



ORCHID CITY

REINVENTING THE FUTURE OF LIVING

EXCEPT INTEGRATED SUSTAINABILITY

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ORCHID CITY

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 Except Integrated Sustainability.*

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LIVING



LEARNING



PRODUCING



ENTERTAINING



WORKING



ORCHID CITY

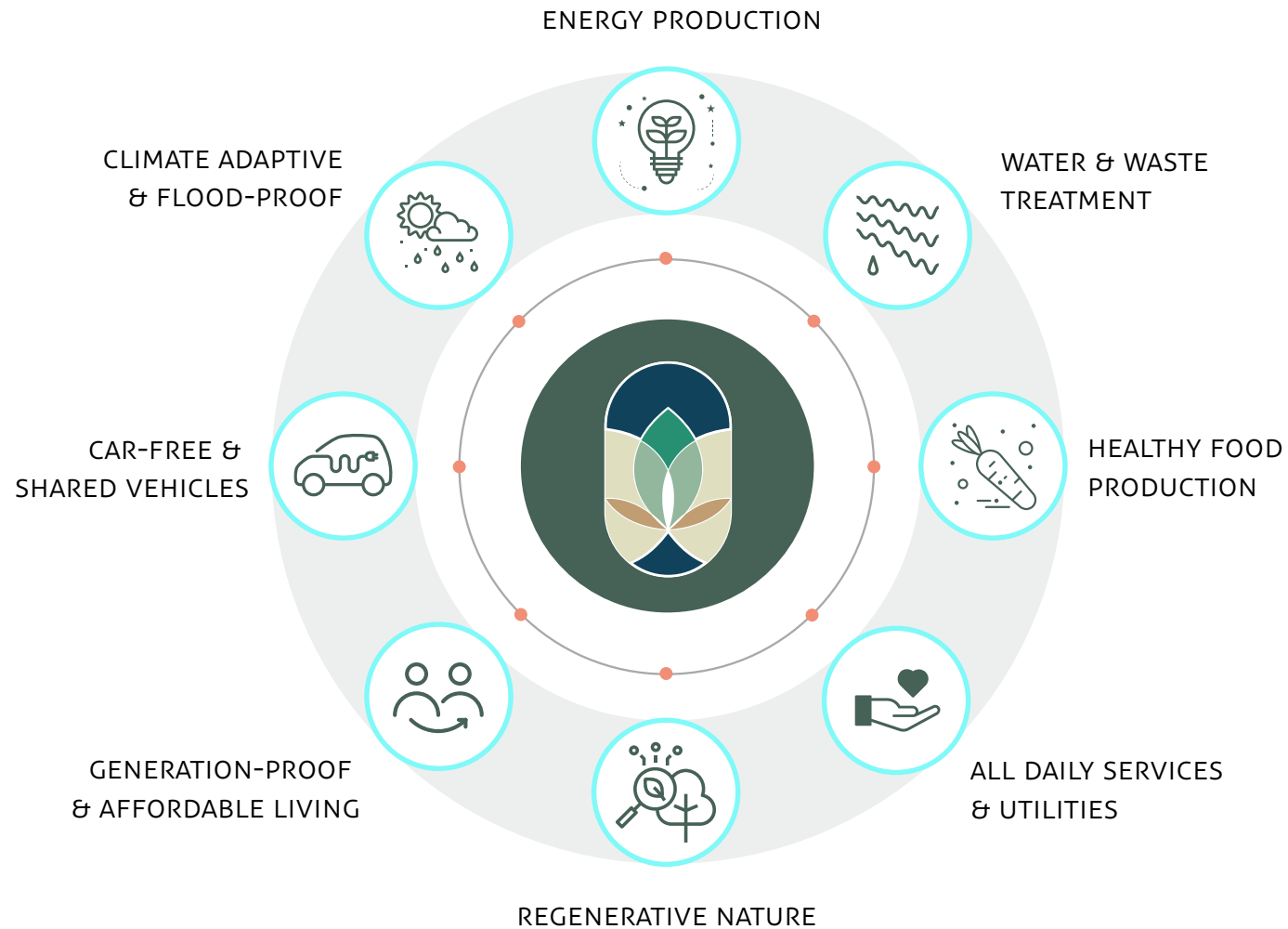
REINVENTING THE FUTURE OF LIVING

We are building a place that has never been built before, in a time where the world desperately needs new solutions for a resilient future.

Orchid City is the world's first self-sustaining city blueprint. Here, we reinvent how we coexist with nature and with each other.

Orchid City goes beyond just being a beautiful place to live. It is a home for those who want to live happy, healthy lives, in harmony with the environment and the community around them. It is the first affordable, physically, socially, and environmentally sustainable city blueprint in the world. For those wanting to help build a better future.

ORCHID CITY IS FULLY SELF-SUSTAINABLE IN





REGENERATIVE NATURE & FOOD PRODUCTION

SELF-SUFFICIENT COMMUNITIES POWERED BY ECOSYSTEM SERVICES

Orchid City regenerates nature, and our relationship with the natural environment. It is entirely self sufficient in terms of food, energy, water, and waste processing, relying 100% on ecosystem services.

Orchid City applies innovative solutions in agriculture and resource management, and uses climate-adaptive strategies. It integrates agroforestry, permaculture principles, circular

greenhouses and aquaculture in diverse production areas. Forest, wetlands, lakes, and wild plains regenerate biodiversity and give us a flourishing environment, resilient towards the future.

These regenerative natural areas in turn give us a healthy and inspiring natural living environment.

HIGHLIGHTS

- › Self-sufficient in food, energy, waste & water
- › Sustainable agriculture through agroforestry, permaculture, and aquaculture
- › Advanced organic greenhouses
- › Constructed wetlands and helophyte filters as biodiverse purification systems
- › Biodiversity preservation and restoration
- › Circular nutrient cycles





REDISCOVER YOUR HAPPINESS & WELLBEING

FIND THE LIFE YOU DESERVE TO LIVE

A rediscovered life, in and with nature. with a focus on wellbeing. A healthy life means more than just conscious living. It requires a healthy and happy community as much as the individual. Orchid City supports mental and physical health, with essential services and community programs, for all.

Orchid City's programs give meaning and purpose, with quality workplaces and meaningful activities. Communities are built

by people from young to old, with generation-proof homes, care services, education, inspiration, and a wide range of programs designed to make people smile and care.

Each Orchid City plan covers solutions that deliver essential services in an inspiring environment that puts well-being first, unifying everything you need to live, work, play, and learn safely and comfortably.



HIGHLIGHTS

- › Mental and physical health programs
- › Public parks, sports, and outdoor activities
- › Entertainment and leisure
- › Research and business center
- › Educational institutions
- › Elderly care
- › Daycare facilities & schools



RECONNECTING PEOPLE THROUGH GENERATIONS

A VIBRANT AND DIVERSE COMMUNITY WHERE EVERYONE CAN STAY CONNECTED.

A rediscovered life, in and with nature, connected to the community, from the start of life to the very end, for all. Orchid City re-imagines living by creating a safe, unique, and exciting place to live and work, for now and for in the future. Together.

As a city of the future, an inclusive, diverse community with affordable, future-proof housing is an essential element. We build communities around values of equality,

diversity, inclusivity and accessibility, ensuring that all city's citizens can grow together. By combining villas, social housing, student housings and elderly care we build a diverse community of transgenerational living where everyone can participate.

Orchid City offers financial support for startups and innovation, as well as workshop centers, community services and programs.

HIGHLIGHTS

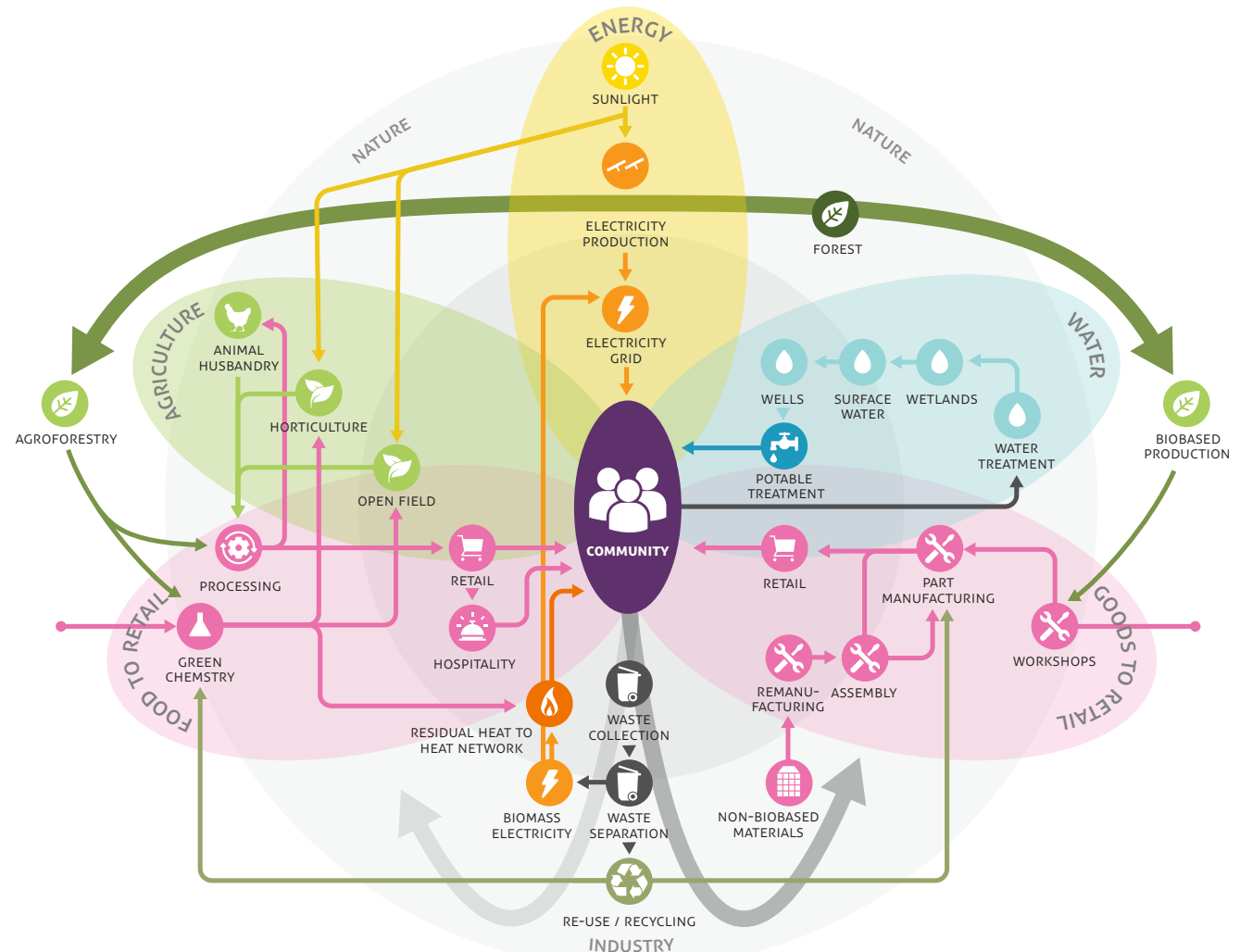
- › Trans-generational living
- › Community services and program
- › Safe, generation-proof homes
- › Commute by bike or public transport
- › Financial support for startups
- › Social housing
- › Workshop centers

RESOURCE CIRCULARITY

REGENERATIVE RESOURCES CYCLES KEEP THE CITY FLOURISHING

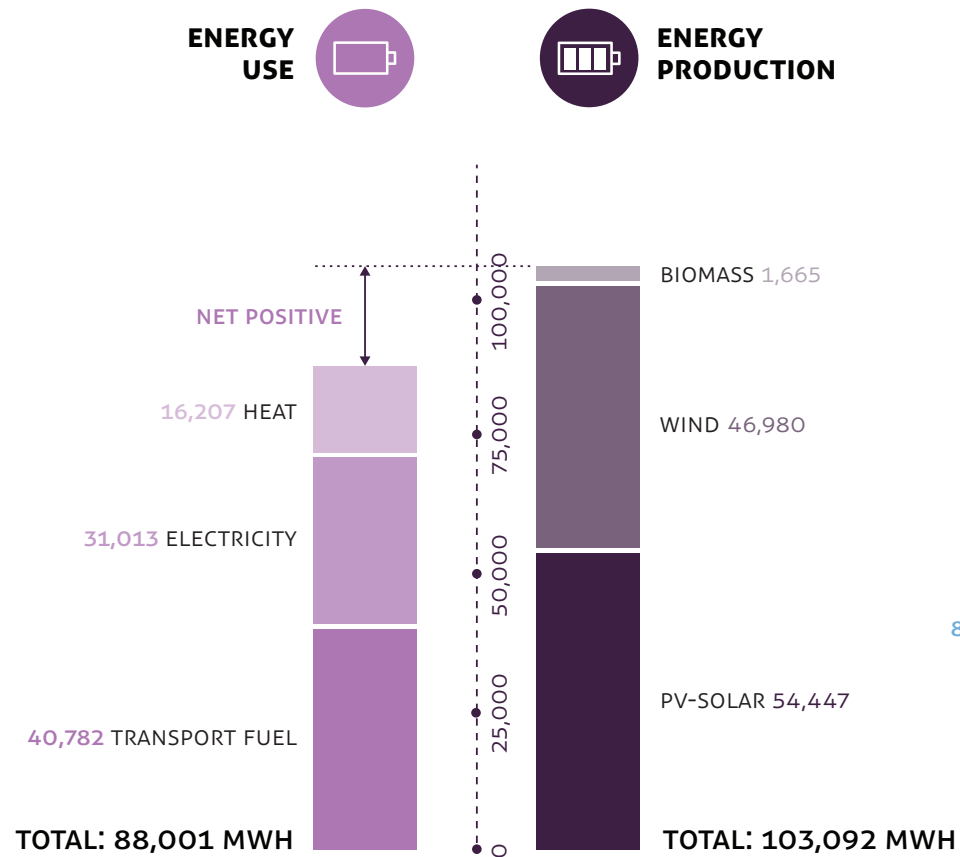
Orchid City's self sufficiency is driven by a closed-loop, circular approach, powered by ecosystem services. Besides food, energy, and water, it is mostly circular with regards to all other resources, including building materials, transport and equipment, and agriculture.

Driven by ecosystem services, a true closed loop economy is created, capturing value as well as boosting ecosystem regeneration. On-site workshops create essential daily products, such as ceramics, textiles and clothing, construction materials, and tools.

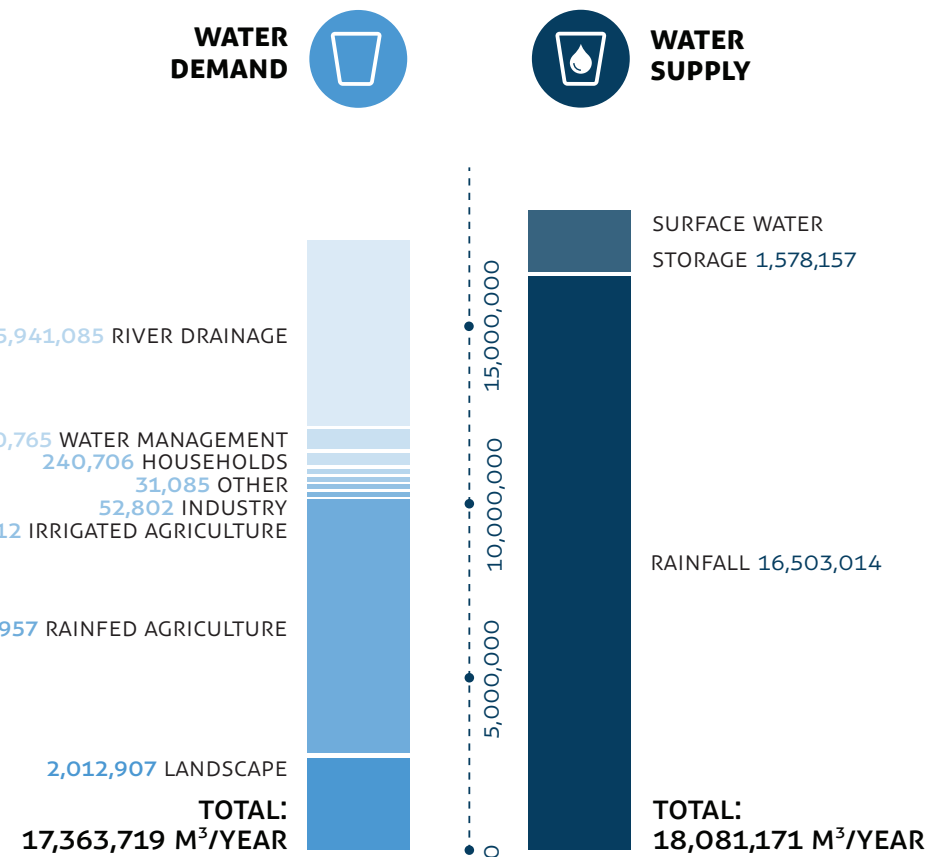


RESOURCE CIRCULARITY

ENERGY

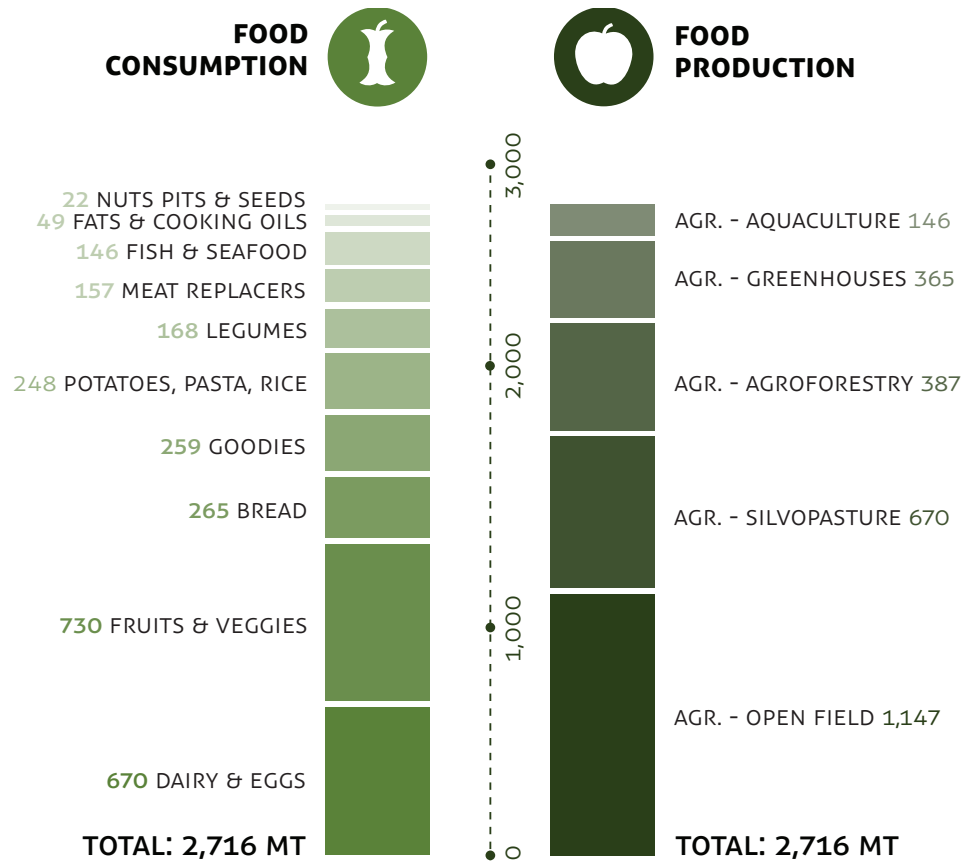


WATER

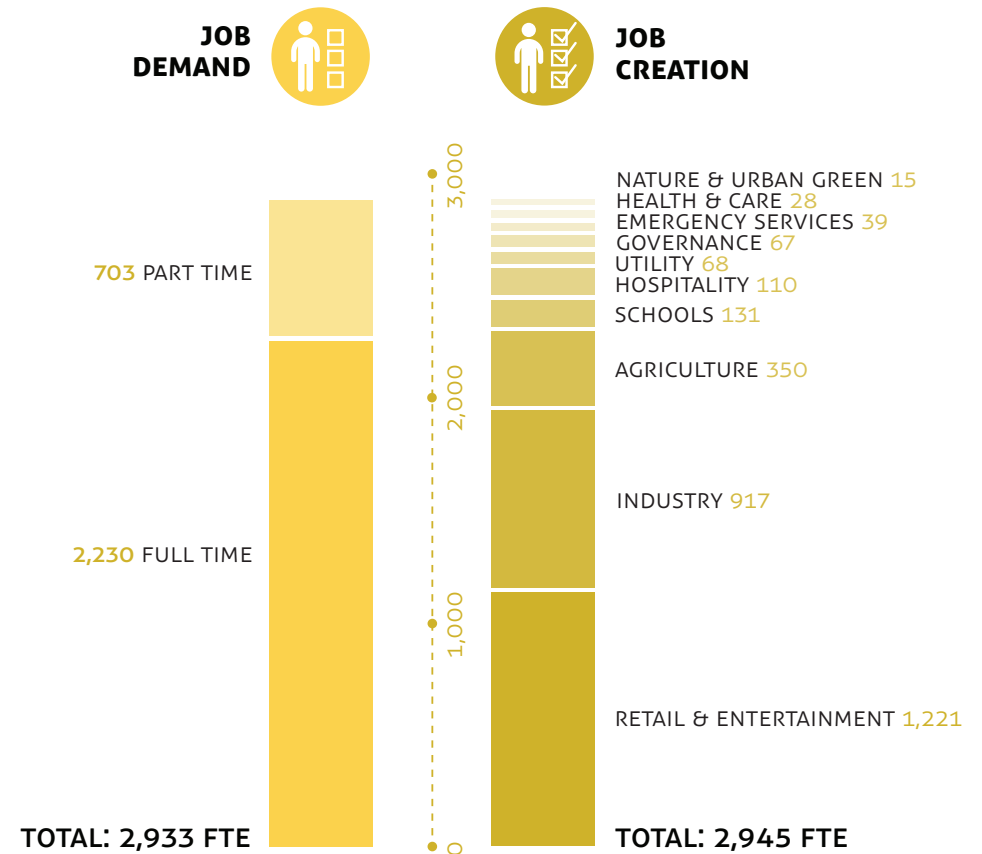


RESOURCE CIRCULARITY

FOOD



JOBS



CIRCULAR FOOD

A complete healthy and balanced diet is catered for in Orchid City with agricultural systems right inside the neighborhood. These are professionally managed, voluntarily supported by the community, and offer organic, safe, and plentiful food year round.

To provide inhabitants with a complete and healthy diet, a large variety of food is produced. The cultivation methods and produce selection are adjusted to local culture and yearly variations.

The main production method is agroforestry, where the cultivation of edible plants is in harmony with nature. This is supplemented by high yield, high tech autonomous greenhouses in which fruits and vegetables are sustainably produced with great efficiency. The forest is also a source for a variety of bio-based building materials that are processed and implemented in the city itself.





ORCHID
CITY

*"What is the use of a house if you haven't got
a tolerable planet to put it on?"*

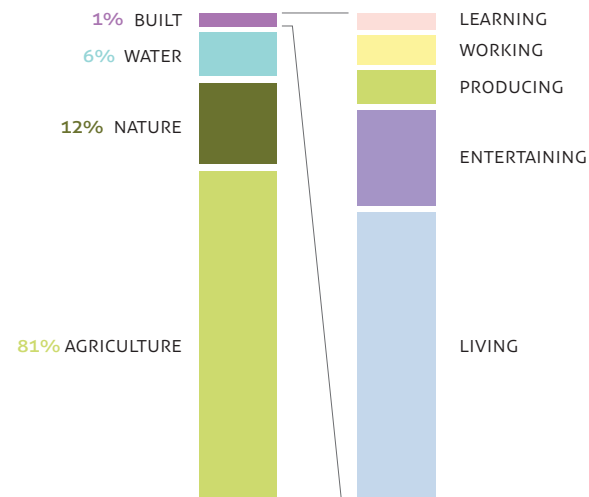
- Henry David Thoreau

PROGRAM OVERVIEW

The program for an Orchid City of 5,000 people offers all daily functions needed.

Orchid City has a diverse program that fulfills both the majority of services expected in a city and ambitious sustainability goals. Diverse housing, care, schools, entertainment, production and working are mixed, in a lively and diverse habitat.

LAND USE & BUILT ENVIRONMENT



PROGRAM		TOTAL (HA)
LIVING		
Housing		13.9 ha
Detached		3.1 ha
Villas		0.5 ha
Semi-detached		3.5 ha
Rowhouse		4.7 ha
Two Bedroom Ap.		0.5 ha
Studio Apartment		0.3 ha
Elderly Homes		0.4 ha
Student Housing		0.1 ha
Social Housing		0.8 ha
Care & Health		0.5 ha
Emergency Services		0.3 ha
Infrastructure		17.0 ha
TOTAL		31.7 ha
LEARNING		
Schools		1.8 ha
Daycare		0.1 ha
Primary Schools		0.9 ha
High School		0.7 ha
Craft School		0.1 ha
TOTAL		1.8 ha
ENTERTAINING		
Hospitality		1.7 ha
Hotel		0.6 ha
Resort		0.5 ha
Restaurants		0.5 ha
Bars / Cafes		0.1 ha

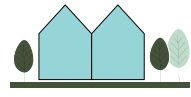
Leisure	3.6 ha
Spa & Relaxation	0.2 ha
Community Centers	0.6 ha
Entertainment	0.5 ha
Culture	0.3 ha
Sport Facilities	0.6 ha
Services	6.0 ha
TOTAL	10.5 ha
PRODUCING & NATURE	
Industry & production workshops	6.7 ha
Urban Green	2 ha
Agriculture	1,462 ha
Open Field	309 ha
Husbandry	1,034 ha
Orchard	96 ha
Greenhouse	23 ha
Nature & Water	332 ha
TOTAL	1,800 ha
WORKING	
Offices	1.1 ha
Co-working	0.3 ha
Retail	0.2 ha
Market	0.6 ha
Conference Center	1.0 ha
TOTAL	3.2 ha
TOTAL ORCHID CITY NL	1,846 ha

This table details the program of a scenario of 5000 people in Orchid City, The Woods, in the Netherlands.

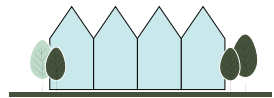
LIVING TYPOLOGIES (NL)



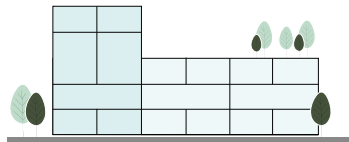
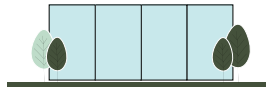
VILLAS / DETACHED



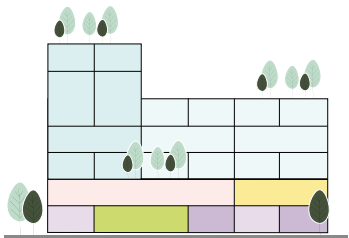
SEMI-DETACHED



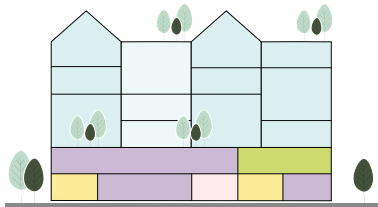
ROW-HOUSES



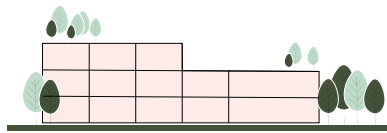
APARTMENT BUILDINGS



HIGH DENSITY MIXED USE

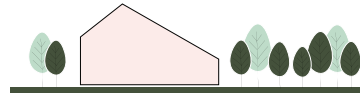


LEARNING TYPOLOGIES (NL)



SCHOOLS

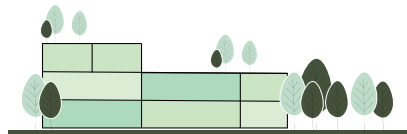
Primary school, high school
and craft school



DAYCARE & PRESCHOOL

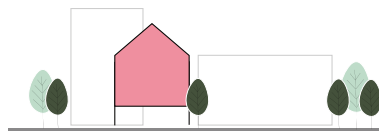


CARE & HEALTH (NL)



CARE & HEALTH

Hospital, clinics, and pharmacies

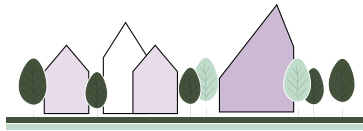


EMERGENCY

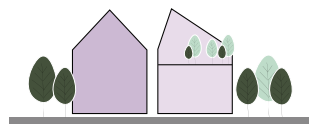
Firebrigade, police station



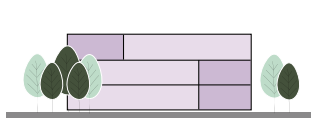
ENTERTAINMENT TYPOLOGIES (NL)



RESORT



RESTAURANT / CAFE



HOTEL



SPA, SPORTS & CULTURE



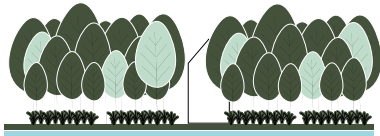
PRODUCING TYPOLOGIES (NL)



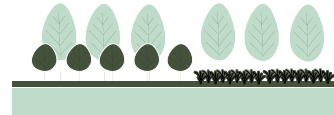
INDUSTRY
Workshops, warehouses, repair



FOOD PRODUCTION
Greenhouses



FOOD PRODUCTION
Food forest



FOOD PRODUCTION
Orchards, open field, silviculture

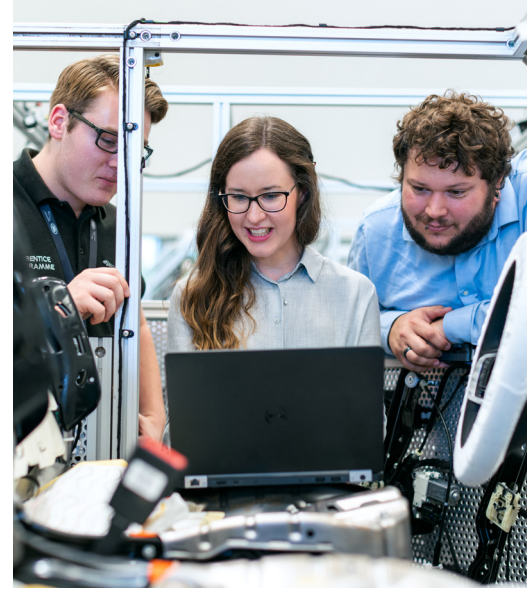
WORKING TYPOLOGIES (NL)



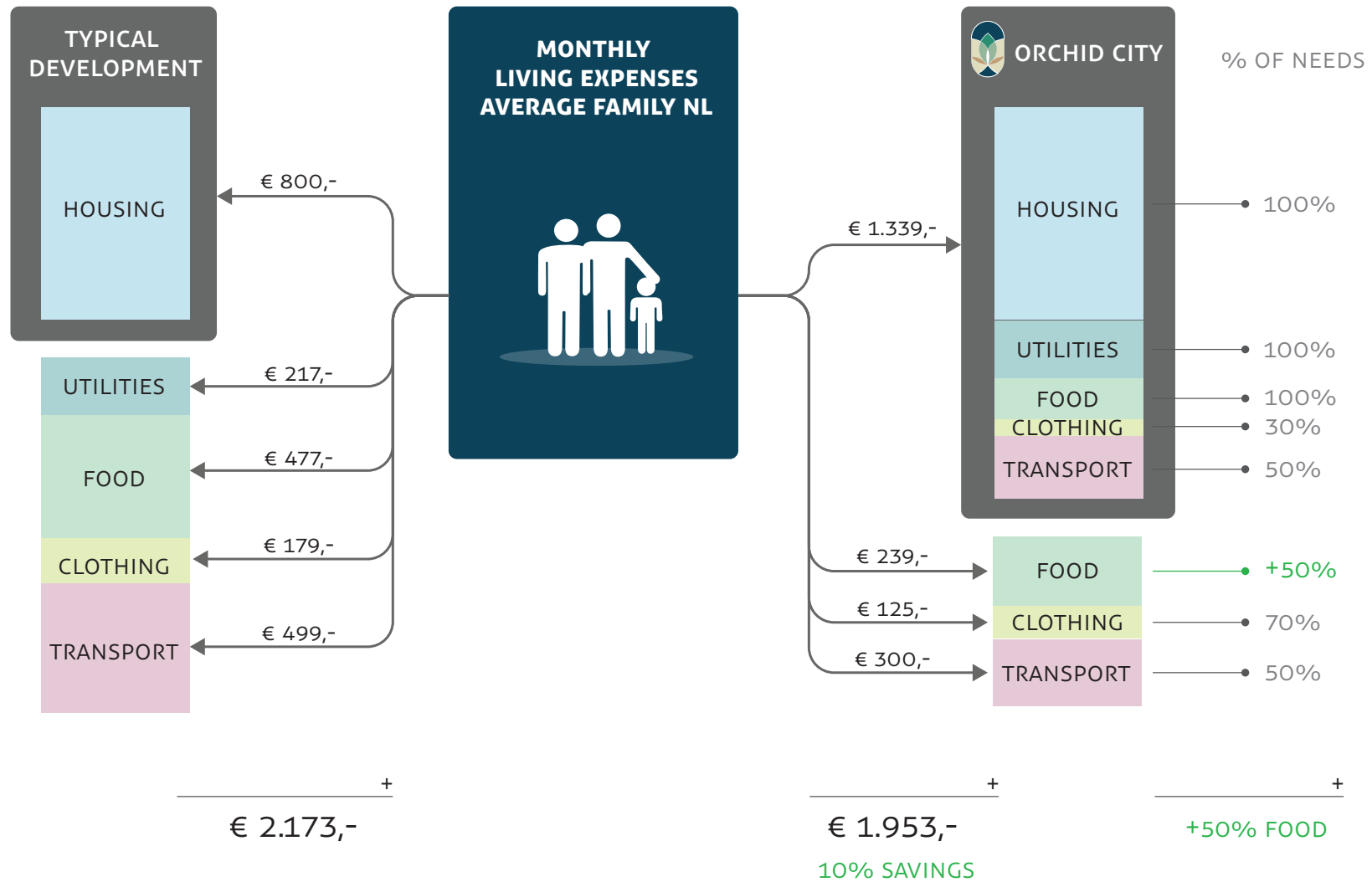
OFFICES, CO-WORKING SPACES & SHOPS



MARKET SPACES
3 units in total



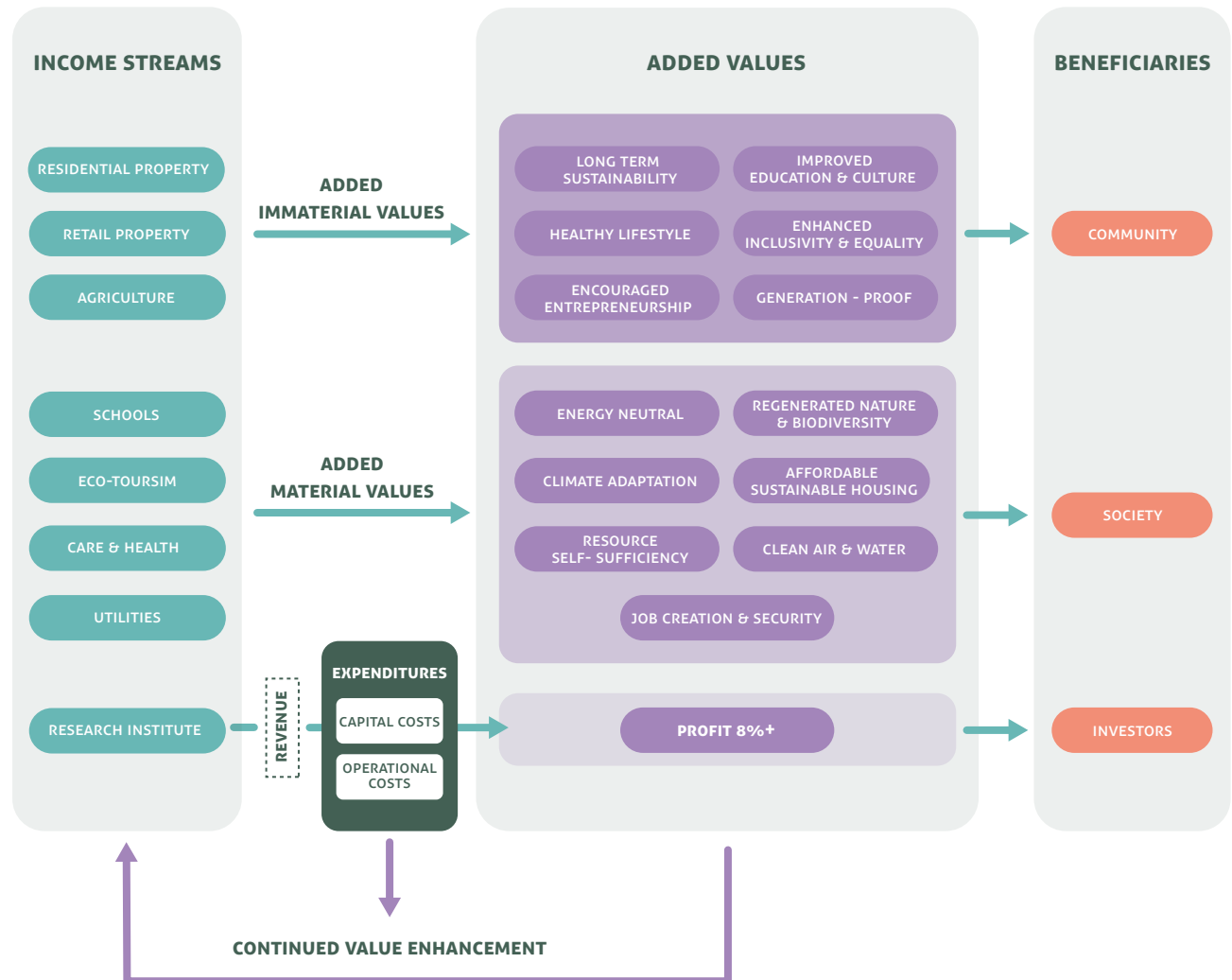
INTEGRATED VALUE MODEL



VALUE BEYOND FINANCE

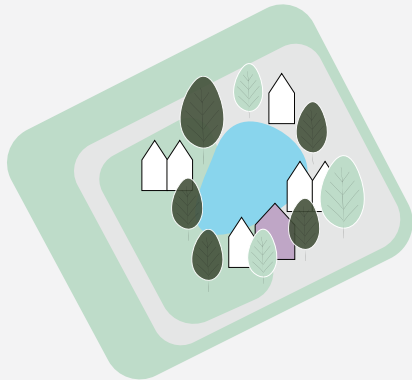
Orchid City's business model generates revenue to support a healthy profit margin, as well as generating added value for beneficial stakeholders, including the community, the region, and the country.

The value diagram to the right reflects the value flows generated through operations at Orchid City, and their material, immaterial, and financial value generated.



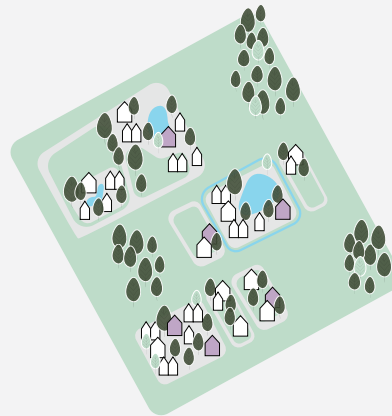
BUILT ON A SCALABLE DYNAMIC MODEL

Orchid City can match in scale corresponding to the availability of space, the ambition of the partners, and the demand for sustainable developments. Anything from a small neighborhood to a sizable town is within reach.



500 inhabitants

Total land area: 175 ha
 Built up area: 4.1 ha
 Centers & satellites: 1
 Self-sufficiency: 75%
 Development costs: € 125 million



5,000 inhabitants

Total area: 1,840 ha
 Built up area: 49 ha
 Centers & satellites: 3-5
 Self-sufficiency: 90%+
 Development costs: € 1.400 million



15,000 inhabitants

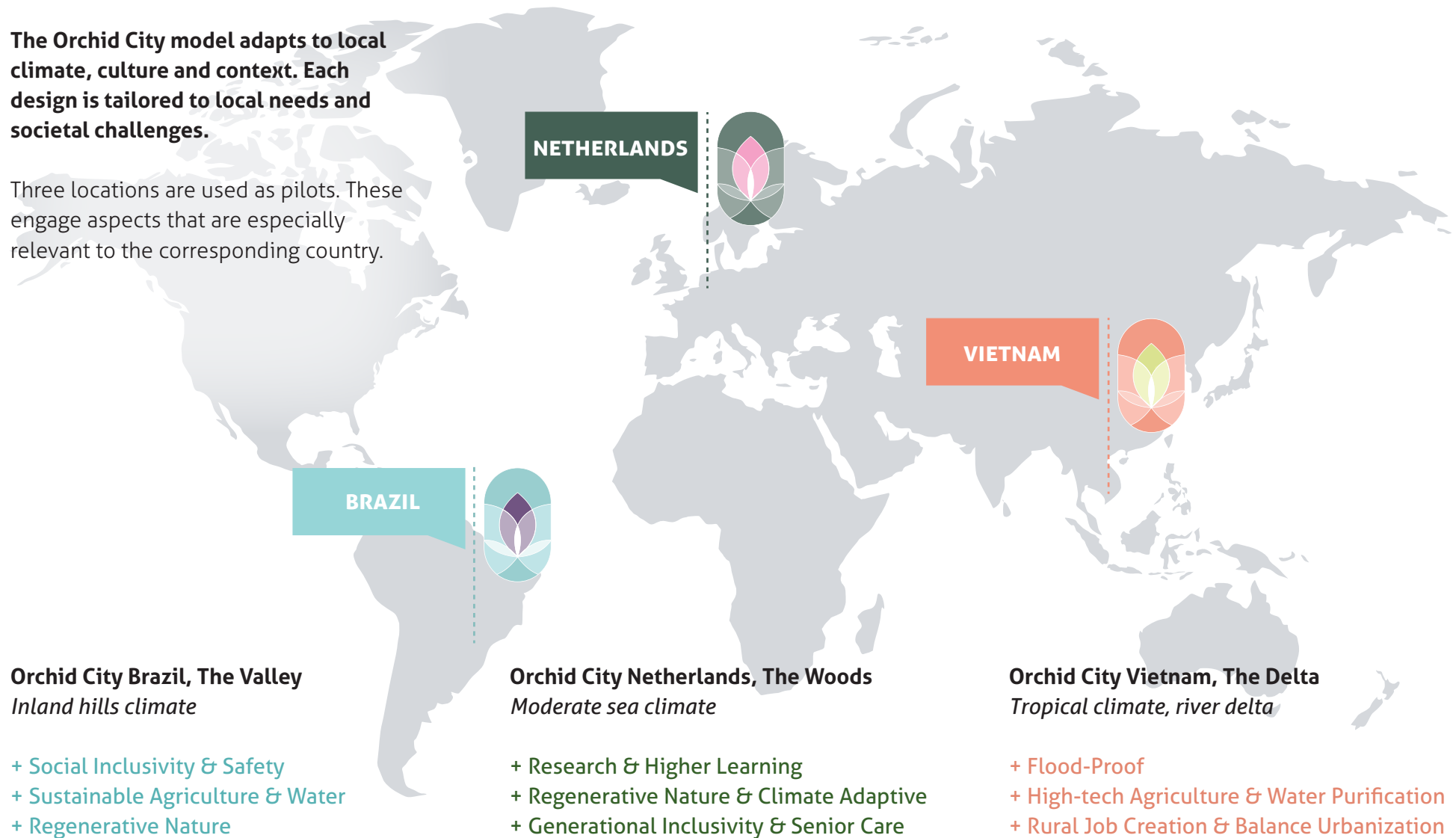
Total area: 5,570 ha
 Built up area: 140 ha
 Centers & satellites: 5-8
 Self-sufficiency: 95%+
 Development costs: € 4.200 million

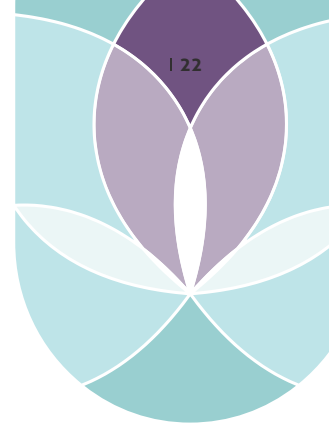
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CONTEXT SENSITIVE ADAPTATION

The Orchid City model adapts to local climate, culture and context. Each design is tailored to local needs and societal challenges.

Three locations are used as pilots. These engage aspects that are especially relevant to the corresponding country.





OC BRAZIL THE VALLEY

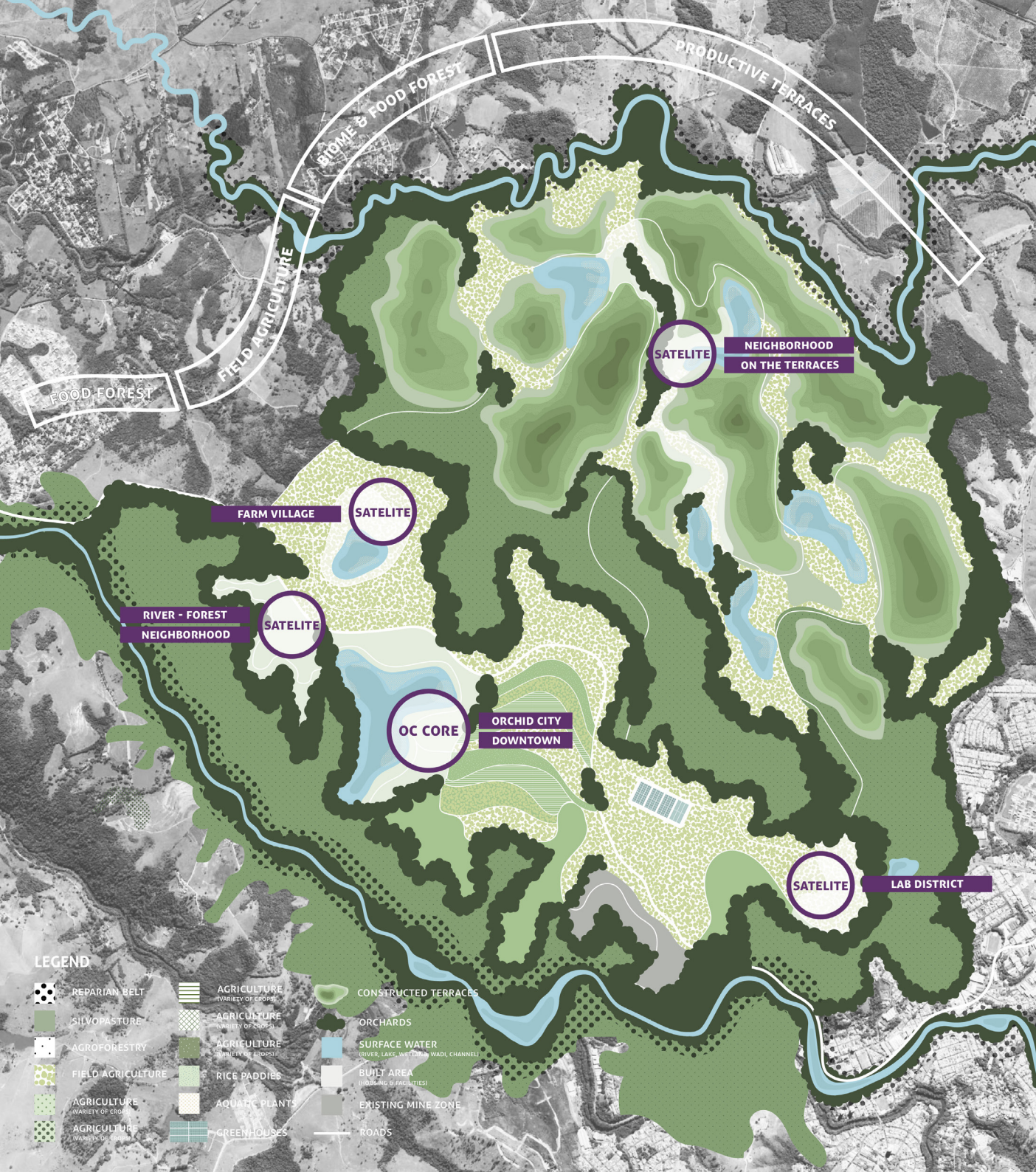
Orchid City, The Valley is located in the Metropolitan Region of Campinas in Brazil. It consists of one core center, which represents the denser, more urban downtown area, and four other satellites, each located on a picturesque and unique landscape within the city. The Valley focuses on specific challenges of social inclusivity, innovative agriculture, water, and natural regeneration.

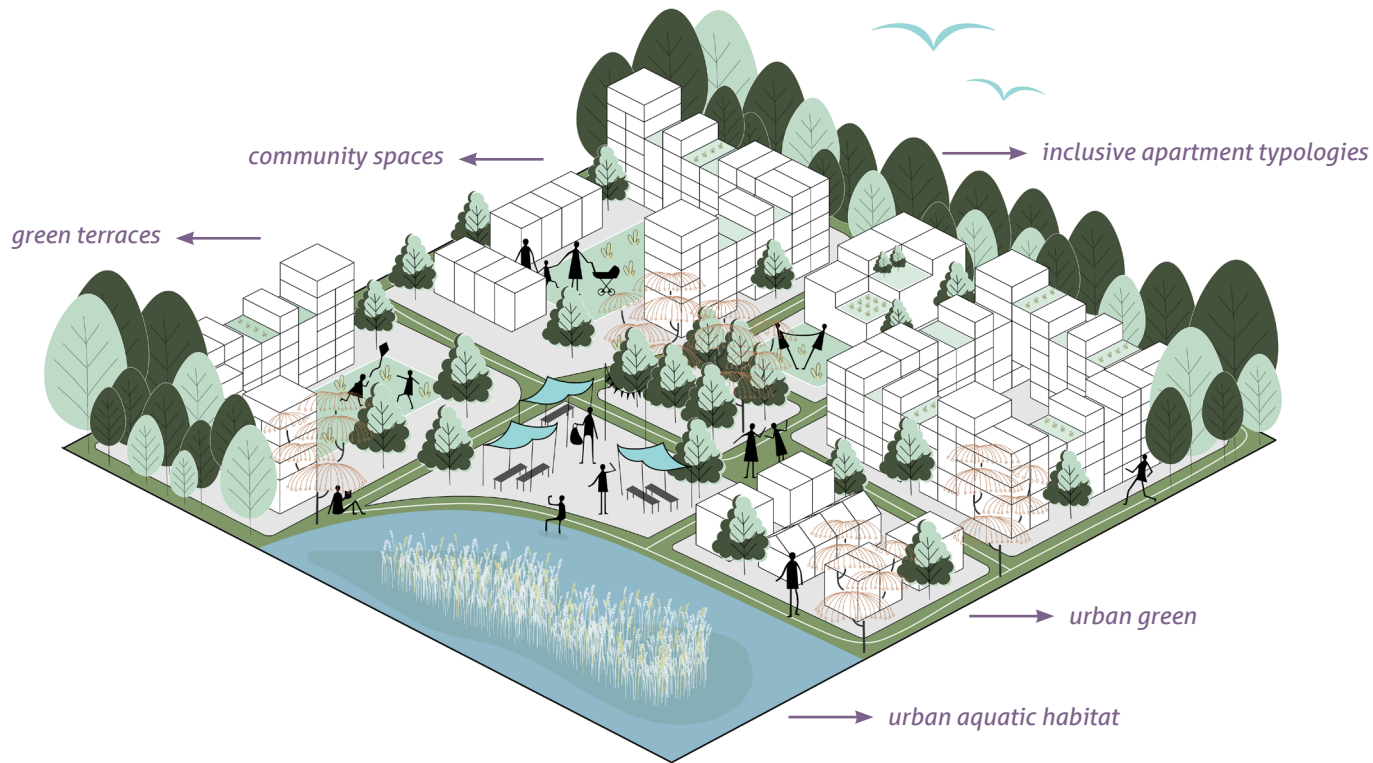
SPECIFIC FEATURES

- › Inland hills climate
- › Social Inclusivity and safety
- › Innovative Agriculture & Water Mngmt
- › Regenerating Nature

PROJECT DATA

- › Inhabitants: 5,000
- › Total area: 2,165 ha
- › Built / open: 21 ha / 2,144 ha
- › Development IRR: 20%





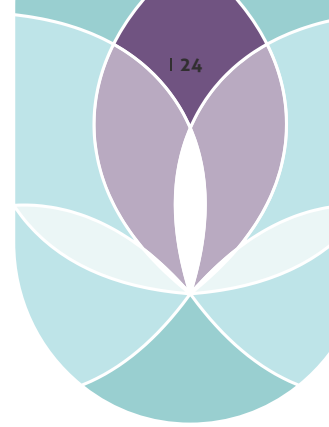
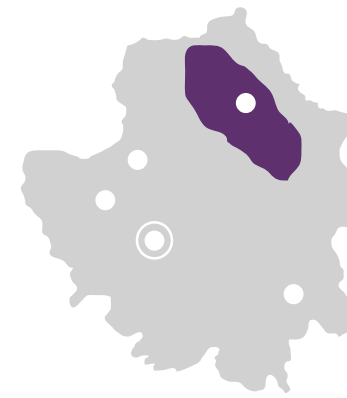
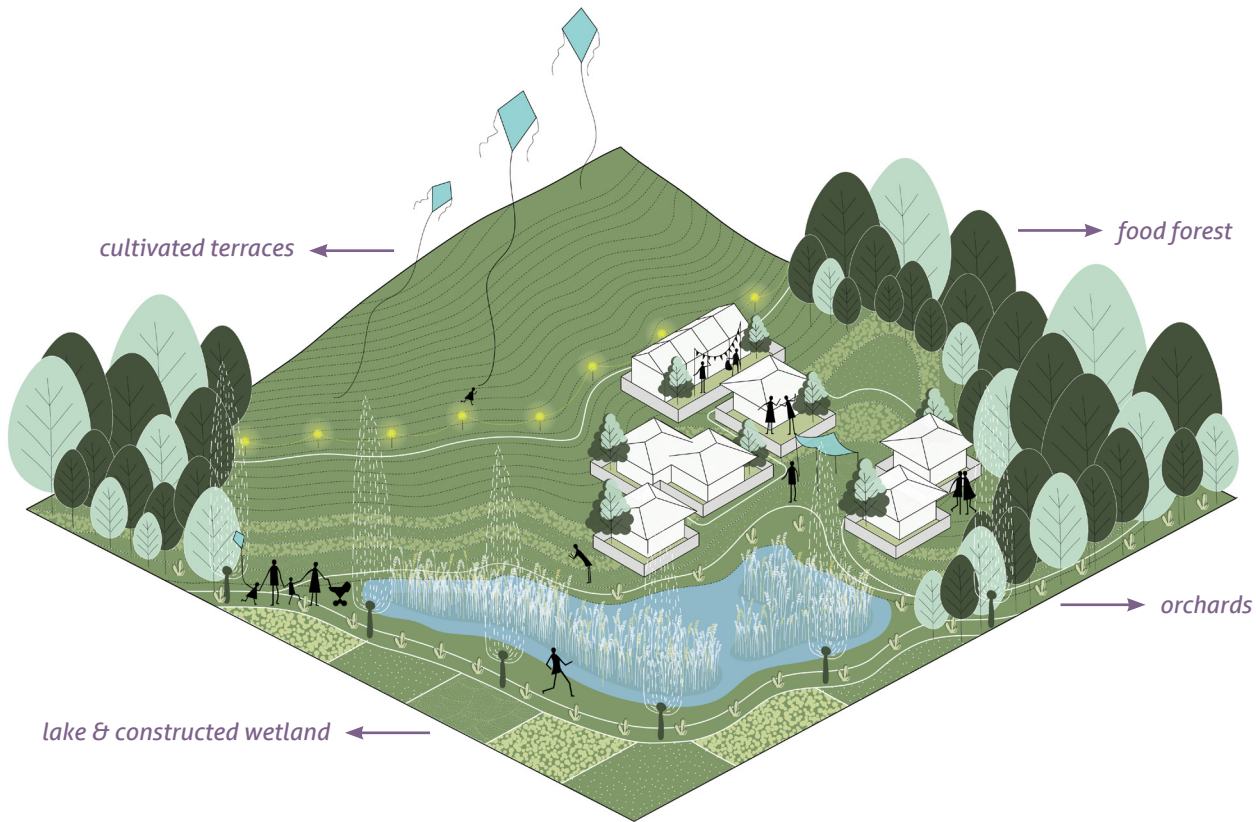
ORCHID CITY DOWNTOWN

The downtown area is well-integrated with the main infrastructure network, connecting Orchid City with the surrounding region. It represents a medium density urban landscape situated next to a lake, with public spaces, diverse programs, and various building typologies. This area represents the heart of Orchid city.

PROGRAMMATIC FEATURES

- › Apartment buildings with a diverse and inclusive set of apartment typologies
- › Offices & co-working spaces
- › Schools and healthcare center
- › Restaurants, shops, and entertainment
- › Urban farming and green terraces
- › Inclusive public spaces for events



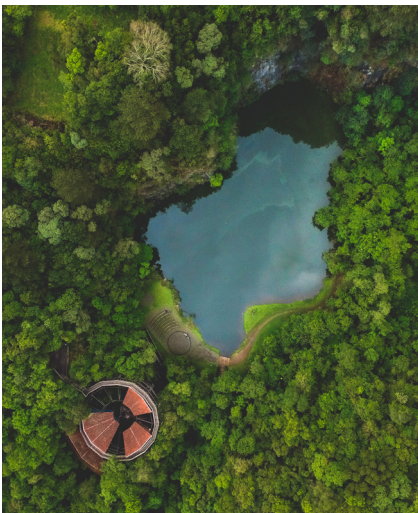


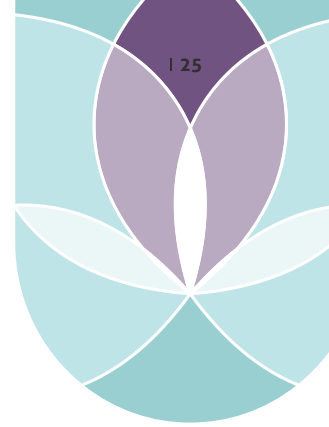
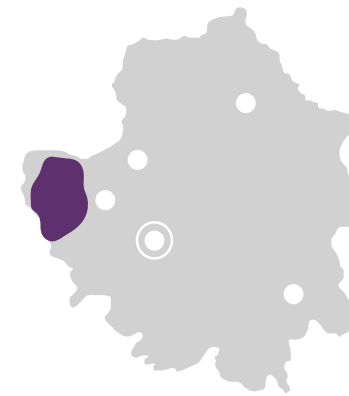
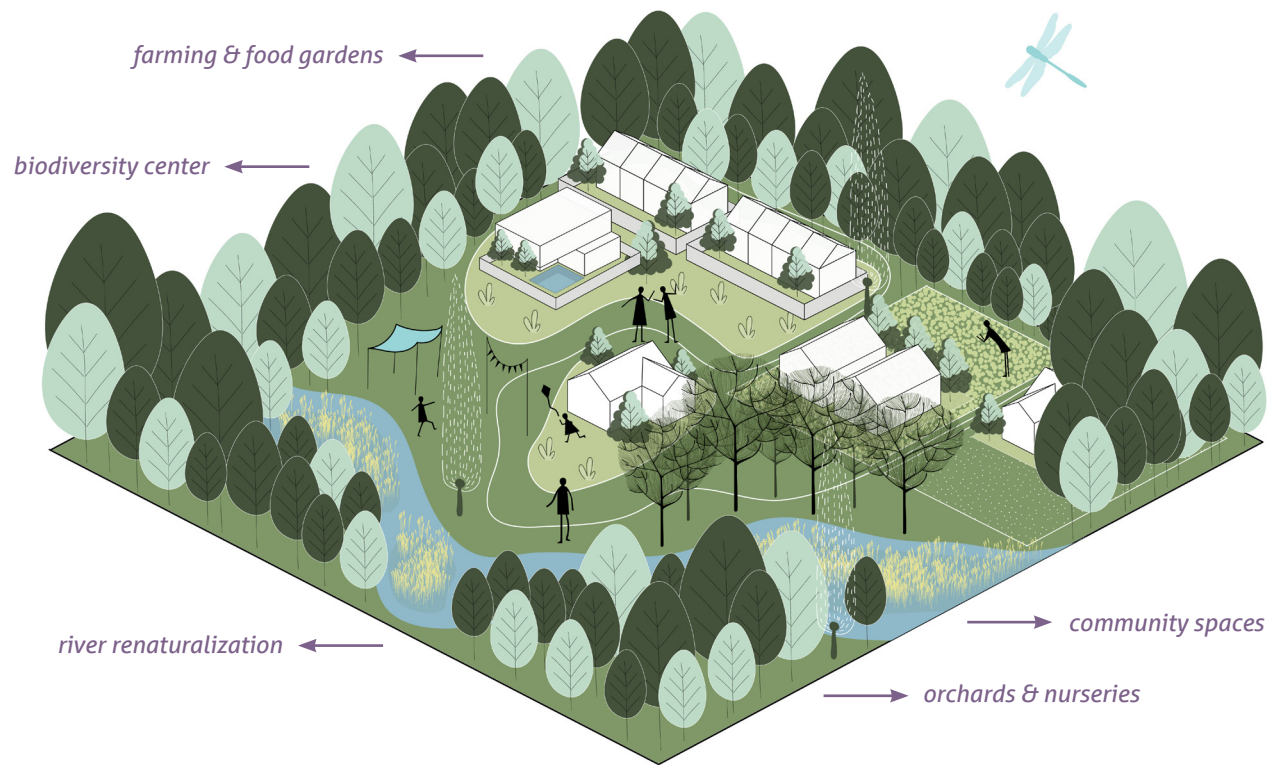
NEIGHBORHOOD ON THE TERRACES

The upper north-east of Orchid City, The Valley comprises a landscape of constructed productive terraces, surrounded by wetlands and orchards. The housing typologies, most (semi)detached, are spread across the landscape, which results in a patched work landscape composition with stunning views.

PROGRAMMATIC FEATURES

- › Terraced agriculture
- › Orchards and agroforestry
- › Constructed wetlands and small lakes
- › Neighborhoods surrounded by nature
- › Villas and detached houses with gardens
- › Sport and leisure trails through the hills
- › Hillside restaurant & Spa
- › Local community spaces





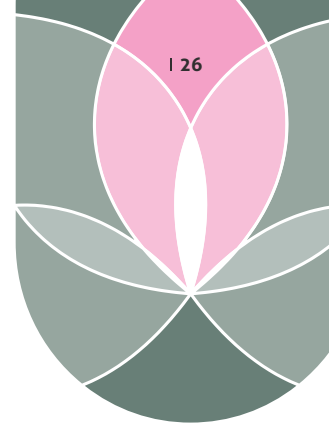
RIVER FOREST NEIGHBORHOOD

Situated on the border of a natural area in the west of Orchid City, this satellite features a landscape in symbiosis between culture and nature, which shapes the neighborhood. The food forest and river park provide a habitat for biodiversity, and a productive and leisure landscape altogether.

PROGRAMMATIC FEATURES

- › Villas, semi-detached and detached houses with gardens
- › Riverside nature conservation
- › Nature inclusive farming
- › Community outdoor spaces
- › Orchards and nurseries
- › Local food fair space





OC NETHERLANDS THE WOODS

Orchid City the Woods is situated in a former 'polder' area. The masterplan consists of a rewilding strategy combined with regenerative production, agricultural innovation and greenhouses. Its core has an urban vibe, surrounded with satellites in diverse landscapes such as wetlands, forests and fields. The landscape mirrors a core objective of this plan, developing knowledge in agricultural production, climate adaptation, generational inclusion and senior care.

SPECIFIC FEATURES

- › Research & Higher learning
- › Regenerative nature
- › Climate adaptive solutions
- › Trans-generational living
- › Affordability

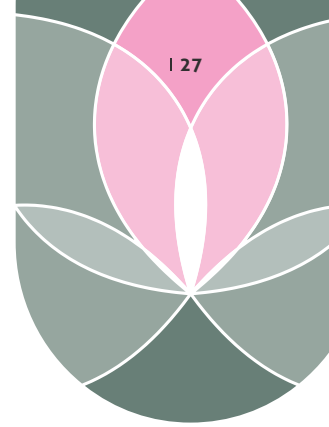
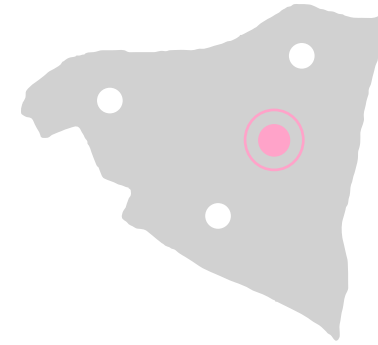
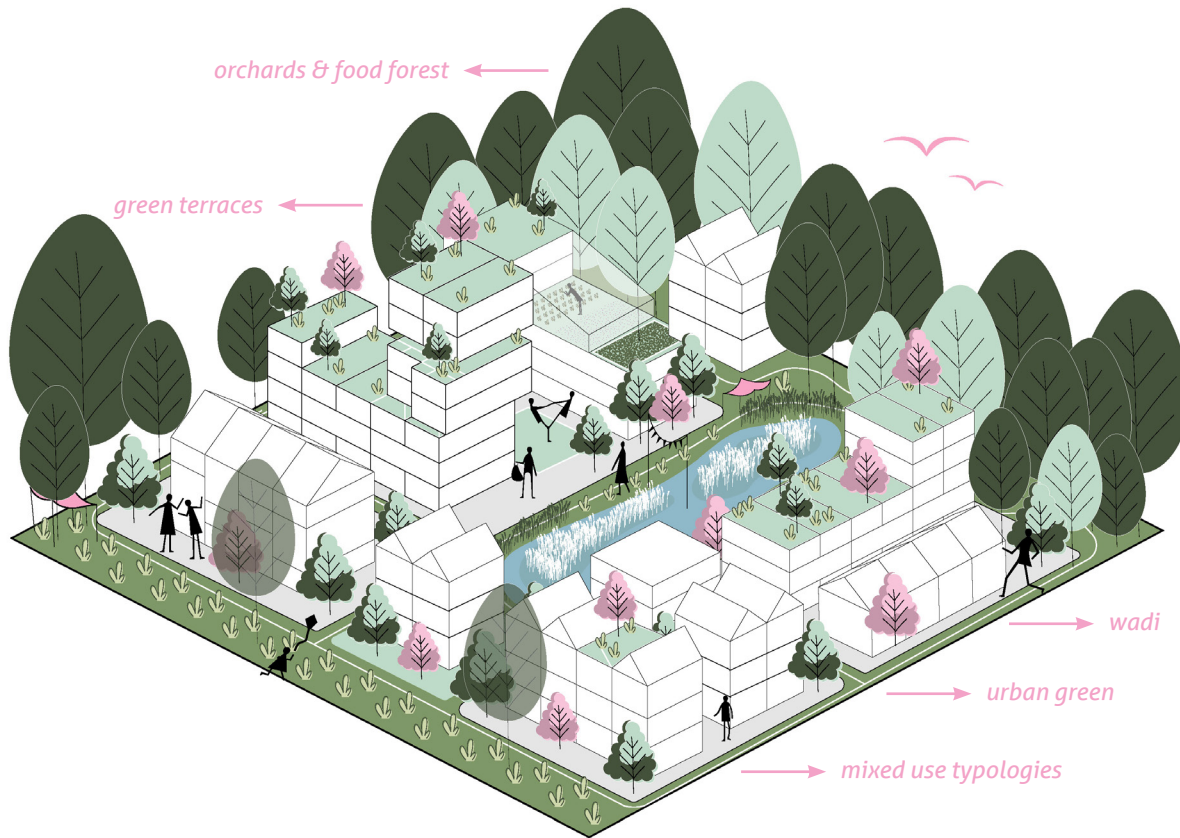
PROJECT DATA

- › Inhabitants: 5,000
- › Total area: 1,845 ha
- › Built / Open: 33 ha / 1,812 ha
- › Development IRR: 20%



LEGEND

- | | | |
|--------------------------------|--------------------------------|--|
| SILVOPASTURE | AGRICULTURE (VARIETY OF CROPS) | SURFACE WATER (RIVER, LAKE, WETLAND, WADI CHANNEL) |
| AGROFORESTRY | AGRICULTURE (VARIETY OF CROPS) | BUILT AREA (HOUSING & FACILITIES) |
| FIELD AGRICULTURE | RICE PADDIES | EXISTING INDUSTRIAL SITE |
| AGRICULTURE (VARIETY OF CROPS) | AQUATIC PLANTS | ROADS |
| AGRICULTURE (VARIETY OF CROPS) | ORCHARDS | RAILWAY |
| AGRICULTURE (VARIETY OF CROPS) | GREENHOUSES | BRIDGES |



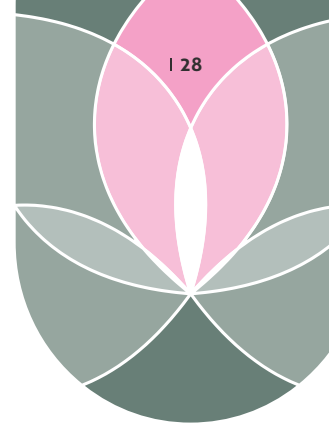
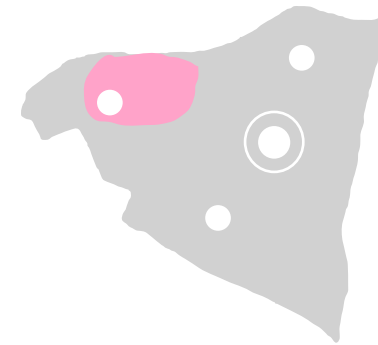
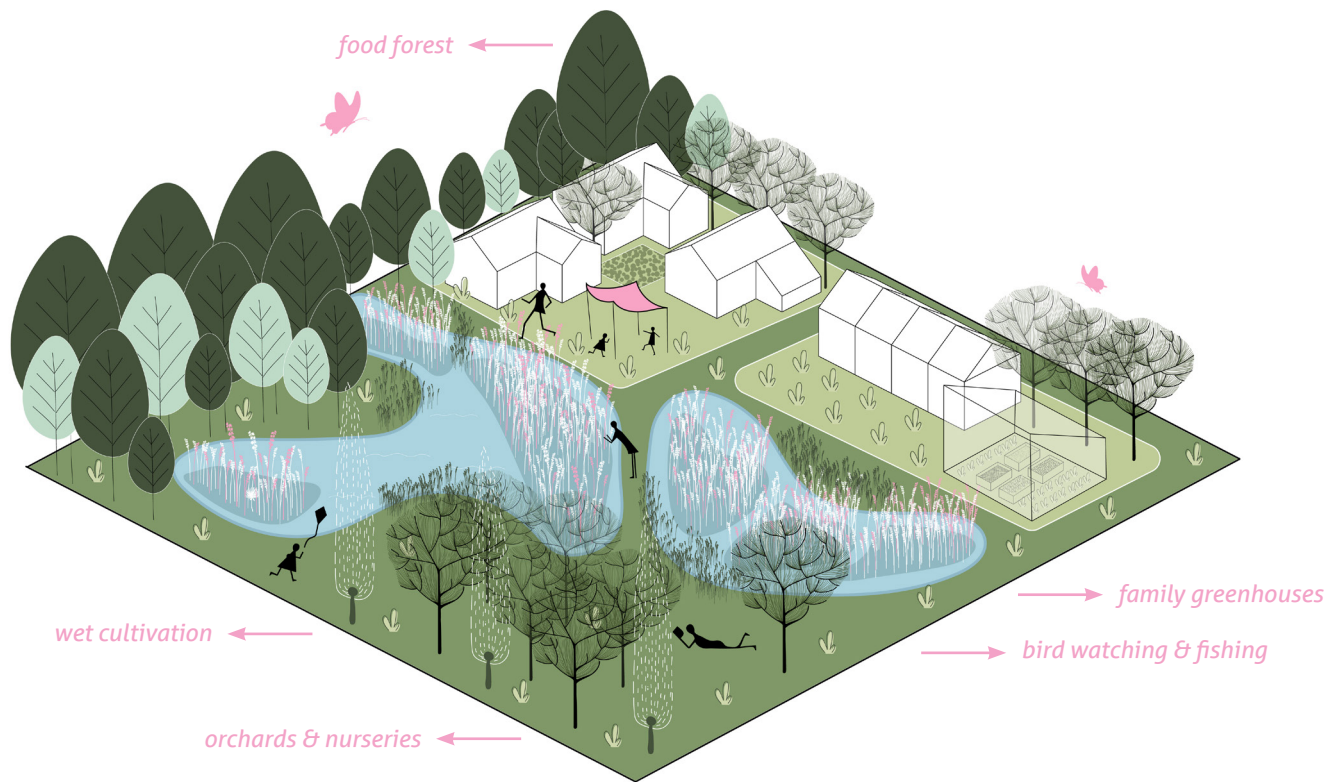
ORCHID CITY DOWNTOWN

Located next to the forest, on the fields and in the center of Orchid City, the Downtown has an urban vibe, with a high density of different housing typologies for students, families and elderly. Different functions like sports and meeting spaces are integrated within the public space. The roofs of the buildings are used for food or energy production, and the lake is used for rain water retention and leisure.

PROGRAMMATIC FEATURES

- › Apartment buildings with diverse typologies, Row housing
- › R&D Laboratory
- › Offices & co-working spaces
- › Schools and healthcare center
- › Restaurants, shops and entertainment
- › Green terraces
- › Community spaces



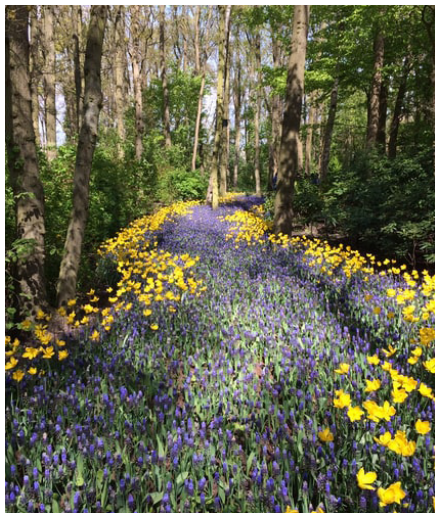


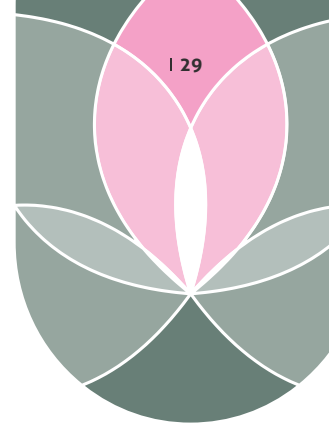
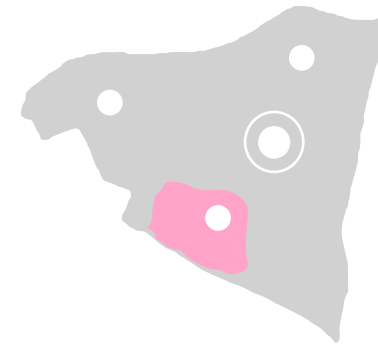
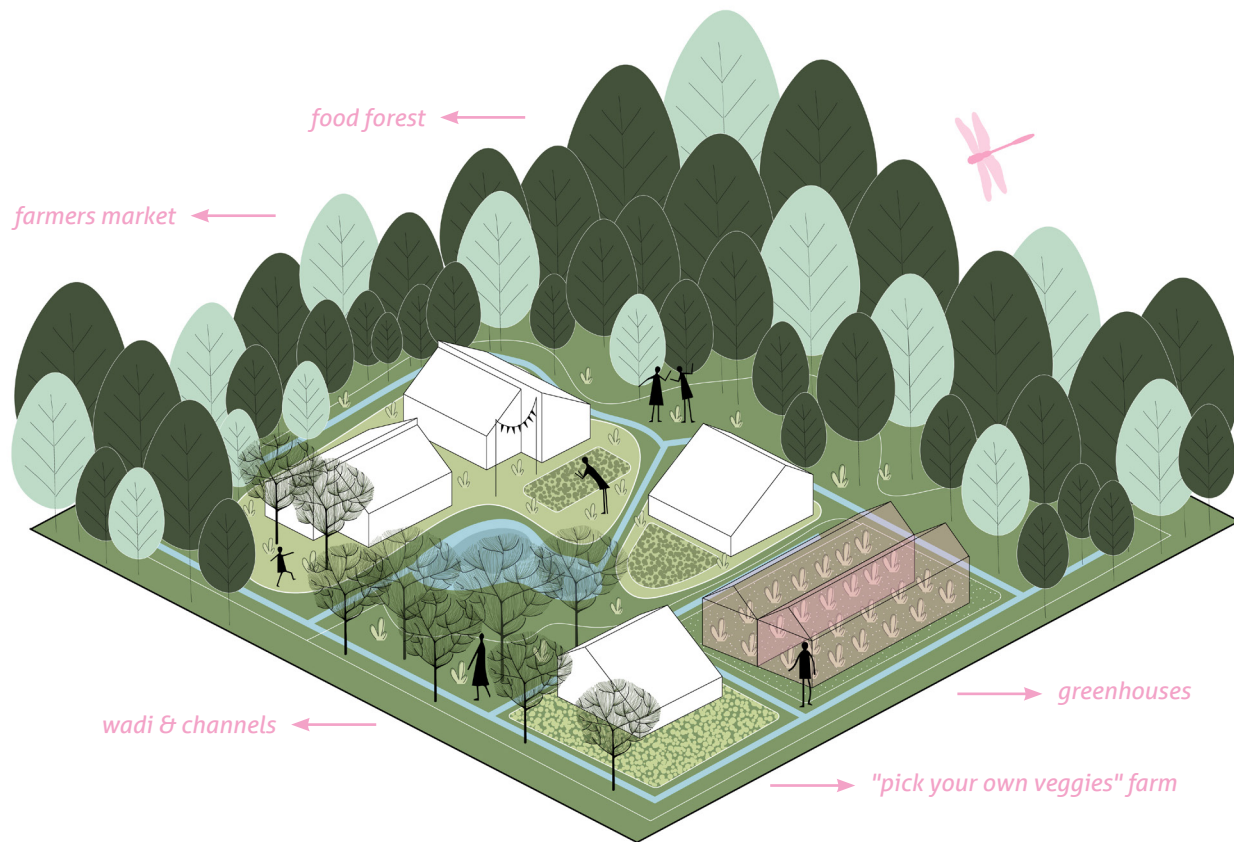
NEIGHBORHOOD ON THE WETLANDS

Situated in the west of Orchid City, this area represents a neighborhood built around and on the water. A living lab for the future of the Netherlands, experimenting with water management, wet cultivation and a habitat for birds.

PROGRAMMATIC FEATURES

- › Semi-detached and detached houses with gardens
- › Wet cultivation and aquatic vegetation
- › Forest of wild vegetation
- › Bird watching areas & fish ponds
- › Community living spaces
- › Family greenhouses and nurseries
- › Leisure areas, sailing and fishing facilities





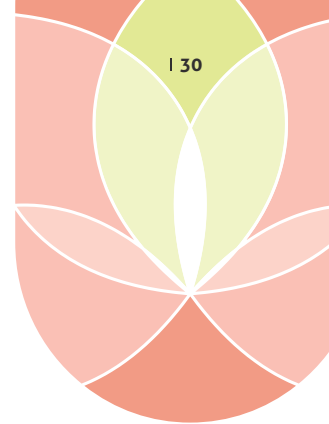
FARM VILLAGE

The area is located in the central-south part of Orchid City and it represents a Farm Village in the middle of nature, with various types of inclusive agriculture, such as a food forest, open fields and greenhouses. The Farm Village is a habitat for biodiversity and a food producing landscape all in one. The houses are spread over the landscape for the ultimate farming experience that facilitates a farming community.

PROGRAMMATIC FEATURES

- › Villas and semi-detached houses with gardens, and row housing
- › Various production types: food forest, open field agriculture and greenhouses
- › Farmers market
- › "Pick your own veggies" farm
- › Slow-food restaurant





OC VIETNAM THE DELTA

Orchid City, The Delta is situated in the north of Vietnam's Mekong delta area. Here, the issue of flooding is a crucial topic. The landscape is purposely designed to guide, control and invite water in different areas of the city. While mangroves and elevated land protect the waterfront, productive constructed terraces, food forests, flood plains and a system of channels are introduced in the inland. This plan focuses on extra job creation and water purification.

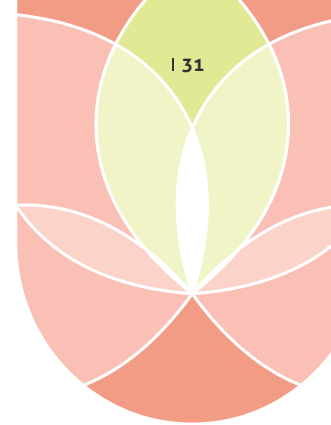
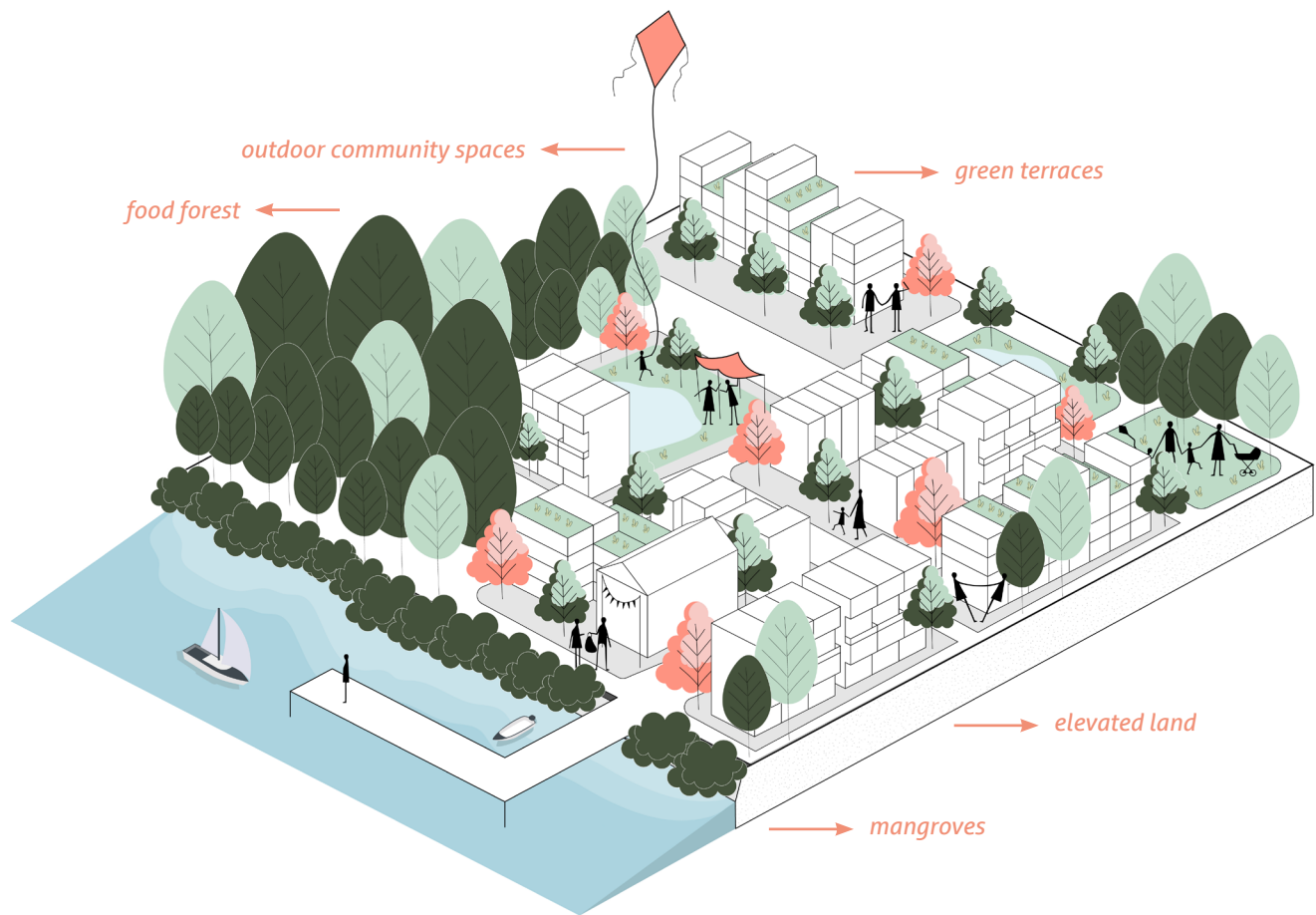
SPECIFIC FEATURES

- › Flood-proofing
- › High-tech agriculture & water purification
- › Diverse and fresh locally grown food
- › Rural job creation & De-urbanization

PROJECT DATA

- › Inhabitants: 5,000
- › Total area: 1,474 ha
- › Built / open: 21 ha / 1,453 ha
- › Development IRR: 18%



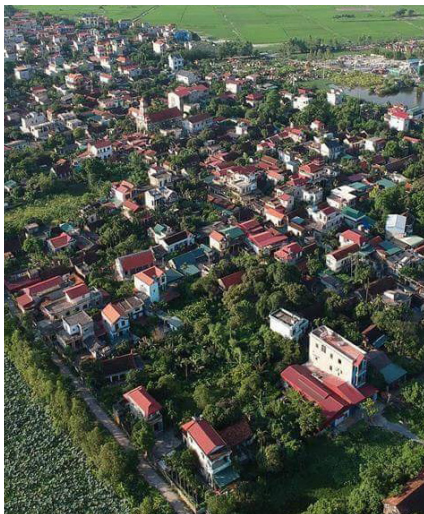


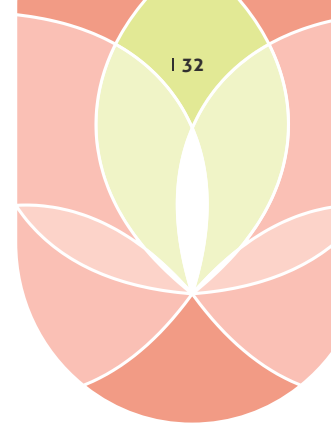
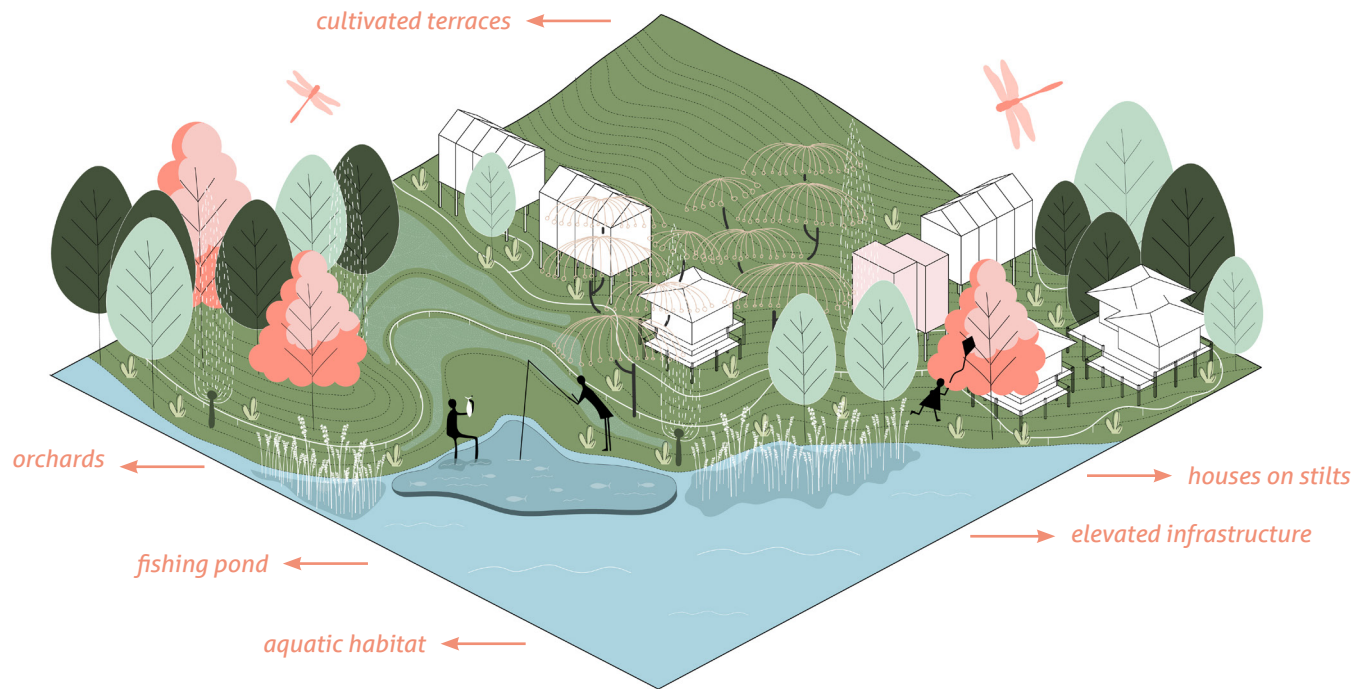
OC WATERFRONT DOWNTOWN

The Downtown is organized in two parts: the inland and the waterfront. The latter is the biggest area of denser urban features within Orchid City, the Delta. It comprises of mixed apartment buildings with a variety of typologies, and a series of facilities for the entire city, as well as public areas and spaces for events. The entire downtown is on elevated land, protected by mangroves along the waterfront. The port hosts both goods and tourists and it connects to a series of smaller docks along the waterfront.

PROGRAMMATIC FEATURES

- › Diverse apartment buildings & row houses
- › Offices & co-working spaces
- › Schools and healthcare center
- › Restaurants, shops and entertainment
- › Port
- › Bioretention areas





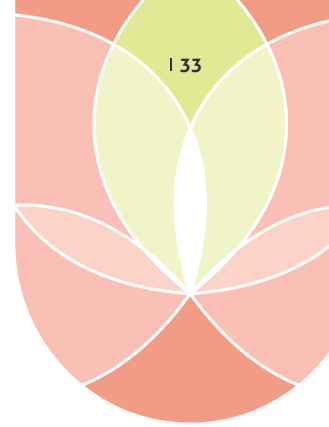
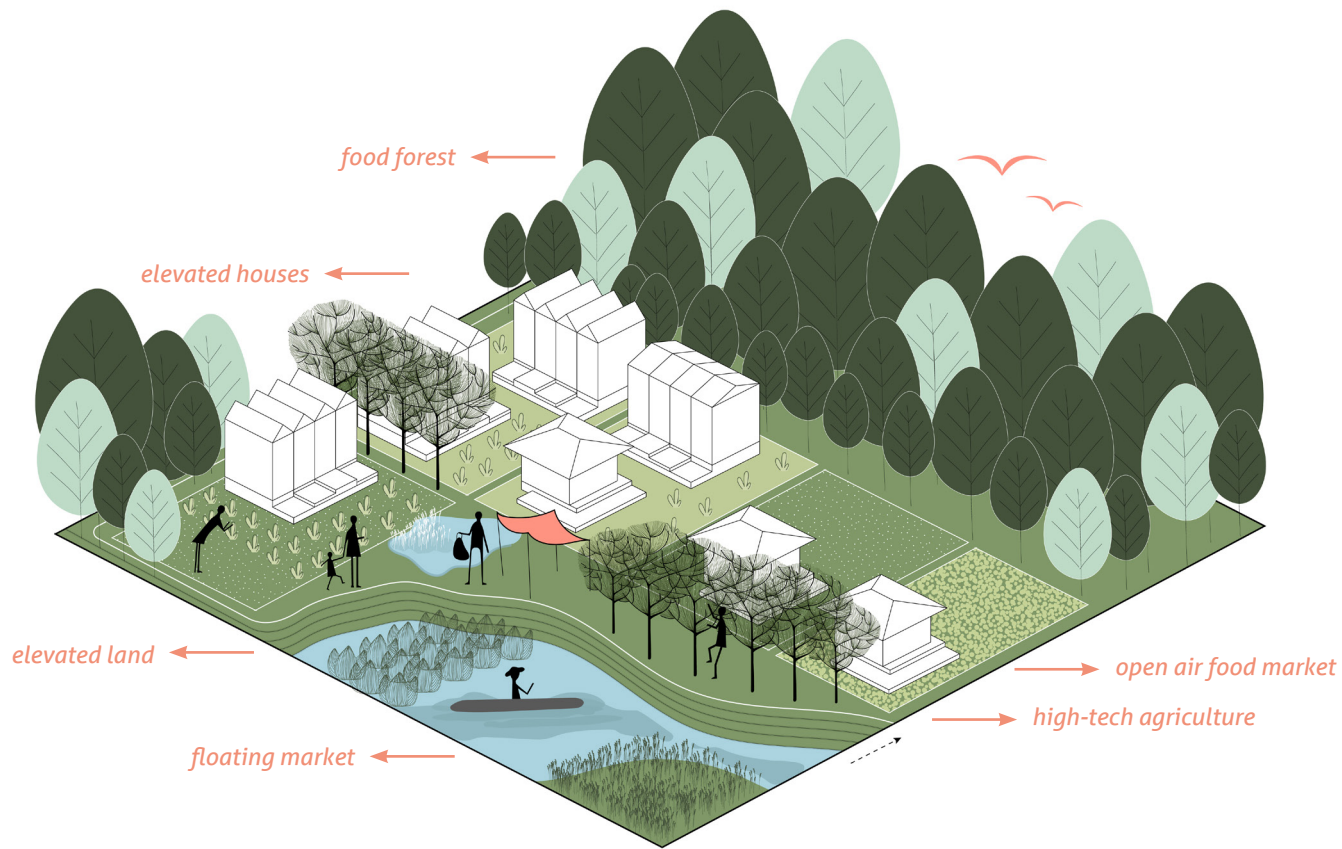
NEIGHBORHOOD ON THE TERRACES

The terraces are located on the north-west of Orchid City, The Delta. While intended as a flood-proof measure, the terraces are also cultivated with a variety of crops, including rice paddies and orchards. Villas and semi-detached houses with gardens populate the top parts of the terraces, while villas on stilts are located on the lowest parts and nearby the waterfront, where the fishing pond is also located.

PROGRAMMATIC FEATURES

- › Villas and semi-detached houses on stilts
- › Elevated flood-proof & productive terraces
- › Elevated infrastructure & food-storage units for emergency situations
- › Fishing ponds
- › Aquatic vegetation, orchards & rice paddies





NEIGHBORHOOD IN THE FOREST

The entire waterfront on the east of the site is surrounded by a food forest, which is an extend to the riparian belt. The city grows its own food within this area, as well as on the open field agriculture and orchards, which are located in inland. This area is elevated in regard to the river crossing nearby, which hosts a floating market. Elevated semi-detached and detached houses with private productive lots and gardens, and an open air food market populate this part of Orchid City.

PROGRAMMATIC FEATURES

- › Elevated row houses, semi-detached & detached houses
- › High-tech agriculture & greenhouses
- › Food forest and silvopasture
- › Open field agriculture and orchards
- › Floating market and open air food market
- › Elevated land nearby the river





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