



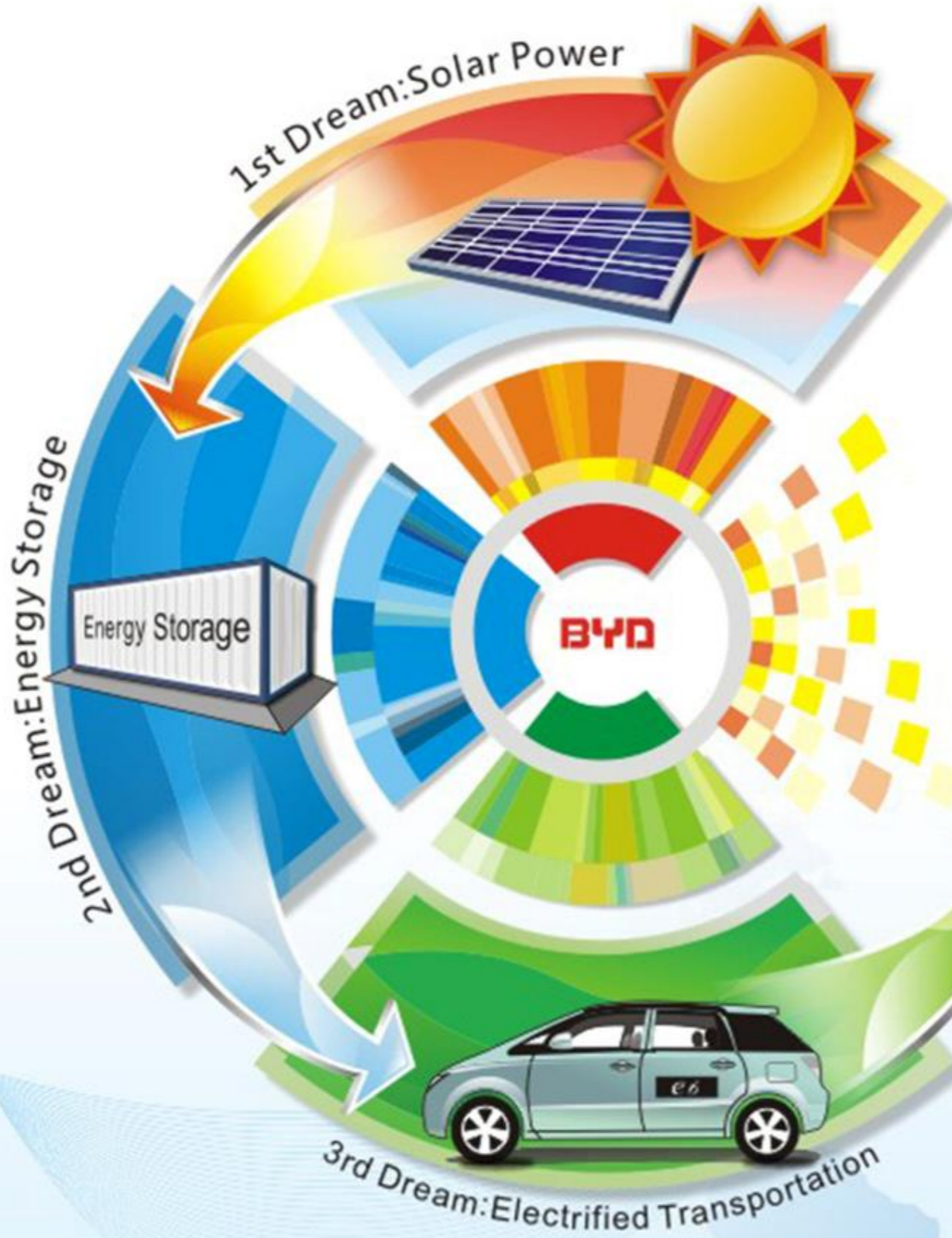
Clean Corridors and Electric Vehicle Technologies: Emerging Opportunities and Challenges

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Eastern US Business
BYD Motors, Inc.



BYD: Build Your Dreams

- BYD is the **largest rechargeable battery** and **electric vehicle manufacturer** in the world.
- BYD's “**Three Green Dreams**” addresses renewable energy with:
 - Affordable solar energy collection
 - Environmentally- friendly energy storage
 - Electrified transportation and other energy –dependent uses
- Fortune Magazine named BYD as one of the “**Top Companies Changing the World**” in 2015



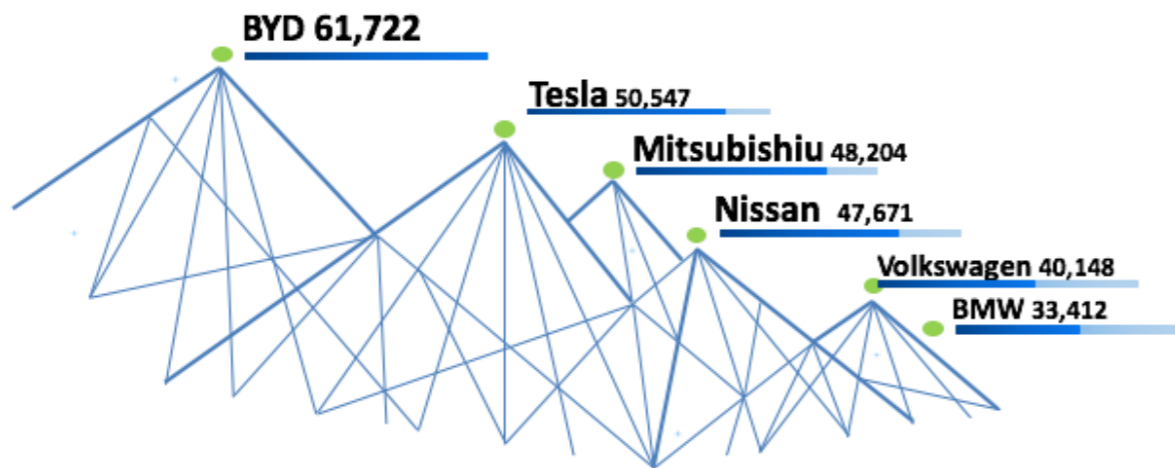
BYD Three Green Dreams



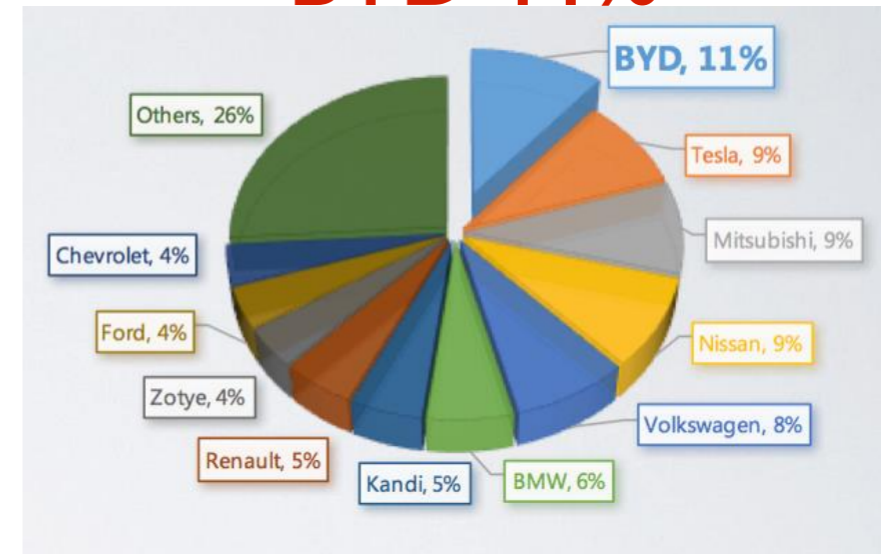


No. 1 Passenger EV Sales Worldwide in 2015

BYD 61,722



BYD 11%



Source: <http://ev-sales.blogspot.com/>

6 Continents, 50 Countries
and Regions, 500 Cities





Full Market Electrified Transportation



7



Traditional Fields

Bus

Coach

Taxi

Private Car

Logistics Vehicle

Construction Vehicle

Sanitation Vehicle

4



Specialized Fields

Warehouse

Airport

Harbor

Mining



Electric Vehicle Infrastructure

- **Opportunities:**
 - Balancing energy between vehicles and grid
 - New industry, for example, ChargePoint and SemaConnect
 - VW Settlements

- **Challenge: Keeping pace with the Demand for EVs**
 - Demand for EV charging may outpace growth in the Supply of charging infrastructure
 - Slow growth in charging infrastructure Supply may constrain future Demand for EVs

- **Emerging issue:**
 - AC as global standard vs. DC as U.S. standard



AC Enables V2X; DC Does Not

Discharge AC power back to the grid, to a load or vehicle to vehicle.
Safety Contingency Plan (each bus is capable of powering a mobile hospital or a Red Cross emergency tent for a week).



V2G
Vehicle to Grid

V2L
Vehicle to Load



V2V
Vehicle to Vehicle



STRANDED VEHICLE ASSIST



Future EV Charge Stations

Private charging companies / DC fast charging partners / **BYD**

EV LEVEL 2

EV LEVEL 3

Private Companies
e.g. ChargePoint

Car Manufacturers
e.g. BYD, Tesla

Utility
Co.

Energy
Service
Companies

220V
AC

480V
DC

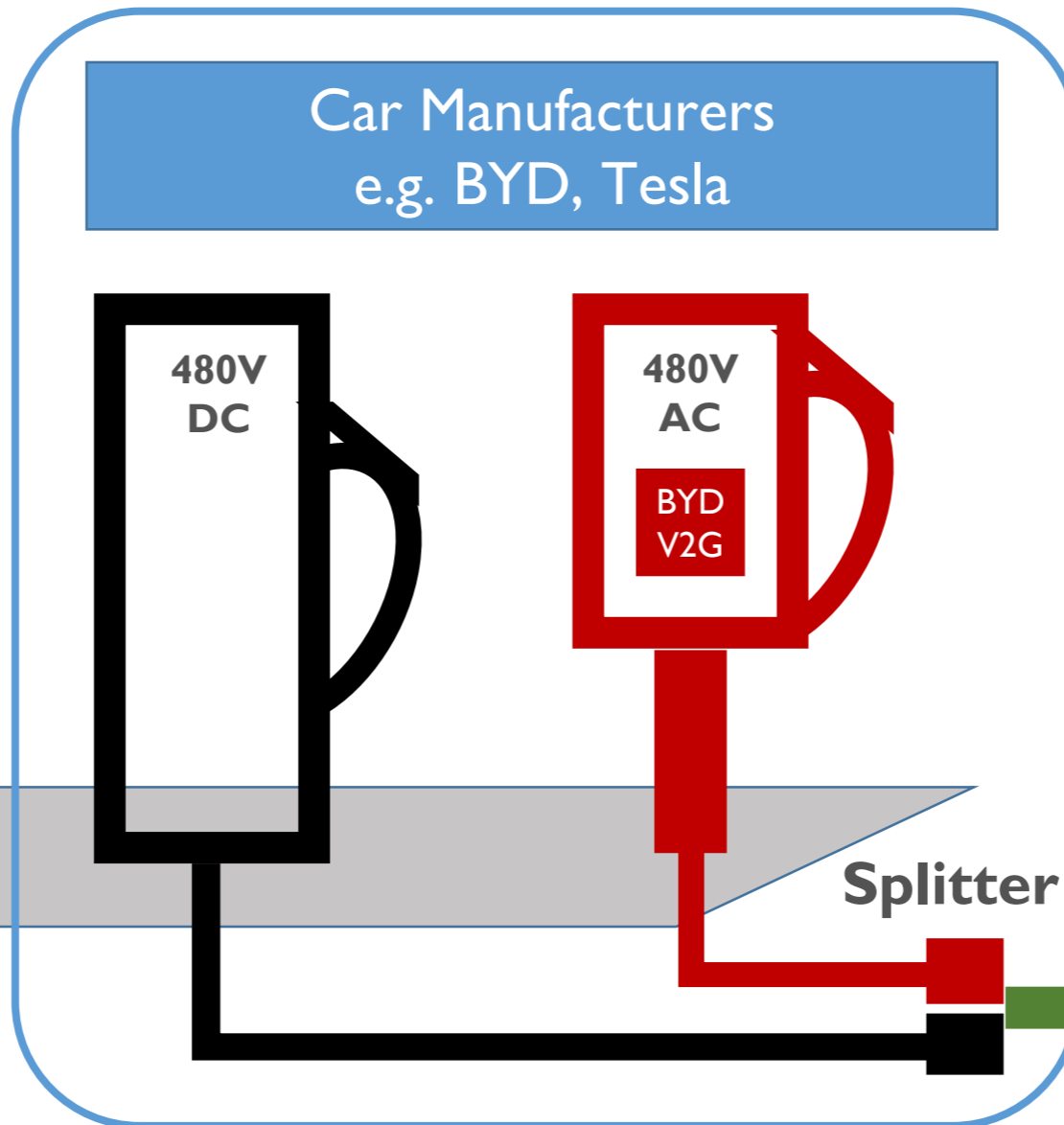
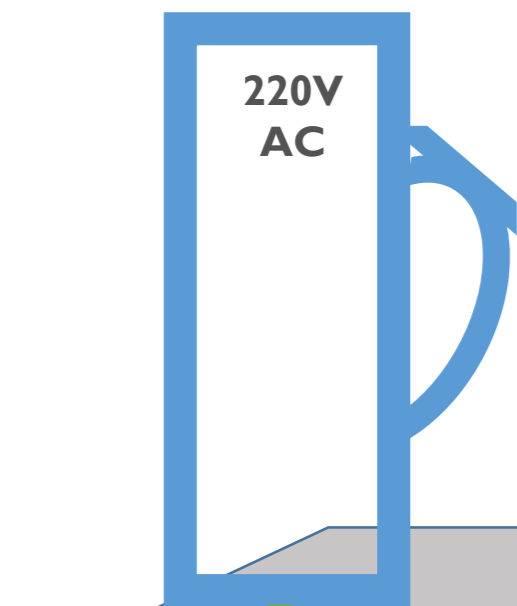
480V
AC

BYD
V2G

Splitter

480V

220V







Thank you!

For more information:

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