A short curriculum vitae - Michael Tsatiris

Dr. Michael Tsatiris is an Assistant Professor at the Department of Forestry and Management of the Environment and Natural Resources at the Democritus University of Thrace, Greece. His major research area is Biomass, Bioenergy and Biofuels. He received his Diploma and Master of Science degrees from the International Center for Advanced Mediterranean Agronomic Studies (CIHEAM, Paris) and his Doctorate from the Department of Forestry and Natural Environment of the Aristotle University of Thessaloniki, Greece. Over the years, he has applied varied approaches to teaching and conducting research with undergraduate and postgraduate students. At the same time, he has authored publications in peer-reviewed journals and conferences.

Research Interest: bioenergy and biofuels



- Website: http://www.fmenr.duth.gr/personel/dep/Tsatiris en.shtml
- Email address: <u>tsatiris@fmenr.duth.gr</u>
- Contact Phone: **+30 25520-41107**
- Fax: **+30 25520-41192**

Selected publications

 Paschalidou, A., Tsatiris, M., Kitikidou, K., Papadopoulou, Chr. 2018. Using Energy Crops for Biofuels or Food: the Choice. Series Title: Green Energy and Technology. Series ISSN: 1865-3529. First Edition. eBook ISBN: 978-3-319-63943-7. Hardcover ISBN: 978-3-319-63942-0. Publisher: Springer International Publishing, p. 121. (International Monograph-Book). Website: <u>http://www.springer.com/la/book/9783319639420</u>

This book performs a SWOT (strengths, weaknesses, opportunities and threats) analysis to examine the current food crisis and how it relates to the use of crops for energy. It analyses how energy crops help solve humankind's environmental changes and mav summarises the economic and practical changes of cultivating and utilising energy crops. Two of humanity's greatest challenges are the need for more food production as well as growing demands for energy. Biofuel cultivation has been identified as a solution to growing energy use, and biomass power plants offer a rare renewable energy source that requires only basic technology.In this context, a dilemma arises concerning whether energy crops should be used for energy or to help remedy the food crisis. SWOT analysis allows us to organise and weigh different pros and cons against each other in terms of economics, job creation, environmental impacts, the climate change agenda, and European Union (EU) directives that promote biofuels over fossil fuels. By pursuing this approach, the book helps researchers and decisionmakers cut through the many competing arguments in connection with this complex subject.

Table of Contents

Global nutritional need- The Energy problem.- Bioenergy -Biomass - Energy crops.- Biofuels.- Biomass-Biofuels and Sustainable approach.- Using Energy Crops for Biofuels or Food:the Choice.- Methods.- Results and Discussion.- Alternative strategies.- Conclusions. Green Energy and Technology

Annoula Paschalidou Michael Tsatiris Kyriaki Kitikidou Christina Papadopoulou

Using Energy Crops for Biofuels or Food: the Choice



- 2. Tsatiris, M. 2012. Analysis of Methodology for the Application of Stratified Random Sampling with Optimum Allocation: The Case Study of Forest Bioenergy. *Journal of Environmental Science and Engineering*, EL Monte, California, USA, 1(1B): 82-91.
- 3. Papadopoulos, A. and Tsatiris M. 2013. Investigation of the feasibility of constructing a biofuel plant in the region of North Evros. Proceedings of *International Conference on Sustainable Intelligent Manufacturing*, 26-28 June 2013, Lisbon, Portugal, pp. 773-778. Indexed in Web of Knowledge and Science Verse SCOPUS.
- 4. Papadopoulos, A. and Tsatiris M. 2013. Investigation of the feasibility of constructing a biofuel plant in the region of North Evros. *Green Design, Materials and Manufacturing Processes.* CRC Press-Taylor and Francis, London, ISBN: 978-1-138-000469, pp. 393-398 (Book's Chapter). Indexed in Web of Knowledge and Science Verse SCOPUS. Website: <a href="https://www.crcpress.com/Green-Design-Materials-and-Manufacturing-Processes/Bartolo-Bartolo-Alves-Mateus-Almeida-Lemos-Craveiro-Ramos-Reis-Durao-Ferreira-Duarte-Roseta-Castro-e-Costa-Quaresma-Neves/p/book/9781138000469
- Tsatiris, M. 2015. An Opinion Poll for the Establishment of a Bioethanol Plant Utilizing Local Resources and a Fuzzy Inference System. *Journal of Environmental Science and Engineering*, 4 (4B):190-202, El Monte, California, USA.
- Tsatiris, M. 2015. Methodology for Selecting the Best Model for Forecasts: The Case Study of Forest Bioenergy. *Journal of Environmental Science and Engineering*, 4 (5A):266-272, El Monte, California, USA
- Tsatiris, M. and K. Kitikidou. 2016. Biomass as a raw material for energy production. *Brazilian Journal of Biological Sciences*, 3 (6): 251-255. Journal Impact factor: 2.5.
- Paschalidou, A., Tsatiris M., Kitikidou, K. 2016. Energy crops for biofuel production or for food? – SWOT analysis (case study: Greece). *Renewable Energy* (Elsevier), 93: 636-647. Indexed in Scopus. Journal Impact factor: 3.404.

- 9. Tsatiris, M., Papastavrou, A., Karameris, A and D. Pallis. 1997. Organization and self-financing of the city parks of Thessaloniki for recreation purposes. *MEDIT*, No 4. Journal of Economics, Agriculture and Environment. Edagricole, Bologna, pp. 30-33.
- 10. Tsatiris, M. 2006. Energy and Environment. Typothito Press Co. Second Edition, Athens, p. 165 (Book, in Greek).
- 11. Tsatiris, M. 2018. Bioenergy and Biofuels. Papazisis Press Co., First Edition, Athens, p. 193 (Book, in Greek).
- 12. Kioulanis, S., Panagiotidou, A., Tsatiris, M. 2018. The Interaction in Online Learning environments. *Theory and Research in the Sciences of Education*, ISSN: 2407-9669, Vol. 2, Issue 1.
- Panagiotidou, A., Kioulanis, S., Tsatiris, M. 2018. Critical Thinking and Interaction in online education as a factor of raising awareness, changing attitudes and transforming citizens' inaccurate assumptions about the environment. Volume 6, Issue 2, 2018. Educ@tional Circle ISSN: 2241-4576
- 14. Tsatiris, M. 2018. Eucalypt for district heating: A fuzzy inference system. *Journal of Scientific and Engineering Research (An International Journal)*, Vol. 5, Issue 3 (2018).
- 15. Tsatiris, M. 2018. Fibre sorghum for electricity generation: A fuzzy inference system. *Journal of Scientific and Engineering Research (An International Journal)*, Vol. 5, Issue 3 (2018).
- 16. Tsatiris, M. 2018. Kenaf for electricity generation: A fuzzy inference system. *Journal of Scientific and Engineering Research (An International Journal)*, Vol. 5, Issue 3 (2018).
- 17. Tsatiris, M. 2018. Switchgrass for cogeneration: A fuzzy inference system. *Journal of Scientific and Engineering Research (An International Journal)*, Vol. 5, Issue 3 (2018).
- 18. Tsatiris, M. and Kitikidou, K. 2018. Energy and biofuels generation from biomass through thermochemical conversion technologies. *Journal of Agriculture and Allied Sciences,* Volume 7, Issue 1 (2018).
- 19. Tsatiris, M. and Kitikidou, K. 2018. Willow for electricity generation: A Mamdani-type fuzzy inference system. *Journal of*

Scientific and Engineering Research (An International Journal), Vol.5, Issue 4 (2018).

- 20. Tsatiris, M. and Kitikidou, K. 2018. Black locust for district heating: A fuzzy inference system. *Journal of Scientific and Engineering Research (An International Journal)*, Vol.5, Issue 4 (2018).
- 21. Tsatiris, M.and Kitikidou, K. 2018. Cardoon for cogeneration: A fuzzy inference system. *Journal of Scientific and Engineering Research (An International Journal)*, Vol.5, Issue 4 (2018).
- 22. Tsatiris, M.and Kitikidou, K. 2018.Giant reed for electricity generation: A fuzzy inference system. *Journal of Scientific and Engineering Research (An International Journal),* Vol.5, Issue 5 (2018).
- 23. Tsatiris, M.and Kitikidou, K. 2018. Miscanthus for Combined Heat and Power: A fuzzy inference system. *Journal of Scientific and Engineering Research (An International Journal),* Vol.5, Issue 5 (2018).
- 24. Tsatiris, M.and Kitikidou, K. 2018.Sweet sorghum for bioethanol production: A Mamdani-type fuzzy inference system. *Journal of Scientific and Engineering Research (An International Journal),* Vol.5, Issue 5 (2018).
- 25. Tsatiris, M.and Kitikidou, K. 2018.Paulownia for district heating: A fuzzy inference system. *Journal of Scientific and Engineering Research (An International Journal)*, Vol.5, Issue 5 (2018).
- 26. Tsatiris, M.and Kitikidou, K. 2018.Poplar for district heating: A Mamdani-type fuzzy inference system. *Journal of Scientific and Engineering Research (An International Journal),* Vol.5, Issue 5 (2018).
- 27. Tsatiris, M.and Kitikidou, K. 2018.Rapeseed for biodiesel production: A Mamdani-type fuzzy inference system. *Journal of Scientific and Engineering Research (An International Journal),* Vol.5, Issue 5 (2018).
- 28. Tsatiris, M.and Kitikidou, K. 2018.Soybean for biodiesel production: A fuzzy inference system. *Journal of Scientific and*

Engineering Research (An International Journal), Vol.5, Issue 5 (2018).

- 29. Tsatiris, M.and Kitikidou, K. 2018.Sunflower for biodiesel production: A Mamdani-type fuzzy inference system using the Fuzzy Logic Toolbox Graphical User Interface (GUI) Tools. *Journal of Scientific and Engineering Research (An International Journal)*, Vol.5, Issue 5 (2018).
- 30. Paschalidou, A., Tsatiris M., Kitikidou K. 2019. Perennial vs Annual Energy Crops-SWOT Analysis (Case Study: Greece). *International Refereed Journal of Engineering and Science (IRJES)*. Issue of January 2019. Journal Impact Factor: 2.31.
- 31. Chouliara, X., Tsatiris M., Kitikidou K. 2019. Renewable energy awareness among generations in Greece. *International Journal of Advanced Research in Science, Engineering and Technology*, Vol. 6, Issue 1, January 2019. Journal Impact Factor: 5.474.
- 32. Chouliara, X., Tsatiris M., Kitikidou K. 2019. Renewable energy education in Ionian Islands of Greece. *International Journal of Advanced Research in Science, Engineering and Technology*, Vol.6, Issue 1, January 2019. Journal Impact Factor: 5.474.
- 33. Giannarou, S., Tsatiris, M., Kitikidou, K. 2018. Energy Conservation in Buildings with Passive Heating and Cooling Strategies in Greece's Climatic Zones. *International Refereed Journal of Engineering and Science (IRJES)*, 7 (7): 29-45. Journal Impact Factor: 2.31.
- 34. Giannarou, S., Tsatiris M., Kitikidou K. 2019. The Role of Education in Designing Bioclimatic Buildings to minimize Energy Consumption. *International Journal of Advanced Research in Science, Engineering and Technology,* Vol.6, Issue 1, January 2019. Journal Impact Factor: 5.474.
- 35. Giannaru S., Tsatiris M., Kitikidou K. 2019. Bioclimatic analysis based on the climate of Greece, in order to minimize energy consumption in buildings. *International Refereed Journal of Engineering and Science (IRJES)*. Issue of January 2019. Journal Impact Factor: 2.31.

- 36. Tsatiris, M., Philippou, J. and Lyrintzis, G. 1995. Energy production methods from biomass. In Jubilee Scientific Session on Forestry Technical Education in Bulgaria, Vol. I - Forest Economy, 7 - 9 June, Higher Institute of Forestry, Sofia, pp. 536 – 547.
- 37. Tsatiris, M., Philippou, J. and Lyrintzis, G. 1996. Biomass as a raw material for energy production. In Second Balkan Scientific Conference on Study, Conservation and Utilisation of Forest Resources, Vol. II, 3 - 5 June, Sofia, pp. 345 – 349.
- Tsatiris, M., Papastavrou, A. and G. Tsantopoulos. 2001. Correlation of fuelwood consumption to the family income and the population size. Proceedings of the International Conference "Forest Research: a Challenge for an Integrated European Approach", Vol. II, 27 Aug. – 1 Sept. 2001, Thessaloniki, pp. 773 – 776.
- 39. Tsatiris, M., Liampas, S. and R. Giovannopoulos. 2006. The utilization of Zeolite of the municipality of Trigono as a soil ameliorative for plant raw material cultivation for biofuel production. Proceedings Vol. 2 of the International Conference on "Sustainable Management and Development of Mountainous and Island Areas", 29 September 1 October 2006, Naxos, Greece, pp. 177-181.
- Tsatiris, M., Skondras, N., Liampas S. and I. Gkotsis. 2006. Contributing to Local Development: The Case of a Bioethanol Production Industrial Unit. Proceedings Vol. 2 of the International Conference on "Sustainable Management and Development of Mountainous and Island Areas", 29 September – 1 October 2006, Naxos, Greece, pp. 172-176.