Mirrors finally bring winter sun to Rjukan in Norway

Rjukan gets no sunlight for about seven months of the year because it is in a valley surrounded by mountains, as Verity Wilde reports.

The people of Rjukan in Norway are celebrating the installation of giant mirrors, which have finally brought winter sunshine to their town centre. (Wednesday Oct. 30, 2013)

Rjukan lies in a deep valley, and during the six months of winter the surrounding mountains cast a shadow over the town even at midday.

About 1,000 people, among them children in sunglasses, cheered when the main square became bathed in sun.

The idea of using mirrors in Rjukan was first proposed 100 years ago.

Rjukan's inhabitants gathered in the main square on Wednesday for the official inauguration of the mirrors.

Some sipped cocktails on sun loungers, while others played beach volleyball on a makeshift sand court.

As the sun's reflected rays illuminated the town square, a band played the song 'Let the Sunshine In', while Rjukan's townspeople cheered, among them hundreds of children with yellow suns painted on their faces, some waving Norwegian flags.

"A hundred-year-old idea has become reality today," said Steinar Bergsland, mayor of the Tinn municipality which includes Rjukan.

He said he hoped the mirrors would attract visitors to the region, which up till now has been associated more with the bravery of the men who sabotaged Hitler's attempt to develop the atomic bomb at a hydroelectric plant near Rjukan.

The project was funded by a combination of private sponsorship and public investment.

Natural sunlight does not reach Rjukan between early October and the middle of March.

The idea of using mirrors to bring sunlight to Rjukan was first proposed 100 years ago.

The mayor of the local municipality, Steinar Bergsland, hopes the sun mirrors will become a tourist attraction.

The three mirrors are controlled by computer and follow the path of the sun.

The problem of how to bring sunshine to Rjukan was first considered a century ago by a Norwegian engineer and industrialist, Sam Eyde, who developed the town to provide workers for the power plant, which lies at the foot of a waterfall.

At the time, the technology did not exist to fulfil his vision to harness the rays of the winter sun.

Instead, a cable car was installed to bring Rjukan's inhabitants to the top of an adjacent mountain for a fix of winter sun.

Initial opposition

By the beginning of the 21st Century, the giant mirror plan had become a viable option, and the Italian village of Viganella installed a similar sun mirror in 2006.

Rjukan's mirror project was revived in 2005 by Martin Andersen, an artist and town resident.

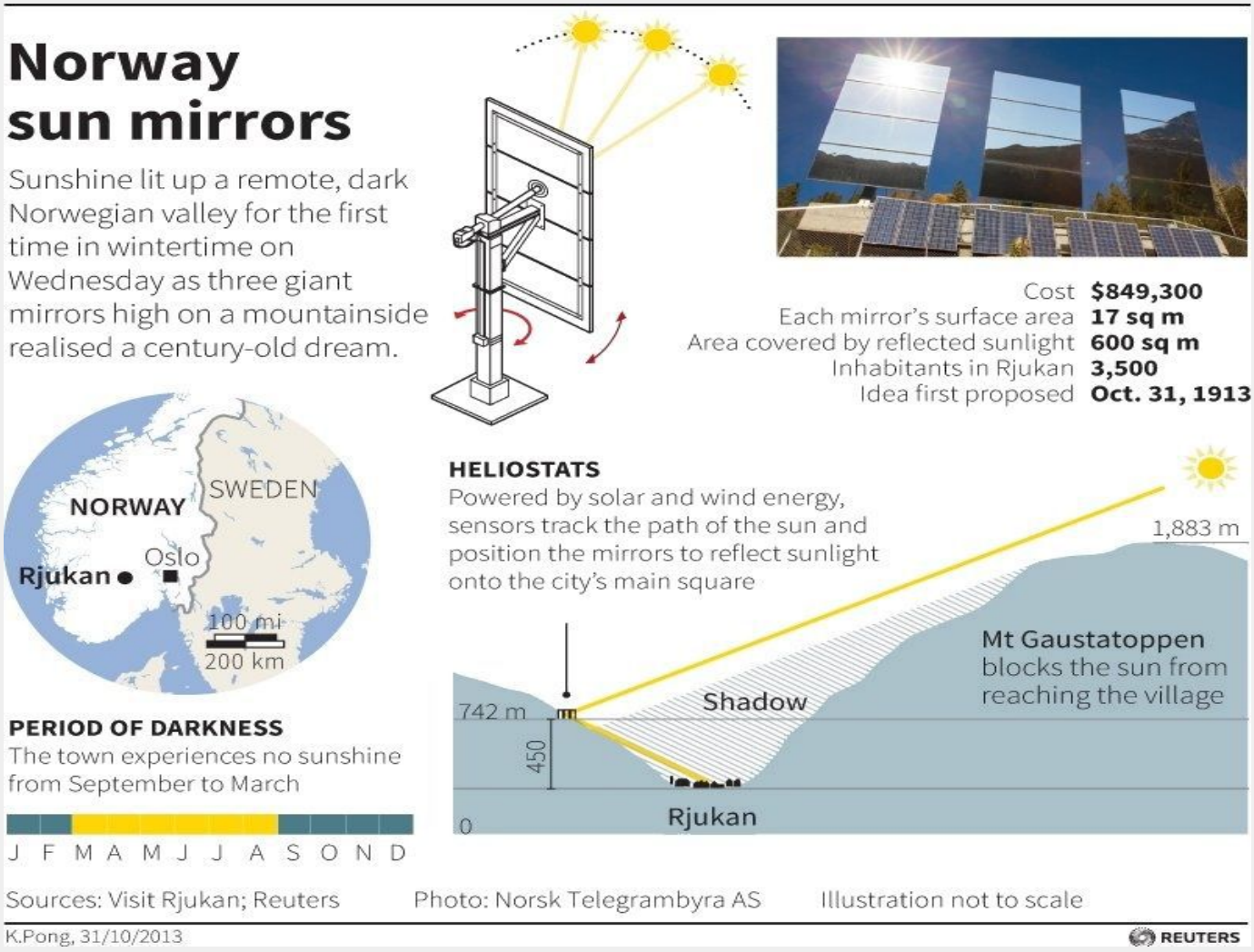
Despite some initial opposition to the use of public money, a combination of private sponsorship and public investment eventually drew together the 5 million Norwegian krone (£528,000; $851,000) needed to complete the project.

The three mirrors, 17sq m each, were brought in by helicopter and placed on a mountain, about 450m above the centre of the town.

Controlled by computers, the tilted mirrors follow the course of the sun to bring sunshine to Rjukan's main square below.

Rjukan is a place "where the impossible has become possible" said Mr Bergsland.

So how does this actually work? Reuters has provided this graphic that explains:



Source : www.bbc.co.uk | Adaptation : LDD-Soft.be

Giant mirrors shed winter sunlight on Norwegian town of Rjukan

Three giant mirrors have been built high on the mountainside above the Norwegian industrial town of Rjukan.

They've been erected to shed some sunlight on a town known for its winter darkness. The mirrors have been installed on the mountain wall about 450 metres above the town's market square.

Each one measures 17 square metres, that's 51 square metres in total to catch the sun's rays and reflect them down on to Rjukan in an elliptical shape of about 600 square metres.

The reflected light will be between 80 and 100 per cent as bright as direct sunlight.

"It's important to have the sun in the winter time and in this town we don't have the sun for six months of the year. People up here want to have the sun. We take the mirrors and reflect the sun down to us. It's a crazy idea but it's funny and I think the people like it," explained Oystein Haugan, the sun mirror project manager.

The mirrors are controlled by a computer to follow the path of the sun, adjusting to the best angle. The idea is not new. It was first suggested in Rjukan 100 years ago and, in 2006, a similar project was successfully set up in the village of Viganella in northern Italy.

Local people, it seems, have embraced the new scheme.

"They say 'hurrah', this is a nice idea. Now we have the sun reflected down to the town square. People are coming here, they're taking pictures, they're laughing and having a good time," said Oystein Haugan.

Solar panels will power equipment to automatically wash the mirrors and move them into position. Designers hope the sunshine will revitalize the town during the winter months.

Source : http://www.euronews.com/ | Adaptation : LDD-Soft.be
