CLAIMS

1. An extended-range full-electric low-speed tractor, wherein comprises a system control unit, a battery pack, a frequency conversion driver, a bidirectional DC-DC converter, a generating set and a drive system, the generating set comprising an engine and a generator connected to the engine, the frequency conversion driver comprising an AC/DC converter and a DC/AC bidirectional converter; wherein the generating set is connected to the AC/DC converter and then divided to two branch circuits, one being connected to the bidirectional DC-DC converter and the battery set in sequence via a DC bus and the other one being connected to the DC/AC bidirectional converter; the battery pack, the bidirectional DC-DC converter, the generating set and the frequency conversion driver are all signal controlled by the system control unit; the DC/AC bidirectional converter is connected to a load; a charging-discharging power of the battery set is greater than or equal to a power of the drive system; the drive system comprises a drive motor, a gearbox, a drive axle and a drive wheel, all of which are connected in sequence; and the DC/AC bidirectional converter is connected to the drive motor.

2. The extended-range full-electric low-speed tractor according to claim 1, wherein the tractor further comprises an auxiliary power supply connected to the DC bus.

3. The extended-range full-electric low-speed tractor according to claim 1 ~~or 2~~, wherein the tractor further comprises a 24V DC power supply connected to the DC bus.