

SUPPORTING CLIMATE REPORTING IN INDONESIAN NEWSROOMS



TABLE OF CONTENTS

EXECUTIVE SUMMARY	01
Key findings	01
CONTEXT	03
Introduction	03
Collaboration across the Indo-Pacific	04
The role of media in climate communication	04
Our approach	06
PART 1. MEDIA ANALYSIS	07
Overview	07
Methodology	08
Results and discussion	09
Conclusion	14
PART 2. BASELINE SURVEY – INDONESIAN JOURNALISTS	15
Overview	15
Methodology	16
Results and discussion	16
Conclusion	24
PART 3. THEMATIC ANALYSIS OF FOCUS GROUP DISCUSSIONS	25
Overview	25
Methodology	26
Results and discussion	27
Conclusion	34
PART 4. A VISIT TO TAKALAR SEAWEED VILLAGES	35
PART 5. KNOWLEDGE-SHARING WORKSHOPS	38
Overview	38
Key observations and outcomes	40
Conclusion	42
PART 6. DISSEMINATION OF FINDINGS	43
CONCLUSION	44
Recommendations	45
REFERENCES	46
APPENDICES	47
Appendix A	47
Appendix B	50

EXECUTIVE SUMMARY

Indonesia is highly vulnerable to the impacts of climate change. Its islands face acute exposure to sea level rise, coastal erosion and extreme weather, alongside mounting pressure on food, water and energy systems. Sulawesi is emblematic of these risks: coastal communities dependent on seaweed farming, fisheries and agriculture are already experiencing changes to weather patterns, tidal conditions and marine ecosystems. Against this backdrop, the quality of regional climate journalism has a material impact on public understanding and the decisions communities, governments and industries are able to make.

In 2026, the Monash Climate Communication Hub and the Australia-Indonesia Centre undertook a project to understand journalists' knowledge and newsroom interest in climate change and the energy transition, using Makassar, South Sulawesi, as a regional case study. Funded by the Australia-Indonesia Institute under DFAT, with Universitas Hasanuddin as the Indonesian research partner, the project combined media analysis, journalist surveys, focus groups, community fieldwork and knowledge-sharing workshops between Indonesian and Australian journalists, researchers and communication specialists.

The research found a clear appetite among journalists to strengthen climate and energy reporting, alongside significant barriers including limited scientific knowledge and access to experts, newsroom pressures, commercial constraints, and limited time and resources.

Key findings

- **Climate change is recognised, but coverage often lacks context.**
Analysis of 152 articles from Sulawesi's online news media between March 2024 and June 2025 found only 11% explicitly attributed climate change to human activity, with links to policy decisions almost entirely absent. Just 0.7% of articles questioned the scientific basis of climate change, indicating strong consensus around its reality.
- **Government and industry dominate the climate narrative.**
Government sources appeared in 45% of articles and industry in 40%, compared with just 5% featuring scientists or researchers. PT PLN, the state-owned electricity corporation, appeared in 27% of article headlines.
- **Journalists are motivated but under-equipped.**
The 15 participating journalists expressed strong commitment to improving their reporting and identified training, expert access and cross-border collaboration as valuable forms of support. Fellowships and grants were repeatedly cited as a primary mechanism for enabling in-depth coverage within newsroom constraints.
- **Training is associated with greater confidence and output, but not necessarily knowledge.**
Previous climate and energy training was not associated with higher climate literacy scores, but was associated with greater confidence in writing about climate change and producing more stories.
- **There is an opportunity to strengthen locally relevant climate journalism.**
Participants valued connections with scientists, peers and international journalists, and opportunities to develop reporting that links climate and energy issues to community experience. The project demonstrated the value of long-term, collaborative engagement over one-off training.

These findings highlight clear scope for further research and research-practice engagement. Strengthening regional climate journalism is both a media development opportunity and an investment in public understanding and community resilience. The model tested in South Sulawesi is modular, evidence-based and explicitly transferable to other regions of Indonesia, providing a foundation for longer-term collaboration as communities, governments and industries navigate increasingly complex decisions around climate change and energy systems.



The report identifies five priorities for strengthening climate and energy journalism in Indonesia:

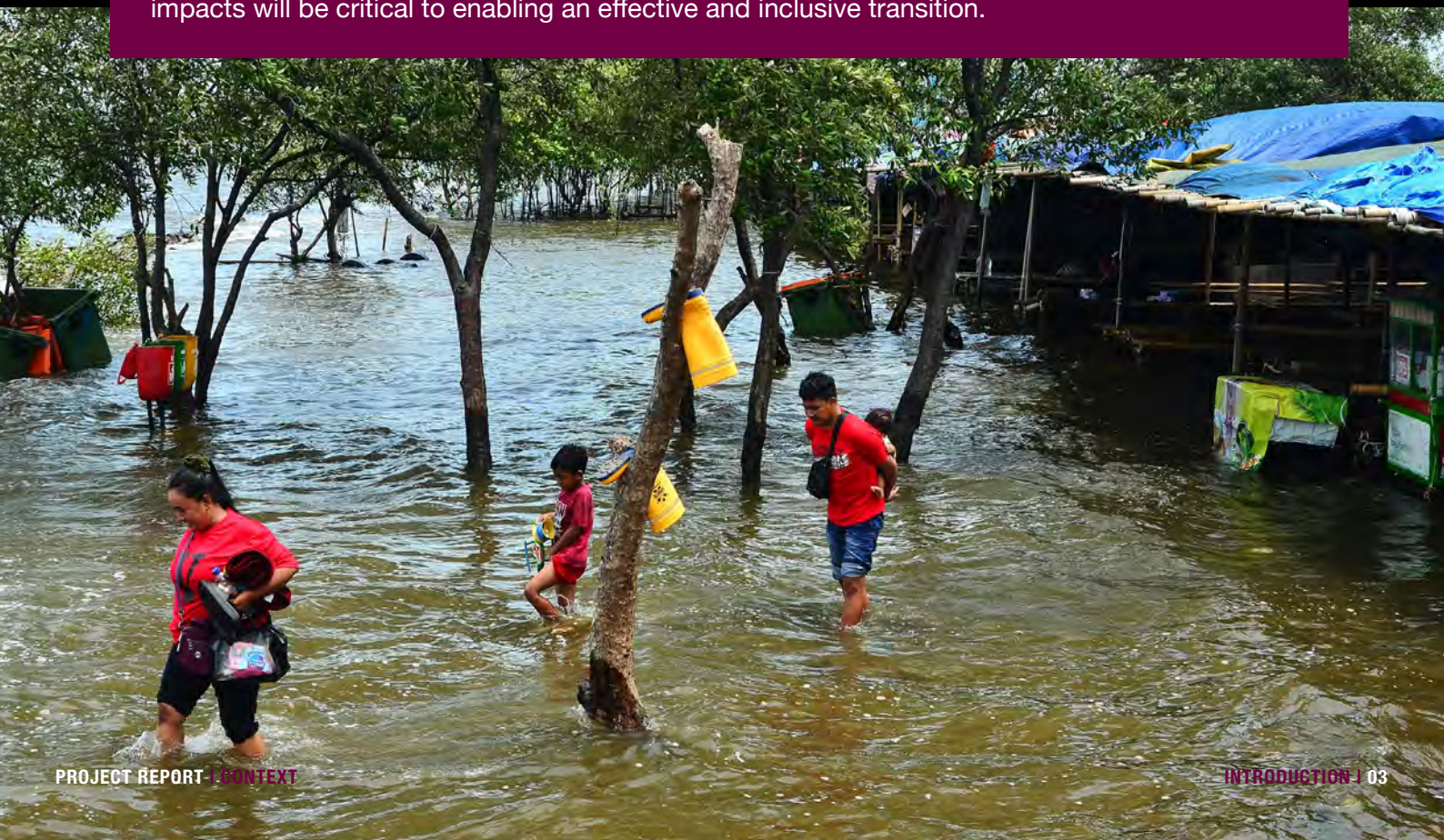
- 1.** Strengthen climate and energy literacy through ongoing journalist training and professional development programs.
- 2.** Build pathways between journalists, scientists, social scientists and other experts to improve access to credible sources and contextual information.
- 3.** Develop regional journalist networks to support peer learning and collaboration.
- 4.** Provide sustainable support mechanisms for climate journalism, including fellowships, grants and reporting partnerships.
- 5.** Improve journalist access to climate and energy data, ensuring information is presented in clear, ready-to-use formats.

CONTEXT

INTRODUCTION

Indonesia is highly exposed to the impacts of climate change. As the world's largest island nation, it is particularly vulnerable to sea level rise, coastal flooding, rising temperatures and changing rainfall patterns, and faces growing pressure on food and water security (World Bank Group, 2021). Island and coastal regions such as Sulawesi, where livelihoods are closely tied to agriculture, fisheries and marine ecosystems, are especially at risk. An assessment of vulnerability conducted in South Sulawesi more than a decade ago found coastal communities were already reporting unpredictable weather, erosion and negative impacts on seaweed farming (Rolos et al., 2012).

Indonesia also faces a complex energy transition. The country's electricity system remains heavily dependent on coal, accounting for around 60% of the national energy mix (International Energy Agency, 2022). This reflects Indonesia's domestic energy needs and the historic role of fossil fuels in supporting economic growth and energy access. At the same time, the government has committed to achieving net-zero emissions by 2060 or earlier and has set targets to increase renewable energy generation, including a goal to achieve 19-23% renewable energy by 2030 (Republic of Indonesia, 2025). Progress towards these goals is influenced by a range of factors, including the geographic complexity of delivering energy across a vast and disconnected landscape, rapidly growing energy demand, existing energy infrastructure and the economic importance of the fossil fuel sector for employment and regional development (International Monetary Fund, 2021). These challenges highlight the importance of ensuring that the transition is practical and responsive to local community needs. Building public understanding and supporting informed conversations about energy, livelihoods and climate impacts will be critical to enabling an effective and inclusive transition.



COLLABORATION ACROSS THE INDO-PACIFIC

Australia and Indonesia face shared climate risks including extreme weather, coastal flooding, and pressure on food, water and energy systems. Bilateral cooperation has been formalised through programs such as the KINETIK partnership, the Indonesia-Australia Infrastructure Partnership (KIAT), and the Sustainable Infrastructure Assistance Program (SIAP2). These programs support clean energy transition, climate-resilient infrastructure and green finance (Department of Foreign Affairs and Trade, n.d.; KIAT, n.d.; KINETIK, n.d.).

As neighbouring countries experiencing different but interconnected energy transitions, Australia and Indonesia have opportunities for practical collaboration that supports economic development, workforce capacity and regional energy security. Areas of shared interest include renewable energy investment, critical minerals and battery supply chains, electric vehicle industries, green hydrogen and ammonia, and the expansion of renewable energy infrastructure in regional and remote communities. Australia's experience in areas such as rooftop solar, the development of renewable energy zones, community energy projects and implementation of policy and regulations may offer useful lessons. Indonesia's rich deposits of critical minerals and growing manufacturing sectors present opportunities for partnership and innovation.

There is also increasing demand in both countries for education, training and skills development related to the energy transition, including renewable energy technologies, grid integration, electric vehicles, climate adaptation and community preparedness. Collaboration across governments, industry, universities and civil society can support knowledge exchange and help ensure a transition that is inclusive and responsive to community needs.



THE ROLE OF MEDIA IN CLIMATE COMMUNICATION

Media play a central role in translating complex climate and energy issues into information that can inform public understanding and policy debate. Framing is a key mechanism in this process, shaped by factors including editorial norms, organisational pressures, interest group influence and the political orientations of journalists (Scheufele, 1999).

Climate change coverage in Indonesia gained prominence when the country hosted COP13 in Bali in 2007, but attention sharply declined in the years that followed as the initial momentum faded (Rochyadi-Reetz and Wolling, 2022). Environmental issues overall remain underrepresented in the Indonesian media today for a number of complex and interrelated reasons (Wahyuni, 2017).



Challenges in climate and energy reporting

Journalists covering climate change face significant structural and contextual challenges, including limited access to reliable data, tight deadlines, resource constraints and competing reporting priorities. In emerging economies, climate and energy reporting also requires navigating complex relationships between environmental goals, economic development priorities and public policy considerations (Nassanga et al., 2016). As a result, coverage often focuses on immediate events with human impact – such as extreme weather or political developments – rather than longer-term systemic issues and solutions (Hase et al., 2021).

The broader information environment also shapes how climate and energy issues are understood by the public. The rapid growth of digital and social media has increased the volume and speed of information sharing, but has also contributed to the spread of misinformation, confusion and public uncertainty around the topic (Denniss and Lindberg, 2025). These dynamics highlight the importance of accessible, evidence-based journalism and trusted public communication.

The need for localised, collaborative communication

Effective climate communication requires locally grounded reporting that connects global climate and energy issues to the everyday experiences of communities (Howarth and Anderson, 2019). Translating scientific and policy information into accessible, relevant and engaging narratives is important for supporting public understanding and informed discussion (Nerlich et al., 2010). Trusted mainstream media channels play a key role in this process, particularly when reporting reflects local contexts, priorities and lived experiences.

In the Australia-Indonesia context, collaboration between journalists and other climate communicators, researchers and institutions can support shared learning and strengthen regional understanding of climate impacts and the energy transition. Cross-border exchange also creates opportunities to share communication approaches, audience insights and practical solutions relevant to communities across the Indo-Pacific region.

OUR APPROACH

To address these challenges, this project combined research, journalist engagement, fieldwork and international knowledge exchange. It was designed to better understand the climate and energy reporting landscape in Sulawesi, identify barriers and opportunities for journalists, and support stronger regional collaboration on climate communication across Indonesia and Australia.

This program was conducted in six primary parts:

1. A media analysis

to assess current climate and energy reporting in Sulawesi.

2. Baseline surveys

with journalists to gauge climate and energy literacy, reporting practices, and key challenges. These were conducted prior to focus groups.

3. Focus groups with journalists

Thematic analysis of focus group transcripts was conducted to explore climate and energy reporting challenges and opportunities in Sulawesi in greater depth, and to identify areas for targeted support.

4. Fieldwork

Following focus groups, participating journalists visited Laikang Village in Takalar Regency, South Sulawesi alongside a team of scientists. This was an opportunity for on-the-ground reporting with members of the community explaining observed change, and scientists providing expert context and explanation.

5. Knowledge-sharing workshops in Melbourne

bringing together a sub-set of the Indonesian journalists participants with Australian media, scientists, and climate communication specialists. Feedback was captured through surveys.

6. Dissemination of findings

in Makassar to share learnings and thank participants for their contribution.

This report also contains a summary of media outputs made throughout the program (Part 7).

PART 1. MEDIA ANALYSIS

OVERVIEW

This study analyses climate and energy discourse in online print and digital news media across the Sulawesi region.



METHODOLOGY

Data was collected from Factiva using the location tag ‘Sulawesi’ for the period 01/03/2024 - 30/06/2025.

The search was conducted using both English and Bahasa keywords related to climate science, the energy transition and sustainability as follows:

“climate change” OR “global warming” OR “carbon emissions” OR “emissions” OR “renewable energy” OR “energy transition” OR “clean energy” OR “net zero” OR “net zero emission” OR decarbonisation OR sustainability OR “solar power” OR “solar-powered” OR “wind power” OR “wind-powered”) OR bioenergy OR “just transition” OR “perubahan iklim” OR “pemanasan global” OR “emisi karbon” OR “emisi” OR “energi terbarukan” OR “transisi energi” OR “energi bersih” OR “dekarbonisasi” OR “keberlanjutan” OR “tenaga surya” OR “tenaga angin” OR “bioenergi” OR “krisis iklim” OR “climate crisis”) AND (Makassar OR Sulawesi)

Sampling

Initial collection: The initial search resulted in 1047 articles

Data cleaning: Duplicates based on title, date and content were removed, bringing the total to 900 articles.

Proportional stratified sampling: A proportional stratified sample of 301 articles was selected for labelling. These were taken across quarters to reflect changes in reporting between different climatic periods of the year (Table 1).

Table 1. Article sample by season

Period	Number of articles in sample
Autumn 2024	36
Winter 2024	40
Spring 2024	53
Summer 24/2025	49
Autumn 2025	98
Winter 2025	25
TOTAL	301

Coding: The 301 articles were labelled according to a modified version of the Codebook for the Analysis of Frames on Climate Change in Media Content and Press Releases in Indonesia (Rochyadi-Reetz, 2024). Modifications were made to reduce the complexity of labelling by removing the framing criteria under each sub-theme (called ‘moral evaluation of frame’ elements). Instead, a binary labelling method was used that only indicated the presence/absence of sub-themes within each article rather than its framing. Labelling criteria for health-related topics were also added to the codebook to investigate the attribution of health impacts to climate change in media reporting.

Data attrition: Of the 301 sampled articles, 67 articles were excluded as syndicated duplicates and 82 articles were removed as ‘false positives’, containing keywords but lacking climate relevance. The final dataset for analysis contained 152 articles.



RESULTS AND DISCUSSION

The 'sustainability' misnomer

The analysis identified two primary reasons for the inclusion of irrelevant articles in the initial search:

1. Linguistic ambiguity of the term 'keberlanjutan':

In Indonesian media, keberlanjutan (which translates to 'sustainability') is frequently used as a synonym for political or operational longevity rather than linked to environmental considerations. For example, the following comment made about the 'sustainability' of a previous administration's programs was picked up in the search, but is not relevant:

Bahasa: [Debat Pilkada Sulsel, Ramdhan-Azhar Singgung Kehadiran Pemerintah, Sudirman-Fatmawati Tegaskan Keberlanjutan](#)

English: In the South Sulawesi election debate, Ramdhan-Azhar touched on the government's presence, while Sudirman-Fatmawati emphasised the sustainability of the partnership.

2. Superficial acknowledgement:

The phrases 'climate change', 'climate crisis' and 'renewable energy' often appear in articles without acting as a central theme or any further explanation. For example, this [Antara \(2025\) article](#) on narcotics mentions renewable energy as part of a broader civic speech but does not provide any relevant detail.

Framing the narrative

Attribution

Direct attribution of responsibility for anthropogenic climate change appeared in only 17 articles (11.2% of the sample). Two of those articles contained multiple attributions (19 total attribution mentions). Where attribution was present, it was almost exclusively directed towards industry and deforestation (15 total mentions). ‘Attribution of political decision-making’ to changes in the climate (e.g. regulations or laws that inform emissions output) was limited, with only a single mention in the sample. Similarly, attribution of ‘Social’ factors such as individual consumption were noted twice across the sample.

This pattern of attribution is consistent with findings from media analyses of extreme weather event coverage. For example, Adiprasetyo et al. (2024) reviewed 589 news articles across 16 Indonesian online outlets to assess coverage of floods. They found that news media tends to downplay human activity as a cause of floods while emphasising the role of nature, and that attribution responsibility was the most frequently employed frame even though it only provided a partial and fragmented explanation of the floods.

Five articles (3.3%) discussed health, with three explicitly attributing health concerns to climate change. Given Indonesia faces heightened risks from heat and climate-sensitive diseases (Rumbiak, 2025), this represents a significant gap. The limited integration of health framing may constrain how audiences understand and relate to climate change, particularly given health effects often feel more immediate and tangible than environmental ones. It may also limit public awareness of associated health risks, reducing the extent to which individuals are equipped to recognise and respond to impacts on their own wellbeing. As a result, climate change may be perceived as a more distant or abstract issue, potentially weakening public engagement and reducing pressure for locally relevant adaptation and mitigation responses.



Framing

The article sample presented climate change as a multifaceted challenge.

Problem frame

‘Ecological Problems’ including but not limited to desertification, rising sea levels, flooding, drought and other extreme weather events, was the most frequently identified concern in the sample, appearing in 23% of articles. This was followed by ‘Economic Problems’ (8.6%). Notably, only 0.7% of articles questioned the scientific basis of climate change, indicating strong consensus around its reality. This pattern aligns with Rochyadi-Reetz and Wolling’s (2022) analysis of Indonesian media, in which ecological problems were also the most frequently occurring frame element, followed by social and economic problems, while uncertainty around climate science appeared in only 3.2% of articles. This suggests that problem-focused framing, particularly around ecological impacts, and the marginalisation of climate skepticism, may be characteristic features of climate change coverage across Indonesian media more broadly.

Benefit frame

Nearly half of the sample (45.4%) referenced the benefits of taking climate action. The dominant perceived benefit was ‘Economic’, featuring in 31.6% of articles. Themes under this banner included opportunities for investment, the creation of ‘green collar jobs’ and the potential for economic prosperity. Highlighting economic benefits is an established communication strategy and may help build political support for low-carbon transitions in emerging economies like Indonesia (Hailemariam and Ivanovski, 2025; Prizzon et al., 2024). However, this framing risks focussing on who benefits from the transition and excluding discussion around who bears the social and economic costs (Prizzon et al., 2024).

‘Social benefits’ of acting on climate change was the second most cited category (19.1%) and included themes such as improved community health and wellbeing, emissions reduction and equity. Around 7% (7.2%) of the article sample referenced both social and economic benefits. The more limited representation of social benefit themes suggests that ‘just transition’ principles are not yet embedded in mainstream Indonesian reporting and discourse. This may reflect either limited policy emphasis on social outcomes or challenges in translating these concepts into locally resonant media narratives.





Mitigation and adaptation

Current and future mitigation and adaptation were mentioned in the analysed coverage.

Mitigation

Climate mitigation refers to ‘actions or activities that limit emissions of greenhouse gases from entering the atmosphere and/or reduce their levels in the atmosphere’ (IPCC, 2024).

‘Mitigation’ and associated strategies were noted in 104 articles (68% of the total sample) and grouped into four broad categories: technological, social, economic and political. However, 87.5% of articles mentioning ‘Mitigation’ only noted a single strategy.

‘Renewable energy’ was the most frequently cited mitigation (34.8%), making up 51% of all mitigation mentions. Social approaches, such as environmental campaigns, using popular culture for awareness raising and the benefits of societal and individual action, were referenced in 21.1% of articles. Only 7.9% mentioned climate policy as a mitigation strategy.

An imbalance in framing may contribute to perceptions of climate action as primarily a technical or individual behavioural challenge, rather than one requiring coordinated policy, institutional reform, and systemic change (Chater and Loewenstein, 2023).

Adaptation

In this analysis, adaptation is defined as ‘adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects or impacts’ (UNFCCC, n.d.).

‘Adaptation’ received considerably less coverage than ‘mitigation’, with 29 articles (19%) referencing adaptation strategies aimed at maintaining quality of life in the face of climate impacts. This imbalance is concerning given Indonesia’s vulnerability to climate hazards including extreme flooding, sea-level rise and rising temperatures (World Bank Group, 2021). It may leave communities unprepared for impacts that are already occurring, regardless of the pace of the energy transition.



Sources

Government institutions and industry were the most frequently cited sources in the sample, appearing in 45.4% and 40.1% of articles respectively. In contrast, NGOs were mentioned in 7.9%, and scientists or researchers were quoted in 5.3%. Local community members and individuals featured in 3.3% of articles.

This sourcing pattern reflects a broader structural feature of climate journalism, particularly in emerging economies. Specialist reporters are becoming increasingly less common and the relationships between climate journalists and their sources have changed. Expert sources remain important, but their composition has shifted from scientists to a broader range of stakeholders including a strong and rising influence of stakeholder PR (Schäfer, 2021).

The barriers to sourcing diverse voices are structural and mutually reinforcing. For academics in emerging economies, achieving publication visibility in high-impact international journals requires navigating significant obstacles: limited institutional research funding, inadequate infrastructure, the requirement to publish in English, and the concentration of research funding agencies in the Global North which are also more likely to cover the high article processing charges that prestigious journals demand (Nakamura et al., 2023; Rucavado Rojas and Postigo, 2025). This leaves researchers from wealthier nations dominating fields like climate science and research from emerging economies systematically excluded from influential reports such as those of the IPCC, reinforcing existing disparities in both scientific visibility and policy influence (Rucavado Rojas and Postigo, 2025).

PT Perusahaan Listrik Negara (PLN), the state-owned electricity corporation and sole distributor of power to approximately 98% of Indonesian households, was the most prominent single actor, appearing in 41 of 152 article headlines (27%). While the essential services and infrastructure PLN provides makes this unsurprising, it reflects a broader pattern in which the government's institutional communications dominate the climate and energy narrative. This is consistent with findings from the CASE Indonesia media monitoring report (2023) which found that 68% of energy transition articles across Indonesia originated from press releases issued by state actors and energy sector players.

When institutional sources dominate and scientific or civil society voices are marginalised, journalism risks functioning as a conduit for official narratives rather than as a resource for informed public debate (Schäfer and Painter, 2021). The quality of information available to citizens about climate change and the energy transition has direct consequences for public understanding and democratic decision-making (OECD, 2022), shaping individual choices and the political conditions under which climate policy is contested and enacted.



CONCLUSION

These findings point to several recurring patterns in climate coverage across online print and digital news media in Sulawesi:

- A predominantly economic framing of the energy transition
- Sourcing heavily weighted towards government and industry actors
- Limited coverage of adaptation relative to mitigation
- A tendency to report on climate action without situating it within broader causal or policy contexts
- Limited attribution of extreme weather events to climate change or rationale for the energy transition

These patterns are not unique to the region. They reflect structural features of climate journalism across emerging economies, including a scarcity of specialist reporters, development-oriented journalism norms that prioritise national progress narratives, and a reliance on institutional press releases (from government and industry) as primary sources.

Strengthening climate reporting will likely require:

- Greater integration of climate and energy science into journalism education in Indonesia and ongoing opportunities to build literacy
- Pathways to access expert commentary

Building this capacity at the regional level presents a clear opportunity to improve the depth, balance, and contextualisation of climate reporting in Sulawesi.

PART 2. BASELINE SURVEY – INDONESIAN JOURNALISTS

OVERVIEW

The following section presents findings from a survey conducted with 15 Indonesian journalists prior to the journalists' focus group in Makassar, Sulawesi. The survey included questions about climate and energy knowledge, reporting experience, training and perceived barriers to impactful localised climate and energy reporting.

The survey is exploratory rather than representative. Its value lies in identifying patterns that can inform future training, newsroom support and collaboration with scientists and other expert sources.

Respondents do not present themselves as experts in climate or energy reporting. Instead, they describe themselves as having moderate levels of knowledge and moderate levels of confidence. They see climate and energy reporting as important to their newsrooms, relevant to audiences, and beneficial rather than risky for their careers. Therefore, the primary issue is not resistance to the topic but rather a gap between perceived importance and actual capacity.



METHODOLOGY

Participants were asked to complete 23 multiple choice and open response questions in-person prior to the focus group discussions on 11/03/2026 (Appendix A).

Results were analysed in R using exploratory data analysis. Given the small sample size, no formal inferential analyses were performed, as statistical power was insufficient to support reliable hypothesis testing.

RESULTS AND DISCUSSION

Knowledge and literacy

Journalists rated themselves at a moderate level across all climate and energy topic areas presented. There was limited variation across respondents and no clear pattern linking higher self-reported knowledge to age or years of experience. This suggests climate and energy literacy should not be treated as something that simply accumulates through time in journalism and that experience alone does not appear to resolve the knowledge gap.

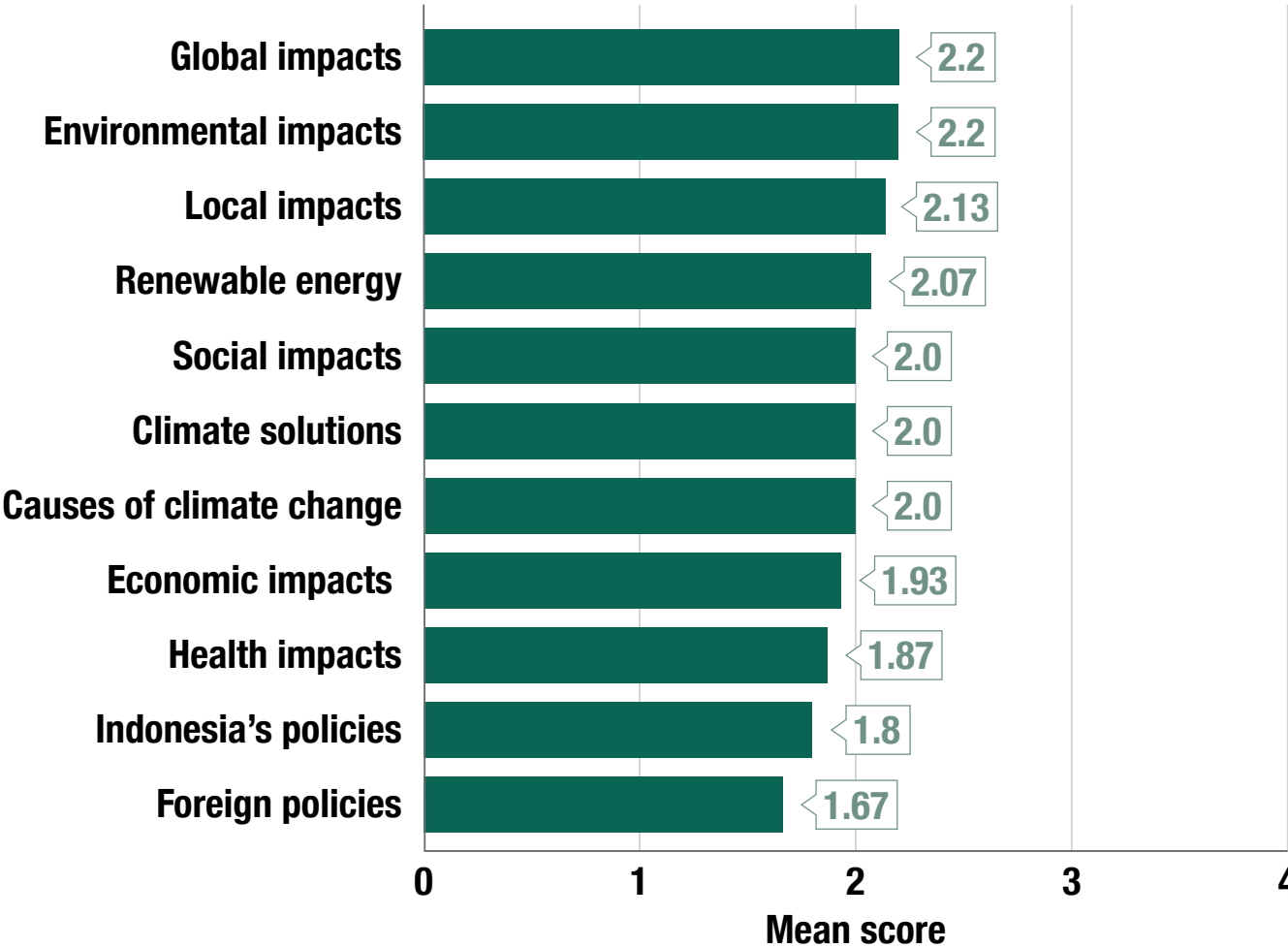


Figure 1. Mean self-reported knowledge score by topic (n=15)

A second self-reported measure asked journalists to rate their ability in three practical areas relevant to climate reporting: climate science, working with data and identifying misinformation. The responses reinforce the broader pattern of moderate rather than expert confidence. Most respondents placed themselves in the middle of the scale, with ratings clustering around ‘fair’. This shows that the knowledge gap is not limited to abstract topic familiarity.

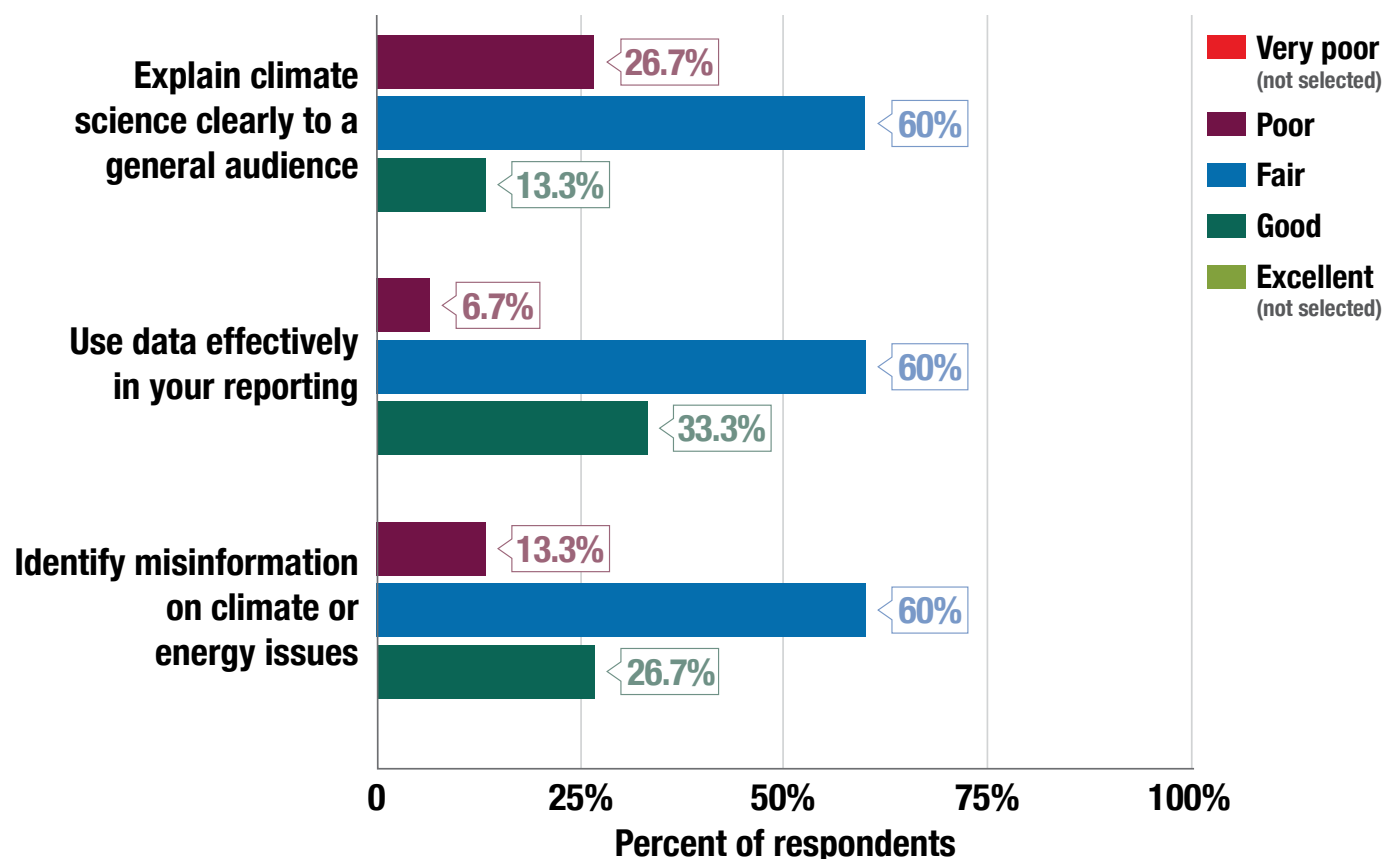


Figure 2. Self-rated ability in climate science, working with data and identifying misinformation (n=15)

The survey also included a practical test of energy literacy, asking respondents to identify fossil fuel and renewable energy sources. These results broadly support the self-reported findings. Respondents were able to classify multiple renewable energy and fossil fuel sources correctly, indicating a basic level of topic-specific knowledge and that moderate self-assessments were broadly consistent with observed performance on straightforward classification tasks.

The classification results reveal the limits of that literacy. Hydrogen and nuclear energy were the most commonly misclassified items. One possible explanation is conceptual ambiguity. Respondents may have interpreted ‘renewable’ as something closer to or synonymous with ‘clean’ or ‘low-emission’ rather than as a defined energy category. The survey design allowed respondents to classify an item as both fossil and renewable, or as neither. That flexibility helped reveal uncertainty rather than forcing an artificial answer. On average, respondents selected a technology as ‘neither’ 26% of the time and ‘both’ 4% of the time. This pattern suggests confusion around the ‘renewable energy’ and ‘fossil fuel’ categories themselves.

Overall, these findings suggest journalists had a basic understanding of key concepts and categories, but their knowledge was not comprehensive and confidence levels remained limited. While respondents appeared equipped for general reporting on climate and energy issues, they reported lacking the depth of knowledge and certainty typically associated with specialist expertise.

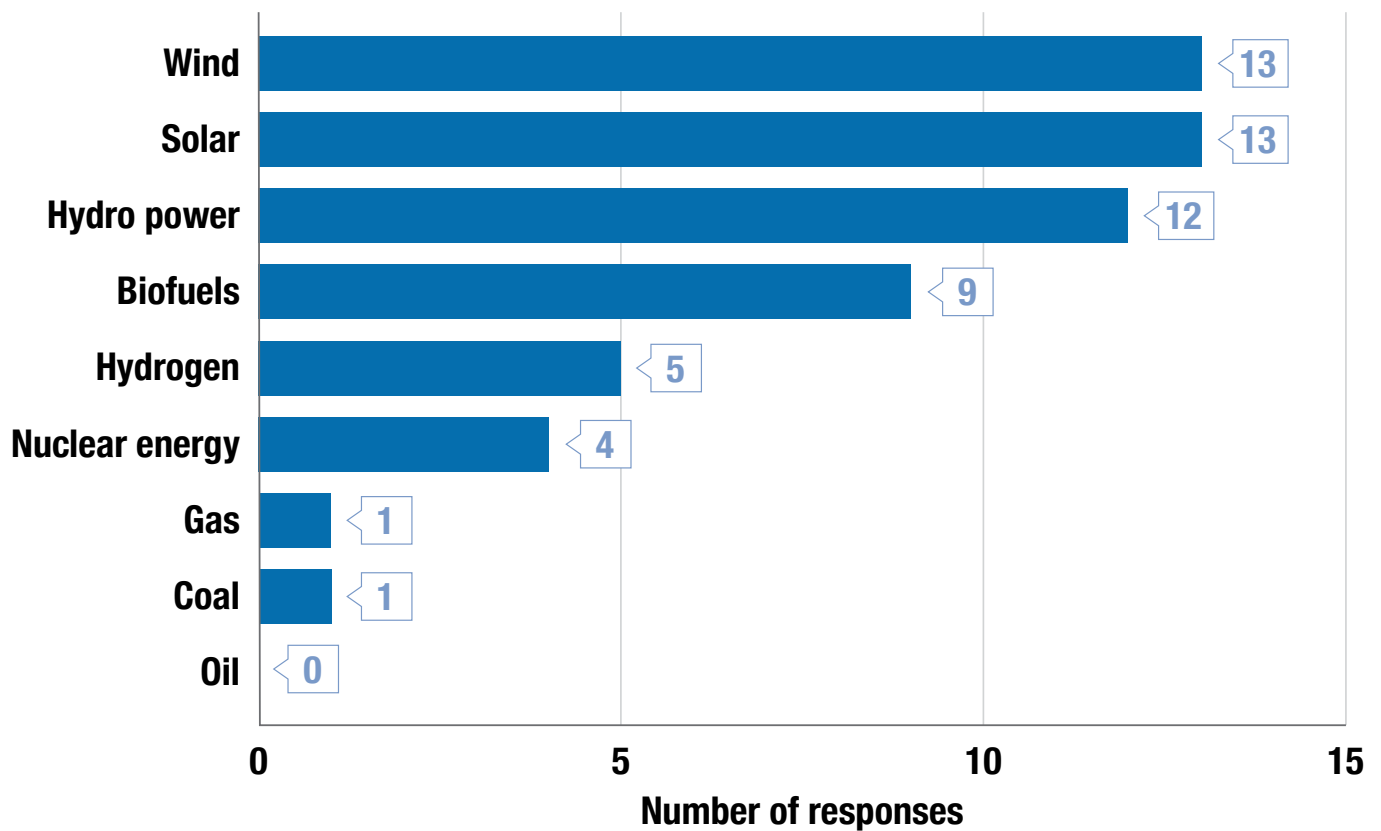


Figure 3. Identification of renewable energy sources (n=15)

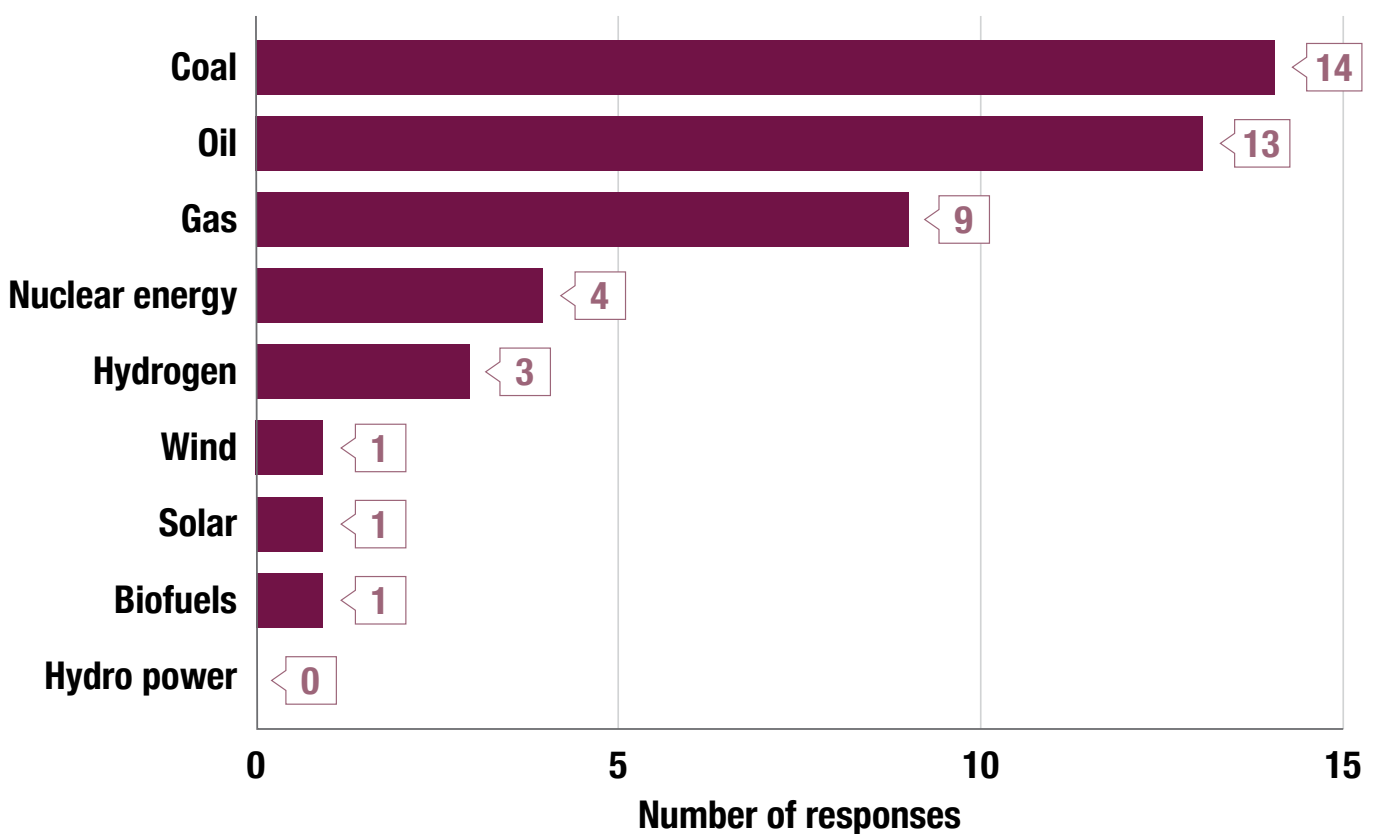


Figure 4. Identification of fossil fuels (n=15)

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Training, confidence and reporting practice

Participants were asked to note prior engagement in climate and energy training or seminars. Interestingly, training did not appear to produce higher literacy scores. However, it did influence reporting practice and confidence. Journalists who had received training reported covering climate and energy issues more frequently and felt more comfortable doing so.

This distinction is important. While training may not immediately translate into measurable increases in knowledge, it may strengthen a journalist's willingness to engage with the topic and reduce hesitation in reporting practice.

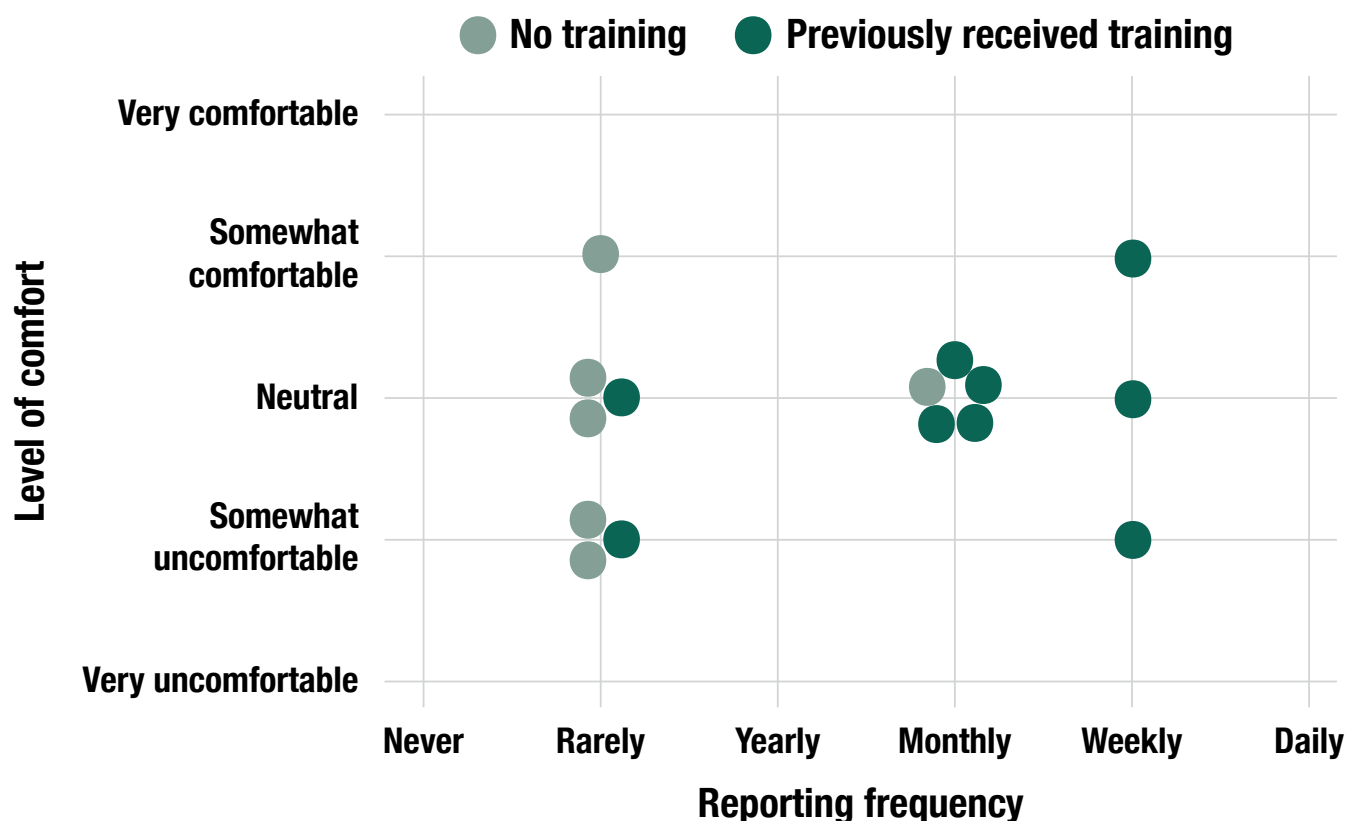


Figure 5. Influence of training on climate reporting frequency and comfort (n=15)

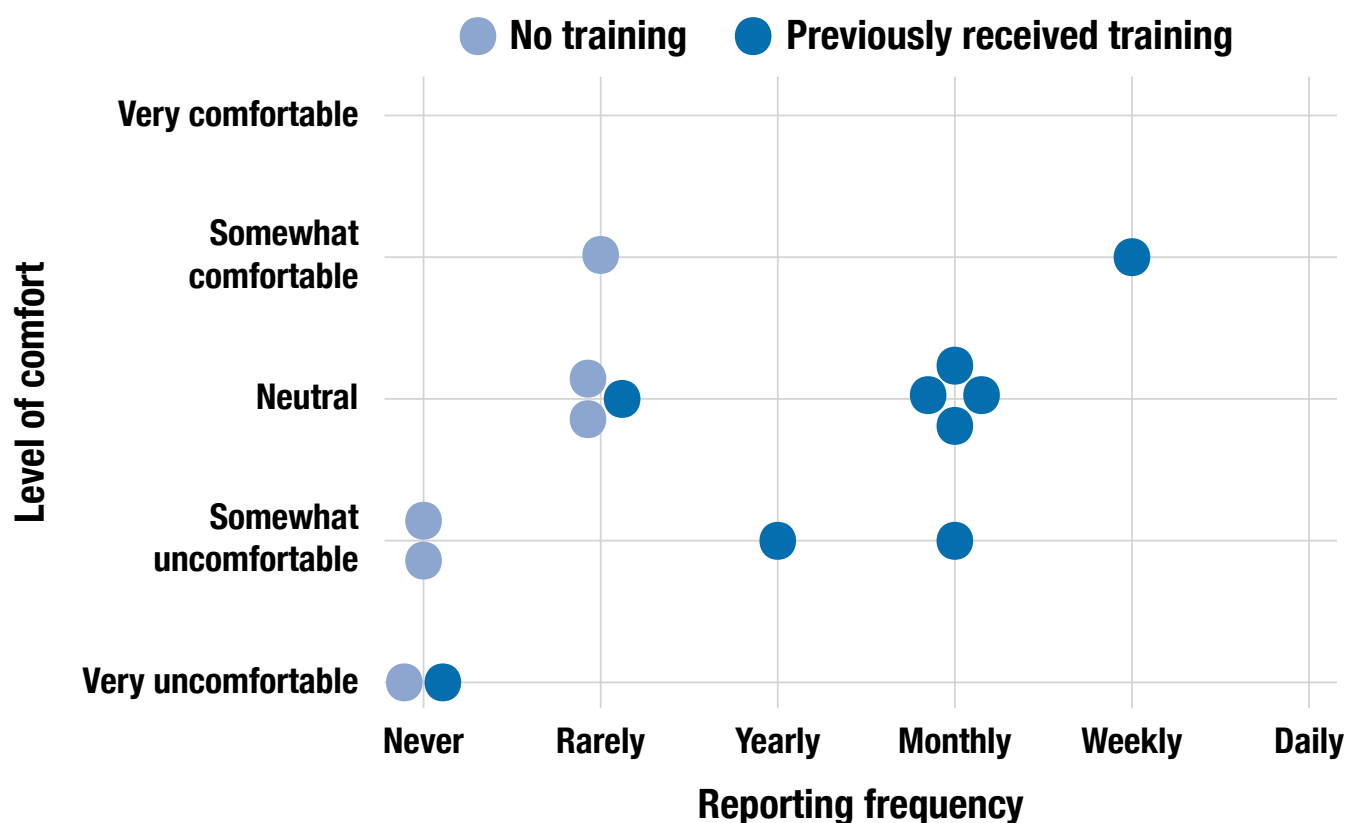


Figure 6. Influence of training on energy reporting frequency and comfort (n=15)

That said, confidence remained limited overall. No respondent reported feeling ‘highly comfortable’ with climate reporting. This again aligns with the broader interpretation of the survey findings. The issue is not that journalists reject climate and energy as a reporting area, but that they approach it as an important and demanding field in which they do not yet feel fully confident.



Demand, incentives and barriers

Respondents consistently viewed climate and energy reporting as supported within their newsrooms and important to their audiences. Those who perceived the topic as more important to their newsroom also tended to see it as more beneficial to their careers, although the limited sample size does not allow conclusions to be drawn. Importantly, all respondents viewed climate reporting as more likely to help than harm their professional prospects. No participants regarded climate reporting as a career risk. This challenges a common explanation for under-reporting. Within this sample, journalists do not appear to be primarily constrained by perceived institutional hostility or concerns about career damage.

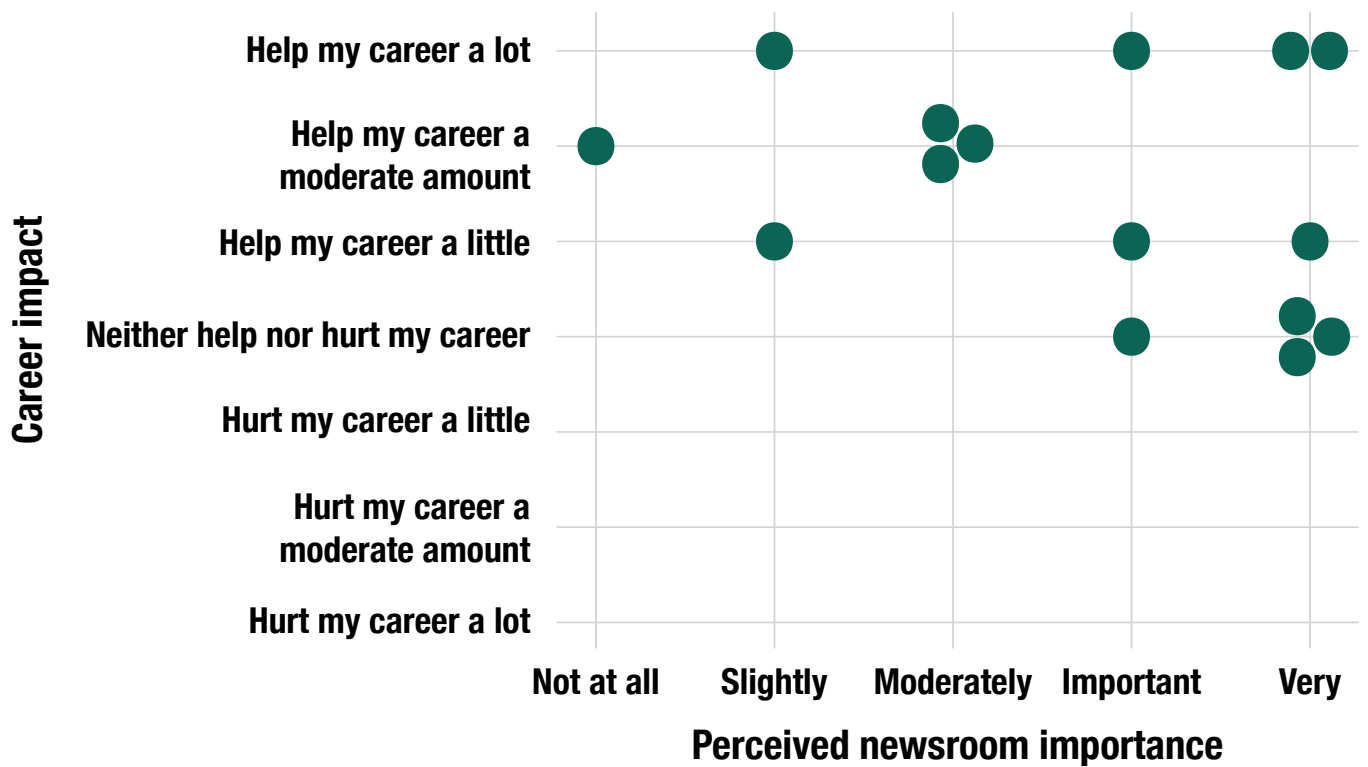


Figure 7. Perceived importance of climate reporting in the newsroom by perceived career impact (n=15)

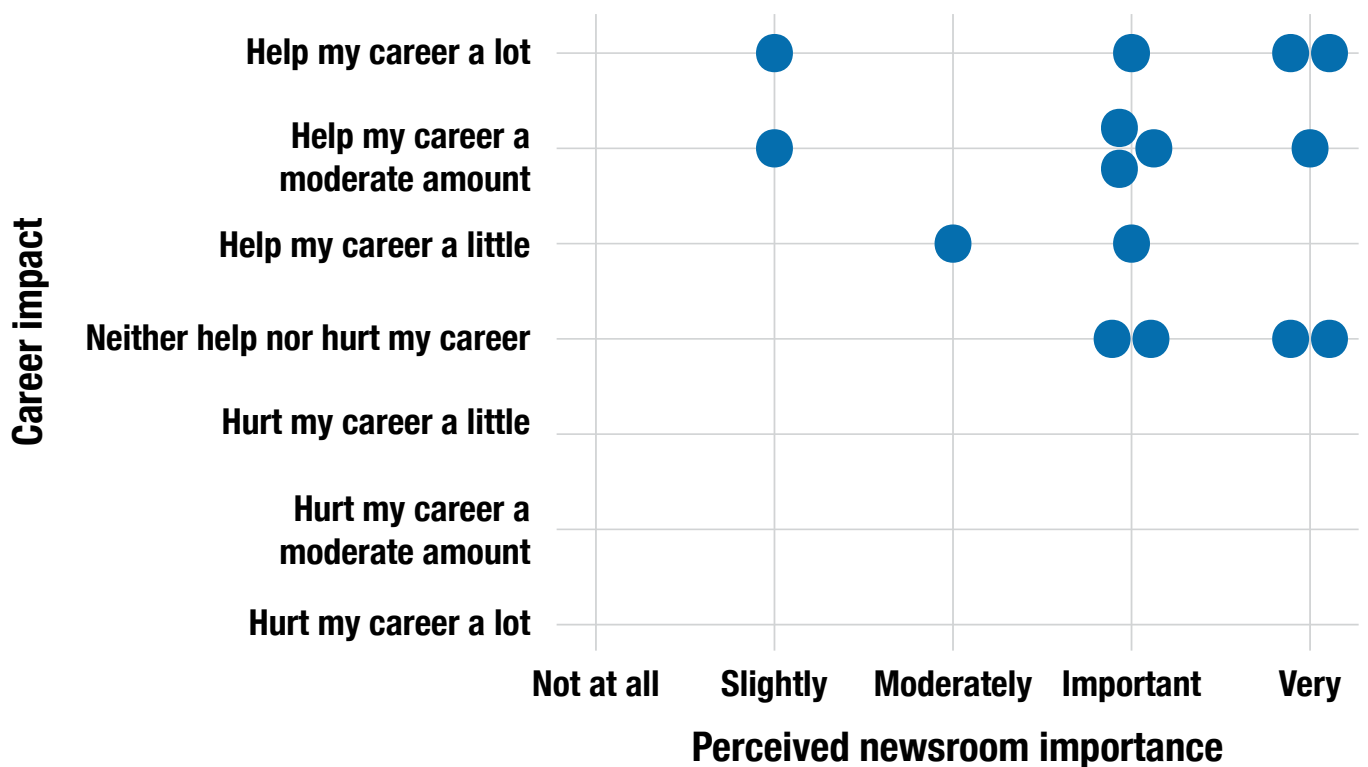


Figure 8. Perceived importance of energy reporting in the newsroom by perceived career impact (n=15)

Audience interest was also rated positively across climate, energy and solutions-focused reporting, with all three areas viewed as similarly important. This suggests journalists see opportunities to move beyond event-based climate coverage and do not perceive audiences as only interested in climate stories framed around crisis or disaster. Respondents also recognised audience value in energy and solutions-oriented reporting.

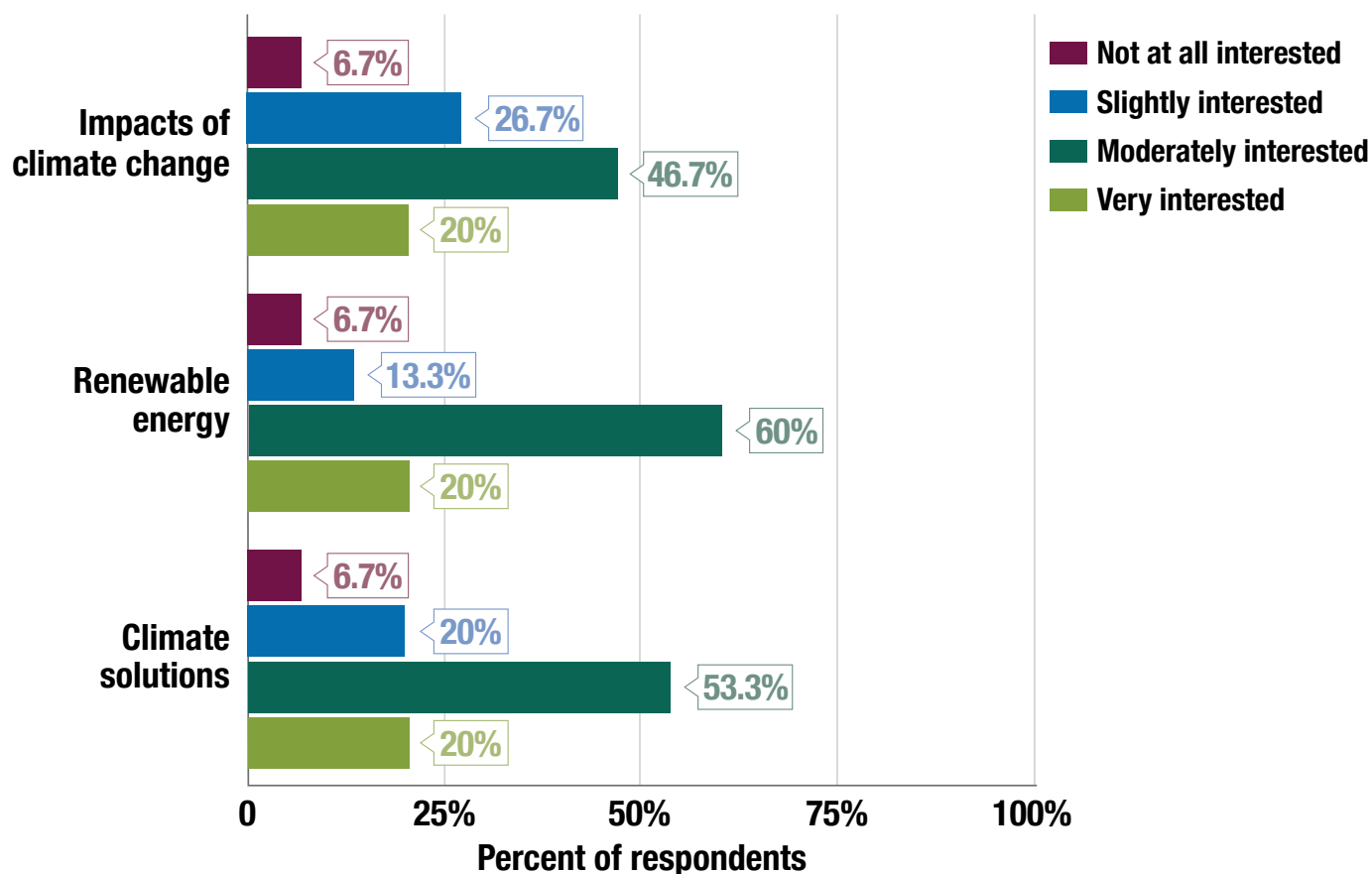


Figure 9. Perceived audience interest in climate, energy and solutions reporting (n=15)



When asked about barriers, respondents identified understanding of the issues as one of the primary limiting factor. Time pressure, sourcing challenges and limited training were also cited as important constraints. These findings suggest future interventions and support should prioritise opportunities for journalists to build deeper knowledge (Table 2).

Table 2. Barriers to reporting on climate and energy (n=15)

Barrier	Responses	Percent (%)
Limited time or competing newsroom priorities	10	66.7
Lack of access to credible sources or experts	9	60.0
Limited understanding of technical/scientific content	8	53.3
Editorial pressure or lack of support	8	53.3
Lack of audience interest	6	40.0
Difficulty accessing reliable data or visuals	5	33.3
Concern about being seen as biased or activist	3	20.0
Limited training or professional development opportunities	3	20.0
Language or terminology challenges	1	6.7
Other (please specify)	0	0

Working with scientists

Most respondents (12 of 15) had already worked with scientists and all expressed interest in increasing interaction (Table 3). This suggests journalist-scientist collaboration is an existing practice with clear demand for expansion.

Table 3. Previous experience working with scientists and desire for more direct climate engagement

Variable	Yes	Percent (%)
Have you ever worked with a scientist or researcher on a news story?	12	80.0
Are you open to using an online platform to connect with climate/energy experts?	9	60.0

This finding has implications for both training design and broader public communication strategies. If journalists identify understanding as their primary barrier, then greater access to scientists may help address that challenge directly. However, collaboration should not be understood simply as a transfer of facts. What journalists appear to need is access to information alongside support in interpreting concepts, resolving ambiguities and translating technical knowledge into forms that are relevant and accessible to audiences.



CONCLUSION

These survey findings point to a coherent overall picture of climate and energy reporting. Journalists demonstrated moderate levels of literacy and their performance on basic energy identification tasks supports that assessment. Self-ratings on climate science, data interpretation and misinformation reflected a similar pattern of moderate confidence rather than mastery.

Respondents saw clear professional and audience value in climate and energy reporting and did not perceive it as a career risk. The primary challenge identified across the survey was understanding of the issues themselves. This finding shifts attention towards the need for capacity-building. Support should therefore prioritise sustained literacy development, clearer conceptual training and structured opportunities for collaboration with scientists and other experts.

PART 3. THEMATIC ANALYSIS OF FOCUS GROUP DISCUSSIONS

OVERVIEW

Fifteen journalists attended focus groups hosted at Universitas Hasanuddin in Makassar, South Sulawesi. Participants were drawn from a range of local and national media organisations and journalist associations, including Harian Fajar, LKBN Antara, Suara.com, Mongabay, Tribun Timur, Tirto.id, Pelakita, Klikhijar.com, the Society of Indonesian Science Journalists (SISJ), and the Indonesian Writers Association South Sulawesi.

The day opened with remarks from Professor Jamaluddin Jompa, Rector of Universitas Hasanuddin, who spoke to the value of university-led science communication in explaining climate change and its impacts on local communities in Eastern Indonesia. Dr Alex Stephens, Consul at the Australian Consulate-General Makassar, also spoke, noting the Australian government's support for bilateral knowledge-sharing on climate change and the importance of accurate media coverage in the region.



METHODOLOGY

Focus groups

Two focus group discussions were conducted with journalists in Makassar, Sulawesi (n=15 total) to assess existing knowledge of climate and energy topics and identify areas for support. The discussions were structured around four thematic sections (Table 4): (1) current understanding and beliefs; (2) newsroom practice and constraints; (3) audience and communication; and (4) support and opportunities. A full list of question prompts can be found in Appendix B.

Focus groups were conducted simultaneously over four hours.

Thematic analysis

Focus group recordings were translated into English prior to conducting a thematic analysis (Braun and Clarke, 2006). This method combines deductive and inductive coding approaches. For Focus Group 1, data was coded inductively, allowing themes to emerge from the material. For Focus Group 2, deductive coding was applied based on a pre-established reference codebook. The two codebooks were subsequently merged and refined using the following process:

- Removal of redundant deductive codes
- Standardisation and merging of overlapping codes
- Restructuring according to a thematic hierarchy
- Categorisation of sub-themes according to focus group discussion sections
- Integration of supporting quotes into the final codebook

Themes were developed iteratively, with sub-theme naming refined during the writing phase. Participant quotes are used throughout the following findings section as illustrative evidence.

Limitations

There are limitations to the methodological approach taken. Focus group data reflects self-reported perceptions and cannot necessarily be generalised to journalists across Indonesia. As a qualitative method, the analysis prioritises depth and contextual understanding over representativeness.

Translation approaches also differed for the two groups:

- Focus Group 1 was translated to English during the session by an in-person translator (due to the researcher only speaking English)
- Focus Group 2 was conducted only in Indonesian, with transcripts later translated by a bilingual researcher. The researcher running this session was bilingual.

A review of the Focus Group 1 material indicates that some English translations did not precisely reflect the intended meaning in the original Indonesian discussion, which may have introduced some imprecision in interpretations made. This limitation is noted where relevant, with the impact mitigated through careful cross-referencing during the coding process.

Thematic framework

The table below presents the final thematic framework, organised into four main themes and corresponding sub-themes derived from the focus group analysis.

Table 4. Thematic framework

Theme	Sub-themes
1. Current understanding and beliefs	Perceptions of climate change impacts; perceptions of the energy transition; drivers of climate change and responsibility framing
2. Newsroom practice and constraints	Climate reporting practices; editorial decision-making and structural constraints; sources of information and verification practices; resource constraints and newsroom capacity; power, politics and external pressures
3. Audience and communication	Audience engagement and perceptions; misconceptions and public beliefs; communication challenges; localisation and narrative strategies; desired journalism approaches
4. Support and opportunities	Collaboration and network-building; alternative media platforms; training and capacity building needs; resource and institutional support needs



RESULTS AND DISCUSSION

Theme 1: Current understanding and beliefs

Perceptions of climate impacts

Participants recognised a wide range of climate impacts including rising temperatures, sea level rise, biodiversity loss, flooding, landslides and food security disruption. These were most frequently linked to concerns about the vulnerability of community and infrastructure in rural and coastal contexts, and perceptions were largely shaped by lived observation or experience rather than formal scientific training. Climate change also tended to be framed as event-driven or disaster-linked, reflecting a broader tendency to associate it with extreme weather events rather than long-term systemic change.

“Island communities are the most impacted by climate change. Why? Resources are limited, access is far, limited. If it is the wave season, it is difficult to get food.”

“Because you see along the coast of our South Sulawesi province – the districts alongside the coastal areas and some islands are experiencing abrasion where they have high tide and even floods from both sides from the coast.”



Perceptions of the energy transition

Understanding of renewable energy adoption and decarbonisation was varied. While journalists generally viewed the energy transition positively, their views were often tempered by scepticism about feasibility, policy commitment and implementation. The primary barriers identified included financial constraints, limited renewable energy literacy and institutional support, and inconsistent or conflicting government policies.

"Why micro-hydro-based renewable energy could not exist was because of the state electricity company (PLN). That is what I found. So it was considered a competitor."

"The government's effort feels half-hearted. Opening the factory of electric vehicles is only for tax. But then no policy on how to limit the use of gasoline and transport vehicles."

"I looked for local people who could give an opinion on that [the energy transition]. However, they still lacked knowledge about it because it was too technical and there had been no socialisation from the government."

Drivers of climate change and responsibility framing

Participants noted several 'drivers of climate change', including deforestation, consumerism, urban expansion and mining. These were often framed within a development-versus-environment narrative, with responsibility attributed to both institutional actors and broader societal consumption patterns.

In line with the drivers identified, discussions tended to emphasise visible environmental degradation, while placing less focus on the central role of 'invisible' greenhouse gas emissions. Participants also noted that public understanding of climate change can be limited, with environmental degradation and local rubbish pollution frequently conflated with climate impacts.

"We are forced by consumerism ... this consumption is destructive. We fulfill the market, while we leave the ecology behind."

"For example in Malili, the river there used to look green. Now it is already brown, affected by mining and the higher rate of rain."

"Once I reported on floods – about mothers that were protesting about the floods that happen continuously in their environment. Yet, if we look with the naked eye, we can see there is no drainage or gutters. So everyone builds houses and there is no path for water to flow."

Theme 2: Newsroom practice and constraints

Climate reporting practices

Climate reporting was largely described as reactive and disaster-focused, triggered by extreme weather events rather than sustained editorial planning. Participants noted that editorial space for climate issues was highly contested, with stories typically gaining traction only when linked to visible disasters or immediate community impacts. Some participants, particularly from smaller outlets, described a higher capacity for solutions-focused or community-based environmental stories.

"We don't exactly receive this news or information as climate change – more as the impact of it. Like you have news about landslides, how people are getting affected."

"Small media focus on sharing good practices or sharing positive stories done by actors in the field. That is what we think is very important and a huge priority."

Editorial decision-making and structural constraints

Structural constraints were identified as a dominant force shaping climate journalism. Commercial dependence on advertisers and sponsors, click-driven pressures, limited newsroom autonomy and conflicting editorial priorities all contribute to the low prioritisation of climate stories. Despite this, some participants noted positive shifts including growing editorial interest in environmental issues and journalists' capacity to advocate for in-depth stories.

"On one hand, we actually have something we can explore, but then it's hindered by policies that are decided at the top levels."

"The editors are restraining what to broadcast and what to report. Marketing sometimes doesn't go along with the coverage. They have to be careful with that because otherwise the ones [companies] who advertise might cancel."

"When I and several friends became assistant editors, we could fight for the newspaper to produce one in-depth [climate] report per month."

"Regarding the change in editorial priorities, for mainstream media like [organisation], I am sure even if it is 'fenced' (firewalled), money is definitely the editorial priority first"

Resource constraints and newsroom capacity

Significant resource constraints – limited funding, time pressures, heavy workloads and broader media industry instability – were identified as barriers to consistent, in-depth climate reporting. These pressures reinforce event-driven coverage and reduce capacity for investigative or long-form environmental journalism.

"The most important thing is the funding issue. A long in-depth report needs five days on location – it needs more than IDR 5 million."

"Mainstream media income, besides advertising, still relies on clicks on the website."



Sources of information and verification practices

Participant journalists reported drawing on expert and scientific sources, NGOs, government reports and digital platforms for climate and energy information. Scientific sources were viewed as most credible, while reliance on social media introduced concerns about misinformation and verification of information. Editorial requirements for cross-checking provided some structure to verification practices, though access to reliable government data and specialist networks was variable.

"Related to climate change or energy transition, we usually do reporting based on research. We review journals from lecturers or researchers and interview them further."

"We journalists who have an (environmental) mindset find it easier, especially if hanging out with NGO friends."

"The editor won't publish our news if there is no cross-checking of information."

"In Sulawesi, it is hard to find experts who understand energy transition issues."

Power, politics and external pressures

Journalists identified political, institutional and corporate influence as significant pressures shaping what is reported and how environmental issues are framed. These dynamics reflect perceived external power relations that can influence reporting decisions and constrain editorial independence in environmental communication.

"The term is greenwashing. As if the company has done something for the environment, but it only meets its standards and gets publicised."

"Not to mention if there is company intervention – being given funds, given training, given various things – so they do not dare to cover it."

"That is what is not conveyed through the media, through reporting. Because maybe there is intervention and so on from companies, from the local government."

Theme 3: Audience and communication

Audience engagement and perceptions

Audience engagement with climate issues was described as highly varied and largely episodic, typically increasing during climate-related disasters or major environmental events. Participants noted growing interest among younger audiences, particularly through social media, while broader audiences remained difficult to engage, particularly long-term.

“Environmental issues that are widely read are the event-based matters. For example, if there is an incident, how many died.”

“When talking about the (core) issue, there are very few clicks.”

Misconceptions and public beliefs

Participants identified several common misconceptions and limitations in public understanding of climate change that may impact sustained engagement. These included the belief that climate change is a purely natural phenomenon, limited understanding of renewable energy, and a tendency to view climate impacts as a future concern.

“People just think that flood is a usual event, something that regularly happens. So then we don’t realise that it’s because of climate change.”

“They say, later you will feel it. So far we read the news, we are not yet worried.”

Communication challenges

Key communication barriers included the scientific complexity of climate topics, difficulty translating technical language and changing media consumption habits. Journalists emphasised emotional and visual storytelling, localisation and youth-oriented digital strategies as effective approaches to face these challenges.

“Environmental issues are actually somewhat complicated, complex, sometimes intricate – with various terminologies, especially when talking about climate change.”

“Our challenge is also: how could we get climate change content to appear on the front page of social media? So when we scroll through TikTok or Instagram, the issue would attract a lot of people.”



Localisation and narrative strategies

Localised storytelling was viewed as essential for making climate issues relevant to diverse communities. Participants emphasised the need for human-centred narratives, community-based framing and the simplification of scientific concepts. An important part of this was the inclusion of Indigenous and local knowledge systems and culturally sensitive framing that avoids misrepresenting local practices and beliefs.

“Communication is very important to convey the message to the grassroots, to the local community. We need to communicate through the local language – how we can translate that into local meaning.”

“Sometimes the scientific approach actually contradicts the conditions of the community. There is local wisdom that, after we look deeper, can maintain balance.”

“Is it merely sharing information or do we want more? Can we make our content more useful?”

Desired journalism approaches

Participants expressed strong support for solutions-oriented, multimedia and participatory approaches to climate journalism. This reflects a desire to move beyond disaster-focused narratives toward reporting that is critical, constructive and can support public understanding and debate.

“I want to write about the impact of climate change now and in the future with very common public language, not only in the form of news, also with videos, graphics, infographics, so people can really digest and understand.”



Theme 4: Support and opportunities

Collaboration and network-building

Collaboration emerged as an enabler for strengthening climate journalism. Participants highlighted the importance of journalist-scientist relationships, NGO partnerships, community engagement, and peer learning networks as mechanisms for improving expertise access and reporting quality. Gaps remain in structured, sustained networking platforms.

“We are always interested in people who can provide information, but also have direct involvement in the field.”

“When you report on environmental issues related to forestry or mining, there are always parties that oppose. So journalists need support from peers or maybe the institution.”

“At [outlet], we have partners, we make fellowships; the goal is how other media friends can care about environmental issues.”



Alternative media platforms

Participants highlighted alternative and citizen journalism platforms as an important part of the environmental journalism landscape. These platforms offer greater editorial flexibility and can provide more sustained coverage of climate topics that are often deprioritised in mainstream newsrooms.

"We realised that there indeed needs to be media dedicated to issues that have not been covered by mainstream media."

"There are processes of managing alternative media that will likely become a future trend."

"That's why I am grateful that alternative media exists, and it becomes a place for citizens and us journalists to share with each other."

Training and capacity building needs

Capacity gaps were also identified, including climate literacy, science communication skills, digital journalism capabilities, AI literacy and field-based reporting experience. These reflect systemic shortfalls in preparing journalists for complex climate reporting.

"We as journalists should have an understanding. Even if it is not provided by the editorial office or the company, it can come from other spaces."

"The problem is, there are many technical things, technical knowledge that the media sometimes find hard to understand."

Resource and institutional support needs

Fellowships and journalism grants were repeatedly cited as critical mechanisms enabling journalists to pursue in-depth environmental reporting that would otherwise be difficult within routine newsroom constraints. These programs were described as building production capacity alongside subject-matter literacy and expert networks.

"To produce investigative coverage, in-depth coverage on the environment, most media follow grants or fellowships that provide the budget."

"I once had a fellowship on renewable energy. That was the first time I wrote about renewable energy. Wrote in-depth. Then after that, I tried to make reports on the environment, joined fellowships."



CONCLUSION

Findings indicate that journalists in South Sulawesi have lived experience and awareness of climate and environmental change. However, this awareness is not consistently matched by scientific literacy, and reporting is significantly shaped by structural constraints such as commercial pressures, limited resources and political influence.

Despite these challenges, there is clear interest in more solutions-focused, collaborative and locally grounded climate journalism. Participants highlighted the need for training, expert networks and institutional support, and saw collaboration within the region and internationally as a key enabler for improving the quality and impact of reporting.

These findings point to a practical agenda for supporting climate journalism in South Sulawesi: building science communication capacity, strengthening journalist-expert networks, supporting alternative and citizen media, and developing sustainable funding mechanisms such as fellowships and grants.

PART 4. A VISIT TO TAKALAR SEAWEED VILLAGES

OVERVIEW

Following the focus groups, participating journalists joined researchers from Universitas Hasanuddin for a field visit to seaweed farming communities in Takalar Regency, South Sulawesi. The visit provided an opportunity for place-based learning and direct engagement with local experiences of environmental change.





The field visit created space for knowledge-sharing between journalists, researchers and community members. Journalists heard directly from a village leader about local environmental conditions and observed day-to-day seaweed farming practices, including women tying seaweed onto ropes for seeding. These observations provided insight into both the economic importance of seaweed farming and its sensitivity to changing environmental conditions.



Time in Takalar also highlighted how climate change is understood by local communities. Environmental change was primarily linked to visible local infrastructure, such as nearby industrial facilities, rather than to broader and cumulative greenhouse gas emissions. This points to a gap in climate attribution understanding, particularly in distinguishing between local pollution sources and the drivers of global climate change.



The field visit created clear opportunities for place-based reporting. Several participating journalists subsequently produced news stories and multimedia content drawing on their observations and interactions during the visit (Table 5). It highlighted the potential role of journalists in contributing to public understanding of climate change within communities. In addition to reporting lived experience, journalists can help provide broader scientific and contextual information that supports audiences to better understand the underlying drivers of observed changes. This function is particularly important in regional and remote communities where access to climate and energy information may be limited.

Realising this potential depends on journalists having access to credible, ongoing training in climate and energy reporting. Strengthening journalist capacity in climate science and attribution and the energy transition would support more accurate, contextualised and locally relevant reporting, and provide a pathway for journalism to enhance community climate literacy.



PART 5. KNOWLEDGE-SHARING WORKSHOPS – MELBOURNE

OVERVIEW

Following the field visit to Takalar, a subset of Indonesian journalist participants travelled to Melbourne, Australia to participate in two days of intensive knowledge-sharing workshops.

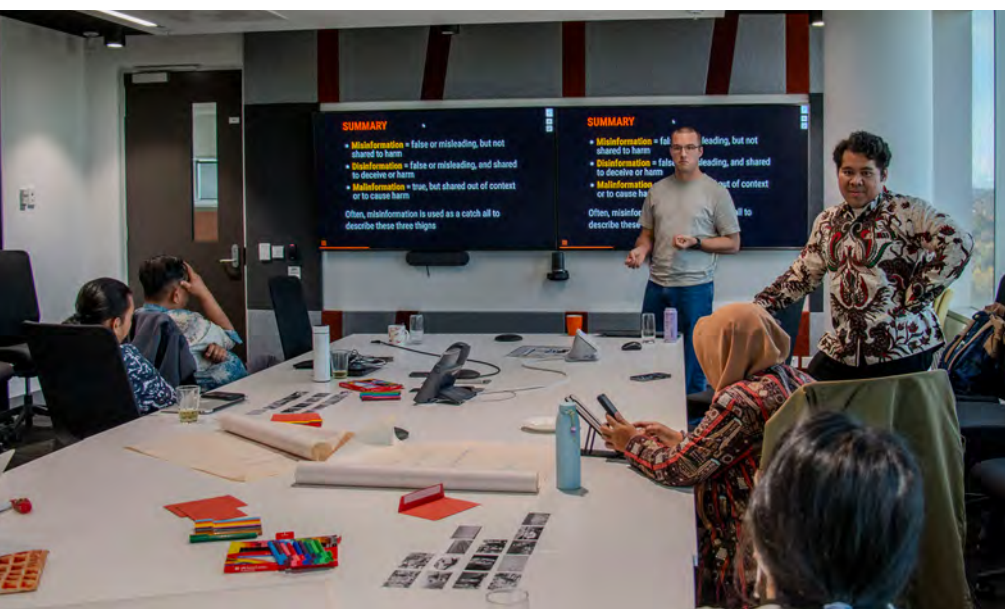
The four participants represented a diverse cross-section of Indonesian media organisations, including national news agencies, regional newspapers, independent journalism networks and digital media platforms:

- Tribun Makassar, part of the Kompas Gramedia media network, with extensive regional newspaper coverage across Indonesia
- PelaKita, an Indonesian-language news and media platform focused on community news, maritime studies and academic and cultural stories
- Members of the Society of Indonesian Science Journalists (SISJ) and the Alliance of Independent Journalists (AJI) Makassar, including freelance and independent journalists
- LKBN Antara, Indonesia's national news agency and one of the country's largest media organisations

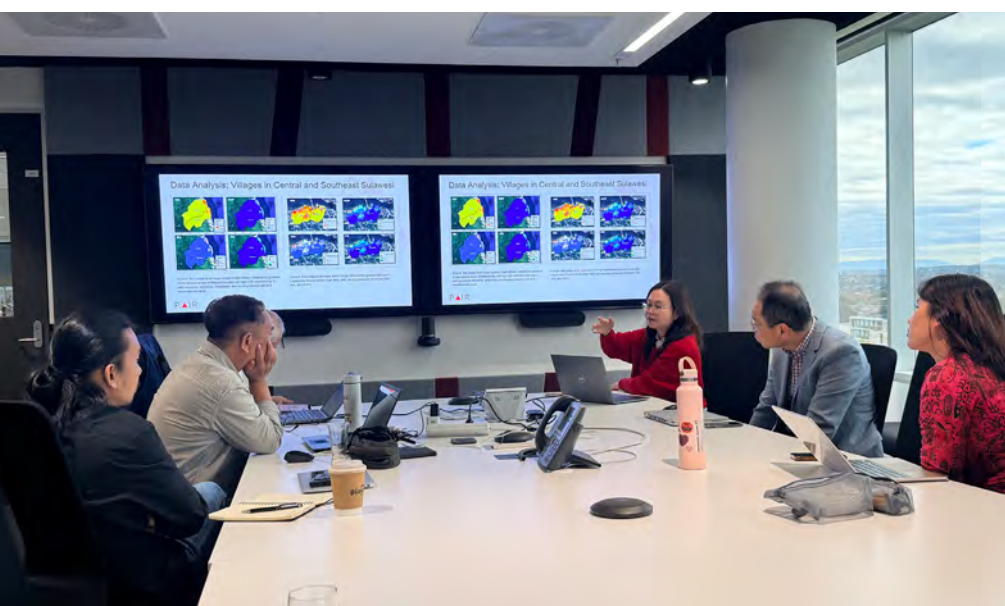




The workshops were designed to strengthen climate and energy reporting capacity through a combination of expert presentations, discussion sessions and collaborative exchange. Sessions focused on improving understanding of climate science, climate impacts, energy transition issues and approaches to effective public communication.



The program created opportunities for Indonesian journalists to engage directly with Australian researchers and communication practitioners. Discussions explored both the similarities and differences in climate communication challenges across Indonesia and Australia, including misinformation, audience engagement, newsroom pressures and communicating complex scientific information in accessible ways.



The workshops also provided space for reflection on the field visit to Takalar and the broader reporting challenges identified during the focus groups. Particular attention was given to the role of local storytelling, trusted communication and solutions-focused journalism in supporting public understanding of climate and energy issues.

KEY OBSERVATIONS AND OUTCOMES

Journalist knowledge exchange

The discussion session and networking dinner with Australian journalists was particularly valuable. It provided participants with an opportunity to compare newsroom environments, reporting challenges and approaches to climate communication across Indonesia and Australia.

Key points:

- Climate reporting in Indonesian newsrooms was perceived to have declined in recent years because it is often seen to not attract advertising revenue. Participants described this as a significant commercial pressure shaping editorial priorities and limiting sustained coverage of climate and environmental issues.
- Journalists in both countries identified similar challenges associated with deadline-driven newsroom environments and limited time for explaining climate causation and complex systemic issues.
- Participants reflected on the tension between the complexity of climate science and the operational demands of daily news production.
- There was strong interest in future collaboration between Australian and Indonesian journalists on shared regional climate issues.
- Participants discussed opportunities for cross-border reporting partnerships, including models where local journalists contribute contextual knowledge, on-the-ground reporting and verification within their communities.

Connections with Australian researchers

Participants met with researchers involved in collaborative Australia-Indonesia projects in Sulawesi through the Australia-Indonesia Centre Partnership for Australia-Indonesia Research (PAIR) program. Discussions covered climate impacts across a range of sectors, including public health, the energy transition and the seaweed industry.

Key points:

- Discussions extended beyond environmental impacts to broader issues including governance, economic transition, social protection and community resilience.
- Journalists expressed strong interest in maintaining contact with researchers as expert sources for future reporting.
- The session highlighted a gap between local climate stories and broader climate science explanations, particularly in connecting lived experiences and observed environmental change with underlying climate drivers.
- Participants identified stronger collaboration between journalists and researchers as important for supporting more accurate, contextualised and evidence-based climate reporting.
- The discussions reinforced the value of ongoing knowledge exchange between researchers and media professionals across Indonesia and Australia.

Constructive journalism and storytelling

Workshop sessions explored constructive and solutions-focused journalism approaches that empower communities to act.

In the final workshop session, participants applied their learning to develop and pitch original climate stories. The pitches demonstrated participants' ability to connect global climate and energy issues with locally relevant and human-centred narratives.

In the final session, participants applied their learning to draft and pitch original climate stories. The pitches demonstrated both the depth of the participant engagement with the program content and their capacity to connect global climate issues with locally relevant, human-centred narratives:

- Climate change and small island initiatives: the adoption of constructive journalism
- The impact of climate change on sea cucumber populations – exacerbating risks for fishermen
- Spreading green energy inspiration through PLTMH in Balantieng Hamlet, Sinjai
- Trash is piling up, Makassar is rotting

These story pitches reflect the core ambition of the workshops: to equip Indonesian journalists with both the scientific literacy and the professional network to produce more rigorous, impactful climate reporting – and to do so in active partnership with Australian counterparts.



CONCLUSION

The Melbourne workshops marked the culmination of a program that moved Indonesian journalists from focus groups and field visits through to direct engagement with Australian researchers, communicators and peers.

Participants reflected positively on the program, highlighting both the practical relevance of the content and the value of cross-cultural exchange. In particular, respondents emphasised learning around climate drivers, exposure to constructive journalism approaches, and opportunities for professional networking and collaboration. The following feedback illustrates these themes:

The session/s or opportunities I [journalist] valued most...

"Opportunities for networking and exchanging ideas."

"The knowledge-sharing session with Australian journalists and the case study session with AIC PAIR researchers. As a freelance journalist who is also active in the Society of Indonesian Science Journalists, it is very important for me to build wider networks that enable collaboration."

"Constructive Journalism, because it challenged us to think about how to allocate resources such as journalists' competencies, time, and funding."

"The importance of understanding the drivers of climate change, sharing with experienced journalists, and the design and implementation of constructive journalism."

"All sessions were useful because they offered new insights."

Participants also offered constructive suggestions for future iterations:

"There is a need for more field practice, including observation and interviews with communities affected by the climate crisis, as well as engaging with government policymakers."

"A Training of Trainers (ToT) model could be useful so participants can share knowledge more widely."

"The sessions were too short; more time should be allocated to each session."

This feedback points to an appetite for deeper and sustained engagement to build climate reporting capacity and impact across both countries.

PART 6. DISSEMINATION OF FINDINGS

OVERVIEW

In May 2026, project findings were presented at Universitas Hasanuddin in Makassar, hosted at the AIC Lab. The event brought together key stakeholders from across the collaboration – Indonesian and Australian researchers, government representatives, and six of the original participating journalists.

The session opened with welcome remarks from Dr Hasnawati Saleh, Indonesian Director of the PAIR Sulawesi Program (AIC) and Director of the AIC@Unhas Lab, followed by A/Prof. Dr Sudirman Nasir from the Faculty of Public Health, who spoke to Universitas Hasanuddin's role as a collaborative research partner. The Australian Government was represented by Consul General Mr Isaac Bennett of the Australian Consulate-General, Makassar, who highlighted the significance of the bilateral research collaboration and its contribution to climate and energy communication.

Lead researcher Amelia Pearson from the MCCH then presented the findings, which were met with strong engagement from the audience. The session proved highly interactive, generating discussion and numerous questions. Closing remarks were delivered by project co-lead Helen Brown from the AIC.



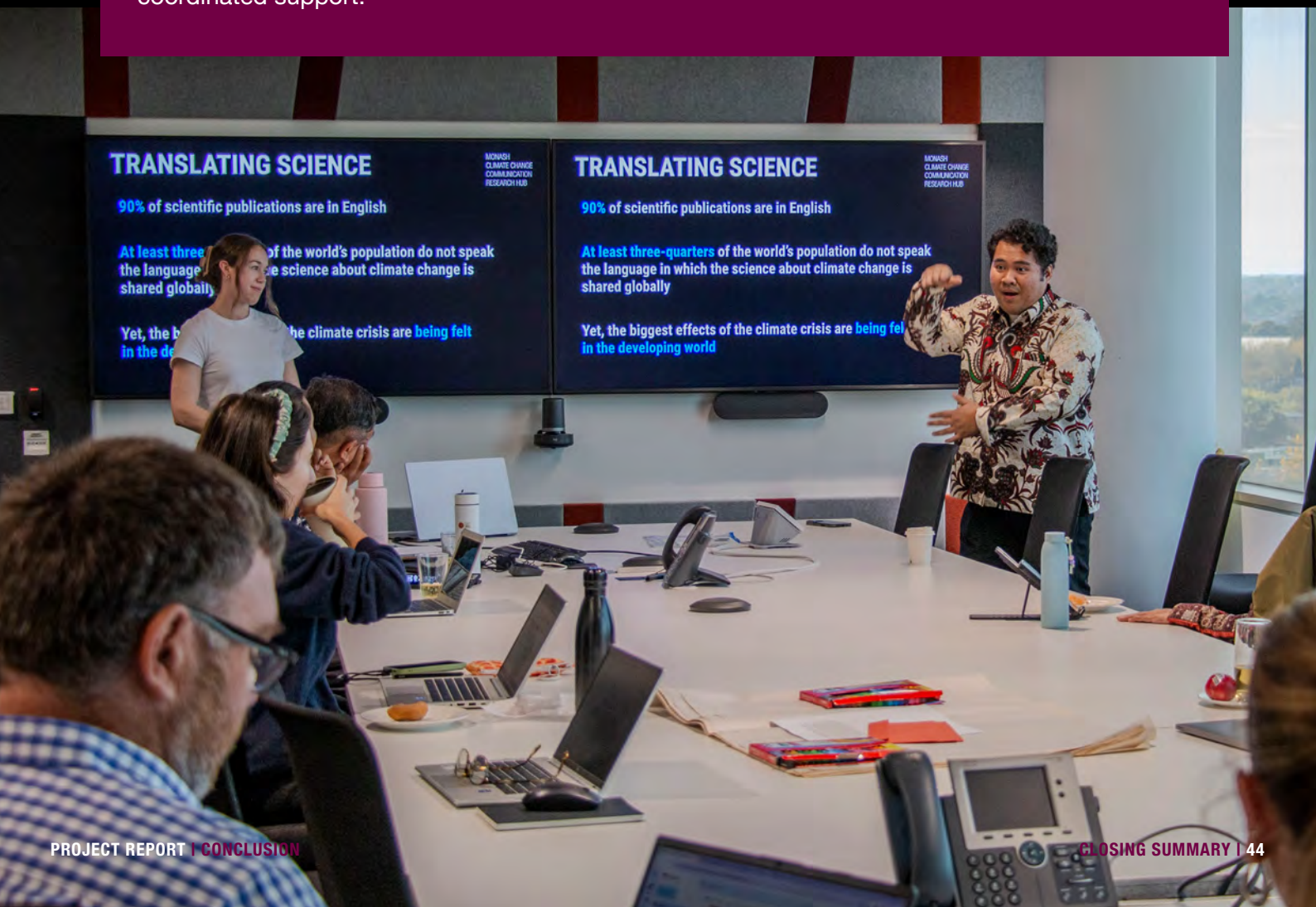
CONCLUSION

CLOSING SUMMARY

Findings from the content analysis, surveys, focus groups, workshops and field activities reveal a climate journalism landscape in South Sulawesi that is motivated and engaged, but constrained by gaps in climate and energy literacy, limited access to expert sources, and the structural pressures of newsrooms.

Coverage tended to be framed through economic and development lenses, with sources dominated by government and industry actors. Coverage rarely situated events or policy developments within broader scientific, political or systemic contexts, and adaptation received comparatively limited attention. Journalists themselves acknowledged the challenge of understanding complex climate and energy issues – yet they also expressed genuine commitment to improving their coverage and a clear appetite for training, expert networks and cross-sector and cross-country collaboration. The field visit component reinforced this, demonstrating how place-based, community-grounded reporting can make climate impacts and responses tangible for audiences.

Strengthening climate journalism in South Sulawesi is fundamentally a question of capacity, access and institutional support – and addressing it will require sustained and coordinated support.



RECOMMENDATIONS

1.

Strengthen climate and energy literacy through ongoing journalist training and professional development programs

2.

Build pathways between journalists, scientists and other technical experts to improve access to credible sources and contextual information

3.

Develop regional journalist networks and peer-learning opportunities to support collaboration and knowledge sharing

4.

Provide sustainable support mechanisms for climate journalism, including fellowships, grants and reporting partnerships

5.

Improve journalist access to climate and energy data, ensuring information in formats that are accessible and usable for journalists

This program demonstrates the value of long-term, collaborative engagement between journalists, researchers and local communities. The combination of research, field-based learning and direct access to experts created opportunities for more informed, locally relevant and publicly meaningful climate reporting.

The approach provides a practical model that could be adapted across other regions of Indonesia. At a time when communities are increasingly required to navigate complex decisions around climate impacts, energy systems and adaptation, access to clear, credible and contextualised information is essential. Strengthening regional climate journalism is therefore both a media development opportunity and an investment in public understanding and community resilience.



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APPENDIX A

Baseline survey questions

Section 1: Demographics & Background

1. Age
 - Under 18
 - 18 – 24
 - 25 – 34
 - 35 – 44
 - 45 – 54
 - 55 – 64
 - Above 65
2. Which gender do you identify with?
 - Female
 - Male
3. Media outlet/employer (*written response*)
4. Role / title, do you have a speciality area e.g. environment, politics, finance etc.? (*written response*)
5. Years working as a journalist
 - Less than 1 year
 - 1–3 years
 - 4–7 years
 - 8–12 years
 - 13–20 years
 - More than 20 years
6. Type of media
 - Print
 - TV
 - Digital news
 - Radio
 - Other (please specify)

Section 2: Climate & Energy Knowledge

7. Matrix Q: How much do you know about each of the following topics? (*Nothing at all, a little, a moderate amount, a lot, I'm an expert*)
 - Causes of climate change
 - Global impacts of climate change
 - Local impacts of climate change in Sulawesi
 - Economic impacts of climate change
 - Environmental impacts of climate change
 - Social impacts of climate change
 - Health impacts of climate change
 - Renewable energy sources
 - Climate solutions
 - Indonesia's climate and energy policies
 - Foreign climate and energy policies

8. Which of the following topics would be most useful for you to know more about to support your climate reporting? (*Select top 3*)
 - Causes of climate change
 - Global impacts of climate change
 - Local impacts of climate change in Sulawesi
 - Economic impacts of climate change
 - Environmental impacts of climate change
 - Social impacts of climate change
 - Health impacts of climate change
 - Renewable energy sources
 - Climate solutions
 - Indonesia's climate and energy policies
 - Foreign climate and energy policies
9. Which of the following energy sources are fossil fuels? (*Select all that apply*)
 - Solar power
 - Wind power
 - Hydro power
 - Nuclear energy
 - Hydrogen
 - Biofuels
 - Coal
 - Gas
 - Oil
10. Which of the following are types of renewable energy? (*Select all that apply*)
 - Solar power
 - Wind power
 - Hydro power
 - Nuclear energy
 - Hydrogen
 - Biofuels
 - Coal
 - Gas
 - Oil
11. Matrix Q: How often do you report on: (*Climate topics, Energy topics*)
 - Daily
 - Weekly
 - Monthly
 - Yearly
 - Rarely
 - Never
 - ...

12. Matrix Q: How comfortable do you feel reporting on:
(*Climate topics, Energy topics*)

Very comfortable
Somewhat comfortable
Neutral
Somewhat uncomfortable
Very uncomfortable

13. Have you previously received training on climate or energy reporting? (e.g. workshops, university course, newsroom training)

No
Yes
- If yes, what sort?

14. What kinds of sources do you typically use when reporting on climate and energy? (*Select all that apply*)

Scientists
NGOs
Industry/business representative
Publically available datasets
Government reports
International media
Community members
Social media
Other (please specify)

15. In your view, how important is climate reporting in your newsroom?

Not at all important
Slightly important
Moderately important
Important
Very important

16. In your view, how important is energy-focussed reporting in your newsroom?

Not at all important
Slightly important
Moderately important
Important
Very important

17. Please select the statement that best reflects your opinion:

“Reporting on the impacts of climate change will likely...”

Help my career a lot
Help my career a moderate amount
Help my career a little
Neither help nor hurt my career
Hurt my career a little
Hurt my career a moderate amount
Hurt my career a lot

18. Please select the statement that best reflects your opinion:

“Reporting on renewable energy topics will likely...”

Help my career a lot
Help my career a moderate amount
Help my career a little
Neither help nor hurt my career
Hurt my career a little
Hurt my career a moderate amount
Hurt my career a lot

Section 4: Perceptions & Support Needs

19. How interested do you think your audience (viewer/reader) is in learning about impacts of climate change?

Not at all interested
Slightly interested
Moderately interested
Very interested

20. How interested do you think your audience (viewer/reader) is in learning about renewable energy?

Not at all interested
Slightly interested
Moderately interested
Very interested

21. How interested do you think your audience (viewer/reader) is in learning about climate solutions?

Not at all interested
Slightly interested
Moderately interested
Very interested

22. Matrix Q: How would you rate your ability to: (*Very poor, Poor, Fair, Good, Excellent*)

Explain climate science clearly to a general audience
Use data effectively in your reporting
Identify misinformation on climate or energy issues

23. What are the biggest barriers you face when reporting on climate or energy issues? (*Select all that apply*)

Limited time or competing newsroom priorities
Lack of access to credible sources or experts
Limited understanding of technical/scientific content
Editorial pressure or lack of support
Lack of audience interest
Difficulty accessing reliable data or visuals
Concern about being seen as biased or activist
Limited training or professional development opportunities
Language or terminology challenges
Other (please specify)

...

24. Have you ever worked with a scientist or researcher on a news story?
Yes
No
25. Are you open to using an online platform to connect with climate/energy experts?
Yes
No
26. What other support or training would be most valuable to you? (*written response*)

END OF SURVEY

[This survey was also translated into Indonesian (Bahasa)]

APPENDIX B

Focus group questions

Opening

- Welcome, introduction of facilitators and participants
- Purpose of the focus group and how it fits into the broader project
- Consent reminder and confidentiality
- Icebreaker: *“What’s the most impactful climate or energy story you’ve reported or read recently?”*

Section 1: Current understanding and beliefs

Goal: Understand baseline knowledge, perceptions, and attitudes

- Compared to 5 years ago, have you noticed any changes in the climate in your local area? If so, what? (Can lead by asking about whether seasons have changed, whether they’ve noticed changed in temperature/rainfall etc)
- Where do you currently get most of your information about climate and energy issues?
- What do you think are the most pressing climate challenges facing Sulawesi/Makassar?
- What do you see as the most beneficial climate change solutions for the local community?
- In your view, is renewable energy a viable solution for addressing climate change? If so, which types do you see as most promising, and why?
- How does your media outlet typically cover climate or environmental topics?
- What is your experience reporting on climate or environmental issues? How often do you cover these topics, and how confident or comfortable do you feel when doing so?”
 - » What kinds of stories have you covered?
 - » Do you feel well-equipped to report on these topics?
 - » Are there aspects you feel more or less confident about (e.g., science, community impact, solutions)?

Section 2: Newsroom Practice and Constraints

Goal: Explore practical challenges and opportunities

- What drives decisions about which climate or energy stories are reported? What’s the decision-making process and who is involved?
 - » How much freedom do you have in pitching or selecting climate-related stories?
- Have you noticed any shifts in audience interest or newsroom priorities when it comes to covering topics with an environmental or energy angle?
- What resources or expertise are currently available in your newsroom to support climate reporting?
- Are there editorial constraints or sensitivities when reporting on climate or environmental issues?
- How do you approach verifying scientific information or data for your stories?
- What, if any, training or support have you received in this area?

Section 3: Audience and Communication

Goal: Understand perceptions of audience and communication barriers

- What do you believe your audience knows or believes about climate change?
- What level of interest do you believe your audience has in climate and energy-related topics?
 - » Do you feel there are any common misconceptions about climate change in your community or audience?
- How do you tailor your stories to resonate with local communities?
 - » Have you ever adapted your reporting style or language when covering science-based topics? How?
- Are there cultural or social considerations you take into account when covering climate issues?
- Have you received feedback from audiences about climate or energy coverage?
- What’s the biggest challenge in making climate stories engaging or relevant?

Section 4: Support and Opportunities

Goal: Identify support needs and ideas for capacity building

- What sort of content would you like to create?
 - » Do you have any topics around climate and energy in mind that you think would be of particular interest to your audience?
- What tools, resources, or support would help you cover climate and energy stories more effectively?
 - » What would an ideal climate reporting toolkit or training look like for you?
- Have you ever worked with or interviewed a climate scientist/energy expert? What was that experience like?
- Would you be interested in collaborating with scientists, NGOs or community groups in future reporting?
- Are there ways that journalists across Sulawesi could better share knowledge or support one another?
 - » How could platforms like Climate and Energy Direct (a platform being created by the MCCH) support your work?

Section 5: Wrap-up and Reflections

- What is one thing you learned or realised today?
- Final questions or comments

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