

**University of Pécs Climate concept** 

**Editor:** 

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#### 1. Introduction

University of Pécs (in the following: University) is the largest higher education institution and health care provider in the South Transdanubian region. Through its activities, the University promotes global environmental change, the extent and speed of global warming. The local negative effects of surface temperature changes increase the exposure and vulnerability of the University's infrastructure and services. A highly integrated organic system has developed between the local environment and the University, operating along the interaction of system control circuits. It is important to avoid interruptions to the system in the face of current environmental challenges or to manage interruptions through system feedback. The University is committed to the smooth functioning and sustainable implementation of its relationship with the environment, balancing environmental and corporate interests.

#### 2. Concept goal

The main goal of the University is to reduce the environmental impact of its activities and the exposure and vulnerability of its infrastructure and activities to local environmental impacts. The concept supports and helps the University's short, medium and long-term goals.

#### 2.1. Short term goals

- 1. Exploring elements of the system between the environment and the University
- 2. Determining the degree of interaction of system elements between the environment and the University
- 3. Reconciling environmental and university goals

#### 2.2. Medium term goals

- 1. Climate Risk Analysis at the University
- 2. Defining mitigation efforts
- 3. Defining adaptation aspirations
- 4. Defining attitude-building endeavors

#### 2.3. Long-term goals

- 1. Evaluation of the partial results of the endeavors
- 2. Achieving the goals set

#### 3. Time frame for the concept

The concept will run from 2023 to 2030, with a 2050 outlook.

### 4. Implementers of the concept

Leading the implementation of the concept belongs to the University Chancellery.

The management of the professional method of implementing the concept belongs to the University Rector's Office. Horizontal and vertical realization of the sub-tasks of the concept are the responsibility of the working groups of the University, involving as much university citizenship as possible.

#### 5. Financial conditions for completing the concept

- Own funds
- Support from economic operators
- Local and regional support
- National support
- EU support
- International support

#### 6. Basics of the concept

The University's climate concept and the ambitions set out in the concept should form part of the national climate protection strategy. When developing the University's climate concept, international, EU, national, regional and local strategies must be taken into account, taking into account university goals and interests.

#### 6.1. Tasks to do

- 1. Exploring the connection with international guidelines
- 2. Exploring the connection with national guidelines
- 3. Exploring the connection with regional guidelines
- 4. Exploring the connection with local guidelines

#### 7. Situation Analysis

# 7.1. Exploring elements of the system between the environment and the University of Pécs

## 7.1.1. Presentation the environment of the University of Pécs

- 7.1.1.1. Relief
- 7.1.1.2. Soil
- 7.1.1.3. Climate
- 7.1.1.4. Hydrography
- 7.1.1.5. Flora and fauna
- 7.1.1.6. Population

- 7.1.1.7. Energy sector
- 7.1.1.8. Transportation
- 7.1.1.9. Water management
- 7.1.1.10. Waste management
- 7.1.1.11. Tourism
- 7.1.1.12. Infrastructure
- 7.1.2. Climate Change Trends in the University Region
- 7.1.2.1. Exploring past and future trends in climate change
- 7.2. Sources of danger to the environment of University of Pécs
- 7.2.1. Natural hazards
- 7.2.2. Anthropogenic sources of danger
- 7.3. Climate protection assessment of University of Pécs
- 7.3.1. Inventory of the University's greenhouse gases
- 7.3.1.1. Energy consumption of buildings and structures
- 7.3.1.2. Transportation
- 7.3.1.3. Agriculture
- 7.3.1.4. Waste management
- 7.3.1.5. Carbon capture
- 8. Investigation of the climate risk of the University of Pécs
- 8.1. Sensitivity test
  - Concerning university service
  - Concerning university infrastructure
- 8.2. Exposure testing
  - For the present
  - For the future
- 8.3. Vulnerability test
  - For the present
  - For the future

## 8.4. Risk analysis

- For the present
- For the future

## 9. Development of the concept of combating global warming

Choosing the right ambitions should take into account effectiveness, consistency with other goals, robustness, safety margin, sustainability, flexibility, distribution effects, urgency and feasibility.

## 9.1. Defining mitigation efforts

Guides:

- Replacement of fossil fuels
- Increasing energy efficiency
- Use of natural resources
- Increase the carbon capture rate

## 9.2. Defining adaptation efforts

Guides:

- Using traditional solutions
- Applying innovative solutions

#### 9.3. Defining awareness-raising endeavors

Guides:

• Increasing Oikophilia

#### 10. Integration of aspirations into the life of the University

- Integrate efforts into development and daily operations
- Identification of responsible for the efforts
- Provide the financial means for the endeavor
- Communication of efforts
- Increasing social acceptance of efforts

#### 11. Check results

- Regular monitoring of results (collection of data and information)
- Developing a control protocol
- Examining the relevance, effectiveness and efficiency of the results
- Modify efforts as needed
- Tracking efforts in emergency situations