

ABSTRACT – Project CAREsolar: An updated framework on community acceptance of renewable energy infrastructures – Practical guidelines for solar plants as a case study (Ref. no53)

The green energy transition is being promoted around the world as key to tackle climate change. However, as it is increasingly fostered and associated measures implemented, such as the deployment of renewable energy infrastructures (REI) like solar plants and wind farms, contestation also has risen. Comparable social processes are also observed in the construction of other infrastructures such as high-voltage power lines or mobile communications base stations. Social sciences' research has attempted to analyze and understand this relevant social issue in the last decades and proposed several and distinct conceptual frameworks for that. The NIMBY (*Not in my backyard*) framework has been one of the most widespread and well-known frameworks for explaining opposition to infrastructure projects, also specifically to REI. It proposes that opposition is due to individuals' selfishness, ignorance, and irrationality, as it expresses individuals' rejecting the construction of an infrastructure of relevance to all 'just because' it is in their backyard, this is, near where they live. However, the NIMBY framework is being increasingly questioned by more recent frameworks that emphasize instead the roles of issues of (in)justice in REI related decision-making processes and policies and their impact on negative responses to these infrastructures. However, the proliferation of conceptual frameworks on energy justice and related issues regarding REI has been immense in recent years and it is difficult to, from a practical perspective, understand how exactly their relevant insights and contributions can be applied to REI projects and decision-making, so that these can effectively become just. This project aims to contribute to that by conducting a systematic academic and grey literature review of the most recent literature on community responses to renewable energy and associated infrastructures. For this, solar energy and associated infrastructures will be the case study and particularly focused, as an expanding and crucial technology within the renewable energy transition, namely in countries like Portugal and Switzerland. Based on this literature review we will then propose an integrated framework to be discussed and validated with key experts and stakeholders in the area. Based on these two previous tasks, the end goal of this project is to deliver a handbook with guidelines for policymakers, energy companies and local

communities, on best practices for the successful deployment of REI, particularly solar. These results should also be transferable to other types of infrastructure.