



CONFERENCE "IMPLEMENTATION OF INNOVATIVE MEASURES FOR CLIMATE CHANGE MITIGATION AND ARAPTATION IN THE MUNICIPALITIES IN **BULGARIA**"

1 NOVEMBER 2022, SOFIA

Stara Zagora Municipality











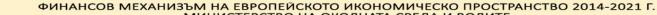












МИНИСТЕРСТВО НА ОКОЛНАТА СРЕДА И ВОДИТЕ ПРОГРАМА "ОПАЗВАНЕ НА ОКОЛНАТА СРЕДА И КЛИМАТИЧНИ ПРОМЕНИ"

ПРЕДИФИНИРАН ПРОЕКТ № 3 "ПРИЛАГАНЕ НА ИНОВАТИВНИ МЕРКИ ЗА СМЕКЧАВАНЕ И АДАПТАЦИЯ КЪМ ИЗМЕНЕНИЕТО НА КЛИМАТА В ОБЩИНИТЕ В БЪЛГАРИЯ РАБОТИМ ЗАЕДНО ЗА ПО-ЗЕЛЕНА, ПО-КОНКУРЕНТНА И ПО-ПРИОБЩАВАЩА ЕВРОПА



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МИНИСТЕРСТВО НА ОКОЛНАТА СРЕДА И ВОДИТЕ ПРОГРАМА "ОПАЗВАНЕ НА ОКОЛНАТА СРЕДА И КЛИМАТИЧНИ ПРОМЕНИ" ПРЕДИФИНИРАН ПРОЕКТ № 3 "ПРИЛАГАНЕ НА ИНОВАТИВНИ МЕРКИ ЗА СМЕКЧАВАНЕ И АДАПТАЦИЯ КЪМ ИЗМЕНЕНИЕТО НА КЛИМАТА В ОБЩИНИТЕ В БЪЛГАРИЯ РАБОТИМ ЗАЕДНО ЗА ПО-ЗЕЛЕНА, <mark>ПО-КОНКУРЕНТНА</mark> И ПО-ПРИОБЩАВАЩА ЕВРОПА



The team

- For performing Analysis of the municipal strategic documents, plans and projects of Stara Zagora Municipality, aimed at identifying the gaps in the urban planning field, related to the climate change mitigation and adaptation, an Expert Team was set up. It consists of three experts from two municipal administrative directorates, which are responsible for environmental protection and strategic planning. Two of the experts are from the Transport, Cleanliness and Environment Directorate and one from the Investment and European Projects Directorate. All experts have rich experience in the preparation, analysis and evaluation of strategy papers, plans, projects and programs;
- The Expert team was also supported by other experts of Stara Zagora Municipality.











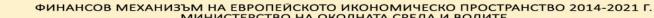












ФИНАНСОВ МЕХАНИЗЪМ НА ЕВРОПЕЙСКОТО ИКОНОМИЧЕСКО ПРОСТРАНСТВО 2014-2021 Г.
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The team



























Norway grants

финансов механизъм на европеиското икономическо пространство 2014-2021 Г. Министерство на околната среда и водите

ПРОГРАМА "ОПАЗВАНЕ НА ОКОЛНАТА СРЕДА И КЛИМАТИЧНИ ПРОМЕНИ"
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The training

Under activity "Improving the capacity for planning, monitoring and introduction of measures for climate change mitigation and adaptation in the Bulgarian municipalities" several trainings have been delivered.

- First training under the project 7-9 December 2021. Training objective starting the process of analysis of the existing strategic and planning documents of the municipalities, bearing relevance to the climate changes. The training was conducted in virtual environment due to the COVID pandemic, which made it possible to include more than the envisaged number of representatives of the municipalities.
- The expert teams of Burgas, Kardzhali, Plovdiv, Ruse, Sliven, Stara Zagora and Sofia started practical work to evaluate the climate change related risks in the big cities — urban heat island effect, alternating floods from heavy rainfalls and drought with water scarcity, as well as urban landslides.























Norway grants



The training

- The partners under the project from the Norwegian Association of Local and Regional Authorities and from the Western Norway Research Institute familiarized the participants with the prepared by them Report on the international experience and good practices (submitted under activity 2.1.).
- The Bulgarian consultation team made introduced the participants into the methodology for analysis of the existing strategic and planning documents and implemented projects in the municipalities (submitted under activity 3).





















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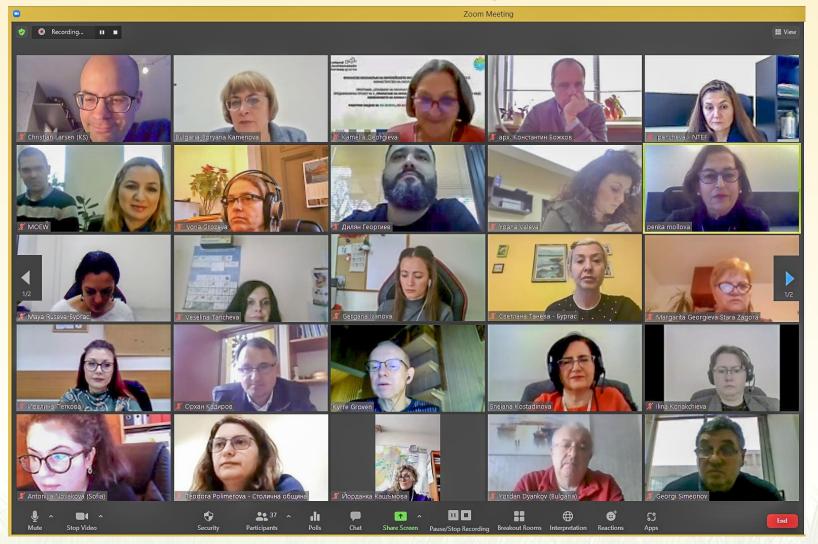
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The training























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The training

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- In carrying out the process of identifying gaps in the urban planning field, related to climate change mitigation and adaptation and future investment measures, the ideas and advice of the experts from the NTEF, the team of Bulgarian consultants from the Analytical-Creative Group and the Norwegian partners made an essential contribution.
- Extremely useful advice and working examples for identifying and implementing concrete climate change adaptation measures have been provided by Norwegian partners through:
 - Report "International experience and best practices for adapting to climate change", which are relevant to the Bulgarian cities, produced by the Western Norway Research Institute on behalf of the Norwegian project partner the Norwegian Association of Local and Regional Authorities (KS);
 - Study trip to Norway with the main purpose of familiarization with the work of the Norwegian municipalities in the climate change adaptation field.























ФИНАНСОВ МЕХАНИЗБМ НА ЕВРОПЕИСКОТО ИКОНОМИЧЕСКО ПРОСТРАНСТВО 2014-2021 Г.
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ПРОГРАМА "ОПАЗВАНЕ НА ОКОЛНАТА СРЕДА И КЛИМАТИЧНИ ПРОМЕНИ" µифиниран проект № 3 "Прилагане на иновативни мерки за смекчаване и адаптация към изменението на климата в общините в българи РАБОТИМ ЗАЕДНО ЗА ПО-ЗЕЛЕНА, <mark>ПО-КОНКУРЕНТНА</mark> И ПО-ПРИОБЩАВАЩА ЕВРОПА



Green solutions in Zheleznik neighborhood

- Threat to which adaptation is being made in Stara Zagora city "urban heat island", which is formed as a result of the increase in the temperatures, especially during the summer and gaps in the urban planning of the built-up city territory. For the assessment of this aspect, data from the conducted measurements taken in different points of Stara Zagora city by Automatic Measurement Stations for AAQ and by a Meteorological Station of the NIHM have been used.
- **Object** the space between apartment blocks in Zheleznik neighborhood. During the summer days, the space is heated by the sun, the apartment blocks accumulate through their black roofs and panel structures a large amount of heat, which is then radiated into the surrounding space.
- What is envisaged implementation of combined measures replacement of pavement, greening, utilization of solar energy and rainwater to overcome the urban heat island effect and to create a favorable environment for recreation and social contacts during the hot summer days for the residents in a small area in Zheleznik neighborhood in Stara Zagora city.
- **Expected result** reduction of the heat stress and the heat island effect for regulation of the local climate and improving the climate mitigation capacity after an increase of the greenery.





















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