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MasterFilter

Address:
Norfolk House, Hamlin Road
King's Lynn, Norfolk
PE30 4NG, United Kingdom

Company Website:
http://www.masterfilter.co.uk

Company History:
Founded 2014. In May 2018, MasterFilter secured a first close with equity investment of £163k (SEIS) from Sustainable Ventures and Innvotec with an additional £23k grant from SCORE.

Capital requirement:
Additional investment of circa £1M (EIS). Close anticipated in July 2019.

Use of Funds:
The investment will be used to enable rapid growth and take advantage globally of a step-change in product performance plus development of next generation product.

Management Team:
MD – Paul Clark: Co-founder. Experienced in leadership positions within engineering, operations, supply chain, programme management & 6 Sigma. Opened a $6M engine facility in the US on time and under budget.

Chairman – Alan Roper: Co-founder. 40+ years engineering experience. Filed and awarded 2 patents ending Q4 2022. Led further design iterations resulting in a new patent filing.

NXD – Alex Lawrence-Berkeley: Digital marketing and communications professional ex-BBC currently very active in the autonomous driving sector.

NXD – To Be Announced: Offer made to a career professional in the wind industry. We hope to announce his appointment end October 2018. Also in discussions with someone with significant ministerial experience.

For more information, contact Greenbackers:

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Description / Company Overview:
MasterFilter has designed and patented an innovative fluid filter that has already made a significant impact within the offshore and onshore wind industries. Currently 20% of all turbine failures are bearing or gearbox related.
MasterFilter is shown to be effective in more than 95% of these failure modes, which translates into a significant reduction in Operations & Maintenance (O & M) costs coupled with increased uptime.
The base technology will be applied in new product development for other sectors e.g. automotive, marine, rail and industrial.

Market Opportunity / Customer Need:
Globally the offshore wind generating capacity of 17.6GW recorded in 2017 is expected to grow to 115GW by 2030. This equates to a CAGR of 16% with India alone accounting for more than half of this new capacity (65GW).
A replacement gearbox can cost £500k and the equipment required to lift 35 tonnes 100 metres into the air is both expensive and difficult to source without causing delay and significant downtime. It is universally accepted within the industry that each day of downtime for a 3.4MW turbine equates to a loss of £10K in revenue per day.
MasterFilter focuses on prevention rather than the cure of failure modes by providing consistency of lubrication to these large and expensive components that rapidly deteriorate and fail when lubricity isn't maintained.

Product / service solutions:
MasterFilter removes contaminants, including water, from fluids and maintains them in an as-new condition. For the offshore wind industry this applies to the lubricating and hydraulic oil circuits by ensuring operation is continuous and performance is not compromised.
MasterFilter is a twin filter unit. The primary filter removes and retains hard particulates of 1 micron and larger. This filter is durable and designed to be self-cleaning. The secondary filter removes water and other fluid contaminants. To maximise effectiveness, it is recommended that this filter is replaced annually. MasterFilter has been purposely designed to make this process simple, quick and clean.

Competitors:
All wind turbines are built with an oil filtration system. Global companies like Eaton Corporation and Parker Hannifin and specialist filtration companies like CC Jensen and Hydac are key players. None have products that perform to the level of MasterFilter or are as compact, yet able to be scaled up in a modular way to cater for increasingly larger turbines with no change to the base technology.

Business model / Milestones /Market Strategy:
MasterFilter has planned its routes to market and set a number of milestones:

1) Initial focus on wind farm operators with low productivity equipment that is out of warranty.
2) O & M subcontractors: good progress is being made with one major business in this arena.
3) Working directly with the turbine OEM's to integrate MasterFilter.
4) Condition monitoring system companies, insurers and investors.

MasterFilter is under continual test at Strathclyde University. An independent technical validation report was published in September. This will be followed by field trials on a 7MW turbine at Levenmouth and with a significant wind farm operator.

Roadmap and Exit
The company's priority focus is now on commercial sales. revenue growth and reaching profitability asap. MasterFilter has confirmed a pressing customer need, substantial market and developed a clear route to develop it. Exit option will likely be by acquisition from an established sector player already providing products and services to OEM's or an active O & M business. With a proven, differentiated product that is designed to save significant cost in a growth industry, MasterFilter is in a strong position to meet its projected revenue targets and milestones.