

Ohio-Israel Agricultural & CleanTech Initiative (OIACI) and CleanTech Advisory Committees Meeting Agenda Wednesday, May 26, 2021 11:00 AM-12:30 PM Via Zoom Meeting Report

45 Zoom Attendees including Advisory Committee Members and Guests:

Ben Baskin, Jacob Bassiri, Katie Bauer, Howie Beigelman, Brad Bergefurd, Dick Bogomolny, Andrew Borst, Don Branson, John Buck, Hanan Caspi, Phil Cassidy, Bob Cohen, Sam Custer, Inon Elroy, Jenna Friedberg, Karl Gebhardt, Chris Gibbs, Brian Gwin, Eyal Harel, Zvi Herman, Amanda Hill, Sarah Horowitz, Wendi Howell, Tracy Intihar, Senator Kunze, Justin Marotta, Fred Michel Jr., Israel Nitzan, Gary Pierzynski, Janine Rybka, Senator Antonio, Zion Shemer, Steve Slack, Dave Smith, Gene Steiner, Bryan Stubbs, Tim Sword, Itzik Tzur, Shannon Vanderpool, Yael Vodovotz, John Werkman, Sara Zeigler

1. Negev Foundation President Welcome: Sam Hoenig

Sam introduced Karl Gebhardt as Incoming Chair of OIACI Advisory Committee.

2. OIACI Advisory Committee Chairperson's Welcome and Presentation to outgoing Chairman Chris Gibbs: Karl Gebhardt

Karl thanks everyone for their participation, from near and far.

He explains his history with the committee, being involved for a long time and how it was originally focused on Agriculture, but added CleanTech based on some of the issues faced here in Ohio and with the expertise in Israel.

He has been to Israel twice, we have an abundance of water here in Ohio and when you look at a place like Israel, where you see the demand for water with the supply being a lot less, they have to address those issues, even though we have an abundance of water in Ohio, we can utilize these processes and techniques here.

Karl then spoke about Chris Gibbs, who stepped in as Chairman 12 years ago, has taken it through an expansion of the agricultural area and adding through CleanTech. Karl says that it is an honor to follow Chris in this role, as Chris was instrumental in putting together 3 trade missions to Israel and is a cattle farmer himself and was instrumental with the Initiative's work with cattle genetics.



Sam continues with announcing a special commemoration to Chris' chairmanship and expresses our deepest thanks and appreciation for all the time, energy and effort Chris has put into the initiative.

Chris: thank you to all the members, Karl is going to be great. Looking forward to serving with you.

3. CleanTech Advisory Committee Chairperson's Welcome: Steve Slack, OSU Prof. Emeritus, Wooster, OH

Steve: the last 15 months have been difficult due to the pandemic, and the CleanTech Initiative has also felt this impact. Nevertheless, we have continued to make progress. Woosh program is expanding, which will lead to clean water fountains in schools. There is a lot on the horizon.

The conference and a seminar that had been pushed back should be able to happen, in person, hopefully soon.

New ideas: workforce development training program, this initiative has a history of finding opportunities like training exercises, to benefit both countries. We have a strong bi-national record with financial benefits on both sides. I look forward to expand on our record of excellence.

4. State of Israel Acting Consul General, Greetings: Israel Nitzon, New York, NY

Israel: As we slowly begin to reopen following the COVID-19 pandemic, we are updating our diplomatic agenda, and we are discussing the exact topics – environmental, innovation, food security, water security, agricultural innovation, technology and CleanTech – that will be discussed in this meeting. We hope to host the governor's [Ohio] visit to Israel to discuss the wide and diverse collaborations.

Thank you to OIACI for making meaningful connections between professionals in Israel and in Ohio. This is key for building our solid relationship.

5. DSA Director's Welcome: John Werkman, Chief, Business Services, Columbus, OH

John: On behalf of Director Lydia Mihalik and the State of Ohio, we welcome and thank Israel Nitzan and Inon Elroy, Economic Minister to North America, and all the speakers today.



We really appreciate the partnership with OIACI, The Negev Foundation and Sam in helping advance economic progress in both Israel and Ohio.

Israel was Ohio's 27th largest export market in 2020, accounting for more than \$180 million dollars' worth of products sold to Israel. We imported \$154 million dollars of products from Israel in 2019. Clearly, we have a mutually beneficial trade relationship.

There are currently 9 known Israeli corporate investments in Ohio, the largest one being Teva Pharmaceuticals in Cincinnati, Ohio, with about 400 employees.

Furthermore, to strengthen Ohio and Israel's ties, in late 2020 DSA added an in-market contractor in Israel to conduct market research.

Cleveland, Columbus and Dayton Ohio all have formal sister city relationships with Israeli cities.

March 2020 Governor Dewine, the DSA director and other directors met with Ambassador Danny Dion and there are talks on more diplomatic meetings coming up.

Presentations:

6. The Israeli Water Ecosystem & Trade, presented by Inon Elroy, Economic Minister to North America, New York, NY

*PowerPoint available, please ask Stephanie Sumner for an electronic copy.

Inon: Israel is so fortunate to have partners like you, The Negev Foundation is always willing to work with us on all of our ideas.

In Israel: Water Technologies, Agriculture, Health & Life Science, New Media and Internet and Cyber Security are the most important.

60% of Israel is desert, an arid environment, therefore, this is the main challenge we have to deal with.

Although the population of Israel has increased significantly, Israel has been able to stay in the same general rate of water consumption since 1964. The only way this was able to happen is through efficiency and large investment in R&D and productivity.

Israel is so efficient, we are able to export our water to Jordan, under the peace treaty with Jordan.



Israel was able to achieve this success with water through:

- Educated society
- Water belongs to the public
- Water management and planning
- Water is separated from politics (as much as possible).

Water innovation includes seed clouds, capturing rain and reusing it, IOT water management, leak detection methods and cybersecurity technologies.

Israel has over 180 innovative water companies.

We support Israeli companies on every level.

Israel also has 60+ international agreements and over 300 leading corporations that have development and manufacturing centers in Israel.

We just want to continue to encourage and support Ohio and Israel partnerships.

7. BlueGreen Water Technologies presented by Eyal Harel, CEO & Co-Founder

Eyal: Thank you to The Negev Foundation for helping us with our first steps into the United States.

BlueGreen Water Technologies is a leader in Water Tech.

In Ohio, you are very familiar with the issue we deal with, removing bacterial infections in water bodies. We are dealing with 60 infected lakes around the world.

With this infection, the water becomes unusable – it becomes toxic – you can't drink the water, you can't recreate in it and you can't irrigate with it. You can't even breathe near the infected water because the infection is airborne. It is a catastrophe, an environmental and health hazard and turns into an economical problem.

Ohio defies the rule that it only blooms in summertime – when ever the water wasn't freezing – it was blooming! All of Ohio's main water bodies are affected by these blooms.

The rich soil found in Ohio is probably the main culprit. Whatever is good for agriculture is also good for the growth of the toxic algae.



So BlueGreen Technologies is the first company in the world that is actually treating lakes and oceans. We have developed products that are USDA approved and the Ohio EPA and others, for use in drinking water and in any body of water – no matter the size or shape.

Currently, primary markets are in Israel, United States, China and South Africa and Russia.

The treatment is very easy and can be done manually, from a boat or aerial application.

Chippewa Lake, in Ohio, was our first project in the US, with help of Sam and The Negev Foundation, this lake was basically closed to the public since 2014, due to toxin levels in the water. It was a major problem for Medina County.

After Medina had to reject all the offers to help the problem, ranging from half a million to \$1.8 billion due to inadequate funding, we thought it would be a good marketing event so we did it pro-bono.

Beginning in August 2019, we treated the lake, it took 25 minutes, and that afternoon the beaches were open and the lake has remained clean ever since then.

After this success, we made Ohio a center of our operations, we opened our first and only manufacturing facility, partnering with SuperiorFlux.

8. Superior Flux & Manufacturing Inc. Ben Baskin, CEO Cleveland, OH

Ben: Thank you to Sam, without whom we wouldn't be here, and of course, BlueGreen Technologies.

We are the contract manufactures of BlueGreen. SuperiorFlux is a family-run business. We make a specialty chemical called Flux, which is used in metal joining.

The met a man in a synagogue who said they were looking for someone who could do "heated-dry manufacturing." As a chemical manufacturer, our name came up.

But of course, anything that is involved with agriculture or lakes or environmental, always ends up with Sam Hoenig, who then persuaded us to get involved.

When we just got started really manufacturing this product, COVID hit. We thought there was no way it was going to developed during COVID. As a testament to the product and how it solves a real serious problem, BlueGreen got busy really fast.



We are now getting new equipment, adding on to our building and looking to expand, and hiring even more employees to work on this product.

9. Groundwork BioAg, Amanda Hill & John Buck, US Sales in New Bloomington, OH

John: We are actually working right now; it is Farming Season. The farm that we are on right now, splits the divide for water that goes north to Lake Erie and water down to the Gulf of Mexico.

Amanda and John represent the entire United States for Groundwork BioAg. Since, COVID hit no one could really travel in from overseas so we have been doing it all by ourselves.

Groundwork has successfully received more funding of \$11 million to grow, worldwide. Growth in the United States has been good. We never stopped travelling within the US and doing trials and research.

2021 production in Israel has been ramped up.

Tradeshows are going to start again in July, which is great for Groundwork to spread the word.

Amanda: GroundWork BioAg decided to partner with Corn Warriors (a reality/documentary TV show). Groundworks is now sponsoring the Corn Warriors Show. We are also sponsoring one of the farmers that is on the show, Corey Atley (out of Cedarview, Ohio). If you are interested in seeing some of this, you can view it through Corn Warriors' Facebook page. And Corey farms lots of land owned by the Governor Devine so we have a direct link to the Governor

Also trying to see how Groundwork can be a part of the Carbon Sequestration Program (Carbon sequestration is the long-term removal, capture or sequestration of carbon dioxide from the atmosphere to slow or reverse atmospheric CO2 pollution and to mitigate or reverse global warming).

Groundwork is also working with the Stateler Family Farm Demonstration Farm for water quality testing and soil testing

(https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/newsroom/features/?cid=nrcseprd1338410), which is part of the H2O Program within Ohio (https://h2.ohio.gov/).



10. Bunker Hill Cheese Co. - Ezra's Dairy, Millersburg, OH, presented by Dr. Sarah Horowitz

Sarah: Bob Troyer, CEO of Bunker Hill Cheese Co. couldn't be here today because, in addition to being the CEO he is back to being a Plant Manager and Cheesemaker!

A few years back, Gad Dairy, the 3rd or 4th largest Israeli Dairy, were exporting their products to the United States, was looking to partner with a US cheese manufacturer so they didn't have to export dairy that required refrigeration. They didn't think of Ohio – they look at the East Coast and West Coast – but we heard about the opportunity and introduced them to several Ohio dairies that were interested in partnering with them.

They chose Bunker Hill as the best match for them. They created a joint-venture called Ezra's Dairy and started manufacturing Israeli-style feta cheese for distribution throughout the US.

Last year, in 2020, their sales increased by 14% (despite the pandemic) and so far in 2021, they have increased their sales by 11%.

Looking to the future, they want to further increase their markets by reaching out to the niche market of the Jewish religious community in New York City by implementing a stricter Kosher certification. This entails using a special milk, called Israeli Milk, which doesn't exist in Ohio, so they are looking at other states.

11. Questions or Comments for any of the Presenters?

David: A question about the SuperiorFlux product: does it contain copper sulfate? Because that is very toxic and has environmental impacts on the lake.

Ben from SuperiorFlux: The product we are making does not contain copper sulfate. And it specifically does not contain that for the reasons you are discussing.

Eyal from Bluegreen: For Chippewa Lake, we use Lake Guard Oxy which has the active ingredient of sodium bicarbonate which generates the active ingredient hydrogen peroxide. It leaves nothing in the water. This is the preferred product of most states, including Ohio and Florida. Lake Guard Oxy is the only approved product for use in Florida's natural waterways. We are not bleaching the algae, we are activating the biological chain reaction within the toxic species, with 24-48 hours the entire species have collapse. Chippewa is 330 acres of lake, it took less than 1 ton of Lake Guard Oxy and took 25 minutes and the response was immediate.



California has also recently approved Lake Guard Oxy use: https://www.water-technologies-lake-guard-oxy/.

12. Advisory Committee Input – Open Session led by Karl Gebhardt

Dick Bogomolny: The Foundation was started a little over 30 years ago to help support the development of high-tech agriculture for Ramat Negev, in the desert. This area was selected because it has 2 different types sand up against each other: one sand has a crust on top of it and the other does not. The two different kinds of sand need to be worked on separately. The work that was being done there was being done to use brackish water from 3,000 feet down underneath the desert. They discovered that there is a limitless supply of brackish water here. But if you use that water to irrigate plants, the plant leaves would die.

So, then Israel developed technology to desalinize water in such a way that the water was pure. With the pure water, they then needed to add nutrients back in it for the crops, and then they realized they could selectively put back nutrients for certain crops – creating different water for different crops. As a result of these developments and technologies, Israel became a supplier of water to Jordan and other countries. And the brackish water technology is still used – brackish water still develops the sweetest fruits. The original technology that The Negev Foundation supported over 30 years ago is still in use alongside al the newer developments and technologies.

Now, in Ohio there are chemical runoffs in the water that are causing the algae problems we've heard about early in this meeting. With the help of Israeli technologies, this toxic runoff water can be cleaned.

All of this has happened over the last 30 years and it looks like Ramat Negev and other places in Israel are going to keep developing new technologies and applications that Ohio farmers and communities can use.

All of this is from Sam and Sarah's hard work in connecting Israel and Ohio.

Sam adds: this initiative was the brainchild of the late Senator Voinovich; he asked us to create this to help a "highway" between Ohio and Israel, particularly with agriculture.

Suggested Topics:

• Workforce/Training Development Program between Ohio and Israel: we have done some work in this in the past, and those who went on this program, come back and were able to use it in the industry and even open their own businesses.



- We would like to bring back this opportunity, primarily for Ohioans studying agriculture and water technology, sending them to Israel and linking them with the Kibbutz Movement in Agriculture and with companies working in Water Technologies because Ohio students don't have as much of an opportunity to express what is going on internationally with new technologies and sciences. Israel is a springboard for companies all over the world.
- O Hopefully we will receive the funding we are asking from the State of Ohio to put the program in place; to get, over the next 2 years, 20-25 students over to Israel for a 4-5 months practicum, but it can only happen if the funding comes through from the state.
- Expanding outreach: We need to get this information out there better, how can we convey our message and encourage dialogue. We need more opportunities, like we have today in this meeting, to participate in discussion with people 6,000 miles away or 6 miles away but can't all meet up in person. Maybe through our university contacts and government agencies we work with (like DSA and the Department of Agriculture, etc.) can help. Maybe we can create a committee around this to find more opportunities.
 - Amanda from Groundwork: she and John will help with social media and podcast, etc. as much as they can. They can connect us with the people who help with Corn Warriors.
 - O Zvi Herman: Capacity building and exposure to people, especially young people, to diverse ecosystems and ag technologies. Israel has accumulated a lot of experience around this. We should consider joining forces, as Ohio and Israel, to partner or work with a third country. It is not easy, but as the Israeli experience with this shows, the private and government sectors might come along too. This definitely has many opportunities in terms of training. And in dealing with climate change, even places with enough water, like Ohio, will have to adjust to climate change. I am part of the team and I am at your disposal, in anyway I can help.
- New and Ongoing Projects: We have new and ongoing projects that we will continue to work on over the next 2 years.
 - One of which, that we are already working with, is a company called Woosh. They manufacture, what we call here, a drinking fountain. This is a new water dispenser system to put into schools.
 We got a grant from the Cleveland Foundation to do this and are also soliciting support from a variety of different sources. 3 schools



in Cleveland will have this system put in. There is a device in the center that sterilizes the bottle before the water is dispensed. The water is pure, no contaminates – either organic or inorganic contaminates. So, the students walk away with pure and clean water. It is a dynamic program, and there are already ones in Dayton, Ohio and in Florida. This is a unique opportunity. The main objective for us is to get Woosh to nest their operations in here in Ohio to manufacture this and other products they have in the works and for distribution.

- Another project is the Ohio-Israel Water Conference, we are working with the Consulate and the Economic Mission in New York and with DSA.
- We would also like to reinitiate what has been successful in the past, the Kosher Seminar for the Food Industry.
- And expansion of workshops in general.
- We need our committee to bring us ideas and issues. Our ideas come from your ideas and from the needs of the State. Please communicate with us with whatever you think is important and what we should be working on.

Adjourn 12:30P.M.