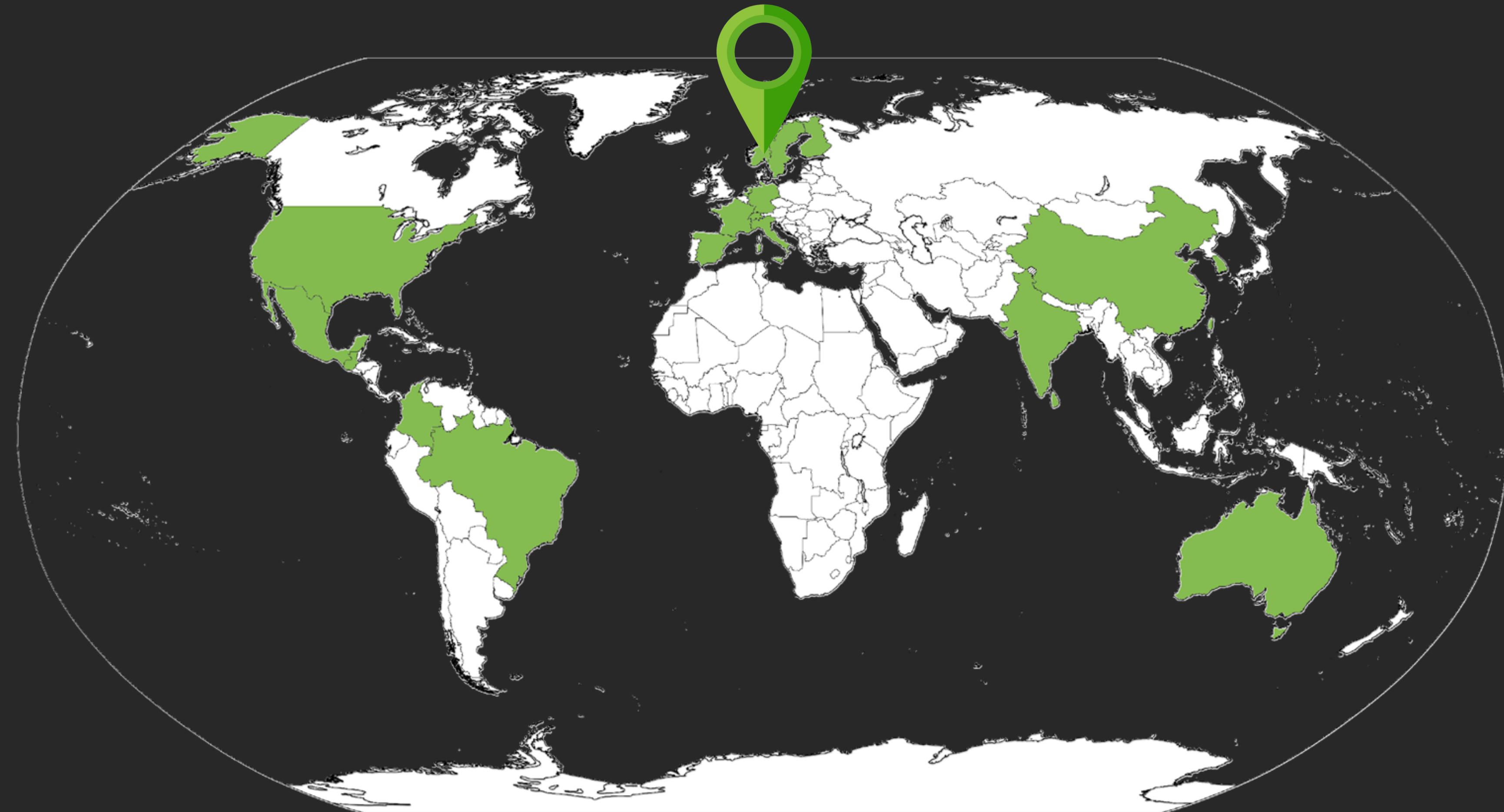


Green Software Foundation

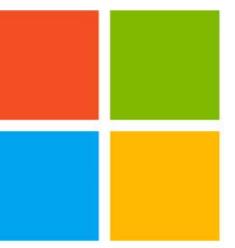
Oslo

October Meetup



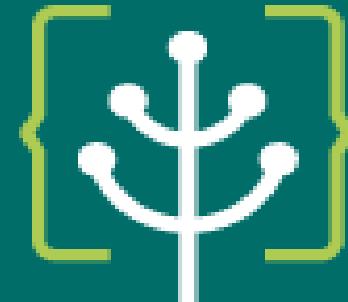
GSF Oslo – October Meetup

- 📈 Code of Conduct
- ❤️ Heartful Thanks to:
 - ❖ Guest speaker: Thomas Li Fredriksen from HUB Ocean
 - ❖ Sponsors
 - ❖ YOU!
- 🌱 Let's Grow the Community Together!



Microsoft

amesto
Fortytwo



Green
Software
Foundation

CLOUD NATIVE
COMPUTING FOUNDATION

Learn about **building software in a sustainable way** in less than 30 minutes:

<https://aka.ms/learn-green>

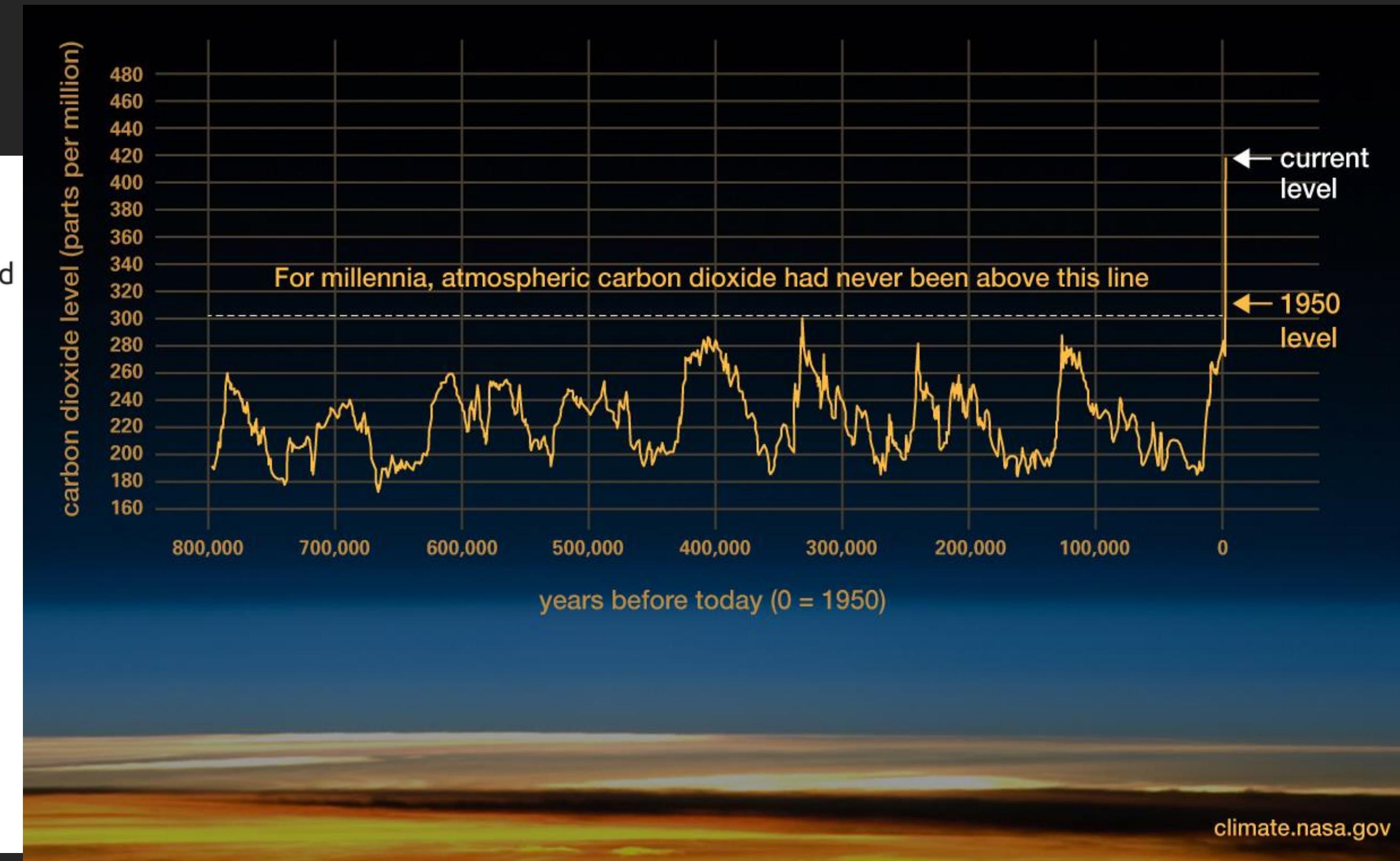
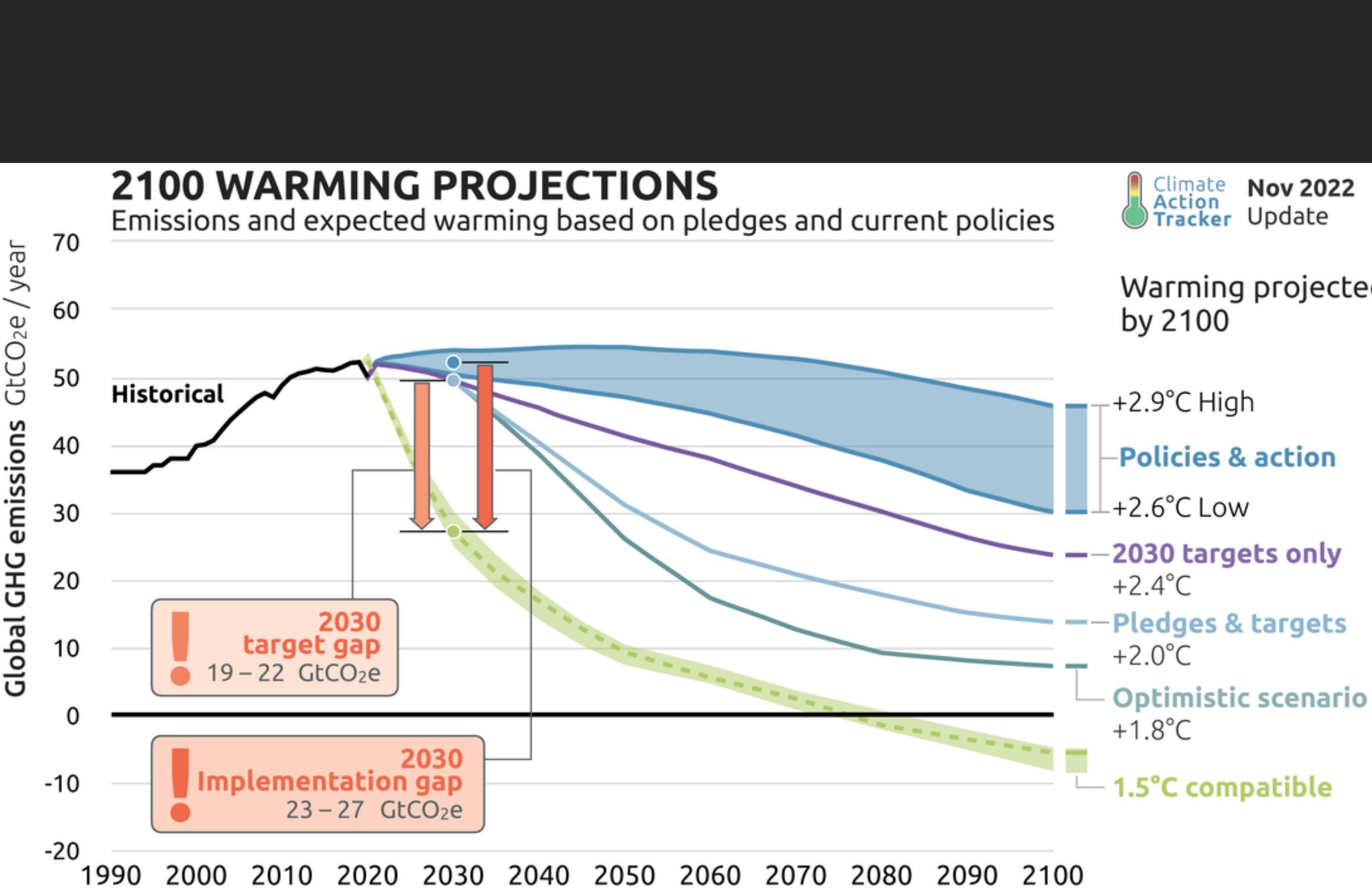
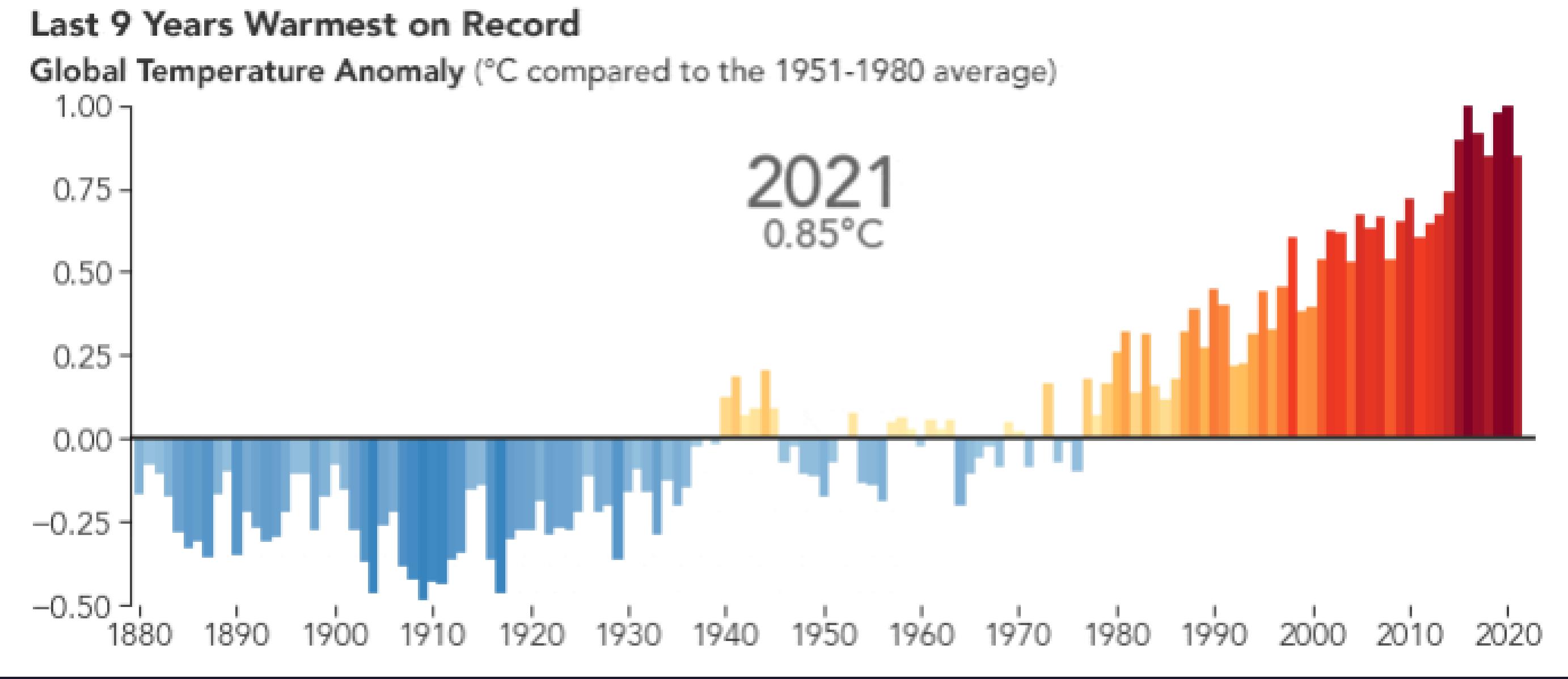


Hi, I'm Kris! ☺



Climate change: is it overrated?





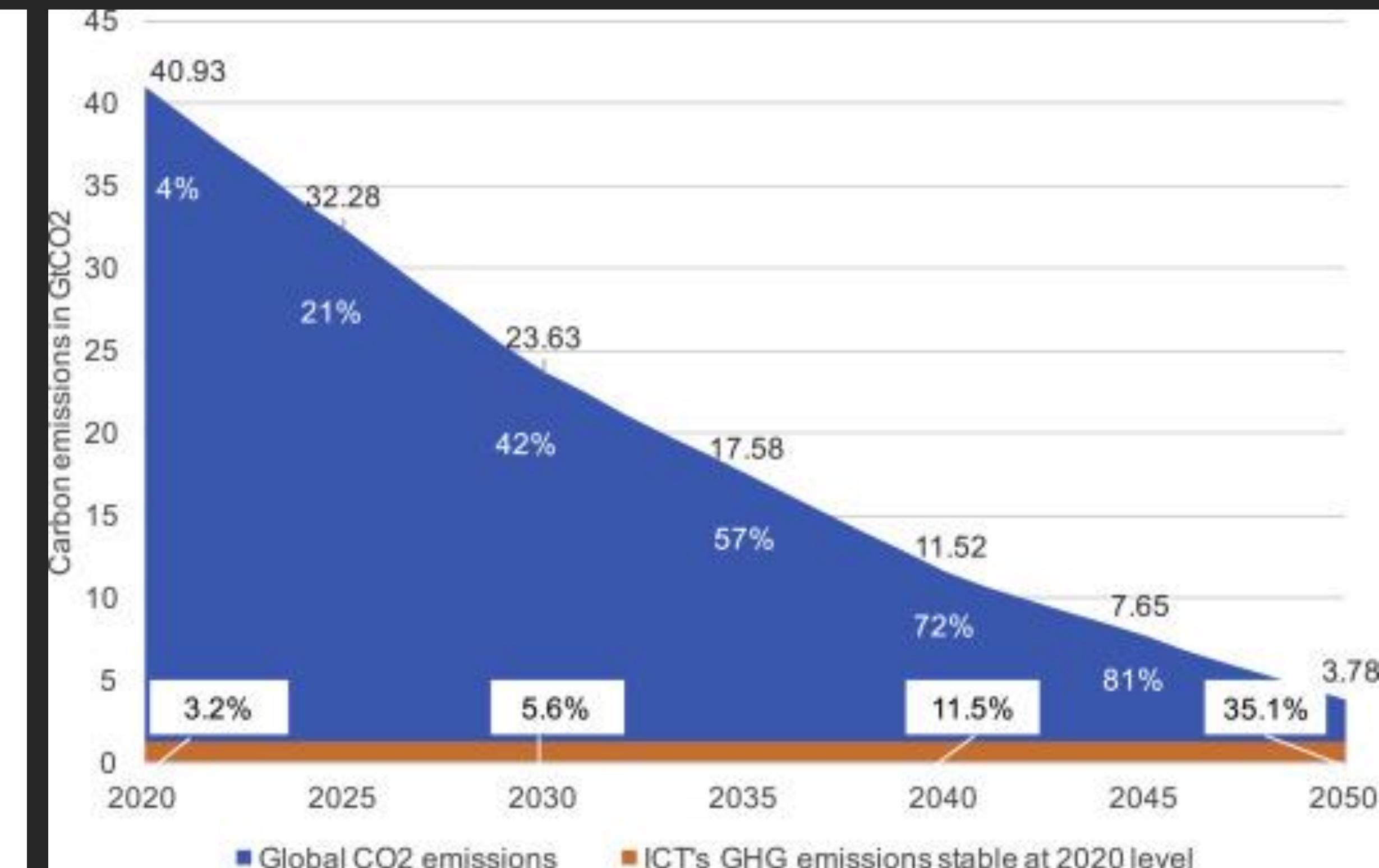
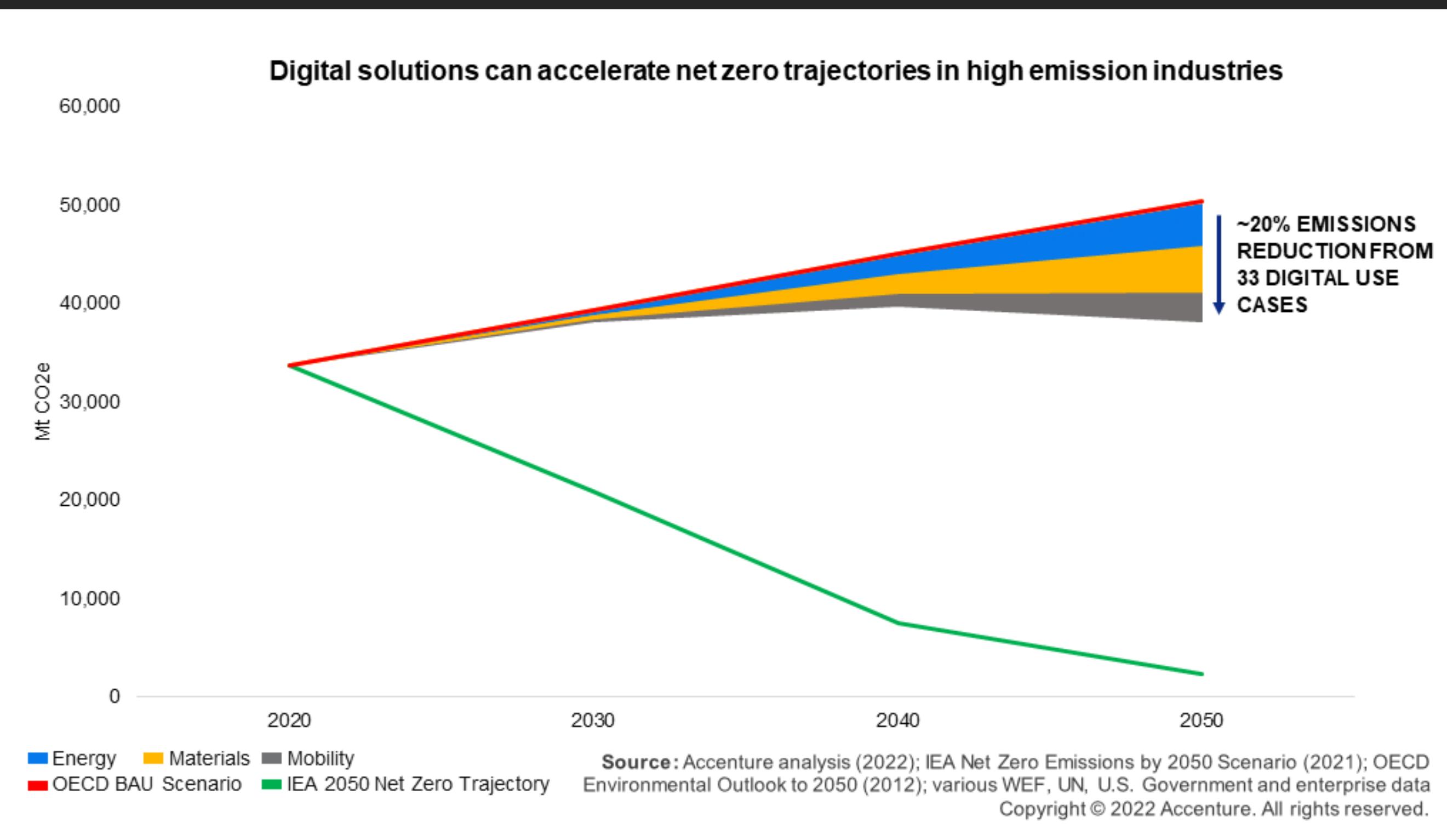
What does it have to do with tech?



Technology – climate friend or foe?



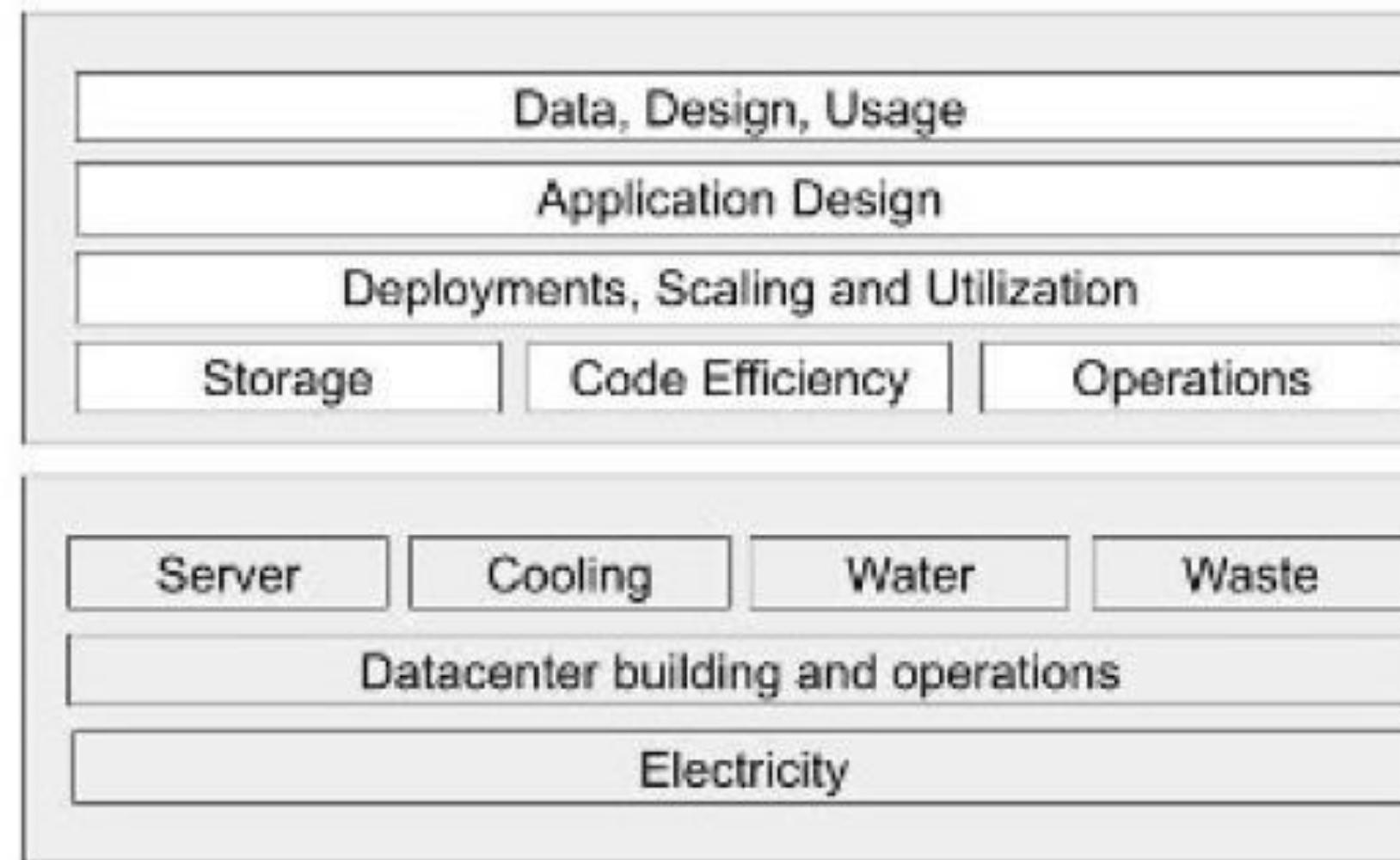
Technology – climate friend or foe?



Sustainability is a shared responsibility



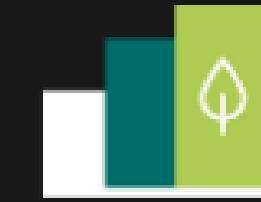
Shared Responsibility Model



Sustainability **ON** the infrastructure

Sustainability **OF** the infrastructure

State of Green Software: A leadership perspective

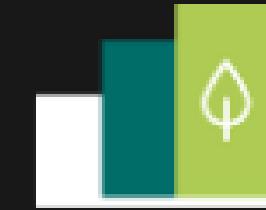


From the 2023 State of Green Software report by Green Software Foundation
Find out more at stateof.greensoftware.org

**63% of CEOs do not rate
sustainability as a top priority**

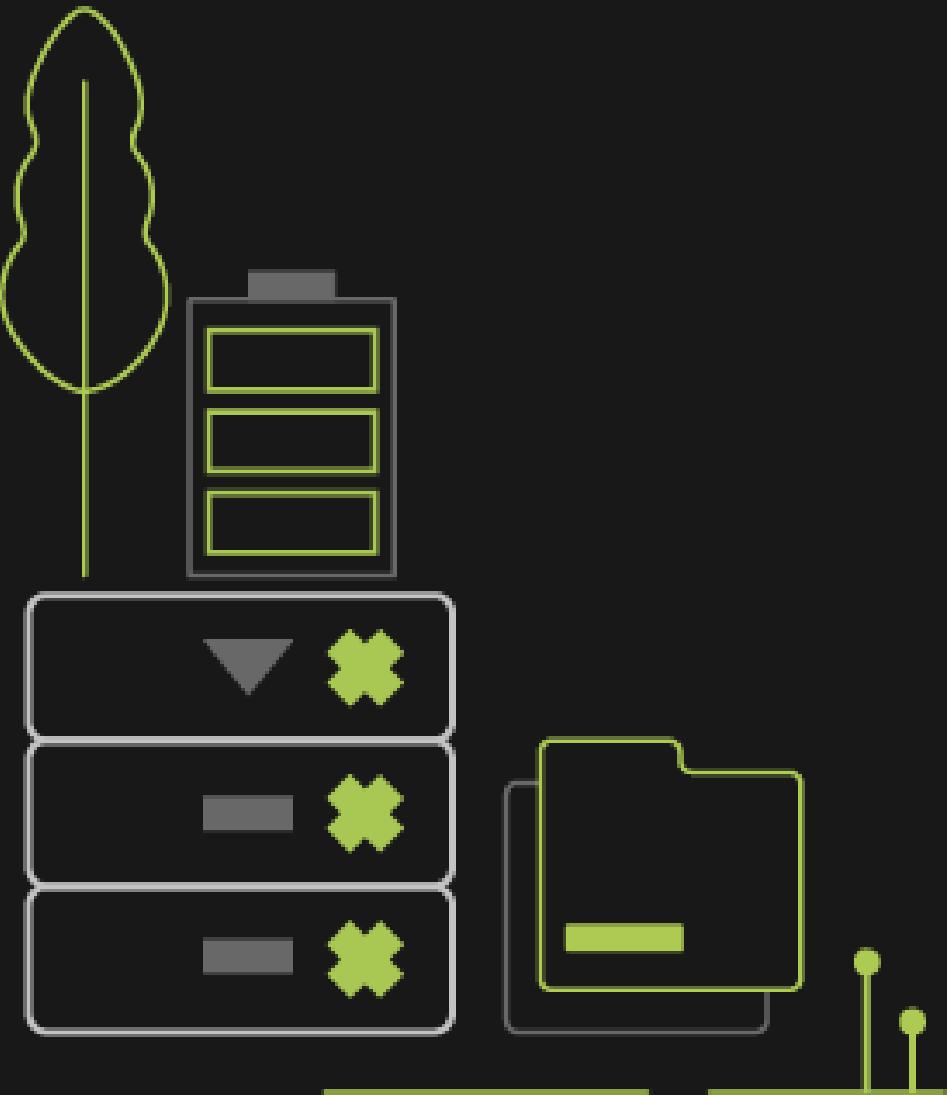


State of Green Software: A technologist perspective



From the 2023 State of Green Software report by Green Software Foundation
Find out more at stateof.greensoftware.org

**Green software is a priority for
software practitioners but still
lacks leadership support**



Green Software Foundation Oslo

Share success stories



Green Software Foundation

Learn from each other



Share experiences

Put learnings in practice

Grow local community

Learn together

Getting Started - Organizations



Green
Software
Foundation



GREEN WEB
FOUNDATION



TAG ENVIRONMENTAL
SUSTAINABILITY

Getting Started: Green Software Foundation



- Non-profit formed under the Linux Foundation
- Focus on sustainability in software development
- Build a trusted ecosystem of people, standards, tooling and best practices
- Change the culture of building software across the tech industry
- Transparency & Diversity



Getting Started: Green Software Foundation



Green
Software
Foundation

- State of Green Software report
- Green Software Practitioner course with the Linux Foundation (LFC131)
- SCI, Carbon Aware SDK,
Impact Engine Framework
- Awesome Green Software GH repo
- Principles of Green SW Engineering
- Green Software Patterns
- Community Activities:
 - Podcast, newsletter, global & local meetups, CarbonHack

E = Energy consumed
by software in kWh

$$\text{SCI} = ((E * I) + M) \text{ per } R$$

I = Carbon emitted per kWh
of energy, gCO₂/kWh

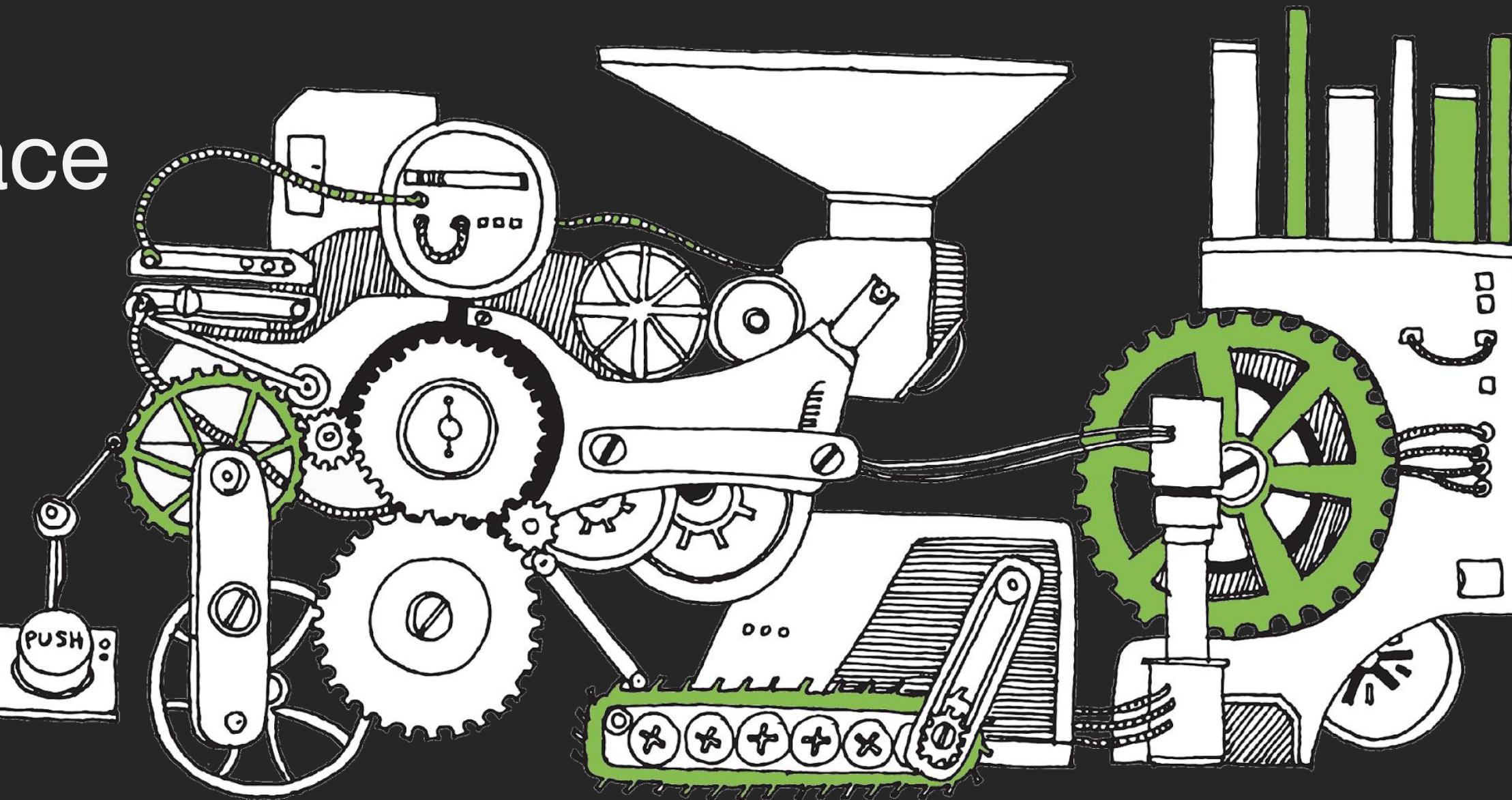
R = Functional Unit; this is how
software scales, for example
per user or per device

Getting Started

CNCF TAG Environmental Sustainability



- Focused on sustainability in cloud native space
- Technical and non-technical activities
 - Identify, define, and develop tooling
 - Community outreach and engagement
 - Collaboration with other environmental or sustainability organizations



Getting Started

CNCF TAG Environmental Sustainability



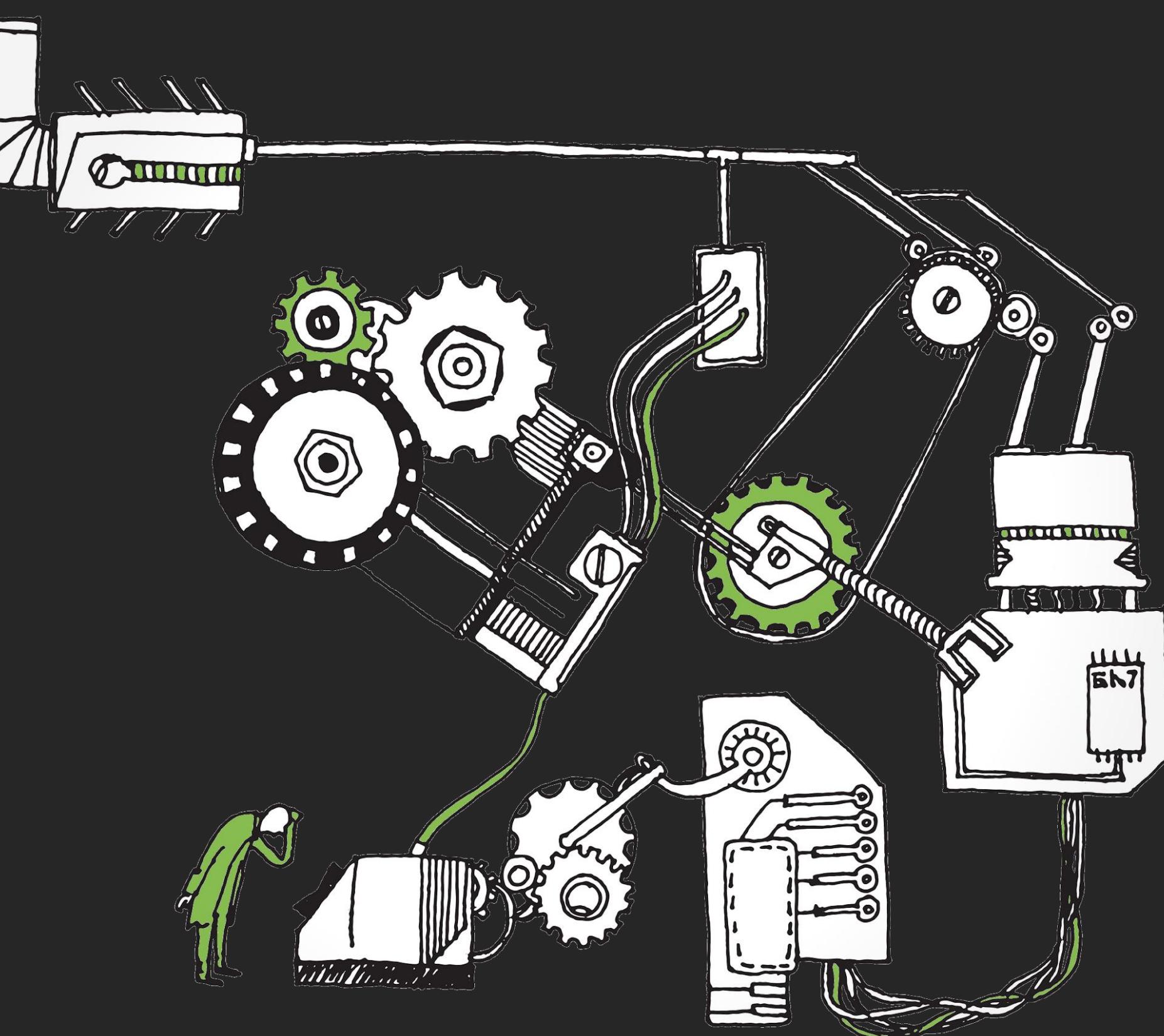
In Progress:

- Cloud Native Sustainability Landscape Whitepaper
- Sustainability footprint measurement of CNCF Projects (Green Reviews WG)
- Community Advocacy and Collaboration

Long-term:

- Cloud Native Sustainability Maturity Model
- Kubernetes Sustainability Deep Dive
- Hackathon

Open Source and Open for All !



Cloud Native Sustainability Week



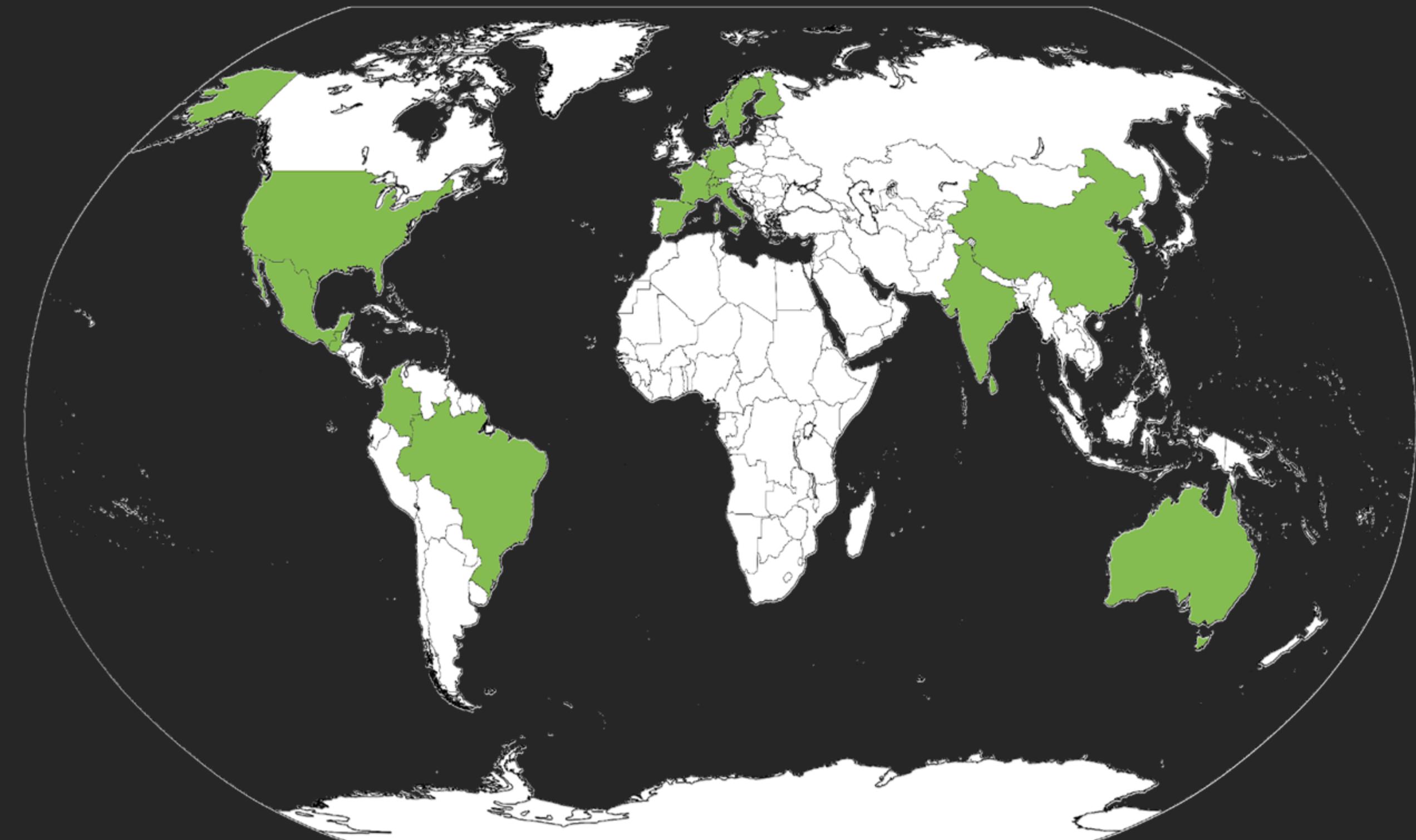
TAG ENVIRONMENTAL
SUSTAINABILITY

21+ Local Meetups

Virtual Mini Conference

Daily Blog Posts

Daily Livestreams on YouTube

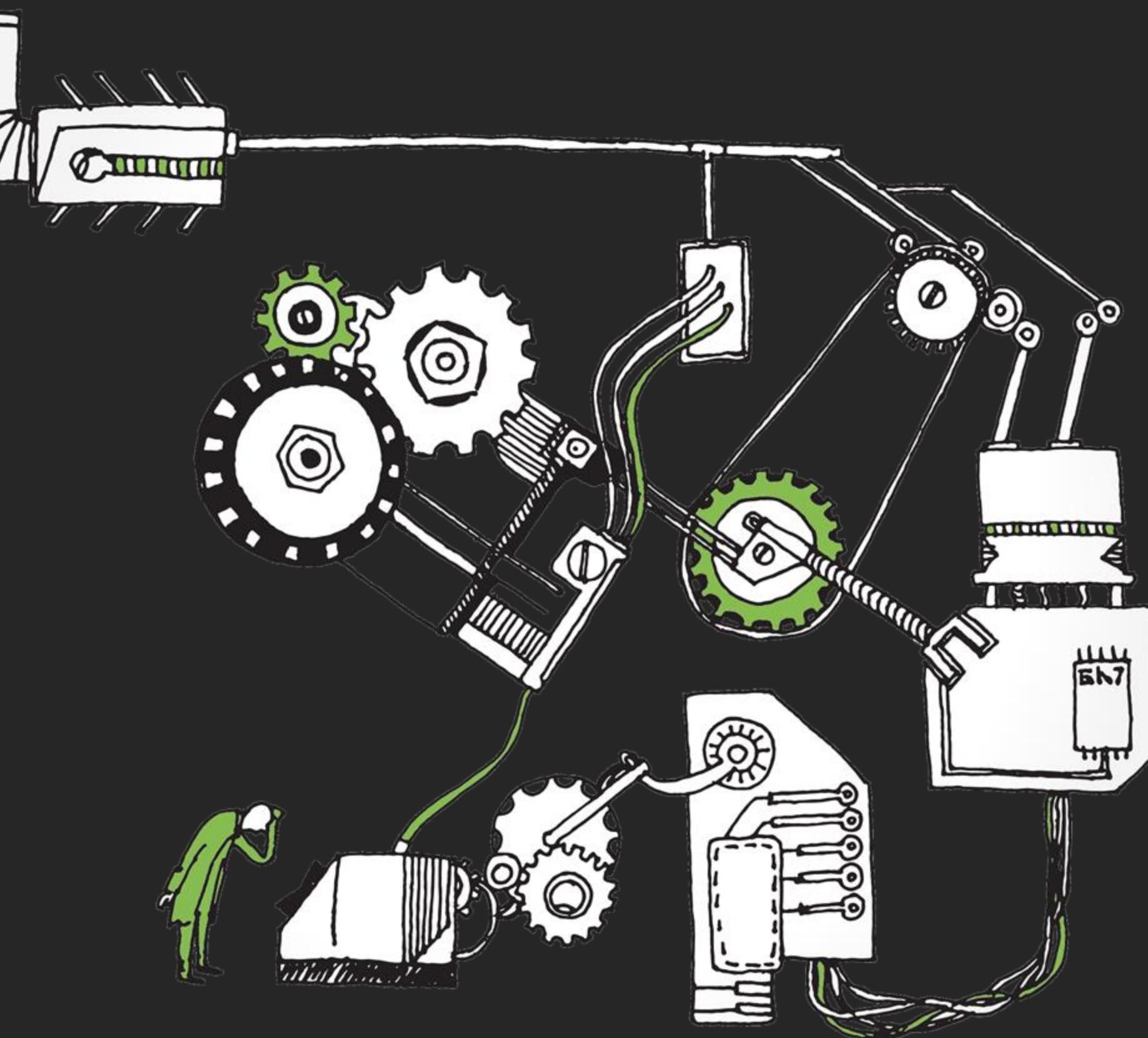


How to contribute



TAG ENVIRONMENTAL
SUSTAINABILITY

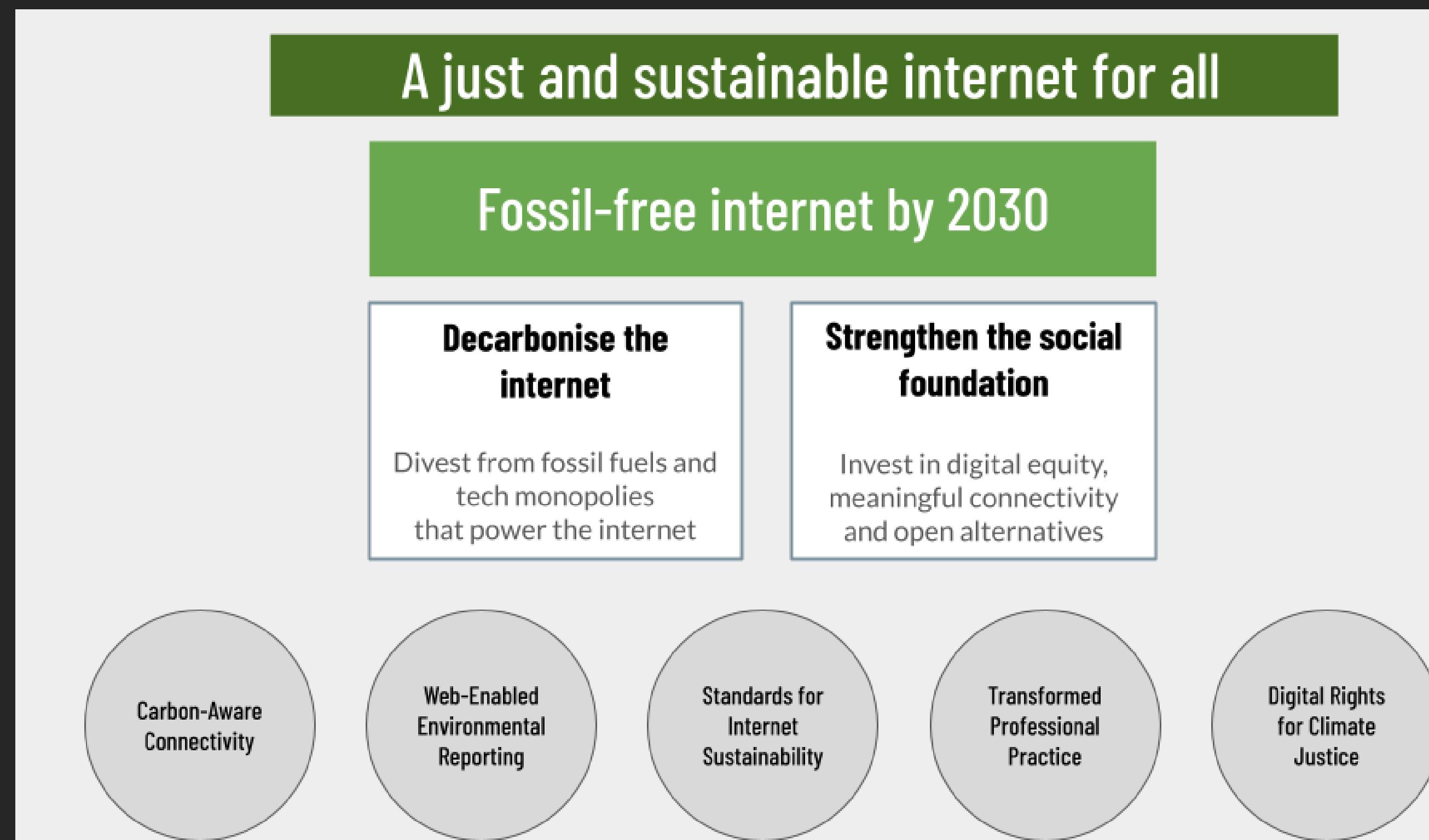
1. CNCF Slack channel: **#tag-env-sustainability**
2. Weekly TAG ENV Meetings
3. GitHub





Getting Started: Green Web Foundation

- Independent non-profit that tracks how much of the internet runs on green energy
- Broader focus throughout the technical space
- Enable the transition to a fossil-free internet
- Open data && Open code
=> Open Source



Getting Started: Green Web Foundation

- Open dataset of websites that run on green energy
- Green Web Check && browser extension
- The Green Web Directory
- Tools for integrating carbon metrics in services
 - CO2.js
 - IP -> CO2 intensity API
 - Grid Intensity CLI
- Green Web Fellowship
- Branch magazine

0.05g of CO₂/view [Website Carbon](#)

Cleaner than 95% of pages tested

© 2023 - Powered by Hugo

RESULT OF GREEN WEB CHECK



CONGRATULATIONS!
kristhecodingunicorn.com
IS HOSTED GREEN

Hosted by: [Firebase Hosting](#)
This hoster is using green energy / compensation for its services.
Supporting evidence for this hoster's claims

- [Notes on acquisition by Google in 2014](#)

It is all about BALANCE && MINDSET !



YOU can make a bigger
impact than you think!



How?

- Engage in local community
- Participate
- Share
- Suggest
- Sponsorship
- Engage in global communities
- Take learnings back to your projects



