higher energy intensity metrics than peers in the CNNO sector. For instance, Europe's largest tower CNNO, Cellnex, consumed 317MWh per $M in revenue in 2023. That's a lot, nearly 5x the average webscale, but still below several telcos with high energy intensity, including LG Uplus (778), Veon (513), and Zain (451). Figure 6 shows energy intensity across a range of different operators, showing the variation among segments and geographies and business models. Interestingly, the two companies with the highest and lowest energy intensity results are both CNNOs, but with a different infrastructure focus.
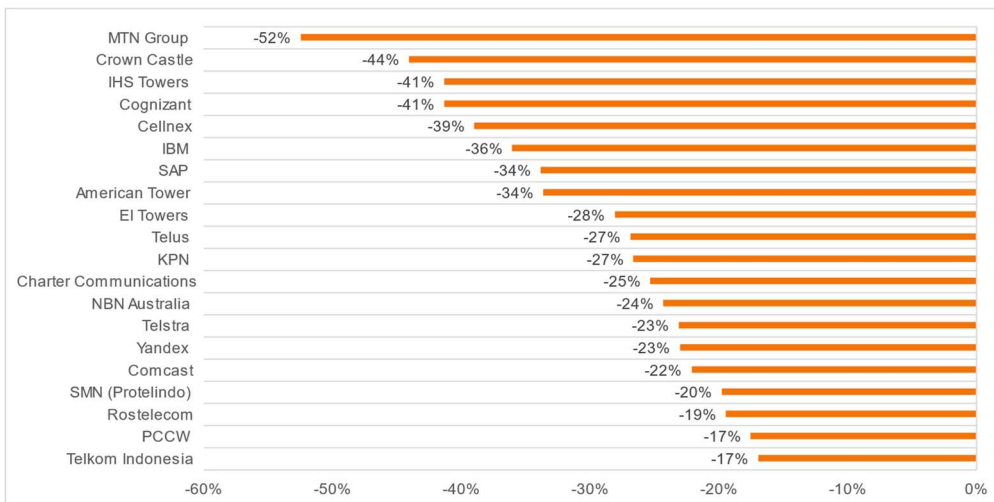
Figure 6: Energy intensity (MWh per $M in revenue): 2023 results for select operators
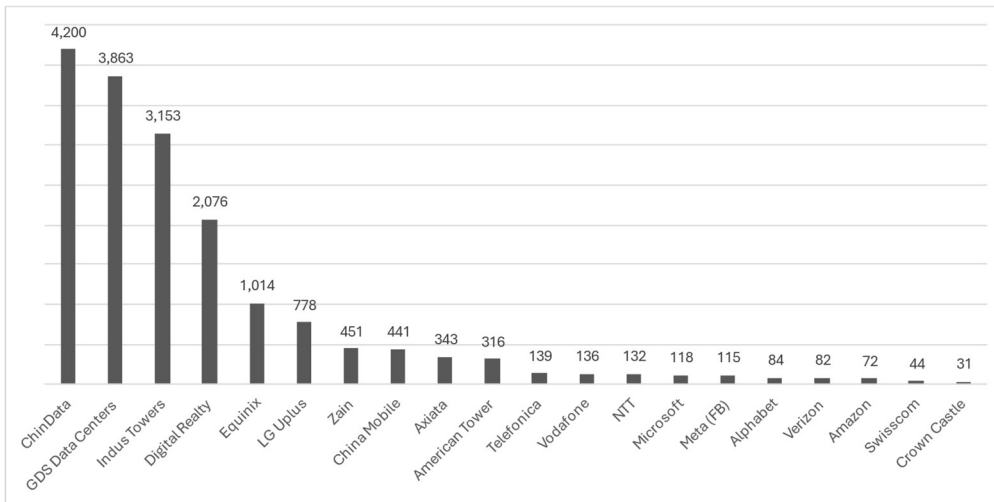
Source: MTN Consulting

The chart above is a snapshot in time, showing energy intensity for one calendar year. What about changes over time? Given that energy is both costly and can come with negative externalities, most operators would like to reduce their relative consumption over time. Reductions in energy intensity can come from energy efficiency initiatives, or outsourcing/selling certain energy consuming assets, or simply modifying the business model. Who are the most improved companies since 2019, as measured by their reduction in energy intensity? Figure 7 below answers this question.

Figure 7: Biggest improvements (i.e. reductions) in energy intensity since 2019

Source: MTN Consulting