

Mejor Publicación de la FCEYE

Enero 2019

Journal of Cleaner Production 176 (2018) 159-174

Facultad de Ciencias Económicas y Empresariales

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Contents lists available at ScienceDirect

Journal of Cleaner Production





Analyzing the effects of the benchmark local initiatives of Covenant of Mayors signatories



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ARTICLE INFO

Article history: Available online 21 December 2017

Keywords: Covenant of Mayors Benchmarks of excellence Local governments Emissions reduction targets Renewable energy production Energy efficiency improvements

ABSTRACT

In 2014, the European Union established a new climate and energy framework for 2020–2030, setting three key targets: a 40% emissions reduction and the achievement of a 27% share of renewable energy production and improvements in energy efficiency. All levels of governments should be involved in reaching these goals, with the role of local authorities being mainly important. Thus, the Covenant of Mayors has been developed as an initiative consisting of a voluntary agreement between local governments to reduce emissions, through specific action plans including policies promoting energy saving and renewable energy.

The aim of this paper is to analyze the main benchmark actions performed, based on the database offered by the Covenant of Mayors organization. A total of 4741 so-called Benchmarks of Excellence from almost 1300 cities were registered, being undertaken mainly by Italian, Spanish, Portuguese and Belgian municipalities. The greatest number of actions is related to municipal buildings, public lighting and local electricity production, which are also the greatest emissions reducing actions. In terms of energy savings, actions are highlighted that are related to a modal shift to public transport, municipal building envelopes, and agriculture and forestry, while actions generating more renewable energy production are related to combined heat and power areas.

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1. Introduction

The European Union has come a long way since it adopted its first package of climate and energy measures in 2008. Nowadays, the EU is on track to meet these targets for emissions reduction and renewable energy production, and has also achieved notable im-

warming to well below 2 $^{\circ}$ C above pre-industrial levels, and pursue efforts to limit the temperature increase to 1.5 $^{\circ}$ C.

To meet these goals, the EU considers it necessary to ensure that all levels of governments are involved in climate policy, implementing energy and environmental measures at all territorial levels, with local emphasis (European Parliament and the