

[Press Release]

Bremen cyclists are more weather- and climate-resilient

Bad weather won't keep Bremen cyclists off their bikes. A study by European research project Climate-fit.city found that compared to their fellow cyclists in Vienna and Berlin, those in Bremen are less affected by the weather. Come rain or shine, they use their bicycles to move about their cities.

European research project Climate-fit.city helps cities prepare for the challenges they will face as a result of climate change. As part of this project, Judith Köberl (Joanneum Research) and her team worked together with bike ride-tracking company Bike Citizens to determine how weather- and climate-resilient cities' cyclists and cycling infrastructure are.

Köberl's team supports cities that promote cycling in developing climate-resilient infrastructure. Based on rides tracked on the Bike Citizens app and data from permanent counting stations, they analysed how cyclists in Berlin, Bremen and Vienna respond to changing weather and climate conditions and how this might vary by district, looking at rainfall, temperature, wind speed and snow. They then assess a city's "climate attractiveness" both based on objective climatic indicators as well as cyclists' perception of them. Results show that Vienna's climate conditions are considered most attractive for cycling.

The study also found that Bremen cyclists seem to care less about the weather and climate variability. The climate attractiveness scores of the cities were deduced using not only data from local cyclists, but also from cyclists of the other cities. Bremen cyclists consistently ranked a city's climatic attractiveness higher (closer to one) than cyclists from other cities.







	 from Bremen	 from Berlin	 from Vienna
 of Vienna	0.71	0.69	0.58
 of Berlin	0.69	0.65	0.53
 of Bremen	0.68	0.65	0.51

Table 1 – Climate-fit.city did not just analyse cyclists' experience of their own city, but also tracked cyclists when they rode their bike in other cities. This table shows how cyclists from Bremen, Berlin and Vienna rated the climatic attractiveness of all three cities, with 0 = very climatically unattractive and 1 = very climatically attractive.

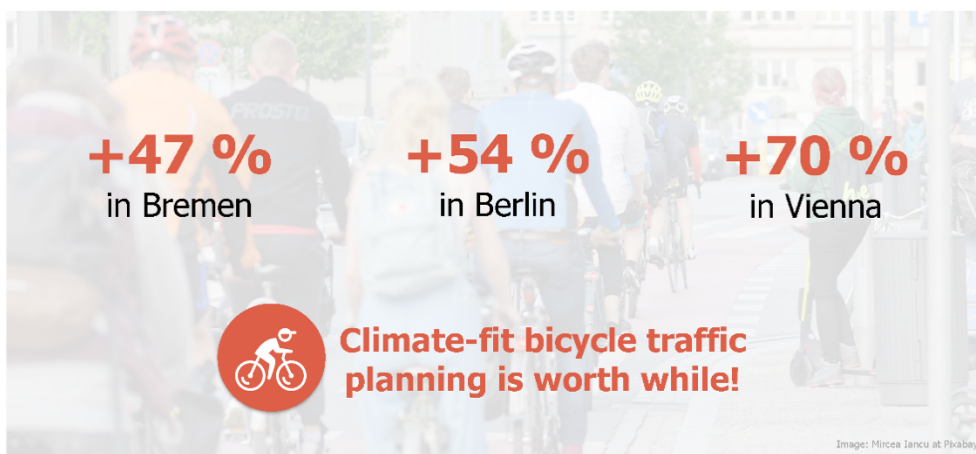
The researchers are not entirely certain what to make of this difference. They suspect that cyclists in Bremen might simply be used to cycling in bad weather. "Public transport may be a crucial factor here," Judith Köberl says. "Vienna has a very attractive public transport network that makes it easy for cyclists to switch to different means of transportation when the weather is bad. In Bremen, the public transport network for commuting is less



developed, so cyclists might just have gotten used to cycling in all weather conditions. Then again, maybe Bremen cyclists are just tougher.”

This research does not just allow cyclists from different cities to compete against one another though. It can show urban planners which areas of their cities need specific adaptations to improve their climate resilience and how cycling might be affected by climate change. The research also shows that reducing cyclists’ sensitivities to weather and climate variability can play an important role in promoting cycling as a green mode of transportation. In Bremen, the current average annual bicycle traffic volume could be increased by 47 % if cyclists were completely insensitive towards variations in meteorological conditions. In Berlin, this potential amounts to an increase of 54 % and in Vienna to an increase of as much as 70 %. Even though they are theoretical possibilities for now, these figures show that climate-fit bicycle traffic planning is worthwhile.

Potential for bicycle traffic volume increases ...



About Climate-fit.city

Climate-fit.city helps cities prepare for the effects of climate change. It provides detailed scientific urban data to predict how a specific city will be affected by climate change and helps cities find tailored mitigation and adaptation strategies.

www.Climate-fit.city

About Joanneum Research

JOANNEUM is a leading international research organization that develops solutions and technologies for businesses and industry covering a wide range of sectors. It is linked to a worldwide network and has been providing leading research according to the highest



international standard for more than thirty years. With more than 450 researchers in seven research units the company ranks among the largest non-university research institutions in Austria. Focused on applied research and technology development, it plays a key role in facilitating the transfer of technology and knowledge in South-East-Austria. JOANNEUM is acting as a customer interface by providing advice and facilitating contact between research, business, industry and the public sector.

About Bike Citizens

Having started with a simple bike navigation app and a smartphone mount, Bike Citizens nowadays focuses on cycling promotion, app technology and data analysis for cities. Bike Citizens aims to give users the possibility to contribute to the livability and engagement in cities through a growing bike culture. The Bike Citizens app has been specifically designed to meet the needs of cyclists in urban areas. It is available in 450 cities worldwide and offers offline navigation, route planning and tracking of cycled routes.

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