POWERING THE MODERN WORLD
AN R&D INTENSIVE INDUSTRY

R&D EXPENDITURES AS A PERCENT OF SALES (2019)

**BY INDUSTRY**

- Pharmaceuticals & Biotechnology: 20.8%
- Semiconductors: 16.4%
- Software & Computer Services: 14.3%
- Media: 8.9%
- Technology Hardware & Equipment: 6.9%
- Mobile Telecommunications: 6.5%
- Financial Services: 5.6%

**BY COUNTRY**

- United States: 16.4%
- Europe: 15.3%
- Taiwan: 10.3%
- Japan: 8.4%
- China: 8.3%
- Korea: 7.7%
- Rest of World: 5.6%

Source: The 2019 EU Industrial R&D Investment Scoreboard.
ESSENTIAL FOR
NATIONAL SECURITY
1 U.S. SEMICONDUCTOR JOB SUPPORTS 4.89 OTHER JOBS IN U.S. ECONOMY

~250,000 Direct Semiconductor Jobs.
MORE THAN 1 MILLION Additional Jobs in the U.S. Economy.

Source: U.S. SEC.
INVESTMENT IN RESEARCH

GOVERNMENT R&D (SHARE OF TOTAL)

ACTION NEEDED

TRIPLE INVESTMENT IN SEMICONDUCTOR SPECIFIC RESEARCH

DOUBLE INVESTMENT IN KEY FIELDS
(e.g. materials science, computer science, applied mathematics)

Source: OECD Science Indicators, April 2020
WORKFORCE DEVELOPMENT

FULL-TIME U.S. GRADUATE STUDENTS IN ELECTRICAL ENGINEERING & COMPUTER SCIENCE


CONGRESSIONAL ACTION NEEDED

REFORM THE HIGH-SKILLED IMMIGRATION SYSTEM by eliminating caps on green cards for STEM students.

INCREASE INVESTMENT IN STEM EDUCATION to double the number of STEM graduates.
POWERING THE MODERN WORLD