Drinking water, the emergence of a sustainable resource in the energy and climate transition of Bordeaux Metropole

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The Bordeaux metropolis, with 800,000 inhabitants, 5th in France, and a world-renowned heritage, benefits from continuous demographic growth and a quality of life that is proudly displayed. This proposal is the result of a regional research program - ADEQWAT 2017-2020 - which aims to better understand the adequacy between the demand for drinking water and the availability of the resource by 2050. Over the past two decades, Bordeaux has put energy transition and the fight against climate change at the forefront of its political agenda. The first priority (2000s) was to revolutionize mobility and transport systems in order to curb "urban sprawl" and car use. Then, ambitious urban housing projects proposed denser alternatives in the form of eco-neighborhoods. The aim is to encourage more virtuous behavior in all areas of urban planning by involving the population in decision-making. In this context, and in a context marked by recent heat waves, water (drinking, rain and waste) is becoming a resource of enhanced practical, symbolic and aesthetic value. Its economical management would require a sobriety of uses and the development of renewable sources (turbine projects on the river, geothermal studies for a collective heating and cooling network system, rainwater recovery). The links between urban planning and water are becoming closer in order to fight global warming and improve public health (greening, fountains, water vaporizers, heat island diagnosis). Finally, in the long term, the resource economy is questioning its governance, foreshadowed by an innovative cooperation with neighboring territories (field projects capturing alternative resources and studies for additional resources). Long invisible in urbanization processes, water is regaining a stronghold after having been one of the emblematic resources of access to comfort for all. As part of a sociological method, 35 experts in water and water development and management were interviewed on past and future transformations in these fields. A foresight seminar then brought together the stakeholders to collectively stabilize several possible futures in the face of the challenges of climate change and the socio-economic development of the territories.

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