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RENEWABLE ENERGY POLICY IN CROATIA

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Abstract

In order to satisfy its commitment to Kyoto Protocol, Croatia is planning to increase renewable energy share in electricity generation for 5.8 percentage points, mainly by kicking off markets in new energy sources, like wind, solar and biomass. Also, Croatia plans to increase the share of combined heat and power, and to introduce biofuels and reach 5.75% share of transport fuels. This paper identifies the areas in Croatia where conversion systems based on renewable energy technologies could be applied. Consideration is given to geographical locations as well as potential applications. Wind, hydro, solar photovoltaic, geothermal and biomass potentials for electricity production were analyzed from a technological and economical point of view. Their energy potential (given as capacity and energy capability) on a regional basis (NUTS 2 and 3 statistical classifications) was calculated for the present situation and with future estimates. Energy supply costs, capital costs and some other influential factors were estimated per NUTS 2 regions and type of renewable energy technology. Finally RES cost – supply curves for 2006 and 2010 are given. The paper gives an overview of recent developments in renewable sector and cogeneration sector, as well as outline of the proposed feed-in based support system for renewable power generation and cogeneration. The paper also surveys Croatian potential in biofuels production, by estimating surpluses in main feedstock production and unused suitable land, as well as biofuels market development by 2010. It gives an overview of planned policy for support of biofuels. The results show that renewable electricity policy goals will be easily reached, mainly by wind, with some geothermal and biomass electricity added to mix. Also, defined goals for cogeneration will also be reached. On the other side, biofuels target will be missed, since the support policy is still not in place.