A systematic approach to recycling

Today’s industrial societies offer their citizens comfort and ease, jobs and leisure, as well as an appropriate infrastructure. At the same time, the modern living environment is transforming into a warehouse brimming with precious raw materials that are coveted by industry. But just how big is the resource depot we live in? Which material flows feed it? Where can precious materials be extracted and re-used? In this issue, we present research projects devoted to questions like these.

Text: Rainer Klose / picture: Empa

In the recently concluded ProSUM-Project, which was funded by the EU’s Horizon 2020 research program over three years, researchers from 30 countries set up a public database that provides information on the flows and stocks of critical raw materials in the European “urban mine”. This means that, for the first time ever, a comprehensive and easily accessible database is available for an entire region of the world. Empa played a key role here.

The other project – a unit in the research building NEST – is an attempt to design a fully recyclable housing unit that is already composed of recycled materials. Lodging in the materials store for the coming generations – well conceived of and implemented. The result is an extremely stylish apartment for two people that has amazed NEST visitors since the beginning of the year.