

The U.S.-Israel relationship provides significant benefits to both countries. While bilateral relations tend to focus on enhancing defense cooperation, Congress also seeks to expand collaboration in other sectors, including water, agriculture, energy and homeland security. AIPAC works with Congress to find new ways to help strengthen and deepen this alliance, including through full implementation of the U.S.-Israel Strategic Partnership Act of 2014.



# Israel is a global leader in water management and technology development.

Despite a desert climate and a shortage of fresh water, in 2014 Israel effectively became "water secure." Israel accomplished this remarkable feat through technological and infrastructure breakthroughs in desalination, drip irrigation, efficient piping, water recycling, and agricultural innovations. Today, Israel provides water to its neighbors and shares with the world powerful new tools to alleviate drought, reduce poverty, and improve the environment.

# Water management is a key priority of the Israeli government.

Israel has long approached water infrastructure as a critical investment. In the midst of a 1999 drought, Israel implemented an emergency plan to address water usage nationwide. The result was a framework to build Israel's first large-scale seawater desalination plant, which opened in 2005. Four more plants have since opened. Desalination now provides approximately 40 percent of Israel's entire water supply. These efforts augment the government's efforts to reclaim wastewater-today an estimated 86 percent of all wastewater is reused in agriculture. In addition, the government aggressively applies technology to detect and minimize water lost from leaking pipes.

### America looks to Israel to help minimize its water shortfalls.

Dozens of U.S. states are currently experiencing abnormally dry conditions and water shortfalls. Due to exceptional dryness and record heat, California has been forced to impose severe water restrictions on its citizens. Similarly, cash-strapped cities on the East Coast and in the Midwest are grappling with a rapidly deteriorating, century-old water infrastructure which loses billions of gallons of clean drinking water each year due to leaking pipes. Accordingly, several U.S. states have signed agreements with public and private Israeli institutions to apply the Jewish state's technologies and expertise to these serious problems.

### AIPAC actively works to advance U.S.-Israel water cooperation.

In 2014, AIPAC supported former Sen. Mary Landrieu's (D-LA) and Sen. Lisa Murkowski's (R-AK) legislation authorizing the establishment of the U.S.-Israel Center of Excellence in energy and water. The bill seeks to bring the countries together at the public, private and academic levels in joint research and development of new technologies. AIPAC has also worked with Congress to promote the Binational Industrial Research and Development Foundation (BIRD), which stimulates and promotes industrial R&D of mutual benefit to the U.S. and Israel. In 2014, AIPAC supported a successful bipartisan, bicameral initiative to extend that program to include collaborative water projects.





# Israel creates and shares agricultural technology and techniques.

With 60 percent of Israel exposed to a harsh desert climate, its farmers and agricultural scientists have developed innovative ways to cultivate crops with minimal water. Today, Israeli techniques and technology, such as drip irrigation, have transformed farming around the world. To help other countries expand both the yield and quality of crops, the Jewish state has launched agricultural programs worldwide to help build human capacity, foster research, and create demonstration farms and agribusiness consulting centers.

# Agricultural development is a key priority of the Israeli government.

In 2013, the State of Israel launched a \$78 million, seven-year initiative to bolster the relationship between agricultural research and Israeli industry. The Israeli private sector has also provided funding in support of this effort. The government hopes to boost exports of cutting edge agrotechnology to help meet the needs of the international community. Beyond benefiting developing countries worldwide, the Israeli government anticipates that this program will help position Israel as a global center of innovation for agricultural technology and food production.

# America and Israel work closely together on agriculture.

In 1977, to establish joint collaboration on agricultural projects, Sen. Daniel Inouye (D-HI) provided funding to launch the U.S.-Israel Binational Agricultural Research and Development Foundation (BARD). The program leverages small investments from both governments to facilitate scientific partnerships, and has promoted innovative research in areas such as drip irrigation, disease control, and farm equipment. Each year, BARD awards approximately 25 grants, each averaging \$300,000 over a three-year period, which is split evenly between Israeli and U.S. researchers. Since inception, it has awarded more than \$300 million.

### AIPAC actively works to advance U.S.-Israel agricultural cooperation.

AIPAC has strongly supported the BARD Foundation since its creation, and in 2014 mobilized on behalf of the U.S.-Israel Strategic Partnership Act. This legislation, authored by Sens. Barbara Boxer (D-CA) and Roy Blunt (R-MO) and Reps. Ileana Ros-Lehtinen (R-FL) and Ted Deutch (D-FL), laid the groundwork to facilitate additional cooperation in agriculture. Today, AIPAC continues to engage with Congress, as well as the U.S. Department of Agriculture, the Israeli Ministry of Agriculture, and BARD to support expanded efforts in this growing partnership. AIPAC's charitable foundation, the American Israel Education Foundation, also brings members of Congress and other key policymakers to Israel, where they gain first-hand understanding of Israel's world-leading expertise in agricultural development.





### Israel's energy security is transforming.

Energy independence is a shared objective of the United States and Israel, and a central pillar of each nation's security. The recent discovery of natural gas deposits off the coast of Israel catapulted the country from energy dependence to a potential role as a regional energy exporter. Similarly, the United States' energy resources have expanded over the past decade. With improved energy security, both nations are well positioned to cooperate further in the advancement of mutual interests—reducing the influence of OPEC, increasing energy efficiency and access to natural resources, and developing alternative transportation fuels.

# Israel's natural gas is improving its regional position.

Israel is developing its natural gas fields, which is improving energy independence and bolstering its economy. This development is encouraging regional trade and cooperation, and providing the option of pro-Western energy supplies to a region dominated by Russia, Iran and Qatar. Israel has reached preliminary agreements to provide energy to Jordan, Egypt, and the Palestinian Authority, and is exploring partnerships with Cyprus, Greece, Turkey and other regional powers. Israel's commercial partnership with U.S. company Noble Energy has also expanded the U.S.-Israel energy relationship.

# America and Israel are partnering to develop renewable energy.

Israel is investing in research and development to create new transportation fuels and move proven technologies to market. Israel's nation-wide Fuel Choice Initiative is tackling gasoline dependence by leveraging Israel as a test bed for new "off-oil" technologies—its objective is to reduce Israel's gasoline consumption 30 percent by 2025 and 60 percent by 2030. Since 2013, the number of alternative fuel companies investing in Israel has increased five-fold. With America, Israeli solar company Energiya Global recently completed construction of a 22.5-megawatt solar project in Georgia while partnering with the U.S. government to expand energy access in sub-Saharan Africa.

### AIPAC actively works to advance U.S.-Israel energy security cooperation.

In 2008, AIPAC lobbied Congress to connect the U.S. Department of Energy with Israel's Ministry of Energy and Water by creating a dedicated energy arm of the U.S.-Israel Binational Industrial Research and Development (BIRD) Foundation. Today, AIPAC promotes annual funding for the joint program that has facilitated nearly \$50 million in grants for the co-development of renewable energy, natural gas and water technologies. In 2014, AIPAC supported the U.S-Israel Strategic Partnership Act, which expanded this relationship by authorizing a U.S.-Israel Center of Excellence to connect the two countries at academic, public and private levels through joint R&D, technology transfer and government-to-government cooperation. In 2016, the U.S. Energy Secretary and Israeli Energy Minister signed an agreement to encourage further exchanges and cooperation between U.S. National Laboratories and Israeli research centers. Partnership is also accelerating through the U.S.-Israel Joint Economic Development Group, an annual economic policy dialogue involving the Departments of State and Treasury.





# Threats to Israel's homeland security are expanding.

With the growing reach and capability of terrorist networks such as ISIS, the international community is grappling with a rapidly developing threat. Israel has significant experience countering homeland security challenges at its ports, in the air, and in the evolving cyber domain—and both its government and private sector are eager to share their expertise with the United States. Today, the two countries share innovative approaches and develop critical technologies to improve their ability to safeguard their citizens.

# The Israeli government has made cybersecurity its highest priority.

Modern infrastructure is controlled by computerized information systems. Governments must take the lead to protect these systems from unauthorized network access. the introduction of malevolent data or code, or insufficient operator security procedures. Israel jumpstarted its effort with its 2010 "National Cyber Initiative," and quickly emerged as a global leader in cybersecurity. The resulting Israel National Cyber Bureau sets national policy, conducts research and development on cybersecurity standards, and—together with Israel's chief scientist—disseminates guidelines to industry. In 2015, Israel established a National Cyber Authority tasked with overseeing cyber defense across Israel's civil, military and industrial sectors.

### Israel and America work together to help keep each other safe.

The U.S. National Nuclear Security Administration's "Megaports Initiative" is equipping Israel's modern Haifa Port with American radiation-detection equipment and specialized training for port personnel. In turn, Israel is helping the Port of Miami protect the four million travelers and 7.4 million tons of goods transiting annually, by using Israeli video monitoring equipment. In civil aviation, the U.S. Transportation Security Administration (TSA) is working with security experts at Israel's Ben Gurion International Airport to improve U.S. airline security. Boston's Logan Airport and the Seattle-Tacoma International Airport have adopted FODetect, an Israeli optical-radar system that protects airport runways from birds and foreign objects.

### AIPAC actively works to advance U.S.-Israel homeland security cooperation.

Following 9/11 and the creation of the Department of Homeland Security, Congress enacted legislation to further U.S.-Israel cooperation in this arena. AIPAC actively supports expansion of U.S.-Israel cooperation, including in the border, aviation, port security and cybersecurity sectors. The charitable organization affiliated with AIPAC, the American Israel Education Foundation, also brings U.S. local law enforcement, state homeland security officials, first responders and other professionals to Israel to enhance U.S.-Israel ties.



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