



ICC INNOVATION PRINCIPLES FOR POLICYMAKERS

Creating and nurturing innovation ecosystems

There is growing awareness among policymakers that innovation is a key driver of economic growth, and a key solution to global challenges such as public health, food security and climate change. The capacity to innovate and to bring innovation successfully to market is a crucial factor in economic competitiveness and socioeconomic development.

Innovation is also a key element in the United Nation's 2030 Agenda for Sustainable Development and mentioned specifically in Goal 9 of the Sustainable Development Goals (SDGs). New technology solutions, together with new business models and appropriate interventions, can significantly assist in achieving the SDGs and create resilient innovation ecosystems that can deal with the risks associated with global health crises, climate change and geopolitical risk.

A supportive policy environment is necessary to create and nurture innovation ecosystems, and to build the confidence necessary for investments in innovative activity. Below are principles to guide policymakers in creating policy frameworks that enable the emergence of productive, resilient and sustainable innovation ecosystems.

1. Build investor confidence in a trustworthy business environment.

- a.** Sustained innovation requires a shared understanding between governments, research institutions and business of the elements necessary to drive investment in innovation. Establishing an open dialogue and soliciting input from all stakeholders is key for building this understanding.
- b.** It is critical to cultivate stable enabling environments with predictable, transparent and robust legal and regulatory regimes designed to encourage innovation and appreciate investment risk. Risk-taking should be fostered through policies that take into account incentives to invest, the cost of risk capital, the plurality of business models and funding sources, and investor requirements for an adequate return on investment.
- c.** An attractive investment and innovation environment requires a stable macroeconomic framework with good public governance, rule of law, enforceable property rights, predictable liability rules, a functioning financial system, a transparent and predictable tax system, an adequate secondary and higher education system, and adequate digital and physical infrastructure.
- d.** The market's rewards for entrepreneurial risk-taking are to a great extent defined by sector-specific regulation that can either limit or enable the proliferation of innovative technologies. National strategies along with the review and upgrade of outdated sector-specific regulations can modernize policy frameworks to support innovators and to allow society to benefit from new innovations.
- e.** Small- and medium-sized enterprises (SMEs) are crucial drivers of innovation, and they make up a significant portion of the private sector in most countries. Governments should facilitate entrepreneurs' access to financing and deliver training on matters such as cybersecurity, export readiness, and IP management and commercialisation. SMEs are often driven to partner relying on IP protections to protect their competitive advantage as they scale up.

2. Promote education and training for a robust innovation ecosystem.

- a.** Innovation flourishes when people have the scientific, technological and other professional skills necessary to sustain it. The public and private sectors have a shared responsibility and interest to develop the relevant skills in the workforce.
- b.** Governments need to make long-term commitments to invest in educational infrastructure, through training of specialised skilled workers and support of academic and research institutes necessary to attract investment in innovation. The creation of innovation clusters that take advantage of unique local capabilities should be explored to further encourage knowledge spill over.
- c.** A workforce reaches its full potential when it is gender-balanced, diverse, inclusive, and engages and inspires youth to become the business leaders and innovators of tomorrow. All stakeholders have a shared responsibility in nurturing these qualities.
- d.** Governments should fund and support public-private research programmes aimed at basic research, frontier technologies and addressing critical challenges, while encouraging business participation through policies that provide investment incentives.

3. Encourage open trade and investment.

- a.** Innovation is a global endeavour, transcending borders. Securing channels for the ideas and technology that will grow a local economy and address its most critical challenges requires open markets and fair competition. Countries should foster coordination and coherence by working towards an open trade policy. This is underpinned by the importance of global and regional value chains to ensure the supply of goods and services, and avoid arbitrary restrictions and disruption.
- b.** Market intervention should take into account dynamic efficiencies and favour this over static benefits; otherwise, there is a risk that the most successful risk takers or innovators will be restricted. Discussions around market intervention should involve the private sector and consider the impact to innovation ecosystems and competition.
- c.** National trade and competition laws must not discriminate between domestic and foreign companies, nor must they 'pick winners'. Privileges or extraordinary rights should not be created to protect national incumbents or local actors. Similarly, national legislation and government procurement policies should not discriminate between products manufactured locally and those imported from elsewhere in the world.
- d.** National systems aimed at attracting investment should conform to agreed international norms and take into account global competition to attract investment capital. Localisation should not be compelled; incentives that will attract global business to invest and operate within the domestic market should be preferred instead. The ability to pursue the best commercial choices will lower the cost of advancing and deploying technology solutions, making it easier to invest and accelerate the dissemination of knowledge locally.

4. Ensure intellectual property systems incentivise both innovation and dissemination.

- a. A stable intellectual property rights system provides the certainty necessary to build trustworthy innovation ecosystems. Intellectual property rights also support technological partnerships by providing the legal framework necessary for collaborative innovation and the exchange of technology and knowledge. Local companies, when targeting local problems through incremental innovation, require IP incentives to support the development of adequate solutions.
- b. Innovation often requires a significant risk appetite. Effective, enforceable, and predictable intellectual property rights reward and incentivise innovators and creators to undertake such risk. Stable and predictable intellectual property systems also provide an important incentive for investing in innovation and enable innovative ideas to be commercialised and scaled.
- c. Collaboration is an effective means for bridging knowledge gaps and is key to advancing technology efficiently. Partnerships across sectors and firms, and between academic research and business, should be encouraged to stimulate knowledge exchange and transfer. To that end creators and innovators need to be able to share information in a trustworthy environment that provides effective protection for confidential information and intellectual property rights. That trust is critical for ensuring that the fruits of research are disseminated by being applied, commercialised, adapted to local circumstances, scaled and advanced.
- d. The use of data supports the generation of meaningful insights and informed decision-making, and drives innovation. Innovators can generate pertinent data or access available data to assist in improving efficiency and delivering the most impactful products and services. Thus, it is critical that IP regimes can support this while protecting commercial intellectual property rights.

References to relevant ICC publications:

- > **ICC Intellectual Property Roadmap**—Current and Emerging Issues for Business and Policymakers
www.iccwbo.org/iproadmap
- > **The Dynamics of Global Technology and Knowledge Flows**
www.iccwbo.org/publication/the-dynamics-of-global-technology-and-knowledge-flows
- > **Trade in the Digital Economy**—A Primer on Global Data Flows for Policymakers
www.iccwbo.org/publication/trade-in-the-digital-economy/
- > **Regulatory Modernization in the Digital Economy**—Developing an Enabling Policy Environment for Innovation, Competition and Growth
www.iccwbo.org/publication/regulatory-modernization-in-the-digital-economy-developing-an-enabling-policy-environment-for-innovation-competition-and-growth
- > **The Importance of Fostering Incremental Innovation**
www.iccwbo.org/publication/importance-fostering-incremental-innovation

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