DODATEK O HOSTOVÁNÍ
KE SMLOUVĚ O ÚČASTI
NA PROGRAMU MERIT

mezi

Středočeské inovační centrum, spolek

a

České vysoké učení technické v Praze

Tento DODATEK O HOSTOVÁNÍ KE SMLOUVĚ O ÚČASTI NA PROGRAMU MERIT uzavřené dne 09. května 2024 (dále jen „**Dodatek o hostování**“) uzavřely následující smluvní strany:

(1) **Středočeské inovační centrum, spolek**
se sídlem Strakonická 3367,150 00 Praha 5
IČO: 042 28 235
zastoupený Mgr. Pavlem Jovanovičem, statutárním ředitelem

(dále jen „**Koordinátor**“)

(2) **Univerzitní centrum energeticky efektivních budov**
se sídlem Třinecká 1024, 273 43 Buštěhrad
IČO: 68407700
Zastoupená Ing. Jiřím Robertem Járou, Ph.D., ředitelem
č.ú. xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

(dále jen „**Partner**“)

(Koordinátor a Partner společně jako „**Strany**“)

PREAMBULE

(A) Strany uzavřely Smlouvu o účasti na programu MERIT (dále jen „Smlouva“), na jejímž základě je realizována jejich spolupráce při realizaci Programu a upraveny podmínky vzniku práva na poskytnutí Podpory.

(B) Realizace Projektu postoupila do další fáze, pročež Koordinátor vyzval Partnera k uzavření tohoto Dodatku o hostování.

(C) Partner v postavení Implementující organizace má zájem nabýt účinností tohoto Dodatku o hostování postavení Hostující organizace, se všemi právy a povinnostmi příslušejícími k tomuto postavení.

Strany v souladu s článkem 9 Smlouvy přistupují k uzavření Dodatku o hostování o následujícím znění:

1. Definice a výkladová pravidla

1.1. Není-li v tomto Dodatku o hostování uvedeno jinak, uplatní se v plném rozsahu definice a výkladová pravidla převzatá Stranami v článku 1 Smlouvy.

2. Předmět a prohlášení stran

2.1. Strany prohlašují, že

2.1.1. Výzkumník předložil Projekt, jehož specifikace tvoří <u>přílohu č. 1</u> Dodatku o hostování;

2.1.2. Projekt předložený Výzkumníkem splňuje požadavky Programu;

2.1.3. Výzkumník má zájem realizovat Projekt u Partnera;

2.1.4. Výzkumník byl vybrán v rámci výběrového procesu Programu a jeho výběr, včetně přiřazení k Partnerovi, byl oficiálně schválen Řídicím výborem (Steering Committee) – Protokol o výběru Výzkumníka a jeho přiřazení k Partnerovi tvoří <u>přílohu č. 2</u> Dodatku o hostování.

2.2. Partner se zavazuje nejpozději do 1. října 2024, od uzavření Dodatku o hostování uzavřít s vybraným výzkumníkem, xxxxxxxxxxxxxxx, narozený xxxxxxxxxx, Pracovní smlouvu svým obsahem odpovídající Pokynům k Pracovní smlouvě (viz Příloha č. 3 Smlouvy). Nebude-li Pracovní smlouva dle předchozí věty v daném termínu uzavřena, pozbývá tento Dodatek o hostování účinnosti a Partner ztrácí postavení Hostující organizace.

2.3. Partner se dále zavazuje poskytnout Vybranému výzkumníku Spolufinancování za podmínek a v rozsahu stanoveném Smlouvou.

2.4. Partner bere na vědomí, že účinností tohoto Dodatku o hostování nabývá postavení Hostující organizace s právy a povinnostmi příslušejícími tomuto postavení. Tím nejsou dotčena další práva a povinnosti plynoucí Partnerovi ze Smlouvy.

3. Ostatní a závěrečná ustanovení

3.1. Tento Dodatek o hostování nabývá účinnosti dnem jeho zveřejnění v registru smluv.

3.2. Ve zbytku zůstávají ustanovení Smlouvy nedotčena.

V ______________ dne __________

V ______________ dne __________

Koordinátor
Mgr. Pavel Jovanovič, statutární ředitel

Partner
Ing. Robert Jára, Ph.D., ředitel

Příloha č. 1 – Specifikace Projektu

Příloha č. 2 - Protokol o výběru Výzkumníka a jeho přiřazení k Partnerovi (Zápis z jednání Steering Committee)

Obě přílohy jsou součástí Dodatku.

URBAN HEAT ISLAND (UHI) MITIGATION STRATEGIES: GLOBAL SENSITIVITY AND UNCERTAINTY ANALYSIS IN CRITICAL LOCAL CLIMATE ZONES (LCZS) AMONG CITIES IN THE CENTER OF EUROPE

1.1 Quality and pertinence of the project's research and innovation objectives

Urban overheating is becoming a serious environmental challenge owing to the growing urban population, cities, and global climate change [1]. In particular, Urban Heat Island (UHI) is a phenomenon in which the air temperature in urban areas becomes significantly higher than in non-urban and rural areas [2], which occurs because of large-scale human modifications, such as replacing greenery with manmade materials with low albedo and increasing anthropogenic heat through vehicles and air conditioning, along with urban geometry [6-7].

Climate change influences human health, ecosystem functioning, and economic losses, as well as the duration, frequency, and intensity of extreme weather events, such as HeatWaves (HWs) [5]. HWs are short-term incidents (more than three consecutive days) that refer to a specific period with high temperatures based on long-term temperature observations depending on the macroclimatic and geographic location. For instance, the definition of HW in Canada differs from that in Lisbon [3]. HWs led to a mortality rate of 70,000 deaths in Europe during the summer of 2003 [4]. In addition, HWs exacerbate an effect known as UHI. Based on this estimation, 68% of the world's population will be residents in urban areas by 2050, among whom the highest rate of urban growth (90%) is observed in Asia and Africa, while 80% of the population in Europe will live in cities. On the other hand, 2.5 billion extra-urban dwellers are residents in cities during the next decades [6]. Therefore, it is crucial to study the UHI phenomenon accurately, as well as its interaction with HWs, in order to propose adequate and efficient mitigation measures.

Urban Microclimate models (UM) are highly required due to their essential contribution to the anticipation of urban thermal conditions and Urban Heat Island Intensity (UHII)) [7]. UM, models can be divided into micro-scale (e.g., building and street), local-scale or neighborhood-scale (e.g., city and surroundings), and mesoscale models (e.g., regional or global). Mesoscale models strongly rely on detailed meteorological data with a high temporal resolution which is barely available due to logistical and financial constraints. On a local scale, urban surface attributes can be presented by explicit geometries or through mean parameters such as surface albedo and roughness length. In micro-scale models, singular elements of urban canopies including building stock materials and environmental characteristics (i.e. urban forms, location of trees) are required [10 -11]. Although mesoscale models are considered state-of-the-art tools for obtaining reliable results in terms of urban weather and climate forecasting, the overall computational cost of these models is high [10]. Among local-scale models, parametric ones such as Urban Weather Generator (UWG) can provide accurate urban microclimatic estimations in a short simulation time period by considering the prevailing urban environment [12-13]. However, various input parameters are required for UM models whose uncertainties may strongly affect the reliability of the results. In this framework, Sensitivity Analysis (SA) and Uncertainty Analysis (UA) can be used to increase model confidence and provide valuable information potentially helpful for designers and policymakers to make better decisions for the future of cities even in uncertain scenarios [13]. However, although a literature review indicated that numerous studies have employed global SA for conducting building thermal simulation analysis, to the best of my knowledge, few studies have focused on SA and UA applied to UM models [14]. Mao et al. [15] adopted a regression-based technique to identify the uncertainties due to different input parameters (calibration problems) and estimated UHII and urban energy consumption in Abu Dhabi. According to their uncertainty analysis, the UWG was a reasonably robust simulator for approximating the urban thermal behavior in Abu Dhabi for different seasons. Matinez et al. [16] performed Morris technique-based SA and characterized the local microclimate via UA and UWG model in La Rochelle, France. Based on the results, vegetation cover, building height, and road albedo were identified as the key parameters due to UA. In another research, Kamal et al. [17] conducted UA to estimate the influence of urban morphology and building energy load by using the UWG model. Based on these findings, an increased building footprint density could increase cooling consumption. However, an increment in the greenery failed to affect energy saving significantly.

A large number of studies are shown that the magnitude of UHI varies with the urban locations, especially with urban morphology [18]. In particular, the urban context is often quickly classified by decision-makers through the Local Climate Zones (LCZs) approach, as the universal standard for analyzing urban morphologies in terms of the UHI phenomenon. The LCZ is identified as a region of uniform surface cover and land use extending over city blocks for several kilometers which are associated with homogeneous urban environments. According to Stewart and Oke's LCZ classification scheme [19], urban areas can be classified using ten homogeneous urban classes (i.e. LCZs) defined in terms of building height, pervious and impervious surface fractions, as well as tree density, and human activity [20]. This study aims to facilitate consistent and climatologically relevant classifications of urban sites for recording temperature observations [22]. Furthermore, some studies demonstrated a qualitative correlation between LCZ classification and UHII [18-20].

My research during PhD was focused on analysing the effect of urban morphology on UHII in Europe using SA and UA methods with the UWG model which fulfilled the variations of the UHII in an uncertainty scenario and identified the most important parameters in each LCZ under fifteen European cities, Also, I determined the correlation between the intensity of UHI and LCZs.

It should be noted that fifteen selected cities based on the K-means clustering technique were divided into three climate zones consist of Zone 1 (southern European cities), Zone 2 (central European cities where Prague situated in this group), and Zone 3 (northern European cities).

Therefore, in the present research for MERIT Postdoctoral Fellowship, cities lie on Zone 2 are chosen as case studies for further analysis which include: Dublin, Ljubljana, Prague, Paris, and Vienna.

Therefore, in the present research work, UHI mitigation solutions which are represented in the following sub-section are applied on critical LCZs for each city in Zone 2 to assess the impact of these solutions on UHII.

Since the present research proposal has a close correlation to my previous finding. first, I require to present and discuss the magnitude of UHI in different urban contexts (LCZs) in Zone 2:

- **Uncertainty Analysis (UA) of Urban Heat Island Intensity (UHII)**

Figure 1. 1 illustrates the results of UA in terms of the average UHII for each LCZ in Zone 2. Moreover, obtained results show that UHII in LCZ1 which represents a compact high-rise building area is higher than in other urban areas. And it is true in all selected cities in this Zone. Followed by LCZ7 (lightweight low-rise buildings), LCZ2 (compact mid-rise buildings), and LCZ3 (compact low-rise buildings).

Overall, the results indicate the potential impact of urban morphology on the average UHII. In other words, the UHII emphasizes the temperature difference between the different LCZs in all cities located in Zone 2.

LCZ1, 2, and 3 dominated by dense urban fabrics have the highest UHI magnitude since these fabrics usually have various urban canyons that lead to lower Sky View Factor (SVF) [19]. It also affects the loss of heat to the sky through long-wave radiation from urban canyons [22] which leads to the formation of more evident UHIs [23]. Another critical LCZs in Zone 2 was LCZ7 which is probably due to urban spatial morphology, urban surface materials, and a large number of buildings in this LCZ.

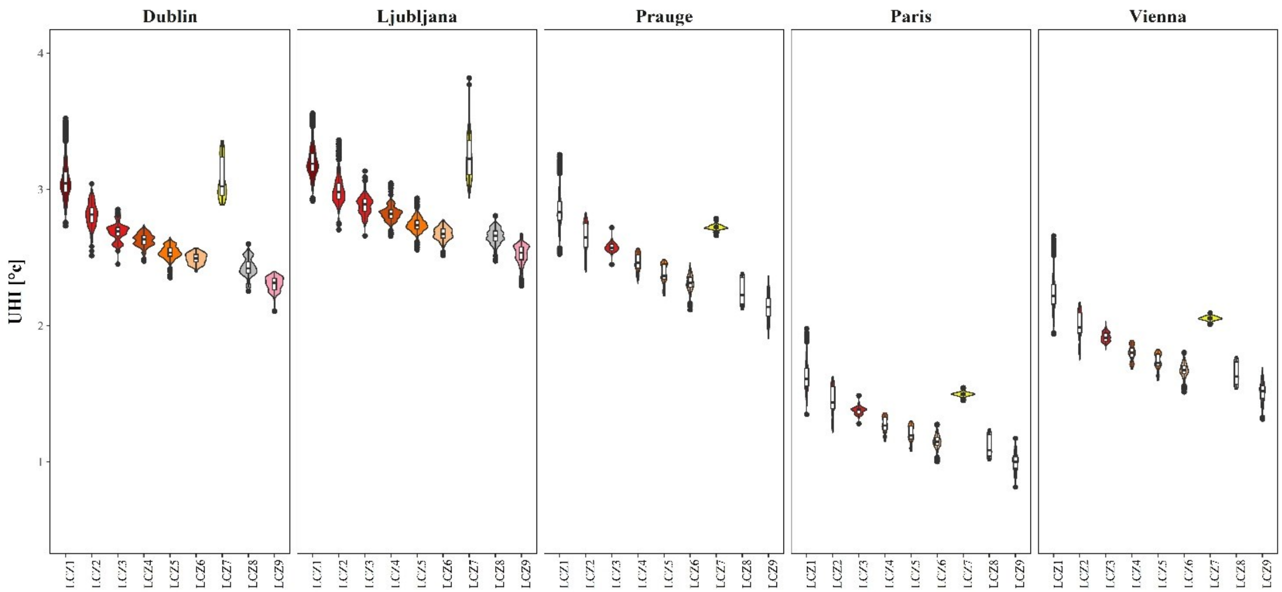

Figure 1. 1. Violin plots with the box-whisker plots of UHII in Zone 2

It is worth noting that the average UHI values are instead in Table 1. 1 based on the measured data in Figure 1. 1.

Table 1. 1. The average and maximum magnitude of UHI for all LCZ types in Zone 2

LCZ	Average of UHII [°C]					Max value of UHI [°C]				
	Dublin	Ljubljana	Prague	Paris	Vienna	Dublin	Ljubljana	Prague	Paris	Vienna
1	3.04	3.19	2.83	1.6	2.21	3.5	3.53	3.24	1.92	2.61
2	2.94	2.97	2.64	1.44	2.01	3.04	3.29	2.83	1.62	2.52
3	2.68	2.88	2.57	1.37	1.92	2.84	3.09	2.63	1.44	1.98
4	2.6	2.81	2.46	1.27	1.81	2.74	2.98	2.56	1.36	1.89
5	2.53	2.73	2.37	1.2	1.73	2.65	2.89	2.48	1.3	1.83
6	2.49	2.67	2.31	1.15	1.67	2.57	2.78	2.46	1.28	1.8
7	3.08	3.25	2.72	1.5	2.29	3.36	3.77	2.78	1.54	2.95
8	2.4	2.64	2.19	1.07	1.6	2.58	2.81	2.39	1.24	1.78
9	2.29	2.52	2.13	0.99	1.51	2.37	2.68	2.36	1.17	1.69

- **Sensitivity analysis (SA)**

Figure 1. 2 indicates the results of 28 input parameters that are taken into account for the SA. This figure shows the Total-order sensitivity indices (ST) obtained from the Sobol SA for each LCZ in Zone 2. It should also be noted that only the input parameters with the highest value of ST values are reported in this figure for the sake of brevity.

Since ST is expressed in relative terms, a comparison between LCZs can be made in terms of input ranking, from the most important (red) to the least important (green). Unsurprisingly, the morphological parameters have the highest impact on the average UHII.

In particular, the fraction of land surface covered with buildings (bld_sf) appears to be a strong predictor of UHII, explaining intra-urban variability, particularly in LCZ1 to LCZ5 as well as LCZ7 in all zones. Followed by the number of buildings using air conditioning (bldcooledPerc) in zones 1 and 2 has the highest impact, especially in LCZ1 and 2 mainly due to the higher amount of building volume present in these LCZs.

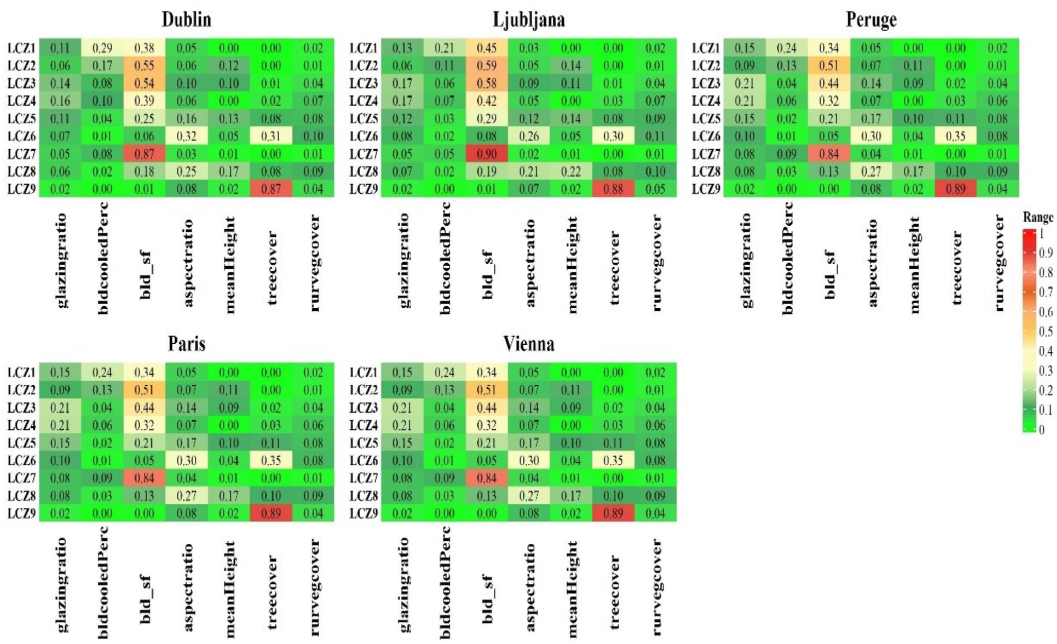

Figure 1. 2. The most influential parameters for each LCZ obtained ST in Zone 2

As conclusion for this section, according to these findings which are carried out during my PhD research, LCZ1, 2, 3, and 7 are the most critical urban areas in terms of UHII among selected cities in Zone 2. So, for further analysis, we are able to evaluate the impact of UHI mitigation strategies such as greening and the use of reflective surfaces namely cool roofs and cool pavement on magnitude of UHI using the UWG model to provide the best UHI mitigation solutions for each city in this Zone.
Besides, by considering the SA results the most influential parameters on average of UHII are identified. Therefore, these parameters long with mitigation's parameters can be considered as input parameters for analysing with the UWG model.

1.2 Soundness of the proposed methodology

The methodology of present research can be conducted in the following four main phases:

- The first phase consists of selecting UHI mitigation scenarios according to relevant literature.
- In the second step, a parametric UWG model is established in terms of range of variations for each LCZ and scenarios.
- The third is related to performing UA, to evaluate the impact of mitigation scenarios on magnitude of UHI.
- The fourth phase belongs to SA. Sobol sensitivity indices are carried out to identify the most influential parameters in each scenario under different urban contexts (LCZs).

1.2.1. Method

The combined trends of UHI intensification and global warming lead to an increased tendency towards the greening of cities as a tool for UHI mitigation. All of the reviewed studies confirm the cooling effect of urban vegetation (green roofs, and green pavements) and its contribution to reduced heat island intensity regardless of the background climatic condition. Additionally, Cool roofs and cool pavements technology have gained a lot of interest in the last years [24]. Hence, among several available UHI mitigation strategies, this study is limited to the analysis of the environmental impacts of urban vegetation (green roofs, and green pavements) and cool technologies (Cool roof and cool pavements).

However, background climatic conditions can impact the median cooling effect of urban vegetation. So, it is crucial to assess these strategies on different climate conditions, particularly in central European cities which are neglected.

Overall, the study can develop new practical guidelines, discuss the public benefits, and elaborates on the future directions of UHI studies [24-25].

The UHI mitigation scenarios for simulation with the UWG model are as follows:

Scenario A or base model: which is a realistic climate condition presented above in LCZs 1, 2, 3, and LCZ7 in all selected cities in Zone 2.

Scenario B: green roof

Scenarios C: green pavement

Scenario D: cool roof

Scenario E: cool pavement

These scenarios should be applied to critical LCZs in five selected cities. So, the total number of simulation scenarios is 80, except for Scenario A. Additionally, the ranges of variation for input parameters of the UWG model should be collected by surveying relevant literature.

It is worth noting that, I firmly believe that my ability to execute this research plan successfully is greatly enhanced under the expert guidance of Professor Jan Tywoniak, who has profound expertise in this research area. His extensive experience and contributions to the field can undoubtedly accelerate the efficiency and quality of my work. Collaborating with Professor Tywoniak will provide invaluable insights, allowing me to gain a deeper understanding of the subject matter and ensuring that the research yields impactful results. Together, we can forge a strong partnership that maximizes the potential of this study and contributes significantly to the advancement of knowledge in the field.

1.3 Quality of the two-way transfer of knowledge between the researcher and the host

The two-way transfer of knowledge between me as the researcher and my host, Prof. Jan Tywoniak, is highly impactful and mutually beneficial, as outlined below:

Cross-Disciplinary Insights: Our knowledge exchange fosters cross-disciplinary insights. I share urban climate mitigation solutions, benefiting his work on building envelope optimization, while his research provides valuable context for building energy modeling.

Advancement of Standards: Prof. Jan Tywoniak's role as head of the national standardization committee can influence industry standards. I contribute insights on energy modeling techniques, potentially impacting future guidelines.

Learning from Experience: Prof. Jan Tywoniak's experiences at UCEEB provide valuable lessons for navigating challenges and guiding my research.

Long-Term Collaboration: The quality of the knowledge transfer establishes a foundation for a lasting partnership with Prof. Jan Tywoniak's research group, fostering continuous mutual learning and substantial contributions to energy-efficient building design.
Publication and Dissemination: Our knowledge exchange leads to joint publications and research dissemination, showcasing our combined expertise and amplifying the impact of our work.
In conclusion, our knowledge exchange has immense potential to advance sustainable building practices, offering innovative solutions and cross-disciplinary insights for energy-efficient building design and urban climate mitigation.

1.4 Quality and appropriateness of the researcher's professional experience, competences and skills.

I have a strong and relevant professional background that aligns well with the proposed Host Organisation, research group, supervisor, and research project. My master's thesis focused on "Numerical Simulation (CFD Simulation) to Analyze Natural Ventilation and Heat Transfer in Shavadoon: A Traditional HVAC System," showcasing my expertise in conducting simulations related to HVAC systems.
Additionally, my Ph.D. thesis titled "Impact of Urban Morphology on Urban Heat Island Intensity in Europe: A Global Assessment Method Based on Sensitivity and Uncertainty Analysis" demonstrates my competence in the field of climate and urban studies, making me well-suited for the current project.
Furthermore, under the guidance of Prof. Tywoniak, who holds significant roles such as Deputy Head in the Department of Architectural Engineering at the Faculty of Civil Engineering, I am confident that I can benefit from his extensive knowledge and experience in the field.
Regarding my skills and competencies, I am proficient in a wide range of software, including Building Information Modeling (BIM), Rhino, Energy Plus, ENVI-Met, Urban Weather Generator (UWG), Python, R, SPSS, ArcGIS, QGIS, Photoshop, Revit, and AutoCAD (2D-3D). These technical skills are highly relevant and valuable for conducting advanced numerical simulations and data analysis required for the proposed research.
In summary, my professional experience, competences, and skills make me a strong candidate to effectively carry out the research project under the guidance of Prof. Tywoniak and in collaboration with the Department of Architectural Engineering at the Faculty of Civil Engineering, Czech Technical University in Prague. My background in CFD simulation and expertise in climate-related studies equip me to contribute significantly to the project's success.

2. IMPACT

2.1 Credibility of the measures to enhance the career perspectives and employability of the researcher and contribution to his skills development

The proposed research offers credible potential to address a critical environmental challenge. It will enhance my career prospects and employability by developing specialized expertise in urban climate and sustainability. The project will also foster the acquisition of valuable technical and transferable skills, making me highly adaptable to diverse professional settings. Ultimately, this research holds promise in contributing to both academic knowledge and practical solutions for urban climate mitigation.

2.2 Suitability and quality of the measures to maximize expected outcomes and impacts

Dissemination and Exploitation Measures:
Scientific Community: We plan to publish our research findings in renowned peer-reviewed journals and present them at international conferences and symposiums. Collaboration with relevant research institutions will facilitate knowledge exchange and expand the impact of our work within the scientific community.
End Users: Engaging with city planners, architects, and policymakers through dedicated workshops and seminars will enable us to share practical UHI mitigation strategies and facilitate their integration into urban planning processes. We aim to raise awareness about UHI, its effects on urban environments, and the positive impact of our research on citizens' well-being and quality of life.
Financial Actors: Collaboration with financial stakeholders, such as investors and urban development agencies, will be established to demonstrate the economic viability and long-term benefits of implementing UHI mitigation measures.
Management of Intellectual Property and Protection Measures: As our research delves into innovative UHI mitigation strategies, we recognize the importance of managing intellectual property and protecting our novel ideas. We will explore relevant legal mechanisms, such as patents, design rights, and copyrights, to safeguard our innovations. Additionally, where appropriate, trade secrets will be utilized to support the exploitation and maximize the impact of our research outcomes.
By meticulously executing this plan for dissemination, exploitation, and communication, we are confident that our research on UHI mitigation will not only contribute significantly to the scientific community but also create meaningful positive changes in the urban environments, benefiting the people of Prague and beyond.

2.3 Sustainability of the candidates' research project in the Region (Central Bohemia/Czech Republic)

The research project on "UHI Mitigation Strategies" holds immense potential for sustainability and further development in the Region of Central Bohemia and the Czech Republic. Through its focus on critical LCZs of Prague, the project addresses pressing urban challenges and aligns with regional sustainability goals since urban overheating is becoming a serious environmental challenge. Also, this project has a possibility to implement in other big cities in the Czech Republic or Europe.
The findings and recommendations have the potential to influence local policies, urban planning practices, and building design guidelines, fostering a more sustainable and resilient urban environment.
Meanwhile, to ensure the longevity and continuity of the research project's impact, we envision opportunities for regional and international collaboration with relevant industry and academic sectors. Partnerships with local governments, municipal authorities, and urban development agencies could facilitate the integration of UHI mitigation strategies into ongoing and future urban planning initiatives. Collaboration with the construction and building industries can drive the implementation of innovative materials and technologies identified during the research.
Internationally, the research project offers the possibility of knowledge exchange and joint investigations with other cities facing similar urban heat challenges. By engaging with international organizations, academic institutions, and research networks, we can share our findings and learn from best practices in UHI mitigation worldwide. Such collaborations can lead to a collective effort in addressing global urban heat issues and contribute to the development of sustainable urban environments beyond national borders.

3. IMPLEMENTATION

3.1 Quality and effectiveness of the work plan and assessment of risks

Data Collection and Analysis: Meteorological data is generated by Meteonorm software. Also, Geographical, and LCZ maps are created by ArcGIS and QGis software. Also, with regard to SA and UA, input parameters (the range of variation for each parameter) is gathered from relevant literature.
Regarding simulation and modeling, the UWG model which is an advanced computational model to simulate UHII variations under various mitigation scenarios is used.
Sensitivity and Uncertainty Analysis: Identify influential parameters and assess model reliability.
Assessment of risks:
Due to the lack of data in terms of the typology of buildings in Prague and general in the center of Europe, selecting the ranges of variation in terms of building parameters for SA and UA would be challenging. So, by collaborating with local agencies and implementing data validation processes are able to mitigate risks.
Also, the Gantt chart of present research work is shown in Table 3. 1.

Table 3. 1. The Gantt chart of present research work

Action	Q1 (2024)			Q2 (2024)			Q3 (2024)			Q4 (2024)			Q1(2025)			Q2 (2025)		
Creating LCZ maps and meteorological data of case studies	■																	
Data gathering		■	■	■														
Model validation				■	■													
Performing preliminary simulations					■	■	■											
Comparing the obtained results with relevant literature								■										
Performing UA									■	■	■	■						
Performing SA									■	■	■	■						
Analysing the results and making graphs with R													■	■				
Writing at least two Q1 papers															■	■		
Participating in conferences and having an oral presentations																■	■	■
Making a conclusion and writing a general policy about our findings																■	■	■

3.2. Relevance, feasibility, and benefit of the research project

The findings of this research hold great potential for publication in esteemed journals like the Sustainable Cities and Society Journal and/or Urban Climate, due to their significance in addressing the pressing issue of UHI mitigation in Critical LCZs. The insights gained from this study can contribute to scientific advancements and inform urban planning policies, promoting sustainable cities and resilient communities.
Additionally, the research outcomes can directly benefit industry stakeholders. Implementing UHI mitigation strategies, such as cool roofs, based on the findings can lead to the growth and improvement of the cool roof market. This can result in enhanced energy efficiency, reduced cooling costs, and improved urban microclimates, making cities more livable and environmentally friendly.
In conclusion, the potential to publish in prestigious journals and the practical applications for the industry make this research project valuable and relevant. Its impact can extend beyond academia, positively influencing urban planning practices and fostering sustainable and climate-resilient urban environments.

3.2. Reference

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Zápis z jednání Steering Committee MERIT ze dne 11.12.2023

Přítomni:

- [redacted] – předsedající Steering Committee
- [redacted] – člen Steering Committee
- [redacted] – člen Steering Committee
- [redacted] – členka Steering Committee
- [redacted] - Programová manažerka MERIT
- [redacted] - Finanční manažerka MERIT

Omluvena:

- [redacted] – členka Steering Committee

Agenda:

1. **Zahájení, schválení programu schůze**

Program schůze:

- **Rekapitulace stavu úkolů z minulého jednání**
- **Představení výběrového procesu**
- **Schvalování předložených projektů**
- **Termíny následujících jednání + zamyšlení nad informacemi potřebnými pro monitoring vědeckých projektů**

Návrh usnesení:

Řídicí komise MERIT bere na vědomí program jednání.

Výsledky hlasování

Pro: 4; Proti: 0

Přijaté usnesení:

Řídicí komise MERIT bere na vědomí program jednání.

2. **Úkoly z minulého jednání**

- Vytvořeno sdílené úložiště pro členy SC v prostředí Microsoft 365
- Aktualizovaný jednací řád a seznam zúčastněných partnerských institucí programu MERIT poslán členům SC
- Připravena Dohoda o mlčenlivosti (Non-disclosure agreement) kvůli zajištění důvěrnosti informací členů Steering Committee, podepsána všemi členy (přílohy tvořily ještě prohlášení v AJ: Prohlášení o důvěrnosti, neexistenci střetu zájmů a nediskriminaci, kvůli splnění podmínek projektu vůči EU)

Návrh usnesení:

Řídicí komise MERIT bere na vědomí stav úkolů z minulého jednání.

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Co-funded by the European Union
Central Bohemia Region

Výsledky hlasování

Pro: 4; Proti: 0

Přijaté usnesení: *Řídicí komise MERIT bere na vědomí stav úkolů z minulého jednání.*

3. **Stručné představení výběrového procesu**

- PPT prezentace Programové manažerky

Návrh usnesení:

Řídicí komise MERIT bere na vědomí informaci o průběhu výběrového procesu první výzvy programu MERIT.

Výsledky hlasování

Pro: 4; Proti: 0

Přijaté usnesení: *Řídicí komise MERIT bere na vědomí informaci o průběhu výběrového procesu první výzvy programu MERIT.*

4. **Schvalování předložených projektů**

- Členům komise byla předem sdílena tabulka s přehledem kandidátů, jejich umístění, včetně navrhovaných secondmentů, stručné abstrakty řešených projektů, a dále kompletní projektové návrhy a hodnotící reporty z obou kol hodnocení
- Všechny projekty prošly hodnocením v mezinárodním transparentním výběrovém řízení v souladu s pravidly programu MERIT.

Návrh usnesení:

Řídicí komise schvaluje celkem 23 projektů předložených do první výzvy programu MERIT, z nichž 15 projektů, které získaly v hodnocení nejvyšší skóre, budou podpořeny, a 8 rezervních projektů může být podpořeno v případě, že některý z podpořených projektů nebude realizován.

Výsledky hlasování

Pro:4 ; Proti: 0

Přijaté usnesení – *Řídicí komise schvaluje celkem 23 projektů předložených do první výzvy programu MERIT, z nichž 15 projektů, které získaly v hodnocení nejvyšší skóre, budou podpořeny, a 8 rezervních projektů může být podpořeno v případě, že některý z podpořených projektů nebude realizován.*

Řídící komise zároveň navrhuje prověřit zejména ruské žadatele a žadatele z třetích zemích z důvodu bezpečnostního rizika realizace jejich projektů (BIS).

5. **Plán pro druhou výzvu a termíny následujících setkání**

- ČERVENEC 2024 – monitoring po prvním reportovacím období (zprávy o průběhu realizace projektů, komunikační a diseminační aktivity vědců, účast vědců na akcích SIC apod.)
- ZÁŘÍ 2024 – schvalování projektů vybraných v druhé výzvě programu

- LEDEN 2025 – monitoring po druhém reportovacím období (zprávy o průběhu realizace projektů, komunikační a diseminační aktivity vědců, účast vědců na akcích SIC apod.)

Návrh usnesení:

Řídicí komise MERIT bere na vědomí plán pro druhou výzvu programu a termíny následujících jednání.

Výsledky hlasování

Pro:4; Proti: 0

Přijaté usnesení

Řídicí komise MERIT bere na vědomí plán pro druhou výzvu programu a termíny následujících jednání. Řídíce komise stanovila termín na příští setkání k prvnímu reportovacímu období dne 25.7.2024.

6. Zamyšlení nad informacemi potřebnými pro monitoring projektů

- Monitoring bude probíhat jednou za 6 měsíců, informace budou pravidelně poskytovány ze strany výzkumných organizací (supervizor + vybraný stážista)

Návrh usnesení:

Řídicí komise MERIT bere na vědomí obsah monitorovacího reportu a schvalují navržené změny.

Výsledky hlasování

Pro:4.; Proti:0

Přijaté usnesení

Řídicí komise MERIT bere na vědomí obsah monitorovacího reportu a schvaluje navržené následující změny, které budou vloženy do monitorovacího reportu:

- neúspěchy a případné změny projektu,

- informace, zda je projekt v souladu s harmonogramem,

- informace o tom, v jakém stavu se projekt nachází,

- milníky projektu.

Monitorovací Report bude upraven a poslán Řídicí komisi k odsouhlasení.

Zapsala: [redacted] Programová manažerka MERIT

Zápis ověřil: [redacted] Předsedající Steering Committee

Příloha: Seznam schválených projektů

Seznam 15 kandidátů s nejvyšším skóre

Name of the candidate	Host organisation	Final score
[redacted]	ELI Beamlines Facility - The Extreme Light Infrastructure ERIC	95,8
[redacted]	Institute of Animal Physiology and Genetics of the Czech Academy of Sciences	95,7
[redacted]	National Institute of Mental Health	94,7
[redacted]	Astronomical Institute of the Czech Academy of Sciences	89,9
[redacted]	Astronomical Institute of the Czech Academy of Sciences	89,7
[redacted]	Institute of Animal Physiology and Genetics of the Czech Academy of Sciences	87,8
[redacted]	Institute of Thermomechanics of the Czech Academy of Sciences	85,6
[redacted]	Astronomical Institute of the Czech Academy of Sciences	84,1
[redacted]	ELI Beamlines Facility - The Extreme Light Infrastructure ERIC	83,3
[redacted]	Czech University of Life Sciences Prague	82,3
[redacted]	Institute of Physics of the Czech Academy of Sciences / HiLASE	81,5
[redacted]	Czech Technical University in Prague, Czech Institute of Informatics, Robotics, and Cybernetics	81,4
[redacted]	Research Institute of Geodesy, Topography and Cartography	81,1
[redacted]	Institute of Physics of the Czech Academy of Sciences / HiLASE	80,1
[redacted]	UCEEB Czech Technical University in Prague, University Centre for Energy Efficient Buildings	78,9

Seznam 8 rezervních kandidátů

Name of the candidate	Host organisation	Final score
[redacted]	National Institute of Mental Health	76,8
[redacted]	Institute of Microbiology of the Czech Academy of Sciences	76,1
[redacted]	Research Institute of Geodesy, Topography and Cartography	76,1
[redacted]	Astronomical Institute of the Czech Academy of Sciences	74,7
[redacted]	UCEEB Czech Technical University in Prague, University Centre for Energy Efficient Buildings	74,6
[redacted]	National Institute of Mental Health	74,5
[redacted]	Institute of Animal Physiology and Genetics of the Czech Academy of Sciences	73,8
[redacted]	ELI Beamlines Facility - The Extreme Light Infrastructure ERIC	73,6