

Publication date: June 2018

**Source:** Technological Forecasting and Social Change, Volume 131

Author(s): Zacharoula Andreopoulou, Christiana Koliouska, Emilios Galariotis, Constantin Zopounidis

Environmental sustainability has become a major goal of public policies throughout the world, as environmental resources are continually eliminated. Climate change mitigation involves decarbonizing electricity generation as the most important energy system-wide change, with a vital role for energy efficiency. The utilization and development of Renewable Energy Sources (RES) constitutes the most critical measure to safeguard energy security, strengthen environmental protection, and tackle climate change. RES are favored as a means of reducing the use of fossil fuels. The market of RES is continuously developing and promoted through the Internet. Renewable energy is, by definition, sustainable and clean. Moreover, the market of RES offers the opportunity to tackle the increasing depletion of fossil resources and the associated environmental impacts. The paper aims to present RES and study the energy policy in EU and Greece. Furthermore, the status of the renewable energy market in Greece and especially in the Prefecture of Thessaloniki is presented. The Internet research retrieved 30 enterprises that promote renewable energy in the Prefecture of Thessaloniki, which were analyzed according to 18 characteristics representing internet adoption. The multicriteria method used for total ranking is PROMETHEE II. According to PROMETHEE II findings, the 'superior' websites can be used to form a conceptual content model while designing an enhanced website for a RES enterprise. The results show that these enterprises in the Prefecture of Thessaloniki must adjust to the new 'information era' and aim to become more effective and efficient while creating their autonomous website. Furthermore, most enterprises with their own websites in this sector are generally still in the initial adoption phase and they should further mature in the next phases of e-commerce adoption.

[Read Full Article](#)