



# 2021 Bourbon Reverse Pitch Solution Catalog

*Bourbon: From the grains to the glass.  
Love it. Drink it. Sustain it.*

[www.bourbonreversepitch.com](http://www.bourbonreversepitch.com)

BOURBON IS BOOMING...

AND KENTUCKY COULDN'T BE HAPPIER

The growth of bourbon's popularity across the world in the last 20 years shows no signs of slowing down and Kentucky as a state is thriving while growing with the demand.

However, alongside these successes are challenges. With the rise of bourbon and boutique distilleries comes the rise of distilling byproducts, aka "stillage/spent grain." This unique combination of circumstances has created an opportunity for innovative solutions in one of the state's signature industries.

Team Kentucky sought new and innovative technologies and solutions from problem solvers, inventors, entrepreneurs, and businesses for expanded uses of distilling byproduct (stillage). Teams pitched to distillers and industry stakeholders at the 25th Distillers Grains Symposium on October 25, 2021. The event was a great success!

To perpetuate the overarching objective of the Bourbon Reverse Pitch, which was to connect distilleries and industry stakeholders with the innovative problem solvers, the below contact information is available with the hope that long-term and sustainable relationships will be forged to implement solutions to create expanded uses of whole stillage.

## 2021 Overall Winner

### BioProducts LLC and C&I Engineering

Primary Contact: Brian Walsh ([b\\_walsh@bioproductsllc.com](mailto:b_walsh@bioproductsllc.com))

Team: Dr. Jagannadh Satyavolu, Brian Walsh, Cliff Richards, Dr. Rajeeva Thilakarathne

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

Solution Description: The company has plans to build units capable of handling 75,000 gallons of stillage a day and converting it into diabetic-friendly sugar substitute, activated carbon, and biocoal, and a protein that can be used in animal feed.



## **2021 Runner-up and Crowd Favorite**

### **Somax Circular Solutions**

Primary Contact: Dan Spracklin ([Dan@somaxhtc.com](mailto:Dan@somaxhtc.com))

Team: Dan Spracklin, Jeremy Taylor

Website: <https://somaxhtc.com/>

Solution Description: Converting wet organic waste streams into earth-friendly biocarbon-products that save our customers money, and help towards sustainability goals.

## **2021 Reverse Pitch Finalists**

### **Biogas Technology Group, LLC**

Primary Contact: George Bower ([gbower@erscience.com](mailto:gbower@erscience.com))

Team: George Bower, Stan Siegel, Jack Givens, Mark Ward, David Gruppo, Michael Foglietta

Website: in-progress

Solution Description: Lexington-based Biogas Technology Group proposed the development of a 500,000 ton/year centralized facility in Mario County to process and convert raw stillage into recoverable products. The facility operates patented technology with zero process emissions and converts the stillage to renewable natural gas, CO<sub>2</sub> and other commercial products. The system is a low energy input alternative to traditional dry-houses.

### **Continental Refining Company, LLC**

Primary Contact: John Wright ([jdwright3@outlook.com](mailto:jdwright3@outlook.com))

Team: John Wright, Kris Gibson, Demetrios Haseotes

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

Solution Description: Somerset-based Continental Refining Co. LLC pitched a method of processing distillers grains to extract vegetable oil and animal feed byproducts. Their model included an off-site location for distillers to deliver their wet stillage, thus creating no additional investment for the distillery.

### **LocalSols**

Primary Contact: Eric Jens ([eric@frehnerjens.com](mailto:eric@frehnerjens.com))

Team: Tom Jens, Steve Wesley, Eric Jens and Kurt Frehner

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

Solution Description: We enable distillers and brewers to upcycle their stillage and spent grains into insect proteins, delivering “superior sustainability” marketing claims that grow spirit/beer brand sales and help the world move closer to carbon neutrality.

### **Meridian Biotech, LLC**

Primary Contact: Brandon Corace ([bcorace@meridian-bio.com](mailto:bcorace@meridian-bio.com))

Team: Brandon Corace, Don Corace, and Erik Corace

Website: [www.meridian-bio.com](http://www.meridian-bio.com)

Solution Description: Texas-based Meridian Biotech is an industrial biotech company with experience in the ethanol/alcohol industry. Meridian Biotech pitched a plan to process excess stillage into alternative proteins and ingredients for the aquaculture and pet food industry.

### **Honorable Mention Solutions**

#### **Heronwood Farm**

Primary Contact: Richard "Dick" Murphy ([rdmurphy@windstream.net](mailto:rdmurphy@windstream.net))

Phone Number: 859-753-2485

Solution Description: The conversion of spent grain to electricity via the generation of biogas. Also, the effluent of the biogas generator is an excellent fertilizer which could be a secondary revenue source.

#### **InLine Engineers**

Primary Contact: Jonathan W. Swinney, PE ([mechengr375@gmail.com](mailto:mechengr375@gmail.com))

Primary Contact Phone Number - (502) 380-7576

Website: <https://www.gray.com/inline>

Solution Description: Our solution is to set up food grade collection sites at each distillery. We would then truck the byproducts to a centralized facility that would turn the byproducts into a meatless food alternative.

#### **NanoStart Inc**

Primary Contact: Khrys Varney ([khrysvarney@yahoo.com](mailto:khrysvarney@yahoo.com))

CEO NanoStart Inc

696-226-6152

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

Solution Description: Our NANOCHAR is an advanced, mobile WTE system that will utilize the stillage as a feedstock to fuel the gasification process and generate syngas. Once processed, the stillage becomes biochar or a carbon depleted ash, that are salable byproducts. Its' mobility allows the NANOCHAR to be set up onsite at most distilleries giving the advantage of eliminating most disposal/transportation costs.

### **One World Clean Energy**

Primary Contact: Bill Bivins ([Bill.Bivins@OneWorldCleanEnergy.com](mailto:Bill.Bivins@OneWorldCleanEnergy.com))

Phone Number: 502-649-6440

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

Solution Description: One World Clean Energy provides waste mitigation as a service. Using our proprietary technology, we process unrecyclable waste mixed with wastewater, such as sewer water or whole stillage, to produce electricity with no waste, no odor, and no stack emissions.

### **PR Animal Health and Feeds**

Primary Contact: Emilio Santa Cruz Bacardi ([emiliobacardi@att.net](mailto:emiliobacardi@att.net))

Phone Number: 859-552-1645

Solution Description: My project is a combination of various known processes and 3 waste streams that together increase the process efficiency and feasibility to dry the stillage and produce an improved animal feed product among other things.

### **Stillaged**

Primary Contact: Cindy Sparks ([cindy@afterlifecompany.com](mailto:cindy@afterlifecompany.com))

Phone Number: 859-551-9137

Website: [www.stillaged.com](http://www.stillaged.com) (In Progress)

**Solution Description:** My idea is to create both Xylitol and PLA (or PHA) bioplastics from stillage waste so that none is wasted. Both are rapidly growing industries and present as much as a 30% ROI over 5 years per a Pennsylvania case study.

### **Tree Of The Field, LLC**

Primary Contact Name: Robin Mason ([robin@treeofthefield.co](mailto:robin@treeofthefield.co))

Primary Contact Phone Number: 859 582 5028

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

Solution Description: Barrel Log is presently available. We are the makers of the Kentucky Bourbon Barrel Fire Log, a seasoned fire log for

distinguished comfort. We have the ability to expand our present line of fine extruded fire logs to include other distilled aromas and to integrate spent grain as an outstanding fire fuel source. We are happy to talk with anyone about the present and future capacity to extrude distilled aroma logs.

### **Water Warriors**

Primary Contact: Steve Chamberland ([schamberland@waterwarriorsinc.com](mailto:schamberland@waterwarriorsinc.com))

Primary Contact Phone Number - 859-629-2236

Solution Description: Poseidon Pellets remove Phosphorus and Ammonia from wastewater, stormwater, and agricultural runoff. A simple process that is so environmentally friendly the pellets can be used as a fertilizer once capacity has been reached , returning the nutrients back to the land.

### **William Hunter Goatley**

Primary Contact: William Hunter Goatley ([ltdgoatley@gmail.com](mailto:ltdgoatley@gmail.com))

Phone Number: 859-878-7267

Solution Description: My solution is to turn the waste into 2 final products:1. Dried Distillers Grain (with Solubles) 2. Waste Water

To achieve the DDG(S) I would build a centralized Drying Production Plant for the smaller distilleries as most larger distilleries have their own drying facilities on site. That will create a dried product that can be stored for longer periods of time (if need be). This product can then be sold to farmers and bread factories. There are currently several solutions available after the grain has been dried. In addition to my current proposal, new technology with the company that I am working with has led to the ability to recover the water that had been evaporated, leading to the ability to capture potable water instead of allowing it to be released back into the atmosphere.

### **Zro Waste Group**

Primary Contact: Perry Daugherty ([pdaugherty@zrowastegroup.com](mailto:pdaugherty@zrowastegroup.com))

Primary Contact Phone Number: 317-874-8718

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

Solution Description: Our solution, Watogy, processes stillage on-site at the source of production. The waste product is converted to usable energy in the forms of heat, process steam, hot water, cooling, refrigeration, electricity and water. Through the process, compounds are broken down into their elemental form leaving minimal by-products that are mostly recyclable.