

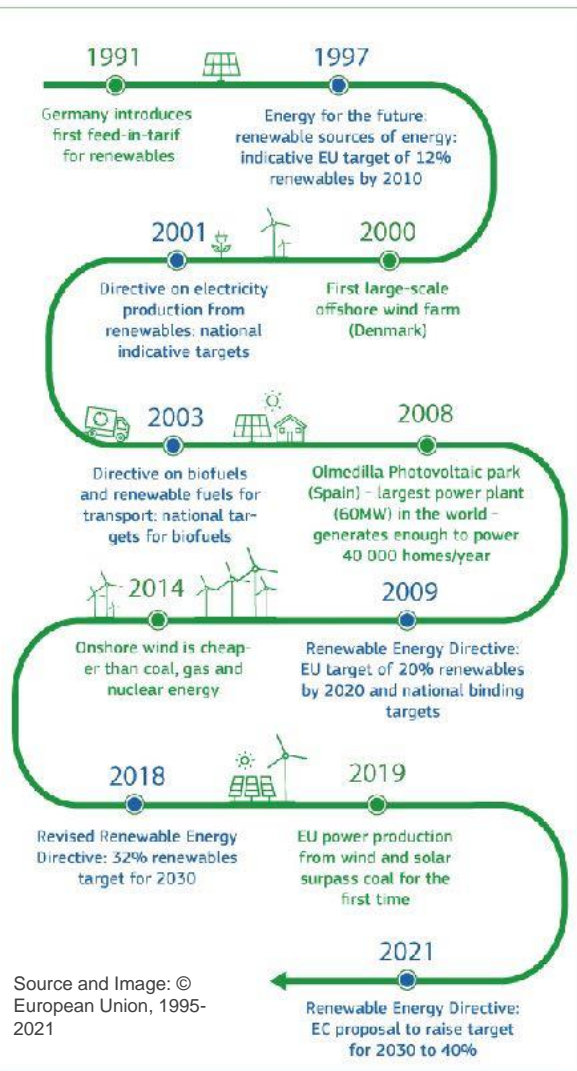


Putting the breaks on burning wood for energy

Woody Biomass and the EU's Renewable Energy Directive - 2022 Update

FOE Japan Webinar, November 4th, 2022

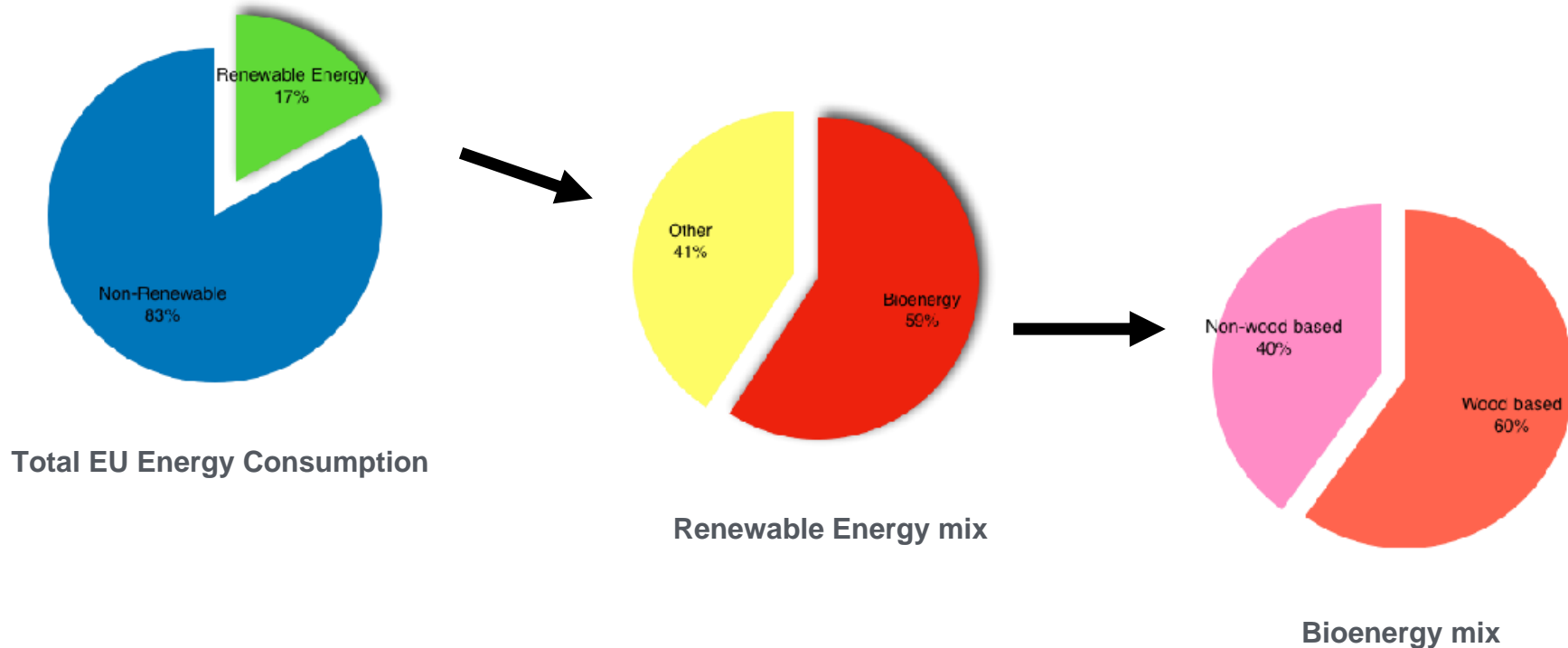
Luke Chamberlain, EU Policy Director, Partnership for Policy Integrity



EU Renewable Energy Directive (RED)

- EU's pivotal legislation to promote renewable energy and reduce emissions from energy production
- Long history of controversy over inclusion of burning wood for energy as 'renewable', given the immediate need to reduce emissions and carbon payback period of burning certain types of wood
- Despite this RED policy considers the burning of woody biomass → zero emissions
- Policy position has led to increase in use of burning wood for energy → increased pressure on forests
- **2020** EU Commission initiates review of RED including how it treats woody biomass
- **2020–2022** NGOs call for woody biomass to no longer be eligible for RED targets and subsidies

How much of EU “renewable” energy comes from woody biomass?



Question: Is this a good thing?

Status of EU Natura 2000 Forests

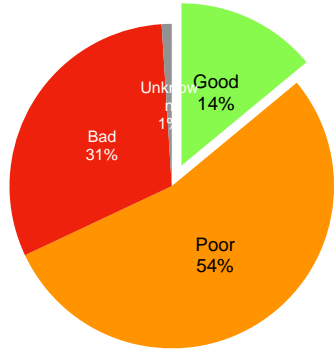
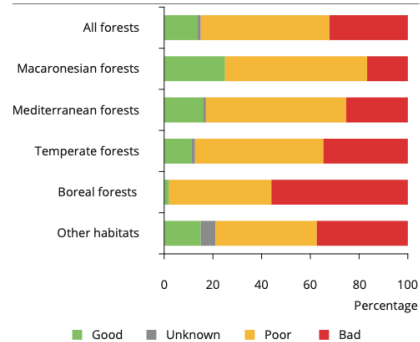


Figure 6.13 Conservation status of forests by region

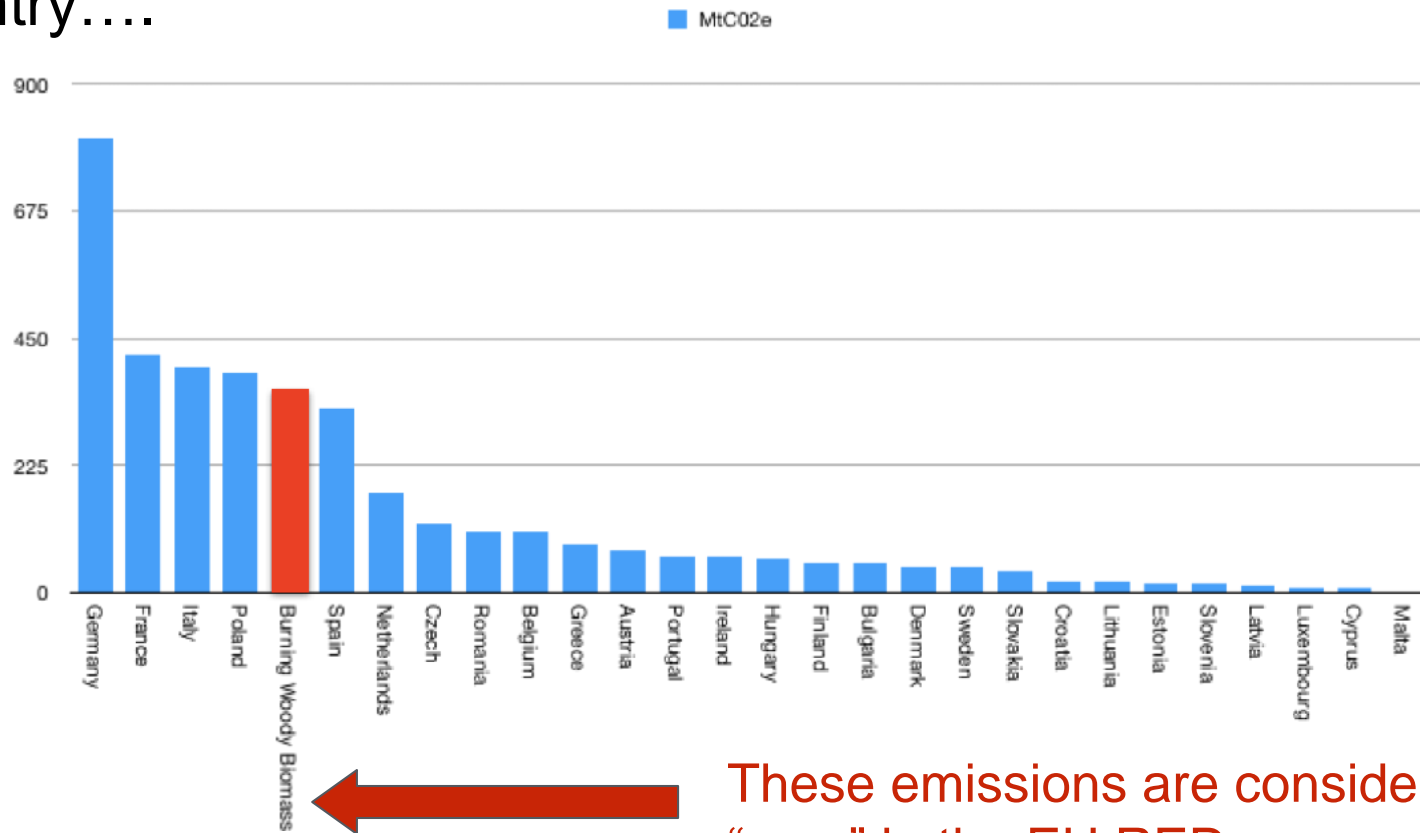


Source: Article 17 Member States' reports and EU assessments.



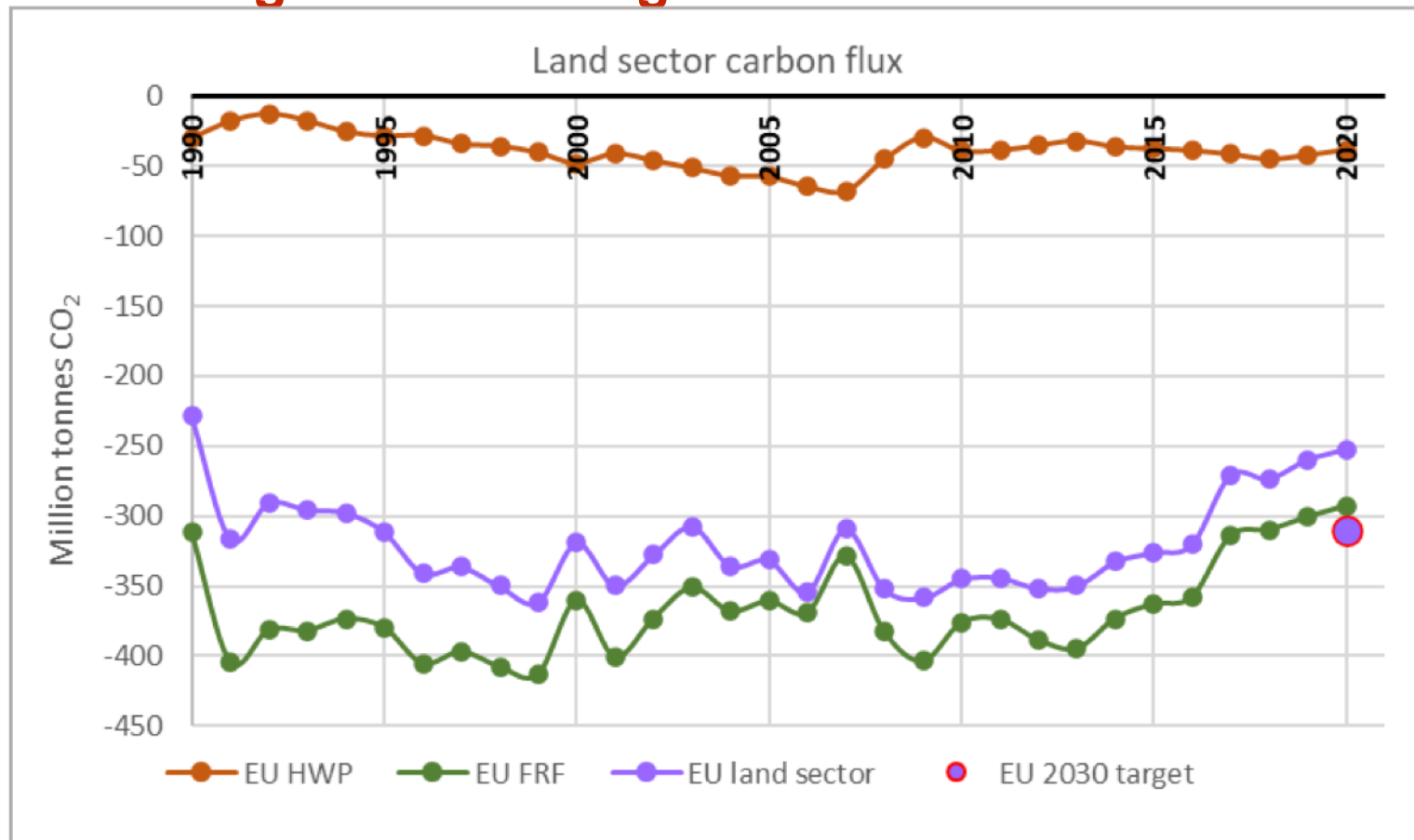
Answer: Not if we care about forests and the climate!

Why is this important? If burning woody biomass were an EU country....

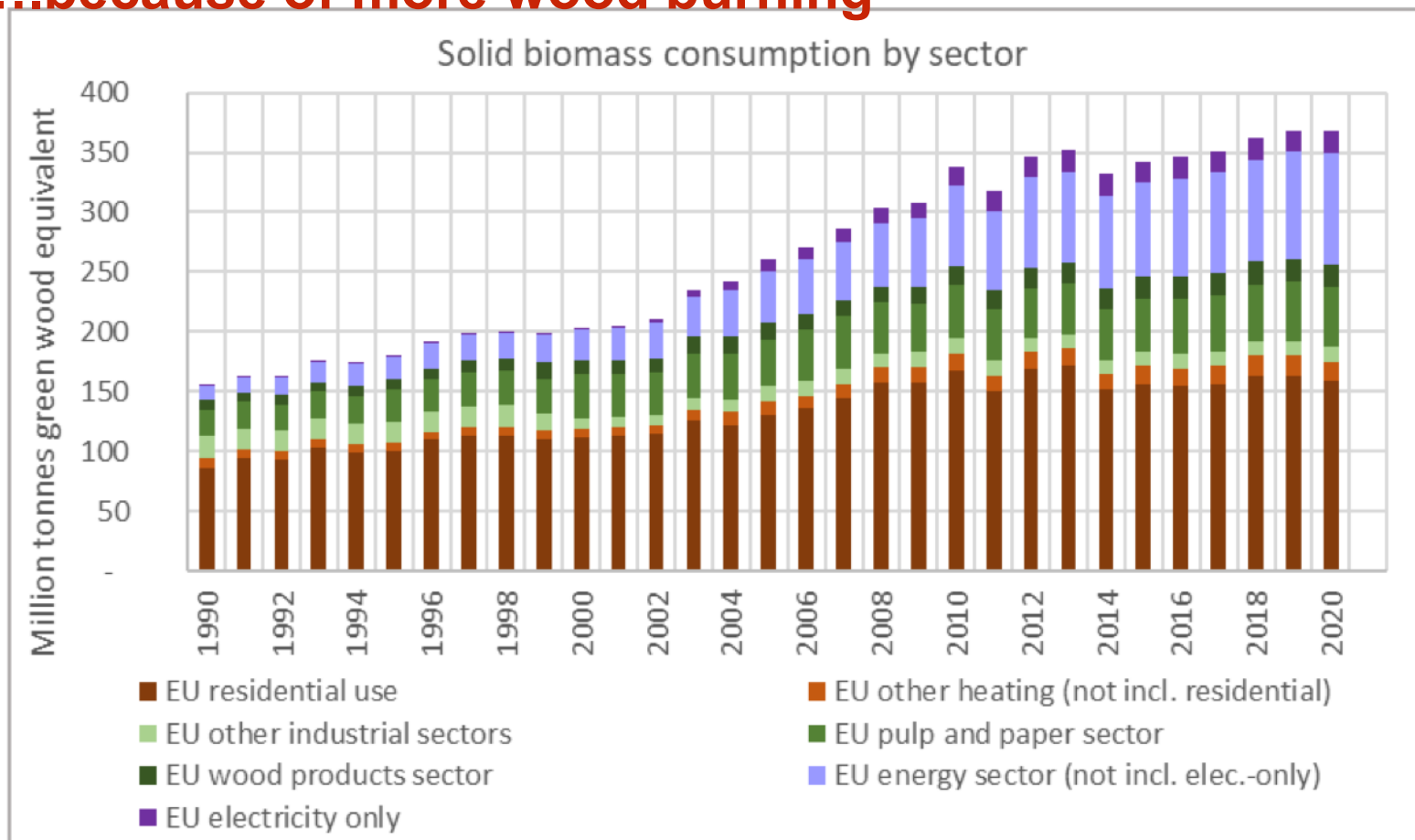


These emissions are considered
“zero” in the EU RED

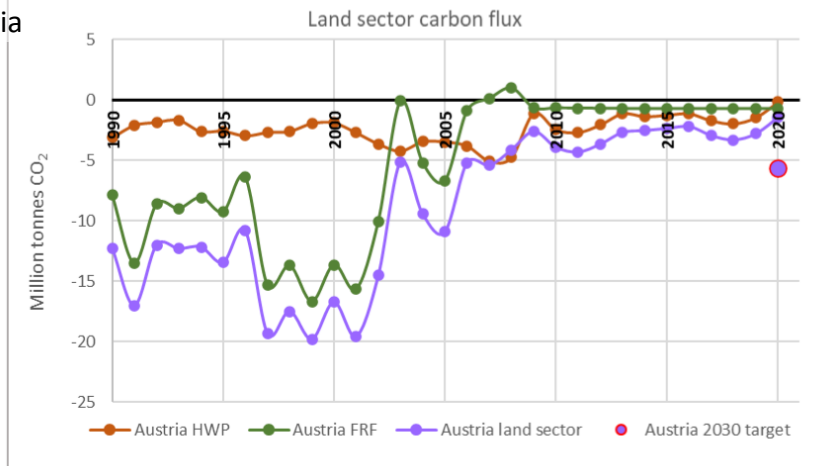
EU climate goals are being undermined.....



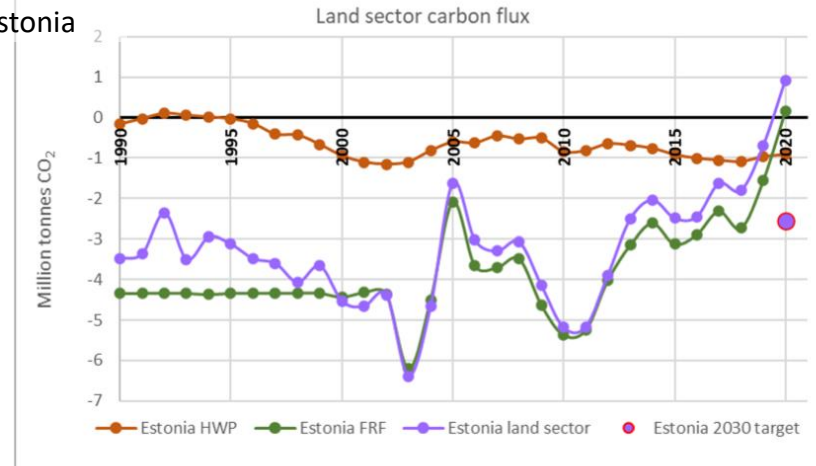
...because of more wood burning



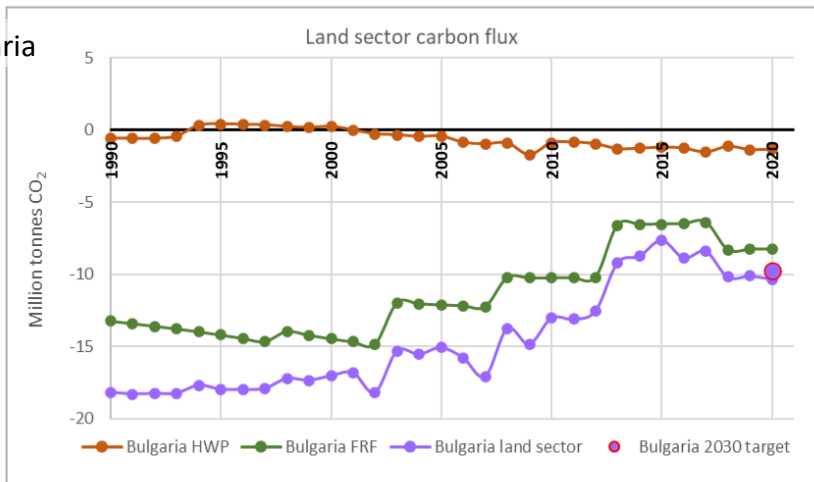
Austria



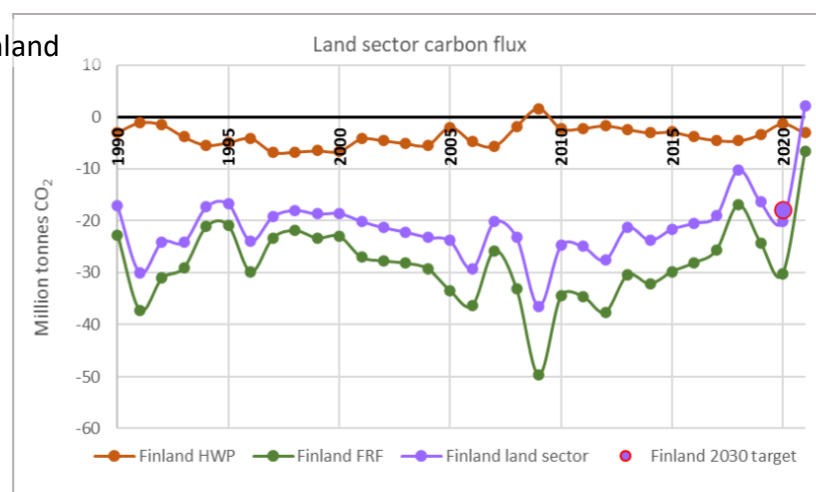
Estonia

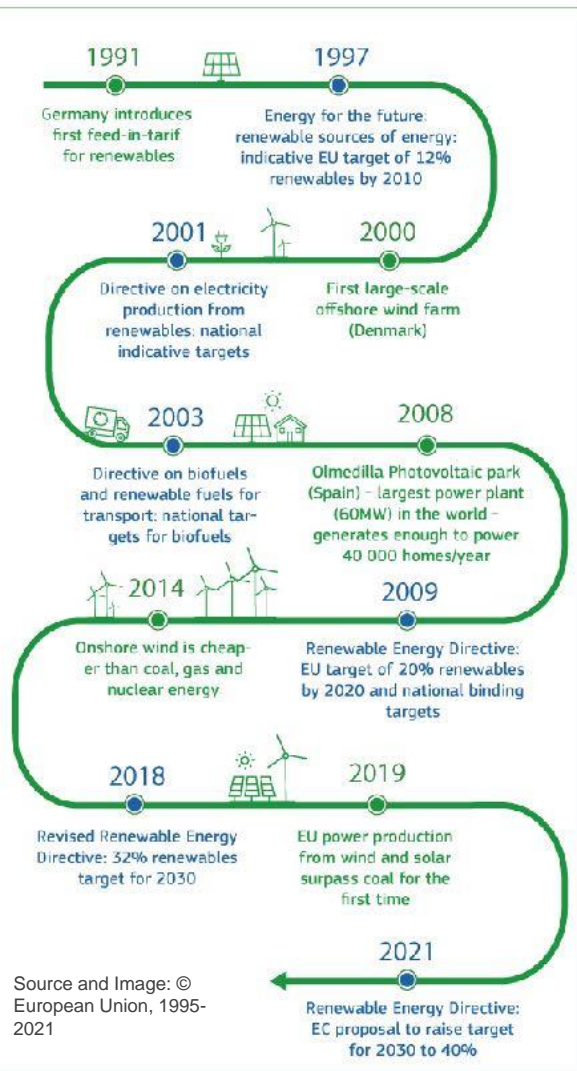


Bulgaria



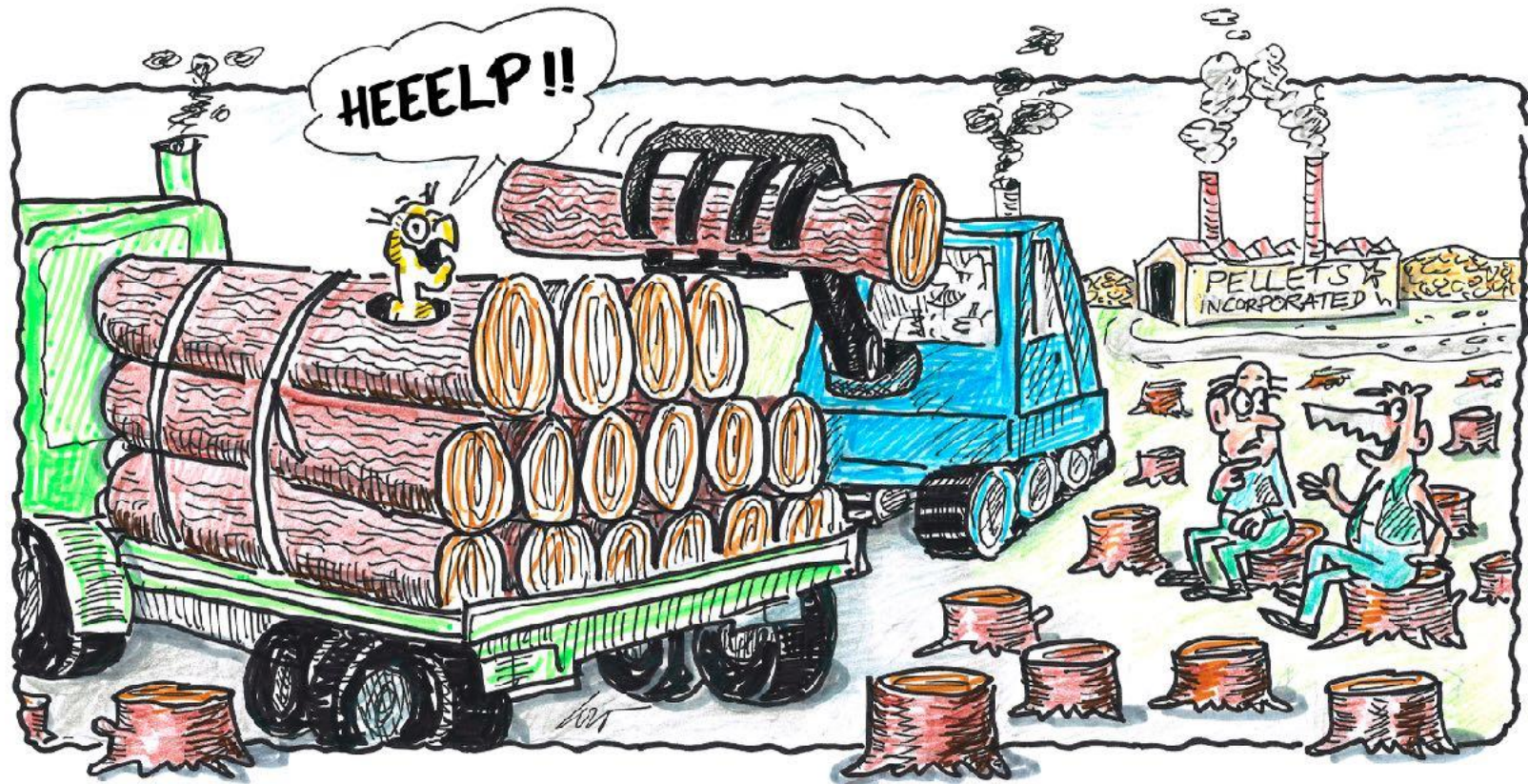
Finland





Increase in wood burning has been incentivised by the RED

- Since 1990, the EU has more than doubled the amount of biomass burned for energy – most of this increase has occurred since 2001, when the EU's first RED policy promoting biomass went into affect
- Financial Times (July 2021): *Growth over the past decade “has been tremendous”, says Thomas Meth, executive vice-president of sales and marketing at Enviva, a major US-based pellet producer. The EU's 2009 move was “certainly one of the catalysts”.*
- CM Biomass (one of world's largest pellet manufacturers and traders): *“CM Biomass Partners was founded in 2009 as a response to the European Union's increased demand for sustainable green energy solutions and the EU RED 2020 targets.”*



“HEY, YOU REALLY CALL THIS WOOD WASTE?!”

“DON’T WORRY, AFTER THE WOOD CHIPPER IT WILL BE WASTE!”



FUTURE ON FIRE

**HOW THE EU BURNS TREES IN THE NAME OF
RENEWABLE ENERGY**

Germany



Austria







Belgium



Romania



Hungary



Slovakia

France



Slovakia



Lithuania



Croatia



Portugal



United States



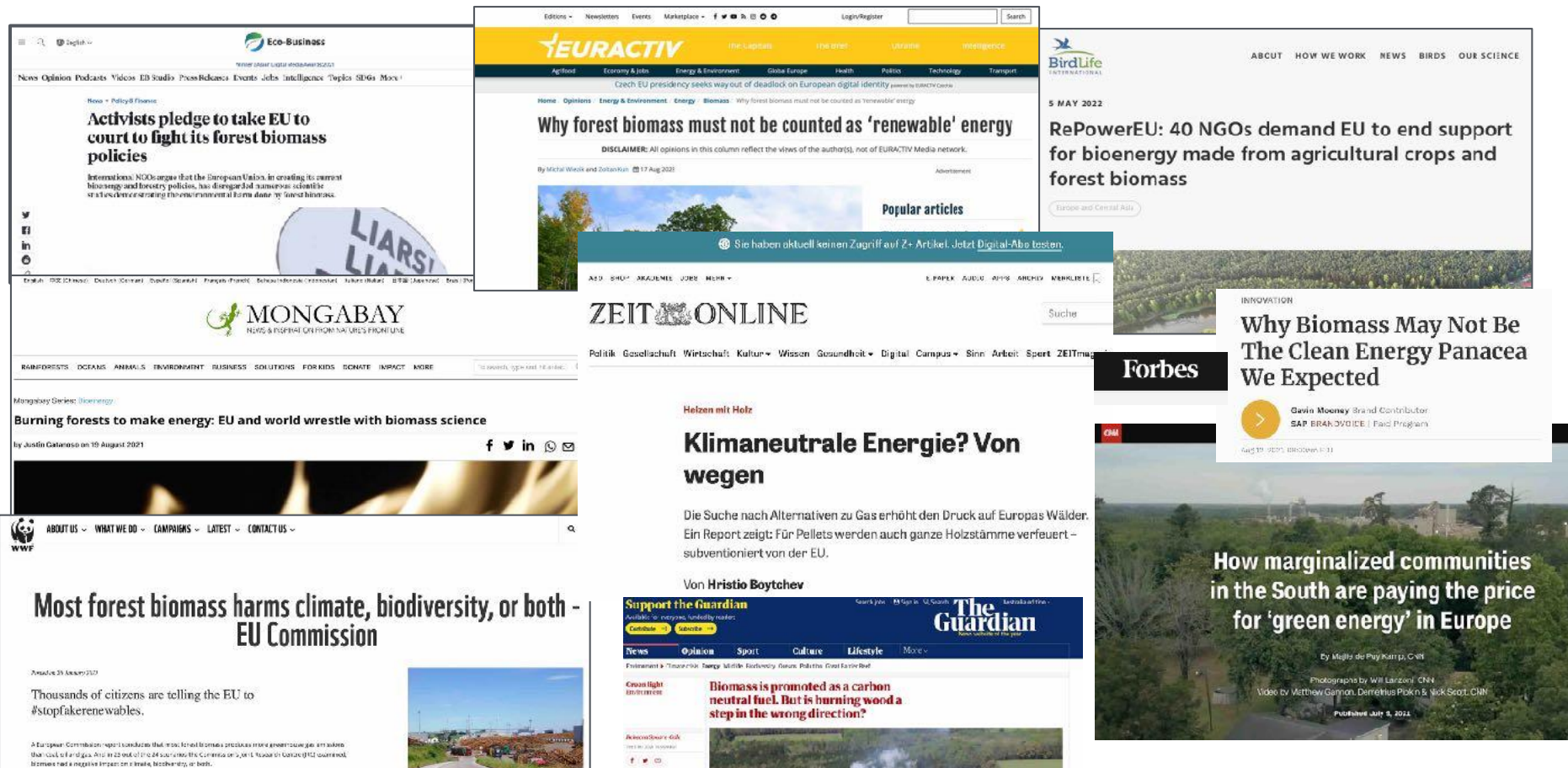
British Columbia, Canada



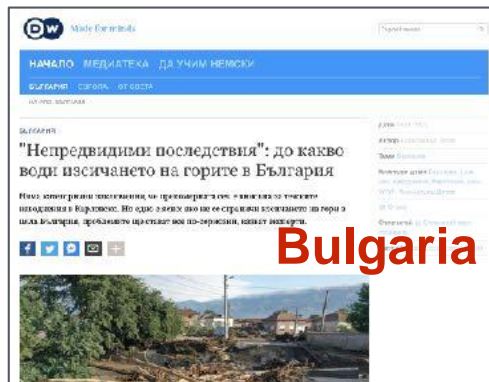
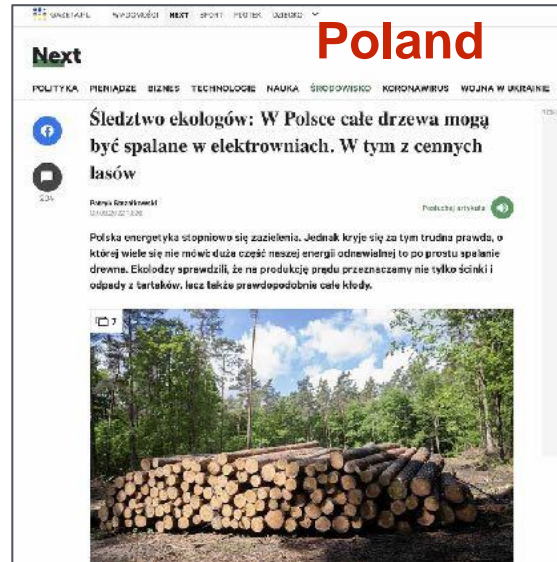
And forests are paying the price



The increasing controversy of burning trees for energy



The increasing controversy of burning trees for energy



The increasing controversy of burning trees for energy



Brussels



Germany



International



Austria



International





130+ NGOs
and over 350,000 individuals have joined
policy statements to end the use of forest
biomass for energy production



**Was Österreichs Gaslieferant
jetzt noch alles liefert.**

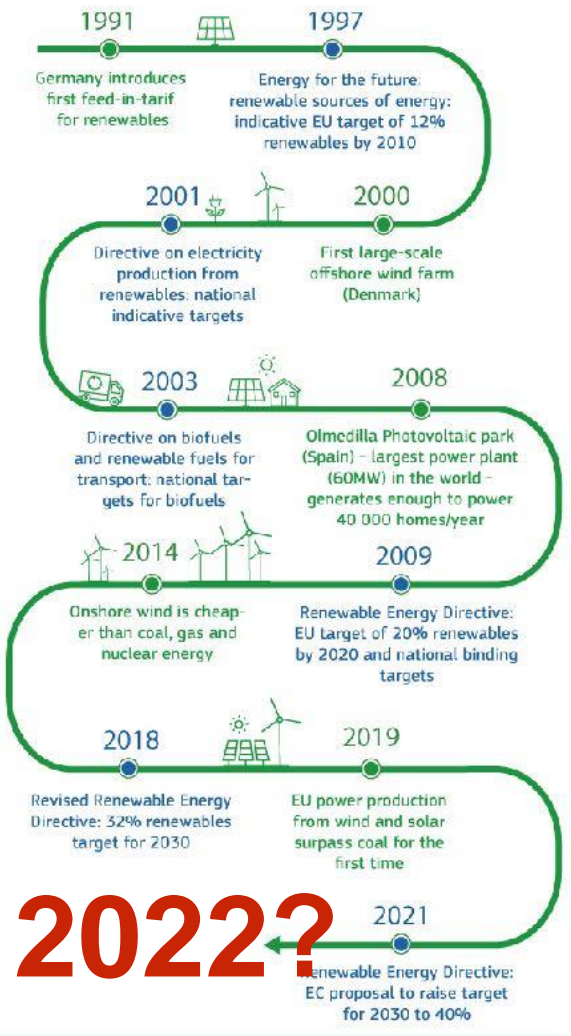


**Energie aus Holz liefert eine
nachhaltige Energieversorgung
ohne Abhängigkeit.**

Ukraine tragedy adds fuel to the fire

- War in the Ukraine has put energy at the centre of EU politics
- Bioenergy industry is insensitively using this tragedy to burn more wood
- Replacing only about 10% of Russian fossil fuel imports to EU would require increasing wood burning by about 60%
- This would need to come from massive increase in logging already threatened forest ecosystems

**Image source: Social media post from
Austrian Biomass Verband**



What was discussed in the RED revision?

- **Climate, Health and Biodiversity impacts** – the big 3 and their associated costs from burning wood
- **How something is burned vs. What is burned** – For the first time, the RED revision focus evolved from “how” something is burned (sustainability criteria) to “what” is burned (starting with Primary Woody Biomass – wood taken directly from the forest). This is a critical development b/c burning wood is worse than fossil fuels per unit energy output, no matter “how” you burn it
- **Subsidies and targets** – What should and should not receive support or contribute to RED targets
- **Cascading Principle of Wood Use** – burning should be a last, not first resort
- **Alternatives** – If not woody biomass, then what?

Joint NGO Infographic: For Members of Parliament and decision makers

EU MUST STOP INCENTIVISING BURNING TREES FOR ENERGY

Climate scientists say to have any hope of fighting climate change, we must dramatically increase the amount of CO₂ taken up and stored in forests. So why is the EU burning forests for fuel?

The EU pays billions in subsidies for burning trees in power plants under the Renewable Energy Directive (RED) and calls it renewable, like solar and wind.

But burning wood for energy is dirty and destructive and harms our climate and our forests.

MEPs should end € billions in renewable energy subsidies for burning forest biomass.

BIOMASS ENERGY IS EXPENSIVE:¹

Wasting at least

€40 BN 

of public money

BURNING FOREST
BIOMASS PRODUCES
MORE CO₂
THAN BURNING
FOSSIL FUELS²



**BURNING FOREST
BIOMASS INCREASES
CO₂ EMISSIONS**

**ENERGY FROM FOREST BIOMASS
IS NOT RENEWABLE**

CO₂ from burning forest biomass for energy is released quickly and trees re-grow too slowly to meet climate goals³

BURNING FORESTS DOESN'T IMPROVE EU ENERGY SECURITY

Incentives to burn forest biomass under the RED have

INCREASED LOGGING

across Europe leading to more degradation of forests and nature.⁴



To replace

10%

of Russian
fossil fuel imports

...would require burning

60%

more EU
wood⁵

EU CITIZENS WANT TO PROTECT FORESTS AND THEIR HEALTH:



of citizens
interviewed
agreed we
should protect
nature⁶



of EU particle
pollution is from
burning wood
and other
biomass⁷

WHAT IS PRIMARY WOODY BIOMASS?



Primary woody biomass ("forest" biomass), is unprocessed wood, from trees that have just been cut.



About half of the harvested wood burned in the EU comes directly from forests, contributing to forest destruction.⁸

The Industry Committee's report on the RED proposes to stop subsidies and incentives for using most primary woody biomass.



LET'S SAVE OUR FORESTS FOR OUR FUTURE



STOP paying billions to burn our forests for energy; 



STOP calling this 'renewable'



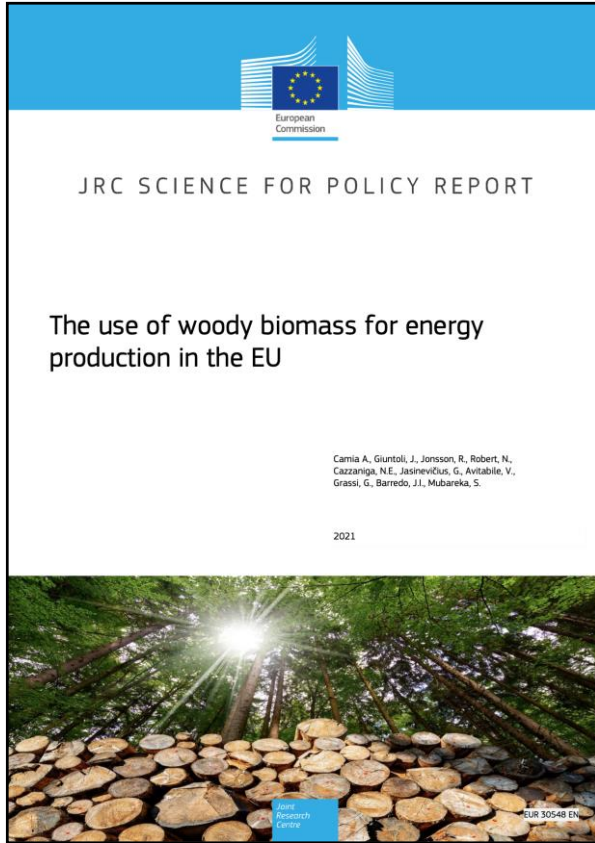
STOP incentives for burning primary woody biomass.



The EU can achieve its net zero targets without subsidising this dirty energy

**WE NEED TO GROW MORE FORESTS, NOT BURN THEM FOR ENERGY.
MEPS MUST TAKE FOREST BIOMASS OUT OF THE
RENEWABLE ENERGY DIRECTIVE.**

2021 Joint Research Centre biomass study

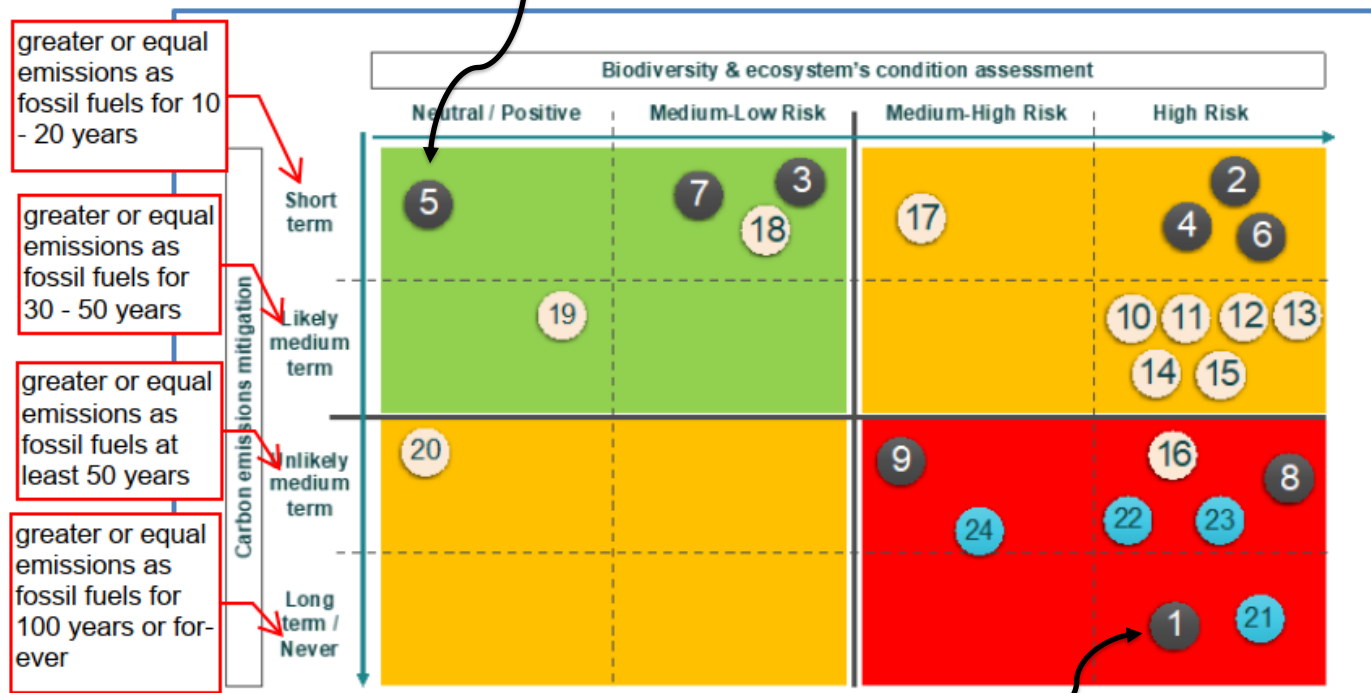


- Out of 24 scenarios of sourcing forest biomass, only 1 likely to have short-term emissions benefit compared to fossil fuels without harming biodiversity (and even then, emissions could be worse for up to 20 years)
- Burning wood emits 350–380 MtCO₂e/year
- About 120 million tonnes of wood annually in the EU is of “unknown origin” and can be attributed to energy sector. Raised as a ‘red flag’ concern.
- *This last point raises serious questions of whether much of wood used for energy is legally sourced*

Yet, the biomass industry welcomed this report as a green light for burning forest biomass.

Majority of forest biomass deemed “high risk” for forest and climate

Only one scenario of 24 (limited removal of fine woody debris) shows low biodiversity and carbon impacts

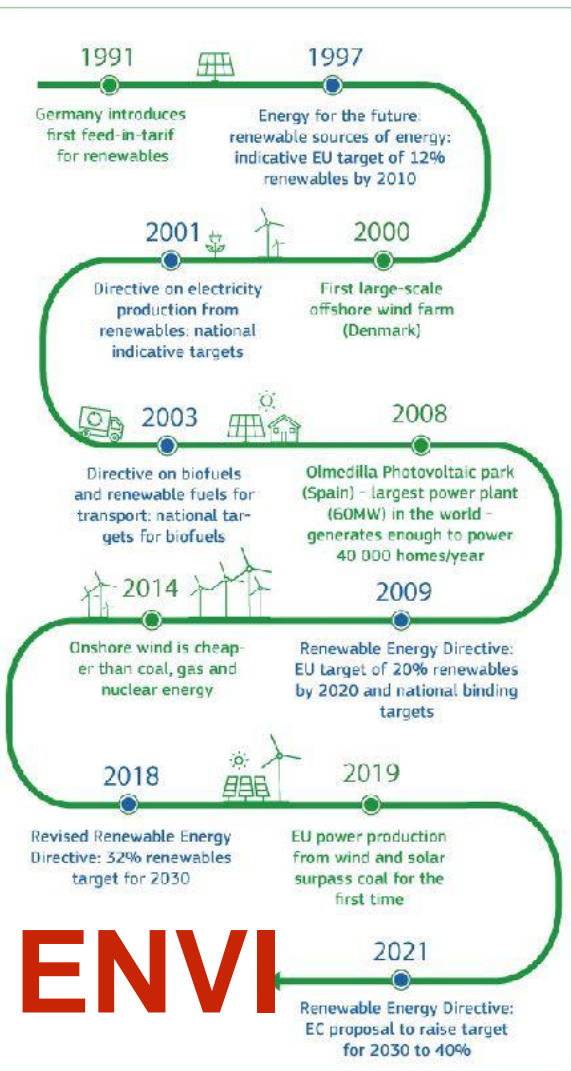


Fine woody debris - climate impacts for up to 2 decades



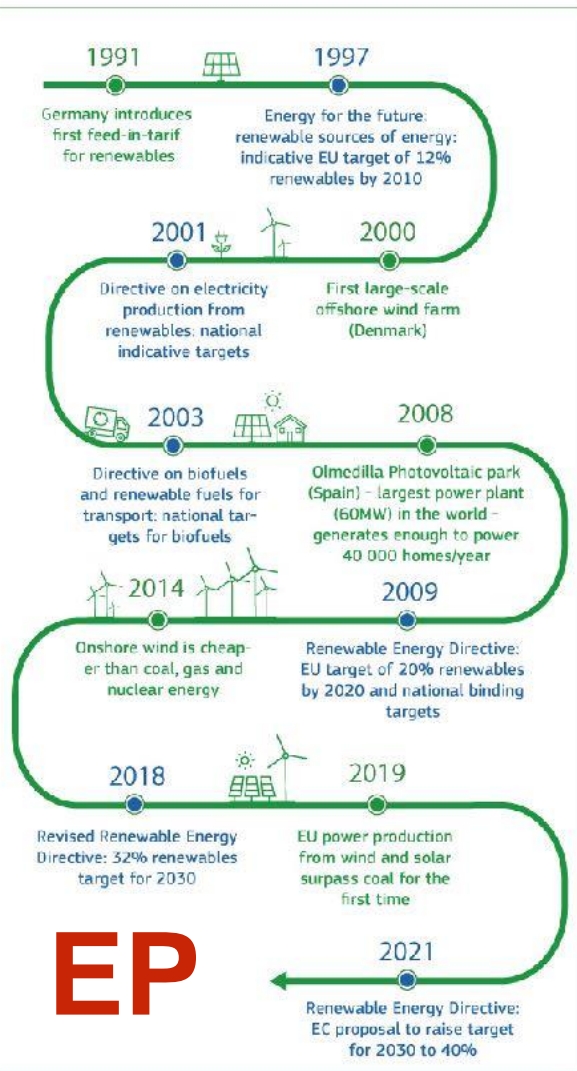
Coarse woody debris - “lose/lose” for climate and biodiversity





Environment Committee Vote, May 2022

- Committees are powerful institutions of the EU Parliament, whose role is to prepare legislative positions based on expert advice, consultation and robust deliberation and debate
- ENVI committee is largest of all EU committees
- For the first time ever, it defined Primary Woody Biomass (wood taken directly from forest) in the RED, therefore addressing “what” is being burned, not just “how” (eg. sustainability criteria)
- Voted to exclude PWB from RED targets, with some loopholes
- Voted to exclude PWB from subsidy eligibility
- Cascading principle of wood use – burning must be a last resort – to be enacted



EU Parliament (EP) Vote, September 2022

- **PWB** – Definition of Primary Woody Biomass maintained, but significant loopholes (forests affected by pests and natural events, fire prevention)
- **Subsidies** – Voted to exclude PWB from being eligible for subsidies (with exceptions like above)
- **Targets** – Voted for a cap and phase down, but vague timeline which won't meet 2030 climate target needs and expressed as share, not absolute value
- **Cascading principle of wood use** maintained but implementation through to be enforced
- **Other Exclusions** – high biodiversity areas (old-growth forest) and land with high carbon stock (wetlands)

For the first time, the EU Parliament acknowledged there is a big problem with burning woody biomass

EIA's 2022 biomass investigations in Eastern Europe

- EIA's [new investigation](#) in Eastern Europe documents the burning of whole logs from protected areas for biomass and pellets in four countries in the region: Romania, Bulgaria, Poland and Slovakia
- This backs up findings from the EU's Joint Research Centre (JRC) that burning whole logs for energy is unsustainable, bad for the climate, and bad for biodiversity
- Illegal logging is widespread in Eastern Europe
- Investigations revealed widespread industry misrepresentation of wood sources



Slovakia

- Investigation focused on biomass plants in eastern Slovakia's HCV forests
- One plant – TEHO, Bardejov – received 6 million euros in subsidies in 2020
- Investigation linked TEHO – which was built on commitment to burn timber industry waste (sawdust etc) – to burning very large logs from Natura 2000 sites in eastern Slovakia
- Recently European Court of Justice [found](#) Slovakia is failing to meet lawful obligations as required in Natura 2000 sites



Poland

- Poland doesn't publish information on destination of wood cut from forests
- Investigation in Natura 2000 forests in southeast Poland, home to some of country's last intact, old growth forests (Lutowiska Forest District)
- Poland's largest biomass burner – Polianec biomass plant – sources from a company that sources wood from these intact forests.
- Polianec received 68 million in subsidies for burning wood in 2021



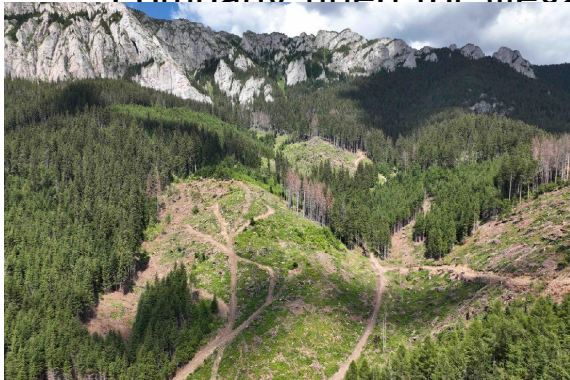
Bulgaria

- Investigation (ongoing) in Natura 2000 forests
- Initial focus on western Bulgaria – Natura 2000 sites classified as old growth forests logged and transported directly to pellet plant
- Bulgarian government directly subsidising the installation of pellet stoves and companies receiving direct subsidies to transport wood
- Unknown whether proper Natura 2000 env assessments have occurred
- WWF recently reported up to $\frac{1}{3}$ of all logging in Bulgaria is illegal
- Recent reports of links between Bulgarian pellet market and voter fraud



Romania

- Evidence of transports of stemwood (“whole logs”) direct from logging in Natura 2000 sites, National Parks and Natural Parks, to pellet makers
- Romania allows commercial logging in protected areas, but environmental impact assessments are required
- Romania is subject of EU Commission infringement since 2020 for failing to properly carry out environmental assessments as required under EU law
- EIA’s partner submitted a formal legal complaint to Romania’s Forest Guard. Pellet company fined for illegal wood intake



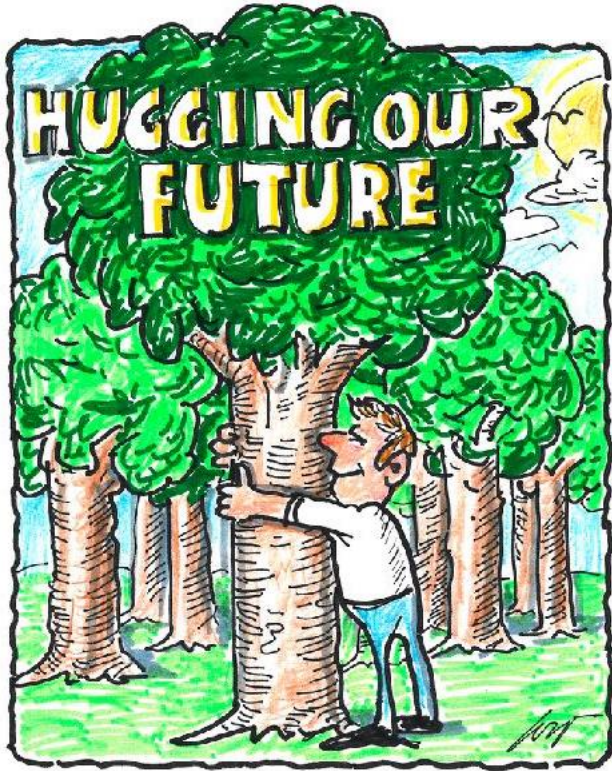
Europe Is Sacrificing Its Ancient Forests for Energy

Governments bet billions on burning timber for green power. The Times went deep into one of the continent's oldest woodlands to track the hidden cost.

By Sarah Hurtes and Weiyl Cai
Photographs by Andreea Campeanu September 7, 2022



Industry statements against wood burning



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- Stora Enso: *“We are under huge pressure, and it breaks my heart really to see biomass going to energy usage or subsidies going to that region because that breaks all the cascading principles”*
- European Panel Association: *“applauds that the Parliament resolution clearly recognises and underlines the need for alignment of bioenergy policies with the cascading principle of biomass...”*
- Polish Wood Manufacturers: *“We believe that it is wasteful to use for energy purposes any kind of wood fibre that can be used as a raw material for further processing in industry. All the more reason why such raw material should not be subsidised.”*
- Portuguese Furniture Industry: *“...when wood is burned it cannot be reused or contribute to the decarbonization of society...”*

Outlook

- Final RED Trilogue negotiations scheduled for December
- The 2022 EU Parliament vote turned the burning of woody biomass from an emerging issue into a serious problem that needs to be solved
- For the first time, the breaks have been put on burning woody biomass for energy at an EU level
- Other industries becoming more worried about resource availability and market distortions from continued support for burning wood for energy
- Further investigations by NGOs will bring even great scrutiny to the sourcing of woody biomass for energy. So too, will companies in the supply chains.
- NGOs continue to call for all forms of combustion to no longer contribute to RED targets, in line with climate commitments - time frame of wood burning carbon recovery overshoots climate targets
- Changes to RED signal increased risk to financial investment in wood burning

Choosing a true Renewable Energy future?



Woody biomass

or



**True low emissions
technologies**

