U.S.–ISRAEL BUSINESS INITIATIVE

U.S. CHAMBER OF COMMERCE

Recommendations for Advancing U.S.-Israel Cooperation in Energy Exploration and Production

Submitted to the Government of Israel in May 2013

EXECUTIVE SUMMARY

- Unprecedented U.S.-Israel commercial cooperation in the hydrocarbons sector, particularly with respect to offshore natural gas exploration and production, has generated valuable opportunities for American companies as well as important economic, fiscal, environmental and security benefits for the people of Israel.

- Deriving the full value of such collaboration over the long term depends upon a stable, supportive, and transparent policy framework and regulatory regime.

- As the recent beneficiary of significant increases in natural gas production, the United States can offer several hard-won public policy lessons from its own experience:

  - By adversely impacting exploration and production activity, excessive regulation threatens to undermine the economic, security, and environmental goals of policy makers.

  - The benefits of the hydrocarbons sector are maximized when the government fosters and monitors market forces, rather than dictating the behavior of market participants.

  - Uncertainty regarding export policy can paralyze energy sector activity and protectionist trade policies can significantly depress production levels, and therefore economic benefits.

  - Science-based environmental safeguards can ensure strong protections consistent with timely development of hydrocarbon resources.

- Recommendations for a public policy framework that further advances U.S.-Israel private-sector cooperation in support of expanded and responsible Israeli energy production include:

  - Deploying an integrated set of policies and regulations that accounts for a hydrocarbons sector significantly larger than envisioned by the currently applicable 1950s-era statute.

  - Establishing a single, separate, and professional authority responsible for hydrocarbons policy.

  - Setting a clear and stable framework that promotes robust exports consistent with Israel's domestic demand levels.

  - Encouraging competition in the domestic natural gas market to address antitrust concerns.

  - Adopting widely used and more readily accessible technical and safety standards.

- The United States and Israel should prioritize cooperation on energy through enhanced bilateral efforts on infrastructure protection, maritime borders, energy security, interagency dialogue, and regional diplomacy.

INTRODUCTION

The U.S. Chamber of Commerce founded the U.S.-Israel Business Initiative to promote a flourishing trade relationship and strengthen bilateral commercial ties. Israel's historic discoveries of natural gas mark an exciting new chapter in joint commercial collaboration, and U.S. companies now play an active role in developing these newly revealed resources. Drawing upon the experience of U.S. natural gas producers operating domestically and internationally, the Chamber respectfully submits this memorandum summarizing public policy recommendations for advancing the burgeoning U.S.-Israel commercial relationship in the energy sector and, in so doing, maximizing the manifold benefits to Israel of a responsible and growing hydrocarbon industry.

In providing the observations and suggestions that follow, the Chamber recognizes the impressive speed with which Israel has transitioned from a country with very limited hydrocarbon exploration and production to one positioned to become a natural gas exporter. As gas from the Tamar reserve began flowing during the holiday of Passover at the end of March, Israeli Prime Minister Benjamin Netanyahu described the historic significance of this event: "On the Festival of Freedom, we are taking an important step toward energy independence."[1] The Chamber congratulates Israel on this remarkable achievement.

Since 2009, approximately 30 trillion cubic feet (TCF) of gross natural gas resources have been identified offshore Israel by commercial firms. These volumes of natural gas have transformed Israel's energy landscape and promise even more significant developments for the country's broader economy. Beginning with Israel's first commercially viable discovery at Mari-B more than a decade ago, Israel moved rapidly to integrate natural gas into the domestic economy. The facts are compelling and bear repeating even to the most well-informed audiences: before 2000, the country's electric utilities did not utilize any natural gas for power generation; in the coming years, the projections suggest that natural gas will account for well over 50 percent of Israel's electricity generation.[2] With the discovery of Leviathan, a field containing an estimated 18 TCF, Israel enjoys the option of becoming an energy exporter.

The government of Israel embraced this energy revolution with a prescient understanding of the considerable and broad-based benefits. Acting as an economic multiplier, natural gas development is anticipated to add between $60 billion and $290 billion (all figures U.S.) to Israel's economy during the next 60 years.[3] As a result of abundant natural gas, Israelis can expect relatively cheaper energy costs, which will generate direct savings to consumers and a more competitive manufacturing industry. In addition, building the infrastructure needed to support the natural gas sector will create jobs and attract foreign capital. In the case of exports, the treasury could receive between $3 billion and $6 billion in net revenue in the coming decades.[4]

Of perhaps equal importance, abundant domestic natural gas will provide Israel with positive non-economic benefits, such as increased energy security and better environmental outcomes. The abrupt termination of Egyptian natural gas imports, which once supplied 40 percent of Israel's natural gas consumption, underscores the importance of domestic production. Natural gas already has helped Israel reduce pollution and carbon emissions by displacing heavy fuel oil and coal from power generation, and there is also potential to leverage the resource for ground-based transportation. Between 2004 and 2011, Israel reduced carbon emissions by more than 17 million metric tons.[5]

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[1] "PM Netanyahu Comments on Start of Flow of Natural Gas from the Tamar Field," Israeli Prime Minister's Office, 30 March 2013.
[2] "Play on a new basin," UBS Investment Research – Israel Oil and Gas Sector Initiation, 5 April 2011.
[3] "Noble Energy Submission to the Israel Natural Gas Policy Committee," Noble Energy, 15 December 2011.
[4] "Israel – an emerging force in natural gas," UBS Investment Research – EMEA Economic Perspectives, 11 May 2011.
[5] "Natural-gas discoveries bring great potential for Israel," *The Jerusalem Post*, 25 July 2012.

Not unexpectedly, so sizeable a shift in a pillar of the national economy has created challenges. Most notably, policy uncertainty – tax, environment, and export, among others – threatens to limit future success. On behalf of the American business community committed to participating in Israel's emerging energy sector, the Chamber hopes that this document makes a positive contribution to the government's deliberations regarding how best to mitigate risk, and maximize the many benefits of energy development.

U.S. EXPERIENCE WITH THE CHALLENGES OF OFFSHORE NATURAL GAS DEVELOPMENT

The United States is experiencing its own boom in natural gas production, although increased development has occurred primarily onshore. Less than a decade ago, the U.S. Energy Information Administration forecast the need for significant natural gas imports. Following advances in production technology, the United States now enjoys an abundance of recoverable natural gas, and many expect it to become a significant natural gas exporter. As in the case of Israel, abundance of natural gas has the potential to remake the American economy for decades. The anticipated benefits of domestic U.S. gas production include:

- Accelerated GDP growth, an improved trade balance, enhanced manufacturing prospects owing to lower energy and feedstock costs, and increased disposable income for the average American family.

- Increased revenue to the federal and state governments, estimated at $2.5 trillion between 2012 and 2035.[6]

- Augmented energy security by eliminating the previously anticipated reliance on foreign and, in some cases, unstable suppliers. In addition, relatively affordable and plentiful natural gas may be used to help displace oil in the transportation sector, thereby further boosting U.S energy security.

- Reduced carbon emissions in the U.S. power generation sector. In 2012 the International Energy Agency reported that U.S. carbon emissions declined 7.7 percent since 2006, and indicated that much of the drop was attributable to the increased adoption of natural gas in the power sector.[7]

As referenced above, the recent increase in U.S. reserves comes from onshore deposits of shale oil and gas, as opposed to Israel's offshore discoveries. Nonetheless, both nations confront similar energy policy challenges, and an assessment of the U.S. experience with natural gas production may offer Israel useful guidance in shaping its own public policy framework.

<u>Regulatory Policy</u>

Challenge: Complex regulatory environment

An overly complex and multilayered regulatory regime can adversely impact investment in the energy sector, and thereby hamper exploration and development. Despite seemingly astounding levels of oil and natural gas production in the United States, complex and onerous regulations have prevented even greater levels of activity.

In this instance, the U.S. offers a negative example – a case study in "what not to do" from the perspective of well-designed public policy. Natural gas exploration and production activities in the United States traditionally have not been subject to a single set of comprehensive federal policies or regulations. Instead, individual states regulate various aspects relating to development and derive royalties and other tax revenues from those efforts, in addition to multiple federal agencies

[6] "America's New Energy Future: The Unconventional Oil and Gas Revolution and the US Economy," IHS Report, October 2012.
[7] http://www.iea.org/newsroomandevents/news/2012/may/name,27216,en.html.

also regulating exploration and development. As a result, the exploration, production, transportation, and sale of natural gas in the United States are subject to a patchwork of often inconsistent and overlapping state and federal regulatory regimes. For example, producers who possess mineral rights to the natural gas contained in the Marcellus Formation – despite geological continuity -- can employ the extraction technique of hydraulic fracturing in the state of Pennsylvania but not in the bordering state of New York.

Lesson: Complex and conflicting regulations can shackle natural gas development by raising the cost of production. For this reason, Israel may wish to erect a consistent and clear approach to natural gas exploration and development under a single regulator.

Challenge: Advancing the public interest by incentivizing private-sector involvement

Natural gas production levels in the United States historically have not been directed by centralized government policies, whether directional or "command and control." Rather, the exploration, production, and consumption of natural gas have been driven by the competitive investments and activities of private companies. These private practices, in turn, have taken place within a variety of federal and state regulatory regimes that define the boundaries of a competitive marketplace.

One model for Israel to consider is the U.S. government's controls on natural gas and other mineral resources on U.S. federal lands and waters, such as the Outer Continental Shelf (OCS). These controls include deciding when and how many tracks to lease for development, the number of years allowed for development, and similar criteria. Even on federal lands, a strict process exists for ensuring competition among private bidders for the right to explore and develop oil and natural gas resources. For example, the offshore leasing program administered by the U.S. Department of the Interior (DOI) requires developers to engage in a competitive, sealed bidding process for the right to develop federal offshore deep water leases. Consequently, the vast majority of natural gas production in the United States is predicated on the competitive efforts of private, profit-seeking firms whose exploration and development efforts are guided by market forces.

Lesson: Natural gas exploration and production should be pursued primarily through policies that rely on market forces and robust competition to spur development. By harnessing competitive market forces to natural gas production, the United States has created one of the most robust commodity markets in the world. Accordingly, competitive development efforts should take place within regulatory structures that ensure a level playing field by policing, rather than dictating, the behavior of market participants.

<u>Export Policy</u>

Challenge: Providing sufficient policy clarity in the medium to long term so producers can make informed investment and production decisions

Like Israel, the United States is blessed with an abundance of natural gas. Energy trade in general, and trade in natural gas, in particular is very expensive, capital-intensive, requires very long contracts and thus requires a great deal of predictability and certainty in the investing policy environment.

As the Department of Energy-commissioned study on natural gas export concluded: "Benefits that come from export expansion more than outweigh the losses from reduced capital and wage income to U.S. consumers, and hence LNG exports have net economic benefits in spite of [very modestly] higher domestic natural gas prices… This is exactly the outcome that economic theory describes when barriers to trade are removed." That's true for Israel as it is for the United States.

Lesson: Israel, like the United States, will be well served by open trade policies for natural gas that establishes rock solid investment conditions allowing the market to determine whether exports should take place. In the event the market then sets up conditions for exports, the economic benefits to Israel would certainly be substantial.

<u>Environmental Policy</u>

Challenge: Ensuring robust protections consistent with timely development of hydrocarbon resources

Environmental issues play a prominent role in FERC's review of proposed interstate pipeline and LNG terminal facilities as well as the DOI's review of both onshore and offshore leasing programs. The *National Environmental Policy Act* (NEPA) requires preparation of an elaborate environmental impact statement and a review process in which FERC must coordinate the efforts of multiple federal and state regulatory bodies. Although natural gas production and related infrastructure projects carry legitimate environmental concerns, contesting projects through a protracted NEPA review process has become a favorite tactic of parties that seek exclusively to halt projects on environmental grounds, rather than enhancing environmental protection in the course of development.

Lesson: Past and ongoing disputes between state and federal regulators – and between environmental interest groups and natural gas companies – strongly suggest that regulations must be carefully tailored to protect legitimate environmental interests without creating either onerous compliance obligations, or a cumbersome regulatory process that can be manipulated or obstructed to stifle development.

<u>United States as a Case Study</u>

The United States may offer Israel a helpful case study as the Jewish State seeks policies to maximize the benefit to the public of natural gas development. Although important differences exist between the Israeli and U.S. natural gas markets, there is significant overlap, especially with respect to regulatory and policy matters. Both nations are motivated by a set of common values with respect to leveraging natural gas production to advance economic, security, fiscal, environmental, and geopolitical objectives. Similarly, both countries confront shared challenges, such as the desire to ensure public safety, environmental protections, and adequate competition. In these areas, the U.S. experience is instructive and holds the following lessons:

- Regulatory certainty is essential to facilitating long-term investments in the natural gas sector.

- Excessive rules and indefinite approval processes disincentivize production.

- Lack of clarity on export policy risks delaying projects, with potentially negative consequences regarding market timing.

- Environmental regulations should be rigorous, relatively simple, and designed to prevent those who seek to defeat, rather than improve, projects from indefinitely delaying development that merits approval.

SUGGESTED RECOMMENDATIONS FOR ISRAEL'S OFFSHORE NATURAL GAS DEVELOPMENT

Pass a comprehensive overhaul modernizing the laws governing hydrocarbon development

Challenge: Dated legislative arrangements

The *Petroleum Law of 1952* governs the entire process of exploration and production of hydrocarbons in Israel, starting from the submission of an application for a Preliminary Production Permit up until receiving a 30-year lease in the reserve. Considering the recent natural gas discoveries in Israeli waters, this law does not provide proper solutions for the realities of modern production. As a result, the lack of legislative clarity is forcing regulators to address the gaps through new regulations. While the Sheshinski Committee and subsequent legislation addressed the obsolete royalty and tax aspects, Israeli energy production still is largely defined by the 1952 law.

The Chamber understands that both the Knesset and various ministries are working to fashion a proper regulatory structure that can provide stability to the market. As the relevant law does not provide clear guidelines, various regulations have been stitched together to form a patchwork of rules governing offshore petroleum exploration and production, petroleum profits taxation, and rules on transfer of petroleum rights, among other issues. Until properly addressed, this unpredictable regulatory regime threatens to deter investors from making necessary decisions and obtaining the massive financial backing needed for development.

Solution: Through comprehensive, unified legislative reform, devise and implement a modern regulatory framework for energy production. Putting together a coherent body of laws and regulations is essential to addressing the realities and demands of modern-day energy markets. Passing a single reform package, as opposed to interim and piecemeal regulations of uncertain duration, would provide much needed stability to Israel's natural gas sector and, as a consequence, strengthen the confidence of international operators and investors.

Streamline the regulatory structure

Challenge: Segmentation of the regulatory structure in Israel

The authorities responsible for regulating the natural gas market are scattered among several ministries and agencies. Bodies responsible for energy regulation include: the Petroleum Commissioner, the Petroleum Council, the Petroleum Unit, the Ministry of Energy & Water Resources, the Antitrust Authority, the Ministry of Finance, the Ministry of Environmental Protection, the Inter-ministerial Prices Committee, and the Planning Authorities. As suggested in the Tzemach Committee report, the lack of coordination among the various regulators represents a serious obstacle, both for companies as they navigate the regulatory environment, and the government as it implements policy goals.

During the last few years, investors and stakeholders in Israel's offshore natural gas sector fields have been forced to contend with different, and sometimes competing, demands and limitations imposed by the multiple regulatory bodies. This situation has become acute in the case of the Tamar and Leviathan reserves, where the holders of rights must contend with prospective intervention by these multiple government bodies on various issues, including marketing, pricing, and ownership.

Solution: Given the complexity of energy issues and the need for timely decision-making, Israel would benefit significantly from the establishment of a single, separate, and professional authority responsible for coordinating the hydrocarbons sector. Such an authority would be responsible for harmonizing action among the various relevant government offices in a timely and efficient manner, and for adjudicating competing government interests. The creation of a dedicated entity would help the government implement policy goals more quickly and effectively. In addition, such a body would be of tremendous value to private stakeholders in providing clear, authoritative declarations of government policy.

<u>Develop a regulatory mechanism for resolving energy infrastructure policy questions in a timely and definitive manner</u>

Challenge: Failure to address the limited capacity/lack of redundancy of the pipeline connecting the Tamar reserve to the transmission network

As of today, a single offshore pipeline connects the Tamar reserve to the mainland. This limitation could have significant consequences for Israel given the cessation of Egyptian gas exports and the coming exhaustion of the Mari-B field. Although natural gas from Tamar officially arrived to market in March, current pipeline capacity will prevent the field from supplying Israel's total demand, despite concerted efforts by the operator to increase delivered volumes.

Regulators have not definitively outlined a policy for addressing this potentially problematic circumstance. Moreover, private suppliers have not received support from the government in the planning process to secure additional entry points. As a result, efforts to establish a northern entry point for the gas near Dor (in addition to the point at Ashdod through which it flows today) were defeated.

Solution: As proposed by the Tzemach Committee, the government should be involved in: planning, allocation, construction, and oversight of infrastructures onshore and offshore; incentivizing the sharing of offshore transmission infrastructures among producers; and ensuring that, as both a regulatory and technical matter, new discoveries can be connected expeditiously to the domestic transmission network.

<u>Devise a clear policy and regulatory framework governing natural gas exports</u>

Challenge: Extended uncertainty regarding export policy

Uncertainty regarding government policy with respect to authorizing export volumes has adversely affected the interest of major oil and natural gas companies in the Israeli market. With the discovery of Leviathan, the government of Israel acknowledged that export would be essential to the commercial viability of future development and appointed the Tzemach Committee to produce recommendations. Although the Tzemach Committee issued a final report in the fall of 2012, the government has not acted on its recommendations and, thus, export policy remains undetermined.

The absence of a clear policy has deterred additional investment in exploration and, obviously, export infrastructure. One major LNG export operator has made investment offshore Israel contingent upon government approval of the Tzemach Committee's recommendations. The situation risks inflicting long-term damage on Israel's offshore hydrocarbons sector by delaying or forcing the cancellation of otherwise attractive exploration and production projects.

Solution: The government should support in the near term a clear, stable framework that promotes robust exports consistent with Israel's domestic needs. Policies that encourage exports have been shown to result in highly dynamic markets that make use of the full potential of available resources. The Tzemach Committee's recommendations would provide an excellent foundation and, if adopted, incentivize greater participation by international oil and natural gas companies in the Israeli market. Such competition likely would translate into the maximum utilization of offshore natural gas reserves, thereby providing for domestic needs and generating the revenue associated with export.

Moreover, once the policy has been set, the government should empower a single regulatory entity with responsibility for the construction and oversight of export facilities, as well as oversight of export licensing process. This framework should include definitive criteria by which decisions will be made and a predictable application procedure.

<u>Encourage market competition through an export policy that incentivizes private-sector investment in future exploration and production</u>

Challenge: Absence of competition in Israel's natural gas market

With the termination of Egyptian natural gas exports to Israel, the Tamar reserve will serve as the sole major source of supply for an undetermined period. For this reason, the government of Israel – specifically, the Antitrust Authority – has expressed deep concerns that the lack of competition could result in suboptimal market dynamics.

In addition to declaring the Tamar partners a monopoly,[8] the Antitrust Authority has: intervened in signed customer agreements in favor of the purchasers and future suppliers; issued a resolution that cross holdings of different resource rights will be forbidden; and held proceedings on whether the Leviathan partnership constitutes an illegal and restrictive arrangement.

The absence of a clear regulatory framework for transparently adjudicating such matters has resulted in extreme uncertainty and fostered a perception of heightened unpredictability. Moreover, some of the ostensibly pro-competitive policy remedies could actually stifle greater competition. For example, many commercial players strategically allocate investments to multiple preliminary permits and licenses to minimize the high risks inherent in exploration. Restrictions on cross holdings may prevent companies from effectively managing risk and, thus, deter new entrants to the Israeli market.

Solution: Approval of the Tzemach Committee's recommendations, which support export volumes that both encourage future investment and account for Israel's domestic needs, would maximize the probability of greater participation and, consequently, competition in Israel's domestic natural gas market. To the extent that the government seeks additional measures, separate sales by partners in a given field likely would foster greater competition than would occur simply by imposing restrictions on cross holdings.

[8] "Now it's official: Antitrust Authority director general declares the Tamar partnership a monopoly," *Calcalist*, 13 November 2012.

Adopt technical standards that promote greater participation in development offshore Israel

Challenge: The adoption of less commonly used engineering standards for Israel's energy infrastructure may unnecessarily limit competition in the country's natural gas sector

The construction, operation, and maintenance of the gas transmission network primarily are carried out according to the Dutch 3650 NEN Standard. This standard is not as widely used as some of the other international options and already has resulted in production delays and challenges. In late 2003, a dispute over the standards governing the Yam Tethys pipeline created a controversy and resulted in the resignation of Dutch firm GasUnie as the project supervisor.[9] Another difficulty arose in 2004 when the Israel Electric Corporation (IEC) was unable to secure a reliable translation of the Dutch safety standards. IEC Deputy CEO Silvio Vitting criticized the decision to adopt a standard written in Dutch, and IEC legal adviser David Yahav requested that the government adopt a more accessible alternative.[10]

Solution: As the above examples make clear, the Dutch standards serve as an impediment to competition and fail to achieve the balance between flexibility, safety, and cost effectiveness. Israel should reassess the standards for its energy infrastructure and consider adopting a more universal option. Doing so would lift obstacles to market access and ensure that the broadest possible range of firms would be able to participate in Israel's natural gas sector. In addition, by expanding the pool of potential vendors, Israel could expect a more competitive bids process and potentially less expensive energy infrastructure development projects.

OPPORTUNITIES FOR EXPANDED U.S.-ISRAEL COOPERATION

Building upon the extensive record of successful U.S.-Israel cooperation across a range of endeavors, the Chamber supports expanded efforts on oil and natural gas exploration and development, as well as related energy matters. The two nations possess many shared energy objectives, ranging from improving safety standards to achieving greater energy security. The program ideas provided below represent a small subset of the potential opportunities.

Protecting energy infrastructure

Interruptions in energy supply can be highly disruptive and represent a serious security threat for modern societies. Protecting the energy infrastructure and energy grid from physical and cyber attacks is a rising security priority. The United States and Israel might direct existing cooperative efforts on homeland security to include energy infrastructure protection. *The United States-Israel Enhanced Security Cooperation Act of 2012* could facilitate greater discussion and collaboration on anticipating and addressing threats to the energy sector.

Formalizing maritime borders

Border disputes that require extensive arbitration could hinder production and dissuade prominent oil and natural gas companies from operating in the Levant Basin. Already, Lebanon has challenged Israel's demarcation of maritime borders and might give in to pressures from internal factions that claim that some of the already discovered fields fall in Lebanese waters. As new finds increase exploration in the region, it will be critical to forestall such disputes by recognizing and formalizing maritime borders.

Promoting energy security

[9] "Yam Thetis completes temporary take-over of gas pipeline," *Globes*, 4 January 2013.
[10] "Translation troubles keep IEC's gas pipeline project up in the air," *Haaretz*, 12 May 2004.

Both Israel and the United States consider energy security to be a top national priority. Given this shared objective, the two countries could launch a special initiative to identify best practices for leveraging natural gas to achieve increased energy security. Research could focus across the supply chain on technological developments in the transportation sector, as well as policy ideas that incentivize alternative vehicle adoption. In addition, the initiative could establish protocols to share R&D advances, such as a bilateral agreement on testing and standards that would obviate the need for redundant testing and certification.

Advancing regional diplomacy

Situated in the eastern Mediterranean, activity in the Levant Basin carries implications for all Mediterranean countries. The United States and Israel could advance a regional diplomatic effort to focus on joint concerns, such as environmental and safety issues.

Reauthorizing the U.S.-Israel Energy Cooperation Program

The program was founded to develop new energy technologies and to help both nations reduce their dependence on oil. Established as a collaborative program between the U.S. Department of Energy and the Israeli Ministry of National Infrastructures, the initiative has funded promising research and attracted millions of dollars in private-sector investment. In light of the recent energy discoveries, the joint initiative should be reauthorized and expanded to include R&D on natural gas exploration, production, transportation, and use in the broader economy.

Opening a U.S. NGO office in Israel on technical issues

Israel's natural gas sector could benefit from the technical proficiency and expertise provided by the U.S. energy industry through greater participation by U.S. trade associations. For example, organizations such as the American Petroleum Institute (API) study and promote industry-wide best practices on technical topics. API maintains several international offices to help countries adopt API's performance-based standards. Opening such an office in Israel could provide the nascent Israeli energy sector with world-class knowledge.

Launching interagency bilateral collaboration

The United States and Israel should initiate a dialogue among the government entities responsible for energy policy and regulation. This dialogue could be anchored by an annual interagency bilateral conference that convenes leading government officials and industry experts to discuss common challenges and best practices. Such an event would present regulators the opportunity to confer with their counterparts on establishing a modern regulatory framework.

Pursuing joint educational programming

The United States and Israel should facilitate collaboration between leading institutions, including universities, industry research groups, and national laboratories. For example, Ben Gurion University and the University of Michigan recently announced a partnership to collaborate on renewable energy research. This model could be adopted with a focus on natural gas production and its various uses. In addition, the countries might encourage innovation centers at which private businesses sponsor research in exchange for partial ownership of the intellectual property.

CONCLUSION

The U.S. business community stands to benefit substantially from an expanding and increasingly successful Israeli natural gas sector. Prudent public policy can help ensure that precious natural resources are utilized responsibly and to the maximum benefit of the people of Israel. The achievements of Israel to date in expediting offshore development have been nothing short of remarkable, and the Chamber is proud that U.S. companies have served as trusted partners to Israel's commercial ventures and policy makers.

The experience of U.S. energy producers suggests that building on this success will require a regulatory framework characterized by certainty, stability, and transparency. In creating a favorable business environment, Israel can attract the world's leading companies and thereby pave the way for continued progress in executing responsible and growing hydrocarbon development.

The Chamber seeks to contribute to an even stronger bilateral relationship and provides this report to the government of Israel in the spirit of the shared values and interests that have defined the U.S.-Israel alliance for more than six decades.