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Electric Bikes Pose Environmental Dilemma

40 million people use them in China

China has now the most rapidly developing economy in the world, but people say it will be surpassed in the near future by India. Cities are packed with people, and the streets suffocated by traffic. The biggest part of the population is using regular bikes to move around, but now more than 40 million people started using electric bikes, or e-bike, which may pose a serious environmental threat. Electric bikes have quickly stormed the cities, outnumbering the cars and regular bikes. These range from the traditional stile pedal bike powered by an electric motor to large electric powered scooters, loosely restricted to speed and size, which have fallen under the same rights as the bicycles, running on bicycles lanes, and don't require driver licenses, vehicle registration or helmets. The supporters of the e-bike phenomena suggest that this form of transport is a positive development, being quieter, non-polluting, and providing better mobility than other forms of transport. Nevertheless, some opponents say that the e-bikes are highly unsafe, increase congestion instead of decreasing it, and are actually producing more pollution indirectly by the power plants emissions which produce these e-bikes, and through possible leaks of acids from the heavy batteries that power them. In Several cities, including Beijing and Guangzhou, people have attempted and succeeded to ban the electric bikes from the roads. With cities ever expanding and becoming more congested, new automobiles fill the road capacity, and most of the people have to use bikes to get better mobility. The public transportation services being often incapable of serving such a large population, and bike trips usually taking too long, the Chinese people had to find a faster and reliable source of transportation. Electric bikes are about 35 percent faster than regular bikes, and have a much larger range, but while mobility is achieved, this comes to the price of pollution. E-bikes use car-size lead acid batteries, which emit 30 to 40 percent of the lead to the environment during the production process, meaning about 3 kilograms per battery. When you think that there are more than 40 million such batteries that power the electric bikes on the streets of China, the amount of lead emitted in the environment is colossal. The reduction of energy use and greenhouse effect gas emissions, come to the price of dumping millions of tons of lead. Nevertheless, the success of the electric bikes must be evaluated in the context of whether they can displace the automobiles, which have more negative impact on the environment than the e-bikes, but so far they are currently replacing mostly the buses, regular bicycle users and a few car users. Ultimately, the electric bikes provide the highest mobility and access to urban areas, with the lowest negative impact on the transportation system and the environment.