

'Pavement power' may light up French city (w/ Video)

April 15 2010, by Lin Edwards

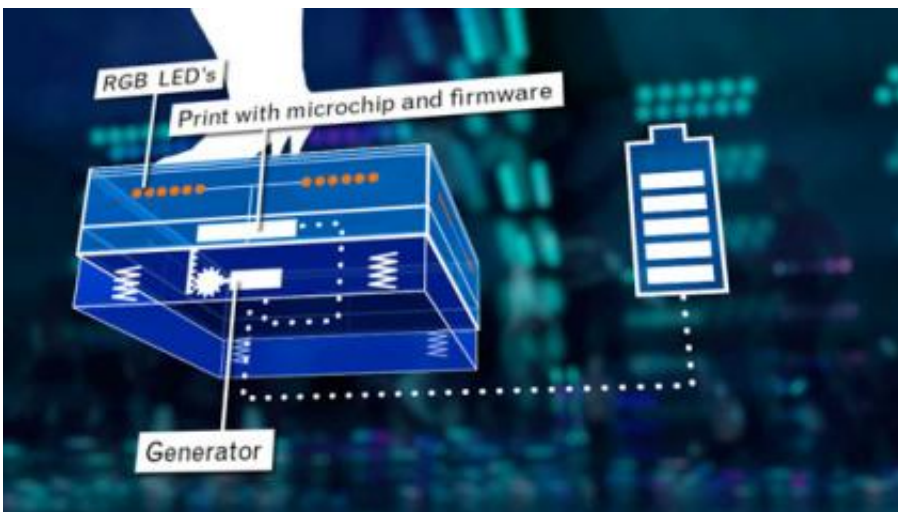


(PhysOrg.com) -- Authorities in Toulouse in the south-west of France are considering a proposal to install "pavement power" technology that would use the energy provided by pedestrians to generate electricity to run the street lamps. A trial section of eight modules already installed in the city produces 50-60 watts, which is enough to power a nearby street lamp.

Deputy mayor Alexandre Marciel, who is also responsible for sustainable development in the city, said the idea has been around for some time but has never been made a reality before, so the project is a world first.

The [pavement](#) modules were developed by a Dutch company, Sustainable Dance Club, which supplies illuminated dance floors lit by the [energy](#) of the dancers. The first installation was at a dance club, “Club Watt” in Rotterdam last year. The modules have embedded microsensors that generate [electricity](#) through the piezo effect when squeezed by pressure exerted on them by dancers on the floor above (or in the Toulouse case, pedestrians on the pavement above).

Marciel said that energy is wasted in the public sphere, and it would be good to cut back the waste. He said it would be some time before the system would be feasible, and there had been problems because the initial prototype modules were designed for energetic dancers and did not work for strolling pedestrians. A model was then developed that does work for people walking normally, but the expense of the pavement modules is still a deterrent. Marciel said the idea was well worth pursuing “in cities where the political will was strong”.



Sustainable Dance Club diagram

There has been a great deal of interest in the SDC system, with a football stadium in Rotterdam recently signing up for a pilot scheme. SDC's marketing director, Jaap van den Braak, said there were several other projects under consideration for using modules in high traffic areas such as sports facilities and stations.

The pedestrian power project is part of a broad effort to place Toulouse, which is known as the technological and aeronautical hub of France, at the forefront of sustainable technology in the country. Marciel said the city was on a mission to become the capital of practical innovation that responds to the needs of the population.

More information: Sustainable Dance Club - www.sustainabledanceclub.com

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Citation: 'Pavement power' may light up French city (w/ Video) (2010, April 15) retrieved 26 April 2024 from <https://phys.org/news/2010-04-pavement-power-french-city-video.html>

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