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City of Marseille

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Marseille 2030

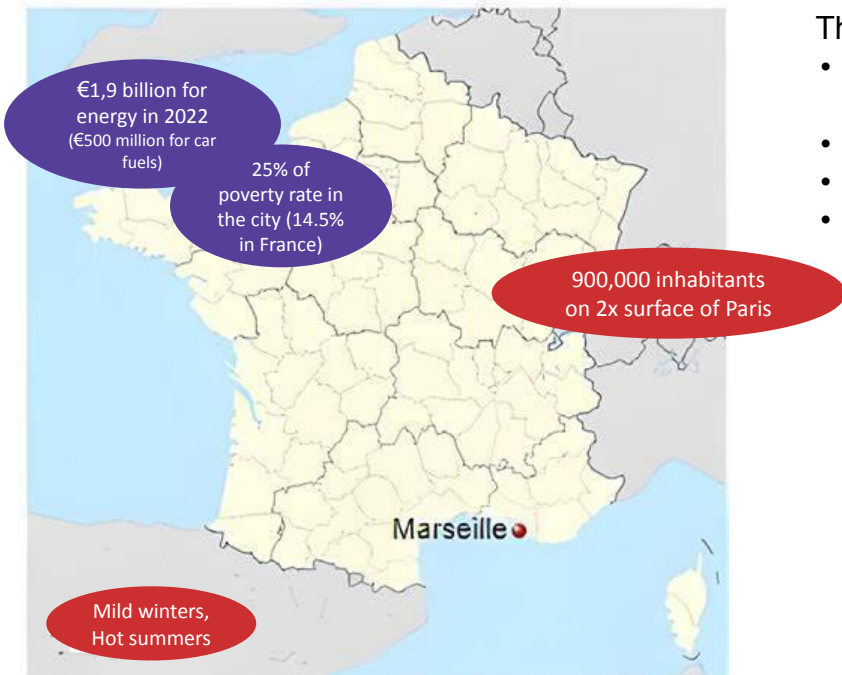
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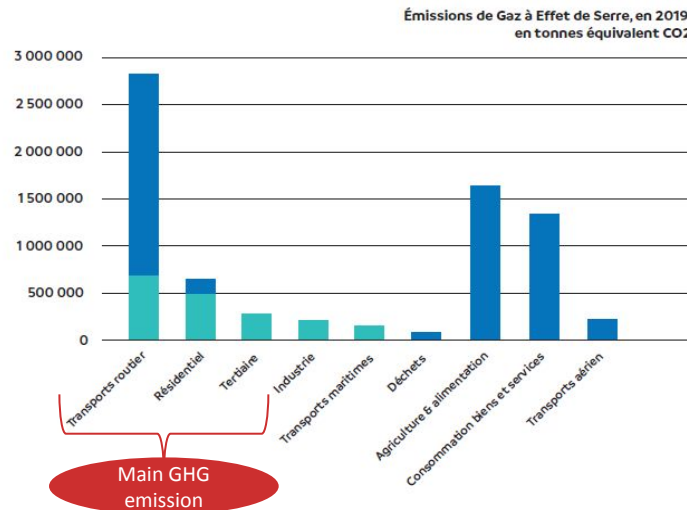
City of Marseille - FRANCE



The City is in charge of :

- municipal buildings (administrative ; schools, swimming pools ; gymnasium etc...)
- public spaces (parks, gardens, beaches etc...)
- social housing
- urban heating networks...

Diagnostic



City of Marseille – FRANCE

City of Marseille labelled « **Climate neutral and smart city** » in 2024

Part of the Cities Mission at the European Level



Climate City Contract : Action plan to reduce our territorial GHG emission by 2030 :

1. Change our modes of transport in Marseille ;
2. Decarbonising the housing stock by fighting fuel poverty and unworthy housing
3. **Increasing sobriety, efficiency and renewable energies**
4. Reduce, Reuse, Sort and Recover waste
5. Strengthen our Mediterranean model of green city
6. Raise awareness throughout the region and transform practices in nurseries and schools.

One of our key project : **Developping urban heating networks to supply 50 000 inhabitants by 2030** => 1st public service delegation voted in december 2024 to connect the north of the city

Current problem

In Marseille, temperature rise is expected to accelerate, reaching +4°C by 2050.

To protect themselves from the effects of heatwaves, residents are resorting to installing individual air conditioners. These air conditioning systems contribute to rising temperatures and create **urban heat islands**.

District Cooling networks are an alternative to air conditioning systems. They can cool buildings using a renewable energy source. In Marseille two existing networks are already capable of cooling buildings. The technology is currently in operation in the 2nd district (Euroméditerranée Area).

This technology is only suitable for new buildings, an not existing buildings. Well, a vast majority of the city's buildings were built before 1990's. Right now, **there's no technical solution for these buildings which would need to be completely redesigned.**

Connecting cooling networks to existing buildings



The number one priority is **public health**. Life in 40-degree weather is unbearable for most city residents. A rise in temperature can lead to an increase in respiratory problems, hyperthermia, and even violence. Regarding energy consumption, it would increase the use of air conditioning systems.

Thus, the City's response must not be counterproductive and cooling systems can be one solution. They must involve the development of renewable energy such as such as **solar thermal, waste heat from industry**, or even **geothermal energy**.

Rising temperatures aren't just a concern for the City of Marseille. Connecting existing buildings to district cooling systems is a crucial issue for Southern Europe, where high summer temperatures are increasingly frequent due to climate change.

Several benefits and advantages can be noted:

- District cooling systems are significantly **more energy-efficient** than individual air conditioning units
- Integration of **Renewable and Waste Heat Sources** and therefore reduction of Greenhouse Gas Emissions
- Centralized cooling systems improve **urban air quality and noise reduction** by reducing the use of individual air conditioning units, which worsen the urban heat island effect
- Centralized maintenance, longer equipment lifespans, and operational cost savings have **economic and operational benefits** compare to decentralized solutions
- District cooling systems can be integrated into broader sustainable urban development planning, contributing to **long-term and joint climate goals**
- Meeting the cooling needs of existing buildings would create a **new market for the construction and renovation sector**

The city of Marseille can **help develop new technical solutions by making some of these public buildings available and requesting the cooperation of local stakeholders** (social landlords, universities, etc.),



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Thank you



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