



Erasmus+



SLOVAK UNIVERSITY OF
TECHNOLOGY IN BRATISLAVA



Politecnico
di Torino



KONYA DULUPINAR
UNIVERSITY
1992



GDAŃSK UNIVERSITY
OF TECHNOLOGY



SPECTRA
Centre of Excellence

PORT FOLIO

Positive Energy districts

Qudnational Course on
Integrated Spatial
Planning Approaches
Towards Green
Universities

BIP PED 2023

Group D

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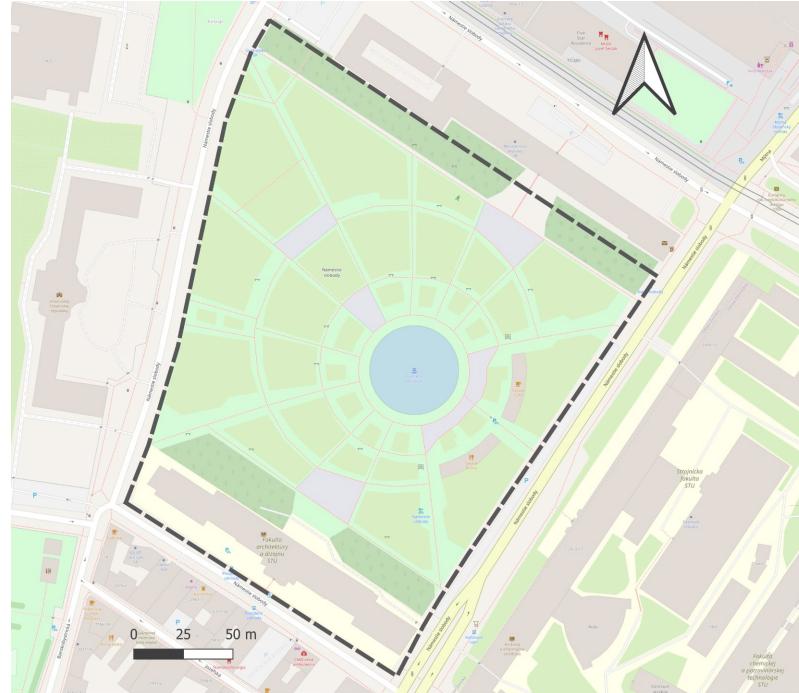
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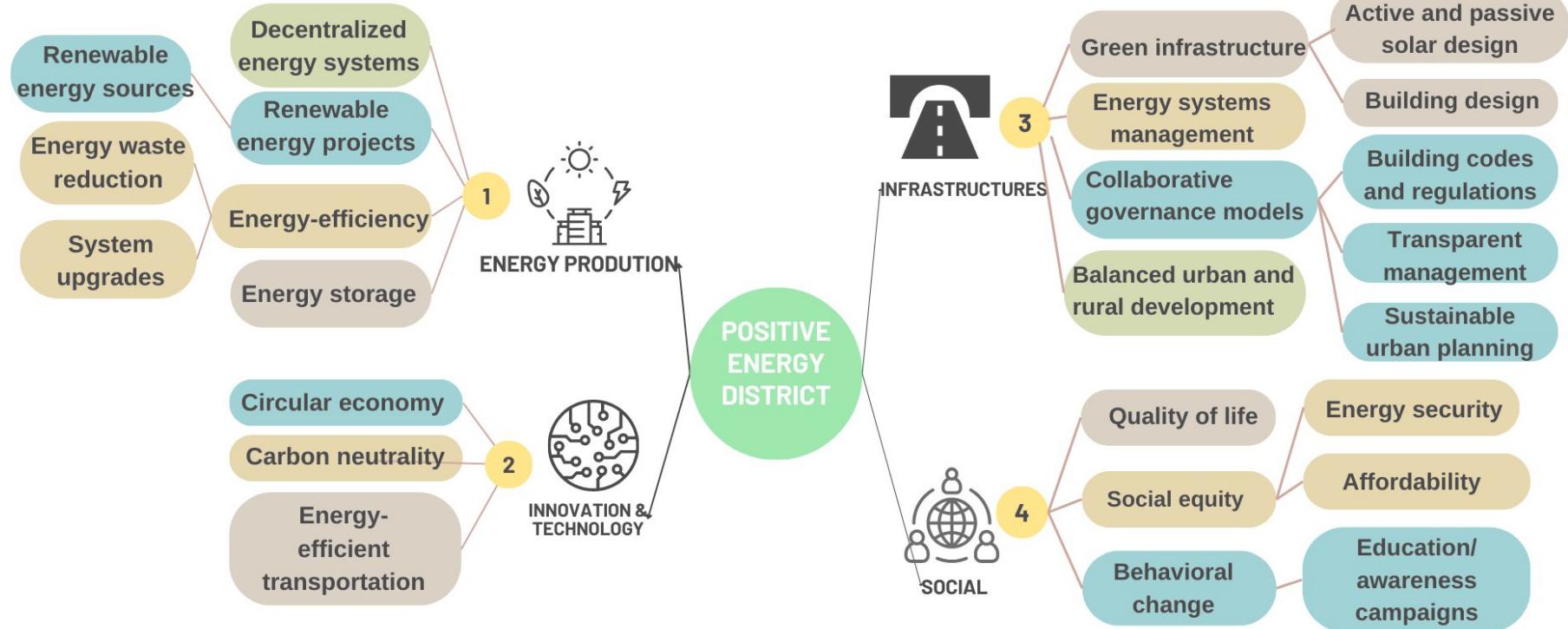
Introduction

Bratislava, the captivating capital of Slovakia, is known for its rich history, and stunning architecture, like Bratislava Castle and St. Martin's Cathedral. The main campus of STU, along with the **Faculty of Architecture** are situated in the heart of the city, **next to Liberty Square**.

Our project aims to create a transformative urban environment, integrating renewable energy, energy efficiency, social integration, and green infrastructure. Through a holistic approach, we have analyzed the existing urban area, identified its strengths and weaknesses, and developed a comprehensive development plan.



The concept: Positive Energy Districts (mindmap)

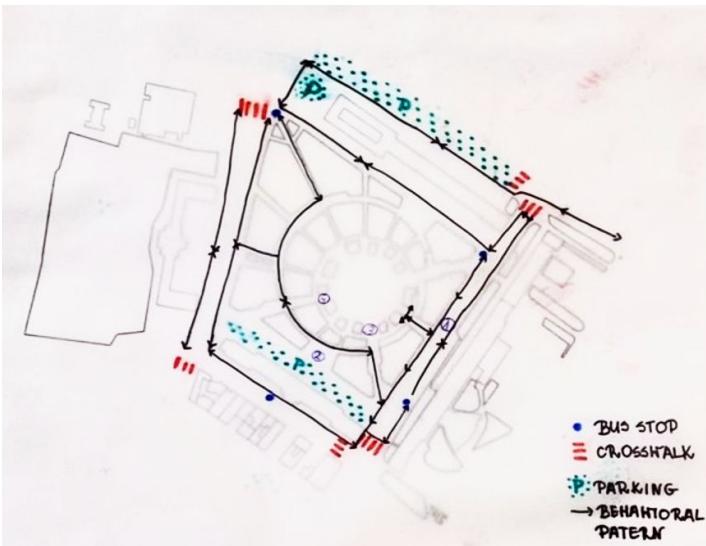


Area Analysis

Study Area Analysis: Liberty Square

Behavioral Pattern:

- Tram line, bus stops, and **public transport accessibility**
- **Underutilized cycle paths** due to safety concerns
- **Pedestrians passing** through the square without stopping
- Lack of pedestrian **crossings** and **car park separation**



Historical Significance:

- Origin as vineyards and the Summer Archbishop's Palace
- **Rebuilt** as a grass area with historical names
- Renamed during socialism and post-Velvet Revolution
- Inclusion of **Post Office** palace and **Slovak Technical University** buildings

- Important role in **national consciousness** and recent revitalization efforts
- Largest fountain with a concrete central area prone to **overheating**
- Green **plots**, insufficient quality **paths**, and **pavilions** with limited seating
- Faculty of Architecture building and **separation** by a car park



Functional Analysis:

Functional Analysis:

Users:

- Pedestrians and cyclists passing through, **higher traffic in morning and afternoon**
- **Occasional use** by students, families, dog owners, skaters, and tourists



Functional Analysis:



- Lack of people and insufficient attractions to encourage staying
- Overheating in the central part of the square
- Lack of meeting places and separation from the campus by a busy road
- Architecture Department not opening onto the square and car park barrier

Main Problems:

Swot Analysis

Positive Aspects	Negative Aspects
Strengths	Weaknesses
<ul style="list-style-type: none">• location in city center• easy access by public transport• connectivity to university	<ul style="list-style-type: none">• people just pass through the place• space does not encourage people to stay• heat island, no shadow in its central part
OPPORTUNITIES	THREATS
<ul style="list-style-type: none">• people do want to spend time outside main (historic) city center	<ul style="list-style-type: none">• place will be empty outside working hours

Site Vision until 2035

Transforming a fountain into a vibrant and lively space.



Integrating the square with the community.



Placing attractive and well-maintained urban furniture for relaxation and socialization



Incorporating modern amenities like phone charging spots and free Wi-Fi coverage.



Enhancing the square's comfort and image with solar-powered lamp posts.



Involving students to infuse fresh perspectives and strengthen integration with the architecture faculty.



Improving the greenery system for visual delight, tranquility, and connection to nature.

Introducing dedicated lanes for eco-friendly transportation options.





**Encouraging
sustainable mobility
and reducing car
dependence.**



**Creating a thriving and
inclusive hub that promotes
community engagement,
well-being, and pride.**



Roadmap

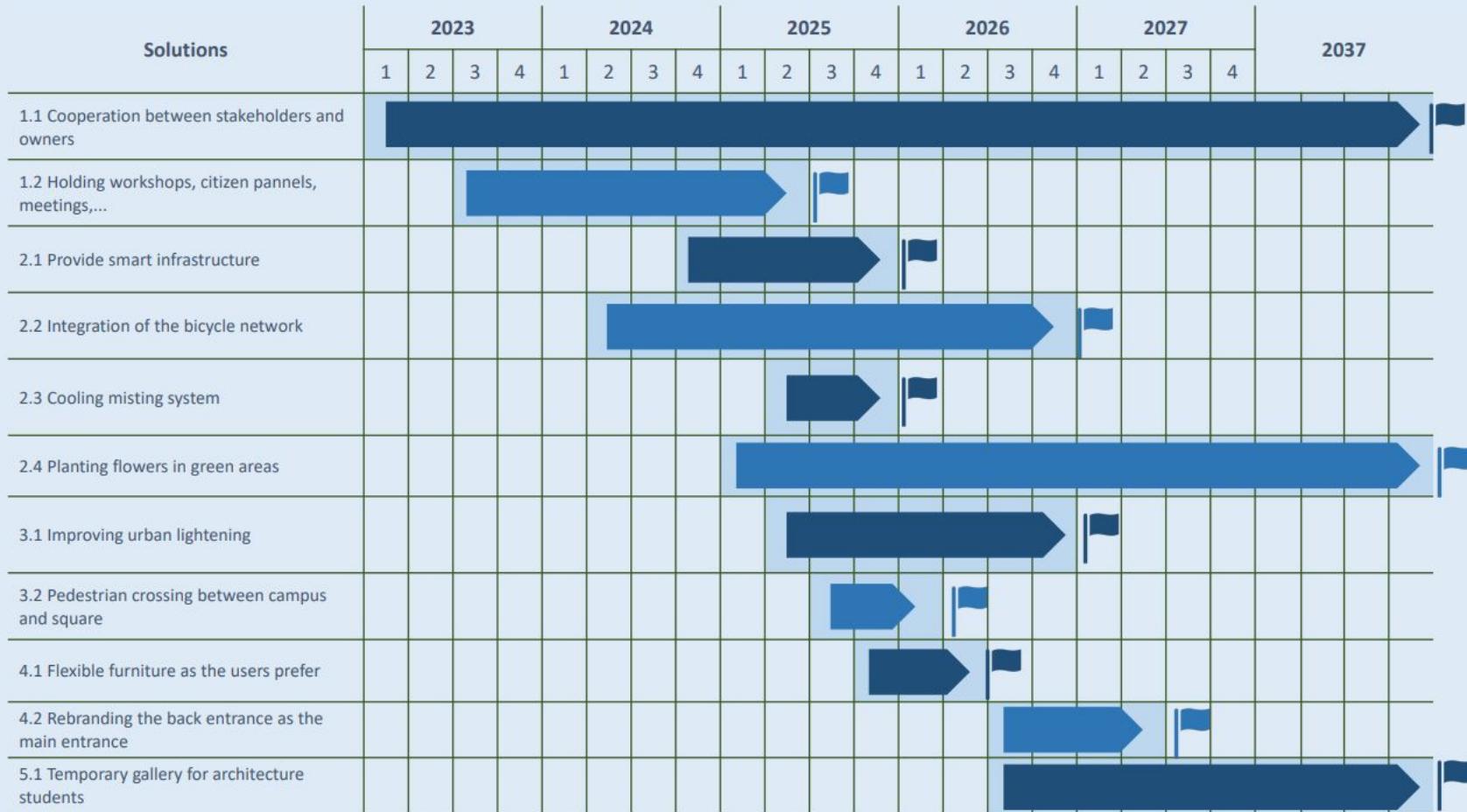
Stakeholders

Stakeholder	Cluster	Level (dimension of the interest)	Typology	Resources
- City's municipality	Administrative	- Local	- Politician	- Political, economic, legal
- STUBA	Academic actor	- Regional	- Experts	- Cognitive
- Public sector entities	Enterprises	- Regional	- Special interest	- Economic, cognitive
- European Union - Banks	Financial	- International - Local, national	- Bureaucrats - Special Interest	- Economic, cognitive, political and legal - Economic, cognitive
- Residents - Students - Visitors	Users	- Local - Local - Local	- General interest - General interest - General interest	- Political, cognitive - Cognitive - Economic

Steps and Solutions

- 1. Analyze needs of students, residents and tourists**
 - 1.1. Cooperation between stakeholders and owners
 - 1.2. Holding workshops, citizen panels, meetings, etc.
- 2. Invest in infrastructure**
 - 2.1. Provide smart infrastructure
 - 2.2. Integration of the bicycle network
 - 2.3. Cooling misting system
 - 2.4. Planting flowers in green areas
- 3. Improve safety**
 - 3.1. Improving urban lighting
 - 3.2. Pedestrian crossing between main campus and square
- 4. Development of commerces and services**
 - 4.1. Flexible furniture as the users prefer
 - 4.2. Rebranding the back entrance of the architecture faculty as the main entrance.
- 5. Culture and art**
 - 5.1. Temporary gallery for architecture students.

Timeline





Conclusions

- Revitalization of Liberty Square, into a vibrant and inclusive space for students, residents, and tourists.
- Interventions to foster accessibility, sustainability, creativity, and integration.
- Collaboration with different stakeholders (horizontal and vertical) is crucial for funding and support.
- Input and participation of the users will shape the project to cater to their needs and preferences.

Thanks
for your
Attention



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