

## Preface

Until the turn of the 2020s, questions around security and defence were not part of sustainability transitions research and were also little addressed in the context of energy transitions. The first two decades of the research field of transitions had an innovation bias. It was built around the search for knowledge on how radical innovations emerge and gradually transform sociotechnical regimes around energy, mobility, or food. Only since the 2010s has more transitions research begun to address the acceleration of transitions and how the processes of scaling innovations connect to the decline of sociotechnical regimes. The established sociotechnical systems have often been described as suffering from path dependence and lock-in, and, hence, destabilization or decline of such systems is difficult to realize. Alongside the attention to regime decline, discussion on broader repercussions of transitions, such as social justice, emerged. Yet little attention was paid to security and defence as influencing factors on transitions or in terms of transitions shaping the security landscape.

My own motivation to research the topic of this book emerged when I heard Professor Johan Schot talk in 2017 about how the sustainability transitions community has paid scarce consideration to negative side effects and the role of war in transitions. This influenced me, as a policy-oriented transitions scholar, to think about defence policy and its interconnections with sustainability transitions. As a result, I wrote a research proposal on this topic, with an empirical focus on the zero-carbon energy transition and its security and defence connections. One of the key areas of interest was policy coherence and integration between energy and defence policies from a transitions perspective. The proposal was awarded funding from the Research Council of Finland in 2019.

Soon after I began the project in September 2019, I realized that a focus solely on energy and defence is too narrow and that a broader perspective on security and security policies is likely to be more fruitful, going also beyond energy security. Therefore, this book takes a broad perspective on security and how it connects to

sustainability transitions. It departs from more traditional national security perspectives tied into defence and geopolitics. It also addresses energy security via security of supply, energy independence, and the operational security of electricity grids. Finally, it touches upon other dimensions of security, such as climate security, positive security intertwined with questions of internal stability of countries and of just transitions, and cybersecurity. The book is based on an analysis of almost ninety expert interviews and over a hundred policy documents. Instead of predefining security, this was left open to be defined by the interviewees and the framing of the policy documents. Nevertheless, for the reader, the book also offers conceptualizations presented in security studies and in energy security research as signposts to the diversity of ways in which security can be understood.

During the initial stages of research, it turned out that few had thought or knew anything about the interconnections between energy transitions and security. In each case country, only about a dozen people could be identified in this interface, most also not considering themselves as experts. The general awareness about energy and security has increased following the high media and policy attention given to the topic after Russia attacked Ukraine in 2022 and an energy crisis in Europe resulted. This book makes detailed knowledge on the energy transition–security nexus more widely available.

This book is intended for researchers and experts interested in the energy transition and its connections to security and defence questions. It is also addressed to sustainability transition researchers in other domains. The book combines sustainability transitions research, security studies, energy security and geopolitics, and policy studies in order to ground qualitative empirical analysis. It focuses on energy transitions and security, and the interplay of energy, security, and defence policies in four European countries in the period 2006–2023, starting from the year of the first Russia–Ukraine gas crisis. Due to the timing of the analysis, the book is able to document in detail the interconnections before and after the 2022 shift in the European energy landscape. It, therefore, also offers insights to decision-makers interested in the past and present of energy transitions and security policies.