1. Introduction

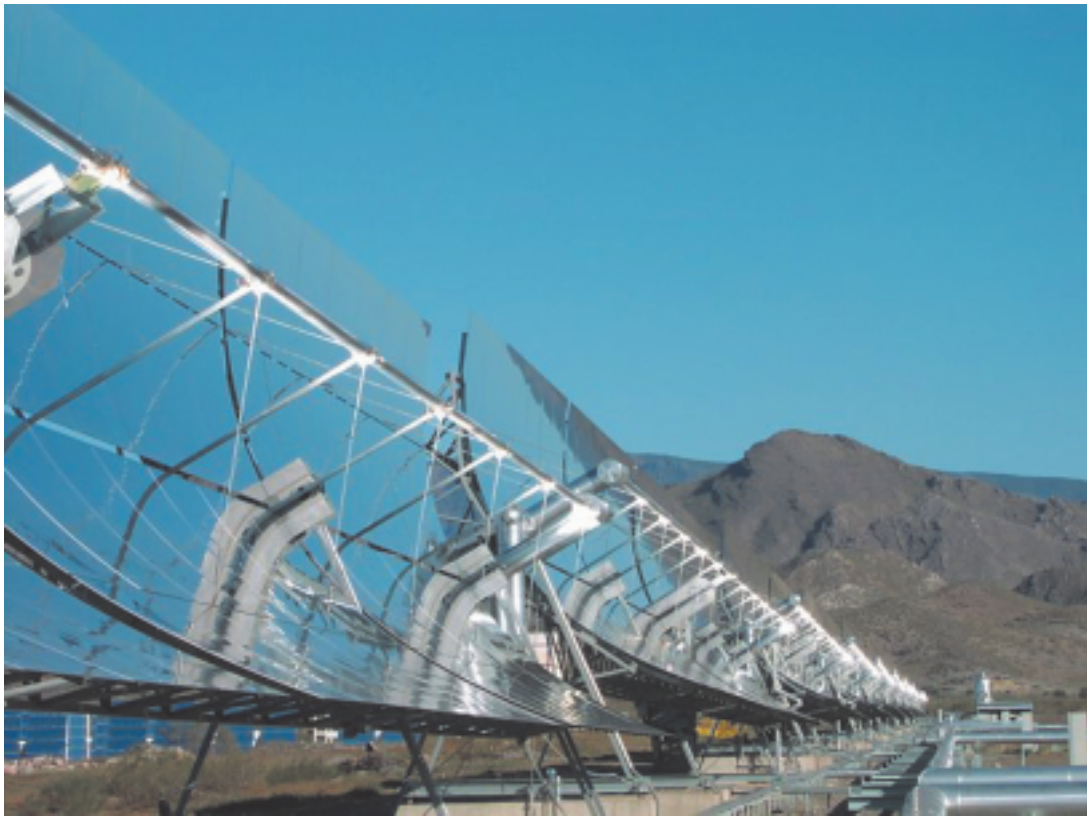

Photo: Volker Quaschning

EU targets for renewable energy will be achieved through actions at the national, regional and, increasingly, local levels. Member States differ considerably in terms of the contribution made by renewable energy to their energy consumption. Member States also have very variable levels of exploitation of different types of renewable energy sources.

This study provides policy-makers and policy implementers with background information and analysis into the successful penetration of a number of renewable energy technologies in EU Member States. The report examines examples of successful penetration, through case studies and analysis of Member State policies and activities. It attempts to shed light on the factors which led to successful implementation of renewable energy in some Member States and in some technologies. The study aims, through the provision of this information, to help policy implementers learn from each others' experiences and contribute to the efforts to meet indicative renewable energy targets.

Section 2 provides background information on what renewable energy is, the importance of renewable energy, renewable energy targets and the rationale behind the choice of the renewable energies covered in this study.

The renewable energy sources covered are:

— solar photovoltaics
— solar thermal
— wind
— biomass energy (as biomass power, biomass district heating and biofuels).

Section 3 develops and applies, for the purposes of this study, a set of selection criteria in order to identify those Member State/technology combinations where renewable energy has penetrated to a greater degree of success than in others.

Section 4 presents the wide range of factors that can influence the likely successful penetration of renewable energy technologies in different Member States, drawing on the considerable amount of previous work carried out at EU and Member State levels on the barriers that hinder implementation of renewable energies.

Section 5 and Annex 1 present examples of successful Member State/technology combinations in the light of the potential success factors identified previously.

Section 6 draws together some of the key issues and potential success factors identified in the examples of successful Member States/technology combinations.

Section 7 draws some conclusions on factors which may contribute to successful penetration of renewables in the Member States.