

## Cleantech & Industrial Growth

# Arcimoto, Inc. | FUV - \$3.00 - NASDAQ | Buy

### Initiation of Coverage

Stock Data			
52-Week Low - High	\$2.26 - \$5.48		
Shares Out. (mil)	16.02		
Mkt. Cap.(mil)	\$48.1		
3-Mo. Avg. Vol.	30,370		
12-Mo.Price Target	\$9.00		
Cash (mil)	\$2.1		
Tot. Debt (mil)	\$1.7		
Tot. Debt (mil): Includes capital lease obligation			
EPS \$			
Yr Dec	—2018E—	—2019E—	—2020E—
		<b>Curr</b>	<b>Curr</b>
<b>1Q</b>	(0.13)A	(0.17)E	-
<b>2Q</b>	(0.14)A	(0.17)E	-
<b>3Q</b>	(0.21)E	(0.17)E	-
<b>4Q</b>	(0.23)E	(0.10)E	-
<b>YEAR</b>	(0.71)E	(0.62)E	0.19E
<b>P/E</b>	NM	NM	15.8x
Revenue (\$ millions)			
Yr Dec	—2018E—	—2019E—	—2020E—
		<b>Curr</b>	<b>Curr</b>
<b>1Q</b>	0.0A	1.8E	-
<b>2Q</b>	0.1A	3.8E	-
<b>3Q</b>	0.2E	6.0E	-
<b>4Q</b>	0.3E	16.5E	-
<b>YEAR</b>	0.5E	28.0E	125.0E



## FUV: Ming the Merciless Would Love the FUV; Initiating at Buy with a \$9.00 PT

Arcimoto is an emerging EV producer tapping into a unique market of short-distance commuters looking for a fun and safe option for short daily drives. The flagship FUV has a striking profile where one could easily imagine Ming the Merciless comfortable behind the wheel, and a ride experience somewhere between a safe motorcycle and a sports car. Strong pre-orders, reasonable pricing, a 70 mile range, and fun factoring into buying decisions, all support our view Arcimoto should see positive momentum.

- **Initiating coverage on Arcimoto at Buy with a \$9.00 target.** The company's flagship \$15k FUV is a two-seater, three wheel, all-electric vehicle that has an enhanced safety profile from the open safety cage, and is technically classified by NHTSA as a motorcycle. Management is diligently working through a stepwise manufacturing ramp, and we expect Arcimoto to transition volume retail sales in 1Q19, as pre-orders are fulfilled.
- **Reservations backlog provides good visibility for the initial revenue ramp, in our view.** Customers can pre-order the FUV for a refundable \$100 deposit. At the end of 2Q18 Arcimoto had 2,800 pre-orders, up from 2,421 in 1Q18, and 1,523 in 2Q17. Recent pre-order momentum of 300+/Qtr was achieved with minimal marketing spend, and nearly no vehicles on the road.
- **Volumes and experience in adjacent markets suggests good potential for Arcimoto to achieve positive sales momentum.** Both the Polaris Slingshot and the Can-Am Spyder sell around 8,000-9,000 units/yr, and are roughly 30%-60% more expensive than the FUV when including typical options. U.S. golf cart sales of 60,000+ units/yr suggest a larger market, as vacation destinations and retirement communities are a key piece of demand. With the three wheels and an open safety cage, we believe a key buyer demographic will be either people that can no longer ride motorcycles, or wouldn't ever, because of safety considerations.
- **We believe the 'FUV Hub' rental model could provide dual synergies, with rapid paybacks for in-rental fleets, and important visibility and hands-on customer experience in key markets.**
- **We forecast 2019 and 2020 revenue of \$28m and \$125m, which assumes Arcimoto delivers ~2,300 and ~10,300 FUVs, respectively.** The expected capacity to produce 200 vehicles a week on a single shift by the end of 2019 suggests these targets should be achievable.
- **We are introducing a \$9.00 target, using a 1.75x P/Sales on our 2020 revenue estimate of \$125m, also accounting for expected dilution.** We see a 1.75x multiple on 2020 estimates as fair for Arcimoto's growth outlook given the unique product, and substantial reservations backlog, offering an attractive transport option at a low price.

## INVESTMENT THESIS

**Initiating coverage on Arcimoto, Inc. at Buy with a \$9.00 price target.** We see Arcimoto as an emerging all-electric utility vehicle producer tapping into a unique market of short-distance commuters looking for a fun and safe vehicle for their daily drives. The company's flagship product, the 'Fun Utility Vehicle' or FUV, has a striking profile where one could easily imagine Ming the Merciless comfortable behind the wheel, and a ride experience somewhere between a safe motorcycle and a sports car. The FUV is a two-seater, three wheel, all-electric vehicle that has an enhanced safety profile from the open safety cage, and is technically classified by NHTSA as a motorcycle. Strong pre-order momentum with pre-orders from every state in the U.S., a reasonable price versus comparable transportation options, and the fun factor impacting consumer buying decisions, all support our view Arcimoto should see positive momentum.

**Reservations backlog provides good visibility for the initial revenue ramp, in our view.** Customers can make pre-orders for the FUV for a refundable \$100 deposit, and at the end of 2Q18 Arcimoto had 2,800 pre-orders for the FUV, up from 2,421 in 1Q18, and 1,523 in 2Q17. With the company adding an average of over 300 reservations per quarter for the trailing four quarters, we see continued order momentum as a healthy positive, even before the units are visible on the road. The company has hosted over 50 ride and drive events for potential customers in the past three years, with California delivering some of the strongest pre-order momentum, and additional orders clustered in Oregon, Texas, Florida, and New York.

**Volumes and experience in adjacent markets suggest good potential for Arcimoto to achieve positive sales momentum.** We believe the market Arcimoto is looking to serve is larger than many might appreciate, as more expensive comparable vehicles often achieve substantial volumes. For the big picture view see the broader U.S. motorcycle market was 470,000 units in 2017, and annual golf carts sales of 60,000+ units as strong positives, particularly given the popularity of golf carts in vacation destinations and retirement communities. Both the Polaris Slingshot and the Can-Am Spyder sell around 8,000-9,000 units annually, and are roughly 30%-60% more expensive than the FUV when including typical options.

**We believe the 'FUV Hub' rental model could provide dual synergies, with rapid paybacks for in-rental fleets, and important visibility and hands on customer experience in key markets.** Arcimoto has opened its first company-owned rental location in Eugene, OR on October 27<sup>th</sup>, and operates a second in Encinitas, CA in partnership with Hula Electric. The vision is to establish locations in active rental markets, where a typical location could have 100 FUVs generating over \$3 million in annual revenue, and \$1 million in profits. The experience of other rental operators often seeing paybacks of a year or less suggests good potential of a profit generating sales operation, where many customers could become buyers.

**We forecast 2019 and 2020 revenue of \$28 million and \$125 million, which assumes Arcimoto will deliver around 2,300 and 10,300 FUVs, respectively.** We believe there is good visibility for the initial revenue ramp, supported by the reservations backlog of 2,900 units, and initial fill at third party rental locations. If we assume Arcimoto retains relatively positive controls on sales and marketing expenses, as well as other frictional costs, we believe the company could be cash breakeven exiting 2020, with 2019 and 2020 net income of (\$13.0) million and \$4.7 million, and EPS of (\$0.62) and \$0.19, respectively.

**We are introducing a \$9.00 price target, using a 1.75x P/Sales on our 2020 revenue estimate of \$125 million, also accounting for dilution from future equity financings.** We see a 1.75x multiple on 2020 estimates as fair for Arcimoto's growth outlook, given the unique product with a substantial reservations backlog, offering an attractive transport option at a low price.

Possible impediments to the achievement of our target price could come from weekly production or the rate of delivery below levels necessary to meet forecasts, and the potential challenges in managing the supply chain during a significant revenue ramp. Investors in Arcimoto will face risks related to the company's access to capital, which could introduce volatility to the stock. The company also faces typical competition from OEMs in adjacent markets, where many have significantly greater resources. If Arcimoto's products were found to have a flaw, this could drive a material warranty expense, and negatively impact the brand.

## COMPANY OVERVIEW

Arcimoto, Inc., based in Eugene, OR, is an emerging all-electric utility vehicle producer working to tap into a unique market of short-distance commuters looking for a fun and safe vehicle for their daily drives. The company's flagship product, the 'Fun Utility Vehicle' or FUV, has a striking profile where one could easily imagine Ming the Merciless comfortable behind the wheel, and a ride experience somewhere between a safe motorcycle and a sports car. The FUV is a two-seater, three wheel, all-electric vehicle that has an enhanced safety profile from the open safety cage, and is technically classified by NHTSA as a motorcycle. The company was founded in 2007, and after a decade of development with 10 iterative prototype vehicles the company came public in September 2017 in a Reg. A offering, raising net proceeds of \$18.1 million. The company today generates its identity from management's stated mission to help catalyze a shift towards a sustainable transportation system, and we see the FUV as a cost-effective solution for short-distance commuters looking for a fun and sustainable ride.

**Figure 1: Arcimoto Signature Series FUV**



*Source: Arcimoto, Inc. Company Website.*

Arcimoto sells the FUV for \$15,000 and management is targeting longer-term base model pricing of \$11,900 per vehicle. The vehicle is offered with many standard safety features, and can be customized, and where buyers can add features including storage options, doors, climate controls, and entertainment options. The vehicle comes with a standard range of 70 miles (or 130 miles with additional battery capacity) and a top speed of 80 mph, which we see as a good fit for the travel needs of an average local commuter. While NHTSA classifies the FUV as a motorcycle, the driving experience is stable and balanced, and the driver doesn't need to counter-steer, like on a motorcycle.

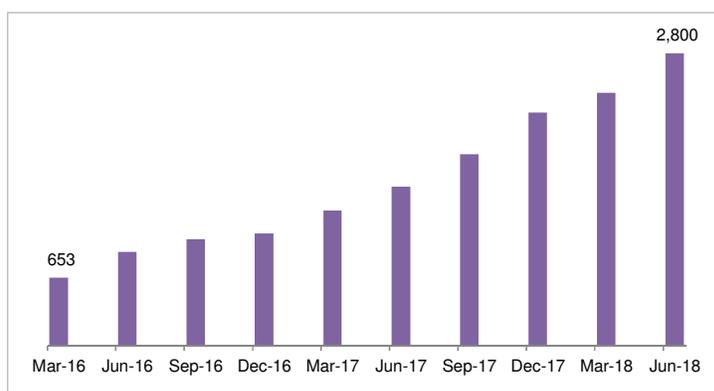
The company has been accepting pre-orders since 2009, where retail customers can put down a \$100 deposit (refundable) for a place in line for one of the early vehicles. Pre-orders have increased from 161 deposits as on October 2015, to 2,904 pre-orders as on August 2018.

Figure 2: Key Product Specifications

KEY SPECIFICATIONS (Targeted)	
Base Price	\$ 11,900
Top Speed	80 mph
Range - Base (12kWh)	70 miles
Range - Extended (20 kWh)	130 miles
Weight	1,100 lbs
Acceleration (0-60)	7.5 secs
Fuel Efficiency	230 MPGe
Battery Type	Pouch Cell
Battery Supplier	Farasis
Charging Time (110 V)	8 hours
Charging Time (220 V)	4 hours

Source: Company SEC filings, website and ROTH Capital Partners.

Figure 3: Number of retail pre-orders received



Source: Company SEC Filings and ROTH Capital Partners.

After building eight generations of prototypes in an iterative design process, the Arcimoto team shifted its focus in late 2015 to developing volume production capabilities, where management estimated a need for \$30 million in funding after the modest \$10 million previously invested through mid-2017.

In September 2017, immediately following the IPO, Arcimoto leased the 30,000 square foot manufacturing space in Eugene, OR. The expansion plan was to set up manufacturing in two phases; Phase-1 assembly leveraging pre-existing vendors, and Phase-2 focusing on task specific tooling, and internalized sheet metal and tube frame fabrication. Critical equipment started arriving in November 2017, with key items including the BLM LC5 Tube and Sheet Laser, E-Turn52 Tube Bender system, robotic arms, and software systems. Management estimates the capital expenditures for tooling and manufacturing equipment for the current facility at \$4.8 million, where \$4.3 million was invested by the end of 2Q18.

Management has taken a defined step wise path towards commercial-scale production moving from the June 2018 start of station-built Signature Series FUVs for internal use, to building beta series FUVs with externally then internally sourced components. The company has now started production of the A-Series (aka Pilot), which has the majority of its components manufactured in house on company-owned tooling. Management has indicated plans for its initial retail sales before the end of 2018, with rising volumes to retail customers likely in 1Q19.

Figure 4: Arcimoto Vehicle Series

	Description	Planned # of units	Purpose/Target	Timeline and current status
<b>Signature Series FUV</b>	Station-Built, Low Volume, High-Cost	10	Early customers, internal use	Delivery completed by June 2018
<b>Beta Series FUV</b>	Line-Built, Low Volume, High-Cost	15	High-utilization fleet deployments (rentals) to drive market awareness	15 unit fleet on-road in September 2018
<b>A-Series FUV</b>	Line-Built, Low Volume, Moderate-Cost	25	Retail production intent, transition to semi-automated manufacture	Currently in production
<b>Retail Series FUV</b>	Line-Built, volume, affordable		Sale to retail customers	Start of production expected by end of 2018

Source: Arcimoto, Inc. Presentation (September 2018) and ROTH Capital Partners.

Upon completion of the A-Series production, and a thorough final validation of product designs, the company will start full-scale volume production of the Retail Series for delivery to customers who have pre-ordered the product. By the end of 2019, Arcimoto plans to demonstrate a build rate of 200 units a week, translating into annual production capacity of about 10,000 units, while operating in a single shift. When the company expands to two shifts, the production capability would expand to 20,000 units.

While most of the metalwork for production is sourced in house, Arcimoto buys tires, braking systems, batteries, and other components from various suppliers. The company's battery vendor is Farasis Energy (incorporating NCM chemistry cells), which is also a supplier to other electric motorcycle producers including Brammo, Empulse and Zero Electric Motorcycles. The FUV is powered by the Arcimoto Battery System, the company's patent-pending architecture for packaging lithium-ion battery which has a high conductivity interconnect between cells and a cooling structure that management believes reduces costs related to thermal management. FutureDrive is Arcimoto's electric drive train technology which combines two electric motors, a custom dual-motor direct drive gearbox and vehicle power electronics.

As of December 2017, Arcimoto had three issued utility patents, including two covering novel aspects of the vehicle architecture, and one covering Arcimoto's dual-motor gearbox design. The company has received a Notice of Allowance for a fourth utility patent covering advances made to the platform through the current model FUV. Arcimoto also has three patent applications pending related to its battery system.

**SALES AND MARKETING MODEL**

Arcimoto is using a ‘direct to customer’ sales model, eliminating the use of a third party dealer. The company’s customers submit their vehicle orders directly on the website (arcimoto.com/preorder), and vehicles are delivered by Arcimoto employees. For the initial sales ramp, we expect sales to benefit primarily from word-of-mouth testimonials, and a local on-road presence driving interest.

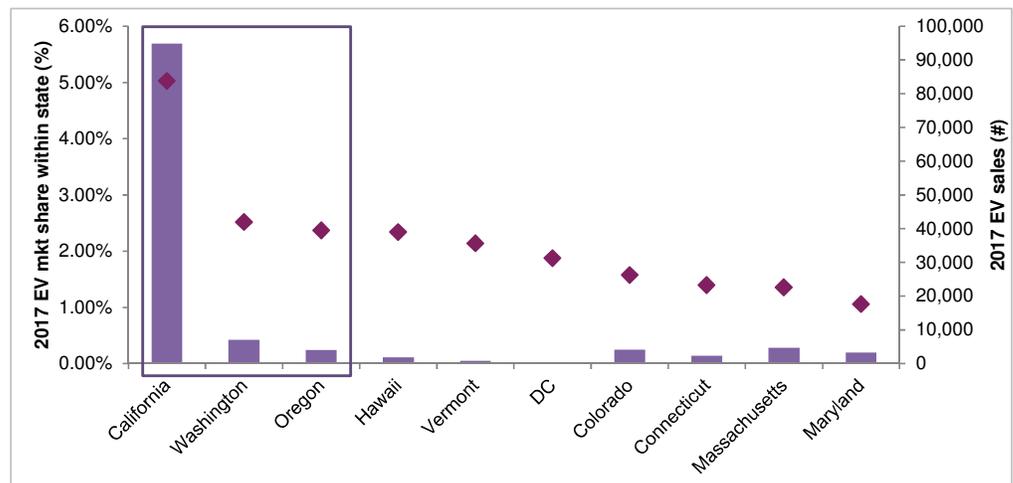
The company is planning on augmenting the web-based experience with retail locations or ‘FUV Hubs’ in select markets that should facilitate expanding customer experience with the FUV. Arcimoto’s plans lean more towards ‘Rental Experience Centers’ than Tesla’s approach with company stores, as experience centers can function as a profitable rental office, where people will be able to rent the FUVs under short-term agreements, or have purchased vehicles serviced. We believe the rental model has two primary benefits for Arcimoto, as the company generates revenue on early sales of Signature or Beta Series FUVs, while putting these vehicles in the hands a wide pool of potential customers.

Management is looking at pursuing the ‘FUV Hub’ business model in three structures; company owned, joint ventures, and franchise locations. Arcimoto opened its first company-owned rental location in Eugene, OR on October 27, 2018, and this location now operates with three Signature Series vehicles. The Hula joint-venture FUV Hub in Encinitas, CA was opened in mid-2017, and the partners plan to open a new facility in San Diego by the end of 2019. The partners envision up to 100 FUVs at each location by the end of 2019, where moderate utilization suggests \$3 million in revenue potential per location, with more than \$1 million in annual profits. Conversations with various potential franchisees are also ongoing.

The team is working on ‘Destination Marketing Plan’, looking to extend the Arcimoto ‘FUV Hub’ presence in vacation destinations that already have active rental markets. (CA, HI, FL, NV, Baja).

Management also plans to host an experience tour in the lower 48 states after volumes have ramped, which would allow an even wider range of potential customers to drive the vehicles. Arcimoto has also displayed FUV prototypes at key events including the Consumer Electronics Show, the NY Auto Show and conducted test drive events in various key states.

**Figure 5: EV penetration in Arcimoto’s initial target markets**



Source: Alliance of Auto Manufacturers and ROTH Capital Partners.

Arcimoto has received pre-orders from across all U.S. states, but the majority comes from Oregon, California, Florida, New York, Texas, New Jersey, and Washington. The company plans initial FUV deliveries to customers in the three states of Washington, Oregon and California, given geographic proximity to the Eugene headquarters. The focus on west coast states makes sense, in our view, as these were the top three states in 2017 when ranked by EV market share.

**COMPETITION**

While passenger vehicles come to mind first when you mention electric vehicles, markets for electric motorcycles and scooters have expanded rapidly over the past few years. We believe an increasing number of customers are open to buying vehicles that are more compatible with their daily driving needs.

Some of the more popular electric vehicles (both motorcycle- and automobile-class) include Renault's Twizy, Daimler's Smart fortwo, and the Toyota iRoad. The Twizy is restricted to 25 mph but is popular as a rental vehicle in few of the U.S. markets, while the iRoad is yet to be launched in the U.S. retail market.

**Figure 6: FUV Competitive Market Landscape - Electric Vehicles**

	Commercial presence				Prototype / concept car / under development			
	FUV	Twizy	Smart fortwo	Solo	iRoad	Morgan EV3	T-REX Electric	Lit C1
<b>Company</b>								
<b>Company</b>	Arcimoto	Renault	Mercedes/Smart	Elettra Meccanica	Toyota	Morgan Motors	Campagna Motors	Lit Motors
<b>Type</b>	Electric	Electric	Electric	Electric	Electric	Electric	Electric	Electric
<b>Wheel</b>	3	4	4	3	3	3	NA	2
<b>Range (max)</b>	130 miles	56 miles	58 miles	100 miles	30 miles	150 miles	NA	170 miles
<b>Top speed (Hw / City)</b>	80 mph	50 mph	81 mph	82 mph	37 mph	> 90 mph	180 kmph	> 100 mph
<b>Fuel Efficiency (Hw / City)</b>	230 mpge	211 mpge	94 mpge/124 mpge	150 mpge	NA	NA	NA	NA
<b>Weight</b>	500 kg	474 kg	500 kg	675 kg	300 kg	< 500 kg	1320 lbs	NA
<b>Acceleration (0-60)</b>	7.5 sec	6.1 sec (0-45)	11.4 sec	8 sec	NA	< 9 sec	3.2 sec	6 sec
<b>Price (base)</b>	\$11,900	£ 6,690*	\$23,900	\$15,500	NA	NA	NA	NA
<b>Federal Tax Credit Eligible</b>	No	NA	Yes	Yes	NA	NA	NA	NA

\* Excludes cost of battery pack, which is leased

Source: Company websites, news releases and ROTH Capital Partners.

The FUV also faces competition from in conventional gas-powered vehicles. Many gas-powered vehicles have much higher prices, and cater to a different market segment. Elio Motors is one of the few companies to target pricing similar to the FUV and claims impressive fuel efficiency at 84 miles per gallon.

**Figure 7: FUV Competitive Market Landscape - Conventional**

	FUV	Elio	Slingshot	T-Rex 16S	3 Wheeler	ScotCoupe
<b>Company</b>						
<b>Company</b>	Arcimoto	Elio Motors	Polaris	Campagna Motors	Morgan Motors	Panther Motors
<b>Type</b>	Electric	Gas	Gas	Gas	Gas	Gas
<b>Wheel</b>	3	3	3	3	3	3
<b>Steering</b>	Handlebar	Steering Wheel	Steering Wheel	Steering Wheel	Steering Wheel	Handlebar
<b>Top speed (Hw / City)</b>	80 mph	> 100 mph	130 mph	130 mph	115 mph	55 mph
<b>Fuel Efficiency (Hw / City)</b>	230 mpge	84 mpg / 49 mpg	~ 25 mpg	~35 mpg	30.3 mpg	80 mpg
<b>Weight</b>	500 kg	610 kg	790 kg	525 kg	525 kg	181 kg
<b>Acceleration (0-60)</b>	7.5 sec	10.8 sec	4.8 sec	3.9 sec	6 sec	NA
<b>Price (base)</b>	\$11,900	\$7,450	\$19,999	\$57,999	\$45,014	\$8,250

Source: Company websites, news releases and ROTH Capital Partners.

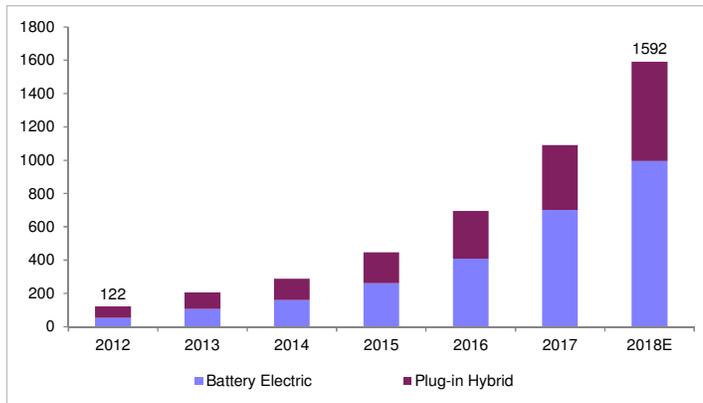
**MARKET OVERVIEW**

**Electric Vehicle Market**

The global market for hybrid, plug in, and all-electric vehicles (xEVs), has evolved rapidly over the past two decades, starting with the commercial introduction of the Toyota Prius in Japan 1997, and its worldwide launch in 2000. Various factors have materialized as tailwinds for alternative fuels and the electrification of drivetrains including environmental concerns, stricter fuel economy standards, declining costs, volatility of crude oil prices, and growth of supporting infrastructure.

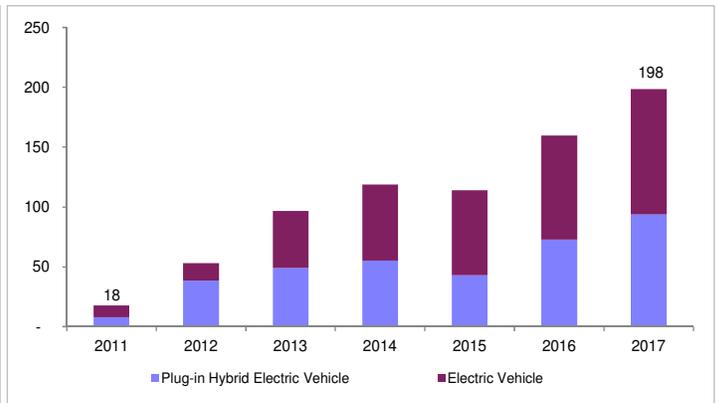
Global xEV sales have accelerated since 2012. The U.S. Department of Energy states the global passenger xEV stock increased from 1 million in 2015 to 2 million by the end of 2016, and 3.5 million passenger xEVs as of June 2018. Bloomberg New Energy Finance (BNEF) forecasts the xEV passenger car fleet will reach 5 million vehicles by March 2019. Despite this progress, there are still just six countries where xEVs make up more than 1% of passenger vehicle sales. We expect future growth to continue accelerating, as the number of new xEV models is expected to increase from 155 today to 289 by 2022, as major OEMs pursue growth in this technology. BNEF forecasts EV sales volumes of 1.1 million units in 2017 will grow to 11 million units global sales in 2025.

**Figure 8: Global Electric Vehicle sales ('000 units)**



Source: BNEF and ROTH Capital Partners.

**Figure 9: U.S. Electric Vehicle Sales ('000 units)**



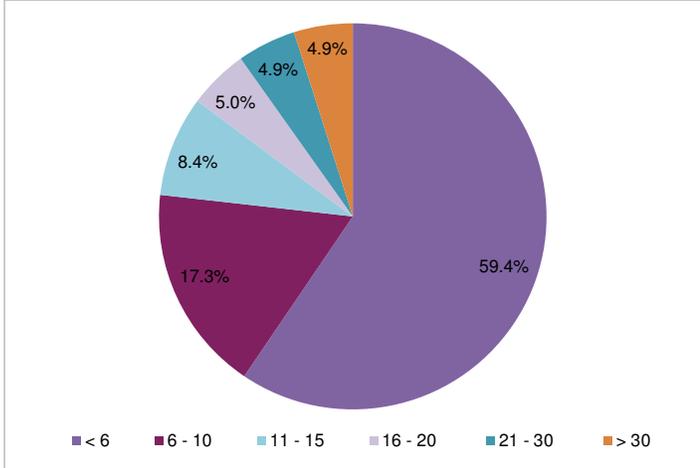
Source: Bureau of Transportation Statistics and ROTH Capital Partners.

The EIA also notes a growth in demand for two-wheel Electric Vehicles, especially in the Asian markets, where two-wheelers are most popular. According to the EIA, the total cost of ownership of an ICE two-wheeler and an electric model is small when accounting for years of ownership and annual travel distance.

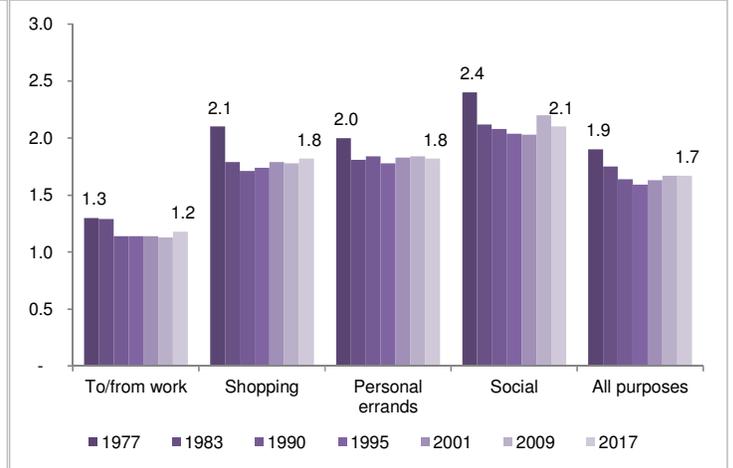
**The U.S. Drive Cycle is Mostly Short Trips**

We believe Arcimoto is targeting a relatively untapped group of customers by providing a convenient, cost-efficient travel solution to meet their daily travel needs.

**Figure 10: Vehicle trips by trip distance (2017, in miles)**



**Figure 11: Average vehicle occupancy by trip purpose**

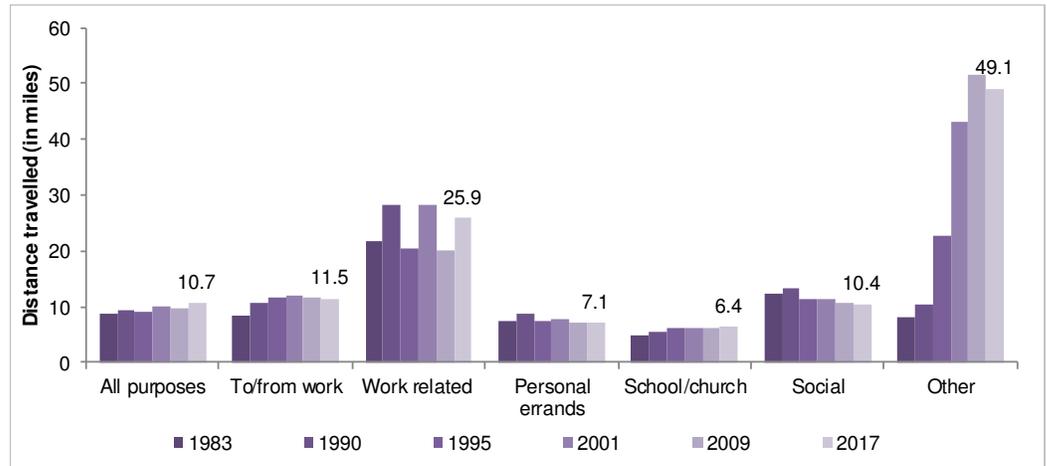


Source: U.S. Department of Transportation and ROTH Capital Partners.

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According to the U.S. Department of Transportation, 59.4% of total vehicle trips in 2017 were less than six miles, and the average person trip length for all purposes was just 10.7 miles. Most trips also have just a single passenger in the vehicle.

**Figure 12: Average vehicle trip length**



Source: U.S. Department of Transportation and ROTH Capital Partners.

Management believes the FUV is a good fit for customers that have a car for comfortable longer-distance travel, or days when weather is difficult, but the FUV can effectively meet most of a driver’s short-distance travel needs, significantly reducing use of the gasoline car. This would allow customers to reduce their travel costs, while adding fun to the daily drives.

## FINANCIAL REVIEW

### 3Q18 Quarterly Results

Arcimoto reported 2Q18 revenue of \$85,332 versus \$656 in 1Q18. Revenue came from sales of the remaining Signature Series vehicles, and initial shipments of Arcimoto's Beta series vehicles. The company's operating loss of (\$2.2) million in 2Q18 compared to (\$2.0) million in 1Q18 and (\$0.6) million in 2Q17. Arcimoto's higher operating loss was a function of the company's investment in the manufacturing facility, preparing for full retail production by 1Q19. EPS of (\$0.14) compared to (\$0.13) in 1Q18, and (\$0.05) in 2Q17.

Cash and short-term investments of \$7.3 million exiting 2Q18 compared to, \$11.1 million at the end of 2Q18, and \$758,000 at the end of 2Q17.

### Guidance

Management indicated on the 2Q18 earnings call that it expects modest revenue in 3Q18, with a substantial pick up in 4Q18.

Arcimoto management has also stated they expect the current manufacturing facility to be able to produce up to 200 vehicles per day by the end of 2019, working a single shift, equal to roughly 10,000 vehicles a year.

Current ASPs management is discussing are also in the \$15,000 range, with a base price of \$11,900 that could be achievable in 2020 once production has ramped, and utilization levels are strong. The amount of optioning on individual vehicles will also have a significant impact on overall prices.

### Financial Forecast

We forecast 2019 and 2020 revenue of \$28 million and \$125 million, which assumes Arcimoto will deliver 2,300 and 10,300 FUVs, respectively. We believe there is good visibility for the initial revenue ramp, supported by the reservations backlog of 2,900 units, and initial fill at third party rental locations.

If we assume Arcimoto retains relatively positive controls on sales and marketing expenses, as well as other frictional costs, we believe the company could be cash breakeven exiting 2020, with 2019 and 2020 net income of (\$13.0) million and \$4.7 million, and EPS of (\$0.62) and \$0.19, respectively.

### Company Financings

On September 21, 2017, the company came public in a Reg A offering issuing 2.9 million shares at \$6.50 per share, raising net proceeds of \$18.1 million after fees and expenses.

In 2Q18, the company submitted a draft application for a \$100 million Advanced Technology Vehicles Manufacturing (ATVM) loan at the U.S. Department of Energy. The current administration has plans to rescind or cancel this plan permanently, creating uncertainty for funding from this application.

We expect Arcimoto to need additional financing to pursue its business plan, and have assumed a \$15 million capital raise at the end of 2018, with another \$15 million raised at the end of 2019. For our model we have assumed an equity issuance, but capital could come from a range of debt or equity instruments.

## VALUATION

We are introducing a \$9.00 price target, using a 1.75x P/Sales on our 2020 revenue estimate of \$125 million, also accounting for dilution from future equity financings. We see a 1.75x multiple on 2020 estimates as fair for Arcimoto's growth outlook, given the unique product with a substantial reservations backlog, offering an attractive transport option at a low price.

Figure 13: Arcimoto's Valuation Comparables (Calendarized)

	Ticker	Rating	Fiscal Year	1-Nov-18 Price	US\$ mn Mkt Cap	P/REV		P/EPS		EV/EBITDA		
						2018E	2019E	2018E	2019E	Cal 2018E	Cal 2019E	
<b>Electric Vehicle Tech Companies</b>												
	Tesla Inc.	TSLA	Neutral	Dec	\$337.32	\$57,544	2.7x	2.0x	n/m	n/m	n/m	n/m
	Nio Inc.	NIO	NC	Dec	\$5.90	\$6,053	10.3x	2.4x	n/m	n/m	n/m	n/m
	Kandi Technologies Group	KNDI	NC	N/A	\$4.81	\$248	n/a	n/a	n/a	n/a	n/a	n/a
	Electrameccanica Vehicles Corp.	SOLO	NC	N/A	\$3.18	\$80	n/a	n/a	n/a	n/a	n/a	n/a
	Elio Motors	ELIO	NC	N/A	\$2.90	\$86	n/a	n/a	n/a	n/a	n/a	n/a
	UQM Motors Inc.	UQM	NC	Dec	\$1.20	\$65	5.2x	1.5x	n/m	12.0x	n/m	11.1x
	Workhorse Group	WKHS	NC	Dec	\$0.78	\$44	1.7x	0.2x	n/m	n/m	n/m	n/m
	Greenpower Motor Company	GPV	NC	N/A	\$0.35	\$32	n/a	n/a	n/a	n/a	n/a	n/a
	Adomani Inc.	ADOM	Buy	Dec	\$0.40	\$29	3.9x	1.9x	n/m	n/m	n/m	n/m
	<b>AVERAGE</b>						<b>4.7x</b>	<b>1.6x</b>	<b>n/a</b>	<b>12.0x</b>	<b>n/a</b>	<b>11.1x</b>
<b>Energy Storage Comparables</b>												
	Ballard Power Systems	BLDP	Neutral	Dec	\$3.72	\$669	6.1x	4.8x	n/m	n/m	n/m	n/m
	Plug Power Inc.	PLUG	Sell	Dec	\$1.85	\$397	1.8x	1.8x	n/m	n/m	n/m	n/m
	Maxwell Technologies Inc.	MXWL	Buy	Dec	\$2.94	\$132	1.0x	0.8x	n/m	n/m	n/m	n/m
	Hydrogenics Inc.	HYGS	Buy	Dec	\$6.46	\$100	2.0x	1.7x	n/m	n/m	n/m	n/m
	FuelCell Energy Inc.	FCEL	Buy	Oct	\$0.85	\$79	0.7x	0.5x	n/m	n/m	n/m	n/m
	<b>AVERAGE</b>						<b>2.3x</b>	<b>1.9x</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
	<b>Peer Average</b>						<b>3.5x</b>	<b>1.8x</b>	<b>n/a</b>	<b>12.0x</b>	<b>n/a</b>	<b>11.1x</b>
	<b>Arcimoto Inc.</b>	FUV	Buy	Dec	\$3.00	\$48	n/m	1.7x	n/m	n/m	n/a	n/a

Note: All estimates are calendarized; n/a = not available, n/m = >45 or <0 and not meaningful

Source: Eikon and ROTH Capital Partners.

## COMPANY MANAGEMENT

### **Mark Frohnmayer, President, Chief Executive Officer and Chairman**

Mr. Frohnmayer has been the President, CEO and Chairman of the Board of Arcimoto since the company's founding in November 2007. Prior to Arcimoto, he was one of the founders of software development company GarageGames.com, which was sold to IAC in 2007. Mr. Frohnmayer holds a Bachelor's degree in Electrical Engineering and Computer Science from UC Berkeley.

### **Douglas M. Campoli, Chief Financial Officer, Treasurer and Secretary**

Mr. Campoli has been Arcimoto's CFO since June 2015. Prior to this, he was the founder of Strategic Financial Consulting from 2013, and the CFO of ManaFuel from 2012 to 2013. Before that, Mr. Campoli was the CFO of GarageGames.com Inc., from 2007 to 2011, and of SeQuential Biofuels from 2004 to 2007. Prior to 2004, he held financial positions at Genuity Inc. and AT&T Paradyne Corp. Mr. Campoli holds a Bachelor's degree in Business and Finance from the University of South Florida, and an MBA in Finance from the University of Tampa.

### **Jesse Fittipaldi, Vice President**

Mr. Fittipaldi has been the Vice President at Arcimoto since 2015. Prior to this, he worked on designing, managing and commissioning large-scale public and private sector building engineering projects throughout Oregon, with a special focus on those requiring expertise in solar, geothermal, energy efficiency, LEED and complicated control strategy. Mr. Fittipaldi has over 20 years of engineering project management and team building experience.

### **Terry Becker, Chief Operating Officer and Director**

Mr. Becker has been the COO at Arcimoto since September 2017 and a director since May 2015. Prior to this, he was the Director of Engineering and Global Product Support at Peterson Pacific Corp. from 2014 to 2017. Mr. Becker was the Engineering, Manufacturing and Operations manager at Arcimoto from 2012 to 2014. From 2008 to 2012, he was the Deputy Director of Operations for the AeroTech segment of JBT AeroTech. Mr. Becker holds an Associate of Science degree in engineering physics from Loma Linda University and a Bachelor's degree in Mechanical Engineering from Walla Walla University.

**Figure 14: Arcimoto Management Compensation Summary**

<u>Name</u>	<u>Designation</u>	<u>Year</u>	<u>Salary (\$)</u>	<u>Option Awards (\$)</u>	<u>All other comp. (\$)</u>	<u>Total (\$)</u>
Mark D. Frohnmayer	President, CEO & Chairman	2017	65,000	10,970	-	75,970
Douglas M. Campoli	CFO	2017	83,285	57,504	-	140,789
Terry L. Becker	COO & Director	2017	28,558	-	-	28,558

Source: SEC filings (Proxy filing dated April 2018) and ROTH Capital Partners.

**Figure 15: Arcimoto Ownership Profile**

<b>EXECUTIVE OFFICERS, DIRECTORS AND MANAGEMENT</b>			<b>TOP INSTITUTIONAL INVESTORS</b>		
<u>Name</u>	<u>Shares (mn)</u>	<u>% owned</u>	<u>Name</u>	<u>Shares (mn)</u>	<u>% owned</u>
Mark Frohnmayer	6.99	43.73%	WR Hambrecht & Co.	1.10	6.90%
Jeff Curl	0.53	3.34%	Paramour Capital	0.10	0.61%
Jesse Grant Eisler	0.35	2.22%	Ironstone Group Inc.	0.07	0.46%
William Emilio Mayer	0.11	0.71%	WM Electric Holdings	0.05	0.31%
John P Hullar	0.10	0.61%	Regis Management Company	0.04	0.25%
Douglas M Campoli	0.02	0.12%	The Vanguard Group	0.02	0.12%

Source: Thomson Eikon (as on October 19, 2018) and ROTH Capital Partners.

## VALUATION

**We are introducing a \$9.00 price target, using a 1.75x P/Sales on our 2020 revenue estimate of \$125 million, including additional dilution for future financing.** We see a 1.75x multiple on 2020 estimates as fair for Arcimoto's growth outlook, given the unique product with a substantial reservations backlog, offering an attractive transport option at a low price.

Possible impediments to the achievement of our target price could come from weekly production or the rate of deliveries below levels necessary to meet forecasts, and the potential challenges in managing the supply chain during a significant revenue ramp. The company also faces typical competition from OEMs in adjacent markets, where many have significantly greater resources. If Arcimoto's products were found to have a flaw, this could drive a material warranty expense, and negatively impact the brand.

## RISKS

- The most significant risk we see comes from the company's low current revenue, and potential for individual contracts and orders to drive lumpy quarterly results. Arcimoto also has a history of losses that are likely to continue until revenue scales.
- Arcimoto operates in a competitive market, and faces competition from large and small competitors, including multi-national auto companies. Many competitors have greater resources at their disposal, and could make investments that Arcimoto might find difficult to match.
- Arcimoto's business model is capital intensive, and the company's growth plans will be dependent on equity and debt financing. Any delays or challenges obtaining financing could drive operating delays.
- Investors in Arcimoto will face risks related to the company's access to capital, which could introduce volatility to the stock.
- Arcimoto's long-term performance depends on consumer choices supporting expansion of the market for all-electric short-haul vehicles.
- The company's business model is dependent on various third parties to deliver raw materials, parts, components and services. Any delays or price fluctuations on the part of these suppliers could significantly impact Arcimoto's ability to complete orders on a timely basis.
- Arcimoto's distribution model relies on direct sales rather than through traditional dealer franchises, which might affect the magnitude of outreach to customers.
- Macro-economic risks that might impact growth in the automotive sector could in turn impact demand for electric vehicles and Arcimoto's products.
- The company faces long and variable sales cycles, requiring significant financial and human resources before recognizing revenues, elevating risks of variance versus forecasts.
- The company is exposed to technology risks, where possible introduction of new technologies by competitors could adversely impact Arcimoto's competitive position.

## COMPANY DESCRIPTION

Arcimoto, Inc. provides all-electric three-wheeled motorcycle for daily transportation. The company's FUV is a pure electric solution that defines the Fun Utility Vehicle category. Its platform comprises four technologies, such as Arcimoto Battery System, FutureDrive, FUV Generation 8 and Arcimoto Switchboard. The Company's products include Adventurer, Transporter, Deliverator and GoGoMoto. Adventurer is the base model FUV, an open-air vehicle for everyday use in mild and warm climates. Transporter features a hard-panel enclosure and extended range battery pack that expands the utility of the FUV in colder climates, sprawling cities, and rural environments. Deliverator features an expanded cargo storage area that replaces the rear seat section for various delivery applications. GoGoMoto is its last mile autonomous solution. *Source: Thomson Eikon, October 2018*

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**Arcimoto Inc. - Income Statement**

(\$'000s, YE Dec-31)	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18E	4Q18E	2018E	1Q19E	2Q19E	3Q19E	4Q19E	2019E	2020E
Total Revenue	-	41	-	-	86	127	1	85	150	300	536	1,800	3,750	6,000	16,450	28,000	125,000
Operating Expenses:																	
Cost of Sales	-	-	-	-	78	78	-	96	165	300	561	1,764	3,638	5,760	14,641	25,802	103,550
Research and Dev.	975	268	264	288	631	1,451	1,048	364	800	800	3,011	800	800	900	900	3,400	4,000
Sales and Marketing	472	85	150	243	350	828	356	418	500	700	1,974	700	750	800	850	3,100	3,900
G&A	460	187	160	156	561	1,064	642	1,400	2,000	2,200	6,242	2,100	2,100	2,200	2,200	8,600	8,800
Other, (net)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operating Profit	(1,907)	(499)	(574)	(687)	(1,534)	(3,294)	(2,045)	(2,192)	(3,315)	(3,700)	(11,252)	(3,564)	(3,538)	(3,660)	(2,141)	(12,902)	4,750
Interest, (Net)	(13)	(10)	(11)	(9)	(4)	(34)	(4)	(17)	(15)	(15)	(51)	(15)	(15)	(15)	(15)	(60)	(60)
Other, (net)	0	0	0	1	12	13	0	40	-	-	40	-	-	-	-	-	-
EBT	(1,919)	(510)	(585)	(695)	(1,526)	(3,315)	(2,048)	(2,169)	(3,330)	(3,715)	(11,262)	(3,579)	(3,553)	(3,675)	(2,156)	(12,962)	4,690
Income Taxes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tax Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Income	(1,919)	(510)	(585)	(695)	(1,526)	(3,315)	(2,048)	(2,169)	(3,330)	(3,715)	(11,262)	(3,579)	(3,553)	(3,675)	(2,156)	(12,962)	4,690
<b>EPS - GAAP</b>	<b>(\$0.19)</b>	<b>(\$0.04)</b>	<b>(\$0.05)</b>	<b>(\$0.05)</b>	<b>(\$0.10)</b>	<b>(\$0.24)</b>	<b>(\$0.13)</b>	<b>(\$0.14)</b>	<b>(\$0.21)</b>	<b>(\$0.23)</b>	<b>(\$0.71)</b>	<b>(\$0.17)</b>	<b>(\$0.17)</b>	<b>(\$0.17)</b>	<b>(\$0.10)</b>	<b>(\$0.62)</b>	<b>\$0.19</b>
Basic Shares	10.0	12.4	12.8	13.2	15.9	13.6	5.9	15.9	15.9	16.0	13.4	16.0	16.0	16.0	16.1	16.0	16.1
Diluted Shares	10.0	12.4	12.8	13.2	15.9	13.6	15.9	15.9	15.9	16.0	15.9	21.0	21.0	21.0	21.1	21.0	24.1
<b>As a % of Revenue</b>																	
Revenue	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Gross Profit	0%	0%	0%	0%	0%	38%	0%	-12%	-10%	0%	-5%	2%	3%	4%	11%	8%	17%
Research and Dev.	0%	0%	0%	0%	0%	0%	0%	426%	533%	267%	562%	44%	21%	15%	5%	12%	3%
Operating Profit	0%	0%	0%	0%	0%	0%	0%	0%	-2210%	-1233%	-2099%	-198%	-94%	-61%	-13%	-46%	4%

Source: SEC filings and ROTH Capital Partners estimates.

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**Arcimoto Inc. - Cash Flow Statement**

(\$'000s, YE Dec-31)	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18E	4Q18E	2018E	1Q19E	2Q19E	3Q19E	4Q19E	2019E	2020E
Net Income	(1,919)	(510)	(585)	(695)	(1,526)	(3,315)	(2,048)	(2,169)	(3,330)	(3,715)	(11,262)	(3,579)	(3,553)	(3,675)	(2,156)	(12,962)	4,690
Depreciation	8	1	1	1	18	20	74	87	95	103	359	112	120	128	135	494	616
Other, (Net)	48	42	43	36	82	204	133	57	50	50	290	50	50	50	50	200	200
Change in Working Capital	244	17	(31)	(37)	(203)	(253)	(946)	(1,078)	1,018	30	(975)	(292)	(232)	(141)	(474)	(1,138)	(1,049)
<b>Cash from Operations</b>	<b>(1,619)</b>	<b>(450)</b>	<b>(573)</b>	<b>(694)</b>	<b>(1,628)</b>	<b>(3,344)</b>	<b>(2,788)</b>	<b>(3,103)</b>	<b>(2,167)</b>	<b>(3,532)</b>	<b>(11,589)</b>	<b>(3,709)</b>	<b>(3,614)</b>	<b>(3,639)</b>	<b>(2,444)</b>	<b>(13,406)</b>	<b>4,457</b>
Investments, (Net)	-	-	-	-	(6,247)	(6,247)	(3,500)	4,500	2,000	3,000	6,000	-	-	-	-	-	-
Capital Expenditures, (Net)	-	-	-	-	(1,960)	(1,960)	(65)	(644)	(500)	(500)	(1,709)	(500)	(500)	(500)	(500)	(2,000)	(2,000)
Other LT assets	-	-	-	-	-	-	-	(39)	-	-	(39)	-	-	-	-	-	-
<b>Cash from Investing</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(8,207)</b>	<b>(8,207)</b>	<b>(3,565)</b>	<b>3,817</b>	<b>1,500</b>	<b>2,500</b>	<b>4,252</b>	<b>(500)</b>	<b>(500)</b>	<b>(500)</b>	<b>(500)</b>	<b>(2,000)</b>	<b>(2,000)</b>
Issuance Common, (Net)	458	434	783	17,808	61	19,086	29	-	-	15,000	15,029	-	-	-	15,000	15,000	-
Debt, (Net)	575	199	(50)	(269)	(5)	(125)	-	-	-	-	-	-	-	-	-	-	-
Capital Lease Payment	-	-	-	-	-	-	(75)	(3)	-	-	(78)	-	-	-	-	-	-
<b>Cash from Financing</b>	<b>1,033</b>	<b>633</b>	<b>733</b>	<b>17,540</b>	<b>56</b>	<b>18,961</b>	<b>(46)</b>	<b>(3)</b>	<b>-</b>	<b>15,000</b>	<b>14,951</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>15,000</b>	<b>15,000</b>	<b>-</b>
Change in Cash	(586)	183	160	16,846	(9,779)	7,410	(6,399)	712	(667)	13,968	7,614	(4,209)	(4,114)	(4,139)	12,056	(406)	2,457
Cash at Beg. of Period	1,001	414	598	758	17,603	414	7,824	1,425	2,137	1,470	7,824	15,438	11,229	7,115	2,976	15,438	15,032
<b>Cash at End of Period</b>	<b>414</b>	<b>598</b>	<b>758</b>	<b>17,603</b>	<b>7,824</b>	<b>7,824</b>	<b>1,425</b>	<b>2,137</b>	<b>1,470</b>	<b>15,438</b>	<b>15,438</b>	<b>11,229</b>	<b>7,115</b>	<b>2,976</b>	<b>15,032</b>	<b>15,032</b>	<b>17,489</b>

Source: SEC filings and ROTH Capital Partners estimates.

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**Arcimoto Inc. - Balance Sheet**

(\$'000s, YE Dec-31)	2016	1Q17	2Q17	3Q17	2017	1Q18	2Q18	3Q18E	2018E	1Q19E	2Q19E	3Q19E	2019E	2020E
Cash and Equivalents	414	597	758	17,603	7,824	1,425	2,137	1,470	15,438	11,229	7,115	2,976	15,032	17,489
Investments	-	-	-	-	6,247	9,746	5,248	3,248	248	248	248	248	248	248
Receivables	1	31	31	1	1	1	0	40	66	288	740	1,461	3,452	15,411
Inventory	27	37	124	200	195	617	1,291	265	257	720	1,336	2,131	4,435	17,291
Other Current, (Net)	28	24	40	127	401	666	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035
<b>Current Assets</b>	<b>470</b>	<b>689</b>	<b>952</b>	<b>17,932</b>	<b>14,667</b>	<b>12,455</b>	<b>9,710</b>	<b>6,057</b>	<b>17,043</b>	<b>13,519</b>	<b>10,472</b>	<b>7,850</b>	<b>24,201</b>	<b>51,473</b>
Property & Equipment, (Net)	9	8	7	7	2,434	3,407	4,556	4,961	5,357	5,746	6,126	6,498	6,863	8,247
Other LT Assets, (Net)	40	43	47	-	-	-	39	39	39	39	39	39	39	39
<b>Total Assets</b>	<b>519</b>	<b>740</b>	<b>1,006</b>	<b>17,938</b>	<b>17,101</b>	<b>15,863</b>	<b>14,304</b>	<b>11,056</b>	<b>22,440</b>	<b>19,304</b>	<b>16,637</b>	<b>14,387</b>	<b>31,103</b>	<b>59,759</b>
Payables	81	66	101	169	664	375	30	62	110	503	1,339	2,714	6,536	30,301
Accrued Liabilities	103	150	167	119	256	255	471	471	471	471	471	471	471	471
Customer Deposits	386	407	427	452	400	432	371	371	371	371	371	371	371	371
Current Capital Lease Obligation	-	-	-	-	-	150	297	297	297	297	297	297	297	297
Other, (Net)	250	324	274	5	-	-	-	-	-	-	-	-	-	-
<b>Current Liabilities</b>	<b>820</b>	<b>946</b>	<b>969</b>	<b>744</b>	<b>1,319</b>	<b>1,212</b>	<b>1,169</b>	<b>1,201</b>	<b>1,249</b>	<b>1,642</b>	<b>2,478</b>	<b>3,853</b>	<b>7,675</b>	<b>31,440</b>
Capital Lease Obligations, (Net)	-	-	-	-	-	774	1,376	1,376	1,376	1,376	1,376	1,376	1,376	1,376
Other, (Net)	325	450	450	-	-	-	-	-	-	-	-	-	-	-
<b>Total Liabilities</b>	<b>1,145</b>	<b>1,396</b>	<b>1,419</b>	<b>744</b>	<b>1,319</b>	<b>1,986</b>	<b>2,545</b>	<b>2,577</b>	<b>2,625</b>	<b>3,019</b>	<b>3,855</b>	<b>5,230</b>	<b>9,051</b>	<b>32,817</b>
Equity	(626)	(657)	(412)	17,194	15,782	13,876	11,759	8,479	19,814	16,285	12,783	9,158	22,052	26,942
Liabilities & Equity	519	740	1,006	17,938	17,101	15,863	14,304	11,056	22,440	19,304	16,637	14,387	31,103	59,759

Source: SEC filings and ROTH Capital Partners estimates.

Regulation Analyst Certification ("Reg AC"): The research analyst primarily responsible for the content of this report certifies the following under Reg AC: I hereby certify that all views expressed in this report accurately reflect my personal views about the subject company or companies and its or their securities. I also certify that no part of my compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

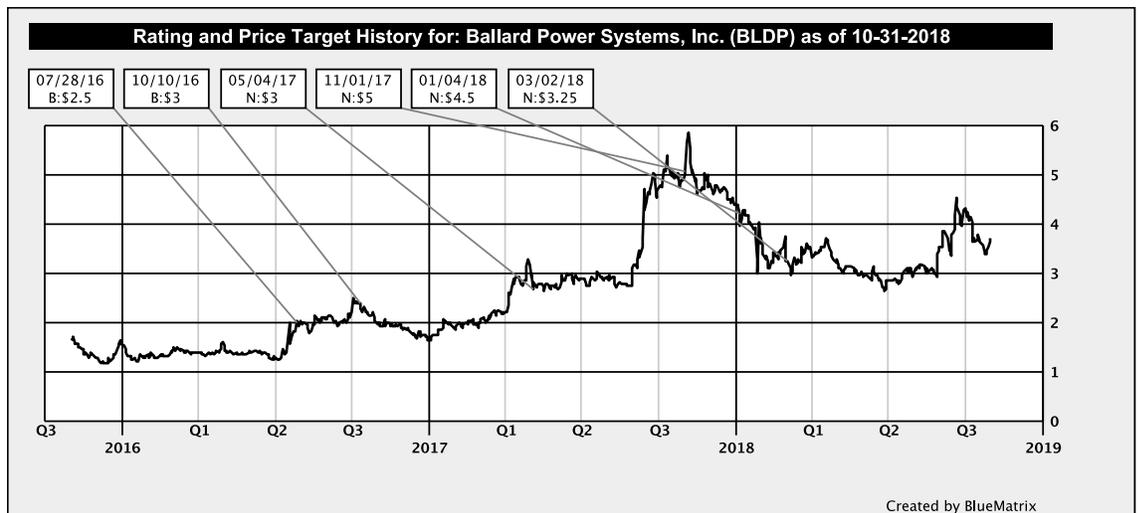
**Disclosures:**

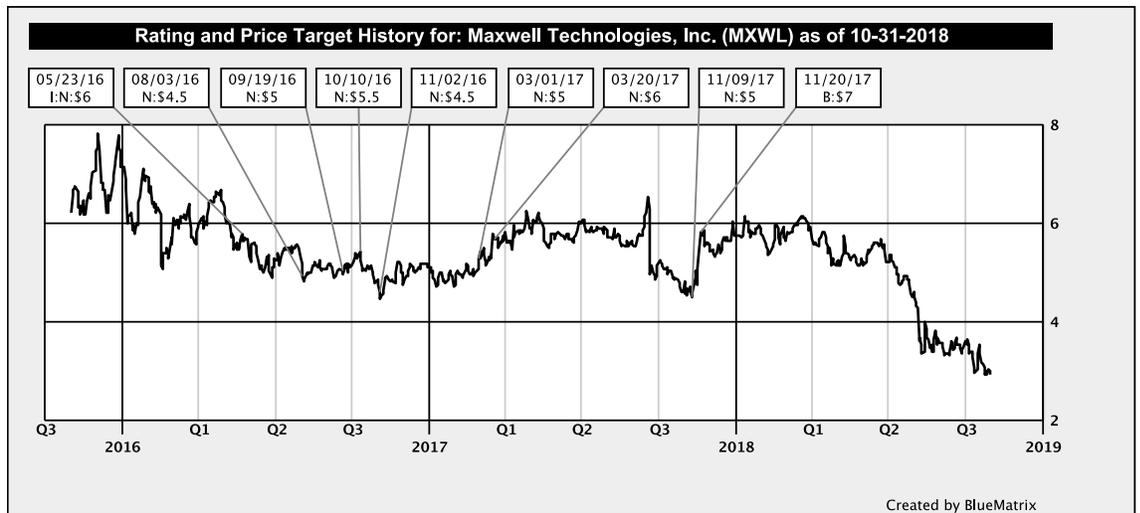
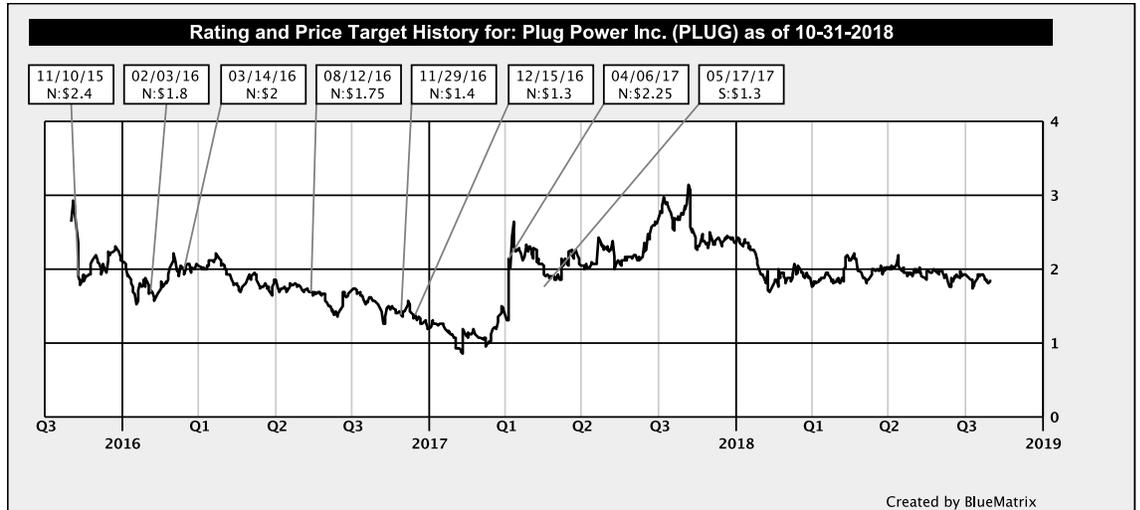
ROTH makes a market in shares of Arcimoto, Inc., Adomani, Inc., Ballard Power Systems, Inc., FuelCell Energy, Inc., Hydrogenics Corporation, Maxwell Technologies, Inc. and Plug Power Inc. and as such, buys and sells from customers on a principal basis.

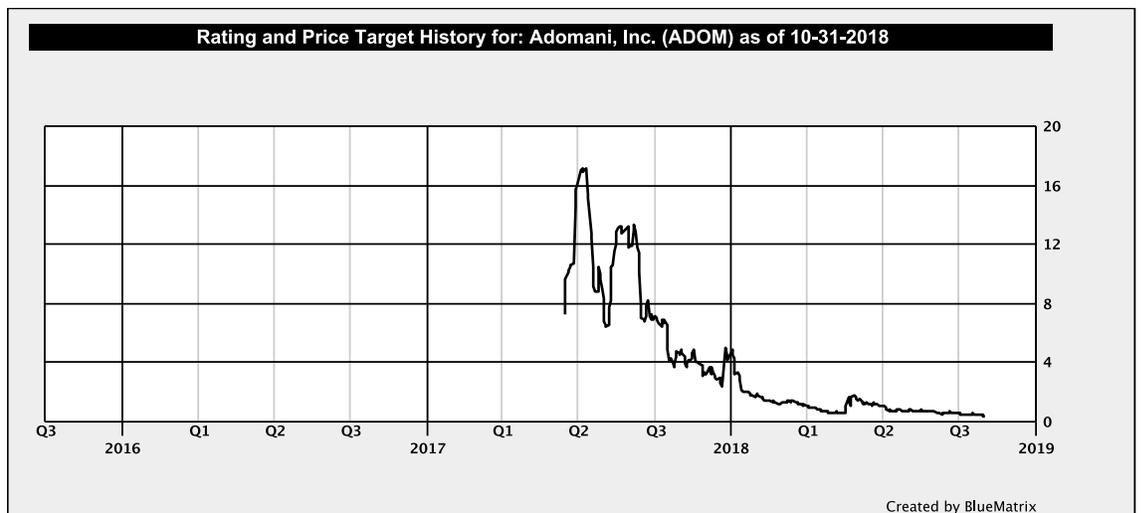
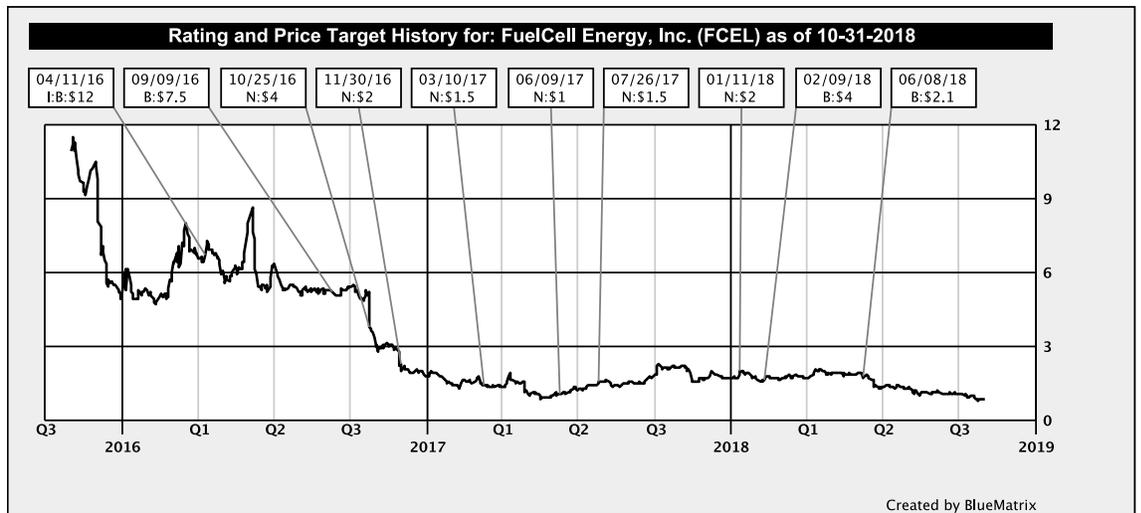
Shares of Arcimoto, Inc., Adomani, Inc., Ballard Power Systems, Inc., FuelCell Energy, Inc., Maxwell Technologies, Inc. and Plug Power Inc. may be subject to the Securities and Exchange Commission's Penny Stock Rules, which may set forth sales practice requirements for certain low-priced securities.

Within the last twelve months, ROTH has received compensation for investment banking services from Adomani, Inc. and Maxwell Technologies, Inc..

Within the last twelve months, ROTH has managed or co-managed a public offering for Maxwell Technologies, Inc..







Each box on the Rating and Price Target History chart above represents a date on which an analyst made a change to a rating or price target, except for the first box, which may only represent the first note written during the past three years. **Distribution Ratings/IB Services** shows the number of companies in each rating category from which Roth or an affiliate received compensation for investment banking services in the past 12 month.

## Distribution of IB Services Firmwide

Rating	Count	Percent	IB Serv./Past 12 Mos. as of 11/01/18	
			Count	Percent
Buy [B]	269	80.06	147	54.65
Neutral [N]	40	11.90	24	60.00
Sell [S]	4	1.19	2	50.00
Under Review [UR]	23	6.85	10	43.48

Our rating system attempts to incorporate industry, company and/or overall market risk and volatility. Consequently, at any given point in time, our investment rating on a stock and its implied price movement may not correspond to the stated 12-month price target.

Ratings System Definitions - ROTH employs a rating system based on the following:

**Buy:** A rating, which at the time it is instituted and or reiterated, that indicates an expectation of a total return of at least 10% over the next 12 months.

**Neutral:** A rating, which at the time it is instituted and or reiterated, that indicates an expectation of a total return between negative 10% and 10% over the next 12 months.

**Sell:** A rating, which at the time it is instituted and or reiterated, that indicates an expectation that the price will depreciate by more than 10% over the next 12 months.

**Under Review [UR]:** A rating, which at the time it is instituted and or reiterated, indicates the temporary removal of the prior rating, price target and estimates for the security. Prior rating, price target and estimates should no longer be relied upon for UR-rated securities.

**Not Covered [NC]:** ROTH does not publish research or have an opinion about this security.

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