



Europe and electronics research

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A macroeconomically independent industrial base in Europe requires world leading electronics research.



(R)evolution



1G NMT



1980

2G GSM



1990

3G UMTS



2000

4G LTE



2010

5G NX



2020

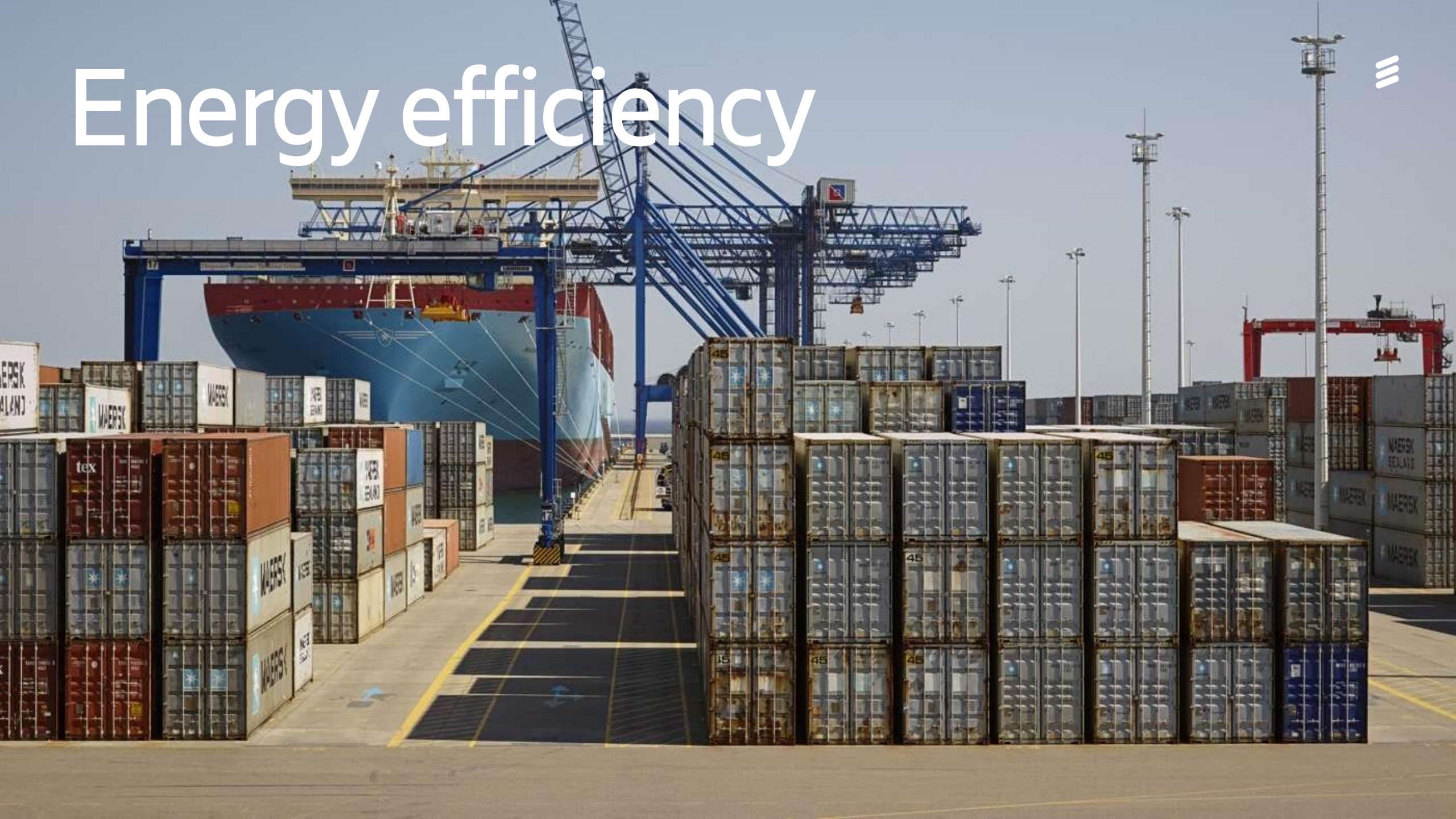
Capacity



Speed



Energy efficiency



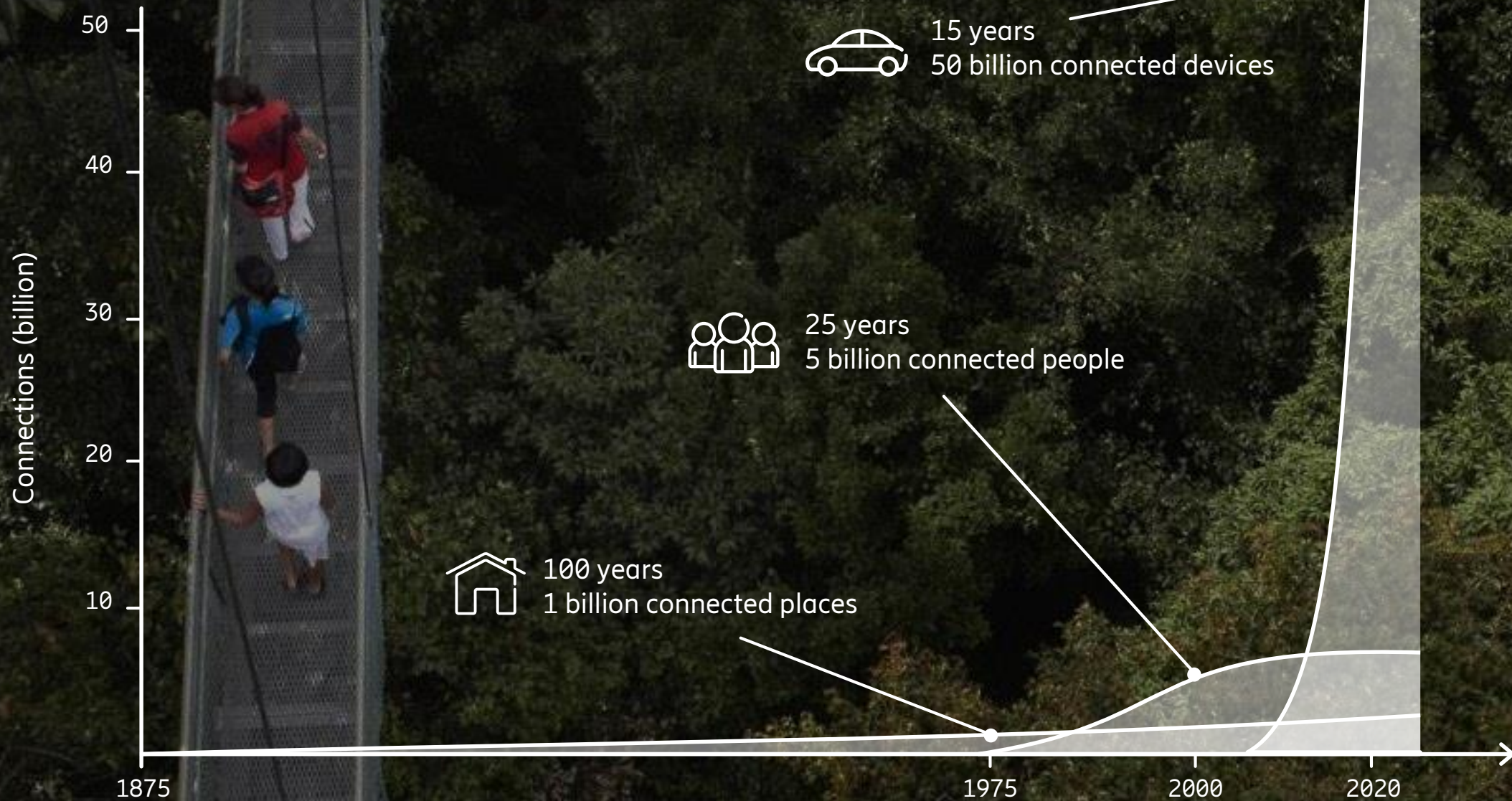
Security



Innovation platform



Exponential growth





Main goods in extra-EU exports



Data extracted in March 2019
Planned article update: April 2020

Highlights

Full-screen Snip

Tweet Machinery and equipment, followed by motor vehicles, were the most exported products from the EU every year between 2014 and 2018.

Tweet In 2018, the top 5 EU export products were machinery and equipment (13.5 % of total exports), motor vehicles (11.0 %), pharmaceutical products (8.9 %), chemical products (8.3 %) and computer, electronic and optical products (7.6 %).

Tweet Germany was the biggest EU exporter of all top 5 export products in 2018 - machinery and equipment, motor vehicles, pharmaceutical products, chemical products and computer, electronic and optical products.

Top 5 CPA categories in extra-EU exports, 2014-2018

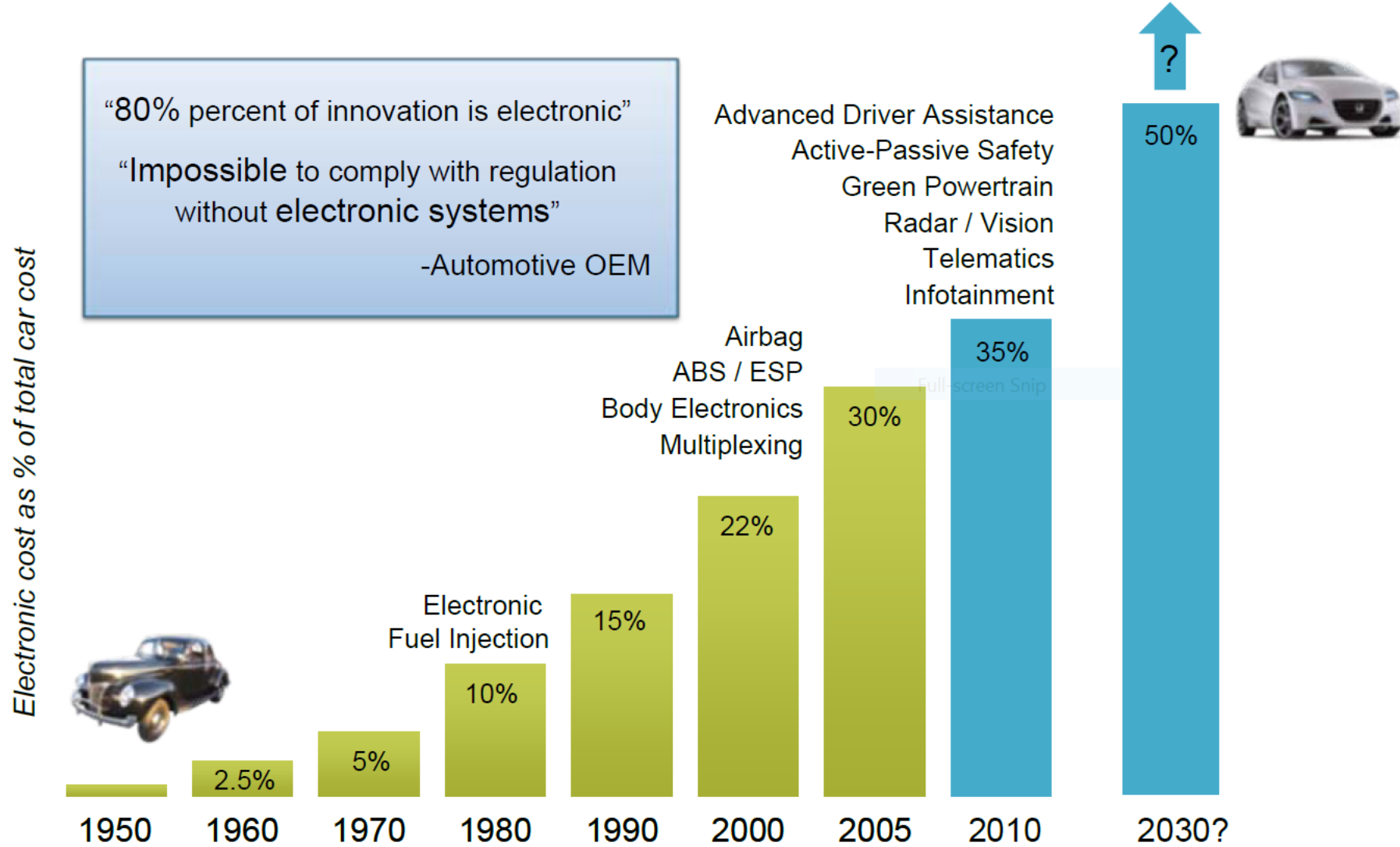


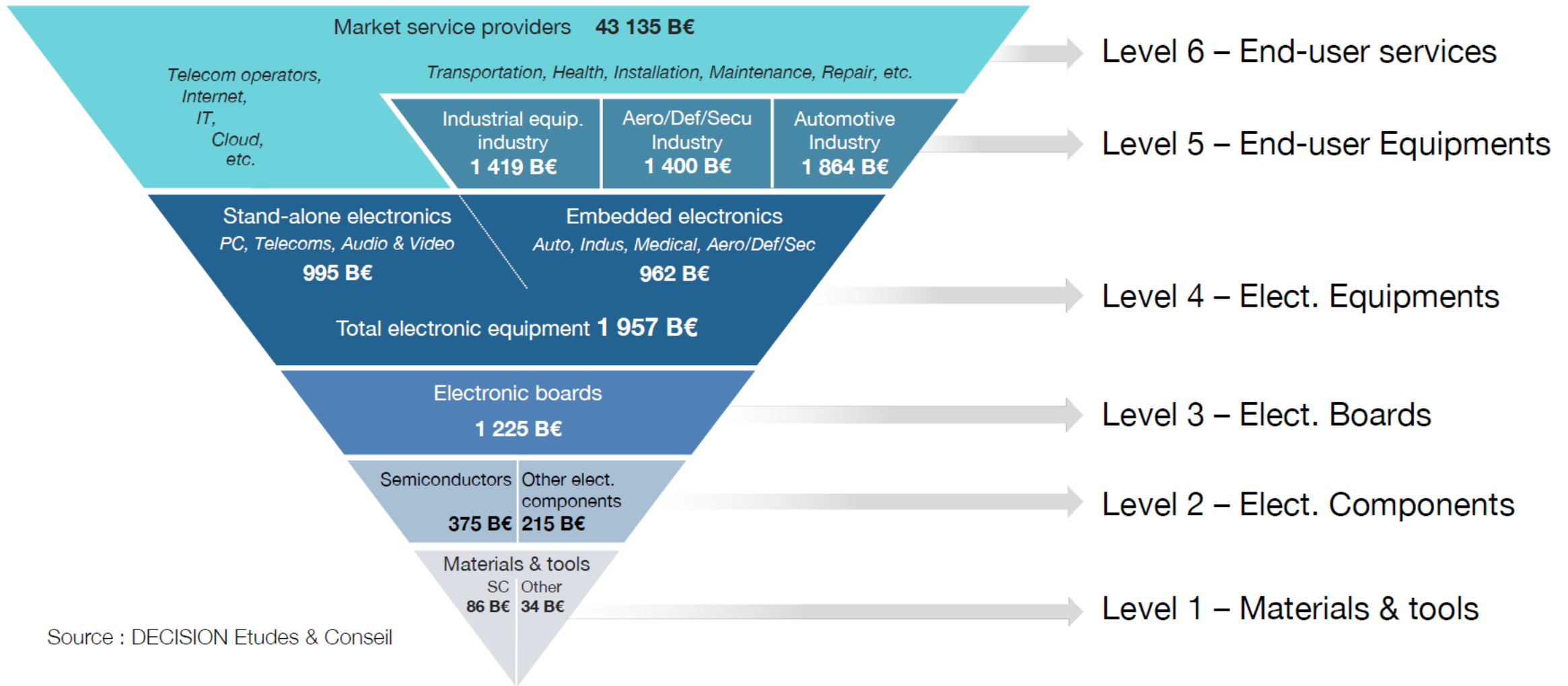
A woman with brown hair in a ponytail, wearing safety glasses and a bright yellow high-visibility vest over a dark jacket, is focused on working with a complex industrial machine. The machine is white and grey, with a red 'ABB' logo on a circular panel. She is using a blue cable to connect a component. The background is a blurred industrial setting.

Regardless of industry, 5G
and electronics will be
competitive factors.

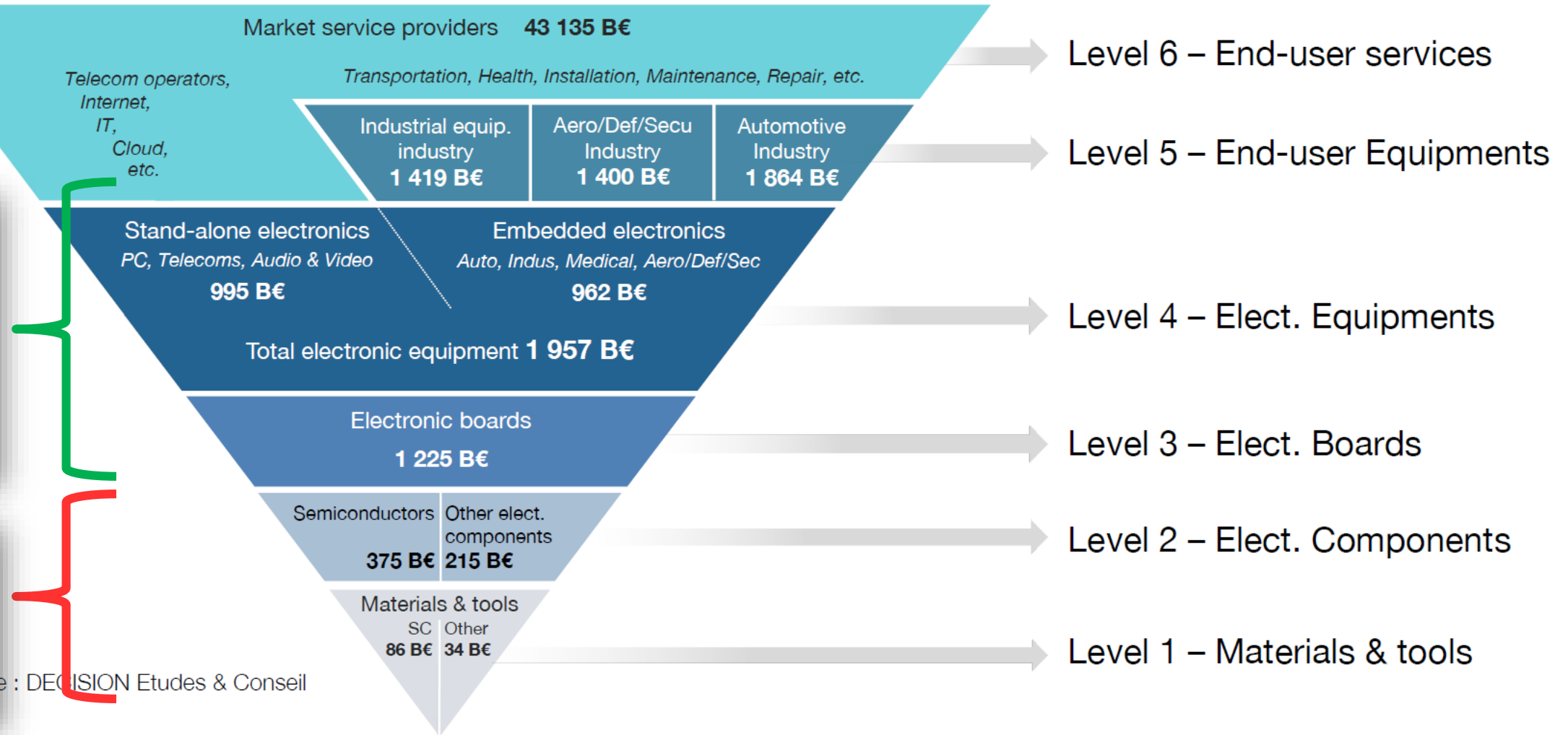
Research into wireless
networks and devices is
vital for Europe.

Automotive Electronic Content Growth

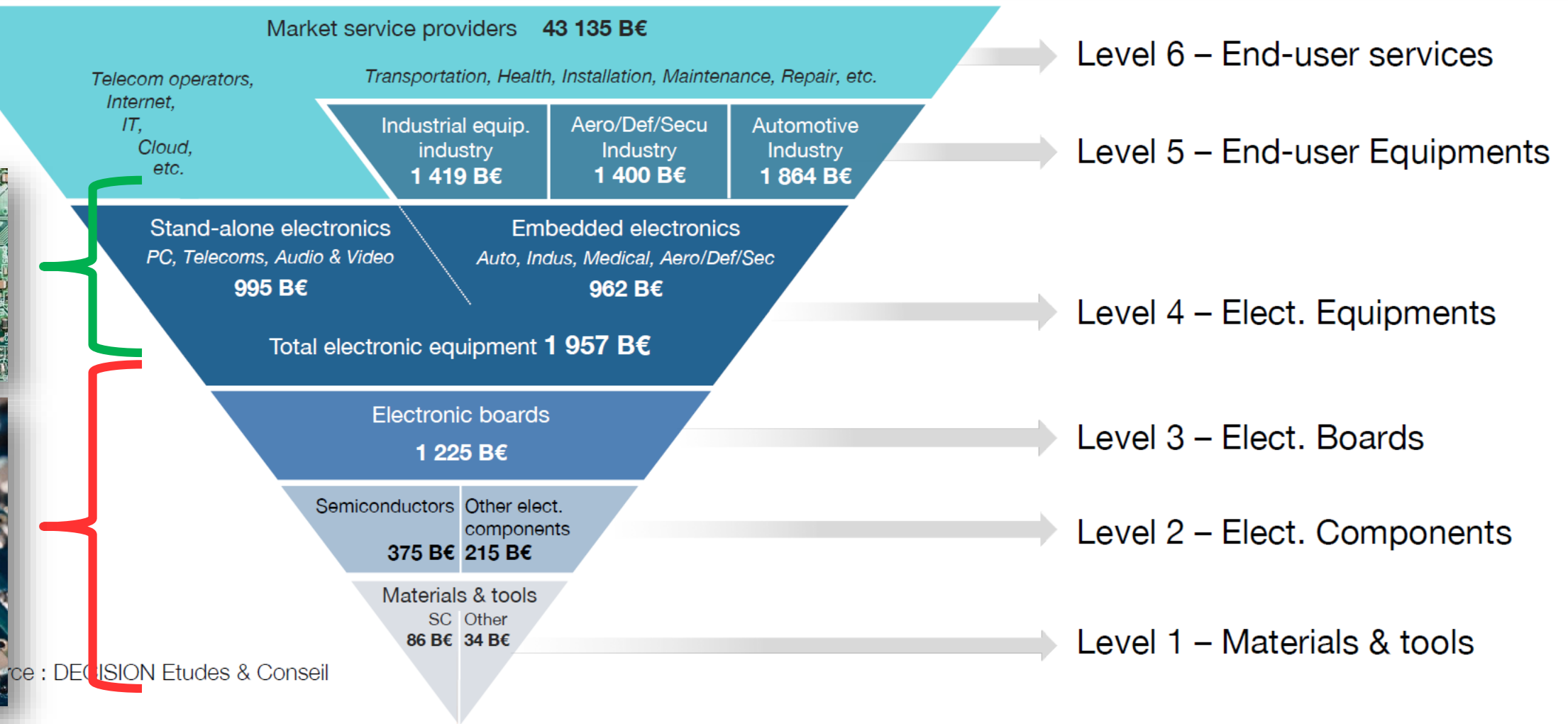
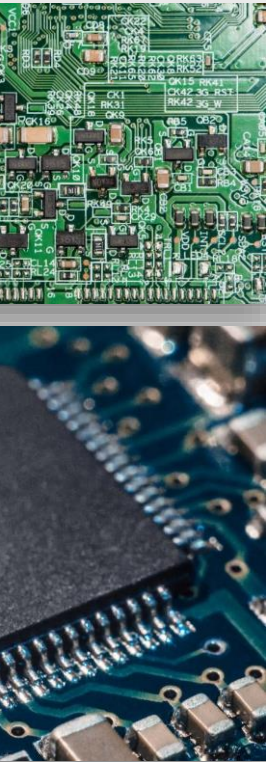




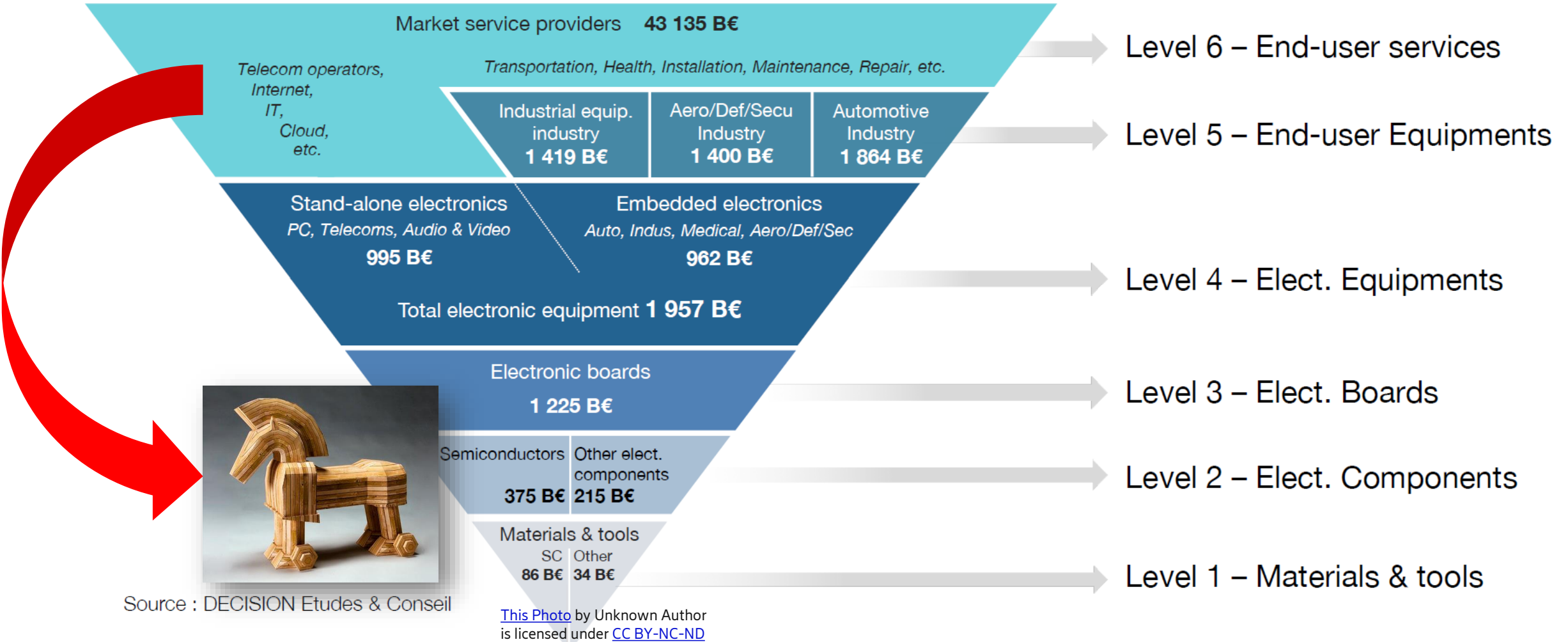
¹ The semiconductor industry is very internationalized and the different production steps of a semiconductor systematically occurs in different countries. As a consequence, the production in Europe in this diagram corresponds to the share of the world production made by companies whose nationality of principal shareholder is European.



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