

The coming of age of India's industrial policy

- Amitabh Kant*

In 2025, the smartphone crossed a threshold that should change how India thinks about industrial policy. With exports of about Rs 2.6 lakh crore, it became the country's largest exported product category, ahead of diesel fuel and cut diamonds. A decade earlier, India was overwhelmingly an importer of handsets. Recently, the Union Cabinet approved a Rs 62K crore Mobile Phone Manufacturing Scheme and Semicon 2.0, with an outlay of Rs 1.3 lakh crore. They demonstrate the next stage of a deliberate climb from assembly to components, design, intellectual property and globally competitive Indian firms.

The mobile-phone experience shows what disciplined policy can achieve. India's electronics production reached Rs 13 lakh crore in 2025-26, while exports touched Rs 4 lakh crore. Domestic value addition has risen from about 15 per cent to 23 per cent. The mobile ecosystem supports roughly 12 lakh direct and indirect jobs, and women constitute nearly 70 per cent of its direct workforce. This is more than an export success. It is industrial policy creating formal work and confidence that India can execute at global scale.

For years, The Western world through Washington Consensus advocated the free-market regime where hyperglobalisation helped them maintain dominance. The Government was asked to stay away from picking Industrial winners. However, that view has not survived geopolitics. The United States, European Union, Japan, South Korea and China now treat semiconductors, batteries, clean technology and advanced manufacturing as strategic infrastructure. Supply chains determine not only competitiveness, but national resilience. India's approach is therefore not a retreat from reform. It is an attempt to update reform for a world in which technology, trade and security have converged.

Semicon 2.0 is the upstream counterpart to India's Electronic Manufacturing stack. Under the first Semicon mission, 12 manufacturing projects with investment exceeding Rs 1.64 lakh crore were approved, and Micron, Kaynes and CG Semi have begun commercial production. The second phase broadens the agenda beyond fabs to six connected pillars: chip design, machines and materials, additional fabrication capacity, advanced packaging, research and talent. This is the right architecture because semiconductor sovereignty is not achieved by building one expensive factory. It comes from dense networks of designers, equipment specialists, chemical suppliers, clean-room technicians, research institutions and customers.

The strategic logic is strongest when the schemes are seen as one value-chain policy. The Electronics Components Manufacturing Scheme is intended to localise printed circuit boards, camera modules, passive components, sub-assemblies and capital goods. Semicon 2.0 pushes further upstream, while the new mobile scheme pulls downstream firms towards design and brands. Each layer improves the business case for the next.

Now India must confront the ownership question. A chip may be designed in Bengaluru and packaged in Gujarat or Assam, yet a large part of its value can still flow offshore through licence fees and recurring royalties on foreign intellectual property. PwC estimates that such payments can absorb 25 to 35 per cent of the budget of an industry-leading chip-design project. Processor cores, interface blocks, verification IP and design tools are indispensable, but as sales rise, per-unit royalties rise with them. India could build the factories, employ the engineers and export the products while overseas owners of foundational IP capture much of the economic rent.

The answer is not autarky; it is ownership in chosen layers. India should accelerate sovereign processor cores, AI accelerators, secure interconnects, indigenous electronic-design-automation capability and

foundational patents in advanced packaging. Open architectures can reduce royalty exposure where commercially sensible. This is also the hardware foundation of sovereign AI. Sovereign AI must include Indian-owned compute IP, not merely locally hosted models.

Capital policy must reinforce that ambition. India has roughly a fifth of the world's semiconductor design talent, but much of it works inside foreign captive centres. Government has indicated that government will co-invest with venture funds in eligible chip-design start-ups, take minority equity without operational control and exit after firms' scale. This is precisely the vote of confidence deep-tech founders need. Patient domestic risk capital can keep intellectual property, holding companies and engineers in India instead of pushing them overseas in search of finance.

Equity support should be matched by equity-linked employee rewards and expedited listing options. SEBI and the exchanges should strengthen the Innovators Growth Platform into a fast, disclosure-rigorous route for qualified semiconductor and strategic deep-tech ventures. Chip-design firms face long development cycles, heavy R&D spending and delayed revenues that conventional listing expectations do not always accommodate. Founders, employees, investors and policymakers need credible routes to liquidity. Without them, India may fund invention but lose ownership just before commercial scale.

Foreign investment must similarly become embedded capability rather than an archipelago of facilities. The expansion of Applied Materials, AMD, Lam Research, KLA and Microchip, and the Tata Electronics-ASML partnership, should move from investment to co-development, local supplier qualification, equipment servicing and selected sub-system assembly. These investments complement semiconductor partnerships with the United States, European Union, Japan, Singapore, the Netherlands and Germany. India's design infrastructure already gives 105 start-ups and MSMEs access to advanced tools; its reach should grow tenfold, with multi-project wafer access and university-industry research. Strategic procurement in telecom, defence, mobility and energy can give Indian chips their first customers.

India is beginning its next chapter with factories, export lines, trained workers, supplier networks and a record of execution. The smartphone changed India's export basket. The next decade must ensure that chips and the artificial intelligence they power change something more fundamental - who owns the technology and who captures the value.

The smartphone was the proof of concept. The chip, and the intelligence it powers, is the larger industrial thesis.

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