# Implementing the European Union Renewable Energy Policy Targets in Bulgaria

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# **EXECUTIVE SUMMARY**

As a member of the European Union (EU), Bulgaria has been implementing the EU's policy targets designed to increase the share of renewable energy (RE) use in gross final energy consumption by 2020. The target for Bulgaria, set at 16%, was accomplished eight years earlier than mandated, in 2012. The result of rapid but poorly regulated growth in renewables—seemingly a success story—illustrates the potential pitfalls of RE policy implementation. Having met its target, Bulgaria undertook a series of restrictive policy measures that undermined short-term RE growth, increased regulatory uncertainty and market stagnation. The objective of this chapter is to understand the factors that shaped these unintended policy measures and outcomes. Drawing on key informant interviews, the chapter presents a case study of renewable energy policy implementation in a multi-level governance system and illustrates the boomerang effects associated with top-down policy implementation.

## INTRODUCTION

Renewable energy is becoming a valuable source of widely available, cleaner, and relatively inexpensive electricity, yet the transition to non-fossil fuel-based economies is far from over. Since 2007 European Union (EU) member states have been working to increase the share of renewables in EU energy consumption, increase energy efficiency, and reduce greenhouse gas (GHG) emissions by 20% from 1990 levels by the year 2020. A cornerstone of the EU 2020 strategy is the Renewable Energy (RE) Directive (2009/28/EC), which set a 20% target for the overall share of renewables in EU gross final energy consumption. Article 4 of the RE Directive mandates that member states develop National Renewable Energy Action Plans, which detail how member states envisage implementing the Directive and reaching the 2020 targets (European Parliament [EP], 2009).

To achieve the common 20% policy target for renewables, each EU member state has agreed to binding, country-specific targets for the overall share of renewable energy sources (RES) in three areas: 1) electricity (RES-E), 2) heating and cooling (RES-H&C), and 3) transport (RES-T). National renewable energy targets differ for each member state because they are calculated as the share of renewable consumption to gross final energy consumption, and take into consideration member states' different starting points, renewable energy potential, and economic performance (e.g., GDP per capita, economic growth forecasts). There is substantial variation in national RES targets, which range from 10% in Malta to 49% in Sweden, placing the overall EU countries' mean at 21% and the median at 18% (2009/28/EC)<sup>2</sup>. Bulgaria's national target for the share of RE consumption was set at 16%.

This chapter examines Bulgaria's experience with the implementation of the national renewable energy policy target under the EU 2009 Renewable Energy Directive. Bulgaria is a fairly recent EU member state (since 2007), whose size and resource endowments are similar to those of other Southeast European countries (e.g., Serbia, Croatia, Moldova). Given the strong trend for policy diffusion in Europe, Bulgaria's implementation of the RE Directive could provide lessons for other countries in the region with comparable political history and aspirations for EU membership. The case also illustrates the challenges of implementing EU policies in recent member states, and the potential for unintended consequences associated with top-down policy goals. Ambitious policy measures can backfire, i.e. they can create unintended consequences or contradictory responses, known as boomerang effects. Boomerang effects reduce the prevalence of desired policy goals and the effectiveness of measures promoting those goals (Kinzig et al. 2013; Brehm & Brehm 1981).

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