

# **TSMC Arizona Community Impact Report**

CHIPS incentives have attracted and secured TSMC Arizona's investment of more than \$65 billion to construct three fabs in Arizona – the largest foreign direct investment in a new greenfield project in the history of the United States. The project is poised to transform the region and create thousands of jobs, from construction workers to semiconductor technicians and engineers.

As part of its project, TSMC Arizona has committed to fostering sustainable growth and creating quality, family-sustaining jobs. TSMC Arizona has planned to launch apprenticeship programs; develop partnerships with local universities; promote worker safety; safeguard the environment through initiatives like advanced water conservation methods and renewable energy commitments; support the regional child care ecosystem; and create benefits for local small businesses. These commitments align with the <u>Good Jobs Principles</u> published by the Departments of Commerce and Labor, and TSMC Arizona will also regularly report to the Department of Commerce on its efforts to uphold these commitments and other efforts to advance the Good Jobs Principles. These commitments, as well as TSMC Arizona's own proactive efforts, reflect the company's dedication to fostering a healthy, skilled workforce.

More information about the commitments included in TSMC Arizona's CHIPS award, as well as TSMC Arizona's other efforts to invest in workers and communities, can be found below.

## Workforce and Community Investments

TSMC Arizona's projects are expected to create more than 6,000 direct manufacturing jobs, more than 20,000 unique accumulated construction jobs, and tens of thousands of indirect jobs over the next five years. As part of its agreement to receive CHIPS incentives, TSMC has made significant commitments to invest in and support local workers, families, and the broader community.

The Department of Commerce is also investing \$65 million dedicated to workforce development as part of the overall incentives package, which will be invested through a workforce intermediary. Through the intermediary model, the Department of Commerce is working with companies to help them identify and utilize strategic partners to mobilize the regional workforce ecosystems necessary to support both the construction and facility workforces of large-scale semiconductor investments. Workforce intermediaries are required to consult with stakeholders across a region's workforce ecosystem, which must include education and training providers (such as high schools, career and technical education providers, community colleges, higher education institutions), labor unions, state and local workforce development boards, child care organizations, and community-based organizations. By collaborating with a variety of strategic partners, intermediaries will create recruiting pipelines and pathways to good jobs for the surrounding community, especially for economically disadvantaged individuals.

TSMC has pledged to work with Shan Strategies and Arizona Community Foundation to identify and utilize strategic partners to invest the \$65 million in workforce funding and mobilize the regional





workforce ecosystems necessary for supporting both the construction and facility workforces for this historic investment.

With regards to workforce training and pipeline creation, TSMC Arizona has five priorities: 1) Develop a Semiconductor Technician pipeline; 2) Develop a U.S. University Engineering pipeline; 3) Create a local-area pipeline for underrepresented groups; 4) Invest in future talent through collaborations with local STEM community organizations, K-12 schools, and career and technical education providers; and 5) Conduct ongoing training and development for its incumbent workforce.

# **Facility Workforce**

In addition, as part of its CHIPS award, TSMC Arizona has made several concrete commitments to support training and education programs for its facilities workforce:

- TSMC Arizona will support U.S. state-registered apprenticeship programs for semiconductor technicians. These programs will expand career opportunities, including for economically disadvantaged individuals. For instance, TSMC Arizona created a Facilities Technician Apprentice Program sponsored by the City of Phoenix. This program is supported by a \$5 million investment representing on-the-job training hours and college tuition support. The company plans to expand the program in 2025 in added apprenticeships and expand into new technician roles. TSMC Arizona will also allocate funding of at least \$2.5 million per year to expand access to and encourage participation of economically disadvantaged individuals in apprenticeship and other education programs.
- TSMC Arizona is collaborating with university engineering programs around the country, including Arizona State University, University of Arizona, Northern Arizona University, and other US institutions such as Georgia Tech, MIT, Purdue University, Stanford University, UC Berkeley, UCLA and the University of Illinois on research and recruitment to nurture the next generation of semiconductor talent and innovation.
- TSMC Arizona is partnering with Maricopa Community Colleges and career technical education programs on initiatives to develop the skills for a career in the semiconductor industry.
- TSMC Arizona has committed to invest at least \$15 million more for programs that support community investment and workforce development, including STEM programs for the K-12 pipeline and initiatives to expand access for economically disadvantaged individuals.
- TSMC Arizona will comply with federal labor law as a condition of its CHIPS award. Like all
  recipients of CHIPS funds, TSMC Arizona will be required to make representations to the
  Department of Commerce on a periodic basis affirming that it is in compliance with federal laws,
  including federal labor law.

### **Construction Workforce**

TSMC Arizona has also made concrete commitments to invest in and support its construction workforce:

TSMC Arizona will, consistent with the statutory requirements of the CHIPS Act include terms
in its construction contracts requiring all construction contractors and subcontractors to
comply with Davis Bacon and Related Acts. In addition, the Department of Commerce is
building a best-in-class Davis Bacon compliance program to ensure that recipients of CHIPS
funding comply with the law.







- TSMC Arizona has committed to achieving a registered apprenticeship utilization rate of at least 15% on the construction site.
- TSMC Arizona has agreed to undertake efforts to maintain or enter into partnerships with
  contractors and/or unions that make financial contributions to registered apprenticeship
  programs in order to increase representation of apprentices on the worksite; support a skilled,
  diverse workforce and provide opportunities for economically disadvantaged individuals; and,
  provide fair wages, opportunities for career growth, comprehensive health insurance coverage,
  and a retirement plan.

# **Worker Safety**

Reflecting TSMC Arizona's commitment to creating a safe and healthy workplace, TSMC Arizona has memorialized the following commitments to worker safety:

- TSMC Arizona has committed to establish a worker safety committee comprised of workers and management that meets regularly and is authorized to address any health and safety concerns.
- TSMC Arizona will review occupational health and safety chemical exposure limits and incorporate the most protective limits available based on published standards (e.g., by the National Institute for Occupational Safety and Health (NIOSH) and American Conference of Governmental Industrial Hygienists (ACGIH)), in the development of TSMC Arizona's safety procedures.
- TSMC Arizona will install tools and equipment in compliance with SEMI S2, the industry safety guideline for environmental, health, and safety practices, which incorporates a range of activities, including but not limited to: equipment installation, gas effluent handling, exhaust ventilation, ergonomics, risk assessment, equipment decontamination, fire risk mitigation, and electrical design.
- TSMC Arizona has partnered with Arizona's Division of Occupational Safety and Health
   (ADOSH) on a program that covers the construction site and allows worker representatives to
   accompany inspectors on site.

# **Environmental Commitments**

TSMC Arizona is committed to implementing comprehensive, industry-leading measures to safeguard the environment. Recognizing the importance of water conservation as a cornerstone of its green manufacturing vision, TSMC has already established rigorous standards based on global best practices. In Taiwan, TSMC implements the world's only sustainable water management standard established by the Alliance for Water Stewardship (AWS). The AWS promotes the adoption of a universal framework for the sustainable use of water – the International Water Stewardship Standard, or AWS Standard. TSMC is the first semiconductor company to receive AWS "Platinum" certification – receiving the highest scores for two consecutive years. TSMC Arizona is committed to applying similarly high standards to protect the environment, with a focus on renewable energy, emissions reduction, and regulatory compliance.

As part of its CHIPS award, TSMC Arizona has made the following commitments.







- TSMC Arizona is investing in onsite renewable energy by installing and operating an onsite photovoltaic solar system that is at least 14.5 MW in size by January 1, 2030.
- TSMC Arizona is committed to compliance with all applicable environmental laws, including the Clean Water Act, Clean Air Act, Endangered Species Protection Act, and the Resource Conservation and Recovery Act to help ensure that every person has a right to breathe clean air, drink clean water, and live in a healthy community.
- TSMC Arizona will install emission control systems (ECS) that reduce potential fluorinated greenhouse gases (F-GHGs) by 90% or more from the baseline emissions of F-GHGs, to assist in the reduction of Scope 1 emissions.
- TSMC Arizona will offset 100% of its Scope 1 and Scope 2 unabated annual emissions through the purchase of carbon offsets or Renewable Energy Credits (RECs).
- TSMC Arizona will segregate known process per-and polyfluoroalkyl substances (PFAS)containing chemicals from other waste streams and direct PFAS waste to a closed bulk storage
  system to be managed at an off-site treatment and disposal facility as permitted by the
  Environmental Protection Agency under the Resource Conservation and Recovery Act.
- TSMC Arizona will participate in industry and government efforts towards achieving viable PFAS substitutions and emission controls.
- TSMC Arizona will mitigate hazards from natural disaster by maintaining the already completed 53-acre drainage channel to mitigate monsoon and flood hazards.
- TSMC Arizona will conserve and recycle water by completing and operating an industrial reclaim water plant (IRWP) and achieve "Near Zero Liquid Discharge," defined as discharging less than 10% of industrial wastewater after treating it through recycling, recovery, and reuse practices. This means that when a planned industrial reclamation water plant is installed and fully operational, TSMC Arizona will on its own or through third parties reuse 90% or more of the industrial water utilized at the projects.

As a reflection of TSMC Arizona's commitment to serving as a global standard for eco-friendly manufacturing, by the first anniversary of the award date, **TSMC Arizona will publicly disclose its environmental responsibility goals on its webpage.** The company will also provide annual progress updates against these goals, focusing on key metrics such as:

- Energy (kWh) used, saved through conservation programs, and produced from clean energy sources.
- Water used, conserved, and recycled.
- Total waste generated, including the percentage of hazardous and nonhazardous waste destined for landfill, incinerator, recycling facility or treatment facility.

## **Child Care Commitments**

TSMC Arizona is committed to providing comprehensive child care support to its employees. In alignment with best practice, and to ensure the company had visibility into and deep understanding of employee needs, TSMC Arizona conducted a child care needs evaluation with its employees, including surveys and focus groups. This evaluation has guided TSMC Arizona in developing responsive strategies







to address diverse child care accessibility, flexibility, and support for working families. Reflecting the results of the needs evaluation, TSMC Arizona's CHIPS award includes the following commitments:

- TSMC Arizona will help defray costs by providing Arizona's facility workforce with an annual child care subsidy of \$1,800 per child that can be used for both licensed child care and for care provided by friends, family, or neighbors, which will help meet challenging child care needs, like care during non-traditional hours.
- TSMC Arizona will collaborate with one or more child care provider to assist employees and contractors in securing child care seats, offering a ten percent tuition discount, and waiving enrollment fees for childcare and extending to non-traditional hours.
- To accommodate non-traditional working hours of some of its employees, TSMC Arizona will work with the provider to extend hours at two locations near the project site, from 5:30 AM to 6:30 PM, with possibility of further extensions if demand requires it.
- TSMC Arizona will increase the supply of available child care seats to meet the needs of its workforce and the community by working with local providers and developers to help expand the availability of seats.

In addition to these commitments, TSMC Arizona is working with the Department of Commerce to:

- Offer navigation tools to expand options by working with Tootris, a tech navigation platform, to
  meet the diversity of their workers' child care needs by expanding access to flexible child care
  support options, including center and in-home providers, expanded hours, transportation, and
  back-up care.
- Strengthen child care system and support child care providers by conducting a thorough
  analysis of local system capacity and accordingly cultivate partnerships with community
  stakeholders such as the Deer Valley Unified School District to support local child care system
  expansion, including strengthening the early childhood education workforce pipeline and child
  care quality.

## Support for Small Businesses

As part of its CHIPS award, TSMC Arizona is committing to take actions to promote outreach to and participation of women-owned, minority-owned, and veteran-owned small businesses. These efforts will include measures such as: setting annual spending goals with respect to local businesses in the nearby area; developing and implementing a training plan to ensure decision-making employees are aware of supplier diversity and small business goals; tracking and monitoring awards and solicitations; including small businesses on solicitation lists; encouraging the solicitation of such businesses where practical; and maintaining public facing webpages describing community investments and opportunities in the region.

