

# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY · OPERATIONS · SUSTAINABLE AVIATION FUELS



# Advanced Aircraft Technologies

**Roei Ganzarski,**  
CEO – magniX



# Middle Mile Small and Regional all-electric propeller aircraft (5-50 pax)

## Technology

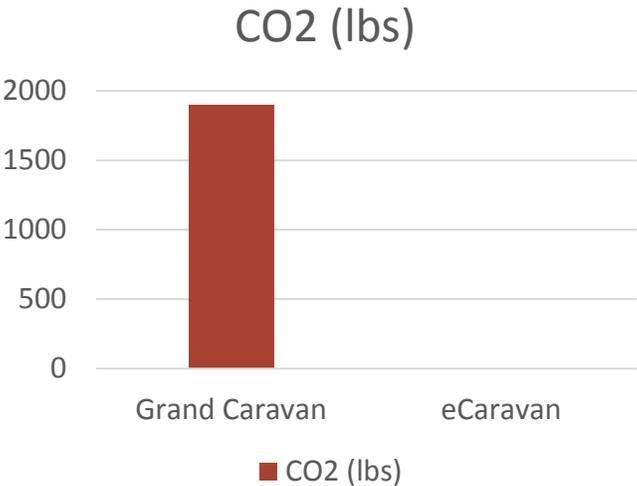
Electric propulsion systems (including motors and power electronics) designed for commercial aircraft. 280KW – 2MW. Multiple sources of electricity.



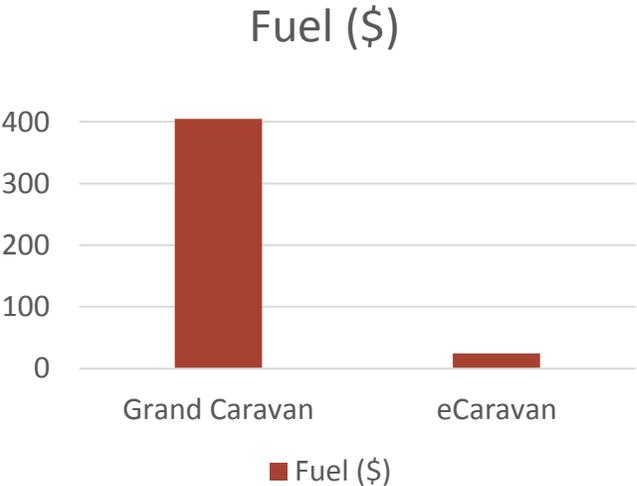
	<b>CO<sub>2</sub> reductions per flight</b>	<b>100%</b>
	<b>Level of finance required</b>	<b>-50%</b>
	<b>Timeframe</b>	<b>2022</b>
	<b>Main challenges</b>	<b>Mindset</b>

# Actual Aircraft Data

## 1.5-hour Cessna Grand Caravan vs. eCaravan



- ZERO Fuel, Zero Emissions
- Significantly Less Maintenance
- Higher Dispatchability
- 40% Less Noise



# Global Scheduled Airline Flight Ranges

OAG Data

Flight Range (miles)	Total Flights	% of Total Flights
0 to 99	1.8 million	5%
100 to 200	3.5 million	9%
201 to 300	4.6 million	12%
301 to 500	7.4 million	19%
501 to 700	5.5 million	14%
701 to 1,000	5.9 million	15%
1,001+ miles	9.7 million	25%
<b>TOTAL</b>	<b>38.7 million</b>	

**14%**  
 <200 miles



**45%**  
 <500 miles



# Changing Our View of Air Transportation

True Point-to-Point: Connecting Communities with Smaller Airports / Smaller Aircraft

Fit equipment to mission: Size, efficiency, noise, emissions

Ultra long range ; long range ; medium range: SAF, Engine Improvements, etc

Short range ; ultra short range: Electric (Battery, Hydrogen) and Electric-Hybrid

Multi-fleet multi-model solutions

Optimizing for emissions AND cost?



## Clean

magniX electric aircraft propulsion systems make less noise, burn no fuel and create zero carbon emissions



## Low Cost

electric aircraft do not need fuel and require less maintenance, making them up to 80% lower-cost to fly per hour



## Accessible

operators can justify offering many more short distance flights - on a wider network of routes, at lower prices and on-demand