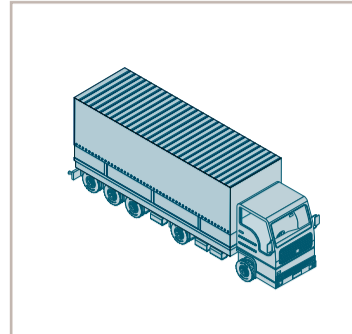


# Operational Excellence at Entegris

## A Premier Advanced Materials Company

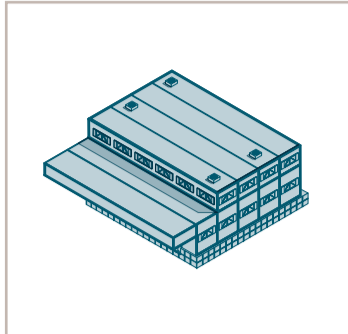
For more than 50 years, Entegris has been researching and developing novel ways of supporting complex, high-volume manufacturing. We have expanded our capabilities, invested in innovation, and driven operational excellence into all aspects of our company to help our customers meet their objectives.



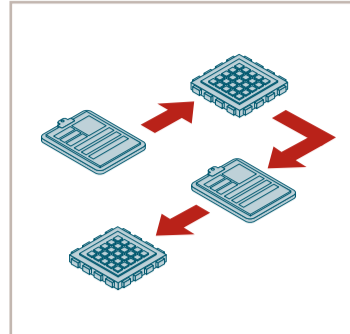
**SAFE AND ROBUST SUPPLY CHAIN**



**PREDICTABLE AND STABLE QUALITY**



**EFFICIENT MANUFACTURING**



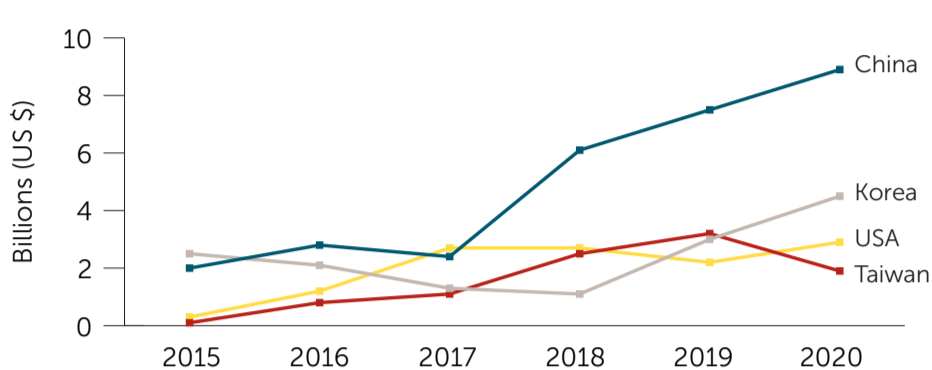
**SPEED OF NEW PRODUCTS**

### SUPPORTING THE "CHINA MANDATE"

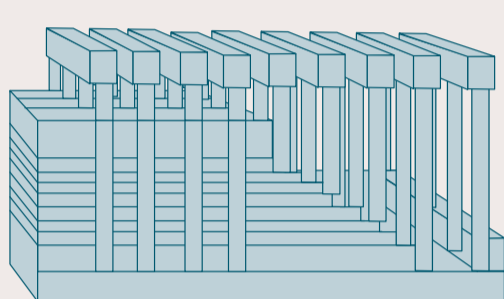
According to SEMI, the China semiconductor fabrication industry has been projected to double its fab capacity since 2015, in support of its Made In China 2025 strategy. Entegris has been there to help.



**Fabrication Investment**



### FOCUS: MEMORY DEVICE FABRICATION

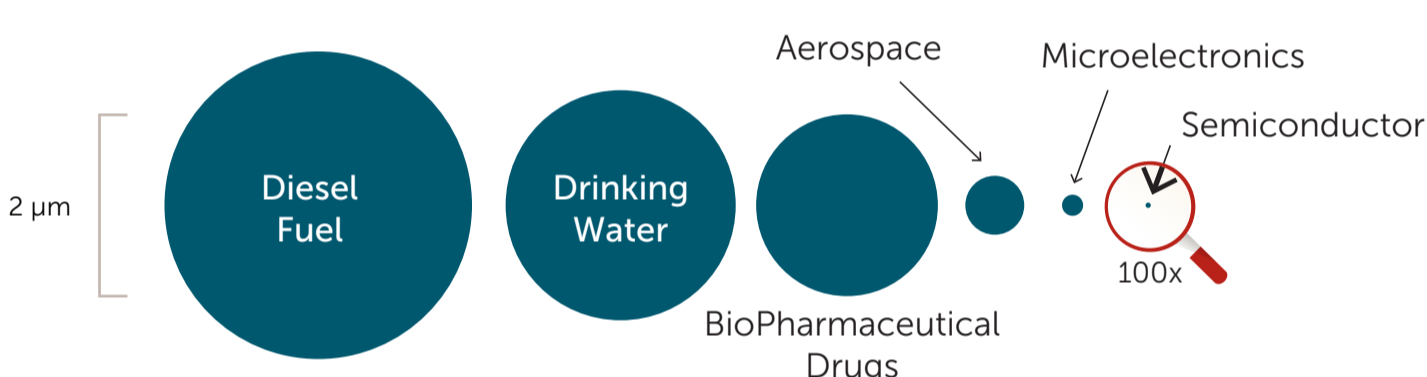


- Need for material purity
- Local, high-quality supply chain
- High volume specialty gases and advanced chemicals

### MATERIAL PURITY AND PREVENTING DEFECTS

Material purity has a much greater impact on yield and performance in the world of integrated circuits than in other device manufacturing industries, which have far higher defect tolerances.

#### SIZE OF KILLER DEFECT BY INDUSTRY



### SAFETY AND ENVIRONMENTAL STANDARDS

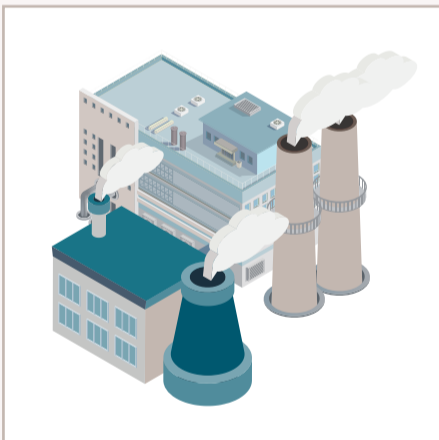
To prevent destructive and costly accidents and environmental damage, suppliers are held to stringent regulations. Through supplier qualification, Entegris supports the highest safety standards with proprietary technologies such as SDS® cylinders, gas cabinets, and delivery systems.



**MATERIAL HANDLING SAFETY**



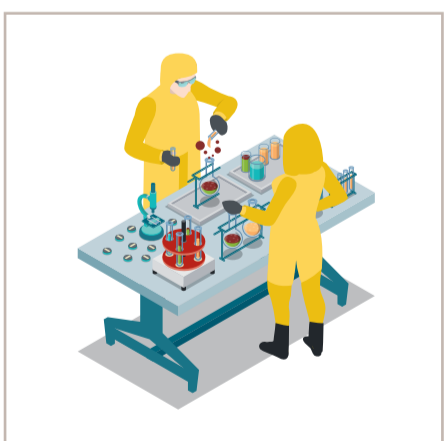
**MATERIAL TRANSPORTATION**



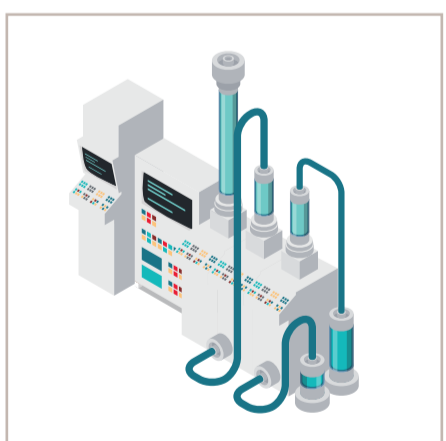
**POLLUTION AND EMISSIONS**

### EMPOWERED LOCAL SUPPLY CHAIN

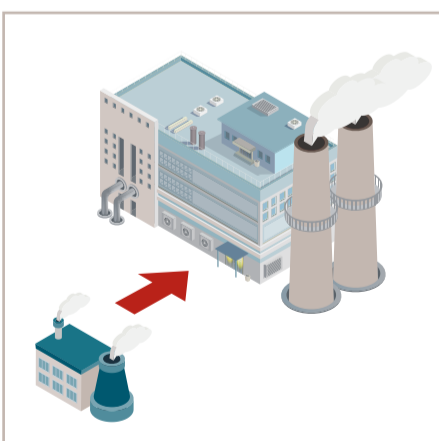
Semiconductor fab suppliers must provide reliable and extremely high-purity materials. Key qualities for suppliers:



**DEVELOP NEW MATERIALS AND DELIVERY SYSTEMS**



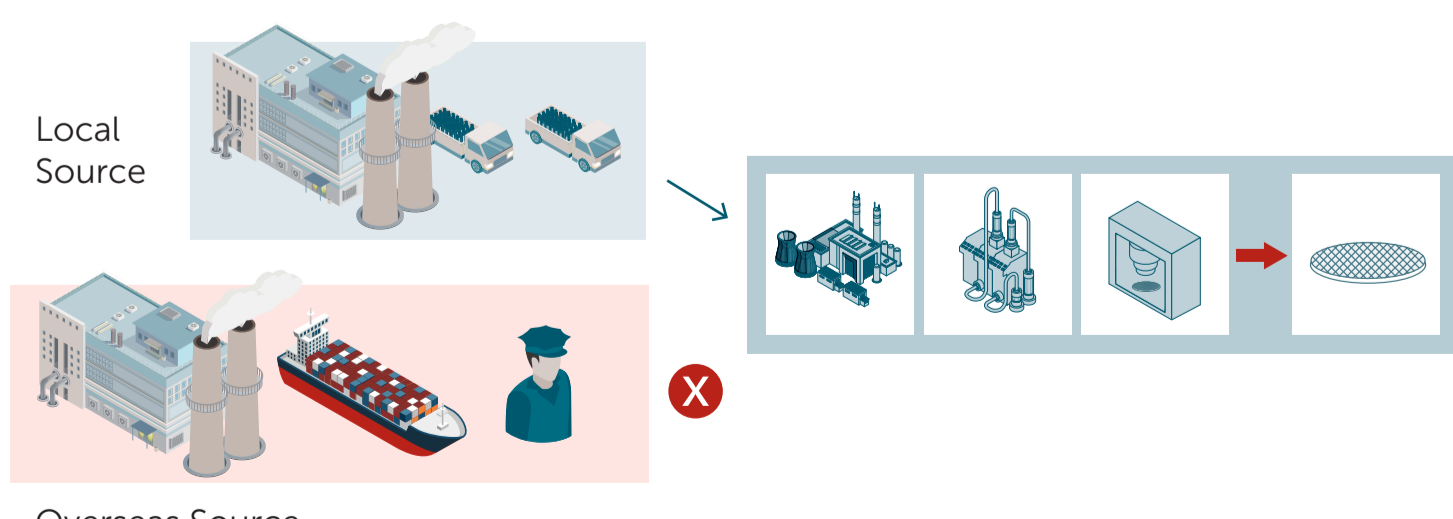
**MATERIAL SYNTHESIS AND PURIFICATION**



**ABILITY TO SCALE UP RAPIDLY**

### LOCAL SUPPLY MEANS SHORTER DELIVERY CYCLES

Operating a complete supply chain in China significantly reduces time and cost associated with import and customs clearance. As a result, customers and suppliers have a reduced need to stockpile materials, leading to less inventory on hand and lower potential for negative environmental impacts—particularly important for high volume materials.



**Learn More**

[www.entegris.com/operational-excellence](http://www.entegris.com/operational-excellence)