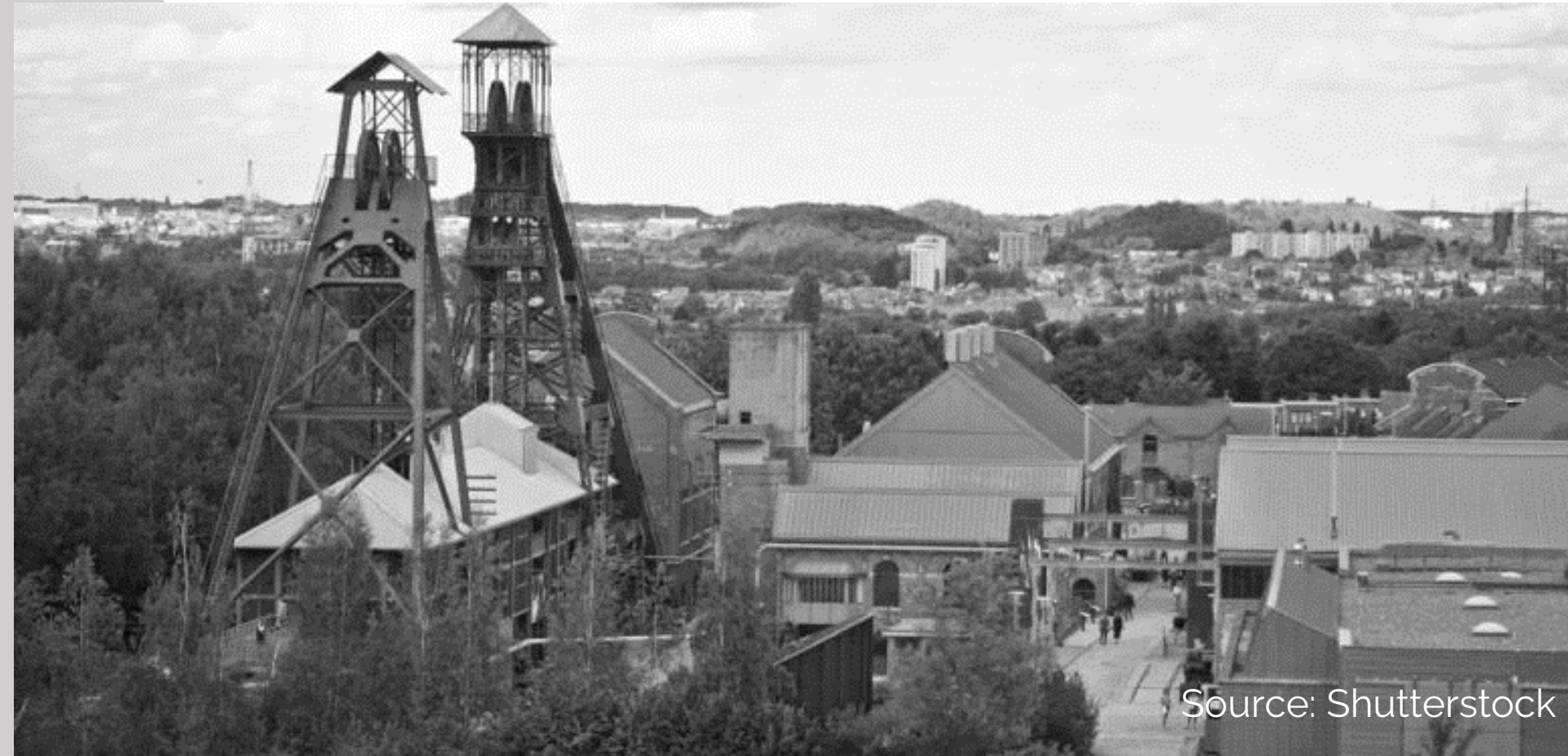


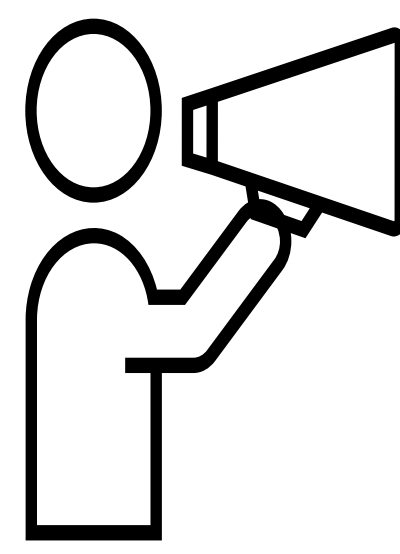
BeBrit Extreme Heat Risk Project City Case Study

About Charleroi

Charleroi, in Belgium's Walloon Region, was founded as a fortress city in 1666. It became Belgium's coal capital in the 19th century, shaping its unique landscape of slag heaps and waterways. Built for defence and industry, Charleroi never developed organically, leaving it struggling for identity in the post-industrial era. Charleroi's regeneration, guided by the **Charleroi Métropole 2015-2025** strategy, aims to revitalize the city through urban redesign, cultural initiatives, and economic renewal. With €145 million in EU funding, projects like green spaces, cultural hubs, and transit upgrades are transforming Charleroi from an industrial past into a vibrant, liveable city.



Source: Shutterstock



"For me it's very difficult. We thought for example of GSM alerts via SMS because all these people have, despite everything, often a phone. The problem is that we do not know how to list their phone number. They change it all the time, they steal their phones, they sell them to consume. In short, we do not know how to have an update list of information, it's very complicated" (Interview).

Key city climate-related policies and planning

- **Sustainable Energy and Climate Action Plan:** adopted in 2017 with a view to achieving the objective of a "zero carbon" city" by 2050
- **The City Project 2019 – 2024:** Seven themes - An inclusive city; A sustainable city; High-performance public services; An enterprising city; An active city; A city built by citizens; A radiant metropolis
- **Nature in the City Strategy:** includes Five Axis: *AXIS 1- SUPER SAMBER!* The Sambre valley as a structuring landscape; *AXIS 2- URBAN NATURE* Exploration of urban forms of nature; *AXIS 3 – FOR HEALTHY, SUSTAINABLE AND LOCAL FOOD;* *AXIS 4- ECOLOGICAL TANKS* Sustaining tomorrow's resources; *AXIS 5 - A SURVEYED LANDSCAPE*
- **Communal Life and Contingency Planning:** The Royal Decree of 16 February 2006 (supp. 22 May 2019, obliges municipalities and provinces to identify the risks located in their respective territories and measure their importance through an in-depth analysis, regularly reviewed and updated
- **General Emergency and Intervention Plan (PGUI):** organizes strategic coordination and sets out the main principles of multidisciplinary intervention that will be essential in the event of an emergency. *Special plans (PPUI)* supplement it according to more specific risks

Assessment of Heatwave Preparedness

- ◆ **City-Level Planning**
 - No dedicated city-wide extreme heat plan.
 - Federal heatwave advice available via AVIQ
- ◆ **CPAS Heat Plan (2022)**
 - **Workers:** Adjust clothing & hours, stay hydrated, apply sun protection.
 - **Homeless Support:** Water distribution, mobile showers, sunscreen, mapped water points.
- ◆ **Grand Hôpital de Charleroi Heatwave Plan**
 - **Patients:** Extra drinks, cooling strategies, hydration rounds.
 - **Staff:** Flexible hours, water stations, adapted uniforms.

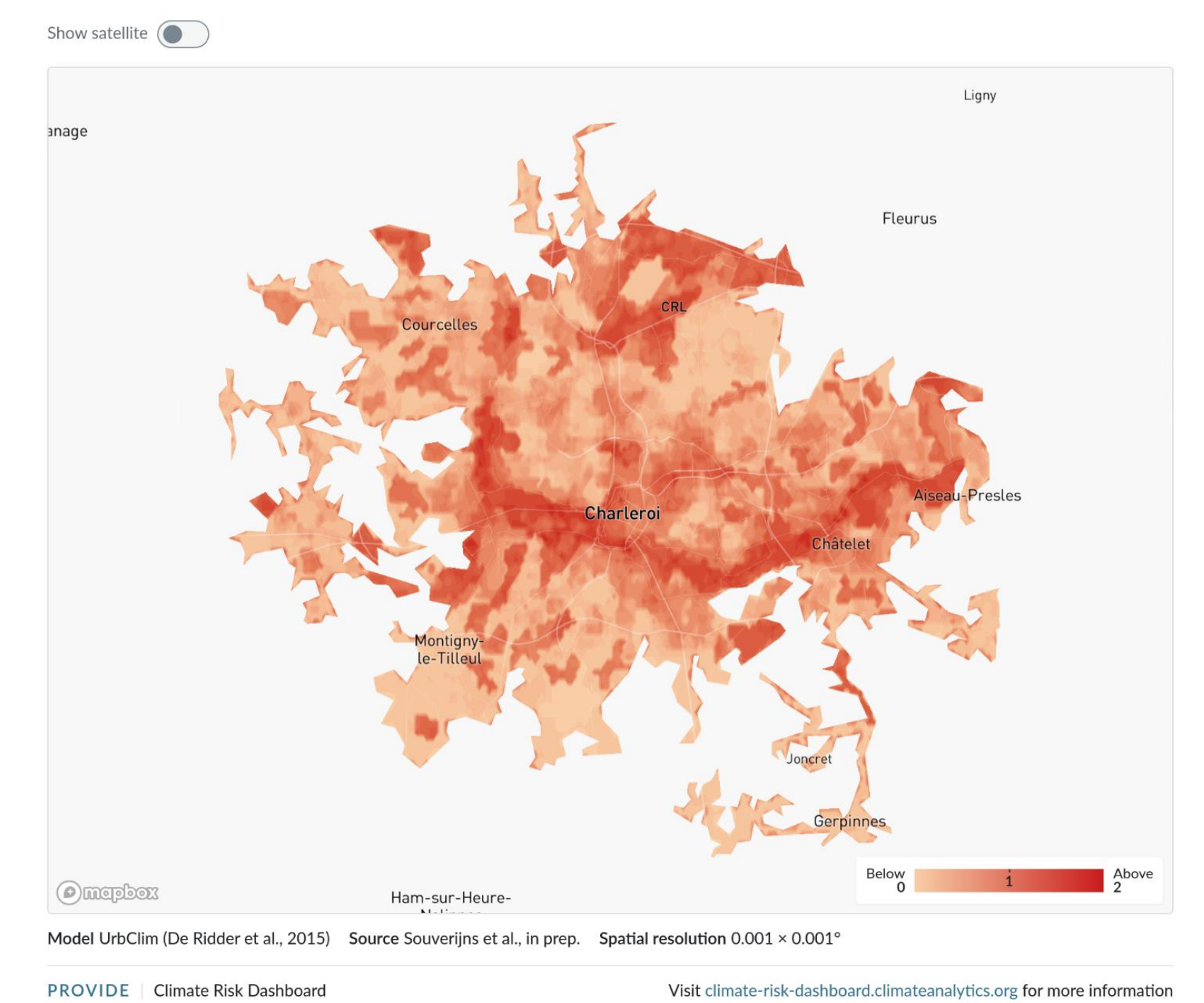
Key Climate Change Challenges

- Urban Heat Island (UHI) effect
- Air pollution
- Drought in some areas
- Loss of biodiversity

Figure 1: This means the number of days per year where wet bulb globe temperature goes over 28°C – Charleroi 2030

Days a year with high heat stress in Charleroi in 2030

This map shows Days a year with high heat stress (expressed in d/yr) over the urban area of Charleroi in 2030, according to the scenario 2020 climate policies.



How to Improve Preparedness & Responses to Extreme Heat in Charleroi

- 1. Recognizing Heat as a Cross-Cutting Risk**
Charleroi lacks a city-wide approach to heat as a multi-sectoral risk, despite integration in health and social care.
Suggestion: Ensure all key departments collaborate on heat risk management to improve city-wide resilience.
- 2. Heat Risk Planning**
Charleroi lacks a comprehensive heat action plan. It relies on federal guidance and targeted social support.
Suggestion: Develop and share a city-wide heat plan with clear advice, accessible resources, and coordinated strategies to protect all residents, especially vulnerable populations.

3. Expand Greening Initiatives

Current funding for greening public spaces is limited to tree bases and façade-mounted plants, excluding parks and larger green areas.

Suggestion: Broaden funding to include parks & community spaces to boost biodiversity, air quality, and public well-being. Simplify the application process to encourage participation.

4. Reach, Identify & Protect Vulnerable Populations

Struggles to inform the homeless due to unstable phone access and limited direct contact points. CPAS knows the city's vulnerable populations, but there is no clear vulnerability map or awareness of heat thresholds beyond health sectors.

Suggestion: Develop a city-wide vulnerability assessment and coordinate heat risk planning across all sectors.

Suggestion: Strengthen street outreach, expand water points as hubs, and leverage informal networks to spread critical information.

5. Addressing Lack of Resources (Financial, Physical, and Human)

Suggestion: Increase public water taps and facilities to ensure access for everyone during hot weather including additional showers and toilets to ensure basic hygiene and health are maintained

Suggestion: Provide lockers for homeless individuals to store their belongings securely. These lockers need to be accessible for a significant portion of the day. Although there are concerns about potential misuse and vandalism, these risks need to be managed to implement effectively.

Suggestion: Increase the number of social workers and staff to meet the needs of vulnerable populations.

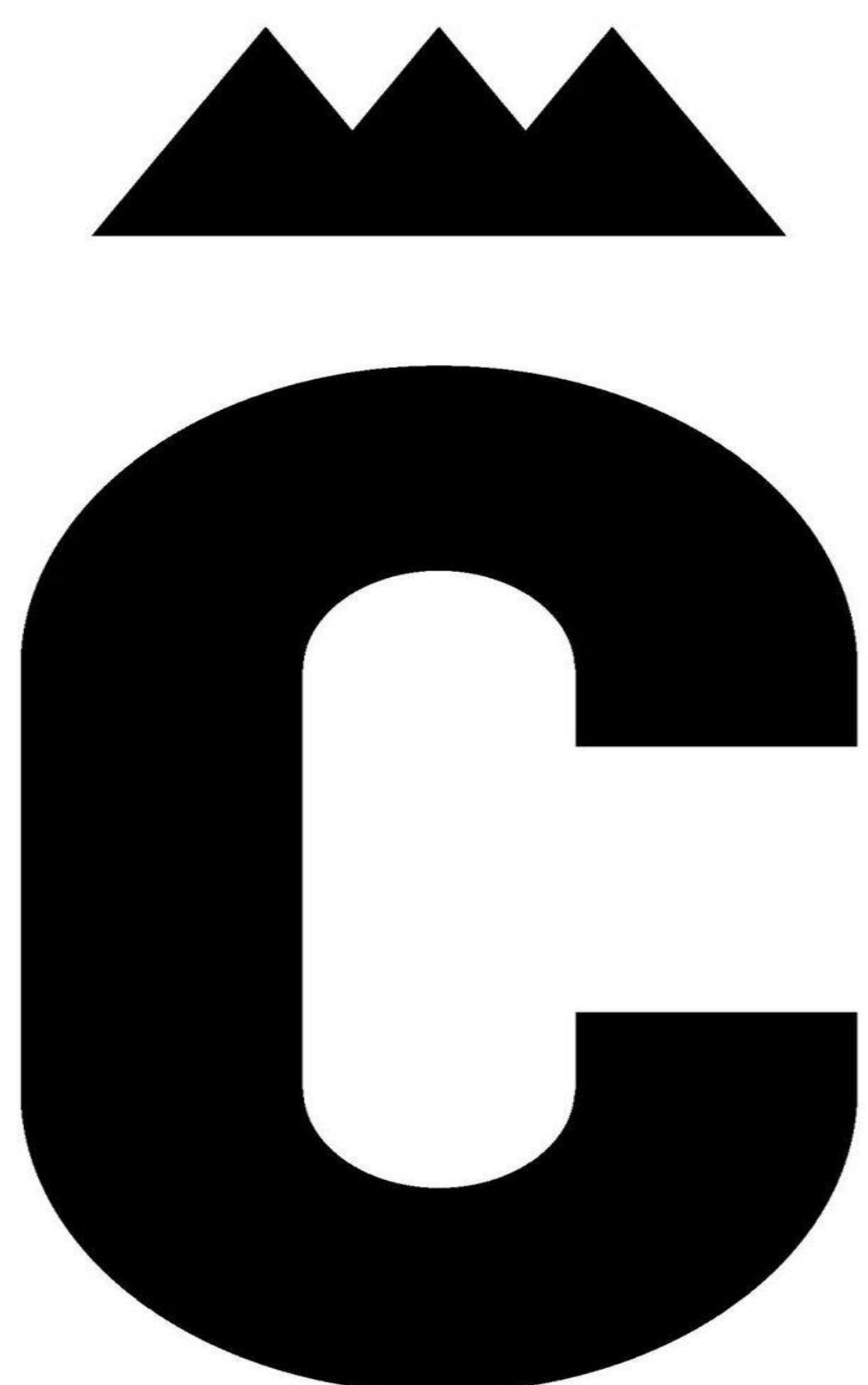
Suggestion: Secure year-round funding for emergency services during heatwaves, similar to winter support.

6. Providing Aid Throughout the Year, Not Just in Cold Weather

Suggestion: Maintain consistent and continuous support for vulnerable populations during both heatwaves and cold weather. Vulnerable individuals face significant health risks during heatwaves, and the same level of support provided in winter should extend into the summer months.

7. Enhanced Funding for Childcare & Social Services

Suggestion: Secure annual funding for childcare and social services as part of the social emergency support, ensuring they can operate effectively year-round. Extreme weather (hot and cold) imposes stresses on vulnerable populations.



CHARLEROI

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