

Grid-Tie System

Solar Combiner Box
PV modules are wired together to make sure the correct voltage from the array matches the system voltage (VDC).

DC Disconnect
Ensures that the system can be isolated from the power source. Disconnects are a requirement under the BC electrical code.

Inverter
An electronic circuit that converts direct current (DC) to alternating current (AC). This provides AC electricity to your main service panel. In this system, solar is fed directly to the inverter.

AC Disconnect (Utility Accessible)
Required under the BC electrical code to disconnect all sources of power production (grid tie only).

Wind Charge Controller
Controls the voltage from the wind turbine.

Diversion Load
Both Wind and Hydro need a dump load to displace energy when the grid goes down.

AC Mains Panel and Meter
Regulates power consumption and power production via net metering. Net metering means you only pay the difference between what you produce and what you use.

AC Disconnect
Isolates power from both the inverter and your main service panel.