

IN THE COURT OF JUSTICE OF THE EUROPEAN UNION

GENERAL COURT

BETWEEN:-

PETER SABO
(ON BEHALF OF WOLF FOREST PROTECTION MOVEMENT)
& Others

Applicants

and

(1) THE EUROPEAN PARLIAMENT
(2) THE EUROPEAN COUNCIL

Defendants

APPLICATION FOR ANNULMENT
PURSUANT TO ARTICLE 263 TFEU

INTRODUCTION AND OVERVIEW

1. The applicants seek annulment of the inclusion of “forest biomass” – essentially trees, including, stems, stumps, branches and bark – as a renewable fuel within the Renewable Energy Directive (recast) 2018 (“the Directive”). As explained below, that inclusion of forest biomass as a potential fuel violates Article 191 of the Treaty on the Functioning of the European Union (“TFEU”) and a number of the applicants’ rights under the Charter of Fundamental Rights.
2. The Directive binds the European Union (“EU”) to achieve a target of at least 32% of its generated energy from renewable sources by 2030, to be made up of individual targets for Member States. That target is a laudable and essential goal for the EU. But the inclusion of forest biomass as a source of renewable energy fatally undermines the goals of the Directive as well as failing to meet the overwhelming scientific consensus for a renewable energy source. Put simply: burning wood for energy puts more carbon in the atmosphere than burning fossil fuels, including coal; and the vast increase in industrial logging which it necessitates destroys the very forest systems that have absorbed carbon from the atmosphere.

3. The applicants each have suffered (and will continue to suffer) particular harms from biomass energy production under the Directive and its predecessor, the Renewable Energy Directive 2009. Those include: the destruction of cultural heritage (in sacred sites in Estonia and the pristine ancient forests of Romania and Slovakia); harms to health, economic well-being and civic environment from the conversion of energy plants from coal to wood fuel and the co-firing of wood with peat (at the Gardanne plant in France and sites in Ireland); and damage to property by logging activities to produce wood chips and wood pellets as biomass fuel (in North Carolina, USA).
4. The Applicants seek an annulment of the Directive's provisions relating to forest biomass, leaving in force the other parts of the Directive including the renewable energy target (as allowed for by Article 264 TFEU).

THE PARTIES

Applicants

- (i) (a) Peter Sabo and (b) WOLF Forest Protection Movement, [REDACTED] Slovakia
- (ii) Hasso Krull, of House of Groves Foundation, [REDACTED] Estonia
- (iii) 2Celsius, [REDACTED], Romania
- (iv) Bernard Auric (on behalf of Association de Lutte contre les Nuisances et la Pollution) of [REDACTED] France
- (v) Tony Lowes, of Friends of the Irish Environment, [REDACTED], Ireland
- (vi) Kent Roberson, [REDACTED] USA

The Applicants are represented by: (i) Rowan Smith, Anna Dews and Carol Day, Solicitors, of Leigh Day, Priory House, 25 St John's Lane, London, EC1M 4LB; (ii) David Wolfe Q.C., Barrister, of Matrix Chambers, Griffin Building, Gray's Inn, London, WC1R 5LN; and (iii) Peter Lockley and Ben Mitchell, Barristers, of 11 King's Bench Walk Chambers, Temple, London, EC4Y 7EQ.

The Applicants consent to be served by e-Curia.

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Defendants

The European Parliament
The European Council

FACTUAL BACKGROUND

Climate change poses a grave threat including to the EU

5. The EU recognizes that climate change is an overwhelming threat to ecosystems and the people who depend on them. Communications from the European Commission (EC) highlight the extreme urgency of avoiding the worst effects of climate change. Issued in 2018, Communication 773, ‘A Clean Planet For All,’¹ states:

“Climate change is a serious concern for Europeans. The current changes in our planet's climate are redrawing the world and magnifying the risks for instability in all forms. The last two decades included 18 of the warmest years on record. The trend is clear. Immediate and decisive climate action is essential.”

6. The EU recognises the Intergovernmental Panel on Climate Change (“IPCC”) as the definitive scientific body speaking on climate change, and has incorporated findings of recent IPCC reports into policymaking. EC Communication 773 extensively references the IPCC’s *Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways* (October 2018), to emphasise the importance of constraining temperature rise to no more than 1.5 degrees Celsius above pre-industrial levels.

Mitigation requires reducing GHG emissions and increasing carbon uptake

7. The IPCC has emphasized that, for climate stabilisation, greenhouse gas (“GHG”) emissions - dominated by carbon dioxide (CO₂) - need to be balanced by uptake of CO₂. Communication 773 recommends an EU policy goal of emissions neutrality by 2050:

“In order to limit temperature increase to 1.5°C, net-zero CO₂ emissions at global level needs to be achieved around 2050 and neutrality for all other greenhouse gases somewhat later in the century. At this point, any remaining greenhouse gas emissions in certain sectors need to be compensated for by absorption in other sectors, with a specific role for the land use sector, agriculture and forests... This would require the EU to achieve greenhouse gas emissions neutrality by 2050.”²

8. Achieving net zero emissions by 2050 means balancing carbon emissions with carbon sinks, which will require massive effort in both directions. The only carbon

¹ European Commission (2018). COM(2018) 773 final: A Clean Planet for All. Communication from the Commission to the European Parliament, the European Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank. Brussels. At https://ec.europa.eu/clima/sites/clima/files/docs/pages/com_2018_733_en.pdf

² *ibid.*

sinks currently under human control to any degree³ are natural systems, including agricultural soils and, especially, forests. Accordingly, many scientists are discussing ‘natural climate solutions,’⁴ especially restoring and expanding forests, as a means of increasing sequestration of atmospheric CO₂.

The importance of forests as carbon sinks

9. International agreements have long recognized the importance of natural carbon sinks. Article 1 of the 1992 United Nations Framework Convention on Climate Change (“UNFCCC”)⁵ (to which the EU is a signatory) states:

“All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall: [...]

(d) Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems;”

10. Article 5.2 of the Paris Agreement (agreed within the UNFCCC in 2015) also emphasises the role of forests and other terrestrial sinks for carbon. Its Article 5 urges signatories to protect and expand forests and to *“take action to implement and support [...] activities relating to reducing emissions from deforestation and forest degradation”*.

11. All scenarios for climate change stabilisation require increasing the carbon sink. Climate modelling shows clearly that the need for ‘negative emissions’ increases the longer action is delayed. Negative emissions, however, are difficult to achieve. The In-Depth Analysis supporting Communication 773 recognised that international commitments to mitigate climate change made under the Paris Agreement – the Nationally Determined Contributions (NDCs) – are currently insufficient to mitigate climate change, and must be strengthened to avoid unrealistic pressure for negative emissions later on:

“...achieving the NDCs would leave global emissions in 2030 above a level consistent with well below 2°C. They are broadly consistent with pathways resulting in 3°C warming by 2100, and, according to the IPCC8,

³ Some projections anticipate a need for development of bioenergy with carbon capture and storage (BECCS), by which plant growth can be used to capture CO₂ from the atmosphere that is then pumped belowground into geological storage. However, deployment of this unproven technology would entail disruption and expense and would not be assured of delivering net storage, given the energetic costs and associated emissions. See Field, C. B. and M. K.J. 2017. "Rightsizing carbon dioxide removal." *Science* 356(6339): 706-707.

⁴ Griscom, B. W., et al. 2017. "Natural climate solutions." *Proceedings of the National Academy of Sciences* 114(44): 11645-11650.

⁵ United Nations (1992). *United Nations Framework Convention on Climate Change*. United Nations, Geneva, Switzerland.

would not limit warming to 1.5°C even if supplemented by very challenging emissions reduction after 2030.

Acting to reduce global emissions as quickly as possible will place the world on a safer path and reduce the need for negative emissions technologies later on. A slower pace of emissions reduction by 2050 would require steeper reductions thereafter, including deployment of negative emissions technologies at even greater scale and faster.”⁶

12. The In-Depth Analysis emphasised that, although the EU has strong climate mitigation policies, much more aggressive action by 2050 is required:

“To be in line with the 1.5°C objective, significantly higher reductions are needed. Full technology pathways with efficient global action beyond 2020 may see EU GHG reductions, including emissions and absorptions of the land use sector, at around -91% to -96% below 1990 levels in 2050. Such scenarios rely heavily on net negative emissions later on in the century to remove actively CO₂ emissions from the atmosphere. If the aim is to reduce the need for large net negative emissions in the second half of the century, higher reductions earlier in the order of magnitude of -100% by 2050 need to be considered, achieving a net zero GHG economy by 2050. This would also be a precaution to avoid carbon lock-in.”⁷

Forests and harvested wood products are the EU’s sole carbon sinks

13. Article 4.1(a) of the UNFCCC requires countries to report GHG emissions annually using the accounting method set out by the IPCC. The Land Use, Land Use Change, and Forestry (“LULUCF”) section of such reports records the GHG uptake and emissions from forests and other land-uses. Net forest carbon uptake or loss is typically measured by 5-year national forest inventories as the difference in standing forest stocks between measurements. Net uptake of carbon (the forest carbon sink) is recorded as a negative number. LULUCF reporting includes carbon sequestered in harvested wood products (“HWP”) in the categories of sawnwood, wood panels, and paper. Figure 1 shows that the forest and HWP categories are the only net sinks for carbon that the EU has so far reported.⁸

⁶ European Commission (2018) In-Depth Analysis in Support of the Commission Communication COM(2018) 773. Available at

https://ec.europa.eu/clima/sites/clima/files/docs/pages/com_2018_733_analysis_in_support_en_0.pdf

⁷ ibid

⁸ Country-level GHG reporting data downloaded from http://di.unfccc.int/detailed_data_by_party

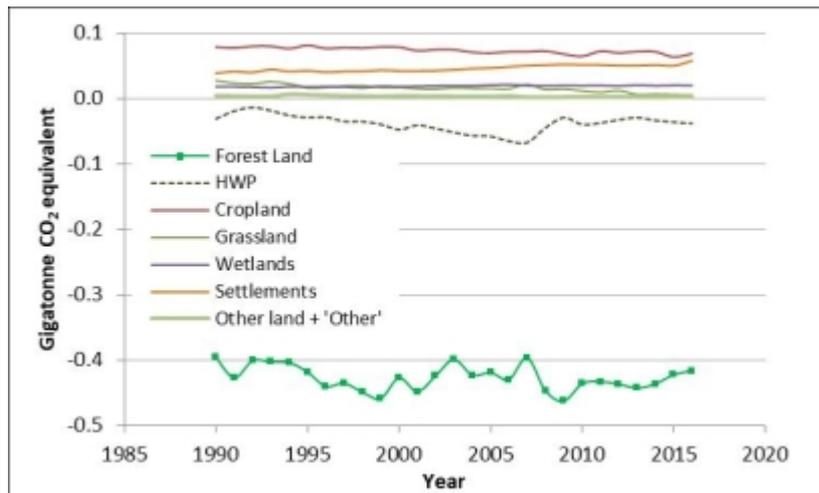


Figure 1. EU-28 data for the sub-categories that make up the LULUCF category in UNFCCC country-level GHG reporting. The sub-categories of forest land and HWP are the only ones that show net carbon sequestration (i.e. negative values).

14. Carbon uptake in forests and HWP balanced about only 7% of the EU's emissions in 2016. Figure 2 (with LULUCF portrayed as positive number to facilitate comparison) illustrates that achieving the EU's goal of balancing emissions and carbon uptake by 2050 will likely require both large emissions reductions and a large increase in carbon uptake in the land sector.

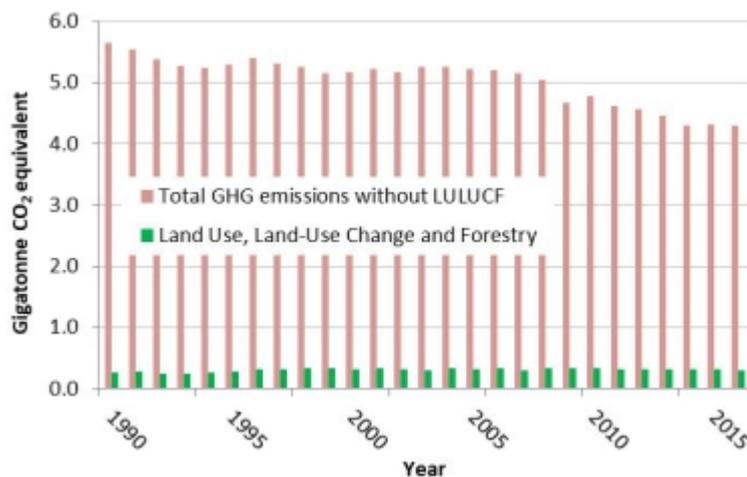


Figure 2. Economy-wide emissions (red) versus net carbon uptake in the EU's LULUCF sector (green), which is solely accomplished by carbon sequestered in forests and HWP. Carbon uptake in the LULUCF sector is portrayed with positive values for ease of comparison with emissions.⁹

⁹ Country-level GHG reporting data downloaded from http://di.unfccc.int/detailed_data_by_party

Biomass energy in the EU at present

15. Biomass can, in principle, be nearly any plant or animal-derived material. However, most biomass used for fuel is wood or a wood-derived waste product, an agricultural residue, or an energy crop. Eurostat data show that the use of biomass for energy increased significantly from 1990 to 2016 (Figure 3). In 2016, total bioenergy (solid biomass, liquid biofuels, biogas, biogenic waste and charcoal) constituted almost 65% of the energy inputs in the EU that constitute “renewable” energy. Solid biomass (wood, agricultural residues, and black liquor), increased 140% over the same period and constituted 45% of renewable energy inputs in 2016 (see statement of Dr. Mary Booth for more detail.)

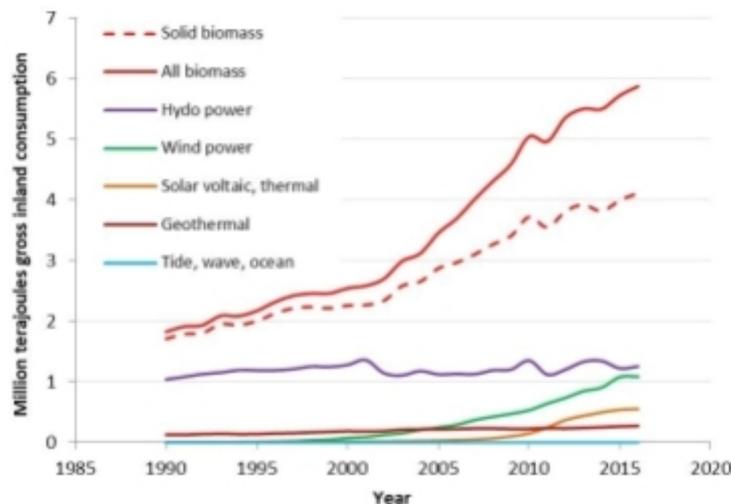


Figure 3. Growth in renewable energy inputs from 1990 – 2016.

16. A report published by the EC’s advisory Joint Research Centre notes “Energy accounts for almost half (48%) of total reported uses of woody biomass on EU-28 level... Bearing in mind that energy uses are underreported, the energy share of woody biomass uses should reasonably be even higher. Indeed, targets for renewable energy set by the EU have resulted in a surge in the consumption of woody biomass.”¹⁰
17. The wood burned for heat and power includes imported wood pellets. Data from Bioenergy Europe show a large percentage increase in the use of wood pellets between 2016 and 2017 (Table 1).

¹⁰ Camia, A., et al. 2018. Biomass production, supply, uses and flows in the European Union. Joint Research Centre, Ispra, Italy. At http://publications.jrc.ec.europa.eu/repository/bitstream/JRC109869/jrc109869_biomass_report_final2pdf2.pdf

Tonnes of pellets	Residential	Commercial	CHP	Power Only	Total
2016	9,002,790	2,906,982	2,399,773	7,525,000	21,834,545
2017	9,741,416	3,370,155	2,945,895	8,080,000	24,137,466
% increase	8.2%	15.9%	22.8%	7.4%	10.5%

Table 1. Use of pellets in Europe in 2016 and 2017. Data from Bioenergy Europe Statistical Report.¹¹

18. According to data from the US wood pellet industry, manufacturing one tonne of dried wood pellets requires about 2.24 tonnes of green stemwood (see statements from Adam Colette and Dr. Mary Booth). There are significant carbon losses ‘upstream’ of the finished pellet, particularly pellets from harvested trees rather than sawmill residues. The carbon footprint of wood pellets includes the roots left after harvesting, which decompose, and tops, limbs, and bark that may be chipped and burned at the manufacturing plant to dry the pellets. Total biogenic emissions are around 2.85 tonnes for every tonne of pellets (see statement from Dr. Mary Booth). Additional to these emissions are the fossil fuel emissions from growing, harvesting, manufacturing, and transporting pellets.

Biomass emissions and the net GHG impact of burning forest wood for energy

19. Biomass power plants generally emit more CO₂ per unit energy than fossil-fired plants,¹² partly because wood tends to have a high moisture content which must be evaporated before useful energy can be generated. Accordingly, power plants combusting solid biomass for fuel tend to operate at a lower efficiency than gas, oil, or coal-fired plants, so more fuel must be burned to generate a given amount of energy which, in turn, emits more CO₂ per unit energy. Wood also has a lower energy content per unit carbon than natural gas, further increasing CO₂ emissions per unit energy relative to gas. Pre-drying wood fuel, and particularly manufacturing it into wood pellets, can increase combustion efficiency and thus reduce carbon emissions per unit energy when the fuel is burned, but that requires energy and emits carbon upstream.
20. Bioenergy emissions are not directly tracked in the land sector under country-level GHG reporting to the UNFCCC, and (as below) will not be tracked under the EU’s new LULUCF rules. However, CO₂ emissions from combustion of biomass are included as a ‘memo’ item in UNFCCC reporting for the energy sector (meaning they are reported, but not included in total emissions). The UNFCCC memo item reports aggregate CO₂ emissions for wood-burning from the industrial, residential, and energy sectors, adding in CO₂ emissions from

¹¹ Bioenergy Europe. Statistical Report 2018. Table 8.11. Brussels. At <https://bioenergyeurope.org/statistical-report-2018/>

¹² Booth, M. S. 2014. Trees, Trash, and Toxics: How Biomass Energy Has Become the New Coal. Pelham, Massachusetts, Partnership for Policy Integrity. At <http://www.pfpi.net/wp-content/uploads/2014/04/PFPI-Biomass-is-the-New-Coal-April-2-2014.pdf>

consumption of liquid biofuels.¹³ Figure 4 shows a steep increase in bioenergy CO₂ emissions since 1990 in the EU. The absolute value of CO₂ stored in the land sector (mostly in forests) is presented for comparison. That the magnitude of emissions so significantly exceeds the magnitude of the land carbon sink suggests that the land carbon sink could be larger if biomass burning were not occurring.

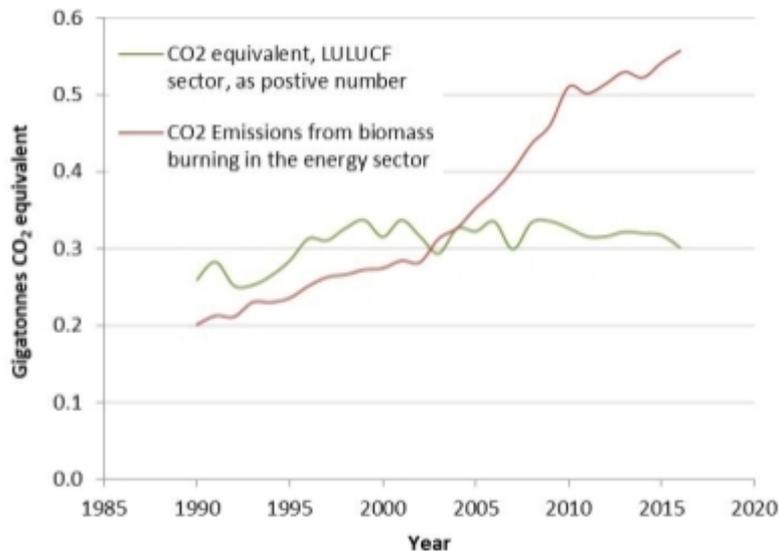


Figure 4. CO₂ emissions from biomass consumption in the EU as reported in the biomass ‘memo’ item of UNFCCC reports, compared to CO₂-e storage in the land sector. Biomass combustion also emits other non-CO₂ greenhouse gases which are not included here.

21. Despite having higher CO₂ emissions than coal per unit energy, burning wood for energy has often been wrongly treated as ‘carbon neutral’ under regulations and incentive programs. The rationale is generally that (1) materials are ‘waste’ that would decompose and emit CO₂ anyway, or (2) that plant sources of biomass will grow back and re-sequester an equivalent amount of CO₂ as was released by combustion.
22. As for (1): burning even waste wood produces considerable net emissions. For instance, the net emissions impact of burning forestry residues (the tops and limbs left over from sawnwood harvesting) can be calculated as the cumulative additional CO₂ from burning rather than allowing material to decompose in the forest. But for temperate and cool climates in Europe, where decomposition rates are typically moderate to slow, burning wood emits much more CO₂ than decomposition. Modeling shows that even after ten years of power plant

¹³ An explanation of the data included in the bioenergy emissions memo item, see United States Environmental Protection Agency (2018). Inventory of U.S. Greenhouse Emissions and Sinks: 1990 - 2016. Washington, DC at p. 3-106. At https://www.epa.gov/sites/production/files/2018-01/documents/2018_complete_report.pdf

operation, 60% to 90%+ of the cumulative CO₂ from residue burning constitutes a net addition to the atmosphere.¹⁴

23. As for (2), EC staff pointed out an obvious flaw in the bioenergy assessment conducted during development of the Directive:¹⁵

“...it is assumed that the CO₂ emitted will be compensated by the CO₂ captured during plant regrowth. However, compared to crops which regrow over short periods, forest biomass is part of a much longer carbon cycle. A forest stand typically takes between decades and a century to reach maturity. Recent studies have found that when greenhouse gas emissions and removals from combustion, decay and plant growth (so-called biogenic emissions from various biological pools) are also taken into account, the use of certain forest biomass feedstocks for energy purposes can lead to substantially reduced or even negative greenhouse gas savings compared to the use of fossil fuels in a given time period (e.g. 20 to 50 years or even up to centuries).”¹⁶

24. That conclusion contrasts with the Directive’s claim that its sustainability and GHG criteria “ensure” that biomass delivers emissions reductions relative to fossil fuels.¹⁷ Contrasting with the Directive’s treatment of biogenic carbon as zero, the EC bioenergy assessment concludes that there is ‘*agreement in the scientific community that adequate account of biogenic CO₂ emissions is needed.*’

25. A number of scientific studies have concluded that the net emissions impact of harvesting trees for energy is even greater than the net impact of burning residues that would otherwise decompose. With regard to burning forest wood to generate electricity, a number of studies have concluded that it can take from several decades to more than a century for forests to regrow sufficiently to draw net bioenergy emissions down to the point where they are equivalent to net emissions if fossil fuels were burned to generate the same amount of electricity. See the statements of Dr. Mary Booth and Tim Searchinger for an overview.

26. The European Academies Science Advisory Council (EASAC), which serves as an advisory body to the EU, explains that it is not only slow forest regrowth but also forgone sequestration that increases the net carbon impact:

¹⁴ Booth, M. S. 2018. Not carbon neutral: Assessing the net emissions impact of residues burned for bioenergy. *Environmental Research Letters* 13(3): 035001. At <http://iopscience.iop.org/article/10.1088/1748-9326/aaac88>

¹⁵ European Commission. 2016. Commission staff working document impact assessment: sustainability of bioenergy. SWD(2016) 418 Final Part 4/4. At http://eur-lex.europa.eu/resource.html?uri=cellar:1bdc63bd-b7e9-11e6-9e3c-01aa75ed71a1.0001.02/DOC_1&format=PDF

¹⁶ *ibid*, p. 15

¹⁷ At Recital 101.

“The net climate effects of harvesting a forested area for bioenergy will thus be a combination of the emissions from burning and the loss of carbon absorption potential after harvest.”¹⁸

27. In January 2018, EASAC wrote directly to the President of the European Commission to warn,

“The legal mandate to record forest biomass-fired energy as contributing to the EU’s renewable energy targets has had the perverse effect of creating a demand for trees to be felled in Europe or elsewhere in order to burn them for energy, thus releasing the carbon into the atmosphere which would otherwise stay locked up in the forest, and simultaneously drastically reducing the carbon sink strength of the forest ecosystems... The potentially very long payback periods for forest biomass raise important issues given the UNFCCC’s aspiration of limiting warming to 1.5 °C above preindustrial levels to ‘significantly reduce the risks and impacts of climate change’. On current trends, this may be exceeded in around a decade. Relying on forest biomass for the EU’s renewable energy, with its associated initial increase in atmospheric carbon dioxide levels, increases the risk of overshooting the 1.5°C target if payback periods are longer than this.”¹⁹

28. The Joint Research Centre (JRC), which serves in an advisory capacity to the EU,²⁰ evaluated carbon accounting for woody biomass for the EU. JRC’s report also warns that harvesting trees (‘stemwood’) for bioenergy can lead to a long-lasting transfer of forest carbon to the atmosphere:

“In the case of dedicated harvest of stemwood for bioenergy purposes and short term GHG reduction policy objectives (e.g. 2020) the assumption of “carbon neutrality” is not valid since harvest of wood for bioenergy causes a decrease of the forest carbon stock, which may not be recovered in short time, leading to a temporary increase in atmospheric CO₂ and, hence, increased radiative forcing and global warming. At the local scale or stand level, the additional harvest of wood for bioenergy creates a temporary decrease of the carbon stock, compared to what would otherwise happen without harvesting. However, at the landscape or national level the mosaic of stands where forest biomass is removed for bioenergy has to be considered, and the continuous rate of wood removals could translate into

¹⁸ EASAC. 2017. Multi-functionality and sustainability in the European Union’s forests. German National Academy of Sciences. Germany, European Academies Science Advisory Council. At https://easac.eu/fileadmin/PDF_s/reports_statements/Forests/EASAC_Forests_web_complete.pdf.

¹⁹ The letter and President Juncker’s response is posted at <https://easac.eu/news/details/easacs-correspondence-with-the-president-of-the-european-commission-on-the-role-of-biomass-energy/>

²⁰ JRC website text: “The Joint Research Centre is the Commission's science and knowledge service. The JRC employs scientists to carry out research in order to provide independent scientific advice and support to EU policy.” At https://ec.europa.eu/info/departments/joint-research-centre_en

a permanent decrease of carbon stock (or a lower increase compared to the reference fossil scenario).²¹

29. Dr. Mary Booth's and Tim Searchinger's statements in support of this Application noted other warnings by independent scientists, advisory bodies to the EU, and even Eurostat (the EU's statistical service) that increased use of forest biomass for energy can significantly increase CO₂ loading to the atmosphere.

How the EU's new LULUCF rules will track forest carbon

30. EU Regulation (EU) 2018/841 ("the LULUCF Regulation") comes into effect in 2021, building on the UNFCCC's reporting approach and aiming to evaluate carbon flux in the land sector on an equal or nearly-equal basis with carbon in other sectors.
31. Like the UNFCCC reporting protocol, the new rules estimate the forest carbon sink as the difference between forest stocks between periodic measurements. However, they differ in key respects. The LULUCF Regulation requires Member States to establish a baseline against which they can measure net forest carbon uptake or loss: the forest reference level ("FRL"). The FRL is a baseline based on forward projection (into the 2021 – 2030 period) of forest carbon uptake and forest management practices from the 2000 – 2009 period (i.e. it is an estimate of the carbon uptakes and losses from forests if the practices of 2000 – 2009 continued). If Member States exceed the FRL (i.e. their forests take up more carbon than projected by their FRL) this generates carbon credits; if they fall below the FRL (their forests take up less carbon than projected by their FRL) this results in debits. If a Member State has a debit (carbon uptakes fall below the FRL), the 'no debit' provision (Article 4 of the LULUCF Regulation) requires the Member State to make up the carbon deficit elsewhere in the land sector.
32. However, as above, all modelling scenarios constraining global temperature rise to no more than 1.5 °C rely on both a very large *increase* in carbon uptake, and significant *reductions* in emissions. Accordingly, simply balancing carbon uptakes and losses (through meeting the FRL) is not enough. Given the steep reductions in atmospheric carbon loading required, even scenarios that maintain or slightly increase the carbon sink are insufficient.
33. Despite that, the EU promotes the LULUCF Regulation as the means of accounting for emission from biomass combustion for produce energy. It argues that the "no debit rule" (as explained and considered further below) will ensure that those emissions are compensated for elsewhere if emissions occur in the LULUCF sector from harvesting biomass for energy.

²¹ Agostini, A., et al. 2014. Carbon accounting of forest bioenergy. JRC Scientific and Policy Reports. Ispra, Italy, Joint Research Center, Institute for Energy and Transport. At http://publications.jrc.ec.europa.eu/repository/bitstream/JRC70663/eur25354en_online.pdf

34. This approach overstates the degree to which bioenergy emissions are counted in the land sector because it relies on the FRL perfectly accounting for all emissions from harvesting. However, this is not the case. The FRL baseline is based on forest harvesting levels and practices from 2000 – 2009. Because the accounting system is set up to capture reductions from the FRL baseline, net forest carbon accumulation *above* the baseline is essentially “extra” carbon that is not counted if it is harvested and burned for energy (if this forest wood is harvested and turned into harvested wood products, however, then this sequestered carbon continues to count as a credit). Only if harvesting is so intense that a Member State’s net forest carbon sink is driven below the FRL does this carbon loss generate a consequence, where the Member State is expected to make up that carbon with reductions elsewhere. However, in either case – whether a Member State’s forest carbon sink is above or below the FRL – if trees are harvested and burned for energy, this adds carbon to the atmosphere.
35. Thus, claims that the LULUCF Regulation will account for biomass carbon losses are only partially accurate, because they do not acknowledge that biomass burning is treated as having zero emissions if a Member State is meeting or exceeding its FRL target. Yet ton for ton, burning wood that would otherwise be stored or added to a forest increases carbon in the air by the same amount, even if a state is meeting its FRL target (see the statement of Tim Searchinger).

The Directive will inevitably increase forest cutting for bioenergy and associated GHG emissions

36. The Directive itself anticipates that forest harvesting for energy will continue to expand. Recital 103 states:

“Harvesting for energy purposes has increased and is expected to continue to grow, resulting in higher imports of raw materials from third countries as well as an increase of the production of those materials within the Union.”
37. There are several incentives in the Directive that make this increase more likely. For example, Annex IX (paragraphs o-q) includes forest biomass in the category of feedstocks for production of biogas for transport and advanced biofuels count double toward Member States’ renewable energy targets.
38. To the extent that increasing demand for biomass drives additional forest harvesting for fuel and increases use of whole trees cut specifically for fuel, this will increase the carbon impact of bioenergy.

Harms to forests from biomass harvesting

39. Forest biodiversity, flood mitigation and water quality tend to vary with forest carbon storage: older, more carbon-rich, forests tend to have the deepest soils and

greatest biodiversity (see statements from Adam Colette and Dominick DellaSala).

40. Biomass harvesting differs qualitatively from other types of harvesting and can have quantitatively different effects, particularly with regard to soil carbon losses. The EC Bioenergy Impact Assessment report points out that “an excessive removal of harvest residues, or the removal of stumps, can harm soil productivity, biodiversity, and water flows.”²² However, the impact assessment does not acknowledge that simply harvesting trees represents the total removal of an ecosystem, and that recovery can take decades to several centuries (Sabo & WOLF, Paun, and Colette statements).
41. Trees hold significant stocks of micronutrients in limbs and leaves. Removing forestry residues can deplete soil nutrient status, leading to loss of site productivity and the ability to regrow the forest.²³
42. Biomass harvesting is promoted to give value to wood which is “low value” because it is not valuable as sawnwood (for example because species, flaws, holes, etc). However, these are the trees most valuable for biodiversity. Removing such trees significantly reduces habitat for cavity-dwelling animals such as owls and squirrels (Jeff Turner and Adam Colette statements). Removing dead and decaying wood also removes materials from base of the food chain that support complex fungi and invertebrate communities.
43. Bioenergy can increase both the area and intensity of forest harvesting by creating a market for residues and trees that are considered “low value,” except as fuel. That leads to more forest road-building, more soil disturbance, more forest fragmentation, and more degradation of water resources and quality.
44. As explained in statements by Jeff Turner, Adam Colette, and Dr. Mary Booth, in the US, forest cutting for wood pellets is occurring in bottomland hardwood forests that ordinarily help control flooding. Flooding and water quality are being observed to worsen due to intensification of forest cutting in wetlands of the Southeast. The statement of Gabriel Paun also discusses flooding that impacted communities in Romania following intensive harvesting.
45. The Commission’s Bioenergy Impact Assessment notes the lack of consistent standards for forest harvesting in the EU, and in some cases the lack of any standards for countries providing biomass to the EU:

“Most Member States have in place legislation and other measures to promote sustainable forest management practices. There are however no EU-wide binding standards ensuring an equal and high level of sustainable forest management practices across the EU Member States, and such

²² At page 18

²³ Federer, C. A., et al. 1989. Long-term depletion of calcium and other nutrients in eastern US forests. *Environmental Management* 13(5): 593-601. At <https://link.springer.com/article/10.1007/BF01874965>

standards don't necessarily exist in non-EU countries that supply biomass to the European market."²⁴

46. As Jeff Turner explains, certain regions of the US Southeast that supply the wood pellet industry do not have laws requiring that forest buffer strips be maintained along rivers. Clearcutting of bottomland hardwood forests and thin to non-existent buffer strips contribute to flooding and water quality degradation.
47. As observed in the 2014 European Commission report "Environmental Implications of Increased Reliance of the EU on Biomass from the South East US," biomass demand is expected to drive natural forest conversion and to contribute to loss of natural forests – and there are no laws prohibiting this:

“Over the last 50 years, demand for fibre has contributed to a very significant increase in the area of plantation pine coinciding with a loss of natural forests. There are no laws that limit the conversion of natural forests to plantations. Bioenergy is expected to be the single largest source of new wood demand in the near future, and this is anticipated to drive expansion of pine plantations at the expense of both agricultural land and natural forests of comparatively high biodiversity value. In addition, the conversion of bottomland hardwood forests (often wetland habitats) to pine can involve significant losses of belowground carbon.”²⁵”
48. Statements from Dr. Mary Booth and Adam Colette describe how wood demand by the wood pellet industry in the US Southeast is driving conversion of hardwood stands to plantation pine monocultures. The statement from Adam Colette describes how his organization, which advocates for protection of forests in the Southeast, made several trips to the EU to tell policymakers about the destruction of forests by the US pellet industry in response to EU incentives for biomass.
49. The use of forest bioenergy can also perpetuate harms to other systems. Co-firing biomass with coal allows coal plants to continue operating and even collecting renewable energy subsidies, perpetuating harms to human health and the climate from burning coal. The statement of Tony Lowes in support of this application describes co-firing biomass in peat-burning plants in Ireland, thereby perpetuating the destructive practice of stripping peat for fuel. The Directive does not recognize peat as biomass, but support for woody biomass co-fired with peat ensures the peat-burning plants continue to operate.

²⁴ At p. 19

²⁵ Kittler, B., et al. 2015. Environmental Implications of Increased Reliance of the EU on Biomass from the South East US. Denmark, European Commission

Harms to human health from bioenergy

50. Air pollution is a considerable health concern in the EU. A report from the European Environment Agency (EEA)²⁶ concluded that in 2013, the estimated number of premature deaths in EU-28 attributed to PM_{2.5} (particulate matter 2.5 microns in diameter and below) NO₂ (nitrogen dioxide) and O₃ (ozone) exposure was 436,000, 71,000, and 16,000, respectively.
51. Burning biomass for energy is a significant source of air pollution. The EEA report states that emissions of particulate matter (PM) from coal and biomass combustion in households and commercial buildings has risen in the last decade, and that these sources are now the main contributors to total PM in the EU. The report states further efforts are necessary to ensure full compliance with EU air quality standards set for the protection of human health and the environment.
52. Biomass power plants generally use emissions controls and thus emit less pollution on an energy-output basis than residential wood-burning, but the emission of hundreds of tonnes of pollution from a single smokestack makes them a health concern like any other power plant. Given the same emissions control efficiency on a heat-input basis, a wood-burning plant can emit more particulate matter per megawatt-hour than a coal plant, because biomass power plants tend to be less efficient than coal plants, and thus require more fuel to generate a given amount of electricity. This in turn emits more air pollution on an energy-output basis.²⁷ This is especially true if the plant is burning green wood chips, because this material is around 50% water by weight, which reduces the efficiency of the power plant. However, particulate matter emissions from plants burning dried wood pellets do not tend to differ from coal emissions to the same degree (see statement from Dr. Mary Booth).
53. Even biomass burners with modern pollution controls emit significant pollution. A survey of permitted emissions at new biomass power plants built in the USA shows that emissions are significant even when using efficient fabric filters to capture PM. For instance, a new 70 MW wood-burning plant in New Hampshire is permitted to emit 37.1 tonnes of PM per year.²⁸
54. Emissions data from a small wood-burning CHP plant in Belgium²⁹ illustrate that wood-burning power plants can be disproportionately polluting. A plant at Ham ('4HAMCOGEN' in the EU's database) is reported by the company³⁰ to have a generating capacity of 9.6 MW. Reported emissions for 2016 include 55.5 tonnes

²⁶ European Environmental Agency. 2016. Air quality in Europe – 2016 report. Luxembourg: Publications Office of the European Union. At <https://www.eea.europa.eu/publications/air-quality-in-europe-2015>

²⁷ Booth, M. S. 2014. Trees, Trash, and Toxics: How Biomass Energy Has Become the New Coal. Pelham, Massachusetts, Partnership for Policy Integrity. At <http://www.pfpi.net/wp-content/uploads/2014/04/PFPI-Biomass-is-the-New-Coal-April-2-2014.pdf>

²⁸ Ibid.

²⁹ Data from European Pollutant Release and Transfer Register. At <https://prtr.eea.europa.eu/#/facilitylevels>

³⁰ At <http://www.2valorise.be/about.html>

of particulate matter (PM10, a calculated value) and 137 tonnes of NOx (a measured value).

55. As the statement by applicant Bernard Auric in support of this application explains, fuel storage yards at biomass power plants can also create pollution from wood dust, a known carcinogen. This has been suffered by people living near the Gardanne plant.
56. The Applicants living near the Gardanne plant also complain of noise. A review of several new biomass power plants in the United States found that noise is a common complaint.³¹ Pellet manufacturing plants are also noisy – one resident living near one of a large pellet plant in North Carolina complained of “non-stop pollution, dust, noise, and truck traffic.”³²
57. Wood pellet manufacturing is also a large source of emissions. A report recently published in the United States by the Environmental Integrity Project³³ surveyed emissions from large pellet-manufacturing plants exporting pellets to Europe. The principle pollutant of concern from these plants is volatile organic compounds, which are emitted during the wood chip drying and pellet cooling phases. These plants are each emitting several hundred tonnes of these pollutants per year.

THE RENEWABLE ENERGY DIRECTIVE

Legal context

58. Recital 1 of the Directive states a core objective of promoting renewable forms of energy as a means of reducing GHG emissions, averting climate change and protecting the environment.
59. Recital 2 explains the Directive is intended to contribute to broader goals, including the EU-wide target for the reduction of GHG emissions by 2030:

“... The increased use of energy from renewable sources or ‘renewable energy’ constitutes an important part of the package of measures needed to reduce greenhouse gas emissions and comply with the Union's commitment under the 2015 Paris Agreement on Climate Change following the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (the ‘Paris Agreement’), and with the Union 2030 energy and climate framework, including the Union's

³¹ Booth, M.S. The bioenergy boom from the federal stimulus: outcomes and lessons. Partnership for Policy Integrity, October, 2018. At <http://www.pfpi.net/wp-content/uploads/2018/10/PFPI-Bioenergy-and-the-Stimulus-Oct-24.pdf>

³² Press Release: Report Finds Rapidly Growing “Green” Energy Industry Releases Dangerous Air Pollution. Environmental Integrity Project. April, 2018. At <http://www.environmentalintegrity.org/news/biomass-report/>.

³³ Environmental Integrity Project. “Dirty Deception: How the Wood Pellet Industry Skirts the Clean Air Act.” April 26, 2018. At <http://www.environmentalintegrity.org/news/biomass-report/>

binding target to cut emissions by at least 40 % below 1990 levels by 2030”

Biomass as a form of Renewable Energy

60. Article 2(1) defines renewable energy:

“‘energy from renewable sources’ or ‘renewable energy’ means energy from renewable non-fossil sources, namely wind, solar (solar thermal and solar photovoltaic) and geothermal energy, ambient energy, tide, wave and other ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas, and biogas;”

That definition expressly includes biomass as a source of renewable energy.

61. Article 2(24) defines biomass itself:

“‘biomass’ means the biodegradable fraction of products, waste and residues from biological origin from agriculture, including vegetal and animal substances, from forestry and related industries, including fisheries and aquaculture, as well as the biodegradable fraction of waste, including industrial and municipal waste of biological origin;”

62. By Article 2(26), biomass includes products derived from trees, which includes primary products such as stemwood, and secondary products such as waste and residues:

“‘forest biomass’ means biomass produced from forestry”

The Renewable Energy Target

63. Article 3(1) requires Member States to ensure that 32% of energy consumption in the EU comes from renewable energy sources by 2030 (“**the Collective Target**”):

“Member States shall collectively ensure that the share of energy from renewable sources in the Union’s gross final consumption of energy in 2030 is at least 32%.”

64. Article 3(2) requires the Collective Target to be met by Member States establishing national targets.

65. Article 3(4) limits the discretion of Member States by imposing a “*baseline share*” of energy from renewable sources for each Member State:

“From 1 January 2021, the share of energy from renewable sources in each Member State’s gross final consumption of energy shall not be lower than the baseline share shown in the third column of the table in Part A of Annex I to this Directive. Member States shall take the necessary measures to ensure compliance with that baseline share.”

The Article 29(1) purposes: Calculating the Share of Renewable Energy

66. Article 7(1) provides that the total consumption of renewable energy is the sum of:
- “(a) gross final consumption of electricity from renewable sources;
 - (b) gross final consumption of energy from renewable sources in the heating and cooling sector; and
 - (c) final consumption of energy from renewable sources in the transport sector.”
67. By Article 7(5), that total consumption is to be represented as a percentage of the total energy consumption from all sources, giving the share of renewable energy in the EU and in each Member State.
68. Contribution to the renewable energy target is only one of three purposes for which biomass can qualify. These are provided in Article 29(1) (“the Article 29(1) purposes”):
- “(a) contributing towards the Union target set in Article 3(1) and the renewable energy shares of Member States;
 - (b) measuring compliance with renewable energy obligations, including the obligation laid down in Article 25;
 - (c) eligibility for financial support for the consumption of biofuels, bioliquids and biomass fuels.”
69. Article 4(1) specifies criteria for a unit of energy from forest biomass to qualify:
- a. Sustainability criteria in Article 29(6);
 - b. Land-use, land-use change and forestry criteria (“LULUCF criteria”) in Article 29(7);
 - c. Greenhouse gas emission savings criteria (“GHG criteria”) in Article 29(10); and
 - d. Energy efficiency criteria in Article 29(11).
70. Recital 93 sets out the ambition of the Directive to expand the forest biomass energy sector:
- “In order to exploit the full potential of biomass, which does not include peat or material embedded in geological formations and/or transformed to fossil, to contribute to the decarbonisation of the economy through its uses for materials and energy, the Union and the Member States should promote greater sustainable mobilisation of existing timber and agricultural resources and the development of new forestry and agriculture production systems, provided that sustainability and greenhouse gas emissions saving criteria are met.”

The consequences of all that

71. As explained below, the Directive's claim that the GHG Criteria, the Sustainability Criteria, and the LULUCF Criteria ensure that biomass burned for energy reduces emissions relative to fossil fuels is simply wrong.
72. As a result, insofar as the Directive results in the expansion of energy from forest biomass (one of its stated aims), it undermines its own purpose of reducing GHG emissions, violates the TFEU Article 191 Treaty obligations and infringes the fundamental rights of the Applicants.

GHG Criteria and Emissions saving calculations methodology

73. Recital 101 states that the purpose of the GHG and Sustainability criteria is to ensure high GHG savings:

“It is appropriate to introduce Union-wide sustainability and greenhouse gas emissions saving criteria for biomass fuels used in the electricity sector and in the heating and cooling sector, in order to continue to ensure high greenhouse gas emissions savings compared to fossil fuel alternatives, to avoid unintended sustainability impacts, and to promote the internal market.” [emphasis added]

74. Article 29(10) sets four GHG emissions saving criteria. However, only one of these - Article 29(10)(d) – is relevant to biomass fuels produced from forest biomass (the first three are concerned with biofuels used in transport):

“The greenhouse gas emission savings from the use of biofuels, bioliquids and biomass fuels taken into account for the purposes referred to in paragraph 1 shall be:

(d) at least 70% for electricity, heating and cooling production from biomass fuels used in installations starting operation from 1 January 2021 until 31 December 2025, and 80% for installations starting operation from 1 January 2026.”

75. While the GHG criteria are intended to ensure a GHG saving from using biomass rather than fossil fuels as an energy source, as explained below, they cannot do that in relation to forest biomass because, in summary:

- a. There are no GHG criteria for existing installations; they are only applicable to new installations post-2021. Existing installations can qualify for the Article 29(1) purposes even without meeting any GHG criteria at all; and
- b. Even when the GHG criteria are applicable to new installations from 2021, the methods to calculate GHG emissions mandated by the Directive are inadequate.

Those are considered in turn.

No GHG Criteria for Existing Installations

76. The first, and clearest, flaw with the GHG criteria is that there simply are none applicable to existing installations: Article 29(10)(d) is only applicable to installations starting operation from 1 January 2021. Existing installations burning forest biomass may consequently qualify for the Article 29(1) purposes and treat biomass as a renewable energy source even if they deliver no GHG savings at all.

Inadequate GHG Accounting Methods for Purposes of GHG Criteria

77. When calculating the GHG emissions of new installations post-2021, the Directive's methods fail to recognise the full GHG impact of burning forest biomass for energy.

78. Article 29(10) provides, in mandatory terms, that

“The greenhouse gas emission savings from the use of biofuels, biogas consumed in the transport sector, bioliquids and biomass fuels used in installations producing heating, cooling and electricity shall be calculated in accordance with Article 31(1).”

79. Article 31(1)(a)-(d) set out four such methods of calculation. Three are relevant to forest biomass used in installations producing heating, cooling and electricity:

- a. Using the default values given in Part A of Annex VI.
- b. Using an “actual value” calculated in accordance with the in Part B of Annex VI;
- c. [relevant only to biofuels]; and
- d. Using a value that combines actual calculated values for some elements of life-cycle emissions, and disaggregated default values (those in Part C of Annex VI) for other elements.

These are considered below.

Article 31(1)(a) – default values

80. Part A of Annex VI sets out a table of deemed GHG emissions savings from the use of various feedstocks, in a variety of different scenarios (catering for different industrial processes, and different transport distances of the feedstock). The table is titled ‘*Typical and default values of greenhouse gas emissions savings for biomass fuels if produced with no net-carbon emissions from land-use change.*’ The values in the table represent the estimated GHG savings from the use of various types of biomass, where the comparison being made is from the fossil fuel GHG emissions generated in producing and transporting the biomass plus the non-CO₂ GHG emissions from burning the biomass, compared with the emissions from burning the fossil fuel alternative that the biomass is assumed to displace (the “fossil fuel comparator”). Biogenic CO₂ is not counted (i.e. the CO₂ emitted from the combustion of the biomass itself).

81. The treatment of forest biomass as having zero biogenic CO₂ emissions appears to rest on the assumption that equivalent CO₂ will be sequestered by regrowth, as long as the land remains forest and is not converted to some other use, such as agriculture (see Annex VIII, Part B). This is why the Table stipulates that the values it contains are only valid if there are no net carbon emissions from land-use change. Clear-felling a forest does not count as land-use change: provided that the land is not converted to (say) agricultural use, it will remain in the same land-use category.
82. The LULUCF criteria set out in Article 29(7) are concerned with maintenance of forest carbon stocks. Whether they are adequate to achieve that aim is discussed below. But even if the LULUCF criteria do achieve that aim, Part A of Annex VI discounts the biogenic emissions entirely when setting the default GHG emissions saving for forest biomass, as long as land-use change is not occurring.

Article 31(1)(b) – calculated emissions

83. The second method for identifying GHG emissions savings from using forest biomass instead fossil fuels is the formula in Annex VI, Part B:

$$E = e_{ec} + e_l + e_p + e_{td} + e_u - e_{sca} - e_{ccs} - e_{ccr}$$

84. The definitions and values of each term in this formula are determined according to the paragraphs in Part B. Insofar as relevant:
- a. e_u represents emissions from ‘fuel in use’. Para.13 of Annex VI, Part B states “Emissions of CO₂ from fuel in use, e_u , shall be taken to be zero for biomass fuels. Emissions of non-CO₂ greenhouse gases (CH₄ and N₂O) from the fuel in use shall be included in the e_u factor.” This is the “zero-rating” of the stack emissions.
 - b. e_l represents ‘annualised greenhouse gas emissions from carbon stock change due to land-use change’. Para.7 gives a further formula for estimating such emissions, averaged over 20 years, by comparison with an assumed reference level.
85. Accordingly, as for the Article 31(1)(a) default values, the formula treats emissions from the fuel in use as zero, and only accounts for changes to biogenic carbon stocks where emissions result from land-use change. In the absence of land-use change, it counts emissions as zero. The Directive (see Annex VIII, part B) adopts the categorisation of the IPCC, such that land use change is when there is a move from one category to another (forest land, grassland, wetlands, settlements, or other land, to cropland or perennial cropland). Significantly, there is no land use change when a forest is felled and allowed to regrow, despite the fact that it may take decades to centuries for the forest to recover. Further, there is no land use change when a natural, biodiverse-rich forest is felled and replaced with a managed forest (such as a mono-crop pine plantation), which has a far

lower capacity to sequester carbon (see statements by Adam Colette and Dr. Mary Booth). Despite this, the Directive treats the emissions caused by this felling as zero. Therefore, like the default values it is not capable of capturing the fact that equivalent CO₂ to that emitted by combusting biomass is only sequestered over a period of decades, assuming that trees do indeed regrow and are permitted to mature to their former size. In contrast, when there is a land use change (such as conversion of a forest to agricultural land), the e_l value attempts to capture the emissions by averaging them over a 20 year period. This difference in treatment of effectively the same action (namely, harvesting a forest) is entirely arbitrary and underlines the fallacy of treating biogenic emissions in the absence of land use change as zero.

Article 31(1)(d) – combined method

86. Article 31(1)(d) provides a combined, simplified calculation method. It allows default, as opposed to individually calculated, values to be used for a number of the terms in the formula given in Part B of Annex VI. This method does not alter the treatment of stack emissions in use, or of emissions from changes in carbon stock, from that described above.

Sustainability criteria

87. Recital 101 states that the function of the sustainability criteria is “*to avoid unintended sustainability impacts*”. The criteria fall far below this goal; they do not impose any requirements to ensure that forest biomass was grown or harvested in a sustainable manner. Instead, they rely on the source country to deal with sustainability considerations.

88. Article 29(6) sets out the sustainability criteria for biofuels, bioliquids and biomass fuels produced from forest biomass:

“Biofuels, bioliquids and biomass fuels produced from forest biomass taken into account for the purposes referred to in points (a), (b) and (c) of the first subparagraph of paragraph 1 shall meet the following criteria to minimise the risk of using forest biomass derived from unsustainable production:

(a) the country in which forest biomass was harvested has national or sub-national laws applicable in the area of harvest as well as monitoring and enforcement systems in place ensuring:

(i) the legality of harvesting operations;

(ii) forest regeneration of harvested areas;

(iii) that areas designated by international or national law or by the relevant competent authority for nature protection purposes, including in wetlands and peatlands, are protected;

(iv) that harvesting is carried out considering maintenance of soil quality and biodiversity with the aim of minimising negative impacts; and

(v) that harvesting maintains or improves the long-term production capacity of the forest;

(b) when evidence referred to in point (a) of this paragraph is not available, the biofuels, bioliquids and biomass fuels produced from forest biomass shall be taken into account for the purposes referred to in points (a), (b) and (c) of the first subparagraph of paragraph 1 if management systems are in place at forest sourcing area level ensuring:

[the same matters listed in (a)(i)-(v)]”

89. Accordingly, the sustainability criteria focus on the regulatory regime that covers the feedstock source and not at all on the condition of the forest from which the feedstock was harvested.
90. Essentially, a source of forest biomass will meet the sustainability criteria if the country of origin has forestry laws or regulations. If there are no forestry laws or regulations in place, an even lower standard applies: the existence of a “*management system*” will satisfy the sustainability criteria.
91. The sustainability criteria for forest biomass are minimal, and woefully inadequate. There is no requirement for the regulatory or management systems actually to promote (let alone achieve) sustainability. Instead, Article 29(6) simply assumes that the mere existence of regulatory or management systems ensures sustainability. The fallacy of this is that laws and regulations governing forest harvesting can vary greatly across jurisdictions. For instance, in the US Southeast, in some watersheds it is required to retain a “buffer strip” of trees next to rivers to protect water quality after clearcutting nearby swamp forests, but in other watersheds, the buffer strip is not required, or a much smaller one is required (see statement of Jeff Turner).
92. The sustainability criteria thus tolerate highly damaging actions, such as clearcutting a mature biodiverse natural forest for biomass fuel to be replaced with a monoculture pine plantation (see Dr. Mary Booth and Adam Colette statements).
93. The criteria for agricultural biomass in Article 29(2)-(5), which are concerned with preventing impacts to carbon-rich or biodiverse lands by their conversion to energy crops, are noticeably more stringent than the sustainability criteria for forest biomass:
 - a. Article 29(2) provides that biomass from wastes and residues from agricultural land only qualifies where systems are in place to address impacts on soil quality and carbon.

- b. Article 29(3) provides that biomass from agricultural sources cannot be sourced from land that was primary forest, highly biodiverse forest, or land that was designated for nature protection or species protection.
 - c. Article 29(4) disqualifies agricultural biomass sourced from land that prior to January 2008 had a high carbon stock, including wetlands and continually forested areas meeting certain criteria.
 - d. Article 29(5) disqualifies agricultural biomass sourced from land that was peatland prior to January 2008, unless producing the material does not involve drainage of previously undrained soil.
94. There is no justification for the failure to adopt more robust sustainability criteria for forest biomass: the effect of harvesting a forest can be as destructive as converting the forest to another land use (see statements from Dominick DellaSala, Adam Colette, and Gabriel Paun).
95. The Directive also treats Member State transposition of the sustainability criteria in relation to biofuels and bioliquids differently from those for biomass fuels: Article 29(12) prohibits Member States from imposing more protective sustainability criteria on biofuels or bioliquids obtained in compliance with the Directive. Accordingly, the sustainability criteria for biofuels and bioliquids provide a ‘ceiling’ of regulation, leaving no discretion to Member States.
96. However, for biomass fuels, Article 29(14) provides that Member States “*may establish additional sustainability criteria.*” Thus merely setting a regulatory ‘floor.’ But that Member State discretion does not remedy the defects of Article 29(6) because:
- a. There is no guarantee the discretion would be exercised; and
 - b. More fundamentally, there are simply no additional sustainability criteria which a Member State could impose that would meet the objective of Recital 101. The only criteria that would come close to minimising the biodiversity harms of forest harvesting, and help to minimise GHG emissions, would be to rule out the use of forest biomass altogether, or to confine qualifying biomass to only those materials that would in any case be burned for disposal, whether or not the energy was captured.³⁴ This they cannot do: the Member States’ discretion to adopt stricter criteria cannot extend to adopting criteria that undermine the purposes of the parent instrument – which include the promotion and development of biomass (Recital 93), the inclusion of biodegradable “*products ... from forestry*” within the definition of renewable, supposedly low carbon form of energy. Member States do not have the discretion under Article 29(14) to alter this definition of biomass through the imposition of additional sustainability

³⁴ Booth, M. S. 2018. Not carbon neutral: Assessing the net emissions impact of residues burned for bioenergy. *Environmental Research Letters* 13(3): 035001. At <http://iopscience.iop.org/article/10.1088/1748-9326/aaac88>

criteria. Nor is that fundamentally changed by the possibility of Member States not including biomass within subsidy regimes.

97. Consequently, for biomass fuels (and biofuels and bioliquids) produced from forest biomass, the sustainability criteria cannot ensure GHG savings relative to fossil fuels and cannot ensure that the biodiversity of forests are protected.

The LULUCF Criteria

98. To qualify for the Article 29(1) purposes, forest biomass must also meet the LULUCF criteria.³⁵ These are far too weak to protect against the harms to forests that are allowable under the sustainability criteria or to justify the zero-rating of biogenic emissions for forest biomass under the GHG criteria. The LULUCF criteria are provided in Article 29(7):

“Biofuels, bioliquids and biomass fuels produced from forest biomass taken into account for the purposes referred to in points (a), (b) and (c) of the first subparagraph of paragraph 1 shall meet the following land-use, land-use change and forestry (LULUCF) criteria:

(a) the country or regional economic integration organisation of origin of the forest biomass:

(i) is a Party to the Paris Agreement;

(ii) has submitted a nationally determined contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC), covering emissions and removals from agriculture, forestry and land use which ensures that changes in carbon stock associated with biomass harvest are accounted towards the country's commitment to reduce or limit greenhouse gas emissions as specified in the NDC; or

(iii) has national or sub-national laws in place, in accordance with Article 5 of the Paris Agreement, applicable in the area of harvest, to conserve and enhance carbon stocks and sinks, and providing evidence that reported LULUCF-sector emissions do not exceed removals;

(b) where evidence referred to in point (a) of this paragraph is not available, the biofuels, bioliquids and biomass fuels produced from forest biomass shall be taken into account for the purposes referred to in points (a), (b) and (c) of the first subparagraph of paragraph 1 if management systems are in place at forest sourcing area level to ensure that carbon stocks and sinks levels in the forest are maintained, or strengthened over the long term.”

³⁵ It is important to note that the LULUCF criteria are not expressly linked to the new LULUCF rules to come into effect in 2021, though the concern (the forest carbon sink) is the same.

99. It follows from the fact that Article 29(7)(a)(i)-(iii) are alternatives that biomass can comply with the LULUCF criteria merely by coming from a country that is a party to the Paris Agreement. This is an exceptionally weak requirement which includes all biomass sourced from any of the 184 countries who have (to date) ratified the Paris Agreement, without even any requirement that the party in question is complying with its Paris Agreement obligations.
100. Option (a)(ii) is slightly more onerous in requiring that the source country has an accounting system in place covering emissions and removals from forestry.
101. But only (a)(iii) actually stipulates land sector carbon stocks be maintained. Even this most onerous criterion is insufficient to compensate for the inadequacies of the GHG and sustainability criteria. The LULUCF requirement simply assesses the balance of forest carbon stocks at the national level. A requirement that LULUCF sector emissions do not exceed removals does not ensure that any particular forest site will be protected or regrown.
102. Option (b) requires that “management systems be in place” in the “forest sourcing area” to ensure maintenance of forest carbon stocks and sinks are maintained, but does not require that the condition actually be achieved. Further, even if maintenance of forest carbon stocks is achieved, this does not mean the atmosphere registers zero carbon when forest wood is burned. The net growth of forests today, including those in Europe, holds down climate change. Ton for ton, burning wood that would otherwise be stored or added to a forest increases carbon in the air by the same amount (see Tim Searchinger statement).
103. Some Member States introduced sustainability criteria under the 2009 RED, leading to emergence of forest certification schemes. In the US Southeast, source of much of the imported wood pellet fuel burned in the EU, the Sustainable Biomass Partnership certification scheme, which assesses the balance of forest growth to harvesting over millions of hectares, has not prevented forest clearcutting where all or the majority of the wood is used to manufacture wood pellet fuel. The impacts have fallen heavily on mature wetland hardwood forests that are considered hotspots of biodiversity and carbon storage (see statement of Adam Colette and Jeff Turner, and statement by Applicant Kent Roberson).
104. The LULUCF criteria cannot compensate for the inadequacies of the GHG criteria and do not justify the failure to account for biogenic emissions (the zero-rating). If the most onerous of the alternative LULUCF criteria were adopted for biomass from third countries (and there is no reason why it would be), its effect would be broadly similar to the application of the ‘no debit’ rule to Member States under Article 4 of the LULUCF Regulation.
105. The LULUCF Regulation intends that across a state’s LULUCF sectors there should be a national balance of emissions and removals of GHGs. In the context of forestry, a debit occurs when the balance of harvesting and growth changes such that the net growth rate drops below the FRL. As explained above at

paragraph 31, under the LULUCF Regulation (Article 3(1)(7) and Article 8(5)), the FRL is a baseline figure against which to measure whether there have been net emissions from the forestry sector *nationally*.

106. The LULUCF criteria in the Directive, which assume the application of the LULUCF Regulation in EU Member States, represent an attempt to balance of GHG emissions and removals nationally, and reflect necessary compromise with administrative practicality. The approach is not a perfect reflection of emissions that actually occur when forest wood is harvested and burned. Thus, the Directive wrongly treats the LULUCF criteria as a protective justification for the zero-rating of forest biomass emissions.
107. As explained above, the FRL approach under the new LULUCF Regulation does not perfectly account for forest carbon losses due to biomass burning. However, even if it did, this would not resolve the incompatibility of the goals of (1) building the forest carbon sink for climate change mitigation, and (2) authorizing member states to provide incentives for biomass burning, thus encouraging transfer of forest carbon to the atmosphere, which is what the Directive does.
108. Finally, whereas the Directive gives Member States some discretion regarding strengthening certain criteria, it does not give Member States discretion in relation to the LULUCF criteria. They are in mandatory terms. Member States are not free to adopt more onerous criteria or insist that only the most onerous criterion it sets out be used. This means that the EU has outsourced oversight of the accounting of emissions from biomass to source countries, including those outside the EU, without mandating any requirement for carbon stocks to be maintained or increased. Further, as explained above, even if the LULUCF criteria required carbon stocks to be maintained, this still would not ensure that forest biomass delivers carbon savings relative to fossil fuels.

SUBMISSIONS

(A) STANDING

Direct and individual concern

109. This is an action for an annulment under Article 263 TFEU. The Applicants each satisfy the requirement to have “*direct and individual concern*” in the operation of the Directive, which entitles them to standing under the fourth paragraph of this Article:

“Any natural or legal person may, under the conditions laid down in the first and second paragraphs, institute proceedings against an act addressed to that person or which is of direct and individual concern to

them, and against a regulatory act which is of direct concern to them and does not entail implementing measures.”

110. The Applicants submit that they meet those requirements.

111. In the alternative, the Applicants submit that the Court ought to reform the previous interpretation of “*direct and individual concern*” because of the special context of environmental law cases. It is widely recognised that adequate environmental protection, more than any other area of law, relies on the involvement of the public and interest groups. This is the basis of Article 1 of the Aarhus Convention to which the EU is a party:

“In order to contribute to the protection of the right of every person of present and future generations to live in an environment adequate to his or her health and well-being, each Party shall guarantee the rights of access to information, public participation in decision-making, and access to justice in environmental matters in accordance with the provisions of this Convention.”

Those are considered further in turn.

Direct Concern

112. Direct concern exists where a legislative act has a direct effect on the legal position of an applicant and Member States have no discretion in its implementation: Case C-386/96 P *Dreyfus*.

113. The Applicants can demonstrate direct concern here. The simple fact that the legislative act at issue is a Directive is irrelevant. The choice of EU legislative instrument does not determine admissibility: Cases T-420/05 and T-380/06 *Vischim Srl*, para.67; Case T-223/01 *Japan Tobacco and JT International*, paras.28-29; Cases 789 and 790/79 *Calpak SpA*. Some Directives, or some parts of Directives, require implementation only in a formal sense, and leave no discretion in practice for Member States as to the substantive effect of the implementing law. In such cases, the Courts have accepted that direct concern can be demonstrated. In Cases T-420/05 and T-380/06 *Vischim Srl*, the Court of First Instance identified direct concern due to the lack of discretion for Member States, rather than in the absence of formal implementing measures:

“In laying down the conditions for placing chlorothalonil on the Community market, the contested directive directly affects the legal situation of the applicant, as a company manufacturing that active substance. Furthermore, so far as concerns those conditions laid down by the contested directive, the action which the Member States had to take was purely automatic. In particular, as the Commission accepts in its rejoinder, the Member States had no discretion as to the maximum HCB content.” (Paragraph 77) (emphasis added)

114. Similarly, in Case T-262/10 *Microban*, in the context of a regulatory act where the test for direct concern is identical, the applicants established direct concern even though the act was addressed to Member States and they were responsible for implementing it. This was because, even though Member States were required to implement the act and had some discretion about “*ancillary*” issues, the Member States had no discretion about the core, non-ancillary issue (paras.29-30).
115. Elements of the Directive are mandatory, as above, including
- a. The renewable energy targets and the legal obligations to meet them;
 - b. The definition of renewable energy, such that it includes biomass;
 - c. The definitions of biomass to include forest biomass, and forest biomass to include stems and stumps (i.e. whole trees);
 - d. The method of calculating the share of energy produced from renewable sources in Article 7 is mandatory, meaning Member States have no discretion to omit energy produced from forest biomass from this calculation;
 - e. The GHG criteria are mandatory, such that Member States have no discretion to account for biogenic emissions when calculating the impact of the use of forest biomass;
 - f. The sustainability criteria in relation to biofuels and bioliquids produced from forest biomass are a regulatory ceiling (see Article 29(12)), such that Member States cannot adopt more protective sustainability criteria;
 - g. There are no possible sustainability criteria for biomass fuels that could obviate the harm such that the discretion notionally given to Member States in Article 29(14) in relation to this use of forest biomass is irrelevant (something not changed just by the discretion a Member State has in relation to financial incentives);
 - h. Member States cannot impose additional LULUCF criteria even the most onerous of which is inadequate to prevent harm. The Member States thus have no relevant discretion over the land-use change aspects of the biomass industry.
116. But even where Member States have some discretion, that does not help here because the Directive establishes an EU-wide renewable energy target and discrete Member State baseline shares. Member States will be penalised if they do not comply with this system and meet their targets. This authorises and directly incentivises the felling and burning of forests which impacts on the Applicants as explained by their statements in support of this Application.
117. In particular, the easiest way for a Member State to comply with the Directive obligations is by increasing reliance on forest biomass, including those of high biodiversity, social and cultural importance. Member States are inevitably going to act upon that authorisation, simultaneously (as it happens) de-prioritising

reliance on carbon-neutral sources of power, such as wind, solar and tide all of which would have avoided the harm suffered by the Applicants.

118. Accordingly, those notional discretions are irrelevant in light of the heavy incentives and obligations and cannot be a way of meaning that the Applicants do not have standing, being left then without effective judicial protection.

The Plaumann formula for individual concern

119. The Court of Justice stated the test for individual concern in Case-25/62 *Plaumann* (“the *Plaumann* formula”). Applicants may challenge legislative acts that affect them:

“by reason of certain attributes peculiar to them, or by reason of a factual situation which differentiates them from all other persons and distinguishes them individually in the same way as the addressee of a decision” (p.107)

120. Similar to direct concern, it is a matter of settled case law that Directives of general application can give rise to individual concern: Cases T-420/05 and T-380/06 *Vischim Srl*, para.68; Case T-135/96 *Union Européenne de l’Artisanat*, para.69.

121. A highly constrained version of the *Plaumann* formula has been used to interpret “*individual concern*” Article 263 in some previous cases. However, the Applicants submit that the best interpretation is that individual concern is established by harm to individual rights.

122. The Court of Justice adopted that wider approach in Case C-309/89 *Codorniu* where the Applicant established individual concern because it had an individual right (a trademark) that was adversely affected by the legislative act (notwithstanding the act being of general application). By analogy, the Directive, although of general application, causes the harvesting of forests and the construction or conversion of power plants to burn the harvested wood. The category of people affected by this aspect of the Directive is limited. Not everyone is affected by felling of forests or the operation of power plants; the Applicants, because of their peculiar attributes, are all individually affected.

123. The Applicants in this case are all directly and individually affected by these parts of the Directive, establishing their standing under Article 263. The direct effect is on their individual legal interests and fundamental rights. In particular:

a. Hasso Krull is a follower of Estonian pagan traditions, with a right to religious worship. This includes worship at sacred forest sites, significant numbers of which have been damaged by the Directive’s predecessor (the Renewable Energy Directive 2009) and are threatened by the further forest harvesting that will be caused by the present Directive;

- b. Bernard Auric and the members of the Association de Lutte contre les Nuisances et la Pollution (“ALNP”) reside close to a power plant in Gardanne, France and suffer harm to their health, amenity and property rights from severe noise and air pollution due to the combustion of forest biomass;
 - c. Peter Sabo, on behalf of the WOLF Forest Protection Movement, relies heavily on the forests of Slovakia in his professional and personal life, both for his own amenity and in execution of his parental duties to his children. He has a deep connection with these forests, which are threatened by the Directive;
 - d. Kent Roberson similarly relies on the forests of North Carolina, USA for his personal amenity and family life. He also runs a business that is contingent upon the health of the forests. These forests are being systematically harvested because of the Directive and its predecessor;
 - e. Tony Lowes has dedicated his adult life to protecting Ireland’s peat bogs. Despite his earlier success at opposing peat-fired power installations, these have now become economically viable because of the possibility of co-firing them with forest biomass and peat fuels. The Directive is solely responsible for threatening his personal and professional life.
124. The harms are all caused and authorised by the Directive: without the Directive (and its predecessor 2009 Directive), there would be no (or significantly less) harm to these interests and rights. These effects are necessary and inevitable products of the Directive; that it will cause this harm when it comes into force is virtually certain. Given the time-limits for an application for annulment, the Applicants have been obliged to bring this action at this stage.

The Plaumann formula should anyway be reformed

125. Notwithstanding that submission that they meet the strict Plaumann formula, the Applicants submit that the Court ought to reform the test, which is manifestly at odds with the general principle of access to justice, and the specific provisions of the Aarhus Convention on access to justice in environmental matters.
126. There is CJEU precedent for reform of admissibility rules to improve access to justice: Case C-294/83 *Les Verts v Parliament*. The case involved a challenge from the French Green Party to a measure adopted by the Parliament governing the recovery of costs spent on political campaigns. Under the Treaty at the time, challenges could be brought to measures adopted by the Council and the Commission but did not provide for challenges against measures adopted by the Parliament. CJEU nonetheless found the action admissible by reading the word “*Parliament*” into the old Article 173 EEC (paras.19-25):

“An interpretation of Article 173 of the Treaty which excluded measures adopted by the European Parliament from those which could be contested would lead to a result contrary both to the spirit of the Treaty as expressed

in Article 164 and to its system. Measures adopted by the European Parliament in the context of the EEC Treaty could encroach on the powers of the Member States or of the other institutions, or exceed the limits which have been set to the Parliament's powers, without its being possible to refer them for review by the Court. It must therefore be concluded that an action for annulment may lie against measures adopted by the European Parliament..." (para.25)

127. The Applicant's legal representatives here have direct experience of the consequences of the strict interpretation of the *Plaumann* test, having represented the Applicants in Case T-91/07 *WWF-UK Ltd v Council* and Case C-355/08 *WWF-UK Ltd v Council Commission*. WWF-UK subsequently submitted observations to the Aarhus Convention Compliance Committee in support of Communication ACCC/C/2008/32 (Client Earth) alleging that by maintaining the stringent criteria of the *Plaumann* formula, the EU failed to comply with Article 9(2), (3) and (4) of the Convention (see below).
128. Regardless of the position in other cases, in environmental cases it is entirely inappropriate to apply a rigid *Plaumann* formula to the identification of individual concern. By its nature, the quality of the environment and the protection and regulation of it is something that affects everyone in both current and future generations. It cannot be a consequence of this that there can be no standing for individuals or environmental NGOs in any case relating to the environment. This is particularly so in light of the EU's commitments made under the UNECE Aarhus Convention.

Aarhus Convention: the EU is a Party in its own right

129. In 2005, the EU as a Party in its own right ratified the UN Economic Commission for Europe Convention, *Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters* ("Aarhus Convention"). The Aarhus Convention establishes standards for the participatory rights of access to information, public participation in decision-making and access to justice in environmental matters.
130. In so doing, the Member States and the EU itself have unambiguously indicated a commitment to enhanced access to justice in the environmental context.
131. Part of that commitment includes Article 9(3):
- "... each Party shall ensure that, where they meet the criteria, if any, laid down in its national law, members of the public have access to administrative or judicial procedures to challenge acts and omissions by private persons and public authorities which contravene provisions of its national law relating to the environment."

132. The Aarhus Convention Compliance Committee has found that a rigid interpretation of “*direct and individual concern*” in Article 263 to be incompatible with the Aarhus Convention:
- a. In Part 1 of its report adopted on 14 April 2011, the Compliance Committee found that the *Plaumann* formula was “*too strict to meet the criteria of the Convention*” because “*persons cannot be individually concerned if the decision or regulation takes effect by virtue of an objective legal or factual situation*” (Part 1, paragraphs 86-89).
 - b. The Compliance Committee repeated this finding in Part 2 of its report adopted on 17 March 2017, stating that the *Plaumann* formula, “*does not implement article 9, paragraph 3, of the Convention because the restrictions to access to justice imposed by the ‘direct and individual concern’ test are too severe to comply with the Convention*” (Part 2, paragraphs 64, 79-81).
 - c. The Compliance Committee also found that that the requirement, in relation to regulatory acts, that there be no implementing measures was incompatible with the Article 9(3) of the Aarhus Convention. As the interpretation of “*direct concern*” has occasionally also required that there be no implementing measures, such an interpretation is also incompatible with the Aarhus Convention.
133. The Compliance Committee also found that EU legislation, Regulation (EC) No 1367/2006 (“Aarhus Regulation”), is not compatible with the Aarhus Convention. The EU is, consequently, not meeting its Aarhus Convention commitments through both its legislation and its standing rules.
134. In relation to access to the CJEU, however, the Compliance Committee recognised that the issue is one of interpretation of Article 263 by the Court, rather than the terms of the Treaty itself or the content of legislation:
- “It is clear to the Committee that TEC article 230 [now Article 263], paragraph 4, on which the ECJ has based its strict position on standing, is drafted in a way that could be interpreted so as to provide standing for qualified individuals and civil society organizations in a way that would meet the standard of article 9, paragraph 3, of the Convention.” (Part 1, paragraph 86)
135. The political institutions of the EU appear to agree with this. As part of its communications with the Compliance Committee, the EC on behalf of the EU submitted:
- “In this regard, the Union would first like to observe that the development of CJEU jurisprudence relating to the Aarhus Convention is a continuous process. It depends on the number of cases that are brought before the Court and the issues that are raised therein. ... This draft finding, however, disregards the evolving nature of the jurisprudence, as it is also

acknowledged by the [Compliance Committee's] recommendations which give the Union the possibility to further implement Article 9 (3) and (4) of the Convention by way of CJEU jurisprudence." (Comments by the European Commission, on behalf of the European Union, to the draft findings and recommendations (18 October 2016), para.31 (emphasis added); see Part 2, para.44).

136. The political institutions of the EU thus recognise that it is for this Court to evolve its interpretation of Article 263 to bring the EU in line with its commitments under the Aarhus Convention in relation to the standing rules. The Applicants submit that the Court should take up this invitation.

137. The Parliament has echoed this call for reform. It passed the *Resolution Of 15 November 2017 On An Action Plan For Nature, People And The Economy*, which clearly recognises the need for the EU fully to comply with the Aarhus Convention and seeks ways to address the findings of the Compliance Committee:

“Emphasises the role of civil society in ensuring better implementation of Union nature legislation, and the importance of the provisions of the Aarhus Convention in this regard;

Calls on the Commission to come forward with a new legislative proposal on minimum standards for access to judicial review, and a revision of the Aarhus Regulation implementing the Convention as regards Union action in order to take account of the recent recommendation from the Aarhus Convention Compliance Committee;” (General Remarks 15-16)

138. Similarly, the Council Decision taking on 18 June 2018 committed the EU to addressing the shortcomings of the Aarhus Regulation,³⁶ on the basis of which the Commission has launched a public consultation.³⁷

139. The political institutions have clearly taken steps to resolve the non-compliance of EU legislation with the Aarhus Convention. However, only this Court has the power to resolve the non-compliance of the standing rules. It thus falls to this Court to interpret Article 263 consistently with the Aarhus Convention, exactly as the Commission anticipated in its submissions to the Compliance Committee (quoted above).

140. The Court has demonstrated a strong commitment to effective access to environmental justice when assessing the standing rules of Member State. For example, in Case C-240/09 *The Slovak Brown Bears Case*, the Court said:

“Therefore, if the effective protection of EU environmental law is not to be undermined, it is inconceivable that Article 9(3) of the Aarhus Convention be

³⁶ <https://www.consilium.europa.eu/en/press/press-releases/2018/06/18/aarhus-convention-council-decision-strengthens-access-to-justice-in-environmental-matters/>

³⁷ <http://ec.europa.eu/environment/aarhus/consultations.htm>

interpreted in such a way as to make it in practice impossible or excessively difficult to exercise rights conferred by EU law.

It follows that ... it is for the national court, in order to ensure effective judicial protection in the fields covered by EU environmental law, to interpret its national law in a way which, to the fullest extent possible, is consistent with the objectives laid down in Article 9(3) of the Aarhus Convention.” (paragraphs 49-50)

141. In light of the position (recognised by the political institutions) that it is a matter for this Court to ensure the EU complies with the Convention, it is essential that the Court evolve its interpretation of “*direct and individual concern*” away from the excessive rigidity of the *Plaumann* formula.
142. The EU is globally the leading governmental body on environmental protection. This is something about which the EU, its Member States and citizens can be rightly proud. However, the application of a rigid interpretation of Article 263 under the *Plaumann* formula in the context of environmental cases is starkly at odds with this position.

Preliminary reference inadequate alternative

143. The Applicants anticipate that the Defendant will argue that there is no need to reinterpret “*direct and individual concern*” as the preliminary reference procedure adequately provides access to justice. This is manifestly not the case, as found by the Compliance Committee:

“While the system of judicial review in the national courts of the EU member States, including the possibility to request a preliminary ruling, is a significant element for ensuring consistent application and proper implementation of EU law in its member States, it cannot be a basis for generally denying members of the public access to the EU Courts to challenge decisions, acts and omissions by EU institutions and bodies; nor does the system of preliminary review amount to an appellate system with regard to decisions, acts and omissions by the EU institutions and bodies. Thus, with respect to decisions, acts and omissions of EU institutions and bodies, the system of preliminary ruling neither in itself meets the requirements of access to justice in article 9 of the Convention, nor compensates for the strict jurisprudence of the EU Courts, examined” (Part 1, paragraph 90; Part 2, paragraph 56)

144. This mechanism is inadequate for several reasons. First, preliminary references are at the discretion of Member State courts (rather than as of right when an applicant satisfies certain admissibility criteria). Consequently, an applicant raising an important issue of EU law may not be able to bring this issue before the CJEU. Second, even if a Member State court does agree to refer a matter, it may choose not to refer the issues the applicant seeks to raise, or it may

choose to re-frame the issues contrary to the wishes of the applicant. Third, similarly, the CJEU may again reframe the issues. Applicants cannot rely on the preliminary reference procedure to bring an issue to the CJEU; they have to surrender their case to the Member State courts and then also to the CJEU. This indirect and uncertain mechanism is manifestly inadequate access to justice.

145. By way of illustration this point, in 2013, the Applicants' legal representatives launched Judicial Review proceedings on behalf of an Irish NGO called An Taisce in the UK High Court alleging that the UK Secretary of State's decision to grant permission for a nuclear power station at Hinckley Point in England was in breach of an EU Directive on Environmental Impact Assessment and UK regulations on transboundary impacts and consultation. The case centred around the meaning of 'likely' in this context, given that Ireland should have been consulted if environmental effects from the project were considered 'likely'. The Court of Appeal considered whether it was possible to give a definitive ruling as to the approach to likelihood in the EIA Directive, or – on the request of the claimants – there should be a reference of that question to the CJEU. The Court of Appeal rejected the request for a preliminary reference and subsequently found against the claimants (see *The Queen on the Application of An Taisce v The Secretary of State for Energy and Climate Change* [2014] EWCA Civ 1111).

146. Adequate judicial protection should be the cornerstone of the EU legal system. It is the basis for uniform enforcement of EU law across the diversity of 28 Member States. The CJEU has (consequently and correctly) held that adequate access to justice within Member States is integral to the EU legal order. A good example is Case C-326/96 *Levez v Jennings*. The case involved access to judicial enforcement of EU rights to non-discrimination in the employment context. The Employment Tribunal claim was time-barred, leaving the claimant to rely instead on a County Court procedure (which was slower and more expensive). The CJEU recognised that the “*additional costs and delay*” of the alternative procedure could be enough to make the legal mechanism ineffective.

147. Resorting to an action in several Member States, in the hope of achieving a preliminary reference, inevitably would lead to additional costs and delays. These steps could also not guarantee that the issues at the heart of this case (the compatibility of the Directive with the Treaty) would even be considered by the CJEU.

Standing for Environmental Interest Groups

148. It is settled case law that representative groups can have standing where individual members of the group have standing: Case T-268/10 *Polyelectrolyte Producers Group GETE (PPG)*. Consequently, ALNP group has standing on the basis of the above submissions.

149. However, the CJEU has previously held that interest groups cannot satisfy the need for direct and individual concern. The Compliance Committee found that this was incompatible with the Aarhus Convention:

“It follows from the *Microban* case and the case law referred to therein that an NGO promoting environmental protection would not be directly concerned with a contested measure unless the measure in question directly affected the organization’s legal position. Such an organization would always be excluded from instituting proceedings under the third limb of article 263, paragraph 4, when it acted purely for the purposes of promoting environmental protection. The Committee considers that while Parties have a margin of discretion when establishing criteria for the purposes of article 9, paragraph 3, of the Convention, that margin of discretion does not allow them to exclude all NGOs acting solely for the purposes of promoting environmental protection from redress.” (Part 2, paragraph 73)

150. There would be significant advantages to the Court’s procedures if appropriate interest groups were granted standing. Cases brought by interest groups can streamline hearings, helping the court to identify the issues and ultimately decide cases more quickly than if the court only hears cases brought by individuals (who will inevitably bring factual complexity).

151. *Bona fide* interest groups, with a proven track record of interest to the issue before the court should be given standing on the basis that this *bona fide* interest is analogous to the direct and individual concern required by Article 263.

152. The Applicants submit that 2Celsius and WOLF Forest Protection Movement each satisfy this requirement:

a. 2Celsius is an exceptional environmental NGO, active across Central and Eastern Europe. It was founded in 2010 to tackle climate change issues and has been campaigning against the combustion of forest biomass for energy through public education initiatives (such as film campaigns) and extensive engagement with governmental bodies; and

b. Since 1993, WOLF Forest Protection Movement has been campaigning to protect forests in Slovakia. It has been campaigning against the use of forest biomass as a source of energy for over a decade.

(B) GROUNDS FOR ANNULMENT

153. The Applicants submit that the inclusion of forest biomass as a renewable energy source within the Directive is incompatible with the EU’s Treaty and Charter obligations and ought to be annulled. The Applicants make this submission on two grounds. The Directive’s treatment of forest biomass as a

renewable energy source, and the inadequate obligations it imposes on Member States, are:

- a. Incompatible with the environmental protection obligations in Article 191, TFEU, in that it manifestly fails to meet the obligations and conditions of this Article; and
- b. Incompatible with the Applicant's fundamental rights under the Charter of Fundamental Rights.

Ground 1: Incompatibility with Article 191

154. Article 191(1)-(3) TFEU states:

“1. Union policy on the environment shall contribute to pursuit of the following objectives:

- preserving, protecting and improving the quality of the environment,
- protecting human health,
- prudent and rational utilisation of natural resources,
- promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change.

2. Union policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay.

In this context, harmonisation measures answering environmental protection requirements shall include, where appropriate, a safeguard clause allowing Member States to take provisional measures, for non-economic environmental reasons, subject to a procedure of inspection by the Union.

3. In preparing its policy on the environment, the Union shall take account of:

- available scientific and technical data,
- environmental conditions in the various regions of the Union,
- the potential benefits and costs of action or lack of action,
- the economic and social development of the Union as a whole and the balanced development of its regions.”

155. The Directive violates a number of these principles in its treatment of forest biomass, as explained below.

156. The Applicants do not contend that each individual obligation is judicially enforceable. But the manifest failure of the Directive measured against the entire Article constitutes the illegality.

157. Article 191 is expressed in mandatory language: the EU's policy shall contribute to the pursuit of certain environmental objectives, shall aim at a "high level of protection" and shall take account of certain factors and considerations. That mandatory language is significant. Even if the individual objectives are aspirational, Article 191 clearly imposes obligations on the EU. The extent of the Directive's non-compliance with those obligations is huge. It is that extreme non-compliance (the manifest failure to act according to Article 191) that constitutes the illegality.

Article 191(1) Environmental Objectives

158. Article 191(1) states four environmental objectives that EU environmental policy must pursue. The Directive's treatment of forest biomass does not contribute to the pursuit of any of them. On the contrary, it is actively harmful to them, as set out in turn below.

Preserving, Protecting and Improving the Quality of the Environment

Forest Ecosystem Impacts

159. Intensive forest harvesting, particularly the harvesting for biomass fuel that tends to remove the majority of wood, literally represents the destruction of an ecosystem. Forests can grow back, but this takes decades to centuries. Thus, to the extent that the Directive promotes and incentivises the use of wood from forest harvesting for biomass, it is doing the opposite of "*preserving, protecting, and improving the quality of the environment.*"

160. Despite promoting the expansion of the use of forest biomass for energy, the Directive does not require Member States to adopt sustainability criteria to ensure the preservation of high biodiversity forests. This is particularly egregious in the case of biomass used for transport fuels (including those made from forest biomass), where the Directive prohibits Member States from adopting more effective standards. The result is the destruction of such forest areas, as described by the applicants Hasso Krull, Raul Cazan, Peter Sabo and Kent Roberson, and in the statements from Adam Colette, Dominick DellaSala, and Gabriel Paun.

161. The Directive also promotes the use of wood pellets as fuel in biomass installations. As explained in the statements of Hasso Krull, Kent Roberson, Dr. Mary Booth, Adam Colette, and Jeff Turner, wood pellets are the form of biomass that does the most harm to forest ecosystems and the climate.

Other Ecosystem Impacts

162. The damage to ecosystems caused by the use of forest biomass is not confined to the forests themselves.
163. As explained in Tony Lowes statement, the Directive's provisions that lead to co-firing installations of biomass with a fossil fuel source have allowed peat-burning installations in Ireland to remain viable. This has caused the continuation of peat harvesting from bog ecosystems. This is done through stripping the peat entirely; like clear-felling a forest, this obliterates the ecosystem. Not only is peat burning extremely carbon intensive, the peat bog ecosystems are increasingly rare and are home to unique species and cultural resources.
164. Further, ecosystems are not discrete, isolated entities. The removal of forests has catastrophic effects on integrated ecosystems. This is particularly so for water systems, which can be degraded by the harvesting of forest for biomass (see the statements of Jeff Turner and Dr. Mary Booth).

Climate impacts

165. By treating stack emissions of biogenic GHG as zero, the Directive fails to capture the impact on the atmosphere of the GHG that are in fact emitted. This failing applies to both EU and non-EU sources of forest biomass.
162. For EU sources, the LULUCF Regulation applies, but this only aims to ensure 'no debit' in carbon stocks and sinks, measured against the FRL (as set out above). In other words, even if completely successful, the LULUCF Regulation does not protect forest carbon stocks from depletion by biomass harvesting, and does not aim to build forests stocks and sinks in the EU, even though such enhancement is necessary to meet the aims of the Paris Agreement and is an accepted aim of EU climate policy.
166. For non-EU sources, the failing is extreme as the LULUCF Regulation is inapplicable. Significant amounts of the biomass fuel used in the EU is sourced from non-EU countries (see statements of Adam Colette and Dr. Mary Booth). For these sources, the Directive imposes no obligation to ensure that re-sequestration of GHG emissions occurs at all. Instead, it outsources this to other states. Without requiring any assessment of whether any re-sequestration has actually occurred, the Directive then mandates that the biomass fuel must be treated as though full re-sequestration had in fact occurred. This causes significant GHG emissions that would not have occurred but for the Directive (as set out in the statements of Dr. Mary Booth and Tim Searchinger).

Protecting Human Health

Air and Noise Pollution

167. Significant air pollution is an inevitable consequence of the use of forest biomass as an energy source. Despite this, the Directive expands the EU's reliance

on forest biomass and takes no steps to minimise the air pollution that will necessarily follow.

168. As a fuel in electricity and heat installations, forest biomass is highly polluting. Even well-controlled plants emit tens of tons of particulate matter and smog precursors per year. This level of pollution can be worse than if an equivalent amount of energy and heat had been produced from coal, as explained by Dr. Mary Booth. This is a staggering consequence of a Directive intended to advance environmental protection.
169. In contrast, none of the other renewable energy sources, over which biomass is promoted, cause air pollution on anywhere near this scale.
170. Applicants Bernard Auric and his colleagues have suffered greatly as a result of air pollution from the combustion of forest biomass. The Directive threatens to maintain (and possibly increase) the air pollution they are experiencing. They are also suffering from noise from the bioenergy operation, a common complaint for this industry. In light of the Directive's measures to increase the use of forest biomass as an energy source, the Applicants will experience even worse levels of air pollution.
171. Furthermore, a direct consequence of the Directive's promotion of forest biomass for use in electricity/heating is the development of the wood pellet industry. Facilities for manufacturing wood pellets from raw biomass are themselves significant generators of air pollution that is harmful to human health, as explained in the statement of Dr. Mary Booth.

Prudent and Rational Utilisation of Natural Resources

172. A prudent policy would be one that was conservative, that acknowledged unknowns, and that saved resources for the future. A rational policy is one that is based on science and common sense. Burning trees for energy as a way to mitigate climate change does not fulfil these criteria.
173. Through the Paris agreement, the EU has committed to limiting average global temperature rises to 1.5 degrees Celsius. The EU has also committed to complete carbon balance by 2050. This requires global emissions to peak soon, and decline rapidly thereafter to achieve a 'net-zero' emissions target by around 2050. This is an adopted goal of EU climate policy. To achieve this, it is necessary to drastically increase natural carbon stocks and sinks. Reforestation and enhanced management of forest carbon are the only negative emissions strategies that are proven at any scale.
173. In this context, the only rational and prudent use of forests is to use them as carbon sinks and stocks and to enhance them to the greatest possible extent. Harvested wood products can, to a limited extent, sequester carbon and contribute to the carbon sink. However burning forest biomass for energy, heating or road transport is an irrational and imprudent use of this natural resource, in light of this

pressing need. Forest harvesting and burning is recognized as a large source of the CO₂ that is driving climate change. Even if the LULUCF regime operated globally and perfectly, under the ‘no debit’ rule it would only be acknowledging forest carbon losses and requiring states to make up the difference in some other fashion. It would not directly mitigate or more importantly avoid the damage to existing forest stocks and sinks caused by harvesting for bioenergy.

174. Further, as explained in in the statement of Dr. Mary Booth, the water content of biomass makes it an inherently inefficient fuel, and pre-drying fuels, as with wood pellets, requires large amounts of energy and associated emissions. It is only because of the irrational policy choice to count biogenic/stack emissions as zero that the Directive may assert that there are GHG savings from forest biomass compared to fossil fuels. In these circumstances it is a highly inefficient use of resources to develop forest biomass sources at the expense of other (low-carbon) renewable sources.

Article 191(2) High Level of Environmental Protection

175. The Directive does not aim at a high level of environmental protection. On the contrary, it encourages a harmful practice (the harvesting and combustion of forest biomass for energy) and adopts inadequate provisions that do not come close rectifying the harms caused to forests.

Failure to Rectify Damage at Source

176. The emission of CO₂ into the atmosphere as the result of fuel combustion is one of the most serious environmental problems facing the world today, because of its central role as a driver of climate change.

177. Instead of rectifying this damage at source, as required by Article 191(2), the Directive promotes the continued release of biogenic/stack emissions of GHGs by accelerating combustion of biomass.

178. As explained above, the Directive’s claim to rectifying environmental damage relies on equivalent carbon as emitted by biomass combustion being re-sequestered by forests at some future time. Confirming that the necessary sequestration occurs is inherently a complex and uncertain exercise that the Directive does not even attempt. To the extent that the LULUCF Regulation is expected to ensure forest carbon stocks are at least counted, this offers only a partial and highly technocratic solution in comparison simply to reducing emissions at source. In short, the Directive adopts an inadequate cure for the harm it creates, instead of seeking to prevent the damage occurring in the first place.

179. Likewise, the Directive does not attempt to tackle the environmental damage caused by the felling of forests at source. On the contrary, it sets up a system of

incentives that is avowedly intended to *expand* that form of environmental damage, by expanding the forest biomass sector, and then seeks to mitigate the damage by the application of sustainability criteria. The weaknesses in the Sustainability Criteria are explained above. Even if the criteria were robust, however, they are by their very nature an exercise in damage limitation: they seek to limit the damage caused by the expansion of the forest biomass industry, rather than tackling (or preventing) that damage at source.

Failure to Adopt the Polluter Pays Principle

180. Despite the harms caused by the combustion of forest biomass, the Directive makes no attempt to implement the polluter pays principle. The Directive actually shifts responsibility for the pollution (GHG emissions) away from the polluter (the facility burning the biomass) and onto the country from which the biomass was sourced (where to the extent the forest carbon loss is recorded, it decreases that country's carbon stocks in the land sector, thus undermining climate mitigation efforts). The Directive further authorises support mechanisms to encourage the expansion of this harmful energy source, which is starkly at odds with the polluter pays principle. This failure to implement the polluter pays principle is exacerbated by the subsequent failure fully to account for and off-set the GHG emissions under the LULUCF Regulation, or possibly at all under the third country accounting systems.

Failure to Apply the Precautionary and Preventative Action Principles

181. Despite the well-documented risks of expanding the harvesting and combustion of forest biomass, the Directive fails to place any limits on the use of forest bioenergy. In contrast, in light of the risks posed by excessive development of biofuels and bioliquids from certain agricultural crops, Recital 80 recognises the need for a limit:

“To prepare for the transition towards advanced biofuels and minimise the overall direct and indirect land-use change impacts, it is appropriate to limit the amount of biofuels and bioliquids produced from cereal and other starch-rich crops, sugars and oil crops that can be counted towards the targets laid down in this Directive.”

182. Similarly, Recital 46 in relation to geo-thermal energy recognises that certain uses should be avoided when they are harmful to health and the environment.

183. In the context of forest biomass, however, the Directive completely fails to apply the precautionary or preventative action principles. It imposes no limit on the harvesting or combustion of biomass, and sets inadequate safeguards, which do not prevent harm to the environment generally and forest ecosystems in particular. This takes no account of the risks to the environment posed by further growth in the biomass industry, contrary to the precautionary or preventative action principles.

Article 191(3) Duty to Account for Scientific and Technical Data

184. The Directive woefully fails to take account of available scientific and technical data. As set out above and in the expert statements of Dr. Mary Booth, Tim Searchinger, and Adam Colette, the use of forest biomass as a fuel source leads to increased concentrations of GHGs in the atmosphere. Further, as these statements recount, the EU received a number of clear warnings concerning existing and potential harms to forests and the climate from the use of forest biomass for energy. These included several warnings from the bodies charged with advising the EU, and from bodies specially commissioned by the EU to investigate bioenergy carbon and forest impacts. Specifically, the scientific advice was the Directive should use carbon accounting to assess the impact of biomass and that it should account for the increase in GHGs in the atmosphere as a result of the use of biomass when assessing whether forest biomass reduces GHG emissions relative to fossil fuels. US NGOs who had documented the destruction of forests by the wood pellet industry also provided in-person testimony to key EU policymakers (see statement by Adam Colette).

185. Instead of heeding these warnings, the Directive treats the bulk of biomass emissions (the biogenic/stack emissions) as not existing. This essentially leaves the regulation of biogenic emissions to separate systems (the LULUCF Regulation within the EU, and whatever carbon accounting system happens to exist in any source country outside the EU), which, as set out above, are incapable of either accounting for or remedying them. The policy ultimately adopted in the Directive does not account for the scientific data proving that the use of biomass increases the concentrations of GHGs in the atmosphere relative to other renewable energy sources and to fossil fuel sources.

Conclusion on Ground 1

186. In light of the above, it is abundantly clear that the Directive manifestly fails to address the objectives and obligations of Article 191 of the TFEU. This Article imposes obligations on the EU. Even if the individual elements are not judicially enforceable, the Court must have the power to identify and annul acts that are in flagrant breach of Treaty obligations. The manifest non-compliance of the Directive with Article 191 is precisely such an act. The Applicants thus submit that its provisions relating to forest biomass should be annulled.

Ground 2: The Directive violates Charter rights of the Applicants

Scope and effect of Charter rights

187. The acts of the institutions are reviewable against the provisions of the EU Charter on Fundamental Rights (“the Charter”). The Charter has the status of the

Treaties by virtue of Article 6(1) TEU and the rights it contains therefore have the status of a higher law to which the legislative acts of the EU institutions must conform.

188. This is confirmed by Article 51(1) of the Charter, which stipulates that the Charter provisions are addressed to the institutions of the Union, who ‘shall therefore respect the rights, observe the principles and promote the application thereof’ in the exercise of their powers, including in the exercise of their legislative competence.
189. Article 52 of the Charter provides that any limitation on the exercise of the rights and freedoms it recognises must be provided for by law and respect the essence of those rights and freedoms. Subject to the principle of proportionality, limitations may be made only if they are necessary and genuinely meet objectives of general interest recognised by the Union or the need to protect the rights and freedoms of others.
190. The preamble to the Charter explains that the rights it contains are recognised by the EU as expressions of ‘the indivisible, universal values of human dignity, freedom, equality and solidarity’. The rights themselves must therefore be regarded as universal, and so enjoyed by citizens of third countries as well as citizens of the EU. Legal acts of the Union must respect these rights in all countries, not just in the territory of the EU.
191. Specific violations of the Charter rights of the applicants are identified below. For the reasons given under Ground 1, these infringements are neither necessary for, nor genuinely meet the important environmental protections objectives of the EU. On the contrary, they undermine them. Therefore none of the infringements below can possibly be justified under the terms of Article 52.
192. Given that this challenge must be brought within two months of the publication of the Directive, the Applicants must look forward and anticipate the violations of their rights that the Directive itself will cause, based on the harm that has occurred as a result of the predecessor Directive.

Article 37 - High Level of Environmental Protection

193. For the reasons given under Ground 1, the Directive breaches Article 37, which requires that a high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development.
194. The inclusion of this right within Chapter IV of the Charter, titled ‘Solidarity’, demonstrates that each of the applicants personally enjoys the fundamental right to be subject to policies which respect this principle. The principle has been breached in all of their cases, with unique individual consequences in each of their cases, as set out in their statements and summarised at paragraphs 3 and 123.

Article 7 - Respect for private and family life; Article 14 – right to education; Article 24 – rights of the child

195. The Gardanne applicants describe in detail how they have suffered serious intrusions into the private sphere of their family life as a consequence of the Directive, in breach of Article 7 [see paras. 1, 5-22 and 24-25 of Bernard Auric’s statement]. These intrusions have also led to a situation that is damaging to the well-being of their children, contrary to Article 24(1).
196. Peter Sabo describes the choice he has made to raise his family in a region of Slovakia where he can access the forests to which he has a deep personal connection, specifically so that he can pass on this connection to his sons [see paras. 1, 4-15 and 39]. Mr Sabo’s connection to the forests is grounded in his deep understanding of their ecological significance and his own interdependence as a human being with natural systems [see para. 4]. The logging threat to the forests where he lives represents an infringement on the private sphere of Mr Sabo’s family life, in breach of Article 7. For the same reason, his right to ensure the education and teaching of his children in conformity with his philosophical convictions has been infringed, in breach of Article 14(3) of the Charter.
197. Kent Roberson describes how hunting in the woods he owns is an intrinsic part of his family life, and has been for over 100 years [see paras. 3, 5 and 21]. The logging damage to surrounding woodland has had a knock-on effect on his own property, reducing the extent to which it supports the small mammals he and his family hunt, and also their ability to access it [see paras. 6, 13, 15 and 16-22]. This is an infringement of his private family life, in breach of Article 7.

Article 17 – Right to Property

198. The Gardanne applicants explain how the value of their property has decreased [see para. 10] as a result of noise and other nuisance brought about, or likely to be exacerbated, by the Directive [see para. 5-15]. This is an unlawful interference, in breach of Article 17.
199. Kent Roberson describes how the logging of forest surrounding his property has left it exposed to extreme weather (itself made more likely by climate change). The removal of the natural buffer around his property has led to an interference with that property as trees have been blown down. He describes how that has reduced both the amenity and financial value of his land, in breach of Article 17 [see paras. above].

Article 35 – Health Care

200. Article 35 requires that ‘A high level of human health protection shall be ensured in the definition and implementation of all Union policies and activities’. The Gardanne applicants describe how the implementation of the predecessor Directive has had highly damaging consequences for human health – including

directly from wood dust – and that the Directive itself is likely to exacerbate these effects, in breach of Article 35 [see paras. 5, 13-15].

Article 10 - Freedom to manifest religion; Article 22 – respect for religious diversity (Article 22)

201. Hasso Krull gives statement about the importance of ancient sacred sites in the native religious tradition of Estonia, and to him personally as an adherent of that religion [see paras. 1, 5-17 and 39]. The damage to these sacred sites caused by the predecessor Directive, and likely to be exacerbated by the Directive itself, interferes with his freedom to manifest his religion, in breach of Article 10, as the religion is inextricably bound up with the significance of particular sites, and it is impossible to practice it in the same way once they have been destroyed.
202. For similar reasons, the impetus to logging provided by the Directive and its inadequate protection of sites of particular religious importance, fail to respect the religious diversity of the Union, contrary to Article 22. The Directive wholly fails to recognise the religious significance, in certain traditions, of forests, which it treats simply as a commodity.

CONCLUSION AND ORDER SOUGHT

203. The Directive is invalid insofar as it is incompatible with principles of higher law, specifically the provisions of Article 191 TFEU and the fundamental rights of the individual applicants guaranteed by the Charter.
204. The honourable Court is invited to use its power under Article 264 TFEU to declare void those provisions of the Directive that allow for energy from forest biomass to count towards the Article 29(1) purposes: namely (a) contributing towards the Collective Target for 2030; (b) measuring compliance with renewable energy obligations, and (c) eligibility for financial support.

DAVID WOLF Q.C.

Matrix Chambers

PETER LOCKLEY

BEN MITCHELL

11 KBW

4 March 2019