

## Country Profile – Israel



Israel has built a strong reputation for developing technology. It has one of the world's highest research intensities, spending 4.5% of GDP, and strong backing for commercialisation through venture capital.

The country benefits from strong links to the USA, which provides a model for the commercialisation of innovation and a large end market for its discoveries. Israel's military strength provides a steady stream of technology. Its national service requirement produces young people who are used to responsibility and who have strong personal networks, both useful characteristics in entrepreneurs.

The government is an avid promoter of innovation, offering schemes through the Office of the Chief Scientist within the Ministry of Industry, Trade and Labor. These schemes help each stage of the innovation process, from providing pre-seed funding through to supporting international collaboration.

At the pre-seed stage, TNUFA provides grants of up to 85% of approved expenses for individuals building prototypes, registering patents or writing a business plan. The HEZNEK seed fund provides matching funds, with grants of up to 50% of an approved work programme, to encourage greater investment in start-ups. The government also spends \$30m a year backing 24 technology incubators, often linked to technical universities.

Pre-competitive research is supported through the MAGNET consortium, which encourages the formation of consortia of industrial and academic partners and the sharing of advanced generic technology. MAGNETON, meanwhile, promotes technology transfer from

one academic institution to an industrial partner. There are also programmes to support nanotechnology and biotechnology, research institutes and research within companies, each with grants of up to 90% of budget.

Israel supports competitive industrial R&D through a fund that will provide between 20 and 50% of the research budget, in return for 3 to 5% of future revenue from products based on the results. The scheme supports more than 1000 projects each year, from 500 companies.

There's also support for international collaboration. The ISERD programme provides grants of up to 50% of approved budget for collaborative work with European companies. There are also specific bilateral funds to promote collaboration between Israel and the US, Canada, Singapore, Britain and Korea.

MATIMOP, the Israeli Industry Center for R&D, promotes joint development with international partners. It acts as a contact point for bilateral industrial R&D programs, and runs the Israeli Innovation Relay Center, which enhances technology transfer.

This activity is backed by a venture capital sector that raised \$724m in 2004. Up to \$1bn is available for investment by Israeli VCs.

### Further reading

Ministry of Industry, Trade and Labor	<a href="http://www.moit.gov.il">www.moit.gov.il</a>
Incubators	<a href="http://www.incubators.org.il">www.incubators.org.il</a>
ISERD	<a href="http://www.iserd.org.il">www.iserd.org.il</a>
MATIMOP	<a href="http://www.matimop.org.il">www.matimop.org.il</a>
Israel Central Bureau of Statistics	<a href="http://www1.cbs.gov.il">www1.cbs.gov.il</a>
Israel Venture Association	<a href="http://www.iva.co.il">www.iva.co.il</a>

Population	6.25m (2005 est)
GDP	\$129bn (2004 est)
GDP growth	3.9% (2004 est)
Labour force	2.68m (2004 est)
Number of companies in the EU500 #	2
Gross domestic expenditure on R&D	\$4.8bn (2002)
Gross domestic expenditure on R&D as %age of GDP *	4.5 (2002)
Total researchers	44 700 (2001)
Government budget appropriations or outlays for R&D *	\$287m (2003)

(Source: CIA World Factbook, # 2004 EU Industrial R&D Investment Scoreboard,

\* Israel Central Bureau of Statistics)

## IQ briefs

### Finland plans to attract researchers

The Academy of Finland and Tekes, the national technology agency, are creating a funding programme to enable Finnish universities and research institutes to hire top international researchers.

The researchers will be expected to work in the areas of science and technology that have been identified by Tekes as of national importance, to help strengthen the local science and technology base. The fund is not supposed to be used to hire visiting lecturers, although those who are funded will be asked to help strengthen the local research base by supervising doctoral theses.

[www.aka.fi](http://www.aka.fi)

### US investment in energy R&D declines

US investment in energy R&D is declining despite supply problems and rising prices, according to a report by scientists at the University of California, Berkeley.

The paper shows that both federal government and private business investments in energy R&D have declined since the 1980s. The US's 2005 federal budget cut energy R&D funding by 11% over 2004. US industrial research in energy halved between 1991 and 2003.

The paper's authors say that US energy companies could increase their R&D spending tenfold and still be below the average R&D intensity of US industry. [socrates.berkeley.edu/~rael/EneryRDIssues2005.pdf](http://socrates.berkeley.edu/~rael/EneryRDIssues2005.pdf)