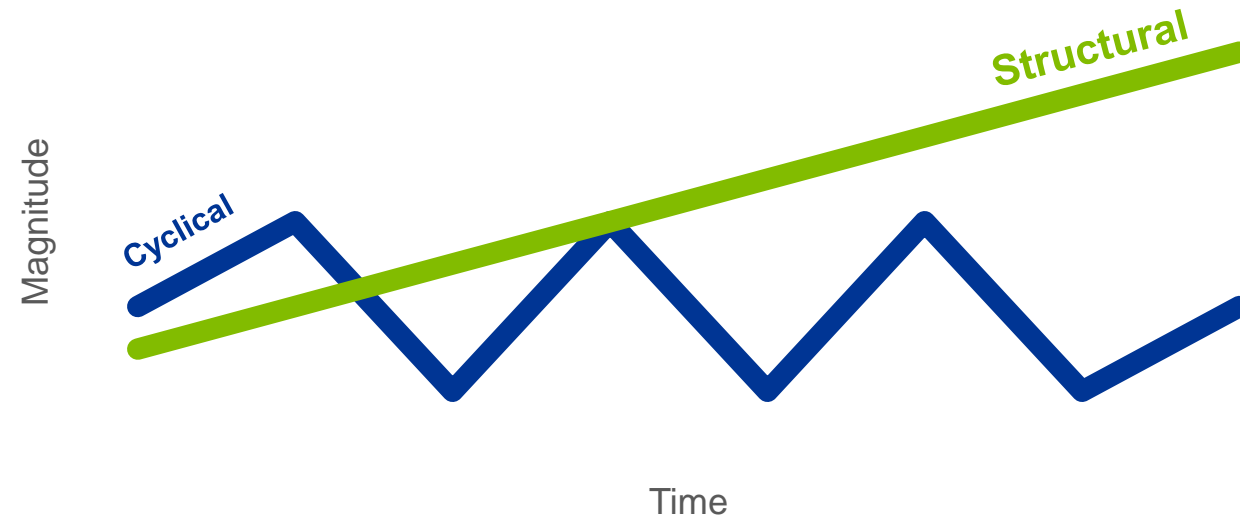


**BlackRock**<sup>®</sup>

**Megatrend Investing**

# Structural vs cyclical themes



**Structural themes are long-term opportunities driven by powerful transformations in our economy and society**

For illustrative purposes only.

# Structural theme: horses vs cars



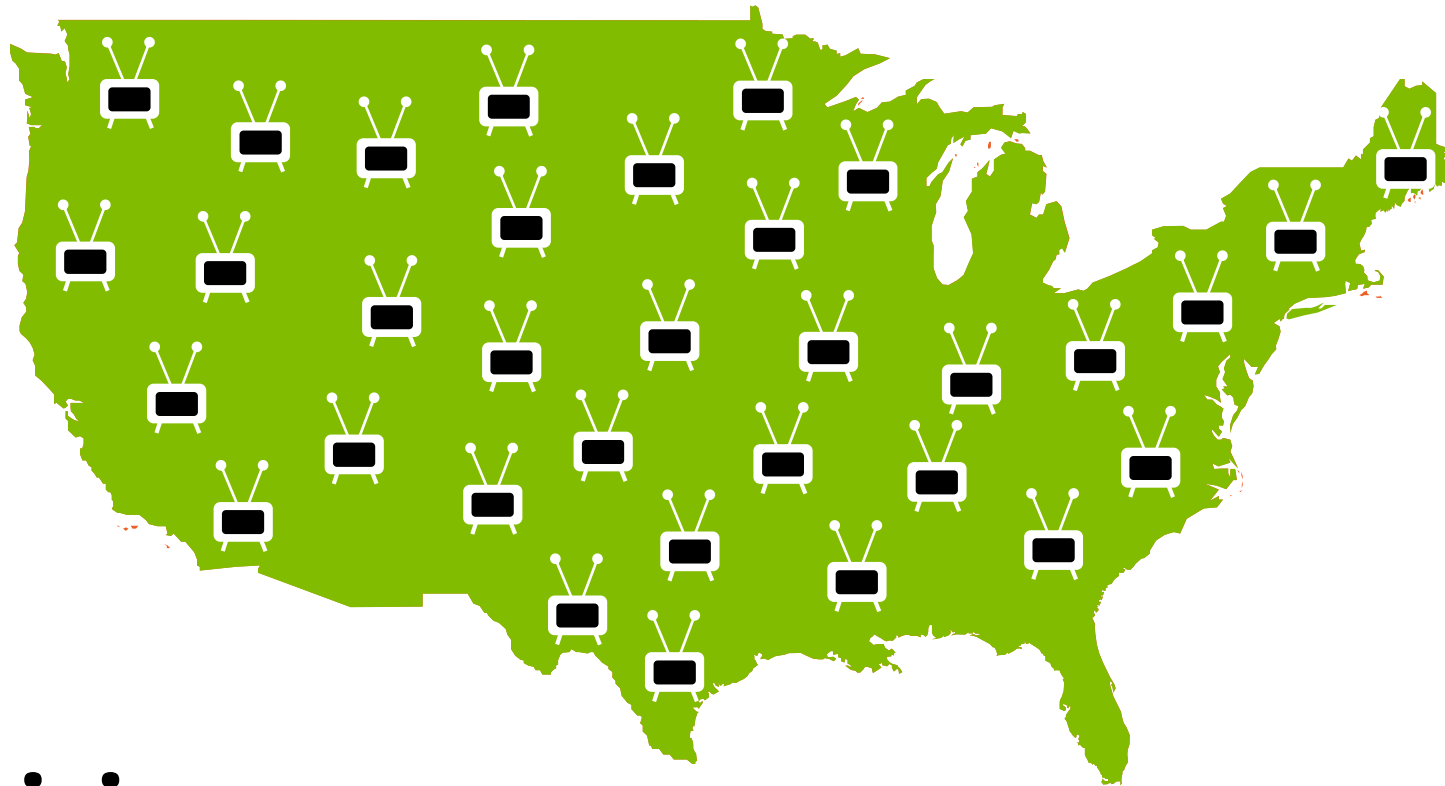
For illustrative purposes only.

**Between 1905 and 1930, the number of horse carriages fell 93%<sup>1</sup>.**



<sup>1</sup> [Riding the Energy Transition, May 2017, Cherif, Hasanov, Pande](#)  
For illustrative purposes only.

# Televisions in American households



**0.01%**  
**1946<sup>1</sup>**

**83%**  
**1958<sup>2</sup>**

<sup>1</sup> "1920s-1960s Television", Elon University School of Communications  
<sup>2</sup> "Number of TV Households in America", Buffalo History Museum

# Global devices connected to the Internet<sup>1</sup>

2025 **75bn**  
2023 **50bn**  
2021 **35bn**  
2019 **28bn**  
2017 **20bn**  
2015 **15bn**



<sup>1</sup>["IoT Connected Devices Installed", November 2016, Statista](#)

# What Americans will sacrifice for 'screen time'

**49%**

willing to give up desert<sup>1</sup>



**74%**

willing to give up alcohol<sup>1</sup>



<sup>1</sup> "Delv Digital Habits 2016 Survey Findings", June 2016, Delv

# Investing in the future

## Too narrow

Specific stocks can be volatile.  
Picking winners and losers is hard.

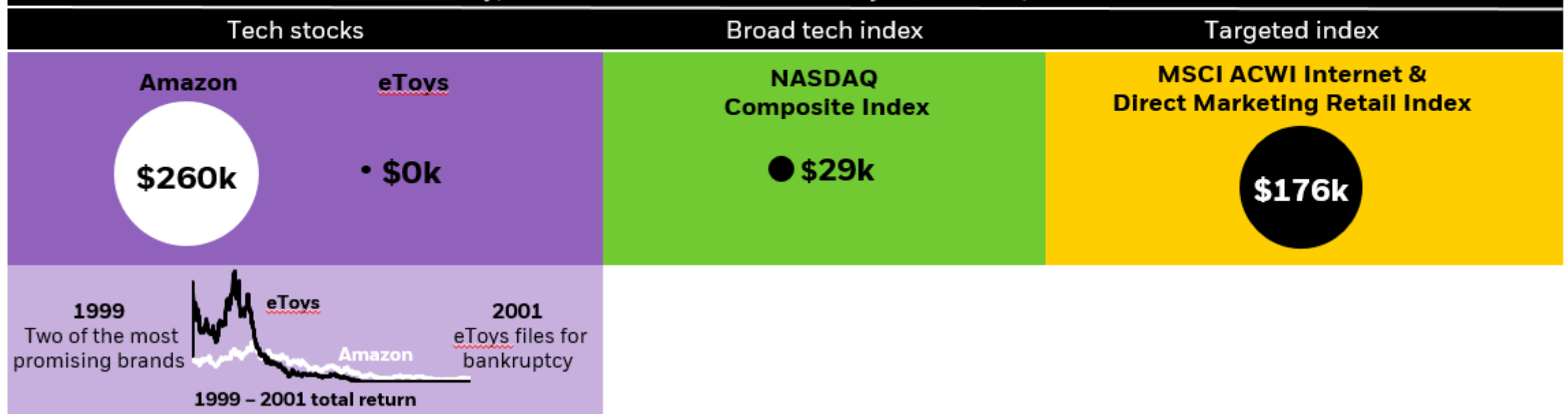
## Too broad

Broad indexes may be too diversified to offer outperformance.

## Targeted megatrend index

Seeking balance between specific stocks and broad based indexes.

Hypothetical Growth of \$10k from May 19, 1999 to present<sup>1</sup>



For illustrative purposes only. Source 1: Bloomberg. Disaster of the Day: Etoys, 12.18.00 <https://www.forbes.com/2000/12/18/1218disaster.html#263e0f5148e5> Etoys, Inc. History, 2001 <http://www.fundinguniverse.com/company-histories/etoys-inc-history/> Index performance is for illustrative purposes only. Index performance does not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. Past performance does not guarantee future results. References to specific companies are strictly for illustrative purposes only and should not be construed as investment advice or recommendations regarding those companies. For holdings information for the iShares funds, please visit <https://www.iShares.com>. The following funds have a percentage holding of amazon as of 6/30/19: (XT 0.56%), (IRBO 1.15%), (IHAK 0%), (IDNA 0%), (IGF 0%) (EMIF 0%) (IFRA 0%) (ICLN 0%) (IDRV 0%), (CNYA 0%) (BGSIX 3.05%) (SHSSX 0%) (CHIX 0%)



# BlackRock's 5 Megatrends

Megatrends are the long-term, transformational forces influencing the future of our global economy & society.


BlackRock believes five key trends will drive seismic shifts today and for years to come:



### Technological breakthrough

Technology is driving exponential progress in the tech sector and far beyond

- Artificial Intelligence
- Robotics
- Cybersecurity



### Demographics & social change

Longer lifespans and modern lifestyles will change medicine and consumer habits

- Genetics
- Immune system research
- Aging



### Rapid urbanization

Mass migration to cities will require new business models and infrastructure

- Infrastructure
- Megacities
- Transit and transportation



### Climate change & resource scarcity

Demand for a clean, green tomorrow will advance energy and conservation

- Self-driving cars
- Clean energy
- Electric vehicles



### Emerging global wealth

Newly affluent consumers will expand in Asia and across emerging markets

- Mainland China
- Emerging consumers
- Digital economies

Examples

# Climate Change & Resource Scarcity

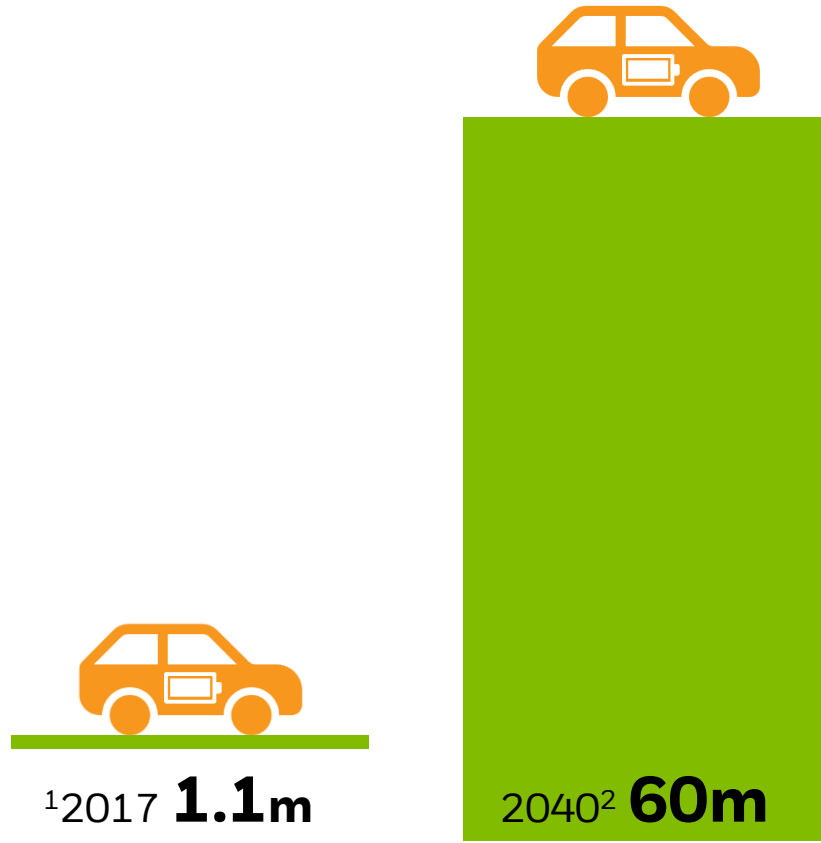
Renewables are set to represent  $\frac{3}{4}$  of the \$12T the world invests in new power technology through 2040<sup>1</sup>



<sup>1</sup>["Bloomberg New Energy Outlook", June 2019, Bloomberg New Energy Finance](#)

# A potential structural growth opportunity

Annual Electric Vehicle (EV) sales globally



<sup>1</sup>["Bloomberg New Energy Outlook", June 2019, Bloomberg New Energy Finance](#)

<sup>2</sup> Forecast may not come to pass

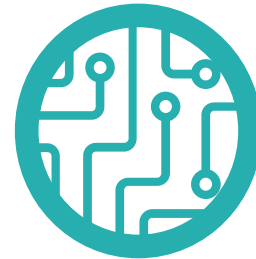
# What's driving the transport revolution?



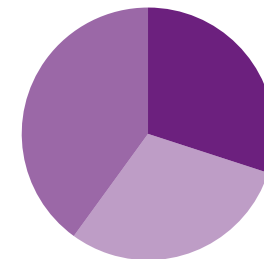
**Chinese Consumers**



**Government Regulation**



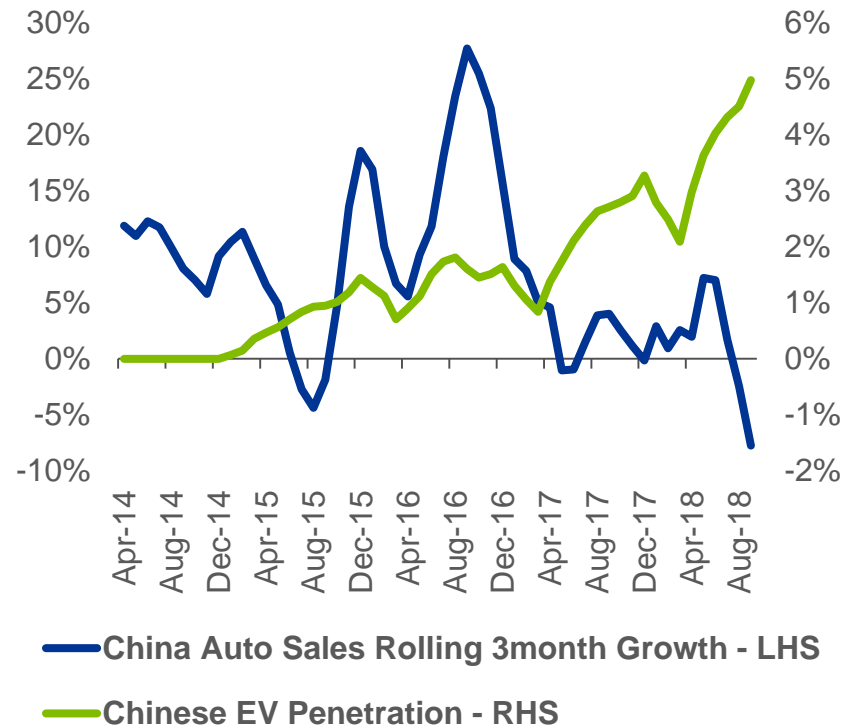
**Technology**



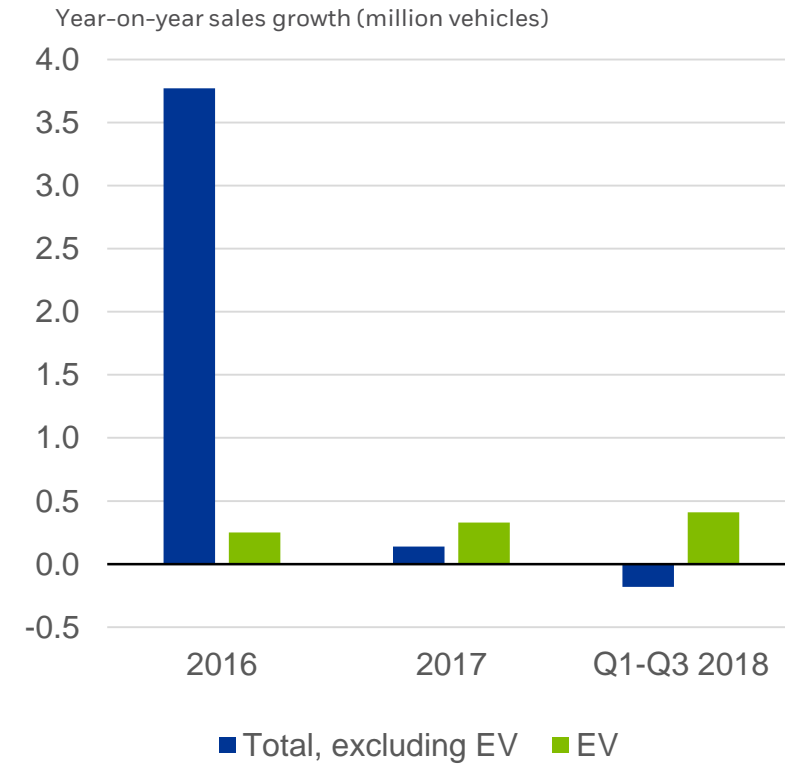
**Economics**

# Shift to EVs in China

Chinese Auto sales growth slowed sharply in September



EVs are ALL the growth in China's auto market



# A potential structural growth opportunity

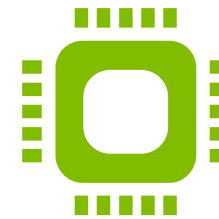
Components, technology, and infrastructure



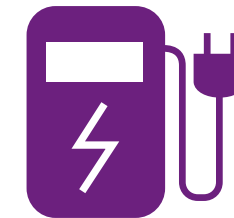
**120m**  
EVs on the road by 2030<sup>1</sup>



**>150m**  
e-motors per annum by 2026<sup>2</sup>



**95%**  
Decrease in price of EV battery from 2010-2030<sup>3</sup>



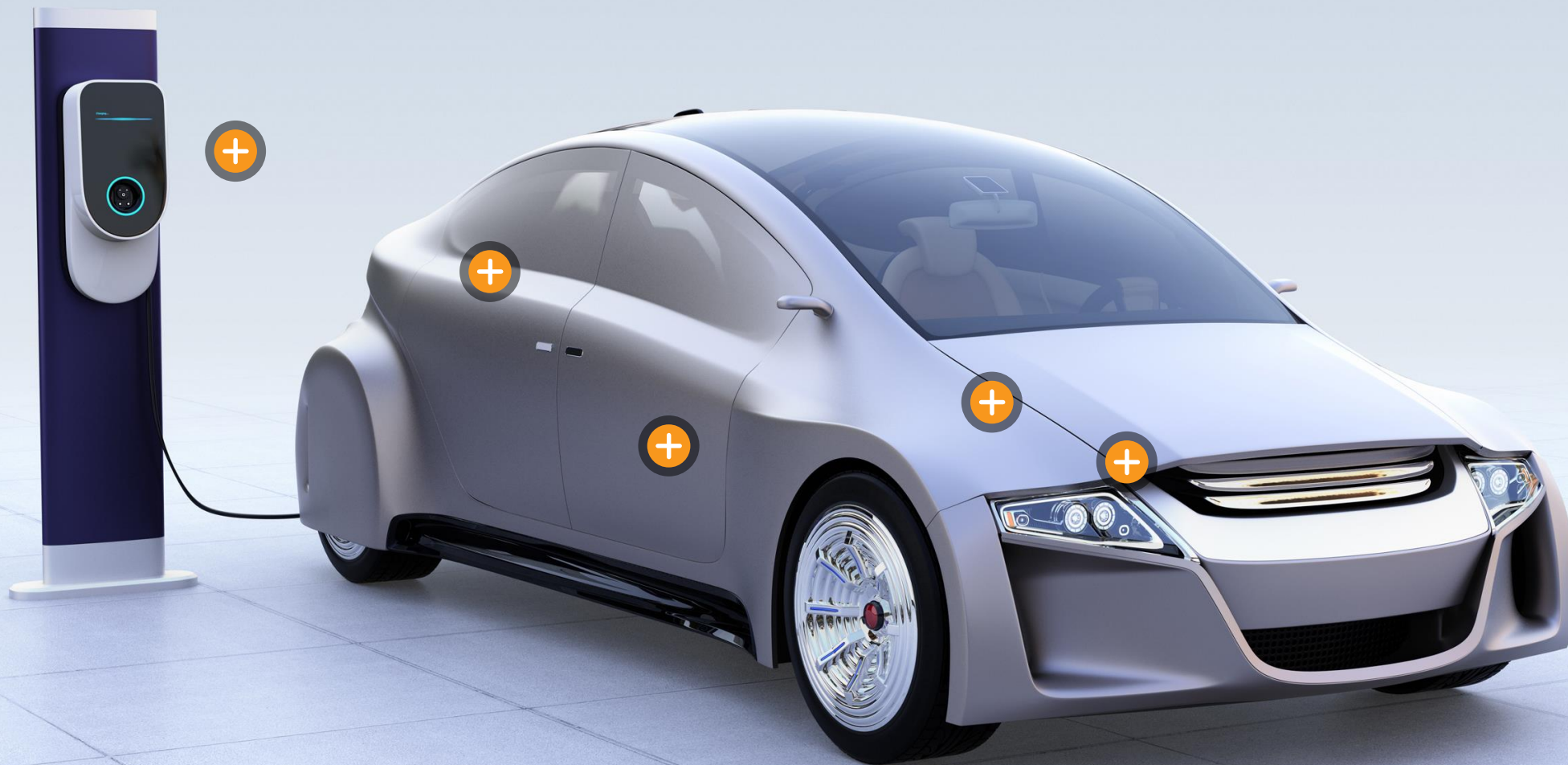
**>\$50bn**  
in charging infrastructure by 2030<sup>1</sup>

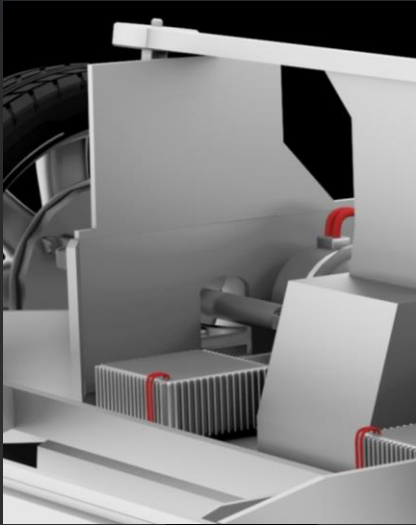
<sup>1</sup> ["WiTricity Acquires Qualcomm Halo", Feb 2019, WiTricity](#)

<sup>2</sup> ["Automotive High-Performance EV Market", June 2019, Marketwatch](#)

<sup>3</sup> ["Behind the Scenes Take Lithium Ion Battery Prices", March 2019, Goldie-Scot, Bloomberg](#)

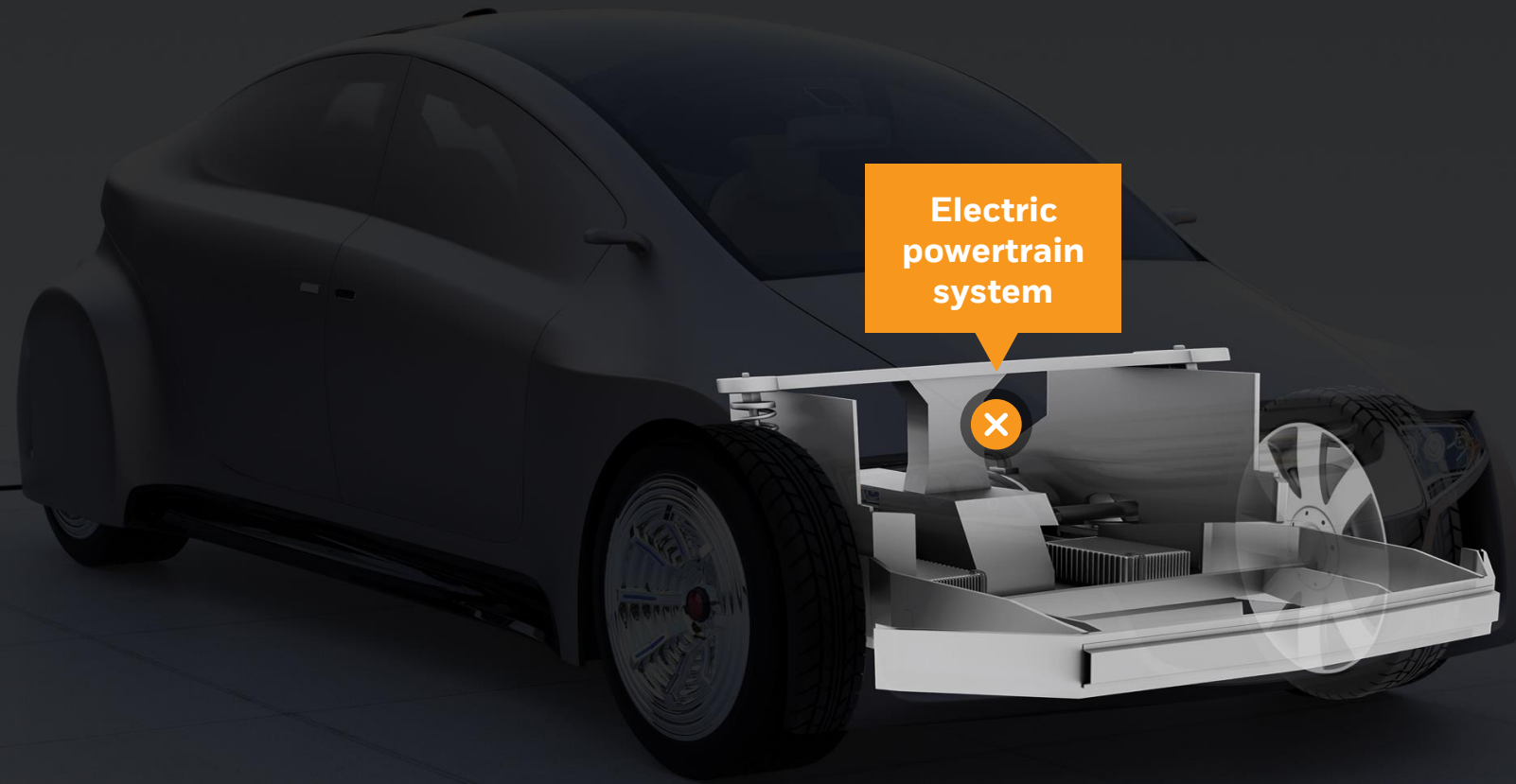
# Owning the value chain



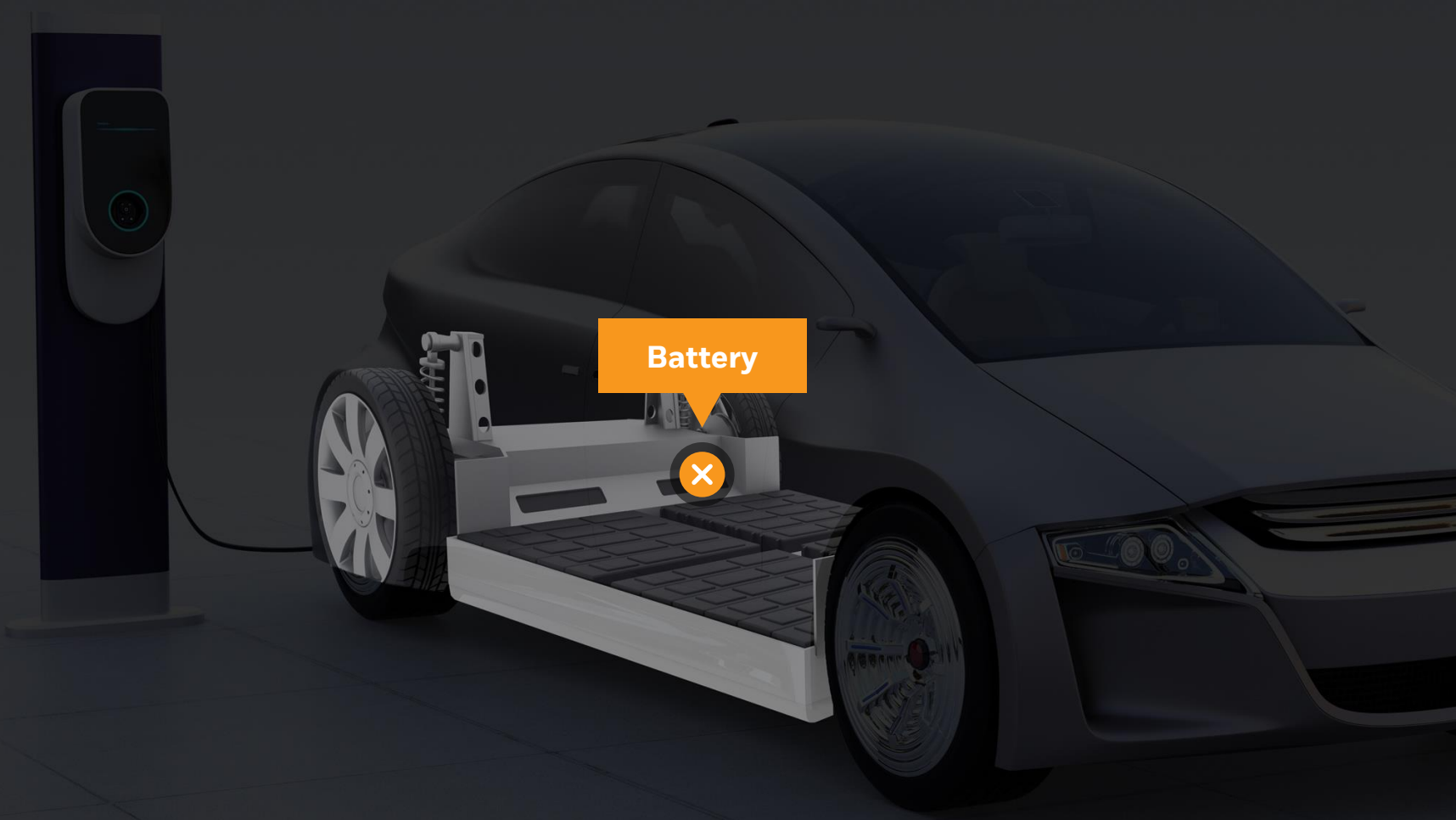


## Valeo

French maker of the electric engines that are EV's hearts and the LiDAR equipment that is a self-driving car's eyes.







## Albemarle Corporation

US-listed producer of lithium and specialty chemicals.

**#1** one supplier of lithium in the world.



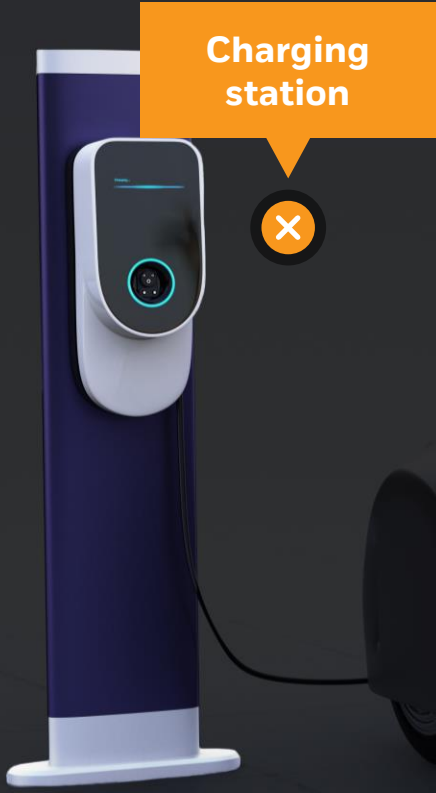
## Semiconductors



## Infineon

Germany-listed, leading producer of automotive semiconductors.

Average EV has approximately 15 times the power-semiconductor content of an internal combustion engine vehicle.



## ABB

Swiss-based leader in smart power, charging infrastructure and technology.

# Megatrends are shaping our future

BlackRock believes five key trends will drive seismic shifts today and for years to come:



## Technological breakthrough

Technology is driving exponential progress in the tech sector and far beyond

- Artificial Intelligence
- Robotics
- Cybersecurity



## Demographics & social change

Longer lifespans and modern lifestyles will change medicine and consumer habits

- Genetics
- Immune system research
- Aging



## Rapid urbanization

Mass migration to cities will require new business models and infrastructure

- Infrastructure
- Megacities
- Transit and transportation



## Climate change & resource scarcity

Demand for a clean, green tomorrow will advance energy and conservation

- Self-driving cars
- Clean energy
- Electric vehicles



## Emerging global wealth

Newly affluent consumers will expand in Asia and across emerging markets

- Mainland China
- Emerging consumers
- Digital economies

Examples

## Important Information

Carefully consider the Funds' investment objectives, risk factors, and charges and expenses before investing. This and other information can be found in the Funds' prospectuses or, if available, the summary prospectuses which may be obtained by visiting [www.iShares.com](http://www.iShares.com) or [www.blackrock.com](http://www.blackrock.com). Read the prospectus carefully before investing.

**Investing involves risk, including possible loss of principal.**

International investing involves risks, including risks related to foreign currency, limited liquidity, less government regulation and the possibility of substantial volatility due to adverse political, economic or other developments. These risks often are heightened for investments in emerging/ developing markets or in concentrations of single countries.

Funds that concentrate investments in specific industries, sectors, markets or asset classes may underperform or be more volatile than other industries, sectors, markets or asset classes and than the general securities market.

Technology companies may be subject to severe competition and product obsolescence. Technologies perceived to displace older technologies or create new markets may not in fact do so. Companies that initially develop a novel technology may not be able to capitalize on the technology.

This material represents an assessment of the market environment as of the date indicated; is subject to change; and is not intended to be a forecast of future events or a guarantee of future results. This information should not be relied upon by the reader as research or investment advice regarding the funds or any issuer or security in particular.

The strategies discussed are strictly for illustrative and educational purposes and are not a recommendation, offer or solicitation to buy or sell any securities or to adopt any investment strategy. There is no guarantee that any strategies discussed will be effective.

The iShares Funds are distributed by BlackRock Investments, LLC (together with its affiliates, "BlackRock").

©2019 BlackRock, Inc. All rights reserved. **iSHARES** and **BLACKROCK** are registered trademarks of BlackRock, Inc., or its subsidiaries. All other marks are the property of their respective owners.