

Enabling the decarbonisation of Australia's energy networks

An international comparison of media representations of gas and hydrogen: framing issue legitimacy

This project arose out of the need to create a new meaning for gas infrastructure. The research team conducted an analysis of the representation of gas and hydrogen in traditional and social media in Australia from 2017-2022, reflected against international discourses. Related risks and opportunities were examined, including the possibility of creating issue legitimacy in relation to the climate crisis.

This summary of the final report outlines some of the main findings outlined in the report and, secondly, outlines key implications for industry practice when communicating about future fuels.

Research findings: what the data and media analysis show

General communication trends and issues:

- 1. Gas is increasingly talked about in relation to hydrogen in the media, however this is predominantly an industry/business discourse.
- 2. Stakeholders state terminological confusion around renewable gas, sustainable gas, fossil gas, natural gas, zero-carbon-energy, de-carbonized gas.

Findings about the public hydrogen discourse in traditional mass media:

- 3. The Guardian is the medium with the most coverage of hydrogen-related issues, followed by the Conversation and Australian Financial Review.
- 4. In 2020, hydrogen becomes a political issue in global discourses and in traditional media in Australia; since 2021 it is debated from more diverse perspectives, but the dominant theme is *future energy* and related *policies*.
- 5. In nearly 80 % of the traditional media articles gas and hydrogen are communicated related to their potential for further economic growth. Media mostly stressed economic aspects rather than technical issues such as those related to the need for gas/gas infrastructure.

Findings about the public hydrogen discourse on social media (Twitter)

Findings about thematic clusters and key themes:

- 6. The twitter discourse is highly concentrated around a thematic cluster of communication about energy transition, which is not connected to other aspects like environmental impacts, climate crisis and risks or civil societal engagement and scientific/research institutions.
- 7. Energy transition, emissions from gas and the hazer group's activities dominate the discourse.
- 8. International developments are discussed only marginally on Twitter, similar to environmental impacts and the climate crisis.
- 9. The electric vehicles theme loses interest since 2017, but it was only a very marginal theme in the hydrogen related discourse.

Findings about the use of hashtags:

- 10. The hashtag hydrogen (#hydrogen) dominates at least until 2021, when conversations around #greenhydrogen emerge. In mid-to-late 2021 #greenhydrogen had become fully developed as a prominent hashtag.
- 11. This is supported by the shift in mid 2021, where the 'techonomy'-focused #hydrogen discourse divides from the #greenhydrogen discourse.

Additional findings about discourse dynamics and drivers

- 12. Industry messages are often hijacked by highly-networked accounts, such as @Simonahac and @KetanJ0.
- 13. Recent COP meetings (UNFCCC), climate strikes and land rights movements are key-events that drive the discourse, rather than the hydrogen strategy or corporate campaigns (Fortitude).

Findings about currently dominant voices in hydrogen discourses and on Twitter

- 14. The European Commission, Shell and Siemens are the dominant voices in the international discourse. In Australia it is the Australian Hydrogen Council and the hazergroup, which is also supported by the ranking of most used hydrogen-hashtags (#hazergroup is Top #3).
- 15. p_hannam (Guardian) is the leading voice on Twitter, followed by chriskenny (sky) and murpharoo (also the Guardian).

Implications for industry and possible actions to lead the conversation

One implication suggested by this study is that a more specific framing of hydrogen in strategic communication is necessary to overcome hydrogen's vague image in the public discourse.

Three broad areas for industry action were also identified:

- 1. Reframe gas: Create clear communication without ambiguity across the industry
- Stronger key messages are needed (e.g., no Net Zero future without us!)
- Link sustainability with "storage" and energy security instead of using it for "greening" purposes
- Repeat the key fact: gas is a facilitator not a "bridging technology / fuel"
- Review and determine what overarching label (or umbrella term) should be used by industry and encourage the sector to stick to agreed terminology
- Focus on storage: (1) create a new images and visualizations (beyond plants, industry, smoking stacks), and (2) create a new narrative / key message
- Develop a standardized set of hashtags for social media communication
- Create your own newsroom / platform
- · Monitor hashtags and thematic clusters on social media continuously
- 2. Find new allies: Spur for good conversations, invite critics, connect with the fringes of the discourse
- Explore new communication channels to reach a broader audience (Facebook, Instagram)
- Don't leave Twitter to the critics, and draw the discourse onto your platforms (panel discussions, conferences, open forums etc.)
- Create discourse coalitions with journalists who are active in social media
- Find new discourse allies this can be energy communities like environmental groups, entrepreneurial, local heroes, techno-centric communities
- · Be more relatable connect your story with potential discourse allies
- 3. Speak up: Collect and create stories, and broaden the discourse with better speaker management
- Gather more stories on the ground
- Personalization give the stories a face
- Create new speaker roles (i.e., sustainability / climate crisis related spokesperson etc.)
- Create more speaker opportunities for the new roles
- Cut your information into smaller portions

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