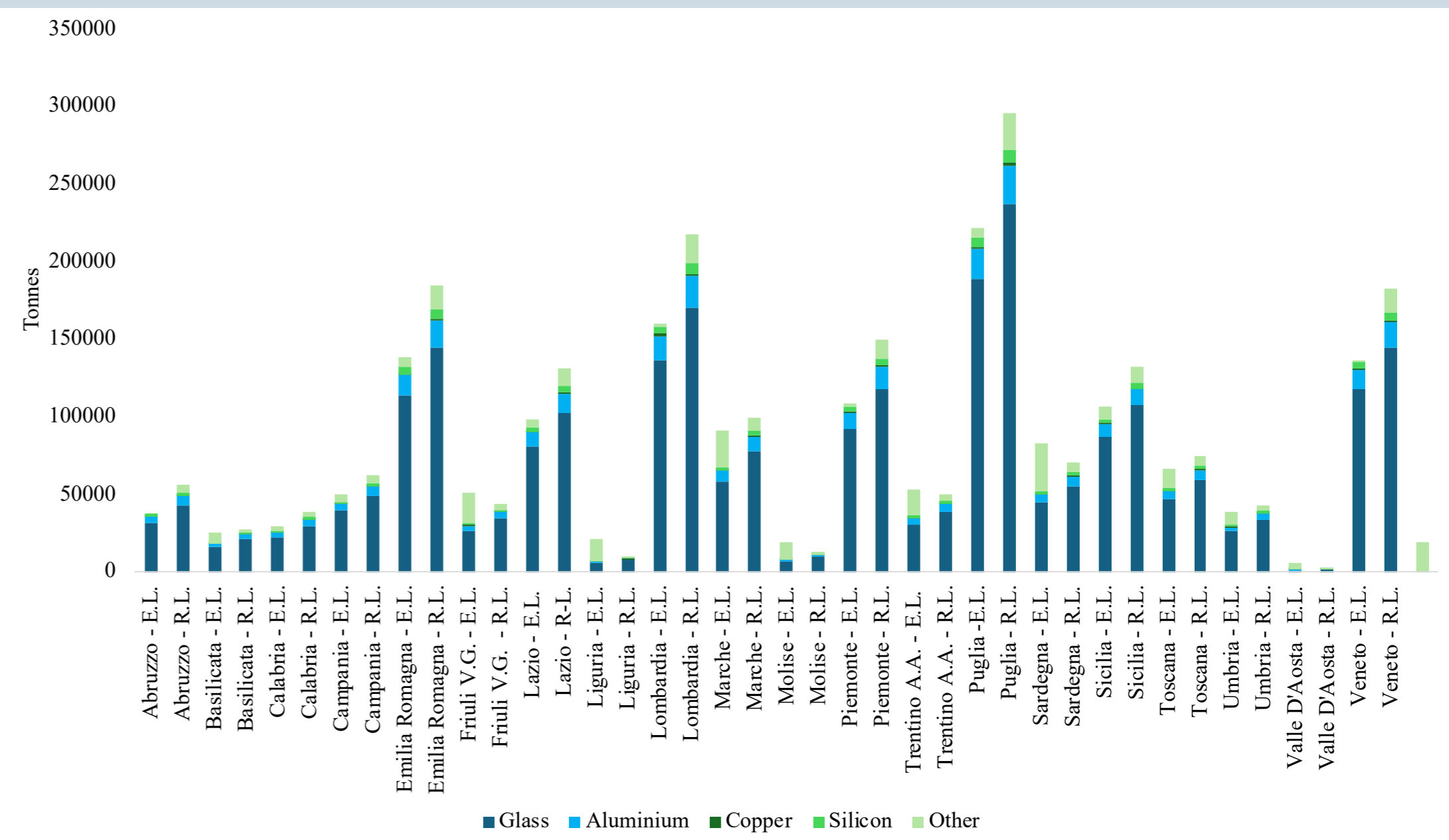


Forecasting and planning are key steps to contribute to the energy transition while minimizing resource consumption

The forecast of waste generated was carried out independently for each Italian region.

This is because the aim is to provide a tool to support the policy maker in planning an efficient material recovery system, providing an indication of the possible economic savings generated.



- We considered all twenty Italian regions.
- The starting data consists of regional installations broken down by technology used.
- The reported results refer to the year 2045.

Introduction

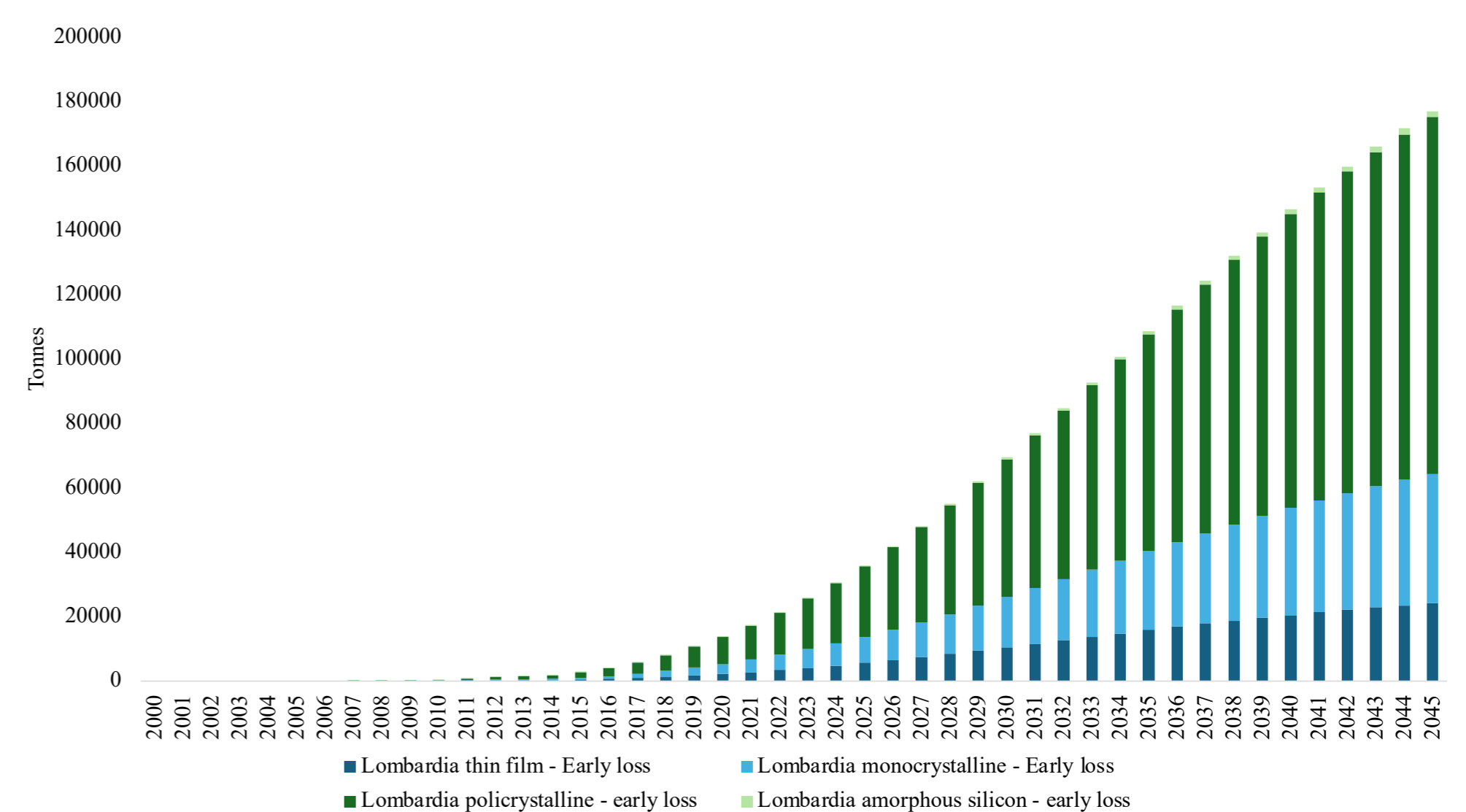
The sudden increase in photovoltaic installations anticipates the issue of the **waste generated** and its management.

With an emphasis on material reuse and minimal waste of resources, we propose a methodology for **forecasting** the waste stream generated and its subsequent economic valorisation.

We used the Weibull function for modelling the generated waste and considered a useful life of 25 years for the **photovoltaic modules**.

Four **different technologies** were considered (Monocrystalline Silicon; Polycrystalline Silicon; Amorphous Silicon; Thin Film).

Results



The results reported here refer respectively to the tonnes of waste generated in the Lombardy Region from 2000 to 2045, and to the economic savings potentially generated by material recovery in the Italian regions.

Methodology

