A Petition to Recommend the Suspension of Unjust Advertising by the Electric Power Development Co., Ltd (J-POWER) (Summary)

Electric Power Development Co., Ltd. (hereinafter referred to as J-POWER) has been advertising thermal power generation by gasifying coal and combusting generated hydrogen as "hydrogen power generation with no CO₂ emissions" as part of its climate change measures. However, this method of power generation lacks clarity on the separation and recovery rate of CO₂ generated, as well as the storage (CCS) of recovered CO₂ in terms of location, timing, and scale, leaving the claim that "hydrogen power generation with no CO₂ emissions" inaccurate. Moreover, this method has only been planned for the Matsushima Coal-fired Power Plant No. 2 (500,000 kW, started operation in 1981), meaning out of all J-POWER's coal-fired power plants (exceeding 8 million kW) only 6% is planned to be adjusted. Furthermore, this process is associated with high costs, which would ultimately be passed on to consumers.

On December 25, 2023, Kiko Network, a specified non-profit organization, and the Japan Environmental Lawyers Federation (JELF) filed a petition to the Japan Advertising Review Organization (JARO), stating that these advertisements violate the Act against Unjustifiable Premiums and Misleading Representations as well as the Environmental Labeling Guidelines, and requested a recommendation for the cessation of these advertisements.

Reasons for the Petition

1. Urgency of Climate Change Response

The world is already entering an era known as "climate boiling," facing an irreversible climate crisis. To avoid this crisis, the world aims to limit the rise in average temperature to 1.5°C as agreed upon during the Paris Agreement and the Glasgow Climate Pact, confirming the need to reduce emissions by almost half by 2030. At COP28, the urgency of transitioning away from fossil fuels to renewable energy, which has already seen a rapid decrease in costs with existing proven technologies, was acknowledged. Particularly, phasing out coal-fired power is considered an urgent matter.

2. Monitoring System for Greenwashing Climate Advertisements

Greenwashing refers to portraying companies, products, or activities as more environmentally friendly than they actually are, often with claims that are not based on facts. Consumers are encouraged by the Basic Consumer Act (Article 2, Paragraph 5; Article 7, Paragraph 2) to consider the protection of the environment. The Act against Unjustifiable Premiums and Misleading Representations (Premiums Act) (Article 5, Paragraph 1, Item 1) prohibit greenwashing advertisement, and is furthermore discouraged by the Environmental Labeling Guidelines.

According to the JARO website, JARO is an advertising review organization formed by related businesses that aims to "to receive complaints and inquiries concerning advertising and labeling, examine them and, where necessary, recommend advertisers modify or discontinue questionable representations." The criteria for reviewing advertising include: (1) the advertising shall be fair and true; (2) the advertising shall not be harmful to consumers; and (3) the advertising shall be in compliance with relevant laws and regulations, public policy, and be decent and pursuant to social manners and customs.

3. Advertisement by J-POWER

J-POWER is a thermal power generation company that owns 8.41 million kW of coal-fired power generation capacity. Recently, the company launched a project called "GENESIS Matsushima Project," which involves adding gasification facilities to the Matsushima Thermal Power Plant Unit 2 (500,000 kW, started operation in 1981), producing and combusting hydrogen. They have been posting the following video advertisements online, emphasizing "CO2-free hydrogen power generation," which is mentioned in the "History of Challenges Edition."

"History of Challenges" (30 seconds) - February 2023 - CM - Learn about J-POWER through the video (gallery.video):

https://jpower.gallery.video/portal/detail/videos/cm/video/6321093900112/%E6%8C%91%E6%88%A6%E3%81%AE%E6%AD%B4%E5%8F%B2%E7%B7%A8%EF%BC%8815%E7%A7%92%EF%BC%892023%E5%B9%B42%E6%9C%88?autoStart=true



Figure 1: "History of Challenges" Adv. Which writes: "In the midst of the challenge towards a CO2 free hydrogen power generation."



Figure 2: "History of Challenges" Adv.

4. Issues with J-POWER's Advertisement Video

a. <u>Violation of the Act against Unjustifiable Premiums and Misleading Representations</u> and the Environmental Labeling Guidelines

This advertisement emphasizes J-POWER's power generation as "CO2-free hydrogen power generation" and claims to contribute towards the "carbon-neutral by 2050" goal, which is in violation of the Act against Unjustifiable Premiums and Misleading Representations and the Environmental Labeling Guidelines. The advertisement, under the premise of increasing consumer concern about climate change, asserts that power generation at J-POWER is "CO2-free hydrogen power generation" and will lead to "carbon neutrality by 2050." This technology relies on the "coal gasification technology" demonstrated in the Osaki Cool Gen demonstration project, where the hydrogen produced is derived from brown coal, and the technology for coal gasification and hydrogen production is still under development. Additionally, only a small portion of power generation is based on hydrogen, while the majority continues to rely on coal-fired power generation, without established measures for separating, recovering, and storing CO2. Therefore, it cannot be considered "CO2-free hydrogen power generation."

J-POWER's claim of "CO2-free hydrogen power generation" in actuality entails continued operation of coal-fired power plants that emit large amounts of CO2, which J-POWER fails to explain. By overly emphasizing "CO2-free," the advertisement misleadingly implies that the electricity they produce is "CO2-free." Furthermore, J-POWER's CO2 reduction target roadmap does not specify which of its many coal-fired power plants will be shut down or when gasification units will be added, while claiming to be "challenging for CO2-free hydrogen power generation."

Thus, the expressions "CO2-free hydrogen power generation," "carbon-neutral by 2050," and "carbon-free energy" in J-POWER's advertisement give consumers the misconception that CO2 does not occur in the entire process, including the lifecycle of the fuel and power generation process. It falsely suggests that J-POWER's electricity is significantly environmentally friendly and "CO2-free."

Additionally, the advertisement leads consumers to expect that J-POWER's electricity will become "CO2-free" in the future, misleading them into believing that there is no need to shut down the coal-fired power plants operated by the company, thereby violating Article 5, Paragraph 1, Items 1 and 2 of the Act against Unjustifiable Premiums and Misleading Representations and the Environmental Labeling Guidelines.

b. The advertisement fails to explain the environmental risks if zero emissions cannot be achieved with hydrogen fuel from coal

For J-POWER's claim of "carbon neutrality by 2050 through CO2-free hydrogen power generation" to be consistent with the 1.5°C target, it is necessary to develop coal gasification and hydrogen combustion technology, as well as technology for separating and capturing CO2, and secure storage locations capable of capturing and storing 90% or more of CO2. However, there is no evidence provided for the technology of CO2 separation and capture, securing storage locations, or achieving 90% or more carbon capture and storage (CCS). This violates the requirements of the Environmental Labeling Guidelines, which include "Providing data and evaluation methods necessary for verifying environmental claims" and "Ensuring access to information for evaluation and verification" (sections 3 and 5).

c. Purposeful Misleading of Consumers

By failing to provide scientific evidence, this advertisement portrays the company as one that produces electricity with a significantly higher environmental benefit than reality, misleading consumers into believing that J-POWER is an environmentally friendly electricity provider with high CO2 reduction efforts. Despite the emission of CO2 into the atmosphere, consumers mistakenly perceive J-POWER's electricity as more environmentally friendly than that of other companies, leading them to continue using electricity generated with large CO2 emissions or indirectly supporting J-POWER's policy. This, in turn, causes consumers to miss the opportunity to switch to new electricity providers focusing on renewable energy, hindering the expansion of renewable energy adoption in the field, and further exacerbating global warming.

d. Therefore, this advertisement should be discontinued.