# Dossier: OXEON ENERGY LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,249,999.00

**Award Date:** 2024-08-16

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

OXEON Energy LLC is a US-based company specializing in the design, development, and manufacturing of solid oxide fuel cell (SOFC) power systems. Their primary business is providing reliable, efficient, and fuel-flexible power solutions for a range of applications, particularly in defense, aerospace, and stationary power generation. Their core mission revolves around developing and deploying advanced SOFC technology to address the critical need for dependable power in demanding environments, including areas where traditional grid infrastructure is unavailable or unreliable. They aim to solve the challenges of inefficient energy conversion, logistical complexities associated with fuel supply in remote locations, and the need for reduced emissions through highly efficient fuel consumption. OXEON's unique value proposition lies in its ability to deliver highly efficient, fuel-flexible (able to use a variety of hydrocarbon fuels), and scalable SOFC power systems, offering a compelling alternative to conventional generators and batteries, especially in applications where long-duration, high-power output, and reduced logistical burdens are paramount.

**Technology Focus:**

* Solid Oxide Fuel Cell (SOFC) Power Systems: OXEON develops and manufactures SOFC power systems that convert hydrocarbon fuels (e.g., propane, natural gas, JP-8) directly into electricity with significantly higher efficiency than traditional combustion engines. They claim efficiencies up to 60% electrical, and over 80% when cogeneration is utilized.
* Fuel Flexibility: OXEON's SOFC technology is designed to operate on a wide range of fuels, including propane, natural gas, diesel, jet fuel (JP-8), and potentially renewable fuels, offering significant logistical advantages in remote or austere environments where fuel availability may be limited.

**Recent Developments & Traction:**

* October 2021: OXEON Energy was awarded a $1.2 million contract from the U.S. Army Combat Capabilities Development Command (DEVCOM) Ground Vehicle Systems Center (GVSC) to develop advanced SOFC technology for military applications. The focus is on improved fuel efficiency and power density.
* November 2022: OXEON Energy announced a follow-on contract, again from the U.S. Army Combat Capabilities Development Command (DEVCOM) Ground Vehicle Systems Center (GVSC) focused on advanced SOFC power generation systems.
* OXEON continues to showcase and test its SOFC systems at various industry and military events, demonstrating its capabilities and seeking further partnerships and deployment opportunities.

**Leadership & Team:**

While exact names and titles are difficult to pinpoint from publicly available data, OXEON lists a team with deep expertise in SOFC technology, power systems engineering, and defense contracting. It can be inferred that senior leadership possesses experience in commercializing advanced energy technologies and navigating the complexities of securing government funding and partnerships.

**Competitive Landscape:**

* Bloom Energy: While Bloom Energy focuses on larger-scale stationary power applications, they are a major player in the SOFC space. OXEON differentiates itself through its focus on smaller, more mobile, fuel-flexible systems specifically tailored for defense and aerospace applications.
* Adaptive Energy: Adaptive Energy is another SOFC manufacturer. OXEON's differentiator is not publicly clear based on available resources, and likely depends on specific system performance characteristics, cost, and fuel flexibility compared to Adaptive's offerings.

**Sources:**

1. [https://www.oxeon.us/](https://www.oxeon.us/)

2. [https://www.cleantechconcepts.com/portfolio/oxeon-energy/](https://www.cleantechconcepts.com/portfolio/oxeon-energy/)

3. [https://www.army.mil/article/252239/advancing\_military\_power\_capabilities\_through\_fuel\_cell\_research](https://www.army.mil/article/252239/advancing\_military\_power\_capabilities\_through\_fuel\_cell\_research)