

Meet Your Green Data

Data in Security and Sustainability

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Strategic Advisor, Technology | Splunk Monday 3rd October 2022

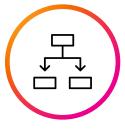
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Kirsty Paine

Strategic Advisor, Technology

Our topics today...











Introductions

The role of data

What about security?

Key challenges (or, priorities)

Kirsty Predicts

Let's get to know each other...



Your organisation...

Over the past two years

Has your organisation, over the past two years:

- Gained a sustainability role?
- Published a sustainability statement?
- Attracted talent with their sustainability posture?
- Changed their travel policy because of sustainability?
- Made sustainability a part of their commercial offering?

The role of data?



Meet your green data!

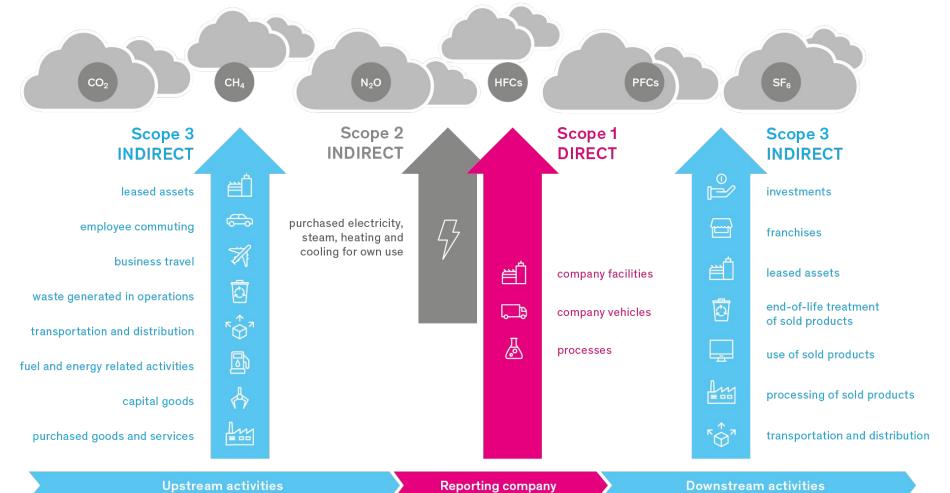
Meet your green data!

(It's the same data you always had)

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- Monitoring endpoints
- Electricity spikes
- Energy bills
- The temperature of your data centres
- Usage of cloud resources
- Production line times
- ...



Splunk Sustainability Toolkit



Splunk Sustainability Toolkit



But how do you make it meaningful to your executives?



Cryptocurrency eco-impact (Bitcoin)

Metrics from September 2022

- Bitcoin consumes 94.9 TWh annually
- Representing
 - 0.15% of the world's energy production
 - 0.43% of the world's electricity production
- Not useful metrics

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- Still not a helpful metric

Bitcoin's ecological impact

Cambridge Bitcoin Electricity Consumption Index (CBECI)





94.94

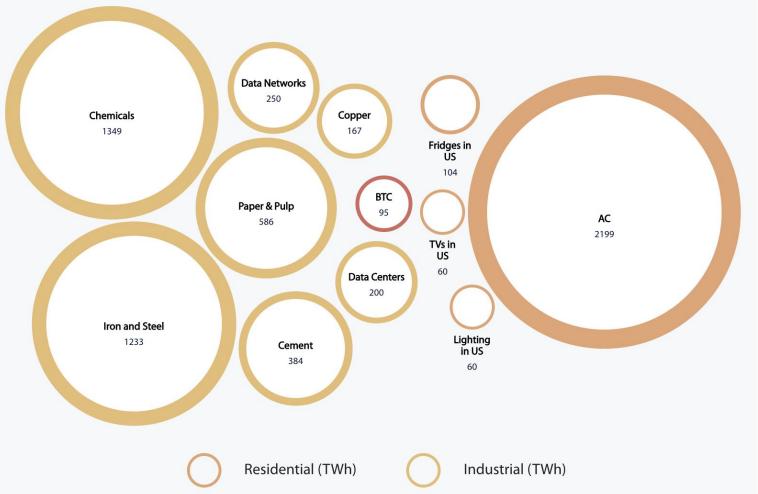
TWh per year

Gold mining



131

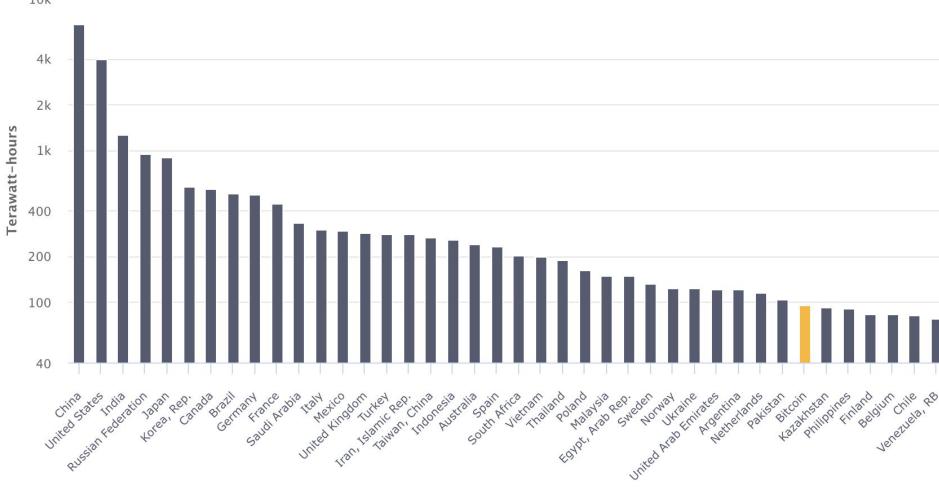
TWh per year



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Country ranking, annual electricity consumption 8k Terawatt-hours Folest Feb. tags South Africa Fighte Arabia Vietnam Wetherlands **Katakhstan** Philippines Tight to do Little feet Ling legistalis Argentina Pakistan Bitcoin

Country ranking, annual electricity consumption



What about security?

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Sustainability today

Early stages

- What teams?
- Limited tooling on the market
- In-house solutions
- No representation at board level
- Budget seen as a cost
- Seen as "compliance team's responsibility"

Security teams years ago

Sustainability is just decades behind...

- What teams?
- Limited tooling on the market
- In-house solutions
- No representation at board level
- Budget seen as a cost
- Seen as "IT team's responsibility"

How security has evolved

What can we learn, and could sustainability do the same?

- Dedicated, global, round-the-clock teams
- Large conferences and upskilling courses for specialists
- Expansive tooling choices, cross-sector solutions
- Representation at board level and strategic differentiator
- Budget seen as necessary, compliance and regulatory drivers
- Seen as everyone's responsibility not just one team or person

Are intruders getting better at attacks or Have we just improved our detection?



Are we doing worse on CO2 or Have we just improved our measurement?



Cloud: with a sustainability lens

Are you cloud-first, on-prem-first, or neither?



A little less CO2, a little more action...

Perhaps you already do these...

Relocate servers

- Co-locate
- Colder climates
- Space
- Move to cloud

Optimise your data centres

- Modern IT
- Cooling
- Automate
- Remove zombie servers
- Use state of the art IT

Empower your staff

- Choice
- Research
- Employee groups

Contracts & commercials

- Purchase for sustainability
- Use contracts



Kirsty Predicts...

Kirsty Predicts

By 2030, we will see the first signs of...

- Sustainability trends and reports from companies, as we have with security now
- Sustainability responsibility at board level
- Sustainability is a key differentiator in purchasing decisions and regulation
- "Sustainability leaks", CO2 guzzling components
 - SOC-like sustainability function, where real-time leaks matter?
 - From measuring a simple footprint to nuanced, real-time interventions
- From single person additional responsibility to full-time roles in a separate team
- "Sustainability is getting harder"

Key

Recommendations



- 1. "Sustainable by Design"
- 2. Measure, change, measure again
- 3. Share best practices
- Look for sustainability in your organisation's policies
- 5. Consider (or create) your strategy
- Empower your staff
- 7. Get ready for the evolution



Takeaways

- Identify the data you need, and the data you don't have
- Measure key areas, make changes, measure again
- Meaningful metrics matter
- We have a lot to learn from security's journey

Resources

- <u>Tackling Your Carbon Footprint with the Sustainability Toolkit</u>
 <u>for Splunk</u>
- Cambridge Bitcoin Electricity Consumption Index: <u>https://ccaf.io/cbeci/index/comparisons</u>
- Measuring PUE: <u>https://www.nrel.gov/computational-science/measuring-efficiency-pue.html</u>

Thank you!

