



E-waste governance as a socio-technical regime: an urban comparison between Milan and Paris

Isabella Capurso¹

Abstract

In recent years the e-waste issue has become a relevant field of analysis amongst several disciplines and research contexts. This waste component indeed presents a number of features that make it a very challenging topic on the political, social and environmental levels. Moreover, of the whole rate of urban solid waste, the e-waste component is comparatively the fastest rising, and this trend is expected to continue according to the quality and quantity of hi-tech product consumption.

The general research aim of this ongoing PhD research is to focus on e-waste management on the urban scale by carrying out a comparative study between Milan and Paris. The policy analysis will explain what the most important variables at stake are in impacting the entire performance of the two cities. In this, the factors that are involved in the e-waste chain at various degrees and that are included in this work are manifold and different: municipality, citizens-consumers, hi-tech producers, utility system, recycling scheme, tertiary sector. Considering the relationship between these players is a good tool to use in looking at the topic of environmental governance on the urban scale, as the concepts of multi-scalar and multi-stakeholders approach are the key factors on which it is most necessary to reflect. Moreover, the comparison will provide further insights into the role of these variables and into the possible alternative method of managing their interactions.

Keywords: E-waste, urban governance, sustainable development, socio-technical regimes, multi-scaling, multi-stakeholders approach

La gestione dei rifiuti hi-tech è divenuta, negli ultimi anni, una tematica di grande rilievo ed interesse in diversi ambiti disciplinari. Infatti, tale problematica possiede una serie di caratteristiche tali da renderla una questione ancora molto aperta, la cui ricomposizione rappresenta una grande sfida sia a livello politico, che sociale e ambientale.

Il fine generale della presente ricerca, ancora in atto, è quello di affrontare il tema della gestione dei rifiuti hi-tech su scala urbana, portando avanti una comparazione tra Milano e Parigi.

L'analisi delle politiche di gestione mostrerà quali siano le variabili

⁽¹⁾ University of Milan “Bicocca”, i.capurso@campus.unimib.it

maggiormente determinanti nell'influenzare a livello globale le performance di raccolta nei due contesti. Tra queste, i fattori indagati sono: le aziende municipali, i cittadini-consumatori, i produttori di hi-tech, le infrastrutture di raccolta, gli schemi di riciclo, il settore second-hand e le associazioni filantropiche.

Interpretare il legame, le sinergie, ed eventualmente i conflitti, tra questi diversi attori, è uno strumento utile per guardare al più ampio tema della governance ambientale. Infatti, si ritiene che solo attraverso uno sguardo multi-scalare e multi-stakeholder sia possibile ad oggi rendere una visione complessiva e intelligibile di un fenomeno complesso come quello della relazione società-risorse. All'interno di questo quadro, la comparazione è ritenuta una metodologia efficace nel rendere con maggiore evidenza il peso relativo delle diverse variabili.

Parole chiave: *Rifiuti hi-tech, governance urbana, sviluppo sostenibile, regimi socio-tecnici, multi-scalarità, approccio multi-stakeholders.*

1. Introduction

The general research aim of this proposal is to gain insights into e-waste governance on the urban scale.

For this purpose it was decided to conduct a comparative research on the cities of Milan and Paris and focusing on the case of e-waste derived by small hi-tech appliances.

The analysis is set up as a study of the supply chain, where the role of all stakeholders and their interrelation are investigated under the theoretical lens of socio-technical regimes.

Before going into the specificities of the two cities, a general overview of the Italian and French macro models for governing the e-waste issue will be presented.

Secondly, the urban comparison will be illustrated and particular emphasis will be placed on the role played by urban space and local stakeholders. Lastly, a theoretical portion will follow. It is aimed at providing a useful contribution not only to the literature on socio-technical regimes, but also to policy making in the field of (e)waste governance.

Methodologically, the research has been grounded on pragmatism and qualitative methods (Johnson R.B., Onwuegbuzie A.J., Turner L.A., 2007), exploiting two phases of analysis. First, has been conducted a secondary analysis of the survey and works already existent on e-waste recycling and policy in Italy and France. Successively the Italian and French e-waste sup-