



ZERO
CARBON
SYSTEM
零碳中心

A LITTLE HOUSE TO BUILD A DREAM ON

Join us to build a better tomorrow

THE DREAM...

Cellphone - 1983



THE DREAM...

Cellphone - 2014



THE DREAM...

Automobile - 1983



THE DREAM...

Automobile - 2014



Messaging - 1983



THE DREAM...

Messaging - 2014



THE DREAM...

House - 1983



THE DREAM...

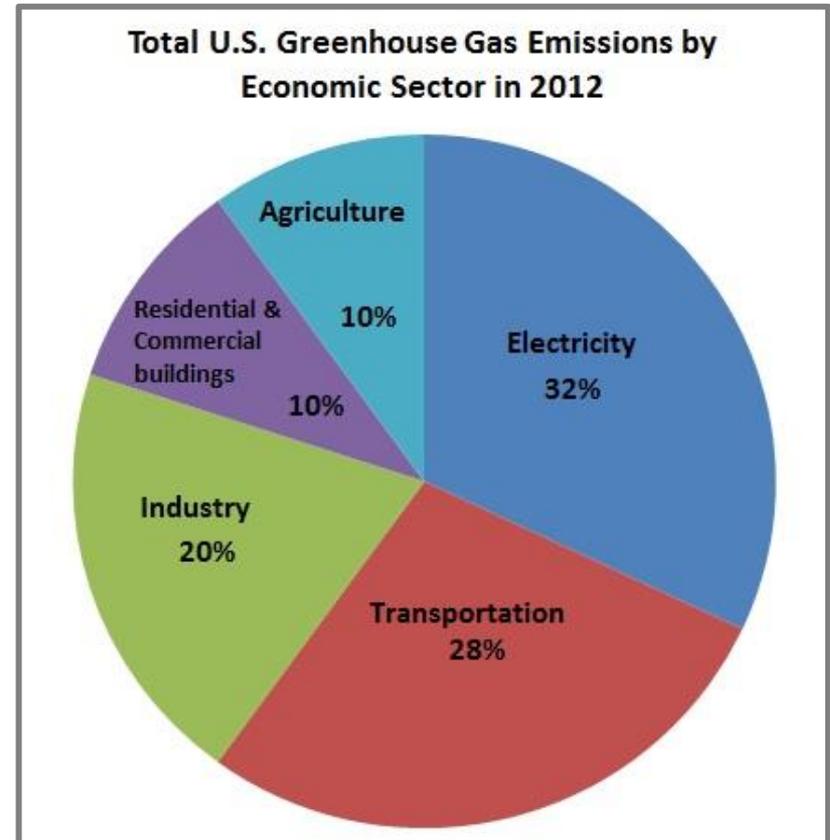
House - 2014



ENERGY CONSUMPTION IN BUILDINGS

In China, energy consumption in buildings are **30%** of total social energy consumption.

In 2013, building energy consumption was equivalent of **1.1 billion tons of Coal**.



THE DREAM...

We dare to dream...

smarter home

connected home

lower energy consumption

safer and more comfortable

secure and independent

affordable ...

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ABOUT ZERO CARBON SYSTEMS

ABOUT ZERO CARBON SYSTEMS

Background

Conceived by the team involved in the development of BedZED (Beddington Zero Energy Development)

2009 Spinoff from Bill Dunster's ZEDfactory

2010 Shanghai EXPO ZEDpavilion

ABOUT ZERO CARBON SYSTEMS

Founder & CEO – Mr. Shuo Chen

After obtaining a master's degree from Martin Center of University of Cambridge in UK, Mr. Chen joined the architecture team that designed the first zero energy community in UK, the Beddington Zero Energy Development (BedZED). In 2009, he was appointed the director of ZEDpavilion of 2010 Shanghai EXPO and built the first zero carbon building in China. Currently, Mr. Chen is dedicated to sustainable city development and commercially viable zero carbon buildings.



ABOUT ZERO CARBON SYSTEMS

Our Mission...

To push the limit of sustainable development

To bring low carbon life style into daily life

To build better cities that's both ecological and economical

Video



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2010 SHANGHAI EXPO ZEDPavilion

ZEDpavilion 2010 SHANGHAI EXPO

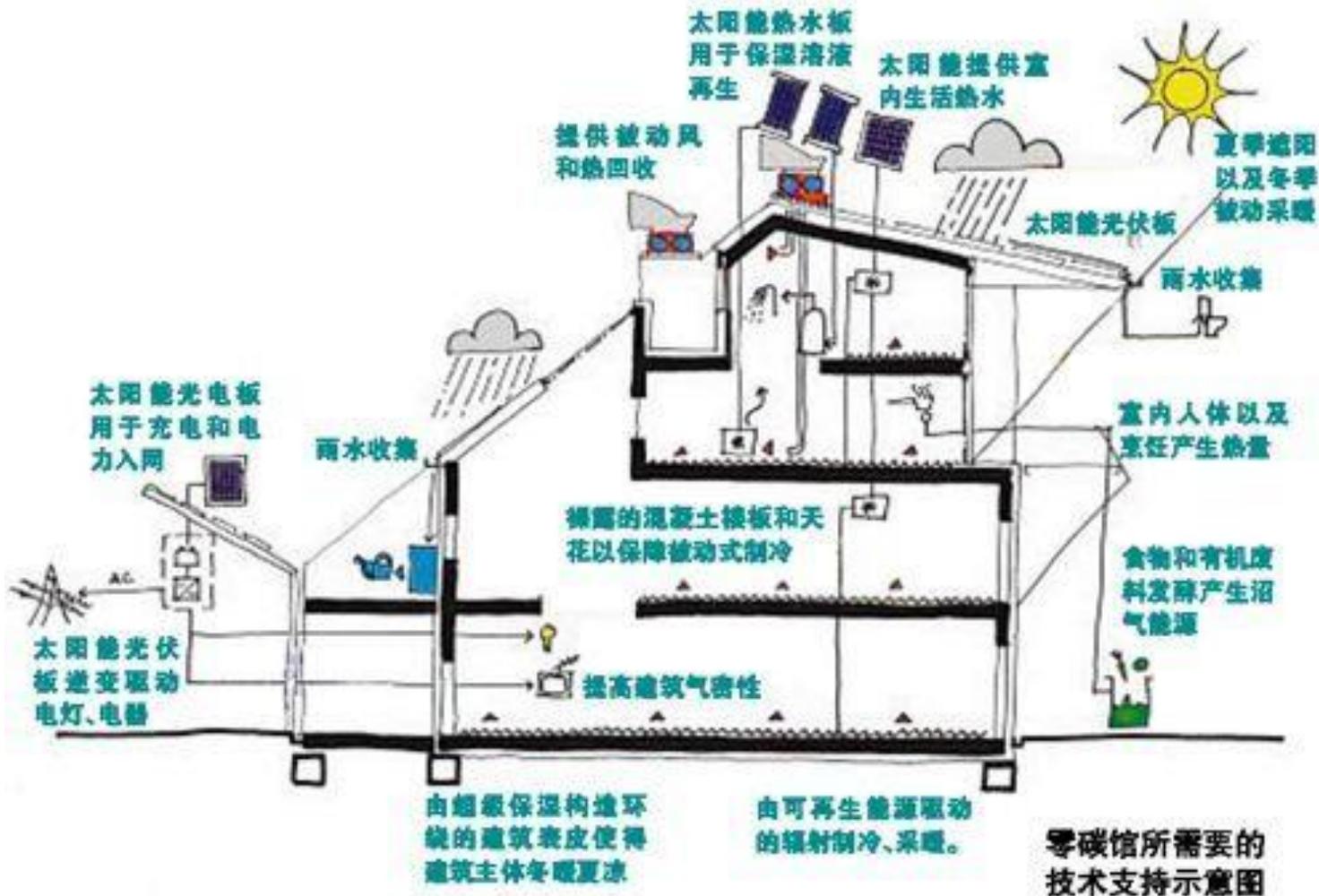


- Total area: 2674 square meters
- Passive ventilation save 70% energy
- Sunroom reduces winter heating energy use by 20%
- Rainwater collection sufficient for 60% of building water usage

Based on the BedZED model
Customized for Shanghai Weather
Adopted local construction practice



ZEDpavilion 2010 SHANGHAI EXPO



ZEDpavilion 2010 SHANGHAI EXPO

- 22 Wind-cowls: Heat recovery ventilation system, powered by low velocity wind and solar panels
- Water sourced heat pump cooling system – sourced from Huangpu River
- Biomass roof insulation
- 50% recycled concrete thermal mass wall
- Photovoltaic power generation
- Recycle bio waste into bio gas power generation
- Wind powered street lamps
- LED indoor lighting
- Solar powered water heating



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ZERO CARBON POD 2.0

Your Zero Carbon Home

ZERO CARBON POD 2.0

The Concept

- Bring zero carbon building closer to daily life
- A small self-sustained habitat
- Prefabricated modules to reduce cost and build time
- Transportable
- Does not damage the surrounding environment
- Smart enough to remember your preferences and habits, automatically controls the indoor environment

ZERO CARBON POD 2.0

Core Technologies

- Solar Panels generating up to 10kw/h electricity
- Battery storage up to 3 days
- DC power system(DC air conditioner, lights, etc)
- Smart power management
- LED lighting
- Sandwiched wall material
- Lightweight steel frame structure
- Rainwater collection and filtration
- Onsite waste treatment through composting toilet, septic tank and artificial wetland
- Smart home automation to control sun shading, lighting, temperature and security

CONCEPT RENDERING AND EXISTING PROJECTS

Zero Carbon Pod 2.0 A



40 square meters
4kw/h Thin film type solar panel
200L phase change solar water heater
Ipad control

CONCEPT RENDERING AND EXISTING PROJECTS



Zero Carbon Pod 2.0 B
120 square meters
10kw/h Solar Power
88kwh Battery Pack
400L phase change solar water heater
4000L rain water tank with 3 stage filtration

CONCEPT RENDERING AND EXISTING PROJECTS

Zero Carbon Pod 2.0 C

300 square meters

100 square meters of patio

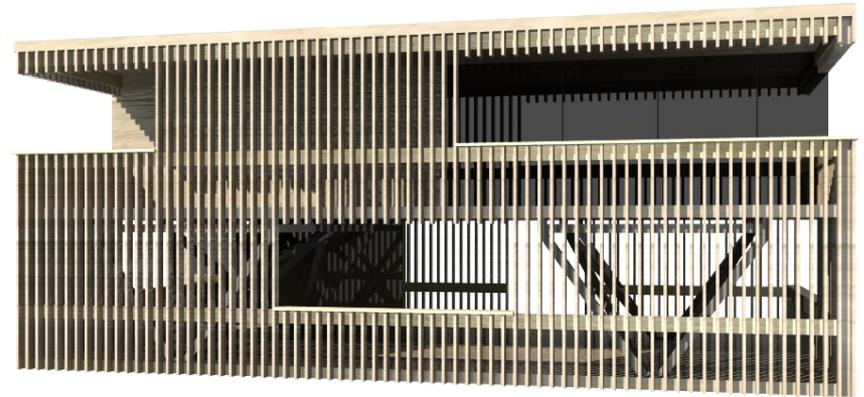
13kw/h solar system

120kwh battery system

Swappable with electric vehicles

100 square meters of artificial wetland

Software control and monitoring



CONCEPT RENDERING AND EXISTING PROJECTS





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ZERO CARBON RETREATS

The Future Is Now

ZERO CARBON RETREATS

Why...

- Experience the most exclusive landscape of the world, get closer to nature
- live in the perfect harmony of smart and sustainable lifestyle
- An investment that offers amazing quick return while preserving the local environment

ZERO CARBON RETREATS

What...

- A self-sustained small community
- renewable energy source(solar, wind, hydro, biogas, biodiesel...etc)
- energy saving, lower CO2 emission (LED, passive housing, water or ground source heat pump...)
- low impact to environment (waste treatment, waste management, recycled and local building material, lightweight structure, off the ground)
- low carbon site planning(transportation, recycling)
- smart cloud-based management
- localized activities and tours
- short development time
- Replicable through franchising

ZERO CARBON RETREATS



PEARL OF PALAU CONCEPT

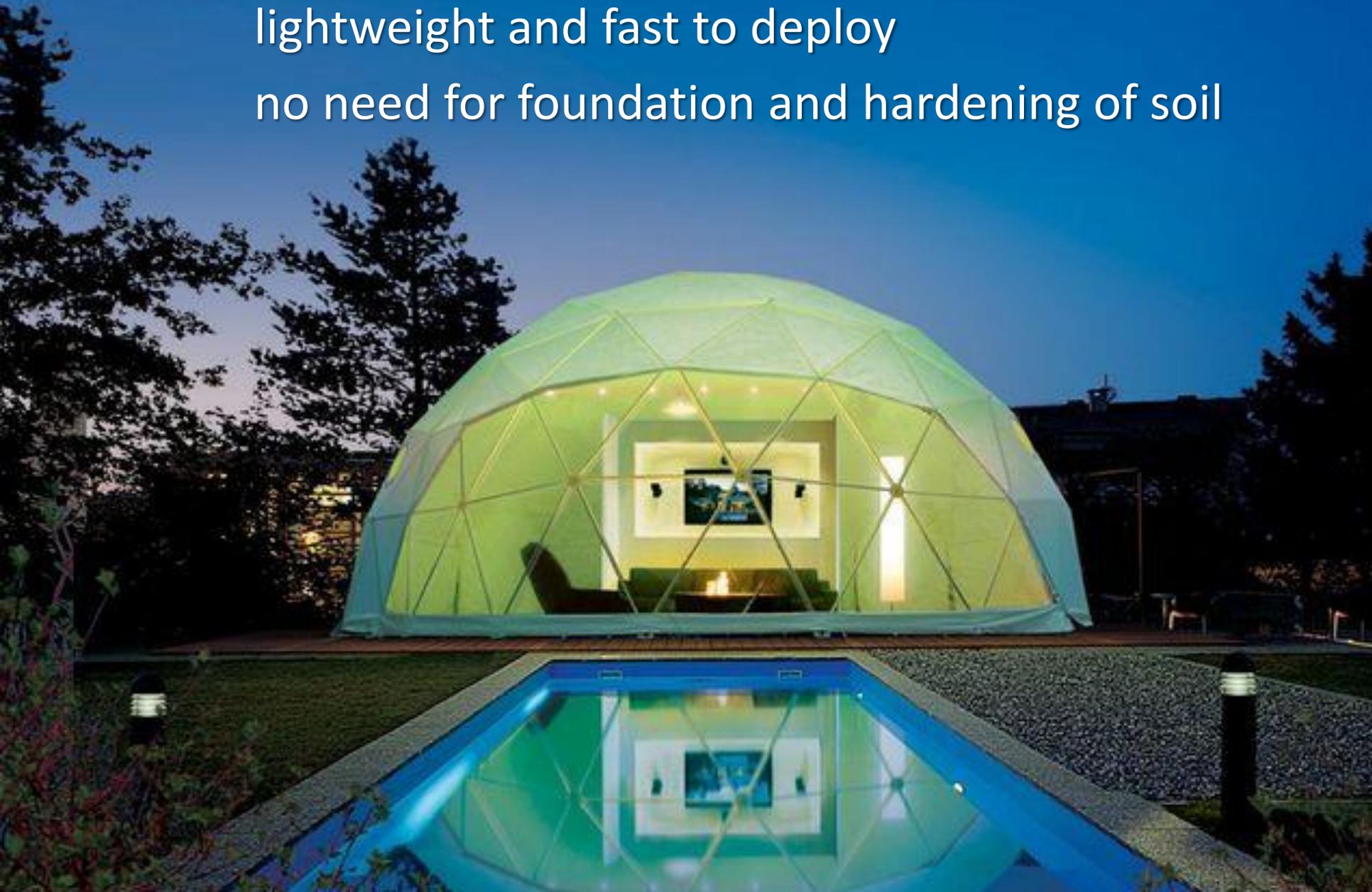
ZERO CARBON RETREATS



Dome tent outer shell

lightweight and fast to deploy

no need for foundation and hardening of soil

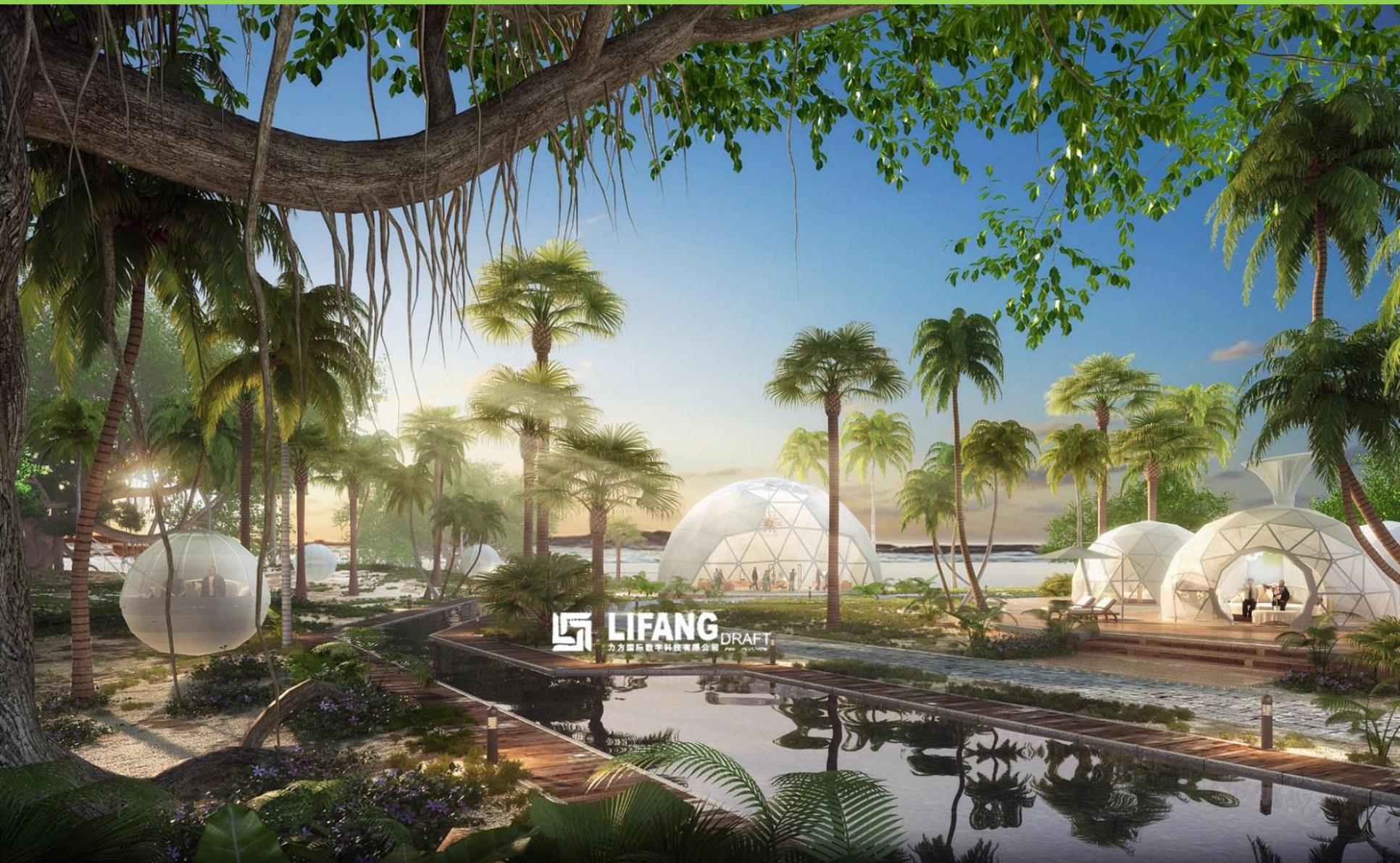


ECO CLUSTER



SOLAR UMBERALLA
BIODIESLE
RAIN WATER COLLECTION PLATFORM

SITE CONCEPT RENDERING



FUN DESIGN AND ACTIVITIES FOR THE YOUNG GENERATION



FUCHUN RIVER CONCEPT



Near Hangzhou
Wetland Nature School
Solar boating experience zone
Local Culture Tour
Local Organic Food

SITE PLANNING



- 1 Wetland and Organic farm
- 2 Organic Restaurants
- 3 Electric Car Park – Solar Charging
- 4 Solar boat dock
- 5 Tree House Villas
- 6 Natural Swimming pool



ZERO CARBON RETREAT MANAGEMENT

Your Specialized Low Carbon Property Manager

- Standardized Branding System
- Standardized Management and Operation System
- Standardized Service Quality Control
- Standardized Technical Support
- Standardized Marketing and Sales Channel
- Standardized Design Control

ZERO CARBON RETREATS

Business Advantages

For Consumers

- Private Residence
- Attractive Design
- Unique Experience
- Exclusive Location



ZERO CARBON RETREATS

Business Advantages

For Investors and Developers

- Faster development/deployment
 - (one year vs. 2-3 years)
- Access to location
 - (temporary building permit, remote location)
- Save money on infrastructure and energy cost
- Rental model reduces initial investment requirement
- Faster to establish franchise chain.



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ZERO ECONOMY

Market Feasibility

ZERO ECONOMY

Investment comparison

Traditional development

7000rmb/square meter + 10000rmb/square meter infrastructure investment
17000rmb/square meter

Zero carbon development

15000rmb/square meter

Business Model Innovation

- Financial Leasing of zero carbon pod equipment
- Crowd sourced design
- Crowd funding project development
- EPC (energy performance contracting)
- Air-conditioning performance contracting
- Lighting management contract
- Standardized property management

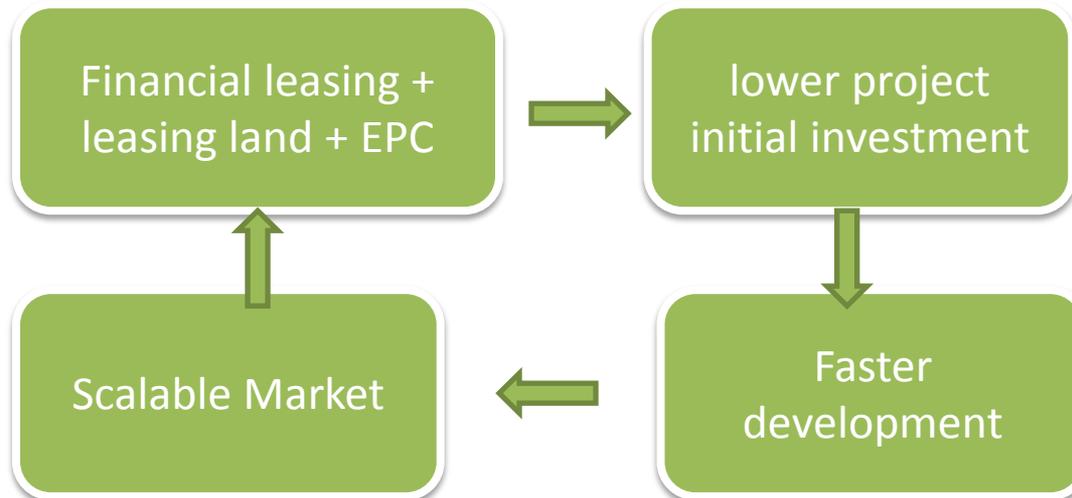
ZERO ECONOMY

Investment return model

Energy Cost Before – Energy Cost After – Gov. Subsidy = **Cost Savings**

cost of using green tech - cost of using traditional tech = **investment in green**

Investment in green / cost savings = payback period



ZERO ECONOMY

Example: For a 300 square meter resort villa

- ZED require 22% down payment as initial investment
- Year occupancy rate for both case: 60%
- OLD development mode operational cost as % revenue: 70%
- ZED development mode operational cost as % revenue: 90%

	Total cost	Initial invest	Room rate/night	Revenue /year	Cost/y ear	Profit/ year	Build period	Payback period
OLD	5.1M	5.1M	8000	1.75M	1.2M	0.55M	1 year	9 years
ZED	4.5M	1M*	8000	1.75M	1.55M	0.2M	0.5 Year	5Years



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THERE IS MORE...

CALL TO JOIN THE DREAM

We are building a O2O Zero Carbon Life Style Platform

A testing ground, A show stage
to demonstrate

latest technology
latest ideas

People come to experience and live the zero carbon life style in our resorts

Everything they like in our resorts they can bring it home

By simply scan a q-code or browse our online portal and mobile app, they can learn more about the green technology and environmentally friendly and innovative products found in our resorts, then purchase with a simple touch

CALL TO JOIN THE DREAM

Our friends who share our vision...



CALL TO JOIN THE DREAM

We are looking for friends and partners

- Architects
- Designers
- Renewable energy technology providers
- Home automation providers
- Sustainable and green building material supplier
- Local activity providers
- Land owners
- investors!



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JOIN US, DREAM TOGETHER!