Case #5: Eurelectric Explores Its Social Contract

Eurelectric is the federation for the European electricity industry. It represents the power sector in over 32 European countries, speaking for more than 3,500 companies in power generation, distribution and supply. According to the Eurelectric website, "We contribute to the competitiveness of our industry, provide effective representation in public affairs and promote the role electricity in addressing the challenges of sustainable development."

In recent years, "bioenergy" or "biomass" has accounted for an increasing percentages of total electricity generation in numerous European countries, including Britain, Denmark, Belgium and the Netherlands. **Eurelectric** is leading the effort for expanding biomass as an alternative to petroleum-based electrical generation to reduce carbon contribution to climate change. However, opinion is widely divided on this effort. The most controversial segment of biomass is wood from forests.

Biomass Opponents

In May 2021, a billboard appeared outside the EU parliament in Brussels playing a video that showed sparse, deforested woodland, spliced together with footage of the bloc's top climate official, and the words "the EU burns forests as fuel." Removing forest biomass — combustible pellets burnt for energy — from the list of energy sources classified in Europe as "renewable" is a major goal of some environmental groups and scientists.

Biofuelwatch. a non-governmental environmental organization based in the United Kingdom and the United States, works to raise awareness of the negative impacts of industrial biofuels and bioenergy. It opposes the expansion of industrial monocultures driven by demand for bioenergy. According to **Biofuelwatch**, using more biomass will require "large-scale logging . . . of the forests we need to store carbon." (www.biofuelwatch.org.uk/)

The **Natural Resources Defense Council (NRDC),** a US-based NGO has been campaigning against biomass from forests since 2014. See ***Global Markets for Biomass Energy Are Devastating U.S. Forests www.nrdc.org)*** A NRDC spokesperson recently observed, **"**Chopping down trees, shipping them around the world on carbon-intensive vessels and burning the wood for energy doesn't comport with the idea of clean energy."

European environmental NGOs **Birdlife Europe**, the **European Environmental Bureau** and **Transport & Environment** recently commissioned the **International Institute for Sustainability Analysis and Strategy (IINAS)** in cooperation with the **European Forest Institute (EFI)** and **Joanneum Research (JR)** to carry out a study on the sustainability of woody bioenergy in the EU. The study's conclusions included:

1. The EU's use of wood is already close to the maximum domestic potential of woody biomass in 2030 if we are to see only low risks to the environment and climate
2. Using stemwood (the stem of a tree, i.e., logs) for energy does not deliver GHG savings compared with fossil fuels

3. Potential for low-risk woody biomass in the EU is not enough to meet the expected demand for all uses by 203
4. Current policies will lead to significant GHG emissions from the use of wood energy by 2030 (http://www.birdlife.org/europe-and-central-asia)

"We are expecting an almighty fight," said a BirdLife spokesperson. "There's a very powerful bloc of European governments completely enslaved to the agricultural and forest lobby."

In February, more than 500 **scientists who oppose biomass electricity generation** wrote to the European Commission and European Council presidents, urging them "not to undermine both climate goals and the world's biodiversity by shifting from burning fossil fuels to burning trees". They added: "Governments must end subsidies and other incentives that today exist for the burning of wood."

Many **scientists who oppose biomass electricity generation** have long been skeptical of the climate benefits of biomass, especially wood. Wood releases more carbon dioxide per unit of electricity produced than coal or gas, and a newly planted tree can take decades to reabsorb the carbon dioxide emitted by burning its equivalent weight. "Wood is a 'sucky' (bad) fuel," said Tim Searchinger, a researcher at Princeton.

In 2009, a group of **scientists who oppose biomass electricity generation** led by Searchinger wrote in the journal Science protesting what they called a "critical climate accounting error." They argued that certain major international climate policies and legislation designed to reduce countries' greenhouse gas emissions allow nations to burn biomass and discount their smokestack emissions but fail to account for the carbon losses caused by cutting down trees to burn them. "It's just cheating," Mr. Searchinger said.

Biomass Support

Among the biggest defenders of biomass is **Bioenergy Europe**, the European trade association representing national biomass associations and bioenergy companies active in Europe. Its aim to promote energy generation from biomass - in all its forms: biopower, bioheat, or biofuels for transport. A Bioenergy spokesperson claimed the concern about harvesting logs for biomass is vastly overstated. A spokesperson declared, "The forest is never harvested for biomass," since it is more profitable to use the wood for furniture or other products.

EU Biomass Policy

Despite scientists' misgivings, EU's renewable-energy directive has encouraged biomass as a fuel source. The **International Energy Agency** said solid bioenergy could produce around 14 per cent of global energy in 2050, compared with just 5 per cent in 2020.

In 2018 — the most recent year for which figures are available — EU countries handed out €10.3bn in support for the biomass sector.

The biomass question is one of the most politically sensitive issues in the EU climate package. It has divided agencies, with the **European Environment Agency (EEA)** wanting tougher biomass rules and the **Directorate-General for Energy (ENER)** pushing back.

Current EU rules permit the use of whole trees for energy production, though say this should be "minimised". Critics say the rules are too lax, and that the combination of subsidies and climate targets incentivises the use of biomass without sufficient safeguards.

UN guidance, emissions from biomass are reported by countries in the land, rather than the energy, sector. As a result, importing nations can enjoy lower domestic emissions and rely on pellet-producing countries to count the carbon.

EU policy makers realize that a change in the status of biomass may make it almost impossible for the EU to meet its target that renewables (biomass, wind and solar) provide a third of all energy usage across the region by 2030.

Biomass Sources

While a number of EU countries utilize their own biomass sources, including local woodlands, the biggest supplier of biomass pellets is the rural United States Southeast, a patchwork of mostly privately owned hardwood forests, swamps, farms, small towns and lots of pine trees.

Supporters of biomass generation argue that because the U.S. Southeast's forests overall are expanding, there is no net loss of carbon dioxide absorption in the region. Accounting rules laid out by the **U.N. Intergovernmental Panel on Climate Change**, a United Nations body that provides scientific information on climate change says pellets sourced from such regions should be considered carbon neutral.

However, some energy industry figures acknowledge that not all biomass brings benefits to the climate, insisting that only low-value wood and forest residues should make the cut under EU law. To bring climate benefits, biomass needs to come from low-value wood residues or smaller trees coming from timber harvests – not from high-value trees that could be used in products like furniture or construction material.

The EU Policy Debate

How to ensure EU energy policies do not encourage the wrong sort of biomass, even inadvertently, is a challenge for EU policy makers.

Biomass currently represents almost 60% of the EU's renewable energy, more than solar and wind power combined, according to the EU's statistical office, Eurostat. And even though wind and solar are growing fast, countries such as Austria, Denmark, Finland, Latvia and Sweden would be unable to achieve their 2020 renewable energy targets without biomass, experts say.

"Bioenergy is basically the backbone for these countries'" renewable energy policies, says Martin Junginger, a professor of energy and resources at Utrecht University.

In early 2021, the **European Commission** announced it would perform a comprehensive assessment of biomass supply and demand in Europe and globally with a view to "ensure that EU biomass-related policies are sustainable".

"The overall objective is to ensure that EU regulatory framework on bioenergy is in line with the increased ambition set out in the "***European Green Deal,"*** the **European Commission** said in its biodiversity strategy, published in May 2021.

Among other things, the biodiversity plan aims to protect primary and old-growth forests, which "keep removing carbon from the atmosphere, while storing significant carbon stocks," the EU paper said.

"The use of whole trees and food and feed crops for energy production – whether produced in the EU or imported – should be minimized," the policy paper added.

Europe Climate Activists In the Courts

In 2020, a group of **European climate activists** filed a lawsuit against the European Union to challenge the notion that forest biomass is carbon neutral, a principle which is currently enshrined in the bloc's renewable energy directive.

"The treatment of biomass as carbon neutral runs counter to scientific findings" showing that burning wood for energy typically emits 1.5 times more CO2 than coal and 3 times more than natural gas, the plaintiffs claimed.

The **European Court of Justice** dismissed the case in May 2021, saying the activists had failed to demonstrate how the directive was of "individual concern" to them.

Still, the **European Commission** appeared to give credit to the plaintiffs, saying its bioenergy review will include new "operational guidance" on the sustainability criteria for forest biomass currently laid down in the EU's renewable energy directive.

Time Frame: Short- vs. Long-Term

So how can policymakers distinguish "good" from "bad" biomass? According to some experts, one way could be to contrast the impact of biomass on global carbon stocks in the short and long term.

"If you burn biomass, then of course there is CO2 being emitted," said Junginger, adding that from that point of view, biomass "critics have a point" and that climate scientists are concerned about the immediate CO2 emissions, which can be "up to twice more than natural gas".

However, what critics fail to acknowledge is the long-term positive effects of biomass on the climate, Junginger added, saying bioenergy from sustainably managed forests is carbon neutral in the long run because trees re-absorb carbon dioxide as they grow.

"Ultimately within two or three decades, even the less sustainable kinds of biomass will have repaid their carbon debt and perform better than fossil fuels," he argued. For him, the choice to rely on biomass therefore depends more on the timeframe in which policymakers place themselves.

"If within ten years, we have to decarbonise everything, then yes, biomass is not a very attractive option" because of the "carbon debt" that biomass creates for the coming decades, Junginger said.

But if policymakers consider that climate change is "a matter of decades and centuries" then biomass has a role to play in mitigating climate change, he claimed.

Biomass supporters also argue that in order to bring climate benefits, biomass "needs to come from a working forest that is returned to forests after harvest – not from forests that are converted to agriculture" or other uses after trees are harvested.

'Transitions' in biomass use

Another potential way to manage the climate impact of biomass is to prioritise the sectors in which it should be used in priority.

"Sustainable biomass is scarce," said Martin Junginger. "So we have to think cleverly where we want to deploy it," he added, citing hard-to-abate sectors of industry and transport as areas where scarce biomass resources could be put to best use.

"At the moment we use biomass mainly for low-temperature heating – so, for heating houses," Junginger pointed out, saying this was "not very clever" because other solutions like insulation or heat pumps are more efficient.

Instead, he said biomass should be used in priority "for industrial purposes which are harder to decarbonise," as well as heavy-duty road transport, shipping and aviation where biofuels can provide an alternative to hydrocarbon-based fossil fuels.

Another transition is the way biomass is used for electricity. "With intermittent wind and solar," biomass is well positioned to provide peak load instead of base load, Junginger said.

Biomass played "a substantial role" in the coal-free run that the UK electricity sector enjoyed in May and June 2021, said Rebecca Heaton, head of climate change at Drax, a British power station running on biomass and coal.

"Obviously the grid will be predominantly solar and wind" in the future, but biomass can help "when the wind doesn't blow and the sun doesn't shine," Heaton said.

****The Intergovernmental Panel on Climate Change (IPCC)** is the United Nations body for assessing the science related to climate change. The IPCC was created to provide policymakers with regular scientific assessments on climate change, its implications and potential future risks, as well as to put forward adaptation and mitigation options.* https://www.ipcc.ch/

In June 2021, the **European Commission** acknowledged that it is considering tightening rules on whether wood-burning energy can be classed as renewable and count towards green goals.

The aim is to protect delicate ecosystems like old growth forests and stop wood fit for other purposes, like making furniture, from ending up as pellets or chips burned to produce biomass energy.

The draft **European Commission** proposal to update the EU rules would require biomass-fueled power and heat plants with a capacity of 5 megawatts (MW) or above to meet sustainability criteria, and provide substantial emissions cuts versus fossil fuels. Biomass plants with a capacity below 20MW are currently exempt from those requirements.

The draft said biomass-fueled installations will count as renewable if they produce 70% fewer emissions than fossil fuels. Currently, that applies only to installations that started operating this year.

The draft said national support schemes promoting biomass energy use must follow a "cascading principle" that wood should only be burned for energy as a last resort.

The EU's current aim is to meet 30% of its energy consumption with renewables by 2030. Commission analysis suggests 38-40% is needed to comply with EU climate change targets.

The proposal could change before publication of the final report as part of a package of policies to cut EU emissions by 55% by 2030, from 1990 levels.

This case is drawn in large part from "Not all biomass is carbon neutral, industry admits as EU reviews policy," by Frédéric Simon for Euractiv, 14/07/2020 (https://www.climatechangenews.com/2020/07/14/not-biomass-carbon-neutral-industry-admits-eu-reviews-policy/)

ACTORS IN THE CASE

Eurelectric

Biomass NGO Opposition (EnvNGOs)

Biofuelwatch

Natural Resources Defense Council (NRDC

Birdlife Europe

European Environmental Bureau, **Transport & Environment**

Scientists who oppose biomass electricity generation

Scientists who support biomass electricity generation

European Commission ((EC)

European Environment Agency (EEA) reports to EC and European Parliament

Directorate-General for Energy (ENER) reports to EC and European Parliament

European Court of Justice

The Intergovernmental Panel on Climate Change (IPCC)

CASE QUESTIONS

1. **(3) What property rights conflicts are raised by this case?**

   Show conflicts in this form:

   _____right to _____[state very specific to the case] **_____**

   versus

   _____right to_____[state very specific to the case **]___**

   (maximum length 80 words)

   [NOTE: in this and future cases, there may be more than one actor asserting one or more rights on either side of the rights conflict]

   NOTE: The rights of government agencies and NGOs are not at issue in the cases in this course! However, as actors, government agencies, media and NGOs do advocate on behalf of the *rights of others who for a variety of reasons cannot act for themselves* in many cases.

2. **(3) How would the following actors describe the view of the <u>Eurelectric</u> social contract:**

a. **European Commission**
b. **Eurelectric**
c. **EnvNGOs**

Note I am asking for the view of a and c regarding Ferroelectric's social contract, not their own social contract.

(maximum length 75 words)

ANSWER ONLY ONE OF THE NEXT THREE QUESTIONS; if you are not clear which question you should answer, send me an email.

If you submitted a case 3 analysis, answer question 3.

d. **(2) Module 4 argues that there is an ongoing movement from "corporate social responsibility" to "sustainability" and now to "creating shared value."**

Create a supporting argument for each of the following assertions:
a. that the Eurelectric is still at the "corporate social responsibility" stage but has moved no further .
b. that the Eurelectric has moved to the "sustainability" stage and has moved no further, i.e., is not yet at the "creating shared value" stage.
You will need to refer to the definitions in the module to make your judgments.
Note: Your personal view may be that the company is really at one of the two levels. Nevertheless, you are to make separate argument that it is at each of the levels.
(maximum length 100 words)

If you submitted a Case 4 analysis, answer question 4.

e. **(2) Propose an elementary ethical code consisting of "general precepts" and "specific practices" regarding the use of biomass for electrical generation that might cme as close as possible to satisfying all of the actors in the case. (maximum length 100 words)**

from Module 3:

IV. Ethical Codes

Many companies use ethical codes to guide the behavior of employees. Similarly, many social media websites have *de facto* ethical codes to guide the behavior of users of their websites.

There are three steps in a successful ethical code:

1. Code Design. Ethical codes consist of a combination of general precepts and specific practices. The general precepts permit broad application of a particular prohibition in a

code, while specific practices define specific activities or practices that are NOT acceptable. **(In the past, students were not careful in considering what the terms "general" and "specific" mean. Please do not make this mistake.)**

If you submitted analyses for both Case 3 and Case 4, answer question 5.

5.(2) What do you think is the likelihood the Eurelectric will be able to fend off the challenge to its use of biomass from the EnvNGOs? Explain your assessment.