

Perspectives of Scientists on technology and the SDGs

61 scientists
→ 3 tasks

97 scientists
→ 58 briefs

20 countries
45 disciplines

Technology-related SDG targets
(48 of 169 targets)

Significant overall technology performance improvement

19 targets

Universal access to sustainable technology

12 targets

Global effective innovation system for sustainable development

17 targets

Proposals for leveraging technology for the SDGs

Strengthening national systems of innovation to accelerate technology progress

Plans, roadmaps and integrated assessment

Building institutions that support sustainable technology progress

Putting technology at the service of inclusion

Crucial emerging technologies for the SDGs until 2030

Opportunities in all SDG areas

Potential threats

Digital-tech

Bio-tech

Nano-tech

Neuro-tech

Other

Green-tech

Clusters	Opportunities	Threats
Bio-tech	Food crops, human health, pharmaceuticals, materials, environment, fuels.	Military use; irreversible changes to health and environment.
Digital-tech	Development, employment, manufacturing, agriculture, health, cities, finance, absolute “decoupling”, governance, participation, education, citizen science, environmental monitoring, resource efficiency, global data sharing, social networking and collaboration.	Unequal benefits, job losses, skills gaps, social impacts, poor people priced out; global value chain disruption; concerns about privacy, freedom and development; data fraud, theft, cyber-attacks.
Nano-tech	Energy, water, chemical, electronics, medical and pharmaceutical industries; high efficiencies; resources savings; CO ₂ mitigation.	Human health (toxicity), environmental impact (nano-waste)
Neuro-tech	Health, safety, security (e.g., electricity theft), higher efficiency, resource saving, new types of jobs, manufacturing, education.	Unequal benefits, deskilling, job losses and polarization, widening technology gaps, military use, conflicts.
Green-tech	Environment, climate, biodiversity, sustainable production and consumption, renewable energy, materials and resources; clean air and water; energy, water and food security; development, employment; health; equality.	New inequalities, job losses; concerns about privacy, freedom and development.
Other	Inclusion, development, health, environment, climate change mitigation, resource availability.	Pollution, inequalities, conflict.