

Sustainability Technology Activity Index Taxonomy

We've developed a taxonomy that groups activities by over-arching area (as per the table below), with examples ranging across specialist domains (such as GreenTech, AgriTech, FoodTech, FinTech, RegTech, PropTech, etc.). However, we're not interested in the niche technologies per se (e.g., how low-carbon concrete for construction projects is actually manufactured, or the machinery deployed in vertical farms, etc.). Rather, our focus is on the contributions a range of emerging and enabling technologies are making as essential tools for those working towards a more (environmentally) sustainable world.

Area	Activity	Description / Examples
Data & decision-making	ESG Reporting	Data integration, extraction, and collection; carbon footprinting, reduction, and reporting
	Nature monitoring & management	Monitoring and verification of natural resources and their biodiversity; waterway clean-up
	Strategy & planning	Data-driven planning to integrate positive environmental policies into wide business ops
Goods & Services	Agriculture & food	Regenerative carbon-friendly agriculture & aquiculture, vertical farms, alternative proteins
	Circular economy	Heat recovery; total product lifecycle management: returns, resale, recycling, etc.
	Green finance	Carbon trading, Regenerative Finance (ReFi)
	Green IT	Virtualising & optimising workloads to reduce energy usage; water & power policies
	Industrial process innovation	Electrification of heat sources, green manufacturing practices (e.g., reducing waste)
	Supply chain optimisation	Smart routing, tracking resources, provenance of sustainable goods; waste management
Lifestyle & logistics	Sustainable, smart buildings	Building utilisation, energy reduction; sustainable construction; smart city planning
	Transport & travel	Micromobility networks, EVs; logistics; sustainable air travel, road & rail infrastructure
Power & utilities	Carbon capture & removal	Direct air capture, carbon sinks (soil, rocks, ocean); biomass processing, etc.
	Energy generation	Renewables (solar, wind, tidal, hydrogen); geothermal, heat pumps; sustainable fuels
	Energy storage	Battery management, decentralised V2X EV 'battery cloud' power storage
	Energy supply	Smart grids, microgrids (prosumer networks)

In defining what we count as 'emerging and enabling technologies' in sustainability use cases, we've expanded upon the TechMarketView software and IT services (SITS) 'New' technology definition used in our proprietary Digital Evolution Model (DEM) and added some with more hardware overtones (such as 5G, 3D-printing, robotics)—see below.

Technology	Description / Content	
3D printing	Supports distributed manufacture, recycling	
5G	Next-gen wireless tech; often private networks	
AI & ML	Predictive & generative artificial intelligence, machine learning, and deep learning tools	
Analytics	Predictive analytics, business intelligence	
AR/VR	Augmented, virtual, and mixed reality	
Automation	RPA & intelligent automation, low-/no-code	
Blockchain	Distributed ledger technologies & immutable centralised ledgers, multi-party computing	
Cloud platforms	Saas, Paas, laas	
Edge computing	Distributed compute & storage, sited closer to data sources (away from enterprise core)	
Geospatial	Spatial imagery and other Earth observation	
loT (Internet of Things)	Sensors & instrumented devices, messaging, data-gathering and control technologies	
Quantum	Quantum computing (c/w classical compute)	
Robotics	Robots, drones	