# ZERO-NET ENERGY TRAINING CENTER

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## Abstract

The project focused on energy performance analyses of a building design with integrated Sustainable building technologies, for eco-friendly high performance design through cutting-edge architecture that approaches the goal of zero-net energy use.

Some of the programs expected to be taught at the Center such as: Building integrated photovoltaic technology, Solar thermal technology, DC powered home appliances for increased energy efficiency, energy audit procedures, HVAC technology; Construction methodology and Sustainable landscape design and construction.

The Center includes two components: the instructional area and the employment counseling area, which will share the snack bar, student lounge and administrative functions.

The main objectives of this project is an integrated environmentally responsive design verified by predictive analyses through sophisticated computerized performance tools to assess building performance in terms of Hybrid Electrical /Thermal energy gains, Identification and optimization of appropriate Passive Cooling Strategies and Contribution of Energy-Efficient HVAC System towards low energy consumption.

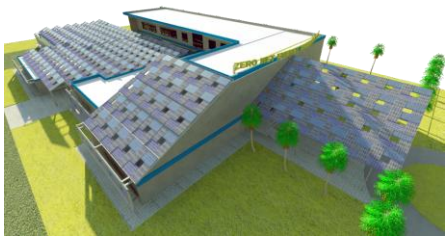

**Figure 1: Zero Net Energy Training Center .**