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District heating in Serbia does not fit into the definition of the modern district heating systems provided by Euroheat&Power. Waste heat is not utilized in district heating systems nor is renewable energy. Heat production in district heating systems in Serbia is solely based on fossil fuels, mostly high quality imported fuel such as natural gas. Heat is produced in large scale boilers designed to deliver optimal heat to most distant consumers in the coldest days and based on design temperatures that have recently been significantly increased in relevant standards. Due to this reasons annual utilization of these capacities is well below 20% and is frequently below 15%. Modernization cycle is yet one of the priorities of the Serbian government and energy minister but in the same is actual business opportunity for foreign companies and holders of modern technology solutions. Rough calculations indicate that fuel costs only are in the range from 45 € to more than 50 € per MWh of heat delivered to the consumers (Assuming total annual costs of fuel at state level at 300 million euros, average specific heat delivered in the range from 140 kwh/m<sup>2</sup> to 160 kwh/m<sup>2</sup>.) This cost is fuel mix dependent and does not change with improved efficiency of distribution or end use efficiency. This is the average cost for the whole production mix in which natural gas dominates with price below cost recovery and in which locally procured lignite still accounts for more than 10%. It is, therefore, very hard to imagine that district heating systems as they are today may remain unchanged even in the period covered by this report (2020). However, designing mitigation measures in such systems poses significant challenges and requires development of new policy and integrating least cost investment planning in the energy sector with due attention paid to possibility for deployment of modern technologies that best fit local heat source options. Distribution and delivery system adds to inefficiency of the provision of district heating due to the situation in which aged distribution networks are used to distribute heat to aged substations. The vast majority of district heating services are in Belgrade. Systems with installed load larger than 100 MWth account for more than 80% of total load connected to district heating systems. Modernization cycle is yet one of the priorities of the Serbian government and energy minister but in the same is actual business opportunity for foreign companies and holders of modern technology solutions.

*Source Serbia Energy Magazine*