

Key figures

Israel has the highest density of tech start-ups in the world.

Israel raises 2.5 times as much global venture capital as the U.S., 30 times more than Europe, 80 times more than India, and 350 times more than China.

Israel is one of the biggest destination for global venture capital per capita.

Israel has about 80 companies listed on NASDAQ, more than all of Europe, Japan, Korea, India, and China combined.

Israel has twice the number of engineers per capita than US and Japan. 34% of Israeli holds university degrees (24% of the work force).

Israel holds the largest number of Nobel Prize winners this past decade.

Israel Science Info

Research, innovation, industry and international cooperation

A first!

Dr. Karnit Flug was designated ninth governor of Israel's central bank. She is the first woman to head the Bank of Israel.



The growth drivers: innovation and entrepreneurship

IATI: the organization representing high tech and life sciences industries



The Israeli Advanced Technology Industries (IATI) is the largest umbrella organization representing the high tech and life science industries. With over 400 members, its mission is to strengthen the Israeli industries across the whole value chain while creating global, technological and innovational leadership. Israel high tech industry has proven its resiliency and serves as one of the world's main sources for technology innovation.

2nd Edition : Innovation Day Israel France, 19 nov. 2013



The second edition of the Innovation Day France Israel is taking place in Tel Aviv November 19, 2013. This major event will bring together nearly 250 Israeli companies and 150 French companies in the biotech, ICT and cleantech. Under the auspices of President Francois Hollande, President Shimon Peres, the Minister of digital economy Fleur Pellerin and Naftali Bennett, Israeli Minister of Industry, the day will be divided between plenary and appointments of business.

ICL Innovation's program: from concept to industrial implementation



By providing the entrepreneurs with the right support, ICL reduces the time, expense and administrative burden associated with taking their project from concept to industrial implementation. Researchers and entrepreneurs who create a strategic relationship with ICL will benefit from its financial strength, professional platform, world-class labs, nurturing environment and global reach. Each project is evaluated from the standpoint of technology, business model and environmental responsibility. ICL Innovation is a strategic partner for entrepreneurs.

INNOVATION AND SUCCESS STORIES...

Hebrew University launches a quantum center • Given Imaging's PillCam Colon in Japan • NCF'Syngas from CO₂ and H₂O • Oxitone, a watch to prevent cardiac arrest • Kailima, a transgenic EPTM technology to produce new varieties • advanced-mem-tech filtration membrane • Jerusalem College of Technology: a microship conceived by two women • Wibbitz, automatically transforms web pages into video • Volcani Institute: the war against hunger • Altair's semiconductors: a combination of performance and flexibility • Ariel's has-ham saves water

shower • TIPA: a biodegradable and recyclable packaging • Seambiotic uses flue gases from coal burning power station for algae cultivation • Haifa University shows the 50's performance • Weizmann: a self integrated circuit from nanowires • Bar-Ilan's bionic eye • MyHeritage: Israel's most promising start-up • Ben Gurion University: an engineered oasis for solar desalination • NTT chooses Compass-EOS next generation routing company • Leviathan energy's wind tulip • Hadassah stops Amyotrophic lateral sclerosis progression...

TaKaDu wins Sustainia award 2013

International institute, Sustainia selects TaKaDu as its best sustainable innovation for 2013 picked among more than 500 projects submitted from 79 countries.

Israeli company TaKaDu won the Sustainia Award, chaired by Arnold Schwarzenegger, for their technology that reduces water distribution losses. In front of an audience of more than 1,000 guests gathered in Copenhagen, TaKaDu was announced winner of Sustainia Award 2013, an award honoring the world's best sustainability innovation.

"The Sustainia Award winner is a great example of the solutions we need. With an advanced technology, they help address a serious issue facing many communities, scarcity of water. They are true green action heroes," says Arnold Schwarzenegger, chair of the Sustainia Award Committee.

"Tonight's award winner is an excellent solution to how we can optimize our most valuable resource: Water. Their state-of-the-art technology helps to reduce water loss and ensure supplies to a growing population," says Dr. Rajendra K. Pachauri, Chair of the UN climate panel, IPCC, who presented the winner in Copenhagen.

25 to 30% of the world's water is wasted

Currently 25 to 30 percent of the world's water production is wasted due to faults in distribution. The winning innovation monitors water grids and warns suppliers of leakages, pipe bursts or other

irregularities. This technology made TaKaDu stand out to the award committee formed by; former governor of California Arnold Schwarzenegger, former prime minister of Norway Gro Harlem Brundtland, Chair of IPCC Dr. Rajendra K. Pachauri and EU Commissioner for Climate Action Connie Hedegaard.

The award is initiated by Copenhagen-based sustainability think tank, Sustainia, in collaboration with Arnold Schwarzenegger's initiative Regions20, UN Global Compact and the EU Commission. Behind Sustainia is also a wide range of companies including Novo Nordisk, Philips Lighting, Cisco, DNV, Realdania and Microsoft.

Winner Safeguards Earth's Most Valuable Resource



Water losses during distribution is a key challenge for the world's water supplies. Older networks typically suffer from higher inefficiencies, but water loss is a symptom of much broader challenges, utilities worldwide find it harder to maintain networks in the face of ageing pipes, increased demand from growing populations, stretched resources and the effects of climate change including extreme weather.

TaKaDu analyses data in real-time

The TaKaDu technology retrieves and monitors large sets of data from sensors in the water networks and analyzes them in real-time. The software-based service automatically locates and classifies irregularities, such as leaks and pipe bursts, and alerts utilities immediately. The technology is currently deployed in six countries; Australia, Chile, Israel, United Kingdom, Spain and Portugal.

Amir Peleg, CEO and founder of TaKaDu: *"We are truly honored to win Sustainia Award 2013 among the many pioneer solutions and strong innovations nominated. This award, and the remarkable mission behind it, will raise awareness of our technology, its unique analytical approach and the great impact our solution has to secure the planet's most valuable resource, water, in a time where climate change and a growing population gravely challenge our water supplies."*

The Sustainia Award Ceremony is a multi-stakeholder gathering in Copenhagen with innovators, decision makers and artists uniting to raise awareness of readily available solutions as a warm-up to COP19 in Poland. With sustainability champions such as IPCC Chair Dr. Rajendra K. Pachauri, UN Global Compact Director Georg Kell and EU Commissioner Connie Hedegaard side by side with renowned artist Olafur Eliasson, global innovators and more than 1,000 citizens, the Sustainia Award Ceremony is a public celebration of the world's best green innovations.

Laura Storm, Executive Director of Sustainia:

"With Sustainia Award, we bring focus to readily available innovations from across the globe with the potential of changing our cities and sectors to sustainable practices. By presenting tangible green alternatives, we show companies and consumers that they can be part of the solution by seizing the opportunities available. It's time to make people part of the solution."

takadu.com



**ICL Innovation
invites great minds
to make a difference!**



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CLEANTECH

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→ Sami Shamoon university; JCT, a microship; Hebrew U quantum center; Weizmann: self integrated circuit from nanowires

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TAU: brain white matter works like e-device; Bar-Ilan U bionic's eye; Haifa University shows the 50's performance; Hadassah



OURS

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Innovation and entrepreneurship, the drivers of growth



Esther AMAR KAGAN
Founder
Publisher

Established in 1948, Israel is made up of more than seventy different nationalities and cultures. The Israeli economy is a diverse open market economy. Being a relatively young state in the modern era, Israel is recognized as a developed market by many major indices. Israel also became a member of the OECD in 2010.

The Israeli economy showed great resilience during the latest global economic crisis. Israel managed to withstand the economic crisis due to its stable banking system, labor market elasticity, lack of complex

instrument in the capital market and timely and targeted reaction of policy makers. In 2010-2011, Israel was ranked 1st at the 'Resilience of the Economy' Index, as part of the WEF Global Competitiveness Index.

Israel is also home to many international high tech companies, who understand its cultural and economic benefits, as well as its innovative spirit. Along with local Israeli firms who became an international success, both international and local firms make Israel worthy of its description as 'The Silicon Wadi'. Israel is known for its unique entrepreneurial and innovative spirit, and excels in: Research and development, Human capital, Entrepreneurship, Venture capital availability, Utility patents per million population.

The Israeli economy is considered to be benefitting from several cultural characteristics of the Israeli society, such as: Challenging norms and 'out of the box' way of thinking; Creativity at working under limited resources; Direct, informal and task oriented approach

The Office of the Chief Scientist [OCS] in the Ministry of Economy is charged with execution of government policy for support of industrial R&D. The goal of the OCS is to assist in the development of technology in Israel as a means of fostering economic growth, encouraging technological innovation and entrepreneurship, leveraging Israel's scientific potential, enhancing the knowledge base of industry in Israel, stimulating high value-added R&D and encouraging R&D collaboration both nationally and internationally. A variety of ongoing support programs developed and offered by the OCS play a major role in enabling Israel to be a key center for high tech entrepreneurship.

Source: Ministry of economy

Here is the first issue of the English version of Israel Science Info,
the magazine of research, innovation, industry and international cooperation.

Israel Science Info has been founded in 2010 by Esther Amar Kagan, science journalist.

This issue contains three sections addressed in the second edition of the Innovation Day:
cleantech, life sciences and ICT.

This magazine is divided into two parts: high tech companies and
universities/research centers.

Open Innovation at Israel Chemicals



Israel Chemicals Ltd (ICL) has recently launched an Open Innovation program to accelerate its development of sustainable new products and processes, as well as to provide solutions for major global challenges.

ICL is a leading fertilizer and specialty chemicals company with operations throughout the world, over 12,000 employees and revenues of \$6.7 billion (2012). Early in 2012 ICL management decided to launch an Open Innovation program to benefit from the full range of knowledge, creativity and initiative available throughout the world and in December 2012 ICL established ICL Innovation Ltd. in an effort to develop and fund innovative products and technologies.

ICL Open Innovation program will help to assure ICL to addressing the challenges created by the growing global population and increased environmental awareness. By embracing the Open Innovation approach, ICL Innovation Ltd. intend to bring the best of the world's innovation, from wherever it originates, and to harness the power of collaboration with scientists/entrepreneurs worldwide to accelerate growth in the areas of Fertilizers, Agro, Food, Specialty Chemicals, Waste Treatment, Desalination, Environment, and Energy.

The ICL Innovation team will scout and select a number of innovative technologies, product ideas and projects from a range of sources, including academic institutions, research institutes, technology cooperatives, incubators and venture capital funds.

Each project will be analyzed from the standpoint of technology, business model and environmental responsibility, as well as rated in terms of its contribution to world needs. Projects selected will enjoy full financial support by ICL Innovation and be "adopted" by an ICL Business Unit which will provide marketing support and supervision. Successful projects will be incorporated into an ICL segment operations which will commercialize and market the product.

ICL Open Innovation "Accelerator" benefits from ICL strong R&D organization which includes approximately 500 employees that work at IMI TAMI - ICL central research institute as well as other ICL R&D facilities in Germany, The Netherlands, the U.S. and elsewhere in Israel.

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Cukierman & Co. a leading investment bank in Israel



Founded in 1993, the Banking Cukierman & Co. Is one of the leading investment banks in the Israeli market offering financial services centered around mergers / acquisitions, strategic partnerships, fundraising and IPOs on European markets in different industry sectors: the Sciences life (Biotech, Medtech & Pharma), TMT (Technology Media and telecom) renewable Energy and Real Estate. She has made more than € 4 billion of transactions since its inception. His second pole of activity is the «Private Equity.» Catalyst Fund investment in Israeli technology and the expansion of the company's activities on the BRIC countries, new bilateral funds were established with China, Russia and emerging markets since 2008.

Go4Europe the conference was created in 1997 by Cukierman & Co. and Catalyst as a « Business Platform» between Israel and Europe to raise awareness of Europe to Israel and Israelis Europeans and facilitate transactions between Europe and Israel. The themes are based on the financial services offered by the business Cukierman & Co. Bank During the previous 10 editions, Israeli and

European politicians such as Mr. Sharon , Mr. Benjamin Netanyahu, Mr. Ehud Olmert , or Mr. Nicolas Sarkozy , by video, opened the conference and business leaders European such as Calyon, Credit Suisse , Nokia, PWC , London Stock Exchange, France Telecom , Deutsche Telecom , Alcatel, Schneider Electric, Veolia , Medtronic , Sanofi -Aventis , Ferring Pharmaceuticals , Novartis, and Rusnano NYSE Euronext participated in the discussions.

In 2012, in the context of 20 years of diplomatic relations Israel / China, Go4Israel/China conference was also set up to attract tops Chinese leaders in Israel and help them discover the « Start Up Nation .» This is a seminar including a day of lectures and presentation of Israeli technology companies , and cultural, tourist visits and interviews with the heads of state of the country . Cukierman & Co. Is found again at the center of relations Israel / China.

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