A Petition to Recommend the Suspension of Greenwashing Advertising by Kansai Electric Power Company, Ltd. (Summary)

On December 25th, 2023, the environmental non-profit Kiko Network and the Japan Environmental Lawyers Federation (hereinafter referred to as "JELF") have submitted a joint-petition to JARO (Japan Advertising Review Organization) regarding ammonia co-firing in coal-fired power generation by the Kansai Electric Power Co., Ltd. The petition was filed to recommend the discontinuation of advertisements that state: “A bright future with zero-carbon power generation in 2050”, achieved by “co-combustion of fuel that does not emit CO2 in power generation,” and “further expansion of the possibilities of nuclear power generation,” advertisements that are defined as “greenwashing.” Below is the summary of the petition.

Overview

Kansai Electric Power Co., Ltd. (hereinafter referred to as “KEPCO”) has advertised in media outlets such as the Asahi Shimbun on the co-firing of ammonia in coal-fired power generation by the company, stating things like “co-combustion of fuel that does not emit CO2 in power generation” (The term “fuel” referring to ammonia), without providing concrete evidence. Furthermore, the company advertised statements encouraging nuclear plant power generation, like “Towards a bright future with zero carbon emissions by 2050,” misguiding consumers from the ways towards sustainable/environmentally friendly power production.

However, ammonia co-firing in coal-fired power generation has minimal effect on reducing CO_2 emissions (as the production rate target lies at 20% by 2030), is not completely free of CO_2 emissions, and is high-cost, as it relies on imports. Nuclear power also faces risks of severe accidents and high-level radioactive waste issues. Nevertheless, KEPCO emphasizes the reduction of CO_2 emissions excessively, misleading consumers into believing that KEPCO’s power generation through ammonia co-firing (especially in coal-fired power generation) does not emit CO_2 and that the electricity generated is environmentally friendly. This gives consumers a false impression that KEPCO is a leading company of CO2 emission reduction measures to prevent global warming (i.e., the advertisements by KEPCO constitute as "greenwashing").

Therefore, Kiko Network and the JELF request that KEPCO discontinue these advertisements and advise against similar advertisements in the future, as these advertisements are in violation of the Act against Unjustifiable Premiums and Misleading Representations and the Environmental Labeling Guidelines.

Reasons for the Petition

1. **Regarding the advertisements by Kansai Electric Power in question:**

a. Target Advertisement 1: Asahi Shimbun, August 20, 2023, page 23

"From now on, it's increasingly the age of electricity."
"For the sake of the Earth's environment, let's generate electricity without emitting CO_2!"
"Did you know? About 40% of the CO_2 that causes global warming is emitted during power generation. Therefore, Kansai Electric is actively pursuing various initiatives to minimize CO_2 emissions during power generation. This includes the active development of renewable energy, primarily offshore wind power, and co-firing fuels in thermal power generation to emit no CO_2. Additionally, we aim to expand the potential of nuclear power generation, which can provide stable electricity without emitting CO_2. We will continue to support current and future power needs while incorporating new technologies. Towards a bright future with zero carbon emissions by 2050. Let's all take action and progress towards zero carbon!"

2. Issues with Ammonia Co-firing Coal-fired Power Generation by KEPCO:

a. Ammonia production processes generate large amounts of CO_2 emissions

While ammonia itself does not emit CO_2 during combustion, the hydrogen used in ammonia production is derived from fossil fuels overseas, leading to significant CO_2 emissions throughout its lifecycle, including the high-temperature, high-pressure production and transportation processes under the Haber-Bosch process (Approximately 1.9 tons of CO_2 are emitted per ton of ammonia produced in the manufacturing process). Therefore, it cannot be considered a "CO_2-free fuel."

KEPCO fails to explain the CO_2 emissions during the production and transportation processes of ammonia. Additionally, KEPCO has not disclosed details such as the targeted power plants for ammonia co-firing by 2030, the start date of co-firing, or the scale of implementation, other than the co-firing plan at the coal-fired power plant operated by Kobe Steel, which is Kansai Electric Power's long-term electricity procurement contract partner.

b. Incompatibility with the 1.5°C Target

The world is already in an era termed "climate boiling," entering an irreversible climate crisis. To avoid catastrophic climate consequences, the world aims to limit the rise in average temperature to 1.5°C, with the need to almost halve

emissions by 2030, as outlined in the Paris Agreement, the Glasgow Climate Pact, etc. Phasing out coal-fired power is considered a particularly urgent matter.

However, ammonia co-firing in thermal power generation relies on technology still in development. Plans involve only around 20% co-firing at some power plants by around 2030, with the remaining 80% relying on coal. This falls short of emission reduction targets by 2030 and is incompatible with the 1.5°C goal.

Furthermore, even with hypothetical Carbon Capture and Storage (CCS) utilization in the hydrogen and ammonia production process, the timeline for implementation remains uncertain. The Intergovernmental Panel on Climate Change (IPCC) demands a 90% CO_2 capture rate, yet current CO_2 capture and storage technology achieves only 60-70%.

Moreover, expanding nuclear power in earthquake-prone Japan is inappropriate, with little feasibility by 2030, rendering it incompatible with the 1.5°C goal.

c. Consumer Incurrence of High Costs

The production and transportation of ammonia entail high costs, resulting in expensive electricity for consumers. Additionally, Carbon Capture and Storage (CCS) technology is extremely costly. Due to its high expenses, CCS installations are currently limited to only one coal-fired power plant in Canada, generating 100,000 kW.

d. Criticism from the International Community

"Ammonia co-firing is not an effective solution for the world." (Statement by IPCC Chairman Jim Ski, from an interview article in the Mainichi Shimbun on August 8, 2023)

"The concept of Japan mixing ammonia or hydrogen with fossil fuels leads to the postponement of energy transition by maintaining existing thermal power generation." (Statement by John Kerry, U.S. Special Presidential Envoy for Climate, from the Mainichi Shimbun on April 19, 2023)

3. Greenwashing and Climate Advertising Monitoring

a. Greenwashing, "a pretense of environmental consideration which is inconsistent with the facts," refers to the portrayal of companies, products, or activities as more environmentally friendly than they actually are, often by presenting misleading environmental claims.

b. Legal Framework Related to Greenwashing in Climate-Related Advertising
   i. Consumer Contract Act (Article 2, Paragraph 5; Article 7, Paragraph 2)
   ii. Act against Unjustifiable Premiums and Misleading Representations (Premiums and Representations Act) (Article 5, Paragraph 1, Item 1)
   iii. Environmental Labeling Guidelines

c. Role of JARO in Greenwashing Advertising Monitoring
JARO has claimed its company purpose as the following, saying "We are engaged in activities aimed at eliminating advertisements that cause inconvenience, harm, or misunderstanding to consumers from society and fostering good advertisements." (extracted from the JARO website). The evaluation criteria for advertising monitoring are as follows: (1) Must be fair and truthful. (2) Must not be detrimental to the recipient. (3) Must comply with relevant laws and social order.

4. Issues with KEPCO's Advertising

a. Violations of the Commercial Code and Environmental Labeling Guidelines

i. Claims such as "fuel that emits no CO_2" and "zero-emission power" are contrary to fact, and the content regarding timing is ambiguous, with important facts not disclosed.
ii. Fails to mention CO_2 emissions during ammonia production and transportation.
iii. Creates a misleading impression among consumers that climate change measures are being adequately taken, despite the lack of plans that align with international goals, due to ambiguous expressions.
iv. By portraying both ammonia-mixed thermal power generation and nuclear power as providing stable electricity for a bright future without emitting CO_2, consumers are misled to believe that stable supply and a bright future are brought about by nuclear power, which is not proven to be the case.

b. Inadequate Explanation of the Environmental Risks in the Case Zero-Emission Power Using Ammonia Fuel Cannot Be Achieved
i. Consumers may mistakenly perceive KEPCO's electricity as environmentally friendly and continue to use electricity generated by emitting large amounts of CO_2.
ii. Consumers miss the opportunity to switch contracts to new power companies that focus on renewable energy and have less impact on the environment.
iii. The continued massive CO_2 emissions from KEPCO's coal-fired power generation exacerbate global warming.