

# Catalysing Data Centre Investment for Africa's High-Performance Computing and Climate Action through the Digital Investment Facility (DIF)

Wednesday, 3 December 2025 13:30 (1h 30m)

The rapid growth of Africa's data-intensive research, artificial intelligence (AI), and high-performance computing (HPC) workloads is driving unprecedented demand for resilient and sustainable data infrastructure. Data centres are emerging as critical enablers of scientific discovery, cloud adoption, and digital innovation, yet the region continues to face significant barriers: limited local hosting capacity, reliance on international facilities, high latency, data sovereignty concerns, and a shortage of investment-ready projects.

The Digital Investment Facility (DIF)—a Team Europe initiative co-funded by the European Commission, Germany, and Finland, and implemented jointly by GIZ and HAUS—addresses these gaps by boosting investment in green and secure digital infrastructure, with a focus on data centres and Internet Exchange Points (IXPs). Operating as a project preparation and advisory facility, DIF supports projects from early design to contract closing, enhancing bankability through technical and financial advisory services, pre-feasibility studies, ESG integration, and investor matchmaking.

Crucially, DIF embeds a climate nexus at the core of its work. By promoting energy-efficient, renewable-powered data centres and aligning with ISO 50001 energy management standards, DIF ensures digital infrastructure projects contribute directly to climate action and the implementation of Nationally Determined Contributions (NDCs). Greener data centres reduce emissions from digital growth, enhance resilience through disaster recovery capacity, and enable the digital tools required for climate adaptation (e.g., climate modelling, earth observation, and early warning systems).

At CHPC, DIF will showcase how its approach enables data centres to meet the demanding requirements of HPC and advanced research—providing low-latency access, high-availability colocation, and sustainable cloud platforms that can host scientific datasets and AI workloads. The presentation will highlight the emerging pipeline of African digital infrastructure projects, the application of international standards, and the opportunities for researchers, policymakers, and investors to collaborate in building a digitally sovereign and climate-aligned HPC ecosystem in Africa.

## Presenting Author

Mr Mulalo Mphidi

## Email

mulalo.mphidi@giz.de

## Student or Postdoc?

## Institute

GIZ

## Registered for the conference?

Yes

**CHPC User**

## **CHPC Research Programme**

**Primary author:** Mr MPHIDI, Mulalo (GIZ)

**Presenter:** Mr MPHIDI, Mulalo (GIZ)

**Session Classification:** DIRISA

**Track Classification:** DIRISA