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## Orbex Secures \$24 Million Funding for Its Graphene-enhanced Rocket

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Orbex, a UK-based private, low-cost orbital launch services company, recently reported that it has secured \$24 million in a funding round led by BGF (London) and Octopus Ventures (London). At the beginning of 2020, Orbex developed what it calls an "advanced, low carbon, high performance micro-launch" rocket called "Orbex Prime".

The new investments secure the roadmap to the first launch of Orbex's vertical launch vehicle, [Orbex Prime](#), from the Space Hub Sutherland spaceport in Scotland. Incorporating a wide range of advanced materials for its development, the launch vehicle boasts a 3D-printed rocket engine manufactured in a single piece without joins in partnership with additive manufacturer [SLM Solutions](#) (Lübeck, [Germany](#)). The vehicle is also built out of graphene-enhanced carbon fiber composites for the main structures and tanks.

BGF and Octopus Ventures have joined existing investors [High-Tech Gründerfonds](#) (Bonn, [Germany](#)), [Heartcore Capital](#) (Copenhagen, [Denmark](#)) and [Elecnor S.A.](#) ([Spain](#)) — parent company of the multi-national space firm [Deimos Space](#) (Tres Cantos, [Spain](#)) — in a new funding round for the orbital launch services company.

Conceived and developed as an environmentally sustainable launch system, the Orbex Prime rocket uniquely uses bio-propane, a renewable biofuel that reportedly cuts CO2 emissions by 90% compared to traditional kerosene-based rocket fuels. Designed to be recoverable and re-usable, Orbex Prime is intended to leave no debris in the ocean or in orbit around the Earth. The company is constructing the rocket vehicle at factories in Forres, near Inverness in Scotland, and Copenhagen in [Denmark](#).

"Orbex is creating a highly innovative launch solution that is rapidly gaining market traction with very serious customers. We're delighted to be part of the future of the company and are excited about what they're looking to achieve, including the first ever vertical launches from U.K. soil," says Simon King, partner at Octopus Ventures.

Orbex has already confirmed six commercial satellite launch contracts, with the first launches expected in 2022. The company's preferred launch site will be the Sutherland spaceport on the northernmost coast of Scotland, which was granted planning permission in mid-August 2020.

"This financing round is an important step forward for Orbex. It helps us maintain our rapid pace and allows us to move forward with certainty towards our first launch from the Sutherland spaceport. With BGF and Octopus Ventures, we have found significant strategic partners who recognize our vision, and who have the capability to support our development through both the early flights and into subsequent growth and production," adds Chris Larmour, Orbex CEO.

The funding round is completed by a €2.5 million grant from the European Horizon 2020 SME Instrument programme — the first for a U.K. space-sector company — to support the development of patented coaxial tanking technology. Orbex previously won £5.5 million in grant funding from the U.K. Space Agency's Launch [UK](#) programme in 2018.

Read the [original article](#) on Graphene Info.