

U.S. DEPARTMENT OF
ENERGY

Office of
ENERGY EFFICIENCY &
RENEWABLE ENERGY

Microelectronics' Energy Efficiency Scaling for 2 Decades (EES2) Pledge and WG Day 1 Closing

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Advanced Materials and Manufacturing Technology Office (AMMTO)

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<https://microelectronics.slac.stanford.edu/amo-microelectronics>



Updates on efficiency doubling, 1000X and more

- **January 14: *Washington Post* article on MIT study of large climate emissions due to self-driving cars**
 - they would need to double the energy efficiency of their microelectronics every year to be sustainable.
- **Late January: Prof. Shankar recruits senior industry leaders to speak**
 - on their energy efficiency scaling goals at March in-person meeting.
- **February 7: At NIST CHIPS Industrial Advisory Committee, Dan Armbrust, Chair of R&D Gaps Working Group, discussed microelectronics' unsustainable energy use**
 - proposed a goal of 1000X computing energy efficiency increase in 10 years.



Thank you

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