# GLETSCHER CITY RESORT

FUJAIRAH UA



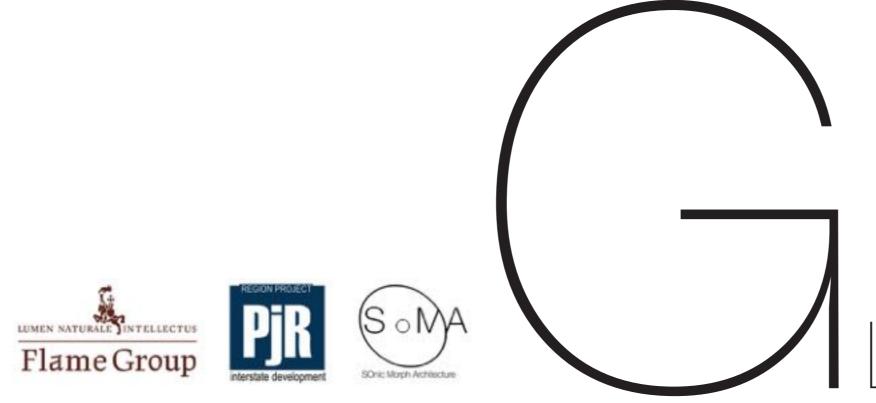
GENOMA program

### DECLARATION

IN THE LAST HUNDRED YEARS, HUMAN ACTIVITY ALL OVER THE GLOBE HAS BEEN INTERFERING WITH THE NATURAL PROCESSES WHICH SUSTAIN LIFE ON EARTH, THE ORIGINS OF THIS INTERFERENCE ARE IN THEMSELVES COMPLEX, BUT WE KNOW THE MAIN CONTRIBUTING FACTORS:

- THE RAPID DEVELOPMENT OF INDUSTRIAL TECHNOLOGY, POWER INDUSTRY, TRANSPORTATION AND IP INDUSTRY;
- THE EVER-ACCELERATING GROWTH RATE OF THE WORLD POPULATION AND, CONSEQUENTLY, SKYROCKETING RATES OF CONSUMPTION.

MACHINERY AND TECHNOLOGY RAPIDLY IMPROVED THE QUALITY OF LIFE OF MANY INHABITANTS OF OUR PLANET, BUT AT THE SAME TIME THEY AFFECTED THE GLOBAL ENVIRONMENT AND RAISED THE ISSUE OF THE SHORTAGE OF PRIMARY VITAL RESOURCES. STRATEGIES DEVELOPED BY HUMANITY TO DOMINATE MINERAL RESOURCES INEVITABLY LEAD TO GLOBALIZATION OF SOCIAL INSTITUTES AND TAKE AWAY FROM THE DIVERSION OF LIFE AND SOCIAL LIFE FORMS. THEY FUEL INTERNATIONAL CONFLICTS AND BRING ABOUT GLOBAL PROBLEMS WHICH BECOME UNCONTROLLABLE AND LEAD TO IRRECONCILABLE CONFRONTATIONS AND WORLD WARS. THESE STRATEGIES DO NOT CREATE A NEW DIVERSITY, THEY DO NOT NOURISH LOCAL LIFESTYLES, NOR DO THEY SERVE TO DEVELOP UNIQUE TERRITORY FEATURES, CONDITIONS, QUALITIES, RESOURCES AND NEEDS. HUMANITY MOSTLY CONSUMES, NOT COEXISTS IN THE WORLD WHICH IT IS PART OF. WE ARE FACING CONSTANT NEW THREATS TO THE EXISTENCE NOT ONLY OF INDIVIDUAL SPECIES OF PLANTS OR ANIMALS, BUT OF ALL LIFE ON EARTH.



### DECLARATION

THIS SHOULD OBLIGE ALL PEOPLE, STATES AND COMPANIES TO UNITE IN ORDER TO FIND COMPREHENSIVE GLOBAL DECISIONS, WHICH SHOULD BE IMPLEMENTED NOT IN THE NEAR FUTURE, BUT IMMEDIATELY TO BRING RELIEF TO NATIONS AND TERRITORIES LACKING ACCESS TO PRIMARY (BASIC) COMMODITIES SUCH AS WATER, FOOD AND ENERGY. FOR THE PEOPLE OF TODAY IT IS VITAL TO MOVE, AS QUICKLY AS POSSIBLE, FROM DEVELOPING NEW INSTRUMENTS OF CONTROL AND DISTRIBUTION OF GLOBAL CONSUMPTION OF NONRENEWABLE NATURAL RESOURCES. TO FINDING INSTRUMENTS AND PRINCIPLES OF SUSTAINABLE LOCALIZATION AND THE USE OF ALTERNATIVE RENEWABLE. ENERGY AND RESOURCES PRODUCED THROUGH ECO-FRIENDLY «GREEN» TECHNOLOGIES. THIS SHOULD BE DONE THROUGH DEVELOPING EXISTING TECHNOLOGIES AND CREATING NEW ONES.

- WHEN THESE ARE INTRODUCED AND INTEGRATED INTO GLOBAL NATURAL PROCESSES, INDIMDUAL CHARACTERISTICS OF FACH GIVEN TERRITORY SHOULD BE TAKEN INTO CONSIDERATION. THE GOAL IS... ...TO DEVELOP THESE TECHNOLOGIES IN BALANCE AND HARMONY WITH THE LIVING AND EVER-CHANGING FEATURES
- OF NATURAL PROCESSES, WHICH RUN DIFFERENTLY IN ALL THE DIVERSE REGIONS OF OUR PLANET. ...TO OFFER AN ADAPTABLE AND BALANCED COMBINATION OF SUCH PARAMETERS AS HEAT, THE MOVEMENT OF THE WIND, HUMIDITY AND THE AMOUNT OF LIGHT.
- ...TO FOLLOW THE ENERGIES IN THEIR ABSOLUTE, VOLATILE AND NATURAL INTERDEPENDENCE.
- ...TO INTERACT WITH NATURE AND COMPREHEND ITS COMPLEXITY, ESPECIALLY WITH REGARDS TO ITS POWER POTENTIAL.
- ...TO WORK OUT TERRITORY DEVELOPMENT STRATEGIES BASED SOLELY ON THIS POWER RESOURCE, TO INCORPORATE ANY IDEAS INTO ITS GLOBAL NATURE.
- ...THE STRATEGY SHOULD ALLOW EVERY PLACE ON EARTH TO MAINTAIN AND SHOWCASE ITS UNIQUE NATURE THROUGH SUSTAINABLE ENERGY LOCALIZATION. THERE IS BEAUTY IN HUMAN INTERACTION WITH NATURE.













## PROJECT PARTNERS

FLAME GROUP INTERNATIONAL CONSORTIUM DECLARES ITS MAIN MISSION AS FOLLOWS: TO DEVELOP AND CARRY OUT PROJECTS WHICH ADHERE TO THE ABOVEMENTIONED CRITERIA AND UNITE COMPANIES AND INDIVIDUALS WHO SHARE THIS VIEWPOINT. THE CONSORTIUM IS A NON-PROFIT ORGANIZATION, IT MERELY FACILITATES COLLABORATION BETWEEN INVESTMENT, ENGINEERING, PROJECT, CONSTRUCTION AND MANUFACTURING COMPANIES.



### TsAGI (CENTRAL AEROHYDRODYNAMIC INSTITUTE)

is a recognized global leader in aerospace research, the design of aircraft of all types and purposes. Besides that TsAGI is a leading international expert on gas dynamics, thermal physics, structural strength and field tests of models of any complexity. In 2018 TsAGI celebrates its 100th anniversary.



#### LS GROUP

is a South Korean corporation, the global giant specializing in the energy sector. The leader in the manufacture of a wide range of electrical and automatic equipment, electronics, new materials and the creation of the alternative energy objects. Its role in «GLETHCER GENOME» project is to create an international consortium, consisting of the largest South Korean companies that are capable of implementing the project of any technical complexity during the shortest time and in accordance with the highest international standards.



### BMF GROUP AG

is a leading European manufacturer of cable transportation systems. It is a full service factoring company, performing all kinds of works in a range from design to operation. It utilizes the technology of solar energy usage for operation of cable transport systems that are great in length and power consumption.



### **WOLTERS KLUWER Financial Services**

is a world's largest corporation in the field of banking, development and provision of banking services, including the programs of calculation and management of risks. It provides services to the regulators and the world's largest banks, including the ECB (European Central Bank).



### RESEARCH AND DEVELOPMENT INSTITUTE FOR CONSTRUCTION PHYSICS (RDICP RAACS)

is a principal Russian scientific research institute of physical processes in construction industry. Its Scientific Research Foundation has a number of patented breakthrough (advanced) technologies for energy saving and thermal protection.



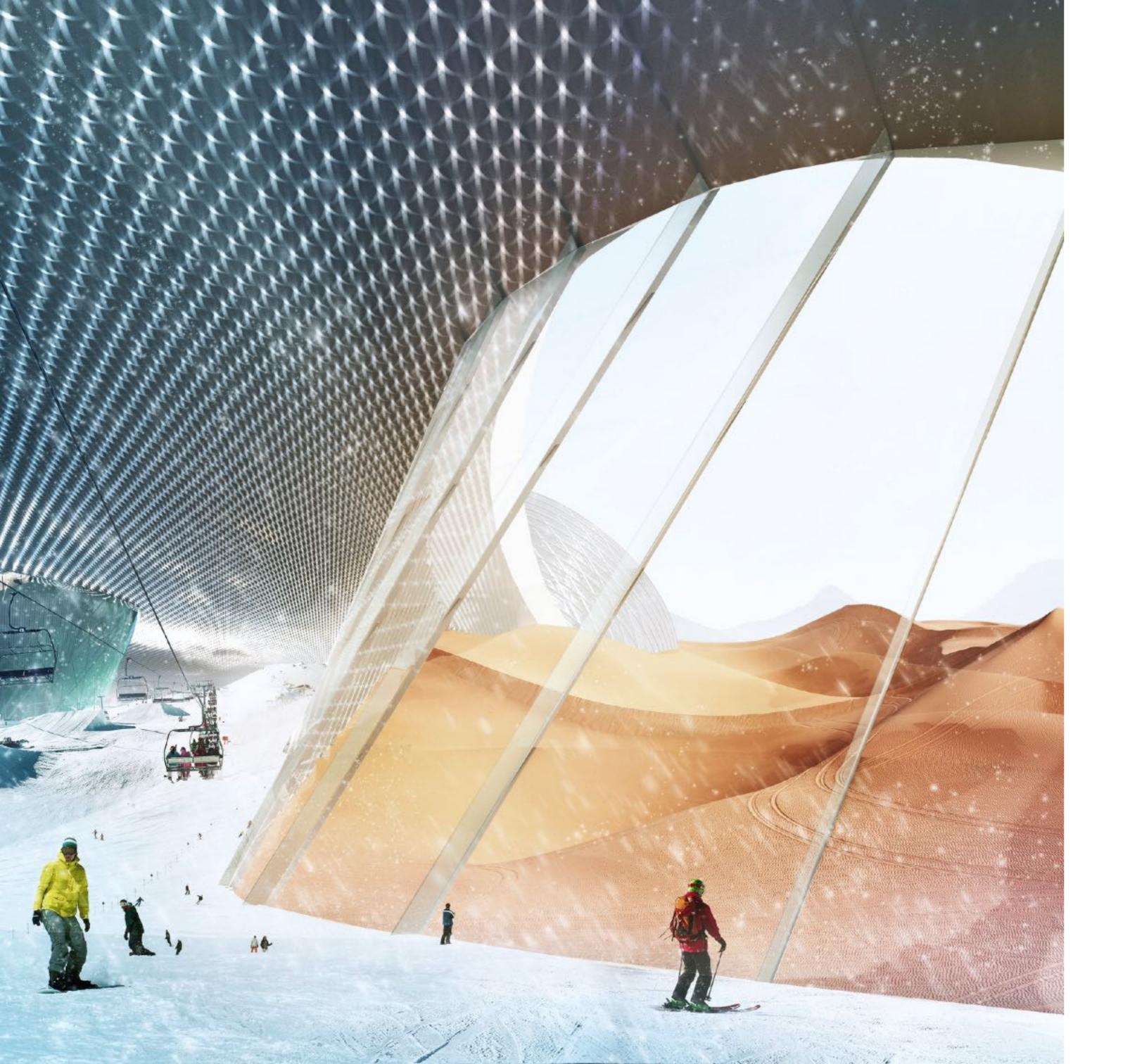




THE NAME FOR THE PROJECT COMES FROM THE UNDERSTANDING
THAT ANY WORK OF NATURE, NOT JUST THE HUMAN BODY, HAS ITS
OWN SOURCE CODE, ITS GENOME, SUCH A COMPLEX, INTERRELATED,
LIVING AND BREATHING PHENOMENON SUCH AS THE GLACIER IN
THE ALPS MUST SURELY HAVE ITS OWN SOPHISTICATED INNER LAWS,
ITS GENOME, WHICH WE TRIED TO RECREATE.

ARCHITECT

DMITRY RAZMAKHNIN



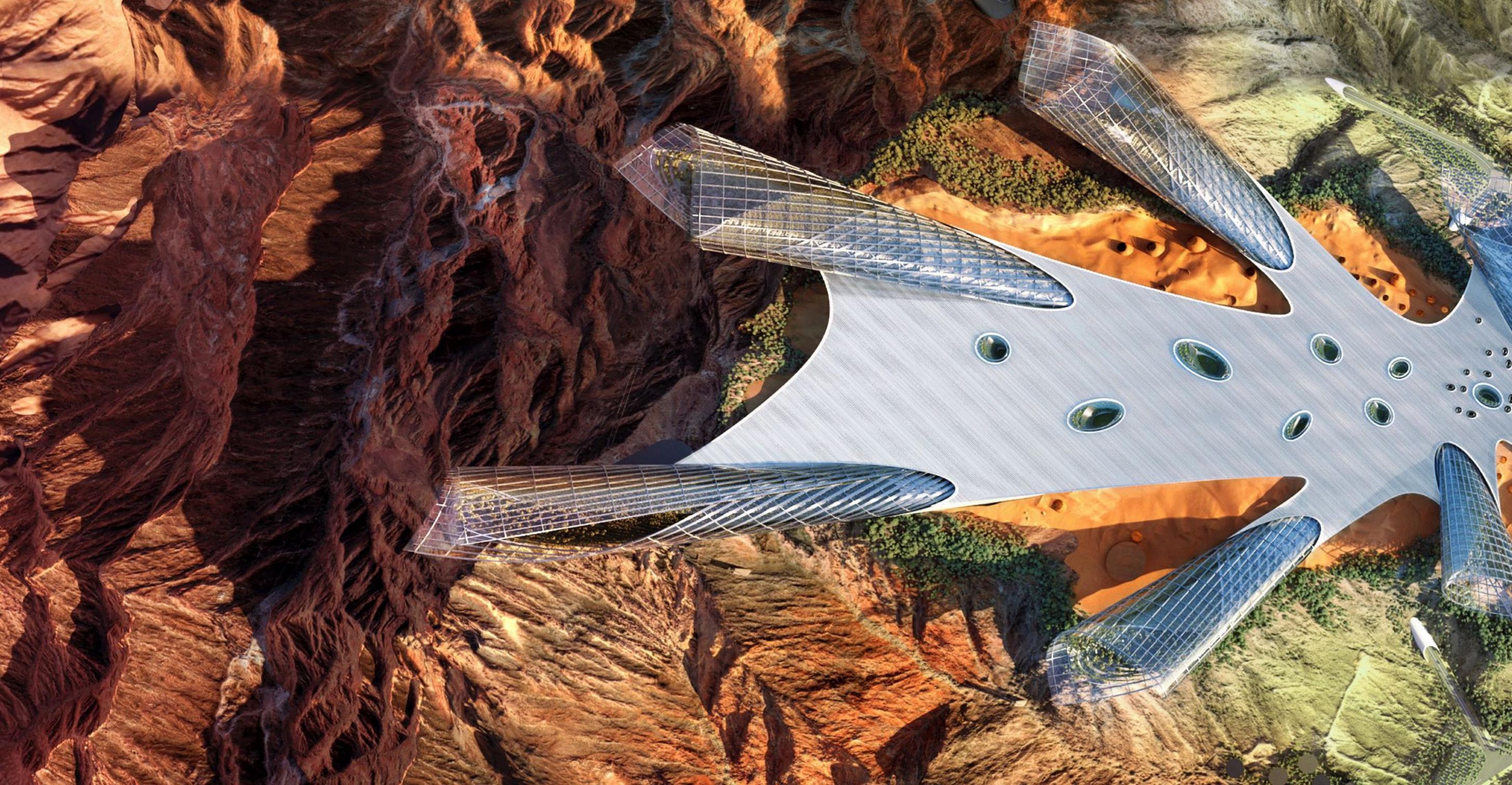


# PLACETO CREATE A NEW

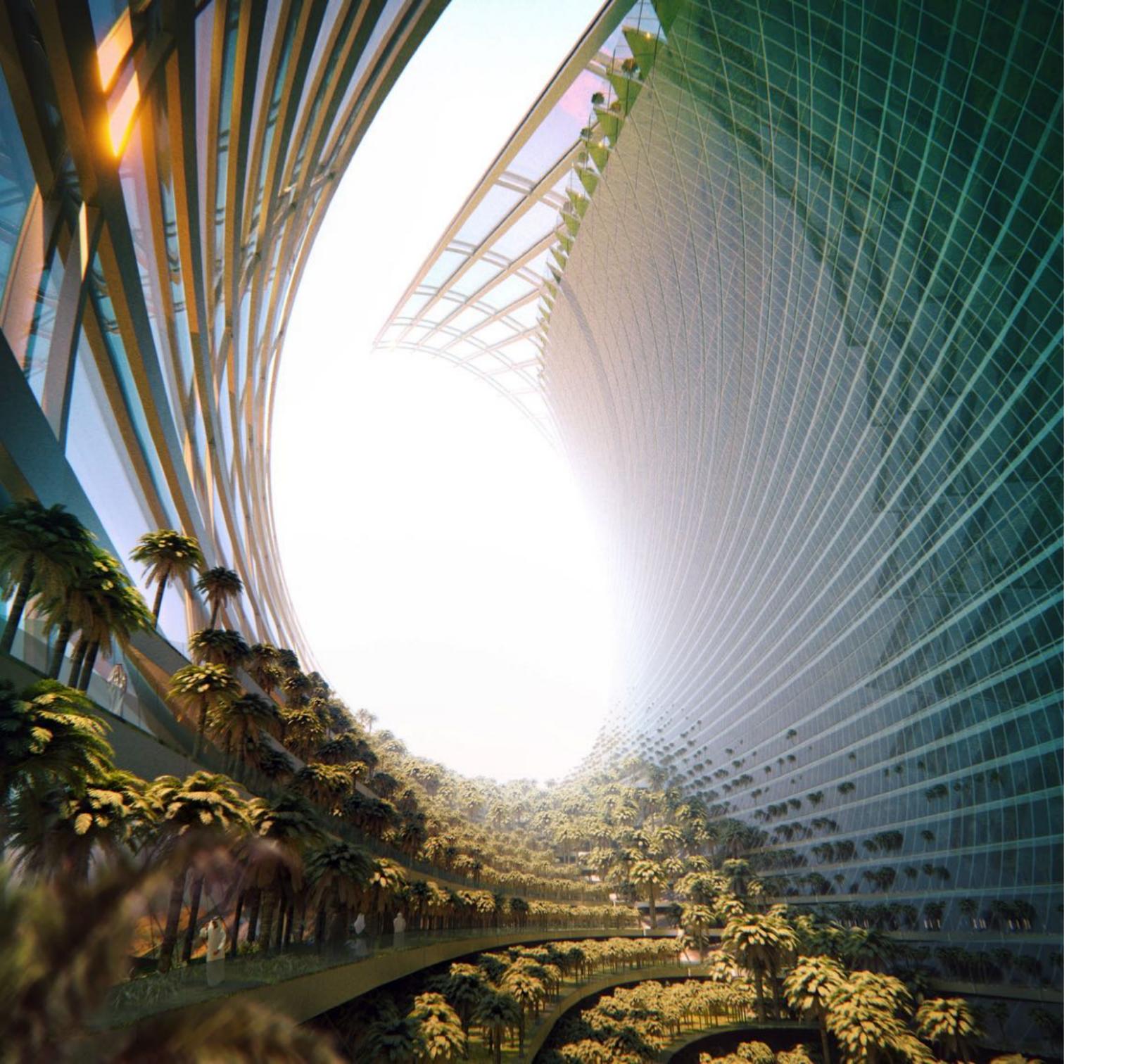
TOPOGTAPHIC FEATURES WITH SUITABLE PARAMETRES
OF NATURAL MOUNTAINSIDE, THE PROXIMITY TO
THE SEA AND RESORTS, CLIMATIC CHARACTERISTICS OF THE REGION,
THAT MEET THE REQUIREMENTS FOR REALIZATION OF THIS
TECHNOLOGICALLY UNIQUE COMPLEX, NATURAL BEAUTY.
THESE FACTORS ALLOWED US TO SUGEST THIS LOCATION
FOR "GLETSCHER GENOM" PROGECT.









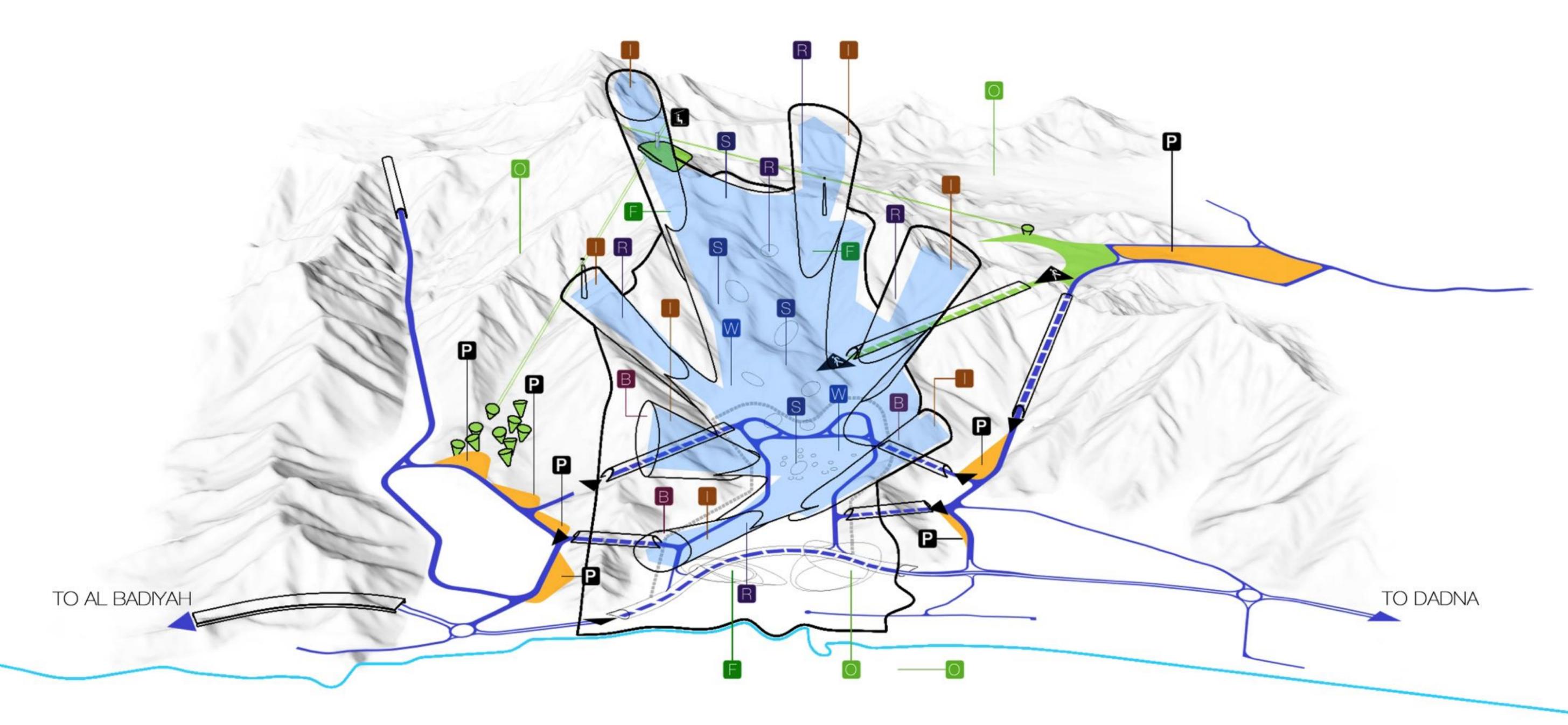


• • • \* SNOWBOARD WINTER PARK WINTER TOURISM INFRASTRUCTURE OPEN AIR SPORT RESORT BUSINESS & PROFIT

## UNCTIONS

HOTELS, APARTMENTS, SHOPPING CENTERS, SPA, FITNESS, SPORTS SCHOOL, ALPINE SKING PROFESSIONAL, RECREATIONAL AND FOR CHILDREN, SNOWBOARD PARKS, TUBING, TOBOGGAN RUNS OF GREAT LENGTH, CROSS COUNTRY SKING AND SNOWSHOEING TRACKS WITH A VARIETY OF OBSERVATION AND SIGHTSEEING LOOKOUTS AND MORE.

THE SCALE OF INTERIOR SPACE ALLOWS
THE CONSTRUCTION OF FULL VALUE SKI RESORT
WITH ALL POSSIBLE TYPES OF ACTIVITIES.



### GENERAL INFORMATION:

TOTAL AREA OF THE SITE: 500 hectares

TOTAL AREA OF CAPITAL BUILDING OBJECTS: 4 002 000 m2

SURFACE AREA: 620 000 m2

SLOPES HEIGHT: 500 m

SLOPES WIDTH: 200-500 m

SLOPES NUMBER: 12-15

SLOPES LENGTH: from 300 m (for children) to 2500 m

SLOPES MAXIMUM OCCUPANCY: up to 5000 guests

AQUAPARK: 60 000 m2

HOTEL COMPLEX: 402 000 m2

including:

premium hotels up to 1 200 rooms, with a total capacity of up to 2 400 people: 300 000 m2 aparthotel for tourists with a total capacity of up to 1080 people: 50 000 m2

aparthotel for athletes with a total capacity of up to 700 people: 40 000 m2

alpine village, with a total capacity of up to 600 people: 12 000 m2

RESIDENTIAL COMPLEX, TOTAL ACCOMMODATION UP TO 6 400 PEOPLE: 740 000 m2

including:

residences: 500 000 m2 apartments: 240 000 m2



GENERAL CAPACITY OF HOTEL AND RESIDENTIAL COMPLEX: up to 11 180 people.

COMMERCIAL SPACES: 850 000 m2

SHOPPING CENTER AND RESTAURANTS: 120 000 m2

BUSINESS CENTER, CONFERENCE HALLS AND CONGRESS HALL: 80 000 m2 EXHIBITION CENTER: 80 000 m2

MUSEUM OF THE FUTURE: 10 000 m2 HEALTHCARE COMPLEX (fitness center, spa,

Medical center): 100 000 m2

ENTERTAINMENT COMPLEX: 100 000 m2
PARKING FOR 12 000 CARS: 360 000 m2
TECHNICAL SPACES: 1 200 000 m2

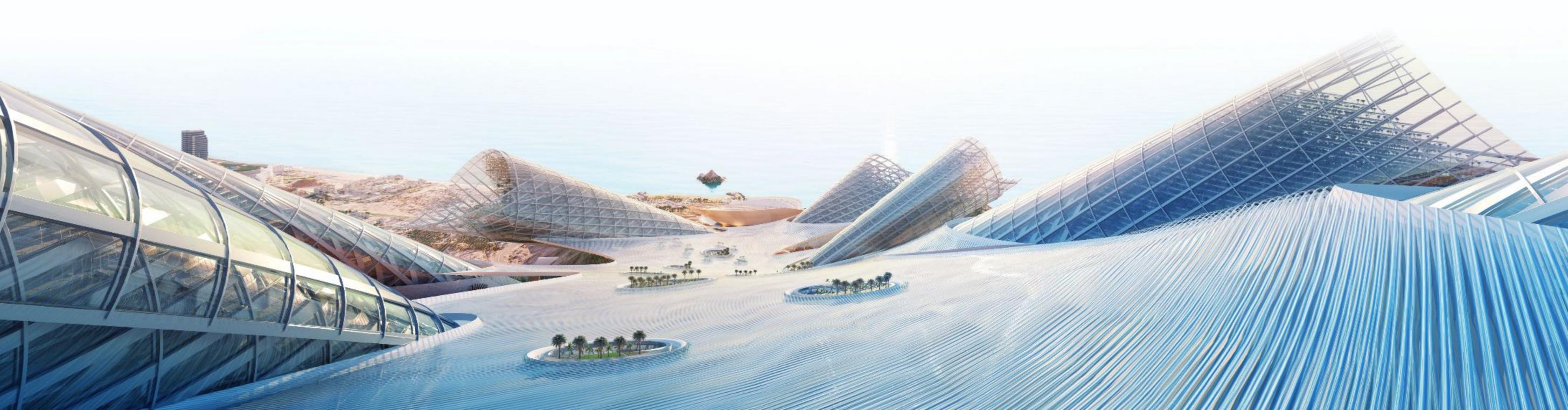
ACADEMY OF SPORT AND TOURISM: 40 000 m2

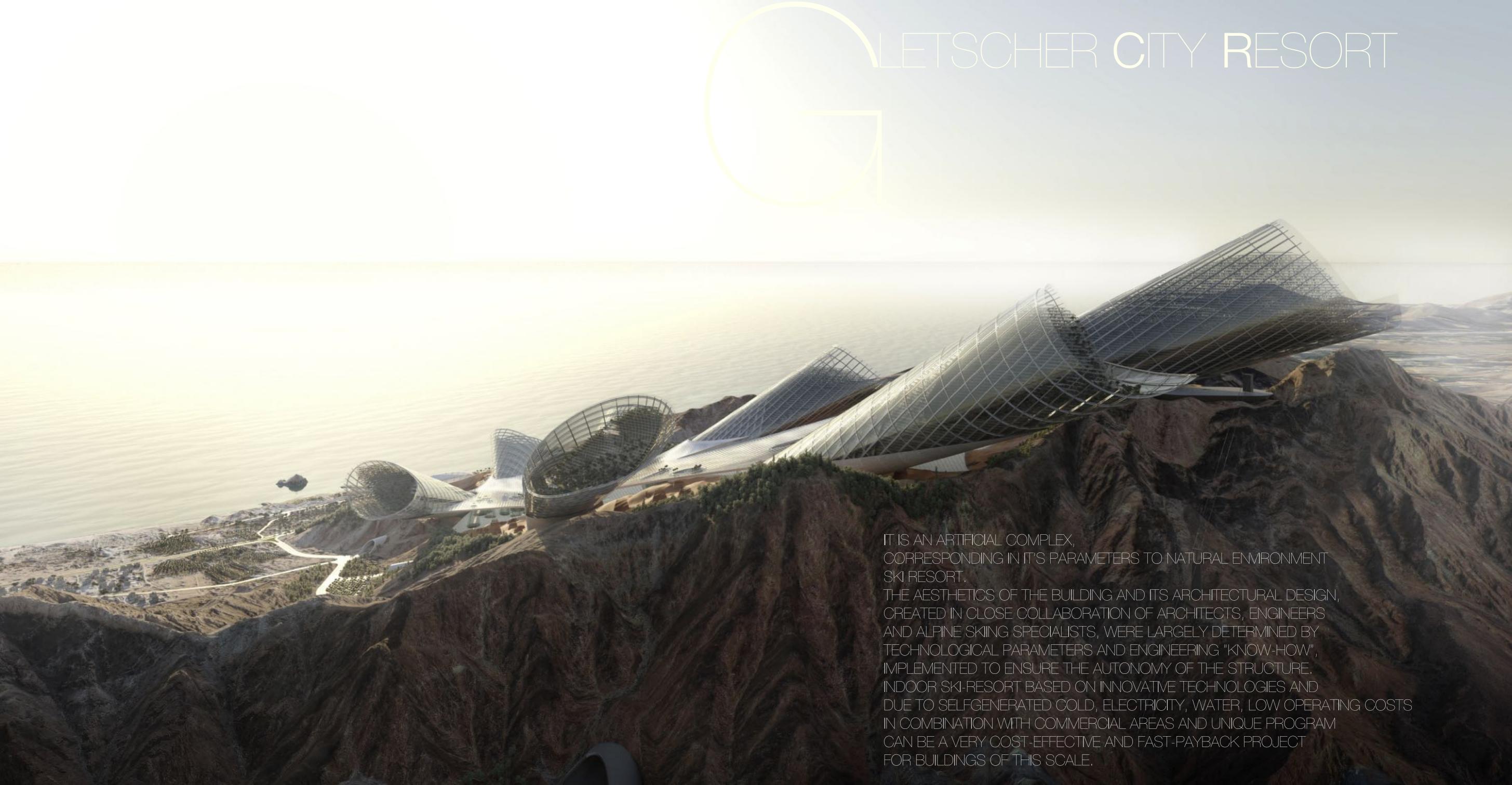
### PROFESSIONAL SPORTS:

TRAINING PROCESS AND HOLDING OF THE WORLD CUP.
ALPINE SKING. SNOWBOARD. FREESTYLE (ALL DISCIPLINES).
CROSS COUNTRY SKING. SPRINT.

### WINTER TOURISM:

ALPINE SKING (PROFESSIONAL, RECREATIONAL AND SLOPES FOR CHILDREN) SNOWBOARD PARKS, TUBING, TOBOGGAN RUNS OF GREAT LENGTH, CROSS-COUNTRY SKING AND SNOWSHOEING TRACKS WITH A VARIETY OF OBSERVATION AND SIGHTSEEING LOOKOUTS.

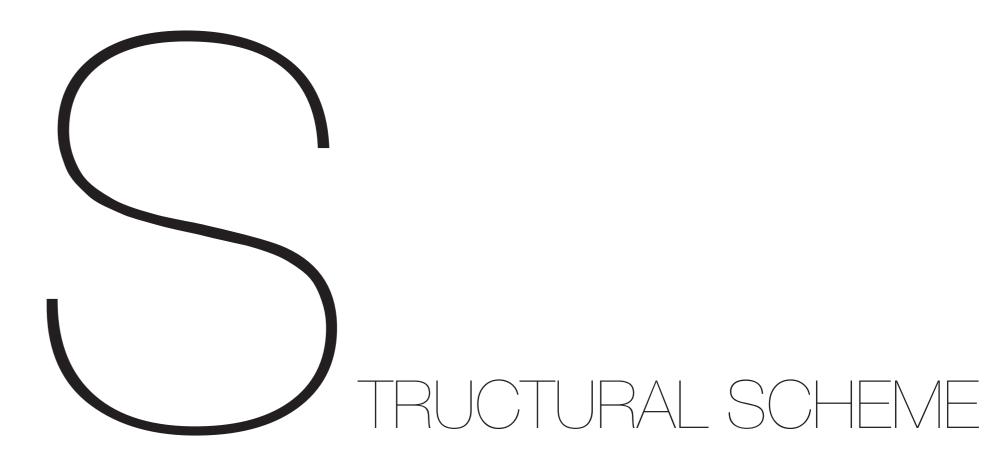






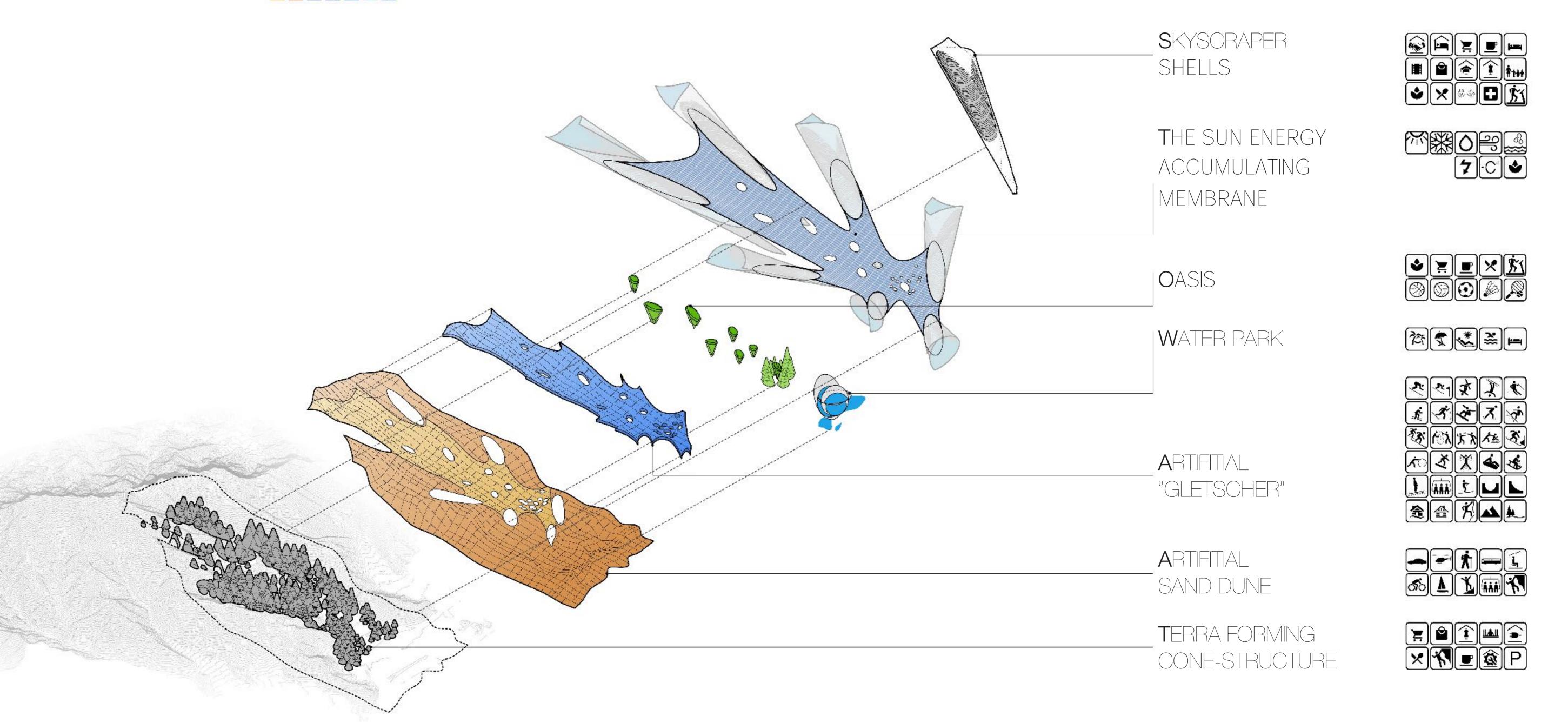
EACH UNIT OF THE BUILDING WAS DESIGNED TO ACCOMPLISH PROJECT'S MAIN OBJECTIVE PERFECT BALANCE BETWEEN FORM AND NATURAL ELEMENTS,
SUCH AS AIR TEMPERATURE, HUMIDITY, WIND CURRENTS, STREAMS OF SUNLIGHT.



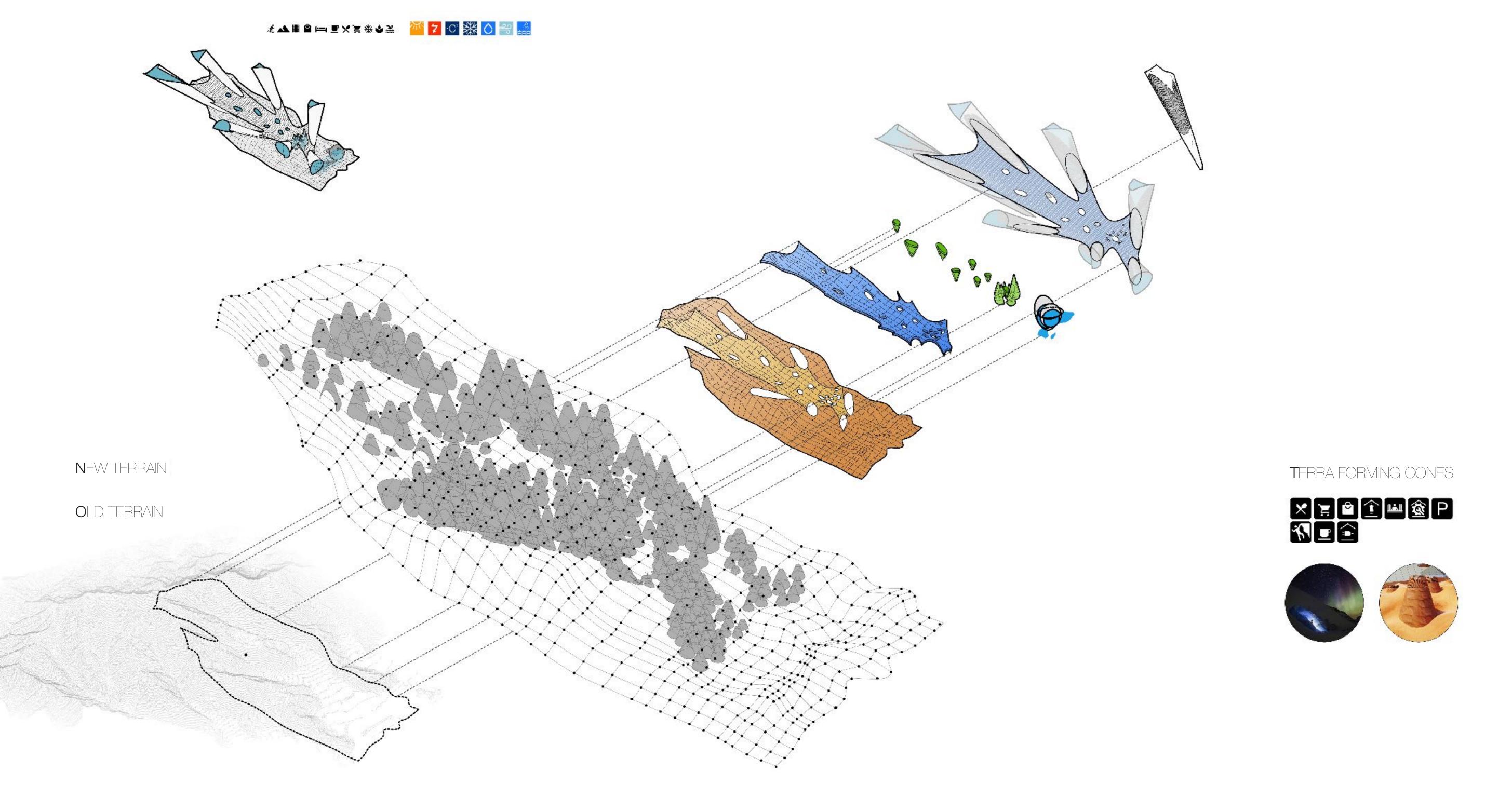


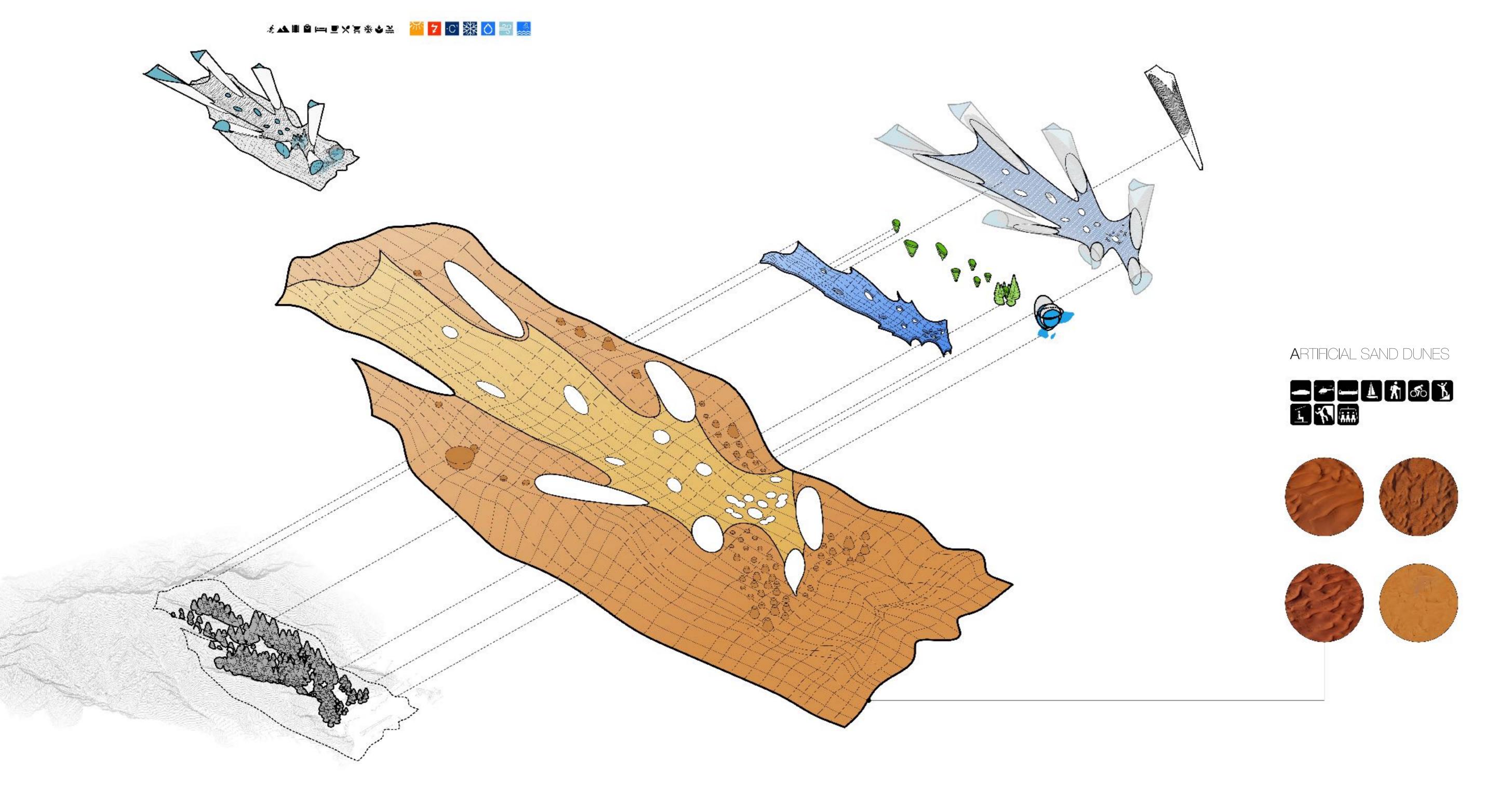
ALL STRUCTURAL ELEMENTS OF "GLETSCHER GENOM" CONSISTENTLY CREATE A UNIQUE ENCLOSED ENVIRONMENT AS DIVERSE AND ABSOLUTE AS NATURE ITSELF.

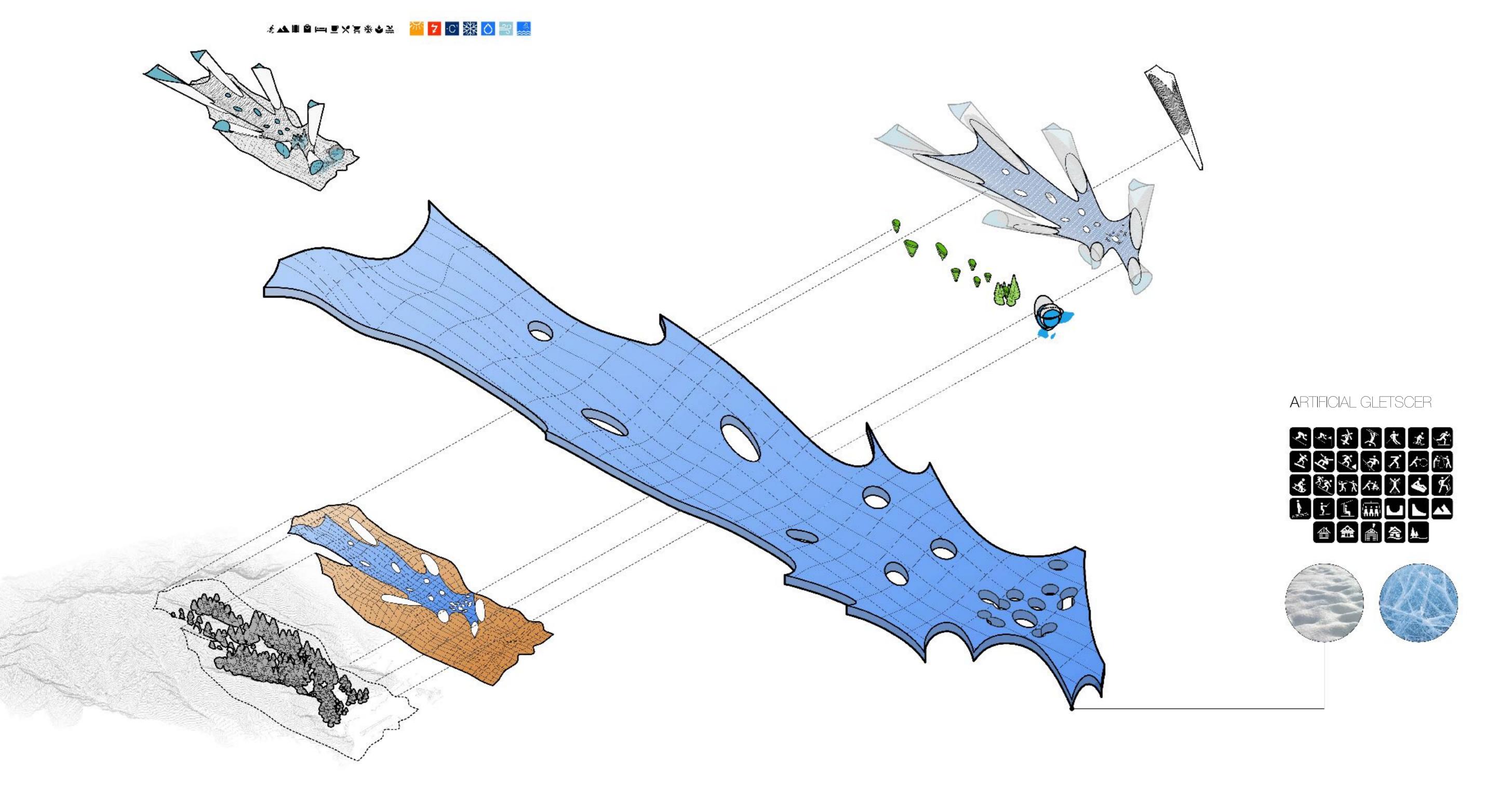


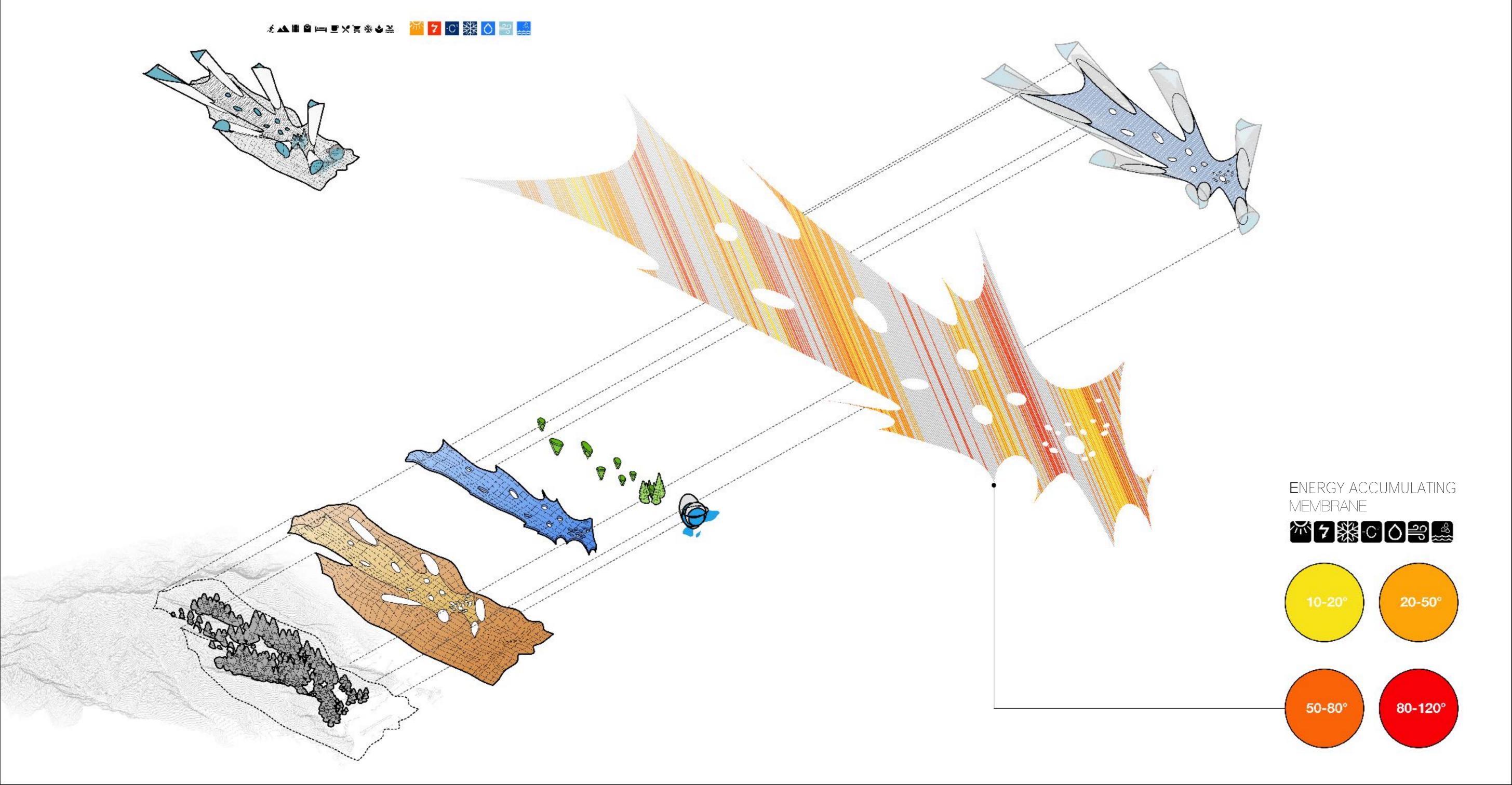


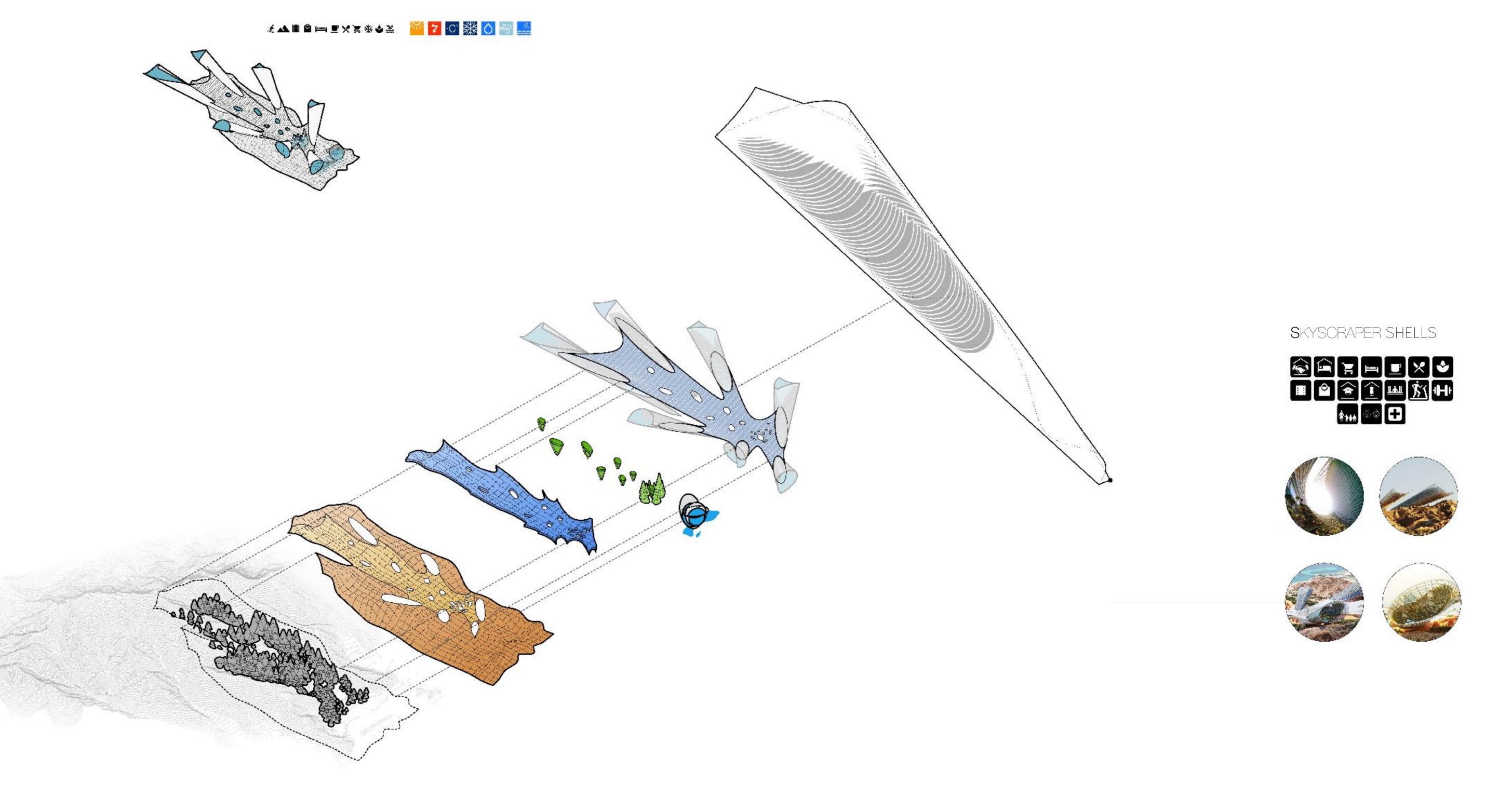
GLETSCHER CITY RESORT

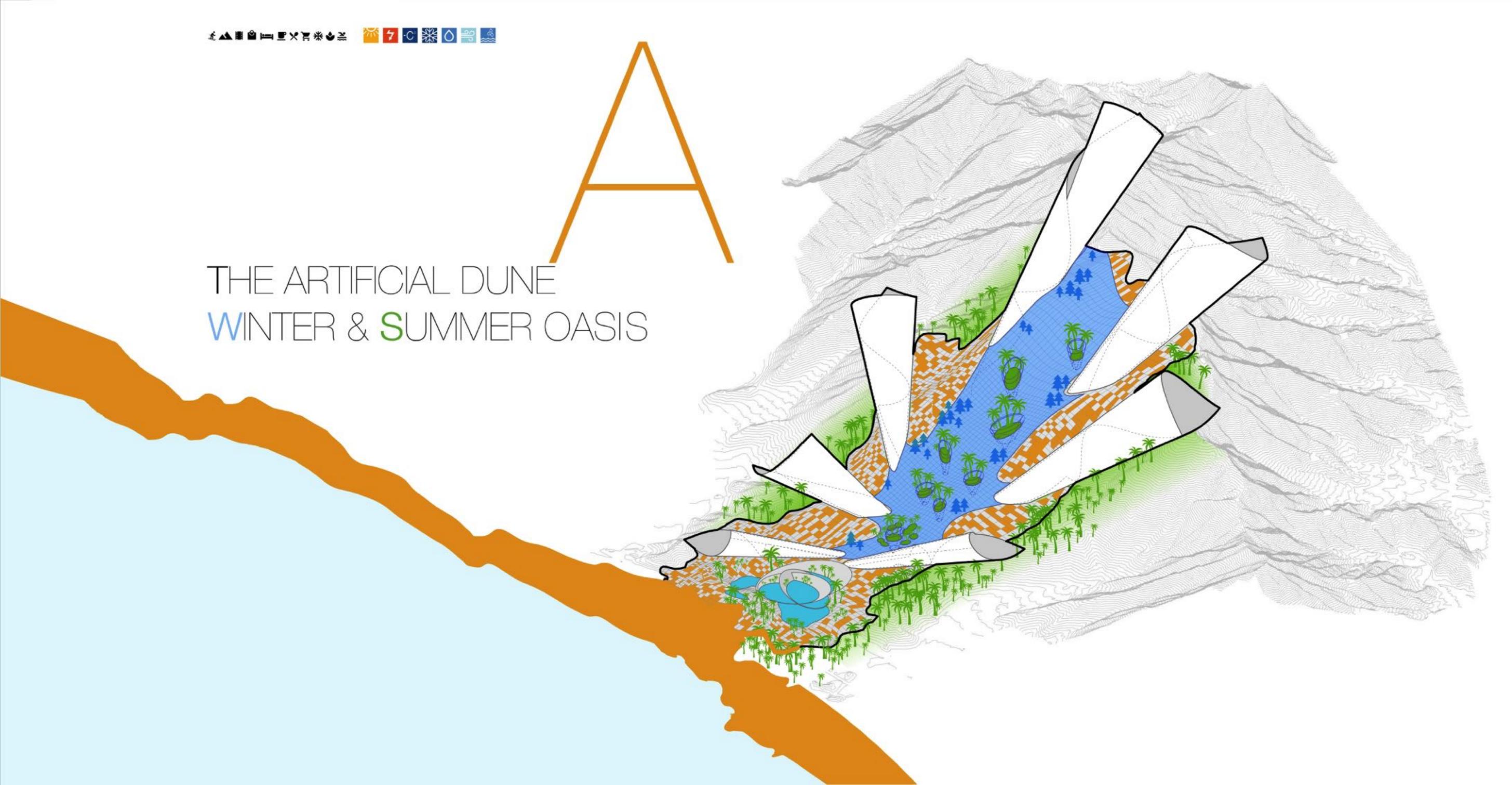




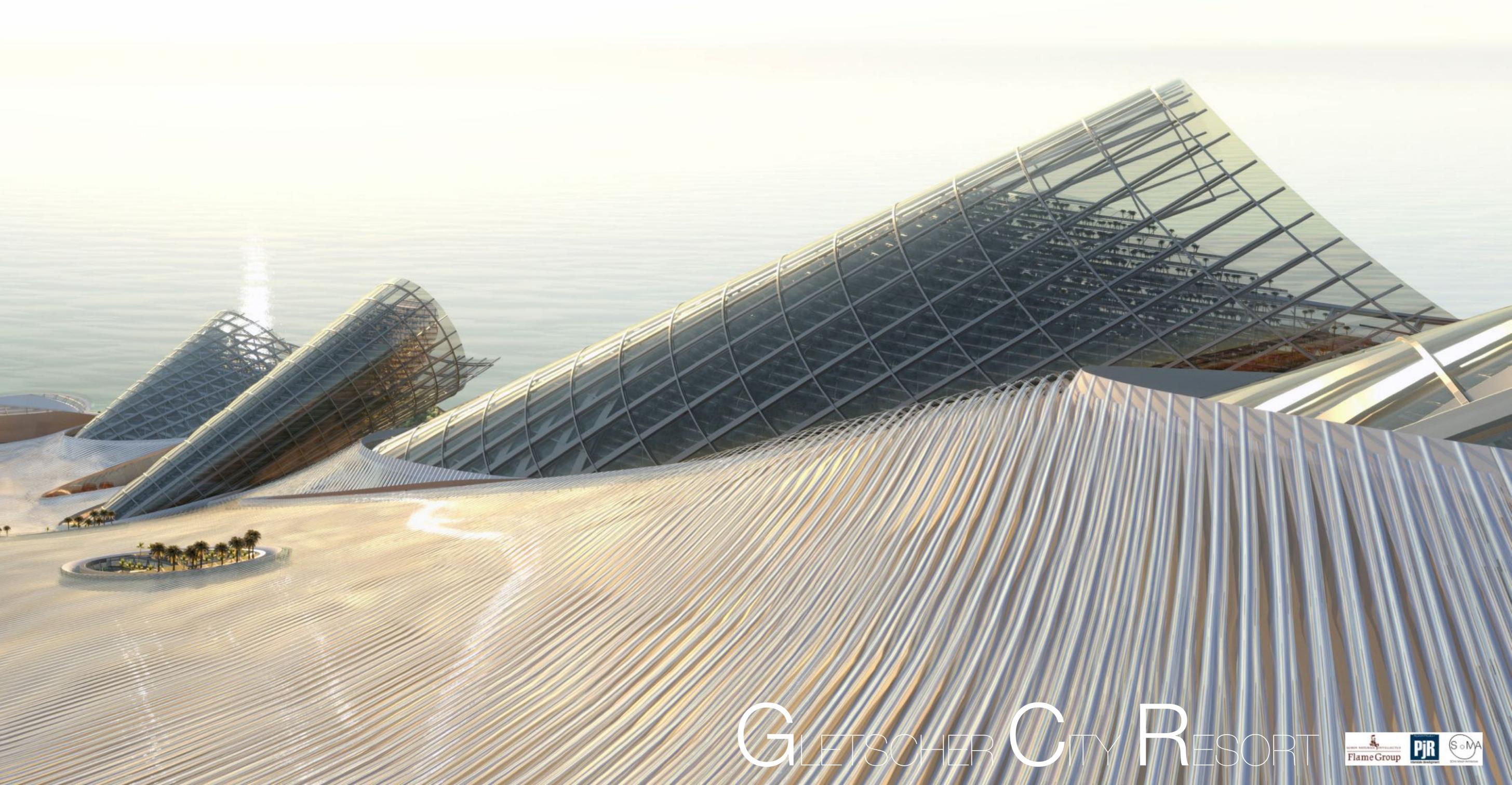








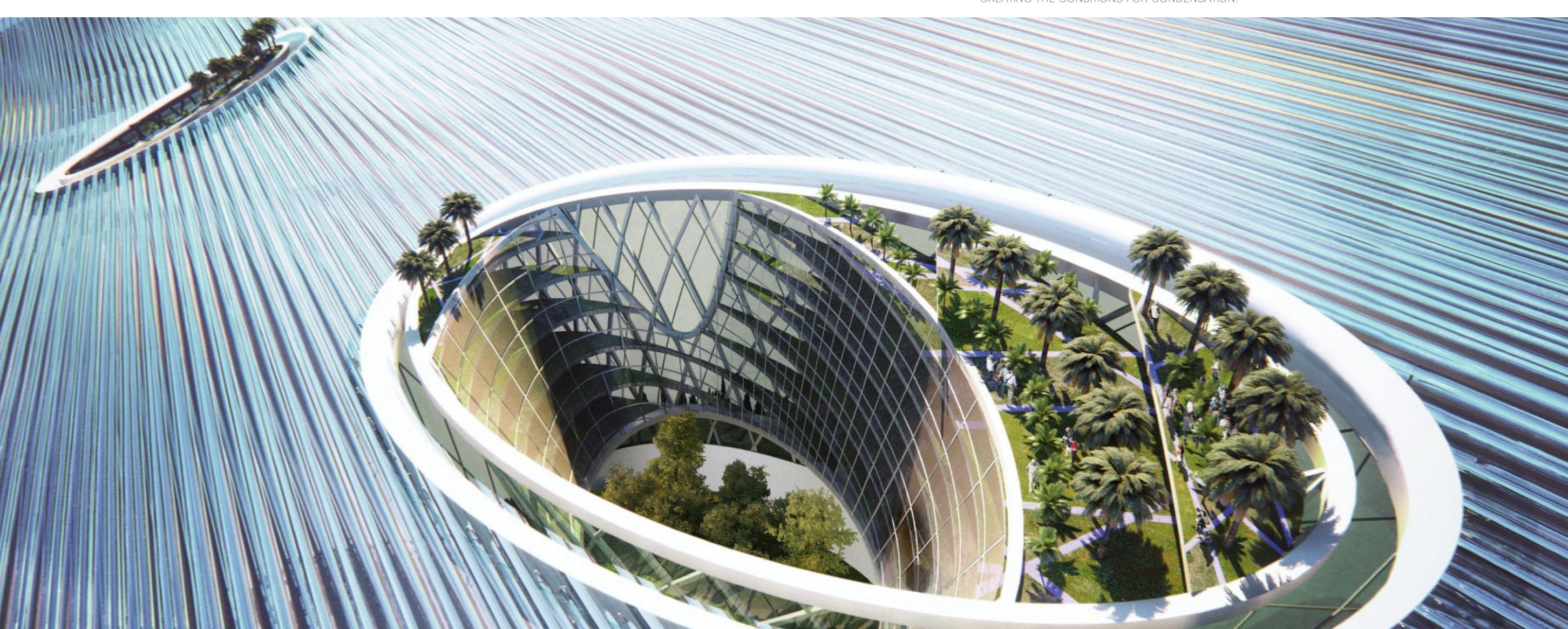




# OASIS SPECIAL CLIMATE AREA

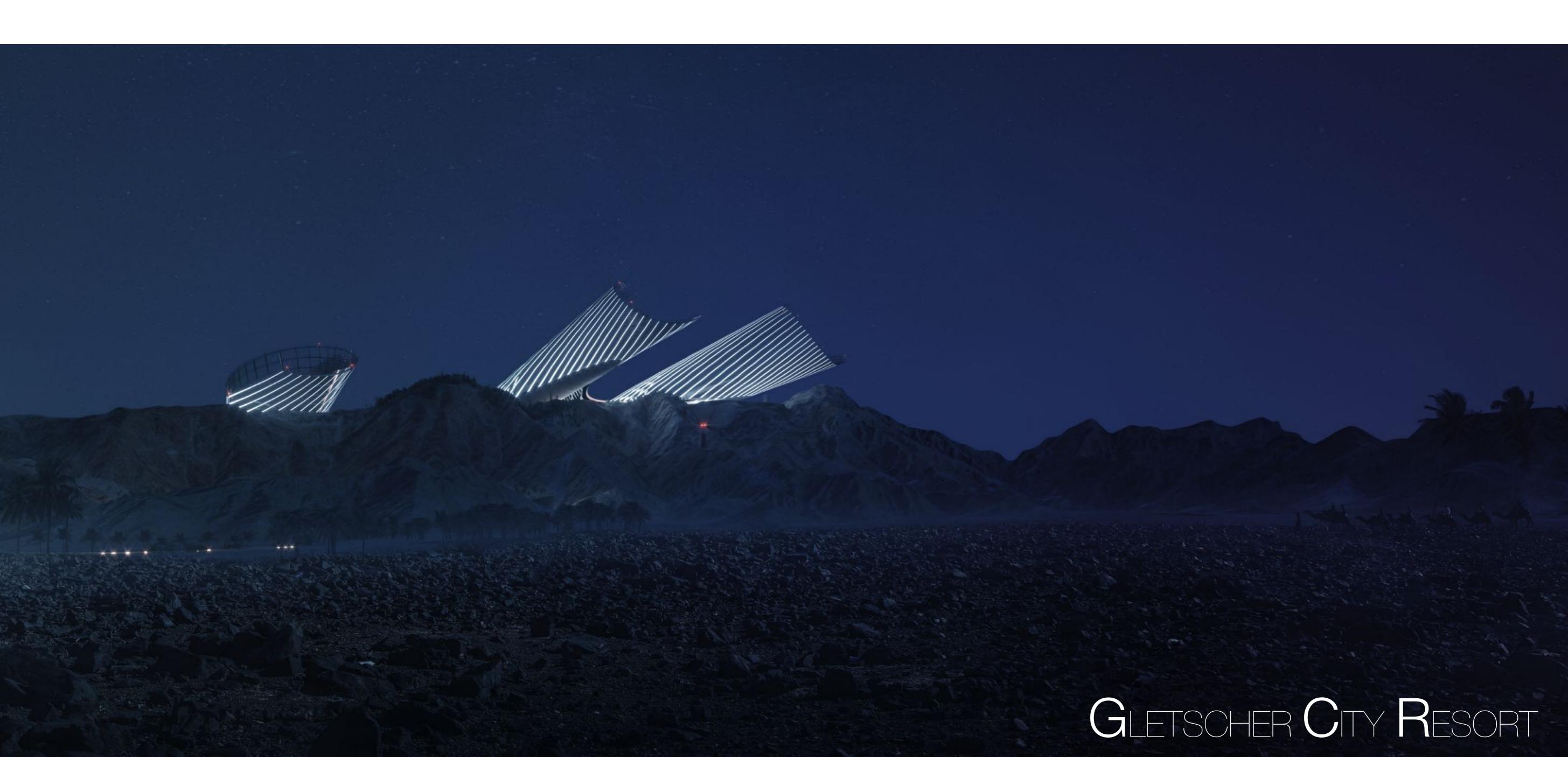
IN THE "OASIS" ZONES A SPECIAL MICROCLIMATE IS FORMED.

EXCESSIVE COLD OF "GLETSCHER"
COOLS THE SPECIFIC SURFACE,
CREATING THE CONDITIONS FOR CONDENSATION.



THE FEATURES OF THIS FACILITY - SUCH AS ITS LENGHT OF 2500 METERS, THE 500-METER ELEVATION, VARIOUS SLOPES, AR TEMPERATURE, HUMIDITY AND LIGHT - WILL BE SUITABLE FOR BOTH RECREATIONAL SKIING FOR TOURISTS AND PROFESSIONAL TRAINING FOR ATHLETES. THE FACILITY WILL PROVIDE THE MOST COMFORTABLE AND SAFE CLIMATE CONDITIONS WHICH MEET FIS (International Ski Federation, Switzerland) REQUIREMENTS, INCLUDING FOR HOSTING MAJOR INTERNATIONAL SPORTING EVENTS, SUCH AS WORLD CUPS IN ALL SLOPE EVENTS.





ENGINEERS PROPOSE THAT THE MAIN FACILITY - THE SKI SLOPE - BE MODULAR, CONSISTING OF 200-500 X 100 M SECTIONS WITH A 20-45 M ELEVATION.

A TOTAL OF 20 SECTIONS (MODULES) WOULD BE CONSEQUENTLY ASSEMBLED INTO ONE COMPLETE STRUCTURE.

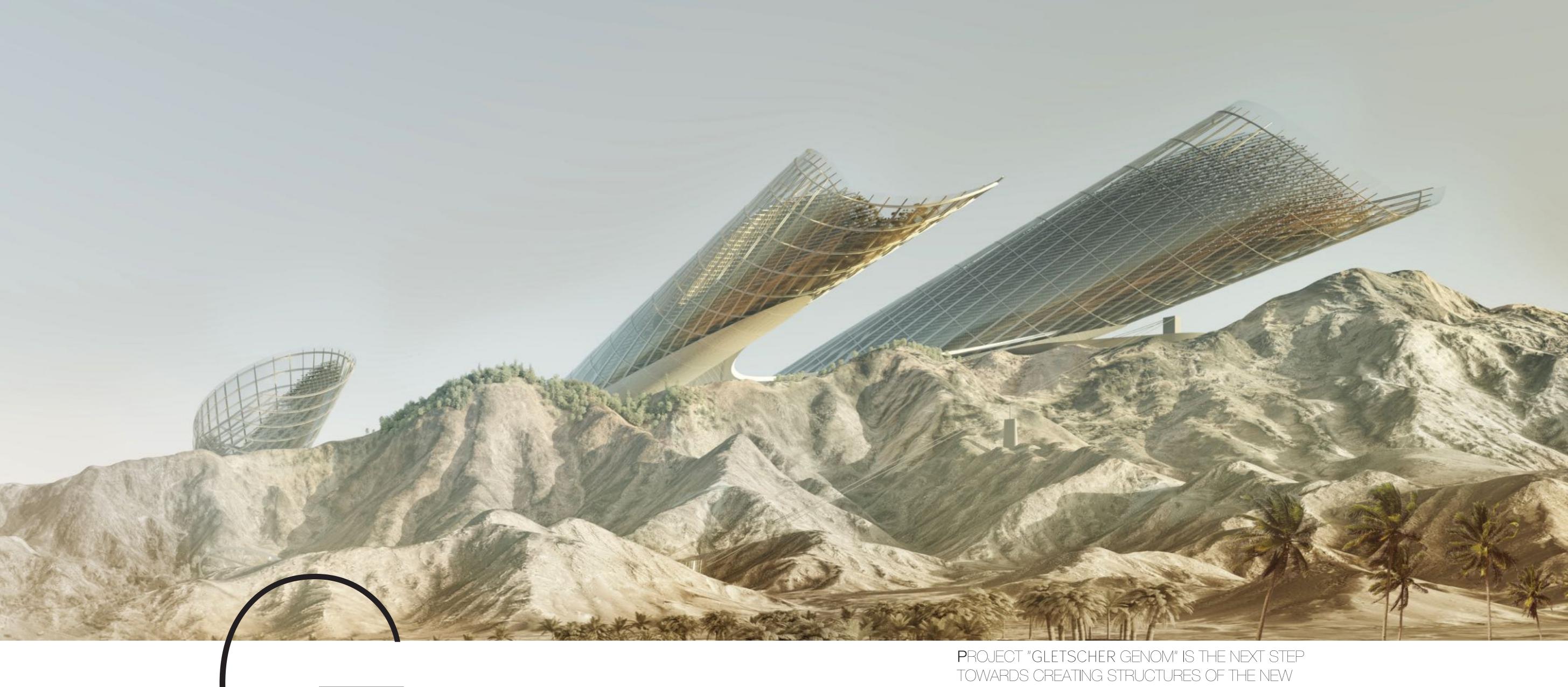
SUCH STRUCTURAL DESIGN ALLOWS TO FLEXIBLY CUSTOMIZE ENGINEERING SYSTEMS ACCORDING TO CHARACTERISTICS OF EXTERNAL WEATHER CONDITIONS.



# 







TOWARDS CREATING STRUCTURES OF THE NEW GENERATION, DESIGNED TO REVEAL THE BEAUTY

OF HUMAN INTERACTION WITH NATURE AND TO

FURTHER EXPLORE IT.

LETSCHER CITY RESORT











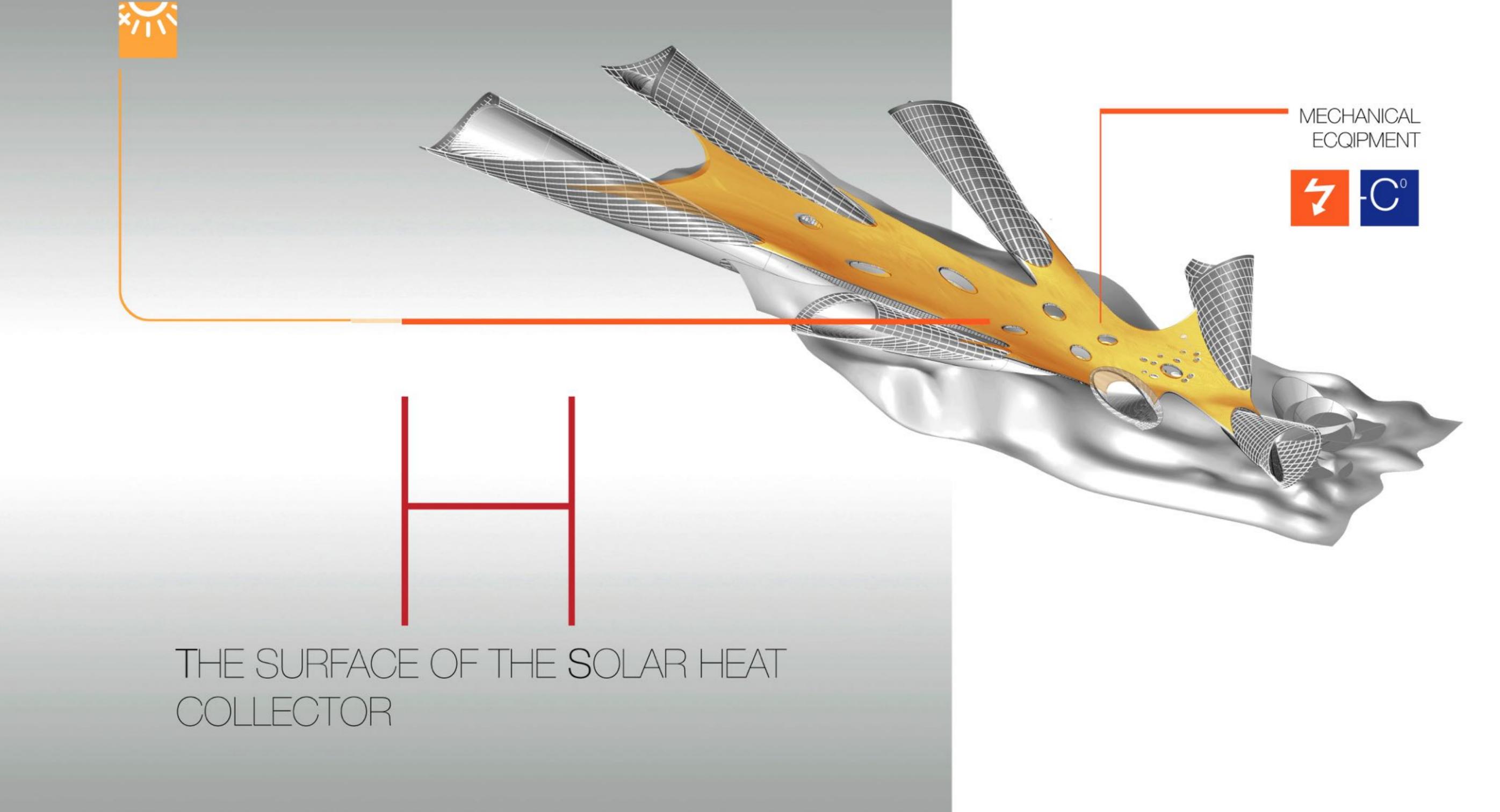






## THE GLETSCHER OF THE SOLAR HEAT SURFACE

THE BUILDING IS A HUGE HEAT COLLECTOR AND A REFRIGERATOR AT THE SAME TIME, AFTER GLACIER FORMATION THE BUILDING CAN BE VIRTUALLY AUTONOMOUS WITH NO EXTERNAL ENERGY SOURCE REQUIRED. THE PROJECT IMPLEMENTS A PROGRESSIVE CONVERSION OF EXTERNAL CLIMATE CONDITIONS IN TO COLD, ELECTRICITY, WATER.











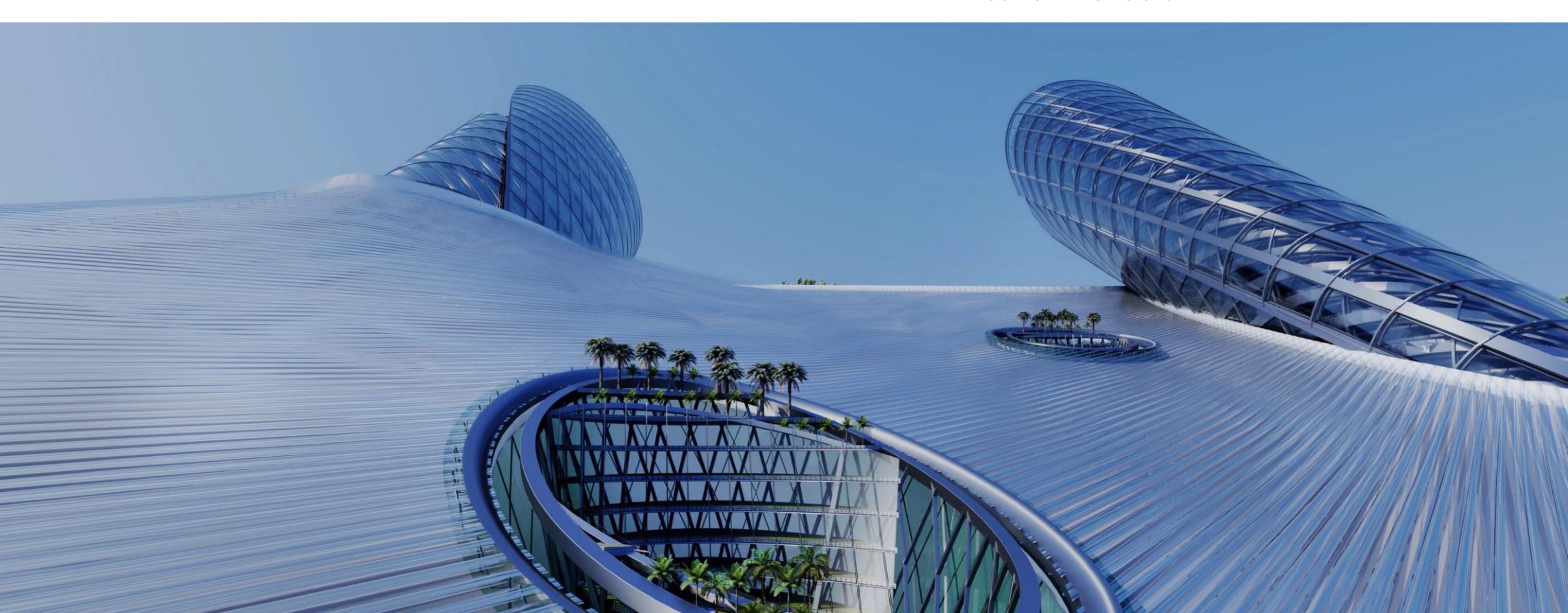






## THE SURFACE OF THE SOLAR HEAT COLLECTOR

THE MAIN POWER SOURCE OF THIS CONSTRUCTION IS THE ENERGY OF HEAT FROM THE ATMOSPHERE HEATED BY THE SUN. A MEMBRANE WITH A VAST SURFACE ACCUMULATES THIS ENERGY CONCENTRATES IT AND WITH THE HELP OF GAS GENERATORS TRANSFORMS IT INTO COLD AND ELECTRICITY THROUGH A SYSTEM OF HEAT-EXCHANGE UNITS.







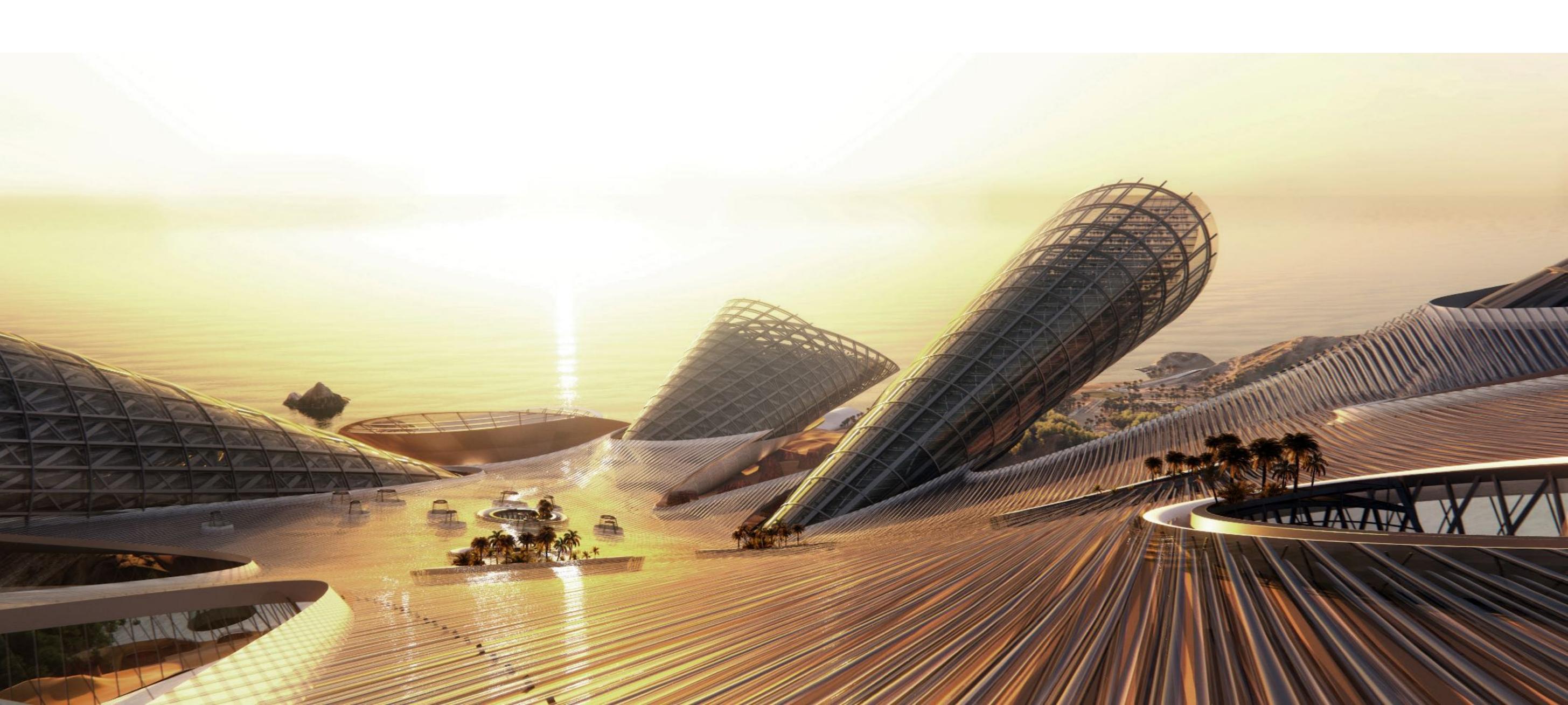


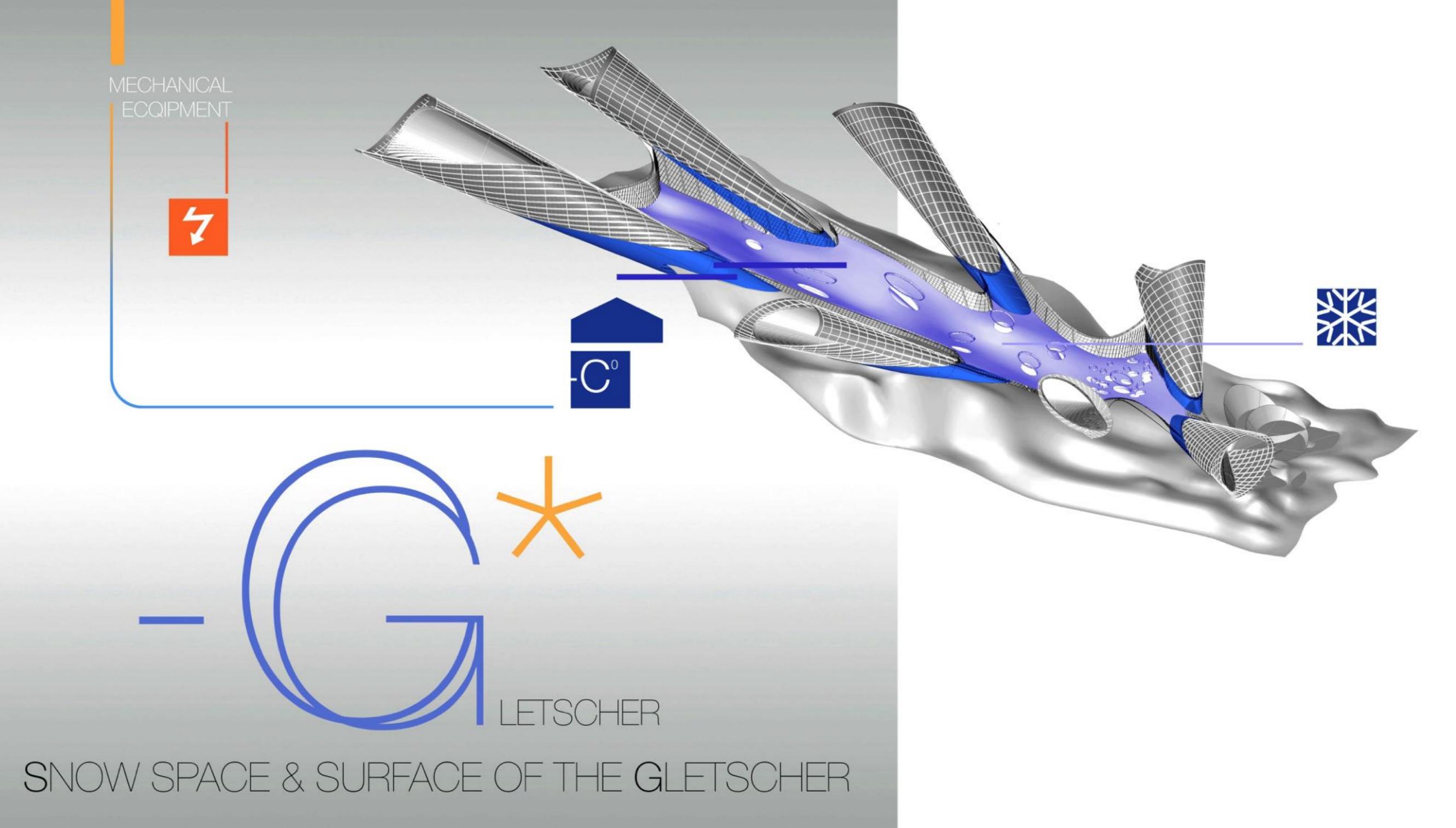






### THE SURFACE OF THE SOLAR HEAT COLLECTOR





















### GLETSCHER

AT THE BASE OF EACH SECTION IS A LAYER OF SNOW AND ICE UP TO 8-10 M THICK. IT RESTS ON THE FLOOR WITH THE INTERCOOLER UNIT.

ROZEN SPACE

















### THE SURFACE OF THE GLETSCHER

FOR COMPLETE AIR RENEWAL EVERY 3-4 HOURS TO SUSTAIN PLEASANT CONDITIONS AND THE NATURAL FEEL OF SNOW.

















### THE SURFACE OF THE GLETSCHER

OF NATURAL LANDSCAPE TO SERVE AS A DIVIDER BETWEEN RECREATIONAL AND SPORTING SKI TRACKS.



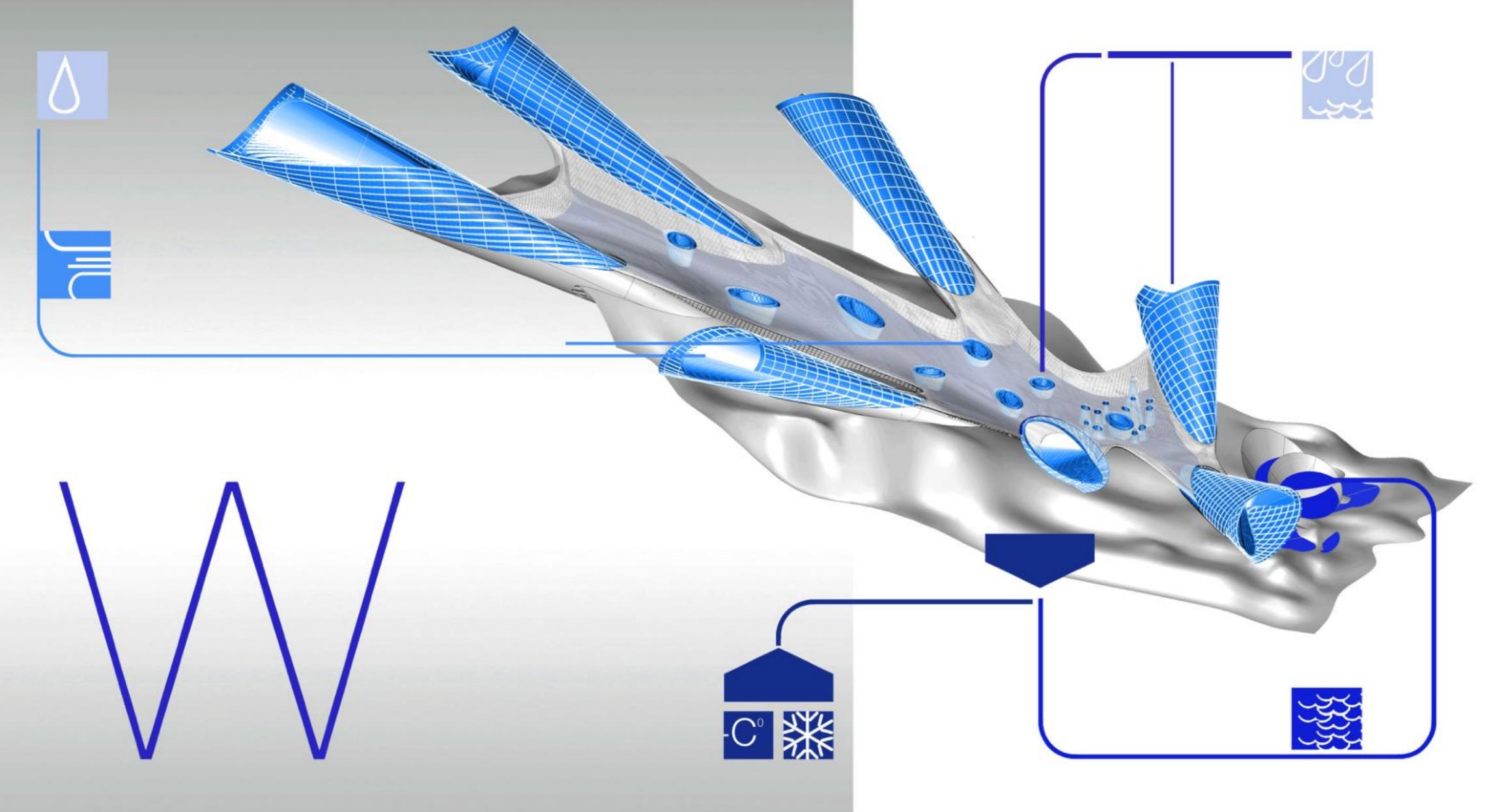


THE PERIMETER OF EACH SECTION WILL BE SECURED BY PANELS WITH A MAXIMUM RESISTANCE TO THERMAL TRANSMISSION.
WE PROPOSE TO USE PATENTED TECHNOLOGIES.









WATER & "OASIS TECHNOLOGY"







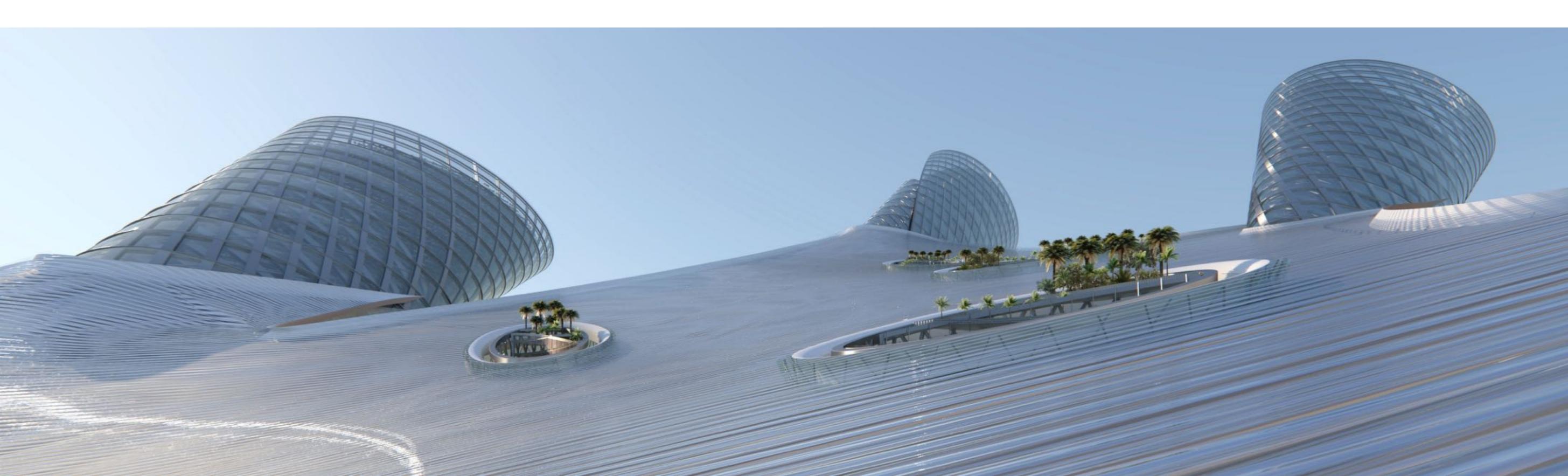






### WATER & "OASIS TOUR ON ON" TECHNOLOGY"

ADDITIONALLY, THE PROXIMITY OF LARGE QUANTITIES OF SUPERCOOL SUBSTANCE TO THE HIGH TEMPERATURES OF THE OUTDOOR ENVIRONMENT PROVIDE A PLEASANT BONUS: THE ABILITY TO COLLECT DISTILLED WATER CONDENSED FROM THE HUMID ATMOSPHERE









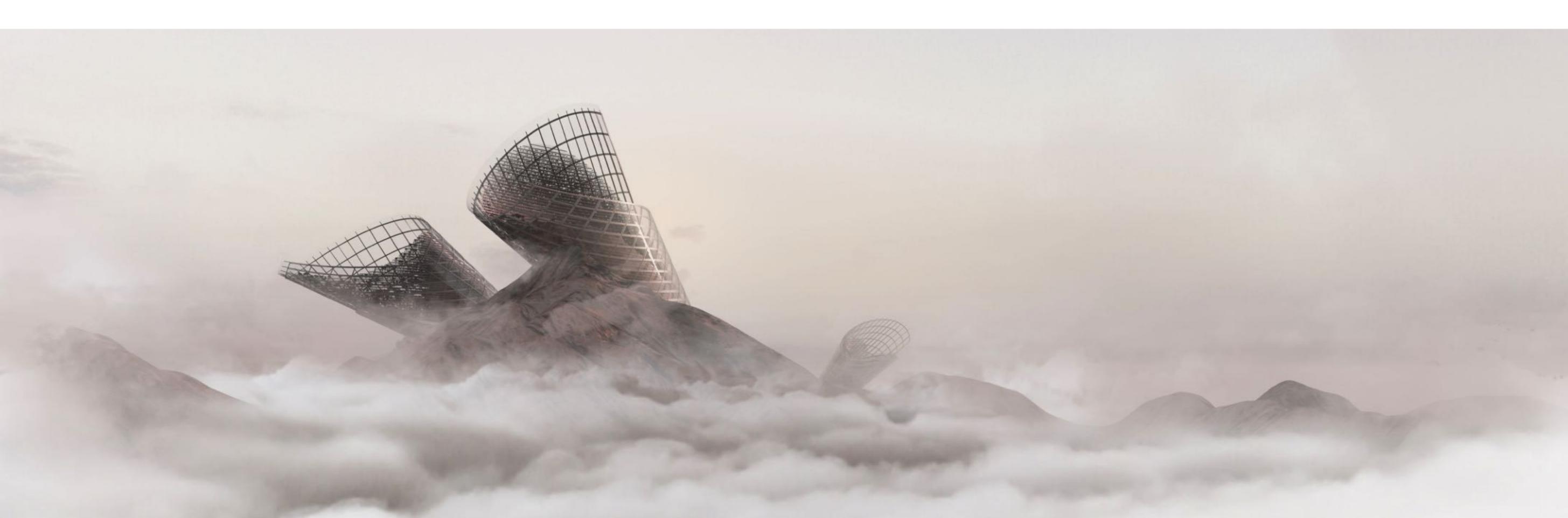






### WATER & "OASIS TOUR ON " TECHNOLOGY"

LARGE AMOUNT OF COLD MEDIA INITIATES THE PROCESS OF CONDENSATION OF ATMOSPHERIC MOISTURE, SIMULATING THE WAY GLACIERS ARE FORMED IN NATURAL ENVIRONMENT. CHILLED BY THE EXCESSIVE COLD THE SURFACE OF THE GLASS PEAKS CONDENSE AIR HUMIDITY.



THE HUMID CLIMATE OF "OASIS"
IS WELL SUITED TO CREATE BEACH AREAS
WITH GREEN TERRACES,
MINIAQUAPARK, RESTAURANTS,
OBSERVATION DECKS OVERSEEING
NATURAL SUMMER LANDSCAPE AND SNOW
TRAILS INSIDE THE COMPLEX.















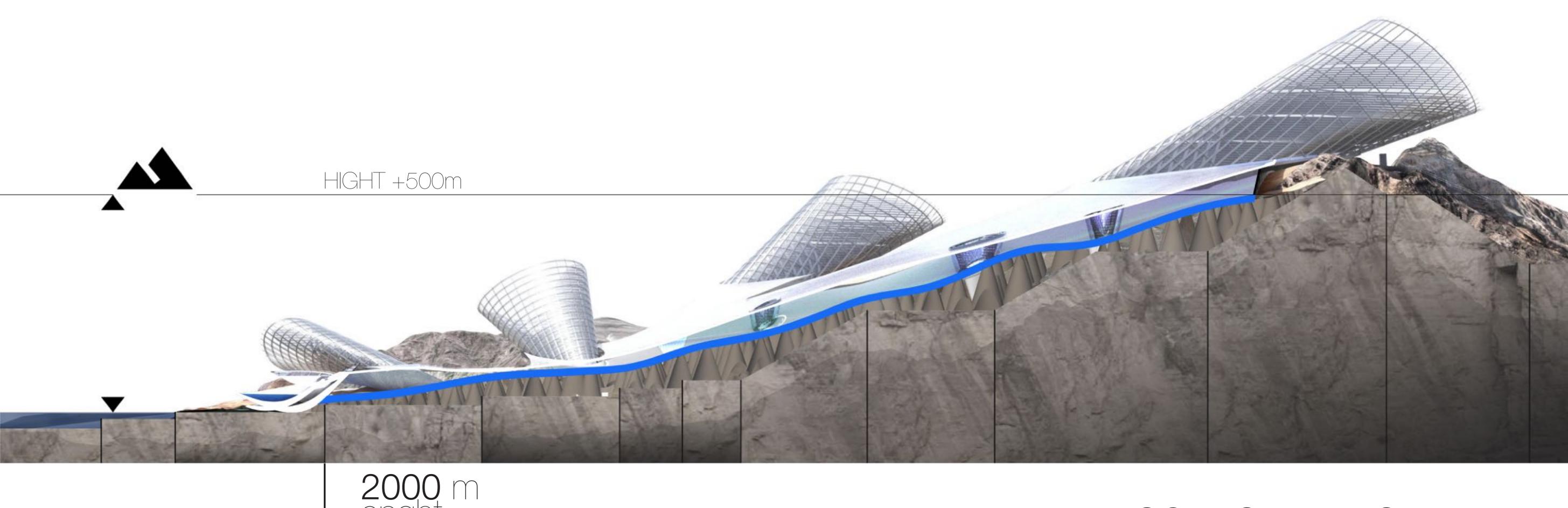
# WATER & "OASIS TECHNOLOGY"











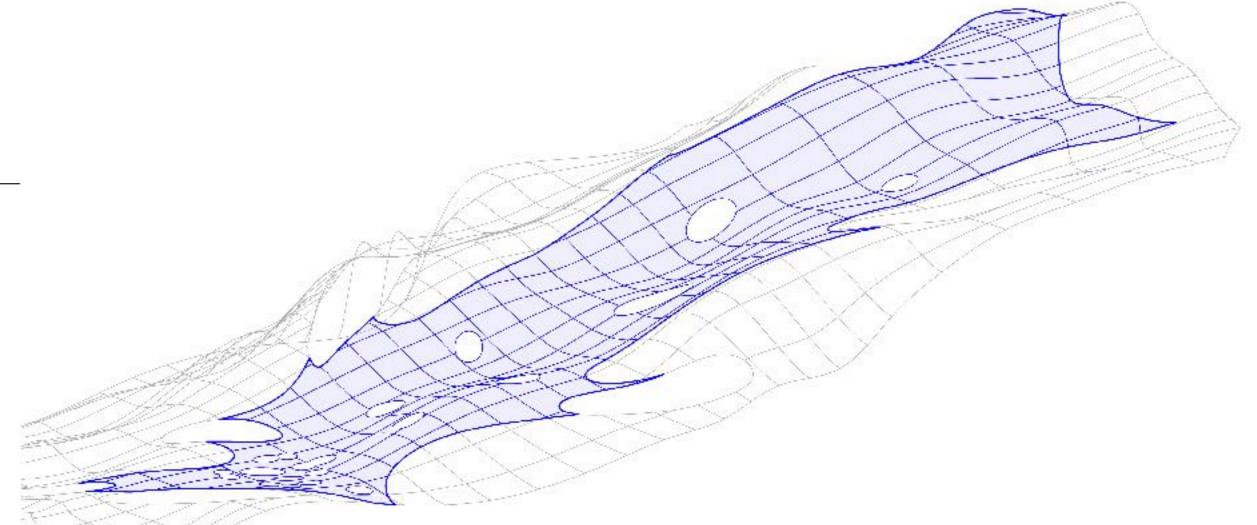
# NATIVE ROCK FOUNDATION FOR GLETSCHER

MOLDING SKI SLOPES INSIDE THE COMPLEX BY PLACING THEM
ON THE ACTUAL MOUNTAINSIDE AND USING ITS NATURAL TOPOGRAPHY
GIVES THE OPPORTUNITY TO FORM SKI TRAILS OF THE MOST DIVERSE VARIETY
WITH A WIDE RANGE OF CHARACTERISTICS AND PURPOSES,
IN COMBINATION WITH EFFICIENT CONSTRUCTION DESIGN THE USE OF NATURAL TERRAIN
GIVES A GOOD ECONOMIC EFFECT FOR STRUCTURES OF SUCH A SCALE.



# MULTY DIRECTIONAL SLOPE OF HILLSIDE

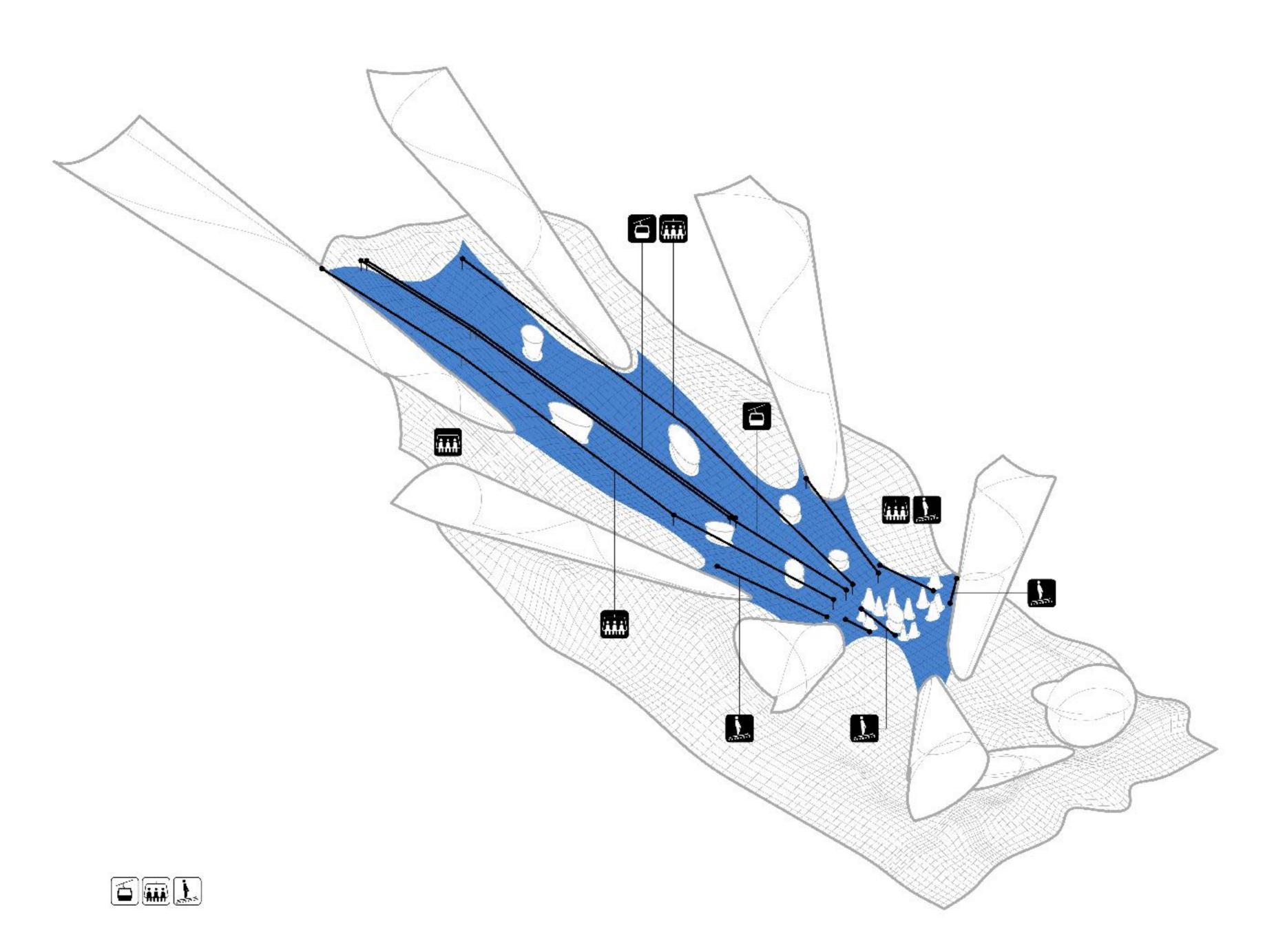
SNOW SURFACE INSIDE OF GLETSCHER CITY RESORT IS ORGANIZED IN SUCH A WAY THAT ALLOWS TO SKI IN DIFFERENT DIRECTIONS, ALONG THE MAIN SLOPE AND IN THE OPPOSITE DIRECTIONS.
SUCH A LAYOUT PROVIDES EQUALLY EXCITING SKING FOR ALL LEVELS OF TRAINING AND ALL TYPES OF SKI SPORTS.





VOW SLOPES

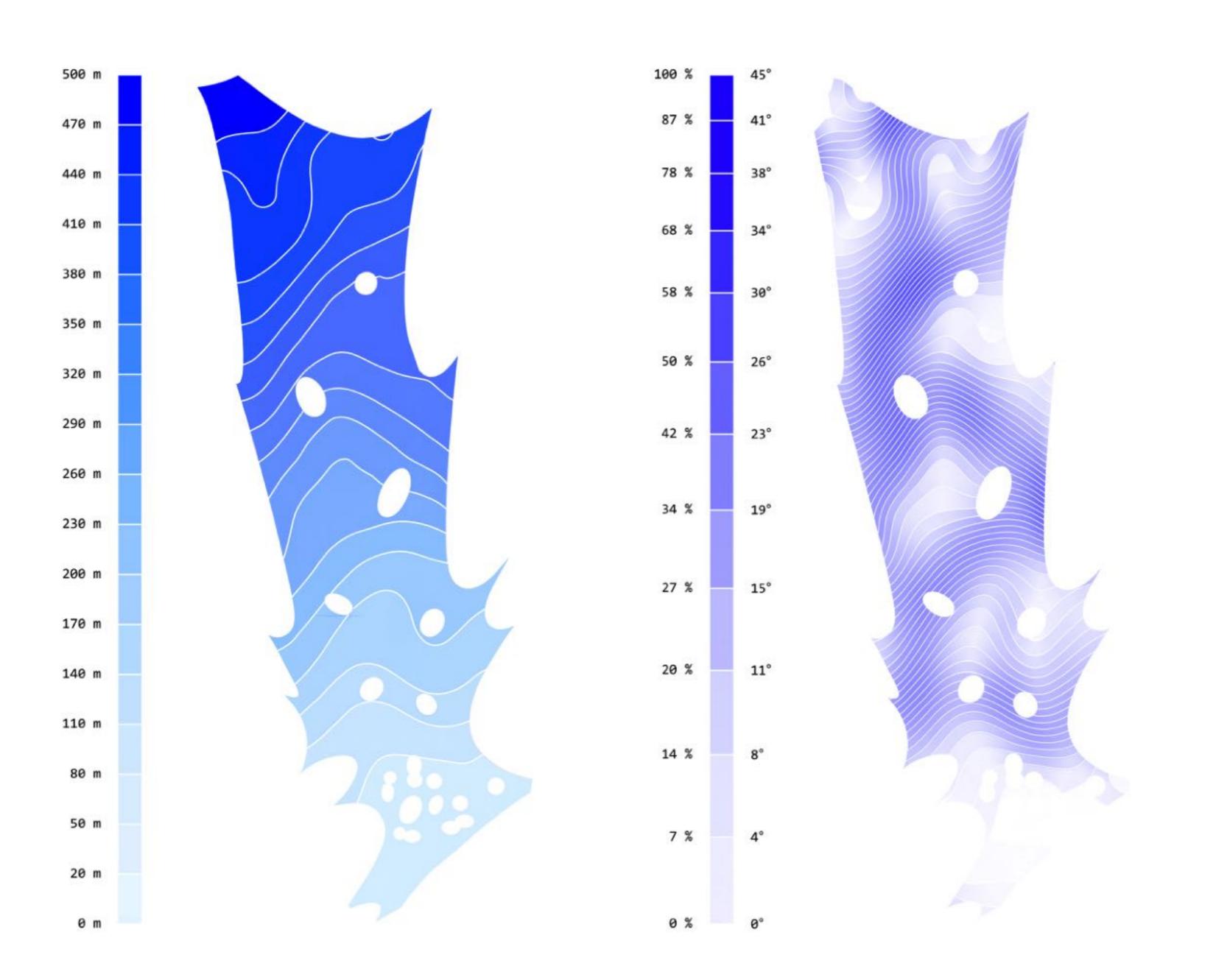


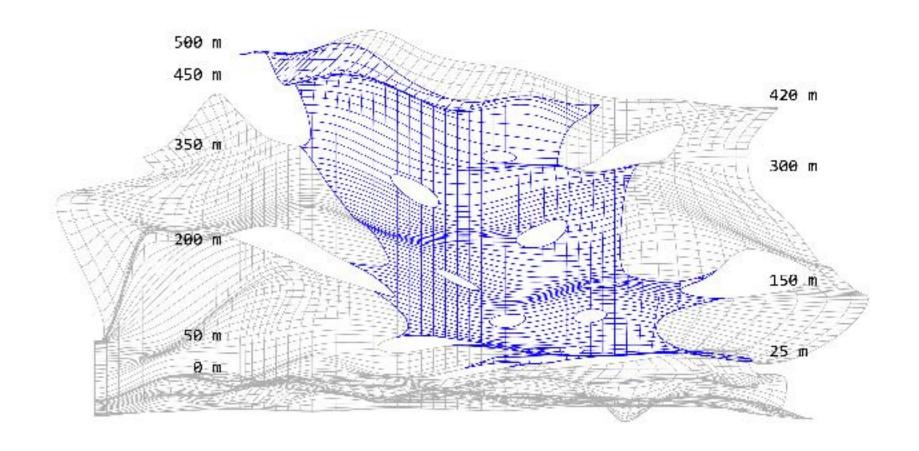


# NATIVE ROCK FOUNDATION - ELEVATION + 500m.

#### 2000 METER LONG PROFILE

THE PROPOSED STRUCTURE OF SKI HILLS
WOULD ALLOW FOR 12-15 GREATLY
VARIED SKI RUNS, FROM 300-M RUNS
FOR KIDS UP TO 2500 M FOR PROFESSIONALS

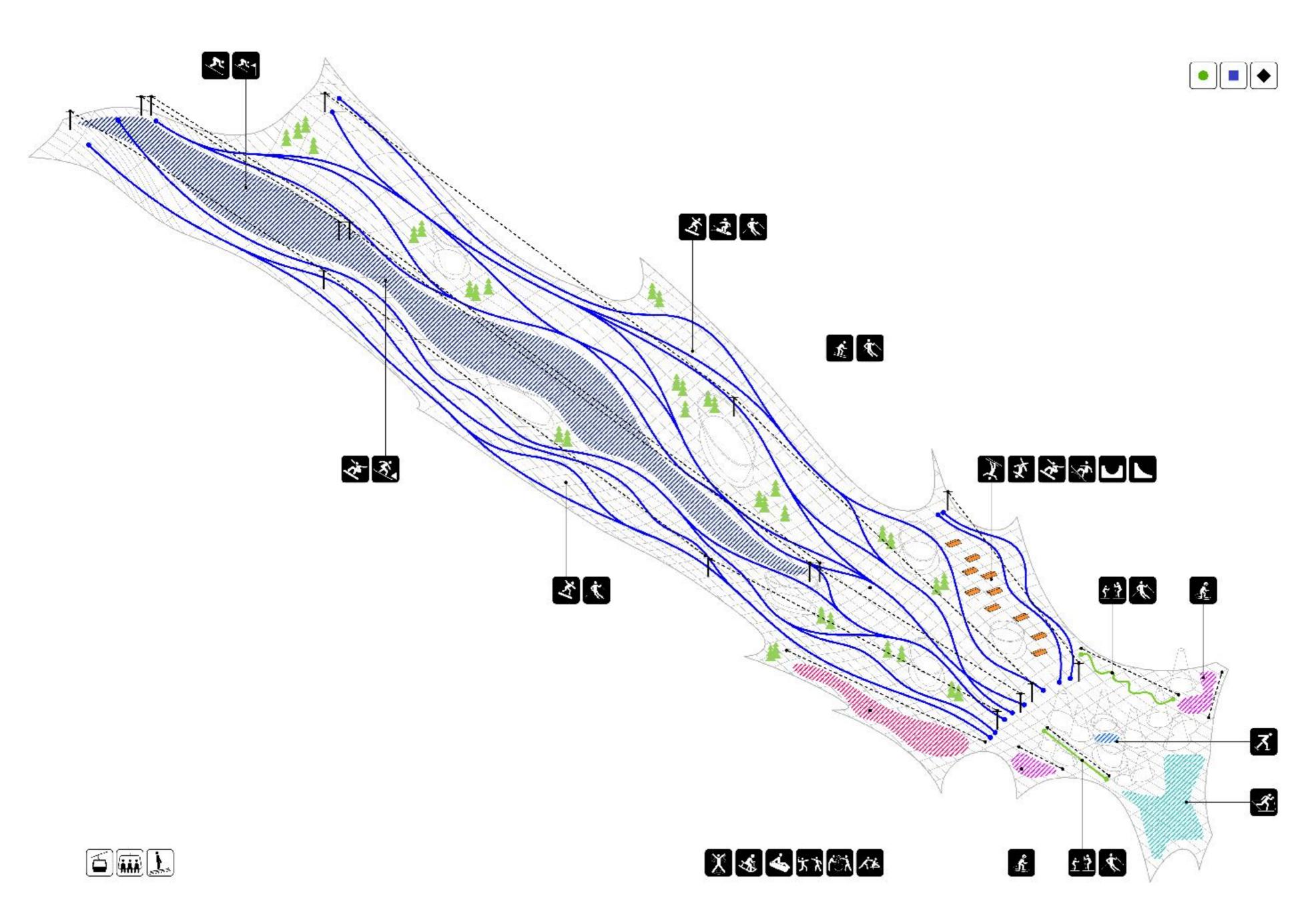






THE WIDTH (200-500 METRES) AND THE GEOMETRY OF THE SNOW SURFACE ALLOW TO CREATE A VARIETY OF TRAILS FOR SKIING IN TRANSVERSE DIRECTION FOR SKIERS WITH DIFFERENT DEGREES OF TRAINING.





### DIMENTIONS OF THE SPACE OF GLETSCHER GENOM

THE FEATURES OF THIS FACILITY (2000 METERS LENGTH, THE 500-METER ELEVATION, 5000 PEOPLE AT A TIME) MAKE IT POSSIBLE TO CREATE A FULLY-FUNCTIONAL SKI RESORT WITH ACTIVITIES OF ALL KINDS SUITABLE FOR BOTH RECREATIONAL AND PROFESSIONAL SKING. IT PERMIT HOSTING MAJOR INTERNATIONAL SPORTING EVENTS OF RS LEVEL, SUCH AS WORLD CUPS IN DOWNHILL (DH), THE SUPERGIANT (SG), GIANT SLALOM (GS), SLALOM (SL), SNOWBOARDING, FREESTYLE, CROSS-COUNTRY SKING. THE PARAMETERS OF THE SLOPES ALLOW TO ORGANIZE A PROPER TRAINING PROCESS FOR PROFESSIONAL ATHLETES. WHILE TOURISTS CAN ENJOY ALPINE SKING WITH TRAINING SLOPES, SNOW PARKS, TUBING, A LARGE TOBOGGAN TRACK, CROSS COUNTRY SKIS, SKI BOOTS, WINTER CLIMBING.





