Energy Integrated Architecture

The Falcon- The use of flexible thin-film photovoltaic modules provides fluid integration with carbon fiber profiles as motorized tracking fins oriented towards sun's path depicting falcons' wing feature. Orienting its fins to the sun will be more effective in Sunlight capture.

The Solar Palm Tree – A vibration resonant wind generator as its additional feature for pv modules on its palm leaf profile. It harnesses wind energy from a phenomenon of vorticity as it leafs profile oscillates on wind range, which then generates electricity through an alternator system. In other words, it is a wind turbine which is not actually a turbine. The leaf like profiles designed to be largely rigid and has the ability to vibrate, remaining anchored to the bottom rod. The top of the leaf is unconstrained and has the maximum amplitude of the oscillation. The structure is built using resins reinforced with carbon and/or glass fiber, materials used in conventional wind turbine blades. Attached on its leaf is flexible thin-film photovoltaic modules which then converts into energy.





