

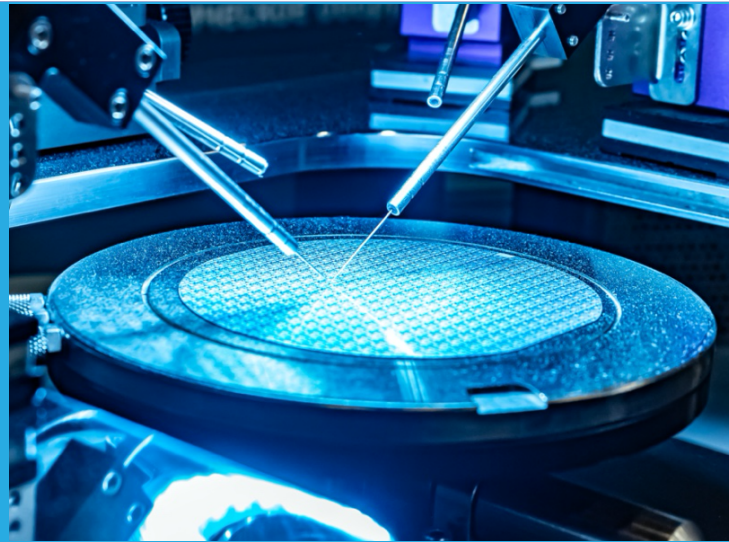
TURNING THE TIDE FOR SEMICONDUCTOR MANUFACTURING IN THE U.S.

A new joint report titled *Government Incentives and U.S. Competitiveness in Semiconductor Manufacturing* by SIA and the Boston Consulting Group finds the U.S. government has a strategic opportunity to reverse the decades-long trajectory of declining chip manufacturing in America, strengthen national security and make our supply chains more resilient, and make our country one of the most attractive places in the world to produce semiconductors, which are the brains of modern technology.

To seize this opportunity, the report finds the federal government must invest boldly in chip manufacturing incentives to make the U.S. more cost-competitive with countries that have offered robust government incentives for years. Doing so would expand chip manufacturing in the U.S., strengthen our country's economy and national security, and fortify America's semiconductor supply chains.

Key Findings:

- 1. A strong domestic semiconductor manufacturing presence is critical to America's economic competitiveness, national security, and supply chain resilience.**
 - **Strategic Innovation:** Strengthening U.S. chip manufacturing will help ensure America out-innovates the world in the strategic technologies of the future - AI, 5G, quantum computing, and more - that will determine global economic and military leadership for decades to come.
 - **Secure Supply Chains:** Producing more semiconductors domestically also would make America's semiconductor supply chains more resilient to future crises and ensure the U.S. can domestically produce the advanced chips needed for our military and critical infrastructure.
- 2. The share of global semiconductor manufacturing located in the U.S. has plummeted in recent decades, mostly because competing governments offer large incentives and the U.S. does not.**
 - **U.S. Decline:** U.S. companies account for **48%** of the world's chip sales, but U.S.-located fabs only account for **12%** of the world's semiconductor manufacturing, down from **37%** in 1990.
 - **Asia's Rise:** **75%** of the world's chip manufacturing is concentrated in East Asia. China is projected to have the world's largest share of chip production by 2030 due to an estimated \$100 billion government subsidies.
 - **Incentive Gap:** Depending on the type of fab, a new fab in the U.S. costs approximately **30%** more to build and operate over 10 years than one in Taiwan, South Korea, or Singapore, and **37-50%** more than one in China. As much as **40-70%** of that cost differential is directly attributed to government incentives.
- 3. Robust federal incentives for semiconductor manufacturing are needed to strengthen national security, attract substantial chip manufacturing to the U.S., and create tens of thousands of American jobs.**
 - **National Security:** Incentives are needed to strengthen our defense industrial base and provide domestic capabilities in chip fabrication to satisfy America's national security needs. Establishing on-shore capabilities to produce microelectronics for national security and critical infrastructure would improve the resiliency of our supply chains and re-balance the military's current reliance on off-shore production.
 - **Economic Security and Growth:** Federal manufacturing grants and tax breaks totaling **\$20-50 billion** would re-position the U.S. from an unattractive investment destination to the most attractive (excluding China) and create as many as **19** new major semiconductor manufacturing facilities (fabs) in the U.S. over the next 10 years, a 27% increase over the current number of U.S. commercial fabs (70).
 - **New Jobs:** Federal manufacturing incentives would create up to **70,000** high-paying jobs in the U.S., ranging from highly educated engineers to fab technicians and operators to material suppliers.



The global industry is expected to increase manufacturing capacity by 56% in the next decade. The U.S. must act now to strengthen our national security and invigorate our economy by creating robust incentives for semiconductor manufacturing in the U.S.