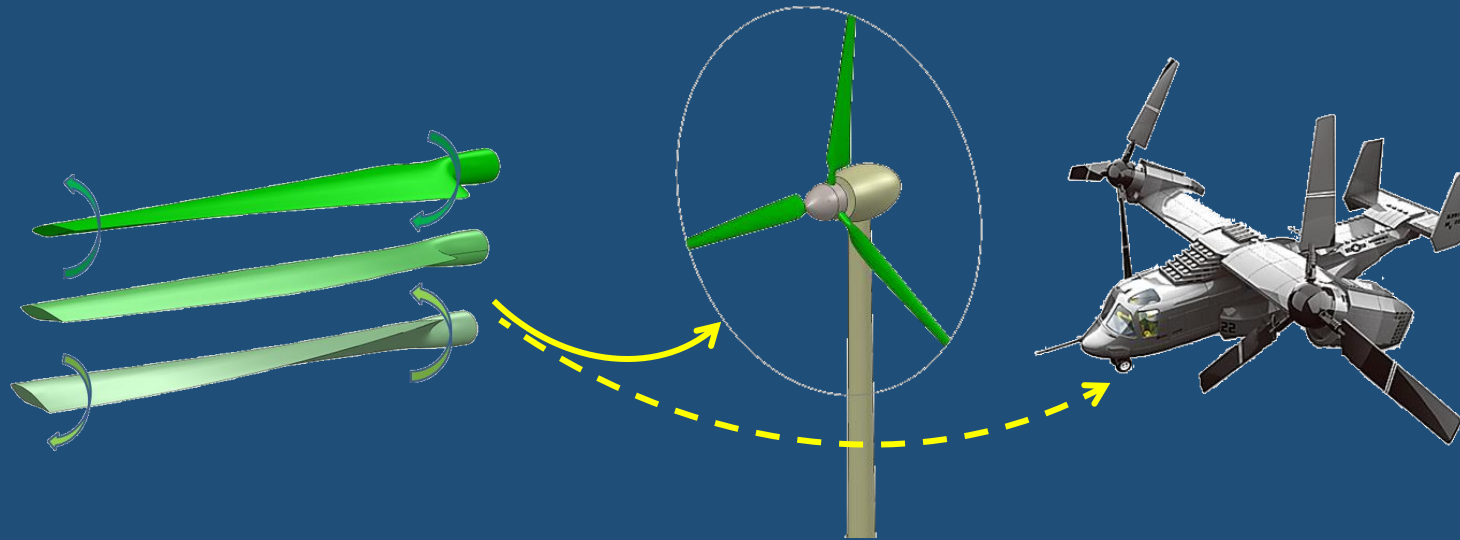


# Atrevida Science: Actively Adaptive Wind Turbine Blade

Mike Bergey, President of Bergey Wind Power

*"The work proposed by Atrevida Science addresses the increasing demand for new technologies to drive down the (Levelized Cost of Energy) LCOE. It will provide a better understanding of materials that can be deployed in next generation blade design."*



Adaptive Aero Structure Innovation from Wind Turbine Research

Angelo D'Ettore, CEO of Cartflow

*"We believe that Atrevida Science is well positioned from a technical perspective to conduct this research and address the cost issue. The collaboration between Atrevida Science and SUNY - University at Buffalo is also a strong partnership that has garnered our interest and excitement and why we are motivated to support this effort."*

## Opportunity

Wind Power: Largest new green energy, CAGR 15%, with technology to resolve pain points related to:

- Inefficient aerodynamic conversion
- High maintenance due to loads

\$78 M target market

## Our Solution

Adaptive wind turbine blade with out-of-plane twisting capability to:

- Increase power production
- Reduce shear forces and fatigue loading
- Reduce turbine vibration

Potential value propositions for aerospace applications that are of AF Customers' interest

## Impact

Significant improvement in wind industry by:

- 13% increase in efficiency (1% ~ 5% increase in return on investment)
- Up to 13% saving in total cost through reduction in loading

Phase I Start: August 9, 2019

Phase I End: November 8, 2019

Planned Phase II Start: April 2020