

## Model of Heat Load on the Atmosphere by Flue Fases

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**This paper presents the analysis of heat load on the atmosphere by flue gases emitted from boilers combusting fuel wood with moisture content  $W = 10 - 60 \%$ . From the analysis results, that the heat load on the atmosphere is affected by the moisture content of combusted wood, as well as the construction of the heat generator's boiler part – the extent of cooling of exhaust gases. The value of heat load factor on the atmosphere by flue gases from combustion of dry fuel wood with moisture content  $W = 10\%$  at flue gases temperature  $t_s = 120 \text{ }^{\circ}\text{C}$  is  $F_Q = 96,22 \text{ MJ.GJ}^{-1}$ . The factor's value at moisture content of the fuel wood  $W = 60\%$  and flue gases temperature  $t_s = 200 \text{ }^{\circ}\text{C}$  equals  $F_Q = 340,67 \text{ MJ.GJ}^{-1}$ .**

**Keywords:** biofuel, wood, moisture content, flue gases, atmosphere.

### Acknowledgments

*The present contribution was developed under the research of a grant project: KEGA- SR Nr: 006TU Z-4/2014, as a result of the work of the authors and a significant assistance of the Cultural and Educational Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic (KEGA-SR)*

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**Paper number: M2015146**

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