



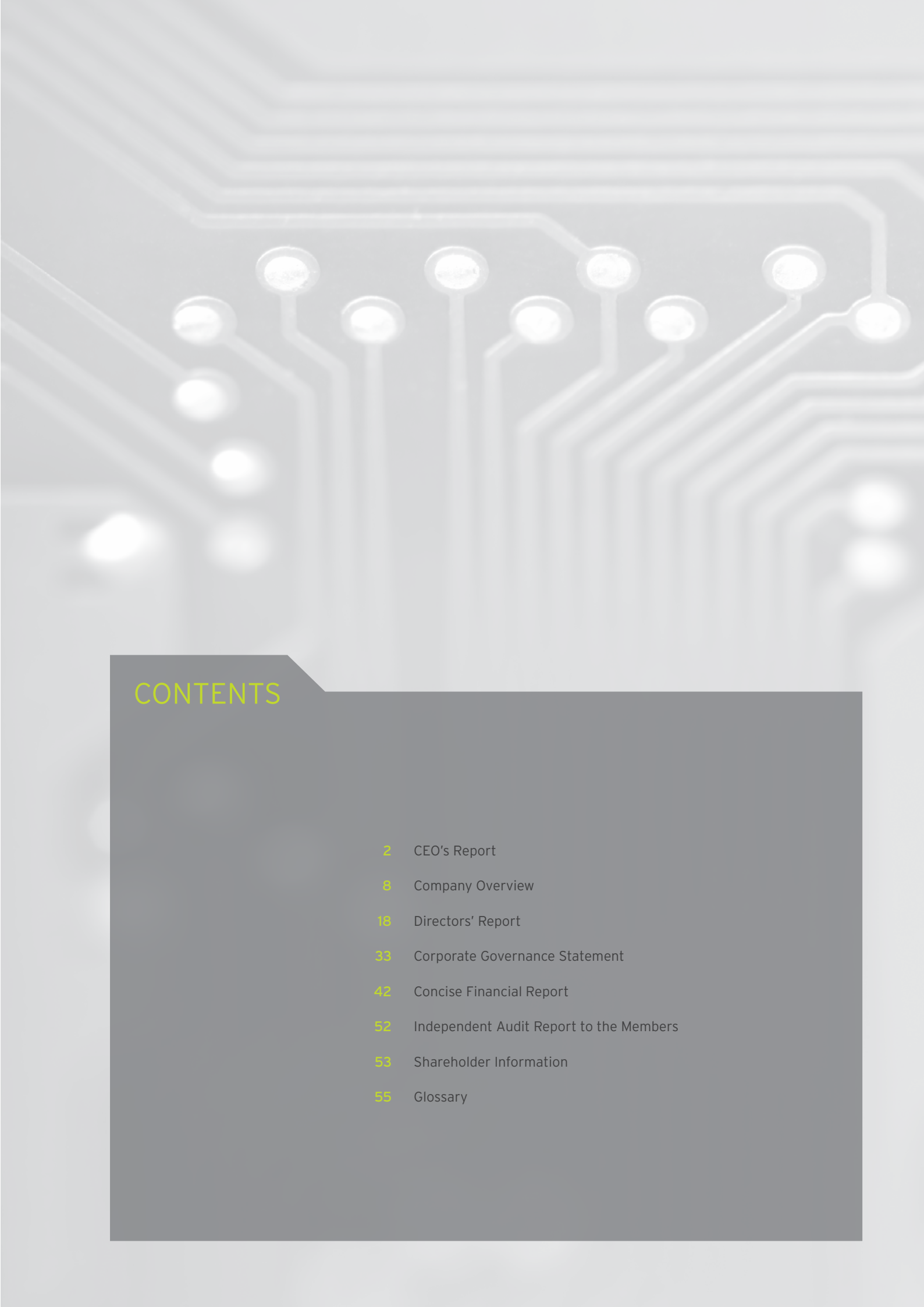
SILEX ANNUAL REPORT 2007



IMPORTANT NOTICE:

FORWARD LOOKING STATEMENTS AND BUSINESS RISKS:

Silex is a research and development company whose assets are its proprietary rights in technologies, including, but not limited to, the SILEX technology, Translucent technology and Fiberbyte technology. In general, the Company's technologies are in the development stage and have not been commercially deployed and are therefore high risk. Accordingly, the statements in this annual report regarding the future of the Company's technologies and commercial prospects are forward looking and actual results could be materially different from those expressed or implied by such forward looking statements as a result of various risk factors. Some risk factors that could affect future results and commercial prospects include, but are not limited to, results from the uranium enrichment development program and the stable isotopes program, the demand for enriched materials including uranium, silicon, oxygen, carbon and others, the outcomes of the Company's interests in the development of various semiconductor, photonic and alternative energy technologies, the time taken to develop various technologies, the development of competing technologies, the potential for third party claims against the Company's ownership of Intellectual Property associated with its numerous technologies, the potential impact of government regulations or policies, and the outcomes of various commercialisation strategies undertaken by the Company.



CONTENTS

2	CEO's Report
8	Company Overview
18	Directors' Report
33	Corporate Governance Statement
42	Concise Financial Report
52	Independent Audit Report to the Members
53	Shareholder Information
55	Glossary

1. THE PERIOD IN REVIEW

The year in review has been one of continuing steady progress in all projects. The highlight was the successful completion of the transfer of our uranium enrichment project from our Lucas Heights facility to GE's Nuclear Fuel Plant in Wilmington North Carolina, including the relocation of a dozen key Silex staff (with their families). As previously disclosed, under the agreement between Silex and GE signed in 2006, the SILEX Technology (the world's only third generation laser based enrichment process under development today) has been exclusively licensed to GE. The receipt of the initial payments from GE under this agreement has underpinned a profit of approximately \$8.8 million for the financial year to 30 June 2007.

Silex subsidiary Translucent Inc. has continued to make progress with its Solar Photovoltaic project, and will soon have its first prototype cells available for testing. Meanwhile, Silex's Adelaide based subsidiary, Fiberbyte Pty Ltd has continued to make good progress with its USB-inSync™ Technology with several products ready for market. We are hopeful that third-party discussions will lead to accelerated adoption of Fiberbyte's technology over the coming year. These and other project activities are discussed in the following sections.

As of the date of this report, Silex remains in a sound financial position with approximately \$21 million in cash reserves and around \$2 million in liabilities. The Company has reported a profit attributable to members of approximately \$8.8 million for the financial year ended 30 June 2007. The main contributions to this result include the Silex operating profit ~ \$16.2 million (resulting from the payments from GE), Fiberbyte's operating loss (~\$0.6 million), Translucent's operating loss (~\$6.4 million), and amortisation charges in Fiberbyte (\$0.4 million). The loss in each subsidiary is related to costs associated with the development of the Company's technologies and is in line with management's expectations.



2. OVERVIEW OF ACTIVITIES:

Silex is an advanced materials technology company developing the following two materials sets:

- Isotopically Engineered Materials (The SILEX Technology - uranium, silicon, oxygen, carbon)
- Band-Gap Engineered Materials (The Translucent Technology - solar, photonics, semiconductors, thermoelectrics)

These materials are being developed for application to two industry sectors:

- The Alternative Energy Sector (Uranium Enrichment, Solar Energy, Thermoelectric Energy)
- The Photonics & Semiconductor Sector (Silicon Photonics / Laser, Advanced Semiconductor Materials).

Advanced materials are proving to be of pivotal importance in both the Alternative Energy and Semiconductor/Photonics markets. Future progress in these industries is fundamentally dependent on materials innovation. We believe the technology initiatives currently underway at Silex and Translucent have the potential to satisfy several key requirements of such materials.

The primary focus of the Company's activities is currently on the following projects:

- The SILEX Uranium Enrichment Project
- Translucent High Efficiency Solar Cells
- Translucent Silicon Photonics

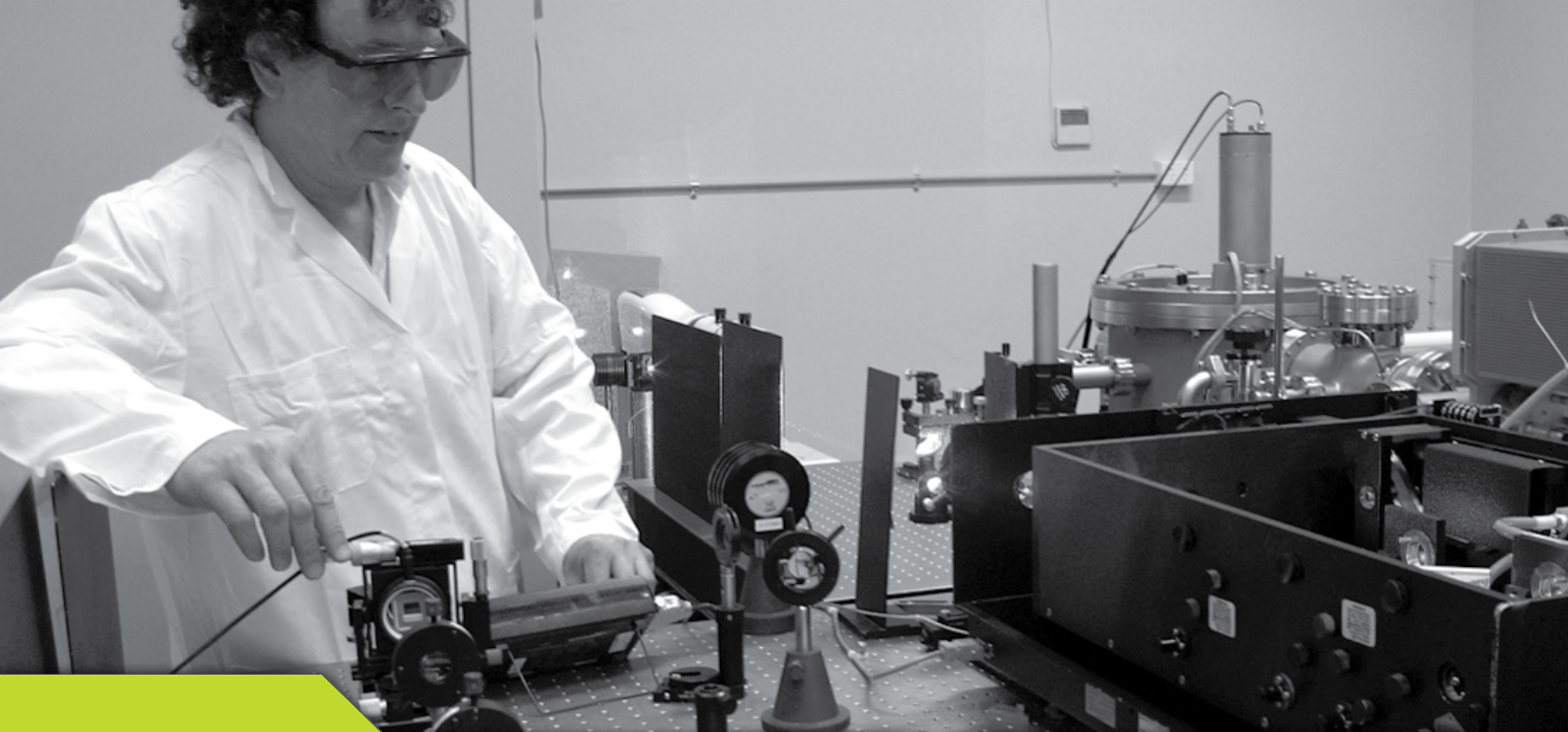
These and other activities are reviewed below.

Silex Enrichment Technology is currently the only third generation laser based enrichment process under development in the world.

3. THE SILEX URANIUM ENRICHMENT PROJECT

3.1 POSITIVE OUTLOOK FOR NUCLEAR POWER

The outlook for nuclear power in light of growing concerns over global climate change is increasingly positive. Many governments and organisations around the world consider nuclear power as one of the most significant means of reducing our reliance on fossil fuels and limiting greenhouse gas emissions while enabling access to abundant and affordable electricity. Increased uptake of nuclear power over the coming years will give rise to increasing demand for nuclear fuel services, including uranium enrichment. World Nuclear Association data (2005 Nuclear Fuel Market Report) indicates steadily increasing demand for enriched uranium in the short term and accelerating demand in the medium to long term. Additionally, a unique situation exists in the enrichment industry on the supply side, whereby up to 40% of the current supply base may not be available beyond 2013. Even with the construction of planned new centrifuge capacity, there could be a significant enrichment supply deficit in the 2015 time-frame and beyond. This represents a potential window of opportunity for the timely deployment of SILEX Enrichment Technology, which is currently the only third generation laser based enrichment process under development in the world.



GE-Hitachi plans to complete the Test Loop Program in late 2008 or early 2009, which if successful, would then open the way for the first commercial enrichment plant to be constructed in the US.

3.2 GE - HITACHI GLOBAL ALLIANCE

As reported by GE in June this year (refer GE Press Release 4 June 2007), GE and Hitachi Ltd of Japan have signed an agreement creating one of the world's most comprehensive nuclear power plant and services operations, called "GE-Hitachi Nuclear Energy". As a consequence, all activities related to the commercialisation of the SILEX Laser Enrichment technology will come under the GE-Hitachi alliance.

Hitachi will not participate directly in the technology or Test Loop project other than as an equity / financial partner. The GE-Hitachi alliance does not effect in any way, the commercial terms of the Commercialisation and License Agreement signed between Silex Systems and GE in 2006.

3.3 THE TEST LOOP PROGRAM - WILMINGTON, NORTH CAROLINA

The transfer of Test Loop activities from Silex's Lucas Heights laboratories in Sydney to the nuclear fuel plant co-located at GE-Hitachi's nuclear energy headquarters in Wilmington N.C. was recently completed. This includes the transfer of uranium enrichment test equipment to be re-deployed in the Test Loop facility, and the relocation of a team of 12 key Silex staff (scientists and engineers) who have joined up with a larger engineering team assembled by GE-Hitachi.

The combined team is now firmly focused on Test Loop activities including the following:

- Test Loop facility licensing activities with the US Nuclear Regulatory Commission.
- Installation of facility infrastructure and services at the Wilmington plant.
- Finalisation of Test Loop equipment designs and related procurement activities.
- Ongoing technical support for the Test Loop laser systems development under a contract awarded to a major US defense contractor.

The purpose of the Test Loop demonstration facility currently being built in Wilmington is to confirm and optimise plant-scale design parameters and demonstrate equipment reliability and process efficiency. GE-Hitachi plans to complete the Test Loop Program in late 2008 or early 2009, which if successful, would then open the way for the first commercial enrichment plant to be constructed in the US.

4. TRANSLUCENT HIGH EFFICIENCY SOLAR CELLS

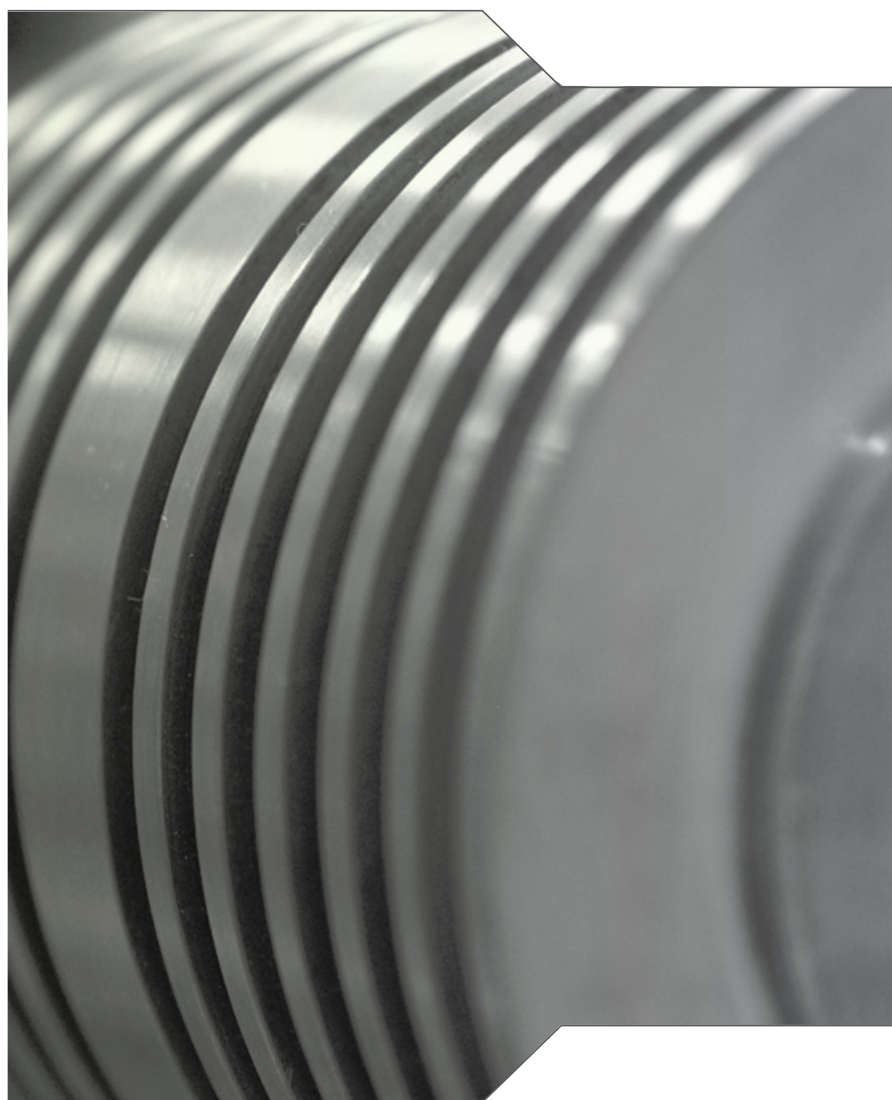
4.1 OVERVIEW

With ever-increasing concerns over greenhouse gas emissions and climate change world-wide, interest in Solar Energy has never been higher. However, whilst the Solar Energy industry undergoes unprecedented expansion, widespread utilization of Solar Energy technology has been hampered by inherently low efficiencies and high costs relative to conventional energy sources. Translucent's solar energy materials have the potential to significantly improve efficiency and drive costs lower.

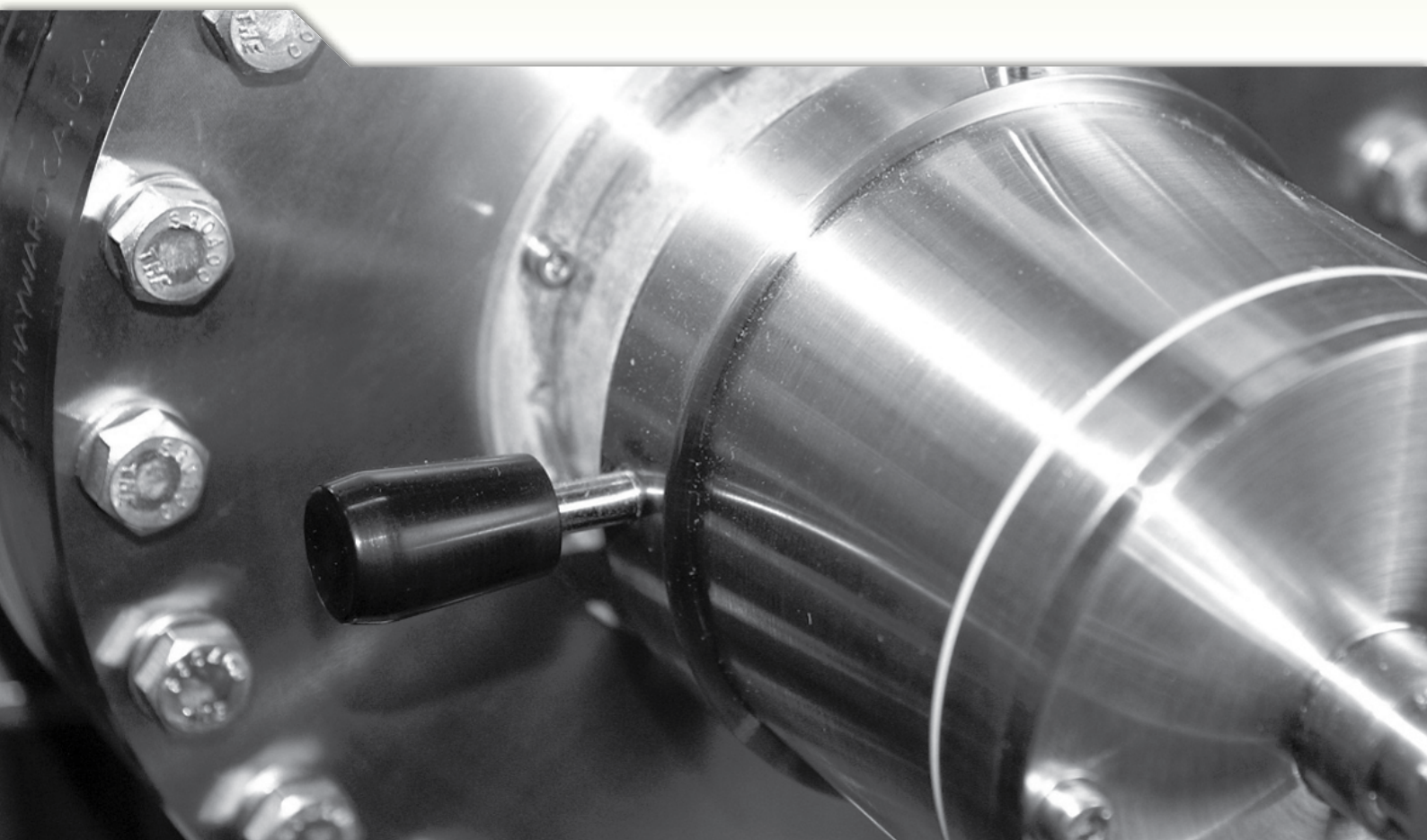
Over the past three decades, the solar industry has been based predominantly on crystalline silicon wafer 'single-junction' technology, with conversion efficiency in commercial solar cells inherently limited to approximately 20%. Over recent years there has been a move towards lower production costs via alternative 'thin film' solar technologies, however silicon based solar still accounts for around 93% of today's market (refer Solarbuzz website: www.solarbuzz.com).

Although thin film technologies offer lower production costs, their single-junction conversion efficiencies are generally lower (typically in the order of 5~10%), and their large scale deployment is still limited by uncertainties such as long term degradation and availability of materials (Indium and Tellurium), resulting in limited up-take of thin film technologies to date.

By contrast, Translucent's approach to solar is twofold: to develop new 'multiple-junction' thin film materials which have the potential to significantly increase conversion efficiency; and to investigate lower cost substrates which may potentially allow the Solar industry to move away from high cost silicon wafer substrates. Translucent's new solar materials, which were spawned out of its photonics materials project, have not previously been considered for application to solar energy conversion. With these factors in mind, Translucent has elevated its solar project to highest priority with a view to achieving industry validation of solar cell prototypes as soon as possible.



Translucent's approach to solar innovation is to develop high efficiency conversion materials and lower-cost non-silicon substrates, potentially driving down cost per watt for solar power.



4.2 SOLAR CELL PROJECT STATUS AND PLANS

Current activities in the solar project continue to focus on optimizing conversion materials and producing sets of prototype cells for third party testing and industry validation. This effort at Translucent's Palo Alto labs has progressed slower than hoped due to the small technical team available, but is expected to be completed within the next 6 months. With a view to addressing this situation whilst at the same time preparing for the transfer of the technology from development to pilot manufacturing, the Company has undertaken a recruitment effort to increase numbers. Consequently, the advancement of the solar cell project has now been strengthened by the recent addition of Dr Andrew Clark (VP - Operations and Manufacturing) and Dr Robin Smith (Director - Materials Engineering), who bring a vast amount of industry experience in product development and pilot manufacturing. We expect to make additional appointments to our technical team in due course.

To be commercially viable, the required materials processing must be scalable. With this in mind the company has designed and constructed a wafer processing module that is compatible with high volume semiconductor manufacturing and built to industry standards. Installation and commissioning will be complete by the end of Q1 in 2008.

Depending on the outcome of the validation process, a program for a solar cell pilot production line is planned for commencement in 2008. Ideally, the commercialisation phase for the technology might involve collaboration with an existing commercial solar manufacturer to reduce time to market. The objectives of the pilot production program will be to demonstrate the scalability of the manufacturing process to high volumes and to confirm the economics of the technology.

5. TRANSLUCENT SILICON PHOTONICS PROJECT

5.1 OVERVIEW

Translucent's 'optical silicon' invention is the original materials development project upon which the company was founded in 2001. The development of optically active silicon which is fully compatible with today's silicon chip fabrication techniques has been a long held objective of the semiconductor industry, and is becoming ever more critical to the continued progress of the silicon chip industry according to Moore's Law. In particular, the development of a silicon laser and optical amplifier (both requiring optical gain) and silicon optical interconnects scaleable to current and future nano-technology nodes is of fundamental importance to such progress.

We believe Translucent's optical silicon project is at the forefront of this field, and is moving steadily towards achieving a complete materials solution for full opto-electronic integration in the silicon CMOS industry.

The Translucent silicon project is part of the Electronics and Photonics Integrated Circuits (EPIC) Program funded by the US Defense Advanced Research Project Agency (DARPA). Under the DARPA Contract which commenced in January 2005, Translucent is funded to develop proprietary silicon-based optical gain materials and devices as part of the broader EPIC Program, details of which can be found at: www.darpa.mil/mto/epic/.

5.2 PROJECT STATUS

Translucent is currently continuing with Phase II milestones in this project, which will result in the demonstration of an electrically driven Silicon Optical Amplifier (SOA) prototype. The SOA device will potentially be used in CMOS compatible silicon-based optical interconnects and gain elements for planar lightwave circuits. As part of the DARPA EPIC program, Translucent is also collaborating with the Micro and Nano-Photonics Research Group (Painter Lab) at the California Institute of Technology (Caltech).

The Caltech Painter Lab (refer to link: <http://copilot.caltech.edu>) is integrating Translucent's optically active materials into their state-of-the-art optical microdisc resonators. This effort is anticipated to result in demonstration of optical amplifier and laser devices suitable for optical signal processing in 2008.

6. FIBERBYTE

Fiberbyte is an Adelaide-based subsidiary (90% owned by Silex) developing novel electronics equipment for the Data Acquisition (DAQ) and Electronics Instrumentation industries, incorporating its proprietary USB-inSync™ technology. In essence, Fiberbyte's USB-inSync™ technology transforms the ubiquitous USB connection bus from a 'dumb' connection to a 'smart', more powerful and synchronous bus with greatly improved capabilities and many more potential applications. The initial target market for this technology is the PC/laptop-based DAQ industry, estimated to be worth in excess of US\$100M p.a. and growing. Additional larger markets have been targeted for application of USB-inSync™ technology, in particular, the Test and Measurement (T&M) instrumentation market.

Fiberbyte recently released its third commercial product, and is actively developing additional products (refer Fiberbyte website: www.fiberbyte.com). Meanwhile, discussions with third parties active in the T&M and DAQ markets are continuing, with the aim of forming strategic partnerships to accelerate adoption of USB-inSync™ technology in key target markets.



Dr Michael Goldsworthy
CEO and Managing Director

28 September 2007

1. MISSION

To become a world leader in advanced materials solutions for Alternative Energy technologies and applications in the Semiconductor / Photonics industry.

2. HISTORICAL BACKGROUND

1988	Silex Systems Limited (Silex) was established as a research subsidiary of Sonic Healthcare Limited, an Australian Publicly listed company.
1990	Silex began researching the isotope separation ideas of the co-inventors Dr Michael Goldsworthy and Dr Horst Struve.
1992	The unique principles of the SILEX (Separation of Isotopes by Laser EXcitation) Process were established.
1994	'Proof of Principle' demonstration of the SILEX Process was achieved at the Company's laboratories at Lucas Heights, south of Sydney. SILEX is in principle a generic or core technology, and has a number of potential applications. The largest existing market - Uranium Enrichment (US\$5 billion per annum) became the initial focus of the Company.
1996	Silex was divested from Sonic and immediately set out to form an alliance with a participant in the uranium enrichment industry. An agreement for the development and licensing of SILEX Technology (exclusively for uranium), was reached with the United States Enrichment Corporation (USEC, Inc).
1998	Silex listed on the Australian Stock Exchange on 7 May 1998.
1999	An Agreement for Cooperation between the United States and Australian Governments was signed paving the way for continued development of the SILEX Technology for uranium enrichment, and facilitating its future transfer to the US.
2000	● The first milestone of the uranium enrichment program was successfully achieved, demonstrating macroscopic enrichment. ● The Stable Isotopes Program was launched to investigate the development of the SILEX Technology for application to silicon, oxygen and carbon enrichment. ● Silex won the 2000 Australian Technology Award for Excellence in the Manufacturing and Engineering sector. ● Silex secured a START Grant from the Australian Government to fund 50% of the SILEX Stable Isotope Program. ● Silex raised \$36 million to assist in funding the development of the Company's technology portfolio.

2001	- Silex moved further into the semiconductor technology field with the acquisition of a 30% interest in Translucent Inc, a Silicon Valley start-up developing silicon planar lightwave circuit technology for the photonics/optical communications industry. - The SILEX Technology was officially "Classified" by the US and Australian Governments. The implications of classification relate mainly to security protocols and protection of the IP associated with the technology.
2002	- Silex acquired a controlling interest in Fiberbyte Pty Ltd, Adelaide-based start-up developing novel technology for the electronics and optical communications industries. - The SILEX Uranium Enrichment Project achieved a key milestone with the first full demonstration of practical uranium enrichment using the SILEX 'Direct Measurement Facility'. - Silex signed a Collaboration Agreement with Sumitomo Mitsubishi Silicon Corporation (SUMCO), the world's second largest silicon wafer manufacturer, to test enriched silicon wafers for semiconductor applications.
2003	- USEC announced its withdrawal from the uranium project after funding it for 6 years. - Silex took a majority ownership in Translucent Inc, moving to ~ 70% interest (from 30%). Also increases its stake in Fiberbyte to 85% (from 51%). - The SILEX silicon project achieves a key demonstration milestone, with enrichment of silicon-28 to 99.9% (from ~92% natural assay). - Translucent achieves key milestone with demonstration of optical activity in silicon.
2004	- Translucent secured core US Patent for its 'optical silicon' invention. - Silex commissioned the world's first silicon laser enrichment pilot plant. - Translucent pursues key 'spin-off' technologies (Silicon-on-Insulator (SOI) substrates and 'high-k' dielectrics) with potential application to the silicon chip industry. Silex and Translucent agree on a ~US\$10M debt funding round to accelerate commercialisation efforts.
2005	- Translucent wins a 4-year US Defence Department DARPA Grant to help develop the 'optical silicon' technology, under DARPA's Electronics and Photonics Integrated Circuits (EPIC) Program. - Results of enriched silicon wafer tests conducted by SUMCO show modest improvements in overall semiconductor device performance. The project has been put on hold until market factors improve. - Subsidiary Fiberyte P/L wins a Federal Government "Commercial Ready Grant" for its novel 'USB-inSync™' Data Acquisition Technology (\$1.5M over two years). - Silex announced the successful completion of its Uranium Enrichment Technology Evaluation project, the results indicating attractive economics. Due Diligence reviews by several potential commercial partners commence later in the year after US Government approvals were received. - Translucent achieved a key milestone in its project to develop a silicon-based photonics material - the demonstration of 'electroluminescence' at room temperature - an important step in the quest to develop a silicon laser and optical interconnects.
2006	- Silex and the General Electric Company sign an exclusive Commercialisation and License Agreement for the SILEX Uranium Enrichment Technology in May, with US Government authorisations received in October. - Translucent files two provisional patents for the development of its advanced materials in Alternative Energy applications: Ultra high efficiency solar cells and thermoelectric energy conversion.
2007	The transfer of the SILEX Uranium Enrichment project to GE's Wilmington, North Carolina nuclear fuel plant was completed in the first half of 2007. This included equipment used in prior work, to be re-deployed in the Test Loop Program, and a team of 12 key Silex staff who joined with the recently formed GE team in Wilmington.

3. TECHNOLOGY OVERVIEW

OUR TECHNOLOGY - IN SUMMARY:

Two sets of unique advanced materials:

- (1) Isotopically Engineered Materials
(SILEX Technology)
- (2) Band Gap Engineered Materials
(Translucent Technology)

Applied to two Industry Sectors

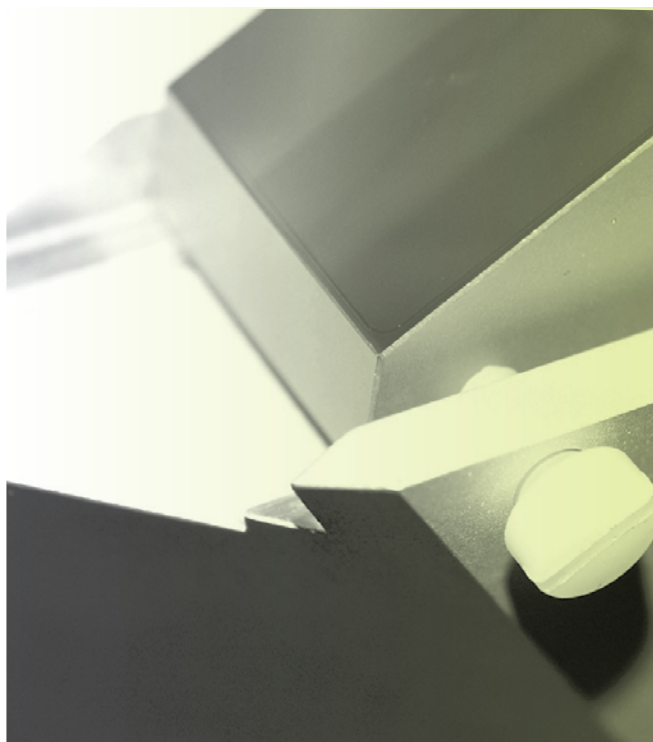
- Alternative Energy
(Uranium Enrichment, Solar Energy, Thermoelectric Power)
- Semiconductors / Photonics
(Optical Silicon, 'SOI', High-k')

4. THE SILEX TECHNOLOGY AND APPLICATIONS:

The SILEX Technology is a unique laser-based process which has the potential to efficiently separate the isotopes of various elements. By separating isotopes, materials with a different isotopic composition to the naturally occurring element can be created. These 'new' materials can exhibit unique properties and behavior, and provide added commercial value. In the case of uranium, the composition of the U-235 isotope is increased from 0.7% in its natural state to around 5% in the enriched state. Enrichment is necessary for uranium to work effectively in the production of energy in nuclear power reactors. Similarly, by enriching silicon, an ultra-pure form of silicon can be created which has unique properties that can potentially be exploited by the semiconductor industry.

Whilst there are other less efficient mechanical methods of enriching materials, the laser-based SILEX Process has a number of advantages, including relatively low operating costs and significantly lower capital costs compared to centrifuge technology. SILEX Technology is currently the only third generation laser-based enrichment technology under development today. Centrifuge, regarded as today's benchmark, is a second generation 'mechanical' technology.

The three main potential applications of the SILEX Technology are briefly outlined below. The status of the Company's activities in these areas has been detailed in the CEO's Report.



The laser-based SILEX Process has a number of advantages, including relatively low operating costs and significantly lower capital costs compared to centrifuge technology.

4.1 URANIUM ENRICHMENT

- THE NUCLEAR POWER INDUSTRY:

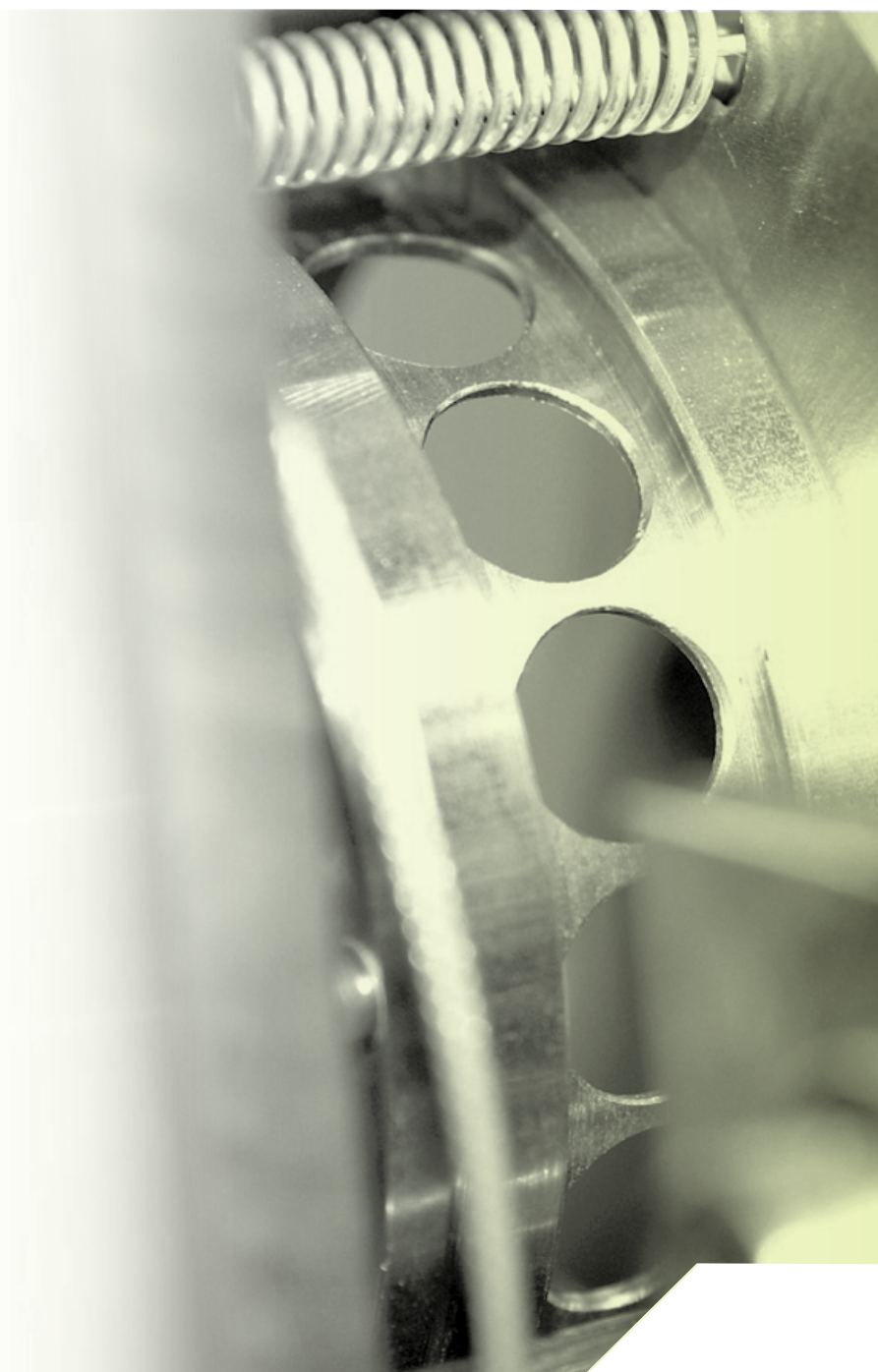
Historically, the Company's primary focus has been on the Uranium Enrichment application of the SILEX Technology. Uranium Enrichment is the key step in the production of fuel for nuclear power reactors. The global Nuclear Power industry currently provides approximately 16% of the world's electricity. The Uranium Enrichment market is currently worth approximately over US\$5 billion per annum. These figures are likely to increase with continuing economic development in Asia and the growing environmental problems associated with the use of fossil fuels, in particular global climate change caused by the emission of greenhouse gases. The Nuclear Power industry is currently experiencing a world-wide resurgence in popular support because of these environmental concerns. Nuclear power is the only large scale, cost effective base-load power source which is free of greenhouse gas emissions.

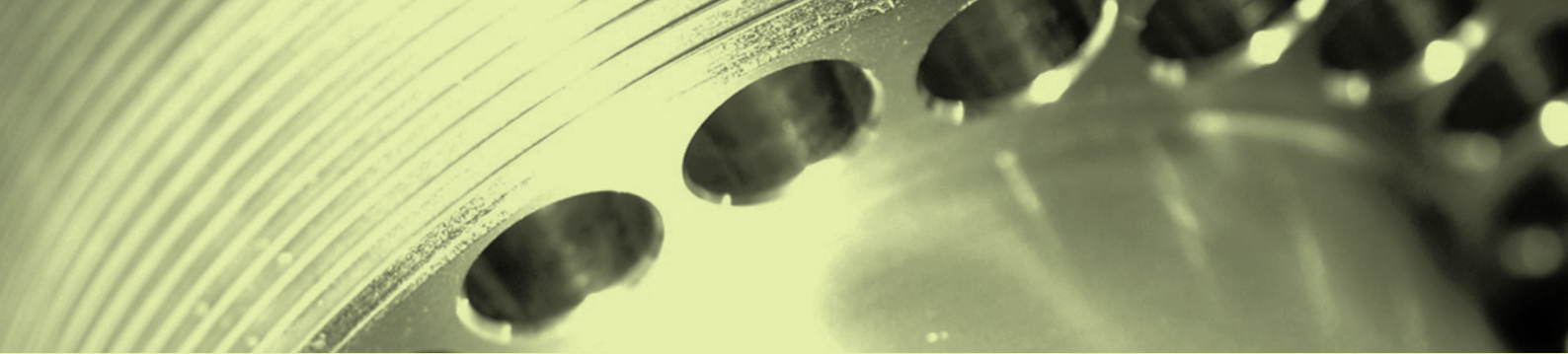
Enrichment is a technically difficult process, which constitutes a major component of nuclear fuel costs (approximately 40% of the total costs). Enrichment involves increasing the concentration of the 'active' U-235 isotope from 0.7% in natural uranium to approximately 5%. The work required to perform enrichment is measured in Separative Work Units (SWUs).

In order to facilitate the potential commercial deployment of SILEX Uranium Enrichment technology in the USA, an Agreement for Cooperation between the United States and Australia relating to the SILEX Technology was implemented and came into force in May 2000. In June 2001, the SILEX Technology was officially Classified by the US and Australian Governments, bringing the project formally under the security and regulatory protocols of each country. These regulatory arrangements are necessary to ensure an efficient technology transfer process whilst maintaining the strictest security safeguards over the Technology and the associated IP.

In May 2006, Silex and the General Electric Company (GE) signed a Commercialisation and License Agreement for the SILEX Uranium Enrichment Technology. Under the Agreement, the SILEX Technology (the world's only third generation laser-based enrichment process) has been exclusively licensed to GE for commercial deployment. With all necessary government approvals completed, the project development activities are now being accelerated at GE's nuclear fuel facility in Wilmington, North Carolina, USA.

The global Nuclear Power industry currently provides approximately 16% of the world's electricity.





THE KEY TERMS OF THE SILEX-GE AGREEMENT ARE AS FOLLOWS:

(i) SILEX Technology Development Program

Silex and GE have agreed to the following development activities, which GE will fund subject to the continued success of the SILEX Technology program:

- **Test Loop:** This program aims to test the efficiency of engineering-scale SILEX equipment, and is expected to be completed in late 2008 or early 2009.
- **Lead Cascade:** This program will involve the construction and operation of the first small production plant after successful completion of the Test Loop.

If the Lead Cascade confirms the efficiency and reliability expected of the SILEX Technology, then GE will continue with the deployment of commercial SILEX enrichment plants.

(ii) Payments

In addition to funding the technology development program GE will make the following payments to Silex:

- US\$5 million after receipt of preliminary U.S. Government approval (payment was made in June 06).
- US\$15 million on receipt of final Government approval (payment was made in October 06).
- US\$15 million upon successful completion of the Test Loop program.
- US\$20 million upon successful completion of the Lead Cascade program.

(iii) Royalty

Upon deployment of commercial SILEX uranium enrichment plants, and for as long as the SILEX Technology is used, Silex will receive:

- A base royalty of 7% of revenues generated from enrichment services using the SILEX Technology.
- An additional royalty of up to 5% (taking the total Royalty to a maximum of 12%) based on the total cost of deployment. The lower the cost of deployment, the higher the royalty.

4.2 SILICON ENRICHMENT - THE SEMICONDUCTOR INDUSTRY:

Today's silicon computer chips and electronic devices are reaching the limits of performance, dictated by technical barriers inherent in natural silicon material, principally speed limitations and heat build-up. In recent years, increasing interest has been shown in the manufacturing of semiconductors with a new generation of novel materials, such as those being developed by Translucent (refer Section 5) and isotopically enriched silicon, in order to help alleviate these problems. With regard to the latter, the Emerging Materials team from International Sematech, one of the semiconductor industry's leading international organisations, recently listed isotopically pure silicon in its 'International Technology Roadmap for Semiconductors - 2003' Report as one of the five technologies being evaluated for possible incorporation into the silicon industry road map tables.

The SILEX Technology has been successfully applied to silicon enrichment, with efficient and cost-effective production demonstrated in a state-of-the-art Pilot Plant facility at the Company's Lucas Heights Laboratories. However, these achievements, combined with the results of semiconductor device tests conducted by partner SUMCO, have not been met with satisfactory industry interest. Consequently, this work has been temporarily suspended in anticipation of future interest being generated as the abovementioned materials and heat dissipation issues inevitably worsen. Silex will continue to monitor this application with a view to re-activating its enriched silicon project should market interest increase.

4.3 MEDICAL DIAGNOSTIC APPLICATIONS

The isotopes of primary commercial interest for medical diagnostics are Oxygen-18 and Carbon-13. These and other isotopes form the basic materials used for bio-medical and in-vivo diagnostic procedures, including detection of cancer and organ disease. Modest but growing markets already exist for Carbon-13 ('urea breath test') and Oxygen-18 (raw material for PET medical imagers used in hospitals). There is consensus within industry that these markets

could potentially grow faster if a more economic source of production could be implemented. These isotopes are currently produced via a relatively expensive conventional technique known as cryogenic distillation. A test program to assess the feasibility of producing Oxygen-18 and Carbon-13 with SILEX Technology is currently underway at the Company's Lucas Heights laboratories in Sydney. The world market for Oxygen-18 is currently estimated to be more than US\$75M per annum, although Silex believes there is considerable potential for expansion with the rapid worldwide uptake of PET imaging technology. The Carbon-13 market is estimated to be at least US\$50 million per annum with growth driven by increasing uptake of the urea breath test.

5. TRANSLUCENT PHOTONICS AND SEMICONDUCTOR TECHNOLOGIES

5.1 SILICON PHOTONICS:

In April 2001, Silex invested in US-based semiconductor start-up Translucent Inc. to support the development of an invention in the field of photonic semiconductor technology known as Planar Lightwave Circuits (PLCs). Initial funding involved a 30% interest in Translucent, and a second funding round in late 2003 saw Silex move to a 70% majority interest.

The Translucent PLC has significant commercial potential because it aims to push low-cost silicon into the photonics arena (optical communications technology) for the first time, delivering significant cost and performance benefits. If successful, Translucent PLCs are initially expected to have broad application in the photonics semiconductor market, currently worth several US billion dollars per year. Translucent achieved the first key technical milestone in November 2003 with the successful demonstration of optical activity in silicon, and the second milestone in November 2005 with the demonstration of 'electroluminescence' in silicon at room temperature.

The Translucent PLC has significant commercial potential because it aims to push low-cost silicon into the photonics arena (optical communications technology) for the first time, delivering significant cost and performance benefits.

5.2 SOI AND 'HIGH-K' SEMICONDUCTOR MATERIALS:

During 2004, Translucent disclosed a 'spin-off' technology which evolved directly from the same class of silicon-based materials being developed for the photonics industry. These materials, initially described as 'Advanced Electronic Materials' (AEM's), include Silicon-on-Insulator (SOI) wafer substrates and 'high-k' dielectric materials. Both of these materials have the potential to help resolve key technical issues that have been identified by International Sematech (the world's leading semiconductor industry organisation) as future technology roadblocks to achieving roadmap targets (essentially the continuation of Moore's Law). Markets already exist for these materials, but have been constrained by the quality and effectiveness of those available. Recent disclosures by Intel and IBM indicate that suitable materials appear to be available to satisfy short term requirements, but it is not clear whether these materials (such as hafnium oxide) will be applicable beyond around 2010. The Company will be monitoring this situation whilst the primary focus remains on the solar and photonics projects. Accordingly, Translucent's current commercialisation strategy places a lower priority on these market segments.

6. TRANSLUCENT SOLAR ENERGY AND THERMOELECTRIC POWER TECHNOLOGIES

6.1 ULTRA HIGH EFFICIENCY SOLAR ENERGY CELLS:

For several decades, solar energy has been the great hope for environmentally clean renewable energy production. However, despite massive development efforts and billions of dollars investment, solar energy remains relatively expensive and heavily dependent on government subsidies or incentives. The key limiting factors in the development of solar energy technology are the performance of the photovoltaic conversion materials and the overall costs of production.

Approximately 93% of today's solar cell production is based on first-generation crystalline silicon (wafer) solar technology, with commercial efficiencies in the range of 15% to 20%. The remaining 7% is based on second-generation thin film technologies which, whilst having lower production costs, have commercial conversion efficiencies typically in the range of 5% to 10%. Today, cumulative solar energy production accounts for less than 0.01% of total Global Primary Energy demand. Despite these figures, the solar energy industry is undergoing rapid growth, driven primarily by Government sponsored programs. The solar (photovoltaics) market is today valued at over US\$11 billion p.a. and is expected to grow to \$50 billion p.a. by 2015.

Clearly innovation is required to enable solar energy to enter the mainstream energy markets without Government support. There appears to be two ways to achieve this: (i) materials innovation and (ii) scaling of production. We believe that the only means to achieve a meaningful breakthrough in solar cell technology is through materials innovation. In June 2006, Silex subsidiary Translucent Inc filed a Patent application for an innovative Solar Cell Technology that has evolved from the continued development of its core semiconductor materials. Translucent's materials-based innovation has the potential to improve the prospects for large-scale solar energy deployment through a reduction in manufacturing costs and an increase in solar cell conversion efficiency. The manufacturing process is based on deposition of thin active-layer semiconductor films on glass or other non-silicon substrates, therefore potentially relaxing the requirement for high-cost silicon substrates. We believe that these proprietary thin active-layer semiconductor films can be tailored to absorb and convert a far greater proportion of the solar energy spectrum than conventional solar cell technology, potentially providing much higher solar cell conversion efficiencies.

As discussed in the CEO's Report, Translucent is currently preparing for an industry validation program, with the hope of reaching the commercialisation phase for this technology within the next two years.

6.2 THERMOELECTRIC POWER TECHNOLOGY:

In July 2006, Translucent Inc filed a Patent application for an innovative Thermoelectric Power Technology that has evolved from the continued development of its core semiconductor materials. Thermoelectric power generation is a well-known effect through which thermal energy (heat) is directly converted into electricity without any intermediate working fluid (steam or gas), and without any moving parts (turbines and rotating generators). Although direct thermoelectric power generation has been utilised on a limited scale in niche applications for many years (for example, in space probe power packs), large scale commercial development for alternative energy production has not been economically viable due to inherent limitations (low efficiencies and high costs) of conventional thermoelectric materials currently available. Translucent's materials have the potential to provide a significant breakthrough in this respect.

Translucent's thermoelectric power concept is a direct result of the same materials development project that the company has been pursuing over the last five years for photonics applications. If successfully developed, Translucent's thermoelectric materials could be commercially deployed in many different formats, utilizing waste heat from sources such as car exhausts and coal or gas fired power plants to increase energy efficiency and total power output, or alternatively, utilizing dedicated heat sources such as nuclear plants and geothermal sources to generate electrical power efficiently without any moving parts and without any greenhouse gas emissions. The thermoelectric materials project is not currently being actively pursued due to resource constraints, but will hopefully be re-activated after the solar project achieves industry validation.

Translucent is currently preparing prototype solar cells for industry validation, which if successful, will hopefully lead to the commercialisation phase for this technology within the next two years.



7. FIBERBYTE

In September 2002, Silex acquired 51% in Fiberbyte Pty Ltd, an Adelaide-based company developing novel electronics products for the Data Acquisition and Optical Communications industries, incorporating its patent-pending 'USB-inSync' technology. In 2006, Silex moved to a 90% interest in Fiberbyte following a restructure in which the commercialisation strategy shifted in focus from the depressed Optical Communications market to the growing Data Acquisition market. In September 2005, Fiberbyte announced the launch of its first product with a third product released in 2007. The commercialisation of Fiberbyte's technology has been assisted by a Federal Government "Commercial Ready Grant" (\$1.2M over 2 years), awarded in April 2005.

The target market for Fiberbyte's initial range of products is the USB-based segment of the Data Acquisition market, currently worth approximately US\$100 million per annum. Beyond this, Fiberbyte's technology may in the future have application to additional segments of the broader Data Acquisition market, and to the billion-dollar electronics instrumentation industry.

Virtually every consumer product we use today has been manufactured and tested in plants using this type of equipment. Applications fall within the Test, Control and Automation areas, including the semiconductor, automotive and mining industries through to medical diagnostics and food processing. A large number of these applications require synchronous measurements and acquisition of data, and the ability to control processes and/or events with precise relative timing. Further information can be found on the Fiberbyte website (www.fiberbyte.com).

Discussions with third-parties active in the Test and Measurement and Data Acquisition markets are evolving, with the aim of forming strategic partnerships to accelerate adoption of USB-in Sync™ technology in key markets.



SILEX SYSTEMS LIMITED
& ITS CONTROLLED ENTITIES

ABN 69 003 372 067

FINANCIAL STATEMENTS FOR
THE YEAR ENDED 30 JUNE 2007

Your directors present their report on the consolidated entity consisting of Silex Systems Limited (Silex or the Company) and the entities it controlled at the end of, or during the year ended 30 June 2007.

1. DIRECTORS

The following persons were directors of Silex Systems Limited during the whole of the financial year and up to the date of this report:

Mr B S Patterson - Chairman
 Dr M P Goldsworthy - Managing Director
 Mr C D Wilks
 Dr C S Goldschmidt
 Mr R P Campbell

2. PRINCIPAL ACTIVITIES

During the year the principal continuing activity of the consolidated entity consisted of research and development of the laser isotope separation technology known as 'SILEX'. Silex also has a 70.3% fully diluted interest in Translucent Inc, a California based company which is researching and developing a solar energy conversion cell, a thermoelectric power technology, revolutionary silicon based materials and manufacturing technology for application to both the optical communications and mainstream computer chip industries.

In addition to these activities, the controlled entity Fiberbyte Pty Ltd (Fiberbyte) is developing data acquisition equipment utilising its proprietary USBinSync technology. Silex increased its interest in Fiberbyte from 89% to 90% during the year.

3. DIVIDEND

No dividend payments were made during the year. No dividend has been recommended or declared by the Board.

4. REVIEW OF OPERATIONS AND ACTIVITIES

TRADING RESULTS

A summary of consolidated revenue and results is set out below:

	2007	2006
	\$	\$
Revenue from ordinary activities	35,744,201	1,112,110
Profit/(loss) before tax	11,967,069	(10,260,336)
Income tax expense	(3,226,150)	-
Profit/(loss) after related income tax expense	8,740,919	(10,260,336)
Net (profit)/loss attributable to minority interest	26,502	(12,921)
Net profit/(loss) attributable to members of Silex Systems Limited	8,767,421	(10,273,257)

Comments on the operations and the results of those operations are set out below:

The increase in revenue is mainly due to revenue from the Uranium Project. In May 2006, Silex and General Electric signed a Commercialisation and License Agreement for the SILEX Uranium enrichment technology. The government approvals required before Silex was entitled to the up front payment from General Electric under the contract were received in October 2006. Revenue for the current year includes \$26,878,000 as an up front payment plus recoverable project costs of \$7,344,000 (both nil last year).

The improved result was mainly due to increased revenue. This was partly offset by higher costs. Income tax expense was \$3,226,150 compared to nil last year.

The Company's cash reserves are invested in bank bills/term deposits and the remainder as cash or deposits at call with banks.

5. EARNINGS PER SHARE

	2007	2006
	Cents	Cents
Basic earnings per share	6.4	(7.6)
Diluted earnings per share	6.3	(7.6)

6. SIGNIFICANT CHANGES IN STATE OF AFFAIRS

The significant changes in the state of affairs of the consolidated entity during the course of the year included the following:

- During the year the required government approvals were received for the Uranium Project Agreement with General Electric. As a consequence Silex received an up front payment of US\$20 million (US\$15 million cash and US\$5 million from settlement of a convertible promissory note). General Electric is reimbursing Silex for its costs on the Uranium Project.
- During the year the Company moved most of its Uranium project staff and equipment to the United States to work on the "Test Loop" project with General Electric.

7. MATTERS SUBSEQUENT TO THE END OF THE FINANCIAL YEAR

The directors are not aware of any matters or circumstances which are not otherwise dealt with in the financial statements that have significantly or may significantly affect the operations of the consolidated entity, the results of its operations or the state of the consolidated entity in subsequent years.

8. LIKELY DEVELOPMENTS AND EXPECTED RESULTS OF OPERATIONS

Silex is a research and development company with interests in a number of technology projects both in Australia and overseas. The Company's future prospects remain dependent on the outcome of those technical programs and the group's success in ultimately commercialising these technologies.

The Group's primary technologies are summarised below:

URANIUM ENRICHMENT PROGRAM

Silex is developing a novel method of enriching uranium using lasers. During the year, the required government approvals for the Agreement with General Electric were received. The majority of the Uranium project team moved to the US in the first half of 2007 to work on the test loop program with General Electric. If the test loop is successful, Silex will be entitled to a milestone payment of US\$15 million. Work would then commence on the next stage of the project.

STABLE ISOTOPE PROGRAM

Silex has been conducting a parallel Stable Isotope Program for several years with the aim of demonstrating cost-effective enrichment of stable isotopes such as silicon, carbon and oxygen. Enriched silicon has the potential to be used as a new material for the semiconductor industry. The unique properties of these enriched materials and the costs and benefits of using them have yet to be fully determined.

TRANSLUCENT INC

Silex has a 70.3% fully diluted interest in Translucent Inc, a California based company which is researching and developing a solar energy conversion cell, a thermoelectric power technology, revolutionary silicon based materials and manufacturing technology for application to both the optical communications and mainstream computer chip industries.

These technologies are still in the development phase. Future commercial prospects for the Translucent technology will depend on continued success with the technical program, third party validation of the technologies, sufficient protection of IP including Patents, and successful implementation of commercialisation strategies.

FIBERBYTE

Silex holds a 90% interest in Fiberbyte, an Adelaide based company with novel technology in the field of optical communications test and measurement equipment, and data acquisition technology. Fiberbyte is looking to form a commercial alliance with an industry player to accelerate the commercialisation of its innovative technology.

9. SHARE OPTIONS

SHARES UNDER OPTION

Unissued ordinary shares of Silex Systems Limited under option at the date of this report are as follows:

Number of options	Issue Price of shares	Grant date	Expiry date
115,000	\$0.55	12th November 2002	11th November 2007
225,000	\$0.65	9th September 2003	8th September 2008
100,000	\$0.65	11th November 2003	10th November 2008
119,000	\$0.95	3rd May 2004	2nd May 2009
240,000	\$0.85	4th May 2005	3rd May 2010
100,000	\$1.77	22nd November 2005	21st November 2010
3,400,000	\$3.60	22nd June 2006	21st June 2011
350,000	\$7.01	9th March 2007	8th March 2012
250,000	\$6.79	22nd August 2007	21st August 2012
4,899,000			

No option holder has any right under the option to participate in any other share issue of the Company or of any other entity. Between balance date and the date of this report 250,000 options were granted and these are included in the above table.

SHARES ISSUED ON THE EXERCISE OF OPTIONS

The following ordinary shares of Silex Systems Limited were issued during the year ended 30 June 2007 on the exercise of options granted under the Silex Systems Limited Employee Share Option Plan.

Date options granted	Issue price of shares	Number of shares issued
14th August 2002	\$0.73	227,000
9th September 2003	\$0.65	220,000
11th November 2003	\$0.65	250,000
3rd May 2004	\$0.95	275,000
8th July 2004	\$0.88	32,500
4th May 2005	\$0.85	443,000
		1,447,500

Between balance date and the date of this report, the following options were exercised resulting in the issue of 548,500 ordinary shares. These options have been excluded from the shares under option table above.

Date options exercised	Issue price of shares	Number of shares issued
9th July 2007	\$0.88	17,500
9th July 2007	\$0.85	140,000
26th July 2007	\$0.73	13,000
26th July 2007	\$0.95	21,000
26th July 2007	\$0.85	153,000
10th August 2007	\$0.85	120,000
30th August 2007	\$0.85	50,000
19th September 2007	\$0.85	34,000
		548,500

10. REMUNERATION REPORT

The remuneration report is set out under the following main headings:

- A Principles used to determine the nature and amounts of remuneration
- B Details of remuneration
- C Share based compensation
- D Additional information

The information provided under headings A-C include remuneration disclosures that are required under Accounting Standard AASB 124 Related Party Disclosures. These disclosures have been transferred from the financial report and have been audited. The disclosures in Section D are additional disclosures required by the Corporations Act 2001 and the Corporations Regulations 2001 which have not been audited.

A PRINCIPLES USED TO DETERMINE THE NATURE AND AMOUNT OF REMUNERATION(AUDITED)

The objective of the Company's executive reward framework is to ensure reward for performance is competitive. The framework aligns executive reward with achievement of strategic objectives and the creation of value for shareholders, and conforms with market best practice for delivery of reward. The Board ensures that executive reward satisfies the following key criteria for good reward governance practices:

- competitiveness and reasonableness
- acceptability to shareholders
- transparency

Alignment to shareholders' interests:

- focuses on sustained growth in share price as well as focusing the executive on key non-financial drivers of value
- attracts and retains high calibre executives.

Alignment to program participants' interest:

- rewards capability and experience
- reflects competitive reward for contribution to shareholder growth
- provides recognition for contribution.

The framework provides a blend of fixed pay and short and long-term incentives.

Directors' Fees

The current base remuneration was last reviewed with effect from 1 July 2006. Directors' fees are currently \$60,000 per director. Additional fees of \$5,000 per annum are also payable from 1 July 2006 for membership on the audit committee and \$5,000 per annum for the remuneration committee. Non -executive directors' fees are determined within an aggregate directors' fee pool limit, which is periodically recommended for approval by shareholders. The maximum non-executive directors' fees currently stands at \$350,000 per annum and was approved by shareholders at the Annual General Meeting on 1 December 2006.

Executive pay

The executive pay and reward framework has four components:

- base pay and benefits
- short-term performance incentives
- long-term incentives via the issue of share options, and
- other remuneration such as superannuation.

The combination of these comprises the executive's total remuneration.

Base pay

Executive salaries are structured as a total employment cost package which may be delivered as a mix of cash and prescribed non-financial benefits at the executives' discretion.

Executives are offered a competitive base pay that comprises the fixed component of pay and rewards. Base pay for senior executives is reviewed annually to ensure the executive's pay is competitive with the market. An executive's pay is also reviewed on promotion.

There are no guaranteed base pay increases fixed in any senior executives' contracts, or arrangements.

Benefits

Executives receive benefits including car allowances.

Retirement benefits

Retirement benefits are delivered under the Silex Systems Limited Superannuation Fund or an alternative fund of the executive's choice. These funds are accumulation funds.

Short-term incentives

At the discretion of the Board, if the Company achieves pre-determined targets set by the Board, then a pool of short-term incentive (STI) funds may be made available for executives and senior staff for allocation during the annual review, or other appropriate times.

A bonus of \$400,000 was approved for CEO Dr Michael Goldsworthy in October 2006 for his efforts in securing the Commercialisation and License Agreement with General Electric and the associated government approvals, which lead to the up front payment from General Electric in October 2006.

Brad Spillane was paid a bonus of \$60,000 in December 2006 for his efforts over the last five years with Silex and for his efforts in the helping the signing of the Commercialisation and License Agreement with GE.

B DETAILS OF REMUNERATION (AUDITED)

Details of the remuneration of the directors and the key management personnel (as defined in AASB 124 Related Party Disclosures) of Silex Systems Limited and the Silex Systems Limited Group are set out in the following tables.

KEY MANAGEMENT PERSONNEL OF SILEX SYSTEMS LIMITED AND THE SILEX GROUP

	Short-term employee benefits			Post- employment benefits	Long term benefits	Share-based payments	
	Cash salary and fees	Cash bonus	Non - monetary benefits	Superannuation	Long service leave	Options	Total
2007	\$	\$	\$	\$	\$	\$	\$
Executive directors							
Dr M P Goldsworthy	506,203	400,000	78,772	12,686	9,789	1,126,860	2,134,310
Mr C D Wilks	93,750	-	-	8,438	-	563,430	665,618
Non executive directors							
Dr C S Goldschmidt	65,000	-	-	5,850	-	-	70,850
Mr B S Patterson	70,000	-	-	6,300	-	-	76,300
Mr R P Campbell	15,000	-	-	61,300	-	-	76,300
Other key management personnel							
B J Spillane	120,217	60,000	11,278	12,686	2,316	70,620	277,117
Company Secretary and Financial Controller							
Total	870,170	460,000	90,050	107,260	12,105	1,760,910	3,300,495

	Short-term employee benefits			Post-employment benefits	Long term benefits	Share-based payments	
2006	Cash salary and fees	Cash bonus	Non - monetary benefits	Superannuation	Long service leave	Options	Total
Name	\$	\$	\$	\$	\$	\$	\$
Executive directors							
Dr M P Goldsworthy	415,007	200,000	28,057	12,139	51,675	27,786	734,664
Mr C D Wilks	77,960	-	-	7,016		13,893	98,869
Non executive directors							
Dr C S Goldschmidt	40,000	-	-	3,600	-	-	43,600
Mr B S Patterson	40,000	-	-	3,600	-	-	43,600
Mr R P Campbell	40,000	-	-	3,600	-	-	43,600
Other key management personnel							
B J Spillane Company Secretary and Financial Controller	93,844	-	10,815	8,446	1,330	32,503	146,938
Total	706,811	200,000	38,872	38,401	53,005	74,182	1,111,271

The relative proportions of remuneration that are linked to performance and those that are fixed are as follows:

Name	Fixed remuneration		At risk- STI		At risk - LTI	
	2007	2006	2007	2006	2007	2006
Executive directors						
Dr M P Goldsworthy	28.5%	69.0%	18.7%	27.2%	52.8%	3.8%
Mr C D Wilks	15.4%	85.9%	-	-	84.6%	14.1%
Other key management personnel						
B J Spillane	52.9%	77.9%	21.6%	-	25.5%	22.1%

There are no other senior managers/executives in the Group.

C SHARE-BASED COMPENSATION (AUDITED)

Options

Options are granted under the Silex Systems Limited Employee Option Plan to other key management personnel. Full time and part time staff of the consolidated entity are eligible to participate in the plan. Options are granted under the plan for no consideration. Options are granted for a five year period and vest 100% after two years. Options are also granted to executive directors. These are subject to shareholder approval, are granted for a five year period and vest 100% after two years.

DIRECTORS' REPORT

The terms and conditions of each grant of options affecting remuneration in the previous, this or future reporting periods are as follows:

Grant date	Expiry date	Exercise price	Value per option at grant date	Date exercisable
9 September 2003	8 September 2008	\$0.65	\$0.25	100% after 9 September 2005
3 May 2004	2 May 2009	\$0.95	\$0.29	100% after 3 May 2006
4 May 2005	3 May 2010	\$0.85	\$0.33	100% after 4 May 2007
22 November 2005	21 November 2010	\$1.77	\$0.95	100% after 22 November 2007
22 June 2006	21 June 2011	\$3.60	\$1.88	100% after 22 June 2008
9 March 2007	8 March 2012	\$7.01	\$3.26	100% after 9 March 2009

Options granted under the plan carry no dividend or voting rights. When exercisable, each option is convertible into one ordinary share.

The exercise price of options is based on the weighted average price at which the Company's shares are traded on the Australian Stock Exchange during the five days immediately before the options are granted, plus five cents.

Details of options over ordinary shares in the company provided to each director of Silex Systems Limited and each of the key management of the group are set out below. When exercisable, each option is converted into one ordinary share of Silex Systems Limited.

Name	Number of options granted during the year		Number of options vested during the year	
	2007	2006	2007	2006
Directors of Silex Systems Limited				
Dr M P Goldsworthy	-	1,200,000	-	-
Mr C D Wilks	-	600,000	-	-
Other key management personnel of the Group				
Mr B J Spillane	-	50,000	170,000	60,000

The assessed fair value at grant date of options granted to the individuals is allocated equally over the period from grant date to vesting date, and the amount is included in the remuneration tables. Fair values at grant date are independently determined using a Binomial option pricing model that takes into account the exercise price, the term of the option, the impact of dilution, the share price at grant date and expected price volatility of the underlying share, the expected dividend yield and the risk-free interest rate for the term of the option.

The model inputs for options granted during the year ended 30 June 2007 included:

- (a) options are granted for no consideration. 100% vests and are exercisable after two years of the date of grant
- (b) exercise price \$7.01 (2006: \$1.77 and \$3.60)
- (c) Grant date: 9 March 2007 (2006: 22 November 2005 and 22 June 2006)
- (d) Expiry date: 8 March 2012 (2006: 21 November 2010 and 21 June 2011)
- (e) Share price at grant date: \$7.36 (2006: \$1.79 and \$3.80)
- (f) Expected volatility of the Company's shares: 45% (2006: 60% and 55%)
- (g) Expected dividend yield: nil (2006: nil)
- (h) Risk-free interest rate: 6.5% (2006: 6%)

The minimum value of options issued during the year is nil. The maximum value of options issued during the year to directors and key management personnel is nil.

Shares provided on exercise of remuneration options

Details of ordinary shares in the Company provided as a result of the exercise of remuneration options to each director of Silex Systems Limited and other key management personnel of the Group are set out below:

Name	Number of ordinary shares issued on exercise of options during the year	
	2007	2006
Directors of Silex Systems Limited		
-	-	-
Other key management personnel of the Group		
B Spillane	87,000	22,000

The amounts paid per ordinary share by each director and other key management personnel on the exercise of options at the date of exercise were as follows:

Exercise date	Amount paid per share	Number of shares	Exercise date	Amount paid per share	Number of shares
15 September 2005	\$0.65	10,000	27 October 2006	\$0.73	5,000
4 October 2005	\$0.65	10,000	30 November 2006	\$0.73	5,000
27 February 2006	\$0.73	1,000	30 November 2006	\$0.65	10,000
21 March 2006	\$0.73	1,000	12 December 2006	\$0.65	10,000
11 July 2006	\$0.73	2,000	1 February 2007	\$0.95	10,000
11 August 2006	\$0.73	2,000	29 March 2007	\$0.95	10,000
30 August 2006	\$0.73	20,000	9 May 2007	\$0.85	10,000
13 September 2006	\$0.73	3,000			

No amounts are unpaid on any shares issued on the exercise of options.

D ADDITIONAL INFORMATION - UNAUDITED

Principles used to determine the nature and amount of remuneration: relationship between remuneration and company performance

The overall level of executive reward takes into account the performance of the Group over a number of years, with greater emphasis given to the current and prior year.

Details of remuneration: cash bonuses and options

For each cash bonus and grant of options included in the tables on pages 22 to 24, the percentage of the available bonus or grant that was paid, or that vested is set out below. The maximum value of options to vest is based on the value determined using the binomial model taking the value calculated as at grant date.

	Cash bonus		Options					
	Paid	Forfeited	Financial Year granted	Vested	Forfeited	Financial years in which options may vest	Minimum total value of grant yet to vest	Maximum total value of grant to vest
Name	%	%		%	%		\$	\$
Dr M P Goldsworthy	100	-	Y/E 30/6/2006	-	-	30/06/2008	Nil	2,253,720
Mr C D Wilks	N/A	N/A	Y/E 30/6/2006	-	-	30/06/2008	Nil	1,126,860
Mr B J Spillane	100	-	Y/E 30/6/2004	100	-	N/A	N/A	N/A
			Y/E 30/6/2005	100	-	N/A	N/A	N/A
			Y/E 30/6/2006	-	-	30/06/2008	Nil	93,905

Further details relating to options are set out below:

Name	A Remuneration consisting of options	B Value at grant date	C Value at exercise date	D Value at lapse date	E Total of columns B-D
		\$	\$	\$	\$
Dr M P Goldsworthy	52.8%	-	N/A	-	-
Mr C D Wilks	84.6%	-	N/A	-	-
Mr B J Spillane	25.5%	-	480,300	N/A	480,300

A = The percentage of the value of remuneration consisting of options, based on the value of options expensed during the current year.

B = The value at grant date calculated in accordance with AASB 2 Share Based Payments of options granted during the year as part of remuneration.

C = The value at exercise date of options that were granted as part of remuneration and were exercised during the year.

D = The value at lapse date of options that were granted as part of remuneration and that lapsed during the year.

SHARE OPTIONS GRANTED TO DIRECTORS AND THE MOST HIGHLY REMUNERATED OFFICERS

No options over unissued ordinary shares of Silex Systems Limited were granted during or since the end of the financial year to the most highly remunerated officers of the Company as part of their remuneration.

No options have been granted since the end of the year.

OTHER EXECUTIVES OF THE CONSOLIDATED ENTITY

There are no officers, other than Executive Directors and Executives noted above, involved in, concerned in, or taking part in, the management of the commercial affairs of Silex Systems Limited.

PERFORMANCE OF SILEX SYSTEMS LIMITED

Year ended 30 June	EPS Cents	STI \$	Share price at 30 June \$
2003	(3.2)	-	0.39
2004	(6.9)	-	0.82
2005	(7.6)	-	1.11
2006	(7.6)	200,000	4.08
2007	6.4	460,000	12.49

The improvement in the earnings per share in the current year, due largely to the Uranium Project revenue, has been reflected in a higher share price. The share price has increased significantly between when the agreement with General Electric was announced in May 2006 and 30 June 2007. The share price has increased over the last 5 years as progress has been made on the Company's projects and increased interest in the Company has been generated in the market. Progress on the projects has not directly been reflected in EPS as the projects are still in the research and development phase and, apart from the Uranium Project, are yet to generate substantial revenue. Until 30 June 2005, earnings per share were calculated in accordance with Australian GAAP as opposed to Australian Equivalents to International Financial Reporting Standards (AIFRS). The STI's in the last 2 years are related to the progress made on the Uranium Project.

11. INFORMATION ON DIRECTORS

A) DIRECTORS' PROFILES

Mr Barry Patterson

ASMM, MIMM, FAICD

Chairman - non executive

Experience and expertise

Mr Patterson has a corporate mining background, but in more recent years has held directorial positions in a number of both public and private companies. He is a major shareholder in Silex through his interest in Polly Pty Ltd.

Other current directorships

Non-executive director of Sonic Healthcare Limited since 1993.

Former directorships in last 3 years

Non executive director of National 1 Limited from June 2003 to July 2004.

Special responsibilities

Chairman of the Board

Member of audit committee

Chairman of remuneration committee

Dr Michael Goldsworthy

BSc (Hons), MSc, PhD, FAIP

Managing Director/CEO - Executive

Experience and expertise

Dr Goldsworthy received his PhD in Physics from The University of New South Wales. Prior to starting with Silex Systems Limited in 1988, Dr Goldsworthy was a member of the University's academic staff and was involved in a number of laser-associated research projects. Dr Goldsworthy is the founder of the Company and has been the driving force behind the SILEX project, and the establishment of the consolidated entity's extensive interests in solar, semiconductor and photonics technologies.

Other current directorships

None

Former directorships in last 3 years

None

Special responsibilities

Managing Director

Mr Christopher Wilks

BComm, ASA, FCIS, FCIM, FAICD

Director - executive

Experience and expertise

Mr Wilks is responsible for financial oversight and corporate development of Silex. Mr Wilks has a background in chartered accounting and investment banking. He was previously a partner in a private investment bank and has held positions on the board of a number of public companies.

Other current directorships

Executive director of Sonic Healthcare Limited since 1989, and non-executive director of Independent Practitioner Network Limited since August 2005.

Former directorships in last 3 years

Non executive director of SciGen Limited from 1999 to October 2005.

Special responsibilities

Company secretary until his resignation as company secretary on 19 September 2007.

Dr Colin Goldschmidt

MB BCh, FRCPA, FAICD

Non-executive

Experience and expertise

Dr Goldschmidt is the CEO and Managing Director of Sonic Healthcare Limited. He was appointed to this role in 1993 and has overseen Sonic's growth within Australia and its expansion into the UK, Europe and the USA. He joined Sonic in 1987 as a pathologist, after completing his Australian Pathology Fellowship training in Sydney in 1986.

Other current directorships

Managing Director of Sonic Healthcare Limited since 1993, and non-executive director of Independent Practitioner Network Limited since August 2005.

Former directorships in last 3 years

Non-executive director of SciGen Ltd from 1999 to October 2005.

Special responsibilities

Member of audit committee

Mr Peter Campbell

FCA, FTIA, FAICD

Non-executive

Experience and expertise

Mr Campbell is a Chartered Accountant with his own practice based in Sydney. He is a Fellow of both the Institute of Chartered Accountants in Australia and the Taxation Institute of Australia and is a registered Company Auditor.

Other current directorships

Non-executive director of Sonic Healthcare Limited since 1993, non-executive director of Admerex Limited since January 2007 and non-executive director of QRxPharma Limited since April 2007.

Former directorships in last 3 years

Non-executive director of SciGen Ltd from 1999 to February 2005.

Special responsibilities

Chairman of audit committee

Member of remuneration committee

B) DIRECTORS' INTERESTS IN SHARES AND OPTIONS AS AT THE DATE OF THIS REPORT

Director's name	Class of shares	No. of shares	Share options
B S Patterson	Ordinary	4,073,863	-
M P Goldsworthy	Ordinary	6,049,533	1,200,000
C D Wilks	Ordinary	2,894,021	600,000
C S Goldschmidt	Ordinary	2,625,937	-
R P Campbell	Ordinary	1,354,823	-

12. COMPANY SECRETARIES

B J Spillane, B.Comm, CA was appointed to the position of company secretary in 2003. Mr Spillane has been Financial Controller of Silex since he joined the Company in 2001. Before joining Silex Systems Limited he was a Financial Accountant in the building products industry for ten years and prior to that an auditor for five years.

Mr Wilks BComm, ASA, FCIS, FCIM, FAICD has held a number of directorial positions with Australian public companies and has a background in investment banking. He resigned as company secretary on 19 September 2007 but remains a director of the Company.

13. MEETINGS

The number of Directors' meetings held during the financial year and the number of meetings attended by each director are set out in the following table:

Director's name	Directors' Meetings		Audit Committee Meetings		Remuneration Committee Meetings	
	Number Held	Number Attended	Number Held	Number Attended	Number Held	Number Attended
B S Patterson	9	9	2	2	1	1
M P Goldsworthy	9	9	-	-	-	-
C D Wilks	9	9	-	-	-	-
C S Goldschmidt	9	9	2	2	-	-
R P Campbell	9	8	2	2	1	1

14. INDEMNIFICATION AND INSURANCE OF DIRECTORS

The Company has entered into agreements to indemnify the Directors of the Company against all liabilities to persons (other than the Company or related body corporate) which arise out of the performance of their normal duties as Directors or Executive Officers unless the liability relates to conduct involving lack of good faith. The Company has agreed to indemnify the Directors and Executive Officers against all costs and expenses incurred in defending an action that falls within the scope of the indemnity.

The Directors' and Officers' liability insurance provides cover against all costs and expenses involved in defending legal actions and any resulting payments arising from a liability to persons (other than the Company) incurred in their position as a Director or Executive Officer unless the conduct involves a wilful breach of duty or an improper use of inside information or position to gain advantage. The insurance policy does not allow specific disclosure of the nature of the liabilities insured against or the premium paid under the policy.

15. ENVIRONMENTAL REGULATION

The Company is subject to the environmental and health and safety regulations applicable to tenants of the Lucas Heights Science and Technology Centre. The Company is also bound by the rules and regulations set out in the Australian Radiation Protection and Nuclear Safety Act, 1998, and is a licensee under the Act.

To the best of the Directors' knowledge, all environmental and health and safety regulatory requirements have been met and there have been no claims made during the financial year.

16. NON-AUDIT SERVICES

The company may decide to employ the auditor on assignments additional to their statutory audit duties where the auditor's expertise and experience with the company and/or the consolidated entity are important.

Details of the amounts paid or payable to the auditor (PricewaterhouseCoopers) for audit and non-audit services provided during the year are set out below.

The board of directors has considered the position and, in accordance with the advice received from the audit committee is satisfied that the provision of the non-audit services is compatible with the general standard of independence for auditors imposed by the Corporations Act 2001. The directors are satisfied that the provision of non-audit services by the auditor, as set out below, did not compromise the auditor independence requirements of the Corporations Act 2001 for the following reasons:

- All non-audit services have been reviewed by the audit committee to ensure they do not impact the impartiality and objectivity of the auditor
- None of the services undermine the general principles relating to auditor independence as set out in Professional Statement F1, including reviewing or auditing the auditor's own work, acting in a management or a decision-making capacity for the company, acting as advocate for the company or jointly sharing economic risk and rewards.

During the year the following fees were paid or payable for services provided by the auditor of the parent company, its related practices and non-related audit firms

	Consolidated	
	2007	2006
Remuneration of auditors	\$	\$
During the year the following fees were paid or payable for services provided by the auditor of the parent entity, its related practices and non-audit firms:		
(a) Assurance services		
Audit services		
PricewaterhouseCoopers Australian firm		
Audit and review of financial reports and other audit work under the Corporations Act 2001	105,812	78,383
Total remuneration for audit services	105,812	78,383
Other assurance services		
PricewaterhouseCoopers Australian firm		
IFRS accounting services	-	6,000
Audit of government grants	3,000	2,500
Total remuneration for other assurance services	3,000	8,500
Total remuneration for assurance services	108,812	86,883
(b) Taxation services		
PricewaterhouseCoopers Australian firm		
Training course fees	718	-
Total remuneration for taxation services	718	-
(c) Advisory services		
PricewaterhouseCoopers Australian firm		
Corporate finance advice	-	-
Total remuneration for advisory services	-	-
Total remuneration	109,530	86,883

17. AUDITORS

PricewaterhouseCoopers continues in office in accordance with section 327 of the *Corporations Act 2001*.

18. AUDITORS' INDEPENDENCE DECLARATION

A copy of the auditors' independence declaration as required under section 307C of the *Corporations Act 2001* is set out on page 32.



Dr M P Goldsworthy
Managing Director



C D Wilks
Director

Sydney
27 September 2007

AUDITORS' INDEPENDENCE DECLARATION

As lead auditor for the audit of Silex Systems Limited for the year ended 30 June 2007, I declare that to the best of my knowledge and belief, there have been:

- a) no contraventions of the auditor independence requirements of the *Corporations Act 2001* in relation to the audit; and
- b) no contraventions of any applicable code of professional conduct in relation to the audit.

This declaration is in respect of Silex Systems Limited and the entities it controlled during the period.



Andrew Sneddon
Partner
PricewaterhouseCoopers

Sydney
27 September 2007

Liability limited by a scheme approved under Professional Standards Legislation

CORPORATE GOVERNANCE STATEMENT

Silex Systems Limited (the Company) and the board are committed to achieving and demonstrating the highest standards of corporate governance.

The directors are responsible to the shareholders for the performance of the Company in both the short and the longer term and seek to balance sometimes competing objectives in the best interests of the Group as a whole. Their focus is to enhance the interests of shareholders and other key stakeholders and to ensure the Group is properly managed.

Day to day management of the Group's affairs and the implementation of the corporate strategy and policy initiatives are formally delegated by the board to the Managing Director and senior executives.

A description of the Company's main corporate governance practices is set out below. All these practices, unless otherwise stated, were in place for the entire year.

1. ROLE OF THE BOARD OF DIRECTORS

The board of directors is accountable to shareholders for the performance of the Group and is responsible for the corporate governance practices of the Group.

The board's principal objective is to maintain and increase shareholder value while ensuring that the Group's overall activities are properly managed.

Silex's corporate governance practices provide the structure which enables the board's principal objective to be achieved, whilst ensuring that the business and affairs of the group are conducted ethically and in accordance with the law.

The board's overall responsibilities include:

- providing strategic direction and approving corporate strategies;
- monitoring management and financial performance and reporting;
- monitoring and ensuring the maintenance of adequate risk management controls and reporting mechanisms, and
- ensuring the business is conducted ethically and transparently.

The board delegates responsibility for day-to-day management of the business to the Managing Director. The Managing Director also oversees the implementation of strategies approved by the board. The board uses committees to support it in matters that require more intensive review and involvement. Details of the board committees are provided below.

As part of its commitment to good corporate governance, the board undertakes regular reviews of the practices and standards governing the board's composition, independence and effectiveness, the accountability and compensation of directors and the board's responsibility for the stewardship of the Group.

2. COMPOSITION OF THE BOARD

The board is comprised of both executive and non-executive directors with a majority of non-executive directors. Non-executive directors bring a balanced perspective to the board's consideration of strategic, risk and performance matters and are best placed to exercise independent judgement and review and constructively challenge the performance of management.

The Chairman is an independent non-executive director, the majority of the board are independent of management and all directors are required to bring independent judgement to bear in their board decision making. The Chairman is elected by the full board.

The Company maintains a mix of directors on the board from different backgrounds with complementary skills and experience.

The board undertakes an annual board performance review and considers the appropriate mix of skills required by the board to maximise its effectiveness and its contribution to the Group.

3. BOARD MEMBERS

The Directors of the Company in office at the date of this statement are:

Name	Age	Position	Expertise
Dr M P Goldsworthy	49	Managing Director/CEO	Physicist and Co-inventor of the SILEX Technology
Mr C D Wilks	49	Director	Investment Banking, Finance and Company Management
Dr C S Goldschmidt	53	Non-executive Director	Company Management
Mr B S Patterson	66	Non-executive Director/Chairman	Company Management
Mr R P Campbell	62	Non-executive Director	Finance and Accounting, Computing and Company Management

All of Silex's non-executive directors, including the Chairman, are considered independent. An independent director cannot be a substantial shareholder (as defined in section 9 of the Corporations Act 2001). The size and composition of the board is determined by the full board.

4. DIRECTORS' INDEPENDENCE

The board has adopted specific principles in relation to directors' independence. These state that to be deemed independent, a director must be a non-executive and:

- not be a substantial shareholder of the Company or an officer of, or otherwise associated directly with, a substantial shareholder of the Company
- within the last three years, not have been employed in an executive capacity by the Company or any other group member, or been a director after ceasing to hold any such employment
- within the last three years not have been a principal of a material professional adviser or a material consultant to the Company or any other group member, or an employee materially associated with the service provided
- not be a material supplier or customer of the Company or any other group member, or an officer of or otherwise associated directly or indirectly with a material supplier or customer
- must have no material contractual relationship with the Company or a controlled entity other than as a director of the Group
- be free from any interest and any business or other relationship which could, or could reasonably be perceived to, materially interfere with the director's ability to act in the best interests of the Company.

Materiality for these purposes is determined on both quantitative and qualitative bases. In addition, a transaction of any amount or a relationship is deemed material if knowledge of it may impact the shareholders' understanding of the director's performance.

5. TERM OF OFFICE

The Company's Articles of Association specifies that all directors other than the Managing Director must retire from office no later than the third annual general meeting (AGM) following their last election. Where eligible, a director may stand for re-election.

Prior to appointment or being submitted for re-election each non-executive director is required to specifically acknowledge that they have and will continue to have the time available to discharge their responsibilities to the Company.

6. CHAIRMAN AND CHIEF EXECUTIVE OFFICER (CEO)

The Chairman is responsible for leading the board, ensuring directors are properly briefed in all matters relevant to their role and responsibilities, and facilitating board discussions.

The CEO is responsible for the day-to-day management of the Company's affairs, and for implementing Group strategies and policies as determined by the Board of Directors.

7. BOARD MEETINGS

The board meets formally at least 9 times a year to consider a broad range of matters, including progress with respect to the Company's various development programs, strategy, financial reviews, acquisitions and investments. Details of meetings and attendances are set out in the Directors' Report.

8. INDEPENDENT PROFESSIONAL ADVICE

Directors and board committees have the right, in connection with their duties and responsibilities, to seek independent professional advice at the Company's expense. Prior written approval of the Chairman is required, but this will not be unreasonably withheld.

9. PERFORMANCE ASSESSMENT

The board undertakes an annual self assessment of its collective performance, the performance of the Chairman and of its committees. This was performed in February 2007 and all deemed satisfactory.

The Chairman undertakes an annual assessment of the performance of individual directors and meets privately with each director to discuss this assessment.

10. CORPORATE REPORTING

The Managing Director and Financial Controller have made the following certifications to the board:

- that the Company's financial reports are complete and present a true and fair view, in all material respects, of the financial condition and operational results of the Company and Group and are in accordance with relevant accounting standards
- that the above statement is founded on a sound system of risk management and internal compliance and control and which implements the policies adopted by the board and that the Company's risk management and internal compliance and control is operating efficiently and effectively in all material respects.

11. BOARD COMMITTEES

The board has established a number of committees to assist in the execution of its duties and to allow detailed consideration of complex issues. Current committees of the board are the remuneration and audit committees. Each is comprised of a majority of non-executive directors. The committee structure and membership is reviewed on an annual basis.

12. REMUNERATION COMMITTEE

The remuneration committee consists of the following non-executive directors:

B S Patterson (Chairman)

R P Campbell

Details of these directors' attendance at remuneration committee meetings are set out in the directors' report.

The remuneration committee advises the board on remuneration and incentive policies and practices generally, and makes specific recommendations on remuneration packages and other terms of employment for executive directors, other senior executives and non-executive directors. Further information on directors' and executives' remuneration is set out in the directors' report.

13. AUDIT COMMITTEE

The audit committee consists of the following directors:

R P Campbell (Chairman)

C S Goldschmidt

B S Patterson

Details of these directors' qualifications and attendance at audit committee meetings are set out in the directors' report.

The audit committee has appropriate financial expertise and all members are financially literate and have an appropriate understanding of the industries in which the Group operates.

The audit committee has its own written charter setting out its role and responsibilities, composition, structure, membership requirements and the manner in which the committee is to operate. The charter is reviewed on an annual basis and is available on the Company website.

Minutes of committee meetings are tabled at the subsequent board meeting.

The audit committee operates in accordance with a charter. The main responsibilities of the committee are to:

- review, assess and approve the financial reports and all other financial information published by the Company or released to the market
- assist the board in reviewing the effectiveness of the organisation's internal control environment covering:
 - effectiveness and efficiency of operations
 - reliability of financial reporting
 - compliance with applicable laws and regulations
- oversee the effective operation of the risk management framework
- recommend to the board the appointment, removal and remuneration of the external auditors, and review the terms of their engagement, the scope and quality of the audit and assess performance
- consider the independence and competence of the external auditor on an ongoing basis
- review and approve the level of non-audit services provided by the external auditors and ensure it does not adversely impact on auditor independence
- review and monitor related party transactions and assess their propriety
- report to the board on matters relevant to the committee's role and responsibilities.

In fulfilling its responsibilities, the Audit Committee receives regular reports from management and the external auditors. It also meets with the external auditors at least twice a year – more frequently if necessary, and reviews any significant disagreements between the auditors and management, irrespective of whether they have been resolved. The external auditors have a clear line of direct communication at any time to either the Chairman of the Audit Committee or the Chairman of the board.

The audit committee has authority, within the scope of its responsibilities, to seek any information it requires from any employee or external party.

14. NOMINATION COMMITTEE

The Board has decided that it is in the Company's best interest that the full Board deal with nomination issues. As a result a Nomination Committee has not been established.

15. EXTERNAL AUDITORS

The Company and audit committee policy is to appoint external auditors who clearly demonstrate quality and independence. The performance of the external auditor is reviewed annually and applications for tender of external audit services are requested as deemed appropriate, taking into consideration assessment of performance, existing value and tender costs. It is PricewaterhouseCoopers policy to rotate audit engagement partners on listed companies at least every five years.

An analysis of fees paid to the external auditors, including a break-down of fees for non-audit services, is provided in the Directors' report. It is the policy of the external auditors to provide annual declarations of their independence to the audit committee.

The external auditor is requested to attend the annual general meeting and be available to answer shareholder questions about the conduct of the audit and the preparation and content of the audit report.

16. RISK ASSESSMENT AND MANAGEMENT

The board, through the audit committee, is responsible for ensuring there are adequate policies in relation to risk management, compliance and internal control systems. These policies, detailed in the audit committee charter are available on the Company website. In summary, the Company policies are designed to ensure strategic, operational, legal, reputation and financial risks are identified, assessed, effectively and efficiently managed and monitored to enable achievement of the Group's business objectives.

Considerable importance is placed on maintaining a strong control environment. There is an organisation structure with clearly drawn lines of accountability and delegation of authority. Adherence to the Code of Conduct is required at all times and the board actively promotes a culture of quality and integrity.

Detailed control procedures cover management accounting, financial reporting, project appraisal, environment, health and safety, IT security, compliance and other risk management issues.

17. OCCUPATIONAL HEALTH AND SAFETY (OH&S)

The Company recognises the importance of occupational health and safety (OH&S) issues and is committed to the highest levels of performance. To help meet this objective the OH&S Committee was established to facilitate the systematic identification of OH&S issues and to ensure they are managed in a structured and rigorous manner. This system has been operating for a number of years and allows the Company to:

- monitor its compliance with all relevant OH&S legislation and regulations,
- continually assess and improve the effectiveness of the Company's OH&S program,
- encourage employees to actively participate in the management of all OH&S issues, and
- reinforce the importance of safe work practices throughout the Company, as mandated by management.

18. ENVIRONMENTAL REGULATION

As noted in the Directors' report, the Company is subject to the environmental and health and safety regulations applicable to tenants of the Lucas Heights Science and Technology Centre. The Company is also bound by the rules and regulations set out in the Australian Radiation Protection and Nuclear Safety Act, 1998, and is a licensee under that Act. To the best of the Directors' knowledge, all environmental regulatory requirements have been met.

19. CODE OF CONDUCT

The Company has developed a Code of Conduct (the Code) which has been fully endorsed by the board and applies to all directors and employees.

In summary, the Code requires that at all times Company personnel act with the utmost integrity, objectivity and in compliance with the letter and the spirit of the law and company policies.

A copy of the Code is available on the Company's website.

20. SHARE TRADING POLICY

The Company has in place a formal share trading policy which places certain prohibitions on the trading of the Company's shares. The policy is on the Company's website. All Silex share dealings by directors are promptly notified to the Australian Stock Exchange (ASX).

21. INDEPENDENT PROFESSIONAL ADVICE AND ACCESS TO INFORMATION

Each director has the right to seek independent professional advice at the Company's expense. However, prior approval of the Chairman is required, which is not unreasonably withheld.

All directors have access to Company records and information and receive detailed financial and operational reports from senior management during the year to enable them to carry out their duties. Directors also liaise with senior management as required, and may consult with other employees and seek additional information on request.

22. CONFLICTS OF INTEREST OF DIRECTORS

The board has guidelines dealing with disclosure of interests by directors and participation and voting at board meetings where any such interests are discussed. In accordance with the *Corporations Act 2001*, any director with a material personal interest in a matter being considered by the board does not receive the relevant board papers, must not be present when the matter is being considered, and may not vote on the matter.

Further details of directors' remuneration, superannuation and retirement payments are set out in the Directors' Report.

23. CONTINUOUS DISCLOSURE AND SHAREHOLDER COMMUNICATION

The Company has written policies and procedures on information disclosure that focus on continuous disclosure of any information concerning the Company and its controlled entities that a reasonable person would expect to have a material effect on the price of the Company's securities. These policies and procedures also include the arrangements the Company has in place to promote communication with shareholders and encourage effective participation at general meetings. The Company's Continuous Disclosure Policy is available on the Company's website.

The Company Secretary has been nominated as the person responsible for communications with the Australian Stock Exchange (ASX). This role includes responsibility for ensuring compliance with the continuous disclosure requirements in the ASX Listing Rules and overseeing and co-ordinating information disclosure to the ASX, analysts, brokers, shareholders, the media and the public.

Information disclosed to the ASX is posted on the Company's web site as soon as it is disclosed to the ASX. Procedures have also been established for reviewing whether any price sensitive information has been inadvertently disclosed, and if so, this information is also immediately released to the market.

24. THE ROLE OF SHAREHOLDERS

The Board of Directors aims to ensure that the shareholders are informed of all major developments affecting the group's state of affairs. Information is communicated to shareholders as follows:

- The annual report is distributed to all shareholders who have elected to receive it and is posted on the company's website. The board ensures that the annual report includes relevant information about the operations of the group during the year, changes in the state of affairs of the group and details of likely future developments, in addition to the other disclosures required by the *Corporations Act 2001*;
- Proposed major changes in the group which may impact on share ownership rights are submitted to a vote of shareholders.

The board encourages full participation of shareholders at the Annual General Meeting to ensure a high level of accountability and identification with the group's strategy and goals. Important issues are presented to the shareholders as single resolutions.

The shareholders are responsible for voting on the appointment of directors.

25. ASX PRINCIPLES OF GOOD CORPORATE GOVERNANCE AND BEST PRACTICE RECOMMENDATIONS

The ASX has released 10 principles of corporate governance. Silex has established a Corporate Governance section on its website (www.silex.com.au) which sets out the information required by the Recommendations plus other relevant information. Below is a listing of each of those principles and recommendations and a comment on Silex's position:

Principle 1. Lay solid foundations for management and oversight.	
Recommendation 1.1 Formalise and disclose the functions reserved to the board and those delegated to management.	Silex's Position The functions reserved to the board and those delegated to management are detailed in section 1.
Principle 2. Structure the board to add value. The composition of the Board is detailed in section 2 and 3 above. The board has been structured to add value to the Company.	
Recommendation 2.1 A majority of the board should be independent directors.	All of the 3 non-executive directors are independent making a majority of the board independent.
Recommendation 2.2 The chairperson should be an independent director.	The chairperson, Mr B S Patterson is an independent director.
Recommendation 2.3 The roles of chairperson and chief executive should not be exercised by the same individual.	Mr B S Patterson is the chairperson and Dr M P Goldsworthy is the chief executive.
Recommendation 2.4 The board should establish a nomination committee.	The board has decided not to establish a nomination committee as it believes the full board is better equipped to handle such matters.
Recommendation 2.5 Provide the information indicated in the Guide to reporting on Principle 2.	This information is provided in this corporate governance statement.
Principle 3. Promote ethical and responsible decision-making. Details on ethical standards are disclosed in section 19 above.	
Recommendation 3.1 Establish a code of conduct.	The Company has established a Code of Conduct.
Recommendation 3.2 Disclose the policy concerning trading in company securities by directors, officers and employees.	Directors' share trading prohibitions are detailed in section 20. All employees are prohibited from buying and selling Silex shares at any time if they are aware of any material price sensitive information that has not been made available to the public. This however does not restrict employees from exercising options (granted under the Silex Employee Option Plan) over unissued Silex shares. Trading of the subsequently issued shares is however subject to the prohibitions above. The Share trading policy is available on the Company's website.
Recommendation 3.3 Provide the information indicated in the Guide to reporting on Principle 3.	Details are included above.
Principle 4. Safeguard integrity in financial reporting The Company has a structure of review and authorisation designed to ensure the truthful and factual presentation of the Company's financial position.	
Recommendation 4.1 Require the chief executive officer and chief financial officer (or equivalent) to state in writing to the board that the company's financial reports present a true and fair view, in all material aspects, of the company's financial condition and operational results and are in accordance with relevant accounting standards.	The chief executive officer and Financial Controller have complied with this recommendation.
Recommendation 4.2 The board should establish an audit Committee.	The audit committee has been established for a number of years.

Recommendation 4.3 Structure the audit committee so that it consists of: - only non-executive directors - a majority of independent directors - at least 3 members	The audit committee is comprised of 3 non-executive independent directors.
Recommendation 4.4 The audit committee should have a formal charter.	The role and responsibilities of the audit committee are summarised in section 13.
Recommendation 4.5 Guide to reporting on Principle 4.	Details are contained above.
Principle 5. Make timely and balanced disclosure The Company has mechanisms in place to ensure compliance with ASX Listing Rule requirements. Refer section 23 above for more details.	
Recommendation 5.1 Establish written policies and procedures designed to ensure compliance with ASX Listing Rule disclosure requirements and to ensure accountability at a senior management level for that compliance.	The Company has written policies and procedures on information disclosure that focus on continuous disclosure of any information concerning the Company that a reasonable person would expect to have a material effect on the price of the Company's securities.
Recommendation 5.2 Provide the information indicated in the Guide to reporting on Principle 5.	A summary of the policies and procedures designed to guide compliance with Listing Rule disclosure requirements is contained in Section 23.
Principle 6. Respect the rights of shareholders. The Company respects the rights of its shareholders via effective communication and making it easy for them to participate at general meetings.	
Recommendation 6.1 Design and disclose a communications strategy to promote effective communication with shareholders and encourage effective participation at general meetings.	Refer section 24 for details of Company strategy.
Recommendation 6.2 Request the external auditor to attend the annual general meeting.	Our auditors, PricewaterhouseCoopers are asked to attend the annual general meeting.
Principle 7. Recognise and manage risk. The Company has established a sound system of risk management and internal control.	
Recommendation 7.1 The board or appropriate board committee should establish policies on risk oversight and management.	The board has established risk management policies.
Recommendation 7.2 The chief executive officer and the chief financial officer (or equivalent) should state to the board in writing that: 7.2.1 the statement given in accordance with best practice recommendation 4.1(the integrity of financial statements) is founded on a sound system of risk management and internal compliance and control which implements the policies adopted by the board 7.2.2 the company's risk management and internal compliance and control system is operating efficiently and effectively in all material respects.	A statement has been provided by the Chief Executive Officer and the Financial Controller.

Recommendation 7.3 Provide the information indicated in the Guide to reporting on Principle 7.	Information is provided in section 16.
Principle 8 Encourage enhanced performance. Enhanced board and management effectiveness is actively encouraged.	
Recommendation 8.1 Disclose the process for performance evaluation of the board, its committees and individual directors, and key executives.	Refer section 9 and Directors' Report for more details.
Principle 9. Remunerate fairly and responsibly. The remuneration committee adopts policies that attract and maintain talented and motivated directors and employees so as to encourage enhanced performance.	
Recommendation 9.1 Provide disclosure in relation to the company's remuneration policies to enable investors to understand (i) the costs and benefits of those policies and (ii) the link between remuneration paid to directors and key executives and corporate performance.	The Directors' report contains details of remuneration paid to directors and executives. Where bonuses are paid, details of the reason for the bonus are described.
Recommendation 9.2 The board should establish a remuneration committee.	The role and composition of the remuneration committee is summarised in section 12.
Recommendation 9.3 Clearly distinguish the structure of non-executive directors' remuneration from that of executives.	Executive and non-executive directors' fees are clearly separated in the Directors' report.
Recommendation 9.4 Ensure that payment of equity-based executive remuneration is made in accordance with thresholds set in plans approved by shareholders.	The Silex Employee Share Option Plan has been approved by shareholders. Options issued to executive directors during the prior year were approved by shareholders at the last Annual General Meeting.
Recommendation 9.5 Provide the information indicated in the Guide to reporting on Principle 9.	This information is provided in this statement of corporate governance and the Directors' report.
Principle 10. Recognise the legitimate interests of stakeholders. The Company recognises that it has obligations to non-shareholder stakeholders such as employees, customers, research partners and the community as a whole.	
Recommendation 10.1 Establish and disclose a code of conduct to guide compliance with legal and other obligations to legitimate stakeholders.	Details of the Code of conduct and compliance with environmental regulations is detailed in sections 18 and 19.



SILEX SYSTEMS LIMITED

CONCISE FINANCIAL REPORT

30 JUNE 2007

ABN 69 003 372 067

CONTENTS	PAGE
Concise financial report	
Consolidated income statement	44
Consolidated balance sheet	45
Consolidated statement of recognised income and expense	46
Consolidated cash flows statement	47
Notes to the consolidated financial statements	48
Directors' declaration	51
Independent audit report to the members	52

RELATIONSHIP OF THE CONCISE FINANCIAL REPORT TO THE FULL FINANCIAL REPORT

The concise financial report is an extract from the full financial report for the year ended 30 June 2007. The financial statements and specific disclosures included in the concise financial report have been derived from the full financial report.

The concise financial report cannot be expected to provide as full an understanding of the financial performance, financial position and financing and investing activities of Silex Systems Limited and its subsidiaries as the full financial report. Further financial information can be obtained from the full financial report.

The full financial report and auditor's report will be sent to members on request, free of charge. Please call 61 2 9532 1331 and request a copy of the full financial report (or email enquiries@silex.com.au). Alternatively, you can access both the full financial report and the concise report via the internet on our website: www.silex.com.au.

CONSOLIDATED INCOME STATEMENT FOR THE YEAR ENDED 30 JUNE 2007

	Notes	2007 \$	2006 \$
Revenue from continuing operations	3	35,744,201	1,112,110
Other income	4	390,776	544,554
Research and development materials		(3,763,844)	(908,051)
Finance costs		(9,997)	(949)
Depreciation and amortisation expense		(1,588,562)	(1,925,886)
Employee benefits expense		(12,644,450)	(6,225,615)
Professional fees		(1,488,053)	(1,331,232)
Printing, postage and stationery		(85,664)	(79,266)
Rent		(417,519)	(370,563)
Travelling expenses		(651,535)	(299,596)
Changes in inventories		41,735	90,590
Raw materials and stores used		(45,875)	(91,970)
Net foreign exchange losses		(2,642,122)	-
Other expenses from ordinary activities		(872,022)	(774,462)
Profit/(loss) before income tax expense		11,967,069	(10,260,336)
Income tax expense		(3,226,150)	-
Net profit/(loss)		8,740,919	(10,260,336)
Profit/(loss) is attributable to:			
Equity holders of Silex Systems Limited		8,767,421	(10,273,257)
Minority interest		(26,502)	12,921
		8,740,919	(10,260,336)

	Cents	Cents
Earnings per share for profit from continuing operations attributable to the ordinary equity holders of the company		
Basic earnings per share	6.4	(7.6)
Diluted earnings per share	6.3	(7.6)

The above consolidated income statement should be read in conjunction with the accompanying notes.

CONSOLIDATED BALANCE SHEET AS AT 30 JUNE 2007

	2007 \$	2006 \$
ASSETS		
Current assets		
Cash and cash equivalents	22,623,517	15,040,749
Held to maturity investments	-	1,390,040
Trade and other receivables	1,791,841	318,825
Inventories	91,166	127,380
Other	81,322	156,332
Total current assets	24,587,846	17,033,326
Non-current assets		
Receivables	191,116	269,070
Property, plant and equipment	2,212,401	3,030,158
Deferred tax assets	7,932	3,899
Intangible assets	8,397,054	8,782,985
Total non-current assets	10,808,503	12,086,112
Total assets	35,396,349	29,119,438
LIABILITIES		
Current liabilities		
Trade and other payables	1,399,232	1,742,322
Borrowings	23,804	6,726,759
Provisions	445,028	248,422
Total current liabilities	1,868,064	8,717,503
Non-current liabilities		
Borrowings	98,211	-
Provisions	100,631	147,081
Total non-current liabilities	198,842	147,081
Total liabilities	2,066,906	8,864,584
Net assets	33,329,443	20,254,854
EQUITY		
Contributed equity	49,224,639	47,531,679
Reserves	3,948,931	1,278,408
(Accumulated losses)	(19,844,127)	(28,611,548)
Parent equity interest	33,329,443	20,198,539
Minority interest	-	56,315
Total equity	33,329,443	20,254,854

The above consolidated balance sheet should be read in conjunction with the accompanying notes.

CONSOLIDATED STATEMENT OF RECOGNISED INCOME AND EXPENSE FOR THE YEAR ENDED 30 JUNE 2007

	2007 \$	2006 \$
Exchange differences on translation of foreign controlled entity	(630,962)	236,159
Net income recognised directly in equity	(630,962)	236,159
Profit/(loss) for the year	8,740,919	(10,260,336)
Total recognised income and expense for the year	8,109,957	(10,024,177)
Total recognised income and expense for the year is attributable to:		
Members of Silex Systems Limited	8,136,459	(10,037,098)
Minority interest	(26,502)	12,921
	8,109,957	(10,024,177)

The above consolidated statement of recognised income and expense should be read in conjunction with the accompanying notes.

CONSOLIDATED CASH FLOW STATEMENT FOR THE YEAR ENDED 30 JUNE 2007

	2007 \$	2006 \$
Cash flows from operating activities		
Receipts from customers (inclusive of goods and services tax)	33,331,202	844,010
Payments to suppliers and employees (inclusive of goods and services tax)	(16,415,882)	(8,792,757)
Interest received	1,347,336	619,272
Interest paid	(9,997)	(949)
Income tax (paid)	(3,228,360)	-
Net cash inflows/(outflows) from operating activities	15,024,299	(7,330,424)
Cash flows from investing activities		
Payment for additional interest in controlled entities	(10,000)	-
Loans to related parties	(140,717)	-
Payments for property, plant and equipment	(571,671)	(555,158)
Proceeds from sale of property, plant and equipment	9,636	14,027
Proceeds from maturity of held to maturity assets	1,390,040	1,736,842
Repayment of loans by related parties	171,928	120,160
Net cash inflows from investing activities	849,216	1,315,871
Cash flows from financing activities		
Proceeds from issue of shares	1,118,091	674,426
Proceeds from promissory note	-	6,849,500
Repayment of promissory note	(6,726,759)	-
Repayment of hire purchase liabilities	(22,985)	(29,681)
Net cash inflows/(outflows) from financing activities	(5,631,653)	7,494,245
Net increase in cash held	10,241,862	1,479,692
Cash and cash equivalents at the beginning of the financial year	15,040,749	13,416,292
Effects of exchange rate changes on cash	(2,659,094)	144,765
Cash and cash equivalents at end of year	22,623,517	15,040,749

The above consolidated cash flow statement should be read in conjunction with the accompanying notes.

This concise financial report relates to the consolidated entity consisting of Silex Systems Limited and the entities it controlled at the end of, or during, the year ended 30 June 2007. The accounting policies have been consistently applied to all years presented, unless otherwise stated.

NOTE 1 PRESENTATION CURRENCY

The presentation currency used in this concise financial report is Australian dollars

NOTE 2 CHANGE IN ACCOUNTING POLICY

(i) Financial instruments - adoption of AASB132/AASB 139

The Group took the exemption available under AASB1 First time adoption of Australian Equivalents to International Financial Reporting Standards to apply AASB 132 Financial Instruments: Recognition and Measurement from 1 July 2005. This change was recognised in the previous financial year and appropriate disclosures have been made in the financial report and concise financial report for the year ending 30 June 2006.

NOTE 3 REVENUE

	2007 \$	2006 \$
From continuing operations		
Up Front Uranium Agreement Fee	26,878,000	-
Recoverable Project costs	7,343,892	-
Interest income	1,342,171	616,213
DARPA contract	159,340	487,174
Other	20,798	8,723
	35,744,201	1,112,110

Translucent has a contract with the US Defence Department - Defence Advanced Projects Agency (DARPA) Program. Revenue comes from the Microsystems Technology Office - Electronic and Photonic Integrated Circuits (EPIC) program.

NOTE 4 OTHER INCOME

	2007 \$	2006 \$
Foreign currency exchange gains (net)	-	132,801
Government Grants	390,776	400,329
Net gain on sale of property, plant and equipment	-	11,424
	390,776	544,554

(i) GOVERNMENT GRANTS

Commercial Ready grants of \$390,776 (2006: \$400,329) were recognised as other income by the Group during the financial year. There are no unfulfilled conditions attaching to these grants. The grant was received by Fiberbyte Pty Ltd and part of it may be repayable in certain circumstances. These include if a change in control of Fiberbyte occurs without Ausindustry's consent; Fiberbyte wishes to commercialise the project other than as represented in its grant application; significantly additional aspects of the project would be commercialised in a country other than Australia, or overseas commercialisation would deliver significantly reduced national benefit when compared to the proposed commercialisation arrangements set out in the application; Fiberbyte becomes insolvent; or Fiberbyte breaches any warranty contained in the Agreement conditions.

NOTE 5 SEGMENT INFORMATION

Primary reporting-geographical segments

The consolidated entity is organised into the following divisions by geographical location.

AUSTRALIA

This includes the operations of the parent entity and the operations of Fiberbyte.

UNITED STATES OF AMERICA

This relates to the activities of Translucent Inc.

	Australia	United States of America	Inter segment eliminations/ unallocated	Consolidated
2007	\$	\$	\$	\$
Up Front Agreement Fee	26,878,000	-	-	26,878,000
Recoverable Project costs	7,343,892	1,882,336	(1,882,336)	7,343,892
DARPA contract	-	159,340	-	159,340
Other	20,798	-	-	20,798
Total segment revenue	34,242,690	2,041,676	(1,882,336)	34,402,030
Unallocated - Interest income				1,342,171
Total revenue				35,744,201
Segment result	18,831,498	(5,564,478)	-	13,267,020
Unallocated revenue and income less unallocated expenses				(1,299,951)
Profit before tax				11,967,069
Income tax expense				(3,226,150)
Net profit				8,740,919
Segment assets	2,038,406	10,726,494	-	12,764,900
Unallocated assets				22,631,449
Total assets				35,396,349
Segment liabilities	1,650,760	416,146	-	2,066,906
Unallocated liabilities				-
Total liabilities				2,066,906
Acquisition of property, plant and equipment, intangibles and other non-current segment assets	162,330	550,724	-	713,054
Depreciation and amortisation expense	493,358	1,095,204	-	1,588,562
Other non-cash expenses	228,105	-	-	228,105

NOTE 5 SEGMENT INFORMATION (CONTINUED)

	Australia	United States of America	Inter segment eliminations/ unallocated	Consolidated
2006	\$	\$	\$	\$
DARPA contract	-	487,174	-	487,174
Other revenue	8,723	-	-	8,723
Total segment revenue	8,723	487,174	-	495,897
Unallocated - Interest income				616,213
Total revenue				1,112,110
Segment result	(6,681,079)	(4,328,271)	-	(11,009,350)
Unallocated revenue and income - interest income and exchange gain				749,014
(Loss) before tax				(10,260,336)
Income tax expense				-
Net (loss)				(10,260,336)
Segment assets	902,545	11,782,205	-	12,684,750
Unallocated assets				16,434,688
Total assets				29,119,438
Segment liabilities	8,603,938	260,646	-	8,864,584
Unallocated liabilities				-
Total liabilities				8,864,584
Acquisition of property, plant and equipment, intangibles and other non-current segment assets	44,700	510,458	-	555,158
Depreciation and amortisation expense	491,511	1,434,375	-	1,925,886
Other non-cash expenses	132,126	-	-	132,126

NOTE 6 DIVIDENDS

No dividends were declared or paid during the year or in the prior year.

NOTE 7 EVENTS OCCURRING AFTER REPORTING DATE

The directors are not aware of matters or circumstances which are not otherwise dealt with in the financial statements that have significantly or may significantly affect the operations of the consolidated entity, the results of its operations or the state of the consolidated entity in subsequent years.

The directors declare that in their opinion, the concise financial report of the consolidated entity for the year ended 30 June 2007 as set out on pages 43 to 50 complies with Accounting Standard AASB 1039: Concise Financial Reports.

The concise financial report is an extract from the full financial report for the year ended 30 June 2007. The financial statements and specific disclosures included in the concise financial report have been derived from the full financial report.

The concise financial report cannot be expected to provide as full an understanding of the financial performance, financial position and financing and investing activities of the consolidated entity as the full financial report, which is available on request.

This declaration is made in accordance with a resolution of the directors.



Dr M P Goldsworthy
Managing Director



C D Wilks
Director

Sydney
27 September 2007



Pricewaterhouse Coopers
ABN 52 780 433 757

Darling Park Tower 2
201 Sussex Street
GPO BOX 2650
SYDNEY NSW 1171
DX 77 Sydney
Australia

www.pwcglobal.com/au
Telephone +61 2 8266 0000
Facsimile +61 2 8266 9999

REPORT ON THE CONCISE FINANCIAL REPORT

The accompanying concise financial report of Silex Systems Limited comprises the balance sheet as at 30 June 2007, the income statement, statement of recognised income and expense and cash flow statement for the year then ended and related notes, derived from the audited financial report of Silex Systems Limited for the year ended 30 June 2007. The concise financial report does not contain all the disclosures required by the Australian Accounting Standards.

DIRECTORS' RESPONSIBILITY FOR THE CONCISE FINANCIAL REPORT

The Directors are responsible for the preparation and presentation of the concise financial report in accordance with Accounting Standard AASB 1039 *Concise Financial Reports*, and the *Corporations Act 2001*. This responsibility includes establishing and maintaining internal control relevant to the preparation of the concise financial report; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

AUDITOR'S RESPONSIBILITY

Our responsibility is to express an opinion on the concise financial report based on our audit procedures. We have conducted an independent audit, in accordance with Australian Auditing Standards, of the financial report of Silex Systems Limited for the year ended 30 June 2007. Our audit report on the financial report for the year was signed on 27 September 2007 and was not subject to any modification. The Australian Auditing Standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance whether the financial report for the year is free from material misstatement.

Our procedures in respect of the concise financial report included testing that the information in the concise financial report is derived from, and is consistent with, the financial report for the year, and examination on a test basis, of evidence supporting the amounts and other disclosures which were not directly derived from the financial report for the year. These procedures have been undertaken to form an opinion whether, in all material respects, the concise financial report complies with Accounting Standard AASB 1039 *Concise Financial Reports*.

Our procedures include reading the other information in the Annual Report to determine whether it contains any material inconsistencies with the concise financial report.

For further explanation of an audit, visit our website <http://www.pwc.com/au/financialstatementaudit>.

Our audit did not involve an analysis of the prudence of business decisions made by directors or management.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

INDEPENDENCE

In conducting our audit, we have complied with the independence requirements of the *Corporations Act 2001*. We confirm that the independence declaration required by the *Corporations Act 2001*, provided to the directors of Silex Systems Limited on 27 September 2007, would be in the same terms if provided to the directors as at the date of this auditor's report.

AUDITOR'S OPINION

In our opinion, the concise financial report of Silex Systems Limited for the year ended 30 June 2007 complies with Australian Accounting Standard AASB 1039: *Concise Financial Reports*.

A stylized, handwritten signature of the PricewaterhouseCoopers firm, written in black ink.

PricewaterhouseCoopers

A stylized, handwritten signature of Andrew Sneddon, written in black ink.

Andrew Sneddon
Partner

Sydney
27 September 2007

SHAREHOLDERS' INFORMATION

1. INFORMATION RELATING TO SHAREHOLDERS AS AT 20 SEPTEMBER 2007

a. Distribution schedule

1 - 1,000	2,423
1,001 - 5,000	2,689
5,001 - 10,000	714
10,001 - 100,000	730
100,001 and over	104
Total number of holders of each class of security	6,660

Voting rights - on a show of hands

- on a poll

Percentage of total holding held by the largest 20 holders

65.83%

Number of total holding less than a marketable parcel of shares

61

Substantial shareholders	Ordinary shares
National Australia Trustees Limiteds	33,674,095
ANZ Nominees Limited	8,054,798

b. Names of Twenty Largest Holders of each Security as at 20 September 2007

Name	Number of securities	Percentage held
National Australia Trustees Limited	33,674,095	24.40%
ANZ Nominees Limited	8,054,798	5.84%
Majenta Holdings Pty Ltd	5,903,923	4.28%
National Nominees Limited	5,719,295	4.14%
J P Morgan Nominees Australia Limited	5,070,550	3.67%
Polly Pty Ltd	4,073,863	2.95%
HSBC Custody Nominees (Australia) Limited	3,797,181	2.75%
Throvena Pty Ltd	2,981,203	2.16%
Citicorp Nominees Pty Limited	2,971,612	2.15%
Hamlac Pty Ltd	2,625,937	1.90%
Quadrangle Nominees Limited	2,562,150	1.86%
Mr Christopher David Wilks	2,505,070	1.81%
Invia Custodian Pty Limited	2,022,962	1.47%
Quintal Pty Ltd	2,000,000	1.45%
Merrill Lynch (Australia) Nominees Pty Limited	1,478,318	1.07%
Mithena Holdings Pty Limited	1,354,823	0.98%
Mr Horst Struve	1,286,887	0.93%
UBS Nominees Pty Ltd	1,152,499	0.83%
LYC Corporation Pty Ltd	966,233	0.70%
Dr Andrew Tan	656,788	0.48%
	90,858,187	65.83%

SHAREHOLDERS' INFORMATION (CONTINUED)

2. VENDOR SECURITIES AS AT 20 SEPTEMBER 2007

There are no vendor securities.

3. INTEREST OF DIRECTORS IN SECURITIES AS AT 20 SEPTEMBER 2007

	Ordinary shares	Interest held
Mr B S Patterson	4,073,863	Beneficially
Dr M P Goldsworthy	6,049,533	Personally/Beneficially
Mr C D Wilks	2,894,021	Personally/Beneficially
Dr C S Goldschmidt	2,625,937	Beneficially
Mr R P Campbell	1,354,823	Beneficially

4. SECURITIES SUBJECT TO VOLUNTARY ESCROW AS AT 20 SEPTEMBER 2007

	Number on issue	Date escrow period ends
As at 20 September 2007 the following securities were subject to voluntary escrow:		
Ordinary shares	27,000	14 March 2008

5. UNQUOTED EQUITY SECURITIES AS AT 20 SEPTEMBER 2007

	Number on issue	Number of holders
Options issued under the Silex Systems Limited Employee Share Option Plan to take up ordinary shares	3,099,000	41
Other options issued to take up ordinary shares *	1,800,000	2

* These options are for directors Dr M P Goldsworthy and Mr C D Wilks.

ISOTOPES

Most chemical elements found in nature consist of two or more “isotopes” of the element. The chemical properties of all isotopes of a given element are essentially identical, but there are differences in their physical properties – namely their mass, or more specifically, the number of neutrons in the nucleus.

These differences are significant and can have technical and/or commercial applications, where the nuclear properties of the element come into play. For instance, illuminated “Exit” signs use tritium, a heavy isotope of hydrogen – however the lightest and most common hydrogen isotope does not have those properties that enable tritium to be used in this way.

Another example is silicon, which occurs naturally with three isotopes: 92% silicon-28, 5% silicon-29 and 3% silicon-30. By enriching or separating the silicon-28 isotope to say, 99.9%, a super pure form of silicon can be created which exhibits better performance characteristics in some semiconductor applications, such as increased thermal conductivity (ie, the ability to remove heat).

STABLE VS UNSTABLE ISOTOPES

Isotopes are found naturally in two forms: stable – which do not change over time; and unstable – which because of imbalances in nuclear structure, decay over time to form a different atomic species. Uranium and Thorium are the two main examples of naturally occurring unstable isotopes. Other unstable isotopes not occurring naturally can be made artificially in nuclear physics laboratories. Unstable isotopes are also known as radioactive or radio-isotopes. In practical terms, isotopes other than Uranium and Thorium are known as stable isotopes, including those of Silicon, Carbon, Nitrogen, Zirconium and others.

LASERS AND ISOTOPE SEPARATION

Lasers can produce monochromatic (i.e. single frequency) light. Depending on the particular type of laser, this light may occur either in the visible or the non-visible (ultra-violet and infra-red) regions of the spectrum. When combined with the ability of certain chemical elements and compounds to be receptive to specific visible or non-visible light (i.e. particular frequencies of electromagnetic radiation), it has been found possible to cause certain physical (and chemical) reactions to take place, and hence to create selective effects on particular target species.

In laser isotope separation processes such as SILEX, special tunable lasers are developed which are capable of producing highly monochromatic radiation which can be absorbed by only one of the isotope species, leaving the other isotopes relatively unaffected. The absorption of the laser radiation causes physical or chemical changes to take place, rendering a new state or compound of the target isotope which can now be separated from the unaffected isotope species. The changed or affected isotope species becomes enriched in the desired isotope (the ‘product stream’) and the unaffected species therefore becomes depleted in that isotope (the ‘tails stream’).

SEMICONDUCTORS

A material whose electrical conductivity is midway between an insulator and a conductor is called a semiconductor. Because of this property, it is possible to manipulate and control small electrical currents in micro-scale semiconductor devices by creating slight changes in the properties of the semiconductor material (such as ‘carrier doping’). Silicon and Germanium are the most widely used semiconductors, with Silicon dominating today’s semiconductor industry because of its low cost and ease of handling.

Semiconductor materials are used to build solid state electronic components, the most basic being the diode, which is the ‘building block’ for more complex components such as the transistor – a fully functional electronic ‘switch’. With modern fabrication techniques, it is possible to build a complex electronic subassembly in which many components are fabricated on a single semiconductor substrate or ‘chip’ (usually made of silicon). This complex subassembly is called an integrated circuit, which in its most advanced form, using ultra large scale integration (ULSI) technology, is the basis of the modern microprocessor, or computer chip.

Most of today’s computer chip structures are dominated by a variety of doped silicon and insulating (oxide) materials and lithographically etched aluminium/metal connectors. However, silicon/metal technology is reaching the limits of performance, and for some years now, there has been a trend towards the use of more expensive compound semiconductor materials such as gallium arsenide (GaAs) and indium phosphide (InP). Compound semiconductors have much faster electrical conductivity or mobility, and can furthermore be utilised to fabricate photo-diodes which can absorb or emit light. The use of light (optical) signals instead of electrical signals can provide a quantum leap in semiconductor performance, however, the conversion from conventional electronic to opto-electronic semiconductor systems is still in its infancy. Today, only long haul and metro networks use optical communications technology, based on fibre optic links. Access (user) networks and mass market consumer semiconductor products such as PCs are still all based on conventional silicon chips and copper wire communications.

URANIUM

Uranium minerals are abundant in the earth’s crust and may be found in many parts of the world. Commercially exploitable deposits, however, are less widely distributed, with Australia and Canada possessing many such uranium deposits, amounting to over 40 per cent of the world’s known low-cost reserves.

The mined product is traded as yellowcake, which is around 98 per cent pure uranium oxide (U₃O₈), processed from mineral concentrates at the mine site.

WHAT IS URANIUM ENRICHMENT AND HOW IS IT USED?

Most of the world's nuclear power stations use uranium in the enriched form, which involves physical processing to change the relative concentration of the isotopes found in the natural uranium mineral. The two principal isotopes are uranium-235 (or U-235) and U-238; in nature these occur as 0.7 per cent and 99.3 per cent respectively of the total uranium element present.

For use in Nuclear Power Reactors a U-235 concentration of approximately 5 per cent is required, and this is achieved through physical separation or enrichment on a commercial scale. There are only two enrichment processes in use overseas at present; these are the diffusion and centrifuge processes. In both cases the feedstock is another chemical form of uranium, the compound uranium hexafluoride (UF₆).

The initial chemical processing which changes U₃O₈ into gaseous UF₆ takes place in a conversion plant.

Enrichment plants have two output streams, the enriched uranium product itself, and depleted uranium, commonly known as tails. In both cases the uranium remains in the chemical form of UF₆. The work performed by an enrichment plant in changing the concentrations of the isotopes is measured by a factor called the Separative Work Unit (SWU). The SWU is explained below.

The enriched uranium thereafter undergoes further chemical processing until it becomes ceramic grade UO₂ pellets for incorporation into the reactor fuel.

THE SEPARATIVE WORK UNIT (SWU)

The production capacity of enrichment plants cannot be conveniently measured in terms of the "throughput" of Uranium, due to several variable and interrelated factors such as the degree of separation or enrichment (product assay) and the extent of depletion (tails assay). For this reason, enrichment plant capacity is measured in "separative work units", which combines all these factors to provide a measure of the work being performed by the enrichment plant as the Uranium passes through it.

SWUs are expressed in either kilogram or ton units. About 120,000 kg SWU are required to enrich the annual fuel loading for a typical large (1000MWe) nuclear reactor - (equivalent to a typical coal fired power station). The capacity of a typical large gaseous diffusion plant is around 10 million SWU/year, while gas centrifugal plants may be built in modules ranging from 200,000-1,000,000 SWU/year. World-wide Uranium demand and Nuclear Reactor fuel requirements translate into a requirement for uranium enrichment separative work services in the range 35-38 million SWU/year over the next 10 years.

PLANAR LIGHTWAVE CIRCUITS (PLCS)

PLCs are the basic building blocks of optical semiconductor devices, that is, the telecommunications equivalent of integrated circuits in electronics. PLCs have application as both passive (photonic function only), and active (photonic and electronic functions combined) components in optical telecommunications, and are the basis of today's "optical processors".

PLCs and photonic devices are made today with compound semiconductor materials such as GaAs and InP. Silicon cannot be used for photonic applications in its natural state. The very high costs associated with using compound semiconductors for photonics and optical communications equipment (there is no large scale integrated fabrication technology such as that which exists for silicon electronic devices), result in them being too expensive to be used in consumer mass market products. This is the reason why our PC's and modems operate with copper wire links and silicon based processors at very slow communication rates (small bandwidth). Only the long haul fibre optic and metro network systems can afford the high costs of photonic and optical communication equipment.

The Translucent Planar Lightwave Circuit has very significant implications for optical telecommunications technology because it aims to push low cost silicon into the photonics arena in a unique way, delivering significant cost and performance benefits.

Translucent's PLCs could have broad application in the rapidly growing photonics semiconductor markets, currently worth several billion US dollars per annum. Photonic or optical semiconductor components are used principally in optical telecommunications equipment, providing the link between broadband (high speed) fibre optic networks and metro/local area electronic networks, which in turn deliver information to and from consumer electronic equipment, such as personal computers/modems, currently at much slower speeds. Translucent's PLCs could overcome these limitations.

Fibre optic connections to the home, the so-called "last mile" of broadband optical telecommunications, will only occur when optical equipment costs are comparable to those of consumer electronics. With Translucent's PLCs, the ability to integrate complex optical paths in an automated fabrication process would dramatically lower the cost of optical components (by at least a factor of ten) enabling the expansion of optical telecommunications into the price-driven consumer market. Typical consumer products that could use the new Translucent silicon PLC technology include personal computers, fibre optic modems and cable TV.

DIRECTORS

Mr B S Patterson - Chairman
 Dr M P Goldsworthy - Managing Director/CEO
 Mr C D Wilks
 Dr C S Goldschmidt
 Mr R P Campbell

AUDIT COMMITTEE

Mr R P Campbell - Chairman
 Dr C S Goldschmidt
 Mr B S Patterson

REMUNERATION COMMITTEE

Mr B S Patterson - Chairman
 Mr R P Campbell

COMPANY SECRETARY

Mr B J Spillane

REGISTERED OFFICE AND PRINCIPAL PLACE OF BUSINESS

Building 64, Lucas Heights Science & Technology Centre
 New Illawarra Road, Lucas Heights, New South Wales 2234, Australia
 Ph: 61 2 9532 1331 Fax: 61 2 9532 1332
 Postal address: PO Box 75, Menai Central, New South Wales 2234

WEBSITE ADDRESS: www.silex.com.au

SHARE REGISTRY

Computershare Registry Services Pty Limited
 Level 5, 115 Grenfell Street, Adelaide, South Australia 5000, Australia
 GPO Box 1903 Adelaide SA 5001, Australia
 Enquiries within Australia: 1300 556 161
 Email: web.queries@computershare.com.au

Enquiries outside Australia: 61 3 9415 4000
 Website: www.computershare.com.au

STOCK EXCHANGE

Listed on the Australian Stock Exchange

AUDITORS

PricewaterhouseCoopers

SOLICITORS

Allens Arthur Robinson

Sullivan and Cromwell (USA)

BANKERS

Australia and New Zealand Banking Group Limited

AMERICAN DEPOSITORY RECEIPTS (ADR) INFORMATION

Silex Systems Limited has established a Level 1 ADR Program. Silex ADRs may be purchased on the Over-the-Counter "Pink Sheet" (OTC) market.

DETAILS ARE AS FOLLOWS:

Ratio: 1 ADR = 5 ordinary shares
 Symbol: SILXY
 CUSIP: 827046 10 3
 Exchange: OTC
 Country: Australia