Accepted Manuscript

Title: TECHNOLOGY FORECAST OF SUSTAINABLE ENERGY DEVELOPMENT PROSPECTS

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PII: S0016-3287(16)30053-2

DOI: http://dx.doi.org/doi:10.1016/j.futures.2016.09.002

Reference: JFTR 2161

To appear in:

Received date: 8-3-2016 Revised date: 30-6-2016 Accepted date: 19-9-2016

Please cite this article as: Matevž Obrecht, Matjaž Denac, TECHNOLOGY FORECAST OF SUSTAINABLE ENERGY DEVELOPMENT PROSPECTS, Futures http://dx.doi.org/10.1016/j.futures.2016.09.002

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ACCEPTED MANUSCRIPT

TECHNOLOGY FORECAST OF SUSTAINABLE ENERGY DEVELOPMENT PROSPECTS

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Study highlights

- Increase of energy efficiency is much more important that maintaining low prices
- In average experts believe that the EU will transit to sustainable energy industry in 2046
- The strongest support was detected for micro hydro and cogeneration of heat and power
- 75% of experts believe that we will witness breakthrough of new technologies

ABSTRACT

Energy policy and energy industry development are strongly correlated with technology forecasting and must adhere to the global development paradigm in accordance with: global trends, environmental restrictions, energy demand, population growth, natural determinations of particular geographical areas and socio-economic development. The core of an effective energy policy consists of reliable data on future trends; technology forecasts are therefore crucial. This paper presents the most important findings gathered in the Slovenian Delphi survey regarding future energy development in Slovenia, the European Union and the world. Results have shown that increasing energy efficiency and decreasing final energy consumption is much more important than maintaining low energy prices. The study has also provided further indication that the prices of all energy sources, including wood biomass, could increase by 2020 and again by 2030 and that achieving a 20 % share of renewables in the EU by 2020 is questionable.

Key words: Delphi survey, technology forecasting, energy policy, sustainable development, renewable energy

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