

EU Biomass Legal Case

Save Forests, Save the Climate

Home Press Release

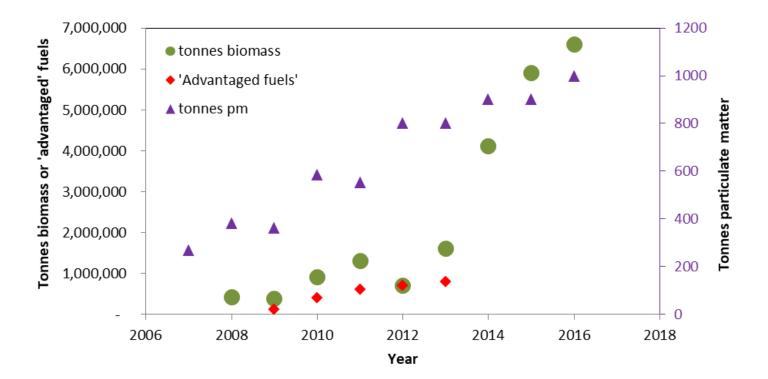
Τŀ

Drax (UK): 1,000 tonnes of deadly particulate pollution a year, a 400% increase since they switched from coal to biomass

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Particulate pollution kills people. A report from the European Environment Agency^[1] concluded that in 2013, the estimated number of premature deaths in EU-28 attributed to PM2.5 (particulate matter 2.5 microns in diameter and below) NO2 (nitrogen oxide) and O3 (ozone) exposure was 436,000, 71,000, and 16,000, respectively.

Data from the massive coal/wood-powered station Drax in the UK illustrates an interesting relationship between burning biomass and particulate pollution. Drax started co-firing wood pellets with coal certain of its six boilers several years ago, and has now converted four of the six boilers to burn only biomass. Over that time, particulate matter emissions have increased about 400% to 1,000 tonnes per year, even though power output has remained fairly constant.



Graph: The relationship between biomass fuel use, 'advantaged fuel' use, and particulate matter emissions at Drax. Particulate matter emissions are graphed referring to the right-hand axis.^[2]

Drax states that the increase in emissions is actually due to its use of "advantaged fuels" – i.e., coal ash, petcoke, and biomass ash, [3] which apparently contains enough carbon after burning the first time that it is worth burning a second time. Drax does not consistently report its use of these 'advantaged fuels' in its annual reports, thus the data in the figure are incomplete. Nonetheless, it is clear that increased biomass use at the plant has not led to a reduction in particulate emissions, but has occurred concurrently with a significant increase.

- [1] 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
- [2] PM data are from https://prtr.eea.europa.eu/#/facilitylevels, except PM emissions for 2012 2016, which are from Drax annual reports.
- [3] Drax 2016 annual report, at https://www.drax.com/investors/results-reports-agm/

