

U.S. Multi-Industry

Datacenter cooling: Google launch of Brazos, Minor -ve implications for MI Cooling names

The sidecar-specific content may be small for MI names, and open-source offerings do not help the incumbents' market share, but there will still be the need to remove heat from the IT room.

Earlier today, Google announced its Brazos system, a rack-mounted / closed-loop liquid-to-air cooling system that enables datacenters to deploy high-density, liquid-cooled equipment inside air-cooled environments. GOOG notes that this architecture can be quickly incorporated into any legacy facility with sufficient power / standard air-handling.

In more detail, Brazos is a modular system, including 3 cooling units and integrated rack manifolds. It supports a 60kW nominal thermal load per rack across its 3 modular units, operates on a 40-60VDC input designed to directly connect with standard rack busbars, and has a design that emphasizes field serviceability. Some of the core components within the Brazos liquid cooling chassis include Air CDUs, high-efficiency air-to-liquid heat exchangers, and hot-swappable fans. The system functions as a self-contained liquid ecosystem that captures heat through liquid at the component level before rejecting it to the datacenter's hot aisle by employing high-efficiency liquid-to-air heat exchangers. Brazos reportedly separates the internal-to-IT liquid loop from the facility water supply, delivering high-performance liquid cooling with the operational simplicity of standard air systems.

GOOG also said that Brazos is generally available, and its manufacturing suppliers are ready to engage with the broader industry to market / produce its design. GOOG stated that it will formally open-source Brazos's technical specifications, visual assets, and design specifications through industry forums within the next few months.

In terms of MI implications we highlight (with the usual caveats that these are preliminary impressions):

- This does not represent the first such 'scare' for US MI companies on cooling architecture evolutions within datacenters, and it is unlikely to be the last;
- The scope of the solution may be quite broad, given that it targets 60kW racks – vs an average installed rack capacity of 25-30kW (newer datacenters tend to have much larger rack capacity);

Barclays Capital Inc. and/or one of its affiliates does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Please see analyst certifications and important disclosures beginning on page 4.

Completed: 16-Jun-26, 19:14 GMT Released: 16-Jun-26, 19:18 GMT Restricted - External

U.S. Multi-Industry

NEUTRAL
U.S. Multi-Industry
Julian Mitchell

+1 212 526 1661

julian.mitchell@barclays.com

BCI, US

Jimmy Yunhao Jiang

+1 212 526 6042

jimmy.jiang@barclays.com

BCI, US

Haemaru Chung

+1 212 526 4758

haemaru.chung@barclays.com

BCI, US

Drew Smith

+1 212 526 1325

drew.smith@barclays.com

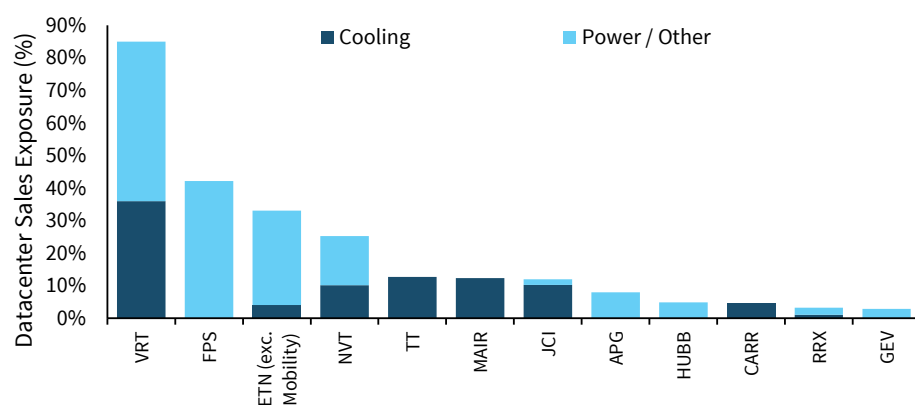
BCI, US



- The key components of the solution seem to be a CDU, a heat exchanger, a fan, a pump, and some sensors. Hence, the \$ content for MI companies who may specialize in products such as chillers or air handlers (CARR, JCI, MAIR, TT, VRT) is quite low, vs a more conventional cooling solution. As a reminder, we show below the power and cooling content per MW as disclosed;
- At the same time, this solution may take up more space (the sidcar – which may limit its adoption) and it seems the heat will still need to be removed from the IT room – which would imply decent content for traditional cooling equipment;
- Google appears to be willing to make the technology freely available, which could pose some risk to the market share not only of traditional Cooling players in this offering, but also perhaps the share of Power companies who are bulking up their presence in Cooling (ETN, NVT). This fits our broader point that most MI companies may have lower market shares in future datacenter power / cooling architectures than they do today (see our recent discussion of [800VDC](#) for instance, or our [Cooling report](#) earlier this year).

We show below datacenter sales exposure for US MI.

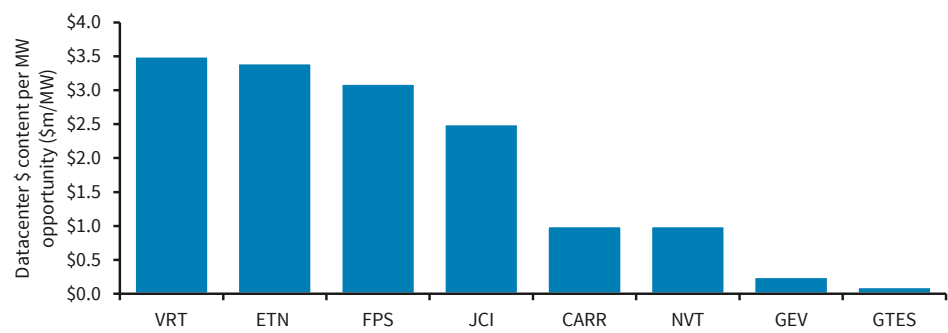
FIGURE 1. VRT has the highest exposure to datacenter cooling in our US coverage, at ~35%+ of sales



Note: Showing the top companies with the highest Datacenter exposure in US MI
Source: Barclays Research, Company Data

We show below various US MI Power and Cooling companies' datacenter content in \$/MW, as disclosed.

FIGURE 2. Stated Datacenter \$/MW content for US MI companies



Source: Barclays Research, Company Data