

Shira Consulting

Sustainable Connections is a non-profit business network of nearly 400 businesses. It supports a local living economy that sustains itself, the community and a healthy environment. Its mission is to empower local business and consumer behavior that promotes a vibrant community and a healthy environment. All its members are local and independently owned businesses, organizations and supportive individuals. Locally owned businesses give back to the community, offer more living wage jobs, ensure the unique character of a region, and have greater control over minimizing the environmental impact of their businesses.

Celt Shira is the owner and sole employee of Shira Consulting. She provides conventional electrical design, as well as consultation on how best to build a house that is efficient in solar and ventilation passivity through the use of green building techniques. Celt has training as an electrical engineer where she learned about conventional design. She then became LEED (Leadership in Energy and Environmental Design) accredited and applied her more conventional electrical engineer training to her new outlook of building energy efficient houses through green building.

Renewable energy is often a very hard to implement alternative to standard energy options. Celt said, "So often the use of renewable energy alternatives is not applicable."

For instance, using wind energy requires very few neighbors, as neighbors making its use in neighborhoods very difficult. Further, solar electric is best used when it is either too expensive to be on a city's grid –i.e. one lives too far out of town-, or used solely as a backup system. The Food Co-op's use of solar panels provides twelve minutes of back up power in case of electric failure.

The first step to building any energy efficient house is to ensure that it fully utilizes the surrounding environment and light that is at its disposal. Celt's philosophy is to get in as early as possible in the design stage of building.

"I like to give an orientation on passive solar at the design phase," says Ms. Shira.

Celt suggests monitoring where the sun hits your house during the winter months. By doing this a homeowner can place materials, such as Gypsum or more wallboard, to increase thermal mass, which acts like a battery and heats the house without having to raise heating costs. To coincide with the thermal mass in a house it is important to ensure that the overhang of the house's eaves is properly built so as not to overheat the house in the summer months. Further, using such techniques as having a vent on a lower northeast corner of a house and a coinciding vent on a higher southwest corner of a house will maximize a building's passive ventilation capabilities. This technique enables a house to be air conditioned less and keeps the house at a comfortable temperature.

For every 1 kilowatt of energy that is produced through on sight renewable energy there is a saving of 1.4 kilowatts that would otherwise have to be produced by a power plant.

Ms. Shira points out that "In the Pacific Northwest we have about five months in which we can use solar electric as an option. Coincidentally, those are the very five months that dams are not running."

Shira Consulting is at the forefront of locally owned businesses in our area that can lead interested customers towards renewable energy options. There are many things that the average home owner can do to increase the energy efficiency of their house.

“There are so many options that can be used to better the passive solar and ventilation efficiency of any house.”