## THE 5 ELEMENTS ENERGY CATELLAY

SITE PLAN DETAILS

Masdar \$ 1000

CONCEPT COMPONENTS

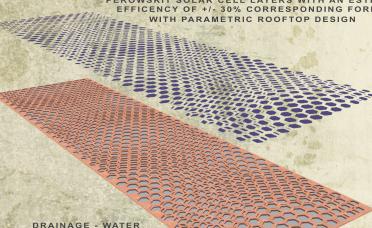
THE TECHNOLOGIES USED IN THE DESIGN PROCESS ARE BASED ON THE 5 ELEMENTS WOOD, FIRE, METAL, WATER AND EARTH WHICH ARE DIRECTLY DERIVED FROM NATURE

CLAY ROOFTOP AND WALL CONSTRUCTION (MAXIMAL ROOFTOP HEIGHT 45 METERS)



PRINTED DIE CUT ORGANIC SOLARCELLS CAN OPERATE WITH HIGHER EFFICENCY THAN CONVENTIONAL SOLAR PANELS. THEY WORK EVEN DURING LOW LIGHT INTENSITY (e.g. DAWN AND CLOUDS), THE PRODUCTION PROCESS WILL BE CHEAPER AND ELEMENTS CAN BE MANUFACTURED ON SITE

PRINTED AND DIE CUT ORGANIC FLEXIBLE
PEROWSKIT SOLAR CELL LAYERS WITH AN ESTIMTED
EFFICENCY OF +/- 30% CORRESPONDING FORMAL



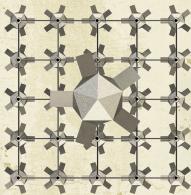
DRAINAGE - WATER COLLECTING PRINCIPLE

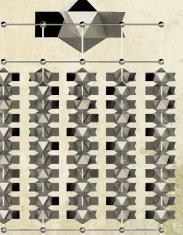


ROOFTOP CLAY AND WALL CONSTRUCTIONS COMBINED WITH PARAMETERIC DESIGN AND INNER WOODEN STRUCTURE PROVIDES ADDITIONAL STATIC RELIABILITY

LAYERS INSIDE THE ROOF TOP HEAT UP WHEN SOLAR RADIATION IS HIGH AND COOLING DOWN WHEN TEMPERATURE FALLS - THE GENERATED CONDENSED WATER WILL BE COLLECTED AND LEAD DOWN THROUGH SIDEWALLS BY DRAINAGE SYSTEM TO SUPPLY PLANTS IN RECREATION ZONE









AN ICONIC ICOSAHEDRON SHAPED VERTICAL MOUNTED TITANIUM



150 ICOSAHEDRON SHAPED WINDTURBINES AND ONE MASTER
TURBINE ON TOP ARE ARRANGED IN FOUR RECTANGULAR TITANIUM GRIDS
OF 28 x 21.5 METERS FORMING A KINETIC SUPER STRUCTURE - WHILE
THE WIND INTERACTS WITH THE ICOSAHEDRONS SPECTACULAR OPTICAL
AND AUDIBLE IMPRESSIONS ARISING FROM DIFFERENT VIEWANGLES

