

Paradigm shift in energy markets: Granular raises funds to launch world's first market for hourly energy certificates

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VC funds Seedcamp, Revent and Powerhouse Ventures have joined a 2m EUR investment round in Granular, a start-up founded by experienced entrepreneurs in the energy sector with a mission to accelerate the shift to clean energy by transforming the way the world buys electricity.

The 20-year-old system of energy certificates that enables consumers to choose one type of electricity over another is flawed by a lack of transparency. Under the current framework, claims of 100% renewable energy can be made by matching electricity consumption with renewable energy produced at any time within a 12-month window. This fails to reflect the 'real world' availability of renewable energy which fluctuates from hour-to-hour, and effectively means that solar energy can be claimed against consumption during night-time leading to distrust and inefficient price signals. Fixing this issue promises to fundamentally re-orient energy markets toward decarbonisation.

Granular is addressing the problem as the leading provider of SaaS tools to trade and manage time-stamped energy certificates (or 'hourly energy certificates') that enable consumers to verify both where and when their energy is coming from carbon-free sources.

Over the past 2 years, Granular's founding team helped to develop the internationally recognised standards for hourly certificates. The company has now partnered with NordPool, the leading European power market operator, and Elexon, to launch the world's first market for hourly energy certificates in the UK. Twelve large energy utilities are participating in the first phase of the market launch, alongside a diverse range of large organisations such as Sky and The University of Nottingham who are demonstrating their sustainability leadership by engaging in the project.

Granular's platform can be used by utilities or corporates to help energy consumers to verify that their consumption is carbon free in specific hours and helps them increase the level of hourly coverage through trading of hourly certificates. With the new investment, Granular will roll-out its platform in the UK and launch in 3 new EU markets and the US.

To truly decarbonize energy supply, there is a fast-growing trend to commit to 24/7 carbon-free energy (CFE), meaning that every unit of electricity consumption is met with carbon-free electricity sources, at every hour and at every location, verified by hourly energy certificates. The use of hourly energy certificates represents a paradigm shift in the way consumers purchase clean energy; increasing transparency in clean energy and carbon accounting claims and incentivising the deployment of renewable energy, demand-side flexibility, and storage. These benefits apply to any sector where there is concern about carbon emissions such as transport, industry, heating, cooling.

One example application is for the hydrogen industry. On 20th May, the European Commission released for consultation new requirements which include hourly matching between renewable generation and electrolyzer consumption that must be met to qualify as green hydrogen. Granular has developed a specific software solution to help hydrogen producers efficiently meet this requirement and verify that their hydrogen is truly green and is in discussions to trial this in Europe soon.

The market for traditional clean energy certificates (called RECs or GOs) is alone worth \$12bn today and set to grow to \$100bn by 2030. As a result of mass-electrification, the \$4tn global electricity sector will be responsible for addressing over 70% of global carbon emission reductions. This means that how consumers choose their electricity is expected to come under increasing scrutiny.

Toby Ferenczi, Granular co-founder and CEO said:

"By establishing a market for hourly energy certificates, Granular is helping to accelerate the shift to a carbon-free grid by harnessing consumer demand to send a razor-sharp price signal that values clean energy according to 'real-world' availability.

Ultimately, we think that all units of energy could be tagged and traded in this way, bringing a radical new level of transparency to energy markets.”

Emily Kirsch, Managing Partner, Powerhouse Ventures said:

“To truly decarbonize energy supply, there needs to be a significant shift to hourly clean energy procurement and Granular is well positioned to provide the tools necessary to manage and scale the emerging 24/7 carbon-free energy market”

Henrik Grosse Hokamp, Partner at Revent said:

“Granular’s solution is a paradigm change for the energy market. It will be finally possible for utilities, corporates, and consumers to buy true 100% carbon-free electricity. This is a crucial step and a missing piece to move our society away from carbon emitting energy production and towards addressing climate change in a meaningful way.”

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Notes to Editors

24/7 clean energy describes the ambition to have 24/7 Carbon-free Energy (CFE), meaning that every kilowatt-hour of electricity consumption is met with carbon-free electricity sources, every hour of every day, everywhere.

Hourly energy certificates are a system available for consumers to verify their electricity source on an hourly basis.

EnergyTag is the independent, non-profit, industry-led initiative to develop the standards for hourly energy certificates – energy attribute certificates with a time-stamp of 1 hour or less. EnergyTag was originally founded by Dr Toby Ferenczi and is now overseen by a 12-person advisory committee of global experts. The Granular GB scheme has been designed to comply with the latest version of the standard published by EnergyTag.

The UN 24/7 Carbon-Free Energy Compact is an ambitious global programme to accelerate the decarbonisation of the world’s electricity systems to mitigate climate change.

EACs / RECs / GOs / REGOs are green labels or ‘trackers’ that guarantee one MWh of electricity as having been produced from renewable energy sources. Renewable energy certificates have existed for over 25 years and are used in all developed energy markets globally. The market for renewable energy certificates was valued at over \$12bn in 2021 and is forecast to reach \$100bn annually by 2030. <https://www.globenewswire.com/news-release/2021/12/15/2352850/0/en/Renewable-Energy-Certificate-Market-Size-Worth-Around-US-100-96-Bn-by-2030.html>

About Granular Energy

Granular is a start-up providing solutions for sourcing for electricity suppliers and corporate consumers to facilitate the transition to 24/7 clean energy. Granular’s mission is to accelerate the transition to a carbon-free electricity system.

Granular’s fast-growing team of expert professionals, with backgrounds in energy and financial markets, spans over 4 countries. Granular is backed by VC funds Seedcamp, Revent and Powerhouse Ventures alongside leading angel investors.

Granular was founded by:

- Dr Toby Ferenczi – Renewable energy PhD and energy entrepreneur with 2 previous exits, ex-OVO Energy and General Electric, degrees from Imperial College and Cambridge University

- Bruno Menu - energy industry professional with experience at EDF, Limejump and Reactive Technologies
- Samuel Cheptou – energy software product manager with experience from 2 previous energy start-ups with a background in banking and quantitative finance.

About Nord Pool

Nord Pool, Europe's leading power market, delivers efficient, simple, and secure trading across Europe. The company, which is majority owned by Euronext, offers day-ahead and intraday trading, clearing and settlement, and additional services, to customers regardless of size or location. Today 360 companies from 20 countries trade on Nord Pool's markets.

Nord Pool operates markets in the Nordic and Baltic regions, Germany, Poland, France, The Netherlands, Belgium, Austria, Luxembourg and the UK. Nord Pool is a Nominated Electricity Market Operator (NEMO) in 15 European countries, while also servicing power markets in Bulgaria, Croatia and Georgia. In 2021 Nord Pool had a total turnover of 963 TWh traded power.

About Seedcamp

Seedcamp is Europe's seed fund, identifying and investing early in world-class founders attacking large, global markets and solving real problems using technology. The Seedcamp Nation includes over 430 startups building breakout businesses that change the way people live, interact and buy and includes publicly listed UiPath, Wise, and unicorns Revolut, Hopin, Sorare, Pleo, wefox, Grover and [viz.ai](#) along with fast-growing businesses such as Ezra, THIS and Synthesia. Seedcamp fast-tracks a founder's vision and creates value through immediate access to smart capital, a lifelong community of support, and a global network built upon more than a decade's experience backing exceptional talent.

About Powerhouse Ventures

Powerhouse Ventures backs seed-stage start-ups building innovative software for rapid decarbonization. Our investors represent some of the world's largest corporations and experts in energy, utilities, mobility, financial services, and tech. We believe that addressing the climate crisis requires deploying our most viable market-based solutions today.

About Revent

Founded in 2020, the Berlin-based VC fund invests across Europe in startups with a clear purpose, using technology to drive systemic change in the areas of climate, health and economic empowerment. The Revent team believes that tomorrow's best companies will emerge where today's greatest environmental and societal challenges lie.