

11th LE:NOTRE Landscape Forum April 26 - 30, 2022 in Rimini, Italy



LE:NOTRE Institute
Linking landscape education, research and innovative practice

ECLAS
EUROPEAN COLLEGE OF
LANDSCAPE ARCHITECTURE
SCHOOLS

 Regione Emilia-Romagna

INTERNATIONAL STUDENT COMPETITION

Rimini - Dancing to the Future

Prize-winning teams of the 8th LE:NOTRE Institute Student Competition



First Prize: Dancing with Fellini

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Red thread of this project is the atmosphere that Fellini is showing in his movie *Amarcord* – I remember. We understand Fellini as a synonym for strong community.

As in Fellini's time, Rimini still has one main city centre. Nowadays one centre is not enough to support the whole city, because it has grown too much. In addition, there is a significant problem with the barriers such as heavy traffic roads, railway and river channels. These are challenging to overcome for pedestrians, cyclists and residents who live in hinterlands and work in the city.

Our proposal is to use Fellini's inspiration and design the city with a network of strong communities. To achieve a strong social system, we need other supportive systems. To create an environment friendly to pedestrians and cyclists, car traffic has to be moved out of the city and replaced with developed public transport network. To create a healthier and more pleasant living space, the existing green areas will be connected with new ones. With that we reduce heat islands. New more self-sufficient neighbourhoods are created by using natural resources such as water and sun energy. City is protected with anti-flood measures, while utilizing floods to produce electric energy.

When we were designing the public space of Rimini we were trying to see it through Fellini's eyes. We became the scenarists of the city and designed Rimini a place that makes dreams come true. Like Fellini said: "living a dream is like making a movie".

There are one main green area and many greenery corridors on the western side. It is a distinctly linear city, where linear areas are separated from each other by strong barriers that are formed by transport infrastructure. Due to ease of car and heavily to drive it is necessary to have a car for everyday migrations, but traffic is inefficient and people are being driven off the streets.

AMARCORD "I remember..."



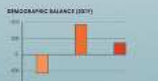
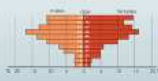
Fellini is a synonym for strong community and good landscape connections. (SOC-ECON)



Small used to be small enough that one city center could fulfill people's needs. (SOC-ECON)

Now the barriers are dividing the city into fragments and city is space with good potentials of living community. (SOC-ECON)

There is a potential to develop here's one main city center to collect or attract. (SOC-ECON)



How is the community connection applied in space? (SOC-ECON)

Greenery was everywhere, the city was kind to nature. (GH)

People would gather on green patches under the shade of trees and spend their family time on the beach or on the beach. (SOC-ECON)

Green patches are divided and need connection. (GH)

Cycling here is dangerous and unpleasant because of cars and lack of greenery. (GH)

How does transport network connect with green infrastructure and people's activities? (SOC-ECON)

Coastline changes was always part of them. (WAT-ENVI)

People were aware of energy, they were enough to sample the water. (SOC-ECON)

Flood risk is becoming a big problem because of sea level rise. (WAT-ENVI)

Solar panels are the main sustainable way of producing electricity. (WAT-ENVI)

Can we connect nature and fantasy to produce energy? (SOC-ECON)

Greenery was everywhere, the city was kind to nature. (GH)

People would gather on green patches under the shade of trees and spend their family time on the beach or on the beach. (SOC-ECON)

Green patches are divided and need connection. (GH)

Cycling here is dangerous and unpleasant because of cars and lack of greenery. (GH)

PROBLEMS POTENTIALS

transport barriers (GH)

existing transportation (GH)

Green patches are divided and need connection. (GH)

There is potential to connect the landscape with coastline. (GH)

Flood risk regarding to sea level rise. (WAT-ENVI)

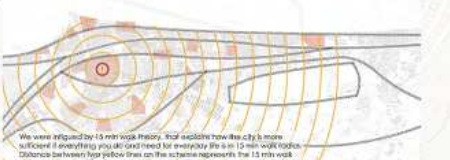
Main natural source of energy is solar. Beach can become a source of clean energy. (WAT-ENVI)

"...this was a town made for people..."



DANCING WITH FELINI

- LEGEND**
- public green area
 - beach area
 - industrial area
 - bulk area
 - agricultural area
 - community joint place
 - problem with beach privatization
 - house
 - building
 - center
 - hotel area
 - degraded area
 - heat island
 - area with potential
 - solar panel
 - restaurant
 - cultural heritage
 - school
 - post office
 - hospital
 - theater, cinema
 - bank office
 - ping-pong, stadium
 - parking lot
 - farm
 - barrier
 - main line
 - bike lane
 - bus route
 - railway
 - metro bus road
 - pedestrian zone
 - carried measures
 - niche line
 - green space
 - open public space
 - solar panel
 - pedestrian/cycling passage
 - niche line
 - pedestrian/cycling passage



VIASION CRITERIA

The areas were chosen because of potentials to develop transport, green infrastructure, energy production and water system. When these criteria will be reached, we will create self-sufficient communities.

SPERM GOALS

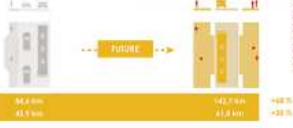
SOC-ECON Open public space and main services just a walk or bike ride away.

GH Adaptation and social friendly environment, developed public transport, less traffic.

ENVI Recreational areas, more green areas and less trees, reducing heat islands.

WAT-ENVI Protecting coastline from erosion, artificial...

is going to be commonly joint place with district centre, main services, pedestrian axis and strong connectivity. 13 new centres will renew main existing centre and will idea of 13 minute city core everyday life of Rimini's residents and visitors. We focused on harmonising relationship with time related to moving around the city.



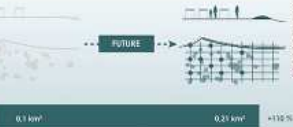
The whole city will be more compactly housing green but also more area mean more green pedestrian routes. For an urban and more sustainable planning new bike paths and green pedestrian routes will be considered. To emphasize the meaning of people into city core area and will have low-rise residential zones, urban public space activities. (RCC-CC01)

"Number one transportation will be bus and bike." (RCC-CC01)



Green zones on the side of the roads will reduce the heat and create a more pleasant environment in the direction of heat for pedestrians. They also represent an habitat for animals and help lowering the air pollution. (RCC)

"People will feel better and healthier. The quality of life in Rimini will improve. There will not open be the centre of gathering." (RCC-CC04)



The roof tile will be replaced with the construction of ramps and or new cycle lanes. People will be allowed on same buildings used the solar to produce more green energy. (RCC-CC05)

"We will use residents, tourists and local hydrocarbon more green energy." (RCC-CC05)

CONCEPT



Small electric car **PELIM** that drives without pedestrian zone.

CARS are allowed outside the pedestrian zone.

BIKE PATHS for people to use a bike.



GREEN PATCHES reduce heat and make city place more sustainable.

EXCESSIVE TREES to create shade in the summer. They make it more pleasant and healthier.



ROOF CREDS on the roof of public building and on some private building where the regulation is possible.

Small electric car **PELIM** (pedelec) for vehicles.

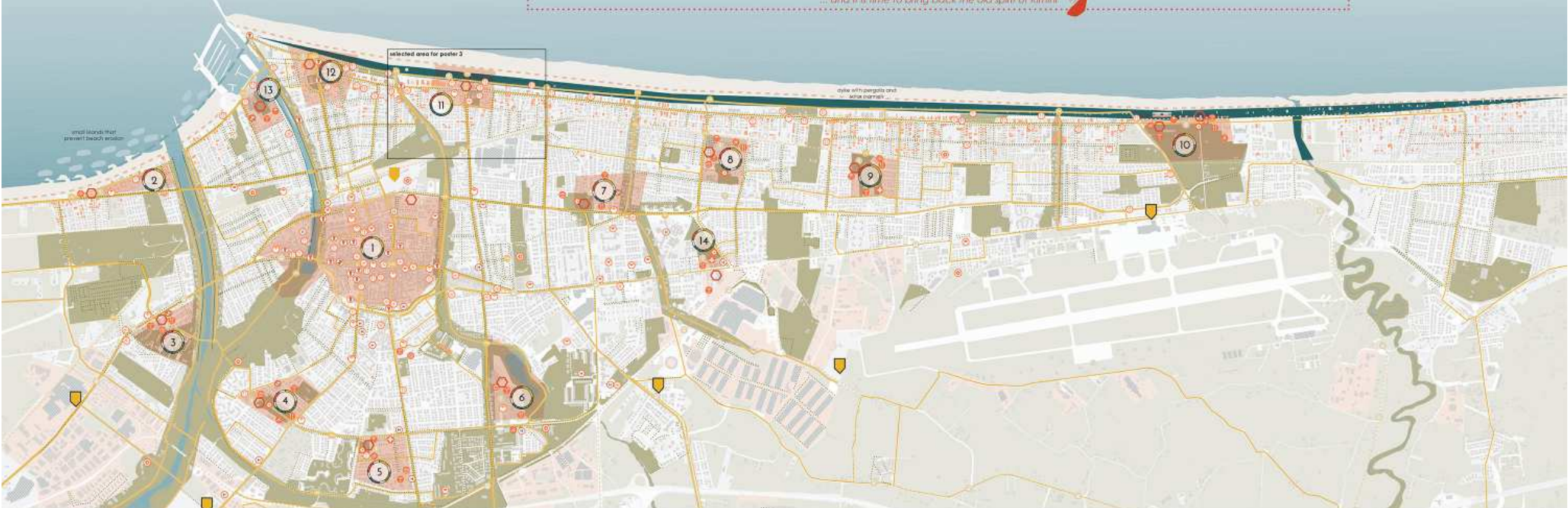
ELECTRIC BIKES zones, where you can use a bike.



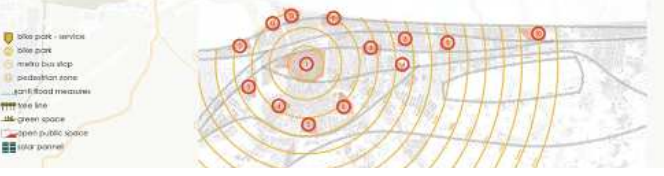
The beach of Rimini is now more accessible and is no longer covered by a long barrier in goods. The privileged area is now 25 km long and the rest of the beach is not privileged. That way the beach area is much more frequent, accessible and is attracting people to move around the beach and do their activities.



"... and it is time to bring back the old spirit of Rimini!"



- LEGEND**
- public green area
 - beach area
 - water
 - industrial area
 - build area
 - agricultural area
 - park garden
 - sear parcel
 - communitly joint place
 - WW barrier
 - tree line
 - bike lane
 - bus route
 - railway
 - main bus
 - road
 - hotel
 - private beach
 - district centre
 - existing service
 - new restaurant
 - new bar
 - new market
 - new post office
 - new pharmacy
 - new health/clinic
 - new bank office
 - new playground/field
 - bike park - service
 - bike park
 - metro bus stop
 - pedestrian zone
 - anti-flood measures
 - new bike
 - new green space
 - open public space
 - star parcel





PEDESTRIAN ZONE

This area is closed for traffic on cars and buses. The space is designed for pedestrians and bikes. The only vehicle that is allowed in this area is a small electric bus named Feltri. Feltris are intended primarily for the older people, people with disabilities and tourists.

Before: 3,000 m² (3,000 m²)
After: 13,000 m² (13,000 m²)

pedestrian zone
 main road for cars and buses
 one-way road
 entrance with wheelchair permission only
 streets named after Feltri
 railway

Car sharing

Car-sharing spots are designed for car sharing. They have their own parking spots on right side of each one-way road. People who want to drive in the area between Feltri and beach will use a car here to use car sharing.

Before: 2,114 m² (2,114 m²)
After: 2,040 m² (2,040 m²)

car sharing
 rain gardens
 green space
 car garden

Dense tree line

Pedestrian zone has big deciduous trees that cover most of the space and shade people in the summertime. The spaces already exist for people who walk or ride their bike in this area. It will have more trees because they produce less noise.

Before: 41,000 m² (41,000 m²)
After: 141,500 m² (141,500 m²)

tree line
 green space
 car garden

Double tree line

Next to the road with the most traffic, we will create tree line on both sides of the road. This will help to calm down the car fumes and make it clearer. Trees will also get green line underneath them, so they will have better conditions to grow.

Before: 2,114 m² (2,114 m²)
After: 2,040 m² (2,040 m²)

tree line
 green space
 car garden

One side tree line

Some streets have just one side tree line. These are mostly already which have one-way road. These are placed between parking spots and create shade for pedestrians and cyclist.

Before: 2,114 m² (2,114 m²)
After: 2,040 m² (2,040 m²)

tree line
 green space
 car garden

Small electric bus - Feltri + electric bikes

Electric Feltris have required solar cells on the roof. But to have they power the electric battery, they will also be covered by solar cells in front of the Feltri on the roof.

Before: 4,500 m² (4,500 m²)
After: 6,100 m² (6,100 m²)

water use system
 flooding
 rain gardens
 solar panels on pergola
 solar panels on roof

Electric bus

Electric buses will have solar cells on the roof and use their energy to drive through the city of Feltri.

Before: 4,500 m² (4,500 m²)
After: 6,100 m² (6,100 m²)

water use system
 flooding
 rain gardens
 solar panels on pergola
 solar panels on roof

Electric car sharing

With system of car sharing, Feltri will become a greener place with lower noise and emissions because all the cars will be covered by electricity. This is the latest driving technology and it will be a solution for parking spaces. These cars will save time and money and it only costs when we really need it.

Before: 4,500 m² (4,500 m²)
After: 6,100 m² (6,100 m²)

water use system
 flooding
 rain gardens
 solar panels on pergola
 solar panels on roof

URBAN GARDENS
 Urban gardens will be located on streets named after Feltri. They are named after Feltri's movies and movie's characters.

We would like to upgrade the spot of Feltri and implement his vision of liberally connected community into these streets.

Every street will get a new role in terms of parking units and blocks. With that the maximum use of Feltri must be the beach and get rid of large of blocks. In that way we will improve the streets that are already important to beach and have symbolic value.

Along streets named after Feltri, local and Feltri will be able to plant some vegetables and other plants. In that way we will expand food production and local will be able to teach others about their location.

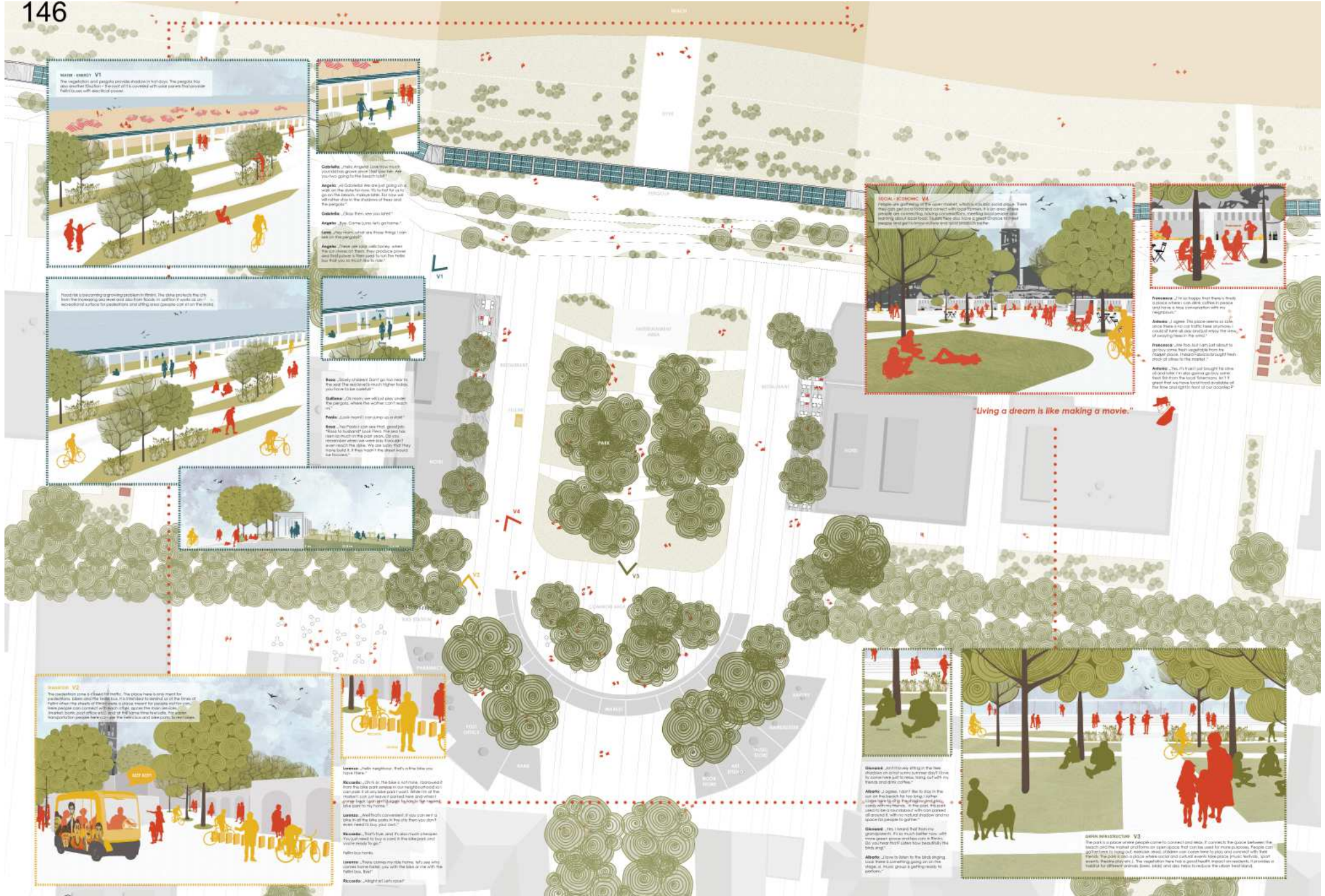
Urban gardens will also contribute to the green infrastructure and help the city move towards being more sustainable.

On the beach we will reduce the amount of private beach spaces. Only small areas will be labeled as private. Small houses for umbrellas and beach equipment will be there but the ground underneath protected from sea level rise.

- LEGEND**
- new restaurant
 - parking
 - post office
 - new post office
 - new pharmacy
 - new school, cinema
 - new bank office
 - photograph studio
 - night
 - bike path
 - bus stop
 - urban garden
 - public green area
 - beach area
 - local area
 - rain gardens
 - solar panels
 - community post office
 - digital cinema
- SCALE 1:1000



All of this area is closed for traffic. Parking is in one level and the space is used as productive zone. People have walking and cycling here. All of this area is meant for people to gather and socialize.



HAZAR ENERGY V1
The vegetation and people provide shade in hot days. The people that you breathe the heat - the rest of it is covered with solar panels that provide electricity with electrical power.



Collette: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

Agnes: "At the moment we are just going to it, you can't have a great look from just one, you're going to the beach!"

Collette: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

Agnes: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

Read the following paragraphs in French. The idea is to help the city from the morning to the end of the day. In addition, it is a good idea to have a school for children and a library for people who are in the area.



Agnes: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

Collette: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

Agnes: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

Collette: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"



HAZAR ENERGY V2
The vegetation and people provide shade in hot days. The people that you breathe the heat - the rest of it is covered with solar panels that provide electricity with electrical power.



Collette: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

Agnes: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

Collette: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

Agnes: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

LOCAL HISTORIC V1
People are gathering in the park, which is a public space. There are many people who are walking and talking, and there are many people who are sitting on the benches. The park is a great place to go to for a walk and to enjoy the view of the city.



Agnes: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

Collette: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

Agnes: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

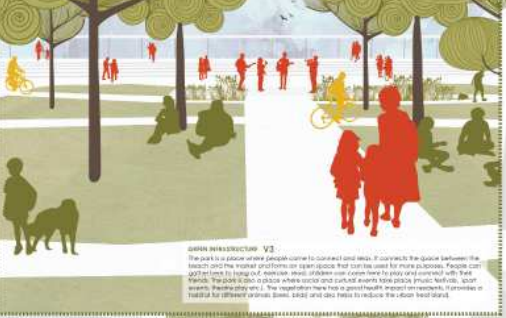
Collette: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

"Living a dream is like making a movie."

HAZAR ENERGY V3
The vegetation and people provide shade in hot days. The people that you breathe the heat - the rest of it is covered with solar panels that provide electricity with electrical power.



HAZAR ENERGY V4
The vegetation and people provide shade in hot days. The people that you breathe the heat - the rest of it is covered with solar panels that provide electricity with electrical power.



Collette: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

Agnes: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"

Collette: "I like a great look from many, you can't have a great look from just one, you're going to the beach!"



Second Prize: Motioning towards Eco-Journey

Angkita Hawlader, Mahasta Mahfouzi, Isat Jahan Nishat, Maximilian Stauch

HSWT Weihenstephan-Triesdorf & HfWU Nürtingen-Geislingen, Germany

Rimini is a landscape of complex mechanisms within different layers - tourism, industry, small-business and agriculture. Thus, we found its resemblance to a machine and envisioned Rimini as a machine of landscape.

Though the terms 'landscape' and 'machine' are dissonant, this contradiction is justified while considering a large-scale landscape like Rimini. Locals are barely involved in its landscape intervention. Meanwhile, this landscape serves significant purposes as agricultural-production, natural reserves, and urban-infrastructure territory. These two practical facets aid in perceiving the machine aspect of this landscape.

Rimini landscape machine needs the power to work better, which is our design intervention. As our concept, we added new functions in different zones with physical and functional connectivity, so that each individual function of this machine can get integrated and start moving. We have introduced a new shoreline for Rimini - the eco-corridor - promoting ecological buffer and sustainable growth for the future.

In our focus area, the potential of historically significant River Ausa is enhanced by renaturalizing, connecting with the existing green network and developing community gardens around it, resulting in a new aura - with more greenery, less fragmentation, improved accessibility, boosting community and tourist participation - thus increasing its economic factors.

Whenever this landscape machine starts working, it will convert the dull and fragmented landscape to a landscape with sustainable tourism, renewable energy, agricultural growth, heritage, culture, and social strength. For a while, it may seem immobile but with time the landscape machine of Rimini will start motioning towards eco-journey.

RIMINI - A MACHINE OF LANDSCAPE

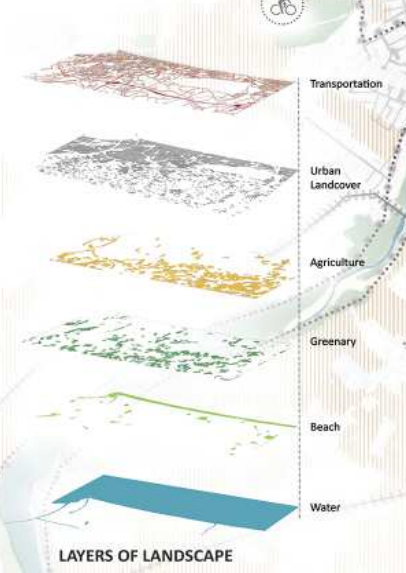


STAKEHOLDERS MAPPING
Development and strategic plans mostly targeted towards tourists, most important actors - the locals - have often been overlooked in the overall vision for Rimini.

HOW THE EXISTING MACHINE IS WORKING? Some malfunctions within landscape machine of Rimini - different zones are not in harmony with each other, the urban area lies in a high flood risk zone due to the surface seal-off, artificial canalisation of the rivers - "The forgotten Ausa" and the major peri-urban agricultural area is almost overshadowed by seafront tourism.



HOW CAN WE REPAIR THE LANDSCAPE MACHINE? The existing condition needs some connections and inputs for which it lacks in great landscape productivity. This machine of Landscape needs the power to work better, which is our design intervention. Whenever it starts working, it will produce the full and fragmented landscape to the desired one - where there will be sustainable tourism, renewable energy, growth of agriculture, heritage, culture, and Social Strength!



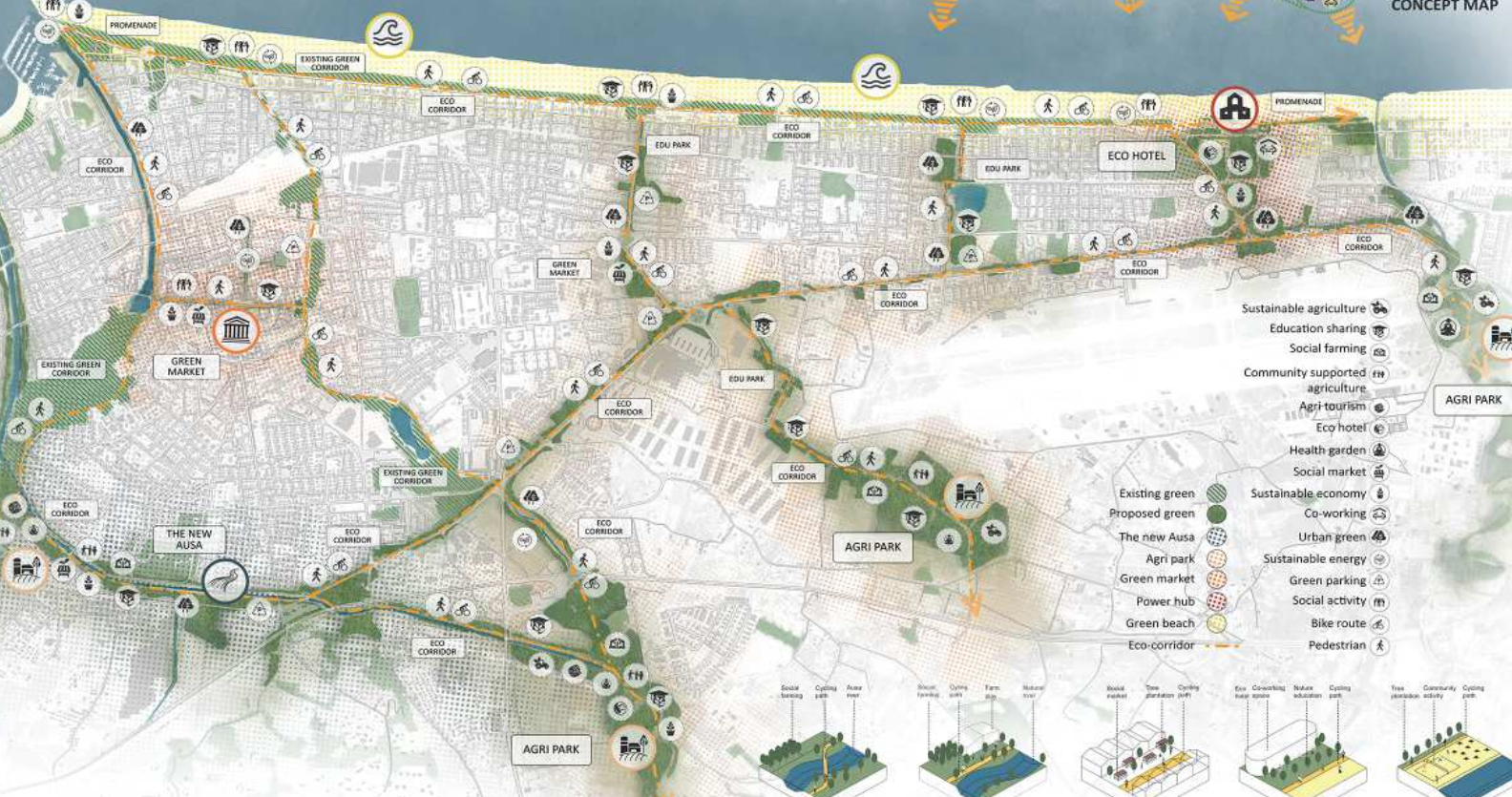
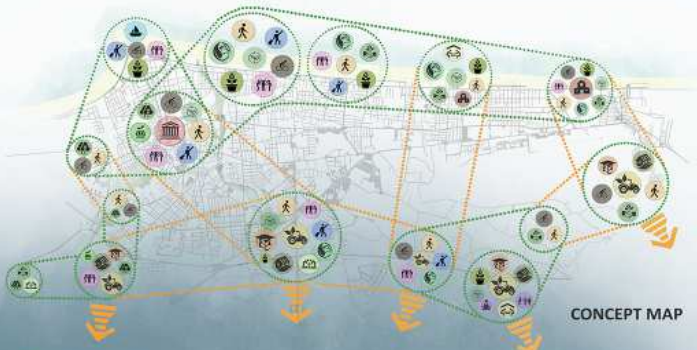
INTEGRATING THE UNITS



HOW ARE WE REPAIRING THE LANDSCAPE MACHINE OF RIMINI ?

To make this landscape machine work better, as a part of our concept, we used our intervention by adding some new functions in the different zones. We connected these different zones with both physical and functional connectivity by means of **tourism, agriculture, health, educational and economic aspects**, so that each different functions of this machine can get integrated and start evolving.

Rimini has the beach shoreline and we introduce this new ecological shoreline that promotes a sustainable plan which is very much needed for this landscape machine and the machine will start its work for producing something better which will help Rimini move towards an eco-journey in the future.



- Sustainable agriculture
- Education sharing
- Social farming
- Community supported agriculture
- Agri-tourism
- Eco hotel
- Health garden
- Social market
- Sustainable economy
- Co-working
- Urban green
- Sustainable energy
- Green market
- Social activity
- Bike route
- Pedestrian



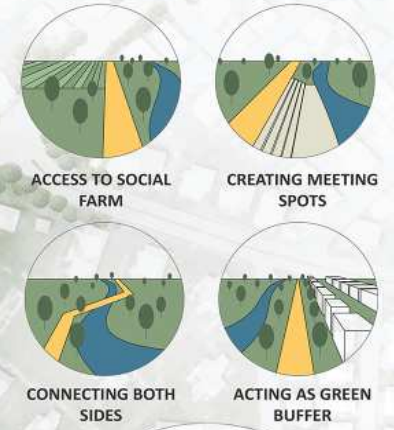
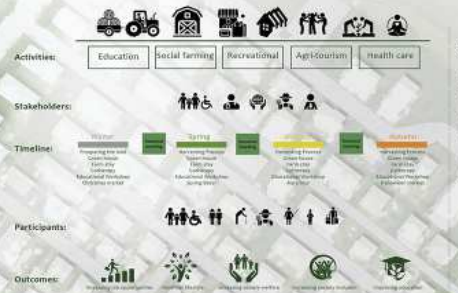
INTERVENTION ZONES



MOTIONING TOWARDS ECO-JOURNEY



THE NEW STORY OF AUSA



The potential of the Ausa river, which is historically significant, has been used to restructure it, giving it a more natural appearance - thus creating a new story for AUSA! Along this AUSA, different functions like social farming, health gardens, co-learning, green market, restoration of riparian zones etc have been developed. The orange path along the river - which is the eco-corridor - connects with the already existing green corridor and has the potential to develop further towards the hinterland in the future. The eco-corridor is altering the river's side to allow greater space to nature. It gives access to social farms, as well as other activities along the AUSA in some places, and sometimes it also serve as a gathering place or a point of involvement. This newly developed eco-corridor has the potential to transform the city's tourism, into something more sustainable and environmentally friendly.



FOCUS AREA



MOTIONING TOWARDS ECO-JOURNEY

THE AUSA HUB

In 'the Ausa hub', different activities and functions come together and are interconnected with other parts of Rimini. The renovated Ausa has a wide and diverse riparian zone as a natural flood protection. From the bicycle and pedestrian orange path one can either enter a recreational deck which gives a close access to the river or the recreational meadow. Community gardens and social farms along the path are used by the community and for ecotourism. Directly next to it is the green market where the regional produced food can be sold and shared.

KEYPLAN



SECTION A-A



SOCIAL FARMING



SECTION B-B



SOCIAL MARKET



SECTION C-C



BANK OF AUSA



Scale 1:200
0 10 20 40m
DETAILED AREA

- 01. COMMUNITY GARDEN
- 02. HEALTH GARDEN
- 03. ORCHARD
- 04. SOCIAL MARKET
- 05. BYCYCLE AND PEDESTRIAN ROUTE
- 06. RECREATIONAL DECK
- 07. RIPARIAN ZONE
- 08. RECREATIONAL MEADOW



Honorable Mention: Rimini Electri-City

Ena Grgur, Luka Jaušovec, Manca Šega, Vid Stropnik, Alen Ternik

University of Ljubljana, Slovenia

Rimini is one of the most attractive coastal cities in Italy, visited by millions of tourists every year. This fact is also reflected in its historic development, city characteristics as well as in different conflicts between uses. Recognized conflicts are addressed with multi-sectoral solutions of three main sectors (society, economy and environment), which will transform Rimini into a holistic and connected system.

This system is being realized in newly established green corridors, formation of public spaces, transport and social connections coast – city – hinterland. Leading factor in transforming Rimini into the unified system are energy-based measures. They realize the goal of self-sufficiency with renewable energy sources. Photovoltaic system is being implemented on residential buildings, hotels, industrial areas and the airport, while wind farms are being built on the sea. These steps serve as a base for other sub-sectors solutions and thus energetic transformation of the city is not only energetic but also comprehensive.

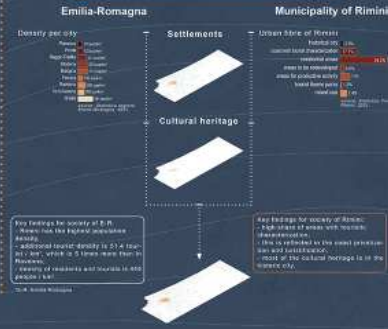
The airport closing functions as a combining area of all three main sectors and as an opportunity to realize a set of goals by introducing solar farming which connects electrical and agricultural production, expansion of green corridors as well as shaping of the public space through the process of landscape democracy. It also becomes a new entrance to the city and its coast from the hinterland by establishing additional cycle-pedestrian and bus connections. Through the bottom-up principle the airport runway is being transformed into an undefined public area that is open to all inhabitants for interpretation.

106

Rimini the Electri-City

By dividing Rimini into three main sectors (society, economy, environment) and their subsectors, main data are analyzed and main key findings are defined. Based on the key findings, problems and potentials of the city are identified. Potentials of the city are used to solve the problems and to argue planned solutions.

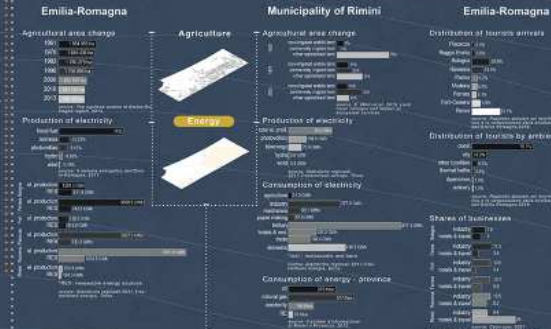
SOCIETY



Key findings for society of E.R.: Rimini has the highest population density in the region, which is 5 times more than in Florence.

Key findings for society of Rimini: High share of areas with forests, which is reflected in the coast protection plan and in the presence of the cultural heritage in the historic city.

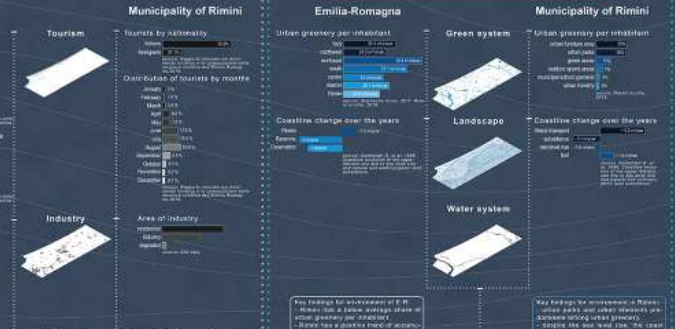
ECONOMY



Key findings for economy of E.R.: 17% of electricity is produced from local sources, which is the highest in the region.

Key findings for economy of Rimini: Rimini has a high share of agricultural land, which is reflected in the high share of agricultural land in the region.

ENVIRONMENT



Key findings for environment of E.R.: Rimini has a lower share of urban greenery per inhabitant, which is reflected in the low share of green spaces in the city.

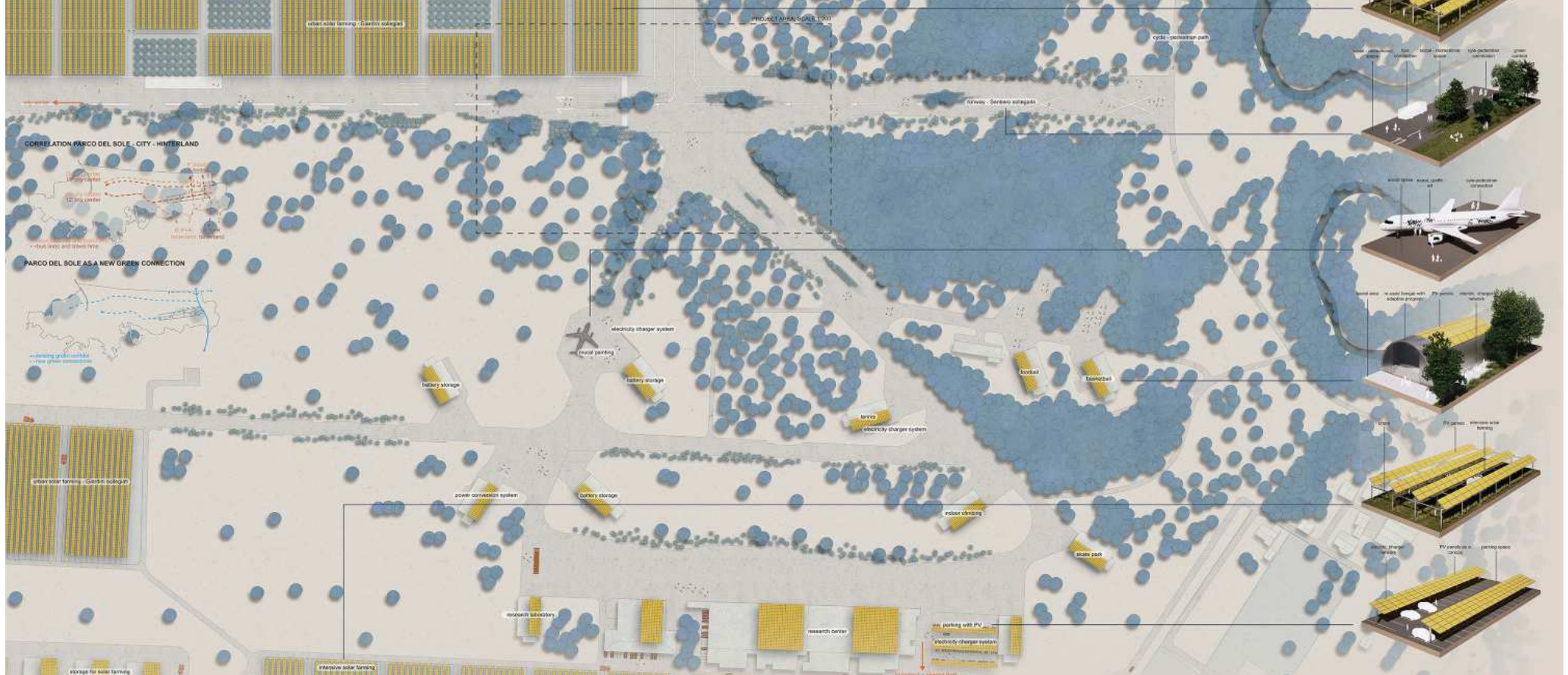
Key findings for environment of Rimini: Rimini has a high share of agricultural land, which is reflected in the high share of agricultural land in the region.



Rimini the Electri-City Parco del Sole

Transformed airport functions in a continuing area of all three main sections. Projected measures simplify easily later expansion identified problems. The airport becomes a new reference to the city from the foreground to newly established urban production and their connection. The identified alternative (PV) potential of the site is used with the PV system on diverse infrastructure (urban and intensive solar farming, PV on terraces, PV on parking area and buildings). In this way the goal of electrical self-sufficiency is achieved. Through this system we integrate the airport runway in transformed into an ecological greenland area. The project was realized with new social programs and the green center is expanded.

1:1.200



CORRELATION PARCO DEL SOLE - CITY - HINTERLAND



PARCO DEL SOLE AS A NEW GREEN CONNECTION



MULTISECTORIAL SOLUTIONS

storage to solar farming

PARKING WITH PV
parking areas that include photovoltaic which provide shade and electricity

establishment of park and city system on the outskirts of the city to reduce motor traffic in the city

RUNWAY - Sentiero solarizzato

green system
green + vegetation + food production + PV

in design of the existing runway into park space for expansion, integration of new green plants and water to provide more living place for people

URBAN SOLAR FARMING - Garden solarizzati

people + biodiversity + PV

solar farming combining agriculture and electricity production through photovoltaic

it functions as an urban garden for the inhabitants of the city

INTENSIVE SOLAR FARMING

food production + PV

solar farming combining agriculture and electricity production through photovoltaic

intensive solar farming system consisting of growing areas in greenhouses built on the ground, produces food for the city's inhabitants

TRANSPORT CONNECTIONS

people + vegetation + biodiversity + PV

new cycle, pedestrian and bus paths designed with vegetation, they connect city with its hinterland

integration of water road system from road power that harvest solar energy and convert it to electricity

BATTERY STORAGE

energy + PV

existing hangars used for design of electricity with batteries in the areas of urban production

COMMUNITY AND RESEARCH CENTER

social area + hangar + PV

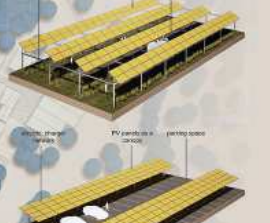
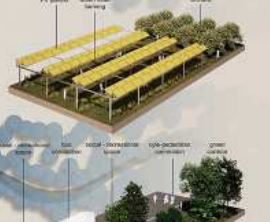
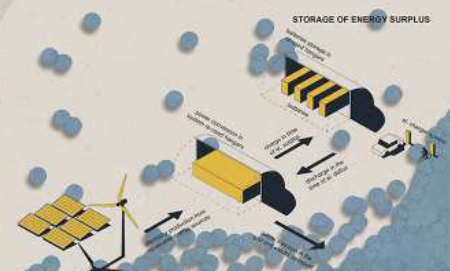
existing hangars used for sport activities such as indoor climbing, football, basketball, tennis, and as venues for performances in grass for rock events

others function as a workshop and research center for renewable energy sources

SCIENCE MUSEUM

social area + hangar + PV

culture center that presents the evolution of renewable energy sources through historical and experimental methods with a great variety of cultural events





Honorable Mention:

Rimini - Do you know your neighbourhood?

Jakob Authenrieth, Jonas Kania, Luise Lonnemann, Pauline Sachs, Sarah Schuster
HfWU Nürtingen-Geislingen, Germany

The challenges associated with the task in Rimini are manifold. A major issue is the homogeneity of the urban structure, the separation of the tourist areas from the rest of the city and the great difference between summer and winter.

To meet these challenges, Rimini is being transformed from a large-scale city into a district city. On the one hand, this is done by developing and designating new green corridors that are oriented towards and extend existing green structures. On the other hand, the newly created districts are oriented towards existing use structures.

To form each new district into a functioning unit, the following 5 principles are applied: Decentralize the tourist areas to revitalize other parts of the city in summer and the beach areas in winter. Reduce and transform traffic towards urban friendly transport. This includes the promotion of public transport through a more effective bus network that allows for quick and spontaneous journeys. Developing green structures into high quality green spaces that can provide recreation and reduce the temperature in and bring fresh air to the city. Creation of identity features of the individual districts that together provide an overall identity for Rimini. Through unique structures and well-chosen uses, a district can be given its own identity. Create a short-way-city that minimizes long distances through good distribution and diversity of uses.

These principles applied to the districts in Rimini creates a good foundation to deal with future challenges together as whole district city.

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RIMINI

Do You Know Your Neighbourhood?

ANALYSIS

Rimini is a city at the Italian Adriatic coast in Emilia-Romagna which is influenced by a long history and is known for its tourism sector, which has expanded steadily. There are huge potentials and initial approaches for the municipal development. The previous image as a location only for seaside resort is about to be redirected to a overarching vacation area with a wide range of diverse activities. Due to the fast population and tourism growth since the 1840's the city

structure has expanded mainly guided by economically interests. In the following analysis it is presented in detail how the result of that is a city with a lot of structural separation, long distances and the remaining pressures of the touristic seasons on the environment. The challenge to find an all over solution will be addressed with a more heterogeneous, decentralized approach.



- USES OF BUILDINGS**
- EDUCATIONAL INSTITUTION
 - CULTURAL INSTITUTION
 - HOTELS AND RESTAURANTS
- USES OF LAND**
- MIXED USE AREAS
 - COMMERCIAL AREA
 - HIGH QUALITY GREEN SPACES
 - TRAFFIC TRIANGLES
- IMPORTANT LOCATIONS**
- PORT
 - HOTEL REACHES
 - HOSPITAL
 - SHOPPING AREA
 - FAIR
 - AIRPORT
- QUALITY OF ENVIRONMENT**
- HIGH QUALITY OF STAYS
 - HIGH QUALITY OF CULTURE
 - MEDICAL AND PHYSICAL THERAPY
 - PRIVATELY LIVED



MAIN STREETS AND CYCLE PATHS



CYCLE PATHS
The city of Rimini is a safe and convenient location for the bicycle. The city of Rimini is a safe and convenient location for the bicycle. The city of Rimini is a safe and convenient location for the bicycle.

MAIN STREETS
Main streets are located along the coast and in the center of the city. They are the main arteries of the city and are used for most of the traffic.

GREEN & BLUE INFRASTRUCTURE



BLUE INFRASTRUCTURE
Blue infrastructure is located along the coast and in the center of the city. It includes the sea, rivers, and canals. It is an important part of the city's infrastructure and provides a natural environment for the city.

GREEN INFRASTRUCTURE
Green infrastructure is located in the center of the city and along the coast. It includes parks, green spaces, and urban forests. It provides a natural environment for the city and improves the quality of life for the residents.

PUBLIC TRANSPORT



Bus Lines
There is a wide range of bus lines that connect the city and the surrounding areas. The bus network is an important part of the city's infrastructure and provides a convenient way for the residents to travel.

Tram Lines
The tram is a public mode of transport that is used in the city. It is a convenient way for the residents to travel and provides a natural environment for the city.

STRUCTURAL TOURISM BORDER



The structural tourism border is located along the coast and in the center of the city. It separates the city from the surrounding areas and provides a natural environment for the city.

GENERAL INFLUENCES ON RIMINI



Long History
Rimini has a long history that dates back to the Roman Empire. It is a city with a rich cultural heritage and a unique character.

Climate
Rimini has a Mediterranean climate that is characterized by hot summers and mild winters. This makes it an ideal location for a vacation.

Tourism
Rimini is a popular tourist destination that attracts millions of visitors each year. The city's infrastructure and services are designed to accommodate the needs of the tourists.

BIG STRUCTURE



The big structure is located along the coast and in the center of the city. It is a natural environment for the city and provides a unique character.

EXISTING DISTRICTS



The existing districts are located in the city and provide a natural environment for the city. They are an important part of the city's infrastructure and provide a unique character.

TARGET: CONNECTED DISTRICT CITY



The target: connected district city is located in the city and provides a natural environment for the city. It is a unique character and provides a natural environment for the city.

0 9 2

POTENTIAL OF THE NEW DISTRICTS

IMAGE

The independence of a district includes its own identity, which is determined by its own structure, building structures, associations, etc. The image of a district is reflected in its name in the cityscape, special buildings, structures, associations, etc.

ACCESSIBILITY

Good accessibility of the district from outside is necessary to enable networking into an urban structure. The accessibility of places within the district is also important.

OPEN SPACES

A good open space structure is characterised by the distribution, quality and type of open space. Open spaces are important for the microclimatic conditions in a city and can also create identities through quality of play.

SERVICES

The attractiveness of a district is also determined by a good distribution of supply facilities. Both the type of infrastructure and the spatial distribution play a role for a functional district.

RIMINI

Do You Know Your NEIGHBOURHOOD?

The larger a city becomes, the more difficult it is to create functioning structures that are accessible to all residents. In many cities, residents are forced to travel long distances to work, school and leisure. Long distances, which can often only be covered by private motorised transport or public transport, pose challenges for the transport network. A district city counteracts this by decentralising most uses and thus

creating short distances. Districts are separate parts of a larger whole with their own identities, which together merge into one big city identity. A district city forms a solid basis that reduces traffic congestion and is well equipped to deal with other external pressures and challenges, such as large numbers of tourists, for example.

PRINCIPLES FOR FUNCTIONING DISTRICTS



- FUTURE GREEN CORRIDORS
- EXISTING GREEN SPACES
- NEW GREEN SPACES
- AGRICULTURAL AREAS
- CENTRE OF DISTRICTS
- COLONNELLA
- FUNCTIONAL BUILDINGS
- URBAN AREAS

NEW PUBLIC TRANSPORT NETWORK



PUBLIC TRANSPORT NETWORK MAP

In order to connect all districts optimally and efficiently, the old public transport network had to be revised in order to achieve fast travel times, the new network consists of central fast express lines connected to local distribution lines.

These express lines will consist of the main station and the local and long-distance lines. In addition to the express and local lines, there is a new line connecting the outer districts of the city.



URBAN QUARTER STRUCTURE

This diagram shows the planning objectives to create a functional urban quarter of the urban quarter and to make it more attractive. To achieve this, the district must be linked to the surrounding neighbourhood. It shows the

importance of the attractiveness of all the principles to create a functional quarter within a city. Please note that this is a future vision.





COLONNELLA

- NEW USES
- SERVICES
- GREEN STRUCTURE
- TOURISTICAL USE
- GASTRONOMIC USE
- EDUCATIONAL USE
- LEISURE
- CULTURAL USE

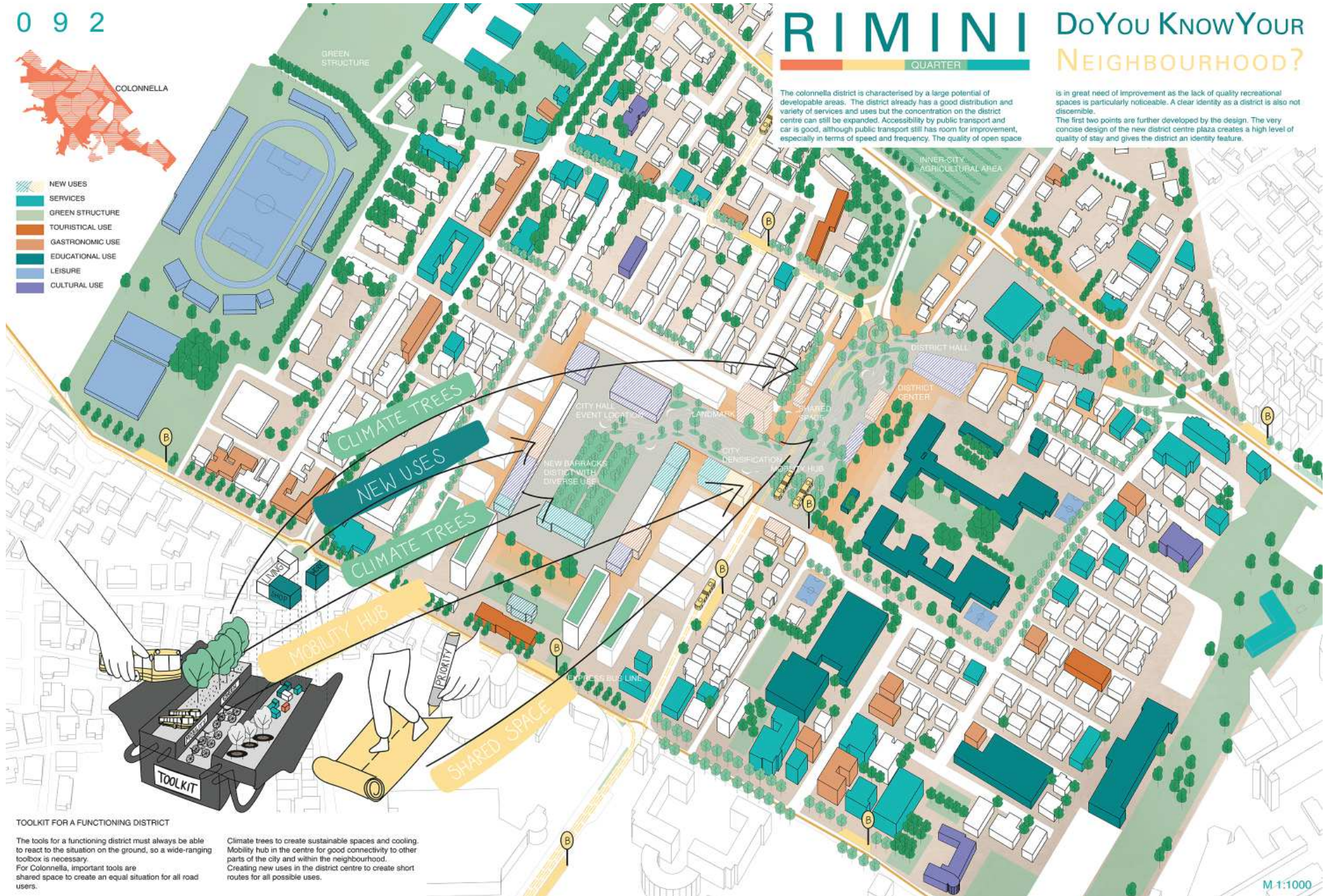
RIMINI

QUARTER

Do You Know Your NEIGHBOURHOOD?

The Colonnella district is characterised by a large potential of developable areas. The district already has a good distribution and variety of services and uses but the concentration on the district centre can still be expanded. Accessibility by public transport and car is good, although public transport still has room for improvement, especially in terms of speed and frequency. The quality of open space

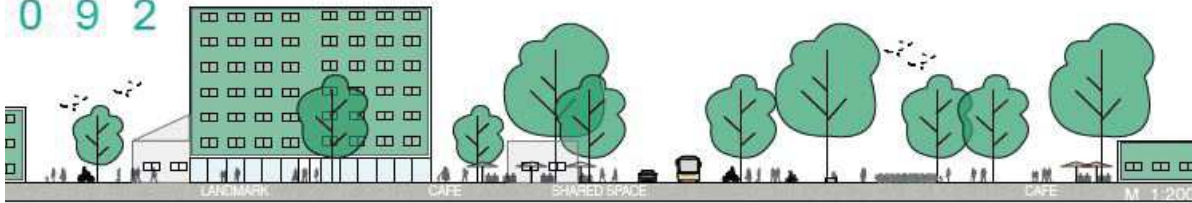
is in great need of improvement as the lack of quality recreational spaces is particularly noticeable. A clear identity as a district is also not discernible. The first two points are further developed by the design. The very concise design of the new district centre plaza creates a high level of quality of stay and gives the district an identity feature.



TOOLKIT FOR A FUNCTIONING DISTRICT

The tools for a functioning district must always be able to react to the situation on the ground, so a wide-ranging toolbox is necessary. For Colonnella, important tools are shared space to create an equal situation for all road users.

Climate trees to create sustainable spaces and cooling. Mobility hub in the centre for good connectivity to other parts of the city and within the neighbourhood. Creating new uses in the district centre to create short routes for all possible uses.



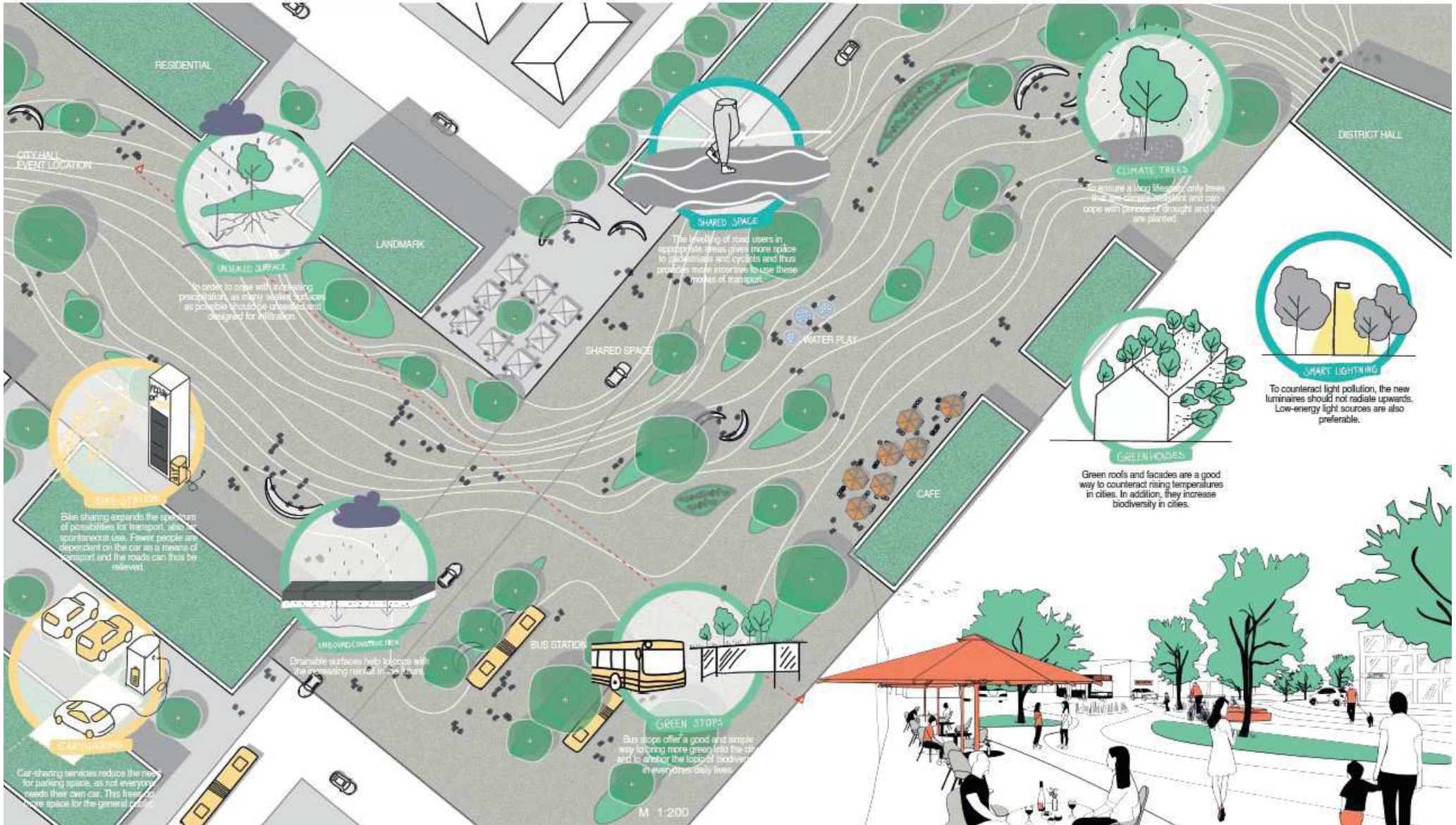
RIMINI

DETAIL

Do You Know Your NEIGHBOURHOOD?

To connect the already existing district center in the north with the barracks area, a new space is created. A space with new uses for everybody. Cafes, restaurants, which have green roofs and facades, come into close proximity to enliven the space. To prevent a disconnection, a shared space area is created. This also makes it more pleasant and safer for pedestrians. The curved white lines are there to

guide the pedestrian and simultaneously are giving the square more dynamic. „Green islands“ with climate trees are placed in a similar form for greenery and shade. The entire surface is made of drainable paving for better infiltration and drainage. Bicycle and car sharing in the district center allows everyone to arrive quickly their destinations. This will further strengthen and improve the existing identity of the district.





Honorable Mention: In between Forests

Pauline Borremans, Marie Cornoedus, Jaron Rop, Yuri Schillewaert

Hogent Kask & Conservatorium, Belgium

Reconnecting the hinterland and the coastline through productive forestscapes

To understand the challenges Rimini faces now and in the future, it is necessary to look beyond the urbanized area. As in many contemporary cities, the link between hinterland and city has been diluted over the past centuries. The hinterland makes urban life possible and has provided the city with food, drinking water, and so much more since its inception. With the threat of climate change, the hinterland becomes even more important than before, but we find that the hinterland itself has never been more fragile than it is now. Massive deforestation has greatly reduced biodiversity, constantly eroding fertile soils and reducing water buffer capacity.

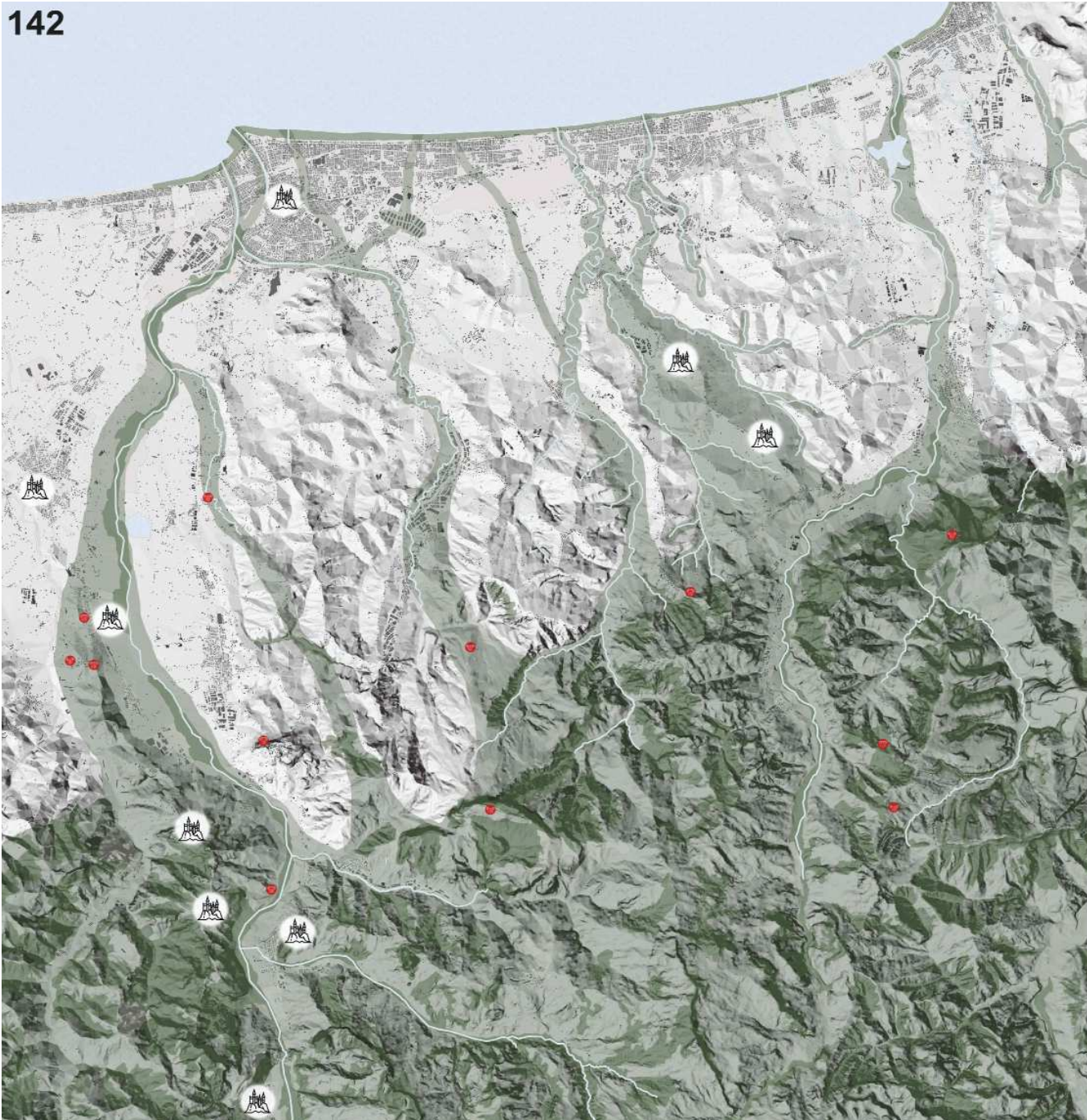
This combined with the standardization and mechanization of agriculture creates poorer soils and more vulnerable crops. In our opinion, the key to a climate-adaptive Rimini lies in the hinterland. In doing so, this region has another great asset up its sleeve. Due to the rich history of the province, the hinterland has a wealth of beautiful castles and historical landmarks. At present, the hinterland is still a hidden gem hidden behind a busy seaside town. In our design we therefore not only include the ecosystem but also want to combine this with an expansion of tourist destinations in the area.

To protect the city against climate change and improve the quality of life, we want to reconnect the city with the hinterland and all its advantages. This we want to achieve by making six corridors. By allowing corridors into the city, space is being created in the densely built-up city. These green axes of the hinterland bring back the biodiversity and productivity to Rimini. It also creates passageways for the inhabitants of the city to rediscover the hinterland and its rich history.

The corridors connect the underlying productive landscape with the sea. Throughout the corridors, paths will be constructed for the vulnerable road user who in this way not only comes into contact with the beach but also gets to know the beautiful hinterland. One of the 6 corridors that we have designed to make the city more fordable, more biodiverse and more liveable is the residential corridor. This corridor was created by connecting existing open spaces in the urban fabric. In order to make the connection with the hinterland, the system of forestscapes has been extended to the sea. Each forestscape has its own vegetation and function. They are connected by the soft road and provide a fascinating and varied landscape. One of these parts is the dune belt, its connection to the sea is an important intervention in our project.

Currently, the sea is difficult to access publicly due to the privatization of large parts of the beach. In addition, the beach strip currently has no added value for biodiversity. Therefore we propose to construct natural dunes along the ecological corridors. These are connected with the ecosystem of the hinterland and prevent the uprooting of the dunes. In the sea we work with a system of coastbusters. By creating a sustainable structure in the water, a real sea forest can be created. This forest increases the biodiversity in the sea area but also creates a productive mussel and oyster farm. In addition, the sea forest also acts as a breakwater. This will reduce erosion of the beach and in the future, when the sea level rises, it will reduce the intensity of the waves.

Due to the rise of the sea level, many houses will flood. By reinforcing the foundations of the existing houses and turning them into stilt houses, we want to ensure that they can still be used. The stilt houses have access via a path that is built at height. By strengthening the foundation, an extra floor can be built in a wooden construction to compensate for the loss of the ground floor. The foundations of the houses become part of the sea forest because they also provide a home for mussels, oysters and other sea life.

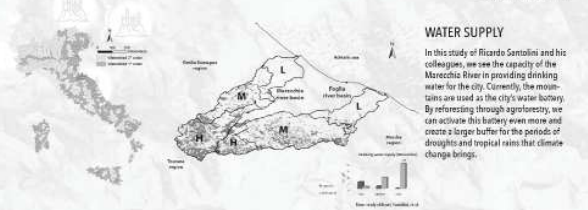


IN BETWEEN FORESTS

reconnecting the hinterland and coastline through productive forestscapes

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In our opinion, the key to a climate adaptive Rimini lies in the hinterland. In doing so, this region has another great asset up its sleeve. Due to the rich history of the province, the hinterland has a wealth of beautiful castles and historical landmarks. At present, the hinterland is still a hidden gem hidden behind a busy seaside town. In our design we therefore not only include the ecosystem but also want to combine this with an expansion of tourist destinations in the area.



WATER SUPPLY

In this study of Riccardo Santolini and his colleagues, we see the capacity of the Marecchia River in providing drinking water for the city. Currently, the mountains are used as the city's water battery. By reforesting through agroforestry, we can activate this battery even more and create a larger buffer for the periods of droughts and tropical rains that climate change brings.



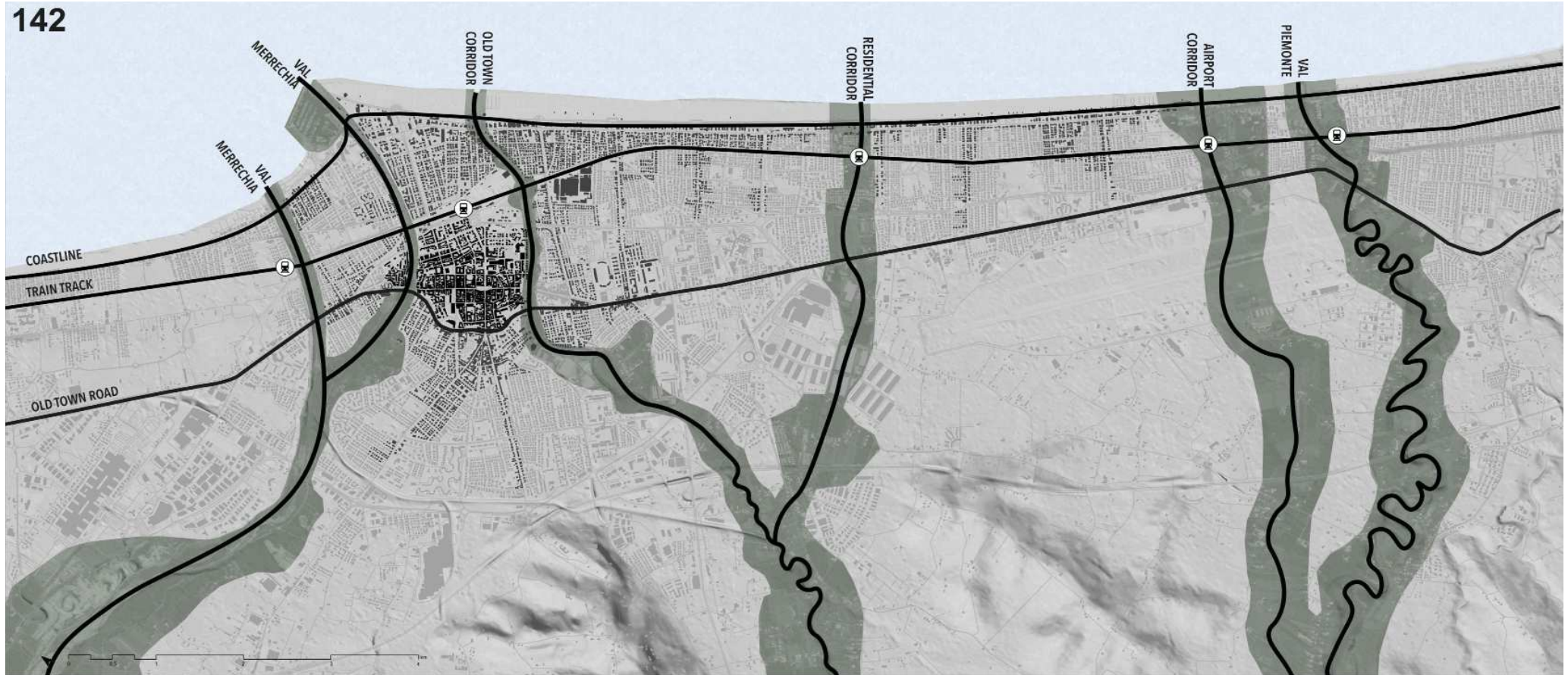
SEA LEVEL RISE

A major consequence of climate change is rising sea levels. Compared to Venice, Rimini is at the edge of the delta to be flooded. The occurrence of a 4°C rise predicts the raising of the sea level up to the ancient city walls.



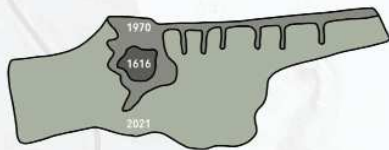
LAND USE

During the Renaissance, Italy experienced major deforestation due to agriculture. This map shows the land uses in the province. As you can see, most of the space is taken up by agriculture. It fragments the natural areas.



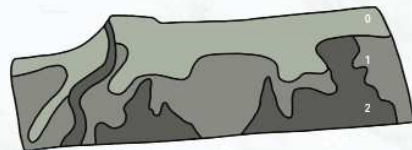
EVOLUTION CITY

For a long time Rimini has remained within the walls of the old city center. It wasn't until Rimini became a beach destination that the city began to grow. The city expanded first mainly along the coastline with a couple of strings reaching to the hinterland. After 1970 the city expanded exponentially.



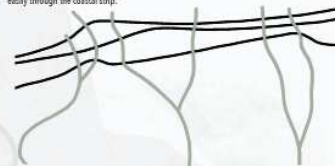
BIODIVERSITY

Rimini is not doing well in terms of biodiversity. Over the entire coast, Rimini is given a score of 0 on a scale of 5. This score applies to the entire urban fabric with the exception of the Marecchia valley which scores a poor 2 out of 5.



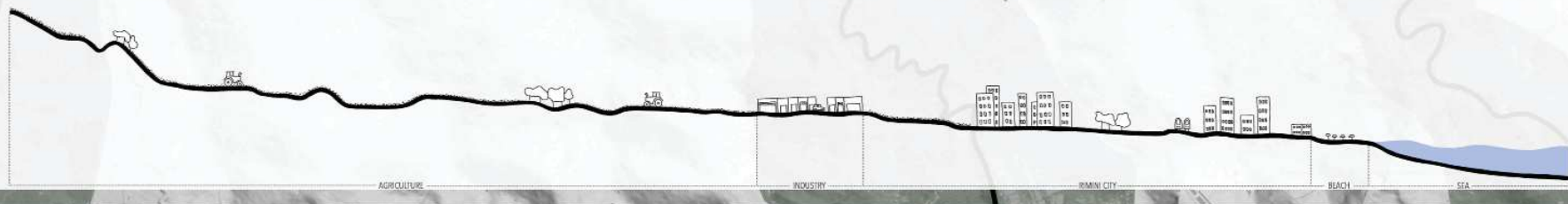
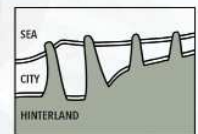
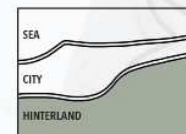
STRUCTURE PLAN

In Rimini, the streets are still dominated by the car. This makes getting around in Rimini less attractive for the vulnerable road user. In our design, we looked for a clear structure to make the city more walkable for soft traffic while connecting it to the hinterland. A major change that we make is the addition of 4 more train stops along the coastline. This will allow tourists to park inland and move easily through the coastal strip.



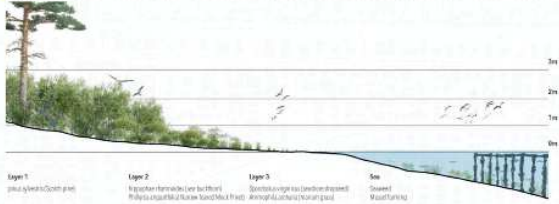
CONCEPT

To protect the city against climate change and improve the quality of life, it is important that the city is reconnected with the hinterland and all its advantages. By allowing corridors into the city space is being created in the densely built-up city. These green axes of the hinterland bring back the biodiversity and productivity to Rimini. It also creates passageways for the inhabitants of the city to rediscover the hinterland and its rich history.

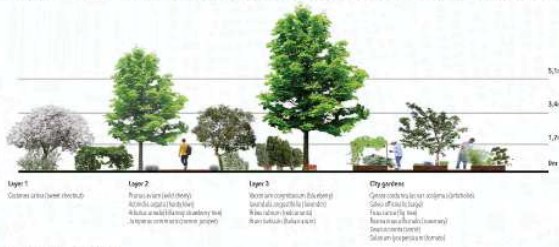


RESIDENTIAL CORRIDOR

DUNES



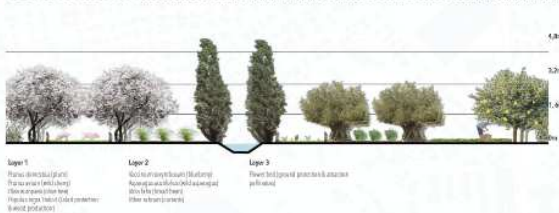
URBAN FOREST AND GARDENS



FOOD FOREST



AGROFORESTRY



To make Rimini climate adaptive for the future, we propose to integrate several green corridors in the city. These corridors connect the underlying productive landscape with the sea. Throughout the corridors, paths will be constructed for the vulnerable road users who in this way not only comes into contact with the beach but also gets to know the beautiful hinterland.

The residential corridor is one of the 6 corridors that we have designed to make the city more fordable, more biodiverse and more liveable. The corridor was created by connecting existing open spaces in the urban fabric. In order to make the connection with the hinterland, the system of forestscapes has been extended to the sea. Each forestscape has its own vegetation and function. They are connected by the soft road and provide a fascinating and varied landscape.



