The only District Heating plant fueled with agricultural residues – sunflower husks, commissioned in 2012, is located in Sremska Mitrovica (Serbia). Electric Power Industry of Serbia (EPS) invested 2.5 M EUR into construction of biomass boiler (installed capacity of 18 MW), used for heating of 3,500 apartments in multistory buildings and 80,000 sq. meters of commercial offices.

District Heating plant in Sremska Mitrovica fueled by sunflower husks

Fuel (sunflower husks) is provided by the Victoria Oil factory located in Sid (40 km distance from District Heating plant), based on the 10-year supply agreement. Victoria Oil is responsible for the transport of sunflower husks to District Heating plant (7-11 tons per truck), and for disposal of ash after combustion. Capacity of operational storage for sunflower husks in District Heating plant is 300 tons, representing the 5-days operational reserve of fuel.

Annual generation of heat is 19.8 GWhth, and fuel consumption is around 4,500 tons per year. Conversion efficiency of the District Heating plant is 86%. Annual fuel savings, compared to use of natural gas, are around 30% (250,000 EUR per year).

A deliverable of Heat Wisely, public awareness raising project on biomass-based heating in the Western Balkans