## From the Guest editors

## Sustainable development and the new energy policy in South Eastern Europe

In its new energy and climate change policies, released in January 2008, European Union has made the most daring change of energy policy up to date. It has decided to set up biding target of 20% renewables in primary energy mix by 2020, to reduce greenhouse gases emissions by 20% by 2020, and reduction of primary energy use by 20% by 2020. A significant technology shift will be necessary to fulfill such goals, but it is already clear that technologies that will be used are available, mainly in the area of renewable electricity and heat generation, biofuels, energy efficiency, especially in buildings, co-generation, nuclear energy in those countries in which it is politically acceptable, which will all be achieved by a combination of binding targets, certificate trading, and fiscal policies.

South Eastern Europe, in its multispeed integration process into the European Union, is soon going to realize that this entire new energy package applies to it also. Assessing from the accession of Malta and Cyprus into EU, two countries not obliged by reduction target by the Kyoto Protocol, the countries of the Western Balkans will have to join the Emission Trading System. Also, it is implicitly possible to calculate that in most of countries of the region the renewable energy in the primary energy mix will have to be increased by 10%, implying huge investments in biomass, wind, solar, and hydro sectors.

The Dubrovnik Conference on Sustainable Development of Energy, Water and Environment Systems, its 4<sup>th</sup> session held in 2007 was dedicated to the improvement and dissemination of knowledge on methods, policies, and technologies for increasing the sustainability of development, taking into account its economic, environmental, and social pillars, as well as methods for assessing and measuring sustainability of development, regarding energy, transport, water, and environment systems and their many combinations. Sustainability being also a perfect field for interdisciplinary and multi-cultural evaluation of complex system, the Dubrovnik Conference has during the first decade of the 21<sup>st</sup> century become a significant venue for researchers in those areas to meet, and discuss, share, and disseminate new ideas.

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

The Report of the U. N. Brundtland Commission,

Our Common Future, 1987

This special issue of papers presented at the Dubrovnik Conference, will try to help energy researchers and experts in the region in this time of paradigmatic change, to have an insight into the things to come.

Guest editors of this Special issue

Neven Duić

Professor, University of Zagreb, Croatia

Zvonimir Guzović

Professor, University of Zabreb, Croatia

Naim Afgan

Professor, Instituto Superior Técnico, Lisbon, Portugal