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Global Clean Energy Announces Advancements in Herbicide Resistant Camelina Varieties

GREAT FALLS, Mont.--(BUSINESS WIRE)-- [Global Clean Energy Holdings, Inc.](#) (OTCQB:GCEH) today announced key advancements to accelerate adoption of *Camelina sativa* (camelina) in areas with higher use of two key herbicide groups, Group 2 and Group 14. This development will allow the Company's patented camelina varieties to be planted in fields treated with residual herbicides, previously off-limits to planting of camelina.

A new Global Clean Energy camelina variety has confirmed resistance to imazamox and imazethapyr, the active ingredients in Beyond¹ and Pursuit¹ (Group 2 herbicides). The commercial launch of this new herbicide resistant camelina variety is expected in 2025. Additionally, Global Clean Energy has tested over 6,000 lines from its camelina tilling library and found tolerance to PPO herbicides (Group 14), such as sulfentrazone contained in Spartan² and Sonic³ herbicides. The Company is initiating introgression of this trait across elite lines in an accelerated breeding program.

"Our advancements in herbicide resistance and tolerance will allow us to target new production areas while accelerating farmer adoption, making it easier to grow camelina and build upon Global Clean Energy's record camelina contracted acreage of 65,000 acres worldwide in 2023," said Mike Karst, Global Clean Energy's Senior Vice President and President of Sustainable Oils, the Company's upstream subsidiary.

Camelina is a resilient oilseed that provides cover crop benefits to land as it is grown, has a quick maturity, and does not displace food and feed crops, while generating additional revenue for growers on otherwise idle or fallow acres. Camelina is cold tolerant, low water use, and can be sown and harvested using farmers' existing equipment.

Global Clean Energy has over 20 years of camelina breeding history and is dedicated to developing and delivering superior, diverse genetics that provide farmers the most suitable high yielding camelina varieties for their growing conditions. The Company has developed a proprietary collection of over 25,000 camelina genotypes possessing naturally divergent traits and a tilling library of over 8,000 distinct mutant lines using conventional non-GMO techniques. Global Clean Energy's 20 patented camelina varieties include both spring and winter varieties with a suite of traits to enable camelina cultivation as an intermediate crop in a wide range of geographies and crop rotations. They are commercially available in the U.S. through Global Clean Energy's subsidiary [Sustainable Oils, Inc.](#), as well as in South America, and throughout Europe through its subsidiary [Camelina Company](#).

1. Beyond and Pursuit are trademarks of BASF Corporation

2. Spartan is a registered trademark of FMC Corporation
3. Sonic is a registered trademark of Corteva AgriScience

About Global Clean Energy

Global Clean Energy Holdings, Inc. (OTCQB:GCEH) is a vertically integrated renewable feedstocks and finished fuels company whose business model is designed to control all aspects of the value chain, with one end of their business anchored in plant science and the other in renewable fuels production. Global Clean Energy has developed a portfolio of proprietary elite varieties of *Camelina sativa* (camelina) to be used as a feedstock for their renewable fuels facility in Bakersfield, California, providing feedstock certainty unmatched in the industry. By eliminating intermediaries and leveraging a vertically integrated model, Global Clean Energy maximizes margin generation through operational and logistical efficiencies while simultaneously minimizing feedstock costs and greenhouse gas (GHG) footprint. The company believes they can achieve “net zero” GHG footprint on all their finished fuels, including renewable diesel, renewable propane, renewable naphtha, and in the future, sustainable aviation fuel (SAF). Global Clean Energy’s camelina holds several advantages over traditional feedstocks yielding additional Low Carbon Fuel Standard (LCFS) credits through a lower carbon intensity (CI) score. The company contracts directly with farmers to grow its ultra-low carbon, nonfood, proprietary camelina crop on fallow land. As a low water use rotational crop grown on fallow land, camelina does not impact food production or compete with other crops for scarce water resources. The result of Global Clean Energy’s vertically integrated farm-to-fuel strategy is a highly sustainable, low cost, and ultra-low carbon finished fuel. More information can be found at www.gceholdings.com.

Forward-Looking Statements

This press release contains forward-looking information. All statements other than statements of historical fact are “forward-looking statements”, including any statements of the plans, strategies and objectives for future operations, the likelihood of improving camelina yields or achieving any profitability therefrom, strategic value creation, risk profile and investment strategies, and any statements regarding future economic conditions or performance, the ability to complete our Bakersfield renewable fuels production facility and the expected financial and operational results of Global Clean Energy Holdings, Inc. In some cases, forward-looking statements can be identified by the use of terminology such as “may,” “will,” “expects,” “plans,” “anticipates,” “intends,” “believes,” “estimates,” “potential,” or “continue,” or the negative thereof, or other comparable terminology. These forward-looking statements are made based on expectations and beliefs concerning future events affecting us and are subject to uncertainties, risks, and factors relating to our operations and business environments, all of which are difficult to predict and many of which are beyond our control, that could cause our actual results to differ materially from those matters expressed or implied by these forward-looking statements. Please refer to the risk factors discussed in our Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, which can be found at the SEC’s website www.sec.gov. The discussion of these risks is specifically incorporated by reference into this press release. Any forward-looking statements are made as of the date of this press release. We do not intend, and undertake no obligation, to update any forward-looking statements.

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