

Weekly Insights on Global Trends

21st century: The Era of Biomimicry

21.10.20



The curved wings of some new planes, inspired by birds' feathers, have allowed to save over **20 bn liters of jet fuels** and to avoid over **56 mn tonnes of CO₂ emissions** since 2000



The new Shinkansen's forefront is designed on the model of the kingfisher's beak to be **10% faster**, and use **15% less electricity**



The Beijing National Stadium, inspired by bird nests, required only **33% of the materials** of a traditional structure

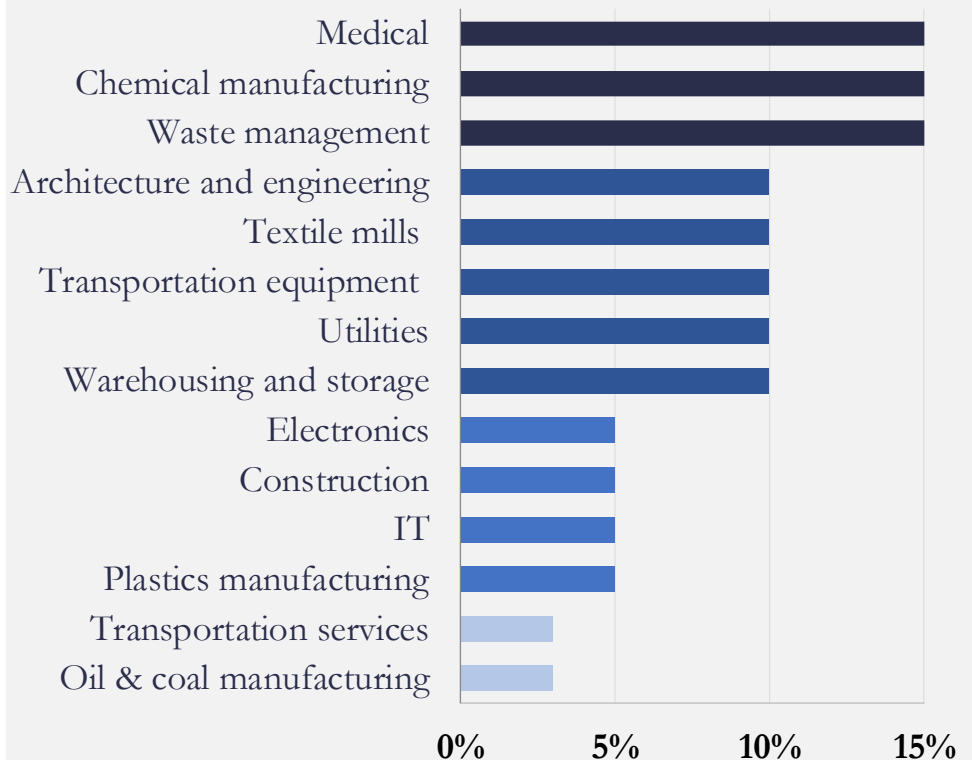
Global biomimetic technology market (USD bn)



Biomimicry, **literally imitation of life**, is an approach to innovation based on solutions developed by Nature. Those processes are proven, efficient, resilient, and therefore **suitable for life on Earth in the long term**. Applications are unlimited.

Biomimicry's market impact, 2025

(% of industry sales)



Towards 2030, in total the **bio-inspired products and services** are expected to be responsible of **\$1.6 trillion of GDP worldwide**, and to mitigate economic costs linked to **resource depletion and pollution** by **\$500 bn**.