

CHERITech'25 **CONFERENCE**

Manchester, UK



2025

14th November

 cheri-alliance.org

CHERI Centre for Software and Tools

Introducing a development hub

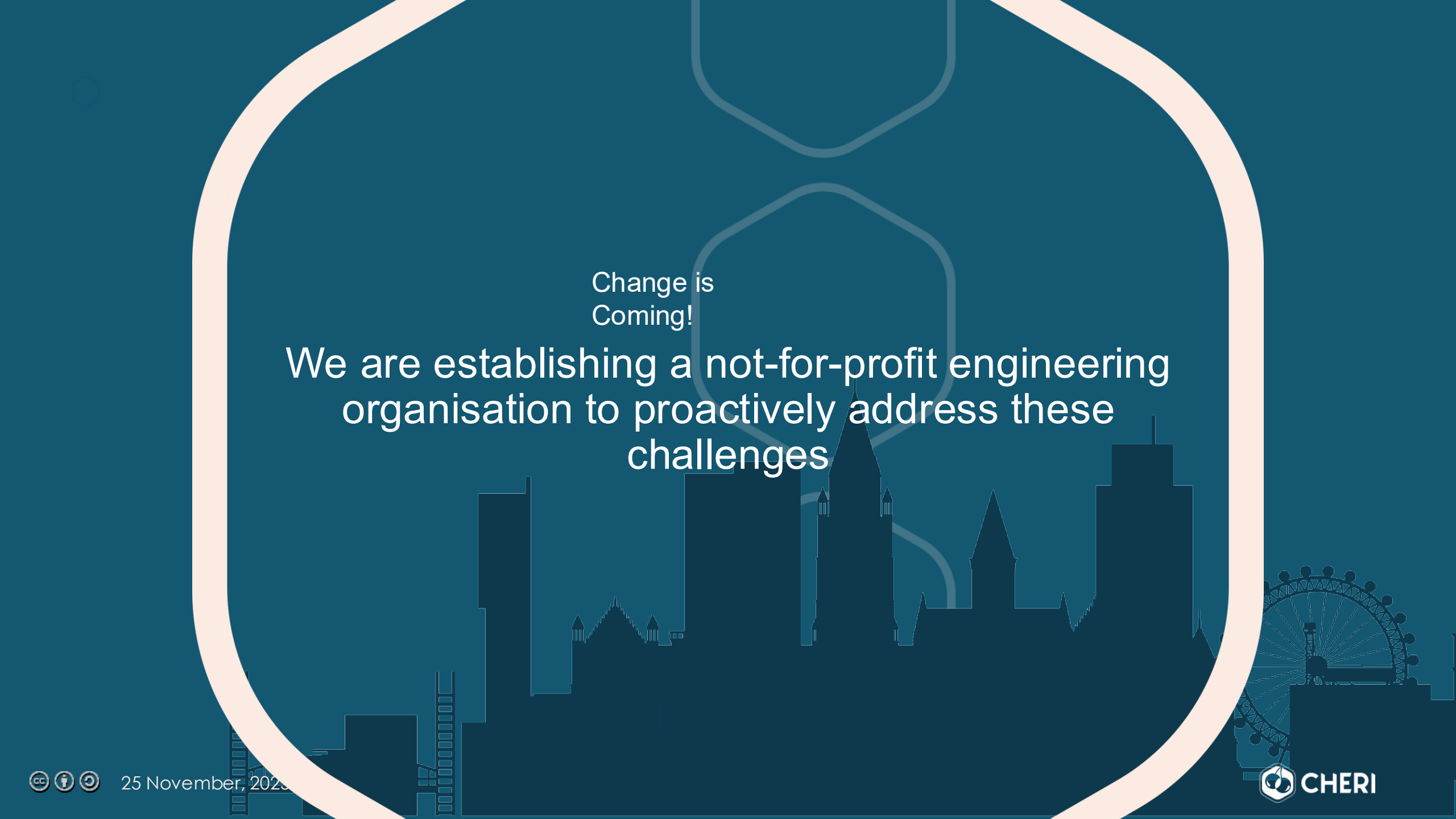
Andrew Murray
Director – The Good Penguin

◻ **A Growing Community**

- Considerable effort invested in CHERI software
- Often though research, demonstrators or proof of concepts
- Aimed at advancing or demonstrating CHERI
- Rarely leads to mature industry ready software stacks

○ Technical Debt is a Barrier to Adoption

- Out of date software
- Fragmentation
- Incomplete software stacks
- Missing documentation
- Forces product makers to work on non-differentiating software in isolation
- **A significant and ongoing effort is needed to enable industry adoption**



Change is
Coming!

We are establishing a not-for-profit engineering
organisation to proactively address these
challenges

Mission Statement

“ Improve the availability, quality and upstream alignment of open-source software stacks and tools for CHERI ”

○ Engineering Team

◆ Core Activities:

- Working with the ecosystem to identify challenges and where we can provide value
- Ready private code for open source
- Consolidating
- Upstreaming
- Rebasing
- Specific Developments

◆ The hub will develop its own engineering team

◆ Initially resources will be provided by The Good Penguin and similar organizations

○ **Open Source Development**

- ◆ Provide the infrastructure needed for open source development
- ◆ Provide CI and hardware in loop testing
- ◆ Allow anyone to participate in development
- ◆ Represent an obvious upstream for staging CHERI work

Distribution

- ◆ Availability of CHERI software and software stacks, representing the 'current state of art'
- ◆ Documented and tested releases for supported platforms

○ Funding

- ◆ Our efforts are initially funded by UKRI
- ◆ We will become self sustainable through:
 - Membership fees (to share costs and consolidate effort to address shared, non-differentiating engineering challenges)
 - Access to hardware board farm
 - Sponsorships / consultancy



We want to hear from you, how can the hub
serve you ?

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Thank you!

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