HUTSA’WA TABA (windy sun)

For centuries people have lived on and around the Fly Ranch. The history and ways of living on the land should be educational for future generations. The nomadic lifestyle of the Paiute tribes helps to maintain a natural balance between people and their environment. Something that is often hard to find nowadays. As the Fly Ranch can function as an environment for experiments and prototypes, this energy generating artwork aims to incorporate this nomadic style. The design is inspired by the Paiute use of textiles and colorful patterns. The basic shape of the modular design is simplistic, a folding square to collect the energy of the wind and the sun. The artwork stimulates awareness of energy use. The energy we use daily seems limitless but it isn’t. To be disconnected from this seemingly unlimited energy and become aware of the limited source of energy suits the philosophy of the Fly Ranch.

The technology used in this design is a solar & mechanical energy harvesting textile. The textile is used in strips that can be woven in the structure to create a pattern inspired by the colorful patterns of the Paiute.

CONCEPT PRINCIPLE

CONCEPT SHAPE

PROTOTYPE MATERIAL:
SOLAR+MECHANICAL ENERGY HARVESTING
TEXTILE

source: https://www.nature.com/articles/nenergy2016138
Title: Micro-cable structured textile for simultaneously harvesting solar and mechanical energy
By: Jun Chen, Yi Huang, et al.