

## Sustainability Improvements for Next-Generation (15G) Dell EMC PowerEdge Servers

### Tech Note by

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### Summary

Dell Technologies relentlessly focuses on improving server sustainability. Designing the PowerEdge product portfolio to work more efficiently allows server technology to continue to advance while simultaneously preserving our environment.

This brief DfD will highlight a few key improvements implemented on next-generation (15G) Dell EMC PowerEdge servers.

### Overview

While server technology typically becomes more powerful with each passing year, Dell Technologies takes pride in designing PowerEdge servers that are more efficient and sustainable generation-over-generation. Below are a few sustainability improvements for next-generation (15G) PowerEdge servers:

### Key Improvements

- Next-generation (15G) PowerEdge servers have an Energy Intensity (EI) reduction of **83%** over the past 8 years

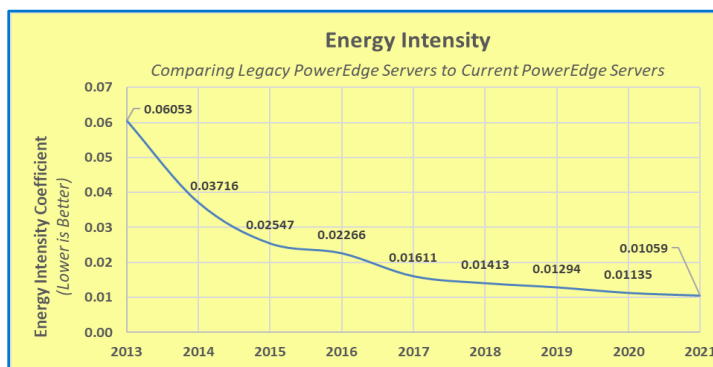


Figure 1 – The average EI for PowerEdge servers has decreased dramatically over the past eight years, largely due to power, thermal and processor improvements

- Next-generation (15G) Intel PowerEdge servers have increased Energy Efficiency (EE) by **20%-60%** over previous Intel PowerEdge servers

15G Energy Efficiency Improvements over 14G		
Performance Measurement	Intel Gold 6x30 CPU	Intel Platinum 8x80 CPU
Idle Power	23.39%	59.71%
Max Power	36.91%	19.36%
PERFCPU	51.86%	50.18%
EffServer	22.48%	29.43%
Perfserver	47.81%	55.02%
Pwrserver	20.68%	19.77%

Figure 2 – The average EE for PowerEdge servers has increased dramatically over the prior-generation, largely due to power, thermal and processor improvements

- **30%** of black plastic used in PowerEdge servers is from recycled plastic
  - Hardware like latches, air shrouds and casings have been targeted

To read more about PowerEdge eco-friendly initiatives, click [here](#)



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