



Funded by  
the European Union



## **Multi-country workshop on Air pollution**

### **from household heating**

– PM<sub>2.5</sub> and B(a)P reduction strategies

**organised in co-operation with**

**Ministry of the Environment of the Republic of Estonia**

**02 - 03 September 2019**

#### **Venue:**

Park Inn by Radisson Meriton Conference & Spa Hotel  
Tallinn, Toompuiestee 27

**Tallinn**

#### **Beneficiary:**

Estonia, Croatia, Latvia, Lithuania

Organised and funded by the  
**Technical Assistance and Information Exchange Instrument**  
of the European Commission



### **Aim of the Workshop:**

---

With the **Environmental Implementation Review (EIR)** the European Commission has launched **TAIEX-EIR Peer 2 Peer** as a new, practical tool that facilitates peer-to-peer learning between environmental authorities. The use of solid fuels, such as wood, in domestic heating significantly contributes to air pollution in the EU, with some Member States, such as Estonia, Latvia, Lithuania and Croatia particularly exposed to that problem. The workshop will provide expertise and advise from more advanced Member States on suitable policy measures at national level, such as phasing out of old boilers and market regulation for new ones and effective inspections as well as mitigation strategies on local level, including development and implementation of air quality plans and effective campaigns for citizens. On the second day, cities and local authorities exchange their experience on reduction strategies on local level via air quality programmes, awareness raising campaigns and other means. The target group of the workshop are Estonian national and local authorities as well as governments and cities with a similar challenges from Lithuania, Latvia and Croatia.

## Day 1: 2<sup>nd</sup> September 2019

**Chair: Mr Marek Maasikmets, Air Quality Management Department of Estonian Environmental Research Centre**

**Venue: Park Inn by Radisson Meriton Conference & Spa Hotel, Toompuiestee 27  
Tallinn**

09:00 *Registration of participants*

### **Introductory session**

09:20 **Welcome address: Mr Harry Liiv, Deputy Secretary General, Ministry of the Environment of the Republic of Estonia**

09:30 **Scene setter:**

Overview of the situation in Estonia:

- Air emission levels of PM<sub>2.5</sub> and B(a)P – why do we need to reduce emissions from household heating?
- Challenges and next steps
- Aim of the workshop

**Ms Riina Maruštšak**, Ambient Air and Radiation Department, Ministry of the Environment of the Republic of Estonia

09:50 Presentations from the participating countries on overview of the situation (challenges in reducing air emissions from domestic heating, etc.) and expectations from this workshop

### **Presentations:**

**Mr Paulius Žvirblis**, Pollution Prevention Policy Group, Ministry of Environment of the Republic of Lithuania, Overview of the situation in Lithuania (10 min for presentation)

**Ms Alda Ozola** and **Ms Lana Maslova**, Ministry of Environmental Protection and Regional Development of Latvia, Overview of the situation in Latvia (10 min for presentation)

**Ms Maja Cindric**, Ministry of Environment and Energy of Croatia, Overview of the situation in Croatia (10 min for presentation)

**Mr Levente Molnár**, Ministry of Environment of the Slovak Republic, Follow-up on the Bratislava TAIEX-EIR PEER 2 PEER workshop on air pollution from

	<p>domestic heating (measures implemented, successes, difficulties/obstacles) (10 min for presentation)</p> <p>The aim of this session is to allow participants and experts to get to know each other. Each learning MS will be asked to provide brief description of current state (incl. challenges) and share their expectations of the workshop.</p>
10:45	<i>Coffee break</i>
<b>Transition from high-emission to low-emission heating</b>	
11:15	<p><b>Experiences and challenges</b></p> <ul style="list-style-type: none"> <li>• What measures have been effective for reducing PM<sub>2.5</sub> and B(a)P emissions from household heating?</li> <li>• Have there been assessments (e.g. via air quality measurements, emission measurements from appliances) to evaluate the impact of implemented measures? Have the measures provided expected outcome?</li> <li>• What were the main challenges in implementing the measures? Examples of challenges and solutions, and lessons learned.</li> </ul> <p><b>Presentations:</b></p> <p><b>Mr Zig Klimont</b>, International Institute for Applied Systems Analyses, Overview of the study "Measures to address air pollution from small combustion sources" (15 min for presentation)</p> <p>An overview of the study: available technologies (incl. new technologies, BAT), good practice examples on reducing PM<sub>2.5</sub> emissions from wood burning (phasing out old boilers/stoves, financial incentives, bans, district heating, etc.), conclusions. Here the presenter has to keep in mind that we have experts from Finland and Czech Republic sharing their experience (avoid duplication of information).</p> <p><b>Mr Mikko Savolahti</b>, Finnish Environment Institute, Finland's experience and future plans on transition from high-emission to low-emission heating (20 min for presentation)</p> <p>Current situation in Finland, measures implemented so far and foreseen in the future (incl. "soft measures"), assessing effectiveness of the measures, possible challenges and solutions, cooperation between national and local levels</p> <p>Discussion and conclusions</p>
12:15	<b>Regulation at national level</b>
	<p><b>Regulation on restricting the usage of old boilers and stoves and phase-out incentives</b></p> <ul style="list-style-type: none"> <li>• How is it regulated, are there any subsidies provided? Is it based on Eco-design regulation? If not, on what criteria is regulation based? How long is the transition period?</li> </ul>

- What kind of subsidies are there for replacing old boilers/stoves? Are there subsidies for switching to different/alternative heating systems?
- What are the control mechanisms – requirements that new appliances need to meet, conditions for application to receive subsidies, etc.?
- Which authority is responsible of regulation and its implementation?

**Presentations:**

**Mr Christian Liesgang**, Umweltbundesamt, Germany’s regulation on phasing out old boilers and stoves (15 min for presentation)

Current situation and regulation, in particular actions for phasing out old boilers/stoves (financial incentives, requirements for existing and new appliances, etc.), future plans

**Mr Pavel Gadas**, Ministry of Environment of Czech Republic, Czech Republic’s experience on phasing out old boilers for 2022 (15 min for presentation)

Current situation and regulation, in particular actions for phasing out old boilers/stoves (financial incentives, requirements for existing and new appliances, etc.), future plans

**Mr Jes Sig Andersen**, Danish Technological Institute, Denmark – A scrapping scheme for phasing out old wood stoves, incentives, standards for new boilers (15 min for presentation)

Current situation and regulation, actions to reduce emissions from wood stoves, in particular the new scrapping Scheme-approach in Denmark and other Danish actions to reduce emissions from wood stoves.

Discussion and conclusions

13:30 *Lunch break*

14:45 **Regulation of boiler market for new boilers**

- What are the emission criteria – Eco-design or more strict criteria? What are criteria in case there are no Eco-design requirements, e.g. masonry made stoves? Are there any national eco-labels?
- What are the control mechanisms to ensure that boilers in the market meet stipulated requirements? Which authority is responsible for that?

**Presentations:**

**Mr Jes Sig Andersen**, Danish Technological Institute, EU eco-design regulation standards for new boilers (25 min for presentation)

Measures how to regulate the market for new stoves or create incentives to buy better performing stoves. Particular attention should be given to the new EU eco-design regulation that is coming into force in the next years and how its implementation could be made an integral part of an integrated action plan in the Member States participating in the workshop

Discussion and conclusions

15:45 *Coffee break*

16:15	<p><b>Inspection of boilers and stoves</b></p> <ul style="list-style-type: none"> <li>• How is inspection of boilers and stoves regulated? Are there any requirements for mandatory inspections? What is the follow-up and are there any sanctions if the result of inspection is unsatisfactory or if there is non-compliance?</li> <li>• Is there cooperation between chimney sweeps and local authorities? How about sharing information of conducted inspections, is there any system in place?</li> </ul> <p><b>Presentations:</b></p> <p><b>Mr Christian Liesgang</b>, Umweltbundesamt, Germany's regulation on inspection of boilers and stoves (15 min for presentation)</p> <p>Inspection of boilers and stoves, emission measurements, cooperation with chimney sweeps and local authorities</p> <p><b>Mr Pavel Gadas</b>, Ministry of Environment of Czech Republic, Regulation on inspection of boilers and stoves (15 min for presentation)</p> <p>Inspection of boilers and stoves, emission measurements, cooperation with chimney sweeps and local authorities</p> <p>Discussion and conclusions</p>
17:30	<p><b>Conclusions and wrap up of day 1 and outlook to day 2</b></p>
18:00	<p>End of day 1</p>

## Day 2: 3<sup>rd</sup> September 2019

**Chair: Mr Marek Maasikmets, Air Quality Management Department of Estonian Environmental Research Centre**

**Venue: Park Inn by Radisson Meriton Conference & Spa Hotel, Toompuiestee 27, Tallinn**

*Please be reminded to sign the attendance list*

### **Introductory session**

**09:00 Welcome address: Mr Harry Liiv, Deputy Secretary General, Ministry of the Environment of the Estonia Republic**

**09:10 Scene setter:**

Introduction of the subject and the Estonian clean air objectives, including summary of day 1

**Ms Riina Maruštšak**, Ambient Air and Radiation Department, Ministry of the Environment of the Republic of Estonia (15 min for presentation)

The role of cities in reaching clean air objectives – what is the role of local authorities in dealing with the PM<sub>2.5</sub> and B(a)P emission mitigation? How important is contribution from local authorities?

**Mr Zig Klimont**, International Institute for Applied Systems Analyses, Overview of the study “Measures to address air pollution from small combustion sources” with focus on local level good practices (15 min for presentation)

Introduction to the topic, importance of reducing emissions from household heating (health impacts, etc.), possible technologies for reducing PM<sub>2.5</sub> emissions from wood heating, examples of good practise with focus on local level

**Good practice examples and case studies** (best practises of the cities, awareness campaigns, financial resources)

**09:45 Reducing PM<sub>2.5</sub> and B(a)P emissions from household heating at local level, development and implementation of air quality programmes** (successful PM<sub>2.5</sub> and B(a)P pollution mitigation strategies: regulation, incentives, communication and integration with other urban strategies and policies)

Experts from cities will share their experience and good practice. Experts will come from cities that have successfully addressed pollution from household heating.

- Examples of cities experiences on development and implementation of air quality programmes and lessons learned, including good practice on

short term measures

- Measures to reduce PM2.5 pollution in so-called household heating areas (small apartment houses), where main combustion source is domestic heating (wood burning stoves and boilers).
- Air Quality Plans to reduce PM2.5 and B(a)P emissions from household heating.
- What measures can local authorities take to reduce emissions from household heating (short term and long-term measures)? What are the costs of the measures, financing sources?
- What kind of support was needed from national authorities, how was the cooperation established?
- Is there any cooperation between the cities and chimney sweeps – what is experience on that? Is there any other cooperation with other instances?

**Presentations:**

**Ms Maria Myllynen**, Helsinki Region Environmental Services Authority HSY, Measures taken in Helsinki Region to reduce PM<sub>2.5</sub> and B(a)P emissions from domestic heating and experience with Air Quality Plan; Urban Partnership guidance on AQP (10 min for presentation)

**Ms Lavinia Laiti**, Environmental Agency of the Province of Trento, The results of the Prepair project, with focus on air quality and biomass burning (10 min for presentation)

**Ms Agnieszka Kapralska** and **Mr Kamil Pawłowski**, Municipality of Krakow, Experience of Krakow city – measures taken to reduce PM2.5 and B(a)P emissions from domestic heating, including challenges (10 min for presentation)

**Ms Eglė Randytė**, Vilnius city, Introduction of the project “Cities in action: Vilnius’s interactive energy classification map” (10 min for presentation)

**Ms Ana Nemet Durdevic**, City of Osijek and **Ms Irena Kozina**, City of Slavonski Brod, Experience of Croatian cities – challenges and good practices (10 min for presentation)

Discussion and conclusions

11:00 *Coffee break*

11:30 **Success factors for cities reducing pm pollution from domestic heating**

**Work in groups**

Work in groups on three topics:

1. Bottlenecks in collaboration between different levels (i.e. local and

	<p>national authorities, NGOs) – how to improve cooperation?</p> <ol style="list-style-type: none"> <li>2. Cost-effective short term and long-term measures for reducing PM2.5 and B(a)P emissions from household heating. How can local authorities contribute to solving the problem?</li> <li>3. Topics on which there is need for additional education of local authorities (Air Quality Plans, impact on health, etc.)</li> </ol> <p>Presentation of conclusions</p>
13:00	Lunch break
<b>Awareness raising, training, and information campaigns</b>	
14:15	<ul style="list-style-type: none"> <li>• Examples of organized campaigns</li> <li>• What was the focus of campaigns – human health, money or energy saving?</li> <li>• Which measures/methods have been effective for changing user behaviour to reduce emissions from household heating?</li> <li>• Lessons learned, recommendations</li> </ul> <p><b>Presentations:</b></p> <p><b>Mr Pavel Gadas</b>, Ministry of Environment, Czech Republic, Campaign “The Smoke-man” (10 min for presentation)</p> <p>Experience with the awareness raising campaign “The Smoke-man”, outcome, learned lessons, future activities on awareness raising</p> <p><b>Ms Hannah von Blumroeder</b>, DUH Germany – “Clean Heat” (10 min for presentation)</p> <p>An overview of the “Clean heat” project, outcome, learned lessons, future activities on awareness raising</p> <p>Discussion and conclusions</p>
15:30	<b>Conclusions and wrap up of day 2</b>
16:00	Meeting of the Estonian Ministry of the Environment with the core group of experts in order to draw conclusions and think about next steps
17:00	End of day 2

## More information on TAIEX EIR PEER 2 PEER:

[http://ec.europa.eu/environment/eir/p2p/index\\_en.htm](http://ec.europa.eu/environment/eir/p2p/index_en.htm)

## More information on TAIEX:

[taix@ec.europa.eu](mailto:taix@ec.europa.eu)

[near-](#)



<http://ec.europa.eu/taix>

<http://ec.europa.eu/taix/experts>



@eu\_near #EUTaix



<http://www.facebook.com/EUNEAR>