

Chernobyl is now the world's unlikeliest green energy experiment

Чорнобиль в даний час є незамінним експериментом

На Чорнобильській АЕС планують знову виробляти електроенергію, але цього разу використовуючи більш безпечну енергію від сонця. Це частина плану країни зі скорочення залежності від все більш ненадійних поставок російського газу і порушення поставок вугілля. Зона відчуження Чорнобиля майже дорівнює території Люксембургу, і влада каже, що це життєво важливо для прагнення України подвоїти виробництво сонячної енергії. Сонячна Чорнобильська АЕС знаходиться в авангарді останнього експерименту, щоб дати можливість задіяти енергію сонця на противагу попереднім зусиллям, кі зазнали невдачі.

<https://timesofindia.indiatimes.com/world/europe/chernobyl-is-now-the-worlds-unlikeliest-green-energy-experiment/articleshow/63352951.cms>

Final preparations are being made to generate electricity again at Chernobyl, this time using safer power from the sun.

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Site of the world's worst nuclear disaster is experimenting with renewable energy. (Photo: Bloomberg) Site of the world's worst nuclear disaster is experimenting with renewable energy. (Photo: Bloomberg)

A hundred yards from the rusting ruins at the site of the world's worst nuclear disaster, a gossamer array of almost 4,000 photovoltaic panels sits atop a thick concrete slab capping a grave of radioactive waste.

When it comes to clean energy, it's hard to think of a less likely place than Ukraine's infamous Chernobyl nuclear plant. But final preparations are being made to generate electricity again, this time using safer power from the sun.

It's part of the country's plan to reduce dependency on increasingly unreliable Russian gas deliveries and disrupted coal supplies. Dominated by the 300-foot, high-grey containment structure that entombs the destroyed reactor,

Chernobyl's exclusion zone is almost the size of Luxembourg and the authorities say it's vital to Ukraine's push to double its solar energy output.

Solar Chernobyl SPP is at the vanguard of the latest experiment to give a place synonymous with catastrophe a new life after previous efforts failed. The company is a partnership between Ukrainian entrepreneur Yevgen Variagin's Rodina Energy Group and Hamburg-based Enerparc AG.

"Our idea was to utilise the waste land that's unsuitable for anything else and somehow develop the investment project and make business in Chernobyl," Variagin, who was a 10-year-old schoolboy in Kiev when the disaster struck in April 1986, said as he showed off the solar panels installed over the past month.

The Chernobyl power plant was once the cornerstone of the Soviet Union's nuclear strategy in Ukraine.

Then the fourth reactor exploded, blanketing the area with radiation that killed 49 people outright and left thousands more with lingering, often fatal health problems. The zone is dotted with abandoned villages and former dairy farms slowly being swallowed up by the dense forest.

Pripyat, once a bustling Soviet-designed town of 50,000 people housing plant workers and their families, is now an eerie tourist destination with collapsing apartment blocks, a decrepit hotel and an empty supermarket. Behind a stretch of buildings with broken windows and peeling facades, an abandoned amusement park is slowly decomposing.

"The reality is some of the land will be abandoned for generations, even a million years," said Yevgen Gucharenko, an agency employee who accompanies tour groups and other visitors. He was 13 when the reactor exploded. "But there are some clean areas, where it's safe enough for short visits."

That's where it fits in to the grand renewable energy plan. Ukraine wants to boost solar, hydro, wind, biomass and biogas output to 11 per cent of power generation by 2020, said Yulia Kovaliv, the head of Ukraine's National Investment Council.

With a cumulative capacity of around 1.2 gigawatts of solar power by the end of 2017, Ukraine already is a "significant player" at par with European countries such as Austria, according to Bloomberg Intelligence analyst James Evans.

The goal now is to lure companies to generate another 1.2 gigawatts of solar energy on the site of the devastation, enough to power 200,000 homes. Solar Chernobyl is the farthest along of two companies preparing to go on line in Chernobyl.

"The project is symbolic," Kovaliv said in an interview in her Kiev office, "and the key for renewables is to make Ukraine more independent in its energy sources."

What to do with Chernobyl has vexed governments in Kiev since the nuclear plant's remaining reactors were finally mothballed in 2000.

For decades, the stretch of deserted forest and ghost towns about 90 kilometres north of the Ukrainian capital have been ring-fenced, with entry strictly monitored. The 1,000 square-mile swath of land is patrolled by special police and exiting visitors are screened as many as four times for radioactivity before being allowed to leave.

With the improved 1.5 billion-euro (\$1.8 billion) containment structure—the "sarcophagus"—finally settled into place last year, the State Agency of Ukraine on Exclusion Zone Management is brainstorming again.

It has granted tourists limited access, warning them in a handbook to refrain from picking up anything off the ground, eating in the open air and wearing shorts and t-shirts. It's also become the center of spent fuel storage for other nuclear plants in the country.

The Chernobyl management authority is now mulling offering abandoned buildings to house data centres and is promoting scientific research, said Vitalii Petruk, its head. For energy producers, the allure is the cable network already laid out to feed Kiev's growing power needs, he said.

The solar idea started taking shape in 2016 after Solar Chernobyl, which already has a 4.2-megawatt site at the edge of the zone in neighboring Belarus, first inquired about operating within the zone and began to wade through the famously slow Ukrainian red tape. It took years to get the project going.

The government has since smelled an opportunity and is now making it easier for companies to set up, said Petruk. "We now understand what needs to be changed," he said.

In all, 203 companies possess a state license to generate solar energy in Ukraine. There are more to come, especially with a deadline for companies to go on line by 2020 to qualify for a special tariff to charge the government—the buyer of the power—about triple the normal fee.

Among them is TIU Canada, which is looking to open a solar farm in Chernobyl after completing a 10.5-megawatt plant about 550 kilometres southeast of Kiev earlier this year.