



Geothermal chances for Food and Tourism: a Country Perspective

29. 6. 2021

Assoc. prof. Maja Turnšek, PhD





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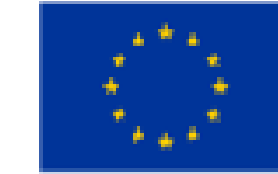
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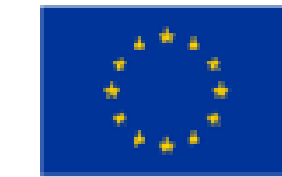
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731117

Greener way to a better world

Providing innovative concepts illustrating how to increase the economic viability of geothermal heat infrastructure using circular food production systems

<https://geofoodproject.eu/>





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This project has been subsidized through the [ERANET Cofund](#) GEO THERMICA (Project no. 731117), from the European Commission, [Rannsóknamiðstöð Íslands / Rannís](#), [Ministerie van Economische Zaken/Rijksdienst voor Ondernemend Nederland / RVO](#) [Ministrstvo za infrastrukturo RS](#) and [Ministrstvo za okolje in prostor RS](#)



Geothermal energy & tourism

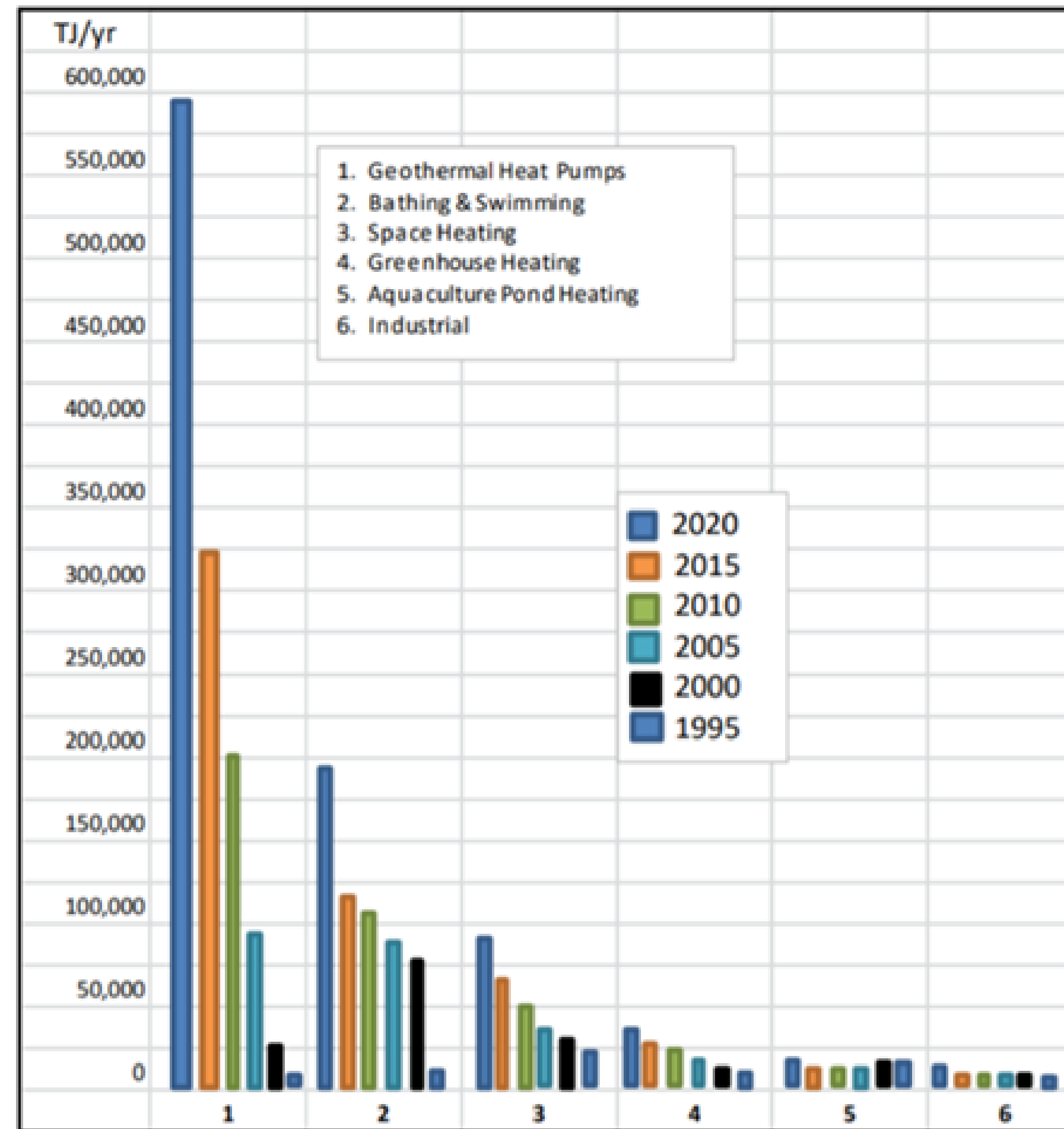
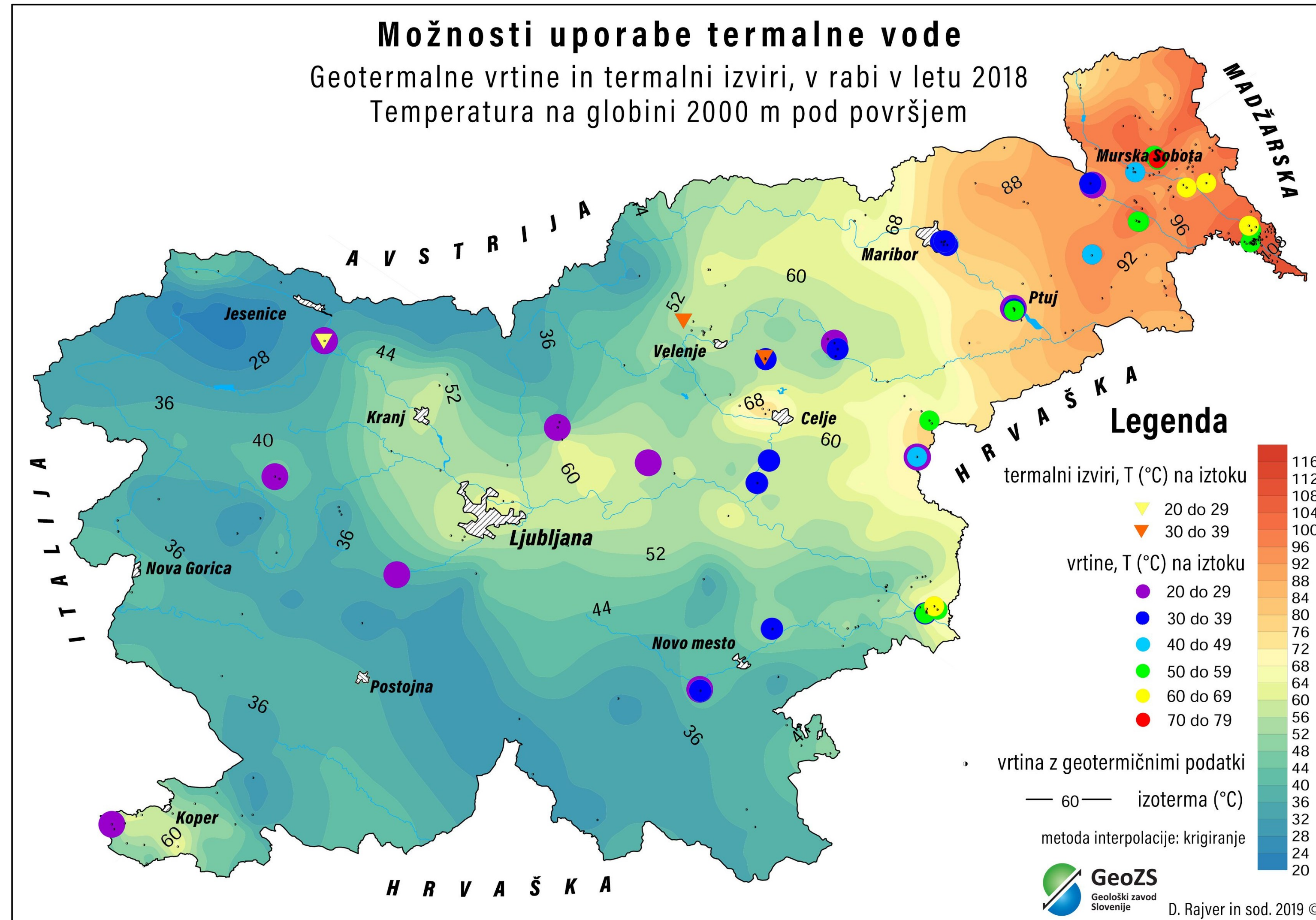


Fig. 2. Comparison of worldwide direct-use of geothermal energy in TJ/yr from 1995, 2000, 2005, 2010, 2015 and 2020.

Slovenia



For tourism

- Balneology
- Food production
industrial tourism
Paradajz d.o.o. &
Ocean Orchids d.o.o.
- Geothermal
educational trail
Cerkno

ADDING VALUE WITH EXPERIENCES: INDUSTRIAL TOURISM AND GEOTHERMAL FOOD PRODUCTION

Barbara Pavlakovič
Maja Turnšek

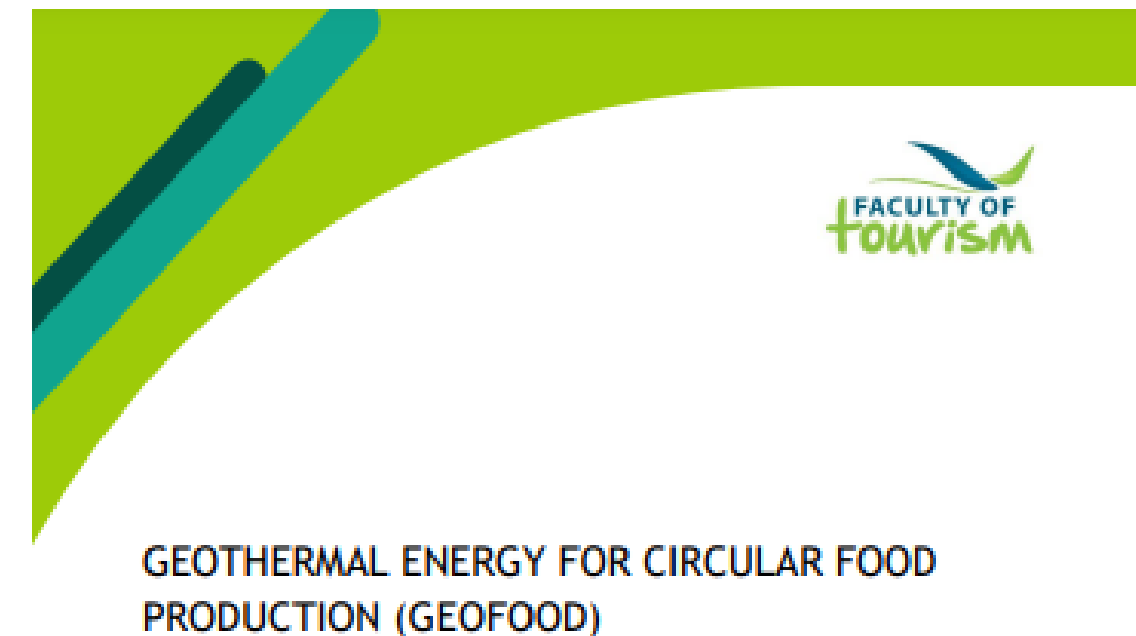
<https://doi.org/10.20867/tosee.05.39>

Abstract

Purpose – The study presents examples of good practice, which use innovative tourism products to extend their visiting season. These destinations are Iceland and Slovenia. Both countries have their high season in summer due to more agreeable weather conditions and warmer climate. Hence, the need for the prolonged season provided creative ideas, like transforming production factories into tourist attractions, and furthermore transform mere sightseeing of these premises into tourism experiences.

Methodology – The paper introduces a case study of two companies – from South Iceland is Fridheimar and from Slovenia company Paradajz d.o.o. The case study was delivered through in-depth interviews with the company representatives and field observation in the factory tour itself. It supplied data about both providers and their industrial tourism practices with which benchmarking analysis was made.

Findings – The results suggest that such tourism products focus mostly on the education and aesthetics dimension of experience design, while escapism and entertainment dimension remain a challenge together with the challenge of overall theming of sustainability and geothermal energy. However, use of industrial tourism products has been a success in extending the tourist season into colder months and adding value to the business model



Connecting innovative geothermal food production with tourism

Report; Project deliverable D 6.3

Barbara Pavlakovič and Maja Turnšek



Proceedings World Geothermal Congress 2020+1
Reykjavik, Iceland, April - October 2021

Adding Value to Geothermal Food Production through Experience Design

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Keywords: circular food production systems, tourism, experience design, sustainability, Geofood

ABSTRACT

Geothermal energy has long been a part of various forms of wellness tourism. Recently, however, it can be observed its preliminary growth in new innovative forms of agro-tourism. The focus of the paper is on the greenhouse horticulture sector that is exploring the potential of geothermal energy for heating as an alternative to fossil fuels. The authors analyse the intertwining of the trends of the so-called "experience economy" and "industrial tourism" on a selection of four case studies from three different countries: Iceland, the Netherlands, and Slovenia. Taking the experience design approach, the authors analyse the options for adding value to the business models of these greenhouse producers through designing educational, aesthetic, entertainment, and the escapist dimensions of experiences offered to visitors of geothermally heated greenhouse producers. Especially, the focus is on the educational dimension of sustainability of the production in relation to the use of geothermal energy and the analysis of the potentials in raising general awareness and dissemination of knowledge.

1. INTRODUCTION

Tourism organizations promote the creation of environmentally and culturally sensitive tourism programs as a strategy for sustainable development (Spenceley et al., 2015). Sustainability is regarded as a balanced approach toward economic, social, and environmental (tourism) development. In alignment with the original Brundtland's (1987), the definition of sustainable development, UNWTO (n.d.) defines sustainable tourism as "Tourism that takes full account of its current and future economic, social, and environmental impacts,

Pavlakovič, B., & Turnšek, M. (2019). Adding value with experiences: industrial tourism and geothermal food production. *Tourism in South East Europe...* 5, 507-520.

Turnšek, M., Thorarinsdottir, R., Boedijn, A., Baeza Romero, E., Espinal, C., van de Ven, R., & Pavlakovič, B. (2020). Adding Value to Geothermal Food Production through Experience Design. Paper presented at the Proceedings of the World Geothermal Congress.

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Geothermal energy & tourism

From Roman times to modern wellness



Geothermal energy & tourism

New niche: industrial tourism and geothermal food production



Figure 2: The progression of economic value in producing tomatoes



Source: Based on Pine and Gilmore, 1998

Role in public awareness & support

14 GEOTERMALNA UČNA POT

Geotermalna energija po učni poti v Občini Cerklno

Učna pot je namenjena spoznavanju geotermalne energije in ogledom pojavov v naravi.

Nekaj točk na geotermalni učni poti predstavljajo tudi pomembni geotermalni objekti, kot so geotermometrična vrtina Ce-1/94 globine 134 m, polje 12 geosond globine 96 m pri Centru za šolske in občolske dejavnosti, geotermalna vrtina pri hotelu Ce-2/95, ki je globoka 2.004 m in je najgloblja delujoča geotermalna vrtina v celotni zahodni Sloveniji.



Open Access

Article

Role of Tourism in Promoting Geothermal Energy: Public Interest and Motivation for Geothermal Energy Tourism in Slovenia

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Academic Editor: Wadim Strielkowski

Sustainability 2021, 13(18), 10353; <https://doi.org/10.3390/su131810353>

Received: 21 July 2021 / Revised: 6 September 2021 / Accepted: 13 September 2021 / Published: 16 September 2021

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Abstract

From household geothermal heat pumps to industrial geothermal heating and electricity production, geothermal energy is one of the most promising future climate change mitigation areas. This paper aims to analyse the potential role that the tourism industry has in the promotion of geothermal energy. Although general knowledge and understanding of geothermal energy is often relatively low, geothermal energy tourism has the potential to encourage the public to use and learn about geothermal energy and its applications. The paper first provides a theoretical conceptualisation of geothermal energy tourism at the energy production

Pavlakovič, B., Demir, M. R., Pozvek, N., & Turnšek, M. (2021). Role of Tourism in Promoting Geothermal Energy: Public Interest and Motivation for Geothermal Energy Tourism in Slovenia. *Sustainability*, 13(18)



GEOTHERMAL ENERGY FOR CIRCULAR FOOD
PRODUCTION (GEOFOOD)

**A feasibility study for the usage of
geothermal energy for aquaponics
circular food production in
Municipality of Brežice**

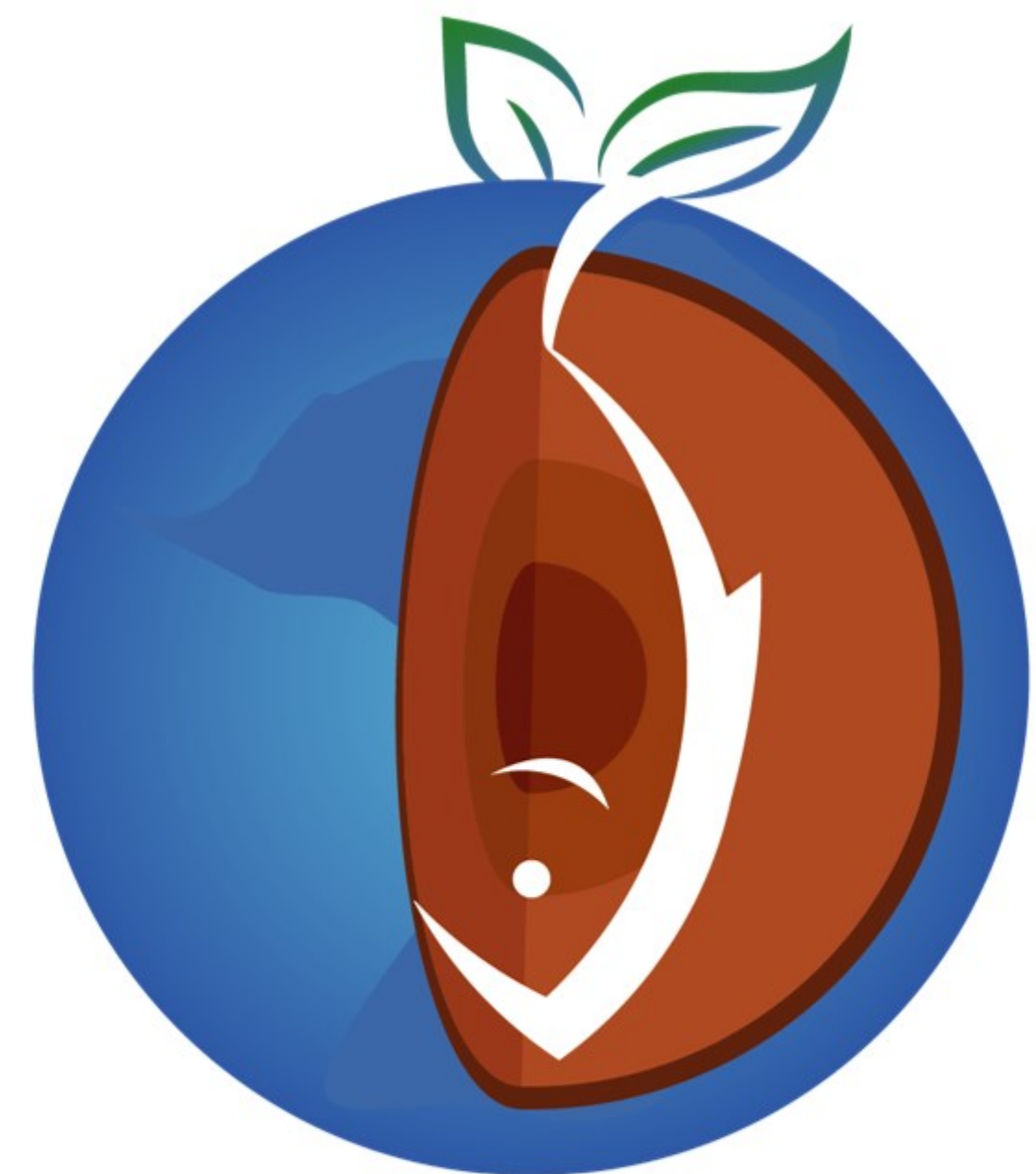
Report; Project deliverable D 6.2

Maja Turnšek (FT UM) and Barbara Pavlakovič (FT UM) and
Alexander Boedijn (Wageningen University & Research)



Turnšek, M., Pavlakovič, B., & Boedijn, A. (2021). A feasibility study for the usage of geothermal energy for aquaponics circular food production in Municipality of Brežice.





GEOFOOD

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