

Lithuanian good practice of measures employed to implement obligations under Protocols to the Convention

<p>Country: Lithuania</p>	<p>Sector: <i>Residential heating, industry</i></p>
<p>Type of strategy, policy or measure: <i>Combination of legislative, economic, informational and scientific measures.</i></p>	<p>Level: National</p>
<p>What is the main objective of the strategy, policy or measure? When has it been implemented/or will be implemented? <i>The main goal of dedicated measures will be to reduce air pollution from residential sector due to solid fuel combustion for domestic heating. By applying combination of measures we expect to accomplish national PM2.5 emission goals for 2020 and 2030, established by Gothenburg Protocol, we also expect reduce urban ambient air pollution levels according EU directives and significantly cut national emissions of chlorinated dioxins/furans and polycyclic aromatic hydrocarbons, related to our obligations under Protocol on persistent organic compounds. Achieving before mentioned goals cannot be done without increasing public awareness on solid fuel combustion impact on human health and environment. Additionally research study on availability to use engineered wood residues for energy in various combustion plants will be carried out with the aim to establish conditions for environmentally-sound manner combustion of chemically treated wood. Implementation of measures is expected to begin in 2018.</i></p>	
<p>Background and driving forces: <i>Lithuania obligated by 2020 to reduce its PM2.5 emissions by 20 % or more and by 2030 no less than 36 % compared to 2005 level. According national pollutant inventory, it's evident that residential heating sector is major PM2.5 release to air contributor, which is responsible for 85 % of all national PM2.5 emission. Moreover, residential heating also emits 85 % of total national dioxin and furan quantity. The main cause of this is that in Lithuania less than only 5 % of all installed solid fuel residential heating systems comply with principles of eco-design and to our concern majority of the existing solid fuel boilers have low energy efficiency and emits significant quantities of before mentioned pollutants. Additionally, development of furniture production industry resulted in increased generation of engineered wood residues, thus rising utilization problems, such as the use of residues in solid biofuel production. At the moment Lithuania doesn't have legal requirements for solid fuel quality and in these circumstances there are more occasions when chemically treated wood residues (or solid biofuel produced from such residues) are used not only in industrial combustions plants, but also in households (sold as by-product). There is lack information on potential harmful impact by burning solid biofuels produced from engineered wood residues in residential and industrial boilers under uncontrolled or poorly controlled combustion process conditions. Lastly, Lithuania encounters problem of low public awareness of negative impact from burning low quality solid fuel or household waste. There are still many occasions when people trying to dispose household waste by burning them in solid fuel boilers.</i></p>	
<p>Description of the strategy, policy or measure: <i>Requirements, conditions and limitations for using engineered wood residues directly for energy or solid biofuel production will based on scientific study made by academic institution. Additionally, this study will try to propose limit values for solid biofuel composition made from virgin biomass with the aim to achieve lowest possible pollutant emissions while burning such solid biofuel in residential boilers under uncontrolled burning process conditions.</i></p>	

Depending on study results, legal act of solid biofuel quality requirements will be developed with proposed limit values and requirements for solid biofuel production from engineered wood residues. Solid biofuel quality requirements will also foresee dedicated market surveillance. We consider that this measure is important to prevent poor quality solid fuel entering Lithuanian market and it's more effective than establish end-of-pipe limit values for residential heating boilers as controlling private estates is very ineffective due the requirement for inspectors to have court order to enter private areas. There are also discussions started for requirements on other solid fuels, such as coal.

To tackle problem of poor state of residential solid fuel boilers, preparations are starting on economic incentives for modernization of residential heating systems. Incentives will include partly compensation on acquisition of not only modern solid fuel boilers, but also of other alternative heating system, such as geothermal and solar energy heating. Incentives will also be available for the solid biofuel fired medium combustion plants.

Under EU funding period of 2014-2020, Lithuania will launch public awareness campaigns on impact on human health and environment from the solid fuel burning and the availability of before mentioned economic incentives.

Costs, Funding and Revenue allocation:

As measures are still under development, there are no exact data on costs.

Scientific study estimated to cost up to 30 thousand Euros and it's expected to be covered by national climate change fund. Public awareness campaigns, modernization of residential heating systems and medium combustion plant boilers will be covered by EU funds and national budget.

Effect and impacts on air pollution abatement:

It's expected that implemented measures will considerably reduce PM2.5, chlorinated dioxin/furan and polycyclic aromatic hydrocarbons national emission. Also is expected to greatly increase local air quality. It's too early to determine impact value, as there is no information on amount of investment will be available.

References/Further information:

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Additional comments: