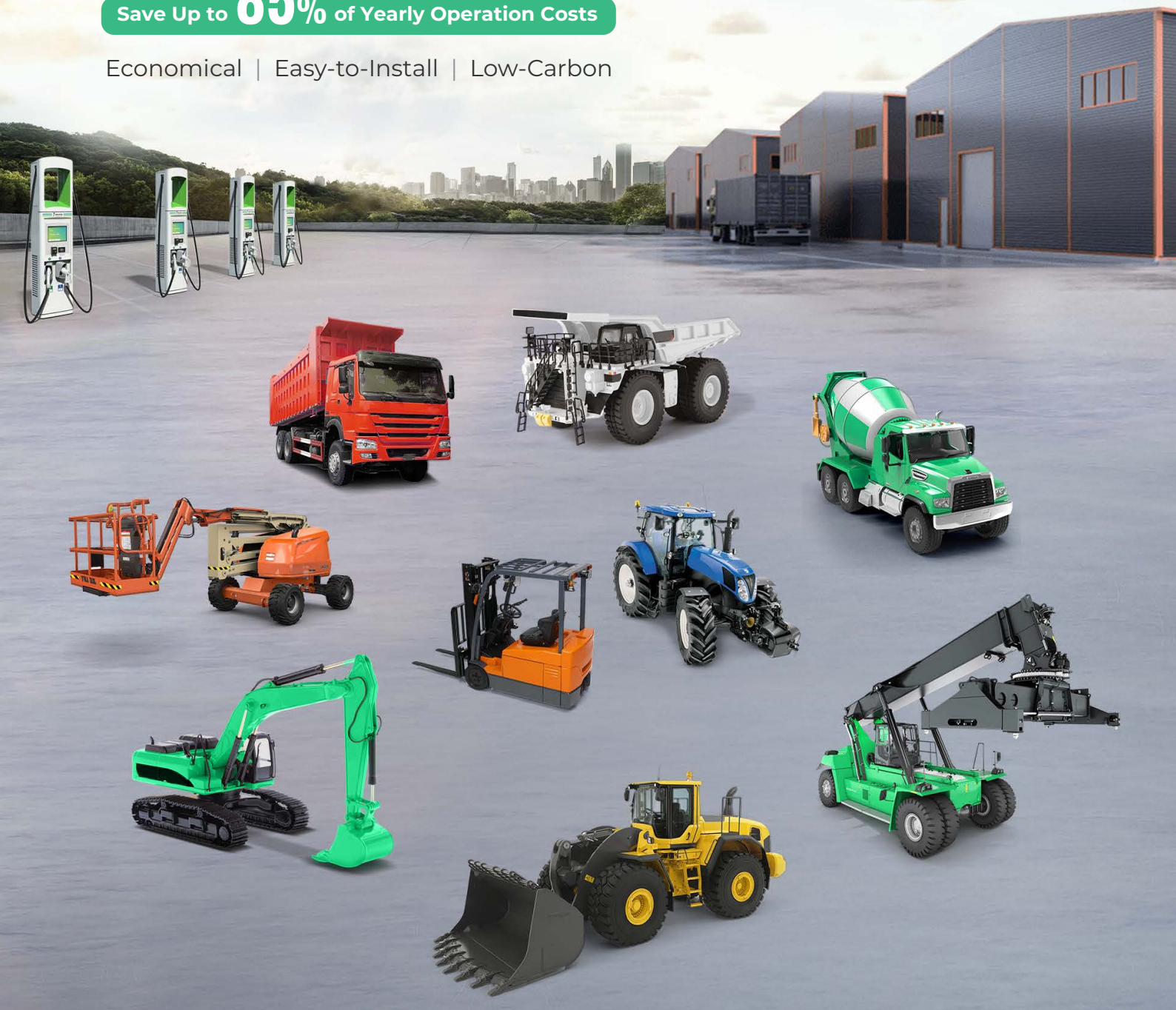
ROYPOW ULTRA DRIVE

Fuel-to-Electric Solutions

for Commercial Vehicles / Construction Machinery / Special Vehicles

Save Up to 85% of Yearly Operation Costs

Economical | Easy-to-Install | Low-Carbon



Li-ion

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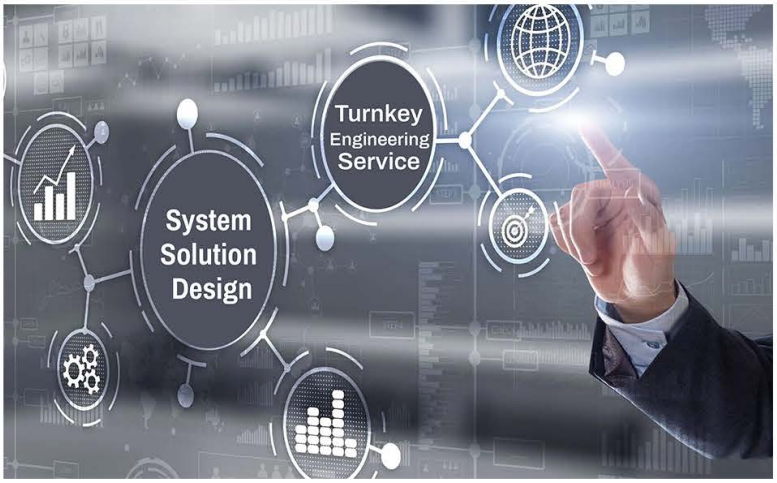
Products and Services



System Solution Design

Turnkey Engineering Service

Fossil Fuel to Electric System for Commercial Vehicles / Construction Machinery / Special Vehicles

Applications

We provide integrated products for aftermarket electrification retrofitting and factory-installed electric systems for the following vehicles (not limited to):

Wheel Loader

Excavator

Boom Lifts

Howo 375 Dump Truck

Off-Highway Mining Truck

Truck Mixer

Agricultural Machinery

Forklift Truck

Port Machinery

Special Custom Equipment

Matured Vehicle Retrofitting Example

Retrofitting Process

1. Design or select based on the customer's vehicle model
2. Remove the original fuel system
3. Install the following modular products

HV Electric Drive Modules:

Wheel Loader

+

Electric Controller x2

+

Motor for Driving x1

+

Motor for Air Pump x1

+

HV Battery x1

+

Thermal System x1

4. Testing and acceptance

Economic Estimation

Lists	Oil Wheel Loader	Electric Loader	Monthly Cost Differenece	Remarks
Fuel consumption per hour (L or kWh)	20L/h	35kWh/h		
Fuel price (RMB)	RMB 7/L	RMB 0.6/kWh		Using private EV chargers avoids public service charges, and charging during off-peak hours costs less.
Daily working hours (h)	12	12	+42,840	
Cost per month (RMB) (240h/month)	50,400	7,560		
Daily working hours (h)	24	24	+85,680	
Cost per month (RMB) (360h/month)	100,800	15,120		
Maintenance costs per month (RMB)	3000	2000	+1000	
Annual cost savings (working for 12 hours per day)				**Each vehicle can save RMB 530,000 per year**
Annual cost savings (working for 24 hours per day)				**Each vehicle can save RMB 1,040,000 per year**

Note: An example with a rated weight of 6 tons. There are differences in energy consumption among different tonnages and models

New Vehicle Retrofitting Example

Retrofitting Process

Requirements and Working Scenarios

- Basic parameter: Vehicle data (size, space, tonnage, power, etc.);
- Main operation scenarios (work instructions, continuous operation time, etc.);
- Current energy consumption;
- Customized new work scenarios;
- Normal/extreme conditions;
- After-sales service

Feasibility Analysis and Draft Plan

- Feasibility analysis and draft plan:
- System selection: motor, battery, electronic controller, etc.;
- Investment/benefit evaluation;
- First vehicle retrofitting target/cost/time;
- Batch retrofitting target/cost/time

Solution Confirmations

- Feasibility analysis and preliminary plan confirmation;
- Cooperation type confirmation;
- Project officially kicks off;
- Project plan and target confirmation:
- Target/costs/time

First Demonstration and Buyoff

- Detailed design Components preparation;
- Control system and software development;
- Removal of the original fuel system;
- Installation and adaptation of the electric drive system;
- System tuning;
- Testing;
- Pre-run;
- Acceptance evaluation

Batch Producation

- Batch production;
- quality control and assurance;
- End test of line;
- Acceptance process

After-Sales Service

- Warranty service;
- After-sales technical support;
- System maintenance;
- Components supply

Solutions

For Large-Scale Construction Equipment

We provide: **50kW~600kW** Motors

30kWh~800kWh (400V~800V) Batteries

Others: Energy Storage Cabinet and Energy Storage Charging Stations

For Small & Micro Construction Equipment

We provide: **3kW~50kW** Motors

5kWh~40kWh (48V~96V) Batteries