



Professional Service Provider of New Energy Power Battery Systems Energy Storage and Microgrid Systems

CF Energy Co., Ltd.



The Largest PACK Manufacturer in Northwest China

- Established in Shaanxi, China from March 2018
- Core management and R&D team members have 20+years experience in clean energy industry
- 600+ employees, 350+ engineers and scientists
- 12 production lines, total investment of 1Billion RMB, and annual revenue of 800+ million CNY
- 5GWh product delivered to serve 4million end users worldwide
- Independent production system of modules, BMS and PACK



OUR VISION

World Tier 1 provider of power battery, ESS and Microgrid systems solution.

OUR VALUE

Humility, reverence, gratitude, and decency

OUR CULTURE

Early, meticulous, lean and pragmatic.
We prioritize and value individuals who strive for excellence

Key Milestones of CFE

- Engaged in R&D and manufacturing in PV industry

2001



- CF Energy founded

2018



- 8 GWh annual Capacity
- 3GWh products delivered

2020



2014



- Established R&D center of lithium battery
- Manufacturing of lithium battery

2019



- 6GWh annual capacity
- Deployed the solution of ESS

2022



- 12 GWh annual capacity
- 5 GWh product delivered



Market Footprint





We've Delivered...



320MW /740MWh

Containerized Energy Storage System



32000+ pcs

Backup Energy Storage System



56000+ pcs

Residential Energy Storage System



15000+ pcs

Batteries used in electrical vehicle



2,810,000+ pcs

Batteries used in light electrical vehicle

Our Service and Plan





4-Wheeler Automotive Lithium-ion Battery Systems

Application

- Electric mining dump trucks
- Electric go-karts
- Electric tractors
- All-electric buses
- Electric cleaning vehicles
- Electric logistics vehicles

CFP4812S3



CFP4820L5-A



CFP4820L5-B





2-Wheeler Lithium-ion Battery Systems

Application

- Electric bicycles
- Electric motorcycles
- Battery swapping projects
- Drones & hoverboards
- Customized solutions for individuals

CFP4826L5



CFP4820L5-B





ESS and Microgrid Systems

Application

- Fossil-fired power plant frequency regulation
- Commercial and industrial container/stationary energy storage stations (serving the peak load shifting and power ancillary services industry)
- Microgrid systems for wind / solar / storage / diesel/charging
- Household energy storage systems



Certification & Technology Patents

Company Certification

IATF16949 / ISO9001
ISO14001 / ISO18001

Product Certification

CE / UL / UN, etc.

Technology Patents

74 patents, and more...





Manufacturing Capability

12

Automatically production lines

12 GWh

Annual Capacity

Flexible production line

Smooth switching choice of square aluminum shell, cylindrical, and soft-pack batteries to meet master production plan

Digital Management

The entire production line is equipped with MES system to achieve lean production

Production Line

12 fully automatic lithium-ion
PACK system production lines

64 sets of Japanese Miaji
high-speed welding equipment

1600
full cycle 100V/72V aging channels

8000 sets of 100% daily aging
lithium battery module capacity



100% EOL



100% PACK Aging Test



100% automatic
module stacking



100% Cell sorting





ALL in-house Test Center



Main Test

- Electrical performance test
- Working environmental test
- Safety performance test



Test Equipment

- Lithium-ion batteries test tank/BMS test tank/constant temperature hot and humid boxes low protection board tester/short circuit tester "explosion-proof box/extrusion needle machine/low temperature box shock/vibration table...

IEC

Test Standard

- GB/T36972-2018 GB/T36672-2008
- GB/T31484-2015 GB/T31485-2015
- GB/T31486-2015 GB/T31486.3-2015
- GB/T27930-2015 6B/T18287-2000
- IEC62619/62040
- UL1973/9540



56,000+ pcs

Residential Energy Storage systems

Global



840,000 pcs

Meituan 2-Wheel Power System

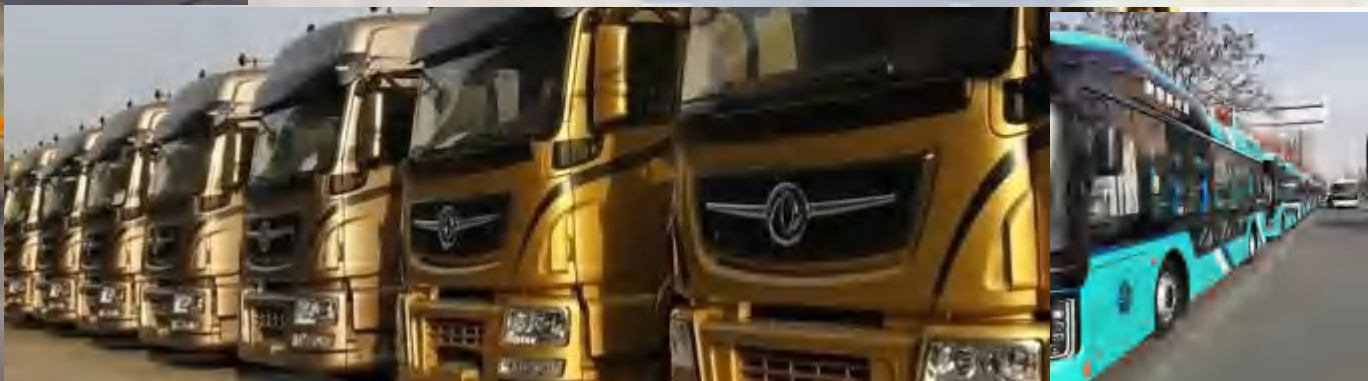
China



96,000 pcs

SF Express 3-Wheel Power System

China



1,200+
6,000+

EV Buses
PHEV Commercial Trucks

China



9MW/9MWh

**Power Grid Side Peak Regulation and
Frequency Regulation project**

Shaanxi, China



30MW/60MWh

Container Energy Storage Project

Gansu, China



100MW/200MWh

Container Energy Storage Project

Ningxia, China



Scan into the CFE website

Thank you!

CF Energy Co., Ltd.