





*"One of my earliest memories is of my Dad and me sitting on the kitchen floor. We were cleaning up an old car starter motor. His idea was to mount it on my little red pedal tractor. He was way ahead of his time with that idea – electric riding toys are everywhere today – that was over 60 years ago and it sure made an impression on me!"*

John McMillian  
Founder & CEO



## Problem: *Range Anxiety*

Range Anxiety is worry on the part of a person driving an electric car that the battery will run out of power before the destination or a suitable charging point is reached.

***"Range anxiety is often cited as the most important reason why many are reluctant to buy electric cars."***



As reported by:  
USA TODAY



*gizmag*

knox news.  
PART OF THE USA TODAY NETWORK



YAHOO!



*We make electric vehicles cool by providing a high performance, three-wheeled, three-passenger, all-electric commuter car that's convenient, economical, pollution free, safe, and fun to drive.*



## Solution: *the Defiant EV<sup>3</sup> Roadster*<sup>TM</sup>

The typical vehicle used for commuting is parked 95% of the time.



*A simple 120-volt outlet is all you need for our electric roadster to have a range of up to 200 miles per day!*



### *The pollution free Defiant EV<sup>3</sup> Roadster*<sup>TM</sup>

**Standard 120-volt outlet (home & work)**

**8 hour recharge (3X faster than a Leaf)**

**Daily Range 200+ miles**

**70+ MPH**

**Price \$24,950 (Net \$19,950 After Tax Rebate)**

**Each Roadster saves 30 barrels of crude oil/year**





## What About Level II Charging?



*The Defiant recharges in ½ the time  
from Level II Charging Stations*

**50% Charge**





# Technology Validation: *Why don't we need \$100,000,000?*

## Assembling Motorcycles; Not Building Cars!

Meet/Exceed All Autocycle Safety Regulations

No Government Crash Testing

## Québec Advanced Transportation Institute (ITAQ)

Leveraging Existing Technology

Manufacturing Scalability

Basic CAD Complete

95% Fewer Parts

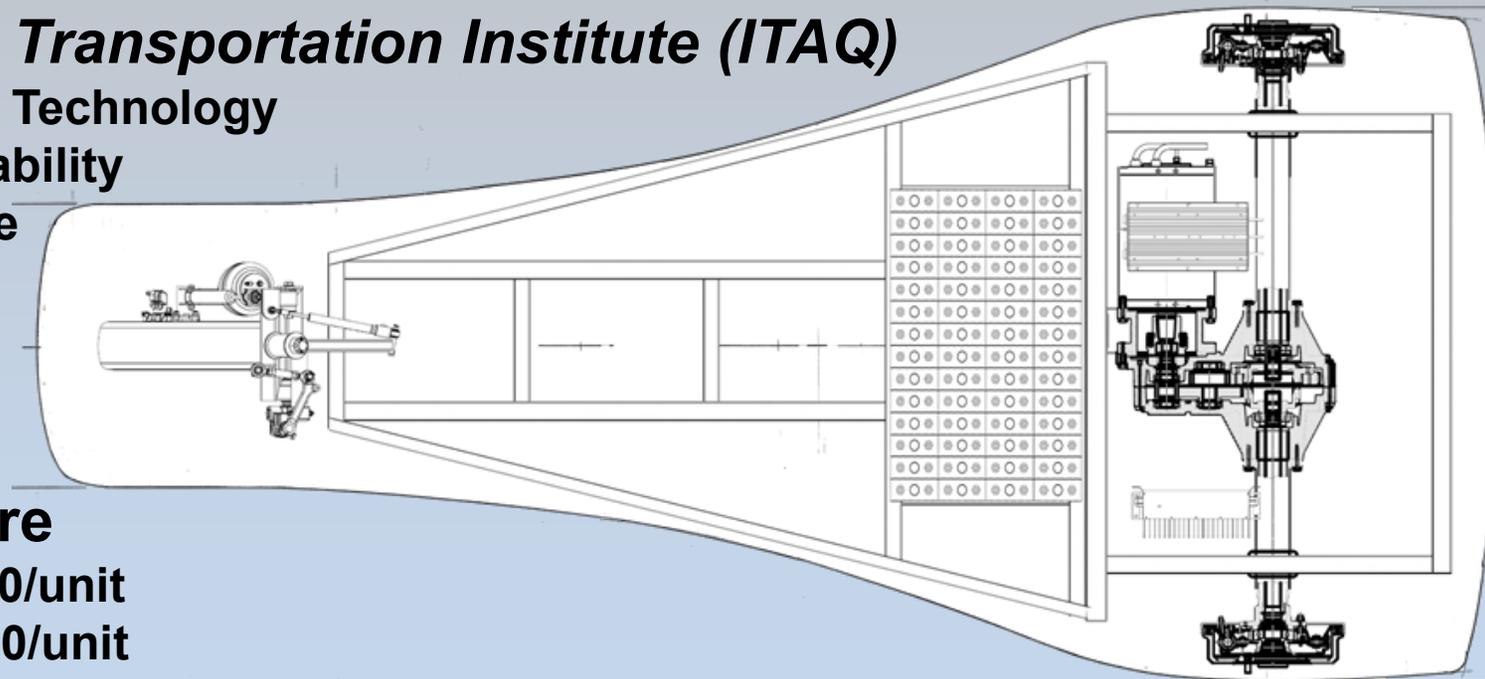
Molds Built

IP > \$1M

## Cost to Manufacture

Low Volume: \$18,750/unit

Gross Margin: \$6,200/unit





## Market: *"Eco-Sports Car Buyers", Fleets, & Agencies*

### **Eco-Sports Car Buyer:**

<b>Daily Commute:</b>	<b>&lt;50 miles</b>
<b>Gender:</b>	<b>75% male</b>
<b>Age:</b>	<b>35 to 55</b>
<b>Location:</b>	<b>Suburban/Urban</b>
<b>Family Income:</b>	<b>\$65k to \$125k</b>
<b>Occupation:</b>	<b>White &amp; Blue Collar</b>
<b>Education:</b>	<b>Technical School/College</b>

### **Fleets & Agencies:**

**Corporate Fleets and Resort Rental Car Agencies**



# Market: Size and Go-to-Market Strategy

Initial Obtainable U.S. Market at Startup: 6,000+ units per year

Go-to-Market Strategy: Assembly Factory → Nonexclusive Dealer Network & Service Centers

Start-up: Year 0 to 1.5

Ramp-up: Year 1.5 to 3.5

Growth: Year 3.5+



Assembly Facility:  
To be established in vacant car dealership.



**IDTechEX projects \$10.5B market for 3-wheeled EVs by 2025.**



# Market: Competitive Matrix

FACTOR	Defiant EV3	STRENGTH	WEAKNESS	Morgan	Arcimoto Fun	Solo	IMPORTANCE TO CUSTOMER
Image and Style		✓					High
Price (MSRP)	\$24,950	✓		\$44,000+	\$19,900	\$16,000+	High
Occupancy	Seats 3	✓		Seats 1	Seats 2	Seats 1	Medium
Classification	Autocycle	✓		Motorcycle	Motorcycle	Motorcycle	Medium
0 to 60 MPH	8 Seconds	✓		7 Seconds	8 Seconds	8 Seconds	Medium
Range	100+ Miles	✓		120 Miles	80 Miles	100 Miles	High
Energy Used @ 40 MPH	100 WH/Mile	✓		225 WH/M (Est)	225 WH/M (Est)	150 WH/M (Est)	Low
Recharge @ 120V	8 Hours (200+ miles daily range.)	✓		14 Hours	8 Hours	10 Hours (Est)	High
Recharge @ Level II	3 hours	✓		5 hours	4 hours	3 Hours	High
Service	Establishing Nationwide Dealership	✓		Dealership (14 in U.S)	None	None	High



# Market: Traction and Validation

***With Less Than \$1000 in Paid Advertising:***

**1000+ Facebook Followers**

**2500+ LinkedIn Network**

**630+ Followers on YouTube – with 500,000+ views**

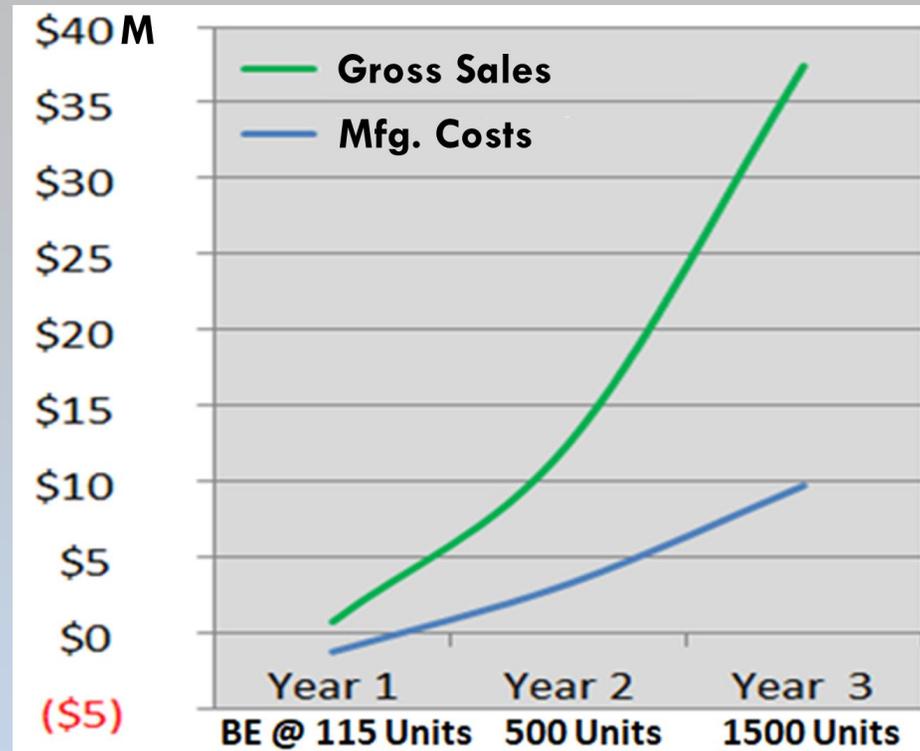
**1200+ Newsletter Subscribers**

***120+ Customers on wait list; \$2.9M pre-orders***





# Financial Analysis



**Beginning with first year of production.  
Lower costs are factored in to account for increased  
production economies of scale and lower component costs.**



# Executive Summary: Team Shockwave

## Leadership Team:



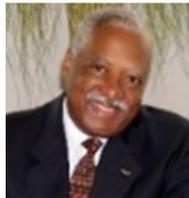
**John McMillian**  
Founder & CEO  
Decades of  
experience with  
electric vehicles,  
leadership, &  
transportation.



**Normand Rheault**  
Cofounder & HR  
Manager Consultant  
at Hyundai Motors  
Canada, & Rolls-  
Royce Limited.



**Carrie Fair**  
Cofounder & Media  
Relations, sales, &  
social media.



**John Felder**  
(Advisor) CEO at  
Cayman Automotive  
and Premier  
Automotive Export.



**Richard Otness**  
(Mentor) MBA  
Harvard, operations  
& industrial  
engineering.



**Thom Reed**  
Spokesperson  
Founder International  
Model & Artist Group  
"Miami Models" (South  
Beach) & Paraween  
Entertainment.

## Fabrication Team:



**Richard Webb**  
Master Fabricator

**Andrew Crider**  
Fabricator



# Executive Summary: Milestones/Validation/Funding

## Milestones:

- \$2.9+M in pre-orders**
- Third Prototype = MVP**
- SAE Certified**
- Automotive Supplier Agreements**
- \$1M+ IP Generated by ITAQ**

## Validation:

- 2019 National Cleantech Open Competition: *Top Ten Finalist***
- 2018 Cleantech Open Accelerator: *Southeast Region Winner***
- 2017 TiECon Detroit: *Excellence in Entrepreneurship Award***
- 2016 IDTechEx: *Most Significant Innovation in EVs***
- 2016 Featured on Discovery Channel's *"All-American Makers"***

## Investments:

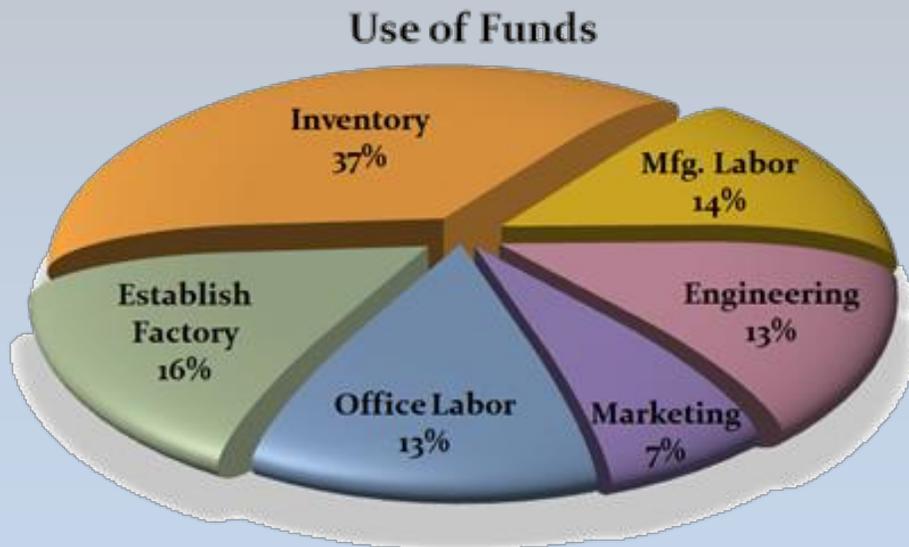
- \$395K – founders, in-kind services, sponsorships, and pitch contests***





# Looking Forward

Seeking additional funds to establish the assembly facility, dealer network, & begin production in the next 12 to 18 months.





# Exit Scenario Options



Management  
Buy Out

Share Buy  
Back

Merger and  
Acquisition

Initial Public  
Offering

## EV Companies



BYD  
Company



Tesla, Inc.



General  
Motors



Electra  
Meccanica



Zero  
Motorcycle

John McMillian, CEO  
Shockwave Motors, Inc.  
[John.McMillian@ShockwaveMotors.com](mailto:John.McMillian@ShockwaveMotors.com)