EFCSN
European Fact-Checking Standards Network

EV Misinformation in Mediterranean Europe

Insights from Spain, France, Italy, Greece, Croatia, and Montenegro

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Content:

Executive Summary

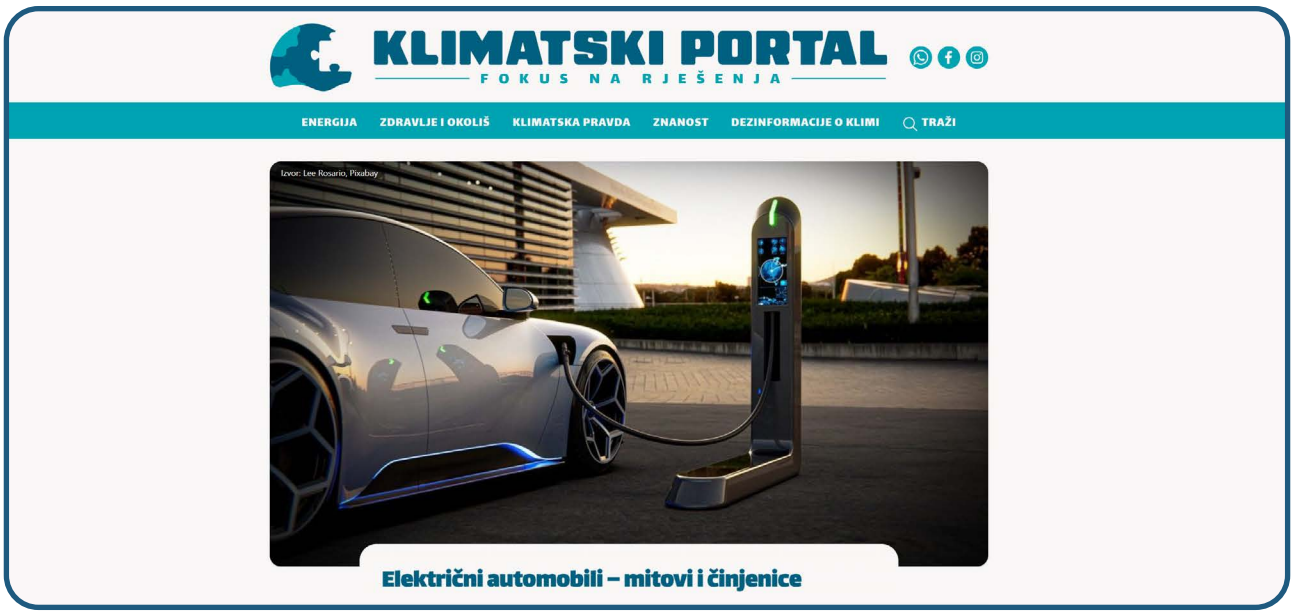
This report analyses EV-related misinformation across six Mediterranean countries: Spain, France, Italy, Greece, Croatia, and Montenegro. We compiled relevant fact-checks from EFCSN's Euro Climate Check database and cross-referenced them with a set of country-level indicators (trust, EV adoption, infrastructure access, GDP). We find that misinformation volume is uneven, and narratives cluster into three families: (1) EVs are unsafe/unreliable; (2) climate policies are harmful or pointless; (3) science on EVs is untrustworthy. The dominant narrative differs by context: safety/reliability claims prevail in Spain, Italy, Croatia, and Montenegro; science-sceptical claims dominate in Greece, and claims about climate policies are dominant in France. Some of the country-level indicators we've chosen to observe appear to be contributing factors in driving and shaping misinformation, others show no clear relationship to it. We conclude that the volume of misinformation, as well as the content of misinformation-based narratives around EVs are very much dependent on the specific national context in which the debate around EVs takes place, meaning that mitigation measures also need to be tailored for each specific context.

Introduction

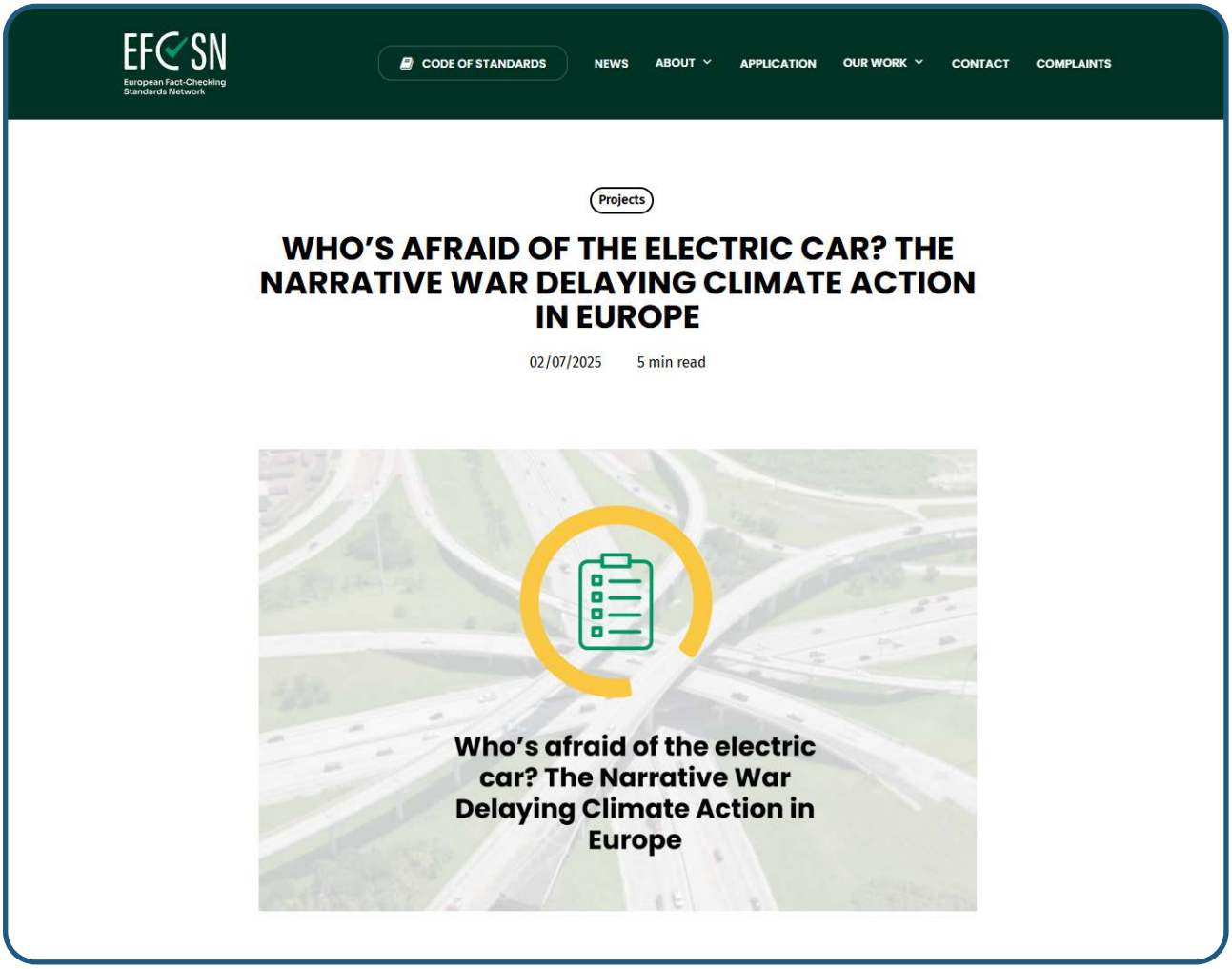
From the perspective of climate scientists, the roadmap is clear: we need to decarbonise the global economy, and we need to do it soon. If the world is to achieve the goals set out in the Paris Agreement, carbon neutrality needs to be reached no later than mid-century. The priorities for decarbonisation are equally clear: most greenhouse gas emissions come from energy, agriculture, and transport.

The overwhelming scientific consensus on climate change should be cause for urgent action, and yet their warnings so far don't seem to have been taken seriously enough. According to a 2024 UN report, current policies put the world on track to warm between 2.6. and 3.1 degrees by the end of the century [1]. The Paris Agreement, adopted by almost every country in the world, sets the goal of limiting warming to 1.5 °C. It also sets a back-up goal of limiting warming as much as possible below 2 °C, since every tenth of a degree increase has dire real world consequences. There are plenty of reasons why the transition to a cleaner, less carbon intensive economy is stalling. The most obvious one is presented in the fact that it's an expensive transition. Just the energy transition needed to limit warming at 1.5 °C is estimated to require an average investment of 5.6 trillion dollars per year by the end of the decade [2]. And yet, the price would probably be less of an issue if there was truly a global agreement on the gravity of the problem. Instead, division seems to be growing, with more and more elected politicians casting doubt on the science of climate change, and regularly resorting to misinformation while doing it. This division around a topic which is clearly an urgent matter bears witness to the effectiveness of an organized climate disinformation campaign, which has been going on for decades and has been well documented [3, 4, 5]. But as time went by, the narrative kept changing. Initial outright denial of climate change morphed into new forms of misdirection. Once the effects of climate change became obvious to the naked eye, in the form of record breaking heat and an increased threat from extreme weather, a new form of denial started to take hold [6]. These new narratives were more nuanced than the previously dominant simplistic claim "climate change is a hoax". They involve misinformation aimed at damaging the credibility of experts, and denigrating the usefulness of climate policy, as well as new technologies that carry potential to contribute to the decarbonisation effort, such as solar panels, wind farms, heat pumps or electric vehicles. The latter will be the subject of this analysis.

Electric vehicles (EVs) are a cornerstone of Europe's strategy to decarbonize transport, yet public debate around EV adoption has been clouded by misinformation. Around the world and across Europe, false or misleading claims circulate about consumer-facing technologies whose adoption is needed in order to adapt to and overcome the challenges presented by climate change. EVs are no exception: their safety and reliability, environmental impacts, as well as the policies promoting them are a regular focus for online misinformation [7, 8].



Major media outlets have run hostile or misleading reports on EVs, and social media is rife with myths, among the most often one being that EVs are not safe due to their batteries frequently catching fire or exploding. Such narratives can undermine public confidence in EV technology and delay climate action in the transport sector [9]. Understanding these narratives and the factors that make certain countries or publics more susceptible to them is crucial for addressing misinformation and ensuring an informed debate about the need to decarbonize transport by transitioning from fossil fuels to a cleaner, more sustainable energy source.



This report presents an analysis of EV-related misinformation in six European Mediterranean countries (Spain, Italy, France, Greece, Croatia, and Montenegro). We draw on data from Euro Climate Check, a database of articles on climate-related misinformation, including those related to EVs, compiled by the European Fact-Checking Standards Network (EFCSN).

This group of countries was not randomly chosen. When it comes to the effects of climate change, the Mediterranean region is one of the world's "hot spots", requiring urgent measures to mitigate and adapt to its effects. Since misinformation has the potential to disturb these efforts, we thought it was suitable to focus on a selected group of European Mediterranean countries. These countries provide for a geographically, politically, economically, and infrastructurally diverse sample, while sharing a similar climate.

We examine the prevalence of EV misinformation in each country, identify the dominant narratives, and explore how these patterns relate to each country's specific context, including levels of public trust in institutions and media, rates of EV adoption, the availability of charging infrastructure, and other socio-economic factors, such as the wealth of the population and the state of development of rail transport infrastructure. The goal is to try to uncover what drives EV misinformation in different environments and to see if factors like low trust or low EV uptake make a country more or less vulnerable to specific misinformation and broader narratives weaved by them.

A recent report published by the EFCSN confirms that EVs are a prime target of climate misinformation across Europe [10]. Their themes often transcend borders, with the same talking points (such as battery fires, "dirty" manufacturing, inadequate infrastructure, etc.) appearing in multiple countries, slightly adapted to fit the specific national context. Such differences hint that local factors have a role in shaping which narratives about EVs gain traction.

Against this backdrop, we analyze the EFCSN Euro Climate Check database to see what patterns emerge in our six focus countries. What types of misinformation about EVs are most common in Mediterranean Europe? How and why does misinformation spread differently across countries and regions with shared climates but differing political, economic, and infrastructural characteristics? How might misinformation be connected with each country's trust in media and institutions, its EV adoption rates and charging infrastructure availability, as well as other relevant factors like economic conditions or availability of transport alternatives? Do countries with higher EV adoption and more charging infrastructure see fewer misinformation (or perhaps different kinds of narratives) than countries where EVs are still rare? We interpret the findings in light of these questions, drawing connections and possible explanations. By examining these questions, we aim to shed light on why certain narratives resonate more in some places than others, and what this means for efforts to combat misinformation. Ultimately, this analysis of EV-related misinformation across six European Mediterranean countries aims to inform strategies to counter false and misleading narratives.

Data, Methodology and Limitations

Data sources

We compiled **a dataset of articles** dealing with EV-related misinformation, published between March 2023 and October 2025. The articles were compiled using the EFCSN Euro Climate Check Repository, which we filtered by country, topic ("transport"), and subtopic ("electric cars"). All of the articles in our dataset were published by EFCSN member organizations in six countries: **Spain, Italy, France, Greece, Croatia, and Montenegro**. Articles regarding climate misinformation in Montenegro couldn't be collected from the EFCSN database, since they're not included in it, so they were collected by directly accessing the archives of Raskrinkavanje.me the only Montenegrin fact-checking organization verified by EFCSN. In total, **this dataset includes examples of 34 articles, both fact-checks and prebunk**s addressing false or misleading claims about electric vehicles, produced by professional fact-checkers. For each published article, our dataset records the country, date, source, article title, whether it's a fact-check or prebunk, and a categorization by narrative. It's worth noting that the EFCSN Euro Climate Check Repository has a total of 53 articles published in this particular subtopic; 30 of those articles (56%) comes from the five countries we've chosen to observe (not accounting for the 4 articles from Montenegro, which were collected separately).

These countries were chosen because our aim is to examine how misinformation relating to electric vehicles spreads in the countries of the Mediterranean, known to be a global warming "hot spot", and to try to identify factors that could be influencing their propagation. So, in parallel, we collected **country-level indicators** representing factors that might influence the spread or uptake of EV misinformation: specifically, we collected measures of public trust in media and institutions of government, data on EV adoption and the availability of charging stations, data on railway infrastructure development, and GDP per capita. Figures were drawn from sources such as the European Automobile Manufacturers' Association, the European Alternative Fuels Observatory, Eurostat, World Bank, etc. Additional sources had to be consulted to compile data on country-level indicators for Montenegro, due to international associations often not including it. The complete list of sources used for this analysis is to be found at the end, under "Sources".

These indicators were selected because we feel they represent factors that have a substantial impact on the public discourse on EVs. Measure of institutional trust is known to be an important factor in the spread of misinformation, which is more effective in a low-trust environment. Data on how far along a country is in EV adoption (such as share of EVs on the road, or the availability of charging stations) informs us on how familiar or novel this technology is to a population. The state of railway infrastructure development tells us something about how important a car is for personal transportation, and GDP per capita is a good indicator of how affordable cars are to a country's population.

Methodology

Our analysis proceeded in several steps. First, we **quantified the volume of EV-related misinformation** in each country by identifying how many articles were in the EFCSN's database. This provides a proxy for how prevalent the issue of EV misinformation has been in the public discourse of that country (recognizing that this can also reflect the activity of fact-checkers, their organizational capacity, as well editorial and methodological preferences). Next, we analyzed the **content of the narratives**: each article was labeled with a narrative category (or sometimes multiple categories). We identified the most common narrative themes overall and noted which narrative was dominant in each country. We've decided to include not only fact-checks in our datasets, but prebunks as well. Fact-checks certainly make for a better way of approximating the volume of misinformation about EVs (since they're produced as reaction to specific pieces of misinformation), but prebunks have the potential to tell us even more about the frequency of specific misinformation-based narratives (since they reflect the fact-checkers' expert opinion about the kind of narratives that were common in the past and can be expected to keep popping up again in the future).

Finally, we examined **how the country-level indicators might relate** to both the number of articles and the type of narratives we've observed. Given the small number of countries, this is a qualitative correlation analysis; we are looking for patterns rather than statistical proof. Throughout, we support observations with data from our compiled dataset and external research. All source data for this analysis are from the latest available year.

Limitations

Our analysis relies on fact-checked items as a proxy for the volume and theme of EV-related misinformation. This sample reflects what was detected and prioritized by fact-checkers, not the full body of misleading content, and can vary in accordance with the number and capacities of fact-checking organizations in each country, as well as their methodological and editorial priorities. Additionally, given the small number of countries examined, as well as the small size of the sample of fact-checked items, observed patterns should not be treated as evidence of causation. Several country-level indicators come from different reference years, and there are some data gaps, especially for Montenegro in EU datasets, which limits comparability.

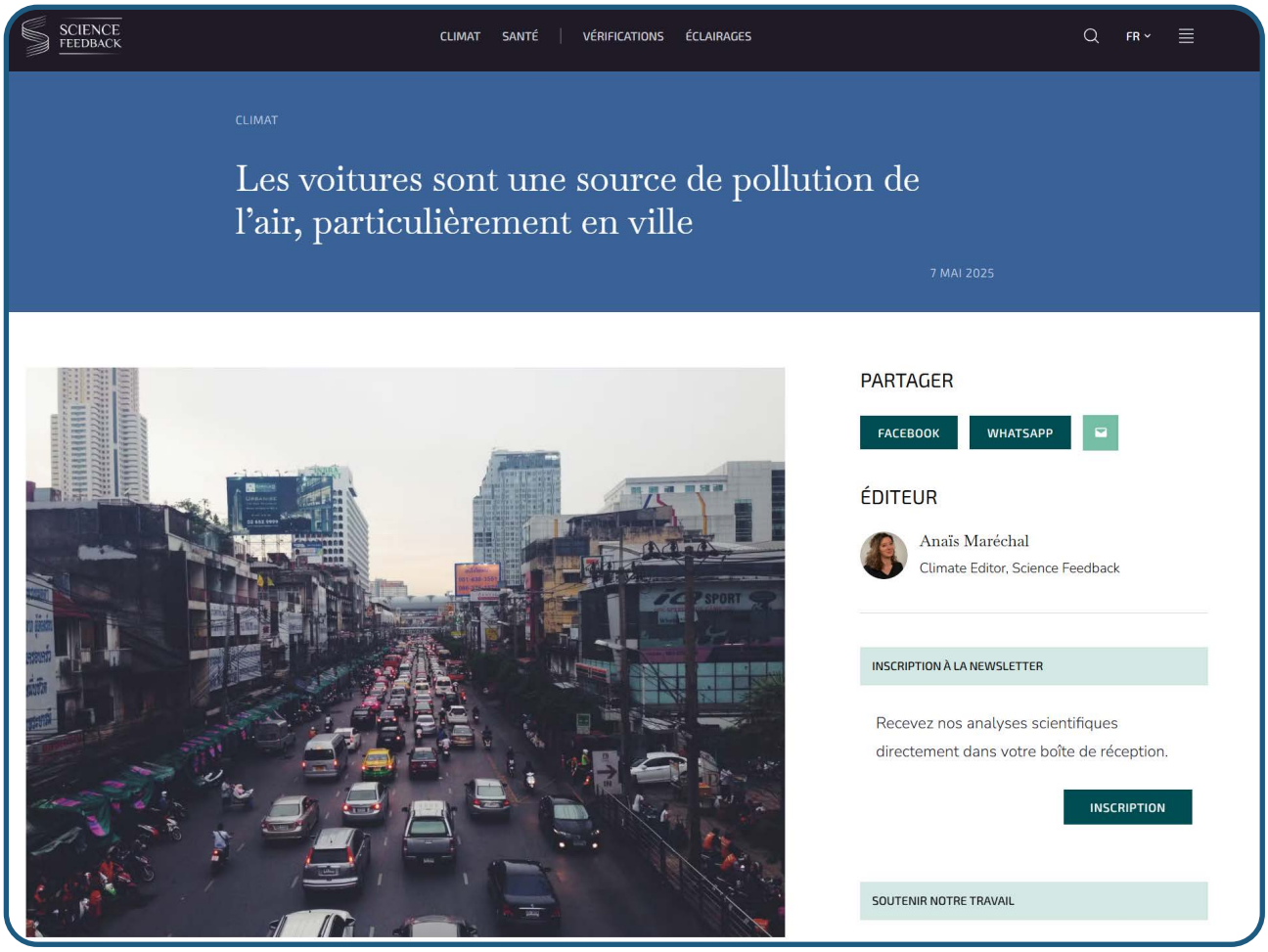
Country Fact Sheets

Spain

Trust in news, 2024: **31%**
Trust in national government, 2024: **29%**
Trust in national parliament, 2024: **24%**
Trust in local or regional government, 2024: **54%**
Share of EVs in the passenger car fleet, 2023: **0.6%**
Share of EVs in new passenger car registrations, 2024: **5.6%**
Number of EV charging points, 2024: **28 655**
Density of the national railway networks, 2023: **32.1 m/km²**
High speed rail lines, 2023: **3190 km**
GDP per capita, 2024: **35 297 $**
Number of EV-related articles: **13 fact-checks + 5 prebunks**

France

Trust in news, 2024: **29%**
Trust in national government, 2024: **19%**
Trust in national parliament, 2024: **24%**
Trust in local or regional government, 2024: **63%**
Share of EVs in the passenger car fleet, 2023: **2.2%**
Share of EVs in new passenger car registrations, 2024: **16.9%**
Number of EV charging points, 2024: **127 530**
Density of the national railway networks, 2023: **43.6 m/km²**
High speed rail lines, 2023: **2748 km**
GDP per capita, 2024: **46 150.50 $**
Number of EV-related articles: **1 fact-check + 2 prebunks**

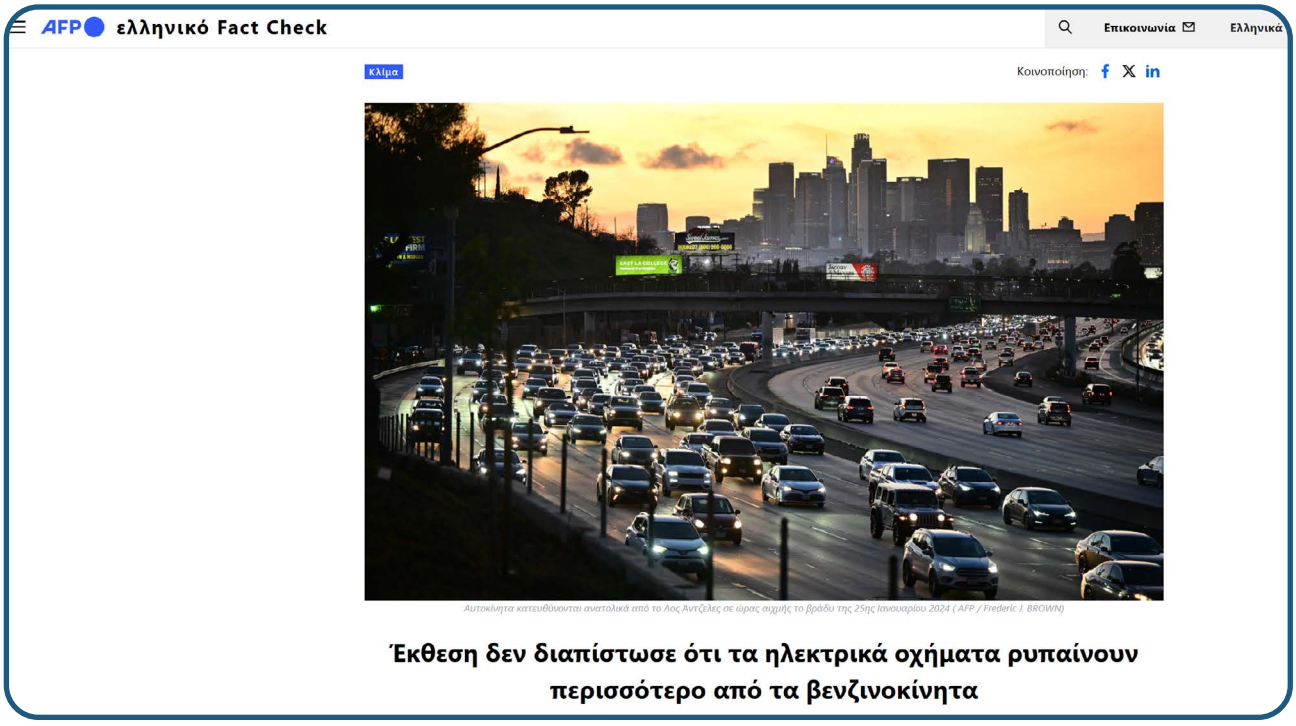


Italy

Trust in news, 2024: **36%**
Trust in national government, 2024: **31%**
Trust in national parliament, 2024: **35%**
Trust in local or regional government, 2024: **44%**
Share of EVs in the passenger car fleet, 2023: **0.5%**
Share of EVs in new passenger car registrations, 2024: **4.2%**
Number of EV charging points, 2024: **44 429**
Density of the national railway networks, 2023: **56.5 m/km²**
High speed rail lines, 2023: **1097 km**
GDP per capita, 2024: **40 226 $**
Number of EV-related articles: **2 fact-checks**

Greece

Trust in news, 2024: **22%**
Trust in national government, 2024: **26%**
Trust in national parliament, 2024: **26%**
Trust in local or regional government, 2024: **32%**
Share of EVs in the passenger car fleet, 2023: **0.2%**
Share of EVs in new passenger car registrations, 2024: **6.4%**
Number of EV charging points, 2024: **4 268**
Density of the national railway networks, 2023: **14 m/km²**
High speed rail lines, 2023: **0 km**
GDP per capita, 2024: **24 752.10 $**
Number of EV-related articles: **2 fact-checks**



Croatia

Trust in news, 2024: **36%**
Trust in national government, 2024: **34%**
Trust in national parliament, 2024: **32%**
Trust in local or regional government, 2024: **45%**
Share of EVs in the passenger car fleet, 2023: **0.4%**
Share of EVs in new passenger car registrations, 2024: **2.8%**
Number of EV charging points, 2024: **1 378**
Density of the national railway networks, 2023: **46.8 m/km²**
High speed rail lines, 2023: **0 km**
GDP per capita, 2024: **23 931.50 $**
Number of EV-related articles: **5 fact-checks**

RAZOTKRIVENO

Švedski vozači Tesle čekaju u dugim redovima na punjenje jer tvrtka ne želi potpisati kolektivni ugovor

Autor/ica: Matea Grgurinović 10 siječnja, 2025

Zbog odbijanja kolektivnog ugovora sindikat električara odbija spojiti nove punjače kao dio akcije solidarnosti s članovima sindikata IF Metall.

Montenegro

Trust in news, 2024: **46%**
Trust in national government, 2024: **41%**
Trust in national parliament, 2024: **40,1%**
Trust in local or regional government, 2024: **N/A**
Share of EVs in the passenger car fleet, 2023: **0.2%**
Share of EVs in new passenger car registrations, 2025: **0,24%**
Number of EV charging points, 2024: **180**
Density of the national railway networks, 2023: **18.4 m/km²**
High speed rail lines, 2023: **0 km**
GDP per capita, 2024: **12 935.50 $**
Number of EV-related articles: **4 fact-checks**


RAS KRINKA VANJE.ME

Početna Politika (Kvazi) Nauka Svijet Klima AI

MANIPULISANJE ČINJENICAMA

Električni automobil se nije zapalio, zapaljen je

Otkako su električni automobili postali češća slika na drumovima širom svijeta, prati ih narativ da lako planu, odnosno da nijesu bezbjedni. Dominantnija je i teorija da električna vozila nijesu tako "zelena", a o svemu tome smo već pisali.

AUTOR/KA: MARKO VUKAJLOVIĆ

24.04.2024.

Podijeli ovaj članak:

Podijeli

foto: pixabay

Fact-Checking Coverage

The volume of fact-checked EV misinformation varied notably across the six countries in our study. Spain had by far the highest number of EV-related false claims debunked by fact-checkers, as well as the highest number of published prebunks. Spanish fact-checkers have produced 13 fact-checks and 5 prebunks, for a total of 18 articles. In contrast, France had the fewest number of fact-checks, with only 1. French fact-checkers also published 2 prebunks on the topic, for a total of 3 articles. In Croatia, fact-checkers have published 5 articles on EVs, all of them fact-checks. Montenegro had 4 published fact-checks, while Greece and Italy had 2. Our sample contains no prebunks from Croatia, Montenegro, Italy, or Greece published during this period.

We can see that EV-related misinformation has been recorded in all of the countries in our sample, but the volume of published articles greatly differs from country to country. This suggests that EV-related misinformation has not been an equally prominent issue everywhere. This is especially clear when comparing the three largest, most populous and wealthiest countries in our sample: Spain, France, and Italy. Spain's high count indicates a particularly active discourse around EVs, while a comparatively low count from France and Italy leaves room for different interpretations.
The first thing that is important to take note of is the number of fact-checking organizations verified by EFCSN in each country: 5 in Spain, 3 in France, 2 in Italy, 2 in Croatia, 1 in Montenegro. Obviously, in a country where multiple fact-checking outlets are monitoring and reporting on climate misinformation, more articles are expected to be produced. Additionally, a fewer number of articles published could partly reflect less attention by fact-checkers to EV-related misinformation, rather than an absence of misinformation.

Spain's high count of EV-related misinformation in the observed period very much stands out, accounting for 52% of our dataset of published articles. 15% are articles from Croatia, 12% from Montenegro, 9% from France, 6% from Italy, 6% from Greece. It is a somewhat unexpected distribution; Croatia and Montenegro are significantly smaller than France and Italy, but the number of active EFCSN verified fact-checking organizations within them doesn't differ significantly (1 in Montenegro, 2 in Italy and Croatia, 3 in France).

Dominant Narratives

For each article in our dataset, we assigned a narrative category describing the actual story that these pieces of misinformation are telling. We identified three main narratives:

1) "EVs are unsafe and/or unreliable" – claims that electric cars are dangerous, unreliable, or impractical (for instance, that EVs are prone to catastrophic fires, or cannot function in certain conditions).

2) "Climate policies are harmful and/or unnecessary" – claims targeting government policies or environmental initiatives involving EVs, portraying them as ineffective or even harmful.

3) "Science on EVs is unreliable" – claims that distort scientific facts about EVs (such as falsely asserting that EVs pollute more than their fossil fuels powered counterparts)

Across the entire set of articles, EV reliability and safety concerns were by far the most prevalent. This narrative was identified in 22 out of the 34 articles we've collected (14 published in Spain, 3 in Croatia, 3 in Montenegro, 2 in Italy; none of the articles published in Greece and France fall into this narrative category).

The second most common narrative was about climate policies, which appeared in 7 articles (4 from Spain, 2 from France, 1 from Croatia). The narrative about the reliability of climate science appears in 6 articles (2 from Greece, 1 from Spain, 1 from France, 1 from Croatia, 1 from Montenegro). So, the majority of the claims debunked or prebunked by fact-checkers played on fears that EVs are fundamentally flawed or dangerous pieces of technology. Claims aimed at attacking climate policies or distorting scientific findings seem to be about equally represented across the dataset (but not so much so much across different countries; the narrative about climate policy is absent from Italy, Greece, and Montenegro, while the narrative about reliability of science doesn't appear in articles from Italy).

The only country in which all three narratives appear are Spain and Croatia. The most represented in both is the narrative about EV safety and reliability (14 articles in Spain, 3 in Croatia). The second most dominant narrative in Spain is about climate policies (4 articles), while the narrative about scientific reliability appears in 1 article. In the case of Croatia, there is no second dominant narrative; both appear in a single article.

In two countries we find examples of just a single narrative. In Italy both published articles are fact-checks of claims that EVs are unsafe. In Greece, both published fact-checks address false claims about the same study, which supposedly found that EVs are polluting more than fossil fuels powered vehicles.

In France and Montenegro, we find two out of three observed narratives. In France, the dominant narrative is about climate policies, found in 2 articles. The third article published in France is a part of the narrative aimed at discrediting climate science. In Montenegro, the dominant narrative is that EVs are unsafe, found in 3 articles. The fourth article published in Montenegro falls into the narrative category of denigration of science.

It's no surprise that these three narratives would reveal themselves as the most dominant. Recent research has shown that exactly these types of narratives - aimed at discrediting climate change-affirming science, policies meant to combat it, as well as "green technologies" like EVs - are becoming the dominant storylines of misinformation related to climate change [11, 12]. These types of narratives are sometimes described as "new climate denial". Where "old climate denial" was looking to deny the very existence of climate change, "new denial" narratives are more subtle, begrudgingly accepting that the issue is (somewhat) real but painting it as not important or severe enough to act on.

In summary, most countries in our study were primarily influenced by the safety/reliability narrative, portraying EVs as dangerous, untrustworthy, or a flawed technology, with the notable exceptions of France and Greece, where the emphasis was on scepticism towards the actual impact EVs have on climate and pollution. These narratives often mix kernels of truth (batteries can indeed catch fire which is hard to put out, and EV manufacturing does emit greenhouse gases) with falsehoods or exaggerations, making them more persuasive than outright fabrications.

Let's take the example of our most popular narrative, that of EV safety and reliability. Data tracking real world use shows that EVs are much less likely to break down than fossil fuel powered cars [13]. They are also less likely to catch fire [14]. But, in the event when they do catch fire, they present a greater safety threat than conventional cars; when a lithium battery catches fire, it's extremely difficult to put out [15] The story is similarly complicated with another widely distributed piece of misinformation, the claim that EVs actually pollute more than conventional cars. It's true that the manufacturing process of some EVs releases more greenhouse gases than the manufacturing process of some internal combustion engine powered cars [16], This is primarily due to the pollution that comes from mining for resources that are needed to produce the batteries [17]. But if we observe the entire life cycle of both types of cars, research clearly shows EVs to be the much greener option [18]. Misinformation peddlers abuse these nuances, often focusing on just a piece of the bigger picture in order to establish the dominance of their desired narrative.

Having identified what the dominant false narratives are in each country, we now turn to trying to understand why those might be dominant. In order to do that, we'll first examine each country's contextual factors.

Drivers of Misinformation

In this section we'll outline key characteristics of each country which we've identified as indicators that could influence the spread of EV-related misinformation: levels of public trust in media and institutions, the progress of EV adoption (including how many EVs and chargers each country has), the availability of railway transport infrastructure and wealth measured by GDP per capita. By comparing these factors side-by-side with the fact-checks we've gathered and our misinformation narratives categorization, we can start to discern patterns and possible connections.

Public trust in news and institutions

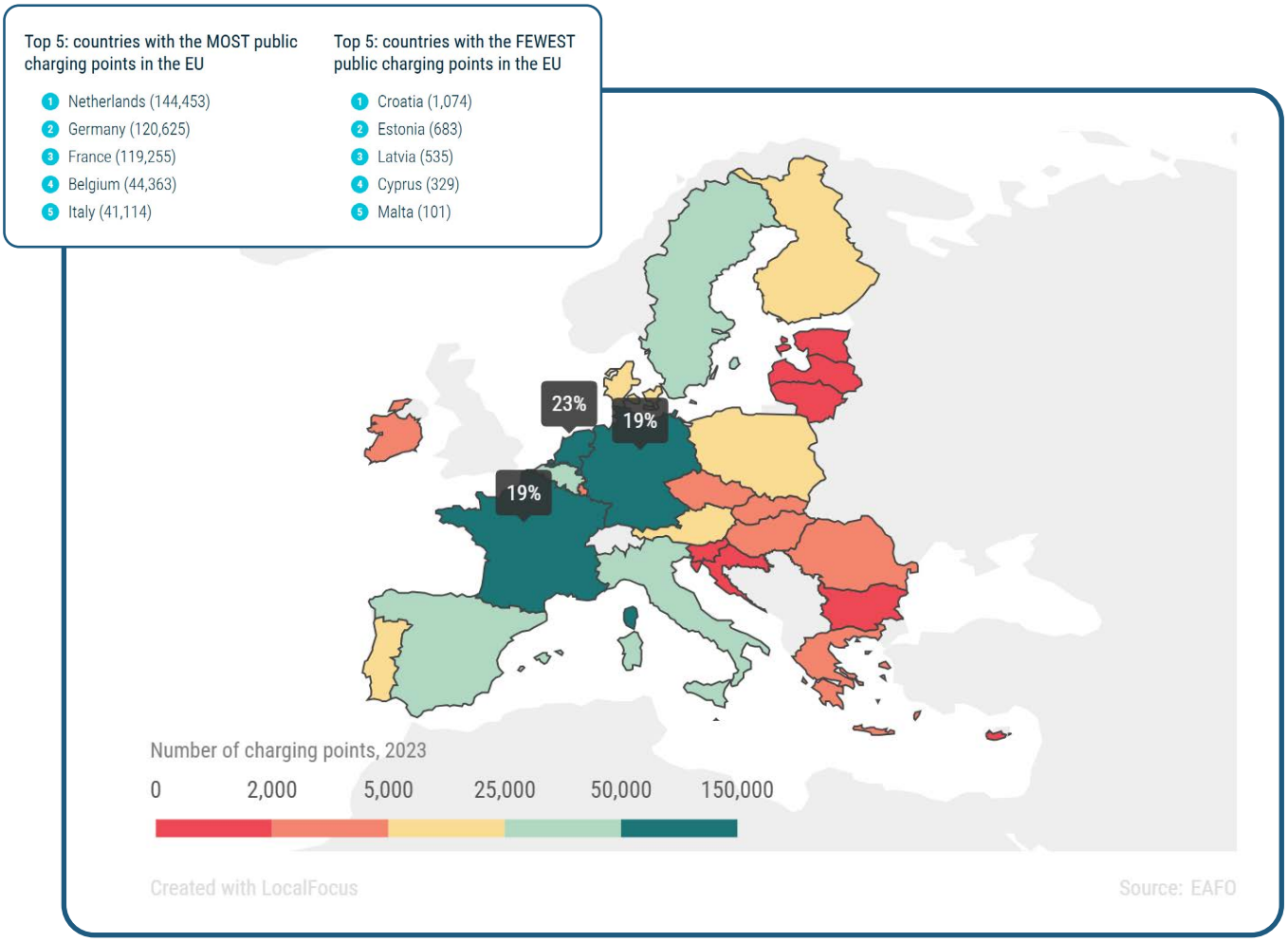
There is considerable variation in how much people trust the media and government in these countries, which can affect how misinformation spreads. Greece has low trust in news, with only about 22% of Greeks saying they trust the news. France also has relatively low trust in news (29%), reflecting a generally skeptical public. Spain's trust in news is a bit higher at 31%, Italy and Croatia are around 36%, while Montenegro - interestingly - shows a relatively high 46% trust in news (though that figure comes from a different source, since Montenegro isn't covered in the Reuters Digital News Report). When it comes to trust in government and parliament, a similar split is seen: France and Greece have low levels of trust in their national government (19% in France and 26% in Greece) and parliaments (24% in France and 26% in Greece), whereas Montenegro reports a mid trust in its government (41%) and parliament (40.1%). Spain, Italy and Croatia fall in between (ranging between 29 and 34% trust in government, and between 24 and 35% trust in parliament). Trust in local authorities tends to be significantly higher across the board, but this may be less directly relevant to EV policies. The main takeaway is that France and Greece are low-trust environments, Spain, Italy and Croatia are at a medium, while Montenegrins express high trust in both media and institutions of government.

In general, low trust in the media or government can create an opening for misinformation-based narratives and conspiracy theories to flourish. People who do not trust official information might be more receptive to claims that "the authorities are lying about EVs" or that "mainstream media won't tell you the real truth". We see that France and Greece, the two countries in our sample where misinformation was aimed primarily at discrediting "the official narrative on EVs", be it scientific findings or climate policies, are indeed places with low trust in institutions. It is plausible that in those countries, the public may be more easily swayed by messages that challenge "the official narrative". Even though our sample is small, this would suggest that the level of trust in societies might not have a huge impact on the volume of information, but low-levels of trust seem to be a breeding ground for a certain kind of narrative, bringing into question the authority and intentions of experts and politicians.

EV adoption rates

The six countries also differ in how far along they are in the transition towards electric vehicles. France is leading in EV uptake among this group; in France about 16% of new passenger cars sold in 2024 were battery electric vehicles. It's followed by Greece and Spain, where the share was at about 6%. France also has the highest overall penetration of EVs in the fleet (around 2.2% of all passenger cars on French roads are EVs), while Spain's fleet share is smaller (0.6%) but growing. Italy, Greece, Croatia, and Montenegro lag further behind. Italy's EV sales in 2024 were at about 4% of all new cars, one of the lowest amongst the wealthier European countries, aligning with reports that Italy's EV adoption is modest [19]. Croatia and Montenegro are at an even earlier stage: EVs made up 3% of new car sales in Croatia in 2024, with no data available from Montenegro. But, the share of EVs in the passenger car fleet would suggest an even smaller share of them among new registrations; their fleet shares are around 0.4% for Croatia and 0.2% for Montenegro. Greece sits somewhat between: only 0.2% of passenger cars in Greece are EVs, but they make up for 6.3% of newly registered cars in 2024, a growing figure but still below the EU average of about 15% [20].

A related indicator is the availability of charging infrastructure, an important enabler of EV adoption. The disparities are quite noticeable. France has built an extensive charging network, with over 127,000 EV charging points, placing it among the top countries in Europe for charger count [21]. Despite low EV uptake, Italy has more than 44,000 charging points. Spain had roughly 28,000 charging points, according to 2023 data by European Alternative Fuels Observator, but



later reports show that number is rapidly growing [22]. Greece lags far behind at roughly 4000 charging points, even with recent growth, a reported 480% increase in 2024 [23]. Croatia also has a humble charging network, with over a 1000 chargers. We couldn't identify reliable data on Montenegro, but different EV travel sites list the locations for only a few dozen charging stations. In summary, we have one high-adoption country (France), three mid-adoption (Spain, Greece and Italy), and two low-adoption countries (Croatia, Montenegro) in our set.

In both the low-adoption countries, the most dominant misinformation-based narrative on EVs is centered around their safety and reliability. This is to be expected; citizens of these two countries have had less opportunity to actually see an EV on the road, or to personally meet someone driving an EV. The technology is still novel, so they are not as familiar with it as the citizens of other countries in our sample, where EV adoption is higher. Less familiarity with certain technology enables fear-based misinformation about its safety and reliability to sound convincing and take hold. After people have become more familiar with EVs, different sorts of narratives begin to take shape. In France and Greece, narratives that question the climate and environmental benefits of EVs take the dominant spot, while in Spain they are present but still overshadowed in volume by concerns about safety. When it comes to the volume of information by country, there doesn't seem to be a clear connection where more EVs or more accessible charging infrastructure equals more misinformation or vice versa. Instead the relationship seems highly dependent on the specific domestic context.

Economic indicators and transport availability

GDP per capita varies widely: France ($46k) and Italy ($40k) are wealthier, Spain ($35k) is in between, while Greece ($25k), Croatia ($24k), and Montenegro ($13k) are significantly poorer. Higher income levels generally correlate with higher EV adoption and greater resilience towards misinformation [24, 25, 26, 27], which is only partially reflected in our dataset: France has a relatively higher EV uptake versus the lower-income countries, but Italy doesn't (even though the volume of observed misinformation in both countries is low). Spain, on the other hand, has a larger volume of observed misinformation than poorer countries in our sample, and a faster EV adoption than somewhat wealthier Italy. Wealth of the population doesn't seem to have any particular connection with the dominant misinformation-based narrative in each country. Cost-focused misinformation wasn't present in our six-country dataset, but cost concerns could be lurking beneath the observed narratives, fueling the willingness to believe certain misinformation, especially in less affluent countries. The affordability issue could be an underlying factor in the spread of some of the safety and infrastructure related misinformation in poorer countries; people may latch onto any available rationale to dismiss EVs when they couldn't afford them anyway. In that sense, misinformation provides a justification to resist an unaffordable change. Montenegro and Croatia fit that mold: low GDP, low EV uptake, yet multiple stories making EVs look unreliable and unsafe, reinforcing the attitude that "we're better off sticking to our old cars."

Additionally, the railway infrastructure data gives a sense of each country's alternative transport options: France, Spain, and Italy all have extensive railway networks and high-speed rail lines. This means that these countries have well-developed public transport for commuting over longer distances, which could influence car usage patterns. Greece and Montenegro have minimal rail networks (rail density is low and they have no high-speed rail), while Croatia has moderate rail coverage but also no high-speed lines. In contrast, countries with good train systems might experience the EV transition slightly differently (urban populations might rely on trains and thus be less immediately concerned with EV issues). Our research does show that in countries with the most advanced railway networks, France and Italy, the volume of observed EV-related

misinformation is among the lowest in our sample. But the volume is also low in Greece, with undeveloped rail networks. Also, the case of Spain once again stands out, with both a high volume of misinformation and a fairly developed rail network. The railway network development doesn't seem to have any particular connection with the dominant misinformation-based narrative in each country.

Summary of Findings by Country

Each country in our study seems to sit at a particular intersection of these factors, which helps explain its EV misinformation profile.

- **Spain:** Medium trust, moderate EV uptake, robust but still expanding infrastructure, mid-high income, moderate car dependance.
  Outcome: high volume of misinformation, dominated by safety and reliability narratives.
  Possible explanation: an EV boom spurring fear and pushback, a political climate where some mistrust exists, and a common reliance on cars as preferred means of personal transport have served as drivers of misinformation.

- **Italy:** Medium trust, moderate EV uptake (despite expanding infrastructure), high income, strong railway infrastructure.
  Outcome: low volume of misinformation, dominated by safety and reliability narratives.
  Possible explanation: because EVs were not yet common, they weren't a hot topic for misinformation, while moderate levels of trust might have, in that context, been high enough to have somewhat inoculated Italy against misinformation-based narratives around EVs. Additionally, a developed railway network might be making the debate around EVs less relevant.

- **France:** Low trust, high EV uptake, high infrastructure, high income, strong railway infrastructure.
  Outcome: low volume of misinformation, dominated by concerns about climate policy effectiveness.
  Possible explanation: robust infrastructure, a familiarity with EVs, and a developed network for alternative transport blunted the impact of misinformation-based narratives.

- **Greece:** Low trust, moderate EV uptake, limited infrastructure, lower income, high car dependence.
  Outcome: low volume of misinformation, focused on questioning the scientifically established benefits of EVs.
  Possible explanation: due to low institutional trust, Greeks are more likely to question experts' opinions on EVs, which aren't as of yet very visible in daily life. The combination of low trust and low (but increasing) familiarity could, in the case of Greece, be resulting in the proliferation of misinformation aimed at discrediting the established science.

- **Croatia:** Medium trust, low EV uptake, low infrastructure, low income, high car dependence.
  Outcome: moderate volume of misinformation, with the dominant narrative being about safety and reliability.
  Possible explanation: low income levels means most people can't afford EVs, which is reflected in slow adoption. Lack of familiarity allows for safety concerns about EVs to spread, while high reliance on cars as means of personal transport drives the interest in the matter of reliability.

- **Montenegro:** Highest level of trust among the countries included in the study, low EV uptake, low infrastructure, low income, high car dependency.
  Outcome: moderate volume of misinformation, dominated by the narrative about the safety of EVs.
  Possible explanation: low familiarity with EVs is a driver for suspicions about their safety and reliability.

In broad strokes, the prevalence of EV misinformation in each country appears to be related to how relevant EVs have become in that country, while the public's predispositions for trust or mistrust, along with the state of its infrastructure, seems to shape which narratives stick. One clear implication is that misinformation finds vulnerabilities in each context, be it fear of the unknown, distrust of authority, economic anxiety, or infrastructural reality. These findings echo the conclusions of a recent EFCSN report that found transport-related misinformation highly dependent on the national context [28]. Our analysis supports that view: the narratives aren't one-size-fits-all but are adapted to local audiences, nonetheless forming a common pattern of delaying climate action by using misinformation to sow doubt or fear.

Understanding these patterns is helpful in determining how countermeasures could be tailored. Responses to these misinformation-based narratives also need to be firmly grounded in that same national context. Fact-checkers and journalists need to keep especially vigilant for misinformation that is more likely to take hold in their specific context and to timely present the public with factually sound information, while educators, public authorities, and non-governmental organizations dealing with the matters of information integrity and media literacy need to be aware of the most dominant narratives to better increase societal resilience.

Conclusion

The transition to electric vehicles is not only a technical and economic challenge but also an information challenge. This comparative analysis of six European countries reveals that misinformation about EVs is pervasive, but it manifests differently depending on local conditions. Each variable we examined - public trust, EV adoption rate, charging infrastructure, economic development indicators - can be in some way connected with these narrative trends, painting a complicated and not always clear picture. This analysis could certainly be improved upon if we had access to a larger dataset, or if additional country-level indicators (such as those accounting for cultural differences) were to be included.

Keeping that in mind, we can conclude that the data would suggest that the **dominant narrative in each country appears to be exploiting whatever the local "weak point" is**; be it fear of new technology, anger at politicians, or mistrust in experts. In Spain, Italy, Croatia, and Montenegro, the dominant narrative was about the safety and reliability of EVs, in France it was the effectiveness of climate policy, and in Greece it was distrust in science. Understanding this is key to crafting effective responses. **Our findings suggest that any successful strategy to counter EV-related misinformation must be locally tailored**. Another clear conclusion is the **importance of cooperation** among fact-checkers and educators. Many of the false narratives we identified are not unique to one country, they echo and propagate transnationally. A fiery EV crash story might originate in one country but get subtitled or repackaged for audiences in another. **Coordinated monitoring** is therefore vital to catch these narratives early and debunk them across languages and borders. Likewise, **proactive communication of facts** (for instance, about EV safety standards) can help inoculate the public against misinformation before they spread. **Misleading narratives thrive by amplifying anxieties and using emotional appeal**. The antidote must combine factual correction with addressing the underlying anxieties.

Electric vehicles promise significant climate and public health benefits, but only if the public understands and accepts those benefits. As this report shows, building and maintaining that understanding will require diligent fact-checking, carefully crafted communication, and sustained efforts to build trust. The data gives reason for optimism: the narratives can be identified, and their influence mitigated with targeted strategies. Shining a light on the truth, and doing so in the right way for each audience, remains our best tool to drive out misinformation and ensure that debates about electric vehicles stay grounded in reality, not fear.

Sources

COUNTRY LEVEL INDICATORS

Trust in news:
Reuters Digital News Report 2025. Available from:
https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2025

**data for Montenegro: Analiza javnog mnjenja o radu medija i nezavisnosti novinara/ki 2025. Available from: https://www.gov.me/dokumenta/cc8bc4ed-694f-4596-89d2-3102e520fb9d

Trust in National Governments:
Standard Eurobarometer 101 - Spring 2024. Available from:
https://europa.eu/eurobarometer/surveys/detail/3216

*data for Montenegro: Political public opinion, CEDEM. Availiable from:
https://www.cedem.me/wp-content/uploads/2024/03/Prezentacija-MART-2024.-.pdf *data for Montenegro:

Trust in National Parliaments:
Standard Eurobarometer 101 - Spring 2024. Available from:
https://europa.eu/eurobarometer/surveys/detail/3216

Data for Montenegro: Political public opinion, CEDEM. Available from:
https://www.cedem.me/wp-content/uploads/2024/03/Prezentacija-MART-2024.-.pdf

Trust in Regional or Local Authorities:
Standard Eurobarometer 101 - Spring 2024. Available from:
https://europa.eu/eurobarometer/surveys/detail/3216

Share of BEVs in Passenger Car Fleet:
ACEA, Vehicles on European Roads 2025. Available from:
https://www.acea.auto/publication/report-vehicles-on-european-roads-2025/

*data for Montenegro: Statistical office of Montenegro. Available from:
https://monstat.org/uploads/files/publikacije/statistika%20saobracaja/2023/PUBLIKACIJA-%20GODISNJA%20STATISTIKA%20SAOBRACAJA%202023-cg%20(1).pdf

Share of BEVs Among New Passenger Car Registrations:
ACEA New Car Registrations, 2024. Available from:
https://www.acea.auto/pc-registrations/new-car-registrations-0-8-in-2024-battery-electric-13-6-market-share/

*data for Montenegro: Ministry of Interior

Total Number of Charging Points:
European Alternative Fuels Observatory, Available from: https://alternative-fuels-observatory.ec.europa.eu/general-information/news/eafo-analysis-trends-ev-charging-infrastructure-across-europe

Density of the National Railway Network:
Eurostat. Available from: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Characteristics_of_the_railway_network_in_Europe

High Speed Rail Lines:
Eurostat. Available from: https://ec.europa.eu/eurostat/databrowser/view/rail_if_line_sp/bookmark/table?lang=en&bookmarkId=72afb6f5-8b88-424c-a228-15dca8659135

GDP per capita:
World Bank. Available from: https://data.worldbank.org/indicator/NY.GDP.PCAP.CD

DODATNI IZVORI

[1] United Nations Environment Programme (UNEP). Emissions Gap Report 2024: No more hot air… please! Nairobi: UNEP; 2024. Dostupno na: https://www.unep.org/resources/emissions-gap-report-2024

[2] BloombergNEF. New Energy Outlook 2025. BloombergNEF; 2025. Dostupno na: https://about.bnef.com/insights/clean-energy/new-energy-outlook/

[3] Oreskes N, Conway EM. Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming. Bloomsbury Publishing; 2010. Dostupno na: https://www.bloomsbury.com/uk/merchants-of-doubt-9781408824832/

[4] Dembicki G. The Petroleum Papers: Inside the Far-Right Conspiracy to Cover Up Climate Change. Greystone Books; 2022. Dostupno na: https://greystonebooks.com/products/the-petroleum-papers

[5] DeSmog. ExxonMobil's Funding of Climate Science Denial. DeSmog; 2015. Dostupno na: https://www.desmog.com/exxonmobil-funding-climate-science-denial/

[6] Center for Countering Digital Hate (CCDH). The New Climate Denial: How Social Media Platforms and Content Producers Profit from Misinformation About the Climate Crisis. CCDH; 2024. Dostupno na: https://counterhate.com/research/new-climate-denial/

[7] Benačić A, Vidov P. Električni automobili: najčešći mitovi i činjenice. Klimatski portal; 2024. Dostupno na: https://klimatski.hr/2024/05/03/elektricni-automobili-najcesci-mitovi-i-cinjenice/

[8] Evans S. Factcheck: How electric vehicles help to tackle climate change. Carbon Brief; first published 24 Oct 2023, updated 28 Aug 2025. Dostupno na (interactivna mapa): https://interactive.carbonbrief.org/factcheck/electric-vehicles/index.html

[9] Science Feedback, Newtral. The road to disinformation: Mapping climate disinformation about transport in Europe. EFCSN; 2025. Dostupno na: https://euroclimatecheck.com/reports/

[10] Science Feedback, Newtral. The road to disinformation: Mapping climate disinformation about transport in Europe. EFCSN; 2025. Dostupno na: https://euroclimatecheck.com/reports/

[11] Center for Countering Digital Hate (CCDH). The New Climate Denial: How Social Media Platforms and Content Producers Profit from Misinformation About the Climate Crisis. CCDH; 2024. Dostupno na: https://counterhate.com/research/new-climate-denial/

[12] Broz T. Fabricating Doubt and Persecuting Science: Analysis of Misinformation About the Climate Crisis in Croatia. Zagreb: Faktograf; 2024. Dostupno na: https://faktograf.hr/wp-content/uploads/2025/03/fabricating-doubt-and-persecuting-science.pdf

[13] Rudschies W. ADAC Pannenstatistik 2025: Sind Elektroautos zuverlässiger? ADAC; 10 Apr 2025. Dostupno na: https://www.adac.de/rund-ums-fahrzeug/unfall-schaden-panne/adac-pannenstatistik/

[14] Energy Saving Trust. EV Fire Risk: Evidence Review. Energy Saving Trust; 2025. Dostupno na: https://energysavingtrust.org.uk/wp-content/uploads/2025/02/EV-fire-risk_report.pdf

[15] Science Feedback. Do Electric Vehicles Catch Fire More Often? Early Evidence Says No. Science Feedback; 25 Sep 2025. Dostupno na: https://science.feedback.org/do-electric-vehicles-catch-fire-more-often/

[16] Hill N, Amaral S, et al. Lifecycle Analysis of UK Road Vehicles. Ricardo Energy & Environment for the UK Department for Transport; 2022. Dostupno na: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1062603/lifecycle-analysis-of-UK-road-vehicles.pdf

[17] Hall D, Lutsey N. Effects of Battery Manufacturing on Electric Vehicle Life-Cycle Greenhouse Gas Emissions. International Council on Clean Transportation (ICCT); 2018. Dostupno na: https://theicct.org/wp-content/uploads/2021/06/EV-life-cycle-GHG_ICCT-Briefing_09022018_vF.pdf

[18] International Energy Agency (IEA). Comparative Life-Cycle Greenhouse Gas Emissions of a Mid-Size Battery Electric Vehicle and Internal Combustion Engine Vehicle. IEA; 2021. (Interactive chart.) Dostupno na: https://www.iea.org/data-and-statistics/charts/comparative-life-cycle-greenhouse-gas-emissions-of-a-mid-size-bev-and-ice-vehicle

[19] European Alternative Fuels Observatory (EAFO). Italy's €600 Million EV Incentive Push: Can It Revive the New Car Market? EAFO; 2025. Dsotupno na: https://alternative-fuels-observatory.ec.europa.eu/general-information/news/italys-eu600-million-ev-incentive-push-can-it-revive-new-car-market

[20] European Automobile Manufacturers' Association (ACEA). New Car Registrations: –1.9% in Q1 2025; Battery-Electric 15.2% Market Share. Press release; 24 Apr 2025. Dostupno na: https://www.acea.auto/pc-registrations/new-car-registrations-1-9-in-q1-2025-battery-electric-15-2-market-share/

[21] European Automobile Manufacturers' Association (ACEA). Interactive Map – Correlation Between Electric Car Sales and Charging Point Availability (2023 data). ACEA; 2024. Dostupno na: https://www.acea.auto/figure/interactive-map-correlation-between-electric-car-sales-and-charging-point-availability-2023-data/

[22] Xinhua. Spain Installs Record Number of EV Charging Points in Q1 of 2025. Xinhua; 8 Apr 2025. Dostupno na: https://english.news.cn/20250408/b384ee78c3924f398f61528f6352d1de/c.html

[23] EVBoosters. Europe Surpasses 900,000 Public EV Charge Points. EVBoosters; 2025. Dostupno na: https://evboosters.com/ev-charging-news/europe-surpasses-900-000-public-ev-charge-points/

[24] Altay S. Who Is Concerned About Misinformation and Why? Exploring Structural and Ideological Determinants of Concern About Misinformation Across 142 Countries. PsyArXiv preprint; 2023. Dostupno na: https://osf.io/preprints/psyarxiv/fz6wu_v1

[25] Shirish A. Impact of Human and Economic Development on Fake News Propensity During the COVID-19 Crisis. Journal of Global Information Management; 2023. Available from: https://www.igi-global.com/article/impact-of-human-and-economic-development-on-fake-news-propensity-during-the-covid-19-crisis/322401

[26] Cha M, Cha C, Singh K, Lima G, Ahn YY, Kulshrestha J, Varol O. Prevalence of Misinformation and Factchecks on the COVID-19 Pandemic in 35 Countries: Observational Infodemiology Study. JMIR Human Factors; 2021. Available from: https://humanfactors.jmir.org/2021/1/e23279

[27] European Alternative Fuels Observatory (EAFO). Regional Insights: Electric Vehicle Adoption Across Europe – New Data. EAFO; 2025. Available from: https://alternative-fuels-observatory.ec.europa.eu/general-information/news/regional-insights-electric-vehicle-adoption-across-europe-new-data

[28] Science Feedback, Newtral. The road to disinformation: Mapping climate disinformation about transport in Europe. EFCSN; 2025. Available from: https://euroclimatecheck.com/reports/