



EUROPEAN CLUSTER
COLLABORATION PLATFORM

Country factsheet

Israel

An initiative of the European Union





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Introduction



This document presents an overview of the cluster policy in Israel. Given its importance to contextualise the cluster policies (and related) analysed in the factsheets, a comprehensive outlook of the country in socioeconomic terms can be consulted in the [OECD Economic Survey: Israel 2018](#). The “Economic Surveys” present the major challenges faced by the country, evaluates the short-term outlook, and makes specific policy recommendations

The global pandemic has affected every sector and business around the world. In Israel, while some companies face hardship and possible extinction as a result of the collapse of industries, Tel Aviv’s tech sector not only remained resilient during the global pandemic, but even outperformed itself by breaking records in capital raised, exits and number of companies¹.

The world-leading high-tech ecosystem and clusters in Tel Aviv experienced significant growth in 2020 despite the pandemic. Investments in Tel Aviv tech companies soared to a record \$6.8 billion, 34% higher than in 2019, and accounted for 48% of all investments in Israeli tech companies. The leading tech clusters in Tel Aviv in 2020 were AI (artificial intelligence), fintech, big data and SaaS (software as a service)². In an effort to speed up disruptive innovations to address Covid-19-related issues, the Israeli Innovation Authority put out a call for proposals and received 750 applications. Out of those, a few dozen promising startups received grants totalling EUR 12.82 million to accelerate their R&D and expedite their Covid-19-related solutions’ time to market.

¹Report from the Tel Aviv-Yafo Municipality’s Center for Economic & Social Research, Tel Aviv Global & Tourism, and IVC Research Center. Available at: <https://bit.ly/3w1dKxk>

² ISRAEL21c, 2020 was a banner year for Tel Aviv’s innovation ecosystem. Available at: <https://www.israel21c.org/2020-was-a-banner-year-for-tel-avivs-innovation-ecosystem/>

01

National cluster policy, programmes and initiatives



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1. National cluster policy, programmes and initiatives

Policy type:	Broad policy
Policy name:	Innovation Policy Science, technology and innovation policy
POLICY OBJECTIVES 	<p>Strengthening cooperation between companies or industry and RTDI actors</p> <p>Increasing competitiveness and boosting scale up of SMEs</p> <p>Supporting internationalisation activities</p> <p>Fostering R&D activities, technology development and implementation</p> <p>Fostering innovation and strengthening innovation ecosystems</p> <p>Promoting entrepreneurship, start-ups and spin-offs</p> <p>Connect to global supply chains</p> <p>The objective of the policy is to continue to foster a thriving innovation ecosystem. It aims to encourage R&D activity in industries, mainly in the manufacturing sector, to link the innovation ecosystem to the public sector and to attract new employees from underrepresented groups of the population.</p>
POLICY FOCUS 	<p>No specific focus</p> <p>The innovation policy does not target any specific sector.</p>



Policy type:	Broad policy
Policy name:	Innovation Policy Science, technology and innovation policy
RESPONSIBLE AUTHORITIES 	<p>In charge of implementation</p> <p>Provides funding</p> <p>The Israel Innovation Authority (IIA) is an independent publicly funded agency created to assist and encourage, directly or indirectly, technological innovation in industry in Israel through a range of tracks, tools and actions. It is structured in six divisions, each of them offering a toolbox of tailored incentive programmes to their target clients. The divisions serve as launching pad for innovative projects, providing entrepreneurs and companies with the most relevant plan to materialise their ideas, develop their products and mobilise private investment., The IIA continuously monitors development in the Israeli innovation ecosystem by conducting research, planning, evaluation and budgetary control activities, and updates its policy and industry support tools accordingly. Taking into consideration the inputs of the IIA the policy is drafted by the Government which also oversees its implementation.</p>
BENEFICIARIES 	<p>SMEs</p> <p>Research organisations</p> <p>Academic institutions</p> <p>Start-ups</p> <p>Large firms</p> <p>Technology centres</p> <p>The beneficiaries of the innovation policy include new entrepreneurs, mature companies developing new products or processes, academics who wish to market their ideas, global corporations looking to collaborate with Israeli technology, Israeli companies seeking new markets and traditional factories seeking to incorporate innovative and advanced manufacturing into their businesses.</p>



Policy type:		Broad policy
Policy name:		Innovation Policy Science, technology and innovation policy
INSTRUMENTS 	Financial	Funding collaboration initiatives Support to R&D projects, SMEs becoming cluster members, etc. Supporting market entry (e.g. testing, proof-of concept, prototyping, demonstration projects) Financing start-ups
	Technical assistance	Support for hard skill development: knowledge transfer, intellectual property, entrepreneurship, export advice, market intelligence Support for networking and partnership building (at national and/or international level)
	Explanation	<ul style="list-style-type: none"> • The innovation policy is mainly implemented through the incentive programmes managed by the IIA. Focusing on promoting business innovation and entrepreneurship, these programmes offer support to basic research, private and public sector activities for supporting innovation, cooperation between the public and private sector in supporting technological innovation, creation of human capital, creating demand in the private sector, increasing demand for technological development, and national and international research funds, government and international funds for research. The incentive programmes are operationalised through calls for proposals. • Start-up Division: offers a range of tools to support the early developmental stages of technological initiatives at the pre-seed or initial R&D stages, helping to materialise ideas while reaching significant funding milestones. • Growth Division: assist hi-tech companies in the sales growth stage as well as mature hi-tech companies that utilise growth channels based on technological innovation and/or seek assistance in funding innovative research and development. • Technological Infrastructure Division: focuses on funding applied R&D infrastructure, promoting applied research in academia, technology transfer, leveraging R&D for Dual Use Technologies, exchange of knowledge and experience and developing of ground breaking innovation by an integrated group of researchers from academia and industry. • International Collaboration Division: coordinates international collaboration in innovative R&D knowledge and technology between Israeli companies and counterpart organisations abroad, thus offering various competitive advantages for the Israeli industry in the global market. Operated by the Europe, Americas and Asia Pacific Desks, as well as the desk for multinational corporations, support for such strategic alliances is made possible through an array of bilateral cooperation agreements and bi-national funds, as well as through the EU Framework Programme for Research and Innovation. • Advanced manufacturing Division focuses on promoting the implementation of R&D and innovation processes in companies in the manufacturing sector to strengthen their competitiveness in the global arena and improve productivity across a variety of industrial sectors.



Policy type:		Broad policy
Policy name:		Innovation Policy Science, technology and innovation policy
		<ul style="list-style-type: none"> Societal Challenges Division: focuses on improving the effectiveness and quality of public sector services, as well as enhancing social welfare and quality of life through technological innovation.
HISTORY 	Period	Unlimited period
	Ending year (<i>for policies with limited period</i>)	No ending year is indicated.
	Starting year	2013
	Explanation	The emergence of clusters in Israel resulted from a combination of different policies focused on the creation of a strong innovation ecosystem, which would harness the strengths and advantages of the country in ICT and defence, respectively. The national investment in R&D, the availability of venture capital (VC), a migration policy for the absorption and integration of high skilled professionals in science, and the efficient transport network at national and international level were some of the central factors endowing the formation of the clusters. These continue to be strengthened through a consistent innovation policy, which legal framework sustains a special legislation and strategic planning in permanent evolution, to meet the evolving needs of the ecosystem. The innovation policy and its evolution thus reflect the political strategy of Israel over time.
BUDGET 	Overall	Not available
	Annual	Not available
	Source of funding	The major sources of R&D financing in Israel are a combination of business enterprise and foreign sectors (in 2012: 84%) and the combination of government and higher education sectors (12%).



Policy type:		Broad policy
Policy name:		Innovation Policy Science, technology and innovation policy
POLICY  EVALUATION	Availability	No policy evaluation
	Results	No official evaluations of the innovation policy were found. Nevertheless, various studies and sources point to the great success of the policy, having achieved positive results over the years, placing Israel as one of the most innovative countries worldwide. Its Silicon Wadi cluster has been often used as an example of success. The proximity of the R&D centres, the industry sites and the urban areas, together with an efficient transport network have been highlighted as important factors for its success. Similarly, the availability of venture capital, the drive of the defence sector, the attraction of a high skilled workforce and the role of the government steering the innovation ecosystem are claimed as some of the main reasons explaining Israel's success. In the last years however, the productivity growth has stalled. The technology-driven growth has not been sufficiently inclusive, and the services and manufacturing sectors haven been overlooked despite its importance for the overall economic performance. In addition, there are annual reports on innovation elaborated by the IIA.
POLICY ALIGNMENT WITH THE EU PRIORITIES 		Green economy Social inclusion

02

State of play of cluster policy



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2. State of play of cluster policy

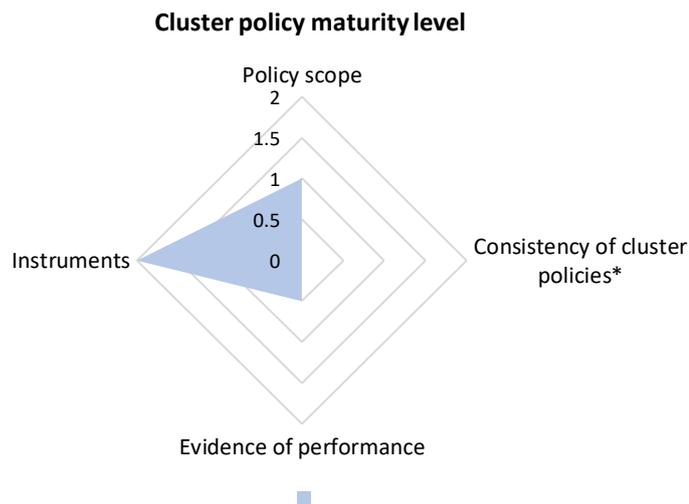
The data below illustrates how the country ranks in terms of maturity of cluster policy. The maturity index is based on a combination of factors presented in Chapter 1 and which are scored based on their existence:

- **Policy scope:** whether the country has a dedicated cluster policy, or cluster creation and/or development is targeted through broader policies (existence of broader policies = 1 point; existence of targeted cluster policies = 2 points)
- **Consistency of cluster policies:** assessment of the duration and experience of the country in doing cluster policies. This dimension assesses only existing cluster policies and not broader policies (no cluster policies available = 0 points; < 10 years of experience or > 10 years (but interrupted) = 1 point; > 10 years (but with clear continuity = 2 points)
- **Evidence of performance:** the existence of monitoring and evaluation mechanisms determines the degree of policy development in the country (no evaluations = 0 points; existence of evaluations of past policies or in-itinere = 0.5 points; existence of ex-ante and/or ex-post evaluations = 0.5 points)
- **Instruments:** whether the policies provide any instruments to support the policy implementation, being these financial and/or technical assistance (1 point for each type of instrument available)

It is important to note that the maturity does not reflect the performance of a country, but only the degree of development of their cluster policy at the moment when the data was collected (2020). The maturity index illustrates how the country scores for each of these four dimensions (policy scope, consistency of cluster policies, evidence of performance and instruments) compared to the maximum score that they can reach.

	Israel	Maximum score
Policy scope	1	2
Consistency of cluster policies*	0	2
Evidence of performance	0,5	1
Instruments	2	2

* This dimension is scored solely if the country has a dedicated cluster policy and it assesses only cluster policies



State of play of cluster policy in the country

No policy evaluation



Policy evaluation (for terminated policies)	The innovation policy has gone through various phases, but no official evaluations of previous periods were found. Nonetheless, a research conducted by Prof. Shaul Lach of the Hebrew University in Jerusalem's (2008) showed that the government support to innovative R&D led to the creation of new research of up to approximately three times higher value than the amount invested, and an added value to the industry between 5 to 10 times higher.
Policy approach in the country	<p>Specific policies to support cooperation projects</p> <p>Broad-based framework policies to support cooperation effectiveness</p>
Continuity	Israel does not have any policy targeting cluster creation and/or development. Clusters emerged around the ICT and defence sectors, which in turn support high-technology areas of special relevance for the country such as medical and pharmaceutical (including medical devices) sectors, agriculture and biotechnology, and natural resources and energy, especially renewables and water technology. The innovation policy has been developed building on the previous successes and the new goals and challenges, reflecting the political strategy of Israel over time.
Consistency	<p>No cluster policy available</p> <p>Israel does not have any policy targeting cluster creation and/or development. Clusters emerged around the ICT and defence sectors, which in turn support high-technology areas of special relevance for the country such as medical and pharmaceutical (including medical devices) sectors, agriculture and biotechnology, and natural resources and energy, especially renewables and water technology. The innovation policy has been developed building on the previous successes and the new goals and challenges, reflecting the political strategy of Israel over time.</p>

Bibliography



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Bibliography

- Carmel, E., de Fontenay, C. (2002), Israel's Silicon Wadi: The forces behind cluster formation. Available at: www.ebusinessforum.gr/old/content/downloads/Israel.pdf
- European Observatory for Clusters and Industrial Change (2019) Cluster programmes in Europe and beyond. Available at: www.eucluster2019.eu/files/events/4538/files/eocic-cluster-programme-report.pdf
- Dyduch, J., Olszewska, K. (2018), Israeli Innovation Policy: an Important Instrument of Perusing Political Interest at the Global Stage, *Polish Political Science Yearbook*, vol. 47(2) (2018), pp. 265–283 DOI: [dx.doi.org/10.15804/ppsy2018208](https://doi.org/10.15804/ppsy2018208) PL ISSN 0208-7375
- The Innovation Policy Platform. STI Outlook Country Profile 2016: Israel. Available at: www.innovationpolicyplatform.org/www.innovationpolicyplatform.org/content/israel/index.html#
- Engel, J.S., (2015). Global Clusters of Innovation: LESSONS FROM SILICON VALLEY. UNIVERSITY OF CALIFORNIA, BERKELEY VOL. 57, NO. 2. Available at: https://people.uta.fi/~atmaso/verkkokirjasto/engel_gci.pdf
- Getz, D., Goldberg, I., (2016). Best Practices and Lessons Learned in ICT Sector Innovation: A Case Study of Israel. Work Bank, Background Paper: Digital Dividends. Available at: <http://documents1.worldbank.org/curated/en/657111468185331183/pdf/102958-WP-Box394845B-PUBLIC-WDR16-BP-ICT-Sector-Innovation-Israel-Getz.pdf>
- Frenkel, A., Maital, S., Leck, E., Getz, D., Segal, V (2011). Israel's Innovation Ecosystem. Samuel Neaman Institute for Advanced Studies in Science and Technology. Available at: www.neaman.org.il/Files/Israel%D7%92%E2%82%AC%E2%84%A2s%20Innovation%20Ecosystem%20-%20Final.pdf
- Israel Innovation Authority: <https://innovationisrael.org.il/en/>
- Israel Innovation Authority Program to Encourage Establishment or Expansion of Operations of Research and Development Companies of Foreign Industrial Corporations in the Fields of Biotechnology, Medical Devices or Digital Health (Pilot). Available at: https://innovationisrael.org.il/sites/default/files/Incentive%20track%20no.%2035-%20English_0.pdf
- Stone, H.A. (2014) Law Encouraging Technological Innovation in Israel: Strings attached. Available at: www.klri.re.kr:9090/bitstream/2017.oak/6446/1/Laws%20Encouraging%20Technological%20Innovation%20in%20Israel%3A%20%22Strings%20Attached%22.pdf