



## PRESS RELEASE

### RENEWABLE ENERGIES

**Sweetch Energy, winner of the European EIC Transition 2022 programme, receives a €2.5 million grant to expand the range of applications for its INOD® technology**

**Climate-tech Sweetch Energy takes another step forward by expanding the range of applications for its INOD® technology to further accelerate the energy transition and the fight against climate change at the time of the COP27 summit.**

Rennes, France - November 9th, 2022 - Sweetch Energy, a renewable energy company specialising in osmotic energy, announced today that it has been awarded a €2.5 million grant as part of the *Transition 2022 programme*, driven by the European Innovation Council (EIC). Sweetch Energy's project is one of the 20 selected for funding out of 165 candidates, demonstrating the company's deeptech capacity to build an industrial vision based on discoveries from leading French scientific research.

This grant will fund Sweetch Energy's research program, aimed at adapting its INOD® technology to the production of clean electricity by using low-temperature waste heat (<100°C). As energy is used (industrial equipment, computer servers, etc.), a significant part of that energy is rejected as heat. When this heat is not recovered or stored, it is called "waste heat". While processes exist to harness waste heat above 100°C, no system currently allows for an efficient production of clean electricity using low-temperature heat (<100°C), which represents an annual global potential of several tens of thousands of TWh. In France, the low-temperature waste heat emitted by the energy production industry alone is close to 1,000 TWh per year, more than twice the country's electricity consumption.

Bruno Mottet, co-founder and chief scientific officer at Sweetch Energy, declares: *"Continuously enriching our nanofluidic platform is what motivates our international team of researchers, who have already proven themselves by developing our disruptive INOD® technology. We are operating in a field that has yet to be explored, and for which we have a number of game-changing projects that aim at engaging science for the benefit of the environment."*

Nicolas Heuzé, co-founder and CEO of Sweetch Energy, states: *"Beyond the pride we feel in having been chosen by the EIC, this European funding once again confirms the major potential of our INOD® technology. This grant will allow us to further accelerate the deployment of renewable energies in the European Union, and thus contribute to its objective of carbon neutrality and energy sovereignty, with the latter having a peculiar resonance given the current geopolitical environment."*

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**Osmotic energy** is generated by the difference in salinity that occurs when fresh river water meets saline sea water. It has the advantage of being unaffected by the weather and produces decarbonised, 100% natural and renewable electricity. It is flexible, does not generate heat or CO2 emissions, and is massively available throughout the world. Each year, nearly 30,000 TWh of osmotic energy – more than the world's total demand for electricity – is released in deltas and estuaries worldwide. While the most optimistic projections predict that the proportion of currently-available renewables will not exceed 50% of global electricity generation by 2050, osmotic energy could increase this share to over 65%.

**Sweetch Energy's INOD® technology** is based on a new generation of nanoscale membranes specifically designed to harness osmotic energy. Combined with proprietary electrode systems, these membranes combine high ion selectivity and high ion transport to achieve unmatched performance. They are also made from environmentally friendly bio-sourced materials.

### **About Sweetch Energy**

Founded in 2015 and based in Rennes with around 30 employees, Sweetch Energy is a renewable energy player specialising in osmotic energy, committed to a carbon neutral world. Its INOD® technology enables the production of clean and competitive electricity from salt water, a permanent and abundant source of energy that has not been exploited to date. Driven by a desire to push back the frontiers of renewable energy, its multicultural and highly qualified team combines scientific expertise and industrial vision. Sweetch Energy benefits from the support of many renowned European and French institutions. It is notably financially supported by industrial, deeptech and cleantech investors (EDF, CNR, Go Capital, Demeter Investment Managers, Future Positive Capital) as well as by the BPI, Ademe and the European Innovation Council, and cooperates closely with French research institutions, notably with the teams of Professor Lydéric Bocquet (CNRS, ENS). Sweetch Energy has won the Mondial Innovation, I-Nov and I-Lab competitions and participated in the European Nanophlow consortium founded by H2020 in the framework of the FET-Open program.

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