Transition to a Sustainable Heating

According to the International Energy Agency, heating sector is the largest world's energy end-user. Providing heating for households, industrial purposes and other applications accounts for around 50% of total energy consumption. In 2017, globally only 10% of heat was produced from renewables and all the rest – from fossil fuels with the most impact on climate change.

Biomass is an abundant and reliable renewable energy source suitable to replace fossil fuels, traditionally used for heating purposes. Biomass used in sustainable manner can tackle three fundamental challenges – climate change mitigation, energy poverty and transition to green economy. Biomass gives the biggest benefits when used in district heating systems in cities.

Lithuania is a good example of how quickly cities can switch their heating sector from natural gas to biomass. Over the course of 5 years biomass share in Lithuania's district heating increased from 30 % to 70%, at the same time heating prices went down by 30-40%. Lithuania created a biomass exchange platform which demonstrated that trading biomass like oil is one of the key elements for transition to a sustainable heating.

The use of biomass produced from local raw materials promotes sustainable regional development, diversifies the rural economy, and reduces dependence on imported fuel, while promoting distributed energy production, reducing greenhouse gas emissions and tackling climate change. Moreover, use of biomass for district heating encourages the creation of green jobs, developing the whole chain of entirely new industries – from biomass production (specialized raw materials' preparation sector), processing (preparation and storage), biomass combustion (biomass boiler house, service sector) to research and applied research (biomass research, combustion efficiency and environmental impact analysis and improvement) as well as promoting bio economy development.

The commitment: Proposed Outcome for the UN Climate Action Summit

Commit to support a transition to sustainable district heating by switching from fossil fuel to biomass:

- ✓ At global and regional level, raising awareness of no-regrets transition to sustainable use of biomass in district heating sector, highlighting the climate mitigation and economic benefits of such choice.
- ✓ Increasing the transfer of sustainable heating technology and knowledge, as well as innovation and sustainable investment by both public and private entities.
- ✓ Helping to create tailor-made instruments to ensure high quality biomass standards and sustainability criteria, affordable biomass price, such as regional biomass trading platforms and appropriate regulation.
- ✓ Ensuring that sustainable forestry and land use best practises take place, increasing LULUCF sector absorption potential in order to ensure transition to climate neutral economy.