RESPONSIBLE COMPUTE.

YOUR GREEN PARTNER IN THE NORTH

Owned by Origo and Borealis Data Center Responsible Compute is a specialized Cloud Service Provider focusing on providing extremely low emissions HPC and AI/ML infrastructure at a competative price point

Borealis DATA CENTER + origo.

Responsible Compute - Conception

Truly sustainable HPC cloud solution

Emissions reporting based on actual metering

Industry standard SLAs

Hardware instances at a reasonable price

Stable platform from world renowned providers giving market leading performance

RESPONSIBLE COMPUTE.
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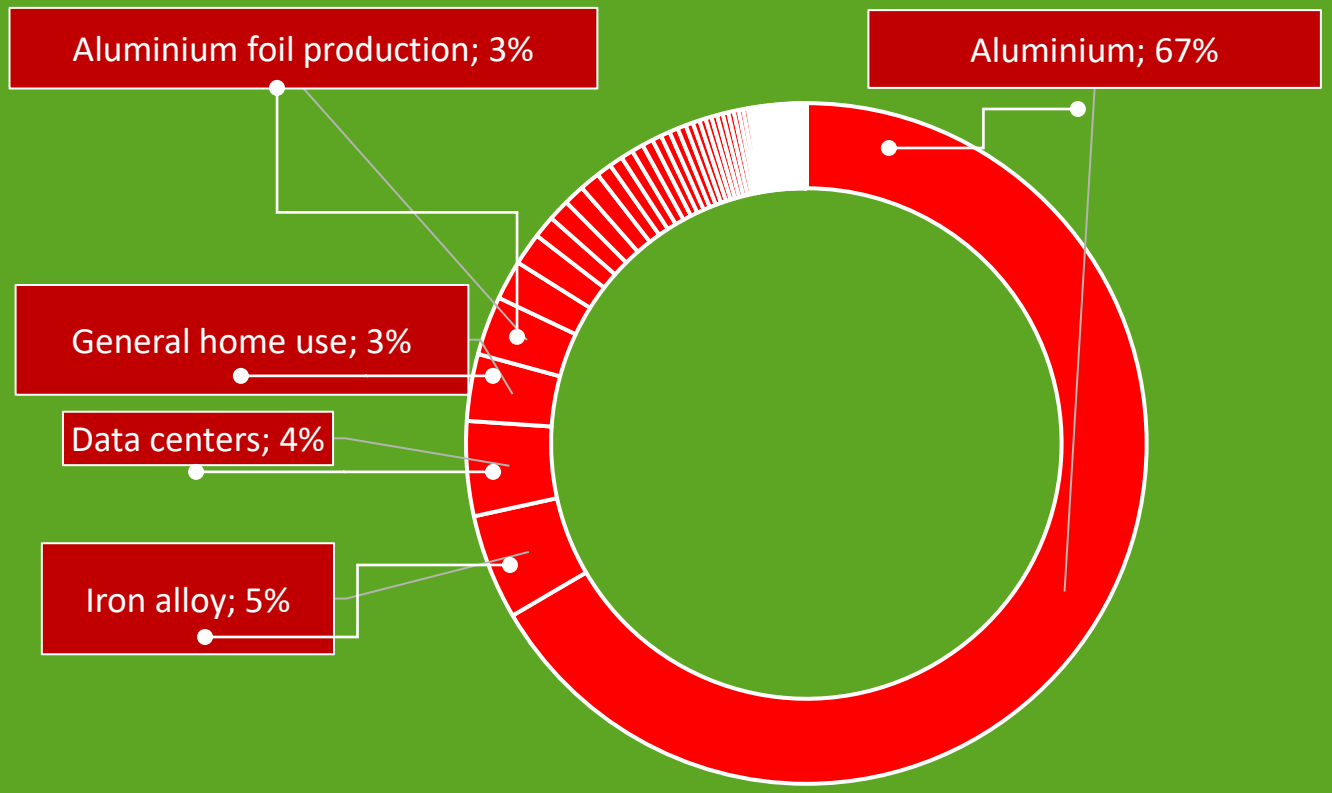
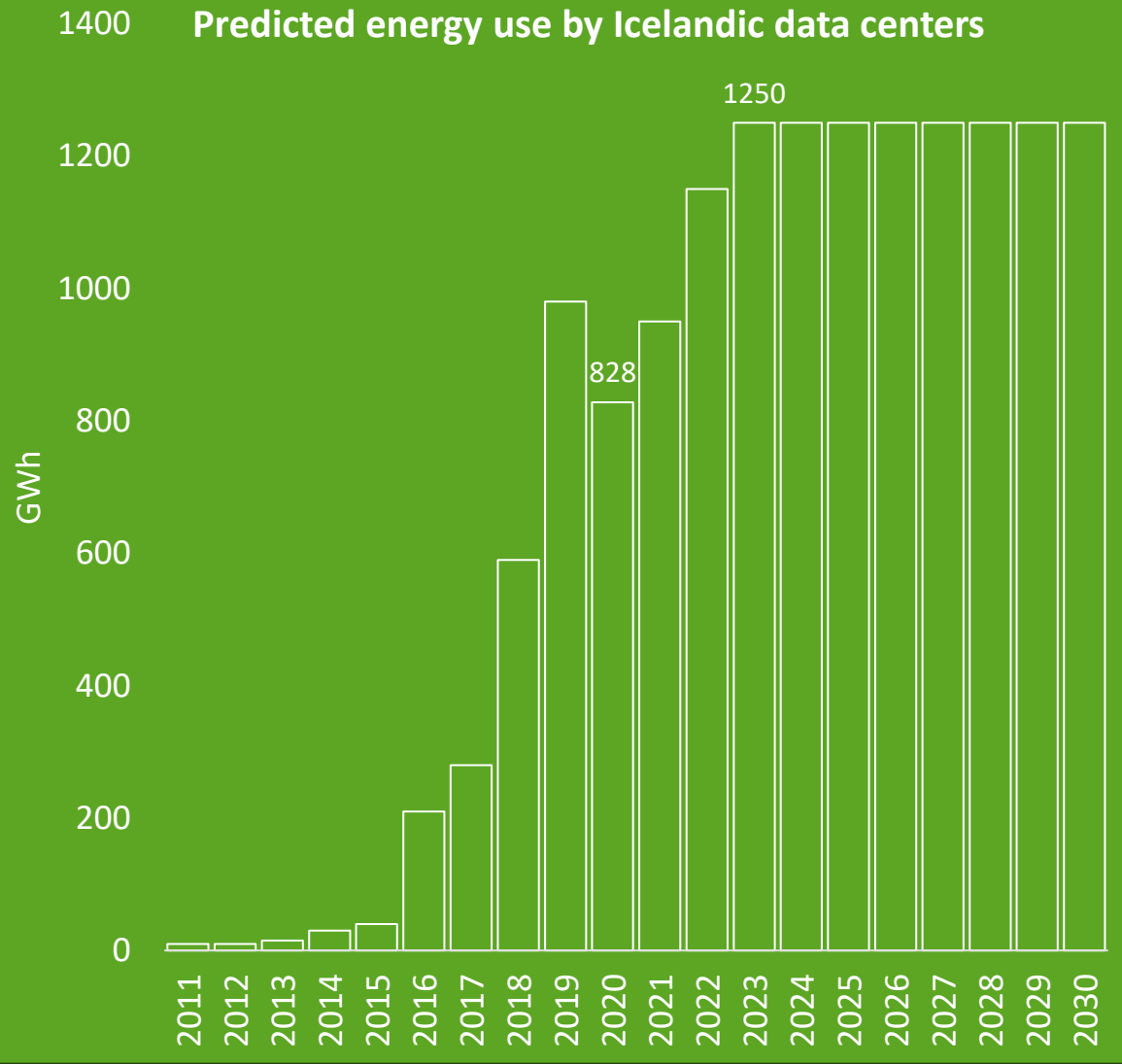
Data centers are among the biggest users of electricity in Iceland



Source: Orkuspárnefnd, Raforkuspá 2021-2060



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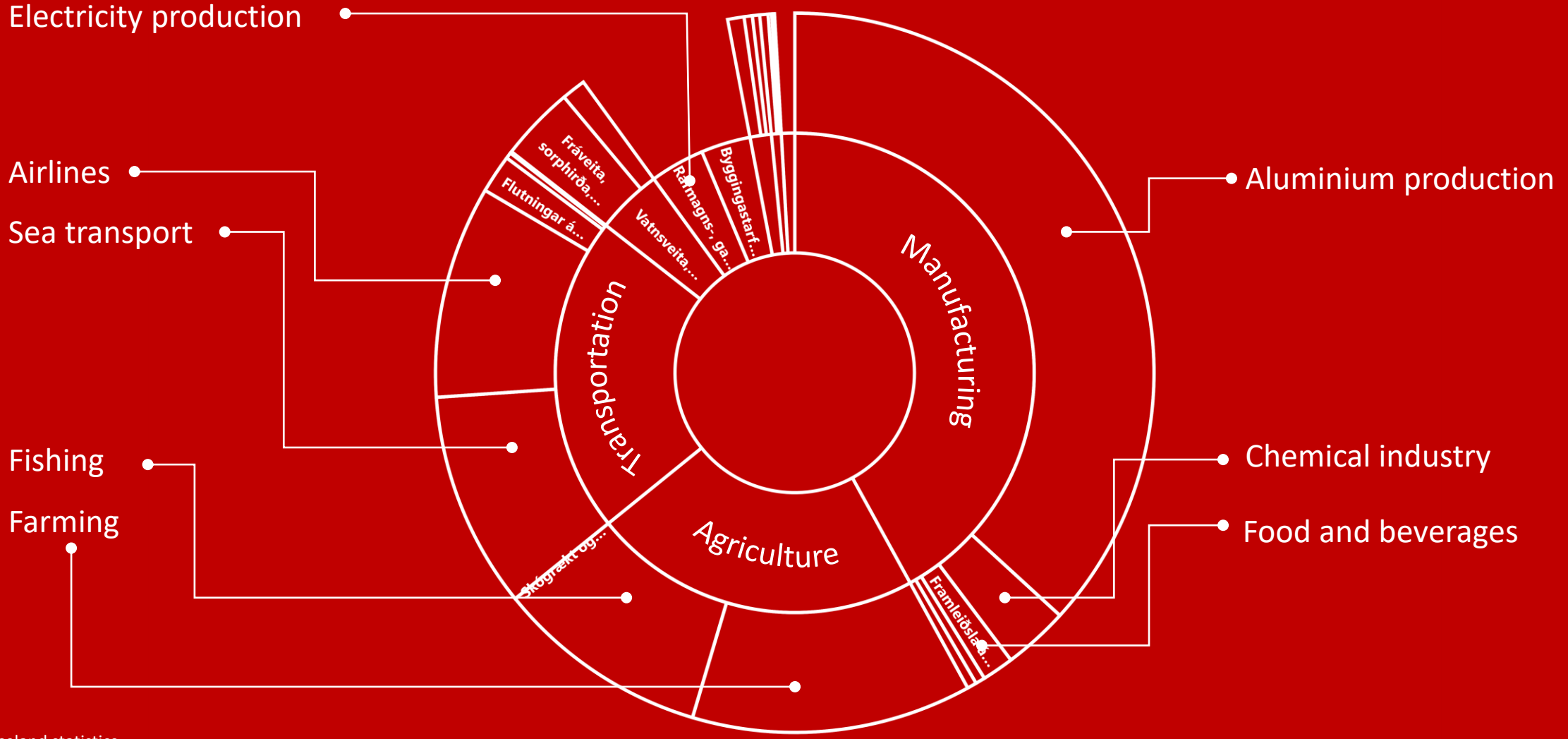
GHG emissions in Iceland from DC is minimal

Despite being among the largest electricity users it barely registers in comparison with other industries



Source: Iceland statistics

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Carbon emissions from Electrical Production

440 g

GLOBAL AVERAGE

100 g

WHAT THE EU CONSIDERS GREEN

(The EU average in 2023 was 253g)

0,9 g

- THIS IS WHERE OUR NATIONAL POWER COMPANY WAS AFTER 2023

Carbon Neutral by 2025

Energy Transition

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Icelands natural resources:
a unique value proposition

- Not all loads are low latency depenent and can be hosted remotely
- Conflict free & geographically isolated
- Renewable green energy
- Stable low temperature allows for free air-cooling
- Abundance of glacier water, ready for water cooling
- Long energy contracts 10-25years
- No transmission cables connecting to other energy markets
- Energy price stable while neighbouring markets have fluctuated

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Sites :

Blönduós, Iceland
Reykjavik, Iceland
Fitjar, Iceland
Kajaani, Finland

Current IT load running ~70MW

Expansion capabilities +200MW

- AI specific expansions
- For NVIDIA GB200 and like
- Above 30MW expansion
- Ready before delivery of GB200

Main Responsible Compute site Blönduós in Iceland :

- lack of geological activity
- vicinity to hydroplant

Borealis DATA CENTER

RESPONSIBLE COMPUTE.
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Rescale Cloud HPC platform

Any software. Any hardware. Any cloud.

1000+ Applications

Full-stack performance optimization

- SW/HW performance intelligence
- HW scale & maturity Intelligence
- App performance Tuning
- Cost optimization

Open source applications | Commercial applications | Custom apps & containers

Application Lifecycle & Licensing Management

R&D automation & data management | Control plane policy & automation | IT business management

Unified API
job service level assurance

Cloud hardware: aws, Azure, Google Cloud, ORACLE CLOUD, RESPONSIBLE COMPUTE.

On-premises hardware: Lenovo, DELL, Hewlett Packard Enterprise, IBM

Full-stack security & compliance

- E2E encryption
- Multi-org data sharing & isolation
- FedRAMP
- ITAR
- HIPAA
- AICPA
- SOC2
- Cloud Security Alliance

Closed loop AI

Private and Secure LLM

Prioritizing Data Sovereignty and Integrity

No data leaves the secure environment of the model

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rescale

- The most reputable HPC as a Service platform in the World
- The Smallest carbon footprint
- Completely reserved hardware instances specific to customer needs
- Competitive and stable price
- Most peaceful and safest place in the world*
- No user perceived latency
- Multi-cloud compatible
- Industry leading sustainability metrics for HPC developed with customers
- Platform and infrastructure provided by industry leaders

*Top of the world peace index for over 10 years in a row

50 x SD630 v2 Intel XEON 8358	Annual CO2 Emissions(Kg CO_2e)
Responsible Compute, Iceland	**3.325**
Un-named cloud Germany	**161.119**

Germany 50 nodes		
Estimated annual emission saving	**157.794**	**kg CO2e**
Gasoline passenger vehicle's annual emis	34	Vehicles
Flight seats from London to New York	267	Flight seats
Tonnes shipped from Los Angeles to Shan	923	tonnes

Example of extract from Sustainability Report

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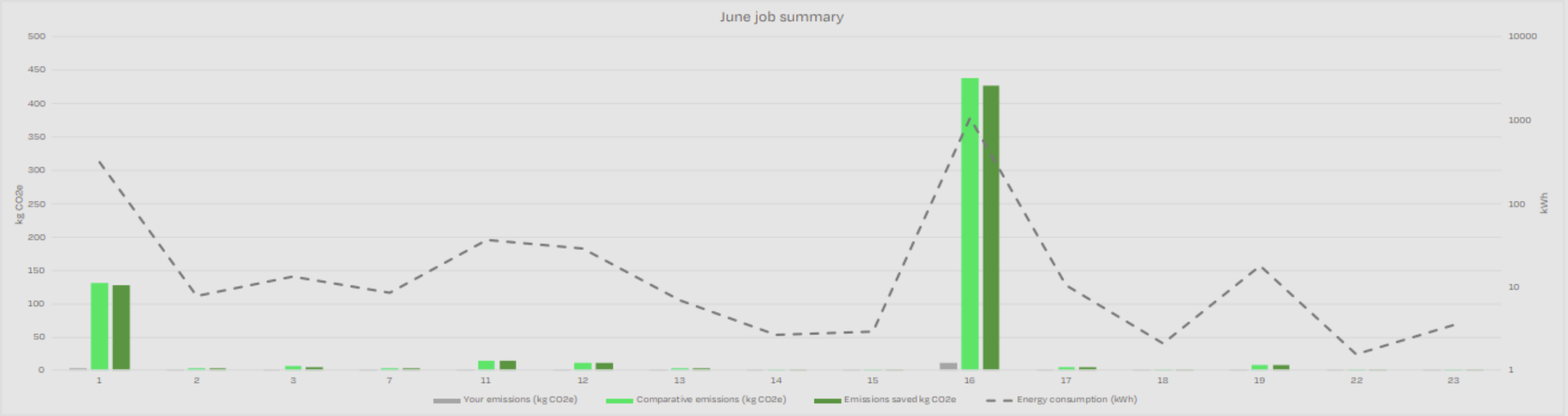

ID	1	2	3	7	11	12	13	14	15	16	17	18	19	22	23
Date	6/2/22	6/7/22	6/7/22	6/9/22	6/17/22	6/18/22	6/19/22	6/20/22	6/23/22	6/24/22	6/29/22	6/29/22	6/29/22	6/30/22	6/30/22
Energy consumption (kWh)	315.5	7.7	13.4	8.5	36.4	29.1	6.9	2.7	2.9	1057.3	10.4	2.1	18.1	1.6	3.5
Your emissions (kg CO2e)	3.4	0.1	0.1	0.1	0.4	0.3	0.1	0.0	0.0	11.5	0.1	0.0	0.2	0.0	0.0
Comparative emissions (kg CO2e)	130.7	3.3	5.7	3.6	15.1	12.0	2.9	1.1	1.2	437.9	4.3	0.9	7.5	0.7	1.4
Emissions saved kg CO2e	127.2	3.2	5.6	3.5	14.7	11.7	2.8	1.1	1.2	426.5	4.2	0.9	7.3	0.6	1.4
Unit hours	18926.6	38.9	66.6	141.1	2752.2	1281.6	323.0	23.0	17.7	58553.0	15.7	16.3	1471.6	12.6	25.3
Cores	484	44	44	264	484	484	484	88	264	484	264	264	484	220	220
Duration (minutes)	2420.3	87.1	147.9	97.1	411.6	326.5	76.1	29.7	33.1	7283.7	115.7	26.7	206.5	15.5	31.9

Example of extract from Sustainability Report

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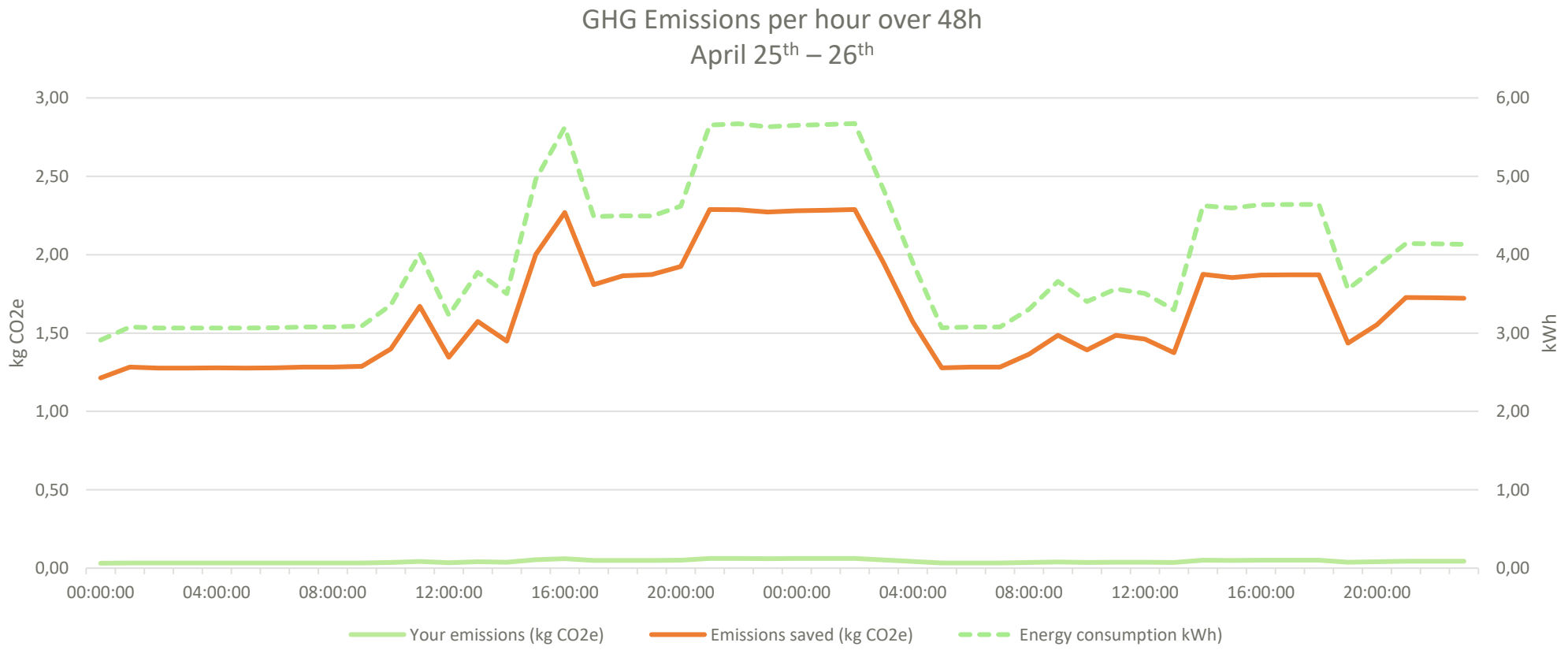

Dashboard

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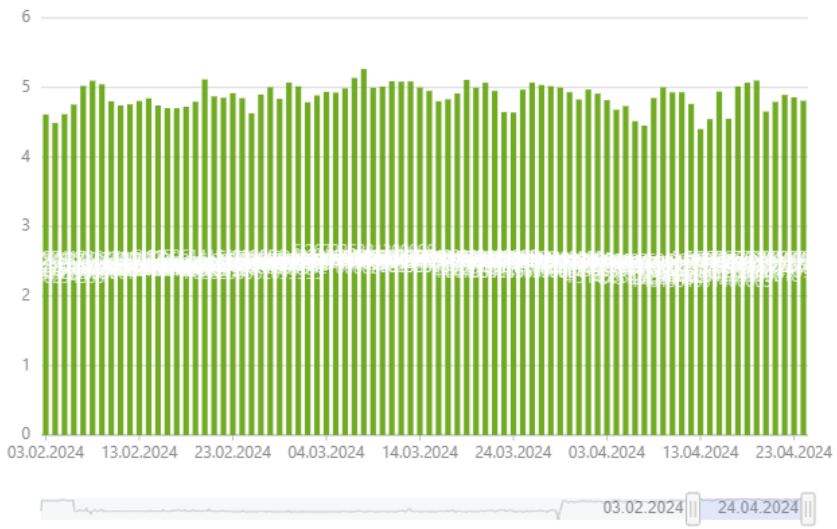
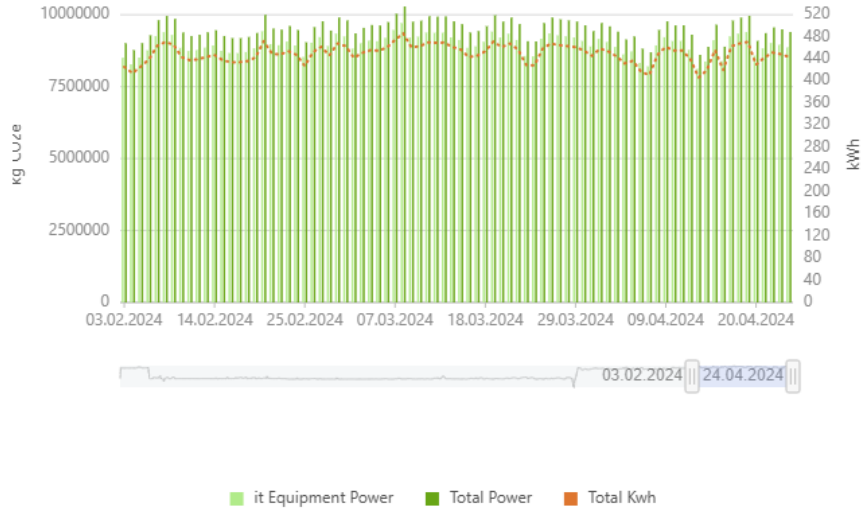
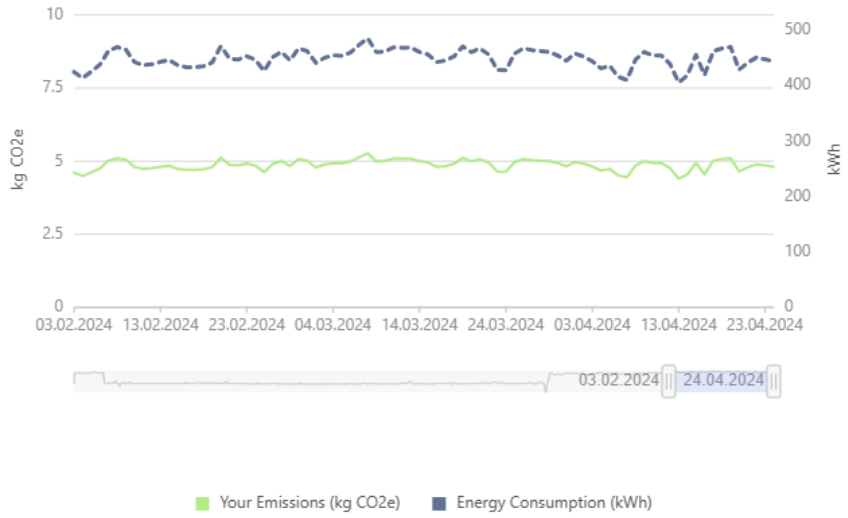
CO2/Kg Emissions per day



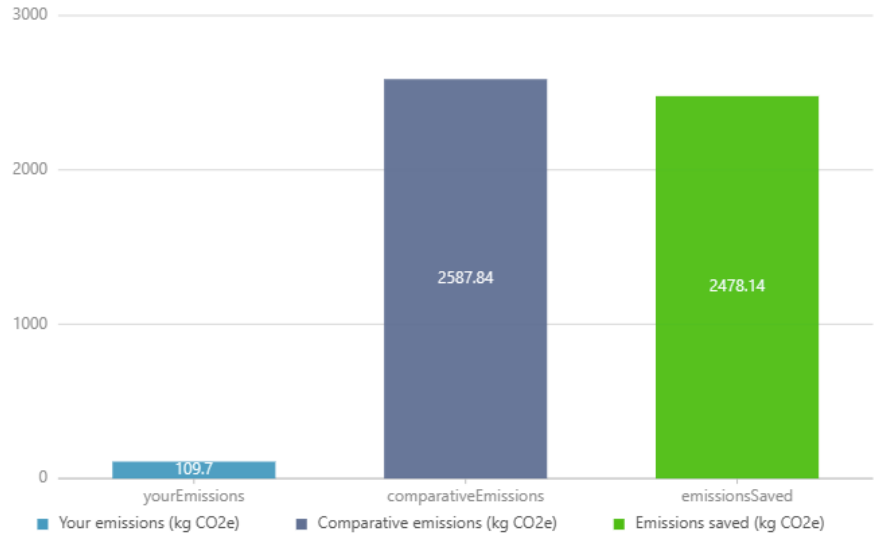
Emissions



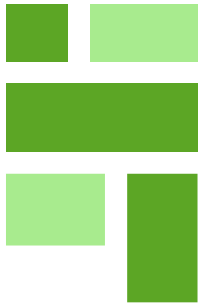
GHG Emissions per day



Emissions comparison



Period Month Country: United Kingdom Month: 04.2024



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