Three Green Dreams
The energy and transportation strategy under current environment situation
ENVIRONMENT & ENERGY CRISIS

COAL
ENVIRONMENT & ENERGY CRISIS

GASOLINE

DISEL
<table>
<thead>
<tr>
<th>53 years</th>
<th>56%</th>
<th>95%</th>
<th>70%</th>
</tr>
</thead>
<tbody>
<tr>
<td>The world has <strong>53 years</strong> of oil left</td>
<td>Estimated <strong>56%</strong> world oil consumption comes from transport based on IEO 2014 delivered energy consumption by end-use sector.</td>
<td>Almost all (<strong>95%</strong>) of the world’s transportation energy comes from petroleum-based fuels, largely gasoline and diesel.</td>
<td>Up to <strong>70%</strong> air pollution from cars and trucks</td>
</tr>
</tbody>
</table>

Source
http://www.bp.com/
http://www.epa.gov/
http://evsroll.com/Car_pollution_facts.html
ENVIRONMENT & ENERGY CRISIS

October, 2013
Beijing
ENVIROMENT & ENERGY CRISIS

December, 2013
Shanghai
Do you want to live like this?
ENVIROMENT & ENERGY CRISIS

Or sport like this?
NO
<table>
<thead>
<tr>
<th>Environment &amp; Energy Crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Warming</td>
</tr>
<tr>
<td>Cities Disappearing</td>
</tr>
<tr>
<td>Disasters &amp; Diseases</td>
</tr>
</tbody>
</table>

We need to do something
Actually we are doing something
Something significant, for the earth
September, 2014
NY, USA
Largest Pure Electric Bus and Taxi Fleet in the World--Shenzhen
## REAL CASE IN SHENZHEN

<table>
<thead>
<tr>
<th>Fleet</th>
<th>Accumulated Kilometers</th>
<th>Fuel Saving (L)</th>
<th>CO₂ Saving (kg)</th>
<th>Number of Trees Planted</th>
</tr>
</thead>
<tbody>
<tr>
<td>850 electric Taxis</td>
<td>293,440,000</td>
<td>29,344,000</td>
<td>67,978,310</td>
<td>339,891</td>
</tr>
<tr>
<td>780 electric buses</td>
<td>64,000,000</td>
<td>30,301,561</td>
<td>67,558,400</td>
<td>337,791</td>
</tr>
</tbody>
</table>

Unleaded gasoline: 8.91 kg CO₂ per gallon
Diesel: 10.15 kg CO₂ per gallon
Source: [http://www.eia.gov/oiaf/1605/coefficients.html](http://www.eia.gov/oiaf/1605/coefficients.html)
Diesel Bus Average Fuel Consumption per 100 km: 40L
Gasoline Taxi Average Fuel Consumption per 100 km: 10L
PS: 1 L equals to 0.26 gallon
Global "Technology 100" (2010, No.1) by Business Week
NO.1

15,000 engineers, most engineers working on new energy vehicle field
NO.1

New Energy Vehicle Sales Volume
Lifetime Achievements

Zayed Future Energy Prize 2014
Three Green Dreams

- Affordable Solar Power
- Energy Storage
- Electrified Transportation
SOLAR POWER
BYD SOLAR POWER ADVANTAGES

1. High Efficiency (more power out of small space on the roof)
2. Excellent Optical Performance
   (power even under less-than-optimal condition)
3. Steady DC Output Voltage
4. Easiness in Being Installed

Our solar panels have been approved by prominent certifying organizations such as UL, CE, TUV, IEC and PV Cycle.
We can offer the key part of inverter, Insulated Gate Bipolar Transistor (IGBT).
PHOTOVOLTAIC PRODUCTION CHAIN

- Monocrystalline Silicon Ingot
- Monocrystalline Wafer
- Monocrystalline Cells
- Monocrystalline Solar Modules

- Polycrystalline Silicon Ingot
- Polycrystalline Wafer
- Polycrystalline Cells
- Polycrystalline Solar Modules
BYD PRODUCTION LINE

- **Wafer**: 1.4GW wafer production capacity
- **Cell**: 1.4GW cell production capacity
- **Module**: 1.4GW module production capacity
BYD PV MODULE

- Average cell efficiency up to 18.2%
- Excellent optical performance

- Positive tolerance 0~3%
- Reliability for output performance

- 12 years for product
- 25 years for liner warranty

- Residential roof top systems
- On/Off-grid commercial systems
- On/Off-grid utility systems

- TUV Salt corrosion resistance test
- TUV Ammonia corrosion resistance test
- 5400Pa for Snow Load Test
- 5400Pa for Wind Load Test

BYD PV GLOBAL FOOTPRINTS
ENERGY STORAGE
**For Grid Operations**

- **Peak load shaving**: discharge during the high power demand, charge during the low power demand.
- **Store and transfer electricity**: a smarter grid
- **Short response time**: 4ms only
- **Improved transmission line and equipment lifetime**
- **Reduced Security Risk**

**For Renewable Balancing**

- Creates a Firm Capacity Output
- Ramp-rate Control on renewable energy generation for higher efficiency
8 Years Working on ESS
Over 50 Projects In service
BYD Overseas Auto Partner Conference

Austria, Belgium, England, Germany, Grace, Italy, Netherland

USA, Canada, Brazil,

Senegal, South Africa

China, Philippine

Australia
Over 400 MWh In service
400 Opening Ceremonies

Olympic Games
19 years battery manufacture experience.

Over 700 MWh batteries service in EVs, Buses and ESS.

- More than 6,000 life cycles
- Excellent safety
- High power output and high energy density
- Good performance in high temperature condition
FULL SCALE ENERGY STORAGE SOLUTION

~MW

Micro Grid System

≤ 100KW

250KW/250KWh (20’ container)

≤ 10KW

38KW/40KWh

3KW/10KWh

≤ 1KW

Portable Power System

6MW/36MWh

50KW/100KWh

500KW/1000KWh (40’ container)

≤ 1KW

Utility Scale ESS

Community System

Home Based System
ELECTRIFIED TRANSPORTATION
BYD: the first Auto Manufacturer in the world to launch Fe Battery Operated Electric Vehicle
BYD 7+4 STRATEGY

- Urban construction logistics
- Sanitation vehicle
- Passenger Transportation (Inter-city)
- Urban transit (Inner-city)
- Consumer vehicle
- Taxi
- Urban logistics (Goods)
- Mining
- Airport
- Harbor
- Warehouse
BYD Overseas Auto Partner Conference

- **Mission Possible**
  - AC charge: 5 Hours
  - 100% Environmentally Friendly Battery
  - 0 Emissions
  - >155 Miles
  - 50 Miles/100 kWh Low Operating Costs
  - In-Wheel Drive
  - Passenger-Oriented Design
  - Aluminium-alloy Body
BYD Overseas Auto Partner Conference

MISSION POSSIBLE

- Environmentally-Friendly Battery
- 0 Emissions
- No Roll-over
- Fire Safe
- 187 Miles
- No Heavy Metals
- 90 mph
- Large Luggage Space
- Spacious Interior
- 5 passengers
BYD EV GLOBAL FOOTPRINTS

Public Transportation

40 countries  156 cities
BYD EV GLOBAL FOOTPRINTS

Consumer Market

3rd Globally

Higher than VW, BMW, Tesla, Renault, etc.

Data got by March, 2015
<table>
<thead>
<tr>
<th>PI</th>
<th>WORLD</th>
<th>Feb.</th>
<th>YTD</th>
<th>%</th>
<th>'14PI</th>
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<tbody>
<tr>
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<td>7.206</td>
<td>15</td>
<td>1</td>
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<tr>
<td>3</td>
<td>BYD</td>
<td>2.289</td>
<td>4.542</td>
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<td>7</td>
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<tr>
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<tr>
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<td>Toyota</td>
<td>832</td>
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<tr>
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<td>Chevrolet</td>
<td>872</td>
<td>1.606</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

(1) - Includes Holden Volt, Opel and Vauxhall Ampera;
MORE HYBRYDS ARE COMING…

TANG
SONG
YUAN
MING
HAN
SHANG
Three Green Dreams

This is the sky we look forward…