Erratum to: Impact of policy instruments in the implementation of renewable sources of energy in selected European countries.

NASIRI, E., ROCHA-MENESES, L., INAYAT, A. and KIKAS, T.

2022

sustainability

MDPI

Correction

Correction: Nasiri et al. Impact of Policy Instruments in the Implementation of Renewable Sources of Energy in Selected European Countries. *Sustainability* 2022, *14*, 6314

Elnaz Nasiri [1,*,†], Lisandra Rocha-Meneses [2,3,*,†], Abrar Inayat [2,4] and Timo Kikas [3]

[1] Department of Law, Faculty of Humanities, Islamic Azad University, Tehran North Branch, Vafadar Blvd., Shahid Sadoughi St., Hakimiyeh Exit, Shahid Babaee Highway, Tehran 1651153311, Iran
[2] Biomass & Bioenergy Research Group, Center for Sustainable Energy and Power Systems Research, Research Institute of Sciences and Engineering, University of Sharjah, Sharjah 27272, United Arab Emirates
[3] Institute of Forestry and Engineering, Chair of Biosystems Engineering, Estonian University of Life Sciences, Kreutzwaldi 56, 51006 Tartu, Estonia
[4] Department of Sustainable and Renewable Energy Engineering, University of Sharjah, Sharjah 27272, United Arab Emirates
* Correspondence: elnaz.nasiri87@gmail.com (E.N.); lisandra.meneses@emu.ee (L.R.-M.)
† These authors contributed equally to this work.

The authors would like to make the following corrections about the published paper [1]. The changes are as follows:

(1) Replacing the sentence in "Section 1. Introduction" in page 2:

Bórawski et al. [13] reported that energy policy is the most important factor when it comes to climate change and Europe will be able to achieve its transportation sector targets only by developing consistent support schemes, and by allowing the countries to have independent policies and support schemes. Marques & Fuinhas [14] developed an empirical study on the effectiveness of public policies in the deployment of renewable sources of energy. The authors concluded that policies, such as quotas and tradable certificates are not effective in the implementation of renewables, while subsidies and feed-in tariffs are effective. However, the adoption of renewable sources of energy depends on the country's energetic dependence. Papiez et al. [15] showed that countries without local fossil fuels invested more in the development and implementation of renewable sources of energy. However, Tutak & Brodny [16] emphasized the importance of developing new financial and support schemes for specific economic sectors and countries with similar characteristics, and Brodny et al. [17] highlighted the need of educating local communities for the adoption of renewables, since some countries still face social resistance.

Singh et al. [18] identified several gaps when it comes to the biomass value chain and their implications in meeting the bioeconomy objectives, such as decreasing the dependence on non-renewable sources of energy. The authors reported that some of the biomass, bioprocessing, and bio-based products policies are not consistent with the bioeconomy goals and are not interconnected with each other. Policy gaps were identified in the land use, biomass production, feedstock conversion, and end use. Panoutsou et al. [19] identified challenges and policy gaps that limit the decarbonization of the European transportation sector, as well as the adoption and utilization of advanced biofuels. The authors reported that advances biofuels still have policy gaps concerning feedstock production and conversion, and end use. Mai-Moulin et al. [20] investigated the effectiveness of the European Renewable Directive II. The authors concluded that not all the sustainability risks on bioenergy are addressed on this directive, and that further clarifications and criteria are required, especially when it concerns biomass feedstocks.

Citation: Nasiri, E.; Rocha-Meneses, L.; Inayat, A.; Kikas, T. Correction: Nasiri et al. Impact of Policy Instruments in the Implementation of Renewable Sources of Energy in Selected European Countries. *Sustainability* 2022, *14*, 6314. *Sustainability* **2022**, *14*, 10636. https://doi.org/10.3390/su141710636

Received: 3 August 2022
Accepted: 11 August 2022
Published: 26 August 2022

with

It has been reported by Bórawski et al. [13] that energy policy is the most important factor when it comes to climate change and Europe will be able to achieve its transportation sector targets only by developing consistent support schemes, and by allowing the countries to have independent policies and support schemes. An empirical study developed by Marques & Fuinhas [14] on the effectiveness of public policies in the deployment of renewable sources of energy. The authors concluded that policies, such as quotas and tradable certificates are not effective in the implementation of renewables, while subsidies and feed-in tariffs are effective. However, the adoption of renewable sources of energy depends on the country's energetic dependence. The research done by Papież et al. [15] showed that countries without local fossil fuels invested more in the development and implementation of renewable sources of energy. However, emphasize done by Tutak & Brodny [16] on the importance of developing new financial and support schemes for specific economic sectors and countries with similar characteristics, and Brodny et al. [17] highlighted the need of educating local communities for the adoption of renewables, since some countries still face social resistance.

Several gaps identified by Singh et al. [18] when it comes to the biomass value chain and their implications in meeting the bioeconomy objectives, such as decreasing the dependence on non-renewable sources of energy. The authors reported that some of the biomass, bioprocessing, and bio-based products policies are not consistent with the bioeconomy goals and are not interconnected with each other. Policy gaps were identified in the land use, biomass production, feedstock conversion, and end use. Panoutsou et al. [19] identified challenges and policy gaps that limit the decarbonization of the European transportation sector, as well as the adoption and utilization of advanced biofuels. The authors reported that advances biofuels still have policy gaps concerning feedstock production and conversion, and end use. Investigation on the effectiveness of the European Renewable Directive II done by Mai-Moulin et al. [20]. The authors concluded that not all the sustainability risks on bioenergy are addressed on this directive, and that further clarifications and criteria are required, especially when it concerns biomass feedstocks.

(2) Add following paragraph in "Section 4.3. Overview" in page 30:

The original version:

Based on the legal framework provided for each country in Section 2, the data gathered about the case study in Section 3, and the legislative analysis and results achieved in Section 4, it is understood that the better the national legislations are implemented and taken seriously by the governments, the higher the energy efficiency level of the State Member will be. For instance, in Estonia, the total gross energy between the years 2007–2018 was even higher than the European Union average (4–28%). This is of particular importance since the increase of solid biofuels usage instead of fossil fuels affects the carbon emissions and the overall energy efficiency of the country. All these factors are related and depend on the legal framework of the country.

In this research, by comparing a wider range of EU member countries and comparing eastern Europe to the western part, it was possible to show how implementing policies will affect the countries' contribution to the EU directives. While previous studies have mostly focused on either decarbonization or comparing much-limited state members, this study goes further and gets in touch with the core legal system of six EU countries located in different parts of Europe. As these countries have different legal systems, it is possible and analyze how having different national laws and procedures affect the EU goals and the transition to a low carbon society.

Add the following paragraph:

Based on the legal framework provided for each country in Section 2, the data gathered about the case study in Section 3, and the legislative analysis and results achieved in Section 4, it is understood that the better the national legislations are implemented and taken

seriously by the governments, the higher the energy efficiency level of the State Member will be. For instance, in Estonia, the total gross energy between the years 2007–2018 was even higher than the European Union average (4–28%). This is of particular importance since the increase of solid biofuels usage instead of fossil fuels affects the carbon emissions and the overall energy efficiency of the country. All these factors are related and depend on the legal framework of the country.

In this research, by comparing a wider range of EU member countries and comparing eastern Europe to the western part, it was possible to show how implementing policies will affect the countries' contribution to the EU directives. While previous studies have mostly focused on either decarbonization or comparing much-limited state members, this study goes further and gets in touch with the core legal system of six EU countries located in different parts of Europe. As these countries have different legal systems, it is possible and analyze how having different national laws and procedures affect the EU goals and the transition to a low carbon society.

Most researchers in this field have focused for example on the sustainable bioeconomy, rather than on the policy instruments and their relationship with the increase of re-newable sources of energy in the final energy mix. There has also been research focusing on reduction of geopolitical risks by increasing the domestic energy production and the steps that need to be taken towards this end. The authors reported the importance of creating new alternatives to centralized restructure for combining different type of interests. Another research emphasizes on the awareness of different approaches to-wards different countries toward sustainability. It was reported that the systems must be modified for each country and legal frameworks cannot be applied to all countries without modifications regarding the cost of producing bioenergy energy and trans-porting the product.

The authors apologize for any inconvenience caused and state that the scientific conclusions are unaffected. The original publication has also been updated.

Reference

1. Nasiri, E.; Rocha-Meneses, L.; Inayat, A.; Kikas, T. Impact of Policy Instruments in the Implementation of Renewable Sources of Energy in Selected European Countries. *Sustainability* 2022, *14*, 6314. [CrossRef]