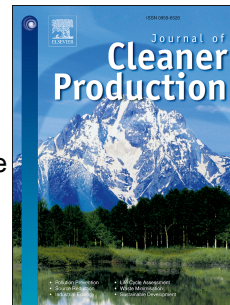


Accepted Manuscript

Municipal Energy policy Constitution and Integration Process to Establish Sustainable Energy Systems – A Case of the Slovenian Municipality

Anja Kostevšek, Janez Petek, Jiří Jaromír Klemeš, Petar Varbanov



PII: S0959-6526(16)00081-0

DOI: [10.1016/j.jclepro.2016.01.046](https://doi.org/10.1016/j.jclepro.2016.01.046)

Reference: JCLP 6634

To appear in: *Journal of Cleaner Production*

Received Date: 24 April 2014

Revised Date: 15 July 2015

Accepted Date: 19 January 2016

Please cite this article as: Kostevšek A, Petek J, Klemeš JJ, Varbanov P, Municipal Energy policy Constitution and Integration Process to Establish Sustainable Energy Systems – A Case of the Slovenian Municipality, *Journal of Cleaner Production* (2016), doi: 10.1016/j.jclepro.2016.01.046.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Municipal Energy policy Constitution and Integration Process to Establish Sustainable Energy Systems – A Case of the Slovenian Municipality

Anja Kostevšek^{1*}, Janez Petek², Jiří Jaromír Klemeš³, Petar Varbanov³

¹*International Institute for Energy Bionics, Kolodvorska 9, SI-2331, Pragersko, Slovenia*

²*Local Energy Agency Spodnje Podravje, Prešernova ulica 18, SI-2250 Ptuj, Slovenia*³*Centre for Process Integration and Intensification – CPI², Research Institute of Chemical and Process Engineering – MÜKKI, Faculty of Information Technology, University of Pannonia, Egyetem u. 10, HU-8200, Veszprém, Hungary*

Abstract

The way forward clearly orients us towards the decarbonisation of energy systems. Sustainable energy systems ensure fewer burdens on the environment and consequently provide success when fighting climate change. Energy policy provides support in addressing the present energy challenges. Municipal policy has often been neglected, with greater emphasis being concentrated at the centralised level. In addition, another identified problem has been the insufficient quality of the municipal policy performance with lack of acknowledging various features within the municipality. Therefore, the presented paper focuses on the constitution of municipal energy policies that include all aspects of municipalities' energy systems and lead towards less environmentally burdened energy systems. The main objective is to enhance sustainable development within municipalities through constitution and integration of suitable municipal energy policies. The proposed paper presents an entirely inclusive process for a municipal energy policy's institutional, implementation and evaluation phases. Municipal energy policy has to enable maximum efficiency of energy systems by implementing customised targets and measures. This novel methodology for integrated municipal energy policy constitution and integration has, in fact, been applied within the Podlehnik municipality, representing one of the small municipalities in Slovenia. This work proposes an important step towards formalising a municipal energy policy constitution and integration process.

Key words: municipal energy policy; municipal energy policy constitution and integration process; sustainable energy systems.

1. Introduction

Energy is becoming an ever more important aspect in today's society (Blumberga et al., 2014). Various energy challenges can be clearly highlighted regarding present day energy systems. The green growth has to be accelerated and incorporated within the policies in order to pursue sustainable development (Lorek and Spangenberg, 2014). Various uncertainties keep appearing regarding the deployment of RES (Krozer, 2013), clean technologies introduction (Costa-Júnior et al., 2013),

* Corresponding author. E-mail address: anja.kostevsek@gmail.com, phone number: +386(0) 41579765, fax number: +386(0) 27480260 (Anja Kostevšek)

Download English Version:

<https://daneshyari.com/en/article/8102447>

Download Persian Version:

<https://daneshyari.com/article/8102447>

[Daneshyari.com](https://daneshyari.com)