

**TEHCET**

Electronics Materials Information



# 2024-2025 CMR™ CRITICAL MATERIALS REPORT ELECTRONIC GASES

SUPPLY-CHAIN & MARKET ANALYSIS  
A CRITICAL MATERIALS REPORT™

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## RESEARCH METHODOLOGY

TEHCET employs subject matter experts having first-hand experience within the industries which they analyze. Most of TEHCET's analysts have over 25 years of direct and relevant experience in their field. Our analysts survey the commercial and technical staff of IC manufacturers and their suppliers, and conduct extensive research of literature and commerce statistics to ascertain the current and future market environment and global supply risks. Combining this data with TEHCET's proprietary, quantitative wafer forecast results in a viable long-term market forecast for a variety of process materials.

## READER'S NOTE

This report represents the interpretation and analysis of information generally available to the public or released by responsible agencies or individuals. Data was obtained from sources considered reliable. However, accuracy or completeness is not guaranteed.

All market shares, revenue and volume numbers represented in the report are estimates only. Many of these companies do not report actual revenues or volumes per segment.

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# TABLE OF CONTENTS

<b>1 EXECUTIVE SUMMARY</b>	<b>11</b>		
1.1 ELECTRONIC GASES BUSINESS - MARKET OVERVIEW	12	3.2.2 AUTOMOTIVE INDUSTRY OUTLOOK	35
1.2 MARKET TRENDS IMPACTING 2024 OUTLOOK	13	3.2.2.1 ELECTRIC VEHICLE (EV) MARKET TRENDS	36
1.3 ELECTRONIC GASES 5-YEAR REVENUE FORECAST BY SEGMENT	14	3.2.2.2 INCREASE IN SEMICONDUCTOR CONTENT FOR AUTOS	37
1.4 ELECTRONIC GASES 5-YEAR REVENUE FORECAST BY SEGMENT- HIGHLIGHT KEY MATERIALS	15	3.2.3 SMARTPHONE OUTLOOK	38
1.5 ELECTRONIC GASES SEGMENT TRENDS	16	3.2.4 PC OUTLOOK	39
1.6 TECHNOLOGY TRENDS	17	3.2.5 SERVERS / IT MARKET	40
1.7 COMPETITIVE LANDSCAPE - ELECTRONIC GASES	18	3.3 SEMICONDUCTOR FABRICATION GROWTH & EXPANSION	41
1.7.1 COMPETITIVE LANDSCAPE - INDUSTRIAL GASES	19	3.3.1 IN THE MIDST OF HUGE INVESTMENT IN CHIP EXPANSIONS	42
1.8 CURRENT QUARTER TOP-5 GLOBAL ELECTRONIC GASES SUPPLIERS' ACTIVITIES & REPORTED REVENUES	20	3.3.2 NEW FABs IN THE US	43
1.9 EHS, TRADE, AND/OR LOGISTICS ISSUES/CONCERNS	21	3.3.3 WW FAB EXPANSION DRIVING GROWTH	44
1.10 ANALYST ASSESSMENT OF ELECTRONIC GASES	22	3.3.4 EQUIPMENT SPENDING TRENDS	45
<b>2 SCOPE, PURPOSE AND METHODOLOGY</b>	<b>23</b>	3.3.5 ADVANCED LOGIC TECHNOLOGY ROADMAPS	46
2.1 SCOPE	24	3.3.5.1 DRAM TECHNOLOGY ROADMAPS	47
2.2 METHODOLOGY	25	3.3.5.2 3D NAND TECHNOLOGY ROADMAPS	48
2.3 OVERVIEW OF OTHER TECHCET CMR™ OFFERINGS	26	3.3.6 FAB INVESTMENT ASSESSMENT	49
<b>3 SEMICONDUCTOR INDUSTRY MARKET STATUS &amp; OUTLOOK</b>	<b>27</b>	3.4 POLICY & TRADE TRENDS AND IMPACT	50
3.1 WORLDWIDE ECONOMY AND OUTLOOK	28	3.5 SEMICONDUCTOR MATERIALS OVERVIEW	51
3.1.1 SEMICONDUCTOR INDUSTRIES TIES TO THE GLOBAL ECONOMY	30	3.5.1 TECHCET WAFER STARTS FORECAST THROUGH 2028	52
3.1.2 SEMICONDUCTOR SALES GROWTH	31	3.5.2 TECHCET MATERIALS MARKET FORECAST THROUGH 2028	53
3.1.3 TAIWAN OUTSOURCE MANUFACTURER MONTHLY SALES TRENDS	32	<b>4 ELECTRONIC GASES MARKET TRENDS</b>	<b>54</b>
3.2 CHIPS SALES BY ELECTRONIC GOODS SEGMENT	33	4.1 ELECTRONIC GASES MARKET TRENDS - OUTLINE	55
3.2.1 ELECTRONICS OUTLOOK	34	4.1.1 2023 ELECTRONIC GASES MARKET LEADING INTO 2024	56
		4.1.2 ELECTRONIC GASES MARKET OUTLOOK	57

# TABLE OF CONTENTS

4.1.3 ELECTRONIC GASES 5-YEAR REVENUE FORECAST BY SEGMENT	58	4.2.8 SUPPLY VS. DEMAND BALANCE - NF3, NITROGEN TRIFLUORIDE	81
4.1.4 ELECTRONIC GASES 5-YEAR REVENUE FORECAST BY SEGMENT- HIGHLIGHT KEY MATERIALS	59	4.2.8.1 ELECTRONIC GASES MARKET OUTLOOK - NF3	82
4.2 ELECTRONIC GASES SUPPLY CAPACITY AND DEMAND, OVERVIEW	60	4.2.9 SUPPLY VS. DEMAND BALANCE - WF6, TUNGSTEN HEXAFLUORIDE	83
4.2.1 ELECTRONIC GASES SUPPLY CAPACITY AND DEMAND, INVESTMENTS	61	4.3 PRICING TRENDS	84
4.2.2 ELECTRONIC GASES PRODUCTION BY REGION	65	4.3.1 PRICING TRENDS - NEON	85
4.2.3 ELECTRONIC GASES PRODUCTION CAPACITY EXPANSIONS	66	4.3.2 PRICING TRENDS - XENON	86
4.2.4 INVESTMENT ANNOUNCEMENTS OVERVIEW	67	4.3.3 PRICING TRENDS - KRYPTON	87
4.2.4.1 REGIONAL ACTIVITY SPECIALTY GAS INVESTMENTS	68	4.3.4 HELIUM PRICE TREND & FORECAST	88
4.2.5 INVESTMENT ACTIVITY ADDITIONAL COMMENTS	69	4.4 TECHNOLOGY TRENDS/TECHNICAL DRIVERS - OUTLINE	89
4.2.6 RARE GASES - XE, KR, NE - SUPPLY VS. DEMAND BALANCE - OVERVIEW	70	4.4.1 ELECTRONIC GASES GENERAL TECHNOLOGY OVERVIEW	90
4.2.6.1 SPECIALTY GAS MARKET: 5-YEAR SUPPLY & DEMAND, SELECT GASES	71	4.4.2 ELECTRONIC GASES TECHNOLOGY TRENDS	91
4.2.6.2 SUPPLY VS. DEMAND BALANCE - NEON	72	4.4.3 SPECIALTY/EMERGING MATERIAL AND APPLICATIONS	92
4.2.6.3 SUPPLY VS. DEMAND BALANCE - NEON (CONTINUED)	73	4.4.4 WF6 MARKET DEMAND, POTENTIAL DISPLACEMENT BY MOLYBDENUM	93
4.2.6.4 SUPPLY VS. DEMAND BALANCE - XENON	74	4.4.5 ALE ETCH GAS LISTING	94
4.2.6.5 SUPPLY VS. DEMAND BALANCE - KRYPTON	75	4.4.6 SUMMARY OF TECHNICAL TRENDS AND OPPORTUNITIES	95
4.2.7 HELIUM SUPPLY V. DEMAND	76	4.5 REGIONAL CONSIDERATIONS	96
4.2.7.1 SUPPLY VS. DEMAND BALANCE - HELIUM	77	4.6 EHS AND TRADE/LOGISTIC ISSUES	97
4.2.7.2 SUPPLY VS. DEMAND BALANCE - REGIONAL HELIUM SUPPLY	78	4.6.1 RUSSIA INVASION OF UKRAINE	98
4.2.7.3 HELIUM SUPPLY RISK BY COUNTRY 2030	79	4.6.2 YEMEN'S HOUTHİ ATTACKS IN THE RED SEA AND GULF OF ADEN DISRUPT GLOBAL SHIPPING	99
4.2.7.4 KEY PLAYERS IN THE HELIUM SUPPLY CHAIN	80	4.6.3 NEW MIDDLE EAST CONFLICT COULD DISRUPT GLOBAL TECH SUPPLY CHAIN AND INTEL'S EXPANSION PLANS	100
		4.6.4 PANAMA CANAL HISTORIC DROUGHT	101

# TABLE OF CONTENTS

4.6.5 EHS ISSUES	102	5.5.1 M&A ACTIVITY AND PARTNERSHIPS	122
4.6.6 EHS ISSUES	103	5.6 PLANT CLOSURES / DIVESTITURES	123
4.6.7 TRADE/LOGISTICS ISSUES	104	5.7 NEW ENTRANTS	124
4.7 ANALYST ASSESSMENT OF ELECTRONIC GASES MARKET TRENDS	105	5.8 SUPPLIERS OR PARTS/PRODUCT LINES THAT ARE AT RISK OF DISCONTINUATIONS	125
<b>5 SUPPLY-SIDE MARKET LANDSCAPE</b>	<b>106</b>	5.9 TECHCET ANALYST ASSESSMENT OF ELECTRONIC GAS SUPPLIERS	126
5.1 ELECTRONIC GASES MARKET SHARE	107	<b>6 SUB-TIER SUPPLY CHAIN, ELECTRONIC GASES</b>	<b>127</b>
5.1.1 INDUSTRIAL GASES MARKET SHARE	108	6.1 SUB-TIER SUPPLY CHAIN: SOURCES & MARKETS OVERVIEW	128
5.2 CURRENT QUARTER TOP-5 GLOBAL ELECTRONIC GASES SUPPLIERS' ACTIVITIES & REPORTED REVENUES	109	6.1.1 BULK GASES AND THEIR SOURCES	129
5.2.1 US SUPPLIER RANKING	110	6.1.2 FLUORSPAR SUPPLY	130
5.3 LINDE PLC FULL YEAR 2023 AND Q4 - ROBUST EARNINGS GROWTH DESPITE SALES DECLINE, FORECASTS CONTINUED STRONG PERFORMANCE	111	6.1.2.1 FLUORSPAR WORLD RESERVES	131
5.3.1 AIR LIQUIDE'S Q4 AND 2023 REVENUES WEIGHED BY DECLINING ENERGY PRICES, BUT SHOWING POSITIVE METRICS	112	6.1.2.2 FLUORSPAR SUPPLY, DEMAND AND PRICING IMPACTS	132
5.3.2 MERCK'S ELECTRONICS SECTOR FACES 4% ORGANIC SALES DECLINE IN Q3 2023, IMPACTED BY SEMICONDUCTOR SLOWDOWN AND MARKET PRESSURES	113	6.1.3 BROMINE SUPPLY	133
5.3.3 TAIYO NIPPON SANSO REVENUES Q3 RESULTS	114	6.2 SUB-TIER SUPPLY-CHAIN EHS AND LOGISTICS ISSUES	134
5.4 REGIONAL TRENDS- KOREA	115	6.3 SUB-TIER SUPPLY-CHAIN TECHCET ANALYST ASSESSMENT	135
5.4.1 REGIONAL TRENDS- JAPAN	116		
5.4.2 REGIONAL TRENDS- CHINA	117		
5.4.3 REGIONAL TRENDS - RUSSIA	118		
5.4.4 REGIONAL TRENDS- USA	119		
5.4.5 REGIONAL TRENDS- EU	120		
5.5 M&A ACTIVITY AND PARTNERSHIPS	121		

# TABLE OF CONTENTS

## 7 SUPPLIER PROFILES

Air Liquide (Maker, Purifier, Supplier)  
Air Products (Maker, Purifier, Supplier)  
Air Water (Maker)  
Cryoion Engineering (Purifier, Supplier)  
DuPont (Maker, Purifier, Supplier)  
...and 20+ more

136

## 8 APPENDIX

8.1 GASES USED BY MULTIPLE INDUSTRIES	296
8.1.1 SPECIALTY GAS INDUSTRY MATRIX	297
8.1.2 GASES USED FOR SEMICONDUCTOR DEVICE MANUFACTURING	298
8.1.3 GASES USED IN THE DISPLAY INDUSTRY	299
8.2 SUPPLIER LISTING BY GAS TYPE	302
8.2.1 HYDRIDES	303
8.2.2 SILICON PRECURSORS (SILANES)	304
8.2.3 ETCHANTS/CHAMBER CLEAN	305
8.2.4 DEPOSITION/MISC	306
8.2.5 BULK GASES	307
8.3 ETCH GAS ROADMAPS	308
8.3.1 ETCH ROADMAPS 1 OF 3	309
8.3.2 ETCH ROADMAPS 2 OF 3	310
8.3.3 ETCH ROADMAPS 3 OF 3	311

295

# FIGURES & TABLES

## FIGURES

FIGURE 1.1: ELECTRONIC GAS MARKET	14	FIGURE 3.13: GLOBAL TOTAL EQUIPMENT SPENDING (US\$ M) AND Y-O-Y CHANGE	45
FIGURE 1.2: HELIUM DEMAND 2023 - 7.4 BCF	15	FIGURE 3.14: ADVANCED LOGIC DEVICE TECHNOLOGY ROADMAP OVERVIEW	46
FIGURE 1.3: TOTAL ELECTRONIC GAS MARKET SHARE 2023, US\$6.01B	18	FIGURE 3.15: DRAM TECHNOLOGY ROADMAP OVERVIEW	47
FIGURE 1.4: TOTAL INDUSTRIAL GAS MARKET SHARE 2023, US\$104B	19	FIGURE 3.16: 3D NAND TECHNOLOGY ROADMAP OVERVIEW	48
FIGURE 1.5: TOP-5 ELECTRONIC GASES MAKERS' QUARTERLY COMBINED SALES (LINDE, AL, AP, RESONAC, TNSC)	20	FIGURE 3.17: INTEL OHIO PLANT SITE AS OF FEB. 2024	49
FIGURE 3.1: GLOBAL ECONOMY AND THE ELECTRONICS SUPPLY CHAIN (2023)	30	FIGURE 3.18: TECHCET WAFER START FORECAST BY NODE SEGMENTS	52
FIGURE 3.2: WORLDWIDE SEMICONDUCTOR SALES	31	FIGURE 3.19: TECHCET WORLDWIDE MATERIALS FORECAST (\$M USD)	53
FIGURE 3.3: TECHCET'S TAIWAN SEMICONDUCTOR INDUSTRY INDEX (TTSI)	32	FIGURE 4.1: ELECTRONIC GAS MARKET	58
FIGURE 3.4: 2023 SEMICONDUCTOR CHIP APPLICATIONS	33	FIGURE 4.2: HELIUM DEMAND 2023 - 7.4 BCF	59
FIGURE 3.5: GLOBAL LIGHT VEHICLE UNIT SALES (IN MILLIONS OF UNITS)	35	FIGURE 4.3: 5-YEAR SPECIALTY GAS SUPPLY & DEMAND	71
FIGURE 3.5: ELECTRIFICATION TREND BY WORLD REGION	36	FIGURE 4.4: NEON SUPPLY/DEMAND FORECAST	72
FIGURE 3.6: AUTOMOTIVE SEMICONDUCTOR PRODUCTION	37	FIGURE 4.5: GLOBAL NEON REVENUES	72
FIGURE 3.7: MOBILE PHONE SHIPMENTS, WW ESTIMATES	38	FIGURE 4.6: XENON SUPPLY/DEMAND FORECAST	74
FIGURE 3.8: WORLDWIDE PC AND TABLET FORECAST	39	FIGURE 4.7: GLOBAL XENON REVENUES	74
FIGURE 3.9: TSMC PHOENIX CAMPUS WITH THE 2ND FAB VISIBLE IN THE BACKGROUND	41	FIGURE 4.8: KRYPTON SUPPLY/DEMAND FORECAST	75
FIGURE 3.10: ESTIMATED GLOBAL FAB SPENDING 2022-2027	42	FIGURE 4.9: GLOBAL KRYPTON REVENUES	75
FIGURE 3.11: FAB EXPANSIONS WITHIN THE US	43	FIGURE 4.10: HELIUM SUPPLY & DEMAND (BCF)	76
FIGURE 3.12: SEMICONDUCTOR CHIP MANUFACTURING REGIONS OF THE WORLD	44	FIGURE 4.11: HELIUM DEMAND BY APPLICATION 2023 - 5.9 BCF	77
		FIGURE 4.12: WW HELIUM CAPACITY BY REGION 2023 VS. 2028 (BCF)	78
		FIGURE 4.13: HELIUM SUPPLY RISK BY COUNTRY 2030	79
		FIGURE 4.14: NF3 SUPPLY/DEMAND FORECAST	81
		FIGURE 4.15: WF6 SUPPLY/DEMAND FORECAST	83



# FIGURES & TABLES

FIGURE 4.16: WORLDWIDE NOBLE GASES ASP TREND	84
FIGURE 4.17: MO PRECURSORS	93
FIGURE 4.18: PLASMA AND THERMAL ALE PROCESSES	94
FIGURE 4.19: 2023 SEMICONDUCTOR ELECTRONIC GASES REVENUE SHARE BY REGION	96
FIGURE 4.20: GREENHOUSE GAS PROTOCOL, DETAILED CATEGORIES	102
FIGURE 4.21: SCOPE 3 EMISSIONS FOR SEMICONDUCTOR COMPANIES	102
FIGURE 4.22: CO2-EQUIVALENT EMISSIONS FOR TYPICAL FAB	103
FIGURE 5.1: TOTAL ELECTRONIC GAS MARKET SHARE 2023, US\$6.01B	107
FIGURE 5.2: TOTAL INDUSTRIAL GAS MARKET SHARE 2023, US\$104 B	108
FIGURE 5.3: TOP-5 ELECTRONIC GASES MAKERS' QUARTERLY COMBINED SALES (LINDE, AL, AP, RESONAC, TNSC)	109
FIGURE 5.4: AIR LIQUIDE'S Q4 AND 2023 REVENUES	112
FIGURE 5.5: MERCK'S 2023 REVENUES	113
FIGURE 5.6: TAIYO NIPPON SANJO REVENUES Q3 RESULTS	114
FIGURE 5.7: KOREA SEMICONDUCTOR DEVELOPMENT PLAN	115
FIGURE 6.1: LEADING COUNTRIES BASED ON MINE PRODUCTION OF FLUORSPAR WORLDWIDE IN 2023	130
FIGURE 6.2: WW RESERVES OF FLUORSPAR IN 2023, BY COUNTRY (US\$/KILOTONNE)	131
FIGURE 6.3: FLUORSPAR PRICE IN US 2014-2023 (US\$/KILOTONNE)	132
FIGURE 6.4: WW BROMINE SUPPLY 2023 (KILOTONNES)	133
FIGURE 8.1: ELECTRONIC SPECIALTY GASES	301
FIGURE 8.2: BULK GASES	301

## TABLES

TABLE 1.1: ELECTRONIC GASES(S) GROWTH OVERVIEW	12
TABLE 1.2: ESTIMATED MARKET SHARE BY SUPPLIER	18
TABLE 1.3: ESTIMATED MARKET SHARE BY SUPPLIER	19
TABLE 3.1: GLOBAL GDP AND SEMICONDUCTOR REVENUES	28
TABLE 3.2: WORLD BANK ECONOMIC OUTLOOK (JANUARY 2024)	29
TABLE 3.3: BATTERY ELECTRIC VEHICLE (BEV) REGIONAL TRENDS	36
TABLE 3.4: DATA CENTER SYSTEMS AND COMMUNICATION SERVICES MARKET SPENDING 2023	40
TABLE 4.1: ELECTRONIC GASES SUPPLIER MANUFACTURING LOCATIONS	65
TABLE 4.2: OVERVIEW OF ANNOUNCED 2023/2024 ELECTRONIC GASES SUPPLIER INVESTMENTS	66
TABLE 4.3: REGIONAL SUMMARY OF GAS MARKET	67
TABLE 4.4: 5-YEAR SPECIALTY GAS SUPPLY & DEMAND	71
TABLE 4.5: SUPPLIERS WITH LOCATIONS IN AREAS OF HIGH RISK	80
TABLE 4.6: GAS TRENDS AND OPPORTUNITIES BY DEVICE TYPE	95
TABLE 5.1: ESTIMATED MARKET SHARE BY SUPPLIER	107
TABLE 5.2: ESTIMATED MARKET SHARE BY SUPPLIER	108
TABLE 5.3: ESTIMATED SUPPLY CHAIN SUPPLIER RANKING	110
TABLE 6.1: BULK AND INERT GAS APPLICATION AND SOURCE DESCRIPTION	129

# FIGURES & TABLES

TABLE 8.1: SPECIALTY GAS INDUSTRY MATRIX	297
TABLE 8.2: GASES USED IN FPD MANUFACTURING	300
TABLE 8.3: HYDRIDE GAS SUPPLIERS	303
TABLE 8.4: SILICON PRECURSOR SUPPLIERS	304
TABLE 8.5: ETCHANT GAS SUPPLIERS	305
TABLE 8.6: DEPOSITION/MISC. GAS SUPPLIERS	306
TABLE 8.7: BULK GAS SUPPLIERS	307
TABLE 8.8: ETCH ROADMAPS	309
TABLE 8.9: ETCH ROADMAPS	310
TABLE 8.10: ETCH ROADMAPS	311

# 2

## SCOPE, PURPOSE AND METHODOLOGY

- SCOPE
- PURPOSE
- METHODOLOGY
- OVERVIEW OF  
OTHER TECHCET CMR™  
OFFERINGS

## 2.1 SCOPE

- This report covers the market landscape and supply-chain for Electronic Gases used in semiconductor device fabrication. It includes information about key suppliers, issues/trends in the material supply chain, estimates on supplier market share, and forecast for the material segments.
- This Critical Materials Report™ (CMR) provides focused information for
  - Business Development Managers
  - Supply Chain Managers
  - R&D directors
  - Investors / Financial Analysts
  - Policy Makers

## 2.2 METHODOLOGY

- TECHCET employs subject matter experts having first-hand experience within the industries which they analyze. Most of TECHCET's analysts have over 25 years of direct and relevant experience in their field. Our analysts survey the commercial and technical staff of IC manufacturers and their suppliers and conduct extensive research of literature and commerce statistics to ascertain the current and future market environment and global supply risks. Combining this data with TECHCET's proprietary, quantitative wafer forecast results in a viable long-term market forecast for a variety of process materials.
- Data and analysis is generated from both primary and secondary market research performed by TECHCET's staff of market and technology analysts. Forecasts models are developed from TECHCET's database of historical information, process flows and wafer forecasts by technology node and device type. These are then validated with market research interviews with industry experts. For more information on TECHCET Critical materials Reports™ please go to <https://TEHCET.com>

## 2.3 OVERVIEW OF OTHER TECHCET CMR™ OFFERINGS

- TEHCET produces electronic material supply chain reports each year as one of its functions for the Critical Materials Council. Reports to be published in 2024 can be found at [www.techcet.com](http://www.techcet.com) and are listed in the table below:

TEHCET's Critical Materials Reports™	
1	CMP Consumables (Pads & Slurry)
2	CMP Equipment Ancillaries (Conditioners, Filters, etc.)
3	CVD /ALD Hi K Precursors
4	CVD DIELECTRIC Precursors
5	Equipment Components - Quartz
6	Equipment Components - Silicon
7	Equipment Components - SiC/Ceramics
8	Equipment Components - Elastomers
9	Gases - Electronic Specialty, Bulk & Rare Gases
10	Metal Plating Chemicals
11	Photoresists, Ancillaries & Extension Materials
12	Sputtering Targets
13	Silicon and SOI Wafers
14	Special Report: SiC Wafers and Manufacturing Costing
15	Wet Chemicals / Specialty Cleans & Containment
16	Special Report: Impact of Chip Expansions on Chemical Supply-Chains
17	Packaging Materials (die attach, EMC, lead frame, wire, etc.)