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## HIGH-PERFORMANCE DOWNHILL SKIS MADE FROM SUSTAINABLE ALGAE BIOTECHNOLOGY

 SPORT & FITNESS

### The lightweight skis replace petroleum with oil derived from purpose-grown micro algae

**Spotted:** Salt Lake City, Utah's WNDR Alpine ski company uses renewable microalgae as the basis for their high-performance skis. Oil from purpose-grown algae forms a strong, lightweight core that greatly reduces the volume of petroleum-based carbon needed for each pair of skis. Combined with locally sourced aspen, the algal foundation helps increase certain performance qualities including durability, damping and stability.

It takes approximately nine days to grow enough microalgae for the required amount of oil. The skis are designed and built in the United States, and to develop its products, WNDR Alpine partners with Checkerspot for its innovative biotechnology platform AlgalTech™. Algae is also used instead of plastic in the sidewalls of the skis.

Describing their work as being on a continuum of improvement, the brand focuses on refining performance through increasing its use of sustainable materials. Most sizes of the skis are available and shipping now.

From [burgers](#) to biodegradable [t-shirts](#), algae and seaweed are proving to be invaluable ingredients in the tsunami of products focused on providing sustainable replacements for the current resource-intensive items found on most shelves, in business and at home.

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### **Takeaway:**

Two of the main benefits of biomaterials such as algae and mycelium are the speed at which they grow and the low volume of resources required to produce them. Algae is capable of being grown in water that is unfit for traditional agriculture, making it an even more valuable product as it helps clean polluting waste from other industries. The main challenge now lies in finding ways to scale production and integrate the materials into current designs and manufacturing processes.