



RECENT

Data Centers to Northern Nevada: No Signs of Slowing

OCT 25, 2023

California's Climate Disclosure Laws Could Have Adverse Effects on Data Centers

OCT 25, 2023

KKR Is Close to Investing \$400m in Subsea Cable Firm OMS

OCT 25, 2023

Amazon Tones Down Its Data Center Noise After Residents Sound the Alarm

OCT 24, 2023

Bankrupt Cyxtera Looks to Sell Data Centers to Brookfield

OCT 23, 2023

FEATURED

Gartner Predicts Top 10 Strategic Technology Trends for 2024

OCT 17, 2023

Conquer the Cabling Chaos: Data Center Cabling Best Practices

OCT 04, 2023

Meta Introduces ChatGPT Competitor, AI Tools Amid Industry Arms Race

SEP 28, 2023

5G vs. WiFi 6: Tips for Choosing the Best Wireless Networking Option

SEP 21, 2023

GREEN IT



SUSTAINABILITY

UN-Backed Data Center Competition Highlights Need for Open Source Sustainability Solutions

OpenUK's 'Patchwork Kilt' data center challenge closes on November 10.

James Walker | Oct 30, 2023



OpenUK has partnered with the United Nations (UN) to launch the 'Patchwork Kilt' challenge, a worldwide competition that's aimed at stimulating innovation in the field of open source [sustainability](#) solutions for data centers.

The global data center industry continues to experience rapid growth. With energy demand from the sector now accounting for [more than 1%](#) of global electricity use, the need for sustainable solutions is greater than ever.

Related: [7 Open Source Tools to Consider for Your Data Center](#)

"Open technology can play a vital role in improving data center efficiency, helping to drive data center operations in a transparent, innovative, and ecologically responsible way," OpenUK CEO Amanda Brock told *Data Center Knowledge*.

Building on its Data Centre Blueprint that was launched at COP26, OpenUK is hoping its latest competition will encourage the next generation of [open source](#) solutions to help ensure the long-term viability of the data center ecosystem.

Patchwork Kilt Data Center Challenge

Related: [openDCIM Offers Open Source Option for DCIM](#)

Running from October 10 to November 11, participants in the [Patchwork Kilt](#) data center challenge can make open source contributions across numerous different fields for developing carbon-neutral solutions for data centers.

The areas include:

- **Heat redirection:** Develop an open source software solution to monitor and redirect heat produced in data centers
- **Building repurposing:** Create an open source tool to better re-evaluate urban spaces, finding brownfield sites that can be reused for data centers
- **Heat reuse:** A statistical analysis of open datasets to identify areas to repurpose wasted heat
- **Circular supply chain:** Build an open source software solution that manages the lifecycle of critical data center components
- **Blueprint evolution:** Analyze Patchwork Kilt data for insights into how to improve global sustainability efforts
- **Community empowerment:** Provide communities with insights from data centers that can be used to build more sustainable cities

Image courtesy of OpenUK



The winner of OpenUK's 'Patchwork Kilt' Data Center Challenge will be announced in February 2024

Industry Support

Jimmy McArthur, director of business development at the OpenInfra Foundation, an open source infrastructure non-profit and maintainer of the [OpenStack](#) project, welcomed the launch of the Patchwork Kilt challenge.

"I love the fact that the UN is taking a stance on putting open source technologies first," McArthur told *Data Center Knowledge*.

"All six of these categories should be urgently addressed. Many responsible organizations working with the OpenInfra Foundation have already started by using OpenStack to help manage their data center workloads."

He added: "I look forward to seeing what the Patchwork Kilt contest uncovers to help drive technology solutions to a more responsible and sustainable place."





Data Center Challenge Details

Submissions for the Patchwork Kilt challenge do not need to come exclusively from UK residents or organizations, Brock confirmed.

"The open source community is global, and we want this to be reflected in the challenge, which is why we're welcoming contributions from anyone with the necessary ability to create them," she said.

Across the different submission categories, OpenUK has a range of requirements to ensure the competition stays true to the ethos of open technology. These include:

- **Licensing:** All contributions should adhere to open source principles, with source code and data released under open source licenses or open data licenses from Creative Commons, the CDLA, or similar.
- **Open Source Software:** Code should be open source, and repositories must be publicly accessible on platforms like GitHub or GitLab. Projects should align with open standards, innovation, and sustainability goals.
- **Supporting evidence:** Submissions should include supporting documentation and a brief video to help others understand and use the project.
- **Environmental Focus:** Each submission should address a specific environmental issue related to data centers and sustainability, as outlined in the respective challenge category.

Positive Strides Toward Sustainability

According to Brock, the data center industry has "undoubtedly made some positive strides toward sustainability" over the past decade.

"Since 2001, data centers have become more energy-efficient through virtualization, improved cooling systems, and server consolidation," she said. "Data center design and construction have become more environmentally friendly, focusing on using sustainable materials and efficient layouts.

However, despite these advancements, she said there's still much work to be done.

"The industry needs to further embrace open technology solutions and other innovations to achieve the goal of genuinely carbon-neutral – or even carbon-negative – data centers."

By integrating sustainable practices and open source technologies into the core of data center operations, Brock said this will make a "substantial and lasting difference" to an industry that is undergoing a period of rapid expansion.

Patchwork Kilt submissions can be made on the UN's Unite platform. The winning contributor will be invited to present their solution at OpenUK's State of Open Con 24 on February 6-7, 2024.

TAGS: BUILD/CONSTRUCTION EUROPE OPEN SOURCE ENERGY

0 COMMENTS

RECOMMENDED READING



Data Center News Roundup: New Facilities Unveiled, AI
OCT 27, 2023



California's Climate Disclosure Laws Could Have
OCT 25, 2023



Sustainability: An IT Mandate Being Embraced in
OCT 24, 2023



The State of Data Center Storage Cooling in 2023
OCT 19, 2023



Data Center Knowledge

Get the latest news, expert advice, and insights from Data Center Knowledge.

[SIGN UP FOR NEWSLETTERS >](#)

GREEN IT

News Analysis



SUSTAINABILITY

California's Climate Disclosure Laws