

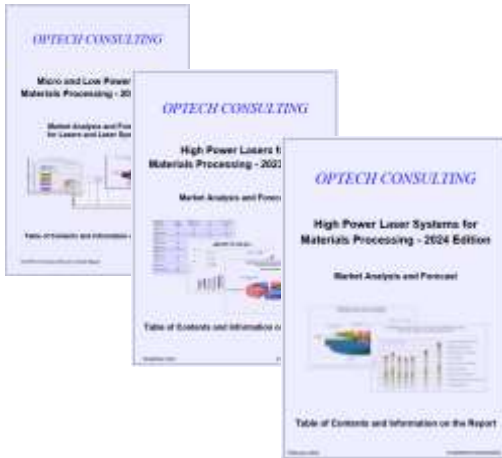
# The Global Market for Industrial Lasers and Laser Systems

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## Where does the Data come from?

### Optech Consulting Market Reports



### Data Sources:

Company financial reports and presentations

Discussions with company experts

Other:

Analyst reports, association data,  
government-contracted reports,...

## Definition

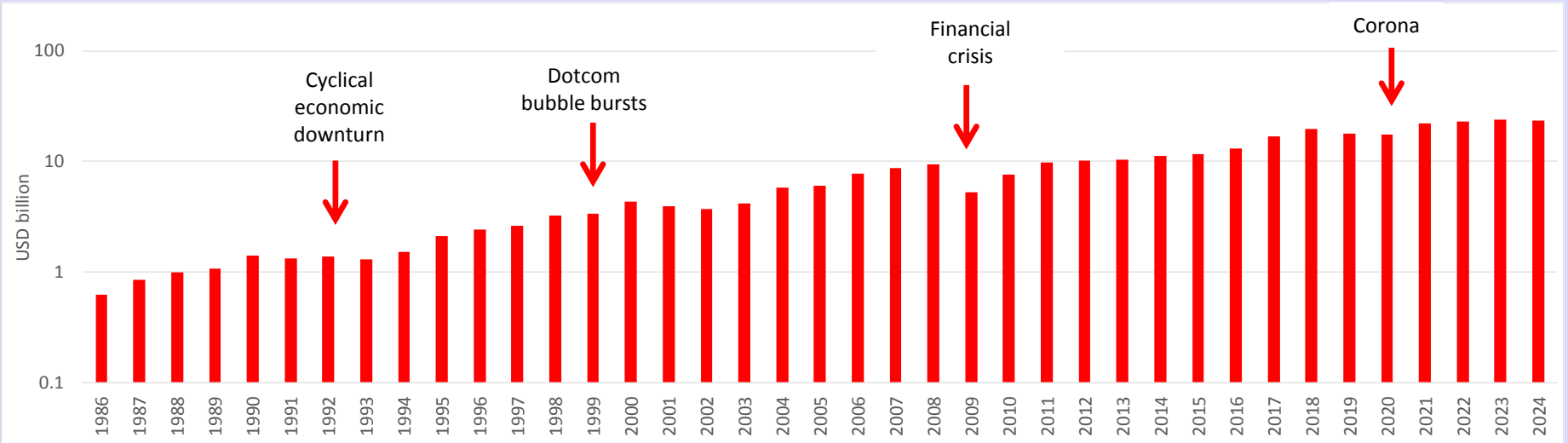
**Laser System** = Machine , includes one or several lasers

Global market 2024: USD 23 million

**Laser** = Laser Oscillator = Light Source

Global market 2024: USD 5 million

# Global Market for Laser Systems



## 2023 Global Market for Laser Systems\* for Materials Processing: USD 23 Billion

### **About 75%:** Laser **Macro** Processing Systems

High power (1kW+) **and** low power (<1kW)

Laser systems for

- High power cutting
- Low power cutting, drilling
- High power welding
- Low power welding: metal, plastics
- Marking
- Additive manufacturing
- Structuring
- Cleaning
- Surface treatment

### **About 25%:** Laser **Microelectronics** Processing Systems

Mainly low power (<1kW average power)

Laser systems used in microelectronics manufacturing for

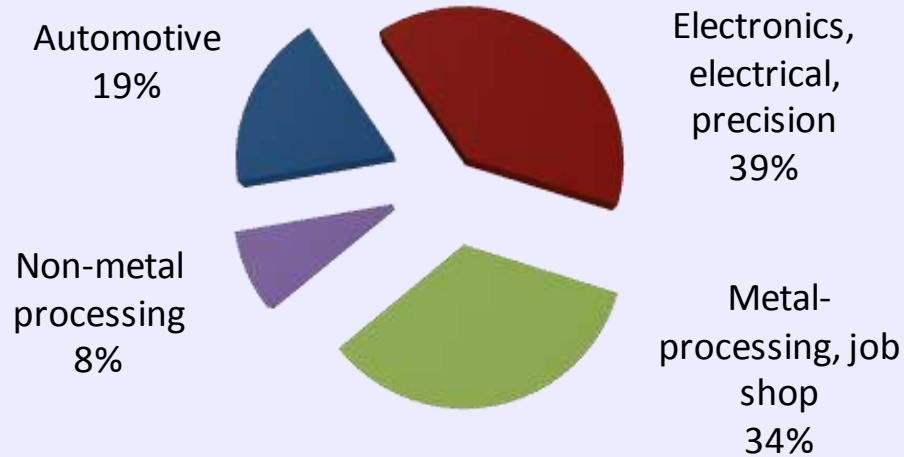
- Ablation, structuring
- Lithography
- Annealing
- Cutting, drilling, joining processes specific for microelectronics manufacturing

Microelectronics manufacturing includes

- Semiconductors, LEDs, FPDs, PCBs, solar cells, electronic component and hybrid circuits, battery cells, FO components, MEMS, microfluidic devices

\* Market size includes the value of the system, except for microlithography (only value of light source included)

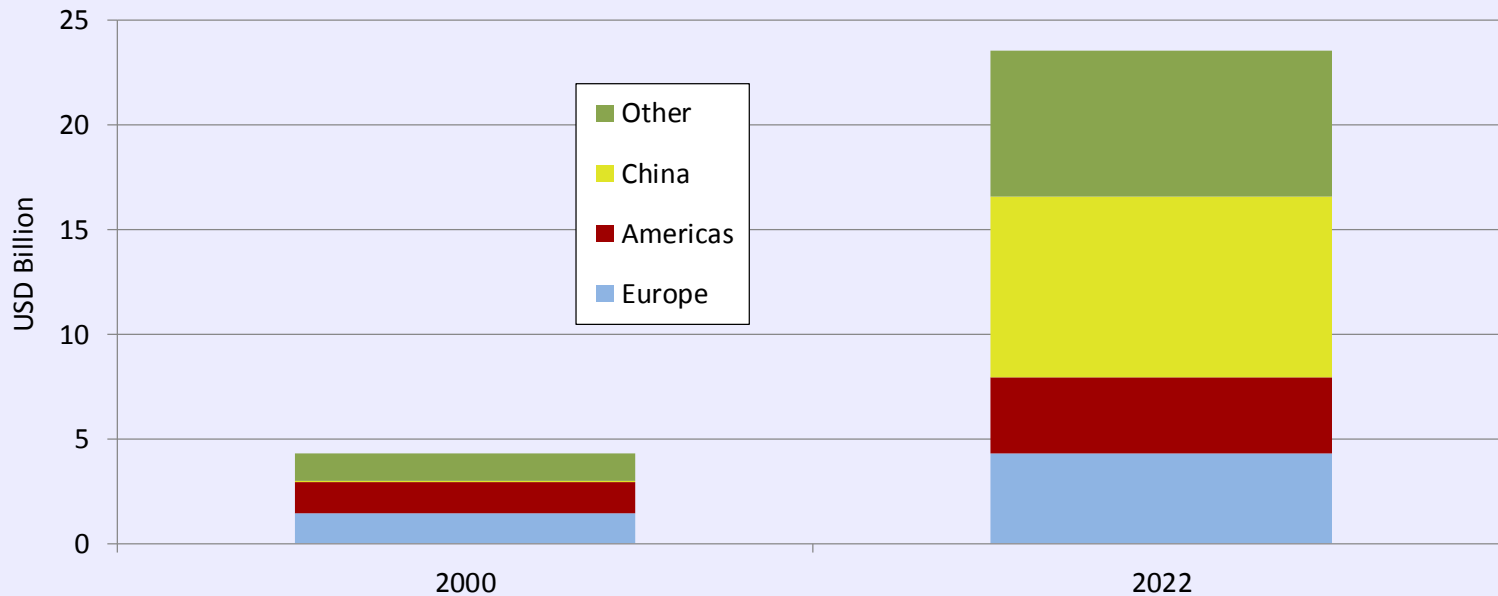
## 2022 Global Market for Laser Systems for Materials Processing, by End Industry



Total: USD 22 billion

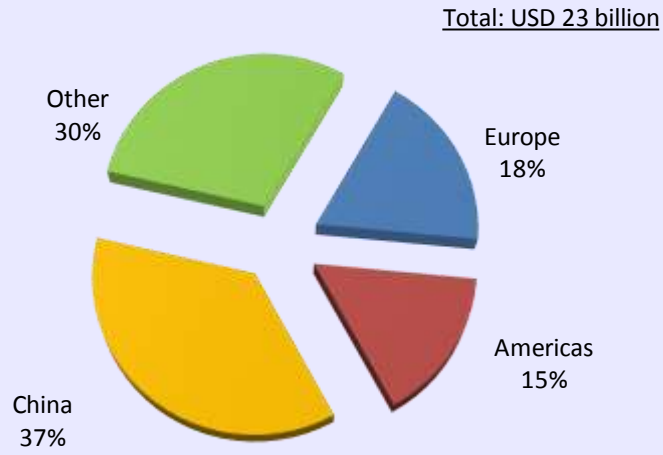
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Global Market for Laser Materials Processing Systems, by Geography



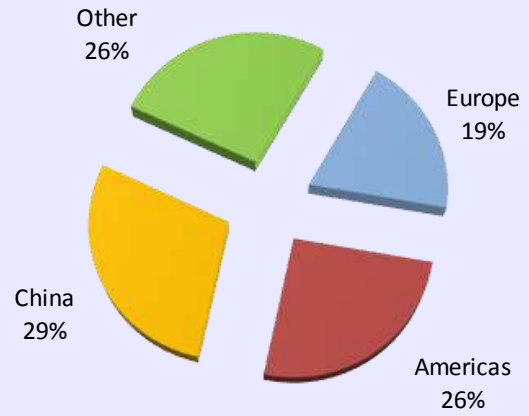
OPTECH CONSULTING - 15 August 2023

Global Market for Laser Materials Processing Systems by Geography, 2023



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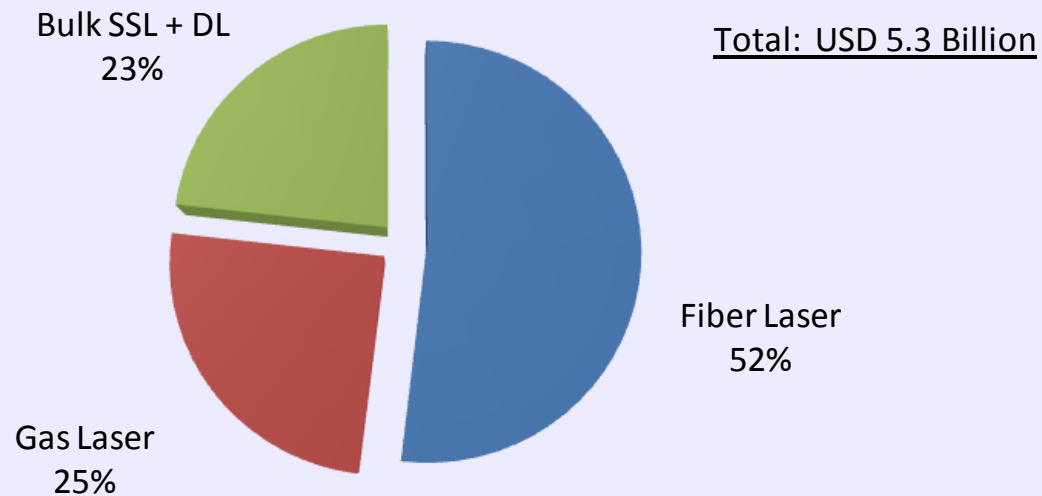
Global Manufacturing Added Value by Geography, 2020



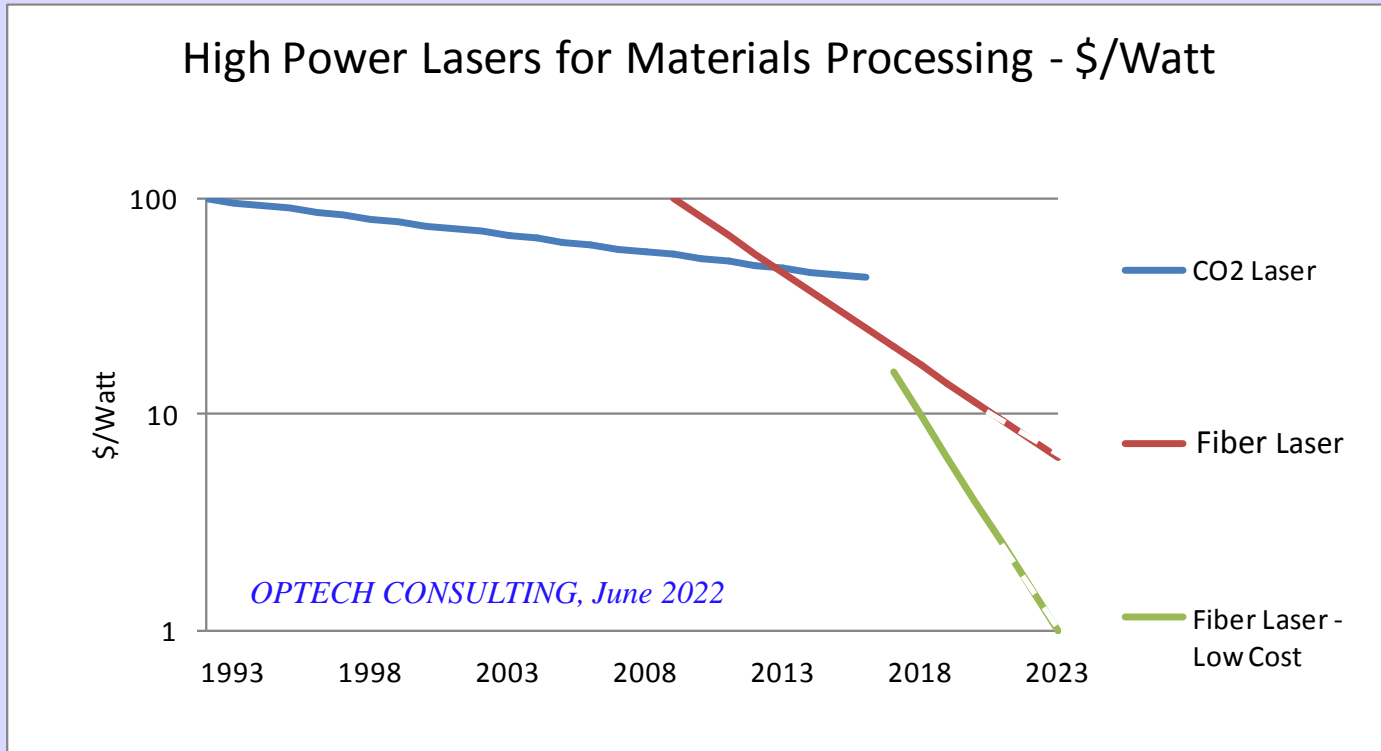
Data: World Bank, Optech Consulting estimates



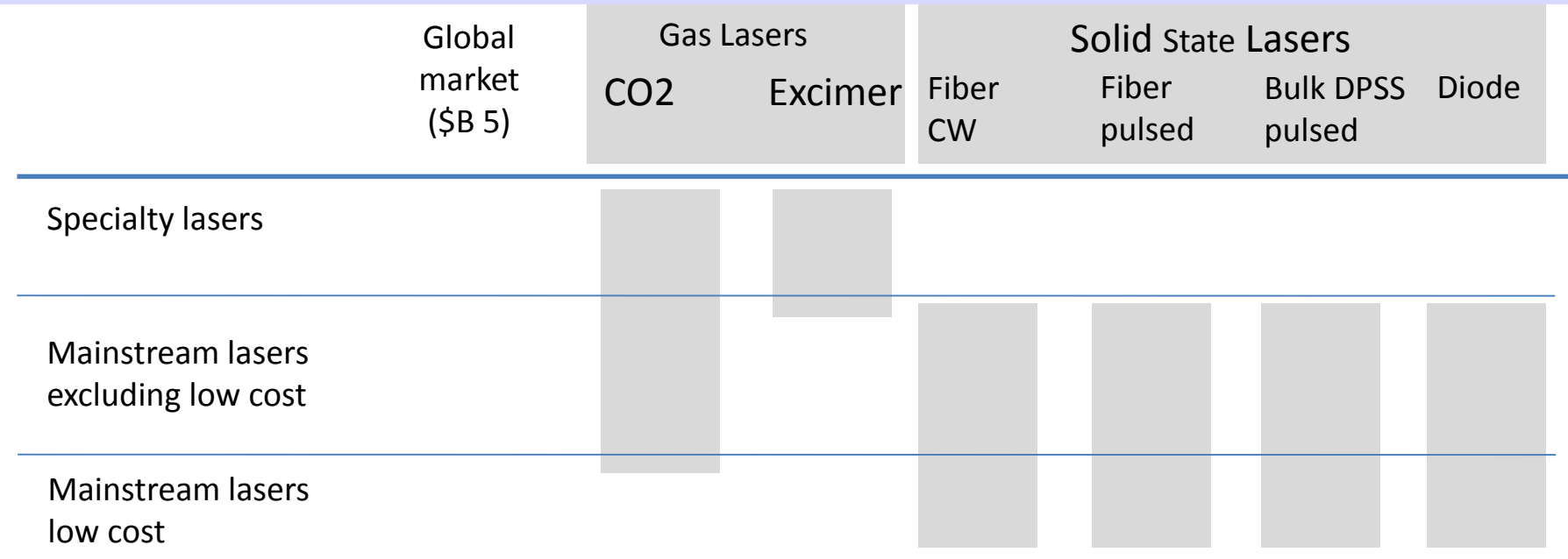
### Global Market for Lasers for Materials Processing 2022



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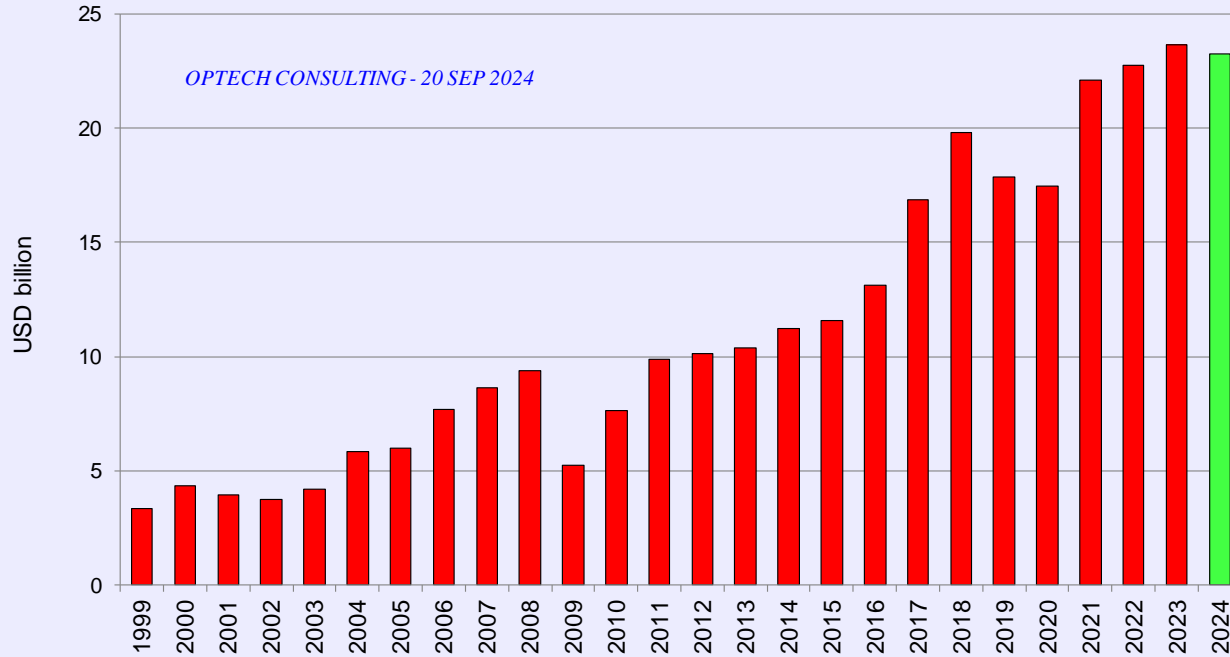


### Industrial Laser Sources Market: Addressable – Accessible



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Global Market for Laser Materials Processing Systems



Market Trend in USD

**2023**

Global market 2023: \$23.5B  
+3.5% vs. 2022

**2024 (expected)**

Global market 2024: \$23B  
-1%... -5% vs. 2023

## Market Growth Laser Systems Market

	<b>2023</b>	<b>2024</b>
<b>by Application</b>	Welding > Cutting > Microprocessing	Microprocessing > Welding > Cutting
<b>by Geography</b>	Americas > China > Europe	China > Europe, North America

## Growth Segments

### High power, 1kW+

Sheet metal cutting

Very high power systems

Low cost systems

Extending market diffusion

Cost sensitive markets

Welding

E-mobility applications

Handheld welding

### High & low power

Additive manufacturing

Cleaning

### Low power, <1kW

Microelectronics applications:

Semiconductor, displays, solar cells,...

Precision cutting, drilling

E-mobility

Medical

## Market Outlook

### Laser Systems

- Continued growth at high single digit rates
- Cyclical growth
- New applications emerging
- Market diffusion due to low cost systems

### Laser Sources

- Continued commoditization
- Market growth lags behind laser systems
- For most manufacturers only 60% of market accessible

### Challenges

- Rapid pace of market trends
- > 60% of market in Asia
- Emerging markets beyond China
- Low cost lasers and systems

## Save the Date

# 17<sup>th</sup> International Laser Marketplace

LASER World of PHOTONICS

Munich, Germany

June 26, 2025



**Free for Visitors of LASER World of PHOTONICS**



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