

At IslandWood, students see the light with clean power systems from SCHOTT solar.

The Challenge

IslandWood, with its 255-acre campus of wetlands and forest on picturesque Bainbridge Island, Washington, is a non-profit center dedicated to educating middle school students about the environment. The site was designed by Mithun, a Seattle architecture firm that sought to incorporate demonstrations of ecological preservation and renewable energy into every part of the facility.

The Solution

SCHOTT solar was contracted through a competitive bid to design, supply and install a 20 kW photovoltaic array on the roof of the school's Learning Studio. The grid-connected system utilizes 80 ASE-300 solar modules, and a custom building-integrated support structure designed by SCHOTT solar. The solar panels are connected to a Xantrex 20 kW inverter. The array will provide enough energy to power the lights, heating and cooling fans, and circulating pumps for the 7,380 square foot building. The system also includes the SunTrack™ monitoring system, which feeds information about the solar system to the school's computer network.

The Results

Generating up to 21,700 kilowatt-hours of electricity, the SCHOTT solar system provides 50% of the annual power needed to operate the Learning Studio. SCHOTT solar's 20 years of PV experience, an innovative mounting design and reliable ASE-300 solar modules helped IslandWood to achieve all of its educational and practical goals. In 2002, the project was also awarded a Gold Certification—designed to recognize sustainable and environmental leadership in the building industry—by the U.S. Green Building Council's *Leadership in Energy and Environmental Design* (LEED) program.

Technical Specifications

SS System: SunRoof™ SR

Size: 20 kW AC PTC

Modules: 80 ASE-300-DGF/50-290

Inverters: Xantrex PV Series PV-20208

Support Structure: custom design

