



# Illinois Association of Aggregate Producers

The Aggregate & Industrial Minerals Industry is Building Illinois' Future

## IAAP Members Learn About Thelen Sand & Gravel's Solar PV System

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October  
2020

Steve Thelen and Dan Shepard welcomed IAAP members to the Antioch, Illinois mine on a bright sunny day in order for us to hear about the long road traveled and challenges overcome that are now resulting in ongoing electricity cost savings, sustainability advantages, and associated marketing benefits of solar power. On hand for the presentation and to answer questions as well were Dave Wilms, Karl Huber, and Chad Sorenson from SunPeak, the IAAP member company responsible for the engineering and construction of this solar system.

Three years ago, SunPeak began working with Steve Thelen to design a 2 MWdc system, one of the largest of its kind in Illinois, that could take advantage of financial incentives and tax credits to offset some of the construction costs and ultimately provide up to 70% of the mine's needed electrical energy during peak sun in the summer. The 7,260 solar panels sit atop fixed racks covering 7.5 acres of mined land that was filled with compacted clean construction demolition debris (CCDD). This has proven to be a perfectly stable, sustainable use for this kind of land.



Mining companies may be skeptical about undertaking a project like this; however, Steve Thelen said, "I wake up every morning knowing I did the right thing." The journey from concept to construction presented some significant challenges, according to Thelen. Foremost was working with the utility company Commonwealth Edison as they all navigated State rules and regulations to gain approval for the very first privately developed solar PV system for this utility company. ComEd engineers were challenged to understand and integrate this behind-the-meter system and manage potential electrical spikes as the solar electricity flows back into the grid on weekends and during the winter

when the mine is not operating. Because this system makes the mine an electrical generator, Thelen Sand & Gravel receives credits towards future electricity purchases when mining equipment is running and power needs to be provided by Com Ed to meet their demand.



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Dan Shepard oversees the project for Thelen. He outlined the costs of construction, as well as credits and incentives utilized, and significant electrical cost savings that resulted in an eighteen month payback timeline with a cumulative cash flow internal rate of return (IRR) of 88%. The company chose to utilize upgraded solar panels to maximize the Solar Renewable Energy Certificate (SREC) credits. Additionally, Thelen Sand & Gravel has enhanced its brand by undertaking this project and garnered positive feedback from local officials, employees and the community at large.

SunPeak takes advantage of European technologies and supply chains to bring advanced solar products to their customers, according to the company's president, Chad Sorenson. A mining company's solar journey begins with an analysis of recent energy bills in order to determine the correct size for the solar PV system and available incentives to help predict the return on investment.

For the Thelen project, battery storage capacity was not necessary, because the mining equipment does not run at night, and utility companies reduce energy reimbursement rates if the system oversupplies the company's needs in a given year. Sorenson acknowledged that the investment tax credit is on schedule to decrease each year, but customers can lock in the current rate before construction begins, and the State's SREC account is currently depleted. State Senator Craig Wilcox (who attended this field trip) said he expects the Illinois legislature will address this appropriation in the coming months. State Representative Tom Weber also was in attendance.

Karl Huber, engineer for SunPeak, answered participants concerns about construction, ongoing maintenance and degradation of the solar panels over time. During the first thirty years these solar panels are in operation, an 8% reduction in efficiency will be realized the first year but thereafter each year will see only 1/2% reduction. Thirty year-old panels will be operating at 85% efficiency. Components may fail but recommended maintenance is generally limited to warranty replacements. Huber has never witnessed damage to their panels from hail or heavy rain and a lot of site engineering goes into determining the placement of support posts and panel angle to reduce potential damage. Dust accumulation does not significantly reduce panel efficiency and generally washing the panels to remove dust is not recommended because scratches may occur that degrade the panels; however, bird poop should be removed because it blocks the sun from entering the photovoltaic cells. Steve Thelen said, "When a thunderstorm comes through in the night, someone has to reset the system in the morning by pressing a button." Off-site monitoring of the system is done by SunPeak and they alert Dan Shepard when something goes wrong. Huber said in the United States, solar panels are not being recycled yet. They are too new and have not reached their end of life but recycling has begun in countries with a more mature solar infrastructure.



Learn much more about solar energy benefiting mining companies on the IAAP website.

<https://www.iaap-aggregates.org/solar-energy.html>

## Congress Passes FAST Act Extension to Continue Highway Funding Through the 2021 Construction Season



Hours before federal spending authorization was set to expire, the Senate passed a continuing resolution which funds most federal programs through December 11th and extends the FAST Act surface transportation funding program through September of 2021. The legislation, which was quickly signed into law by President Trump, also provides a \$13.6 billion transfer to the Highway Trust Fund which is projected to keep it solvent through the 2021 fiscal year. When it became apparent Congress would not pass a multi-year surface transportation reauthorization bill prior to the election, the IAAP and other construction industry groups threw support behind the one-year extension to provide IDOT and other state DOTs certainty in planning their 2021 programs. We continue to urge Congress to include additional funding in the next COVID-19 relief package to backfill motor fuel tax shortfalls caused by the pandemic.

### IDOT Releases Annual Program for FY 2021

IDOT released today the Fiscal Year 2021 Annual Highway Improvement Program, outlining spending of \$3.150 billion. This is for FY 21 and represents the current year's plan out of the \$21.26 billion included for highways in the multi-year Fiscal Year 2021-2026 Proposed Highway Improvement Program. More details are available here: <https://bit.ly/3lpO09k>.



Illinois Department  
of Transportation

### Webinars and Educational or Training Videos from IAAP Members

During this pandemic, companies are adapting to the education and training challenges for their employees by utilizing virtual learning.

Some IAAP member companies may host webinars, a YouTube channel, website, or other platform to convey information to people working in the mining industry. IAAP has been collecting links from members such as the law firm of Conn Maciel Carey, Clanin Marketing, ISCO Industries and RESPEC and placed them on a webpage at [www.iaap-aggregates.org/webinars-and-videos.html](http://www.iaap-aggregates.org/webinars-and-videos.html)

If your member company offers similar services free of charge and is not listed here, contact Shawn McKinney ([shawn@iaap-aggregates.org](mailto:shawn@iaap-aggregates.org)) at the IAAP. He will make sure all IAAP members know about it.

# IAAP Annual Golf Outing

A beautiful day welcomed 144 golfers to the September 17th Golf Outing held at WeaverRidge and Coyote Creek golf clubs in Peoria. Due to the strong support of everyone attending, this outing raised \$8,580 for the IAAP Political Action Committee. PIE Committee members sold 50/50 raffle tickets raising a total of \$1,116 for the IAAP's Rocks, Minerals & Mining Workshop for Illinois teachers.

This golf outing offers a unique opportunity to have fun and visit with friends in the industry. Using a scramble format, the event proved to be highly competitive once again. In addition to golf, member companies sponsored challenge holes at WeaverRidge, and golfers at both courses could win numerous door prizes. The 50/50 raffle drawing, with a prize of \$705, was claimed by Tony Fiorentini (Dimond Bros. Insurance) who donated half of it back to the PIE Committee.



Despite COVID-19 restrictions that prevented gathering for the traditional dinner and trophy awards ceremony, everyone agreed it was a really fine day to be playing golf. View the results video and pictures from the outing on the IAAP website [www.iaap-aggregates.org/golf-outing.html](http://www.iaap-aggregates.org/golf-outing.html).

## WeaverRidge Results

1st Place  
Howell Tractor & Equipment  
team of Todd Demoss, Aaron  
King, and Mike Heuser

2nd Place  
Scott Malpasuto, Blake  
Donaghue, Dale Howard, and  
Tim Theobald with Hanson  
Material Service

3rd Place  
Nick Pyszka (Tema Isenmann),  
Jimmy Johnson & Scott  
Napiecek (RB Scott), and Steve  
Novak (Hanson Material Ser-  
vice)

Longest Drive at #1 – Ridge Ackerman (Martin Equipment)  
Closest to Pin at #8 – Zach Zmudka (LafargeHolcim)  
Closest to Pin at #12 – Dan Ristow (WestSide Tractor Sales)  
Longest Putt at #18 – Vince Caputo (Ozinga Materials & Logistics)

## Coyote Creek Results

1st Place  
Troy Kutz, Josh Quinn, Dan  
Johnson (Bluff City Materials),  
and Jason Zeibert (Finkbiner)

2nd Place  
Mike Maynard, Brad Bruins,  
Todd Hoffstater (TCI Manufac-  
turing), and Chad (Mill Creek  
Mining)

3rd Place  
Mark Blanchflower & Dan  
Jaynes (MAB Equipment),  
Steve Nelson & Ron Kastor  
(Tri-Con Materials)

Closest to the Pin at #6 – Jeff Krzyaniak (Dimond Bros. Insurance)  
Longest Drive at #9 - Josh Quinn (Bluff City Materials)  
Closest to the Pin at #11 – Chad Broege (Beverly Materials)  
Longest Putt at #18 – Steve Nelson (Tri-Con Materials)



Finkbiner Equipment hosted hole #10 where a correct guess of the quantity of tees in the big jug won a free screening machine rental and a ring tossed onto the peg won other branded items.



Mid-States Aggregate Equipment hosted a closest to the pin competition at hole #17 with a Yeti cooler prize for the winner.



Oak Hill Contractors hosted a longest drive contest on hole #13 with a Yeti cooler going to the winner and cinch bags and tumblers for each golfer.



# Golf Outing Sponsors

**EXCLUSIVE GIFT SPONSOR**  
**RB Scott**

**MARGARITA SPONSOR**  
**Civil & Environmental Consultants**

**GOLF BALL SPONSOR**  
**Rock Machinery**

**INTERACTIVE HOLE SPONSORS**  
**Finkbiner Equipment**                      **Oak Hill Contractors**  
**Mid-States Aggregate Equipment**

**BEVERAGE SPONSORS**

<b>Altorfer CAT</b>	<b>Ozinga Materials &amp; Logistics</b>
<b>BITCO Insurance Companies</b>	<b>Powerscreen Midwest Crushing &amp; Screening</b>
<b>Bluff City Materials</b>	<b>D Construction</b>
<b>D Construction</b>	<b>Tema Isenmann</b>
<b>Diamond Bros. Insurance</b>	<b>Tuscola Stone</b>
<b>Finkbiner Equipment</b>	<b>VCNA Prairie Aggregates</b>
<b>Loos Service &amp; Supply</b>	

**HOLE SPONSORS**

<b>Alta Equipment</b>	<b>Midwest Industrial Sales</b>
<b>Altorfer CAT</b>	<b>Ozinga Materials &amp; Logistics</b>
<b>Brownfield Environmental</b>	<b>Polydeck</b>
<b>Engineering Resources</b>	<b>Pomp's Tire Service</b>
<b>Clean Soils Consulting</b>	<b>Ritchie Bros.</b>
<b>Clifton Steel</b>	<b>Rock Fusco &amp; Connelly</b>
<b>G.W. Van Keppel</b>	<b>Rock Machinery</b>
<b>Hanson Material Service</b>	<b>Roland Machinery</b>
<b>Horton Supply</b>	<b>Sauls Seismic</b>
<b>LafargeHolcim</b>	<b>Tri-Con Materials</b>
<b>Loos Service &amp; Supply</b>	<b>Vibra-Tech</b>
<b>MAB Equipment</b>	<b>Vulcan Materials</b>

**LUNCH SPONSORS**

<b>Construction Digest</b>	<b>Ozinga Materials &amp; Logistics</b>
<b>Construction Equipment Guide</b>	<b>Tuscola Stone</b>
<b>Hanson Material Service</b>	<b>Vulcan Materials</b>
<b>Elmhurst Chicago Stone</b>	<b>Polydeck</b>

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IAAP's Dan Eichholz presents the first place trophy to the Howell Tractor team.



Civil and Environmental Consultants margarita stop.

**The IAAP Golf Outing will be hosted in Peoria in September of 2021. See you there.**

## Measure Your Company's Sustainability Efforts

The IAAP's Sustainability Committee developed the *Self-Assessment Guide to Sustainable Commerce* to help your company achieve higher sustainability performance. This guide can be used as a tool to analyze, improve, and promote sustainability efforts and/or as a starting point or baseline for beginning a journey toward sustainability; it is not a test and there are no right or wrong answers. It's designed to be flexible enough to fit any company's business circumstances, as such, analysis can be done company-wide, plant by plant, or product line by product line.

Download the *Self-Assessment Guide to Sustainable Commerce* and guidance addendum on the IAAP website here: [www.iaap-aggregates.org/sustainability.htm](http://www.iaap-aggregates.org/sustainability.htm)

Here's sample guidance for the Facilities section:

### **Does your company track the consumption and reduction of water use?**

- Recognize and understand the different water sources used at the facility
- Water is rarely consumed at a mine. Water that is transferred from one area of the mine to another – or to a nearby river is not consumed, but moving it comes at a cost.
- Public perception is that water pumped from a well or water discharged to a stream is “consumed” or “used”. Change the way you talk about using water.
- Simple spreadsheets can be developed to list reduction efforts and track water use
- Water pumped from wells is easiest to track and cost savings (electricity and pump wear) can be realized if pumping rates are reduced

### **Does your facility have a method to measure and reduce greenhouse gas emissions?**

- Simple spreadsheets can be developed to list reduction efforts, calculate and track greenhouse gas emissions.

### **Does your company require the use of non-toxic and non-hazardous maintenance and janitorial supplies?**

- Prepare an inventory of products used and whether or not they contain toxic or hazardous chemicals
- Replace products with non-toxic and non-hazardous products.

### **Is on-site recycling for office materials provided?**

- Paper, cardboard and containers (glass, plastic and aluminum) are easily collected for recycling with labeled bins
- Most communities provide recycling centers

Use the Self-Assessment Guide to prompt discussions internally and with stakeholders identifying ways to increase product, service and vendor efficiency; reduce energy demands and negative environmental impact; and improve employee and community satisfaction.

Members of the Sustainability Committee invite you to contact IAAP Assistant Director Shawn McKinney at [shawn@iaap-aggregates.org](mailto:shawn@iaap-aggregates.org) or 217.241.1639 with questions about improving your company's sustainability efforts or to tell your company's story about improving sustainability.

## Picture Your Mine on the Cover of the 2021 IAAP Membership Directory

Do you have an attractive mine site you would like to see featured on the cover of the Illinois Association of Aggregate Producer's Membership Directory? If so, show us the pictures.

Please send Jodi Crowe ([jodi@iaap-aggregates.org](mailto:jodi@iaap-aggregates.org)) digital pictures of your stone or sand highwall, dredging, crushing, screening, washing, barging, or stockpiling area and equipment. Preferably take this picture so that it is taller rather than wider and frame a lot of sky or highwall at the top or floor at the bottom. Doing so in this manner will allow for it to better fit the whole cover without cropping while leaving room for the IAAP logo and title. The 2020 cover you see to the right is a good example.



## IAAP Education Foundation Scholarship

The IAAP Education Foundation Scholarship program strengthens the Illinois aggregates industry by promoting the education of worthy students. Applications may be downloaded using the links below.

- ◆ The Education Foundation scholarship supports students learning and training to be the next generation of professionals in the industry. <https://bit.ly/33wGTpi>
- ◆ The Joanne Kluessendorf Memorial scholarship promotes the education of individuals seeking a career in teaching Earth Science or Geology. <https://bit.ly/3ivrh9F>

For 2021, the IAAP Scholarship Committee will award up to five (5) scholarships of at least \$2,000 each. These scholarships are a one-year grant. Students may re-apply in subsequent years.

More information is here: [www.iaap-aggregates.org/education-foundation-scholarship.html](http://www.iaap-aggregates.org/education-foundation-scholarship.html)

## Blasting Licensure and Certification Training and Examination

All individuals whose duties include the direct supervision of blasting operations at surface mining operations are required to be licensed or certified. The next training and examination sessions are scheduled for October 20-23, 2020 at the IDNR office in Springfield, Illinois.

To obtain a blaster license or certificate, a person must provide an application to the Department of Natural Resources and show proof of blaster training. Once the application is approved, the person must pass an examination administered by the Department. Individuals may obtain the required training from colleges, consultants or representatives from explosives manufacturers. Training will be provided by the Department, at no charge, in conjunction with each examination.

If you have any questions concerning the blaster license, certificate training or examination please contact Antony Lacey at (217)494-8633. You may also email at [Antony.Lacey@illinois.gov](mailto:Antony.Lacey@illinois.gov) or Angela Martin at [Angela.Martin@illinois.gov](mailto:Angela.Martin@illinois.gov).

## Safety Slogan T-Shirts



Clearance sale on some sizes of the 2020 Safety Slogan T-shirts. Get yours for \$5 each + \$5 shipping for whole order.

Twelve year old Katherine Lillwitz's design is printed on the back of a safety green 50/50 cotton polyester T-shirt along with a small IAAP logo on the front. Katherine won our design contest this year and is the daughter of Jim Lillwitz who works for Hanson Material Service.

Order here

[www.iaap-aggregates.org/safety-slogan-t-shirts-order.html](http://www.iaap-aggregates.org/safety-slogan-t-shirts-order.html)

## 2021 Safety Slogan & Logo Contest

[www.iaap-aggregates.org/safety-slogan-contest.html](http://www.iaap-aggregates.org/safety-slogan-contest.html)

### New Associate Member

#### EQUIPMENT CORPORATION OF AMERICA

PO Box 306 (Ship to: 1000 Station Street)

Coraopolis, PA 15108

(412)264-4480 | Fax: (412)264-1158

Website: [www.ecanet.com](http://www.ecanet.com)

Dave Johnston, Branch Manager –

[djohnston@ecanet.com](mailto:djohnston@ecanet.com)

Rex Christensen – [rchristensen@ecanet.com](mailto:rchristensen@ecanet.com)

*Other Location:*

**Danville, IN**

170 Bentree Blvd. | Danville, IN 46122

(317)294-8603

*Products/Services:* Furukawa Rock Drills, Rock drill tooling, Bauer Drill rigs, RTG Pile driving equipment, Klemm Micropile drill rigs, MAT Grouting plants and pumps.

#### MOBYDICK TOTAL SOLUTIONS

435 Grande Vista Blvd.

Bradenton, FL 34212

(850)797-3194

Christina Galliano –

[customerservice@us.mobydick.com](mailto:customerservice@us.mobydick.com)

Trey Hansen – [Tlhansen@us.mobydick.com](mailto:Tlhansen@us.mobydick.com)

*Products/Services:* construction and installation of MobyDick Wheel Washing Systems

### Dropped Associate Member

TURNKEY PROCESSING SOLUTIONS

Warrenville, IL

### IAAP Calendar of Events

October 14, 2020: IAAP PIE Committee Meeting; Zoom Conference

October 15, 2020: IAAP Spec/Tech Meeting; Zoom Conference

October 20, 2020: IAAP Safety Committee Meeting; Zoom Conference

November 5, 2020: IAAP Environmental Committee Meeting; Zoom Conference

November 6, 2020: IDOT Bid Letting; Hanley Building, Springfield, Illinois

November 12, 2020: IAAP Board of Directors Meeting; Zoom Conference

December 4, 2020: IAAP Sustainability Committee Meeting; Conference Call