



PROLOGUE:
Ordinary solar panel is putting solar panel and frame on the ground directly. There is only narrow space in between each row and strong sun light and reflection, as unfriendly environment for human, animal and vegetation...

Future / Energy / Renewable / Nature

FERN

wildlife sanctuary park

site 1

It locates next of wildlife sanctuary and park. It is such a beautiful location. And also FERN was inspired by flamingo and natural element there.



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FERN

FERN solar plant covers your head above. FERN casts shadow on the ground and allows to wind coming in the plant site. This friendly environment invites animal, green and people in the field.

SEMI-TRANSPARENT FLEXIBLE PV FILM

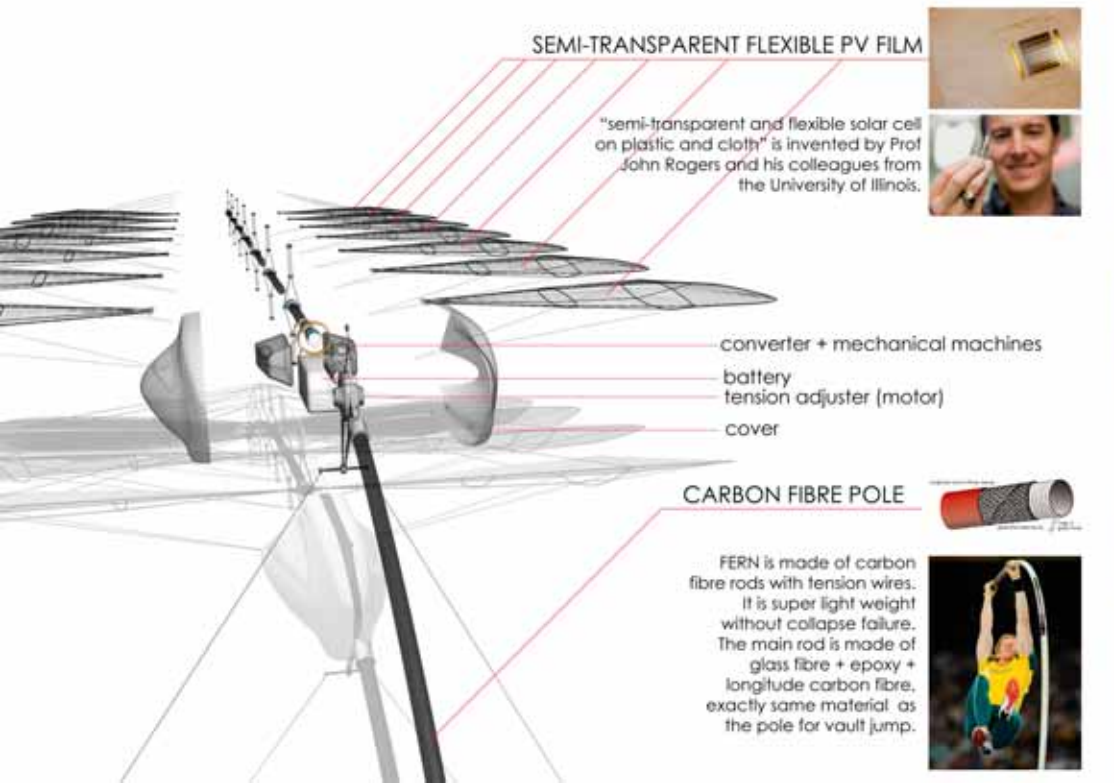
"semi-transparent and flexible solar cell on plastic and cloth" is invented by Prof John Rogers and his colleagues from the University of Illinois.

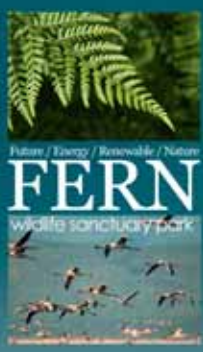


- converter + mechanical machines
- battery
- tension adjuster (motor)
- cover

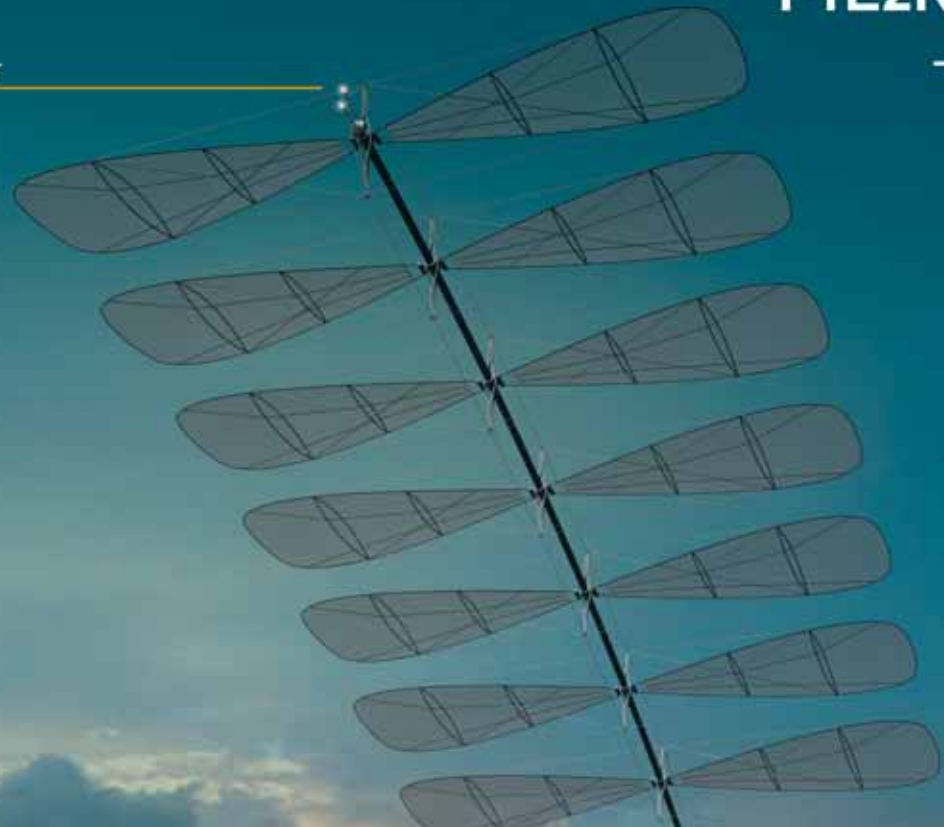
CARBON FIBRE POLE

FERN is made of carbon fibre rods with tension wires. It is super light weight without collapse failure. The main rod is made of glass fibre + epoxy + longitude carbon fibre, exactly same material as the pole for vault jump.





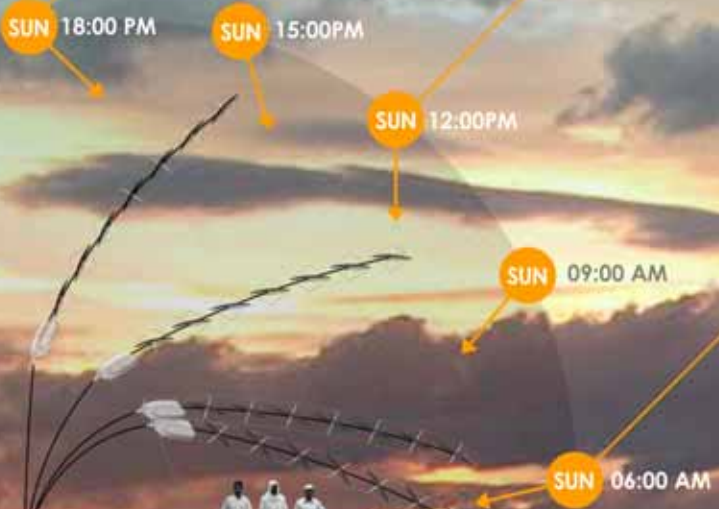
EVENING position in Summer



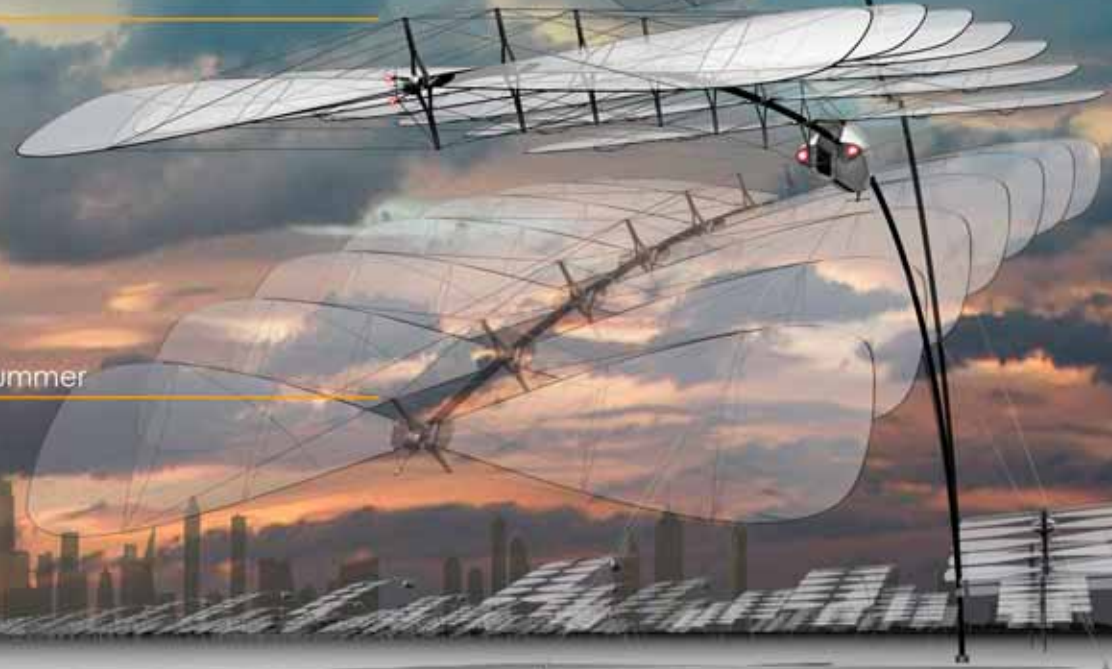
DAILY MOVEMENT:

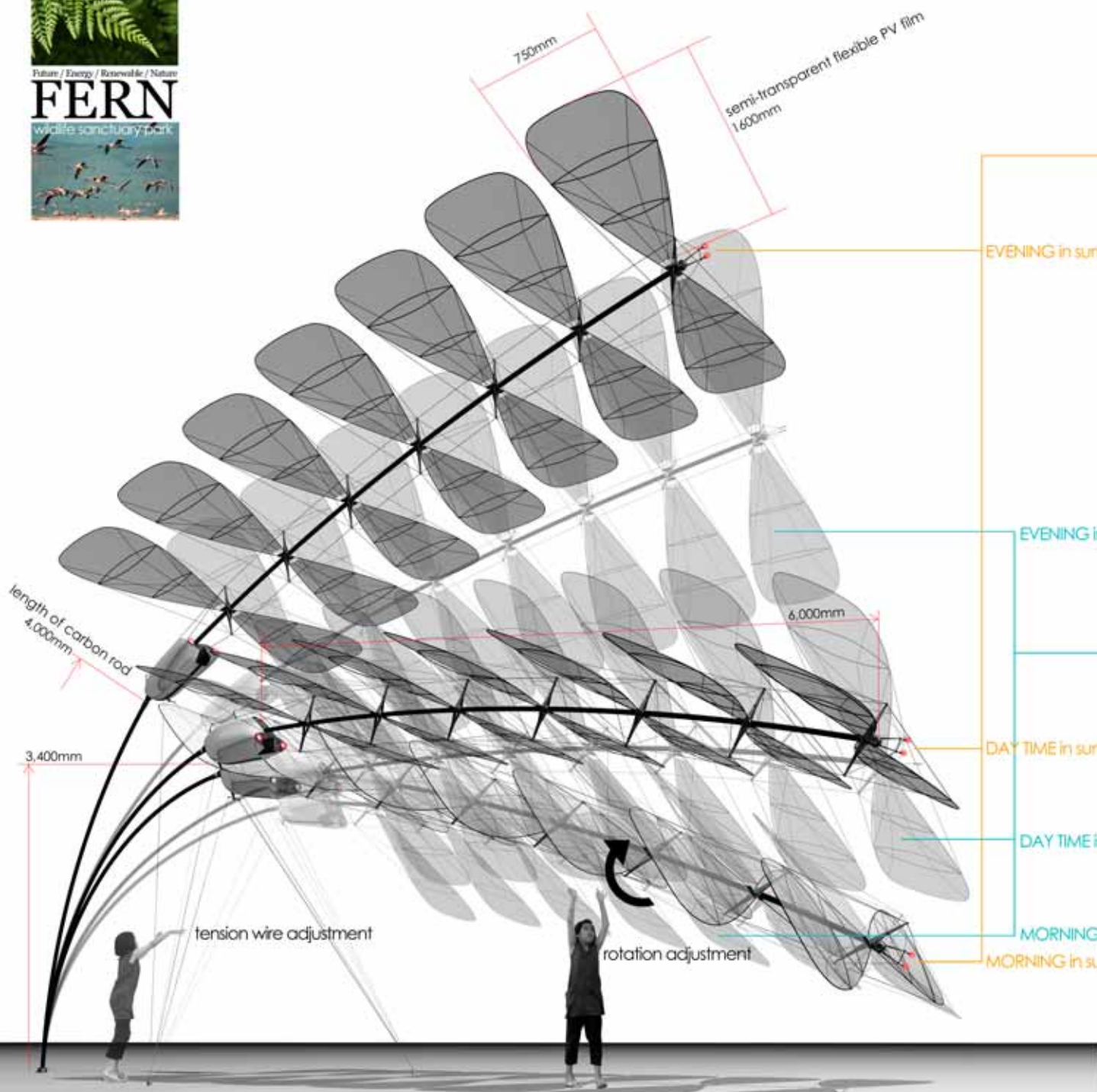
FERN is bowing and standing for following the movement of sun all the time in all season.

DAYTIME position in Summer



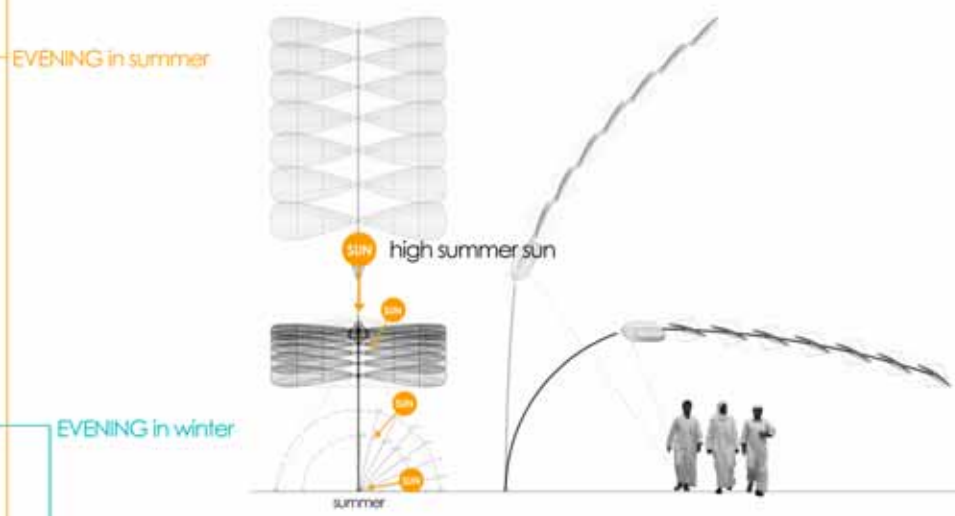
MORNING position in Summer



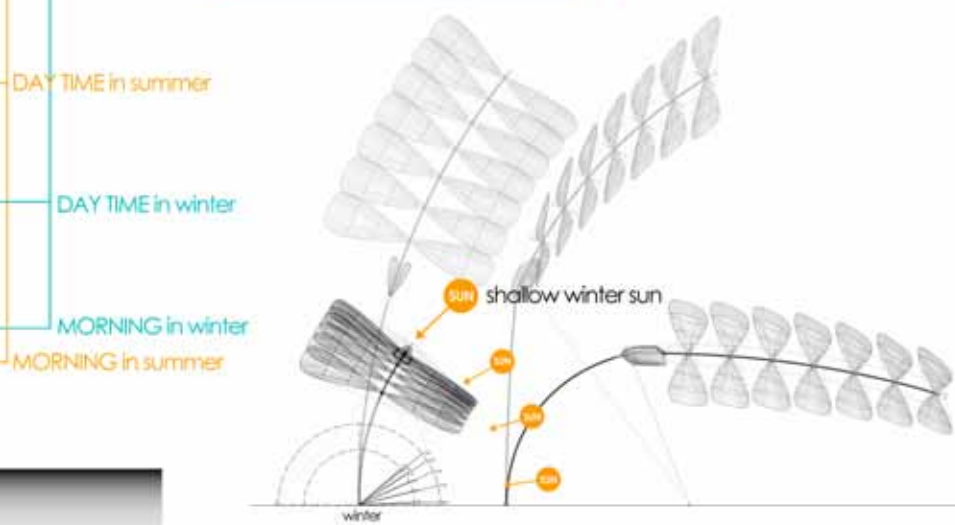


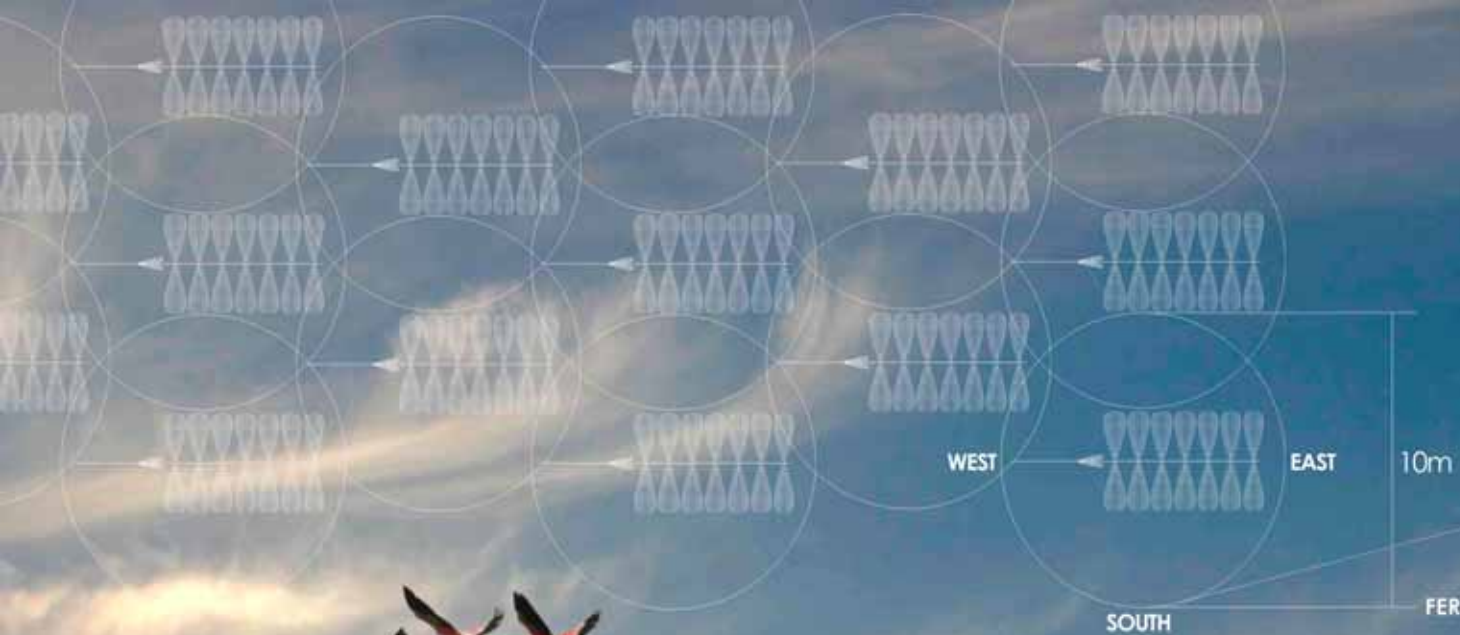
FERN bents its own main rod structure and rotate wing of PV film for following sun movement from morning until sunset by the tension wire.
Season adjustment is also easily done by the same technology. FERN can chase the sun light, whatever the angle of sun in "summer high" or "winter shallow" or "morning low" or "evening far" !

SUMMER MOVEMENT



WINTER MOVEMENT





maximum 10,256 units

FERN IMPLANTATION pattern: 10 meter diameter clearance

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FERN

