The renovation of the EGWW building includes 13,000 sf of solar photovoltaics on a 25,000 sf canopy which also doubles as a water collection surface. The solar array is expected to produce 200,000 kWh of energy annually.

**Window to Wall Ratio** - The building skin is optimized for daylighting and thermal efficiency with a glazing to wall ratio of 43%.

**Lighting** - Energy efficient, optically enhanced electric lighting systems with advanced controls will reduce lighting energy usage by 40% compared to Oregon Code.

**Radiant Ceiling Panels** - Heating and cooling are delivered separately by an energy efficient hydronic distribution system using radiant ceiling panels.

**Plug Loads** - are proposed to be reduced through incorporation of high efficiency task lighting and use of Energy Star appliances, computers with LCD monitors, and LCD TVs for training and conference rooms.

**Fresh Air** - Indoor air quality will be improved through use of a dedicated outside air system (DOAS) that provides 100% fresh air; exhaust air heat recovery ensures energy efficiency.

**Shading Devices** - on the south, west and east façades contribute to minimizing the solar heat gain during summer, with shading designed to be different on each orientation to respond to sun conditions.

**Light Reflectors** - on the south and east façades provide additional reflected daylight into the daylight zone.

**Energy Savings** - 55%
RAINWATER COLLECTION
A 25,000 SF canopy above the building collects rainwater that can be reused in other areas of the building.

RAINWATER STORAGE
An existing rifle range has been converted into a 165,000 gallon tank that will store the rainwater for reuse in toilet flushing, irrigation and mechanical cooling makeup water.

WATER REUSE IN MECHANICAL COOLING TOWER
16% of the building’s total water use is used for the building’s mechanical systems. This will be reduced to 9% via a non-potable water reuse approach.

WATER CONSERVING PLUMBING FIXTURES
Water conserving fixtures and fittings together with rainwater reuse strategies described above result in a water savings of 60% compared to similarly sized “typical” building’s usage.

WATER REUSE IN IRRIGATION
Reuse of non-potable water for irrigation results in a water savings of 55% compared to similarly sized “typical” building’s usage.

MANAGING STORM WATER
By storing rainwater in the 165,000 cistern, the project meets EISA’s goals of mitigating negative stream flow effects.