

# Open Government Data: Applications for Sustainability

---

Master Thesis submitted in fulfillment of the Degree

Master of Science

in Sustainable Development, Management and Policy

Submitted to Dr. Marta Sabou

Alison Koczanski

1143006

Vienna, 9 June 2014

## **ABSTRACT**

Beginning in 2009, President Barack Obama introduced the Open Government Data (OGD) initiative, an approach to usher in a new form of government characterized by increased transparency, collaboration, and public participation. Through this OGD initiative, governments release to the public their raw datasets spanning a wide range of domains. Especially at the local city level, governments are encouraging businesses and individuals alike to create mobile and web-based applications from this raw data. Currently however, much of the attention of governments, researchers and businesses focuses on the potential uses for these OGD applications and their economic and business implications.

This master thesis complements the state of the art understanding of the implications of the OGD phenomenon by examining the ways in which current OGD-based applications are being used based upon economic, social, and environmental sustainability. This thesis also investigates ways these applications might extend themselves to be more useful to these sustainability efforts in the future. A taxonomy across these three pillars of sustainability was created to categorize current applications in both Vienna and New York City and focus groups were carried out in these two locations to explore the experiences of actual users. Additionally, these focus groups helped provide useful recommendations for general characteristics OGD-based applications must exhibit to be successful in the future. Creators of OGD-based applications in Vienna were also surveyed to determine their motivations behind creating these applications. Drawing upon these multiple methods, it was concluded that there are ample opportunities for OGD-based applications to support all three aspects of sustainability. Furthermore, as a side effect of the performed analysis, a suite of general recommendations for the extension of these applications were derived, including: increased awareness of the initiative and applications among citizens; creating well-functioning applications and ensuring the accuracy and reliability of the data once it is in application form; as well as the diversification of channels for communication and networking among all stakeholder groups.