Cleantech for Italy





Cleantech for Italy

Q2 2025 Briefing

July 2025

Powered by



Supported by







Authors and Methodology



Federico Cuppoloni *Director, Cleantech for Italy*

Federico is the Director of Cleantech for Italy, a new initiative launched to boost the country's cleantech industrial leadership. Before that, he worked as a deep tech venture capital investor focusing on space technologies and gained experience in R&D funding. He holds an MBA from the Collège des Ingénieurs and has a background in economics and policy.



Leonardo Massa *Investment Director, MITO Technology*

Leonardo is the Investment Director at MITO Technology, a venture capital fund specialising in early-stage investments in climate tech and science-equity startups. MITO Technology identifies and supports high-impact, planet-healing innovations. He holds an MBA from the Collège des Ingénieurs and has expertise in nanotechnology and material engineering.



Michele Torsello Head of Policy and Strategy, Cleantech for Italy

Michele is a Director at the Italian Ministry of Economics, where he deals with climate change mitigation and industrial policy. He served as Director of the Prime Minister's Task Force for Hydrogeological Risks and Special Advisor for decarbonization for the Minister for Sustainable Infrastructure and Mobility. He is a 2024 Columbia University MPA graduate.

Methodology

The main source for this analysis is the data we periodically collect from public sources. Unless otherwise specified, cleantech funding includes equity (VC and other forms), debt, and grant financing.

Starting from this release, we have updated our sector classification using Cleantech Group's taxonomy, which includes the following cleantech verticals:

- Agriculture & Food: precision agriculture, indoor farming, food waste, food supply chain, crop inputs, alternative proteins, biomass, animals
- Energy & Power: renewables, nuclear, hydrogen, energy storage, energy networks, energy services, buildings, biomass and waste-to-energy, energy efficiency
- Materials & Chemicals: advanced materials, advanced manufacturing, biotechnology, building materials, CCUS, fuels and chemicals, industrial materials, process technology, specialty chemicals
- Resources & Environmental Management: environmental monitoring, climate risk, carbon removal, natural resources, water, remediation
- Transportation & Logistics: aircraft, EV charging, fleet management, micromobility, maritime, on-road vehicles and components, rail, infrastructure
- Waste & Recycling: waste management, wastewater, construction, fashion

Cleantech for Italy's summit took place in Rome in June

- On June 26, Cleantech for Italy convened its annual Cleantech
 General Assembly at the Chamber of Deputies. The event brought
 together innovators, investors, institutions, and industrial leaders to
 discuss how Italy can scale up the adoption of clean technologies and
 anchor them within a competitive industrial strategy.
- The event featured strategic interventions from national and international leaders. These include the Ministry for Enterprises and Made in Italy, the International Energy Agency, the European Investment Bank, and top academic and industrial players, focusing on the role of cleantech in driving economic security, sustainability, and competitiveness.
- Three thematic panels explored key enablers of cleantech industrialisation: technology transfer, innovation finance, and industrial demand. Speakers highlighted persistent bottlenecks, such as permitting, late-stage financing, and skills gaps, and called for a more integrated support ecosystem to translate research into strategic value chains.
- Cleantech for Italy reaffirmed its five-pillar manifesto and called on public and private actors to take coordinated action to scale up clean technologies across all sectors of the economy.

Investments started strong in Q1, driven by VC activity

- Cleantech investment activity in Italy remained modest in Q2 2025, with €22.6 million raised across 7 deals. This follows a stronger Q1, which saw €63.8 million in funding. Combined, total investments for H1 2025 reached €86.4 million. This is a notable recovery compared to H1 2024 and broadly in line with 2022–2023 levels.
- Despite the quarter-on-quarter slowdown, 2025 continues to outperform the previous year and confirms renewed investor interest in Italian cleantech, particularly among international backers. Since 2019, cumulative cleantech funding in Italy now stands at €1.13 billion.
- The sectoral composition of cleantech investments in Italy continues to reflect strong investor preference for high-potential verticals. Materials & Chemicals stand out as the fastest-growing segment, increasingly attracting venture capital thanks to their potential to enable industrial decarbonisation and next-generation manufacturing.

On June 26, cleantech leaders and institutions convened to align on priorities for Italy's industrial transition

Cleantech for **Italy**

This first edition of Stati Generali del Cleantech brought together key players from the Italian cleantech ecosystem (innovators, investors, institutions, and industrial leaders) to discuss the strategic levers needed to grow the sector and accelerate its large-scale adoption as a lever for a more ambitious industrial policy.

The event was opened by the Vice President of the Chamber of Deputies, Anna Ascani. She framed the ecological transition as a "gigantic opportunity," not a sacrifice, to create new jobs, promote innovation, and ensure a habitable planet for future generations. She stressed the strong connection between clean energy and the sustainability of the digital transition.

Adolfo Urso, Minister for Enterprises and Made in Italy, described cleantech as an indispensable lever for decarbonisation and competitiveness, within the context of four major transitions (green, digital, geopolitical, and demographic) affecting the economy. He highlighted the global growth of the sector and major investments underway in Italy. He referenced tools such as the Transition 5.0 plan and development contracts for sustainable industry, stressing the importance of public support for technology transfer where market failures exist.









Dedicated keynotes explored energy transition, technology transfer, public finance, and industrial decarbonization

Cleantech for **Italy**



Paolo Frankl (Head of the Renewable Energy Division at the International Energy Agency) called the energy transition a "major opportunity in terms of energy security, diversification, and industrial policy." He noted that most global energy investments are now dedicated to clean energy. He pointed out the "unstoppable" expansion of renewables, particularly solar PV and wind, due to their "lowest cost of generation." He also mentioned the growth of electric vehicles and the strategic role of batteries. Frankl warned of China's dominance in clean tech manufacturing and called for innovation and diversification. He stressed the importance of demand for sustainable fuels, summarising with "demand, demand," and concluded that the energy transition will happen regardless: Italy and Europe must seize the opportunity to lead.



Stefano Corgnati (Rector of Politecnico di Torino) discussed research and cleantech as "drivers of competitiveness." He stressed the need to govern and coordinate the entire "value chain"—from training young talent and inspiring them to envision a future in Italy, to fostering collaboration among universities, research centres, and companies in physical "Innovation Hubs." He said, "there is no technological innovation without parallel regulatory innovation" and that "innovation only penetrates society if it's not feared," calling for a public narrative that makes technology accessible. He described cleantech as a "high knowledge-density sector" where Italian ingenuity can ensure competitiveness.



Gelsomina Vigliotti (Vice-President, European Investment Bank) gave an overview of Europe's industrial revival and the role of the European Investment Bank (EIB). She explained the EIB's mandate to address market failures and support public goods. She raised concerns about the "scale-up phase" for startups, which is poorly financed in Europe, leading to non-European acquisitions. She presented the European Tech Champions Initiative and innovation support packages, and introduced the idea of "patient capital" via tools like venture debt. EIB's presence in a company is seen as a "quality stamp" that facilitates market access.



Ferrante Benvenuti (Managing Director & Partner at Boston Consulting Group) presented the study "Cleantech: Pathways for Italian Industry." He introduced the "famous energy trilemma": competitive costs, environmental sustainability, and energy security. He emphasised the key role of industry in Italy's GDP and emissions and the competitiveness gap on energy costs due to reliance on natural gas. He noted that most industrial energy use is for high-temperature heat, which has limited decarbonisation options. The study calls for doubling Italy's renewable capacity by 2030 and explores decarbonisation technologies like heat pumps, biomethane, hydrogen, and CCS. Benvenuti showed that Italy receives a small share of Innovation Fund support for industrial-scale projects compared to other countries.

Panel 1 – From Lab to Market: Policies to Strengthen Italy's **Innovation Ecosystem**

Cleantech for **Italy**

Moderated by Paola Pica (Il Corriere della Sera)

- Francesca Galli (Director at the Ministry of University and **Research)** highlighted applied research investments under the NRRP and strong collaboration with industry for technology foresight and skills development. She mentioned the Italian Fund for Applied Science and the reform of the industrial code, which abolished the "professor's privilege" to balance incentives between academia and industry. She also referenced "innovative PhDs" that include work placements and tax credits for doctoral hiring.
- Sara Morisani (Director of AIRI) noted that Italy's R&D spending is still below the EU benchmark and that cleantech needs a "jolt." She proposed better coordination of public research organisations and aligning education with emerging technologies and market demand.
- Mike Vasconselos Tocchetti (Project Development Manager at Energy Dome) presented their CO₂ battery project, which evolved from theory to a demo plant and is now commissioning its first fullscale plant in Sardinia. He highlighted the importance of "dialogue" with institutions and regulators, including their tech's inclusion in the unified text on renewables.
- Giorgio Graditi (Director General of ENEA) reiterated the complexity of moving from lab to market. He promoted "smart sector integration", involving actors, knowledge, demand, and models. He insisted on defining demand rather than forcing technology, aiming to translate innovation into collective wellbeing.



Panel 2 – Financing Growth: Mobilising Public and Private Capital for Industrialisation

Cleantech for **Italy**

Moderated by Carlo Cici (The European House – Ambrosetti)

- Cristina Tomassini (Head of the Green Transition Fund at CDP Venture Capital) reaffirmed cleantech as strategic for CDP VC and said that "venture capital is not just a financial investment, it is primarily an industrial investment." She stressed the need to develop new technologies to reach Net Zero and called for more structured corporate—startup collaboration.
- Andrea Nuzzi (Head of Business at Cassa Depositi e Prestiti) described the institution's support for cleantech firms across their lifecycle through financial tools and advisory services. He identified permitting as a major national bottleneck. He advocated greater use of guarantees and hybrid debt/equity tools, and strengthening Important Projects of Common European Interest (IPCEIs).
- Fabrizio Cobis (Director at the Ministry of University and Research) highlighted NRRP research investments that supported many young researchers. He guestioned what happens after their contracts end and stressed the need to retain this human capital and avoid past mistakes, such as abandoned innovation clusters.
- Andrea Bianchi (Head of Strategy, Industrial Policy and Sustainability at Invitalia) observed a shift in Europe's approach to cleantech as an industrial challenge. He called for "financial platforms" uniting various stakeholders and aligning tools along the entire value chain. He stressed the need for a "European dimension" to industrial policy," as national approaches are insufficient, and noted the absence of "large aggregators" in Europe.



Panel 3 – Industrial Demand: Accelerating Adoption in Hardto-Abate Sectors

Moderated by Paolo Bricco (II Sole 24 Ore)

- Biagio Mazzotta (Chairman of Fincantieri) shared the company's ambitious emission-reduction targets, including zero-emission operations in port and methanol/hydrogen-powered ships, with the first hydrogen vessel scheduled for future launch. He discussed designing "natively eco-sustainable" vessels and the need for a supporting ecosystem of port and energy infrastructure.
- Letizia Magaldi (VP of Magaldi Green Energy) said she sees a "huge market" for decarbonising industrial heat and argued that "80% of the technologies we need to decarbonise already exist." She said renewables plus storage are now the cheapest energy source and that Europe can build its cleantech industry, but lacks awareness of its strength and ability to scale demand.
- Walter Da Riz (Director of Assovetro) described how "clean" in the glass sector includes green energy, CO₂ capture, and circularity (Italy has high glass recycling rates). He highlighted Italy's energy efficiency advantages in furnace design due to historically high energy prices. He said public funding should target CAPEX, not OPEX, because OPEX subsidies do not incentivise investment.
- Paolo Casalino (Director at the Ministry of Enterprises and Made in Italy) referred to the need to "protect" Made in Italy/Europe from foreign competition. He stressed the need to "promote" new business models beyond subsidies, particularly in cost-intensive sectors like green steel and cement. He reiterated the need for regulatory simplification and improved permitting.

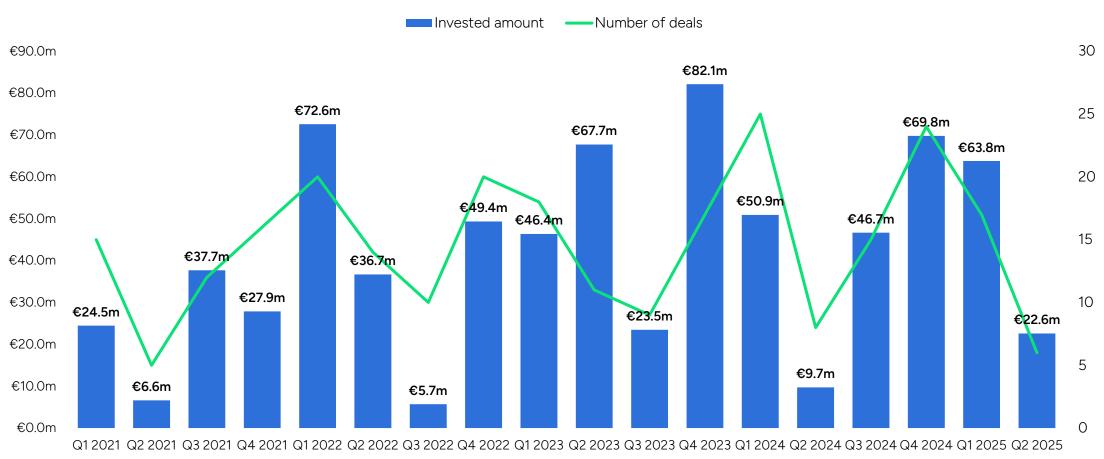


As in the previous year, Q2 2025 saw limited investment activity, with €22.6m raised across 7 deals





Cleantech VC investments by deal size and deal count, 2019-2024



Sources: Cleantech for Italy, MITO Technology

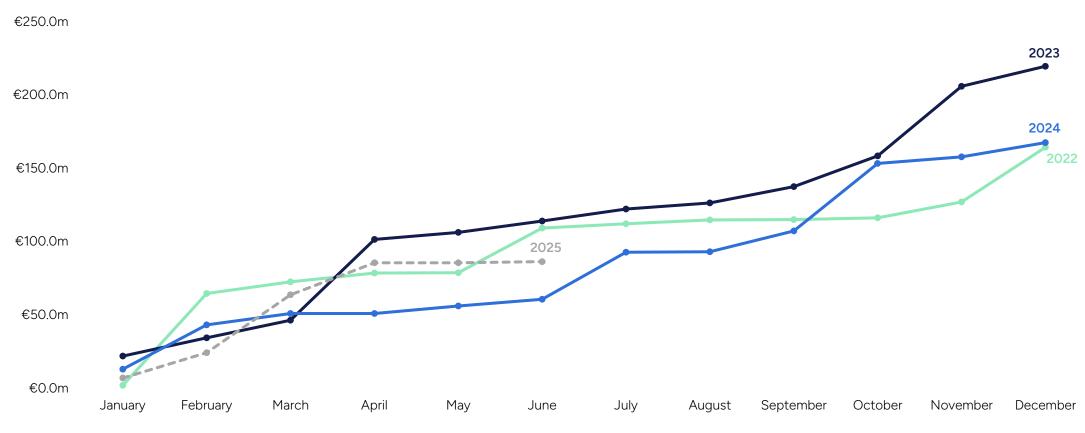


In the first half of the year, 2025 is tracking in line with previous years and significantly outperforming 2024





Monthly evolution of cleantech VC funding, 2019-2025

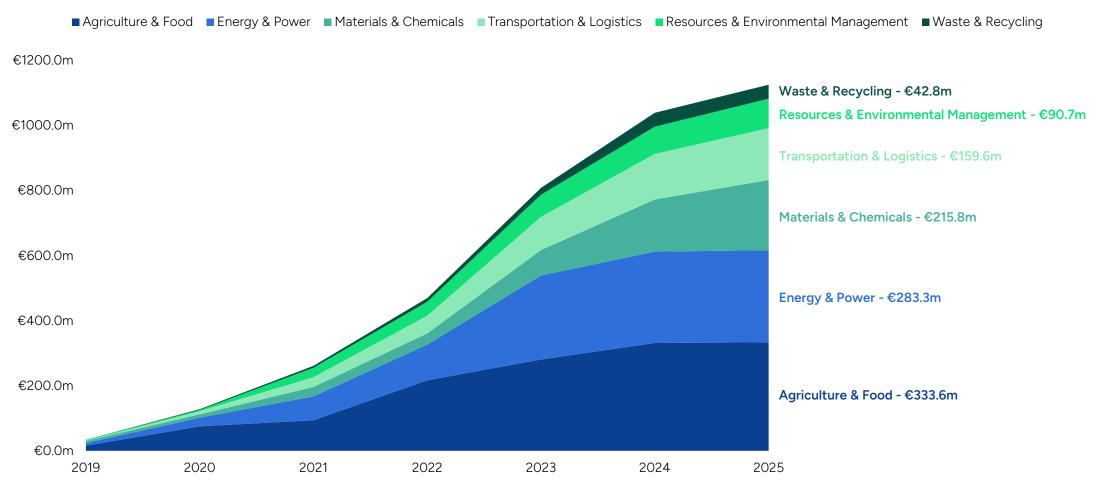


With total investments of €86.4m in the first half of the year, cumulative funding since 2019 has reached €1.13bn





Cumulative total cleantech funding per sector, 2019-2025



Sources: Cleantech for Italy, MITO Technology

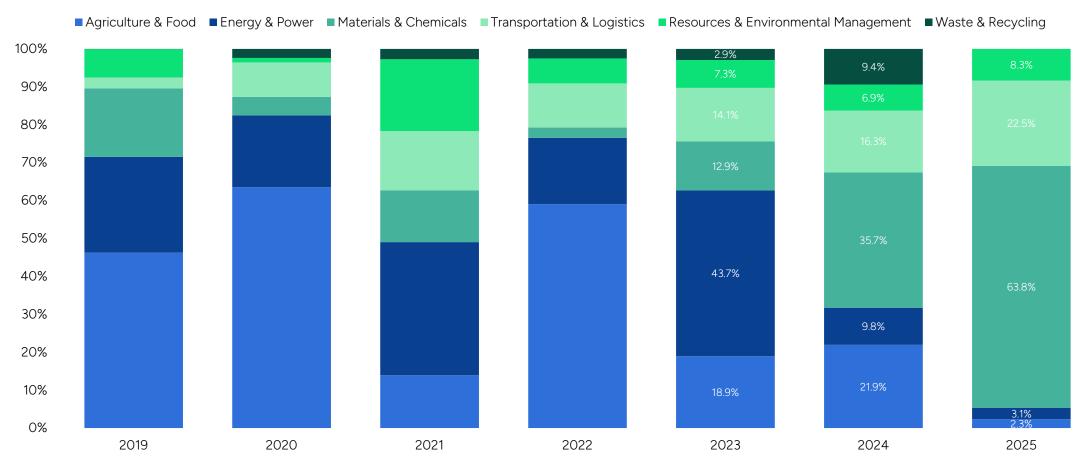


VC exposure to cleantech verticals remains focused on areas perceived as high-potential, such as Materials & Chemicals





Sector contribution of total cleantech funding, 2019-2024



Sources: Cleantech for Italy, MITO Technology

The largest deals of H1 2025 show that Italian scaleups continue to draw strong interest from international investors





Company	Description	Funding Amount	Main Investors
CamGraPhIC	Energy-saving, graphene- integrated photonics technologies	€25.0 million	CDP Venture Capital Sgr Sony Innovation Fund Sony Innovation CAPITAL Bosch Ventures Bosch Ventur
5 blubrake	Anti-lock braking systems for e-bikes and light electric vehicles	€12.0 million	Olgebris Fundracer
ARSENALE BIOYARDS	Biomanufacturing platform focused on bio-based alternative products	€10.0 million	CDP Venture Capital Sgr PLUGANDPLAY greysilo
W • S E N S E INTEGRATED CARLELESS SOLUTIONS	Underwater wireless communication enabling data transfer and monitoring	€7.2 million	CDP Venture Capital Sgr SWEN Capital Partners RUNWAY® AXON FINCANTIERI RYPPIes
KRILL	Transformation of organic by-products into sustainable biomaterials	€6.0 million	CRÉDIT AGRICOLE
RESILCO Resilience Company	Transformation of industrial waste into secondary raw materials	€5.0 million	360 CAPITAL TECH # PLANET
N novac	Energy storage systems, combining supercapacitor and battery materials	€3.5 million	Eleureka! cdp GALAXIA CDP Venture Capital Sgr

Cleantech for Italy

Forging the path to cleantech leadership in Italy

Find out more about Cleantech for Italy on <u>our website</u> and follow us on <u>LinkedIn</u> to stay updated on our latest initiatives and events.

Federico Cuppoloni

Director – Cleantech for Italy federico.cuppoloni@cleantech.com









