



The debate about the impact of burning solid biomass on air quality was steadfastly ignored by European Commission in revising the EU's renewable energy policy. It is not too late for the European Parliament to rectify this, writes Linde Zuidema.

Linde Zuidema is a bioenergy campaigner at the forests and rights NGO Fern.

The European Union's dependence on burning solid biomass – most of it wood – to meet its renewable energy targets makes no sense environmentally. It harms the climate, and damages forests and biodiversity.

Because of this, opposition to the policy has swelled over the past year among the public and scientists.

Next week the European Parliament will vote on a proposed revision to the Renewable Energy Directive, which will determine the EU's future use of biomass. If approved, it will inevitably mean the continued burning of vast quantities of biomass, mainly in the form of wood.

Quite apart from its disastrous environmental impact, there's another reason any legislation which increases biomass burning for heating and power should be strenuously resisted. And it's one that – until now – has been largely overlooked.

New research for Fern by Dr Mike Holland, a leading independent air pollution expert, reveals the perilous cost to EU citizens' health from burning solid biomass.

It indicates that tens of thousands of EU citizens are dying prematurely every year as a result of exposure to air pollution from burning solid biomass.

Other health impacts include cancers, cardiac and respiratory complaints, asthma attacks and working days lost to ill health.

Dr Holland's main focus was assessing 27 biomass burning power plants in the EU where emissions data was available.

Ten of these plants were former coal power stations that have been converted to run on biomass or to be co-fired with a mixture of biomass and coal. The other 17 plants were purpose built biomass plants.

The former coal plants accounted for the bulk of the negative health impacts, due to factors including their much greater size and generally higher levels of harmful sulphur emissions, which were partly linked to continued coal burning in co-fired sites.

Dr Holland's analysis indicates that more than 1,300 people are dying prematurely each year as a result of exposure to air pollution from the 27 facilities considered.

Measured in financial terms, health costs linked to biomass burning for power generation run into billions of euros each year, with health costs associated with emissions from former coal and co-fired plants amounting to 137,000 euros per year on average for every mega-



watt of electrical capacity installed.

Investments in power generation are long term. So once a power plant is built it's likely to stay in operation for several decades – with the health impacts spreading over that time. Dr Holland's report also reviews the evidence of the health impact of air pollution from the use of biomass in domestic heating in the EU.

This has become more widespread in recent years driven partly by renewable energy policies, but also because wood is often cheaper than alternative heating fuels such as coal and oil. Domestic biomass burning increased in the wake of the 2008 economic crisis. A study by Sigsgaard and others estimates that exposure to smoke from domestic biomass use led to 40,000 deaths across the EU in 2014. The authors say this is a conservative figure.

Dr Holland extends Sigsgaard's analysis to produce a fuller picture of the range of health impacts from domestic biomass burning. In a single year, he estimates that in addition to the 40,000 deaths across the EU, there were more than 130,000 cases of bronchitis, more than 20,000 respiratory and cardiac hospital admissions, a million asthma symptom days for children aged 5-19, 43 million restricted activity days and 10 million working days lost. All because of exposure to fine particles from domestic biomass emissions.

In the debate about revising the Renewable Energy Directive, some compare air pollution caused by burning biomass with that from fossil fuels. But biomass is not competing against fossil fuels to fill the gap between current and desired levels of renewable power generation: it is competing against other renewable technologies, which may offer a solution with substantially lower external costs.

Yet this debate about the impact of burning solid biomass on air quality was steadfastly ignored by European Commission in revising the EU's renewable energy policy. It is not too late for the European Parliament to rectify this.

Given the drastic effect that biomass burning is already having on its citizens' health – as well on forests and the climate – the Parliament must abandon its current path, specifically by ending support for converting coal installations into biomass ones, and for burning biomass in large-scale inefficient installations.

Only then, will the EU have a renewable energy policy that respects the environment as well as its citizens' health.

Source: euractiv.com