

## Conclusions of the Energy and Environment conference 2008

1. This conference is being held at a time when a forthcoming comprehensive public hearing on the draft of the Energy development strategy of the Republic of Croatia is expected so hopefully these conclusions from this gathering will contribute to this strategic energy document.
2. All interested parties are herewith invited, especially from the academia and business sector, units of regional and local government to actively participate in the debate on the Draft of the Strategy on energy development of the Republic of Croatia and to contribute in the area of energy efficiency, renewables and environment protection.  
We invite county prefects and mayors to take over their part of responsibility in energy management in their areas, with a view to realising common and individual benefit for counties, towns and municipalities in Croatia while maximally respecting sciences and profession that ought to be supported by political decisions.
3. We recommend to financial institutions (banks, funds etc) to continue with work on implementation of programmes and realisation of projects and measures for the usage of renewable sources of energy and energy efficiency, contributing thus to implementation of principles of sustainable development.
4. Following the obligation of aligning Croatian legislation with the aquis of the EU, we emphasise the need of drafting and implementation of a law on efficient use of energy and related measures and accompanying action plans keeping in mind the existing experiences and examples of good practice.
5. We are indicating the need for a strong National agency for renewable sources of energy and energy efficiency with local branches, in order to form a network of regional energy agencies, all of which will enable a fast flow of ideas and efficient carrying out of the policy of energy efficiency, from national up to a local level.
6. All energy sources need to have the same starting point within the RC Strategy of energy development, without any discrimination, while it is mandatory to respect techno-economic rules as well as the principles of environment protection.
7. As it is the case with other countries, Croatia is also facing a multifold challenge caused by climate changes, an increase in energy consumption with the simultaneous decrease of the availability of conventional sources of energy. It is with radical innovations, both technological and institutional, that we can deal with this challenge. The dynamics of globalisation requires from all the countries, especially Croatia, to invest a great deal more of human and financial resources in such innovations, namely from the side of the public and private sector. Innovations in the field of energy require investments in the development of low-carbon options in the production of energy. Unfortunately, the sectors of conversion and final use of energy (power plants and construction industry) are not sectors innovative enough in this regard.
8. Croatian Strategy of energy development needs to take into account, besides the safety of energy supply, energy efficiency and environmental impact, also, and in a great measure so, the socio-economic aspect of sustainable development, containing incentives for the development of the segment of Croatian entrepreneurship which contributes to the opening of new work places and strengthening of export activities.
9. The analyses indicate that the use of bio-fuel of the first generation has not given the expected results on the global level, the case being the same also in Croatia. Based on

this, recommendations follow to start with a more intensive development of technologies for the use of bio-energy of the second generation.

10. Biofuel production in Croatia is not satisfactory although a 5% share increase of biofuel in traffic is considered to be a realistic target. Croatia avails of enough of unused land and possesses sufficient production capacities for such biofuel production and particularly the biodiesel. Current ratio of biodiesel production price in relation to conventional diesel fuel is not stimulating. Hence, definitive and systematic stimulating measures are required in this sector.
11. Analyses done according to scientific criteria show that the current status of traffic is not acceptable from the standpoint of sustainability. In the near future strong intervention from politics into traffic sector is to be expected aiming at the increase of sustainability.
12. In the next transitional period of 50 years it is expected that the current conventional energy sources such as coal, oil and natural gas, with approximately same share of nuclear energy power will continue to have a dominant role in basic energy systems, which still, at the present stage of commercialisation require subsidies for a wider use.
13. In order to implement fully the principles of sustainable development in urban environment, the use of renewable sources should come to the forefront. In this sense, a minimal share of the renewable sources should be stipulated. Heat protection of new and renovated buildings ought to reach standards of „energy efficient buildings“, as a more economic usage of renewable sources is thus provided.
14. Cogeneration and trigeneration plants offer large potentials of the efficient consumption of energy, which, in Croatian conditions, is not exploited enough. The introduction of such systems in industry and in the communal heating systems for needs to be intensified and given incentives. The surpluses of the produced electrical energy need to be accepted into the electroenergy system of Croatia, the case not being such at the moment as there are numerous administrative limiting conditions.
15. Once the so-called system of feed-in tariffs (guaranteed incentive purchasing prices for surpluses of electrical energy from renewables and cogeneration) has been introduced, it is necessary to reconsider the scheme of relations among elements that make part of that system as well as their efficacy in real life conditions. It is also necessary to introduce the system of incentives in the segment of the electro-energy grid connecting of renewables and cogeneration. The total effect of renewables and cogeneration (technological, climate and ecological) represent a sufficient reason for the socialisation of part of the costs necessary for the construction and use of such systems.
16. Special attention needs to be paid to a faster development of technologies for the productions of electrical energy of greater power from the renewable sources of energy, which, at the moment, is insufficiently represented, while in the existing system of stimulation of production of electrical energy from photo-voltaic sources, the limitation of 1 MW needs to be revoked.
17. This meeting expresses their gratitude to numerous experts, scientists and all the present participants, who have, with their ideas, initiatives and effort, achieved worthwhile results and presented very instructive and successful examples from their practice. Many of these examples can be used as models for a wider implementation in our surroundings and in other projects.