Cleantech for Italy

EXECUTIVE SUMMARY – ENGLISH

Towards Industrial Scale

A "First-Plant Policy" for Italy

July 2026

Federico Cuppoloni
Michele Torsello

Cleantech for Italy

Cleantech for Italy is a coalition bringing together organisations active across the entire Italian clean technology value chain: universities, research centres, innovative companies and investors. The initiative promotes dialogue between key players in cleantech innovation, industry representatives and public decision-makers, helping to shape an industrial policy capable of supporting the development and widespread adoption of technologies that are key to Italy's future. Cleantech for Italy is part of the Cleantech for Europe network.

This report

Towards Industrial Scale: A "First-Plant Policy" for Italy analyses the barriers that are hindering the financing and construction of the first industrial cleantech plants in Italy. It examines the role of industrial policy in fostering the development of supply chains linked to emerging technologies and proposes eight measures to bridge this gap in the short term, drawing on existing public instruments. The analyses were developed on the basis of a review of the literature and discussions with businesses, investors, financial operators and representatives of public institutions.

Recommended quote

Cuppoloni, F. e Torsello, M. (2026), *Verso la scala industriale. Una "Politica Primo Impianto" per l'Italia*, Cleantech for Italy.

Contacts

Federico Cuppoloni: federico.cuppoloni@cleantech.com
Michele Torsello: michele.torsello@cleantech.com

Disclaimer

Released by Cleantech for Italy, July 2026
cleantechforitaly.com

Executive Summary

Over the past six years, Italy has built up a significant track record of innovation in the main cleantech sectors. Through CDP Venture Capital and its associated funds, **the public sector has catalysed around €1.4 billion of investment in over 250 companies operating across various segments of the cleantech sector**, with a gradual shift towards areas with a strong industrial focus, such as advanced materials, high value-added components and energy storage.

However, this capital is at risk of being lost at the crucial moment of the transition to the industrial phase. **The Italian funding trajectory comes to an end, in fact, on the cusp of initial industrialisation, when a company builds its first full-scale plant** and begins to benefit from progress along the learning curve. For the venture capital that supports these projects in the earlier stages, when the technology is being developed, this type of investment is too capital-intensive; at the same time, traditional infrastructure funds and project finance do not step in because the project is not yet bankable. The cohort of companies currently at this threshold has a funding need that existing instruments do not systematically cover.

The consequence is just as significant for individual companies as it is for the Italian industrial system: **in the absence of specific tools to bridge this gap, technologies developed and validated in Italy, often using public funds, are scaled up elsewhere, in jurisdictions equipped with tools better suited to capital-intensive phases.** This would thus replicate, in the case of today’s emerging technologies, the pattern already observed with mature technologies, where Europe’s capacity for innovation has not translated into a commensurate manufacturing capacity.

This constraint arises within a defined timeframe. The Industrial Accelerator Act, presented by the European Commission in March 2026, will introduce preference criteria for European production in public procurement and support schemes for strategic sectors, effectively sparking competition amongst Member States to attract emerging supply chains to their respective territories. In other words, **those countries that are the first to industrialise their technological innovations will have the opportunity to secure a share of an intra-EU market that is currently taking shape**. Preparing for this now is therefore essential to avoid passively enduring this restructuring.

The solution outlined in this paper is a “First Plant Policy”: an operational agenda covering the next twelve months, which requires neither new institutional frameworks nor new fiscal resources. The guiding principle is to enhance the efficiency of the tools already in place, focusing on the currently underserved segment of industrial scale-up within a shared scope of projects. The agenda is structured around three key levers:

- Public finance, for which a coordinated package of instruments is proposed: the extension of Invitalia’s Development Contracts to early-stage industrialisation projects, a SACE guarantee facility dedicated to technological and industrial risk, and the activation of Cassa Depositi e Prestiti’s *Fondo Rotativo Imprese* in tandem with the guarantee. These three instruments build, on a transaction-by-transaction basis, the financial structure that the Italian system currently fails to provide, thereby reducing project risk and enabling the inflow of private investment.

- Demand, both public and private, for which three complementary measures are proposed: a preference for European technology in incentive schemes, starting with the MACSE auctions for long-term storage; a grid of technological and application priorities for the allocation of incentives to private demand; and a public counter-guarantee scheme for offtake contracts, modelled on the European Investment Bank's pilot scheme.
- Permits, for which it is proposed to designate pilot sites as Net-Zero Acceleration Valleys under the Net-Zero Industry Act and to introduce a fast-track authorisation process for strategic cleantech projects, with priority given to grid connection procedures.

The eight measures are summarised in greater detail in the table below.

Measure	Function	Structure
Development Contracts for FOAKs	They include a non-repayable grant and subsidised financing that directly covers a portion of the capital expenditure for the first plant – the part that no public funding scheme currently targets specifically for FOAKs.	Invitalia defines a dedicated scope for Development Contracts, with eligibility criteria, thresholds and types of support tailored to FOAK projects, combining non-repayable grants and subsidised loans.
SACE guarantee on technological risk	It absorbs the technological risk that keeps banks out of the project, bringing it below the threshold for standard bank financing and unlocking private debt that would not otherwise flow in without the guarantee.	SACE introduces a dedicated guarantee scheme that brings the project below the standard bankability threshold, mobilising private capital without any direct exposure of public funds beyond the guarantee.
***Fondo Rotativo per le Imprese* (FRI)**	It reduces the cost of debt and covers the residual risk not covered by the guarantee, bringing the overall cost of capital within the economic viability of an initial plant.	CDP activates the FRI within the same scope, in tandem with the SACE guarantee: the subsidised loan reduces the financial burden and covers the residual risk borne by the bank.
Preference for European technology	Set aside a portion of demand that is incentivised for European production, giving domestic operators the initial volume they need to begin their learning curves before facing global competition.	The competent Ministries introduce a European preference criterion in MACSE/LDES tenders, subsequently extending it to *Transizione 5.0* and *Nuova Sabatini*, following the model of the *FER X Transitorio* scheme.
Technology priority matrix	It focuses incentives on combinations of technology and application that have been shown elsewhere to generate beneficial effects for the relevant industry, thereby preventing support from being spread too thinly across uses with low industrial returns.	The Ministry of Enterprise and Made in Italy, in collaboration with the relevant technical bodies, supplements existing instruments with a framework that rewards combinations of technology and application which have led to the establishment of well-established supply chains elsewhere.

Counter-guarantee on offtake contracts	It makes the purchase contract bankable by providing a guarantee for the counterparty, thereby ensuring that FOAK has the multi-year revenue predictability that banks require in order to finance the plant.	SACE or CDP launch a national public counter-guarantee scheme for offtake contracts, modelled on the EIB pilot scheme, to create contractually guaranteed demand for the first plant.
NZIA Net-Zero Acceleration Valleys	They bring environmental assessments and planning forward to the wider area, so that individual projects located in the valley can build on that preparatory work and deal only with the remaining authorisations.	The Government and the Regions designate pilot sites as NZAVs under the Net-Zero Industry Act: regional clusters where environmental assessments and planning have been carried out in advance, managed by a single point of contact.
Fast-track permitting process	It sets clear deadlines and establishes a single point of coordination for strategic projects, thereby eliminating the time-related risk associated with the authorisation process, which compounds the industrial risk of the FOAK and drives its relocation elsewhere.	The Ministry of Enterprise and Made in Italy and the network operator establish a fast-track process for strategic projects, giving priority to grid connection and access to authorisations.

This report shows that **the tools needed to oversee the initial implementation phase already exist, and that what is lacking is their coordinated focus on industrial scale-up**. The window of opportunity is open, but the learning curves and the consolidation of standards favour those who industrialise first. Mobilising existing tools now, whilst simultaneously creating the conditions for the "First Plant" approach to become established in the long term, is the choice that will determine whether Italy will play a part in shaping European cleantech supply chains or remain a passive recipient.

Roma | Milano

www.cleantechforitaly.com

Cleantech *for* Italy