EU BIOENERGY POLICY: DEBUNKING THE MYTHS ON FOREST BIOMASS

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INTRODUCTION

Bioenergy has a role to play in tackling climate change. But only if it provides significant and rapid cuts in emissions compared to fossil fuels. And that depends mainly on what you're burning.

Unfortunately, when it comes to wood, EU rules treat pretty much everything equally, from large tree trunks to sawdust. Even though the climate impacts are radically different. So more and more trees are being burnt for energy - in the name of climate action.

But there is hope in sight. In the negotiations on the Renewable Energy Directive, the European Parliament has called for a limit on the amount of 'primary woody biomass' (meaning tree trunks, stumps and other wood taken straight from the forest) that can be counted towards renewable energy targets. This would at least limit the potential future damage that could be caused by EU bioenergy policies.

Unfortunately, the forest biomass industry is fighting tooth and nail to stop it, and prevent any meaningful restrictions on what they can burn. Here are some of their most common arguments, with answers.

MYTH 1. BURNING WOOD IS BETTER THAN FOSSIL FUELS BECAUSE IT'S RENEWABLE

Wood is renewable, but not necessarily low carbon. In fact, as hundreds of scientists have warned, burning trees (as opposed to waste from sawmills or paper mills) can increase emissions for decades or centuries compared to fossil fuels. The European Commission's own scientists have made clear that even burning 'fine woody debris' (for example small branches) can increase emissions for as long as twenty years - time we don't have if we are to stop runaway climate change

This is for various reasons, including that:

- Burning wood creates more emissions than fossil fuels (for the same amount of useful energy);
- It takes a long time for trees to grow back, and recapture carbon from the atmosphere; and
- Even dead trees would take a long time to rot (and release carbon) if they were left in the forest.

But just to be clear, this isn't an argument for burning fossil fuels. On the contrary, it's an argument for investing in energy efficiency and in low carbon alternatives such as wind and solar power and heat pumps.

MYTH 2. WE DON'T BURN FORESTS FOR ENERGY, WE ONLY BURN WASTES AND RESIDUES

Are the logs in these photos really just 'waste and residues'? Even if they have no commercial value - for example because they're bent, a bit rotten, or simply too big for the sawmill - they would store carbon for decades if left in the forest. Burning them for energy is counterproductive in climate terms, not to mention bad for biodiversity.

MYTH 3. WOOD WOULD ROT ANYWAY IF WE LEFT IT IN THE FOREST RELEASING CO2, SO IT'S FINE TO BURN IT

Wood can take decades to rot, particularly larger things like tree trunks, stumps and big branches (materials that European Commission scientists at the Joint Research Center (JRC) call 'coarse woody debris') and some of the carbon stays in the soil long term. Whereas burning such materials releases the carbon into the atmosphere straight away. That's why the JRC says that burning coarse woody debris would only provide carbon benefits compared to fossil fuels in the long term, if ever. Leaving dead wood in the forest is also crucial for biodiversity - we need more dead wood not less.

MYTH 4. WE CAN'T LEAVE DEAD WOOD IN THE FOREST BECAUSE OF FOREST FIRES AND BARK BEETLE INFESTATION

And yet our few remaining ancient and old growth forests contain large amounts of dead wood - one of the reasons they are rich in carbon and biodiversity. And even if there are cases where dead wood needs for some reason to be removed, that should be treated as an exception - it can't be used as justification for any and all dead wood to be burnt for energy. Indeed EU bioenergy policy is not the appropriate tool for addressing such issues, which should be done through forestry policies.

MYTH 5. WE HAVE TO HARVEST TREES AND PLANT NEW ONES SO FORESTS CARRY ON ABSORBING CARBON

While it is true that the rate at which a forest as a whole absorbs carbon from the atmosphere decreases over time, that is because it's storing an increasingly large amount

of carbon. That's a good thing, not a reason to harvest it on climate grounds, even if some of the wood harvested ends up in long-lived products. As the European Commission points out: "recent scientific studies [indicate that] until 2050, the potential additional benefits from harvested wood products and material substitution are unlikely to compensate for the reduction of the net forest sink associated with the increased harvesting".

MYTH 6. THE AMOUNT OF CARBON IN EU IN FORESTS IS INCREASING SO BURNING BIOMASS IS FINE

Overall, EU forests absorb more carbon each year from the atmosphere than is lost from harvesting. But that doesn't mean that burning trees for energy makes sense in climate terms. On the contrary, and as explained above, doing so is likely to increase emissions for decades or centuries compared to fossil fuels, and forests would be absorbing even more carbon if harvesting rates were reduced. Dramatic recent increases in forest harvesting, partly to meet rising demand for forest biomass, could if continued reduce the capacity of EU forests to absorb CO2 in future.

MYTH 7. WE NEED TO BURN WOOD BECAUSE OF THE ENERGY CRISIS - NOT BAN IT!

The EU is not talking about banning the use of wood for energy. People will continue to be able to burn firewood as they always have. Indeed many households have had to burn more wood in recent months because of the rise in fossil fuel prices, particularly those in fuel poverty. The question in these negotiations is what types of wood should specifically be incentivised by the EU Renewable Energy Directive - not for this winter or the next but for the next decade and beyond.

MYTH 8. THE RENEWABLE ENERGY DIRECTIVE ALREADY CONTAINS ROBUST SUSTAINABILITY CRITERIA FOR FOREST BIOMASS. AND THERE ARE NEW ONES PROPOSED ON THE 'CASCADING USE' PRINCIPLE.

The existing sustainability criteria - though extremely complex and administratively burdensome for businesses - are largely meaningless. For example, the criteria relating to greenhouse gas savings don't count the emissions from actually burning the biomass. And while sustainable forest management is very important for biodiversity reasons, what matters from a climate perspective is what you're burning, not how sustainably it was produced. As for the cascading use principle, i.e. prioritising the highest value added uses of wood so that it is used, re-used and recycled as a material wherever possible, that's essentially about commercial decisions. But as explained above, even if trees aren't suitable for products, and have no market value, that doesn't mean that burning them for energy makes any sense in climate terms.

MYTH 9. BIOMASS EMISSIONS ARE COUNTED IN THE LAND USE SECTOR, UNDER THE LULUCF REGULATION, SO THAT'S GOOD ENOUGH

The recently agreed changes to the accounting rules in the EU's LULUCF Regulation, which will come into force from 2026 onwards, represent a significant improvement on the very weak system in place at present. But they won't solve the bioenergy problem because they won't provide strong enough incentives - either at national level or for individual operators - not to burn trees for energy, including trees imported from outside the EU. The basic problems with relying on LULUCF accounting as a solution to the bioenergy problem were raised by scientists the last time the Renewable Energy Directive was being revised.

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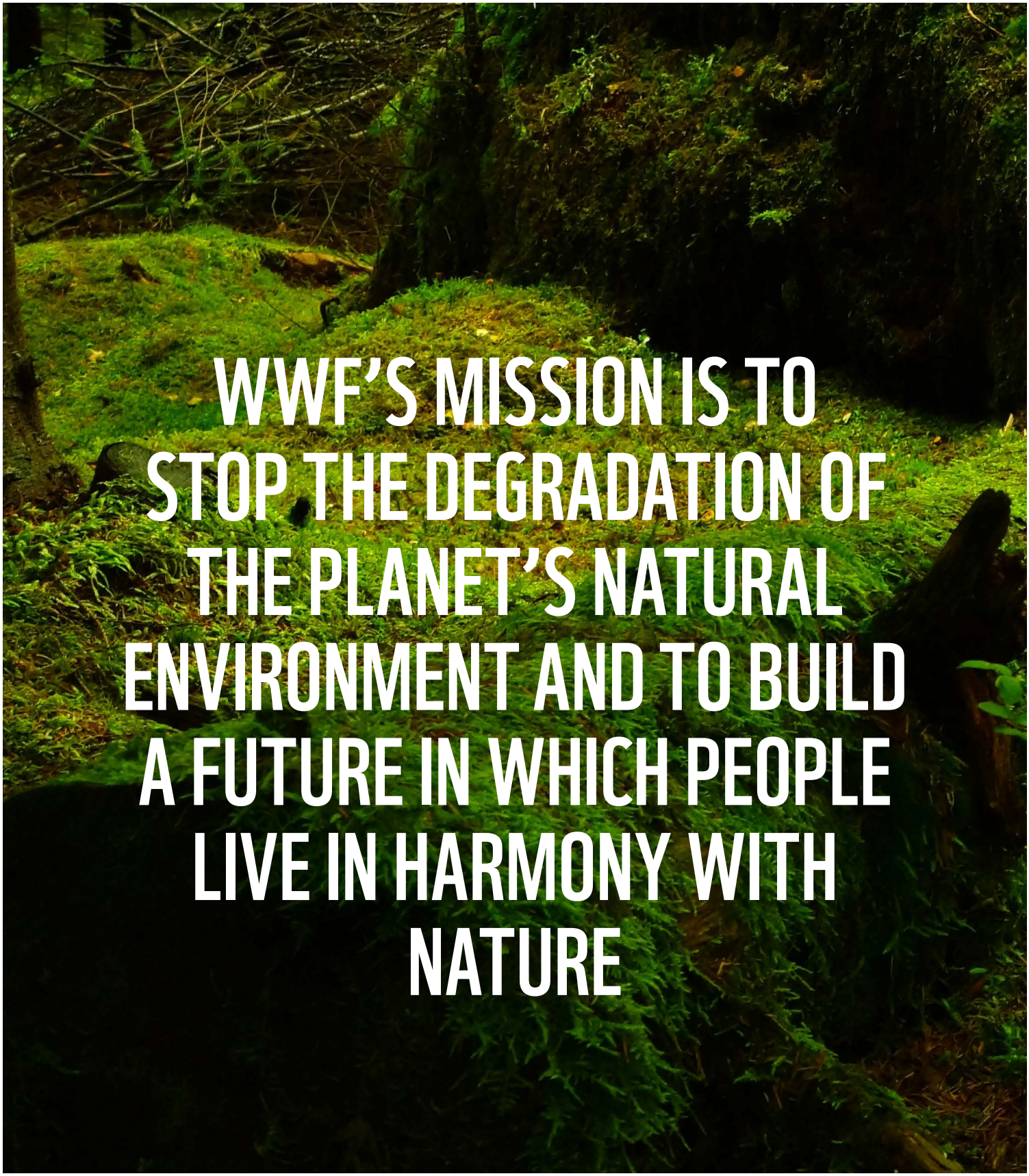

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