



CHIEF EXECUTIVE'S REPORT

This has been a year of both consolidation and achievement for IRL. Following from our effort to restructure the business reported in the last two annual reports, IRL has continued to position itself strongly for the future.

We grew our revenue by \$2.9m, and recorded a profit of \$0.7m for the year. Our net cash flow from operations of \$5.6m places the company in a highly favourable position. Our pipeline of contracts under negotiation with industry has more than doubled, although cancellation of the proposed R&D tax credit programme and the global financial crisis have resulted in the completion of many of these new contracts being delayed by customers. Nonetheless, by year end we signed new commercial contracts with industry to the value of almost \$18m spread over the next two to five years, a result representing a threefold improvement on the prior year.

People, culture and progress

Recent staff satisfaction surveys report very significant changes in our culture. Our people report a high level of pride in, and commitment to the organisation. They can be rightly proud because their efforts, their support of change, and their desire to make an impact to improve New Zealand have been the defining features of our recent success. In all avenues of our operations we have people who are not only professional, but also at the forefront of achievement in their particular activities. Elsewhere in this report we list many of the team and individual achievements during the present year. This, however, is just the tip of the iceberg. Many more people make exemplary contributions that largely go unrecognised, but not unappreciated. IRL is undoubtedly a healthier, more vibrant, more robust company than at any time in its history as a result of this combined effort. Just as they are proud of IRL, New Zealand can be proud of them.

A very tangible impact of our people development activities has been the staff-led and delivered initiative *What's Your Problem New Zealand?* that is noted elsewhere in this report.

Any recognition of our progress needs to include an appreciation of our Board of Directors. I would like to thank two people in particular – Craig Stobo and Brian Rhoades. Craig has completed two terms as a director and over the last three has been Deputy Chair. He has been a constant source of insight and advice through some difficult times. Brian Rhoades has been an understanding and supportive Chair, and has

done much to improve both governance and management in IRL. He has provided me with wonderful support and guidance. I wish him well in his future endeavours elsewhere in the CRI sector.

Operational changes

In early 2007, IRL adopted a continuous process of workforce planning which seeks to identify new areas for investment and an orderly and co-ordinated withdrawal from areas where funding is not available. This is an ongoing process which is under constant review. The organisational changes that the Board initiated in 2006 with my appointment have continued with the establishment of a new management team. This team has been drawn from both within IRL and from the external market, resulting in an effective and well-balanced combination of internal knowledge and experience and private sector commercial expertise.

A new remuneration system was implemented in 2007, becoming fully operational this year. It has redressed the disadvantageous labour market position IRL found itself in, has prevented major loss of key people, and has provided an opportunity for staff to improve their remuneration through performance achievement. The new system has also helped to ensure that IRL continues to attract top global talent.

Significant cultural changes brought about by a number of formal and informal programmes have been evident over the last year. An example of one of the programmes that has had a major impact on culture change is the Leadership Development Programme, aimed at young and mid-career staff. This programme has seen the development of a significant leadership cadre (some 64 staff have completed the programme) and this is being rewarded by increasing recognition within the scientific, engineering and business communities for this group. In addition the firms IRL works with see the benefits of this each day with the value these staff add to those businesses.

Continued focus on IRL's purpose and role

IRL has continued to work on science that has multiple

benefits for shareholders and New Zealand. As a Crown-owned enterprise, IRL is very conscious that we must respond to the needs of the nation's industry and to requirements of government policy. We capture this in our purpose statement and deliver in five roles:

- growing the economy by providing scientific solutions to address problems or exploit opportunities
- improving the productivity of existing firms
- creating new industries and products to diversify the economy
- providing science-based facts to inform policy issues
- maintaining New Zealand's long-term capability to serve the research needs of manufacturers.

The purpose and role statements for IRL in successive strategic plans since 2006 also show a strengthening commitment to working with industry to achieve productivity improvements and economic growth. This demonstrates a significant shift from the focus in earlier years on commercialising intellectual property generated by IRL.

While commercialising IRL's valuable IP through industry partnerships remains a component of IRL's activities, the primary focus is now on the development of R&D solutions to resolve problems relevant to New Zealand industry and enabling these firms to exploit opportunities they have identified. IRL needs to continue to ensure that an appropriate balance is maintained between these activities, which are strongly synergistic.

This change in emphasis is well understood within the company and in industry, although we acknowledge there is more work to do, and IRL will continue to promote its changed approach to industry in 2009/10 and beyond.

Restoring capability

During the year, the equity injection to IRL from the Crown, reported in our 2008 Annual Report, was deployed to restore R&D capability. The equity injection was received for two purposes: \$10.5m to enable deferred capital purchases and systems improvement essential to delivering on existing research contracts and \$2m to be used to build industry engagement.

To date, IRL has invested \$6.7m (\$5.5m in capital equipment and \$1.2m in industry engagement and business development). A further amount of \$5m for capital is fully committed for the 2009/10 year and the remaining \$0.8m for business development will be deployed by March 2010.

The larger intention of the equity injection – equipment and

system improvement – has enabled us to ensure delivery on existing contractual commitment. IRL is also most appreciative of the opportunities the equity injection has opened up to further interact with industry and we are keen to ensure that everyone is aware that it has enabled us to make significant progress to achieve our aim to support industry productivity and economic development.

Industry engagement

A critical component of the return of IRL to its broader core purpose commenced in late 2006 has seen us move away from narrow technology platforms. This has been welcomed by industry, and we consider the company is now being successfully repositioned alongside key industries, with newly formed relationships with major sector enterprises and industry bodies. We acknowledge the Crown aspirations for growth in industry engagement and IRL continues to work to enhance these aspects of our operations as a strategic priority.

The equity injection included an amount of \$2m to be deployed for business development and industry engagement activities over the current and the 2009/10 fiscal years. These monies were received in March 2008 and deployed to activate an industry engagement plan, including recruitment of five new staff into business development roles, with recruitment completed in October 2008.

During the present year, IRL has repositioned itself with industry through active engagement with our peak industry body, Business NZ. IRL has been admitted to membership of the Major Companies Group (MCG). This relationship gives IRL full access also to each of the employer and manufacturers groups throughout New Zealand.

As part of this exercise IRL has developed new relationships with several industry groups, including the Capitalising on Research and Development Action Group (CRAG), the New Zealand Manufacturing Group, Auckland Metro and Innovation Centre projects, Wireless Network, Plastics Industry Association, Marine Industry Association, and the New Zealand Biomedical Cluster. IRL has been instrumental in establishing an HTS Industry Association with prominent domestic and global businesses joining the industry cluster.

As a result of the extra human resource capability, IRL has been able to achieve higher levels of engagement than previously. Achievements during the period of the equity injection include:

- A joint venture between IRL and General Cable has been formed to commercialise IRL HTS cable technology.
- New major contracts (those valued at over \$50,000) have been signed with over 16 companies.



- IRL recently signed a contract with Ovine Automation Limited to provide robotics and automation solutions to the meat industry. The key players in this research consortium include 10 meat industry players and the Meat Industry Association. The total consortium budget is \$14.9m, of which \$8.4 million is allocated for IRL work over five years.
- Major new international contracts (over \$100,000) have been signed, or will be signed in the near term, with the Indian Institute of Astrophysics, Albert Einstein College of Medicine, the Agency for Science, Technology and Research (Singapore), Meat & Livestock Australia, and more than 10 private companies.
- IRL has entered into a collaborative research agreement based on several assistive devices projects with the Industrial Technology Research Institute of Taiwan. ITRI has secured NT\$8m (around NZ\$1m) from the Ministry of Economic Affairs in Taiwan to support the first year's project activities.

IRL has continued to provide assistance to small and medium-sized firms, including support through the TechNet schemes.

In addition, 22 private companies are now co-located on IRL campuses, enriching our daily interactions with industry.

What's Your Problem New Zealand?

The *What's Your Problem New Zealand?* initiative, which has been spectacularly successful, with 700 enterprises represented at briefings and 105 formal applications received, is an example of the new proactive outreach from IRL to the manufacturing and industrial sector.

What's Your Problem New Zealand? has played an important role in encouraging a wider participation of industry in R&D and in thinking about innovation. It has proved to be a timely intervention that over the next 18 to 24 months has the potential to lift industry R&D investments alongside IRL by 20% to 30%. Entering the next year, IRL expects to be in active negotiation with around 25% of the entrants in the competition.

Revenue growth and diversification

It is pleasing to report that IRL improved its total revenue position by approximately \$3m during the year. This is the third year of revenue growth, and it reflects the growing confidence of our customers in IRL's capacity both to do research and to manage its own business profitably. The challenge still remains to diversify and grow revenue, and that means achieving a greater conversion of pipeline negotiations into active research contracts in the coming year.

More growth in commercial revenue had been expected in the current year, but many of our industry partners have

indicated that they wish to delay decisions to initiate R&D, both as a result of changes in the taxation treatment of R&D and because of the general concerns and difficulties created by the global financial crisis. We did note, however, a shift in confidence towards the end of the financial year that resulted in some significant contracts being signed in June. Although these contracts are some nine months behind our original estimates for signing, it is pleasing to be able to report progress. It is also noteworthy that over half of our existing negotiations are with new customers.

Avoiding sector capture

As custodians of the nation's manufacturing and process engineering capability, IRL has learnt over the last three years that it is important that our know-how and research are accessible to a large cross-section of New Zealand industry. Manufacturing exists in almost all sectors of the economy, and both our customer base and the feedback we have received through *What's Your Problem New Zealand?* indicate that we need to avoid having our capabilities captured within individual sectors. Often other research providers provide the skills the private sector customers need to develop new products, but those customers need to come to IRL to address research needs in terms of processing and manufacturing.

As part of strategy execution, IRL has developed operational plans that take these matters into account. While our Industry Engagement Plan has sub-sector plans for specialty manufacture (industrial and medical), communications technology, biomanufacture (translational medicine and advanced ingredients), specialty food processing, construction and engineering, energy production and distribution, and Māori innovation, it also recognises the need to work with the high-growth, high-technology manufacturers that exist in all sectors. In the coming year we will publish a number of case studies outlining the impact of this work.

The research portfolio that IRL has developed over the last three years reflects a range of government and industry needs and plans. We have used input from the Crown Review of IRL Capabilities (2005), the Manufacturing Plus study (2006), MoRST priorities (including Transformational R&D) as expressed in successive statements of intent, negotiations with the Crown around the national measurement portfolio, and inputs from other departments such as the Ministry of Economic Development. In addition, we have engaged widely with the industry groups identified above to assess business needs and opportunities. We have strong relationships with NZTE and FRST. Together, these inputs can give confidence

that our portfolio reflects government priorities, is synergistic with other agencies, and is strongly supportive of, and supported by, industry.

Progress with commercialisation ventures and partnerships

The progress that IRL has made over the last three years to more comprehensively fill its role in the New Zealand economy has enabled us to develop new approaches to commercialisation. Achieving a positive operating cash flow has allowed IRL to invest in developing expanded commercialisation resources, and to contemplate further investment in commercialisation activities which the company's weak balance sheet previously precluded.

Over the past year, for example, progress has been made in General Cable Superconductors (IRL has 49% equity in this company) for Roebel cable production; with Mimotopes for peptide synthesis; and with Spark Dental Technologies for dental imaging. Ongoing discussions are continuing with potential commercial partners in relation to a number of other technologies, such as cryocoolers.

Similarly, GlycoSyn is under regular review by management and the Board, who are conscious of the need to manage GlycoSyn activities in a manner that does not expose other parts of the business. IRL's strategy for managing the risks associated with GlycoSyn has been to seek to partner with a strategic investor which can add value. However, we recognise that further development is needed before GlycoSyn fulfils its promise and becomes a fully attractive proposition to an external investor. The current focus is to build the order book for GlycoSyn's substantial capability before once again approaching the investment market. Over the past year, GlycoSyn has generated a positive contribution to IRL's fixed overhead and operating costs.

Conclusion

IRL has made a substantial investment in a revitalised commercialisation and business development function focused on a stronger level of engagement with industry. The benefits of this investment have yet to be realised. In the 2009 financial year, IRL planned to increase its revenues and, while some growth and an improved prospects pipeline have been achieved, the company fell short of its commercial revenue projections due to the difficult economic and commercial situation facing business in New Zealand and overseas. The difficult commercial environment is likely to be a feature of business for the next few years, but IRL is confident that

substantial revenue growth from commercialisation activities is achievable as the company rolls out its strategic plan.

I would like to thank the directors of IRL and our many supporters in government and industry for the considerable efforts and support that have been made to assist us not only to restore IRL to financial health, but also to set the scene for an exciting future.

Finally, it is with great pride that I present the 2008/09 IRL Annual Report. The huge achievements that IRL continues to deliver are entirely the results of the talents, passion and efforts of all IRL staff, whose creativity and ability to focus and partner continue to translate into the delivery of great science and practical solutions for the benefit of New Zealand.



Shaun Coffey CEO

