

Steps to prepare and submit your application for Hack the Climate

This guide aims to assist you in preparing a clear and engaging description of your city's issue or need, effectively fulfilling the substantive criteria in the most compelling manner.

1) How to Prepare a City's Challenge

Identify the most significant challenge related to the green transformation of cities that your local government is facing. The following resources might be helpful:

- Data collected by the local government
- Strategic documents
- Issues and needs reported by residents
- Observations from municipality Staff
- Formal and legal requirements from central administration or the European Union.

For inspiration, we have identified four thematic categories along with examples of challenges faced by local governments. Remember, these are just examples, and your challenge could pertain to a different area as long as it is related to the green transformation of cities.

<p>Pollution Prevention</p>	<p>Cities are grappling with numerous environmental protection challenges. While regulations and initiatives seem to result in a reduction of pollutants, this battle remains an ambitious goal. Pollution exists in various forms - in the air, water, and soil - and originates from diverse sources. The key will be to find solutions that contribute to a significant reduction of these harmful substances.</p>
<p>Natural Resources Optimisation</p>	<p>Optimizing the consumption of natural resources is one of the most crucial challenges for the future of our cities. In the face of rapid urbanization and a growing population, our cities require solutions that enable efficient management of natural resources. Approaches utilizing technology and data are needed to optimize the use of water, energy, and other natural resources within the city. This may involve monitoring and analyzing water or energy consumption, smart waste management, or platforms supporting residents' education on resource-efficient usage.</p>
<p>Sustainable Urban Mobility</p>	<p>Road transportation is one of the primary contributors to poor air quality in cities. Finding ways to optimize public transportation and reduce CO2 emissions, for which cars are responsible, is a key goal for many cities. Sustainable urban planning and mobility management utilizing modern technologies can provide assistance in this regard. Together, we will explore the application of IT tools in this area.</p>



Spatial planning	<p>Rational and sustainable urban space management is becoming an increasingly significant challenge due to urbanization pressures. Our cities are rapidly expanding, bringing with them challenges related to efficient utilization of available space. It is within this domain that the key to creating a future where urbanization aligns with green infrastructure, environmental friendliness, and a high quality of life for residents lies.</p> <p>This could entail leveraging IoT technologies and digital twins for monitoring and optimizing land usage, as well as designing solutions with a focus on sustainable development to support diverse community needs.</p>
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2) Engage the city officials responsible for the challenge area. A good practice is to establish a task force that:

- Will verify and refine the challenge objectives,
- Compile a dataset that could be useful for programmers,
- In the case of qualifying for hackathon, respond to participants' questions,
- Participate in the implementation of the winning solution.

<p>Complete the fields in the table below. For your ease, you can utilize the draft from this document and subsequently transfer the descriptions to the application form on the website. Kindly be advised that the deadline for completion is September 3rd, 2023.</p>	
<p>Why do you want to take part in the course? Explain what your expectations and motivations are regarding participation in Hack the Climate.</p>	<p>What problem would you like to solve in your city? What is your main challenge and its context? Why is it important for you to solve the problem and what data resources can be used to solve it?</p>
<p>What functionalities do you expect from a tool that responds to the described challenge? Present and describe the expected features of the solution, as well as outline who is intended to operate this solution. Specify the scope of responsibilities for this individual within the office, and provide information about their availability during Hack the Climate and the implementation phase.</p>	<p>What target group does the challenge apply to? Describe the target group of this challenge: Identify a specific subset of city residents and outline their primary need or issue, age range, approximate size, and other distinctive characteristics. Justify the positive impact of addressing this challenge for both the group and the urban ecosystem, and propose a way to measure this impact (KPI).</p>



How do you rate the universality of the challenge? Based on publicly available sources, estimate the number of cities facing a similar challenge. Please provide these sources.

Availability of solutions on the market
Are there solutions on the Polish market that address the reported challenge? Answer based on your own knowledge of the Technology for Cities Map (<https://pfrdlamiast.pl/technologie-dla-miast.html>), City Technology Exchange (<https://gielamiejskichtechnologii.pl/>), and other available sources. If yes, please list the companies offering such solutions.

3) How will the submissions be selected?

From the correctly submitted Entries, a designated committee will select 12 Challenges based on:

1) The formal criteria assessed on a binary scale, compliance with which is necessary for participation in the Competition:

a. The possibility of City collaboration with Participants regarding the transmission of information essential to solving the Challenge:

- Availability of designated City representatives during various stages of the Competition (i.e., preparatory workshops, held on-site in Warsaw, virtual Hackathon, Project Implementation, and study visit to Stavanger, Norway), following the schedule published on the website <https://www.pfrdlamiast.pl/hacktheclimate>),
- Proficiency in English at least on a communicative level, enabling effective communication during different activities within the Competition.

b. Provision of data resources related to the Challenge.

2) Merit-based criteria evaluated on a scale of 0 to 3 points:

- a. Detail of the Challenge description (including support with specific examples and data),
- b. Significance for the urban ecosystem (including impact on residents' quality of life, administrative efficiency, etc.),
- c. Functional expectations and the possibility of finding a Challenge solution within the Hackathon format (feasibility within 48 hours),
- d. Scalability of the Challenge (presence of a similar issue in other cities),
- e. Significant difficulties in solving the Challenge using products or services available in the market (preferred absence of identical products or services on the market),
- f. Team representation and motivation (city submissions represented by interdisciplinary teams composed of representatives from administrative units related to the thematic areas of the competition will be preferred).

4) Let's Stay in Touch

We invite you to follow our website at <https://pfrdlamiast.pl/hack-the-climate.html> and send any questions to the email address miasto@pfr.pl.

