



UNIVERSITY OF PÉCS

Chancellery

Technical Services Directorate

**University of Pécs**

**Climate concept**

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## Content

1. Introduction .....	3
2. Concept goal.....	3
2.1. Short term goals.....	3
2.2. Medium term goals.....	3
2.3. Long-term goals .....	3
3. Time frame for the concept .....	3
4. Implementers of the concept .....	3
5. Financial conditions for completing the concept.....	4
6. Basics of concept.....	4
6.1. Tasks to do.....	4
7. Situation Analysis.....	4
7.1. Exploring the elements of the system between the environment and the University of Pécs .	4
7.1.1. Presentation on the environment of the University of Pécs.....	4
7.1.2. Climate Change Tendencies in the University Region.....	5
7.2.Hazard sources of the University's environment .....	5
7.2.1. Natural hazards.....	5
7.2.2. Antropogenic Hazards .....	5
7.3. The University's climate risk assessment.....	5
7.3.1. Inventory of the University's greenhouse gases .....	5
8. Exploration of the climate risk of the University of Pécs.....	5
8.1. Sensitivity test .....	5
8.2. Exposure testing .....	5
8.3. Vulnerability test .....	5
8.4. Risk analysis.....	6
9. Concept development of combating global warming.....	6
9.1. Defining mitigation efforts .....	6
9.2. Defining adaptation efforts.....	6
9.3. Defining awareness-raising endeavors .....	6
10. Integration of aspirations into the life of the University .....	6
11. Checking the results .....	6

## **1. Introduction**

University of Pécs (in the following: University) is the largest higher education institution and health care provider in the South Transdanubia region. Through its activities, the University intensifies global environmental change, the extent and speed of global warming. The local negative effects of surface temperature changes increase the exposure and the 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 the system control circuits. It is an important purpose to avoid interruptions of 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 the 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 the elements of the system between the environment and the University
2. Determining the extent of interaction of system elements between the environment and the University
3. Harmonizing environmental and university goals

### **2.2. Medium term goals**

1. Climate Risk Analysis of the University
2. Defining mitigation efforts
3. Defining adaptation aspirations
4. Defining attitude-shaping endeavours

### **2.3. Long-term goals**

1. Evaluation of the partial results of the endeavours
2. Achieving the goals set

## **3. Time frame for the concept**

The concept will run from 2020 to 2030, with a 2050 outlook.

## **4. Implementers of the concept**

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

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 strength
- 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, taking international-, EU-, national-, regional- and local strategies into account, university goals and interests has to be also preserved.

### **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 the elements of the system between the environment and the University of Pécs**

#### **7.1.1. Presentation on 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 Tendencies 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 the 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. Exploration 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**

When choosing the right ambitions, effectiveness, consistency with other goals, robustness, safety margin, sustainability, flexibility, distribution effects, urgency and feasibility should be taken into account.

#### **9.1. Defining mitigation efforts**

Guides:

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

#### **9.2. Defining adaptation efforts**

Guides:

- Using traditional solutions
- Applying innovative solutions

#### **9.3. Defining awareness-raising endeavours**

Guides:

- Increasing Oikofilia

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

- Integrating efforts into development and daily operations
- Identification of those who are responsible for the efforts
- Providing the financial means for the endeavour
- Communication of efforts
- Increasing social acceptance of efforts

### **11. Checking the results**

- Regular monitoring of results (collection of data and information)
- Developing a control protocol

- Examining the relevance, effectiveness and efficiency of the results
- Modifying efforts as needed
- Tracking efforts in emergencies