). Komodifikasi adegan humor dalam akun Instagram Netflix Indonesia. *Komuniti: Jurnal Komunikasi dan Teknologi Informasi*, 16(2), 168-194. <https://doi.org/10.23917/komuniti.v16i2.2118>
- Sareen, S., & Haarstad, H. (2018). Bridging socio-technical and justice aspects of sustainable energy transitions. *Applied energy*, 228, 624-632. <https://doi.org/10.1016/j.apenergy.2018.06.104>
- Saud, M., Mashud, M., & Ida, R. (2020). Usage of social media during the pandemic: Seeking support and awareness about COVID-19 through social media platforms. *Journal of Public Affairs*, 20(4), e2417. <https://doi.org/10.1002/pa.2417>
- Schmid-Petri, H., & Zehe, A. (2024). *Energy transition? Yes, please! The discussion about energy transition on Instagram*. <https://doi.org/10.21203/rs.3.rs-3899890/v1>
- Sekaringtias, A., Verrier, B., & Cronin, J. (2023). Untangling the socio-political knots: A systems view on Indonesia's inclusive energy transitions. *Energy Research & Social Science*, 95, 102911. <https://doi.org/10.1016/j.erss.2022.102911>
- Simanjuntak, U., & Hasjanah, K. (2025, January 22). 100 hari Prabowo-Gibran: Peluang mempercepat transisi energi Indonesia. Institute for Essential Services Reform. <https://iesr.or.id/100-hari-prabowo-gibran-peluang-mempercepat-transisi-energi-indonesia/>
- Sulistyo, M. F., Sukmajatnika, D. Z., & Syaputra, R. (2024). Using Instagram Reels as a media for government public service information. *PERSPEKTIF*, 13(1), 212-220. <https://doi.org/10.31289/perspektif.v13i1.10574>
- Sumarwan, E., Kartika, T., Fitria, N., Aprilia, A. A. T., & Indriani, A. N. (2024). Instagram sebagai media komunikasi pembangunan pemerintah: Studi pemenang Penghargaan Pembangunan Daerah Tahun 2022. *Jurnal Komunikasi Pembangunan*, 21(2), 124-137. doi:10.46937/21202350795.

- Thompson, S. (2023). Strategic analysis of the renewable electricity transition: power to the world without carbon emissions?. *Energies*, 16(17), 6183. <https://doi.org/10.3390/en16176183>
- Tulung, A. A., Suskarwati, S. U., & Abinta, V. C. (2021). Instagram sebagai media government public relations Kementerian Komunikasi dan Informatika di masa pandemi Covid-19. *Commed: Jurnal Komunikasi dan Media*, 5(2), 137-148. <https://doi.org/10.33884/commed.v5i2.3667>
- van Sluisveld, M. A. E., Hof, A. F., Carrara, S., Geels, F. W., Nilsson, M., Rogge, K., Turnheim, B., & van Vuuren, D. P. (2020). Aligning integrated assessment modelling with socio-technical transition insights: An application to low-carbon energy scenario analysis in Europe. *Technological Forecasting and Social Change*, 151, 119177. <https://doi.org/10.1016/j.techfore.2017.10.024>
- Vespa, M., Schweizer-Ries, P., Hildebrand, J., & Kortsch, T. (2022). Getting emotional or cognitive on social media? Analyzing renewable energy technologies in Instagram posts. *Energy Research & Social Science*, 88, 102631. <https://doi.org/10.1016/j.erss.2022.102631>
- Viendyasari, M., Syukri, M., Yandri, E., & Rahmawati, D. (2022). Public perception of renewable energy in Indonesia: Implication for communication strategy. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 6(3), 1582-1596. <https://doi.org/10.31955/mea.v6i3.2517>
- Wuryandani, D. (2025). Perubahan target bauran energi baru terbarukan Indonesia. Isu Sepekan Bidang Ekkuinbang, Komisi XII, Minggu ke-3 Februari 2025. Pusat Analisis Keparlemenan, Badan Keahlian DPR RI.