

# Civil Bulletin

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## Solar Park at Charanka, Gujarat is India's first of its kind.

This solar park constructed in Charanka, Gujarat makes the state Asia's largest solar park hub. This park spread across 5,000 acres, with a capacity of 500 MW, the park can generate both solar and wind energy.

This park is in operational since 2013, it hosts 19 different projects by different developers, including Alex Astral, US-based Sun Edison, Lanco Solar, Roha Dychem, and GMR.



### Mid-sem Exam of Sem-4/6

As per Academic calendar, mid-sem exam of sem-4 and 6 conducted online.



### GTU Sem-5 Result declared

Vaghasiya Hiren Mansukhbhai has topped the sem with 9.7 SPI.



### GTU going for online exam of 6th sem

Due to Covid-19's 2nd wave GTU going for online exam.

We shape our buildings,  
thereafter they shape us.  
-Winston Churchill

"After all, our Killers are our... Brothers!!??  
-Bal Gangadhar Tilak

"A man is but the product of his thoughts. What he thinks, he becomes."  
-M.K.Gandhi

## New Material That is Changing Commercial Construction

### Air Cleaning Bricks

Indoor air quality (IAQ) is becoming a more important concern for commercial real estate. There is no shortage of ways to improve IAQ, but most of them require active energy use to filter the air. Those methods emit carbon and other pollutants in large amounts into the air over the long term.

Prof. Carmen Trudell at Cal Poly San Luis Obispo's school of architecture has invented a passive system that makes use of the bricks on the outside of the building to filter out the heavier particles in the air as it enters the space.

Using the concrete bricks funnel air into an internal cyclone filtration section that separates heavy elements and drops them down into a hopper at the base of the wall. After that clean air is pulled into the building by using either mechanical-device or passively, and maintenance can simply remove and empty the hopper on a periodic basis.

During testing, the system removed about a third of fine particulate matter and 100 percent of coarse particles. Trudell's system is inexpensive relative to alternative options which makes it a better option.

## RAINWATER HARVESTING

**Rainwater harvesting** is the collection and storage of rain, rather than allowing it to run off. Rainwater is collected from a roof-like surface and redirected to a tank, cistern, deep pit (well, shaft, or borehole), [aquifer](#), or a reservoir with percolation.

Its' uses include watering gardens, [livestock](#), [irrigation](#), [domestic use](#) with proper treatment, and domestic heating. The harvested water can also be committed to longer-term storage or [groundwater recharge](#).