# Entropy Inc. Announces Five New Third Party Agreements, Increasing Total Project Pipeline to Approximately 1.5 Million Tonnes Per Annum

(TSX: AAV)

CALGARY, AB, Oct. 12, 2021 /CNW/ - Entropy Inc. ("Entropy" or the "Corporation", a subsidiary of Advantage Energy Ltd. or "Advantage") is pleased to announce new Memoranda of Understanding ("MOUs") with four additional emitting corporations to develop Carbon Capture and Storage ("CCS") projects, and with an industrial equipment manufacturer to develop integrated CCS solutions for new equipment. These MOUs represent further progress in the commercial deployment of Entropy's patent-pending technology, demonstrate versatility across a broad range of applications and jurisdictions, and provide visibility to a growing pipeline of opportunities.

# **Highlights of the Additional MOUs:**

- A well-capitalized public midstream and royalty company and Entropy have agreed to jointly evaluate the development of CCS projects in multiple jurisdictions.
- A growth-oriented private energy company has engaged Entropy to evaluate the development of a CCS project on an oil treatment and storage facility in Alberta.
- Compass Energy Systems Ltd. and Entropy have agreed to jointly develop innovative CCS solutions for compressors and
  industrial process equipment that are integrated into the fabrication process, to significantly reduce the total cost and
  energy required to capture carbon from flue-gas. The first prototype for a compressor with integrated CCS is currently
  undergoing engineering design and development, funded by Entropy, with a possible in-service date within 18 months.
- Nauticol Energy Limited ("Nauticol") and Entropy have agreed to jointly evaluate the development of CCS for auxiliary boilers at the proposed Blue Methanol plant near Grande Prairie, Alberta. With support from Entropy, Nauticol intends to increase its total carbon capture to over 90% for the facility, setting a global standard for environmentally responsible methanol production. Since the project is a greenfield development, Entropy plans to develop a factory-integrated CCS design for boilers.
- A publicly traded, liquids-focused Canadian energy company has engaged Entropy to evaluate the application of CCS to abate emissions from a proposed gas-to-power project, also suitable for a factory-integrated CCS design.

Entropy's pipeline of projects under MOU is now over 1.5 million tons per annum. The five new MOUs are in addition to the previously announced project at the Advantage Glacier Gas Plant (183,000 TPA in two phases), and four earlier MOUs (please refer to Entropy press release dated June 2, 2021). Scoping design, engineering, and subsurface evaluations are underway for each of the identified projects.

Entropy continues to engage with numerous other third-party emitters in a variety of industrial applications such as boilers, compressors, cement production and power generation, with a significant pipeline of additional potential projects in development in multiple jurisdictions.

# <u>Update on Entropy's Glacier Project and Ongoing Research and Development</u>

Phase I of Entropy's modular CCS project at Glacier, Alberta, remains on-time and on-budget, with operations expected to begin in early second quarter 2022. All major equipment has been purchased with modules currently being fabricated in Alberta facilities. Entropy expects to break ground at the Glacier plant in November 2021. Up to 200 people will be employed by the construction project.

At the University of Regina's Clean Energy Technologies Research Institute ("CETRI"), the second protocol of Entropy's research and development is underway. During this phase, Entropy's patent-pending process design will be run over 6 months using our patent-pending Entropy23<sup>TM</sup> solvent, to demonstrate the combined energy efficiency gains and the degradation-resistant properties of Entropy23<sup>TM</sup> when applied to flue-gas. Prior to finalizing the optimized blend of Entropy23<sup>TM</sup>, CETRI researchers have already achieved industry-leading heat duty of approximately 2 GJ/tonne of carbon dioxide in two separate pilot plants, compared to traditional MEA processes at over 4 GJ/tonne.

Entropy is committed to commercial deployment of state-of-the-art technologies in CCS and in other clean energy opportunities, building on the combined strengths of Advantage, Allardyce Bower Consulting and our advisors from CETRI. For more details, Entropy has posted an updated version of the corporate presentation at <a href="https://www.entropyinc.com/investors/">www.entropyinc.com/investors/</a>.

#### About Entropy Inc:

Entropy is a privately-owned company, founded by Advantage to apply sophisticated science and engineering to commercialize CCS. Entropy's technology is expected to deliver commercial profitability at a carbon price below CAN\$50/tonne, using proprietary modular carbon capture and storage technology. Entropy intends to deploy this technology in the global effort to reduce and eventually eliminate carbon emissions.

### About Advantage Energy Ltd:

Advantage is a low-carbon energy producer focused on developing its high-qualityMontney resources. Advantage's owned infrastructure, top-tier cost structure and capital efficiency provide a strong foundation for sustainable, disciplined production growth. With modern, low emissions-intensity assets and the Glacier carbon capture and sequestration asset, Advantage continues to proudly deliver clean, reliable and sustainable energy, contributing to a reduction in global emissions by displacing high-carbon fuels. Advantage's common shares trade on the Toronto Stock Exchange under the symbol AAV with its head office in Calgary, Alberta, Canada.

#### About Allardyce Bower Consulting Inc:

ABC is a Calgary-based engineering, procurement and construction management company with leading expertise in several aspects of gas processing and modularization. ABC's principals Brent Allardyce and Rick Bower provide over 75 years of related experience in designing, troubleshooting, and operating gas processing facilities with innovative professional services and unique capability.

# About Clean Energy Technologies Research Institute (CETRI):

CETRI centralizes all low-carbon and carbon-free clean energy research activities at the University of Regina. Areas of research focus include decarbonization and zero-emission hydrogen technologies, carbon capture and utilization, and waste-to-renewable fuels and chemicals. Bringing together one of the most dynamic teams of researchers, industry leaders, innovators, and educators in the energy field, CETRI's mission aligns with the Environment & Climate Action areas of focus in the University of Regina's Strategic Plan.

# Advisory

The information in this press release contains certain forward-looking statements, including within the meaning of applicable securities laws. These statements relate to future events or our future intentions or performance. All statements other than statements of historical fact may be forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "anticipate", "continue", "demonstrate", "expect", "may", "can", "will", "believe", "would" and similar expressions and include statements relating to, among other things, the benefits to be derived from the MOUs and the expectation that they will result in completed CCS projects; expectation that the potential CCS projects as described will capture carbon dioxide TPA as disclosed; expectation that there is a significant pipeline of additional potential projects in development; expected benefits of Entropy's technology; Entropy's strategies and plans for its technology and Entropy's focus; and Advantage's strategy and focus. Advantage's and Entropy's actual decisions, activities, results, performance or achievement could differ materially from those expressed in, or implied by, such forward-looking statements and accordingly, no assurances can be given that any of the events anticipated by the forward-looking statements will transpire or occur or, if any of them do, what benefits that Advantage or Entropy will derive from them.

These statements involve substantial known and unknown risks and uncertainties, certain of which are beyond Advantage's and Entropy's control, including, but not limited to: changes in general economic, market and business conditions; industry conditions; actions by governmental or regulatory authorities including increasing taxes and changes in investment or other regulations; changes in tax laws and incentive programs; changes in carbon tax and credit regimes; competition from other producers; the lack of availability of qualified personnel or management; intellectual property and patent risks; credit risk; changes in laws and regulations including the adoption of new environmental laws and regulations and changes in how they are interpreted and enforced; ability to comply with current and future environmental or other laws; stock market volatility and market valuations; failure to achieve the anticipated benefits and results of Entropy's technology; failure to achieve the anticipated benefits of Entropy's relationships with third parties; ability to obtain required approvals of regulatory authorities; and ability to access sufficient capital from internal and external sources.

With respect to forward-looking statements contained in this press release, Advantage and Entropy have made assumptions regarding, but not limited to: conditions in general economic and financial markets; effects of regulation by governmental agencies; current and future commodity prices and royalty regimes; future exchange rates; royalty rates; future operating costs; availability of skilled labor; timing and amount of net capital expenditures; the impact of increasing competition; that Advantage and Entropy will have sufficient cash flow, debt or equity sources or other financial resources required to fund its capital and operating expenditures and requirements as needed; that Entropy's conduct and results of operations will be consistent with expectations; that Entropy will have the ability to develop its technology in the manner currently contemplated; current or, where applicable, proposed assumed industry conditions, laws and regulations will continue in effect or as anticipated; and the anticipated benefits and results from Entropy's technology are accurate in all material respects. Readers are cautioned that the foregoing lists of factors are not exhaustive.

Management has included the above summary of assumptions and risks related to forward-looking information above in order to provide shareholders with a more complete perspective on Entropy's future operations and such information may not be

appropriate for other purposes. Entropy's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements and, accordingly, no assurance can be given that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do so, what benefits that Advantage and Entropy will derive there from. Readers are cautioned that the foregoing lists of factors are not exhaustive. These forward-looking statements are made as of the date of this news release and neither Advantage or Entropy disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise, other than as required by applicable securities laws.

SOURCE Advantage Energy Ltd.

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