

Qatar figures out novel way to cool crowds for 2022 World Cup

March 28 2011, by Bob Yirka



(PhysOrg.com) -- In what should be viewed as a contender for some sort of science prize for originality, researchers at Qatar University have come up with an idea whereby artificial clouds might be used to hover over stadiums for the 2022 world cup, which the nation will be hosting eleven years from now, to overcome nearly non-stop sunlight and extreme heat.

Qatar, the tiny, oil rich, barely a bump on the Arabian peninsula, middle eastern country, was chosen over much larger possibilities, despite protests by several other countries, and now must figure out a way to host soccer matches in outdoor stadiums in the summer, in a place where temperatures average 115 degrees Fahrenheit for all of July.

Saud Abdul Ghani, head of the mechanical and industrial engineering



department at Qatar University, and his team have come up with plans for a helium filled dirigible of sorts, constructed of very lightweight carbon fiber and other super-light materials, that would be flat, as opposed to the more familiar spheroid blimps often seen hovering over sporting events at other venues. By making them flat, the artificial clouds could both take advantage of solar energy to power the four electrical motors, and create a much bigger sun block. The clouds/dirigibles would be large enough to cover both the field and stands, and would be steered and held in place via wireless remote control by someone on the ground.

The artificial clouds would serve as an additional aid in cooling players and fans (and practice facilities) as engineers for the planned stadiums are expected to come up with a way to install some form of solar powered air-conditioning as well.

When Qatar was selected to host the 2022 <u>World Cup</u>, many people expected the games would be moved to the winter, when temperatures would be more mild; FIFA's president, Sepp Blatter, though has been adamant that the games would be played as scheduled, insisting that trying to host a World Cup during the middle of the regular soccer season for most teams would be untenable.

Each cloud is expected to cost somewhere in the neighborhood of half a million dollars.

More information: via **BBC**

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Citation: Qatar figures out novel way to cool crowds for 2022 World Cup (2011, March 28) retrieved 28 April 2024 from



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