

DATA CENTERS AND THEIR ENERGY CONSUMPTION: PUBLIC OPINION VS. POLITICS

Dr. Julian Bothe

ECOCOMPUTE

November 13, 2025



/ AlgorithmWatch

- AlgorithmWatch is a non-governmental, non-profit organization based in Berlin and Zurich.
- We fight for a world where algorithms and Artificial Intelligence (AI) do not weaken justice, human rights, democracy, and sustainability but strengthen them.



/ The AI Boom in Germany, EU and Elsewhere

[The AI Apply] Strategy encourages an **AI first policy** where AI is considered as a potential solution whenever organisations make strategic or policy decisions,

European Comission, October 2025



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So soll Deutschland zur KI-Nation werden

Mehr Rechenpower, mehr Geld vom Staat und Regulierung als Chance:

Thomas Jarzombek, Staatssekretär im Digitalministerium, erklärt den Plan für künstliche Intelligenz.

Von Jakob von Lindern

15. Mai 2025, 16:34 Uhr



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"My personal opinion is that it's primarily about computing power." (not about sustainability)

Wildberger, 18.9.2025

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„We will reduce the Energy Efficiency Act to a 1:1 implementation of the EU Energy Efficiency Directive. In addition, the amendment will be subjected to a practical review with a particular focus on data centers.“

German Government, 5th November 20205

it's primarily about
out sustainability)

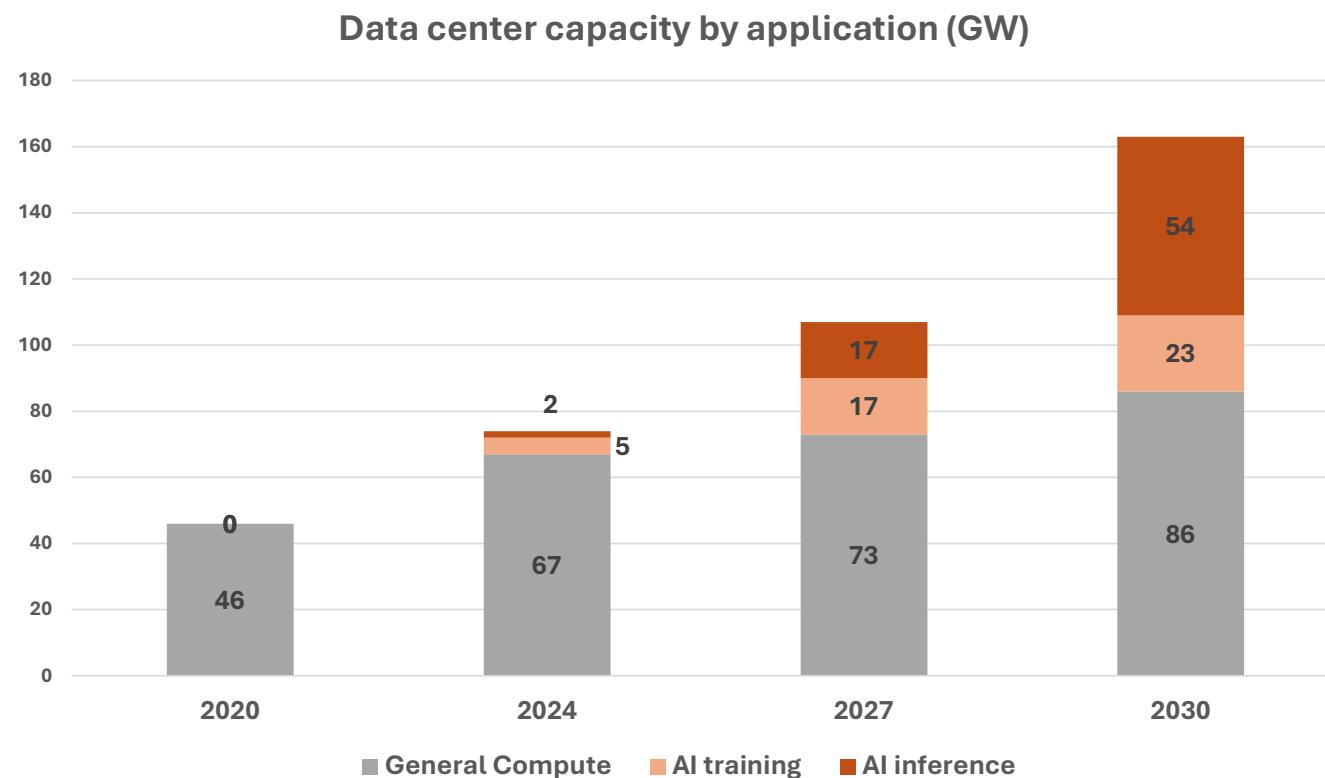
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The Power Use of the AI Boom Estimates and surging Projections



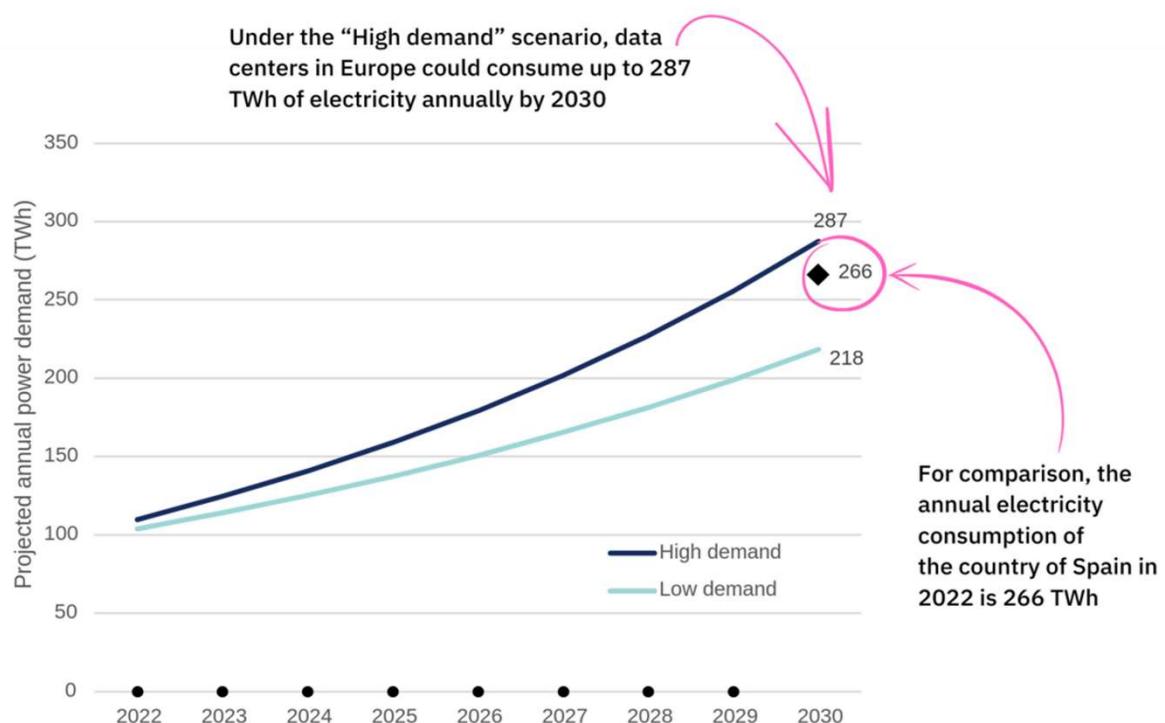
The AI Boom Drives the Data Center Expansion



<https://www.bain.com/insights/ai-data-center-forecast-from-scramble-to-strategy-snap-chart/> October 25



Figure 1. Baseline and projected data centre power demand (TWh) in Europe under two demand hypotheses.

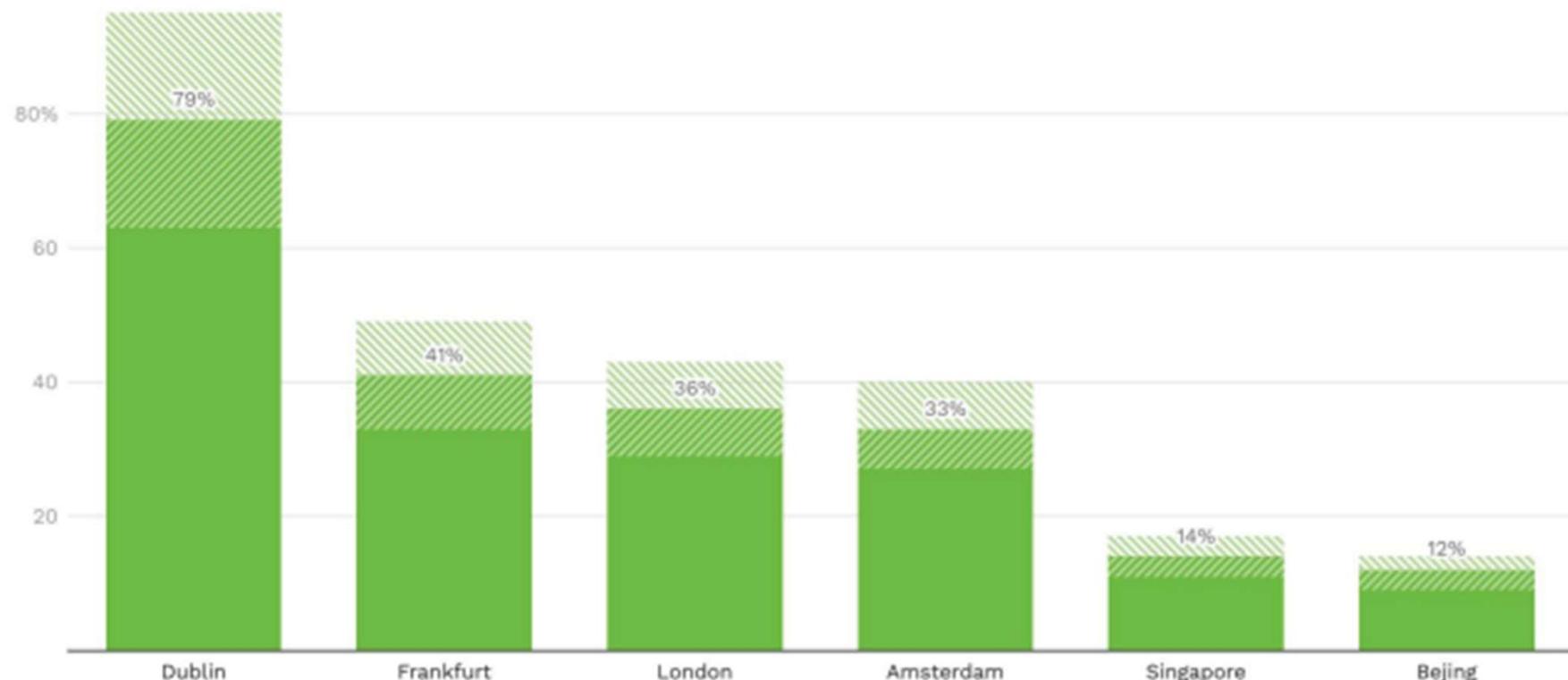


EUROPE’S DATA CENTRES COULD CONSUME AS MUCH ELECTRICITY AS THE WHOLE OF SPAIN.



Selected Cities

share of data centres electricity consumption (with uncertainties)

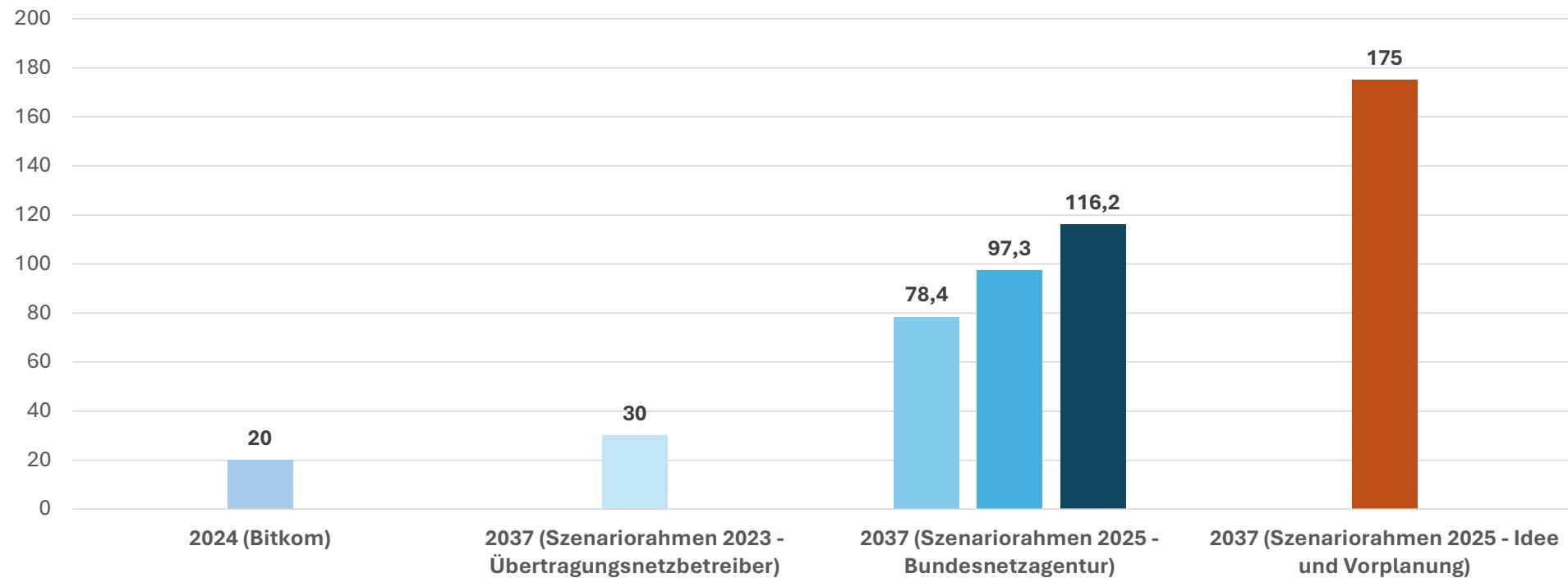


Source: own compilation based on: McKinsey 2024; IEA 2024a, 2025 and other sources¹



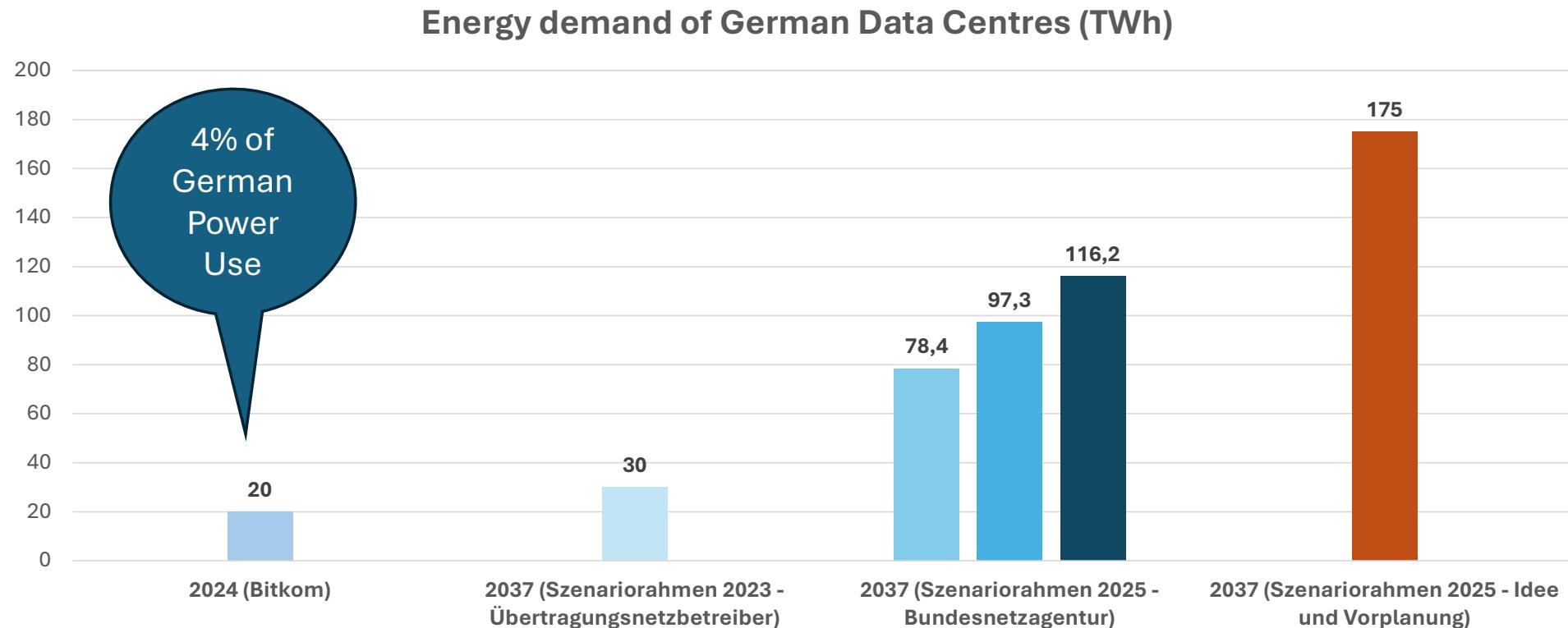
/ Current and Projected Power Use

Energy demand of German Data Centres (TWh)



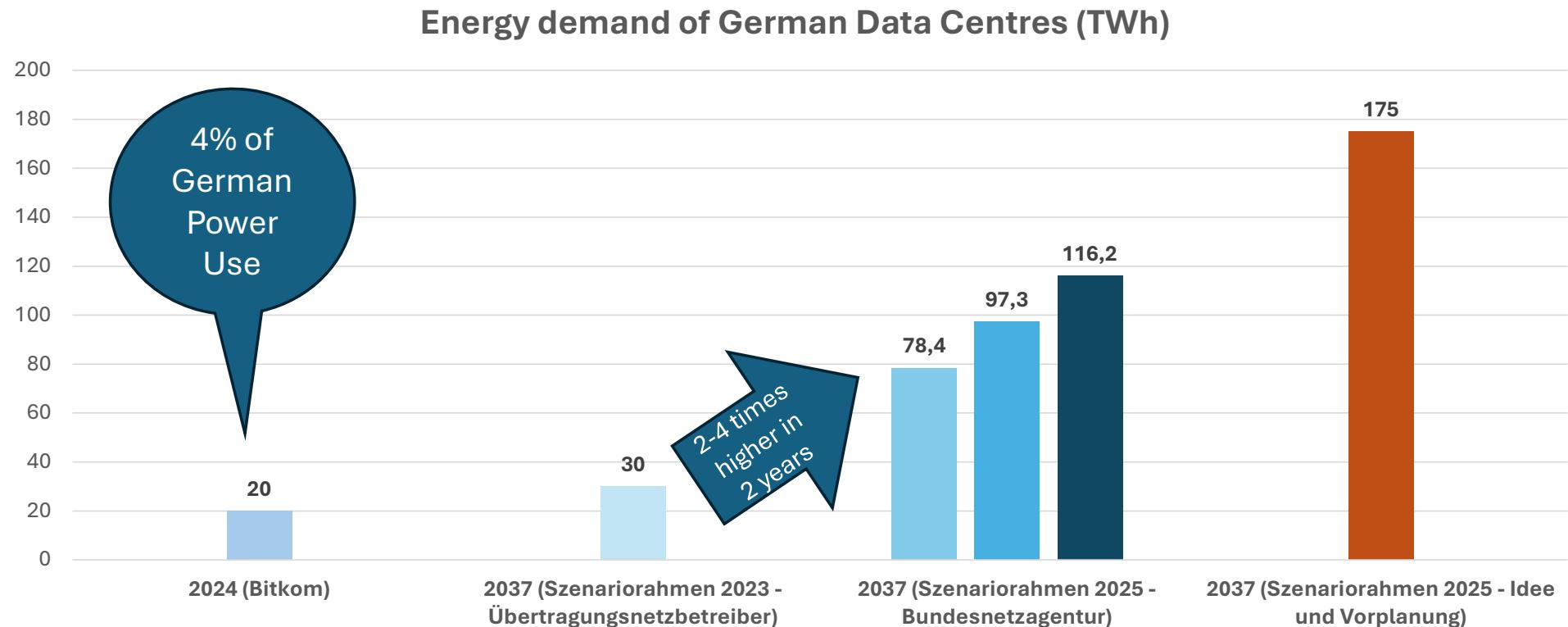


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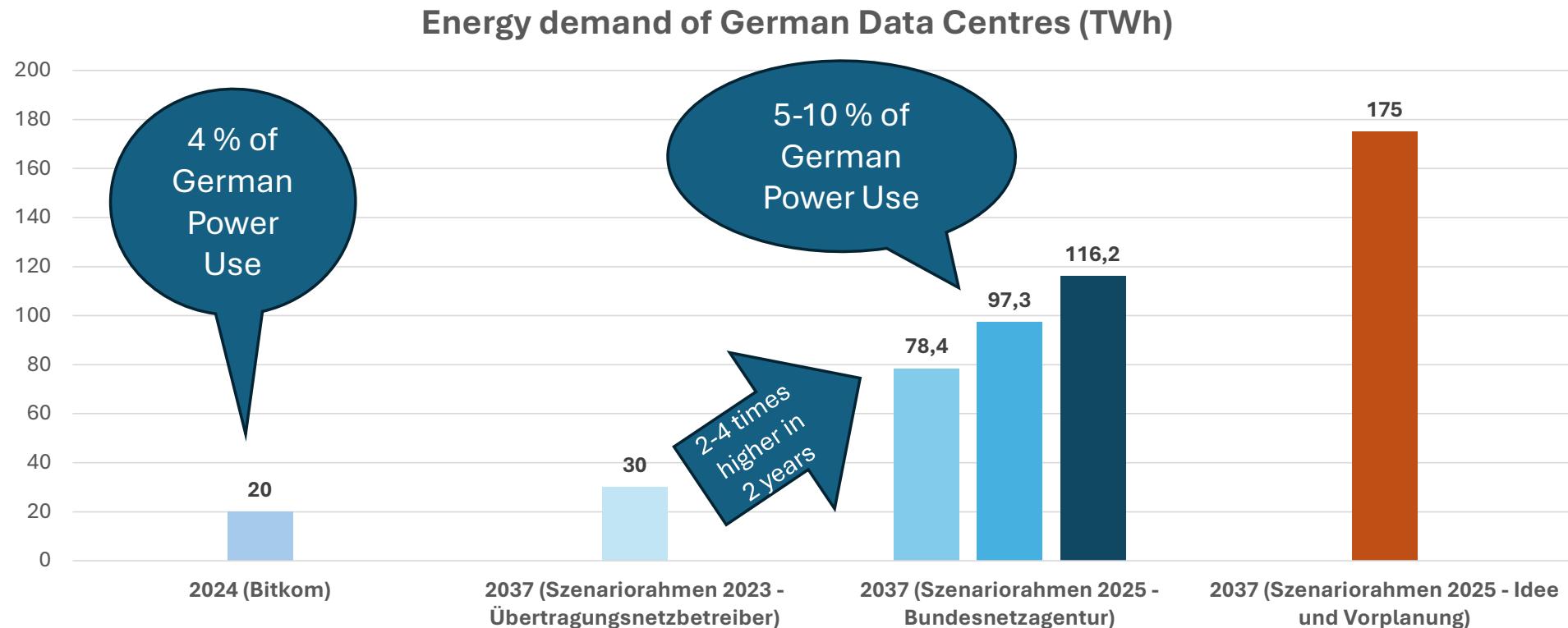


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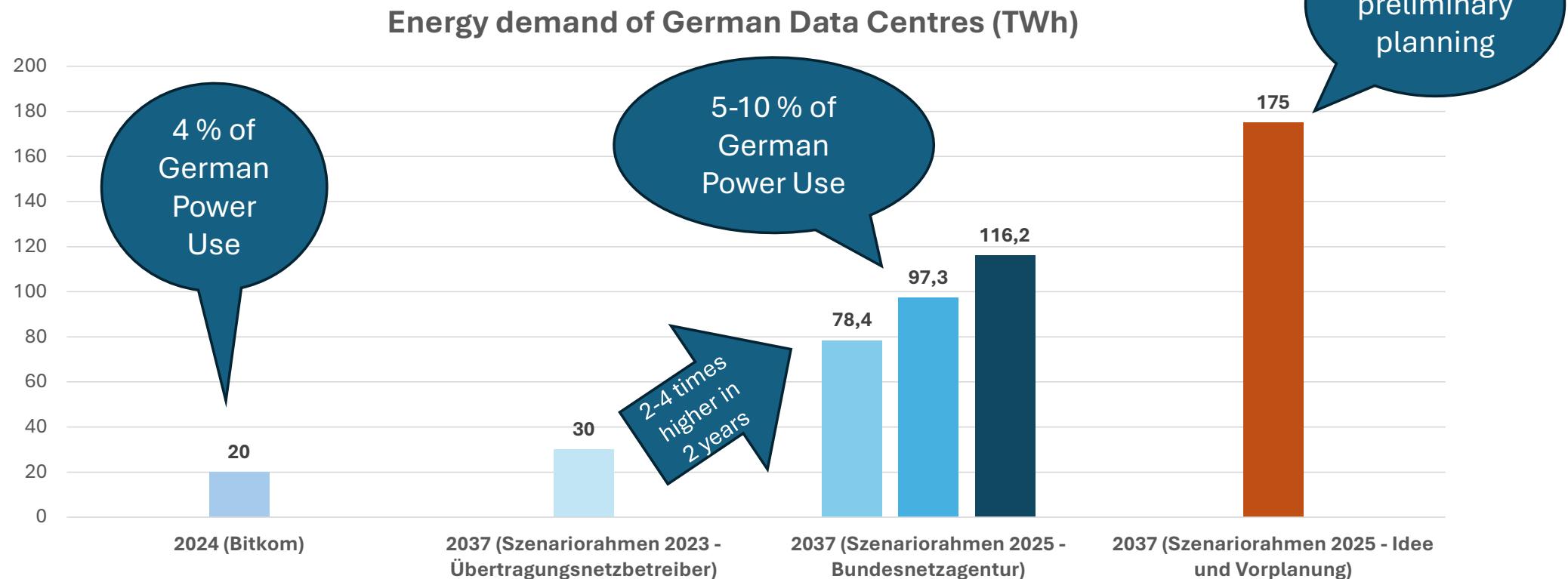


/ Current and Projected Power Use





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Findings Report Germany

Attitudes towards Data Centers



/ Demographics / Sample Germany

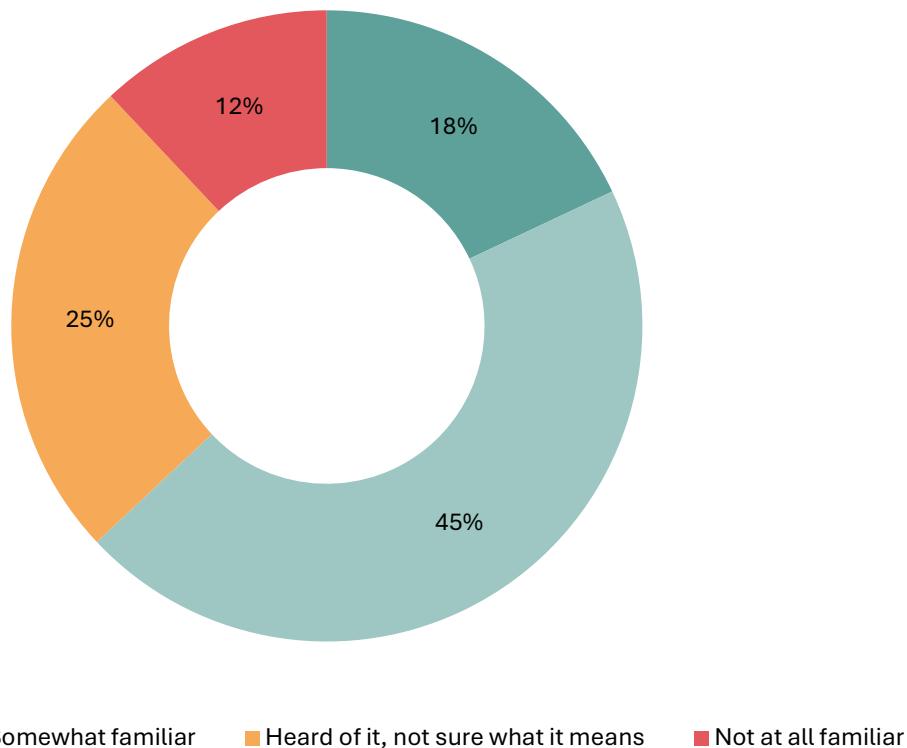
Germany

- / Fieldwork: 17 September 2025 - 28 September 2025
- / Unweighted sample size: 1002. Weighting applied
- / Percentages do not always add up due to rounding.
- / All countries: $n = 5.032$, Margin of Error $\approx 1,38\%$,
- Germany: $n = 1.002$, Margin of Error $\approx 3,1\%$

- / Further Countries: United Kingdom, Ireland, Spain, Switzerland
- / Overall Results see:
<https://algorithmwatch.org/de/mehrheit-besorgt-ressourcenverbrauch-rechenzentren/>



Almost two thirds (63%) were familiar with the term 'data center' prior to this survey.



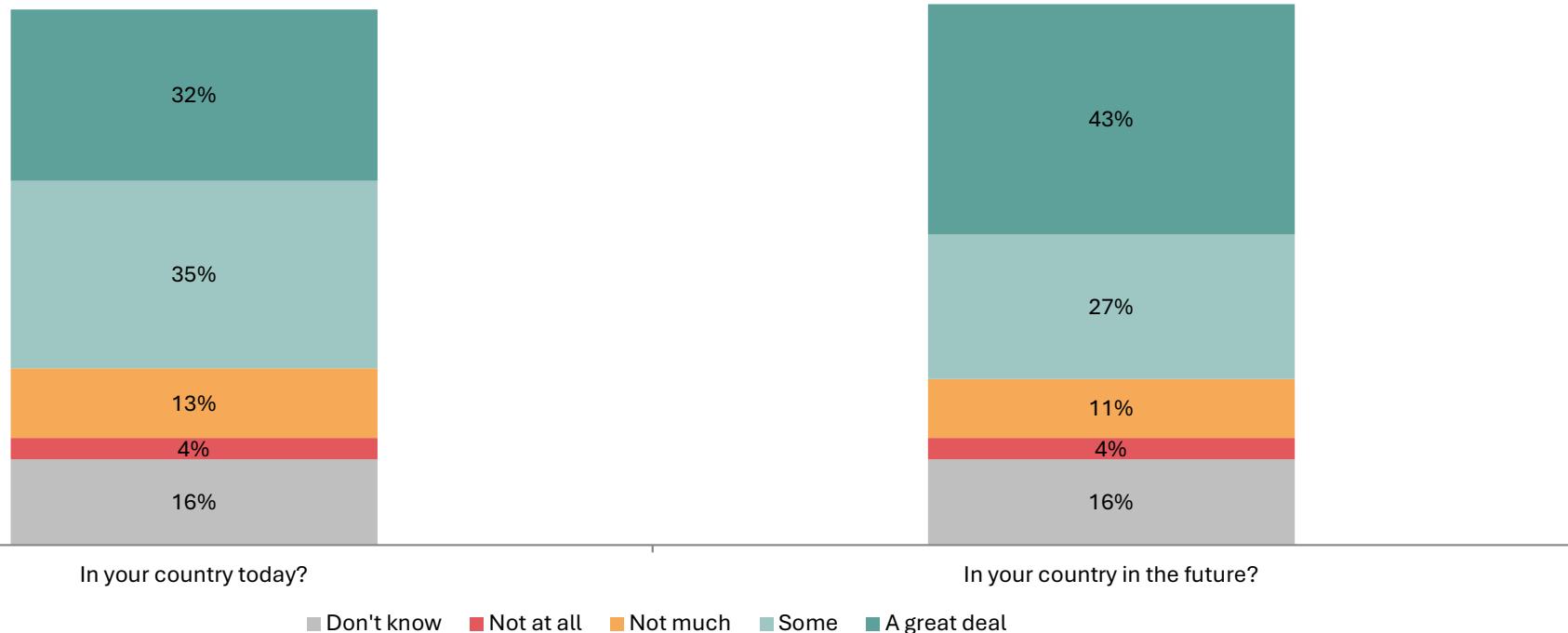


Findings Report Germany

Concerns on Resource Consumption by DCs

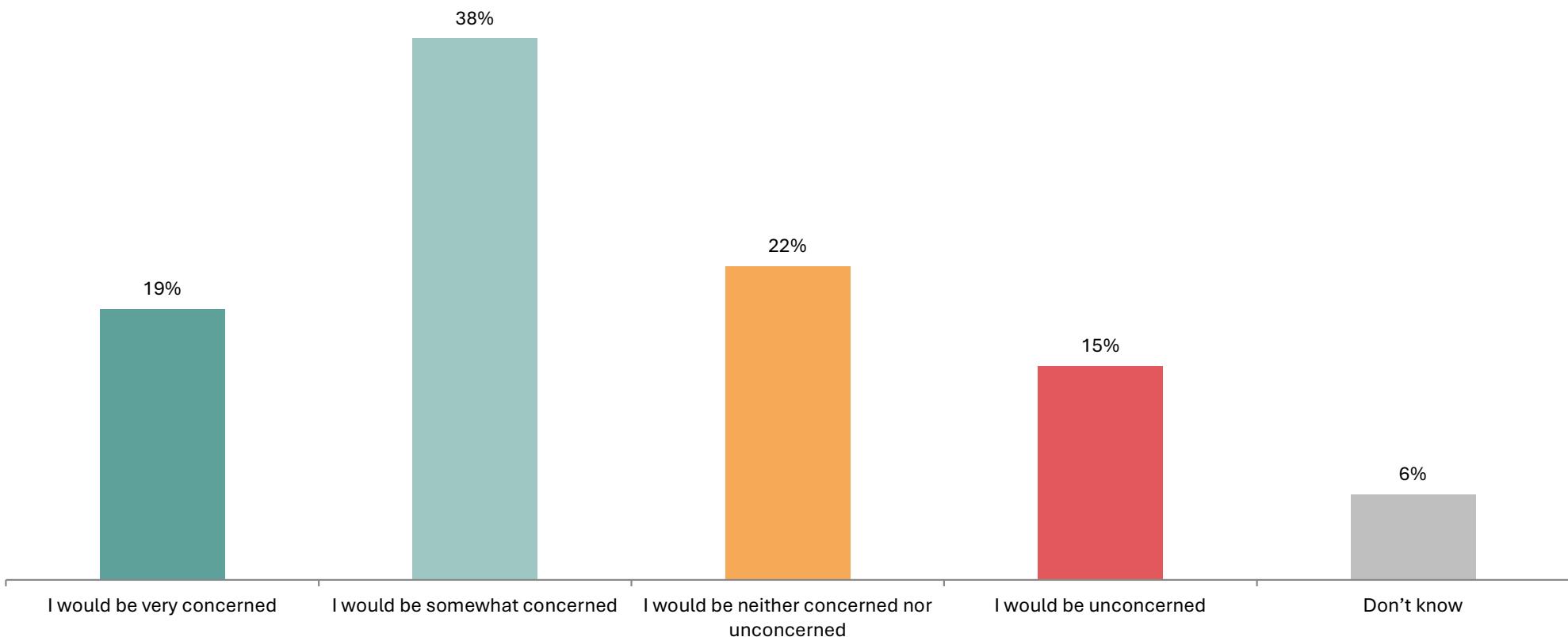


32% believe DCs contribute a great deal to overall energy consumption in GER today, 43% believe they will in the future.



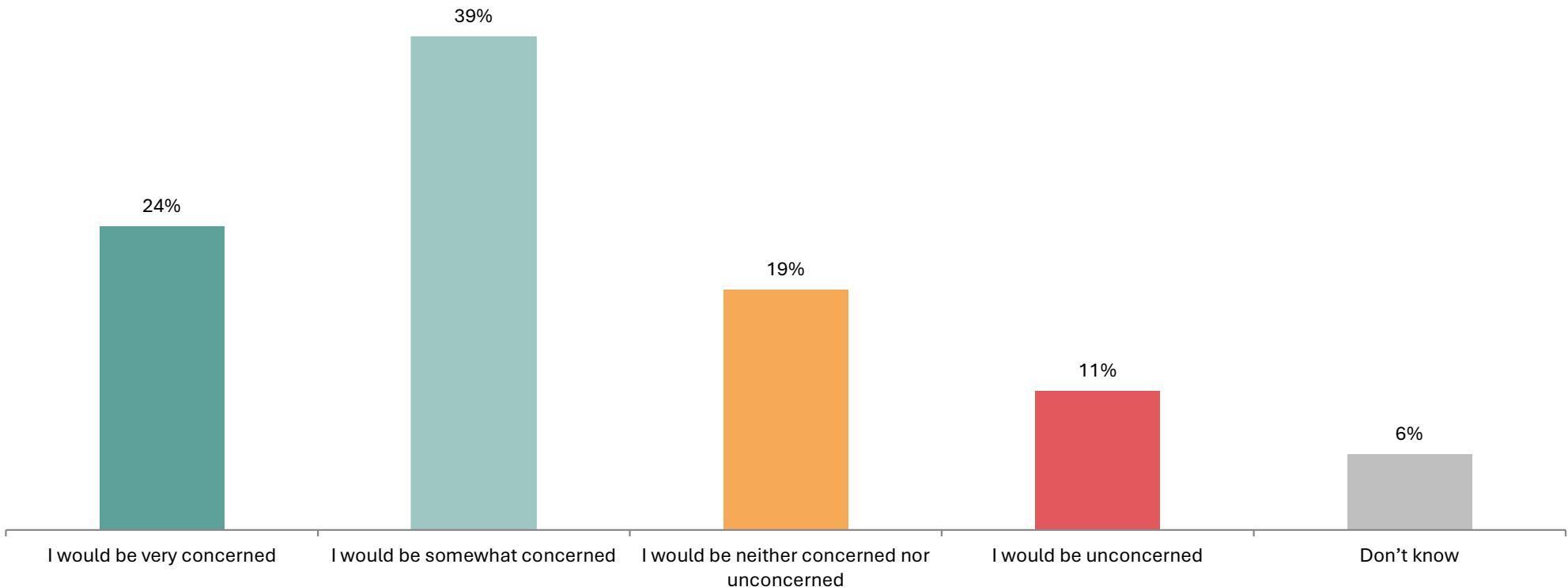


57% are concerned that their own water supply needs could be affected by new data centers water usage





If new DCs are being built, 63% would be concerned that their water usage would affect the surrounding ecosystem.



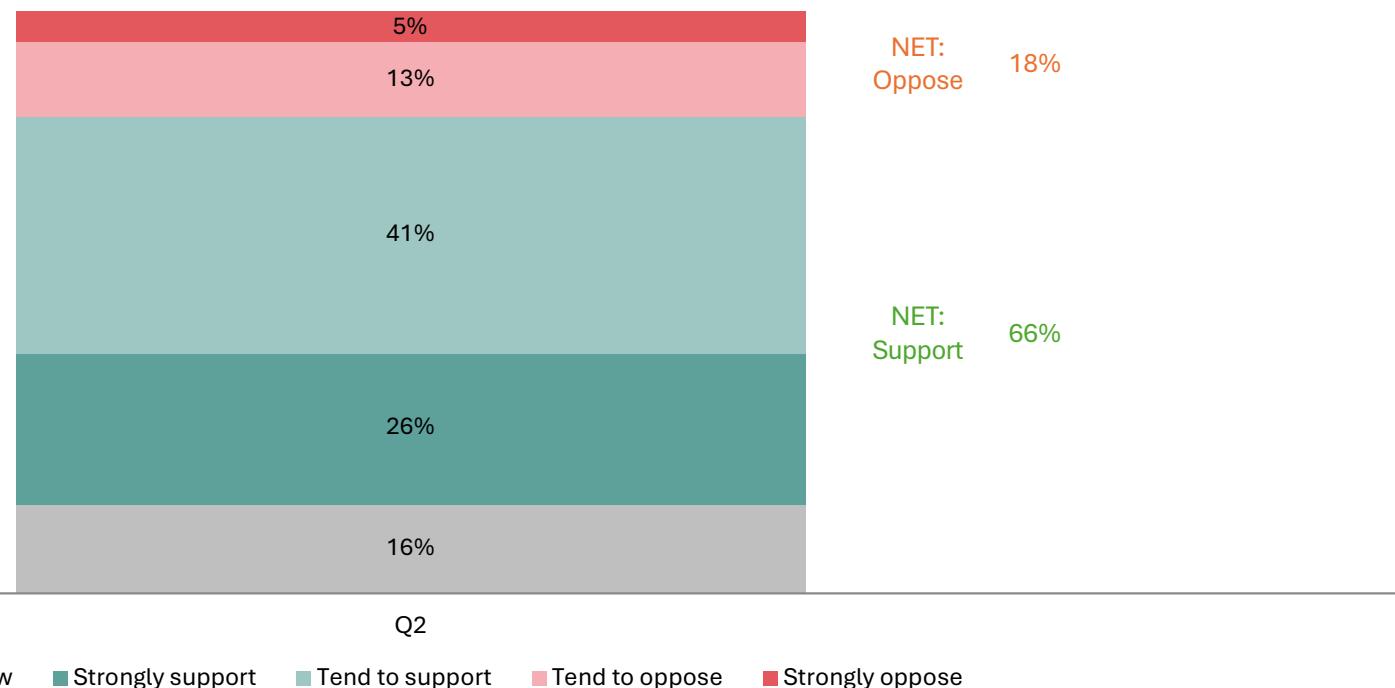


Findings Report Germany

Powering New Data Centers



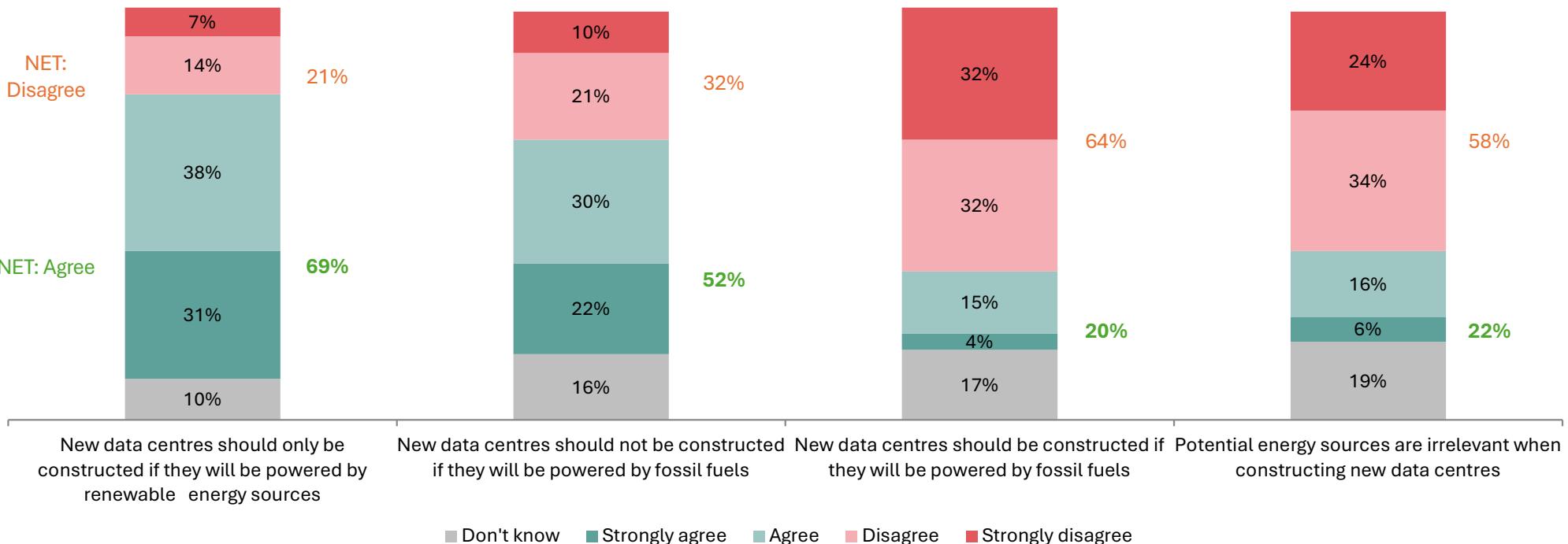
66% would support a measure that would only allow new DCs to be constructed if **additional** renewable energy sources are created in order to power them (i.e., renewable energy that was not already planned / planned to be used in the country).



- Sample size: n = 1,002 | Base = Respondents who saw the question | Q = "To what extent would you support or oppose a measure that would only allow new data centers to be constructed if new renewable energy sources are created in order to power them? (i.e., by renewable energy that was not already planned / planned to be used in the country)" (Single choice)



69% think new DCs should only be constructed if they will be powered by renewable energy sources.



- Sample size: n = 1,002 | Base = Respondents who saw the question | Q = "Thinking about the construction of new and bigger data centers over the next 10 years, to what extent do you agree or disagree with the following statements." (Single choice) - New data centers should only be constructed if they will be powered by renewable energy sources

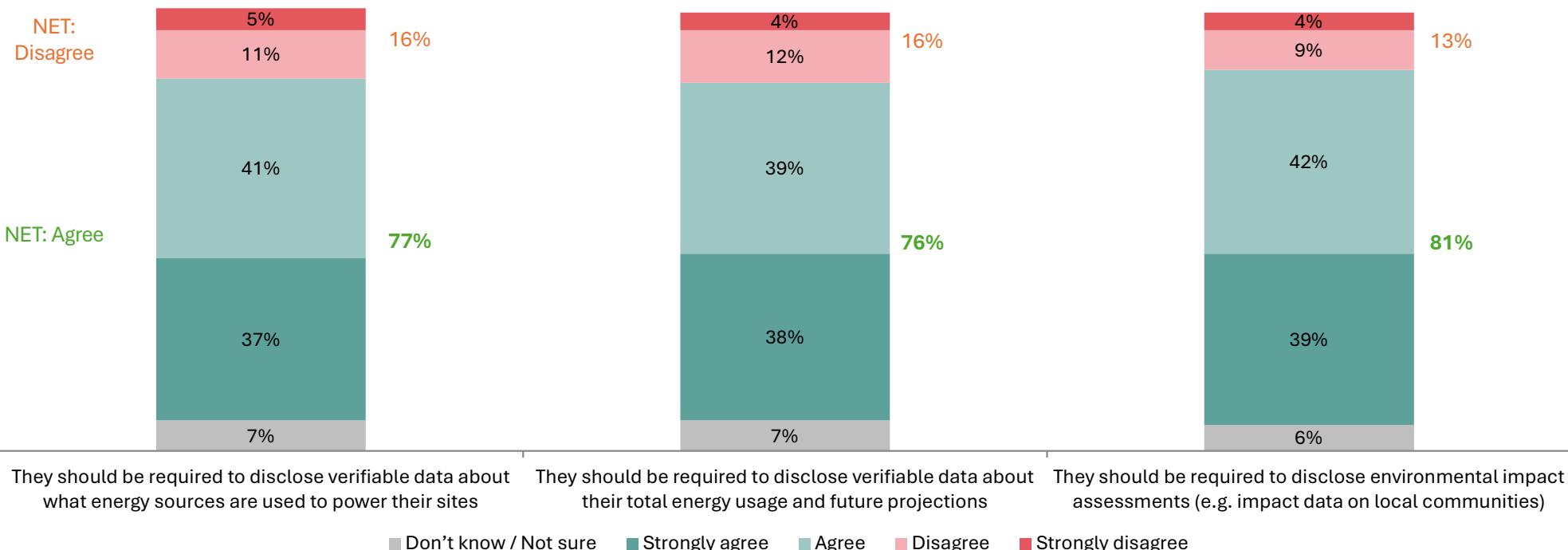


/ Findings Report Germany

Regulating Data Centers

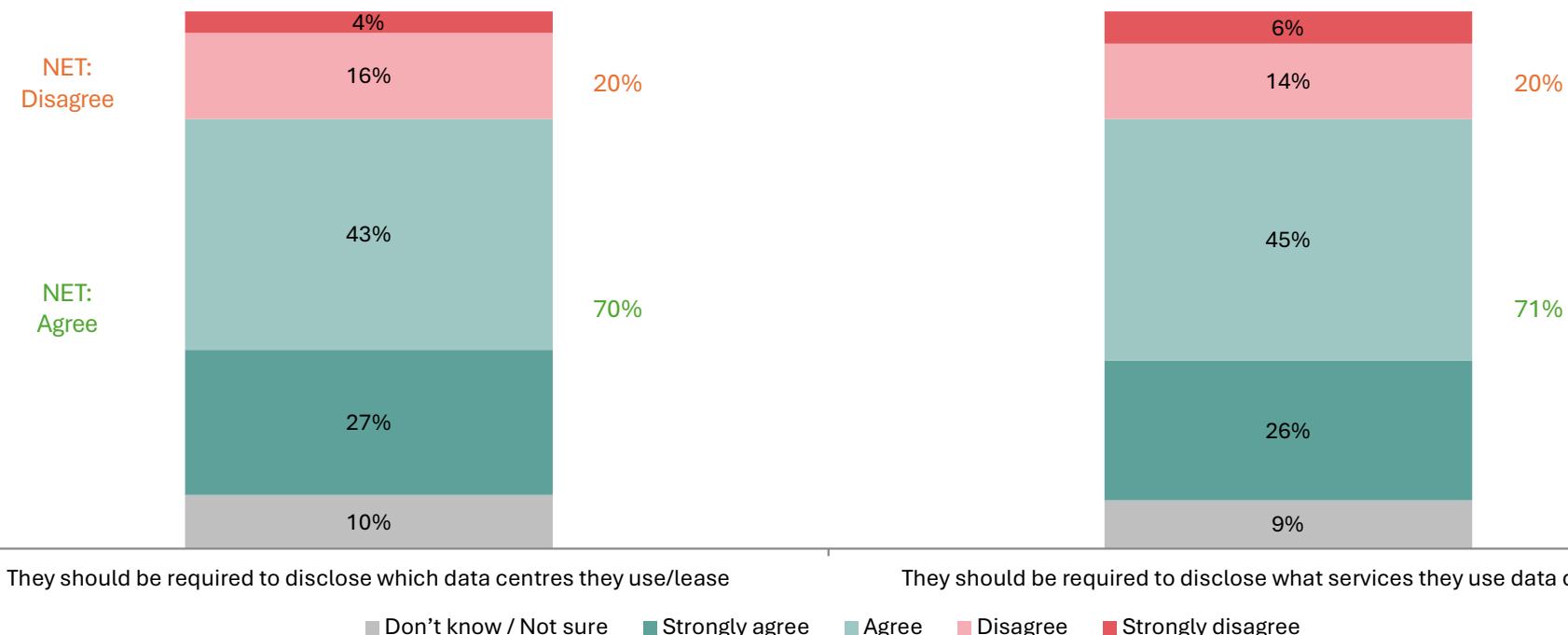


People overwhelmingly think that DC operators should disclose data about energy sources (77%), total energy consumption and future projections (76%) and environmental impact assessments (81%).





7 in 10 think that companies that use/lease DC should be required to disclose which DC they use/lease (70%) and what services they use/lease it for (71%).





/ Transparency about consumption?

- It is mandatory, it is enforceable.
- Do operators do it?

§13(1) EnEfG: Betreiber von Rechenzentren sind verpflichtet, bis zum Ablauf des 31. März eines jeden Jahres Informationen über ihr Rechenzentrum nach Maßgabe der Anlage 3 für das vorangegangene Kalenderjahr zu veröffentlichen



/ Conclusion: More transparency, additional renewables

- People are concerned about the increasing resource consumption of data centers.
- They expect regulation and transparency regarding key information.



/ Conclusion: More transparency, additional renewables

- To limit the current AI boom and its Ressource use, we must:
 - Allow new data centers only when (additional) renewable energy is secured
 - Ensure transparency
 - Put Sustainability in AI first – not AI Use or Computing Power!



/ Thank you!

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/ Results of the Survey available at:

<https://algorithmwatch.org/de/mehrheit-besorgt-ressourcenverbrauch-rechenzentren/>