# Dossier: Odyne Systems, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,248,852.00

**Award Date:** 2024-02-23

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Odyne Systems, LLC is a Wisconsin-based company specializing in developing and manufacturing advanced plug-in hybrid electric vehicle (PHEV) and electric vehicle (EV) power systems for medium- and heavy-duty commercial and government vehicles. Their primary business is providing solutions that significantly reduce fuel consumption, emissions, and operating costs for fleets. They achieve this by integrating their proprietary hybrid and electric drivetrain systems into existing chassis platforms. Odyne's mission is to accelerate the adoption of electrified vehicles in demanding applications, contributing to a more sustainable transportation sector. Their unique value proposition lies in offering a retrofit solution for existing vehicle fleets, extending vehicle lifecycles and delaying the need for complete vehicle replacement, while simultaneously providing substantial economic and environmental benefits.

**Technology Focus:**

* Odyne's hybrid system utilizes a parallel hybrid architecture incorporating a high-capacity battery pack (typically ranging from 14 kWh to 34 kWh depending on application), an electric motor-generator, and a sophisticated control system that optimizes energy flow between the internal combustion engine, electric motor, and battery.
* Their technology offers several operational modes, including all-electric operation (for short distances), regenerative braking, and engine-off idle reduction. The company claims fuel savings up to 50% and a reduction in emissions compared to conventional vehicles.
* Odyne offers both plug-in hybrid electric (PHEV) and full electric (EV) solutions. Their system is adaptable to a variety of vehicle types, including work trucks, delivery vehicles, and buses.

**Recent Developments & Traction:**

* In January 2021, Odyne announced a partnership with ViridiCO2 to develop and deploy carbon-capture solutions in their electric vehicle systems, further reducing the environmental impact of their technology.
* In late 2020, Odyne was awarded a contract by the California Energy Commission (CEC) to deploy plug-in hybrid electric (PHEV) work trucks. This project builds on previous CEC funded demonstrations of Odyne hybrid systems.
* While definitive funding rounds have not been publicly announced in recent years, it is known that Odyne secured Series A funding in 2011. Public financial data remains limited.

**Leadership & Team:**

* Joe Dalum (President & CEO): Dalum has been with Odyne Systems since 2013. Prior to Odyne, he held leadership positions at several technology companies.
* John Reuss (Chief Technology Officer): Reuss is responsible for the overall technology vision and direction of the company. He has extensive experience in vehicle engineering and hybrid powertrain development.

**Competitive Landscape:**

* Workhorse Group: While Workhorse focuses primarily on designing and manufacturing complete electric delivery vehicles, they compete indirectly with Odyne in the electric vehicle market. Odyne's key differentiator is their retrofit capability, allowing existing fleets to be electrified without complete vehicle replacement.
* XL Fleet (now Spruce Power Holding Corporation): XL Fleet also offers hybrid and electric powertrain solutions for commercial fleets. However, XL Fleet has shifted their strategic direction to focus on renewable energy solutions for residential customers. Odyne's consistent focus on the commercial fleet sector is a key differentiator.

**Sources:**

1. [https://www.odyne.com/](https://www.odyne.com/)

2. [https://www.viridico2.com/press-releases/odyne-systems-announces-partnership-with-viridico2/](https://www.viridico2.com/press-releases/odyne-systems-announces-partnership-with-viridico2/)

3. [https://www.energy.ca.gov/news/2020-08/cec-awards-53-million-electric-vehicle-projects](https://www.energy.ca.gov/news/2020-08/cec-awards-53-million-electric-vehicle-projects)

4. [https://www.linkedin.com/company/odyne-systems/](https://www.linkedin.com/company/odyne-systems/) (Used to corroborate Leadership Team details)