

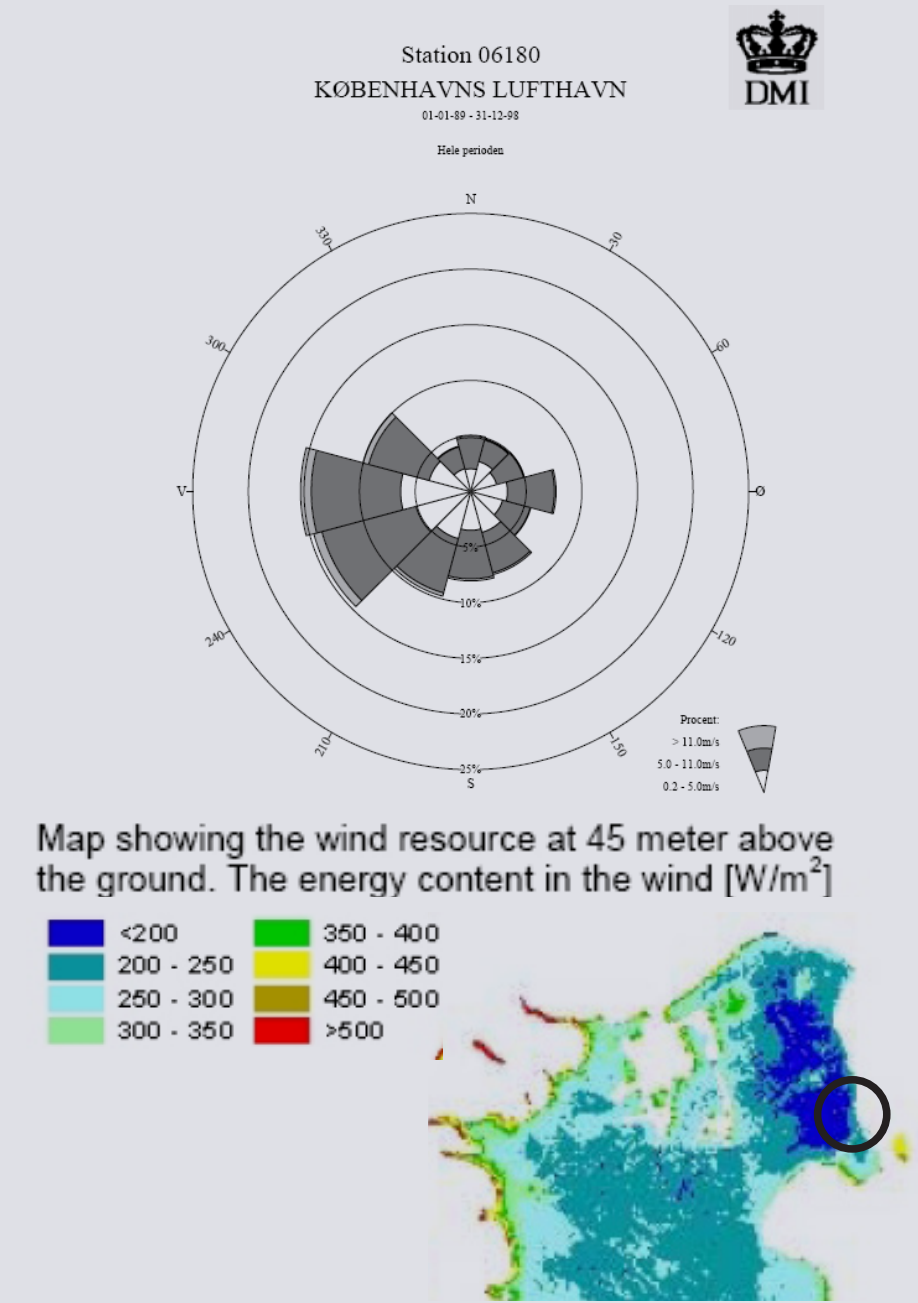
DESIGNED STRUCTURE CAPTURES ENERGY FROM FOUR SOURCES AVAILABLE ON SITE - WATER, WIND, RAIN AND SUN. THANKS THAT IT IS EFFICIENT ALSO IN CLOUDY CONDITIONS AND DURING THE NIGHT. THE FILM OF MIRROR HAS THREE LAYERS - THE PVC CORE WITH PIEZOELECTRIC MODULES IS COVERED AT THE TOP WITH PV FILM, AT BOTTOM WITH REFLECTIVE COATING. BOTH EXTERNAL LAYERS PROTECT THE PVC FILM FROM UV-RADIATION.

DURING THE NIGHT, THE WHOLE SYSTEM POWERS THE LED LIGHTING INSTALLATION UNDER THE WATER. THAT EMPHASIZES THE EYE, WHICH WILL BE VISIBLE ALSO AT WINDY AND STORMY NIGHTS. THE EXCESS POWER IS DIRECTED TO THE CITY ELECTRICAL GRID.

1. PIEZOELECTRICS - WIND, RAIN AND WATER STREAMS

THE VERTICAL SURFACE OF MIRROR IS PERPENDICULAR TO PREVAILING WIND DIRECTION. PIEZOELECTRIC MODULES, INSTALLED AT EACH FLAP ON THE MIRROR, CAPTURE THE ENERGY FROM FLAPPING WHEN WIND BLOWS, AND FROM ITS DEFORMATIONS MADE BY RAINDROPS.

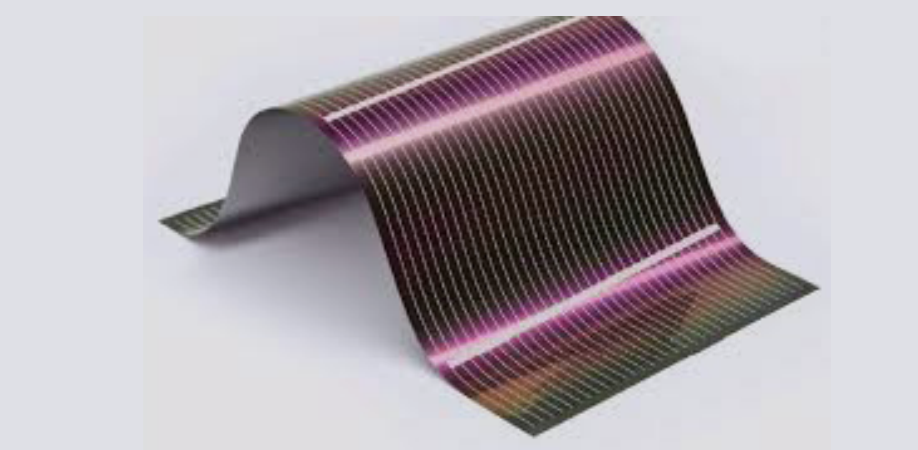
EACH FLAP OF SIZE 1x1.6m PRODUCE APPROXIMATELY 4W OF ENERGY AT 7.5m/s WIND SPEED. THE TOTAL NUMBER OF 3000 MODULES PRODUCES 87.600kWh YEARLY. ADDITIONAL 4.380kWh PRODUCED BY RAIN.



SIMILAR PIEZOELECTRIC MODULES CATCH ENERGY FROM THE WATER CURRENTS IN SHALLOW PARTS OF THE FLOODED EYE. 4.000 sq.m. OF AREA IS COVERED WITH PIEZOELECTRIC FLAPS. WATER STREAMS PRODUCE CONSTANT PRESSURE TO THAT ELEMENTS, SQUEEZES AND STRETCHES THEM. THE MODULES UNDER PRESSURE PRODUCE APPROXIMATELY 14.600kWh YEARLY.

2. PV FILM - SUN ENERGY

PHOTOVOLTAIC FILM (PV) WITH 10% EFFICIENCY PRODUCES 432.000kWh



3. TOTAL EFFICIENCY

WIND+WATER+RAIN+SUN = 538.580kWh yearly
That will supply 150 houses with energy.

SIGHT

