

# The Biomass connection: links between the pulp and paper and biomass industry in South America

Pictured right: This biomass power station is part of the Valdivia pulp mill complex, operated by Celulosa Arauco y Constitución S.A, in the Los Rios region of southern Chile.

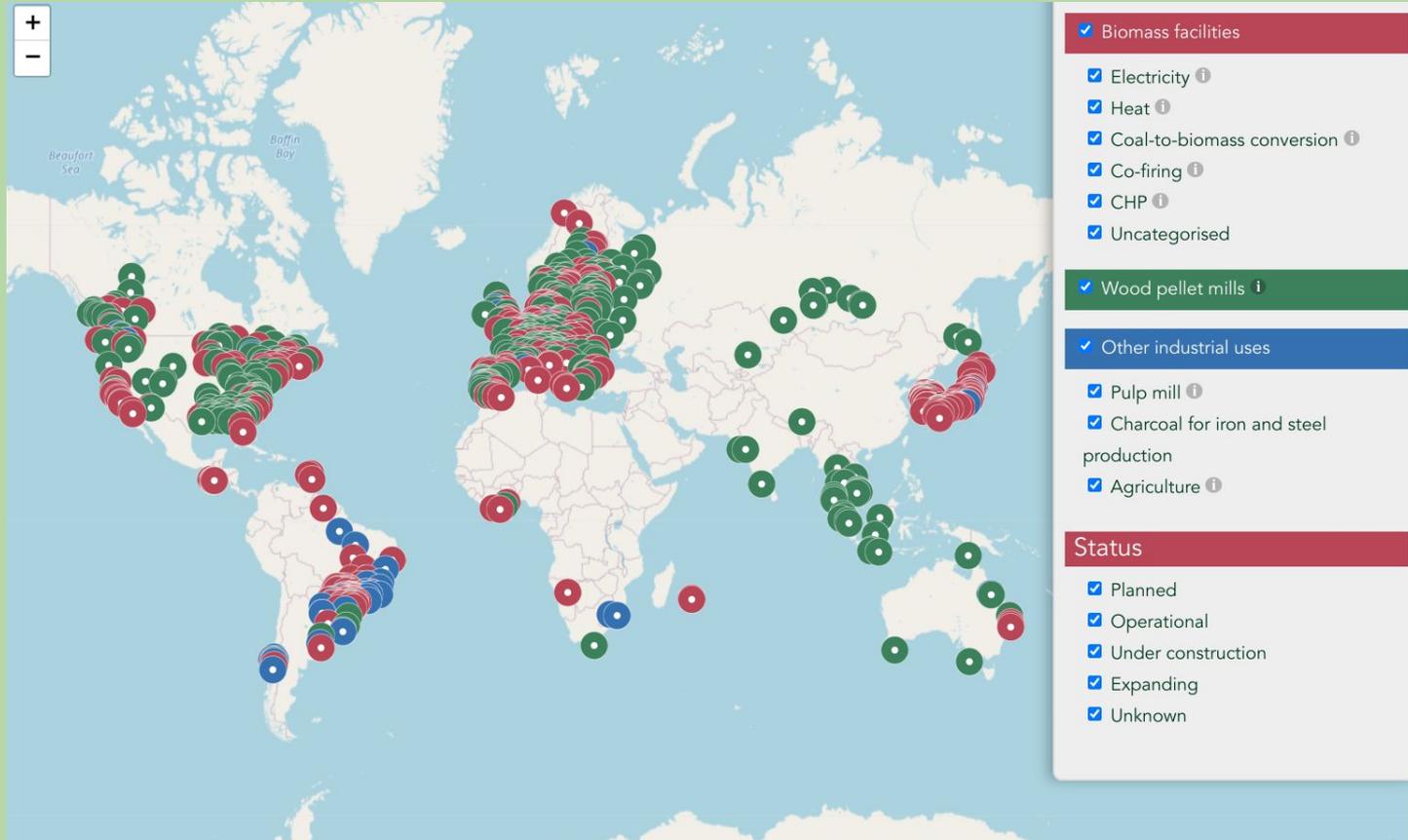


# A new global trend to burn more biomass at pulp mills

- Traditionally, the pulp and paper industry has burned black liquor and often waste bark (by-products of its operations) in combined heat and power (CHP) biomass boilers to produce heat and electricity to power its operations.
- There is a new trend for pulp mills to build additional *oversized, electricity-only* biomass burners alongside its existing CHP units.
- And, where pulp mills have CHP plants which run on fossil fuels, we are also seeing a trend of replacing these fossil fueled CHP plants with biomass plants.

# Mapping the biomass industry

<https://environmentalpaper.org/tools-and-resources/mapping-bioenergy/>





**Biomass facilities**

- Electricity *i*
- Heat *i*
- Coal-to-biomass conversion *i*
- Co-firing *i*
- CHP *i*
- Uncategorized

**Wood pellet mills *i***

**Other industrial uses**

- Pulp mill *i*
- Charcoal for iron and steel production
- Agriculture *i*

**Status**

- Planned
- Operational
- Under construction
- Expanding
- Unknown

**Biomass boilers (>20MW) linked to Pulp and Paper facilities in South America**

# Why is the P&P industry burning more biomass?

It allows them to benefit from generous subsidies and other support mechanisms directed towards biomass electricity:

- They can sell the electricity produced by their biomass burners to the public grid at subsidised rates.
- They can sell carbon credits through the United Nations Carbon offsets platform, if their biomass plants are registered as projects under the Clean Development Mechanism (CDM).
- It helps them reach decarbonisation targets by replacing fossil fuel use (even though biomass is more emissive than fossil fuels per unit of energy produced.)
- It reduces the carbon taxes imposed on them by some countries. (Without investing in biomass energy, pulp mills may soon find it too costly to operate.)

# What is the problem with burning more biomass at pulp mills?

- Both the oversized, stand alone biomass power stations and the biomass CHP plants replacing fossil CHP plants, usually **require more wood than the waste produced by the pulp mills alone** can provide, which means that additional wood has to be sourced from somewhere.
- There is usually no independent verification of the actual feedstock used in the biomass boilers.

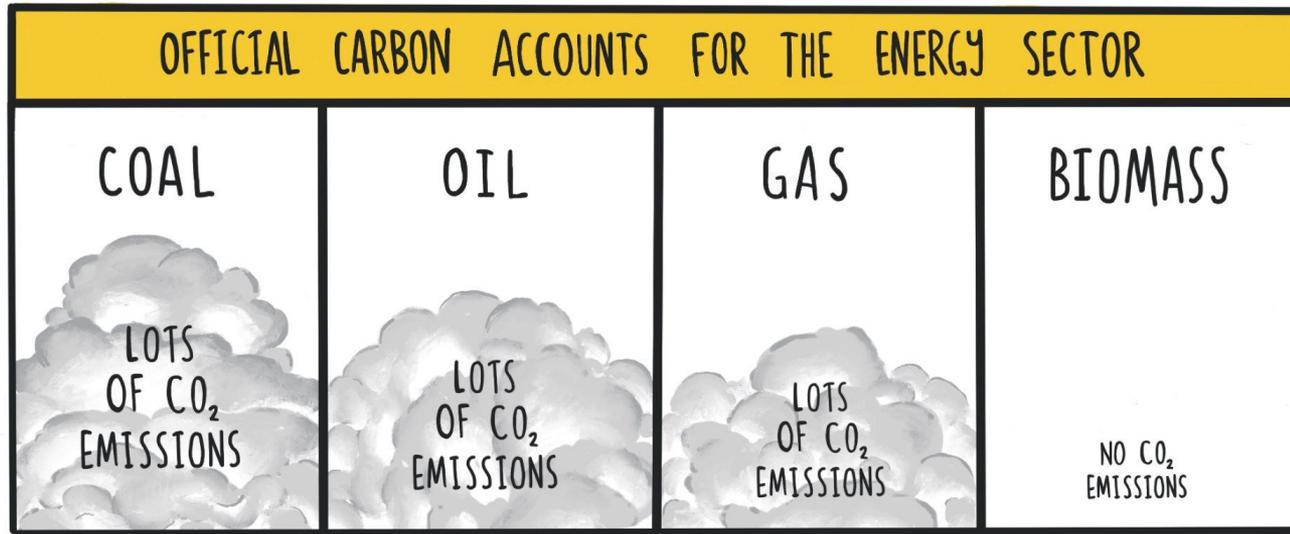


As a result, these developments are very likely incentivising plantation expansion (typically of non native eucalyptus species) and increasing logging.



# Burning biomass is not carbon neutral

Regardless of exactly *what* they burn in the biomass boilers, burning *more* wood *will* increase the carbon emissions of the industry. These just aren't counted because of the false assumption that biomass is carbon neutral and flawed carbon accounting methodologies.



# Burning biomass is not carbon neutral

- A wealth of scientific literature and civil society reports clearly demonstrate that burning biomass for energy is **not** carbon neutral.
- Burning biomass *immediately* emits large quantities of greenhouse gases into the atmosphere.
- But it takes decades to centuries for forests to regrow (if they are even allowed to) and sequester the carbon that has been released.
- This is far too long to effectively contribute to the emissions reduction targets needed to tackle climate change.

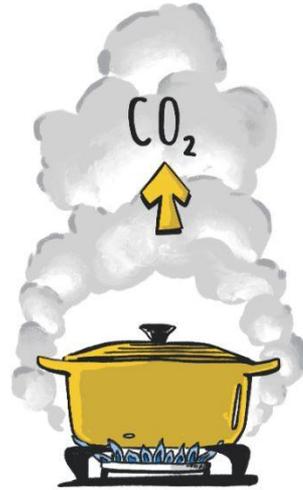
# THE CARBON EMISSIONS REALITY



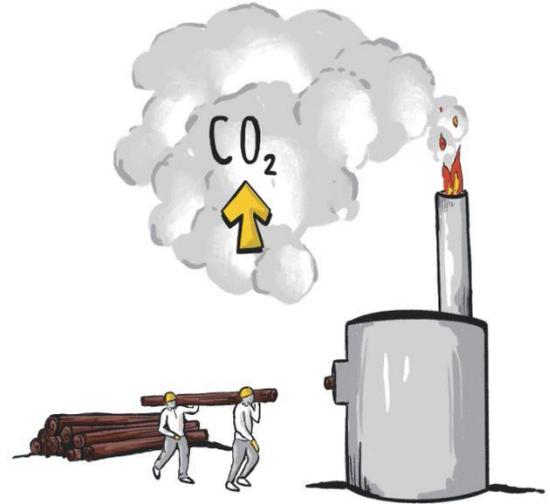
COAL



OIL



GAS



BIOMASS

# Burning biomass is being used to justify a toxic Industry narrative

- Pulp and paper companies are using biomass electricity generation to *greenwash* their image, claiming that they are “sustainable” because they are producing their own energy.
- They also claim that they are reducing carbon emissions because they are zero fossil fuels,
- They claim that because they are “using every part of the tree” that their operations are part of the “circular economy.”
- This narrative hides the true impact of their operations on people and the environment and allows pulp and paper companies to continue business as usual.



ILLUSTRATED BY  HEARTWOOD VISUALS

# Reasons to campaign jointly on the pulp and paper industry and biomass in South America:

- To combat the greenwashing of the P&P industry it is essential to characterise biomass as a false clean energy solution.
- In many cases they are actually the same industry, with the same companies involved.
- The social and environmental costs are similar. Expansion of plantations, for example, is an issue which resonates with groups working on pulp and paper *and* groups working on biomass.
- By developing and sharing common messaging, we can amplify both campaigns at the same time.
- However, while there is clear overlap, working on both together will only be relevant to some pulp mills in some countries. Separate campaigns are still necessary.



FUEL

CLIMATE  
DISASTER

~~RENEWABLE  
ENERGY SOURCE~~

**BURNING TREES TO  
GENERATE ELECTRICITY  
IS NOT A RENEWABLE  
ENERGY SOURCE:  
IT'S A CLIMATE DISASTER**

## Further reading

EPN has released a case study documenting the relationship between the pulp and paper industry and biomass in Chile, available here:

**Arauco's Valdivia biomass power station:** *carbon emissions and conflicts with indigenous communities in Chile*. 2021:

(English)

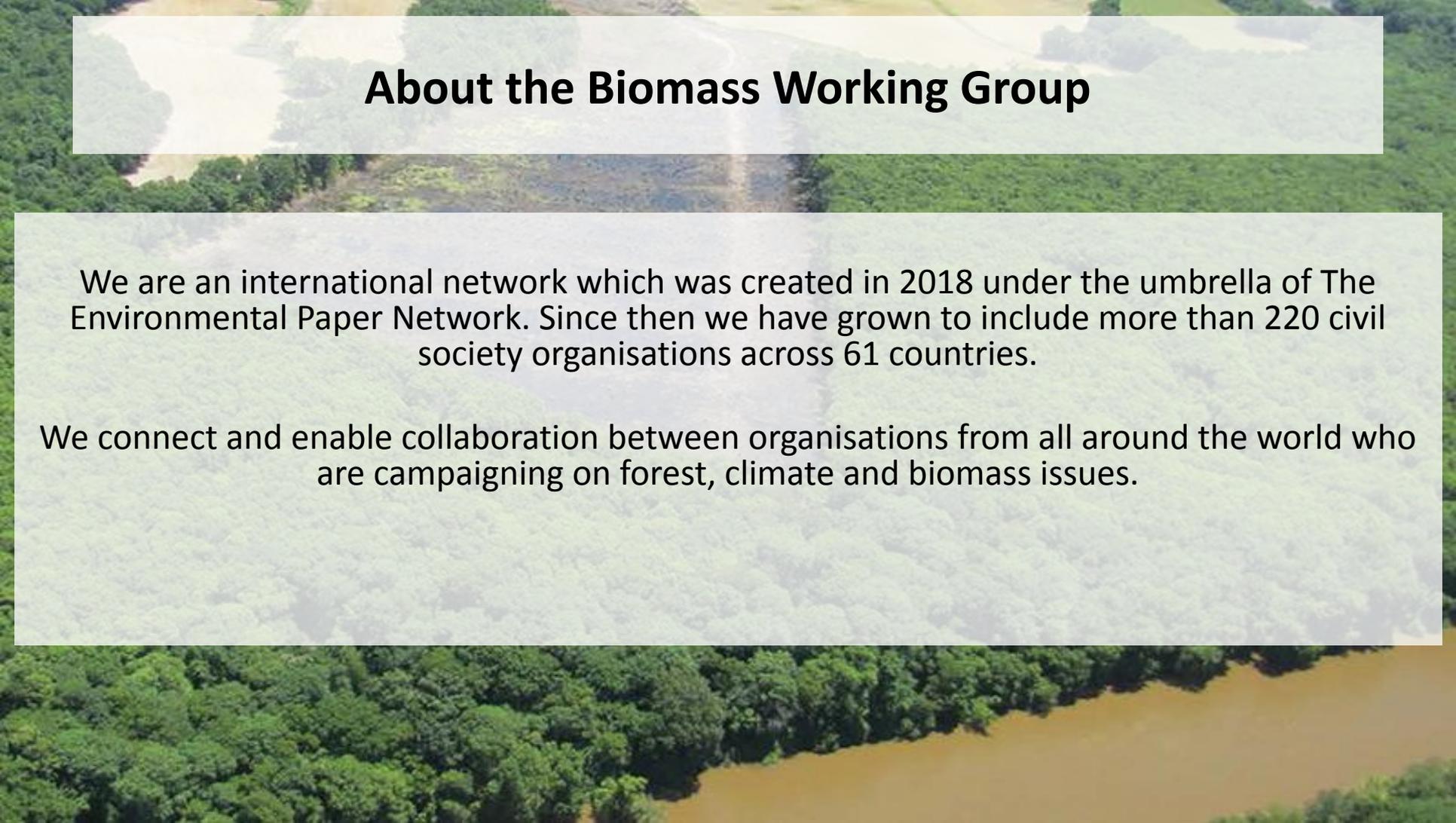
<https://environmentalpaper.org/wp-content/uploads/2021/11/Valdivia-case-study.pdf>

(Spanish)

<https://environmentalpaper.org/wp-content/uploads/2021/11/Valdivia-case-study-ES.pdf>

This can also be found in the biomass info library, along with other resources in English, Spanish and Portuguese.

<https://environmentalpaper.org/biomass-library/>

An aerial photograph of a dense, green forest. A river with brownish water flows through the center of the forest, curving towards the bottom right. The forest is thick and vibrant green, with some lighter patches where the ground is visible.

## About the Biomass Working Group

We are an international network which was created in 2018 under the umbrella of The Environmental Paper Network. Since then we have grown to include more than 220 civil society organisations across 61 countries.

We connect and enable collaboration between organisations from all around the world who are campaigning on forest, climate and biomass issues.

# Visión

**La Biomass Delusion Statement es la declaración fundacional del Biomass Working Group.**

<https://environmentalpaper.org/the-biomass-delusion/>

“Compartimos la visión de un mundo en que la prosperidad de los bosques nativos juega un rol significativo en afrontar el cambio climático y contribuir a un futuro limpio, sano, justo y sustentable para toda la vida en la Tierra. Quemar bosques para la producción a gran escala de energía no puede ser parte de ese futuro. En cambio, debemos proteger y restaurar el bosque nativo, y así reducir emisiones y remover dióxido de carbono de la atmósfera mientras apoyamos la biodiversidad, la resiliencia y el bienestar.”

# The Biomass Working Group: Subgroups and Coordinators

- Global Biomass Working Group Coordination
  - Policy and Networking (Peg Putt - EPN)
  - Strategy and Organisation (Sophie Bastable - EPN)
- Biomass Finance (Karen Vermeer - EPN)
- Europe grassroots campaigns (Almuth Ernsting - Biofuelwatch)
- East Asia regional group (Peg Putt - EPN)
- Africa regional group (Kwami Kpondzo - FoE Togo & GFC)
- Latin America regional group (Diego Oyarzo & Camila Romero - Colectivo Viento Sur)
- Asia Pacific regional group (Souparna Lahiri - GFC)

We also facilitate ad hoc “pop up” groups which form as needed for specific projects eg. Planning for COPs, or International Day of Action

For more info and to join the biomass  
working group

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