Can you imagine, instead of hearing each year how Tuzla and Pljevlja are among the most polluted towns in Europe, that actually they are the cleanest and most technologically smart cities with respect to heat supply and air quality in southeastern Europe?
It may seem like a wild dream, but with nation-wide efforts and wise investments, the two countries could become regional leaders in planning and implementing district heating fourth-generation solutions within the next decade. That's what two analyses prepared by Bankwatch, and which will see the light of print this autumn, indicate.
So far, both Tuzla and Pljevlja have been about coal-dependency and old central heating systems, but the time has come for redesigning urban heat policy, in a modern way which integrates and interconnects multiple renewable projects.
Bosnia and Herzegovina and Montenegro have both signed the Green Agenda for the Western Balkans, thus committing to adopting the EU's climate legislation and therefore reaching climate neutrality by 2050.
However, their most recent climate commitments are nowhere near the level of ambition of the Green Agenda. BiH's greenhouse gas emissions reduction target for 2030 is 33.2% compared to 1990, while for Montenegro it is 35%.
Clearly a lack of political will as well as gaps in information and know-how are still pulling both governments into the dirty embrace of the coal.
What authorities in both countries are still slow to understand is that, when a complex large infrastructure solution (in this case, coal) reaches the end of its life cycle, a window of opportunity appears.
The gradual phasing out of coal-firing in Tuzla and Pljevlja represent a chance to redefine the cities' entire energy infrastructure, using the existing power plants and the heat grids as valuable structures which can be given a new role. The towns are, therefore, in an optimal place to implement a European model solution for an integrated, highly efficient, user-friendly and fossil-free heating system with a mid-term payback perspective. Apart from exceptional cases, such a system cannot be built on one energy resource alone.
Expelling coal from individual heaters, microgrids and district heating systems is one side of the coin, but the other key aspect is ensuring that the towns of Pljevlja and Tuzla do not replace it with yet other unsustainable heating solutions. For example, we are witnessing the ever-increasing role of biomass in district heating grids: while biomass is mostly capable of generating heat at high temperatures and often mostly affordable, from the climate and environmental perspective, it is not a good solution: using large quantities of biomass conflicts with the important goals of climate protection, sustainable food production and preserving forest practices.

The optimal solution for a community can dramatically vary from case to case, as it is dependent on local needs and objectives. But what is for sure true for all cases is that the process of decarbonisation of heating supply systems has to start with the reduction of heating demand both on the consumer side and in the heat-transmission infrastructure. This is then followed by the introduction of efficient, renewable heat-generation technologies.

To identify those technologies for Pljevlja and Tuzla, Bankwatch has been working on two studies, which map the potential for using sustainable renewable energy sources for heating at these two locations: the solutions studied include solar, geothermal, heat pumps, heat recovery from existing industries, the potential for heat storage, and possible energy efficiency measures.

While exploring the preferable and realistic solutions for constructing renewable-based district heating networks, combined with individual solutions, we hope to get engaged in a dialogue about „best practices" with actors from all around Europe, especially the local communities where the transformation of the heating systems will be happening.

Source: Just Transition