II-VI INC
Form 10-K
August 28, 2012

United States

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

x **Annual Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended June 30, 2012**

¨ Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the transition period from _____ to _____.

Commission File Number: 0-16195

II-VI INCORPORATED

(Exact name of registrant as specified in its charter)

PENNSYLVANIA	25-1214948
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
375 Saxonburg Boulevard Saxonburg, PA (Address of principal executive offices)	16056 (Zip code)

Registrant s telephone number, including area code: **724-352-4455**

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	**Name of Each Exchange on Which Registered**
Common Stock, no par value	Nasdaq Global Select Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes X No ____

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act.

Yes____ No X

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes X No ____

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for shorter period that the registrant was required to submit and post such files).

Yes X No ____

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. x

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer x Accelerated filer ¨ Non-accelerated filer ¨ Smaller reporting company ¨

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ¨ No x

Aggregate market value of outstanding Common Stock, no par value, held by non-affiliates of the Registrant at December 31, 2011, was approximately $969,097,000 based on the closing sale price reported on the Nasdaq Global Select Market. For purposes of this calculation only, directors and executive officers of the Registrant and their spouses are deemed to be affiliates of the Registrant.

Number of outstanding shares of Common Stock, no par value, at August 20, 2012, was 62,888,133.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant s definitive proxy statement, which will be issued in connection with the 2012 Annual Meeting of Shareholders of II-VI Incorporated, are incorporated by reference into Part III of this Annual Report on Form 10-K.

Forward-Looking Statements

This Annual Report on Form 10-K (including certain information incorporated herein by reference) contains forward-looking statements made pursuant to Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act), and the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements relate to the Company s performance on a going-forward basis. Forward looking statements are also identified by words such as expects, anticipates, intends, plans, projects or similar expressions.

The forward-looking statements in this Form 10-K involve risks and uncertainties, which could cause actual results, performance or trends to differ materially from those expressed in the forward-looking statements herein or in previous disclosures. The Company believes that all forward-looking statements made by it have a reasonable basis, but there can be no assurance that these expectations, beliefs or projections as expressed in the forward-looking statements will actually occur or prove to be correct. Actual results could materially differ from such statements. In addition to general industry and economic conditions, including any failure to sustain the recent recovery from the global economic downturn, factors that could cause actual results to differ materially from those discussed in the forward-looking statements include, but are not limited to: (i) the failure of any one or more of the assumptions stated above to prove to be correct; (ii) the Risk Factors set forth in Item 1A of this Annual Report on Form 10-K; (iii) purchasing patterns from customers and end-users; (iv) timely release of new products, and acceptance of such new products by the market; (v) the introduction of new products by competitors and other competitive responses; and (vi) the Company s ability to devise and execute strategies to respond to market conditions which could have a material adverse effect on our results of operations and cash flows. These forward-looking statements speak only as of the date of this report and the Company disclaims any obligation to update information in this report, including any forward-looking statements, whether as a result of new information, future events or developments, or otherwise.

PART I

Item 1. BUSINESS

Introduction

II-VI Incorporated (II-VI, the Company, we, us, or our) was incorporated in Pennsylvania in 1971. Our executive offices are located at 375 Saxonburg Boulevard, Saxonburg, Pennsylvania 16056. Our telephone number is 724-352-4455. Reference to II-VI, the Company, we, us, or our in this Annual Report on Form 10-K, unless the context requires otherwise, refers to II-VI Incorporated and its wholly-owned and majority-owned subsidiaries. The Company s name is pronounced Two Six Incorporated. The majority of our revenues are attributable to the sale of engineered materials and opto-electronic components for industrial, military and medical laser applications, optical communications products, compound semiconductor substrate-based products and elements for material processing and refinement. Reference to fiscal or fiscal year means our fiscal year ended June 30 for the year referenced.

The Company consists of four reportable segments: (i) Infrared Optics; (ii) Near-Infrared Optics; (iii) Military & Materials; and (iv) Advanced Products Group (formerly Compound Semiconductor Group). See below for a more detailed description of these segments.

In July 2011, the Company acquired all of the outstanding shares of Aegis Lightwave, Inc. (Aegis), a privately-held company based in Woburn, Massachusetts with additional locations in New Jersey and Australia. Aegis supplies tunable optical devices required for high speed optical networks that provide the bandwidth expansion necessary for increasing Internet traffic. Aegis became a business unit within our Near-Infrared Optics operating segment. The financial results include the results of Aegis since the acquisition date.

In December 2010, the Company acquired all of the outstanding shares of Max Levy Autograph, Inc. (MLA), a privately-held company based in Philadelphia, Pennsylvania. MLA manufactures micro-fine conductive mesh patterns for optical, mechanical and ceramic components for applications such as circuitry, metrology standards, targeting calibration and suppression of electro-magnetic interference. MLA became a business unit within our Military & Materials operating segment. The financial results include the results of MLA since the acquisition date.

In January 2010, the Company acquired all the outstanding shares of Photop Technologies, Inc. (Photop), a privately-held company based in Fuzhou, China with additional locations in China, the United States (U.S.) and Hong Kong. Photop is a vertically integrated manufacturer of crystal materials, optics, microchip lasers for display applications and optical modules for use in fiber optic communication networks and other diverse consumer and commercial applications. Photop became a business unit within our Near-Infrared Optics operating segment. The financial results include the results of Photop since the acquisition date.

Our Internet address is www.ii-vi.com. Information contained on our website is not part of, and should not be construed as being incorporated by reference into, this Annual Report on Form 10-K. We post the following reports on our website as soon as reasonably practical after they are electronically filed with or furnished to the Securities and Exchange Commission (the SEC): our annual reports on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K, and any amendments to those reports or statements filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the Exchange Act). In addition, we post our proxy statements on Schedule 14A related to our annual shareholders meetings as well as reports filed by our directors, officers and ten-percent beneficial owners pursuant to Section 16 of the Exchange Act. In addition, all filings are available via the SEC s website (www.sec.gov). We also make available on our website our corporate governance documents, including the Company s Code of Business Conduct and Ethics, governance guidelines and the charters for various board committees. All such documents are located on the Investors page of our website and are available free of charge.

Information Regarding Market Segments and Foreign Operations

Financial data regarding our revenues, results of operations, industry segments and international sales for the three years ended June 30, 2012 is set forth in the consolidated statements of earnings and in Note 11 to the Company s consolidated financial statements included in Item 8 of this Annual Report on Form 10-K and is incorporated herein by reference. We also discuss certain Risk Factors set forth in Item 1A of this Annual Report on Form 10-K related to our foreign operations which are incorporated herein by reference.

General Description of Business

We develop, refine, manufacture and market engineered materials and opto-electronic components and products for precision use in industrial, military, optical communication, photovoltaic, medical and aerospace applications. We use advanced engineered material growth technologies coupled with proprietary high-precision fabrication, micro-assembly, thin-film coating and electronic integration to enable complex opto-electronic devices and modules. Our products are supplied to manufacturers and users in a wide variety of markets including industrial, military, optical communications, photovoltaic and medical and are deployed in applications that we believe reduce the cost and improve the performance of laser cutting, welding and marking operations; reduce the cost and improve the reliability of military-related products; reduce the cost and improve the operations of optical communication products; reduce the cost and improve the operations of photovoltaic products; reduce the cost and improve the reliability of medical procedures; and reduce the cost and improve the performance of cooling and power generation solutions. A key strategy of the Company is to develop, refine and manufacture complex materials. We focus on providing critical components to the heart of our customers assembly lines for products such as high-power laser material processing systems, military fire control and missile guidance devices, fiber optics and wireless communication systems, photovoltaic systems, medical diagnostic systems and industrial, commercial and consumer thermal management systems. We develop, manufacture, refine and market infrared and near-infrared laser optical elements, military infrared optical components and assemblies, optical communications components and modules, selenium, tellurium and rare earth metals and chemicals, thermoelectric cooling and power generation systems and single crystal silicon carbide (SiC) substrates.

Our U.S. production operations are located in Pennsylvania, Florida, California, New Jersey, Texas, Mississippi and Massachusetts, and our non-U.S. production operations are based in China, Singapore, Vietnam, the Philippines, Germany and Australia. In addition to sales offices at most of our manufacturing sites, we have sales and marketing subsidiaries in Japan, Germany, China, Switzerland, Belgium, the United Kingdom (U.K.) and Italy. Approximately 60% of our revenues for the fiscal year ended June 30, 2012 were from product sales to customers outside of the U.S.

Our primary products are as follows:

Laser-related products for CO_2 lasers and forward-looking infrared systems and high-precision optical elements used to focus and direct infrared lasers onto target work surfaces. The majority of these laser products require advanced engineered materials that are internally produced.

Laser-related products for one micron lasers for welding, cutting and drilling in automotive, semiconductor and other material processing applications. We produce tools for laser material processing, including modular laser processing heads for fiber lasers, yttrium aluminum garnet (YAG) lasers and other one-micron laser systems. We also manufacture beam delivery systems including fiber optic cables and modular beam systems.

Optical and photonics components and modules for use in optical communication networks and other diverse consumer and commercial applications. We leverage our expertise in crystal materials, silicon materials and optics to design and manufacture a diverse range of customized

optics and optical components such as optical transport, amplifier, monitoring and wavelength management devices, optical routing and switching components, test instruments and equipments, projection display components and laser devices.

Laser-related products for solid-state lasers, high-precision optical elements and assemblies used to focus and direct laser beams onto target work surfaces and Ultra-violet (UV) Filters used in systems to detect shoulder-launched missiles to help improve the survivability of low-flying aircraft if attacked. The majority of these laser products require advanced engineered materials and crystals that are internally produced.

Military infrared optical products and assemblies including optics for targeting and navigation systems.

Selenium and tellurium metals and chemicals and rare earth materials via refining and reclamation processes. These products are used as additive materials for metallurgical, glass and animal feed applications, and are also used for photovoltaic, infrared optics, thermoelectric modules, electronics, energy harvesting and other industrial applications.

Thermoelectric modules, thermoelectric systems, power generation modules and power generation systems based on highly engineered semiconductor materials that provide reliable and low cost temperature control or power generation capability.

SiC substrates which are wide bandgap semiconductor materials that enable fabrication of electronic devices for highly energy efficient, high frequency and high power applications.

See We Are Subject to Stringent Environmental Regulation included in Part I, Item 1A of this Annual Report on Form 10-K, which is incorporated herein by reference, for a discussion of the impact of environmental regulations on our business and operations.

Our Markets

Our market-focused businesses are organized by technology and products. Our business is comprised of the following primary markets:

Design, manufacture and marketing of engineered materials and opto-electronic components for infrared optics for industrial, military and medical applications by our II-VI Infrared operations.

Design, manufacture and marketing of customized technology for laser material processing to deliver both low-power and high-power one-micron laser light for industrial applications by our Infrared Optics HIGHYAG Lasertechnologie GmbH (HIGHYAG) operations.

Design, manufacture and marketing of a diverse range of customized optics, optical components and optical modules for consumer and commercial applications such as fiber optic communications, projection and display products, lasers, medical equipment and biomedical instrumentation by our Photop and Aegis operations in the Near-Infrared Optics segment.

Design, manufacture and marketing of ultra-violet, visible and near-infrared laser products for industrial and military applications, including laser gain materials and products for solid-state YAG and other crystal-based lasers by our VLOC Incorporated (VLOC) operations in the Near-Infrared Optics segment.

Design, manufacture and marketing of infrared optical components and optical assemblies for military and commercial applications and design, manufacturing and marketing of micro-fine conductive mesh patterns for military and commercial applications by our Military & Materials Military operations.

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Refinement, reclamation, manufacturing and marketing of selenium, tellurium and rare earth material products for industrial, photovoltaic and other applications by our Military & Materials Materials Processing and Refinement operations.

Design, manufacture and marketing of thermoelectric modules and assemblies for cooling, heating and power generation applications in the defense, telecommunications, medical, automotive, gesture recognition, consumer and industrial markets by our Advanced Products Group s Marlow Industries, Inc. (Marlow) operations.

Design, manufacture and marketing of single crystal SiC substrates for use in the defense and space, telecommunications, and industrial markets by our Advanced Product Group s Wide Bandgap Group (WBG) subsidiary.

Infrared Optics Market. Over the last few years, significant increases in the installed worldwide base of laser machines for a variety of laser processing applications have driven CO_2 laser optics component consumption. It is estimated that there are over 60,000 CO_2 laser systems currently deployed in the world. CO_2 lasers offer benefits in a wide variety of cutting, welding, drilling, ablation, cladding, heat treating and marking applications for materials such as steel alloys, non-ferrous metals, plastics, wood, paper, fiberboard, ceramics and composites. Laser systems enable the manufacturers to reduce part cost and improve quality, as well as improve process precision, speed, throughput, flexibility, repeatability and automation. Automobile manufacturers, for example, deploy lasers both to cut body components and to weld those parts together in high-throughput production lines. Manufacturers of motorcycles, lawn mowers and garden tractors cut, trim, and weld metal parts with lasers to reduce post-processing steps and, therefore, lower overall manufacturing costs. Furniture manufacturers utilize lasers because of their easily reconfigurable, low-cost prototyping and production capabilities for customer-specified designs. In high-speed food and pharmaceutical packaging lines, laser marking is used to provide automated product, date and lot coding on containers. In addition to being installed by original equipment manufacturers (OEMs) of laser systems in new machine builds, our optical components are purchased as replacement parts by end users of laser machines to maintain proper system performance. We believe that the current addressable market serviced by our II-VI Infrared operations is approximately $500 million.

One-Micron Laser Market. In many areas of material processing, laser technology has proven to be a better alternative to conventional production techniques. The precise cut and elegant seam are visible proof of a laser beam s machining efficiency. Industrial applications such as cutting, drilling and welding have driven the recent market growth of the one-micron laser systems, and are demanding increased performance, lower total cost of ownership, ease of use and portability of one-micron laser systems. One-micron laser systems require efficient and reliable tools, including modular laser processing heads for fiber lasers, beam delivery systems including fiber optic cables and modular beam systems. We believe that the current addressable market serviced by our HIGHYAG operations is approximately $60 million.

Near-Infrared Optics Market. The Near-Infrared laser market is driven by applications in the optical communications, military, medical and industrial markets. The optical communications market is being driven by demand for high-bandwidth communication capabilities by the growing number of worldwide Internet subscribers, broadband users, mobile device users and cloud computing users, and the greater reliance on high-bandwidth capabilities in our daily lives. For example, Internet activities, data storage, video and music downloads, gaming, social networking and other on-line interactive applications are growing rapidly. High bandwidth communication networks are being extended closer to the end user with fiber-to-the-home and other fiber optic networks. Mobile data traffic also is increasing as smart phones continue to proliferate with increasingly sophisticated audio, photo, video, email and Internet capabilities, as well as data connection & storage through cloud computing networks The resulting traffic, in turn, is felt throughout the network, including the core that depends on optical technology. Military applications include use in long-range surveillance, rangefinders, target designators, missile detection, countermeasures and directed energy laser weapon systems. Medical applications include aesthetic, vision correction, dental, ophthalmic and diagnostic lasers. Industrial

market segments are addressed by YAG and fiber lasers, which are used in higher power applications such as cutting and welding, and lower power applications such as marking and scribing. These industrial applications are demanding higher performance levels for less cost, creating competition for other technologies. The near-infrared market also addresses opportunities in the semiconductor processing, instrumentation, test and measurement and research segments. We believe that the current addressable markets serviced by our Near-Infrared Optics segment, is approximately $2 billion.

Military Infrared Optics Market. We provide several key infrared optical components such as windows, domes and related subassemblies to the military market for infrared applications in night vision, targeting, navigation and Homeland Security systems. Infrared window and window assemblies for navigational and targeting systems are deployed on fixed and rotary-wing aircraft, such as the F-35 Joint Strike Fighter, F-16 fighter jet, Apache Attack Helicopter, and ground vehicles such as the Abrams M-1 Tank and Bradley Fighting Vehicle. Infrared domes are used on missiles with infrared guidance systems ranging from small, man-portable designs to larger designs mounted on helicopters, fixed-wing aircraft and ground vehicles. Additionally, multiple fighter jets including the F-16 are being equipped with large area sapphire windows, manufactured by the Company, as a key component for the aircraft providing advanced targeting and imaging systems. The development and manufacture of these large area sapphire windows has played a key role in our ability to provide an even larger suite of sapphire panels that are a key component of the F-35 Joint Strike Fighter Electro Optical Targeting System. High-precision domes are an integral component of a missile s targeting system providing efficient tactical capability while serving as a protective cover to its internal components. A key attribute to these systems is the ability to filter electro-magnetic interference using micro-fine conductive mesh patterns. This technology is also applied to non-optical applications for absorbing and transmitting energy from the surfaces of aircraft and missiles. Our military infrared optical and non-optical products are sold primarily to U.S. Government prime contractors and directly to various U.S. Government agencies. These products have applications in commercial and medical markets as well. We believe that the current addressable market serviced by our Military Infrared Optics business is approximately $750 million.

Materials Processing and Refinement Market. Numerous processes require the presence of high-purity elements for proper processing. The Company s Pacific Rare Specialty Metals & Chemicals, Inc. (PRM) business addresses the market for rare elements, including selenium and tellurium. Selenium and tellurium usually are by-products of refining processes for other more common materials such as copper and zinc. High-purity selenium and tellurium are used in a variety of industrial applications, including the manufacture of steel and glass, the production of animal feeds and fertilizers, the manufacture of infrared optics and thermoelectric modules and the production of photovoltaic solar panels. Rare earth elements are used in many electronic and alternative energy applications. Our products are sold to customers who require selenium, tellurium and/or rare earth elements in their manufacturing processes. We believe that the current addressable market serviced by our PRM business is approximately $250 million, although market estimates are highly dependent upon minor metal index pricing.

Thermoelectric Market. Thermoelectric Modules (TEMs) are solid-state semiconductor devices that act as small heat pumps to cool, heat and temperature stabilize a wide range of materials, components and systems. Conversely, the principles underlying thermoelectrics allow TEMs to be used as a source of power when subjected to a temperature difference. TEMs are more reliable than alternative cooling solutions that require moving parts and provide more precise temperature control solutions than competing technologies. TEMs also have many other advantages which spurred the adoption of TEMs in a variety of industries and applications. For example, TEMs provide critical cooling and temperature stabilization solutions in a myriad of defense and space applications, including infrared cooled and un-cooled night vision technologies and thermal reference sources that are deployed in state-of-the-art weapons, as well as cooling high powered lasers used for range-finding target designation by military personnel. TEMs also allow for temperature stabilization of telecommunication lasers that generate and amplify optical signals for fiber optics systems. Thermoelectric-based solutions appear in a variety of medical applications including instrumentation and analytical applications such as DNA replication, blood analyzers and medical laser equipment. The industrial, commercial, and consumer markets provide a

variety of niche applications ranging from desktop refrigerators and wine coolers to gesture recognition technology, semiconductor process and test equipment. In addition, power generation applications are expanding into fields such as waste heat recovery, heat scavenging and co-generation. We believe the current addressable markets serviced by our Marlow operations are approximately $325 million.

Silicon Carbide Substrate Market. SiC is a wide bandgap semiconductor material that offers high-temperature, high-power and high-frequency capabilities as a substrate for applications at the high-performance end of the defense, telecommunication and industrial markets. SiC has certain intrinsic physical and electronic advantages over competing semiconductor materials such as Silicon and Gallium Arsenide. For example, the high thermal conductivity of SiC enables SiC-based devices to operate at high power levels and still dissipate the excess heat generated. Typically, our customers deposit either SiC or Gallium Nitride (GaN) epitaxial layers on a SiC substrate and then fabricate electronic devices. SiC and GaN-based structures are being developed and deployed for the manufacture of a wide variety of microwave and power switching devices. High-power, high-frequency SiC-based microwave devices are used in next generation wireless switching telecommunication applications and in both commercial and military radar applications. SiC-based, high-power, high-speed devices improve the performance, efficiency and reliability of electrical power transmission and distribution systems (smart grid), as well as power conditioning and switching in power supplies and motor controls in a wide variety of applications including aircraft, hybrid vehicles, industrial, communications and green energy applications. We believe the current addressable market serviced by our WBG operations is approximately $75 million.

Our Strategy

Our strategy is to build businesses with world-class, engineered materials capabilities at their core. Our significant materials capabilities are as follows:

Infrared Optics: Zinc Selenide (ZnSe), Zinc Sulfide (ZnS), Zinc Sulfide Multi Spectral (ZnS-MS), and Chemical Vapor Deposition (CVD) Diamond

Near-Infrared Optics: Yttrium Aluminum Garnet (YAG), Yttrium Lithium Fluoride (YLF), Calcium Fluoride (CaF_2), Yttrium Vanadate (YVO_4), Potassium Titanyl Phosphate (KTP), Barium Borate Oxide (BBO), and Amorphous Silicon (a-Si)

Military Infrared Optics: Germanium (Ge)

Materials Processing and Refinement: Selenium (Se), Tellurium (Te) and Rare Earth Elements

Thermoelectric Modules: Bismuth Telluride (Bi_2Te_3)

Silicon Carbide Substrates: Silicon Carbide (SiC)

We manufacture precision parts and components from these and other materials using our expertise in low damage surface and micro fabrication, thin-film coating and exacting metrology. A substantial portion of our business is based on sales orders with market leaders, which enable our forward planning and production efficiencies. We intend to capitalize on the execution of this proven model, participate effectively in the growth of the markets and continue our focus on operational excellence as we execute additional growth initiatives.

Our specific strategies are as follows:

Vertical-Integration. By combining the capabilities of our various business segments and operating units, we have created opportunities for our businesses to address manufacturing opportunities across multiple disciplines and markets. Where appropriate, we develop and/or acquire technological capabilities in areas such as material refinement, crystal growth, fabrication, diamond-turning, thin-film coating, metrology and assembly.

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Investment in Manufacturing Operations. We strategically invest in our manufacturing operations worldwide to increase production capacity and capabilities. The majority of our capital expenditures are used in our manufacturing operations.

Enhance Our Reputation as a Quality and Customer Service Leader. We are committed to understanding our customers needs and meeting their expectations. We have established ourselves as a consistent, high-quality supplier of components into our customers products. In many cases, we deliver on a just-in-time basis. We believe our quality and delivery performance enhances our relationships with our customers.

Identify New Products and Markets. We intend to identify new technology, products and markets to meet evolving customer requirements for high performance engineered materials. Due to the special properties of the advanced materials we produce and/or refine, we believe there are numerous applications and markets for such materials.

Utilize Asian Manufacturing Operations. Our manufacturing operations in China, Singapore, Vietnam and the Philippines play an important role in the operational and financial performance of the Company. We will continue to strategically invest in these operations and utilize their lower-cost capabilities.

Identify and Complete Strategic Acquisitions and Alliances. We will carefully pursue strategic acquisitions and alliances with companies whose products or technologies may compliment our current products, expand our market opportunities or create synergies with our current capabilities. We intend to identify acquisition opportunities that accelerate our access to emerging high-growth segments of the markets we serve and further leverage our competencies and economies of scale.

Balanced Approach to Research and Development. Our research and development program includes both internally and externally funded research and development expenditures targeting an overall investment of between 5 and 7 percent of product revenues. We are committed to accepting the right mix of internally and externally funded research that ties closely to our long-term strategic objectives.

Our Products

The main products for each of our markets are described as follows:

Infrared Optics. We supply a broad line of precision infrared opto-electronic components such as lenses, output couplers, windows and mirrors for use in CO_2 lasers. Our precision opto-electronic components are used to attenuate the amount of laser energy, enhance the properties of the laser beam and focus and direct laser beams to a target work surface. The opto-electronic components include both reflective and transmissive optics and are made from materials such as ZnSe, ZnS, copper, silicon, gallium arsenide and germanium. Transmissive optics used with CO_2 lasers are predominately made from ZnSe. We believe we are the largest manufacturer of ZnSe in the world. We supply replacement optics to end users of CO_2 lasers. Over time, optics may become contaminated and must be replaced to maintain peak laser operations. This aftermarket portion of our business continues to grow as laser applications proliferate worldwide and the installed base of serviceable laser systems increases each year. We estimate that 85% to 90% of our infrared optics sales service this installed base of CO_2 laser systems. We serve the aftermarket via a combination of selling to OEMs and selling directly to system end users.

One-Micron Laser Components. Our broad expertise in laser technology, optics, sensor technology and laser applications enables us to supply a broad array of tools for laser materials processing, including modular laser processing heads for fiber lasers, YAG lasers and other one-micron laser systems. We also manufacture beam delivery systems including fiber optic cables and modular beam systems.

Near-Infrared Optics. We manufacture products across a broad spectral range, including UV, Visible and Near-Infrared. We offer a wide variety of standard and custom laser gain materials, optics, optical components and optical module assemblies for optical communications, military, medical, industrial, scientific and research and development laser systems. Laser gain materials are produced to stringent industry specifications and precisely fabricated to customer demands. Key materials and precision optical components for YAG, fiber lasers and other solid-state laser systems are an important part of our near-infrared optics product offerings. We manufacture waveplates, polarizers, lenses, prisms and mirrors for visible and near-infrared applications, which are used to control or alter visible or near-infrared energy and its polarization. In addition, we manufacture coated windows used as debris shields in the industrial and medical laser aftermarkets. We offer fiber optics, micro optics and photonic crystal parts for optical communications, optical and photonic crystal parts for instrumentation and laser applications, optical components and modules for optical communication networks, as well as diode pumped solid-state laser devices for optical instruments, display and biotechnology. Our Near-Infrared Optics segment also produces components for UV Filters used in early warning missile detection. The end use of the UV Filter products we make is in systems used to detect shoulder-launched missiles to help improve the survivability of low-flying aircraft when attacked.

Military Infrared Optics. We offer optics and optical subassemblies for infrared systems including thermal imaging, night vision, targeting and navigation systems. Our product offering is comprised of missile domes, electro-optical windows and subassemblies, imaging lenses and other components. Our precision optical products utilize infrared optical materials such as sapphire, germanium, zinc sulfide, zinc selenide, silicon and spinel. In addition, our products also include visible and crystalline materials such as calcium fluoride, barium fluoride and fused silica. Our products are currently utilized on the F-35 Joint Strike Fighter, F-16 fighter jet, Apache Attack Helicopter and ground vehicles such as the Abrams M-1 Tank and Bradley Fighting Vehicle as typical examples.

Material Processing and Refinement. Our product offering includes selenium and tellurium metals and chemicals and rare earth materials in a variety of purity levels and forms.

Thermoelectric Modules and Assemblies. We supply a broad array of thermoelectric modules and related assemblies to various market segments. In the defense market, TEMs are used in guidance systems, smart weapons and night vision systems, as well as soldier cooling. TEMs are also used in products providing temperature stabilization for telecommunication lasers that generate and amplify optical signals for fiber optic communication systems. TEMs are also used in gesture recognition technology. We also produce and sell a variety of solutions from thermoelectric components to complete sub-assemblies used in the medical equipment market and other industrial and commercial applications. Thermoelectric modules, used as power generators, are also applied in a range of end-use applications. We offer single-stage TEMs, micro TEMs, multi-stage TEMs, planar multi-stage TEMs, extended life thermocyclers, thermoelectric thermal reference sources, power generators and thermoelectric assemblies.

Silicon Carbide. Our product offerings are 6H-SiC (semi-insulating) and 4H-SiC (semi-conducting) poly-types and are available in sizes up to 150 mm diameter. SiC substrates are used in wireless infrastructure, radio frequency (RF) electronics, power conversion and power switching industries.

Research, Development and Engineering

Our research and development program includes internally and externally funded research and development expenditures targeting an overall investment of between 5 and 7 percent of product revenues. From time to time, the ratio of externally funded contract activity to internally funded contract activity varies due to the unevenness of government research programs and changes in the focus of our internally funded research programs. We are committed to accepting the right mix of internally and externally funded research that ties closely to our long-term strategic objectives. The Company continues to expect externally funded research and development to decrease in the near term due to governmental budget constraints.

We devote significant resources to research, development and engineering programs directed at the continuous improvement of existing products and processes and to the timely development of new technologies, materials and products. We believe that our research, development and engineering activities are essential to our ability to establish and maintain a leadership position in each of the markets that we serve. As of June 30, 2012, we employed 713 people in research, development and engineering functions, 395 of whom are engineers or scientists. In addition, certain manufacturing personnel support or participate in research and development on an ongoing basis. Interaction between the development and manufacturing functions enhances the direction of projects, reduces costs and accelerates technology transfers.

During the fiscal year ended June 30, 2012, we focused our research and development investments in the following areas:

Silicon Carbide Substrate Technology: SiC substrate technology development efforts continue to move forward, with emphasis in the areas of defect density reduction, substrate fabrication, surface polishing and diameter expansion. In fiscal year 2012, we continued work on a new program funded by the Air Force Research Laboratory (AFRL) for development and manufacturing optimization of 100mm 150mm 4H (semi-conducting) SiC substrates for high power switching applications and 6H (semi-insulating) SiC substrates for RF applications. We became one of the first SiC producers in the world to introduce 150mm substrates for the power device markets. Our research and development efforts in all of these areas have been both internally and externally funded.

CVD Diamond Technology: The Company continues to develop CVD synthetic diamond materials for various optical applications including extreme ultra-violet (EUV) lithography. During fiscal year 2012, we began to commercially market our CVD synthetic diamond materials. Our research and development efforts in this area have been internally funded.

Photonics Design: We have ongoing efforts to design, refine and improve our photonic crystal materials, precision optical and micro optical parts, passive and active optical components and modules, components for fiber lasers and laser devices for instrumentation and display. Our research and development efforts in this area have been internally funded.

Thermoelectric Materials and Devices: We continue to develop the industry-leading Bi_2Te_3 Micro-Alloyed Materials (MAM) for thermoelectric cooling applications. Enabled by the thermal performance and fine grain microstructure of MAM, our research and development has focused on achieving levels of miniaturization and watt density beyond the reach of TEMs based on single crystal and polycrystalline materials produced by standard crystal growth techniques. In addition, we are developing capabilities in thermoelectric power generation materials that, combined with our intellectual property position, will allow us to bring to market new thermoelectric compounds. Our research and development efforts in this area have been both internally and externally funded.

The development of our products and manufacturing processes is largely based on proprietary technical know-how and expertise. We rely on a combination of contract provisions, trade secret laws, invention disclosures and patents to protect our proprietary rights. We have entered into selective intellectual property licensing agreements. When faced with potential infringement of our proprietary information, we have in the past and continue currently to assert and vigorously protect our intellectual property rights.

Internally funded research and development expenditures were $21.4 million, $16.1 million and $11.8 million for the fiscal years ended June 30, 2012, 2011 and 2010, respectively. For these same periods, the externally funded research and development expenditures were $7.0 million, $7.8 million and $7.0 million, respectively.

Marketing and Sales

We market our products through a direct sales force and through representatives and distributors around the world. Our market strategy is focused on understanding our customers requirements and building market awareness and acceptance of our products. New products are continually being produced and sold to our established customers in all markets.

Each of our subsidiaries is responsible for its own worldwide marketing and sales functions, although certain subsidiaries sell more than one product line. However, there is significant cooperation and coordination between our subsidiaries to utilize the most efficient and appropriate marketing channel when addressing the diverse applications within the markets. These subsidiaries and related product lines are as follows:

The Infrared Optics marketing and sales activities are handled through a direct sales force in the U.S. and through our wholly-owned subsidiaries in Japan, Germany, China, Singapore, Belgium, Switzerland, the U.K. and Italy as well as through distributors throughout the rest of the world.

The One-Micron Laser marketing and sales activities are handled through a direct sales force in the U.S., Japan, Germany, Italy and Belgium as well as through distributors throughout the rest of the world.

The Near-Infrared Optics segment markets its products through its direct sales force in the U.S., China, Europe, Japan and Australia, and through distributors throughout the rest of the world.

The Military Infrared Optics marketing and sales initiative is handled through a direct sales force in the U.S.

The Materials Processing and Refinement marketing and sales initiative is handled through a direct sales force in the Philippines and occasionally through non-exclusive distribution channels.

The Thermoelectric Modules marketing and sales initiative is handled through a direct sales force in the U.S., through our wholly-owned subsidiary in Germany, through direct sales forces co-located in II-VI offices in Japan, China and Singapore, as well as through distributors throughout the rest of the world.

The Silicon Carbide marketing and sales initiative is handled through a direct sales force in the U.S. and at our wholly-owned international subsidiaries.

Our sales forces develop effective communications with our OEM and end-user customers worldwide. Products are actively marketed through targeted mailings, telemarketing, select advertising, attendance at trade shows and customer partnerships. Our sales forces include a highly-trained team of application engineers to assist customers in designing, testing and qualifying our parts as key components of our customers systems. As of June 30, 2012, we employed 264 individuals in sales, marketing and support.

We do business with a number of customers in the defense industry, who in turn generally contract with a governmental entity, typically a U.S. Governmental agency. Most governmental programs are subject to funding approval and can be modified or terminated without warning by a legislative or administrative body. The discussion provided in the section on Risk Factors set forth in Item 1A of this Annual Report on Form 10-K related to our exposure to government markets is incorporated herein by reference.

Manufacturing Technology and Processes

As noted in the Our Strategy section, many of the products we produce depend on our ability to manufacture and refine technically challenging materials and components. The table below shows these key materials.

Product Line	Materials Produced/Refined
Infrared Optics	ZnSe, ZnS, ZnS-MS, CVD Synthetic Diamond
Near-Infrared Optics VLOC	YAG, YLF, and CaF_2
Near-Infrared Optics Photop	YVO_4, KTP and BBO
Near-Infrared Optics Aegis	a-Si
Military Infrared Optics	Ge
Materials Processing and Refinement	Se, Te and Rare Earth Elements
Thermoelectric Modules and Assemblies	Bi_2Te_3
Silicon Carbide Substrates	SiC

The ability to produce, process and refine these difficult materials and to control their quality and yields is an expertise of the Company. Processing these materials into finished products is also difficult to accomplish; yet the quality and reproducibility of these products are critical to the performance of our customers instruments and systems. In the markets we serve, there are a limited number of suppliers of many of the components we manufacture and there are very few industry-standard products.

Our network of worldwide manufacturing sites allows products to be produced in regions that provide cost-effective advantages and enable proximity to our customers. We employ numerous advanced manufacturing technologies and systems at our manufacturing facilities. These include automated Computer Numeric Control optical fabrication, high throughput thin-film coaters, micro-precision metrology and custom-engineered automated furnace controls for the crystal growth processes. Manufacturing products for use across the electro-magnetic spectrum requires the capability to repeatedly produce products with high yields to atomic tolerances. We embody a technology and quality mindset that gives our customers the confidence to utilize our products on a just-in-time basis straight into the heart of their production lines.

Export and Import Compliance

We are required to comply with various export/import control and economic sanctions laws, including:

The International Traffic in Arms Regulations (ITAR) administered by the U.S. Department of State, Directorate of Defense Trade Controls, which, among other things, imposes license requirements on the export from the United States of defense articles and defense services which are items specifically designed or adapted for a military application and/or listed on the United States Munitions List;

The Export Administration Regulations (EAR) administered by the U.S. Department of Commerce, Bureau of Industry and Security, which, among other things, imposes licensing requirements on the export or re-export of certain dual-use goods, technology and software which are items that potentially have both commercial and military applications;

The regulations administered by the U.S. Department of Treasury, Office of Foreign Assets Control, which implement economic sanctions imposed against designated countries, governments and persons based on United States foreign policy and national security considerations; and

The import regulatory activities of the U.S. Customs and Border Protection.

Foreign governments have also implemented similar export and import control regulations, which may affect our operations or transactions subject to their jurisdictions. The discussion provided in the section on Risk Factors set forth in Item 1A of this Annual Report Form 10-K related to our import and export compliance is incorporated herein by reference.

Sources of Supply

The major raw materials we use include zinc, selenium, zinc selenide, zinc sulfide, hydrogen selenide, hydrogen sulfide, tellurium, yttrium oxide, aluminum oxide, iridium, platinum, bismuth, silicon, thorium fluoride, antimony, carbon, gallium arsenide, copper, germanium, molybdenum, quartz, optical glass, diamond, and other materials. Excluding our own production, there are more than two external suppliers for all of the above materials except for ZnSe, ZnS, hydrogen selenide and thorium fluoride, for which there is only one proven source of supply outside of the Company s capabilities. For many materials, we have entered into purchase arrangements whereby suppliers provide discounts for annual volume purchases in excess of specified amounts.

The continued high-quality of and access to these materials is critical to the stability and predictability of our manufacturing yields. We conduct testing of materials at the onset of the production process. Additional research and capital investment may be needed to better define future starting material specifications. We have not experienced significant production delays due to shortages of materials. However, we do occasionally experience problems associated with vendor-supplied materials not meeting contract specifications for quality or purity. A significant failure of our suppliers to deliver sufficient quantities of necessary high-quality materials on a timely basis could have a materially adverse effect on the results of our operations.

Customers

Our existing customer base for infrared optics including our laser component products consists of over 6,000 customers worldwide. The main groups of customers for these products are as follows:

OEM and system integrators of industrial, medical and military laser systems. Representative customers include Trumpf, Inc., Bystronic, Inc. and Rofin-Sinar Technologies.

Laser end users who require replacement optics for their existing laser systems. Representative customers include Caterpillar, Inc. and Honda of America Mfg., Inc.

Military and aerospace customers who require products for use in advanced targeting, navigation and surveillance. Representative customers include Lockheed-Martin Corporation and Northrop Grumman Corporation.

For our one-micron laser products, our customers are automotive manufacturers, laser manufacturers and system integrators. Representative customers include Volkswagen Corporation and Laserline Gmbh.

For our near-infrared laser-based optics and crystal products, our customers are OEMs and system integrators of solid-state lasers used in industrial, scientific, military and medical markets. Representative customers include Northrop Grumman Corporation and Raytheon Company.

For our near-infrared high-volume optics, components and modules products our customers are system and sub-system integrators for telecommunications, data communications and cable TV, as well as manufacturers of commercial and consumer products such as instrumentation, fiber laser, display and projection devices. Representative customers include Huawei Technologies, Co., Ltd., Oclaro, Inc. and Corning Incorporated.

For our military infrared optics products, our customers are manufacturers of equipment and devices for aerospace, defense, medical and commercial markets. Representative customers include Lockheed-Martin Corporation, Raytheon Company and various U.S. Government agencies.

For our materials processing and refining products, our customers are manufacturers and developers of materials for industrial applications, including the manufacturing of steel and glass, the production of animal feeds and fertilizers and the manufacturing of infrared optics, thermoelectric modules and solar cells. Representative customers include 5NPlus, Inc. and Retorte Arubis Group.

For our thermoelectric products, our customers manufacture and develop equipment and devices for defense, space, telecommunications, medical, industrial, automotive, gesture recognition and commercial markets. Representative customers include Flextronics International, Bio-Rad Laboratories, Inc. and Raytheon Company.

For our SiC products, our customers are manufacturers and developers of equipment and devices for high-power RF electronics and high-power and high-voltage switching and power conversion systems for both the U.S. Department of Defense and commercial applications.

Competition

We believe that we are a significant producer of products and services in our addressed markets. In the area of infrared laser optics and materials, we believe we are an industry leader. We believe that we are an industry leader in laser material processing tools for high-power one-micron laser systems. We are a significant supplier of YAG rods and near-infrared laser optics to the worldwide markets for defense, scientific, research, medical and industrial applications. We are a leading photonics designer and integrated supplier of fiber optics, micro optics, precision optics, optical components, optical modules and photonics crystal materials for optical communications applications. We are a leading supplier of infrared optics used in complex military assemblies for targeting, navigation and thermal imaging systems to major military prime contractors. We believe we are a leading supplier of selenium and tellurium products for electronic, agricultural, photovoltaic and thermoelectric applications. We believe we are a global leader in the design and manufacturer of TEMs and thermal control assemblies. We believe we are a global leader in the manufacturing of single crystal semi-insulating SiC substrates for use in the defense and telecommunication markets, and a preferred alternative to the current leading supplier of SiC for industrial markets.

We compete on the basis of product technical specifications, quality, delivery time, technical support and pricing. Management believes that we compete favorably with respect to these factors and that our vertical integration, manufacturing facilities and equipment, experienced technical and manufacturing employees and worldwide marketing and distribution provide competitive advantages.

We have a number of present and potential competitors that are larger and have greater financial, selling, marketing or technical resources. Competitors producing infrared laser optics include Sumitomo Electric Industries, Ltd. and Newport Corporation. Competing producers of automated equipment and laser material processing tools to deliver high power one-micron laser systems include Optoskand AB and Precitec, Inc. Competing producers of YAG materials and optics include Northrop Grumman Corporation and CVI Melles Griot. Competing producers of optical component and optics products include O-Net Communications, OPLINK Communication and Axsun. Competing producers of infrared optics for military applications include DRS Technologies, Inc., Goodrich Corporation and in-house fabrication and thin film coating capabilities of major military customers. Competing producers of selenium and tellurium metals and other chemicals include Umicore and Vital Chemical. Competing producers of TEMs include Komatsu, Ltd., Laird Technologies and Ferrotec Corporation. Competing producers of single crystal SiC substrates include Cree, Inc., Dow Corning Corporation, Nippon Steel, Bridgestone and SiCrystal AG.

In addition to competitors who manufacture products similar to those we produce, there are other technologies or materials that can compete with our products.

Bookings and Backlog

We define our bookings as customer orders received that are expected to be converted to revenues over the next twelve months. For long-term customer orders, the Company records only those orders which are expected to be converted into revenues within twelve months from the end of the reporting period due to the inherent uncertainty of an order that far in the future. For the year ended June 30, 2012, our bookings, consisting of those bookings converted to revenues prior to year end, were approximately $535 million compared to bookings of approximately $520 million for the year ended June 30, 2011.

We define our backlog as bookings that have not been converted to revenues by the end of the reporting period. Bookings are adjusted if changes in customer demands or production schedules move a delivery beyond twelve months. As of June 30, 2012, our backlog was approximately $179 million compared to approximately $176 million at June 30, 2011.

Employees

As of June 30, 2012, we employed 6,030 persons worldwide. Of these employees, 713 were engaged in research, development and engineering, 4,557 in direct production (of which 1,304 employees of Photop in China work under contract manufacturing arrangements for customers of the Company) and the remaining balance of the Company s employees work in sales and marketing, administration, finance and support services. Our production staff includes highly skilled optical craftsmen. We have a long-standing practice of encouraging active employee participation in areas of operations management. We believe our relations with our employees are good. We reward our employees with incentive compensation based on achievement of performance goals. There are 125 employees located in the Philippines that are covered under a collective bargaining agreement.

Trade Secrets, Patents and Trademarks

We rely on our trade secrets, proprietary know-how, invention disclosures and patents to help us develop and maintain our competitive position. We have begun to aggressively pursue process and product patents in certain areas of our businesses. We have confidentiality and noncompetition agreements with certain personnel. We require that all U.S. employees sign a confidentiality and noncompetition agreement upon commencement of employment.

The processes and specialized equipment utilized in crystal growth, infrared materials fabrication and infrared optical coatings as developed by us are complex and difficult to duplicate. However, there can be no assurance that others will not develop or patent similar technology or that all aspects of our proprietary technology will be protected. Others have obtained patents covering a variety of infrared optical configurations and processes, and others could obtain patents covering technology similar to our technology. We may be required to obtain licenses under such patents, and there can be no assurance that we would be able to obtain such licenses, if required, on commercially reasonable terms, or that claims regarding rights to technology will not be asserted which may adversely affect our results of operations. In addition, our research and development contracts with agencies of the U.S. Government present a risk that project-specific technology could be disclosed to competitors as contract reporting requirements are fulfilled.

We currently hold registered tradenames and trademarks including the following representative listing:

II-VI Incorporated(TM) tradename

Infraready Optics(TM) tradename

MP-5(TM) tradename

Marlow Industries, Inc.(TM) tradename and trademark

Photop Technologies, Inc.(TM) tradename

VLOC Incorporated(TM) trademark

Aegis Lightwave, Inc.(TM) trademark

Item 1A. RISK FACTORS

The Company cautions investors that its performance and, therefore, any forward-looking statement is subject to risks and uncertainties. Various important factors including, but not limited to, the following may cause the Company s future results to differ materially from those projected in any forward-looking statement. You should carefully consider these factors, as well as the other information contained in this document when evaluating your investment in our securities.

General Economic Conditions May Adversely Affect Our Business, Operating Results and Financial Condition

Current and future conditions in the economy have an inherent degree of uncertainty. As a result, it is difficult to estimate the level of growth or contraction for the economy as a whole. It is even more difficult to estimate growth or contraction in various parts, sectors and regions of the economy, including industrial, military, telecommunication, photovoltaic and medical markets in which we participate. Because all components of our forecasting are dependent upon estimates of growth or contraction in the markets we serve and demand for our products, the prevailing economic uncertainties render estimates of future income and expenditures very difficult to make. In addition, changes in general economic conditions may affect industries in which our customers operate. These changes could include decreases in the rate of consumption or use of our customers products due to economic downturn. These conditions may have a material adverse effect on demand for our customers product and, in turn, on demand for our products. Adverse changes may occur in the future as a result of declining or flat global or regional economic conditions, fluctuations in currency and commodity prices, wavering confidence, capital expenditure reductions, unemployment, decline in stock markets, contraction of credit availability or other factors affecting economic conditions generally. For example, factors that may affect our operating results include disruptions to the credit and financial markets in the U.S., Europe and elsewhere; adverse effects of the ongoing sovereign debt crisis in Europe; contractions or limited growth in consumer spending or consumer credit; and adverse economic conditions that may be specific to the Internet, e-commerce and payments industries. These changes may negatively affect sales of products, increase exposure to losses from bad debt and commodity prices, and increase the cost and availability of financing and increase costs associated with manufacturing and distributing products. Any economic downturn or the failure to sustain the recent recovery from the global economic downturn could have a material adverse effect on our business, results of operations or financial condition.

Our Future Success Depends on International Sales and Management of Global Operations

Sales to customers in countries other than the U.S. accounted for approximately 60%, 59% and 49% of revenues during the years ended June 30, 2012, 2011 and 2010, respectively. We anticipate that international sales will continue to account for a significant portion of our revenues for the foreseeable future. In addition, we manufacture products in China, Singapore, Vietnam, the Philippines, Germany and Australia and maintain direct sales offices in Japan, Germany, Switzerland, the U.K., Belgium, China, Singapore and Italy. Sales and operations outside of the U.S. are subject to certain inherent risks, including fluctuations in the value of the U.S. dollar relative to foreign currencies, the current global economic uncertainties, tariffs, quotas, taxes and other market barriers, political and economic instability, restrictions on the export or import of technology, potentially limited intellectual property protection, difficulties in staffing and managing international operations and potentially adverse tax consequences. There can be no assurance that any of these factors will not have a material adverse effect on our business, results of operations or financial condition. In particular, currency exchange fluctuations in countries where we do business in the local currency could have a material adverse affect on our business, results of operations or financial condition by rendering us less price-competitive than foreign manufacturers. Our sales in Japan are denominated in Yen and, accordingly, are affected by fluctuations in the U.S. dollar/Yen currency exchange rates. We generally reduce our exposure to such fluctuations of the Yen through forward exchange agreements which target to hedge approximately 75% of our sales in Japan. We do not engage in the speculative trading of financial derivatives. There can be no assurance, however, that our practices will reduce or eliminate the risk of fluctuation of the U.S. dollar/Japanese Yen exchange rate.

Commodity Prices May Adversely Affect Our Results of Operations and Financial Condition

We are exposed to a variety of market risks, including the effects of changes in commodity prices. Our businesses purchase, produce and sell high purity tellurium, selenium and other raw materials based upon quoted market prices from minor metal exchanges. As a result, the negative impact from changes in commodity prices such as the recent decline in global tellurium and selenium prices, which may not be recovered in our product sales, could have a material adverse effect on our business, results of operations or financial condition. In the event that the global index price of tellurium or selenium experiences a further decline from its current level, the Company would be required to record an additional write-down of its tellurium or selenium inventory in future periods.

Continued U.S. Budget Deficits Could Result in Significant Defense Spending Cuts

Specific to the military business within our Infrared Optics, Near-Infrared Optics and Military & Materials segments, sales to customers in the defense industry totaled approximately 20% of revenues in the fiscal year ended June 30, 2012. These customers in turn generally contract with a governmental entity, typically a U.S. governmental agency. Continued record U.S. Federal budget deficits could result in significant pressure to reduce defense spending, which could result in delays and/or cancellations of major programs. Most governmental programs are subject to funding approval and can be modified or terminated with no warning upon the determination of a legislative or administrative body. The loss of or failure to obtain certain contracts or the loss of a major government customer could have a material adverse effect on our business, results of operations or financial condition.

A Significant Portion of Our Business is Dependent on Other Cyclical Industries

Our business is significantly dependent on the demand for products produced by end-users of industrial lasers and optical communication products. Many of these end-users are in industries that have historically experienced a highly cyclical demand for their products. As a result, demand for our products is subject to cyclical fluctuations. This cyclical demand could have a material adverse effect on our business, results of ope