

Market Insight Report Reprint

Cloud and service providers drive power-consumption growth within the datacenter industry

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According to 451 Research's Datacenter Services and Infrastructure Market Monitor report, total global datacenter power consumption is expected to reach over 77,000 MW by 2026, and cloud and service provider datacenter power consumption should nearly double.

451 Research

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Introduction

According to 451 Research's latest Datacenter Services and Infrastructure Market Monitor, total global datacenter power consumption is expected to reach over 77,000 megawatts by 2026, a CAGR of 5.2% from 2019-2026. The cloud and service-provider datacenter footprint, in terms of power consumption, should nearly double from over 13,500 MW in 2020 to over 26,000 MW in 2026, accounting for one-third of total datacenter power consumption by 2026.

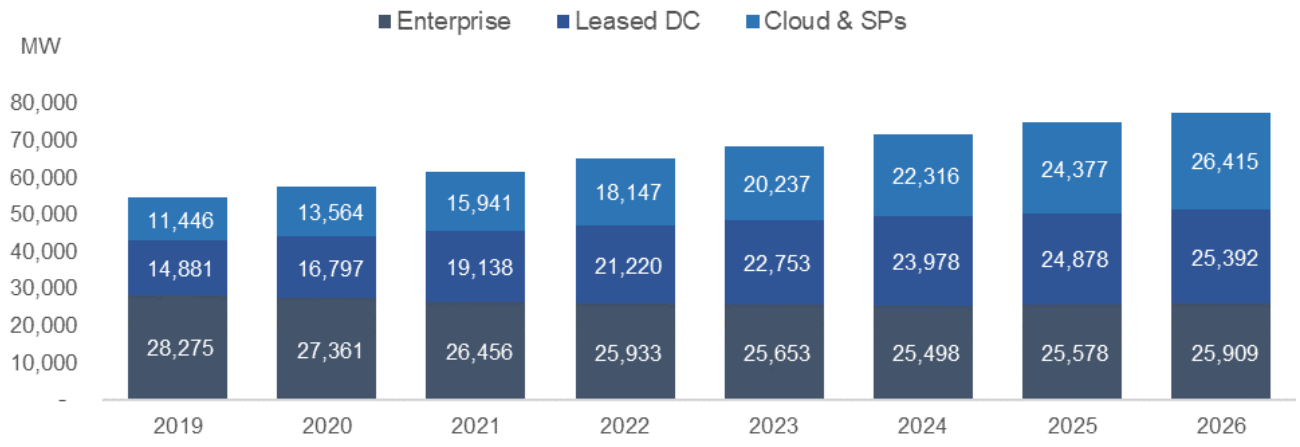
THE TAKE

Increased adoption of cloud services and infrastructure will likely remain the key driver of growth within the datacenter industry for the foreseeable future. The cumulative net-new power consumption within cloud and service-provider-operated datacenters is expected to total over 12,800 MW from 2021-2026, accounting for 64% of total datacenter net-new cumulative power consumption. We expect to see enterprise-operated datacenters decline over the forecast period (in terms of power consumption) as the migration to third-party datacenter providers, leased datacenters and cloud service providers continues. The leased datacenter segment should also benefit from cloud and service-provider growth in the next five years. In fact, 37% of total leased datacenter cumulative net-new power consumption from 2021-2026 is expected to come from cloud and service-provider demand within leased datacenter facilities.

Cloud and service providers to account for one-third of datacenter power consumption

Global total datacenter compute power consumption is expected to grow from 2019-2026, totaling over 77,000 MW by 2026. The enterprise datacenter segment accounted for over half of total power consumption in 2019, but the shift toward off-premises will likely continue during the forecast period, and by 2026 enterprise datacenters will likely account for 33% of total datacenter power consumption. Off-premises is expected to account for the majority of total power consumption, with leased datacenters increasing from 27% share in 2019 to 33% in 2026, while the cloud and service-provider segment is expected to grow from a 21% share in 2019 to 34% in 2026.

Datacenter Utilized Power in MW by Operator



*Excludes server rooms/closets, micro DC and telco hubs

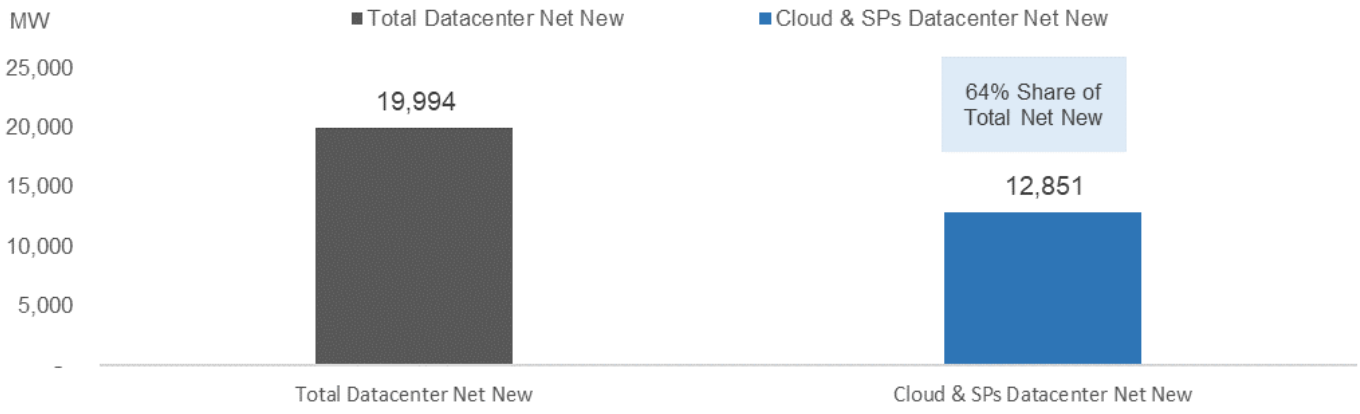
Source: 451 Research's Datacenter Services and Infrastructure Market Monitor 2021

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Cloud, service providers to account for 64% of total datacenter cumulative net-new power

Examining cumulative net new datacenter power consumption, cloud and service providers will likely drive the majority of growth over the next five years, adding over 12,800 MW from 2021-2026 and accounting for 64% of total cumulative datacenter power consumption. We further estimate that 39% of cloud and service-provider cumulative net-new power consumption will be within leased datacenters, with 61% within owned and operated enterprise facilities.

Cumulative 2021-2026 Net-New Utilized Power in MW



*Excludes server rooms/closets, micro DC and telco hubs

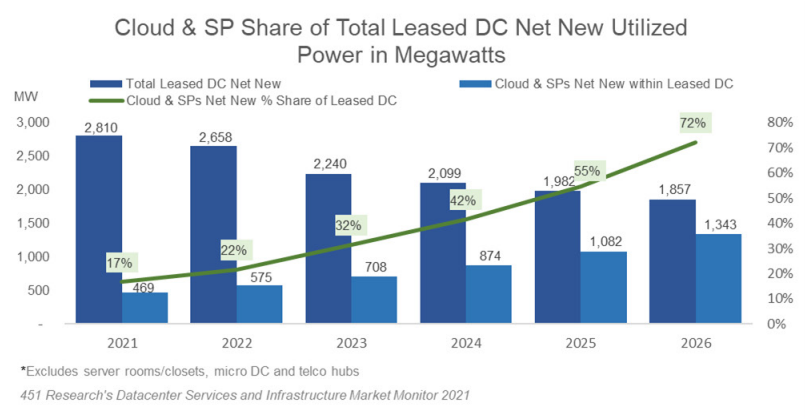
Source: 451 Research's Datacenter Services and Infrastructure Market Monitor 2021

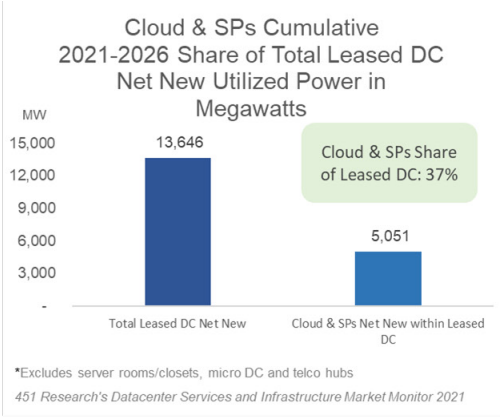
Cloud, service providers to drive leased datacenter power consumption growth

Cloud and service providers often lease space from leased datacenter providers. Overall, leased datacenter cumulative net-new power is expected to total more than 13,600 MW from 2021-2026. Cloud and service providers within leased datacenter facilities are expected to account for 37% of total cumulative leased datacenter net-new power consumption. We estimate that in 2019, cloud and service providers accounted for 17% of total net-new power consumed within leased datacenters; by 2026 we expect 72% of net-new power consumption within leased datacenters will come from cloud and service providers. Insight from providers indicates that cloud and service-provider demand within leased facilities will likely continue to increase. "In many major markets across the globe, cloud and service providers are taking up to 80% of wholesale space," says Kelly Morgan, Research Director of 451 Research's Datacenter Channel.

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Cloud & Service Provider Net-New Utilized Power in MW





Source: 451 Research's Datacenter Services and Infrastructure Market Monitor 2021

Methodology and definitions

The Datacenter Services and Infrastructure Market Monitor was built using many industry inputs, including 451 Research's Datacenter KnowledgeBase; Hosting, Cloud & Managed Services Market Monitor; internal cloud datacenter database; analyst input; and Voice of the Enterprise surveys. The model represents the total installed base of datacenters globally and its capacity attributes by owner type. We segment owner type into enterprise and leased datacenters. Cloud and service providers represent a subsegment of enterprise and leased datacenters, as they can own the facility or lease space/facility from leased datacenter providers. To learn more about our methodology, coverage and definitions, please refer to our Datacenter Services and Infrastructure Market Monitor report.

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