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**PRESS RELEASE**

***RADPEC S.A. COMPLETES PROJECT***
***WITHIN NORWEGIAN FINANCIAL MECHANISM***

*RADPEC S.A. has completed the project titled “Reduction of Flue Gas Emission by Modernizing WR-25 Boilers” within the Norwegian financial mechanism. The pertinent agreement was executed with the National Fund for the Protection of the Environment and Water Management on 05 March 2014.*

**The project consisted in the construction of a system enhancing the effectiveness of flue gas dedusting in two WAR-25 boilers as well as modernising the pressure part of one boiler by constructing a third water heater pass, increasing its efficiency and power.**

The dust extraction systems in WR-25 boilers number 3 and 4 in the District Heating Station North were upgraded, which made it more efficient. Also, a water heater (economiser) was added in the 3rd pass of boiler 4. The tube air heater in the boiler was replaced with a water heater (with the heated area of 316.7 sqm) with a water flow control system and a flue gas temperature control downstream of the boiler. This way, the boiler’s efficiency will be increased by reducing the temperature of flue gas coming out of the boiler by 40-50°C, which will mean a 3% increase in efficiency.

Thanks to the completed modernisation project, the amount of coal burnt will be reduced, and as a result there will be less emission of all pollutants into the air.

The tests of flue gas in the upgraded dedusting systems performed by independent, accredited laboratories, have confirmed the overall efficiency of the system at 98.8%.

With this project, the existing systems have been brought to compliance with the requirements of Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants of over 50 MW.

The cost of the project amounted to PLN 3,675,000.00, of which PLN 958,500.00 was covered by a non-refundable subsidy.

**The scope of modernization of each system included:**

* production and assembly of a system of cyclone filters to replace cyclone batteries, capable of variable operation modes (bag-based, mechanical and mixed, in a parallel mode), controlled with slide dampers with an attenuator, characterised by dedusting efficiency to below 100 mg/Nm3 in terms of 6% O2, for each of the three variants and the production and fitting of a MOS-type axial multi-cyclone with flue gas back feed;
* manufacture of a dedusting system preserving the existing flue gas extraction system via flue gas fans with engine power of 75 kW each (2 units);
* adaptation of ash chutes to the existing FULMAR 125 conveyor collecting the dust from under the new cyclone filter;
* integration of the cyclone filter in the place of the cyclone battery;
* replacement of flue gas ducts to the flue gas pass fans as required for the cyclone filter;
* execution of a compressed air system ensuring medium of appropriate quality and quantity for the cyclone filter;
* deployment of cabling, meters, controls as well as signals of operation and failure of cyclone filters in the flue gas deashing system satisfying the prerequisite of dust quantity below 100 mg/m3, visualisation control of the control panel and the controller from the Measuring, Control & Automation Systems cabinet;
* modernization of the drives of flue gas fans by replacing the engines with new, energy-efficient ones with the power or 75 kW (0.4 kV, 980 rpm), with a new thrust clutch;
* replacement of cable ducts for power supply, control and metering systems in the area of boiler deashing with mesh troughs with fittings.

The project completion will lead to improvement in the quality of air and will cause the following reductions in the gas and dust emissions during the year:

CO2 - 678 tons/year

the values apply to boiler 4, whose pressure part has been modernized

SO2 - 2.3 tons/year

NOx - 0.8 tons /year

CO - 0.3 tons/year

dust - 1.8 tons/year - this value applies to two boilers