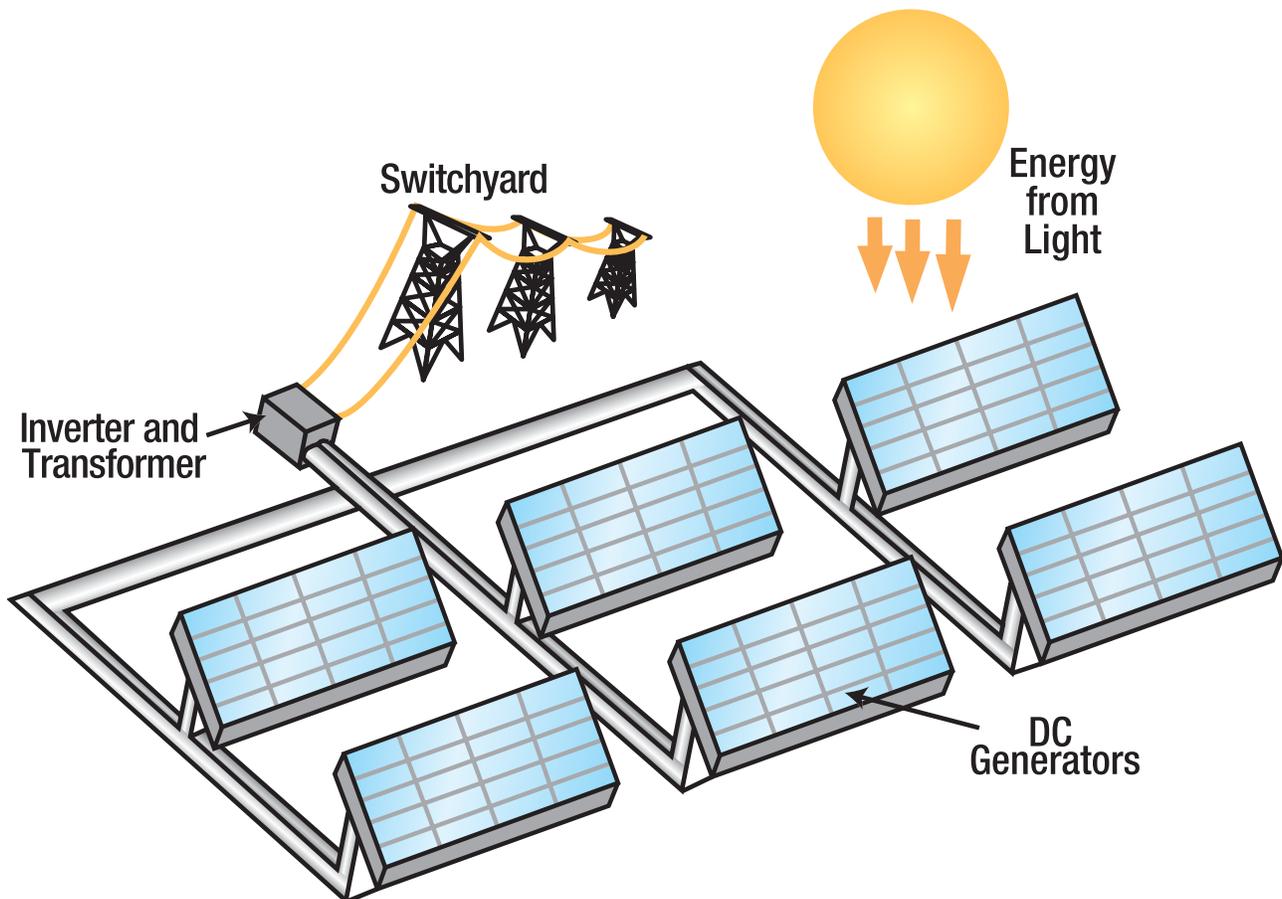


Solar



Solar photovoltaic (PV) systems use semiconductors to convert energy from the sun into Direct Current (DC) electricity. The power is converted into Alternating Current (AC) through an inverter. AC power is needed to be compatible with electricity coming from the utility grid. Most PV systems consist of flat glass-faced panels mounted on rooftops or racks. Emerging PV technologies can be integrated into roofing shingles, films applied to a building exterior, and other building materials. The amount of electricity a given PV system generates is proportional to the amount of sunlight it receives and decreases with cloud cover. PV systems are designed to withstand all the potential rigors of the environment.