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Does civil society matter? Challenges and strategies of grassroots initiatives in Italy's energy transition

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ABSTRACT

The paper analyzes the role of civil society in Italy's energy transition with particular attention paid to those forms of social innovation developing new energy pathways alternative to the dominant ones. The international literature emphasizes the weakness of such initiatives in southern Europe as compared to Northern European countries. However, there is a lack of analysis of empirical cases in this area, as well as convincing explanations for the lagging behind of Southern European countries.

Against this background, on the basis of qualitative research centered on semi-structured interviews with civil society actors, we analyze the main grassroots initiatives emerging in Italy in regard to the production, consumption, and recently the provision, of renewable energy. In the discussion part of the paper, we explore these innovative practices with a comparative approach taking Germany as the main reference point. Hence we explain the fragility of Italian experience in relation to structural socio-economic characteristics of the country – namely municipal socialism and dualism of the capitalist system – and to the evolution of the Italian cooperative movement. Eventually we also assess the potential of emerging initiatives for challenging the existing centralized energy system.

1. Introduction

A large body of literature has recently considered the role of civil society in energy transition. The latter has been analysed from two main points of view. On the one hand, using the concept of social acceptance of renewable energy sources (RES), one strand of the literature has analysed local conflicts and opposition to renewable energy production projects and facilities decided from above and promoted in the name of the green energy revolution [1]. This literature [2,3,4,5,6] has criticised the NIMBY syndrome explanation as an over-simplification of people's actual motives. Hence it has highlighted the role of local communities in claiming and pushing for a strong ecological modernization [7], taking account of justice and fairness – both procedural and distributive (e.g., [8,9]) – as well as the social and ecological sustainability of the projects proposed. In this way, as stressed by Smith [10][10,p. 5], civil society may become a major source of reflexivity within the energy transition.

On the other hand, another strand of the literature has considered civil society to be a source of social and organizational innovation promoting a variety of energy pathways alternative to the dominant traditional ones [10,11]. This will be the subject of our paper. Community renewable energy (CRE) projects are the most widely studied forms of civil society social innovation.

CRE includes a variety of experiences of renewable energy development and provision characterized by various degrees of public participation in project development [3,12]. As highlighted by Walker [13], community initiatives can take different financial, organizational and legal forms, ranging from green energy cooperatives owning the energy infrastructures – the most widespread and oldest model – through community charities running the plant, to co-ownership of green energy projects by local communities, enterprises and local government. They may operate only as energy producers or also as providers [14]. Moreover, they can take the form of a community of place, where people are mainly mobilized by the fact that they belong to the same territory, or the form of a community of interest [13], where people are united in a common action by other factors, such as the sharing of economic, environmental or solidarity interests.

Research (e.g., [15,16,17,14,18]) highlights that in Northern European countries like Denmark and Germany cooperatively-owned plants have existed since the early 20th century. In the 1970s, as a result of the energy crisis and the desire to find alternatives to nuclear power, such social innovation underwent a

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significant revival. Hence in 2000s the liberalization of energy systems, feed-in tariff for renewable energy production and scalable technology have led to a wider societal diffusion of renewable energy cooperatives [19,18].

A recent boom of CRE projects has been documented also in other countries like the UK as a result of specific government support programs and of growing awareness at the grassroots level of the environmental costs of traditional fossil fuels (e.g., [20,13,21,22,23,12]).

Research on CRE has generally stressed the distinctive environmental and social advantages of this form of organization of energy production/consumption compared with government or business-led developments [21]. In particular, it has been emphasized how, by building on local knowledge and networks, CRE often consist of more locally appropriate solutions [24], which also contribute to local economic development [25,22,26] and community cohesion [12]. Moreover, it has been stressed that community initiatives may result in increased awareness of energy issues and more sustainable energy consumption practices [12,20].

Research on renewable energy cooperatives has highlighted in particular that organizations of this kind have access to non-market resources, like trust, strongly needed for the re-production of quasi-public goods like energy [27,19]. Having access to these social resources allows civil society organizations to ensure closer control over the nature of the energy and its price [19,p. 203]. Some studies have also explained the decision by consumers to buy electricity from renewable energy cooperatives in terms of their ability thus to reduce transaction costs [28,18].

Among the factors that can favor or hinder this development, the literature has highlighted the importance of the interaction between the macro institutional framework and the micro level actor-network [14,21]. In particular, at the macro level, institutional and cultural factors have been emphasized. Among the former are systems of financial support, land use policies, incentive and taxation schemes, legislation concerning the production, sale and distribution of electricity, and organization of the electricity grid [14,19]. Among the latter are traditions of 'energy activism' and legitimacy issues. At the individual level, attention has been paid in particular to the presence of key committed individuals with access to the information, skills, and economic capital needed to start the project, as well as to social capital in order to form supportive partnerships [29,14,13,30,21].

As stressed above, the large majority of the studies in the literature on CRE initiatives have focused on Northern/Central European countries, while almost no studies have been conducted on Southern European ones. Indeed, the international literature explicitly stresses that Southern European countries lag behind in the involvement of civil society in energy transition [19,31]. However, the tentative explanations for this weakness – i.e. a lower population density and therefore less income available for investment, lower environmental concerns, and a lesser development of renewable energies [31] – tend to be vague and not based on empirical research.

Starting from this background, our general objective in this article is to contribute to filling the gap in the literature on the role of civil society in energy transition in Southern Europe. In particular, we consider the need recently stressed also by Brondi et al. [32]. to address the grassroots level of energy transition in the case of Italy.

The article has two purposes: on the one hand, drawing on original empirical research it explores the main CRE initiatives in Italy; on the other, it conducts comparative analysis of these initiatives in order to provide an in-depth explanation of their weakness with respect to ones in other European countries.

Accordingly the article is structured as follows. Section 2 presents in detail the research method used to study Italian civil society's involvement in energy transition and to select the case studies considered in the article. Sections 3, 4 and 5 analyse the most significant initiatives involving Italian civil society in respectively renewable energy production, consumption and provision. Section 6 (discussion) conducts a critical analysis of the practices described in the previous sections. In particular, the weakness of renewable energy grassroots initiatives in Italy will be interpreted in relation to characteristics of the country's social and economic organization – so-called municipal socialism and dualism in the Italian industrial sector – and to the evolution of the Italian cooperative movement. A comparison will be made with Germany, given its leading role among European countries in the ecological modernization process – and in particular in energy transition – and given its geographical proximity to Italy. Finally, in the Conclusions not only the weaknesses but also the potential of emerging initiatives for challenging the existing centralized energy system will be highlighted.

2. Exploring civil society initiatives on renewable energy in Italy

2.1. Context of the research

In order to investigate the role of civil society in Italy's energy transition, it is important to review the trend in Italy's renewable energy production and its impact on land and local communities. Hydroelectric production has traditionally been the most important RES in Italy in terms of installed capacity. However, its contribution has remained substantially unchanged since the 1950s, when large dams were constructed in the Alpine areas [33].

Beginning in 2009, the significant rise in installed capacity of renewable energy was driven by the rapid growth of photovoltaic production. This was the result of the introduction in 2005 of a very generous feed-in tariff scheme, together with a net-metering system, for solar electricity (called *conto energia*). As a consequence of this policy development, Italy's installed photovoltaic capacity rose rapidly from 87 MW in 2007 to 18,450 in 2014, making the country the second largest photovoltaic market in Europe after Germany. Less important increases have concerned other RES, which have also benefited from national subsidies of different kinds. This is particularly the case of biogas-power plants and wind farms. For the former, a generous all-inclusive tariff was introduced in 2007. The latter enjoyed both a special sale price and a system of green certificates [34]. Indeed, as highlighted by Brondi et al [32], Italy is one of the countries with the strongest policy support for green energy production. As stressed by these authors, this has mainly been the result of a strategic political choice, rather than of environmental concerns, given that Italy is the biggest importer of energy in the EU.

The combination of the generous incentive system for renewable energy and the liberalization of the electricity market in the late 1990s produced new land-use tensions which exhibited a spatially differentiated pattern. In particular, land-use conflicts mainly concerned large biogas facilities in northern agriculture-oriented lowland areas, and large wind and on-land solar PV plants in southern regions [34]. This was a first kind of mobilization by civil society intended to unsettle the regime [10]. Data from 2011 NIMBY Forum report highlight that, in the past five years, energy-related conflicts have become the most frequent kind of local environmental controversy in Italy [35,34] .[1]

[1] NIMBY Forum is a permanent media observatory sponsored by the Italian Minister of the Environment and the Italian Minister for Economic Development. It was created in 2004 with the aim of collecting data on local opposition to a variety of different facilities as reported by the major national and local newspapers.

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