

# AAMC



## Altisource Asset Management Corporation

EARNINGS CALL

AUGUST 14, 2023

TICKER: (AAMC)

# Forward-looking Statement

Certain comments made in this presentation may contain forward-looking statements in relation to operations, financial condition and financial results of Altisource Asset Management Corporation (“AAMC”) and such statements involve a number of risks and uncertainties. Forward looking statements are usually identified by or are associated with such words as “intend,” “plan,” “believe,” “estimate,” “expect,” “anticipate,” “hopeful,” “should,” “may,” “will,” “could,” “encouraged,” “opportunities,” “potential,” and/or the negatives or variations of these terms or similar terminology. In particular, forward looking statements include, but are not limited to, statements as to our ability to develop and implement our new alternative lending business, including the ability to obtain leverage and potential return on equity, the impact of current inflationary economic and market conditions, including the current rising interest rate environment and development in the credit market, and our ability to develop, improve and optimize our information technology to support our business plans. These statements reflect management’s current beliefs and estimates of future economic circumstances, industry conditions, Company performance, and Company financial results and are not guarantees of future performance. All such forward-looking statements are based on current expectations and assumptions that are subject to certain risks and uncertainties that could cause actual results to differ materially from those expressed or implied in the relevant forward-looking statement. With respect to the growth and returns from our alternative lending business, our expectations depend on the ability to acquire and originate loans at attractive pricing, to obtain leverage, to successfully manage our loan portfolio and successfully dispose of loans at attractive levels. These risks and other risks are described in the Company’s filings with the Securities and Exchange Commission. Any forward-looking statements made in this presentation speak only as of the date of this presentation. Except as required by law, AAMC does not intend to update these forward-looking statements and undertakes no duty to any person to provide any such update under any circumstances.



# Altisource Asset Management Corporation ("AAMC")



## Alpha Control



### Challenge

Range and heat generation over an EV's drive cycle, i.e. Efficiency.



### Solution

Select and utilize multiple motors optimized for vehicle operations (patents awarded).



### Outcome

50% reduction in energy loss and heat generation resulting in an 8% increase<sup>1</sup> in range.



### Market Size

EVs represent a +\$299 billion annual market by 2030.<sup>2</sup>



### Roadmap

Next steps: prototype development & technology demonstrator (12 to 18 months - \$4 to 7 million), followed immediately by commercialization.



### Team

World class engineering team with exceptional networks across multiple industries and aligned incentives.

<sup>1</sup> Purple Sector

<sup>2</sup> IEA Forecast, global EV sales

<https://www.iea.org/reports/global-ev-outlook-2022>



## Challenge

Two of the greatest challenges in electric vehicles are range and heat dissipation.

Corroborated by both Elon Musk and Peter Rawlinson.

“...for an electric motor, it’s easy to get peak power for a short period of time – it’s hard to have sustained peak power, because you overheat, and it’s hard to get high efficiency over a complicated drive cycle. Those tend to be the problems we wrestle with.” **Elon Musk, CEO, Tesla**

“... less waste heat to dispel means you can have smaller radiators; smaller radiators lets you mold the car more aerodynamically, reducing losses to wind resistance. It all adds up.”

**Peter Rawlinson, CEO, Lucid Motor**

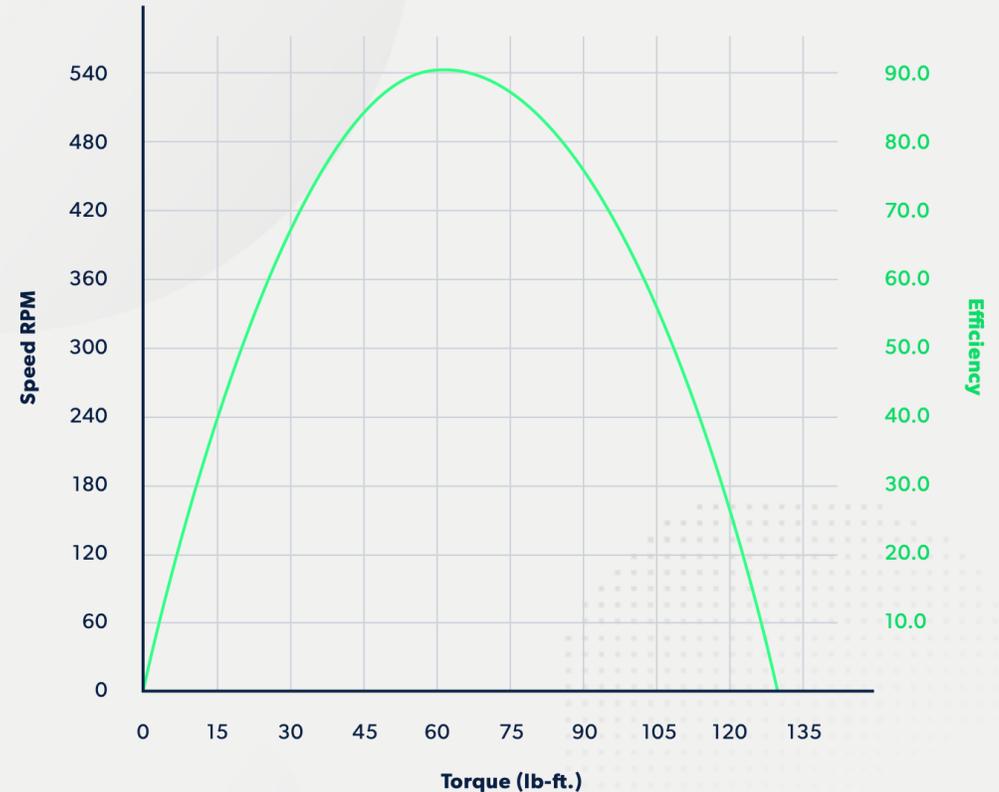


## Solution

Alpha Control. solves the two primary problems of electric vehicles (automobiles, trucks, construction/mining equipment, aircraft):  
Heat generation and  
Range which are a function of Efficiency.

Heretofore, peak efficiency was achieved over a very narrow range of torque and RPM.

## Efficiency



Outside of this range, efficiency decreases, and heat generation rapidly increases.

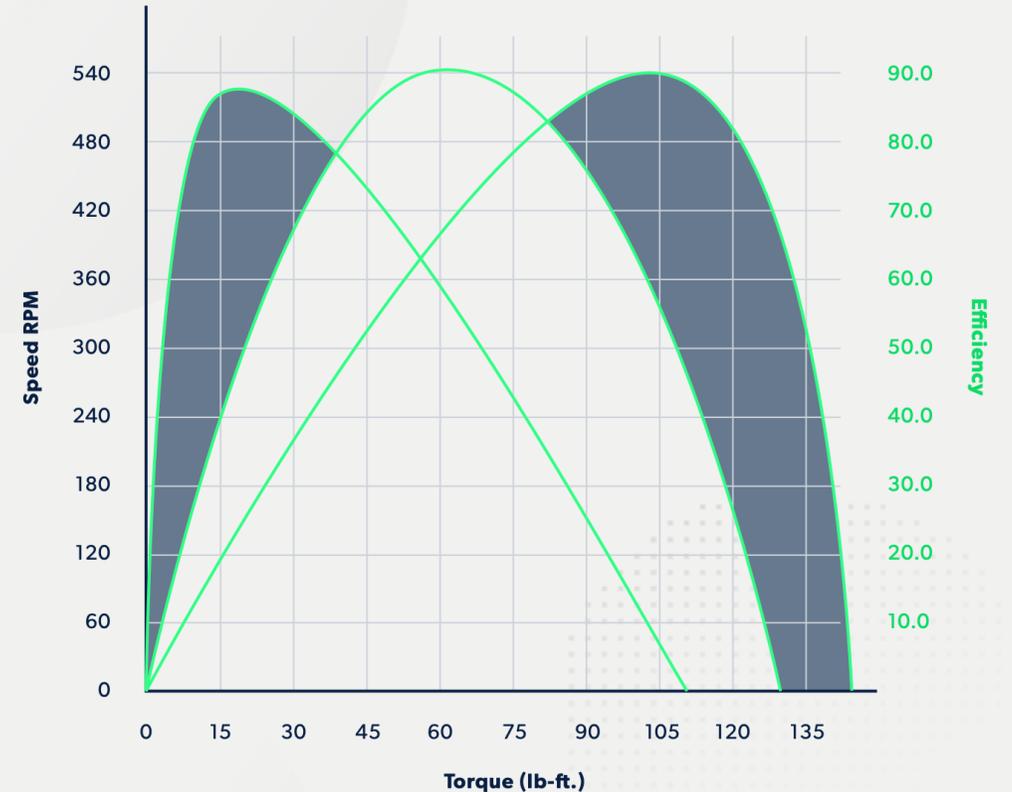


## Solution

Patented solution reduces energy loss and heat generation by utilizing multiple small motors instead of one large motor with each motor efficient at a different combination of torque and RPM.

Utilize multi-variate optimization to determine motor selection (including braking) to globally optimize over the entire trip.

## Efficiency



Areas in blue represent enhanced efficiency and decreased heat generation. The greater the variability in torque and RPM, the greater the savings.



## Patent Protection

Alpha Control owns two US patents and one UK patent with additional patents pending.

Highly rated patent counsel  
Mayer Brown



US011279241B2

(12) **United States Patent**  
Erbey et al.

(10) **Patent No.:** US 11,279,241 B2  
(45) **Date of Patent:** \*Mar. 22, 2022

(54) MULTI-MOTOR SWITCHING CONTROL SYSTEM AND METHOD FOR INCREASED EFFICIENCY AND ENERGY SAVINGS

(58) **Field of Classification Search**  
CPC ..... B60L 15/2045; B60L 7/10; B60K 1/02; G01C 21/3407; G01C 21/3453



US011485237B2

(12) **United States Patent**  
Erbey et al.

(10) **Patent No.:** US 11,485,237 B2  
(45) **Date of Patent:** Nov. 1, 2022

(54) MULTI-MOTOR SWITCHING SYSTEM AND METHOD FOR OPTIMIZED PERFORMANCE

(56) **References Cited**  
U.S. PATENT DOCUMENTS

(12) **UK Patent** (19) **GB** (11) **2600354** (13) **B**  
(45) Date of B Publication 31.05.2023

(54) **Title of the Invention:** Multi-motor switching system and method for optimized performance

## Outcome



50% reduction in energy loss and heat generation.



Enables bespoke motor configurations for materially enhanced performance and/or range.

# Technical and commercial assessment<sup>1</sup>



## Patent approach evaluated

Patent mathematics has been reviewed and evaluated by world class automotive and motorsport engineering team.



## Simulation, modelling & testing

Simulation models developed and correlation testing completed at award winning IAAPS advanced propulsion center.



## Commercial feasibility and value assessed

Commercial feasibility evaluated and value to OEM assessed.

1. Purple Sector

# Technical development

Tesla model 3 standard range (single motor) used as the baseline vehicle

Patent evaluated



Simulation toolset developed & controller optimised



2 phases of physical testing on 3 different motors completed – simulations correlated in representative conditions

## Low fidelity Model

High speed assessment

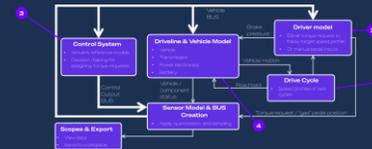
Matlab model – runs 3600x faster than real time



## High fidelity model

Thorough evaluation

Simulink model – all parameters



**IARPS**  
ADVANCING PROPULSION



UNIVERSITY OF  
**BATH**

These steps have generated the foundations for effective application of the patent and enabled commercial assessment



## Case study<sup>1</sup>

Patented Technology applied  
to a Tesla Model 3

*1. Purple Sector*



# 8.4%

## Range increase

+31.4km additional range

Range was increased from 375.1km to 406.5km using the WLTP (Worldwide Harmonised Light Vehicle Test Procedure) combined cycle and a configuration with 2 motors and an optimized controller.

# Commercial assessment<sup>1</sup>

Using the technical toolset and findings, three business cases were assessed in application of the patented technology to the Tesla Model 3



**Improve range & maximise retail price**

**\$393m annually**

Increase profit per vehicle of \$1.7k (increase retail price by 100% of perceived value of range extension)



**Improve range and partially increase retail price**

**\$193m annually**

Increase profit \$850 per (increase retail price by 50% of perceived value of range extension)



**Maintain range and reduce battery size (reduce BOM cost)**

**\$105m annually**

Maintain retail price, implement lower specification battery for same range

*Note – Market perceived value of range extension \$54.25/km results in an increased list price of \$1.7k per vehicle. All three cases assume patent technology only applied to 19% of Tesla vehicles (% of Tesla's sold as standard range variants in the USA). Cost of patent license + any non-recurring engineering costs to implement not considered.*

# Development opportunities

Range benefits were limited by available motor technologies

Current motor design optimization in automotive is focused on single motor use



**Efficient motor design and selection of alternative existing motors that leverage patent technology for increased gains**

1

Motors are capable of being 94% efficient but generally operate at a much lower level of efficiency

2

Potential efficiency gains are much higher than the 8.4% achieved with the Tesla Model 3 example

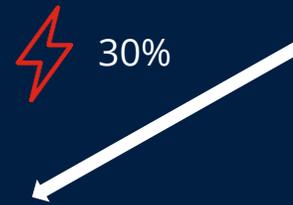
3

Further development to improve the business case and technology attractiveness for OEMs

# Market potential

**\$996bn<sup>1</sup>**

Global light vehicle sales 2030, 97m units



**\$299Bn<sup>2</sup>**

TGlobal EV sales  
2030, 29.1m units



**\$49.5Bn**

Total addressable  
market 2030



**\$9.27Bn**

Serviceable  
addressable  
market 2030

Note – 19% utilization will vary between manufacturers and sectors. \$1.7k incremental profit margin will vary based on range improvement realized, BoM cost of vehicle and perceived customer value in different applications

<sup>1</sup> SPG Global estimate <https://www.spglobal.com/mobility/en/products/automotive-light-vehicle-sales-forecasts.html>

<sup>2</sup> IEA Forecast, global EV sales <https://www.iea.org/reports/global-ev-outlook-2022>

**World Class Partner To  
Develop Prototype &  
Commercialize Product**



### **Seabird Technologies Ltd**

Led by CEO Richard Draisey, ex-McLaren Racing Strategy & Finance Director  
Co-Founded by Alejandro Agag, Chairman of Formula E, Extreme E & E1

World class engineering team with vast experience spanning multiple industries

- High performance automotive
- Electric mobility
- Formula One, Electric motorsport (Formula E, Extreme E, E1 Series)
- Aerospace
- Maritime



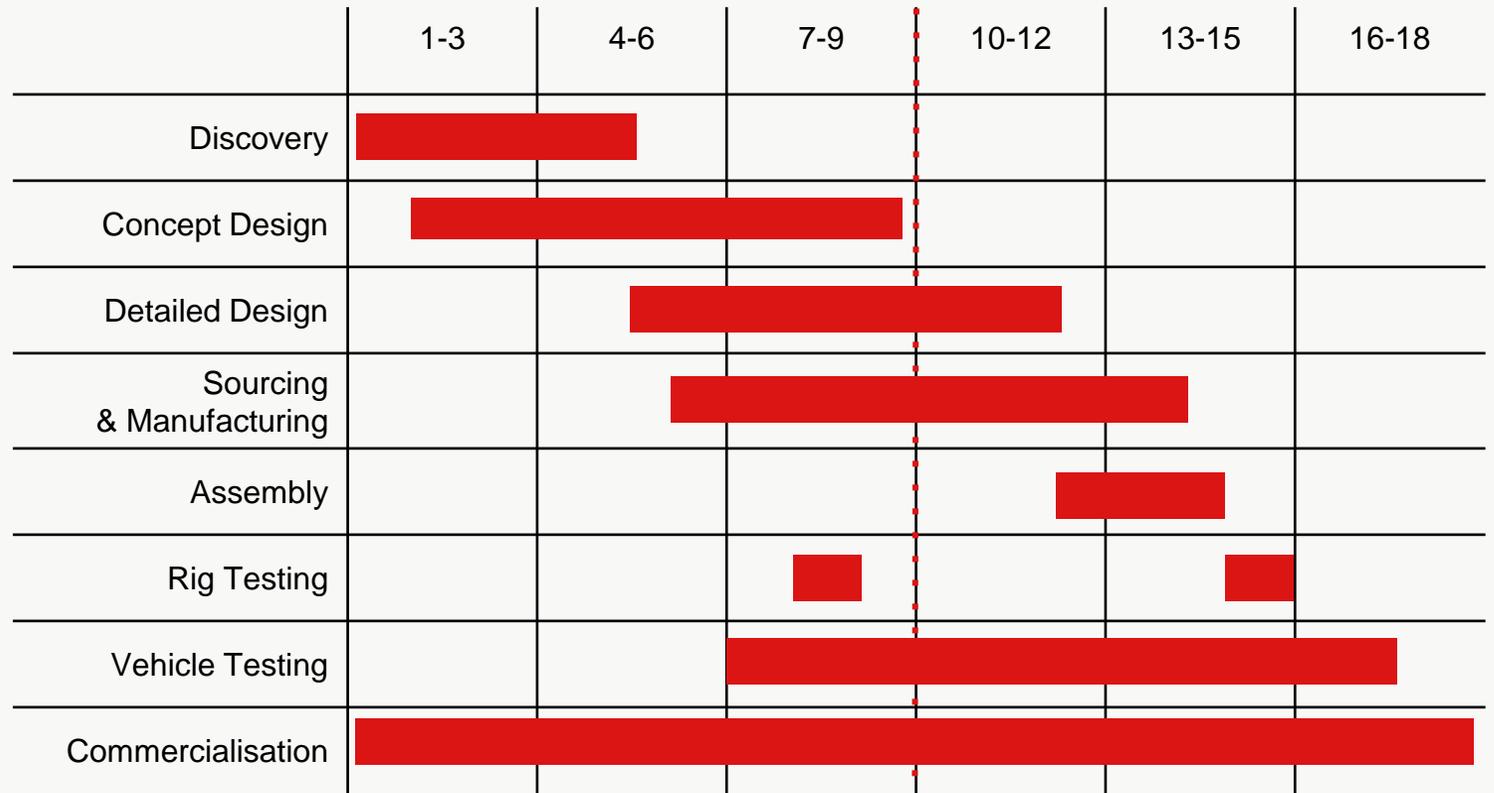
### **Key Engineering team**

- Mark Mathieson, ex-Chief Engineer Powertrain Research at McLaren Automotive
- Nathan Baker, ex-VP Simulation Engineering, Arrival
- Ciaran Branney, ex-Power Unit performance lead, Mercedes & McLaren Automotive



\$7 to \$8 million

**Prototype  
Development  
(Estimate)**



# Strong alignment of interest in our development partners



## Partner Development Contract



Structure demonstrates conviction in technology and application by world class partner.



10% ownership in the Company when revenue attributable to Partner's efforts exceeds \$500 million per annum.



Exclusive worldwide distributor for two years:

- 10% of revenue from net sales directly attributable to Partner's efforts up to \$250 million per annum.
- 20% of revenue from net sales directly attributable to Partner's efforts over \$250 million per annum.

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