CLAIMS

1. A transport refrigeration unit comprising:

a battery;

a combustion engine generator adapted to charge the battery;

a controller;

a fuel level sensor configured to output a fuel level signal to the controller; and

wherein the controller is configured to select between the combustion engine generator and the ~~renewable~~ wind energy source based at least in-part on the fuel level signal, and the wind energy source includes a condenser fan motor and a condenser fan adapted to drive the condenser fan motor when exposed to wind.

2. The transport refrigeration unit set forth in claim 1, further comprising:

a motion sensor configured to output a motion signal indicative of rotational motion of the condenser fan, wherein the controller is configured to utilize the motion signal when selecting between the combustion engine generator and the wind energy source.

3. The transport refrigeration unit set forth in claim 2, wherein the transport refrigeration unit is adapted to be located at end of a truck, trailer, or cargo container.

4. The transport refrigeration unit set forth in claim 3, further comprising:

a battery charging circuit, wherein the controller is configured to electrically switch the condenser fan motor from receiving electrical power to the battery charging circuit.

5. The transport refrigeration unit set forth in claim 4, wherein the condenser fan motor is adapted to be driven by the wind energy source blowing through the condenser fan, and thereby generating electrical power by the condenser fan motor to charge the battery via the battery charging circuit.