



COMMONWEALTH of VIRGINIA

Office of the Governor
Virginia Israel Advisory Board

MEMORANDUM

TO: Governor Terry McAuliffe

FROM: Mel Chaskin – Chairman, Virginia Israel Advisory Board

DATE: November 14, 2017

RE: 2017 Annual Review of the Virginia Israel Advisory Board

CC: Distribution List (Attached)

The VIAB contributed to the growth of 128 new jobs in FY 2017. These jobs generated approximately \$7.42 million in revenue and in state tax revenue of \$426,880.00. The board continues to be an effective means of enhancing the relationship between Virginia and Israel. Based on direct and indirect job creation from projects developed by the VIAB (FY 2000-2017) the Commonwealth has historically received 563% return on investment.



Mel Chaskin
Chairman, Virginia Israel Advisory Board

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FY2017

FY2017 REVIEW OF ACTIVITIES

Mel Chaskin Chairman

Chuck Lessin Vice Chairman

November 2017



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Virginia Israel Advisory Board

VIAB OBJECTIVES

The primary mandate of the Virginia Israel Advisory Board continues to be economic development in Virginia. Our goals and strategies are:

- ✚ Facilitating new Israeli company entry into Virginia thereby creating jobs.
- ✚ Working with the Israeli companies already located in Virginia to help facilitate internal growth and expansion via the VIAB extensive network.
- ✚ Leveraging each company's strength to create a multiplier effect for job creation.
- ✚ Place emphasis on job creation in Southwest Virginia in the area of Agro Technology. This will augment a "new economy" for a rural area that has been dramatically affected by the decline in both the tobacco and coal industries.
- ✚ To devote from 10% - 15% of our energies to unique educational and cultural projects.

FY2017 REVIEW OF ACTIVITIES

Summary

1. The VIAB invested a significant amount of its resources in FY2017 to building relationships that will lead to sustainable growth that translates into investment and job growth in the Commonwealth. One key program includes leveraging the MOU that was signed between the Strauss Group and Virginia Tech during the Governor's trip to Israel in July 2016. As a result of the program which took place in January 2017, seven companies presented to a team of Virginia Tech experts and four of these companies visited Virginia within four months of the program.
2. A second major initiative brings the largest private Israeli HMO hospital, Macabbi, into a cooperation agreement with the Carilion ecosystem in Roanoke. The agreement is designed to lead to cooperation in translational research which in turn leads to commercialization in the Roanoke region. Another goal is the creation of a \$100 million new Venture Capital fund that can bring a steady flow of high-quality deals to Roanoke. The build-out of each successful company will take place in Roanoke and thus serve as a sustainable job creator based on innovation.
3. During FY2016, the VIAB invested considerable effort to launch Project Turbine. An Israeli energy company with strong financial backing and success in Israel and Europe is convinced, after having met the Governor in 2016, that Virginia can offer a unique opportunity for entry into US market. The goal of the company is to build multiple facilities of either wind, solar or hybrid solar & wind that will add up to 500 MW of power or more. Unfortunately, Virginia does not offer many wind opportunities. The company is currently identifying and negotiating with potential local partners. Finding the partner has become a prerequisite for successful entry into the market. The VIAB remains cautiously optimistic they will succeed and continues to provide support for the project.
4. EPC, a manufacturer of an onsite waste treatment facility for remote locations, received final approval for activation of their first US unit in Tazewell, Virginia. The company plans to establish marketing, company headquarters and manufacturing/assembly in the region during FY2018 or

FY2019. A major vendor of EPC is also expected to build a production facility in the region based on EPC's anticipated successful sales efforts.

5. OSG of Greenville announced in September 2017 that they will expand their facility and create an additional 55 jobs with the potential for more jobs in the future.
6. Two companies that were part of the Virginia-Israel Life Science Commercialization Center that the VIAB initiated in 2010 in Richmond, ImmunArray and Cupron, continue to grow and expand in Virginia and beyond.
7. A new cooperation agreement to conduct joint R&D projects in Agriculture that will lead to commercialization was signed between Hebrew University and Virginia Tech.
8. The first phase of the Chickpea research at VSU had disappointing results. The VIAB worked with the Secretary of Agriculture to shift the research to Virginia Tech along with modest State funding for Chickpea development. It is now clear that to develop a chickpea that can grow in Virginia's relatively moist climate, a full multi million dollar breeding program is necessary for the development process.
9. During the Governor's visit in July 2016, Tessa Dairy announced a \$500,000 gift of their micro dairy production facility to Virginia Tech which will provide the company with a showcase facility from which they expect to expand into the US. Details have been finalized, and delivery should take place in FY2018.
10. Aquaculture continues to be a major focus for the VIAB. The VIAB initiated Project Jonah, which is projected to be a major transformational project creating 426 jobs in Southwest Virginia. The scope of the project has changed, and there have been delays in raising the necessary capital. The VIAB has voiced concerns about this and the management changes that have taken place over the past two years.
11. Independent of Project Jonah, the VIAB has been working with three other aquaculture companies with proven innovations. The VIAB organized a visit to Israel for Virginia Tech's Aquaculture expert, Dave Kuhn, Ph.D., along with two other Virginia Tech Agriculture experts, for a working visit to Israel in January 2017. The Virginia Tech team visited these companies and others. Four of the companies subsequently visited Virginia for discussion about potential expansion into Virginia.
12. The number of new jobs created during FY2017 is 128. This number would have doubled had Project Sunshine commenced operation as anticipated. The 128 new jobs represent additional tax revenue to the Commonwealth of \$426,880 on a tax base of \$7.42 million.
13. From FY2000 – 2017, the VIAB has been involved with activities adding approximately 2,179 new jobs to Virginia's workforce. These jobs have generated approximately \$74.9 million in state tax revenues. If we discount this amount by a conservative 78% for multiple parties involved in the facilitation process, the amount of tax revenue generated by the VIAB is \$16.48 million which represents a 563% return on Virginia's investment in the VIAB over the past 17 years.
14. The current pipeline of jobs is 434 over the next 1 – 3 years without Project Turbine which we are aggressively pursuing and are optimistic that we will close in FY2018. Project Turbine can bring an additional 1,100 jobs over the next 1-4 years.
15. The State Auditor of Public Accounts completed the VIAB Audit for FY2017 and reported no issues.

ECONOMIC DEVELOPMENT MISSION

ECONOMIC DEVELOPMENT PROJECTS

1. Project Cycle

Disruptive technology that converts municipal solid waste into high-value plastic

The company has developed a breakthrough patented technology enabling the conversion of unsorted Municipal Solid Waste (MSW) into a novel thermoplastic composite material. The company's management has visited Virginia several times, and the Governor reciprocated with a visit to their facility. The key parameters for this project are:

- ✚ \$40-\$70 million+ facility in Virginia
- ✚ Timeline: decision to establish in Virginia was delayed because of the decision to expand their Israeli pilot plant to a commercial size level. Expected timeline for Virginia decision is within 12 months.

Current Status

The company has raised significant funding but decided to expand their Israeli pilot before approaching the US market to fine tune their equipment and algorithms. The VIAB remains very close to this project because of its disruptive technology and potential for Virginia to be the first demonstration plant for the company in the United States.

CEO visits Virginia

We have visited Virginia several times and are impressed with the support we have received. The location will enable legislators and Federal Government officials to view our state-of-the art facility and appreciate the full impact of our disruptive technology.

CEO

104 Jobs

1-4 years



2. EPC LTD opens first US facility in Tazewell, Virginia

An onsite wastewater recycling technology that will serve new recreational park and serve as the company's demonstration site in the United States. EPC and a key vendor of EPC expect to open manufacturing in Virginia within 12 – 24 months.

EPC "bio-disk" system uses an ecologically friendly biosystem to address challenges of rural communities where connecting to the municipal line is cost prohibitive. The bio-disk unit is a scalable system designed for multiple residential clusters of individual homes in residential, subdivision, apartment complexes, condominium, and commercial applications such as hotels, and recreational centers such as parks.



E.P.C Ltd.

The VIAB recognized the importance of EPC's solution for rural America and the quality of the company's management and worked with EPC for many years to help the business define their proper market entry strategy in the Commonwealth.

Current Status

EPC won an RFP from Tazewell to install its system in Cavitt's Creek Recreational Center which up to now has been unable to reach its goal of building revenue generating cabins on the property because of the prohibitive costs of connecting to the main sewage line. As an alternative to septic systems, EPC's system requires much less land and is ecologically friendly.

EPC is also supplying both the cabins and the waste treatment infrastructure that was not part of the original RFP.

Construction was expected to be completed in 2016, but complications due to the terrain created unexpected changes in the design. The company, working closely with the County engineers, overcame all obstacles and received their operating permit in 2017.

Next Stage for EPC

1. The company will establish a marketing and sales organization. The Tazewell facility will be the demonstration center.
2. Begin assembly of the bio disk in Virginia.
3. EPC installed piping and connections at the request of the county using novel products by another Israeli company, Hofit, one of the largest producers and the original inventor of polyethylene inspection chambers, utility holes, and other products for drainage, sewage and water treatment systems. EPC has acquired the rights to sell and manufacture Hofit's products in the United States.



Top: Jeremy Weisman, CEO of EPC **Middle:** Cavitt's Creek, Tazewell; **Bottom:** EPC Waste Treatment Unit in Tazewell, Virginia

25 Jobs

1-3 years

75 Jobs

2-5 years



Left: Installation of settling tanks (2017).

Top: Pat Greene, a Tazewell Administrator with Charles Botwick, CEO of EPC America

Bottom Left: Pat Green turns system on for first time on August 1, 2017

Bottom Right: Virginia Tech experts, Professors (L)Tom Thompson and (R)Joe Macy at EPC vendor site.



“We have been working with Virginia for 17 years on this project! Had it not been for the VIAB and the local Tazewell officials, we could not have executed this project. We are committed to establishing two manufacturing facilities in Tazewell as a result.”

Jeremy Weissman, CEO EPC America

3. Project Turbine

A leading Israeli company interested in building multiple alternative energy projects for solar, wind and hybrid energy facilities in Virginia

The Governor and his team visited Energix, an alternative energy company that builds and operates projects in Europe and Israel. The company wants to enter the solar and energy field in the United States and is interested in Virginia because of its potential and the potential of developing alternative energy.



The Governor with the CEO of the parent company at the Company HQ in Tel Aviv

Financial Strength and other Attributes:

- Strong financial backing from their Israeli “parent” company, Alony Hetz, with over \$1 billion in real estate projects in Washington DC and Northern Virginia. Alony Hetz partners with the Carr Group in Washington, DC.



- Ability and desire to build and operate the facility(s).
- The desire to construct 500+MW of solar/wind/hybrid alternative energy facilities in Virginia, where there is not one wind facility.
- Emphasis on social responsibility.



The company visited Virginia within two months of the Governor’s visit to Israel. The VIAB continues to drive the project bringing together counties, private and public experts in energy, the VEDP, and other relevant groups.

Current Status:

Based on assistance from the VIAB and its Board members, high-level discussions have taken place with interested players. The company has concluded they must team or create a local partnership with a company that can assist with permitting and offtakes agreements. They are in the process of searching for qualified partners. Because of the potential for significant job creation, the VIAB remains very close to this project.

Asi Levinger
CEO, Energix
Speaking in
Wise County



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600 Jobs
1-3 years

500+ Jobs
2 – 5 years

4. OSG announced expansion in Greenville in 2017

The delayed announcement ends with success.

OSG is a specialist glass manufacturer that develops a broad range of glass products, including bulletproof safety glass such as bullet-resistant windows, curved, flat, laminated and insulated.



Revolutionary transparent armor technologies, advanced LCD glass systems (ScreeneX), solar systems and many others have been developed by OSG team to answer customer needs.

Governor McAuliffe visit to OSG

An announcement of OSG's expansion was expected while the Governor visited their facilities in July 2016. However, a few days before the visit an opportunity for the company was brought to them which necessitated the postponement of OSG's decision to expand their Virginia facility.



The VIAB worked diligently with the company to provide the company sufficient time to vet the new opportunity and yet not lose the incentive package that was already presented.



After the agreed upon period that OSG management needed to evaluate the opportunity, the company decided to move forward with their original plans.

A formal announcement of the expansion was made in September, 2017. OSG announced that they would invest \$3.5 million and create 55 jobs within three years.

Other innovative areas for potential expansion:

- ScreenX - Smart window with integrated LCD windscreens
- Silk-Light: Integrated light-driven display system
- Infrared radiation-protective technology
- Anti-reflective glass
- Anti-vandalism glass against various threats
- Light-weight compositions, for weight reduction
- Heavy impact solutions



55 Jobs

1 year

5. Program initiated between Israel's largest private HMO, Macabbi (Assuta) and Virginia's leading HMO, Carilion

Joint investment in early stage companies and the potential for creating a new investment fund of \$100 million.

The VIAB initiated a program where two leading HMO systems in Virginia and Israel will work together to create innovation and research projects.

In recent years, Carilion has reinvented itself adding a new Medical School, Research Institute, a Venture Capital arm and established a partnership with Virginia Tech. With Israel's reputation for medical innovation, a strategic alliance between both ecosystems could offer Macabbi access to the US market and Carilion a leadership position as an innovator.

Some of the goals for a collaboration agreement are:

- ✚ Addressing challenges for rural health care.
- ✚ Establishing a new \$100 million VC fund that could exploit Assuta's dominant position in the Israeli health care system.
- ✚ Access to market for Israeli innovation.
- ✚ Economic development in Roanoke and the region.
- ✚ Financial benefits for both ecosystems through product innovation and Venture Capital activities.
- ✚ Global development for Carilion via Assuta's international presence and activities.

Next Steps

1. Both sides have met, and subsequent internal discussions by each respective organization have resulted in positive responses to move forward.
2. Documents are being drawn up to formalize the relationship.
3. The sides are exploring one or two near term joint projects that will test the waters and lead to expanded cooperation.

35 Jobs

1 – 3 years

Virginia Tech Carilion & Maccabi/Assuta Ecosystems



Top: (L to R) Drs Mike Friedlander, Ari Shammis, Ascher Shumulewitz.

Bottom: Carilion leadership headed by Nancy Agee at head of table on left.

6. Tessa to enter US Market via Virginia Tech

Israeli company to donate \$500,000 of equipment to Virginia Tech Food Science & Technology Department

Tessa announced during the Governor's reception in 2016 that the company would give a \$500,000 mini dairy to the Virginia Tech Food Science and Technology Department at Virginia Tech. The equipment will serve as a teaching tool for the University and a demonstration site for marketing efforts of the company in the US.

Current Status

Details of design and installation requirements are still under discussion. Delivery is expected in Q4 of 2017 or Q1 of 2018.



Plans call for manufacturing and assembly in the Southwest Virginia. TESSA Mini Dairy lines are equipped for a full production cycle including the equipment for receiving and cooling milk, pasteurization, separation, fermentation, and packing of ready products. Apart from these, TESSA Mini Dairy lines include all necessary auxiliary units and equipment such as pumps, filter, and so forth.

8 Jobs

1-3 years

30 Jobs

3-5 years

“Tessa equipment is unique equipment that I have not seen before in the United States.”

Professor Joe Marcy, Ph.D., Head of Food Science and Technology Department, Virginia Tech

7. VIAB initiated Life Science program in Richmond expands

VIAB Life Science program in Richmond results in additional \$10 million of investment and growth in jobs in Virginia

During the Governor's visit to Israel, an investment company, Exigent, announced that they led a successful investment round of \$10 million for **ImmunArray**, a Life Science company that the VIAB brought to Richmond, Virginia, via its program that took place several years ago.

A second Israeli company expanding in Virginia through the VIAB program, **Cupron**, is also growing in Virginia through a licensing agreement with EOS, a company in Norfolk, which produces hospital countertops with impregnated Cupron material which has been proven to reduce hospital-acquired infections (HAI) significantly.

According to Immunity CEO, Donna Edmonds, additional jobs will be created in the coming years.



Donna Edmonds, CEO of Immunaray



30 Jobs

2-4 years

8. Hebrew University and Virginia Tech sign Agreement

Agriculture based program calls for joint projects that will lead to commercialization

Virginia Tech has researched current issues affecting people around the globe. Areas of strength include water quality preservation and enhancement, growing plants in a changing environment, food security in rural settings to name a few.

The **Hebrew University** of Jerusalem's Robert H. Smith Faculty of Agriculture, Food and Environment has focused on gaining maximum productivity with limited natural resources.

Next Steps

- Modest fund raising for four joint projects is a prerequisite for execution of the agreement. Both sides are working to resolve.
- Selection committees will evaluate the various projects that will be submitted based on a "call for proposals.

Other projects

In addition to the formal joint projects, there are other projects that Virginia is exploring that originate from the Hebrew University's School of Agriculture. The following are updates on these projects:

9. Project Paper

This company has developed a proprietary technology for the economically viable industrial-scale extraction of nano crystalline cellulose (NCC) from side streams of the paper industry and wood pulp. The company also develops unique technologies for producing NCC based materials such as high oxygen barrier films for packaging, additives for packaging materials, water-based adhesives, paints and ecologically-friendly foams for composites, transportation, and construction.

The opportunity in Virginia centers around the Shandong Tranlin Paper Company that will establish a \$2 billion manufacturing company in Chesterfield, Virginia or with another potential partner. The VIAB continues to foster a potentially synergistic relationship between the Israeli company that utilizes the waste from a paper producing facility as feedstock for their production facility that could be built adjacent to a paper installation.

10. Project Leaf

The VIAB continues to work with a company that focuses on advancing regenerative medicine by utilizing its proprietary processing technologies to reproduce human collagen which is a protein present in all the body's organs and tissues. It provides the matrix that sustains the body's structure. Until the invention of this product, all of the collagen used in medicine including orthopedics, wound management, cardiology and general surgery, was harvested from dead animals and other sources.



The tobacco plant is the basis for this platform. The resulting product could be a disruptive technology in this field as the alternative is relatively “impure.”

The company has recently raised \$25 million to establish its first production facility in Israel but plans to develop other growing facilities and a production facility in the future in the US. The VIAB will continue to pursue this company even if it is a longer term project because we are sure that the experience of high-quality Virginia tobacco will match the expectations and requirements of the company’s process.

It should be noted that the “tobacco” product itself has gone through an extensive breeding program over many years and while it looks like a natural tobacco plant, it has many sophisticated genetic qualities that differentiate it. The company has expressed to the VIAB that the plant must be grown under the highest quality control standards and by a particular protocol that will be provided to the farmers. Discussions with VDACS has confirmed that carefully selected Virginia farmers can produce a high-quality product according to the required protocols.

10 & 11:
20 - 50 Jobs
2-5 years

11. Update: Project Sunshine... Smart Turnkey Greenhouse

Delay of opening due to upward revision of size, investment and job creation

The VIAB initiative has expanded significantly from the original plan, which has resulted in a delay of about 12 months.

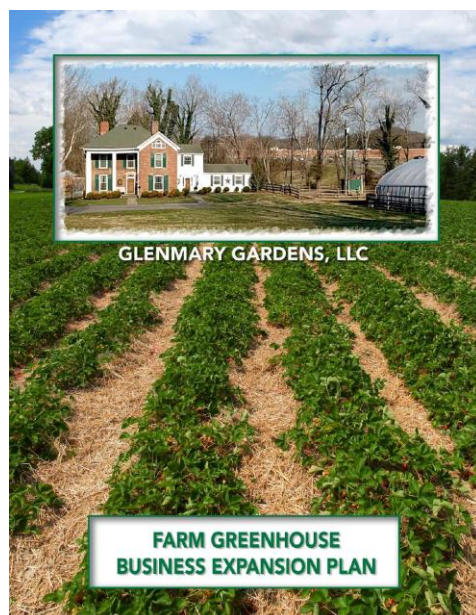
The “super smart” greenhouses will enable the economically viable production of fresh produce 12 months a year.

The key parameters for the project:

- Location of project: Smyth County, Virginia
- Project size: \$25.2 million
- Job creation: 140
- Investment: \$13.7
- Local Virginia farmer/businessman and Israeli company developing project
- Virginia Tech Agriculture experts consulted.



Top: Land under contract for the project. Total amount of 70 acres will accommodate Phase A and B.



Comprehensive business plan

140 Jobs
1-3 years

12. Update: Aquaculture Projects

The VIAB initiated Project Jonah in 2013

The VIAB has identified Southwest Virginia as an ideal location for inland aquaculture production that deploys newer, cost efficient technologies developed in Israel and not yet introduced into the United States. With 92% of fish consumed in the United States imported, the VIAB and experts at Virginia Tech believe Virginia should pursue this company aggressively.

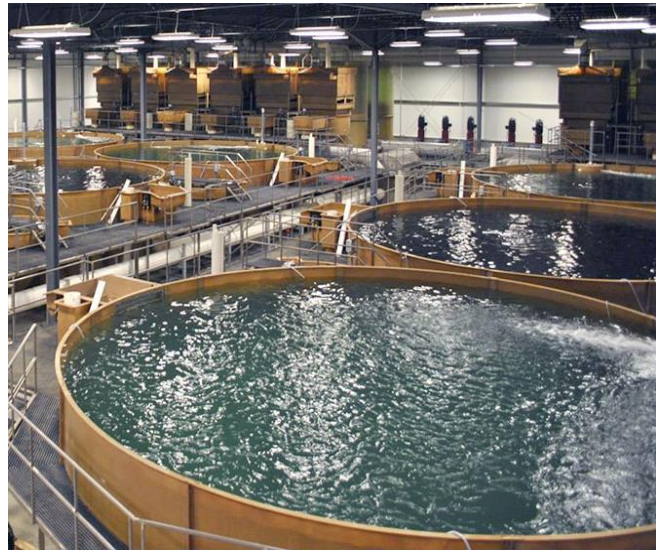
13.1 Project Jonah. The VIAB began an initiative, **Project Jonah**, in 2013. The \$120 - \$150 million project ultimately will create 426 direct jobs and 750 – 1,250 indirect jobs in Southwest Virginia. The project is considered a “transformational project” for Southwest Virginia because it brings a vertically integrated aquaculture business to the region.

By mid-2015, the VIAB had completed significant milestones. The company hired a highly qualified CEO with experience and successes in both fundraising and business development. At the appropriate time, the VIAB transferred primary responsibility for the project to the VEDP which has significant complementary resources critical to secure the project for Virginia. Because the company has not been able to raise sufficient capital to execute Project Jonah, we prefer to take a conservative approach, and not include any new projected job creation from the project at this time.

13.2 Project Zidon. A second Israeli aquaculture company, **Project Zidon**, is considering Virginia to establish a working demonstration project with support from Virginia Tech. The project will not interfere in any way with Project Jonah as they will be growing a non-competing fish. They will incorporate their new, patented and proven advanced technology, professional management, a realistic proposal and a connection between Hebrew University and Virginia Tech. The VIAB has taken the following steps to advance the project:

- ✚ The VIAB organized a visit by Dr. David Kuhn, a Virginia Tech aquaculture expert, to meet with management of the company and their professional experts as part of his professional tour to Israel in January 2017.
- ✚ Leadership from **Project Zidon** visited Virginia Tech in July 2017. Potential locations, investment, parameters, and a possible private-public partnership were

discussed. While still in early discussions, the VIAB sees this project moving forward aggressively and quickly because of the following factors: Virginia Tech’s interest, the company’s vision, quality of management and financial capabilities.



R-L: Dr. Dave Kuhn, expert from Virginia Tech and Project Zidon expert.

30 Jobs
2-3 years

13.3 Project Mega. Another aquaculture project that deploys a “Mega Flow” technology claims a significant reduction in energy usage, which is one of the largest expenses of inland aquaculture farms. Operating in Israel, the company wants to expand into the United States. Since this project is significantly more modest regarding investment and size compared to Project Jonah and yet has important, proven new technology to offer, the project should be viewed as mutually exclusive as the other two aquaculture projects with game changing potential. This project is still in its early stages.

LEAD-HEAD RAS SYSTEMS IS A VERY IMPORTANT STRATEGY FOR REDUCING OPERATIONAL EXPENSES AT RAS FACILITIES. IT APPEARS THAT MEGA FLOW HAS SOME NICE INNOVATIVE FEATURES.

David Kuhn PhD, Aquaculture specialist at Virginia Tech



Dr. Kuhn, PhD and Dr. Thompson, PhD get a close up view of the Mega technology at it's Eilat pilot plant during their trip to Israel in January, 2017

13.4 Project Hatch. The VIAB is in discussions with another Israeli aquaculture company with a unique system for a commercial hatchery. We are discussing potential market entry strategies. Dr. Kuhn has held talks with the CEO of the company who visited Virginia Tech in February 2017. This project is still in its developmental stages.

14. Virginia Tech Experts Visit Israel in January 2017

After the Governor’s visit to Israel in July 2016 and the signing of the MOU between Virginia Tech and The Strauss Group of Israel (50% owners of Sabra Dipping), VIAB activated the MOU. The VIAB initiated a program where seven Israeli companies were chosen to deliver a presentation to a panel consisting of representatives from The Strauss Group, Virginia Tech, and other experts.

The program’s purpose is to identify and assist select start-ups, young ventures, and mature **agro tech** and **food tech** companies to enter and expand in the US market. 19 companies applied and seven were chosen for Phase 1 discussions in Israel. Phase 2 will allow for one-on-one business meetings in Virginia for the selected companies. Four of the seven companies have visited Virginia for professional discussions as a result of the program. The four companies are in other sections of this report. The program is designed as an ongoing program.



Determination L to R:
 Dave Kuhn, PhD
 Robert Williams, PhD
 Tom Thompson, PhD
 Agriculture Experts
 from Virginia Tech who
 visited Israel in
 January 2017

15. Project Bag

Israeli company can manufacture in the US and compete with Chinese Imports

Reusable utility bags have become increasingly prevalent in the US as a result of heightened interest in ecology and conservation. Until now, almost all of these bags are manufactured in China because of the labor intensive sewing of seams.

The VIAB continues to work with this company giving direction and suggestions on how they can build sales in the US to justify building their first manufacturing line. The company visited Southwest Virginia and has

15 Jobs

1-3 years

expressed interest in the construction of a manufacturing line as soon as sales justify the operation. We continue to brief the new Senior VP who is responsible for the expansion efforts.



OTHER ECONOMIC DEVELOPMENT ACTIVITIES

16. Chickpea Research - Update

Reestablishing Momentum for the Virginia-Israel-Sabra chickpea research

In 2010, the VIAB facilitated discussions with Sabra Dipping and Virginia's Secretary of Agriculture about introducing the chickpea crop to Virginia. A successful development program would serve both the interests of the State by creating anywhere between 8,000 – 10,000 jobs, and the interests of a major corporation in Virginia by helping them save millions of dollars on transportation if they purchased their chickpeas in Virginia. VIAB has already secured a verbal commitment for the purchase of these chickpeas if they can be successfully bred.



Research initiated in 2010 did not achieve our goals. The project is now headed by Prof Tom Thompson, Department Head of Crop and Soil Environmental Sciences at the University.

In 2017, Virginia Tech researched best practices in growing chickpeas in Virginia. Prof. Thompson concluded that only a large scale, multi-year breeding program could produce the desired results. We are concerned that based on the first inconclusive research, the company lacks confidence that is required to make the multi-million dollar investment in Virginia that will take from 4 – 6 years to complete.

17. VIAB Teaming Program

The VIAB has identified and addressed an opportunity that leverages the strength of both Virginia & Israel:

Israeli companies develop new technologies in the defense, cyber security and aligned industries and

Virginia offers a large pool of businesses that can provide a path to market for these innovative companies via teaming agreements.



The opportunity: Every Federal Agency must “set aside” 3% of their purchases to companies that fall into a particular category that includes: 8(a) Small Disadvantaged Business; Women-Owned Small Business (WOSB); Veteran Owned Small Business (VOSP) and so on. Companies certified in any of these categories receive certain benefits that level the playing field when competing for Federal Contracts. The Israeli companies that can offer superior technologies can team with these Virginia companies who often lack the ability to develop their technologies.

Once a foothold is achieved, the Israeli company will need a presence in the US and eventually manufacturing and assembly capabilities to satisfy other demands such as Federal “Buy America” requirements.

While the VIAB enhanced the model during FY2016 through a growing “model relationship” between Darkblade (Virginia VOSP) and Semperis (Israeli company), we did not have the bandwidth to execute a full program as we had hoped in Hampton Roads. We hope to implement the program in FY 2018.



18. Update: Direct Flight between Dulles and Israel

The VIAB, Metropolitan Washington Airports Authority (MWAA) and Fairfax County have worked together for years to secure a direct flight between Israel and Dulles. Clusters of Israeli companies tend to grow wherever there is a city connecting it to Israel via a direct route.

The VIAB has aggressively approached this opportunity in 2016 highlighted by the Governor’s meeting with EL AL executives in July 2016 during his visit to Israel.

Outcome: EL AL is appreciative of the quality research that has been provided them and confirmed that Virginia is on the short list for future route decisions.

Activity in FY2017 and FY2018

While United remains uninterested, EL AL began an additional nonstop route to Miami. We remain on the shortlist.

An Israeli businessman, Amir Neeman, who moved from San Francisco to Virginia, contacted the VIAB and offered to assist in our challenge by using successful tactics that he used to help secure the non-stop flight between SFO and TLV. The VIAB will continue to work in close collaboration with Amir.



19. Teaming and Leveraging with Fairfax County

The VIAB leverages our contacts throughout the Commonwealth with the Fairfax County Economic Development Authority. We team on several programs and initiatives with an emphasis on companies in the Defense, Homeland Security and Cyber Security areas. We team and collaborate with each other at different times and with different intensities. Companies we have worked together with over the years:





20. Non-Dilution Grants from Israeli Sources

20.1 BIRD Foundation Grants

The BIRD Foundation provides up to a \$1 million grant per project for joint R&D projects between an Israeli company and a US Company. The VIAB uses this as a tool to attract Israeli companies to Virginia by offering to locate potential partners for Israeli companies. While this does not result in a significant number of jobs in the short term, it does provide potential funding opportunities for Virginia partnering companies as well as future growth in the Commonwealth.



20.2 Israel Innovation Authority

The IIA is similar to the BIRD Foundation in that it promotes Israeli innovation via joint programs between an Israeli company and a foreign company. This fund, however, will support 50% of the Israeli company's development budget and not the US partner's. The US partner will have to be either self-funded or funded by state, local or private funding. There is no limit to the amount the Israeli company can receive.



The VIAB works closely with both of these sources of funding and can assist Virginia companies to benefit.

21. Retention Activities – Zim Integrated Shipping

Over the past few years, Zim management has turned to the VIAB for assistance in resolving several issues: 1) Visa issues 2) A retention issue that involved 400 jobs and 3) Assistance to address a problem that affected their activities in Port of Oakland in California. The VIAB guided the CEO to a resource within our network that helped the company deal with those problems.



The company in Norfolk hired a new CEO in the fall of 2015. After the VIAB proactively met with the CEO, it was agreed that the VIAB would arrange a "good will" meeting with either the Governor or the Secretary of Trade and Commerce. We continue to try to coordinate the meeting with the new Secretary of Trade and Commerce, Todd Haymore.

CULTURAL & EDUCATION PROGRAMS

22. Virginia – Israel Minds in Motion Program

Initiated by the VIAB and the Richmond Ballet and now in its eighth year

Minds in Motion is a program that teaches fourth-grade students from a Jewish and Arab community discipline, dedication, and self-awareness by leading them together through a series of choreographic movements which must be memorized and expanded upon in each class session. The program is not a dance class, but a way to teach students the benefits of applying themselves to a task involving both mental and physical challenges. The program is an outreach program of the Richmond Ballet.

The Virginia-Israel Program is unique because of the following attributes:

- Encourages the development of **expressive participation skills concentrating on creativity, self-confidence, focus, and dedication**
- Fosters improvement of interpersonal skills building on values of cooperation, mutual respect, and self-awareness
- Nurtures an understanding and appreciation of working towards the achievement of a challenging physical and mental goal
- Promotes relationships between children of all backgrounds, which is particularly impactful in the Middle East
- Guides MIM students to unite beyond stereotypes, which is a meaningful message for Jewish and Arab participants
- Informs a more compassionate community with cooperative experiences as students practice towards a unified performance goal and moving in unison
- Breaks down social boundaries and lays the groundwork for collaborative dialogues.



Approximately 400 students participate in this compulsory program

23. Virginia Israel Cultural Event to help fund Minds in Motion

The most challenging aspect of the Minds in Motion Funding is sustainable funding

One of the most difficult aspects of the **Virginia Israel Minds in Motion Program** is securing sustainable funding. Mr. Thomas Smith, the CEO of “Binns of Williamsburg,” offered to assist with a program that would encompass both a unique cultural event that would also serve as a fund raiser. Once the VIAB

explained the program and its goals to Tom, he embraced it. He suggested a unique approach: He secured the agreement of a group of women artists from Israel to donate their work for a fundraising event that will take place in Virginia (either Williamsburg and/or Richmond) to raise funds for the Minds in Motion Program.

The artists from Israel agreed to donate their art that will be auctioned off with all of the proceeds earmarked for the Virginia Israel MIM program. Highlights of the event:

- ✚ The event will be held in March 2018 in coordination with Binns of Williamsburg and the Richmond Ballet.
- ✚ Thomas Smith and the Richmond Ballet are organizing the event and will leverage their respective followings.
- ✚ We anticipate that 60 - 80 women artists from Israel will donate their work and come to Virginia for the event at their own expense.
- ✚ The VIAB will help coordinate other cultural events such as meetings, town hall type events, and home hospitality to introduce the Israeli women to the Virginia community as a cultural event.
- ✚ The proceeds from this event will be donated to the Minds in Motion Program for ongoing activities.



Thomas Smith, CEO of "Binns of Williamsburg and mentor of program.



Introducing Tom Smith to the Israeli Minds in Motion Family: L to R: Michael Dinitz, Hadar Timor, Tom Smith, Orit Katz, Ralph Robbins, Jeremy Weissman.

Tom discussing the program with an artist in Israel



24. Virginia Tech Student Program with Amdocs

VIAB initiates Capstone program between Virginia Tech Students and Global company Amdocs.

Virginia Tech

The Center for Business Intelligence and Analytics (CBIA) at Virginia Tech offers a Master of Science in Business Administration with a concentration in Business Analytics (MSBA-BA). This program provides a rich, innovative and multidisciplinary analytical perspective by admitting students from non-business backgrounds (engineering, computer science, statistics, sciences, policy studies) and students with business backgrounds including business IT, marketing and finance. The curriculum was developed because Virginia Tech is a leader in engineering, sciences, and business. Students in the MSBA-BA program have the skills to address corporate challenges poised in capstone projects and have a working knowledge of business issues and analytics to develop a business case that will have a high return on investment for Amdocs.

Amdocs

Amdocs is a leading software & services provider to the world's most successful communications and media companies. As their customers reinvent themselves, they enable their digital and network transformation through innovative solutions, delivery expertise and intelligent operations.

Amdocs and its 25,000 employees serve customers in over 85 countries. Listed on the NASDAQ Global Select Market, Amdocs had revenue of \$3.7 billion in fiscal 2016.

Given that Amdocs usually works with high-level Tier 1 schools such as MIT and Wharton, their decision to work with Virginia Tech and to financially sponsor the program is a testament to the quality of the students and staff at Virginia Tech. The VIAB will offer support to the program both in Virginia and in Israel.



Virginia Israel Advisory Board

GOALS FOR FY2018

1. To finalize agreements to develop two projects in Southwest Virginia: Smart Greenhouses and Project Turbine. Both projects can bring 100's of jobs to SW Virginia within 1 – 3 years.
2. Strengthen the bonds between Virginia and Israel in the Agro Technology field by executing the new agreement between the Strauss Group and Virginia Tech.
3. To develop at least two projects with an investment of between \$5 million - \$10 million each that will result in a total of between 50 and 100 new jobs in FY2018.
4. Finalize agreements on at least one aquaculture project. At the same time, we will continue to work with Secretary of Trade and Commerce Todd Haymore to monitor the progress of Project Jonah which will go through a critical period in Q3 2017 when the VECEDA conditional grant is due to expire.
5. Generate 20 qualified leads, which the VIAB will develop in cooperation with other State Agencies such as the VEDP and the County EDAs. Based on experience, we know that we have to screen seven targeted companies on average to get one qualified lead with above-average potential for growth in Virginia.
6. Expand the “teaming program” with the goal of finding partners for three additional Virginia companies.
7. Facilitate and activate the agreement between Macabbi and Carilion.
8. Facilitate the Cultural program with Israeli women artists that is also a fundraiser for the Virginia-Israel Minds in Motion Program.
9. Facilitate the Tessa dairy equipment delivery to Virginia Tech.

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