**Samsung Electronics Co., Ltd., a world leader in advanced memory technology, announced that its 512-gigabyte (GB) embedded Universal Flash Storage (eUFS) 3.0 will be awarded Carbon Footprint and Water Footprint Certifications from the highly respected UK-based Carbon Trust during a ceremony at the British Embassy in Seoul, Korea later today. Samsung's 512GB eUFS 3.0 is the first mobile memory in the industry to be recognized by an international certifying organization, which was made possible through the company's extensive efforts to reduce carbon and water footprints.**

**The Carbon Trust is a globally accredited non-profit certification body established by the British government to accelerate the move to a sustainable, low-carbon economy. Each certification** by the Carbon Trust was made after thorough assessment of the environmental impact of carbon emissions and water usage before and throughout the production cycle, based on international standards*.

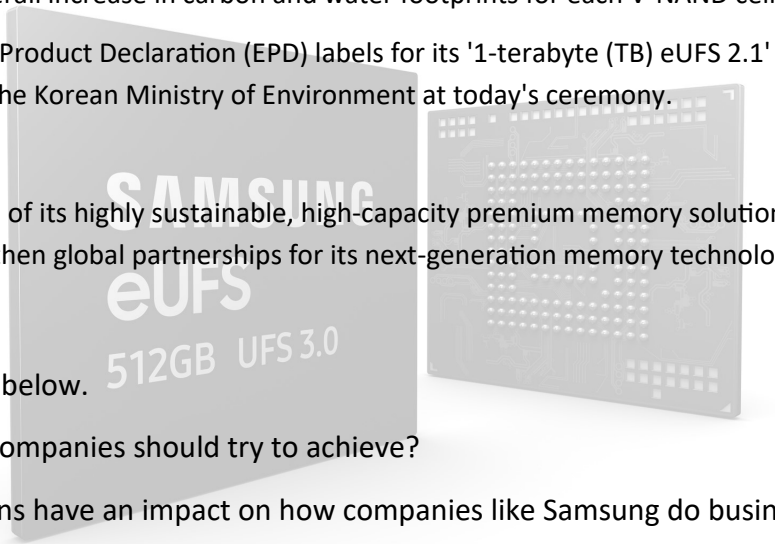
"We are extremely pleased that our cutting-edge memory technologies not only demonstrate our capability to overcome more challenging process complexities, but also are recognized for their environmental sustainability," said Chanhoon Park, executive vice president and head of Giheung Hwaseong Pyeongtaek Complex at Samsung Electronics. "Samsung will continue to create memory solutions that provide the highest levels of speed, capacity and power efficiency at extremely small geometries for end-users worldwide."

Samsung's semiconductor innovations enable sustainable production

Based on the company's fifth-generation (90+ layers) V-NAND, Samsung's 512GB eUFS 3.0 provides optimal speed, power efficiency and productivity to deliver twice the capacity and 2.1 times the sequential speed of its fourth generation (64 layers) V-NAND-based 256GB eUFS 2.1, while requiring 30 percent less operating voltage. Additionally, Samsung's fifth-generation V-NAND utilizes a unique etching technology that pierces more than 90 cell layers in a single precise step. This allows the chip to have nearly 1.5 times more stacked layers than the previous generation and accommodate a 25-percent reduction in chip size. Such innovations help to minimize the overall increase in carbon and water footprints for each V-NAND cell layer.

Samsung is also being awarded Environmental Product Declaration (EPD) labels for its '1-terabyte (TB) eUFS 2.1' and its 'fifth-generation 512-gigabit (Gb) V-NAND' by the Korean Ministry of Environment at today's ceremony.

Samsung plans to actively expand the adoption of its highly sustainable, high-capacity premium memory solutions into many more flagship smartphones and further strengthen global partnerships for its next-generation memory technologies.




## Semiconductors

Read the article and discuss the questions below.

1. Are these kinds of awards something companies should try to achieve?
2. Do these kinds of awards / organizations have an impact on how companies like Samsung do business?
3. What kinds of future applications do you think these kinds of products could be used for?
4. What do you think will be the next evolution of this technology? Why?