

# GREENWASHING: THE ENERGY SECTOR



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# Introduction

The energy sector is central to the green transition and reaching climate neutrality goals by 2050. However, misleading green claims can permeate the multilevel energy-related activities, affecting consumers and the sector itself, all within the EU legislative framework.

With no clear legal framework to substantiate green claims and prohibit misleading ones, some businesses have been accused of greenwashing. Procedurally, the Renewable Energy Directive III, the delegated acts on renewable fuels of non-biological origin, and the Taxonomy Regulation are closely linked to greenwashing debates.

**Greenwashing** can be defined as a **form of advertising or marketing spin in which green press releases and green marketing are deceptively used to persuade the public that an organisation's products, aims, and policies are environmentally friendly**. It can take several forms, such as selective disclosure, symbolic actions, meaningless labels, fabricated data, and false associations. For an environmental and financial overview of greenwashing, take a look at our [Guide to Greenwashing](#) and [Greenwashing: The Financial Sector](#).



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# Greenwashing consumers?

Customers can be misled into thinking that products or services are more environmentally friendly than they actually are in a number of ways. While greenwashing practices can occur in all sectors of the economy, certain examples of greenwashing are unique to the energy sector.

Greenwashing could take place through advertising or other forms of marketing that use vague or misleading language, or by making exaggerated or false claims about a company's environmental credentials. For example, an energy company could claim that its products are "clean" and/or "renewable" without providing any evidence to back up these claims. They might also use images of wind turbines or solar panels to suggest that their energy comes entirely from renewable sources, when in fact it is still largely generated by fossil fuels. Similarly, consumers oftentimes cannot verify the source of the so-called "green" energy they have signed up for with their suppliers. The lack of transparency combined with selective disclosure and false associations is a textbook example of how consumers can be greenwashed in their day-to-day lives.



# Greenwashing Debates in Energy Investments & New Technologies

According to IRENA, the green transition of the energy sector can take place only with significant investments in renewable energies and technologies and simultaneously moving away from fossil fuels. IRENA has also claimed that carbon capture technologies are complementary to increasing the use of renewable energies and reducing fossil fuels in order to meet climate neutrality targets. These investments and technologies represent opportunities to mitigate CO2 emissions and combat climate change. Nonetheless, the way companies communicate their sustainable practices to consumers has also become fertile ground for claims of greenwashing to emerge.

## Carbon Capture Technology

Major fossil fuel enterprises have made commitments to reaching net zero emissions. However, stakeholders have criticised some companies, accusing them of leveraging the sustainability narrative and highlighting symbolic actions in their communication while pursuing or bolstering their fossil fuel activities — while new investments in fossil fuels are incompatible with the Paris Agreement climate goals according to the International Energy Agency (IEA). ClientEarth argued that some businesses place their new investments in carbon capture technologies centre stage to camouflage the more significant investments in expanding fossil fuel

operations. According to the IEA, the amount of greenhouse gases emitted by certain enterprises is higher than what could be removed via carbon capture technologies. Carbon capture technologies will have an important role to play in the decarbonisation of energy-intensive industries, however, disproportionately communicating investments in these solutions could be considered a form of greenwashing. To avoid accusations of greenwashing, companies should invest in these technologies as a complementary solution and communicate on these in a proportionate fashion.



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## Investments in Clean Energy

The Climate Reality project shed light on similar misleading claims related to investments in clean energy, such as solar, wind, and algae-based biofuels. The group argues that some businesses present their investments in clean energy in a positive light, using big bold numbers, without disclosing the implications or the scale of their operations. Some companies may endorse small projects developing clean energy, which appear to be a step in the right direction but pale in comparison to their fossil fuel operations. According to a report by the Union of Concerned Scientists, consumers can be easily misled by climate pledges that are exaggerated. ClientEarth argued that such net zero pledges within the energy sector could be considered misleading since the businesses in question failed to tackle the majority and the root cause of their emissions.

The negative effects of such greenwashing include hindering, delaying, or blocking necessary climate action and deceiving consumers. An analysis conducted by The Conversation found that misleading claims erode citizens' trust in green claims. As a result, the businesses that make real efforts to combat climate change and reach net zero goals suffer from a credibility deficit. An overall lack of credibility and trust in green claims can set truly progressive companies back by discouraging investors to fund decarbonisation projects and consumers to support them.



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## Renewable Hydrogen

The war in Ukraine pushed energy security to the top of the EU's agenda, and the European Commission has shifted its attention to hydrogen to reduce the EU's dependence on Russian fossil fuels and diversify the energy mix.

However, according to the IEA, the share of renewable hydrogen was only around 0.1% of global hydrogen production. The European Commission concurred that over 96% of hydrogen was produced with fossil fuels, therefore emitting greenhouse gases. The two main barriers hindering renewable hydrogen uptake are infrastructure and investment. Hydrogen infrastructure is costly and slow to develop due to the high upfront costs.

To mitigate these concerns, the IEA suggested making use of existing infrastructure, such as gas pipelines. A study conducted by the EU Agency for the Cooperation of Energy Regulators concluded that it was unclear if and when the necessary conditions for repurposing gas infrastructure for hydrogen would be met across Europe. Stakeholders expressed concerns about the prolonged use of gas infrastructure that may be used as a front to cover further investment in fossil fuels. A group of NGOs sent a letter to the European Commission criticising the list of green projects that included plans to expand fossil-based hydrogen production and infrastructure. They argued that labelling new gas infrastructure projects as green would be greenwashing, notwithstanding their

potential inputs for the hydrogen sector in the future. The gaps in the current regulatory framework regarding investment in hydrogen infrastructure may leave the door open for greenwashing.

According to IRENA, hydrogen produced from fossil sources is cheaper than hydrogen produced from renewable energy sources, which makes the former a more cost-effective and attractive option, especially at a time when energy prices are so high. Nonetheless, the EEB warned that blending hydrogen into fossil fuel pipelines can serve as grounds for some businesses to mislead consumers by overstating the sustainability of incorporating hydrogen in order to continue gas activities. A report by Heinrich-Böll-Stiftung European Union and Environmental Action Germany concluded that any delay in phasing out fossil fuels, such as blending with hydrogen, significantly weakened the EU's ability to fulfil its climate commitments in time.

At the same time, there is no clearly established method to differentiate between hydrogen coming from fossil fuels and hydrogen coming from renewable sources. The ICCT expressed concerns about the certification of renewable hydrogen, which may allow some operators to make fake green claims about the origins of hydrogen. The ambiguity of guidelines and rules opens up the possibility for some actors to make misleading green claims.

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# Greenwashing Debates in EU Energy Legislation

## RED

The first Renewable Energy Directive (RED) entered into force in 2009 and has undergone two revisions, one in 2018 and one in 2021. The latter, RED III, was presented as part of the “Fit for 55 Package”, to align it with the European Green Deal regarding the EU’s emission reduction goals. One of the most important aspects of the file is the classification of the different energy sources according to sustainability criteria. RED defines, among others, what is considered renewable energy and what energy sources Member States can use to meet the targets. At the same time, it guides investors towards future-proof solutions that contribute to reaching climate neutrality, such as sustainable renewable energy projects and kick-starting hydrogen production and use.

Prompted by new security of supply concerns, stakeholders advocated for the inclusion of low-carbon sources as renewable energy, in addition to the well-known solar, wind, and geothermal energy. Most importantly, some stakeholders backed classifying hydrogen and nuclear energy as renewable based on their contribution to attaining net zero goals and energy security. The advantages of nuclear energy include wide availability and deployment capacities, affordability, low-carbon footprint, flexibility, and reliability, as well as contribution to decarbonisation and reducing dependency on fossil fuels. Nuclear and hydrogen may have a role to play in the short- and medium-term decarbonisation, due to their reduced emissions footprint. However, some stakeholders have argued that even though nuclear and hydrogen-based energy have a lower carbon footprint than fossil fuels, they cannot be considered renewable due to their negative environmental impacts, and labelling them as green may facilitate greenwashing. The regulatory framework around renewable energy can prevent greenwashing, but it can equally maintain ambiguity, and thus, a fertile ground for misleading green claims to flourish.



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## RFNBOs

In line with the RED requirements, the Commission adopted two delegated regulations: one defining rules on renewable hydrogen production and clarifying the additionality criteria for renewable electricity, and another setting out a methodology to calculate life cycle GHG emissions. The two legislative acts cover renewable liquid and gaseous transport fuels of non-biological origin (RFNBOs), including renewable hydrogen, and aim to ensure that the electricity used for producing RFNBOs is of renewable origin.

One of the most contentious points is the additionality principle, according to which there should be additional renewable electricity capacity for renewable hydrogen production. Some stakeholders and MEPs have criticised the additionality principle, claiming that it could hinder a swift hydrogen ramp-up in Europe, restrict access to the production of hydrogen, and increase prices for consumers. On the other hand, not having an additionality condition would imply that hydrogen from fossil-based electricity could be counted as renewable hydrogen.

Several NGOs have criticised the proposed delegated acts, highlighting the potential for greenwashing. Global Witness stated that the regulations enable green hydrogen to be produced with electricity coming from fossil fuels when there is an insufficient supply of renewables, which they believe indicates a clear case of greenwashing. In a similar vein, ECOS argued that an unsuitable chain of custody system could pave the way for greenwashing, as it could blur the distinction between renewable and non-renewable low-carbon hydrogen along the supply chain. The tensions related to the renewable energy classification extended to other files.



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## Taxonomy

Based on similar concerns, the delegated act on taxonomy that proposes to include gas and nuclear power in the classification of sustainable projects as transitional activities has received criticism from some stakeholders. Some NGOs claimed that the delegated act may enable some companies to advertise misleading information and greenwash unsustainable activities under a seemingly green label.



## Conclusion

In between rapid technological innovations, unprecedented geopolitical challenges, and ambiguous regulatory frameworks, greenwashing can find fertile ground to emerge. With negative consequences for the environment and consumers, preventing greenwashing has become a priority in order to ensure that the green transition to climate neutrality can progress swiftly. Misleading claims, false associations, and untrue information are a few examples of greenwashing that have been reported in the energy sector. Stakeholders have advocated for clear rules and guidelines regarding green claims in order to diminish the risk of greenwashing.

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