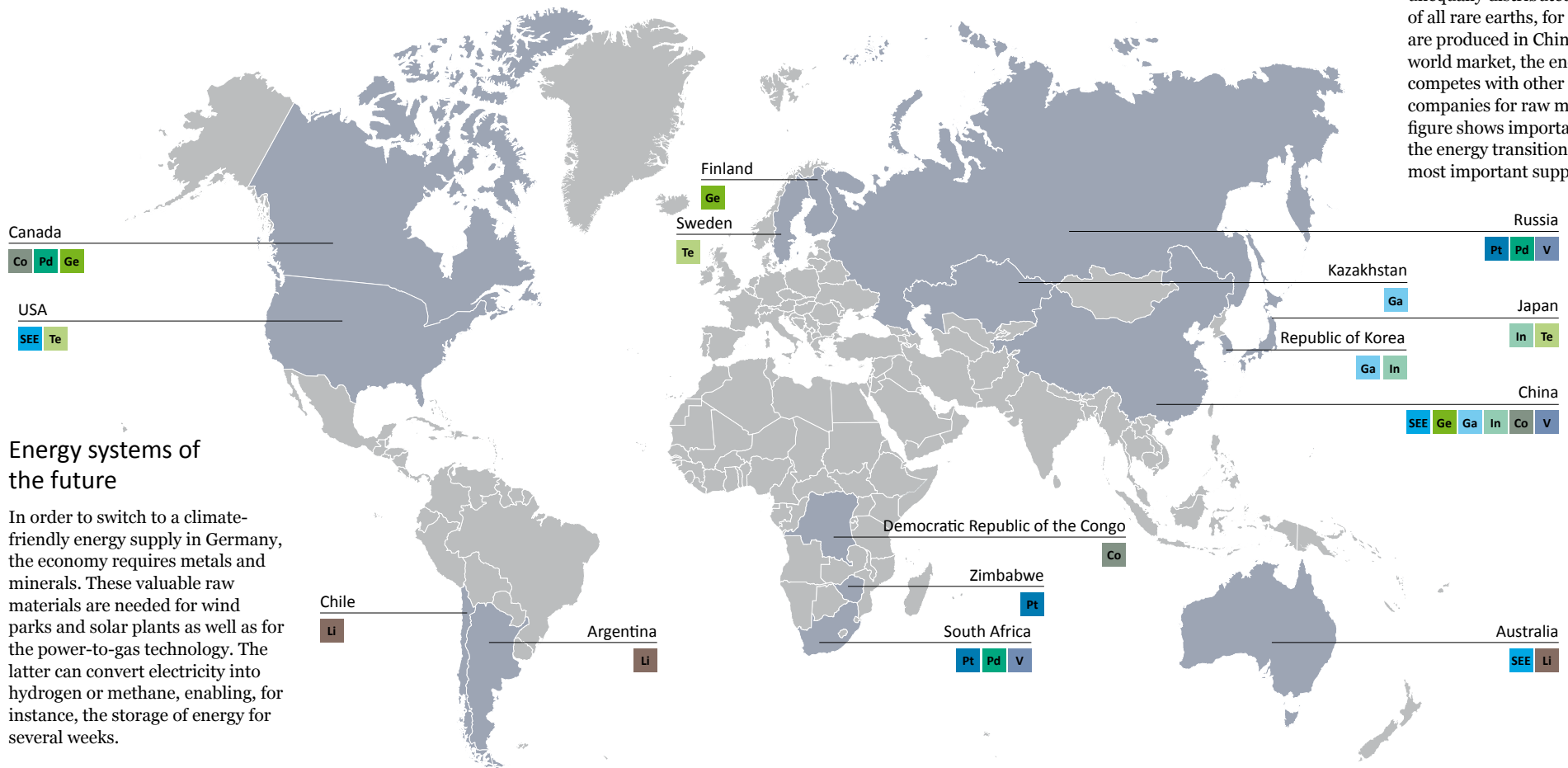


No energy transition without metals



Raw materials from all over the world

The natural metal deposits around the world are sufficient to implement the energy transition. However, the resources are very unequally distributed. Four-fifths of all rare earths, for instance, are produced in China. On the world market, the energy sector competes with other technology companies for raw materials. The figure shows important metals for the energy transition and their most important supplier countries.



Energy systems of the future

In order to switch to a climate-friendly energy supply in Germany, the economy requires metals and minerals. These valuable raw materials are needed for wind parks and solar plants as well as for the power-to-gas technology. The latter can convert electricity into hydrogen or methane, enabling, for instance, the storage of energy for several weeks.



photovoltaic system

In Te Ge Ga



wind turbine

SEE Co



smart power grids

SEE Ge Ga In V
Pt Pd Co



Lithium-Ion battery

Co Li



redox flow battery

V



power-to-gas plant

SEE Pt Pd Co



electric vehicle

SEE Pt Pd Ge Ga
Te Co Li V