Preface

Research on the ‘policy uptake’ of citizen sensing – here defined as the adoption by institutional actors of citizen sensing methods and findings – is still in its infancy, especially in terms of empirically based studies. The few actors in the debate include the USA Citizen Science Association’s (CSA) Law and Policy Working Group, the Environmental Law Institute (ELI) and the USA Environmental Protection Agency (all based in Washington D.C., USA),\(^1\) which have often been providing studies on the topic but from a primarily USA perspective (Environmental Law Institute 2002; McElfish, Pendergrass and Fox 2016). Nonetheless, research on the topic from a European standpoint is growing (Haklay and Francis 2018; Mah and Davies 2019). European scholars have already stressed the potential of web mapping tools to collect geospatial data in the hands of concerned citizens and their conceivable applications for environmental policy and law enforcement (Gutiérrez 2018a; 2018b; Haklay and Francis 2018). Moreover, publications are growing\(^2\) on the possibility of citizen science (and sensing) to impact on society, on science and also on policy (Bonn et al. 2018, 466; Shanley et al. 2019).

Furthermore, the European Citizen Science Association (ECSA) features a working group named ‘Policy, strategy, governance and partnerships’ aimed at ‘informing on and advocating for the value of Citizen Science for achieving policy goals’.\(^3\) The European Commission’s (EC) DG Environment, too, started recognizing the promises of using citizen-operated technologies for policy and law enforcement.\(^4\) Moreover, the EC’s Communication COM(2017)312 stressed the potential role of citizen science in streamlining environmental reporting. The envisaged opportunities are many, ranging from a closer connection of the affected people to environmental decision-making, to a wider,


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more diverse and inclusive availability of evidence for policy on critical environmental issues, to the possibility of even mitigating socio-political conflicts. The EC’s Joint Research Centre (JRC), supported a study on the potential of citizen science for environmental policy (Bio Innovation Service 2018), on the basis of the analysis of an inventory composed of 500+ cases. Among the findings of the study, it is stressed that empirical evidence on the policy uptake of citizen science is currently low and scarcely researched at the European level. These studies identify a gap in the current knowledge and make a point for the present research.

The mentioned academic and grey literature – however – does not take the novel four-fold perspective adopted in this book. Indeed, from a thorough investigation, I realized that the idea of combining the elements of risk, technology, the grassroots-drive and distrust to form a lens of analysis for citizen sensing has not been used to date. In current (scholarly) discourses revolving around risk governance and citizen sensing, this four-fold frame has not been adopted so far. In spite of the existence of numerous studies bringing together technology and risk, as well as citizens and technology, and lastly citizens and (dis)trust, (dis)trust and technology, and (dis)trust and risk, it is instead hard to find the grassroots and distrust element clearly related to technology and risk and more specifically applied to citizen sensing (citizen science/community-based monitoring etc.). Yet, civic discourses I encountered in an early phase of this research were bringing in all these four elements and merging them into arguments. Under this perspective, the lens of analysis adopted here not only operates as an effective selection criteria but also represents an element of novelty of the book. Furthermore, the mixed-methods approach that I adopted to target the research aim is quite novel to the field as rarely studies in the sector performed a fuzzy-set Qualitative Comparative Analysis (fsQCA), on the side of purely ethnographic research.

This piece of work is addressed both to researchers in the field and to practitioners. It contributes to the academic literature falling under different disciplines, among which environmental law, public administration scholarship, socio-legal studies, Science and Technology Studies (STS), and political sciences. Also interested communities (such as participants of citizen science initiatives) and broader publics (e.g. communities affected by environmental issues) could find value in this research. Furthermore, I deem that professionals in the sector (e.g. policy-makers, judges, lawyers); environmental and public health authorities; charities and non-governmental organizations; the

private sector and environmental consultancy firms may also be interested in the findings contained in this book.

Source: Alice Toietta for this project, 2020.

Figure 0.1 Sensing citizen in action