

World Data Centers & Growth



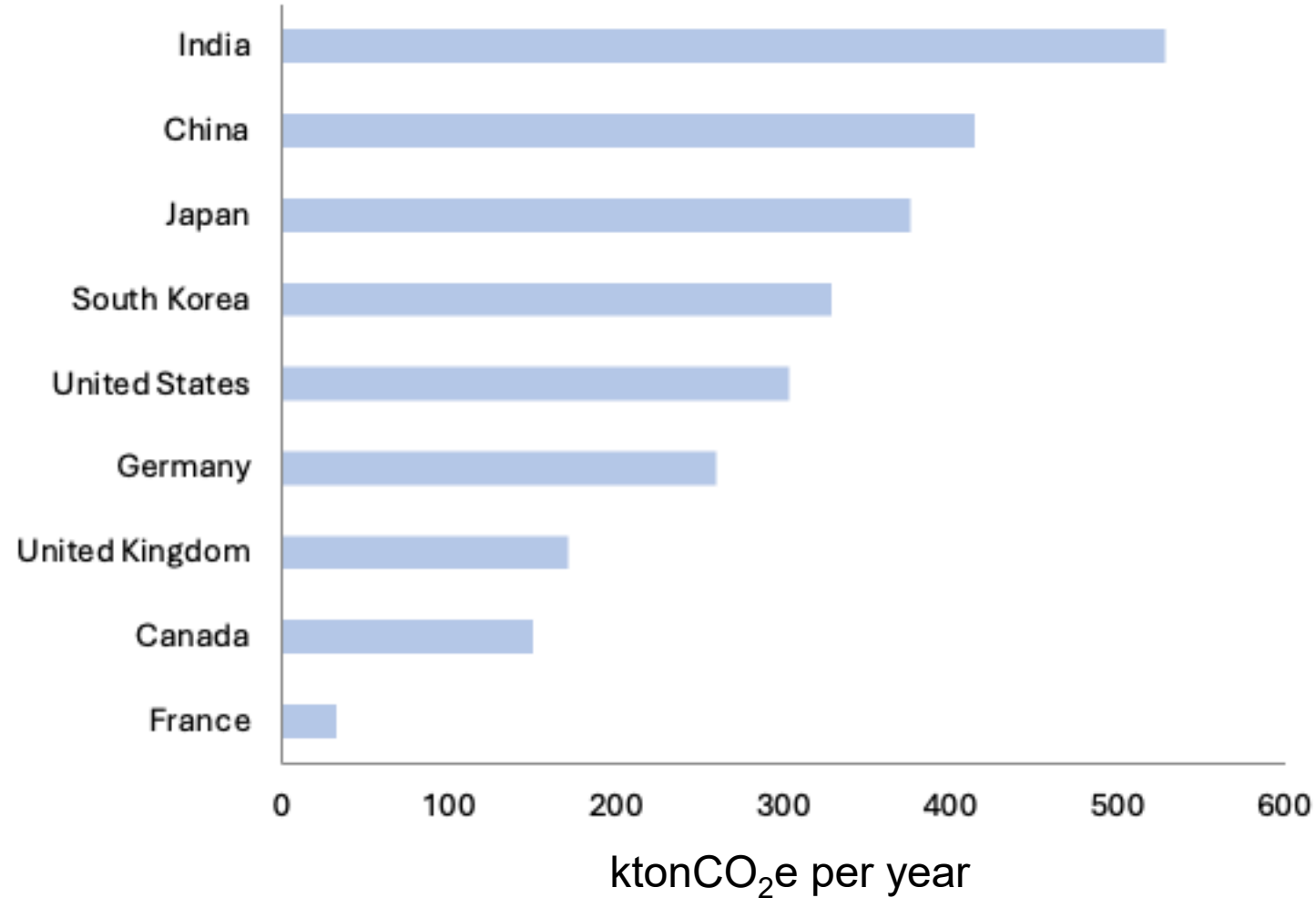
~117 GW⁽ⁱ⁾ of installed data center capacity today → ~226 GW⁽ⁱⁱ⁾ by 2030

*Cite: Virgüez, E., & Azevedo, I.L. Uneven carbon footprints of the global data center industry
(working paper)*

Sources: (i) S&P Global Market Intelligence, 451 Research Data Center Knowledge Base. (ii) IEA base case projection. Stanford analysis of operational facilities (market-level aggregation protects facility-level records).

Carbon Footprint

Example with 100 MW grid-connected data center at 90% load



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Electricity Markets & Policy

Feasible solutions to power data center will depend on:

- Electricity market design
- Opportunities for grid connection versus co-siting of data center and generation
- Interconnection requests complexity, process times and investment in transmission
- Policy drivers for de-carbonization and sustainability and clean power procurement mechanisms
- Electricity prices
- Community preferences, perceptions, and implications for affordability
- Data center flexibility value