Bioenergy a risk to equitable clean energy transition

- Bioenergy production is linked to deforestation, air pollution, land grabbing, and human rights violations ;
- Industrial-scale bioenergy increases greenhouse gas emissions, harms biodiversity, and reverses the original intent of renewable energy policies.
- risks in bioenergy supply chain must be considered in the renewable energy policy reform

Solutions for Our Climate, Korea Federation of Environmental Movements and Advocates for Public Interest Law held an online seminar on "Understanding Bioenergy Trade and Supply Chain Risk in Asia" on the 24th to shed light on environmental and social problems arising from the production and consumption of bioenergy feedstock. Members from the civil society based in Indonesia, Vietnam, the United States, and Europe attended the event to share their experiences and implications of each country.

Biomass and palm oil-based biofuels production is expanding, supported by governments around the world who are keen to promote renewable energy. However, bioenergy has a negative impact on climate, ecosystem, and local livelihood. Above all, industrial-scale bioenergy counters the main purpose of the renewable energy policy by increasing greenhouse gas and air pollution and threatening the ecosystem biodiversity.

The EU's renewable energy policy is also deeply dependent on bioenergy. Biomass, which accounts for up to 37% of the EU's renewable energy causes deforestation in Europe and North America. In 2016–2018, deforestation across Europe increased by 49% and biomass losses increased by 60%. In particular, imports of wood pellets from the U.S. and Canada are increasing, and they are sourced from ecologically significant forests with endangered species habitats.

"The only way to stop the massive climate, environmental and social damage caused by bioenergy is to exclude them from renewable energy and other 'green' policies," said Almuth Ernsting, a researcher at Biofuel Watch, who presented the European case.

Korea is also seeing a surge in bioenergy use with various institutional support. From 2014 to 2017, Bioenergy ranked first in the amount of renewable energy supply certificates (REC) among renewable energy support, and it still ranked second in 2018-19. In particular, biomass development has grown more than 61 times over the past six years. Meanwhile, palm oil-based bio-heavy oil production nearly tripled between 2014 and 2019.

"Though it is desirable to phase out fossil fuel and expand renewable energy to achieve the 2050 Net-zero target, shifting that volume to bioenergy is problematic. Burning biomass in large-scale power plants has no advantage in climate and environment even if biomass residues are used," said Kim Soojin, a senior researcher at Solutions for Our Climate. “In addition, the carbon footprint of imported palm oil-based fuels such as biodiesel and bio-heavy oil is even larger, but the government continues to give RECs to encourage the use of biofuels."

Korea's bioenergy highly depends on imported feedstock. More than 90% of wood pellets are imported from Vietnam and more than 60% of palm Kernel Shell(PKS) bio-SRF and palm based biofuels are from Malaysia and Indonesia. Palm oil, the main raw material for biofuels, has long been criticized by civil society at home and abroad due to its massive environmental damage and human rights violations in the production process.

"To meet other countries' renewable energy target, Indonesia's rainforest is being destroyed, endangered plants and animals are disappearing," said Kurniawan Sabah, director of Indonesia's civic group Indies. "Korea and other palm oil importers should consider how it affects the environment and communities of the country of origin in the process of producing renewable energy materials and reflect them in their renewable energy policies."

"The Korean government should stop providing public financial support to companies involved in forest destruction and human rights violations in the process of bioenergy production," said Shin Young Chung, a lawyer at the Advocates for Public Interest Law, who has been raising issues in palm oil industry for years. “It is also necessary to establish a system to monitor supply chains to prevent imports of palm oil produced by environmental damage and human rights violations while increasing the rate of biodiesel mixed obligations."

The organizers of this event (Solutions for Our Climate, Korea Federation of Environmental Movements, and Advocates for Public Interest Law), issued a civil society statement on bioenergy that included demands for policy reform to consider risks of bioenergy supply chain in Korea. The full text of the statement can be found in the attached file.