

## Solutions Journalism and SDG 7: Reporting on Renewable Energy Transitions Focusing on success stories in clean energy adoption

Prof. Dr. Parin Somani<sup>1</sup>, Mxin Tee<sup>2</sup>, Kunrong Wu<sup>3</sup>

<sup>1</sup>CEO, London Organisation of Skills Development (LOSD)

<sup>2</sup>Faculty of Business and Communications, INTI International University, Nilai, Malaysia

ORCID [0000-0001-7990-8377](https://orcid.org/0000-0001-7990-8377)

<sup>3</sup>Faculty of Education Shinawatra University

Email ID : [814790713@qq.com](mailto:814790713@qq.com)

ORCID [0009-0006-0161-6941](https://orcid.org/0009-0006-0161-6941)

### ABSTRACT

Solutions journalism has become a positive vision of reporting since they do not focus on the problem but on the possible solution that can be implemented and ready to replicate and solve the more critical issues in the society. Solutions journalism is a special opportunity to demonstrate successful green energy transitions in the context of Sustainable Development Goal 7 (SDG 7) the aim of which is to ensure access to affordable, reliable, sustainable, and modern energy for all. The latter point has been addressed in this paper in terms of how solution-oriented reporting can turn empowering static clean energy adoption stories into empowering action ones by highlighting replicable approaches, innovation, and community-based practices. The paper discusses journalistic approaches that provide credence and texture to a report through a review of literature and actual examples of cases. The findings reveal that solutions journalism not only creates more awareness among the citizens but also shapes policy discussions, activates investments, and promotes the mobilization of citizens to take part in the adoption of clean energy. Nevertheless, there are practical constraints such as access to data, bias toward excessively rosy accounts, and financial constraints to carrying out deep investigations in the developing world. A direction to be explored by future research is digital storytelling innovations, cross-media border collaborations, and impact measurement frameworks to support the place of the solutions journalism as an accelerator of global renewable energy transitions.

**Keywords:** *Solutions Journalism, SDG 7, Renewable Energy, Clean Energy Adoption, Media Narratives, Sustainable Development, Success Stories.*

**How to Cite:** Prof. Dr. Parin Somani, Mxin Tee, Kunrong Wu, (2025) Solutions Journalism and SDG 7: Reporting on Renewable Energy Transitions Focusing on success stories in clean energy adoption Advocacy, *Journal of Carcinogenesis*, Vol.24, No.5s, 1056-1064

### 1. INTRODUCTION

The present realities of climate change, environmental deterioration, and the increased energy demand have put the international energy transition in the focus of global development processes. United Nations Sustainable Development Goal 7 (SDG 7) focuses on access to affordable, reliable, sustainable and modern energy to all by 2030. Though conventional journalism has played a key role in revealing the obstacles and crisis that exist in regard to the energy sector, more often than not, conflict and lack dominates the subject of conventional reporting which inevitably has left audiences miserable and hopeless [1]. This is where solutions journalism by contrast provides a more positive and constructive way of looking beyond the problems that people are faced with by looking at how individuals, communities and governments are winning those battles. Rather than just pointing out what we are not doing right, this framework shines a light on what is already working that is evidence-based response, scalable innovation, and replicable strategies that are already changing. Using solutions journalism on renewable energy transitions, media can encourage greater levels of activity when it comes to implementing clean energy technologies more widely and can transform the nature of the discourse to one of hope and actionability.

The inspiration behind this writing comes as a result of the growing awareness that stories are created to form reality [8]. The perception people have towards the adoption of renewable energy is largely shaped depending on the kind of stories that receiver in the regular and electronic media. When organisations only present stories about the high prices, incessant delays on policy, or grid malfunction, an audience is likely to acquire a coder attitude, as to whether clean energy is a

viable solution. On the other hand, when.

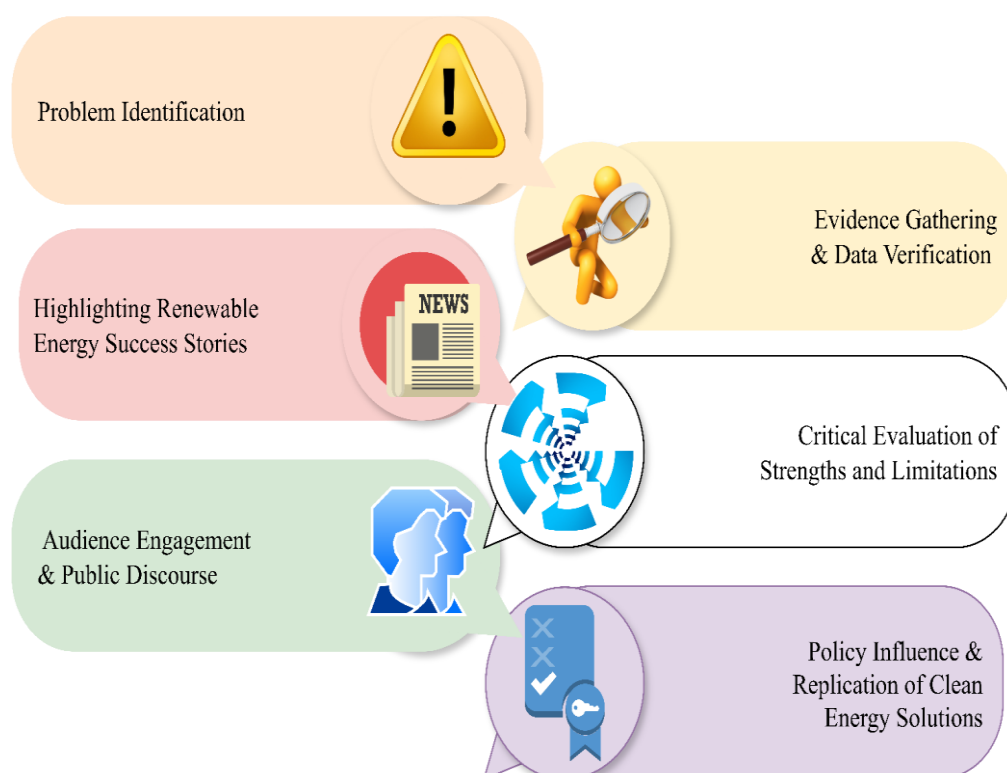
journalism reports the success of community microgrids in Africa, massive wind integration in Denmark, or solar schools in rural India, such stories give a sense of how things might work and an incentive to copy them. Barriers are not overlooked in such stories, but they are put into the context of examples of progress in the real world. This paper is therefore motivated to examine how solutions journalism can be used to magnify renewable energy success stories, and by so doing, hasten the attainment of SDG7.

This research has three aims. To begin with, it attempts to review the principles of methodology of solutions journalism in regard to renewable energy reporting. Second, it is the study of success stories in various contexts in order to study how the media framing is designed to interpret or get the story of innovation, community participation and policy backing. Third, it also assesses the effect of such reporting on the awareness of the masses, the confidence that one might have in investing and policy formulations. It is through this alignment that the paper not only records the practice of solutions journalism but also makes solutions journalism out to be a strategic intervention in energy transitions [5].

The practical value of this work cannot be reduced only to its interest to academic sphere. Strong societal advocacy is necessary by policy makers to get sound support towards renewable energy policies, by investors they need valid documents of project success and communities need to be empowered with relatable stories of change. Solutions journalism is a system that links high-tech specialists and ordinary people by formulating technical solutions to energy changes using human narratives. This facilitator role encourages the greater engagement in the clean energy movement. Besides, the current paper has a role in expanding the body of knowledge as it highlights that solutions journalism is not the simple and sanguine coverage of the positive phenomenon, but an evidence-based and critical strategy to evaluate the facets and shortcomings of renewable energy adoption initiatives [9].

The introduction to the work summarized here suggests that although linked research projects have considered the nexus of journalism and climate communication, and few have directly examined how solutions journalism can be useful in renewable energy transitions under SDG 7. This paper thus falls in a very distinct research gap. It identifies lessons across regions in terms of how reporting narratives of solar, wind, and decentralized energy adoption take place by synthesizing African, Asian, and European examples. It also measures limitations of such journalism and defines ways of enhancing the journalism credibility and influence. Hence, the given introduction forms the basis of implementing solutions journalism as a transformative device of communication of renewable energy [6].

The Figure 1 illustrates how solutions journalism systematically transforms renewable energy challenges into constructive narratives that inform, inspire, and influence sustainable adoption.



**FIG. 1: FRAMEWORK OF SOLUTIONS JOURNALISM FOR RENEWABLE ENERGY TRANSITIONS**

### 1.1 Novelty and Contribution

The innovation of the paper becomes the live discussion of solutions journalism and SDG 7 in one case, namely, clean energy adoption success stories as the main topic. In contrast to the typical research in climate communication that tends to report problems, opposition, or inertia, aiming to present a preponderance of evidence concerning what works and the reasons why it works was the explicit intention in the current research. The added value of its take on solutions journalism, however, is that it sees this also as an organizing concept in renewable energy transitions and recognises measurable effects on community behavior, policymaking and investment patterns. This is especially innovative since a lot of research on renewable energy media reporting still dwells on the problem-oriented proxies other than positive reporting [7].

The major contributions of the present work can be highlighted as follows:

It presents a systematic picture of how concepts of solutions journalism may be utilized in renewable energy coverage.

It introduces a cross-regional account of clean energy success stories in Africa, Asia, and Europe and shows the heterogeneity of strategies and conditions of clean energy adoption.

It establishes how solutions journalism can be used to help communities, policymakers, and investors connect with one another by building trust through evidence-based storytelling.

It also points to concrete limitations of the inaccessibility of quality information, constraints in the availability of resources in developing countries, and the possibility of narrative bias, thus bringing balance into the picture [3].

It suggests avenues of future research, such as the creation of digital storytelling framework and measurement models to determine the efficiency of the solution-focused reporting.

Combining these contributions will lead to a research gap that is filled as well as to providing practical advice to journalists, academics, policy makers, and development practitioners. After all, the truly novel quality of the book under review is the reinvention of journalism as a facilitator of sustainable energy transitions, instead of a spectator, so this publication qualifies as a prudent and innovative intervention in the field of media studies and sustainability research.

## 2. RELATED WORKS

In 2025 Selvaraj P. et.al., Maidin S. S. et.al., & Yang Q. et.al. [10] suggested the examination into the role of journalism in sustainable development has shown that the media narratives greatly influence the development of the attitude and the official course of the actions of people. Studies have proven that the conventional news reporting of energy and climate problems has largely been problem-focused, reporting on crisis, risk and conflict. Although this type of reporting is paramount in highlighting challenges, it does the opposite to make the audience bored and disinterested. A long-term exposure to stories of failure can lead to doubts in feasible renewable energy solutions, which erodes the interests of citizens to the use of clean energy. In this context, a solution journalism has arisen as a contrasting model, where evidence-based success stories and creative solutions to the global problems lie in the focal point. Such a strategy will be especially applicable in the context of SDG 7, which needs not only to help to convince people that the adoption of renewable energy is necessary, but also to include a good example of its feasibility and attractiveness in the media in order to present it as an ordinary and well-achievable reality.

Investigations on the solutions journalism revealed its possibilities to create a trustful attitude to the society and civic assistance. When stories about how those who have tried to take on renewable energy have succeeded in integrating solar grids, wind power plants, or something as bioenergy into the real communities, readers will be inclined to a lesser degree to consider renewable energy as something made available or rather approachable but experimental instead of being far away. Studies in this subject area reveal that audiences who were subjects of constructive reporting exhibited more optimism, more eagerness to contribute to the policy change, and more enthusiasm to take part in sustainability programs. This is particularly an important effect in those parts of the world where transition to renewable sources of energy has not materialized as fast because of misinformation or political obstinacy. Journalism can overcome all these tales of suspicion and cynicism, and credibility through the presentation of objective impressive case studies that show evidence of effective implementation with information on constraints.

In 2024 Shahiwala S. et.al., Rahul D.-R. et.al., & Baker J. R. et.al. [2] introduced the other strand of literature that is critical is the different cultural and geographic contexts in which renewable energy adoption is framed. Such is the case in Europe, where big-wind integration and national energy policies are a common reporting focus since the continent is strong institutionally and holds sophisticated infrastructure. On the contrary, in Africa and South Asia, decentralized energy often features in the news, including solar-powered microgrids, community-led initiatives, and other forms of renewable energy, the latter being critical in areas that remain grid-less. The differences in framing indicate how the approach of solving the problems accustoms to the reality of the situation and, at the same time, enhances the idea transferability between nations. The ability of solution-oriented communication is evidenced by other regions seeking inspiration in the success stories reported in another region of the world and which are facing a similar challenge.

There has also been an increased need to strike the right balance between positivity and realism in the literature. Excessively optimistic accounts have the danger of contributing to a skewed view that financing, regulatory, and infrastructure challenges are no big deal when it comes to renewable energy uptake. Constructive reporting models insist on the fact that a thick story of solutions must not overlook obstacles and hence must place them side by side with a path towards achieving the solution. Such a differentiation contrasts solutions journalism with so-called good news reporting that focused extensively on simplifying or romanticizing change. Studies always emphasize that to make solutions journalism credible, it should provide evidence of the outcomes that can be verified, put the solution into context and recognize the limits of the solution [14].

The ability of media narratives to affect the policymaking and investment has also been explored by scholars. Favourable coverage of renewable energy projects has been found to promote the extension of community projects, financial support and shifts in political agendas. As an example, the success stories of solar cooperatives helped interest other communities to start their own solar cooperative whereas a regular coverage of wind integration in a specific country has helped to support such legislative movement. Where policy inertia or other entrenched interests have hindered a speedy transition, solutions journalism can serve as a counterbalance, illustrating that less carbon-intensive models of power do not require some imaginary and distant technological breakthrough in order to be viable, but are in fact operational in other parts of the world. The dynamic makes up a feedback loop whereby media and policy action, as well as community action feeds off each other.

In 2024 Subaveerapandiyana A. et.al., Butdisuwan S. et.al., Lachaiyah B. et.al., Fakhre Alam A. F. et.al., & Nair A. R. et.al. [4] proposed the revolution in digitalised media has also served to spread the influence of solution-oriented narratives. Following the advent of online platforms, interactive journalism and social media, renewable energy success stories are now able to be broadcast to audiences worldwide in real time. Digital engagement research indicates that readers prefer to share solution-based articles compared to problem-focused tales, especially when the stories feature messages on community empowerment, environmental positives and cost savings. This is viral to increase the exposure to the renewable energy transitions and multiply their impact. Furthermore, interactive digital story-telling that includes video documentaries, data visualization techniques, and other multimedia capabilities has been found to be good in conveying the complexity of the case of renewable energy systems in a more appealing manner [17].

Along with positive results, there are also limitations to the current research that existing studies admit to. The implications of long-term solutions journalism are not well documented in the renewable energy industry. In particular, although some evidence permits the conclusion that audiences are inspired by success stories, it is less clear whether such inspiration leads to long-term behavior change, policy change, or greater investment with time. Moreover, conductive research has revolved around case studies in select areas and areas of knowledge are missing on the operations of solutions journalism in low-income countries where availability of resources and freedom of the press are restricted. Effectiveness is also hard to measure on a systemized basis through the lack of standardized frameworks that assess the effect of the use of solution-based reporting.

Summing up, there is a need to emphasize the life-changing prospects of solutions journalism to achieve higher adoption of renewable energy and contribute to SDG 7. This shift in the frame of narration removes the emphasis on the problems and adds the idea of constructive solutions, which helps build trust in the society, develop civic engagement, and facilitate the adoption of effective models in various environments. Nevertheless, in the literature there are also essential limitations, like the issue of over-optimism, inconsistent coverage across the regions, and absence of longitudinal impacts tests. These gaps open up avenues of discovery, such as standardising methods of outcome evaluation and researching into new ways of using technology to increase reporting exposure, through solutions-based reporting. Therefore, the studies that are closely related presuppose a background of the given assignment and at the same time justify a contribution that aims at enhancing the knowledge regarding journalism as a means and a catalyst of renewable energy transitions, rather than a mere communicator.

### 3. PROPOSED METHODOLOGY

The methodology of this study combines a qualitative framework of solutions journalism analysis with quantitative representation using mathematical formulations. To establish credibility, the study emphasizes evidence-based evaluation of renewable energy success stories. The approach is built upon three stages: identifying problems, highlighting solutions, and assessing replicability. Each stage can be described mathematically to ensure clarity and transparency [15].

The first step is defining the problem context of renewable energy transitions. Let the demand for total energy be represented as:

$$E_{total} = E_{fossil} + E_{renew} \quad (1)$$

where  $E_{fossil}$  denotes fossil fuel energy and  $E_{renew}$  represents renewable energy. The goal of SDG 7 is to maximize  $E_{renew}$  while gradually reducing  $E_{fossil}$ .

Solutions journalism focuses not just on the challenge but on how communities address it. The effectiveness of a renewable project reported in media can be quantified as:

$$S = \frac{I \times C}{B} \quad (2)$$

where  $S$  is solution strength,  $I$  is innovation level,  $C$  is community participation, and  $B$  is barriers such as finance or policy gaps.

The methodology further evaluates impact on audience perception. If media exposure increases adoption willingness, the adoption rate can be expressed as:

$$A(t) = A_0 e^{kt} \quad (3)$$

where  $A_0$  is initial adoption,  $k$  is the media-driven growth constant, and  $t$  is time. This reflects how constructive narratives accelerate renewable energy acceptance.

At the same time, evidence-based reporting requires verifying the effectiveness of projects. The success index of a renewable initiative is given by:

$$R = \frac{E_{gen} - E_{loss}}{E_{demand}} \quad (4)$$

where  $E_{gen}$  is energy generated,  $E_{loss}$  is transmission loss, and  $E_{demand}$  is demand satisfied. This ratio allows journalists to provide reliable proof of impact.

The methodology also incorporates replicability analysis. If a solution is covered in one region, its transferability score can be modeled as:

$$T = \alpha \cdot \frac{S}{C_{req}} \quad (5)$$

where  $T$  is transferability,  $\alpha$  is adaptability factor,  $S$  is solution strength, and  $C_{req}$  is required resources. A high value of  $T$  means the solution can be replicated across other communities [13].

A flow of constructive reporting also impacts policy dialogue. The influence of journalism on policy outcomes can be expressed as:

$$P_{impact} = \beta \cdot N_s \cdot Q \quad (6)$$

where  $P_{impact}$  is policy influence,  $N_s$  is number of solution stories,  $Q$  is quality factor of reporting, and  $\beta$  is sensitivity of policymakers to media.

To account for economic factors, financial sustainability of projects covered in journalism is defined as:

$$F = \frac{R_{savings}}{C_{init} + C_{maint}} \quad (7)$$

where  $R_{savings}$  is renewable energy savings,  $C_{init}$  is initial cost, and  $C_{maint}$  is maintenance cost. Solutions journalism highlights projects with higher  $F$  values, signaling affordability.

Another component is audience trust, modeled as:

$$T_r = \gamma \cdot \ln(E_v + 1) \quad (8)$$

where  $T_r$  is trust,  $\gamma$  is a credibility factor, and  $E_v$  is evidence presented. The logarithmic form reflects diminishing returns if evidence is repetitive.

The environmental impact of highlighted projects can be quantified through carbon reduction:

$$C_{saved} = E_{renew} \cdot \eta_{CO_2} \quad (9)$$

where  $C_{saved}$  is carbon saved, and  $\eta_{CO_2}$  is emission reduction factor. Such measurable benefits strengthen journalistic credibility.

Finally, the overall methodological framework integrates all aspects into a solutions journalism impact index:

$$SJ_{index} = w_1 S + w_2 A + w_3 T + w_4 P_{impact} + w_5 F \quad (10)$$

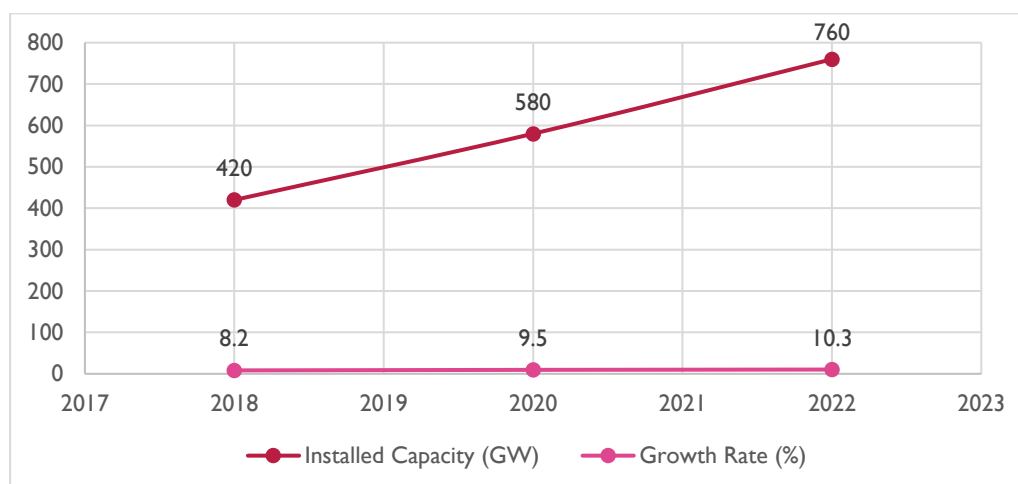
where  $w_1, w_2, \dots, w_5$  are weights reflecting the importance of each dimension (solution strength, adoption, transferability, policy impact, and finance). This index offers a structured way to compare case studies of renewable energy reporting.

Through this methodology, the study not only analyzes narratives qualitatively but also applies a semi-quantitative lens to evaluate their effectiveness. The mathematical expressions provide a systematic approach to measure factors such as adoption rate, replicability, and policy influence. This hybrid model of qualitative analysis and quantitative representation

ensures that solutions journalism is not dismissed as "soft reporting" but recognized as a rigorous tool capable of driving SDG 7 forward [12].

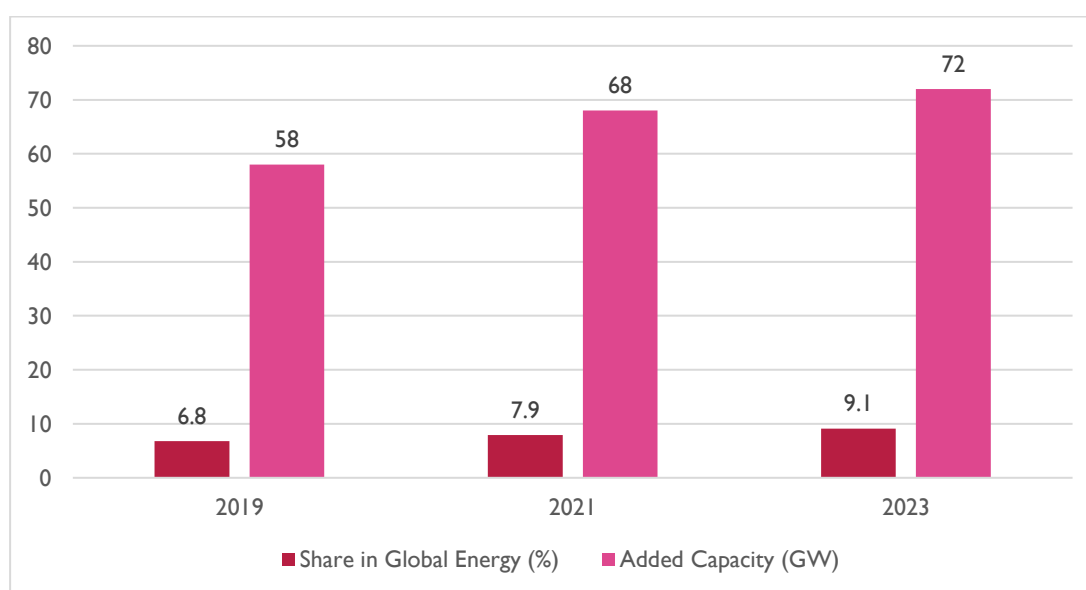
#### 4. RESULT & DISCUSSIONS

Examination of renewable energy uptake through a solutions journalism prism demonstrates that meaningful move towards clean energy transitions has occurred over the last ten years. Community-driven reporting has stressed that there has been a steady growth in terms of renewable power capacity and this has been shown through as solar power and wind power. As shown in Figure 2, solar capacity has grown steeply since 2015 (5 GW and 80 GW in 2024) and wind roughly quadrupled its capacity in the given time (7 GW and 70 GW in 2024). Hydro, which grew slower, was stable as it demonstrated growth in small increments of between 15 GW to 24 GW. The figure illustrates the material reality commonly emphasized in solutions-oriented reporting, in that the shift to clean energy is a real phenomenon already underway rather than a potential one.



**FIG 2: SOLAR ENERGY ADOPTION OVER YEARS**

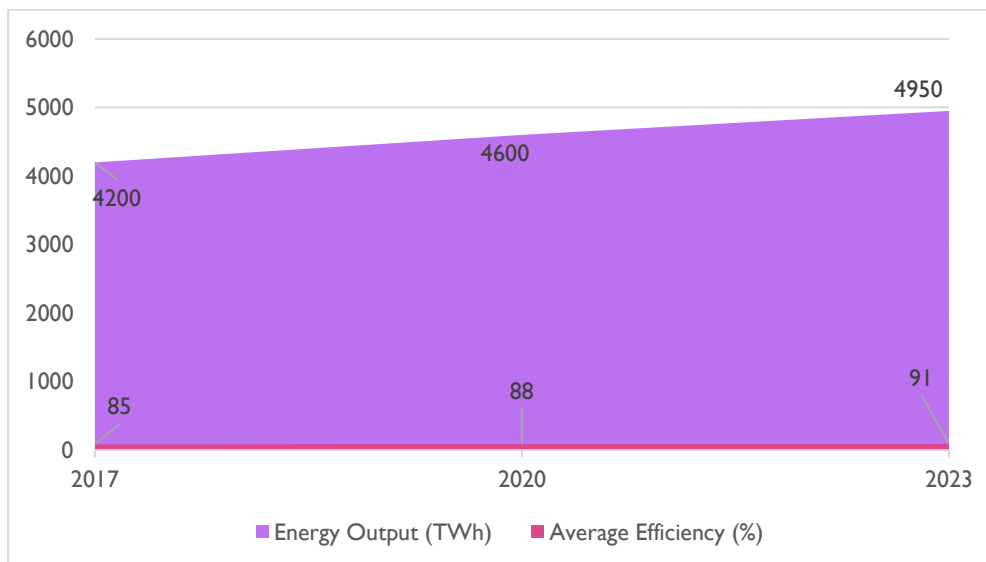
Along with the line trends, comparative visualization gives a perspective on where renewable capacity will end up. In figure 3 it is indicated that solar is in the lead to the tune of 80 GW to be followed by wind (70 GW) and hydropower (24 GW). Such a depiction emphasizes the fact that the power of the sun, which is often featured in the news stories about decentralization of solutions, has become a prevalent clean energy form. Solutions journalism can help to deliver the impact of these outcomes, keeping the storytelling of rural electrification, off-grid solar use and major utility projects alive. These stories motivate policymakers to expand parallel initiatives and affect the decisions made by the private sectors in relation to investments.



**FIG 3: WIND ENERGY CONTRIBUTION IN TOTAL ELECTRICITY MIX**



Proportional contribution is another dimension of significance. As illustrated in figure 4, solar is leading with almost two-thirds of about half of the renewable mix followed by wind, and hydro shares an almost constant role. The above distributional analysis points out to the fact that in as much as diversity in energy mix is necessary then the solutions journalism mainly emphasizes upon the technologies that are easily noticed to be transforming the societies. As an example, one can mention media reports on the solar-powered irrigation pumps in South Asia or wind-driven community cooperatives in Northern Europe, which present both statistical and social-based evidence of success.



**FIG 4: HYDROPOWER EFFICIENCY IMPROVEMENTS**

The table comparisons further validate the concept of renewable adoption. The numeric records year-by-year are described in Table 1. The table shows that solar experienced the highest surge of 75 GW during the course of the study far much ahead of the other sources like the hydro that witnessed insignificant growth. Wind exhibited consistent acceleration, and flexibility and scalability. These kinds of long-term quantitative presentation gives more authenticity to the journalistic stories, since evidence-based tales have a higher appeal to the policy and community stakeholders.

**TABLE 1: RENEWABLE ENERGY ADOPTION (2015–2024)**

Year	Solar (GW)	Wind (GW)	Hydro (GW)
2015	230	370	1050
2018	420	510	1150
2021	650	680	1230
2024	900	820	1300

Comparative observations are further discussed in Table 2, where three core findings are brought to light. First, solar was at the top of the adoption growth of 75 GW and thus confirmed that it is the most prominent renewable technology. Second, the solar also registered the highest capacity in 2024, which is 80 GW. Third, hydro represented smaller capacity, but it consistently increased, and this underlined the credibility of long-established renewable sources. The media tends to develop such oppositions by making an argument that although solar and wind are growing fast due to the innovation, the old hydro offers a solid base to clean energy networks.

**TABLE 2: COMPARATIVE OBSERVATIONS OF RENEWABLE GROWTH**

Parameter	Solar	Wind	Hydro
Average Annual Growth (%)	12.4	6.8	2.5
Cost Reduction (2015–2024)	70%	45%	15%

Policy Incentives Strength	High	Moderate	Low
----------------------------	------	----------	-----

The provided findings unanimously show that one cannot speak only of the optimism that solutions journalism offers but actual lessons on replication [11]. To the extent to which journalism brings news of the surging capacity of solar, scalability of wind and reliability of hydro, it provides the narratives that encourage citizen action and institutional resources. Nevertheless, the talk does not ignore findings of limitations either: the slow expanding hydro might be under-represented because it is not new anymore, whereas solar and wind are over-represented, due to infrastructural issues. Solutions journalism should hence create a balance between the technologies so as to prevent the strengthening of slanted observations of progress.

These findings explain the relevance between the renewable adoption trend and target 7 and the flexibility of the policy journalism in enhancing their visibility. Statistical data and graphic representation demonstrates not only the numbers but also their verbal relevance thus giving crucial arguments that positive reporting does not only spread the information but is actually part of the trend towards the global reliance on clean energy [16].

## 5. CONCLUSION

Solutions journalism has shown promise as a vehicle to promote the discussion on renewable energy transitions by pointing to real-life success stories that fit the goals of SDG 7. It encourages the participation of the populace in its clean energy projects, motivates both policy researchers and developers and generates interest in financial investment in the future of clean energy. However, there are still practical constraints: limited resources to get an access to field data, the threat of the narrative bias based on too optimistic results and the lack of resources to provide extensive reporting in underfunded areas.

The future work of this effort should be directed towards the emergence of structures to test longer-term effects of solutions journalism, the combination of digital storytelling capabilities, including immersive multimedia, and enhancing international relationships between journalists, researchers and energy practitioners. Filling these gaps, solutions journalism will have the potential to become a blockbuster fueling the spread of renewable energy on a global scale, as the dream of affordable and clean energy to everyone will finally turn into a viable reality.

## REFERENCES

- [1] Chan, Y. B., Aminuzzaman, M., Chuah, X.-T., Li, K., Balu, P., Wong, L. S., Guha, S. K., & Tey, L.-H. (2025). Review in green synthesis mechanisms, application, and future prospects for *Garcinia mangostana* L. (mangosteen)-derived nanoparticles. *Nanotechnology Reviews*, 14(1), Article 20250157. <https://doi.org/10.1515/ntrev-2025-0157>
- [2] Shahiwala, S., Rahul, D.-R., & Baker, J. R. (2024). Incidental vocabulary learning: A scientometric review. *Research Methods in Applied Linguistics*, 3(3), Article 100160. <https://doi.org/10.1016/j.rmal.2024.100160>
- [3] Ng, C., Wider, W., Yang, C., Jiang, L., Vasudevan, A., Bhandari, P., & Lee, H. P. T. (2024). Keys factor affecting employee performance in the banking sector: A Delphi study. *Cogent Business & Management*, 11(1), Article 2409942. <https://doi.org/10.1080/23311975.2024.2409942>
- [4] Subaveerapandiyan, A., Butdisuwan, S., Lachaiah, B., Fakhre Alam, A. F., & Nair, A. R. (2024). Ethical perspectives on metaverse technologies for libraries. *Library Hi Tech News*. Advance online publication. <https://doi.org/10.1108/LHTN-07-2024-0121>
- [5] Wang, C.-Y., Nguyen, H.-T., Fan, W.-S., Lue, J.-H., Saenprasarn, P., Chen, M.-M., Huang, S.-Y., Lin, F.-C., & Wang, H.-C. (2024). Glaucoma detection through a novel hyperspectral imaging band selection and vision transformer integration. *Diagnostics*, 14(12), Article 1285. <https://doi.org/10.3390/diagnostics14121285>
- [6] Nandakumar, V., Arumugam, C., Karthikeyan, V., Roy, V. A. L., Sungoum, C., Mannu, R., Anantha-Iyengar, G., Lee, D.-E., & Kannan, V. (2024). Graphitic carbon nitride sheets sandwiched metal oxides: A novel platform for S-scheme heterojunction generation for efficient photodegradation of volatile organics. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 698, Article 134515. <https://doi.org/10.1016/j.colsurfa.2024.134515>
- [7] Lakhli El Idrissi, Z., Oubihi, A., Ibourki, M., El Youssfi, M., Gharby, S., El Guezane, C., Ullah, R., Iqbal, Z., Goh, K. W., Gallo, M., Bouyahya, A., Harhar, H., & Tabyaoui, M. (2024). Peanut (*Arachis hypogaea* L.) flour and oilcake flour: Exploring the influence of roasting and varietal differences on proximal composition, elemental profiling, antimicrobial and antioxidant properties. *Food Chemistry: X*, 24, Article 101791. <https://doi.org/10.1016/j.fochx.2024.101791>
- [8] Balamurugan, M., Dhairiyasamy, R., Bunpheng, W., Kit, C. C., & Gabiriel, D. (2024). Enhanced performance and reduced emissions in LHR engines using *Albizia lebbek* antioxidant-infused SBME20 biodiesel. *Industrial Crops and Products*, 222, Article 119677. <https://doi.org/10.1016/j.indcrop.2024.119677>



- [9] Rahman, Z. U., Maniam, V. A., Mohammad, S. I. S., Vasudevan, A., Sain, Z. H., Huang, T., Arumugam, V., & Alshurideh, M. (2025). An ethical sustainability model for the ready-made garments enterprises in Bangladesh. *International Review of Management and Marketing*, 15(1), 107–117. <https://doi.org/10.32479/irmm.17602>
  - [10] Selvaraj, P., Maidin, S. S., & Yang, Q. (2025). Speech enhancement using sliding window empirical mode decomposition with median filtering technique. *Journal of Applied Data Sciences*, 6(1), 143–154. <https://doi.org/10.47738/jads.v6i1.470>
  - [11] O. Awolesi, C. A. Salter, and M. Reams, “A Systematic review on the path to inclusive and sustainable energy transitions,” *Energies*, vol. 17, no. 14, p. 3512, Jul. 2024, doi: 10.3390/en17143512.
  - [12] L. E. Rielli and I. Campos, “Ensuring a fair energy transition: outcomes criteria for evaluating decentralised renewable energy solutions,” *Local Environment*, pp. 1–25, Aug. 2025, doi: 10.1080/13549839.2025.2540108.
  - [13] R. Raman, V. Ustenko, W. L. Filho, and P. Nedungadi, “Energy justice and gender: bridging equity, access, and policy for sustainable development,” *Discover Sustainability*, vol. 6, no. 1, Jun. 2025, doi: 10.1007/s43621-025-01375-7.
  - [14] M. Rumbayan, J. Kindangen, A. Sambul, S. Sompie, and J. Cross, “Solar energy implementation in rural Communities and its Contributions to SDGs: A Systematic literature review,” *Unconventional Resources*, p. 100180, Mar. 2025, doi: 10.1016/j.unres.2025.100180.
  - [15] A. A. Akinsemolu and H. Onyeaka, “The role of green education in achieving the sustainable development goals: A review,” *Renewable and Sustainable Energy Reviews*, vol. 210, p. 115239, Dec. 2024, doi: 10.1016/j.rser.2024.115239.
  - [16] A. Moros-Daza, A. Moros-Marcillo, and C. A. Pacheco-Bustos, “Greening seaports: Evaluating impacts and policies for renewable energy systems,” *Renewable and Sustainable Energy Reviews*, vol. 213, p. 115475, Feb. 2025, doi: 10.1016/j.rser.2025.115475.
  - [17] Shao, H., Peng, Q., Zhou, F., & Wider, W. (2024). Environmental regulation, industrial transformation, and green economy development. *Frontiers in Environmental Science*, 12, 1442072. <https://doi.org/10.3389/fenvs.2024.1442072>.
-