

ASTROPHISM
ORGANIC
FARM
URBAN
SPACSCRAPER
AMPUNKOTA
FOLD
TECHNOLOGY
ARCHITECTURE
ALGORITHMIC
WATERSCRAPER
HABITAT
FLOOD
WIND
SOLAR
TECHNOLOGY

EVOLOLO

SKYSCRAPERS

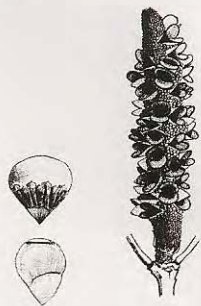
WALK
SUBURBIA
WANO
ROBOTIC
PRISON
CITY
VIRAL
SYMBIOCITY
DYSTOPIA
INSTANT

SHOCK PODS SKYSCRAPER

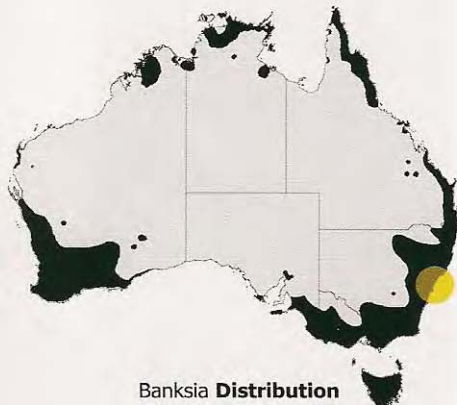
RANA ABOUD

EWEN WRIGHT

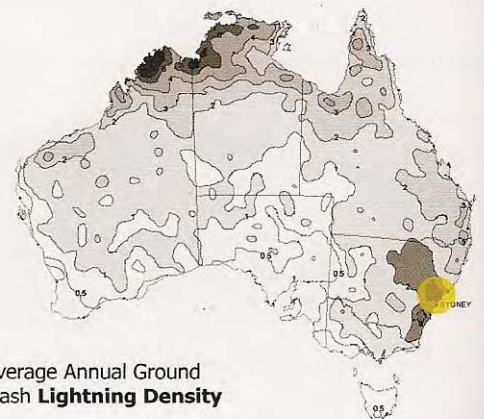
AUSTRALIA



Native Australian
Banksia Integrifolia

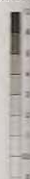


Banksia Distribution



Average Annual Ground Flash Lightning Density

Number of flashes km⁻²



There are over 2000 thunderstorms happening across the globe at any given time. Sydney, Australia receives some of Australia's highest volumes of thunderstorms, and with enough energy discharged during a typical storm to power all of the country for three hours, why not harness it? The Shock Pods are a way of capturing the electrical energy in lightning and converting it to usable energy to power Sydney.

The native Banksia plant of Australia inspires the Shock Pods form and operation. The Banksia has pods that release seeds after years of dormancy when burned or subjected to intense heat. The pods that give the Shock Pods their namesake work in

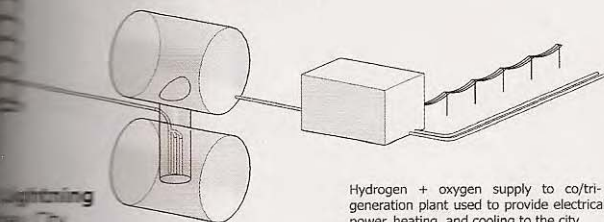


0143

Estimated 1 mega volt
40 amps for 20 ms lightning strike

Reduced down to 10 volts

Electrolysis of water in pods
to produce hydrogen and oxygen gas



What if the lightning released in a thunderstorm could be harnessed to power entire cities?

This is the aim of 'Shock Pods', a series of skyscrapers that draw formal inspiration from the native Banksia plant of Australia.

The Banksia has follicles, or 'pods', that may release their seeds after many years of lying dormant by opening if burnt or subjected to a similar heat. In a similar vein, 'the Shock Pods' are fueled by lightning shocks, capturing the rainwater from a thunderstorm within the openable pods, and electrolysing the water using the power from a lightning strike to break the atomic bond of a water molecule.

During a thunder storm, there is enough energy discharged to power Australia for approximately three hours. With over 2000 thunder storms world wide at any one time, it is an abundant source of energy. By converting this electrical potential energy to chemical potential energy, it can be safely stored between storm events. When the pods are empty they open again to the sky, a visual reminder to the residents of the city the availability of energy and the process of its generation.

SHOCK PODS