

Empowering companies to reduce emissions from cloud-based software

B2B SaaS Impact Startup

Today:

Green Software Development

Climate impact from software industry

Today



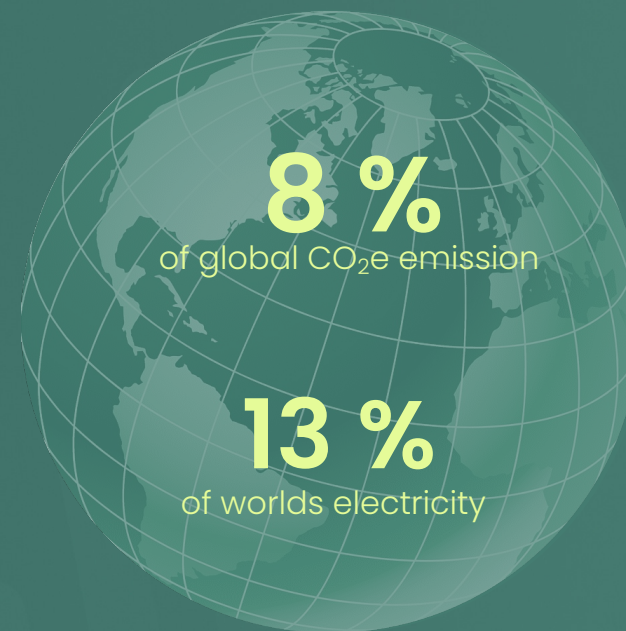
2% of global CO₂e emission



Comparable with the aviation industry

2030

Estimated to consume up to:



8% of global CO₂e emission

13% of world's electricity



More than the heavy duty vehicle industry

Who are **driving** this growth?

Empower & Engage



THE CONCEPT

Green Software Development

“ I used to think full-stack meant like a website to a database. And now I understand full-stack means like, from user behavior to how **electricity is bought and sold** on a grid. ”

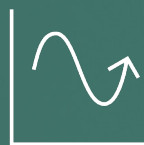
Asim Hussain – Director Green Software Foundation

THE CONCEPT

The Fullstack concept extended



Electricity Sources



Carbon intensity fluctuations



Customer Behaviours



Development & Operations



Geographical distances



Weather conditions



Applications



Frontend



Datacenters



Database



Backend

Recommendations to optimize for the climate



Re-location



Right sizing

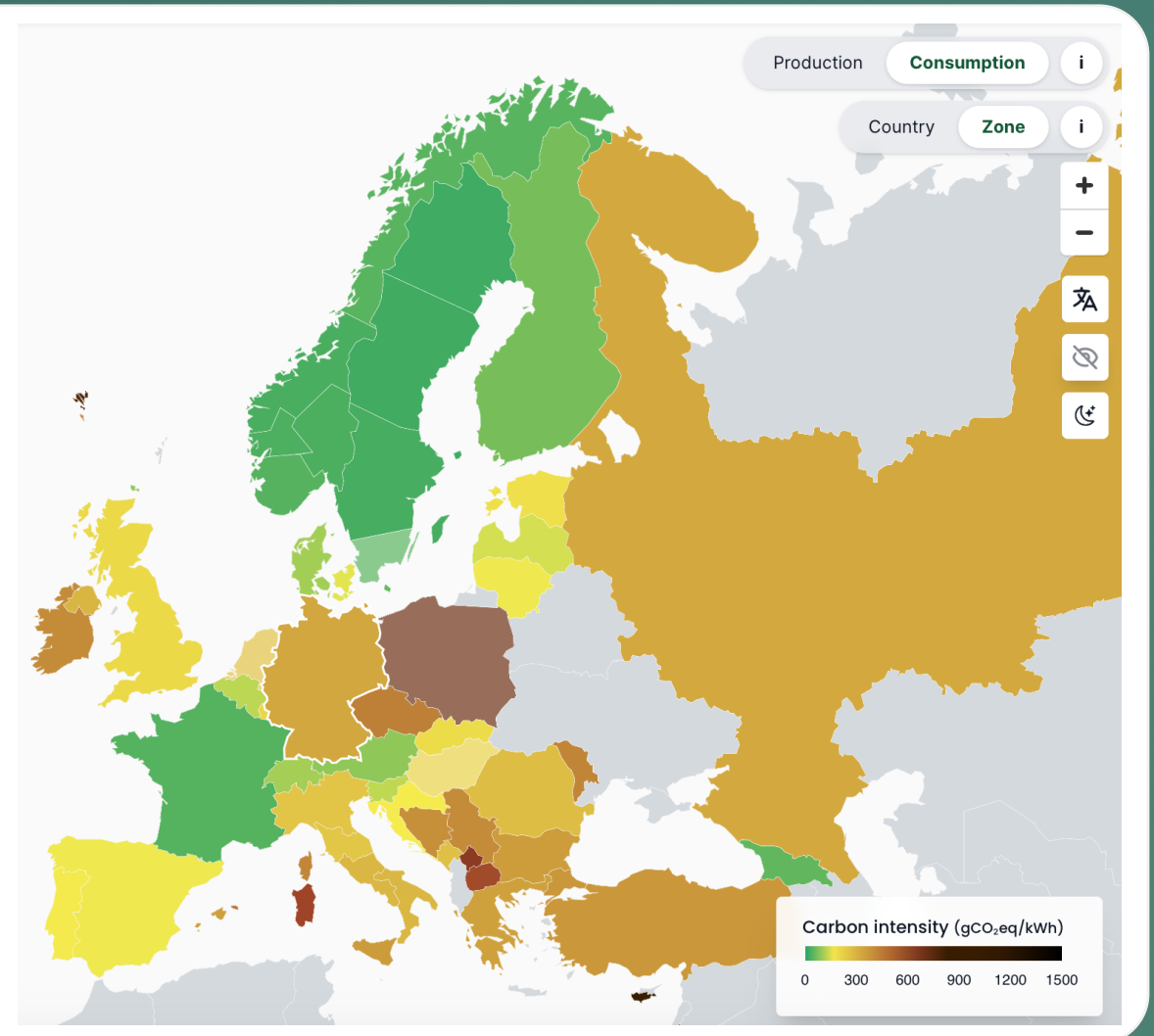
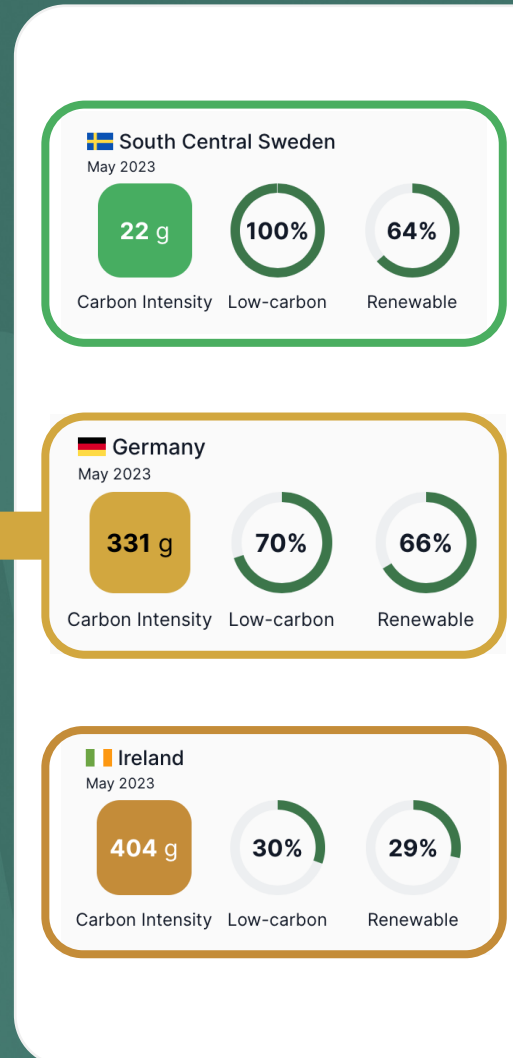
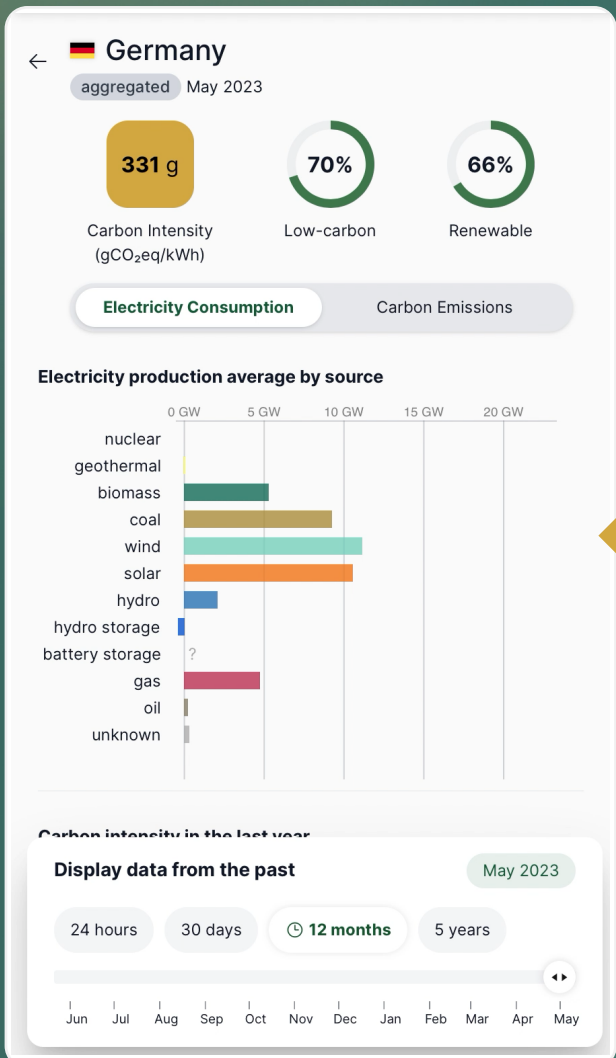


Re-architecting

Today:

More than 60% of the world's electricity
is generated from **fossil fuels**



Re-location

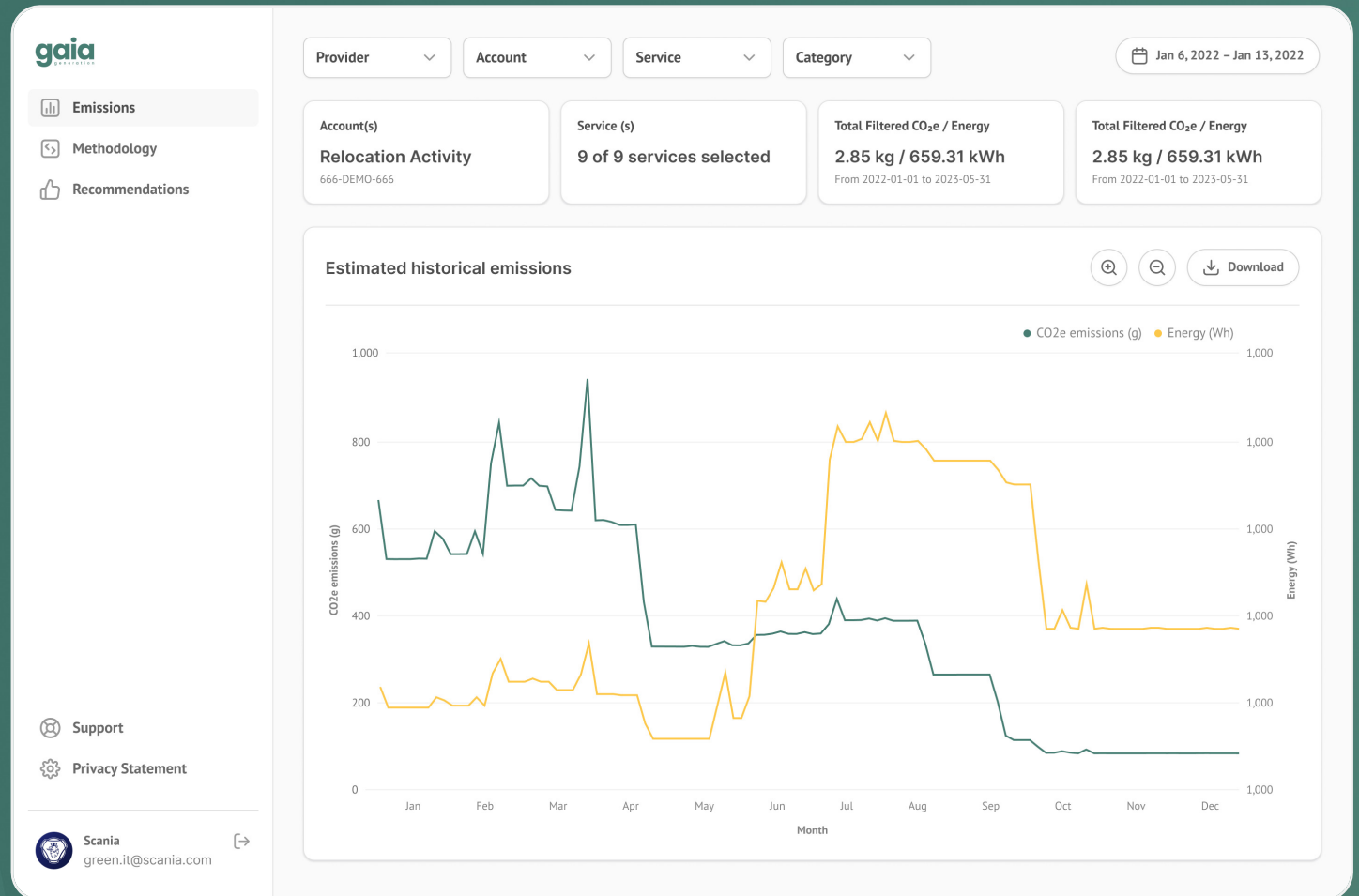


Germany's past 12 months' carbon intensity = 459 g CO₂e /kWh

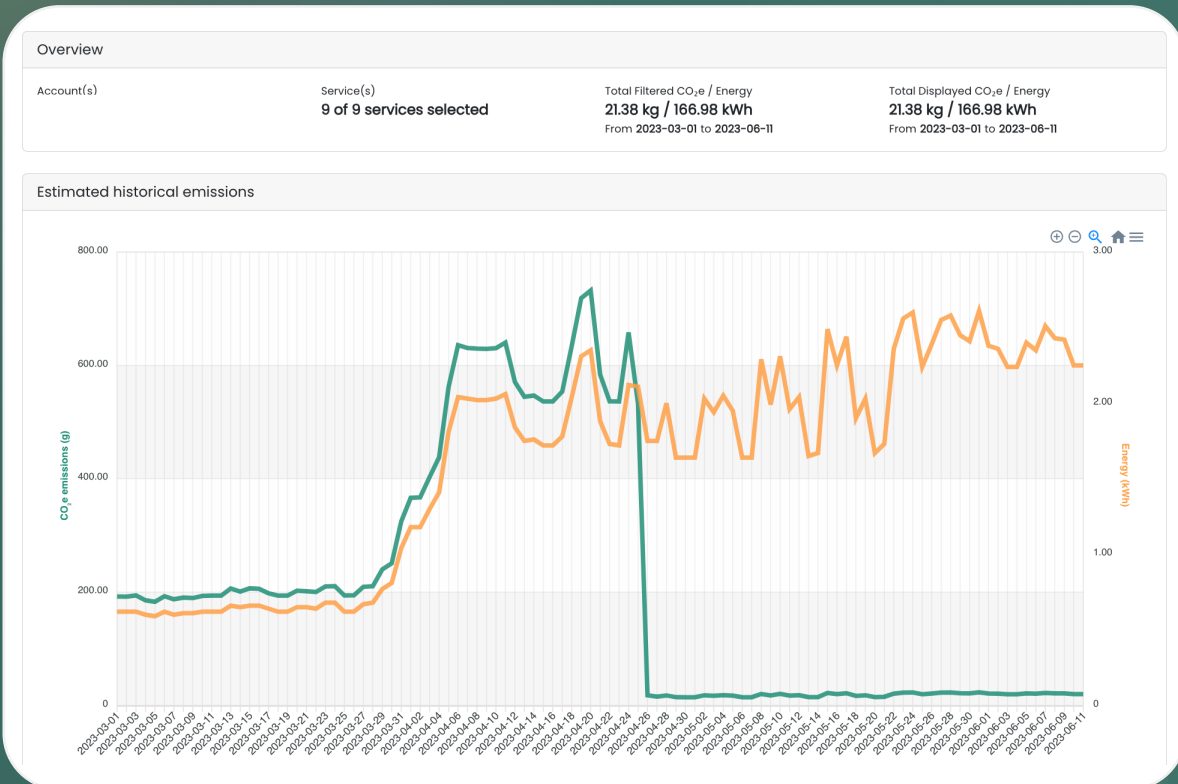
THE PRODUCT

Visualising CO2e emissions & energy consumption from cloud native IT systems

- **Multicloud support**  
- **Close feedback loop**
- **World Class Granularity**
- **Aligned with CSRD**
- **Enterprise ready**

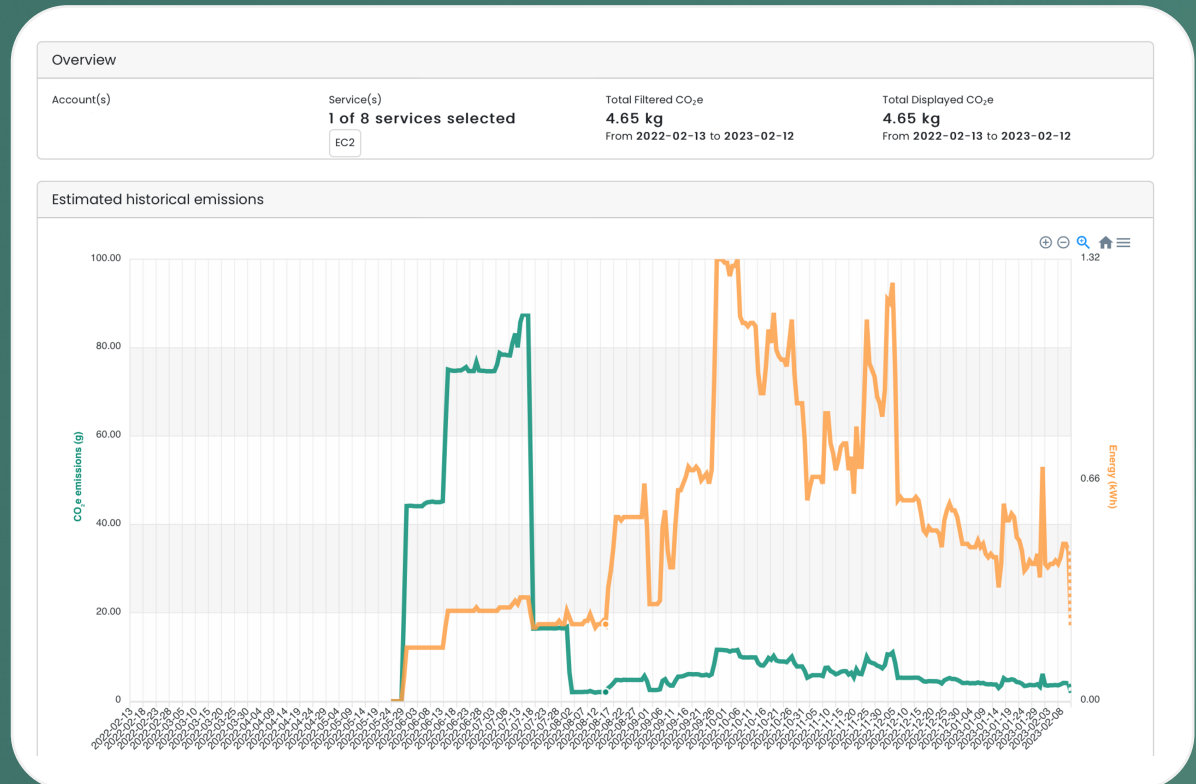


Re-location use cases



The daily average CO₂e emissions is lowered with

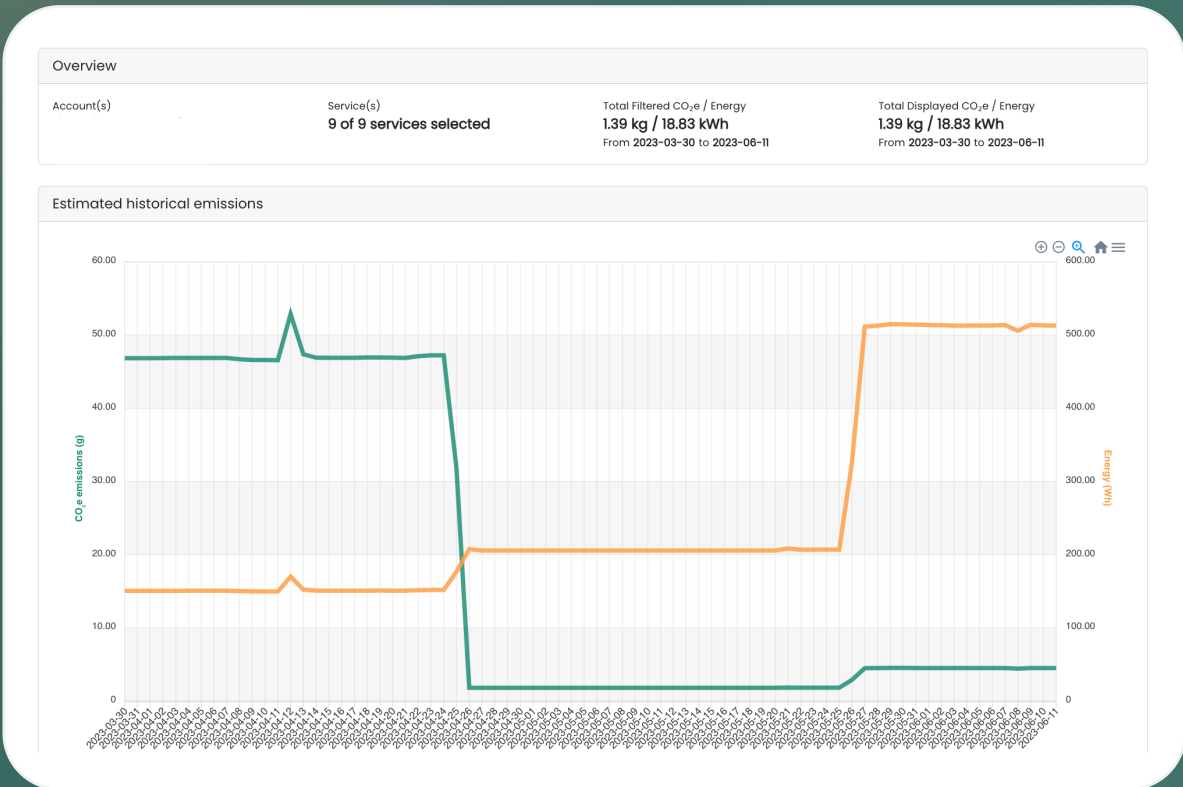
- 95%



The daily average CO₂e emissions is lowered with

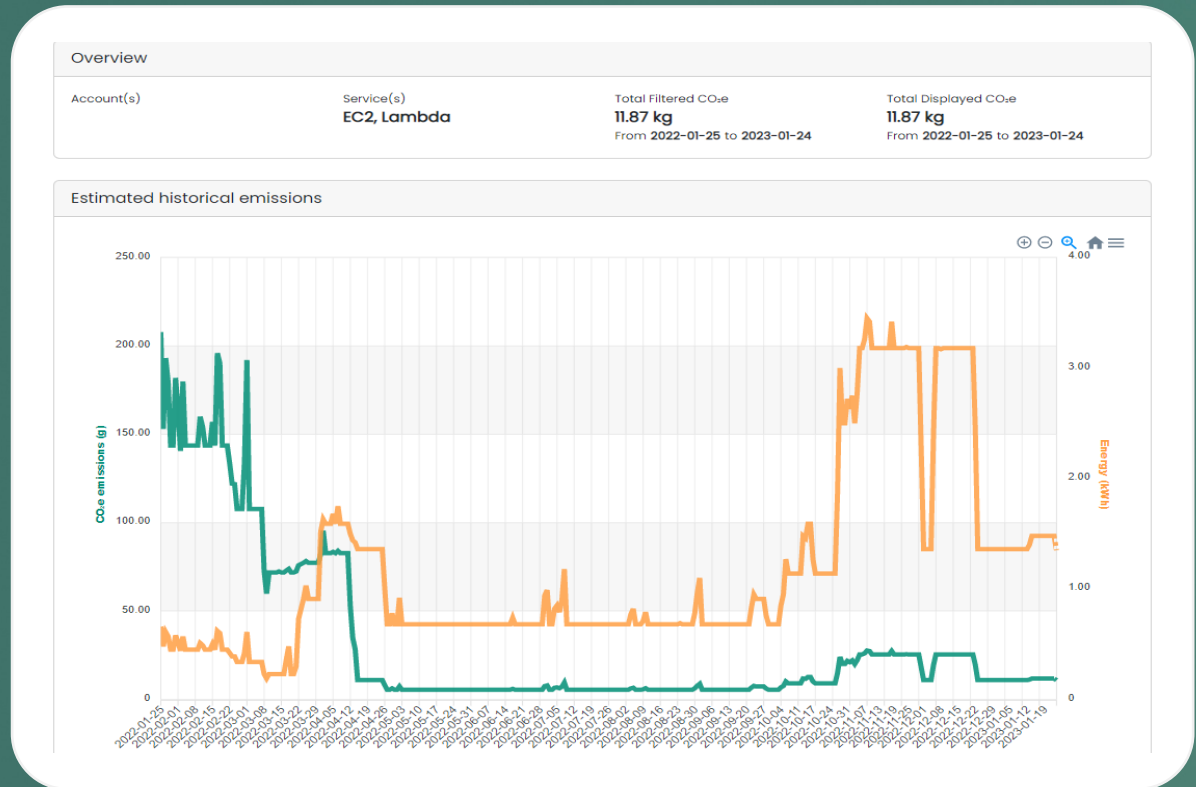
- 90%

Re-location use cases



The daily average CO₂e emissions is lowered with

- 94%



The daily average CO₂e emissions is lowered with

- 98%

What do software practitioners want?

92%



of software practitioners
are concerned about
climate change

62% answered they are VERY
concerned.

54%



of software practitioners
say they have or want to
implement carbon-
aware features

Activities they have
already identified

40%



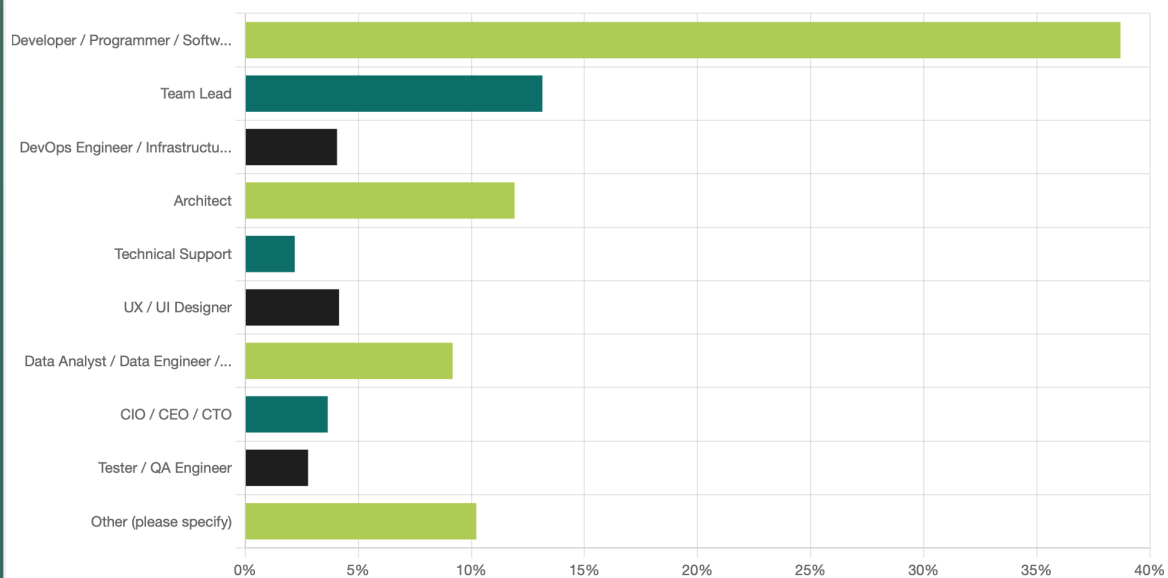
millennials say they've
chosen to work for an
employer because of
their sustainability work

and 30% said they decided to leave a
job because of poor sustainability
performance.

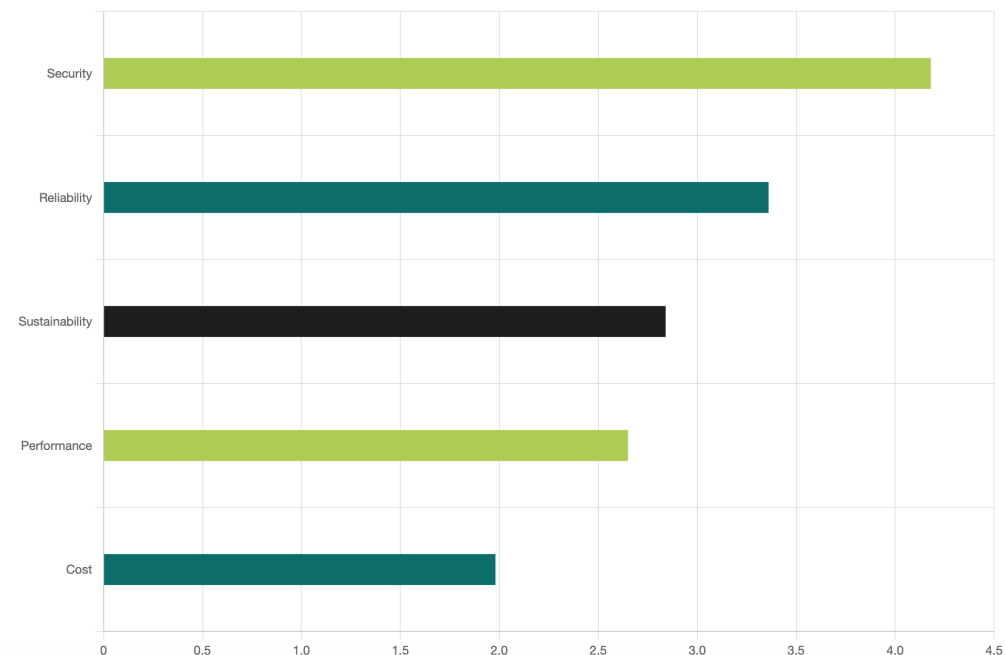
LATEST STUDIES

What do software practitioners want?

What kind of software practitioner are you?



How would you rank the following in order of importance? You can drag and drop the options to order them with the top one being the most important (1 = the most important).



OBSERVATIONS FROM TALKING TO OVER 100 CIO / CTO

What do CIOs and CTOs want?



**Attract & retain
tech talent**



**Deliver on future
customer demands**



**Show progress in
sustainability work**



**Stay
Compliant**

UPCOMING LEGISLATION

CSRD – EUs new legislation

- **Directly affects companies with over 250 employees**
- **Comes into force **fiscal year 2024****
- **Will guide investors**
- **Emissions reporting demands for **supply chain (Scope 3)****
 - **Increased Transparency**
 - Calculations based on primary data (actual usage/consumption data)
 - Full transparency on calculation model
 - **Reporting due for Audits**
 - **Companies need to report on optimizations / reduced emissions year by year** (removals not allowed)



SUMMARY

Main takeaways of Green Software Development

- CSRD will hit the software industry with a bang!
- Companies are requesting **location-based** data to align with emissions reporting
- The software developers and architects have a lot of **influence** on where to host workloads (in the cloud)
- Green Software Development is happening!

My message to you:

For Germany to **become an attractive region** to host software, it's carbon intensity needs to decrease substantially!

Probably decrease with **90%** to be below 45g CO₂e / kWh