Supplemental Information from the Semiconductor Industry Association (SIA)
E.O. 12866 Meeting – June 26, 2025
RIN: 2060-AV98
Phasedown of Hydrofluorocarbons: Review and Renewal of Eligibility for
Application-specific Allowances

Thank you to OMB and EPA for the opportunity to meet to discuss this important rule.

Please find below two demonstrations of the unique cyclical nature of the semiconductor industry: changes in fab capacity utilization rates (figure 1) and fluctuations in industry's semiconductor shipment revenue (figure 2).

As noted in SIA's comments to EPA on the proposed rule,[1] the proposed allocation method, which is based on historic growth and past usage, is inadequate to accurately forecast the semiconductor industry's *projected* HFC usage needs. The American Innovation and Manufacturing (AIM) Act requires EPA to provide the semiconductor industry with "the full quantity of [HFC] allowances necessary based on projected, current and historical trends." Therefore, SIA believes the allowances formula and method should rely on company projected HFC usage. Such a modification will allow EPA and companies to account for semiconductor industry cyclicality, among a variety of factors, that can affect semiconductor industry HFC usage.[2] The rule should not require companies to rely on receiving sufficient allowances based on unique circumstances, which are limited in scope and may or not be allocated to companies.

In addition, SIA would like to reiterate the importance of promptly issuing a final rule in order to provide EPA with sufficient time to complete the 2026 HFC allowances cycle and provide the "full quantity of allowances necessary" for semiconductor manufacturing. This will ensure supply chain continuity and help support the goals of the Administration and Congress with respect to the economy, national security, technology leadership, and supply chain resilience.

SIA would be pleased to provide any additional information necessary. Thank you.

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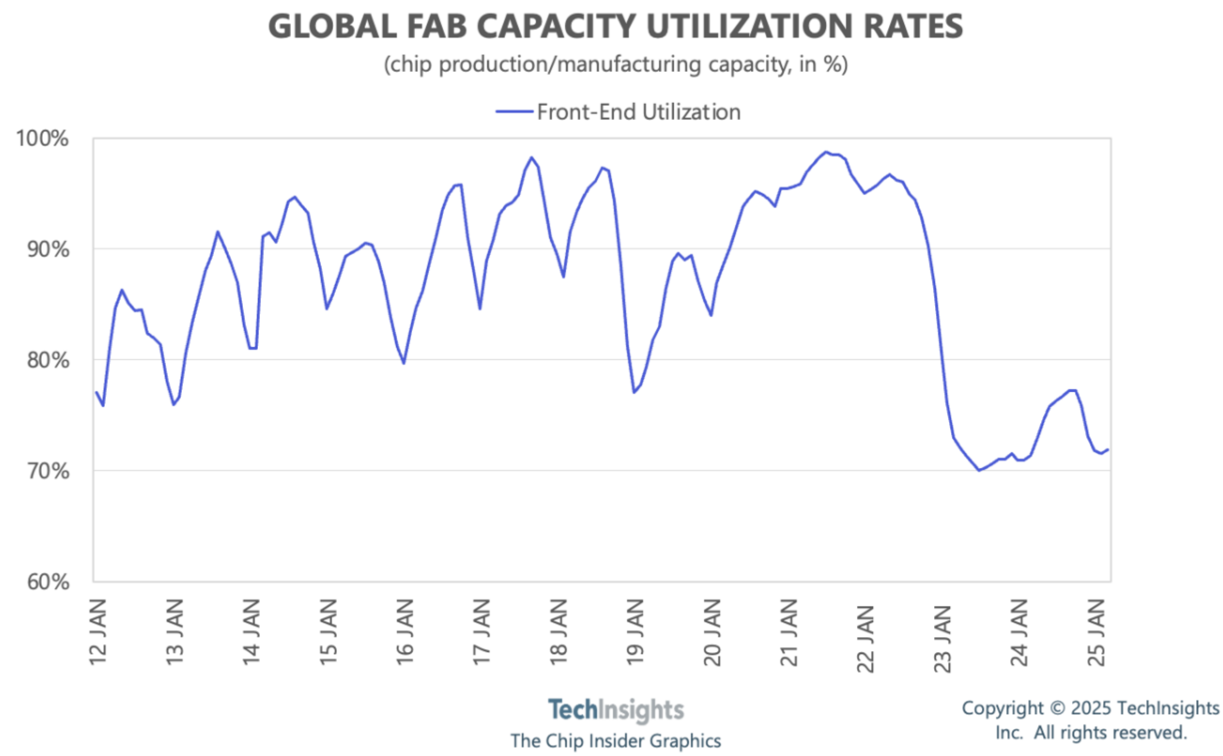
[1] Comment ID: EPA-HQ-OAR-2024-0196-0032, available at https://www.regulations.gov/comment/EPA-HQ-OAR-2024-0196-0032
[2] See Slide #16 in SIA presentation to OMB, June 26, 2025.

Figure 1: Fab Capacity Utilization Rates

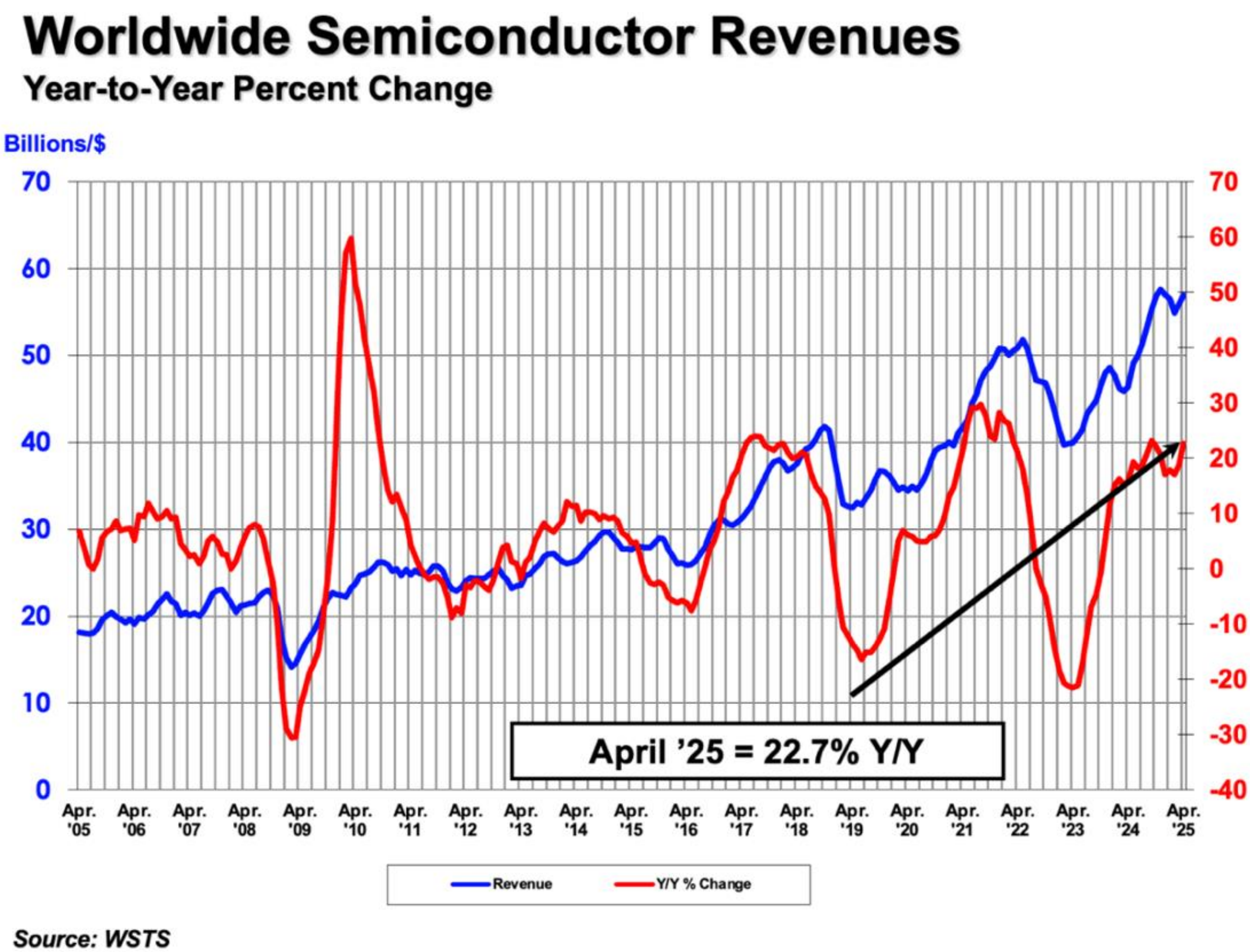
- This chart shows the regular fluctuation in global front-end manufacturing utilization,[3] which is tied to HFC usage. Market cyclicality often results in the industry utilizing different percentages of capacity due to market and customer demand. A fab utilization rate of at least 80% is typically considered the long-term model of "full" utilization. That said, when market demand runs high, such as in a cyclical market upturn, fabs will typically run above 80%, with some fabs running as high as 90-100% such as during the COVID-19 pandemic. The industry can also experience steep declines during downturns such as when fab utilization rates fell to 70% by the end of 2023. Fab utilization can also vary substantially by company and semiconductor type.



[3] TechInsights, "The Chip Insider: Industry Weekly Performance," accessed on June 26, 2025. TechInsights, "Order Activity is Slowly Increasing Despite Low Utilization (October Update)," October 2024. https://www.techinsights.com/blog/order-activity-slowly-increasing-despite-low-utilization-october-update

Figure 2: Worldwide Semiconductor Revenues & Year-to-Year Percent Change

- This chart shows that the overall global industry growth trend has been upwards over the past 20 years (as shown by the blue line). That said, there are downturns every few years (as shown by the red line).[4] Downturns may distort the results of the proposed HFC calculation formula, which does not account for a rebound in demand, output growth, and HFC usage. Deloitte adds, “The infamously cyclical semiconductor industry had a challenging year in 2023, the seventh downturn since 1990.”[5]



[4] Semiconductor Industry Association / World Semiconductor Trade Statistics, “April 2025 GSR Table and Graph,” June 2025. https://www.semiconductors.org/wp-content/uploads/2025/06/April-2025-GSR-Table-and-Graph.pdf
[5] Deloitte, “2024 semiconductor industry outlook.” https://www.deloitte.com/us/en/Industries/tmt/articles/semiconductor-industry-outlook.html