FOREWORD

All the world's researchers who deal with the causes and consequences of climate change have spent the year 2015 under the auspices of the Paris Climate Summit – the Conference of Parties of the UN Framework Convention on Climate Change – COP21. During the preparations for the climate change summit, the main emphasis was placed on setting research-based goals for reducing climate change. These goals are indicators such as limiting the global warming temperature in the next century and setting limit values of greenhouse gas (GHG) emission concentrations.

The goals related to the reduction of GHG emissions are achievable mainly through understanding the GHG sources and how to reduce them – technological process and the development of innovative technologies that make it possible to implement low carbon technological systems. It's possible to introduce such actions in every sector of the economy, in each household, in every enterprise of the agricultural and industrial sectors, as well in in the energy supply system.

The introduction of a low carbon heating supply system is a broad area of research to cover, starting from the use of sustainable, renewable energy resources and the increase of energy efficiency in choosing an individual and centralised heating system – to assessment of the optimal operation of installed technologies.

Within this journal, the reader will find the studies related to analysis of district heating networks from plant level to country level, waste-to-biomethane use in urban systems, applications for Clean Development Mechanism and GHGs emission reductions in gold mining industry, life cycle costs analysis of hybrid solar drying systems and thermochemical fuel properties analysis of melon seed husk observed as a potential biomass feedstock for clean energy and power generation.

I wish all readers to find interesting ideas that will serve as a snowball effect to fuel new projects and ideas that will lead to even further new and creative ideas.

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