

Cecilia Biancalana, Daria Loreti

# Obstacle or Opportunity for the Environment? Exploring Attention to Environmental Issues and Framing of the Energy Crisis in the First Year of the Russo-Ukrainian War in an Italian Newspaper

(doi: 10.3270/113280)

Comunicazione politica (ISSN 1594-6061)

Fascicolo 1, aprile 2024

**Ente di afferenza:**

*Università di Torino (unito)*

Copyright © by Società editrice il Mulino, Bologna. Tutti i diritti sono riservati.

Per altre informazioni si veda <https://www.rivisteweb.it>

**Licenza d'uso**

Questo articolo è reso disponibile con licenza CC BY NC ND. Per altre informazioni si veda <https://www.rivisteweb.it/>

Cecilia Biancalana, Daria Loreti

# Obstacle or Opportunity for the Environment?

Exploring Attention to Environmental Issues and Framing of the Energy Crisis in the First Year of the Russo-Ukrainian War in an Italian Newspaper

## ABSTRACT

This paper examines the role of media in shaping public discourse on the environment, particularly amidst competing crises. Existing literature indicates a tendency for decreased coverage of environmental issues during high-impact events. Focusing on the Italian context, this study investigates the influence of the Russian-Ukrainian war and the energy crisis on media representation of environmental issues in the country. Specifically, we analyze whether these events overshadowed climate concerns and how they were portrayed – either as catalysts for the green transition or as obstacles to global climate change mitigation efforts. The study is based on an analysis of 1,264 articles published by *Corriere della Sera* during the first year of the war. Initially, a codebook was employed to assess the extent and manner in which the newspaper addressed environmental topics. Subsequently, a qualitative examination of frames was conducted to determine whether the war and energy crises were depicted as catalysts or obstacles in environmental coverage. Findings reveal an initial overshadowing effect on environmental issues during the early stages of the war, albeit temporary. When analyzing the framing of the war and energy crisis in environmental coverage, a coexistence of «opportunity» and «obstacle» frames is discernible, with the former prevailing.

**Keywords:** environment, climate change, news media, energy crisis, Italy.

## 1. Introduction

The media play a crucial role in addressing climate change, as also the 2022 Intergovernmental Panel on Climate Change report acknowledges (Ipcc, 2022: 1358). Not only are they one of the arenas in which public problems compete (Hilgartner and Bosk, 1988), but they also shape public opinion and influence decision-makers by highlighting the issue and raising public concern (Carmichael and

Brulle, 2017), as well as by offering different frames (Dewulf, 2013). Indeed, the media serve as a battleground on which different social groups, institutions, and ideologies contend to define and construct social reality (Gamson and Modigliani, 1989). In turn, different definitions of the problem of climate change can influence the actions of representatives and policymakers sensitive to the media's handling of the issue (Gavin, 2009).

However, despite the significance of the climate crisis, environmental news is often overshadowed by the coverage of other crises, such as economic ones or armed conflicts (Djerf-Pierre, 2012), which are better able to attract media attention. Against this background, the paper addresses two gaps in the existing literature. First, while the relationship between the pandemic crisis and environmental coverage has been studied (Ho *et al.*, 2023), to our knowledge, the effects of the global energy crisis that has resulted from the Russo-Ukrainian war<sup>1</sup> have not been examined. This disruptive event may have caused an overshadowing of news about the environment and climate change, but it may also have generated different ways to frame the energy crisis connected to them. Second, our focus is on a context under-studied with respect to media coverage of environmental and climate change issues: namely, Italy (Biancalana and Ladini, 2022).

The paper analyzes environmental coverage by *Corriere della Sera*, the most-read newspaper in Italy, during the first year of the Russo-Ukrainian war. It reports an analysis conducted on a total of 1,264 articles using a codebook to determine how the newspaper addressed environmental issues, and with a specific section devoted to climate change. Moreover, the paper examines how the energy crisis has been framed in relation to environmental issues.

The paper is structured as follows. Section 2 provides a literature review on news media coverage of climate change, focusing on its interaction with other competing crises. In section 3, we review existing studies on how Italian media cover climate change. Section 4 justifies our choice of the case study and explains our data and methods. Finally, in section 5, we analyze our data in terms of salience, thematic focus, and actors present in the news media coverage. Finally, in section 6 we examine articles related to the environmental impact of the war and of the energy crisis to identify the main frames present in the news.

<sup>1</sup> When we use the term «energy crisis», we are specifically referring to the one arising from Russia's invasion of Ukraine.

## 2. Climate change news coverage in the midst of competing crises

Because the ability of news media to cover various issues is limited (Brosius and Kepplinger, 1995), due to the finite carrying capacity of the arenas in which public problems take shape, problems must compete for attention. If we assume that media attention is a zero-sum game (Zhu, 1992), and that issues have an «attention-cycle» (Downs, 1972), then it becomes clear why some issues can become «victims» of others in media coverage. However, we also know that issues and arenas are interconnected: on the one hand, interactions between issues can occur beyond a zero-sum game, and coverage of one issue can lead to reporting on another (Geiß, 2011); on the other hand, also interactions among public arenas occur, and feedback among them can influence the development of a social problem and its displacement (Hilgartner and Bosk, 1988).

Media attention to climate change varies over time and among countries (Schmidt *et al.*, 2013). It is influenced by various interconnected factors, both internal to news organizations and media systems and external to them, such as policymakers' attention and public concern, as well as obviously real-life events (see Boydstrum, 2013). We know for instance that environmental issues attract attention on specific occasions like report releases, international conferences, or natural disasters (Schmit *et al.*, 2013). However, they are also susceptible to displacement (Downs, 1972): research has shown that environmental coverage diminishes when it has to compete with highly impactful and attention-grabbing events, such as international crises or global economic upheavals (Djerf-Pierre, 2012).

Environmental issues tend to be displaced by other issues because of their relatively less obtrusive nature: while some events within the environmental domain, like natural disasters, can be attention-grabbing, most research categorizes environmental issues as unobtrusive. As stated by Djerf-Pierre (2012: 503), the long-term, complex, uncertain, and ambiguous nature of many environmental problems impedes them from capturing the news media's attention. Similarly, policymakers and the public may find it difficult to pay attention to the climate crisis (Van der Ven and Sun, 2021). Consequently, the climate crisis may be overshadowed by other crises in media coverage.

By contrast, a recent crisis like the COVID-19 pandemic has exhibited all the characteristics mentioned above. Research has demonstrated, in fact, that climate change issues have been overshadowed by the pandemic. Despite happening in a period during which climate change issues appeared to be gaining significance, the pandemic garnered significant media coverage, becoming a competitor for climate

change coverage. Numerous studies confirm that the climate crisis was crowded out by the prominence of COVID-19 in media reporting (Rauchfleisch *et al.*, 2023; Lyttimäki *et al.*, 2020; Stoddart *et al.*, 2023).

However, research has also noted that pro-climate frames emerged in the context of the pandemic. In an analysis of news stories linking COVID-19 and climate change, Stoddart and colleagues found that COVID-19 has been viewed as an opportunity for climate action, and that the pandemic and climate change can be perceived as parallel crises (Stoddart *et al.*, 2023). Simultaneous crises can also complement each other: it is therefore conceivable that the media can establish connections between different issues or crises, instead of simply replacing one with another.

Since COVID-19 another crisis has emerged, and it competes with climate change for media attention: the Russo-Ukrainian war and the subsequent energy crisis. Because these issues involve armed conflicts and have economic implications, it seems likely that they will displace climate change on the news agenda (Djerf-Pierre, 2012). Nevertheless, the current global energy crisis possesses specific characteristics that make it relevant in relation to the environment. While COVID-19 also had connections to the environment (such as mobility restrictions, the issue of zoonotic spillover, etc.), the energy crisis is closely linked to a critical stage of ecological transition, particularly in relation to energy sources. Therefore, we can expect it not only to displace environmental news but also to have an impact on how the media frame energy- and environment-related news.

Numerous academic studies have explored how the media frame discussions concerning climate change and environmental issues (see Anderson, 2009). Similarly, research has also been conducted on the framing of energy-related matters (especially, but not limited to, nuclear energy). Magnusson and colleagues (2021) found that, in most studies, economic and environmental frames encompassed both positive aspects, such as economic opportunities for individuals, companies, and countries – as well as renewable energy's positive impact on the fight against climate change – and negative ones, such as economic burdens and concerns about competitiveness, and potential negative environmental externalities. Considering our interest in understanding how the current global energy crisis is framed in relation to the energy and ecological transition, as well as the fight against climate change, we hypothesize that the energy crisis can be portrayed in two distinct ways.

The ongoing Russo-Ukrainian war, in fact, has created a discursive battleground within public discourse, giving rise to two contrasting thematic framings of the energy crisis in regard to environmental issues. On one hand, there is a perspective that views the war in Ukraine as a potential *opportunity* for the development of new climate and energy policies in Europe (Steffen and Patt, 2022). The consequent energy

crisis may prompt a reevaluation of energy systems and induce transition towards more sustainable and renewable sources, thus serving as a catalyst of innovative solutions and policies aimed at mitigating climate change. On the other hand, the war can be seen as a potential *obstacle*, since there is a risk that opportunities for environment-friendly energy transitions will be overlooked in favor of immediate energy needs (e.g. an emphasis on fossil fuels) (Zakeri *et al.*, 2022). The scarcity or instability of energy sources that have followed the invasion, coupled with economic challenges, may divert attention and resources away from environmental concerns, potentially hindering progress in combating climate change.

### 3. Italian media and climate change between sporadicity and dramatization

The Italian context is characterized by two major paradoxes: firstly, despite the increasing implications of climate change for various social, economic, health and political domains, the public debate on the topic remains relatively limited (Beltrame, Bucchi and Loner, 2017). The attention paid to it by Italian media is episodic, intermittent, and significantly lower than in other European countries (see also Boykoff *et al.*, 2023). Moreover, and perhaps consequently, there are still only few in-depth analyses of how climate change is communicated and represented in the public sphere in Italy (Biancalana and Ladini, 2022).

Nevertheless, the extant literature identifies some characteristics of climate change communication in Italy. Firstly, there is limited discussion of its causes in the media, with a greater emphasis on its consequences (Inglisa, 2008; Pasquare and Oppizzi, 2012). Moreover, Italian newspapers are said to portray the timing of climate change effects somewhat unclearly, with a lack of consensus on when these impacts will be felt (Biancalana and Ladini, 2022). Finally, dramatization and spectacularization are common features of the public narrative on climate change. For instance, the phenomenon of *meteonomia*, i.e. the personification of weather events and a narrative of conflict between humans and nature, is extensively used in public information. Furthermore, media narratives constantly tend to blur the distinction between short-term weather and long-term climate (Candela, 2015).

Besides the scientific literature, we have access to reports commissioned by Greenpeace from the Osservatorio di Pavia. The first one (Azzalini, 2020) analyzes the climate crisis in broadcast news during the coronavirus pandemic and confirms a decrease in attention to environmental issues in that period, primarily due to the concentration of the news agenda on the health emergency. However, a detailed

analysis reveals a positive shift towards increased coverage of news related to the environment, nature, and animals, supported by data and statistics. This comes at the cost of fewer news items about natural disasters and weather conditions, which are characterized by a strong emotional and emergency component.

While in certain contexts, emotional appeals can be effective means to initially reach audiences (Hoewe and Ahern, 2017), the literature suggests that fear-inducing communications produce contradictory results in regard to awareness-raising about climate change (Boykoff and Pearman, 2019). Thus, during the COVID-19 emergency, although the space devoted by the media to environmental issues decreased in terms of quantity compared to ordinary periods, the «quality» of environmental information, defined as more in-depth and awareness-raising news, appeared to improve in Italy.

A second report, relating to the year 2022, highlights that the attention paid by the main Italian media (newspapers and TV news programs) to the climate crisis appears limited and sporadic, and that their coverage seems to ignore the responsibility of gas and oil companies for CO<sub>2</sub> emissions (Azzalini and Marchese, 2022). Furthermore, the study examines the space provided by newspapers for advertisements by the fossil fuel industry and automotive, airline, and cruise companies. It reveals a strong dependency of the Italian press on funding from polluting corporations; a dependency rooted in some structural characteristics of the Italian media system<sup>2</sup>. The significant influence of the economic world also emerges from analysis of the dominant voices discussing the crisis. Representatives of economic and financial organizations take the lead, surpassing politicians and institutions, with experts and environmental associations ranking lower in prominence. Even prime-time television news broadcasts devote little space to the issue, and extreme events remain the main focus of attention, including in-depth programs.

In conclusion, the evidence from the Italian context, besides demonstrating the low salience and the episodic treatment given to climate change by the media, shows that the news media coverage of the issue has some distinctive characteristics linked to the dramatization of weather events and the prominence of economic views.

<sup>2</sup> According to the Media for Democracy Monitor (Padovani *et al.*, 2021), the independence of news media is a critical aspect of the Italian media system, given the historical evolution of journalism in close connection to political and economic entities. Hallin and Mancini (2004) classify Italy as an example of a «polarized pluralist» model, characterized by a high degree of politicization, significant state influence on the media, and limited professional autonomy. Specifically, in Italy, the connections between politics, powerful social and interest groups, as well as large businesses, and journalism have always been strong. The country is marked by a scarcity of «pure publishers», by which is meant entrepreneurs involved solely in the publishing industry. Media outlets, whether privately owned or linked to the state, have been utilized by commercial owners to exert influence in the political and economic sphere.

In the case of COVID-19, while a decrease in the quantity of news stories has been detected, it seems that their «quality» increased.

Starting from these assumptions, the aim in what follows is to understand if the news coverage of the environment and climate change has diminished during the war and the subsequent energy crisis, and how the latter has been framed in relation to the environment.

#### 4. Research design and methods

The research reported in this paper analyzed the environmental coverage of *Corriere della Sera*, the most widely-read newspaper in Italy, during the first year of the Russo-Ukrainian war (from February 24, 2022, to February 24, 2023)<sup>3</sup>. This specific period and timespan was chosen for several reasons.

In the first place, two years after the COVID-19 pandemic, when many countries were returning to a sense of normality, the war and the consequent energy crisis emerged as significant global events that captured media attention. Although wars are often viewed as distant crises that may not directly affect the lives of citizens, particularly those who do not live in war-torn countries or neighboring regions, the Russo-Ukrainian war has had a direct and negative impact on the daily lives of many people. As regards Italy, the country has been impacted by the energy crisis, because it heavily relies on Russian gas (Prontera and Lizzi, 2023). This circumstance has resulted in the great salience of energy-related issues in the public and political debate (Bentivegna, Marchetti and Roncarolo, 2023).

Indeed, according to the International Energy Agency (IEA), although energy markets began to tighten in 2021 due to various factors, Russia's invasion of Ukraine was the event that significantly worsened the situation. Energy prices reached unprecedented highs, contributing to elevated inflation rates and substantial economic repercussions<sup>4</sup>. Therefore, the Russo-Ukrainian war and the energy crisis align precisely with the events described by Djerf-Pierre (2012) as crowding out environmental issues.

Moreover, the energy crisis has implications for ecological transition. On the one hand, the conflict in Ukraine and the consequent energy crisis could create an *opportunity* for the formulation of innovative climate and energy policies in Europe

<sup>3</sup> This study focuses on a legacy media outlet, because they still play a crucial role in shaping public opinion and influencing decision-makers, maintaining their agenda-setting function (Bentivegna and Boccia Artieri, 2020).

<sup>4</sup> See: IEA (International Energy Agency), *Global energy crisis*, at: <https://www.iea.org/topics/global-energy-crisis>. Last accessed January 30th 2024.

that focus on the implementation of renewable energy technologies and the reduction of dependence on fossil fuels (Steffen and Patt, 2022). However, policymakers could also prioritize short-term solutions, seeking new fossil fuel supply routes in order to enhance energy security. This emphasis on fossil fuels may result in an *obstacle* to climate-friendly energy transitions (Zakeri *et al.*, 2022). Therefore, the energy crisis allows us to observe two potentially different frames at work.

Our research was based on 1,264 articles. We downloaded news items from the Westlaw platform between February 24, 2022 and February 24, 2023, that contained one of the following keywords in the title: alluvion\* (flood); ambient\* (environment, environmental, environmentalist etc.); clima\* (climate change, climate emergency, climate crisis etc.); ecologi\* (ecology); efficientament\* (energy efficiency); emission\* (e.g., CO2 emissions); ghiaccia\* (glacier); green; inquinament\* (pollution); rinnovabil\* (renewable energy); riscaldament\* (referring to global warming); serra (greenhouse gas); siccit\* (drought); sostenibil\* (sustainable); transizion\* (referring to green or sustainable transition).

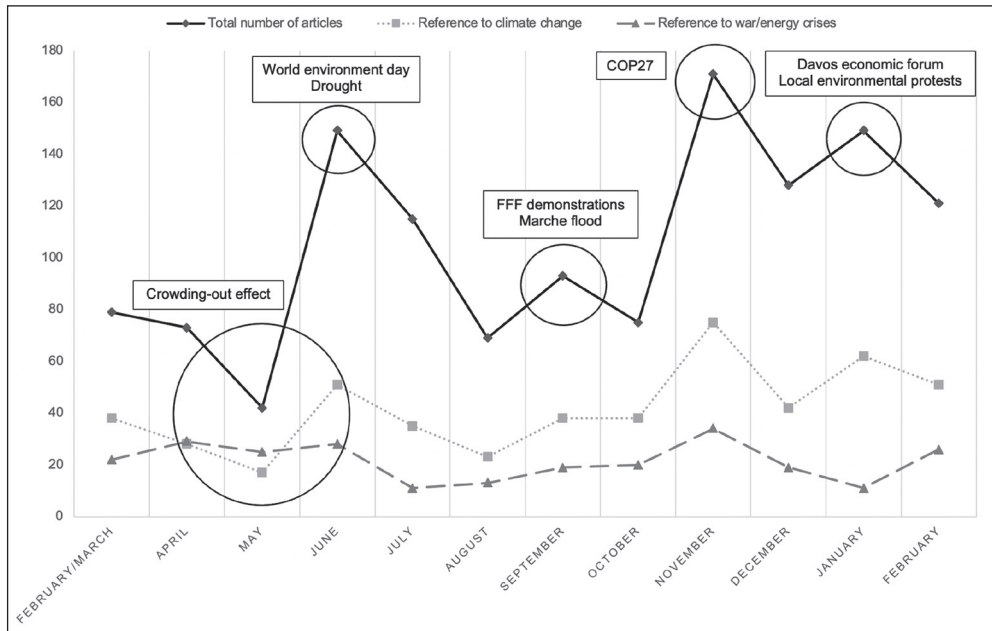
Articles were coded by two independent coders<sup>5</sup> by means of a codebook (see Appendix) aimed at determining the following aspects: the section of the newspaper in which the article was published, the territorial focus of the story, the main topic (within the broad category of the environment), the tone (positive/negative), whether climate change was a central topic in the news story, whether climate change causes or consequences were mentioned, the actors present in the stories, if the article referred to the war or the energy crisis, and, if so, how they were defined and represented.

We instructed the coders to recognize two main definitions of the problem or interpretive packages (Gamson and Modigliani, 1989): (a) the crisis is seen as an obstacle to climate change action and ecological transition (e.g. return to fossil fuels); (b) the war/energy crisis can be an opportunity for the environment (e.g. growth of renewables). There was also an «ambiguous» code when there was reference to the crisis as both an opportunity and an obstacle within the same article. Additionally, there was a category for «other environmental impacts of the war» (e.g. nuclear disaster).

In the analysis that follows, we will first explore the extent and the ways in which environmental topics were discussed within the news coverage. We will then isolate the articles that addressed the energy crisis and the war and conduct a more specific examination of the prevalent frames, unpacking the two interpretive packages identified.

<sup>5</sup> The coding was conducted between April and June 2023. Initially, the coders were asked to code a randomly selected sample of 50 articles. Krippendorff's alpha was calculated, and in a second meeting, articles with a value below 0.67 were discussed in order to align the two coders. A new sample of 50 articles was coded again to assess agreement between the coders and address any remaining concerns.

Figure 1. Articles on environmental issues published per month (24/2/2022-24/2/2023) (n. = 1264)



Note: The articles published on 24–28 February have been added to the month of March.

## 5. Trends in articles

We hypothesized that because of their more obtrusive nature, resulting in more public and policymaker attention, the war and the consequent energy crisis had crowded-out environmental news. Figure 1 shows the total number of articles on environmental issues published per month, along with the number of articles in the total making mention of two crises: climate change<sup>6</sup> or the war and energy crisis<sup>7</sup>.

<sup>6</sup> Our objective was to map various environmental themes present in the coverage. Notably, there was no category specifically labeled «climate change» because climate change can be linked to other themes and is not considered a stand-alone news topic (see also Beltrame, Bucchi and Mattè, 2012 on climate change as a «masterframe»). This approach also enabled us to observe the extent to which news stories related to other themes mentioned climate change and the way in which it was discussed.

<sup>7</sup> The energy crisis and the war are considered together here for two reasons. The first is that we consider the energy crisis to be an outcome of the war. The invasion of Ukraine, as acknowledged by the International Energy Agency (IEA), was the event that triggered the global energy crisis. Therefore, they are tightly connected, even though it is important to emphasize that they are two distinct phenomena. However, it was not deemed necessary to separately examine references to the crisis and references to the war, because in the corpus both were linked to environmental themes in the same manner (mainly concerning

On inspection of the above figure, the first thing one notices is the presence of some peaks in media attention on environmental issues that correspond to public events, extreme climatic events, and protests. Moreover, even though the coverage increases over time, indicating the growing importance of environmental topics in news coverage during the year analyzed, we see that May was the month in which coverage of the environment was lowest.

This first result seems to confirm that environmental issues gain attention during specific events like international conferences or natural disasters (Schmit *et al.*, 2013). However, events are necessary but insufficient factors for media attention (Boydstrum, 2013). Understanding the dynamics of media salience it is necessary also to investigate other variables, such as the context in which the news is produced (e.g. in terms of policymakers' and the public's concern), as well as the role of actors, the editorial line of a news outlet, and its target audience.

For instance, in regard to the drop in May, to be noted is that this was a crucial moment of the war. It was when the EU discussed the Russian oil and gas embargo, prompting discussions on the consequences of the conflict on energy-related aspects also at the national level, and causing widespread concern among the public and policymakers. Interestingly, April and May were the only periods when references to the crisis and war outnumbered those to climate change in our corpus. It is important to note that the articles considered in this corpus related to environmental topics: the presence of references to the crisis and war within it, and their temporary surpassing of climate change references during a certain period, suggests that the energy crisis «crowded-out» the climate crisis from media coverage, at least for a period.

As expected, in the context of a more impellent crisis and a downturn in policymakers' and the public's attention, the newspaper talked less about the unobtrusive problem of the environment, and when it did so, it linked it with the more pressing crisis. Nevertheless, the crowding-out seems to have been temporary. Indeed, subsequently, environmental coverage increased again, and references to climate change regained prominence over the energy crisis, although references to the latter were still present.

As regards mentions of climate change, they were relatively rare in the newspaper's environmental coverage. This finding becomes even more significant when considering how many articles had climate change as their central theme. Climate change was mentioned by 498 articles (40%); however, it was the central theme of only 56 articles (5% of the total articles analyzed and 12% of the articles that re-

energy sources and the energy transition). The only way in which they could be viewed distinctly was if we considered the issue of nuclear emergency, which is linked to the war and not to the crisis. However, we did not find this issue in the corpus.

ferred to climate change). However, it is interesting to note that the articles that mentioned the causes of climate change (263, 21%) outnumbered those that mentioned its consequences (137, 11%). Although our analysis was focused on a single newspaper and covered a one-year period, this finding is interesting and is at odds with the trend found in the literature on media coverage of climate change (Inglisa, 2008; Pasquarè and Oppizzi, 2012), namely, the predominance of consequences over causes.

So far, we have discussed the overall environmental coverage. However, to gain better understanding of the dynamics of media salience we can also analyze the specific topics that *Corriere della Sera* addressed within its environmental coverage and the actors most frequently mentioned. Table 1 displays the themes most prevalent in the newspaper's coverage. The table also shows the percentages of articles, for each topic, that mention climate change (and do so as a central theme), war, and the energy crisis.

The three predominant themes are: (a) weather (as in meteorological conditions) and extreme climate events (for example, the drought that hit Italy in the summer of 2022); (b) ecological transition; and (c) the issue of energy and energy transition, which includes references to renewable energies, photovoltaic panels, en-

**Table 1.** Themes most prevalent within the newspaper's coverage, and percentages of articles referring to climate change and war/energy crisis (n. = 1264)

Topic	% of the total of the articles	% of articles that mention climate change	% of articles that mention climate change as a central theme	% of articles that mention the war and/or the energy crisis
Weather and extreme climatic events	24	35	10	14
Ecological transition	22	39	3	27
Energy and energetic transition	19	49	4	48
Sustainability and green products	15	36	0	3
Pollution	11	40	5	10
Nature	11	37	8	5
Corporate responsibility	7	57	0	13
Environmental protests	5	57	12	17
Data presentation, research and reports	2	34	10	7
Conferences and agreements	2	81	35	32
Other	11	29	3	10

Note: The codebook instructed coders to specify the main topic of the article and, if possible, a secondary one. The column related to the percentage of the total articles includes both the main and secondary topics. This is why the sum of the column is not 100%.

ergy communities, energy efficiency, and savings, encompassing the topic of green buildings and incentives. A fourth extensively covered theme is (d) sustainability and green products. The less addressed themes are environmental protests, the presentation of data, research, and reports, and climate conferences and agreements.

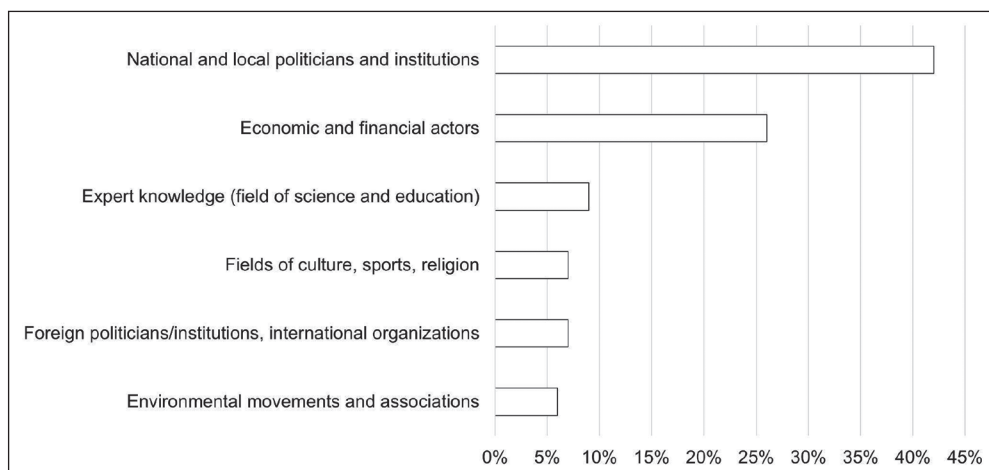
We can now look at how many of the articles for each theme mention the climate crisis or the energy crisis. Among the articles that address extreme weather events, only 35% of them refer to climate change, and only 10% do so as a central theme. The percentage of articles that centrally reference climate change drastically diminishes when we consider the second and third most covered themes: ecological transition, and energy transition. In these cases, we see that climate change is mentioned in 39% and 49% of the cases, but it is central in only 3% and 4% of them, respectively.

As regards the articles that make more reference to climate change, the first category is (not surprisingly) the one related to conferences and agreements (81%). In joint second place, 57% of articles dealing with corporate responsibility and protest movements refer to climate change. However, no article on corporate responsibility has climate change as its central topic, while 35% of articles on conferences and 12% of articles on environmental protests do so. It seems that articles on enterprises only mention climate change, and the same applies to articles on green products. Also in this case, no article has climate change as its central topic, exposing the coverage to the risk of being simple «green-washing».

As for references to the war and the energy crisis, they are made in 27% and 48% of the articles related to ecological transition and energy transition, respectively: the energy crisis and the war have been consistently present in environmental coverage by *Corriere della Sera*, especially in the articles dealing with energy transition. In the next section, we will focus on articles making reference to the energy crisis and identify the main frames used.

How can we interpret these results? On the one hand, they reflect the editorial line of *Corriere della Sera*, a broadsheet newspaper published in Milan, considered Italy's economic capital, and which has been historically linked to the interests of Italian industry. It is not surprising, therefore, that the newspaper has an incentive to pay attention to various economic issues, and to give space to economic actors also in its coverage of the environment, as we will see in more detail later. The low number of articles on extreme climatic events that have climate change as their central topic shows that *Corriere della Sera* struggles to link that phenomenon to the climate crisis. Finally, the limited attention paid to the presentation of data and reports and international conferences can be explained by the nature of such news, which is reported only when a report is released or when an agreement or conference takes place. Moreover, it reflects the scant newsworthiness of such events, and of the

**Figure 2.** Most mentioned actors by category (percentage on the total of mentions of actors n. = 2171)



actors involved in them, as they are not easily usable in a dramatized coverage (see Candela, 2015), and the newspaper has no incentive to cover them.

In regard to actors, Figure 2 illustrates the most frequently mentioned actors classified into broader categories<sup>8</sup>. National and local politicians emerge as the actors most frequently referenced, accounting for 42% of mentions. Economic actors occupy the second position, representing 26% of mentions. The prevalence of national and local politicians and economic actors in articles related to the environment indicates the significance attributed to these actors by the newspaper and the fact that they actively contribute to shaping the agenda on environmental issues. This result matches our expectations, also given the Italian «polarized pluralist» model characterized by a high degree of politicization and tight connections with industry.

The results also underscore the relatively limited attention paid to social movements and science. Actors falling within the category of «expert knowledge» (including experts, climatologists, and universities) account for 9% of mentions. Approximately 7% of mentions concern foreign and supranational politicians, institutions, and organizations, as well as actors in the realms of culture, sports, and religion. The scant presence of international organizations (such as the UN) in the coverage also confirms the limited newsworthiness of events such as international agreements. Lastly, environmentalist movements and associations receive only 6% of mentions, indicating a lower level of prominence in the newspaper's coverage.

<sup>8</sup> See the Appendix for the composition of categories and the disaggregated results.

## 6. Frame analysis

Understanding with which frame *Corriere della Sera* presented the war and the crisis in its articles related to the environment is important because, by means of the framing process, different meanings can be attributed to these events, thereby shaping public opinion and influencing policymakers. Goffman (1974) conceptualizes frames as the guiding principles that govern both social activities and how they are perceived. As regards media analysis, Tuchman (1978) defines framing as the journalistic process of organizing events to provide meaning. Therefore, we can say that the central components of frames and framing processes are salience (involving selection and exclusion, see Entman, 1993) but also connectivity (establishing associations between ideas) (for a review see Barisione, 2009). Our research initially concentrated on exploring the salience of different frames, before analyzing the main ideas associated with them.

As said, the coders were asked to identify articles containing two main definitions or interpretive packages regarding the issue of the energy crisis. A total of 62 articles were selected. In the second phase of our research, we conducted a more interpretative analysis of these articles using the MAXQDA software.

MAXQDA is a software designed for qualitative and mixed-methods data analysis. It makes it possible to code, retrieve and count specific portions of text. We first coded the 62 articles with the two interpretive packages of «obstacle» and «opportunity», which can be considered as master frames (Snow and Benford, 1992). The «obstacle» code was used with respect to portions of text considering the war and the subsequent energy crisis as challenges to addressing climate change and ecological transition, possibly leading to a resurgence in the use of fossil fuels. Conversely, the «opportunity» code was used with respect to portions of text that identified the war and the consequent energy crisis as a chance for environmental transition, as in the case of the promotion of renewable energy sources.

Then, moving from a general understanding to a more specific one, we inductively searched for specific frames within the two master frames that identified different aspects, consequences, and implications of them. Each article could contain multiple frames, also of different nature. After the initial inductive coding of all articles, we revisited the categories, seeking to merge similar frames in order to achieve a comprehensive and mutually exclusive categorization. The results are shown in Table 2, together with the number of occurrences of each frame, and the number of articles in which the frame is present.

As regards the opportunity master frame, a first way to decline it is that the crisis is an opportunity to accelerate transition processes. The crisis could indeed prompt actions such as increased investment in sustainable energy sources.

Table 2. Opportunity and obstacle frames

Frame	N. occurrences of the frame	N. articles in which the frame is present
<i>Master frame: opportunity</i>		
The crisis and the war offer a chance to accelerate transition processes	15	13
The actions needed to solve the war/energy crisis are the same as those for the climate crisis	12	10
The crisis and the war present an opportunity to raise citizens' awareness about climate change	8	7
The crisis and the war provide an opportunity for energy security and/or energy independence	8	7
<i>Total</i>	<i>43</i>	<i>37</i>
<i>Master frame: obstacle</i>		
Climate change and clean energy are not the priority; energy independence/security is	22	16
The war and the energy crisis put climate change in the background and increase pessimism	8	5
The war and the energy crisis are hindering progress towards sustainability	3	3
Sustainability and energy independence cannot be reconciled	1	1
<i>Total</i>	<i>34</i>	<i>25</i>

Note: Because each article can contain more than one frame, the figures in the two columns may be different.

Energy security concerns have motivated countries to achieve a massive increase in renewables, expected to be 30 percent higher than the growth announced only a year ago (ID779).

A second opportunity frame emphasizes that strategies and actions to address both the energy and climate crises may overlap in numerous ways. This points to a potential integration of solutions aimed at tackling both issues, suggesting that addressing them jointly could yield more effective outcomes.

Greenhouse Effect, War Effect. Every climate solution is also a peace solution (ID1111).

A third opportunity frame sees the crisis as an opportunity to increase awareness about climate change. This may be because crisis situations prompt indi-

viduals to reflect on the links between conflicts and environmentally virtuous behaviors, paving the way for closer attention to the climate issue.

The only benefit of the energy crisis is that it has pushed consumers in this direction and made them more aware of the need to change the system, so much so that we are flooded with requests to install photovoltaic panels (ID382).

Finally, the crisis can be seen as an opportunity to place greater emphasis on domestic energy production and renewable energy sources.

The battle for sustainability goes hand in hand with energy security (ID1077).

the energy crisis [...] suggest us to devote an extraordinary effort to renewables, for greater independence from Russian gas (ID37).

As regards the obstacle master frame, the first frame suggests that in a context of crisis, companies and citizens push climate action into the background: energy security, viewed as an immediate priority, is seen as more urgent than transitioning to clean energy sources and long-term sustainability.

we cannot put environmental issues before food supply issues (ID24).

Three years ago the emphasis was all on clean energy, the priority was decarbonization. Today, after an energy crisis experienced around the world, the priority has become ensuring energy security and affordable supplies (ID753).

Moreover, the war in Ukraine and the energy crisis may have caused a shift of attention, causing climate change action to be seen as less important than energy security and the war.

It was supposed to be the G7 Climate Summit, the summit of industrialized countries led by the German presidency, that was destined to mark a decisive turning point in the fight against global warming. But Russia's war of aggression against Ukraine and its devastating consequences have turned the agenda of Western leaders upside down (ID184).

The immediate damage caused by scarcity becomes, in the minds of many, more important than the environmental emergency (ID753).

The third obstacle frame indicates that war and the energy crisis may hinder progress towards Green Deal goals or other sustainability initiatives, slowing the transition to a greener society.

Europe was accelerating on the Green Deal: it risks being stopped by a war that seems to benefit fossil-rich world powers, like the USA, interested in selling us their gas (ID1111).

Finally, a fourth obstacle frame highlights a potential conflict between pursuing sustainability and ensuring energy independence. There may be tensions between opting for cleaner energy sources and dependence on energy resources during crises.

given tragic current events, from the war in Ukraine to the energy crisis, sustainability and independence in supply do not seem fully reconcilable (ID1077).

On looking at these frames, it can be said that two contrasting narratives within the master frames emerge. Table 3 presents the main contrasting frames, together with their number of occurrences.

While frames within the opportunity master frame (43) are overall more present than the ones within the obstacle frame (34), there are differences in the extent to which the contrasting narratives are found in the coverage. Notably, the idea that energy independence is more important than sustainability prevails over the idea that energy security can be achieved through sustainability. The frame that claims that energy security should be the priority, also in the face of sustainability goals, is indeed the one most present in the coverage. This reflects shared concerns, in Italian public opinion and especially enterprises, about the economic effects of the country's dependence on Russian gas.

Moreover, we find the same number of frames stating that the crisis helped to raise climate change awareness and that it shifted focus away from it. However, the newspaper gave extensive space to the idea that the energy crisis can accelerate energy transition, and that the two crises are interconnected.

**Table 3.** Opposition between opportunity and obstacle frames

Master frame: opportunity (43)	Master frame: obstacle (34)
Energy independence and security can be pursued through sustainability (8)	Energy independence is more important than sustainability (22)
The energy crisis increases awareness of climate change (8)	The energy crisis fosters pessimism about the fight against climate change and a shift of focus (8)
The energy crisis could accelerate energy transition processes (15)	Green Deal/sustainability objectives are hindered by the war/crisis (3)
Interconnection between the energy crisis and the climate crisis (12)	The climate crisis and the energy crisis are irreconcilable crises (1)

In sum, despite the immediacy of the energetic crisis – a crisis that could in principle hinder efforts to combat climate change – opportunity frames are present in *Corriere della Sera*, and they were prevalent in the coverage analyzed. However, if some voices assert that the crisis could be an opportunity for the fight against climate change, accelerating the transition and raising awareness about the topic, there are also strong views which claim that the environment is not a current priority. The contrast between opposing frames testifies that there is an ongoing battle of ideas and narratives, but it also shows that, amid the occurrence of multiple crises, there is also room for environmentally friendly views.

## 7. Conclusions

Our aim in this paper has been twofold. Firstly, given the prevalent tendency for the environment to be displaced by concurrent crises, our intent has been to assess whether this has been the case of an Italian newspaper during the first year of the Russo-Ukrainian war. Secondly, we have analyzed how the newspaper framed the energy crisis within its environmental coverage.

Besides the obvious significance of the topics discussed in this paper for citizens, policymakers, and the planet, this study is important for two main reasons. Firstly, it addresses an unexplored area. To our knowledge, no prior study has undertaken an analysis of environmental coverage in the year following the invasion of Ukraine. Secondly, the scarcity of studies on Italy adds significance to our research, because it effectively fills an existing gap in the literature.

Our findings reveal that during the month of May there was indeed a decline in the environmental coverage of the *Corriere*. This can be attributed to an overshadowing effect of the events that followed the invasion, which garnered substantial attention during that period. This result is corroborated by the fact that articles mentioning the war and the energy crisis outnumbered those making reference to climate change in terms of volume during the month of May. We can hypothesize that, as happened during the first phases of the pandemic, citizens' and policymakers' attention and concern shifted to a more impellent crisis (which also had characteristics favorable to wide media coverage), giving less space to news about the environment.

However, we know that issues and arenas are interconnected, and that media attention is driven by a number of different and interrelated factors that extend beyond events. To better understand the dynamics of media attention it is therefore necessary to investigate other aspects of environmental coverage. For instance, in regard to topics, among the main subjects featured in the newspaper's environmen-

tal coverage we find weather and extreme climatic events, as well as ecological and energy transitions. As regards the former, the result (and especially the consideration that climate change is rarely present as a central topic in these articles) aligns with what we know about Italy's media landscape, where newspapers tend to emphasize weather-related content over climate change due to its intrinsic capacity for dramatization and spectacularization. Moreover, as regards actors, to be noted is that political and economic stakeholders feature prominently as voices within this coverage, confirming a characteristic feature of Italy's media landscape.

When examining the framing of the war and energy crisis in the environmental coverage, we noted a coexistence of both positive and negative frames, with the overall prevalence of the «opportunity» frames over the «obstacle» ones. In similar manner to the dynamics observed in the case of COVID-19 (Stoddart *et al.*, 2023), different crises can also be depicted as coexisting parallel challenges and presented as opportunities to accelerate the transition towards a more sustainable future. Nevertheless, it is essential to acknowledge the presence of influential voices contending that the urgency of addressing the climate change crisis must yield to a more pressing economic imperative, namely energy security. In a context in which policymakers seem predominantly engaged in exploring fossil fuel supply pathways to fortify energy security, this emphasis on economic considerations may cause neglect of the advancement of climate-conscious energy transitions. This is all the more important considering, as we have seen, that economic powers are actors prominently represented in the overall Italian media system and particularly in the news coverage analyzed.

## Appendix. Codebook

*Note:* if the article mentions several topics, consider for coding purposes only when it refers to the environment, climate change, sustainability, renewables, etc.

### General Information

A. *Article identification number*

B. *Date*

C. *Article title*

*D. National page or local page*

- National (Yes = 1; No = 0)
- Local (Yes = 1; No = 0)

*E. If local, specify city*

*F. What is the article generally about? In which macro-area can it be classified?*

- Politics (reference to policy makers, political decisions, political confrontation, social movements, demonstrations, at national or local level) (Yes = 1; No = 0)
- Economy, business, finance, taxation (for example, many articles discussing green products are to be found in the economics and business section) (Yes = 1; No = 0)
- (Local) news (Yes = 1; No = 0)
- Foreign affairs (foreign policy, European policy, summits and international agreements) (Yes = 1; No = 0)
- Culture and entertainment (cultural events, fairs, shows, book presentations, fashion, cultural page) (Yes = 1; No = 0)
- Sport (Yes = 1; No = 0)
- Editorial (Yes = 1; No = 0)
- Other (specify in notes field) (Yes = 1; No = 0)

*Note:* fashion can be considered both in culture and entertainment (when referring to events such as fashion shows) or in economics, when it is seen as an economic sector.

*G. Territorial focus of the news*

If an article is in a local section, it may talk about foreign topics, or vice versa. Therefore, this question refers to the territorial focus in the news item.

- Local (Yes = 1; No = 0)
- National (Yes = 1; No = 0)
- Foreign/International (Yes = 1; No = 0)
- European (Yes = 1; No = 0)
- Multiple contexts (Yes = 1; No = 0)
- Not applicable (Yes = 1; No = 0)

*H. Main topic*

*I. Secondary topic (optional)*

Articles were selected that deal with environmental issues in a broad sense. What is the article about, within the macro environmental topic?

*Note:* Please indicate the main topic and possibly a second one; if you can identify a third one, please include it in the note.

- Climate (weather) and extreme weather events (e.g. drought, heat, environmental disasters e.g. Marmolada) (Yes = 1; No = 0)
- Pollution (reference to low air quality) (Yes = 1; No = 0)
- Environmental protests (e.g. Fridays for future but also reference to other environmental protests) (Yes = 1; No = 0)
- International climate conferences and agreements (e.g. COP26) (Yes = 1; No = 0)
- Presentation of data, research and reports (e.g. IPCC report or specific research is published) (Yes = 1; No = 0)
- Ecological transition (e.g. sustainable agriculture, sustainable mobility, circular economy, references to the PNRR) (Yes = 1; No = 0)
- Sustainability and green products (sustainable fashion, green furniture, green architecture, natural cosmetics) (Yes = 1; No = 0)
- Corporate social responsibility (towards environmental issues) (Yes = 1; No = 0)
- Energy and energy transition (renewable energy, photovoltaics, energy communities, energy efficiency and energy savings, including the issue of green homes and incentives) (Yes = 1; No = 0)
- Nature (e.g. landscape, parks, green areas, urban greenery, environmental protection in general) (Yes = 1; No = 0)
- Other (specify in notes) (Yes = 1; No = 0)

*J. What is the general tone of the news (with reference to the environment)?*

Does the narrative mainly convey a positive, negative or neutral message? Do terms such as «problem», «threat», «fear», «loss» etc. prevail in the narrative of the environment proposed by the article? or «hope», «opportunity», «innovation»? In other words, are the scenarios evoked positive, negative or neutral?

- Narration with a predominantly positive tone (Yes = 1; No = 0)
- Narration with a predominantly negative tone (Yes = 1; No = 0)
- Neutral tone narration (Yes = 1; No = 0)
- Narration with ambiguous tone (Yes = 1; No = 0)

The tone of the article is ambiguous when an ambivalent narrative emerges, e.g. the article starts with markedly positive tones and then closes with negative tones (or vice versa), in other words, there is no prevailing tone but the two alternate.

*K. Does the article refer (directly or indirectly) to climate change?*

(explicit reference is made to: «climate change» or «global warming»; or indirectly by mentioning issues related to climate change) (Yes = 1; No = 0)

*L. Is the subject of climate change central to the article?*

Climate change is the central theme of the article, it can be defined as the subject of the proposed arguments. (Yes = 1; No = 0)

If there is a reference (direct or indirect) to climate change:

*M. Are the causes of climate change mentioned in the article?*

- Fossil fuels (coal, fuel, oil, petrol, methane, gas are mentioned as a cause of climate change) (Yes = 1; No = 0)
- CO<sub>2</sub> emissions (carbon dioxide emissions, carbon dioxide, greenhouse gases, deforestation, livestock farming, fertilisers, etc. are indicated as a cause of climate change) (Yes = 1; No = 0)
- Political decisions (political inaction, lack of proposals, political indecision, incentive to invest in fossil fuels, etc. are indicated as causes of climate change) (Yes = 1; No = 0)
- Corporate decisions (fossil fuel companies, polluting, unsustainable companies, etc. indicated as causes of climate change) (Yes = 1; No = 0)
- Lifestyles (diet, resource waste, motor vehicle abuse, waste production and management, etc.) (Yes = 1; No = 0)
- Natural (volcanic eruptions, solar radiation, etc.) (Yes = 1; No = 0)
- Other (Yes = 1; No = 0)

*N. Are the consequences of climate change present in the article?*

- Environmental (higher temperatures, droughts and forest fires, fresh water availability, floods, sea level rise, loss of biodiversity, erosion, landslides, water shortages, air pollution, extreme weather events, ocean acidification, etc. indicated as a consequence of climate change) (Yes = 1; No = 0)
- Economic (economic losses, flood/cyclone-induced indirect damage and direct damage to buildings, infrastructure, damage to tourism etc. indicated as a consequence of climate change) (Yes = 1; No = 0)
- Social (forced migration, increased hunger, increased poor nutrition, increased inequalities of class, ethnicity and gender etc. mentioned as a consequence of climate change) (Yes = 1; No = 0)
- Health (illnesses, heat stroke, worsening respiratory and cardiac conditions, mental health problems, increased heat-related summer mortality, etc. named as consequences of climate change) (Yes = 1; No = 0)
- Other (Yes = 1; No = 0)

*O. Does the article refer to «future generations»?*

(reference to future generations, new generations, next generations, young generations, etc.) (Yes = 1; No = 0)

*P. Does the article refer to Europe?*

(reference to European directives, European energy market, Green Deal, etc.) (Yes = 1; No = 0)

*Q. Does the article refer to the 2022 election campaign?*

(Yes = 1; No = 0)

*R. Does the article refer to a local election campaign?*

(Yes = 1; No = 0)

*S. Does the article refer to the war in Ukraine?*

(Yes = 1; No = 0)

*T. Does the article refer to the energy crisis?*

(Yes = 1; No = 0)

The article refers to the war/energy crisis:

*U. Frame*

- The energy war/crisis is an obstacle to the fight against climate change and the ecological transition (return to fossil fuels) (Yes = 1; No = 0)
- The energy war/crisis can be an opportunity for the environment (e.g. renewables) (Yes = 1; No = 0)
- Ambiguous (reference to both crisis as opportunity and obstacle in the same article) (Yes = 1; No = 0)
- Not applicable (none of the answers) (Yes = 1; No = 0)

*V. Actors: which actors are nominated*

- Foreign politician or institution (government member, parliamentarian or party leader – specify country) (Yes = 1; No = 0)
- European politician or institution (European Union, Europe in the EU sense, MEP, commission, council, parliament, e.g. Roberta Metsola) (Yes = 1; No = 0)
- Members of the Italian government (president of the council, ministers, under-secretaries etc.) (Yes = 1; No = 0)
- Party leaders (specify: Meloni, Berlusconi, Salvini, Letta, Fratoianni, Conte, Calenda, Renzi, Bonelli, other) (Yes = 1; No = 0)
- Party (specify: Fratelli d'Italia, Lega, Forza Italia, Partito Democratico, Alleanza Verdi-Sinistra, Movimento 5 stelle, Azione-Italia Viva, other) (Yes = 1; No = 0)
- Local politicians (e.g. municipal councillor, local party member, mayor, councillor) (Yes = 1; No = 0)
- Local public authority (e.g. municipality, region, regional environmental agency, Arpa, province) (Yes = 1; No = 0)
- UN (e.g. UN Climate Change Conference) (Yes = 1; No = 0)
- Other international/supranational body (Yes = 1; No = 0)

- Companies, banks, employer associations (e.g. Confcommercio). Including public enterprises (e.g. RFI) (Yes = 1; No = 0)
- Trade unions (CGIL, CISL etc.) (Yes = 1; No = 0)
- Environmental social movements (e.g. Fridays for Future etc.) (Yes = 1; No = 0)
- Environmental associations (e.g. WWF/Legambiente etc.) (Yes = 1; No = 0)
- Science/scientists/climatologists (e.g. IPCC) (experts) (Yes = 1; No = 0)
- School (Yes = 1; No = 0)
- University (e.g. event held at university or university professor being interviewed) (Yes = 1; No = 0)
- Religious actors (e.g. Bishops, Pope, priests, nuns, etc.) (Yes = 1; No = 0)
- World of culture/art (writers, photographers etc.) (Yes = 1; No = 0)
- World of sport (Yes = 1; No = 0)
- Other (specify) (Yes = 1; No = 0)

## Data on actors

### *Composition of categories*

#### *1. National and local politicians and institutions*

- Members of the Italian government (Prime Minister, ministers, undersecretaries etc.)
- Party leaders
- Political parties
- Local politicians (e.g., city councillor, local party member, mayor, councillor)
- Local public entities (e.g., municipality, region, regional environmental agency, province)

#### *2. Foreign politicians/institutions, international and supranational organisations*

- Foreign politician or institution (government member, parliamentarian, or party leader)
- European politicians and institutions (European Union, Europe in the EU sense, Member of the European Parliament, Commission, Council, Parliament, e.g., Roberta Metsola)
- ONU (e.g., when referring to the United Nations Climate Change Conference)
- Other international/supranational organisation

#### *3. Economic and financial actors*

- Companies, banks, employers' associations (e.g., Confcommercio), including public companies (e.g., RFI)
- Trade unions (CGIL, CISL etc.)

#### 4. *Environmental movements and associations*

- Environmental social movements (e.g., Fridays for Future etc.)
- Environmental associations (e.g., WWF/Legambiente etc.)

#### 5. *Expert knowledge (field of science and education)*

- School
- University (e.g., event held at the university or university professor interviewed)
- Science/scientists/climatologists (e.g., IPCC) (experts)

#### 6. *Field of culture, sports, religion*

- Religious figures (e.g., Bishops, Pope, priests, nuns, etc.)
- World of culture/art (writers, photographers etc.)
- World of sports

## Disaggregated results

Actor	Number of mentions
Companies, banks, employers' associations	545
Local politicians	238
Local public entities	236
Members of the Italian government	179
Political parties	165
World of culture/art	110
University	100
Party leaders	87
Science/scientists/climatologists	79
Environmental associations	69
Environmental social movements	65
Other	63
European politicians and institutions	61
Foreign politician or institution	46
ONU	31
School	27
World of sports	23
Trade unions	17
Other international/supranational organisation	15
Religious figures	15
<i>Total</i>	<i>2171</i>

### Data Availability Statement

The data that support the findings of this study are available from the corresponding author, Cecilia Biancalana, upon reasonable request.

#### Cecilia Biancalana

Università di Torino

Dipartimento di Culture, politica, società

Lungo Dora Siena, 100 – 10153 Torino

E-mail: [cecilia.biancalana@unito.it](mailto:cecilia.biancalana@unito.it)

ORCID: <https://orcid.org/0000-0001-7954-6337>

#### Daria Loreti

Università di Torino

Dipartimento di Culture, politica, società

Lungo Dora Siena, 100 – 10153 Torino

E-mail: [daria.loreti@unito.it](mailto:daria.loreti@unito.it)

ORCID: <https://orcid.org/0009-0006-6518-210X>

### References:

- Anderson, A. (2009). Media, politics and climate change: Towards a new research agenda. *Sociology compass*, 3 (2), 166-182.
- Azzalini, M. (2020). *I cambiamenti climatici nei TG «dopo» il Coronavirus*, <https://www.osservatorio.it/i-cambiamenti-climatici-nei-tg-dopo-il-coronavirus/>.
- Azzalini, M. and Marchese, M. (2022). *L'informazione sulla crisi climatica in Italia 2022*. Rapporto di ricerca, Osservatorio di Pavia per Greenpeace Italia.
- Barisione, M. (2009). *Comunicazione e società*. Bologna: Il Mulino.
- Beltrame, L., Bucchi, M. and Loner, E. (2017). Climate change communication in Italy, in *Oxford Research Encyclopedia of Climate Science*. Oxford: Oxford University Press.
- Beltrame, L., Bucchi, M. and Mattè, B. (2013). Climate change as a rhetorical resource and masterframe: An analysis of the daily press coverage and public opinion in Italy, in A. Salvatore, O. Schmidtke and H. Trenz (eds.) *Rethinking the public sphere through transnationalizing processes: Europe and beyond* (pp. 187-207). London: Palgrave Macmillan.
- Bentivegna, S. and Boccia Artieri, G. (2020). Rethinking public agenda in a time of high-choice media environment. *Media and Communication*, 8 (4), 6-15.
- Bentivegna, S., Marchetti, R. and Roncarolo, F. (2023). Quando la fine è nota: il clima della campagna del 2022 e le agende tematiche del confronto, in ITANES, *Svolta a destra? Cosa ci dice il voto del 2022* (pp. 137-149). Bologna: Il Mulino.

- Biancalana, C. and Ladini, R. (2022). Climate change in Italian public opinion, media, and parties: State of the art and research agenda. *Polis*, 36 (3), 455–472.
- Boydston, A.E. (2013). *Making the news: Politics, the media & agenda setting*. Chicago: The University of Chicago Press.
- Boykoff, M. et al. (2023). *European newspaper coverage of climate change or global warming, 2004–2023. Media and climate change observatory data sets*. University of Colorado: Cooperative Institute for Research in Environmental Sciences.
- Boykoff, M. and Pearman, O. (2019). Now or never: How media coverage of the IPCC special report on 1.5 C shaped climate-action deadlines. *One Earth*, 1 (3), 285–288.
- Brosius, H.B. and Keppinger, H.M. (1995). Killer and victim issues: Issue competition in the agenda-setting process of German television. *International Journal of Public Opinion Research*, 7 (3), 211–231.
- Candela, A. (2015). Storytelling e cambiamenti climatici nella rappresentazione mediatica delle previsioni meteorologiche. *Studi culturali*, 12 (3), 373–390.
- Carmichael, J.T. and Brulle, R.J. (2017). Elite cues, media coverage, and public concern: An integrated path analysis of public opinion on climate change, 2001–2013. *Environmental Politics*, 26 (2), 232–252.
- Dewulf, A. (2013). Contrasting frames in policy debates on climate change adaptation. *Wiley Interdisciplinary Reviews: Climate Change*, 4 (4), 321–330.
- Djerf-Pierre, M. (2012). The crowding-out effect: Issue dynamics and attention to environmental issues in television news reporting over 30 years. *Journalism studies*, 13 (4), 499–516.
- Downs, A. (2016). Up and down with ecology: The «issue-attention cycle». *The Public Interest*, 28, 38–51.
- Entman, R.M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, 43 (4), 51–58.
- Gamson, W.A. and Modigliani, A. (1989). Media discourse and public opinion on nuclear power: A constructionist approach. *American Journal of Sociology*, 95 (1), 1–37.
- Gavin, N.T. (2009). Addressing climate change: A media perspective. *Environmental Politics*, 18 (5), 765–780.
- Geiß, S. (2011). Patterns of relationships between issues: An analysis of German prestige newspapers. *International Journal of Public Opinion Research*, 23 (3), 265–286.
- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Cambridge, MA: Harvard University Press.
- Hallin, D.C. and Mancini, P. (2004). *Comparing media systems: Three models of media and politics*. Cambridge: Cambridge University Press.
- Hilgartner, S. and Bosk, C.L. (1988). The rise and fall of social problems: A public arenas model. *American Journal of Sociology*, 94 (1), 53–78.

- Ho, S.S. *et al.* (2023). Environmental debates in the time of the COVID-19 pandemic: Media, communication, and the public. *Environmental Communication*, 17 (3), 209-217.
- Hoewe, J. and Ahern, L. (2017). First-person effects of emotional and informational messages in strategic environmental communications campaigns. *Environmental Communication*, 11 (6), 810-820.
- Inglisa, M. (2008). *La rappresentazione dei cambiamenti climatici nei media italiani*. Como: Ibis.
- IPCC (2022). *Climate change 2022: Mitigation of climate change*. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press.
- Lyytimäki, J., Kangas, H.L., Mervaala, E. and Vikström, S. (2020). Muted by a crisis? COVID-19 and the long-term evolution of climate change newspaper coverage. *Sustainability*, 12 (20), 8575.
- Magnusson, D., Sperling, K., Veenman, S. and Oteman, M. (2021). News media framing of grassroots innovations in Denmark, the Netherlands and Sweden. *Environmental Communication*, 15 (5), 641-662.
- Padovani, C. *et al.* (2021) Italy: A highly regulated system in search of equality, in J. Trappe and T. Tomaz (eds.) *The media for democracy monitor 2021: How leading news media survive digital transformation* (vol. 2). University of Gothenburg: Nordicom.
- Pasquaré, F.A. and Oppizzi, P. (2012). How do the media affect public perception of climate change and geohazards? An Italian case study. *Global and Planetary Change*, 90, 152-157.
- Prontera, A. and Lizzi, R. (2023). The necessary reorientation of Italian energy policy. *Contemporary Italian Politics*, 15 (2), 252-268.
- Rauchfleisch, A., Siegen, D. and Vogler, D. (2023). How COVID-19 displaced climate change: Mediated climate change activism and issue attention in the Swiss media and online sphere. *Environmental Communication*, 17 (3), 313-321.
- Schmidt, A., Ivanova, A. and Schäfer, M.S. (2013). Media attention for climate change around the world: A comparative analysis of newspaper coverage in 27 countries. *Global Environmental Change*, 23 (5), 1233-1248.
- Snow, D.A. and Benford, R.D. (1992). Master frames and cycles of protest, in A.D. Morris and C.M. Mueller (eds.) *Frontiers in social movement theory* (pp. 133-155). New Haven, CT-London: Yale University Press.
- Steffen, B. and Patt, A. (2022). A historical turning point? Early evidence on how the Russia-Ukraine war changes public support for clean energy policies. *Energy Research & Social Science*, 91, 102758.
- Stoddart, M.C., Ramos, H., Foster, K. and Ylä-Anttila, T. (2023). Competing crises? Media coverage and framing of climate change during the COVID-19 pandemic. *Environmental Communication*, 17 (3), 276-292.

- Tuchman, G. (1978). *Making news: A study in the construction of reality*. New York: Free Press.
- Van der Ven, H. and Sun, Y. (2021). Varieties of crises: Comparing the politics of COVID-19 and climate change. *Global Environmental Politics*, 21 (1), 13-22.
- Zakeri, B. *et al.* (2022). Pandemic, war, and global energy transitions. *Energies*, 15 (17), 6114.
- Zhu, J.H. (1992). Issue competition and attention distraction: A zero-sum theory of agenda-setting. *Journalism Quarterly*, 69 (4), 825-836.

