

Energy, Science and Technology

Énergie, Sciences et Technologie Manitoba

**Annual Report
2003 – 2004**

**Rapport annuel
2003 - 2004**

Manitoba



His Honour John Harvard, P.C., O.M.
Lieutenant Governor of Manitoba
235 Legislative Building
Winnipeg MB R3C 0V8

Your Honour:

I am pleased to present the Annual Report for the Department of Energy, Science and Technology for the fiscal year ending March 31, 2004.

Respectfully submitted,

Tim Sale
Minister

Son Honneur John Harvard, P.C., O.M.
Lieutenant gouverneur du Manitoba
Palais législatif, bureau 235
Winnipeg (MB) R3C 0V8

Monsieur le Lieutenant gouverneur,

J'ai le plaisir de présenter à Votre Honneur le rapport annuel du ministère de l'Énergie,
Sciences et Technologie pour l'exercice se terminant le 31 mars 2004.

Je vous prie d'agréer, Monsieur le Lieutenant gouverneur, l'expression de mon profond respect.

Le ministre,

Tim Sale



Honourable Tim Sale
Minister of Energy, Science and Technology
Room 333, Legislative Building
Winnipeg MB R3C 0V8

Dear Minister Sale:

I have the honour of presenting the Annual Report for the Department of Energy, Science and Technology for the period April 1, 2003 to March 31, 2004.

The mission of the department is to increase the innovative capacity of all Manitobans to support community development, economic growth, and diversification and provide a focus for government information technology requirements.

The department has undertaken many activities in collaboration with our partners and stakeholders. The highlights below illustrate achievements in support of the department's activities:

- A Memorandum of Understanding for Cooperation on Addressing Climate Change was signed by Manitoba and Canada on March 19, 2004 wherein the parties agreed to further coordinate federal-provincial efforts on climate change policies and measures.
- A Climate Change Community Challenge strategy was developed to enlist local citizen involvement in greenhouse gas emission reduction approaches.
- Delivery of expanded federal-provincial cost-sharing for a multi-stakeholder led impacts and adaptation research network for Canada's Prairie Region.
- The Manitoba Climate Change Action Fund provided support totaling \$247,420 for a total leverage project value of \$2.7 million through the program.
- Energy Development Initiative (EDI) worked with companies and numerous communities interested in establishing or expanding ethanol production in Manitoba.
- EDI and Manitoba Hydro staff met with approximately 30 US and Canadian companies, in a variety of sectors, to discuss in detail, advantages of relocating or expanding operations to Manitoba.
- Through the Manitoba Research and Innovation Fund (MRIF), the Province provided over \$12.0 million to support research and innovation. Specifically, \$2.0 million went to support the indirect costs of research at Manitoba's five health research centres and further \$500 thousand supported technology commercialization activities in the areas of ICT and Life Sciences.
- The MRIF also funded 41 research projects for a total of \$8.8 million. This leveraged over \$12.0 million in additional funding from the federal government through the Canada Foundation for Innovation, Genome Canada and the Canadian Institutes of Health Research.
- The Manitoba Centres of Excellence Fund provided support totaling \$483,800 to 12 projects and leveraged federal support at a ration of 5:1.
- In 2003/04 the Department provided \$1.95 million in funding to the Manitoba Health Research Council to support the administration of the Council and its personnel awards and research grants.
- Led a delegation of Manitoba's life sciences industry representatives to BIO 2003 International Biotechnology Convention and Exhibition held in Washington DC. Over 16,000 registered for the

convention (3,500 from outside North America, 990 Canadians, 11,600 Americans) and 1,268 exhibitors (47 US states and 57 nations).

- The second annual Business of Science Symposium was held in Winnipeg on October 8 and 9, 2003. The conference highlighted the growth of Manitoba's life sciences sector to national and international delegates in attendance and provided a networking opportunity for industry stakeholders, in addition to raising awareness and promoting business and career opportunities in Manitoba's growing life sciences industry.
- Broadband Initiative continues to lend support to the activities undertaken by Industry Canada's Broadband for Rural and Northern Development (BRAND) Program. This \$105.0 million national initiative announced in September 2002 has provided 118 Manitoba communities with a total of \$6.6 million in matching funds to enable the creation of broadband networks throughout the province.
- Out of the work from the Community Connections Initiative the youth development team (from Brandon University) has developed into a small Manitoba software development company (Function Four, Inc.).
- Technical and application support was provided to access sites by a Help Desk established by the Swan Valley Resource Network with support from Community Connections. This has since developed into a small Manitoba company (83 North, Inc.). A similar Francophone helpdesk was developed in partnership with Réseau de ressources communautaires franco-manitobain (CDEM). Community Connections has funded approximately 50 access sites in bilingual Manitoba municipalities.
- Through the collaborative effort of the Province of Manitoba and the City of Brandon, Convergys Corporation announced an expansion of its contact centre operations into Brandon. Operations are expected to begin in July of 2004 with employment to reach 300 by the end of year two. By choosing to establish operations in Brandon, Convergys will spur job creation and economic spin-offs in the local community and their commitment to downtown will help support efforts to revitalize the downtown area.

The department is committed to the Principles and Guidelines set out in the Sustainable Development Act and incorporates them in departmental activities, programs and business practices. Departmental initiatives support sustainable development through minimizing waste through the efficient use of office supplies and recycling, increased utilization of the internet to communicate and disseminate information to our internal and external clients, delivery of a variety of seminars and implementing audio conferencing.

The department continues to participate on various Sustainable Development Committees and Working Groups such as the Steering Committee, the Code of Practice, Financial Management Guidelines, Sustainability Reporting and the Regulation Sustainable Development working teams.

The department is continuing with innovative initiatives and strategic planning that will contribute to the success of Manitoba.

Respectfully submitted,

John Clarkson
Deputy Minister



M. Tim Sale
Ministre de l'Énergie, des Sciences et de la Technologie
Palais législatif, salle 333
Winnipeg (Manitoba) R3C 0V8

Monsieur le Ministre,

J'ai l'honneur de vous présenter le rapport annuel du ministère de l'Énergie, des Sciences et de la Technologie pour la période du 1^{er} avril 2003 au 31 mars 2004.

La mission du ministère consiste à accroître la capacité d'innovation de tous les Manitobains et Manitobaines afin de soutenir le développement communautaire, la croissance économique et la diversification, et à offrir un point de convergence pour les besoins du gouvernement en matière de technologie de l'information.

Le ministère a entrepris plusieurs activités en collaboration avec nos partenaires et groupes d'intérêt. Les points saillants indiqués ci-dessous illustrent les réalisations appuyant les activités ministérielles :

- Signature par le Manitoba et le Canada d'un Protocole d'entente de coopération en matière de lutte contre les changements climatiques le 19 mars 2004, dans lequel les parties conviennent de continuer à coordonner leurs efforts quant à la mise en œuvre des politiques et des mesures destinées à lutter contre les changements climatiques.
- Élaboration d'une stratégie de défi communautaire en matière de changement climatique afin de faire participer les populations locales aux mesures de réduction des émissions de gaz à effet de serre.
- Mise en œuvre de mesures fédérales-provinciales étendues de partage des frais pour la création d'un réseau de recherche sur les impacts climatiques et l'adaptation de la région des Prairies dirigé par des groupes d'intérêt multipartites.
- Aide du Fonds d'action sur le changement climatique du Manitoba totalisant 247 420 \$, ce qui a permis d'obtenir un financement de contrepartie total de 2,7 millions de dollars pour l'ensemble du programme.
- Collaboration du personnel de l'Initiative de développement énergétique (IDE) avec des entreprises et de nombreuses collectivités intéressées, afin d'établir ou d'accroître la production d'éthanol au Manitoba.
- Rencontre du personnel de l'IDE et de Manitoba Hydro avec environ 30 entreprises américaines et canadiennes, de divers secteurs, pour discuter en détail des avantages du déménagement ou de l'accroissement des exploitations au Manitoba.
- Versement par la Province de plus de 12 millions de dollars pour soutenir la recherche et l'innovation, par le truchement du Fonds pour la recherche et l'innovation du Manitoba (FRIM). En particulier, la Province a versé 2 millions de dollars pour soutenir les coûts indirects liés à la recherche dans cinq centres de recherche sur la santé, ainsi que 500 000 \$ supplémentaires pour soutenir les activités de commercialisation de la technologie dans les domaines de la TIC et des sciences de la vie.
- De plus, financement par le FRIM de 41 projets de recherche pour un total de 8,8 millions de dollars. Cela a généré un financement de contrepartie supplémentaire de 12,0 millions de dollars du

gouvernement fédéral par le biais de la Fondation canadienne pour l'innovation, de Génome Canada et des Instituts de recherche en santé du Canada.

- Aide d'un total de 483 800 \$ accordée à 12 projets par le Fonds pour les centres d'excellence du Manitoba, ce qui a généré un financement fédéral de contrepartie selon un ratio de 5 pour 1.
- En 2003-2004, financement de 1,95 millions de dollars accordé par le ministère au Conseil manitobain de la recherche en matière de santé, afin de l'aider à financer son administration, ainsi que ses bourses au personnel et ses subventions de recherche.
- Direction de la délégation de représentants du secteur des sciences de la vie du Manitoba à BIO 2003 International Biotechnology Convention and Exhibition, une conférence-exposition qui a eu lieu à Washington (D.C.). Plus de 16 000 personnes se sont inscrites à cette conférence (3 500 de l'extérieur de l'Amérique du Nord, 990 Canadiens, 11 600 Américains), ainsi que 1 268 exposants (47 états américains et 57 pays).
- Tenue du deuxième Business of Science Symposium annuel à Winnipeg les 8 et 9 octobre 2003. Ce symposium a attiré l'attention des délégués nationaux et internationaux sur la croissance du secteur des sciences de la vie du Manitoba et a fourni des occasions de réseautage aux intervenants de ce secteur, ainsi que des occasions d'affaires et de carrières dans le secteur manitobain croissant des sciences de la vie.
- Appui continu de l'Initiative d'accès à large bande aux activités entreprises par le Programme à large bande, en ce qui a trait au développement rural et du Nord d'Industrie Canada. Cette initiative nationale de 105 millions de dollars annoncée en septembre 2002 a permis de fournir des fonds de contrepartie de 6,6 millions de dollars au total à 118 collectivités manitobaines afin de permettre la création de réseaux à large bande dans toute la province.
- Transformation de l'équipe de développement (de l'Université de Brandon) en une petite entreprise manitobaine de conception de logiciels (Function Four, Inc.), grâce aux travaux du programme Connexions communautaires.
- Fourniture de services de soutien technique et des applications aux sites d'accès par un centre d'assistance créé par le Swan Valley Resource Network avec l'aide du programme Connexions communautaires. Ce centre est devenu depuis une petite entreprise manitobaine (83 North, Inc.). Un centre d'assistance francophone similaire a été créé en partenariat avec le Réseau de ressources communautaires franco-manitobain (CDEM). Le programme Connexions communautaires a financé approximativement 50 sites d'accès dans les municipalités bilingues du Manitoba.
- Annonce par Convergys Corporation de l'étendue des opérations de son centre d'appel à Brandon grâce à la collaboration de la Province du Manitoba et de la Ville de Brandon. Les opérations devraient commencer en juillet 2004, et comprendre jusqu'à 300 employés à la fin de la deuxième année. En choisissant de s'installer à Brandon, Convergys stimulera la création d'emplois et les retombées économiques dans la collectivité locale, et son engagement envers le centre-ville permettra d'appuyer les efforts de revitalisation de ce dernier.

Le ministère veille à se conformer aux principes et aux directives énoncés dans la *Loi sur le développement durable* et s'efforce de les intégrer dans ses activités, ses programmes et ses pratiques. Les initiatives ministérielles appuient le développement durable à l'aide des mesures suivantes : réduction des déchets grâce à l'utilisation efficace des fournitures de bureau et au recyclage, utilisation accrue d'Internet pour communiquer et diffuser l'information à nos clients internes et externes, offre de divers séminaires et mise en œuvre de conférences téléphoniques.

Le ministère continue de participer à divers comités et groupes de travail du développement durable comme les équipes de travail chargées du comité directeur, du code de déontologie, des lignes directrices en matière de gestion financière, de la communication de rapports sur le développement durable et des règlements sur le développement durable.

Le ministère continue d'avoir recours à des initiatives innovatrices et à une planification stratégique qui contribueront au succès du Manitoba.

Veillez agréer, Monsieur le Ministre, l'expression de mes meilleurs sentiments.

Le sous-ministre,

John Clarkson

TABLE OF CONTENTS

| Title | Page |
|---|-------------|
| Preface | 1 |
| Introduction | 1 |
| Report Structure | 1 |
| Statutory Responsibilities | 1 |
| Sustainable Development | 2 |
| Organization | 3 |
| Role and Mission | 3 |
| Avant-Propos | 5 |
| Introduction | 5 |
| Structure du Rapport | 5 |
| Responsabilités Législatives | 5 |
| Développement Durable | 6 |
| Organisation | 7 |
| Rôle et Mission | 7 |
| Administration and Finance | 9 |
| Minister and Executive Support | 9 |
| Financial and Administrative Services | 10 |
| Energy Development Initiative | 12 |
| Energy Development Initiative | 12 |
| Climate Change | 15 |
| Energy and Climate Change Initiatives | 17 |
| Science, Innovation and Business Development | 18 |
| Science, Innovation and Business Development | 18 |
| The Industrial Technology Centre | 27 |
| Manitoba Health Research Council | 28 |
| Manitoba Information and Communication Technology | 29 |
| eManitoba Secretariat | 29 |
| Information and Communication Technology Policy | 30 |
| Information and Communication Technology Service Delivery | 32 |
| Legislative Building Information Systems | 34 |
| Manitoba Education Research Learning Information Network (MERLIN) | 36 |
| Amortization and Other Costs Related to Capital Assets | 37 |
| Financial Information | 38 |
| Reconciliation Statements | 38 |
| Expenditure Summary | 39 |
| Expenditures Summary Explanations | 42 |
| Revenue Summary by Source | 43 |
| Five-Year Expenditure and Staffing Summary by Appropriation | 44 |
| Part B Capital | 45 |
| Appendices | 46 |
| A. Associated Agencies | 46 |
| B. Summary of Business Assistance | 47 |
| C. Listing of Business Assistance | 48 |

PREFACE

INTRODUCTION

The Department of Energy, Science and Technology (EST) was established in September of 2002. The Financial and Administrative Services branch under Industry, Economic Development and Mines (IEDM) is a cooperative unit that also provides service to EST.

REPORT STRUCTURE

The Annual Report is organized in accordance with the department's appropriation structure as at April 2003 and in the Main Estimates of Expenditure for the Province. The Report includes financial performance and variance information at the main and sub-appropriation levels and information relating to the department's objectives and results at the sub-appropriation level. The Report also includes information about associated agencies, business assistance, revenue and expenditures, a five-year comparison of expenditures and a staffing analysis.

STATUTORY RESPONSIBILITIES

The Minister of Energy, Science and Technology is responsible for the following:

| | |
|--|-------|
| The Gaming Control Act..... | G 5 |
| The Gaming Control Local Option (VLT) Act..... | G 7 |
| The Economic Innovation and Technology Council Act | E 7 |
| The Energy Act | E 112 |
| The Manitoba Health Research Council Act..... | H 28 |
| The Manitoba Hydro Act | H 190 |

SUSTAINABLE DEVELOPMENT

The department is committed to the Principles and Guidelines set out in The Sustainable Development Act and works to incorporate them in department activities, programs and business practices.

The Principles and Guidelines of Sustainable Development are:

1. Integration of Environmental and Economic Decisions
2. Stewardship
3. Shared Responsibility and Understanding
4. Prevention
5. Conservation and Enhancement
6. Rehabilitation and Reclamation
7. Global Responsibility
8. Efficient uses of Resources
9. Public Participation
10. Access to Information
11. Integrated Decision Making and Planning
12. Waste Minimization and Substitution
13. Research and Innovation.

The Sustainable Development Procurement Goals:

14. Education, Training and Awareness
15. Pollution Prevention and Human Health Protection
16. Reduction of Fossil Fuel Emissions
17. Resource Conservation
18. Community Economic Development

ORGANIZATION

The department's 2003/2004 organization structure is illustrated in the Organization Chart, page i. The roles, responsibilities and staffing are outlined in the following information.

ROLE AND RESPONSIBILITIES

MISSION

We build the capacity for Manitobans to prosper through innovation, by:

- creating strategic partnerships,
- encouraging investment,
- enabling equitable access to the right tools,
- promoting awareness and knowledge and
- championing critical policy development.

FOCUS

The Department was established in recognition of the following:

- **Innovation** is key to future economic development and **capacity to deliver** government initiatives;
- **Energy, science and technology** are critical to the further development of the Manitoba economy;
- Government's need to **focus** economic development priorities; and
- **Strengthen** the approach to economic development.

The Department will:

- Focus provincial innovation activities;
- Assist in the growth and success of our science, research and technology assets;
- Strengthen, develop, grow and attract knowledge-based industries;
- Focus government information technology requirements;
- Build community based partnerships through connectivity;
- Focus government climate change implementation plans;
- Strategically develop Manitoba's energy resources, in co-operation with public and private sectors
- support innovation in communities and schools;
- link response to climate change with innovation and economic success;
- link government's own IT activities with innovation and economic development.

The Department will work collaboratively with business, individuals, government departments and communities to:

- strengthen their capacity to succeed;
- enhance the competencies they need to prosper;
- raise their profile locally, nationally and internationally; and
- foster an environment that supports sustainable economic growth.

Some of the immediate and short-term priorities for the Department are:

- The development of a comprehensive national implementation framework for the climate change initiatives;
- The communication and implementation of an Innovation Framework for Manitoba
- The approval of research funding through the Manitoba Innovations Fund for the current fiscal year;
- The development of a plan for the East West Hydro Grid;
- The implementation of an Ethanol mandate for the Province;
- The development of Broadband community based networks;
- Creation of the Manitoba Information and Communications Technologies Division bringing together the corporate ICT branches from across government;
- The development and implementation of a comprehensive business development strategy for the Biotechnology development.

To achieve its mission, the department is organized in 4 divisions:

ADMINISTRATION AND FINANCE DIVISION provides for the executive management of the department and central financial, administrative, human resources and computer support services to departmental programs.

ENERGY DEVELOPMENT INITIATIVE develops and implements energy development and climate change initiatives, and economic development strategies involving hydro-electric resources and alternate energy development opportunities. Develops, monitors and coordinates the implementation of energy policies and climate change initiatives and related provincial programs.

SCIENCE, INNOVATION & BUSINESS DEVELOPMENT functions as the government's primary focus for business development services to industry and communities in the areas of life sciences, knowledge enterprises, technology and infrastructure to support economic growth and stimulate employment. Oversees the implementation of the Manitoba Centres of Excellence fund and the Manitoba Research and Innovation Fund; provides a coordinating function for all research, innovation, science and technology initiatives in government; provides funding for health research initiatives; develops, analyzes and communicates policies related to telecommunications; develops strategic plans, business plans and provides research, analysis and evaluation services.

MANITOBA INFORMATION and COMMUNICATION TECHNOLOGY develops a comprehensive e-strategy for the province building on strengths in business, education and government community; develops key Information and Communication Technology (ICT) strategies, policies, standards and business processes to optimize the delivery of core ICT functions in support of service delivery goals; provides an information and communication technology environment within government where appropriate technologies are fully integrated with service delivery requirements; and provides analytical framework for review and approval of all ICT plans, projects and expenditures.

AVANT-PROPOS

INTRODUCTION

Le ministère de l'Énergie, des Sciences et de la Technologie a été établi en septembre 2002. La Direction des services administratifs et financiers, qui relève d'Industrie, Développement économique et Mines Manitoba, fournit également des services au ministère.

STRUCTURE DU RAPPORT

La présentation du rapport annuel reflète la structure budgétaire du ministère en avril 2003 et celle du Budget des dépenses de la Province. Le rapport contient des renseignements sur les postes principaux et secondaires du budget en ce qui concerne le rendement financier et les écarts par rapport aux prévisions, ainsi que des renseignements sur les postes secondaires en ce qui concerne les objectifs du ministère et les résultats obtenus. Il présente en outre des renseignements sur les organismes associés, le soutien aux entreprises, les recettes et les dépenses, ainsi qu'une récapitulation quinquennale des dépenses et de la dotation en effectif.

RESPONSABILITÉS LÉGISLATIVES

Le ministère de l'Énergie, des Sciences et de la Technologie veille à l'application des lois suivantes :

| | |
|---|-------|
| <i>Loi sur la Commission de régie du jeu</i> | G 5 |
| <i>Loi sur les options locales en matière de jeu (appareils de loterie vidéo)</i> | G 7 |
| <i>Loi sur le Conseil de l'innovation économique et de la technologie</i> | E 7 |
| <i>Loi sur l'énergie</i> | E 112 |
| <i>Loi sur le Conseil manitobain de la recherche en matière de santé</i> | H 28 |
| <i>Loi sur l'Hydro-Manitoba</i> | H 190 |

DÉVELOPPEMENT DURABLE

Le ministère veille à se conformer aux principes et aux directives énoncés dans la *Loi sur le développement durable* et s'efforce de les intégrer dans ses activités, ses programmes et ses pratiques.

Principes et directives de développement durable :

1. Intégration des décisions économiques et environnementales
2. Supervision de la gestion de l'environnement
3. Responsabilité partagée et compréhension
4. Prévention
5. Conservation et promotion
6. Récupération et remise en état
7. Responsabilité planétaire
8. Utilisation efficace des ressources
9. Participation du public
10. Accès à l'information
11. Prise de décision et planification intégrées
12. Réduction et remplacement des déchets
13. Recherche et innovation

Objectifs de développement durable en matière d'approvisionnement :

14. Éducation, formation et sensibilisation
15. Prévention de la pollution et protection de la santé humaine
16. Réduction des émissions de combustibles fossiles
17. Conservation des ressources
18. Développement économique communautaire

ORGANISATION

L'organigramme, qui se trouve à la page i, reflète la structure organisationnelle du ministère pendant l'exercice 2003/2004. L'information qui suit porte sur le rôle et les responsabilités de ce ministère ainsi que sur la dotation en personnel.

RÔLE ET RESPONSABILITÉS

MISSION

Nous donnons aux Manitobains et Manitobaines la possibilité de prospérer par le biais de l'innovation de la manière qui suit :

- création de partenariats stratégiques
- encouragement des investissements
- accès équitable aux outils adéquats
- encouragement de l'éducation et du savoir
- soutien en ce qui a trait à l'élaboration des politiques essentielles

INTÉRÊT

Le ministère a été créé en reconnaissance de ce qui suit :

- ***l'innovation*** est la clé du développement économique et de la ***capacité de mener à bien*** les initiatives gouvernementales;
- ***les secteurs de l'énergie, des sciences et de la technologie*** sont essentiels à la prospérité économique du Manitoba;
- le gouvernement doit ***faire converger*** ses priorités en matière de développement économique;
- le gouvernement doit ***renforcer*** l'approche au développement économique.

Le ministère

- mettra l'accent sur les activités provinciales liées à l'innovation;
- contribuera à la croissance et au succès de nos atouts dans les secteurs de la science, de la recherche et de la technologie;
- renforcera, développera, fera croître et attirera des entreprises fondées sur le savoir;
- fera converger les besoins du gouvernement en matière de technologie de l'information;
- créera des partenariats dans la collectivité grâce à la connectivité;
- mettra l'accent sur les plans de mise en œuvre du gouvernement liés au changement climatique;
- mettra en valeur, de manière stratégique, les ressources énergétiques du Manitoba en collaboration avec les secteurs public et privé;
- soutiendra l'innovation dans les collectivités et les écoles;
- fera le lien entre la réponse au changement climatique d'une part et l'innovation et le succès économique, d'autre part;
- fera le lien entre les activités de TI du gouvernement d'une part et l'innovation et le développement économique, d'autre part.

Le ministère collaborera avec les entreprises, les particuliers, les autres ministères et les collectivités aux fins suivantes :

- renforcer leur capacité de réussite;
- rehausser les compétences nécessaires à leur prospérité;
- améliorer leur image aux plans local, national et international;
- favoriser l'établissement d'un milieu propice à la croissance durable de l'économie.

Parmi les priorités immédiates et à court terme du ministère, il y a celles-ci :

- élaboration d'un cadre national détaillé de mise en œuvre des mesures liées au changement climatique;
- diffusion et mise en œuvre d'un cadre pour l'innovation au Manitoba;
- approbation de fonds de recherche par le biais du Fonds des innovations du Manitoba pour l'exercice en cours;
- élaboration d'un plan pour le réseau hydroélectrique est-ouest;
- mise en œuvre d'un mandat en matière d'éthanol pour la province;
- création de réseaux communautaires à large bande;
- création de la Division des technologies de l'information et des communications du Manitoba qui réunit toutes les directions de technologies de l'information et des communications du gouvernement;
- élaboration et mise en œuvre d'une stratégie détaillée de développement des entreprises pour la mise en valeur du secteur de la biotechnologie.

Pour mener à bien sa mission, le ministère est organisé en quatre divisions :

DIVISION DE L'ADMINISTRATION ET DES FINANCES : offre un appui à la haute direction du ministère et fournit des services centralisés de gestion financière et administrative, de ressources humaines et de soutien informatique aux programmes ministériels.

INITIATIVE DE DÉVELOPPEMENT ÉNERGÉTIQUE : élabore et mène à bien des initiatives en matière de développement énergétique et de changement climatique ainsi que des stratégies de développement économique touchant les ressources hydroélectriques et les possibilités de mise en valeur d'énergies de rechange; élabore, surveille et coordonne la mise en œuvre de politiques énergétiques, d'initiatives en matière de changement climatique et d'autres programmes connexes du gouvernement.

SCIENCES, INNOVATION ET DÉVELOPPEMENT DES ENTREPRISES : agit comme principal point de convergence du gouvernement pour les services de développement des entreprises destinés à l'industrie et à la collectivité dans les secteurs des sciences de la vie, des entreprises du savoir, de la technologie et des infrastructures en vue de soutenir la croissance économique et de stimuler l'emploi; supervise la mise en œuvre du Fonds pour les centres d'excellence du Manitoba et du Fonds pour la recherche et l'innovation du Manitoba; fournit des services de coordination pour toutes les initiatives de recherche dans le domaine de la santé; analyse et communique les directives relatives aux télécommunications; élabore des plans stratégiques, des plans d'affaires, et fournit des services de recherche, d'analyse et d'évaluation.

BUREAU DES TECHNOLOGIES DE L'INFORMATION DU MANITOBA : élabore une stratégie détaillée des services en ligne pour la province en s'appuyant sur les forces des secteurs des affaires et de l'éducation, ainsi que sur celles du gouvernement et des collectivités; élabore des stratégies, des politiques, des normes et des méthodes administratives clés pour les technologies de l'information et des communications (TIC) afin d'optimiser la prestation des principales fonctions des TIC en appui aux objectifs de prestation des services; fournit une architecture des TIC au sein du gouvernement en intégrant les technologies appropriées aux exigences en termes de prestation de services; fournit un cadre d'analyse pour l'examen et l'approbation des plans, des projets et des dépenses en matière de TIC.

ADMINISTRATION AND FINANCE

The Administration and Finance Division comprises the Executive Support Offices and the cooperative Financial and Administrative Services section of IEDM.

MINISTER'S SALARY AND EXECUTIVE SUPPORT

- Executive Support includes the Offices of the Minister and Deputy Minister. The Minister provides leadership and direction to ensure the goals and objectives of the department are accomplished. The Office of the Deputy Minister provides the Minister with advice and information regarding issues and matters of concern to the department. Executive Support is responsible for providing the department with policy direction and the overall planning and co-ordination of departmental activities.

18-1(a) Minister's Salary

| Expenditures by Sub-Appropriation | Actual 2003/04 \$ | Estimate 2003/04 FTE | \$ | Variance Over (Under) | Expl. No. |
|--|----------------------------------|-------------------------------------|-------------|----------------------------------|----------------------|
| Minister's Salary | 28.8 | 1.00 | 29.0 | (0.2) | |
| Total Expenditures | 28.8 | 1.00 | 29.0 | (0.2) | |

18-1(b) Executive Support

| Expenditures by Sub-Appropriation | Actual 2003/04 \$ | Estimate 2003/04 FTE | \$ | Variance Over (Under) | Expl. No. |
|--|----------------------------------|-------------------------------------|--------------|----------------------------------|----------------------|
| Total Salaries & Employee Benefits | 308.1 | 6.00 | 344.6 | (36.5) | |
| Total Other Expenditures | 80.1 | | 83.0 | (2.9) | |
| Total Expenditures | 388.2 | 6.00 | 427.6 | (39.4) | |

ADMINISTRATION AND FINANCE

FINANCIAL AND ADMINISTRATIVE SERVICES

The Financial and Administrative Services Branch provides services to the departments of Energy, Science and Technology (EST) and Industry, Economic Development and Mines (IEDM) and related agencies. The Branch provides financial management, administrative, information technology and human resource services to both departments.

OBJECTIVES

- The objectives of Finance and Administrative Services is to: provide leadership, program direction and operational coordination to support department activities; to provide high quality, timely and customer responsive administrative, financial management, information technology and human resource service; develop and administer appropriate administrative and financial standards, policies and procedures; and to develop and maintain appropriate reporting systems to provide timely and accurate decision-making information to senior management in the departments and in central agencies through a centralized support service.

ACTIVITIES/RESULTS

- In support of the branch objectives and the mission of the Department, the branch processed payments and receipts; recruited, deployed, trained and paid staff; administered and coordinated the Department's parking and pool vehicle programs; provided for physical accommodations including furniture and equipment and mail distribution; provided advisory and specialized accounting and financial management services to departmental personnel and related entities; managed the Department's records management program and provided timely, accurate and relevant information to departmental and central agency decision-makers including budgetary and cash flow information to Treasury Board.

In 2003/04 Financial Services processed the following for EST and IEDM; 44,414 payment/revenue transactions and 480 authority-seeking documents (214 for EST and 266 for IEDM) and 69 Freedom of Information requests (28 for EST and 41 for IEDM).

In addition, the section prepared the Detailed Estimates, Estimates Supplement, Annual Report and all other year-end financial reports for both, IEDM and EST.

The Human Resource Services section provided staffing, employment equity, job analysis and classification, employee counselling, labour relations, and pay and benefits administration. The shared resources of the unit also provide staff and organizational development, occupational health and safety, and employment equity program development.

Human Resource staff that support Energy Science and Technology are part of the consolidated HR unit that also services the Departments of Culture Heritage and Tourism, Finance, Industry, Economic Development & Mines, and the Office of the Auditor General

- Human Resource activities are carried out in accordance with The Civil Service Act, the Manitoba Government Employee Union Master Agreement, Manitoba labour laws, and Workplace Health and Safety legislation.

Specific activities of Human Resource Services during 2003-2004 included:

Employment Equity Statistics as at Fiscal Year End

| | 2002-2003 Actual (%) | 2003-2004 Actual (%) |
|-------------------------|-------------------------------------|-------------------------------------|
| Aboriginal | 1.3 | 1.5 |
| Women | 47.4 | 47.0 |
| Persons with Disability | 2.6 | 1.5 |
| Visible Minority | 2.6 | 3.0 |

- The branch continues to co-ordinate the implementation of government-wide policies and initiatives.
- Two temporary and eight regular positions were filled through formal competition process for EST. Three positions were filled through various direct appointments.
- Prepared detailed classification analysis under delegated and non-delegated authority for 14 reclassification requests.
- Consulted with management/supervisory personnel, employees and the M.G.E.U. in the resolution of various labour relations issues. No formal grievances were filed.
- Maintained payroll records for 148 EST employees.
- Provided benefit information on 22 employee appointments and lay-off to EST employees.
- Energy Science and Technology participated in the various Internship programs offered through the Civil Service Commission.
- Staff attended seminars totaling approximately 18 days of learning events for EST/IEDM that were designed and delivered in 2003. These events range from Project Evaluation, Performance Conversations, Managing Change, Competency Based Management and Leadership Development programs.
- Organizational consulting consisted of advice and recommendations on Organizational design, facilitation of strategic planning and the integration of Civil service initiatives into organizational culture.

Computer Services provided the department with information technology support services including: computer systems design and implementation; equipment evaluation and acquisition (outside the Desktop Refresh); user education and assistance (outside the standard suite); and implementation of government wide initiatives from the Office of Information Technology and adherence to guidelines and standards.

- Additional Computer Services activities undertaken for EST during the year included:
- Creation of the central Manitoba Contact Directory of all government employees at the first step to facilitate the access of people, programs and services of government for At Your Service Manitoba.
- Refresh of computers and re-engineering applications to XP.

18-1(c) Financial and Administrative Services

| Expenditures by Sub-Appropriation | Actual 2003/04 \$ | Estimate 2003/04 FTE \$ | Variance Over (Under) | Expl. No. |
|--|----------------------------------|--|----------------------------------|----------------------|
| Total Other Expenditures | 150.0 | 150.0 | - | |
| Total Expenditures | 150.0 | 150.0 | - | |

ENERGY DEVELOPMENT INITIATIVE

ENERGY DEVELOPMENT INITIATIVE

- Energy Development Initiative (EDI) comprises a key component of the department. Two branches make up EDI, Energy Policy and Energy Economic Development.
- EDI focuses its efforts on promoting clean energy development in the province.

OBJECTIVES

- The primary objectives of the Energy Development Initiative include: developing and implementing government-wide economic development strategies encompassing Manitoba hydroelectric resources and other emerging renewable energy development opportunities; developing, analyzing and implementing provincial government's energy policies.

ACTIVITIES/RESULTS

Energy Policy

Energy Policy is responsible for developing broad energy policies that establish a framework for sustainable energy economic development and programs that contribute to the reduction of greenhouse gas emissions. The following provides a summary of activities:

Ethanol: The Bio-Fuels Act was passed by the Manitoba Legislature that can trigger the mandating of 10 percent ethanol in 85 percent of the gasoline in the province. The Interdepartmental Ethanol Committee continues to meet and oversees the implementation of Manitoba's ethanol strategy. This group is coordinated by EDI. The Manitoba Ethanol office continues to be the central contact for industry and the Manitoba public in areas pertaining to ethanol.

Hydro Projects: The Wuskwatim Hydro Electric Project is currently before the Clean Environment Commission (CEC). The CEC is expected to complete its public work by June 2004. Should an environmental license be granted, Manitoba Hydro and its NCN partners would make a decision on whether or not to proceed with the project. Wuskwatim would be a low-impact 200 MW project on the Burntwood River. EDI assisted with this work where government involvement was required. EDI officials also participated in discussions with government officials in Ontario relating to a new clean energy transfer from Manitoba to Ontario. A pre-feasibility study has been completed triggering a feasibility study which is now underway.

Wind Power: EDI continues to study the viability of wind power in Manitoba. In addition, several policy tools are being assessed as to whether they would be relevant in the Manitoba context.

Other Renewable Energy: There are ongoing evaluations being conducted into the viability of other renewable energy initiatives including ground source heat pumps (geo-thermal heat pumps), bio-gas and micro-hydro projects. The division also represents Manitoba on the Powering the Plains Initiative and on the energy subcommittee of the Legislators Forum – both regional organizations were set up to foster cooperation between and amongst upper Midwest states and Manitoba.

East-West Grid: Manitoba continued its efforts to raise the national profile of an east-west power grid. Such an initiative would potentially result in enabling the transfer of clean energy from Manitoba to other Canadian jurisdictions.

Energy Efficiency: The Government announced that it was seeking public input on a new agency that it was creating that would be dedicated to promoting efficiency. EDI has led this consultation exercise and is participating in the establishment of the agency.

Energy Economic Development

Energy Economic Development is responsible for promoting existing energy resources and helping to develop emerging renewable energy sources for sustainable and environmentally responsible economic growth in Manitoba. Energy Economic Development partners closely with Manitoba Hydro in carrying out its responsibilities. The following provides a summary of activities:

Hydro-Electric Power Sale

EDI co-managed studies with Ontario Energy, Hydro One and Manitoba Hydro to evaluate the feasibility of a large, long-term Manitoba hydro-electric power sale to Ontario and all the associated infrastructure developments. This work is being done under the auspices of the Manitoba/Ontario Clean Energy Transfer. Memorandum of Understanding (MOU) was signed on June 20, 2003. The study is near completion.

Ethanol

EDI carried out activities to ensure ethanol production and associated economic development in Manitoba increases. EDI worked with eight companies and numerous communities interested in establishing or expanding ethanol production in Manitoba. A shorter list of companies and communities are now moving to the next stage of due diligence, arranging financing and executing their business plans for investment and plant development. Husky Energy applied and was approved for a \$6.4 million contribution under the Government of Canada's Federal Ethanol Expansion program for a new plant in Manitoba.

Wind Energy

EDI provided ongoing business development support to Bison Wind LP in their efforts to build a \$190 million, 99 MW wind farm near St. Leon Manitoba. The company continues with its external project financing negotiations. Business development support was also provided to Shell Canada Renewables as they pursued wind energy opportunities in association with Manitoba Hydro. In relation to potential Manitoba wind farm developments, EDI commenced an assessment of economic development opportunities associated with wind turbine and component manufacturing and servicing.

Hydrogen

EDI continued to coordinate and chair the activities of the Manitoba Hydrogen Steering Committee. The Manitoba Hydrogen Initiative received considerable profile as EDI presented the Committee's guiding document, Manitoba Preliminary Hydrogen Opportunities Report, at the Canadian Hydrogen/Fuel Cell Conference in Vancouver. Progress continues on several of the key projects identified as priority actions within the Report, including the Hydrogenics hybrid fuel cell bus project, an assessment for a hydrogen centre of expertise, an electrolysis unit to produce hydrogen at Manitoba Hydro's Dorsey station, a proposed stationary fuel cell demonstration utilizing bi-product hydrogen, a signed memorandum of understanding between the Government of Manitoba and the Government of Iceland on hydrogen development, and other proposed transportation related projects utilizing hydrogen in modified internal combustion engines.

Investment Attraction

EDI promoted Manitoba's energy advantage as a centre piece in seeking broad industrial investment into the province. EDI and Manitoba Hydro staff met with approximately 30 US and Canadian companies, in a variety of sectors, to discuss in detail advantages of relocating or expanding operations to Manitoba. Several hundred more companies were reached through a number of sector specific trade shows and conferences. EDI, in cooperation with Manitoba Hydro, completed a power quality study that identified industrial sectors most sensitive to power quality issues. Results will be used to help better focus the marketing of the province's energy advantage. To help profile Manitoba, EDI website and promotional brochures were revamped and in cooperation with Manitoba Hydro, several national advertisements were placed and event sponsorships undertaken.

18-2(a) Energy Development Initiative

| Expenditures by Sub-Appropriation | Actual 2003/04 \$ | Estimate 2003/04 FTE | \$ | Variance Over (Under) | Expl. No. |
|--|----------------------------------|-------------------------------------|----------------|----------------------------------|----------------------|
| Total Salaries & Employee Benefits | 803.1 | 11.00 | 813.8 | (10.7) | |
| Total Other Expenditures | 553.6 | | 502.8 | 50.8 | 1 |
| Total Expenditures | 1,356.7 | 11.00 | 1,316.6 | 40.1 | |

1. Required expertise necessitated the branch to use contracted services originally budgeted in salaries.

CLIMATE CHANGE

As part of the Energy Development Initiative Division, the Climate Change Branch (CCB) contributed to climate change and energy related efforts of the Government of Manitoba during the 2003 - 2004 fiscal year; acting as a champion and catalyst both within the government and across the province to raise awareness and promote action on advancing understanding of climate change impacts and adaptation as well as reducing greenhouse gas emissions.

CCB developed programs and policies that assisted citizens, organizations and businesses seize opportunities to take action on climate change and enhance their quality of life and benefit Manitoba's economy. The Manitoba Climate Change Action Fund (MCCAF), a component of the Sustainable Development Innovation Fund, was administered by the Branch and provided grants to support practical, made-in-Manitoba actions that respond to the issue of climate change.

CCB also advocated on behalf of Manitoba in work related to national climate change and greenhouse gas emission reduction programs.

ACTIVITIES/RESULTS

Promoted and administered the Manitoba Climate Change Action Fund (MCCAF).

In the final year of its four-year \$1million total budget, the MCCAF processed 23 applications, requesting a total of \$419,669.00 from the Fund, and provided grants to 11 projects to support innovative ways to reduce greenhouse gas emissions and to adapt to the challenges and opportunities caused by climate change. The 11 approved projects received \$247,420.00 in MCCAF funding, for a total leveraged project value for the program of \$2.7 million.

Worked collaboratively with citizen and stakeholders to enhance knowledge and plan actions related to climate change.

Increased citizen and stakeholder participation in consultation efforts throughout Manitoba. Provided citizens and stakeholders information on Manitoba Government climate change actions. Liaised with climate change researchers and stakeholders to gain better understanding of climate change activities and their implications for citizens.

Assisted in the development of an effective national climate change implementation plan.

Participated in federal-provincial working groups with officials from other provinces-territories and the federal government to represent Manitoba interests in the development of a Kyoto implementation plan.

Promoted climate change education and outreach.

Enhanced public education and awareness of climate change through participation in the Climate Change Connection, climate change workshops, seminars and conferences such as the international CUSO Communities and the Impact of Climate Change Conference, the Climate Change Community Challenge and by encouraging departmental and government participation in the annual Commuter Challenge as part of Government's commitment to lead by example.

Implemented a strategy to encourage citizens to make greenhouse gas emission reduction plans and monitor and celebrate success.

Developed terms of reference and program guidelines for Manitoba's Climate Change Community Challenge (C4). Pursued partnership development with the federal government's One-Tonne Challenge Program and C4 initiative. In developing the C4 Program, collaborated with community-based organizations to pursue cooperation and encourage local involvement to reduce greenhouse gas emissions.

Grant Assistance

Grant assistance supports partnerships and national collaboration in furtherance of implementing climate change and greenhouse gas emission reduction actions.

In 2003-04, a total of \$6.9 was provided in grant assistance.

\$6.4 was provided for VCR membership. This was Manitoba's proportional share (based upon an established "CCME" national formula based upon population) of a national cooperative program to achieve voluntary greenhouse gas emission reductions. Manitoba Hydro received an award as a leading corporate participant in this program.

\$0.5 was provided for PARC. This was Manitoba's share of a contribution to a national policy coordination effort amongst provincial and territorial governments who sought to explore the potential for developing joint program or policy efforts. Manitoba's current work on credits for clean energy and East-West national clean power grid have grown from this effort.

18-2(b) Climate Change

| Expenditures by Sub-Appropriation | Actual | Estimate | | Variance Over (Under) | Expl. No. |
|--------------------------------------|---------------|-------------|---------------|--------------------------|--------------|
| | 2003/04 \$ | FTE | 2003/04 \$ | | |
| Total Salaries & Employee Benefits | 243.4 | 7.00 | 416.3 | (172.9) | 1 |
| Total Other Expenditures | 188.7 | | 145.2 | 43.5 | 2 |
| Grant Payments | 6.9 | | 14.3 | (7.4) | 3 |
| Total Expenditures | 439.0 | 7.00 | 575.8 | (136.8) | |

1. *Positions remained vacant and contracted services were used.*
2. *Required expertise necessitated the branch to use contracted services originally budgeted in salaries.*
3. *Timing and level of planned activities did not take place as anticipated.*

ENERGY AND CLIMATE CHANGE INITIATIVES

The Energy and Climate Change Initiatives provides for analysis of energy and climate change initiatives on the Manitoba economy.

18-2(c) Climate Change

| Expenditures by Sub-Appropriation | Actual 2003/04 \$ | Estimate 2003/04 FTE \$ | Variance Over (Under) | Expl. No. |
|--|----------------------------------|--|----------------------------------|----------------------|
| Total Other Expenditures | 319.2 | 400.0 | (80.8) | 1 |
| Total Expenditures | 319.2 | 400.0 | (80.8) | |

1. *Timing and level of planned activities did not occur as anticipated.*

SCIENCE, INNOVATION AND BUSINESS DEVELOPMENT

SCIENCE, INNOVATION AND BUSINESS DEVELOPMENT

OBJECTIVES

The main focus of Science, Innovation and Business Development (SIBD) is to provide Manitoba with a comprehensive, integrated and coordinated approach to innovation, research and technology initiatives including:

- research, innovation and technology policy development and coordination;
- knowledge based industry development and growth;
- building Manitoba's life sciences presence
- smart community development; and
- extending broadband access to all of Manitoba.

SIBD's mission is *to promote and enhance a climate of research, innovation and technology development that spurs responsible economic development for the benefit of all Manitobans*. Its objectives are to:

- develop public policy initiatives in support of research, innovation and technology development;
- develop a provincial innovation infrastructure;
- build and strengthen the research and innovation capacity within the province;
- build community capacity for sustained economic development in the new economy;
- build the capacity for new company formation, attraction and growth; and
- coordinate the implementation of public policy initiatives in the areas of research, information technologies, and investments.

PROGRAM AREAS

Strategic Planning and Analysis

Strategic Planning and Analysis provides a central role for the Department in areas of strategic and operational planning and organizational development. Strategic Planning and Analysis also provides policy and research support to the Department and is the lead across government on the development and implementation of policy, strategies and initiatives on innovation, science and research issues.

Knowledge Based Business Development

Knowledge Based Business Development works in partnership with key stakeholders to develop an innovation environment in which Information Communications and Technology (ICT), new media and cultural industries can thrive. Overall the group will support the development of knowledge-based business community by working with companies to identify opportunities for innovation and strategic partnerships to support their growth.

Life Sciences

Life Sciences works with multiple public and private stakeholders to strengthen Manitoba's globally competitive life sciences cluster in the health, agri-food and environment sectors, leading to positive social and economic outcomes for all Manitobans.

Broadband Initiative

The Broadband Initiative works with the private sector and community based organizations in order to provide high-speed connectivity and Broadband capacity to those areas in the province where such services do not currently exist.

ACTIVITIES/RESULTS

• **Strategic Planning & Analysis**

Manitoba Research and Innovation Fund (MRIF)

With an allocation of \$12.25 million, the Manitoba Research and Innovation Fund (MRIF) is the main vehicle for provincial research and innovation funding. Established in 2003/04 the MRIF has three separate components: Research Funding, Health Research Initiative and Innovation Funding. The objectives of the MRIF are:

- to increase the capacity of Manitoba’s universities, colleges, hospitals and other not-for profit institutions to carry out important world-class scientific research and technology development through the funding of research projects identified as a priority by the Province;
- to increase Manitoba’s capacity for innovation through the support of science and technology awareness, technology commercialization and other strategic initiatives;
- to enhance job creation, economic growth, productivity and competitiveness;
- to encourage collaboration between and within the private sector and research institutions;
- to enhance Manitoba research institutions' abilities to attract and keep world-class researchers and skilled technicians, and to conduct state-of-the-art research; and
- lead to improvements in Manitobans' health, environment, and quality of life.

Research Fund - The Research Fund provided \$8.8 million in 2003/04 to expand Manitoba's research capacity. To date, the Province has approved \$56.2 million for Research Funding projects. Some of the projects approved for funding include the Canada – Kenya Collaboration on Infectious Disease Research, Manitoba Centre for Health Policy Endowed Child Health Chair, Fundamental Geonomics of Abiotic Stress in Crop Projects – Genome Prairie project

Health Research Initiative - HRI funding, totalling \$2.0 million was provided to the five research centres in 2003/2004. The program funds were apportioned to each centre according to a formula that has been used consistently since the program's inception as a pilot project in 1996/97. Payments to each HRI participant were as follows:

| Institution | Funding Allotment |
|---|--------------------------|
| CancerCare Manitoba | \$177,574.54 |
| Manitoba Institute for Child Health | \$57,986.57 |
| Health Sciences Centre | \$440,694.35 |
| St. Boniface General Hospital Research Centre | \$451,518.31 |
| • University of Manitoba | \$872,226.23 |
| TOTAL: | \$2,000,000.00 |

Innovation Fund - This program is used to assist the implementation of the identified strategic priorities of the Department. Funding in this stream is catalytic, supports the broader industry in developing their innovation structures, and promotes economic development by leveraging and expanding research capacity and assisting with technology commercialization.

In 2003/04 the following projects received funding:

| | |
|--|-----------|
| TRLabs | \$480,000 |
| MindSet | \$250,000 |
| Incubat | \$200,000 |
| International Academy of Cardiovascular Sciences | \$ 25,000 |

- **Manitoba Centres Of Excellence (MCEF)**

The national headquarters for the Intelligent Sensing for Innovative Structures (ISIS) network that conducts R&D on advanced composite materials and electronic sensors for construction engineering projects such as bridges and earthquake resistant buildings is located at the University of Manitoba. During 2003/04 MCEF support totaling \$483,800 was provided to the following projects and leveraged federal support at the 5:1 ratio:

- Canadian Genetic Diseases Network
- Micronet
- Canadian Institute for Telecommunications Research
- ISIS Canada
- Sustainable Forest Management
- Canadian Arthritis Network
- Vaccines & Immunotherapeutics of Cancer & Chronic Viral Diseases (CANVAC)
- Canadian Stroke Network (CSN)
- Photonics
- Canadian Water Network
- Auto 21
- PENCE

- **Manitoba Health Research Council (MHRC)**

In 2003/04 the Department provided \$1.95 million in funding to the Manitoba Health Research Council to support the administration of the Council and its personnel awards and research grants. MHRC was established to “promote and assist basic, clinical and applied research in the health sciences in Manitoba and to advise the Minister on health research matters referred to Council”. Over its 20-year history, the Council has performed its role primarily through financial support (grants and awards) to newly appointed investigators, postdoctoral fellows and graduate students.

- **Manitoba Network For Science And Technology (Mindset)**

The Manitoba Network for Science and Technology (MindSet) is an EST sponsored initiative led by a full-time Program Facilitator that supports the development, co-ordination and implementation of year-round science and technology awareness activities in Manitoba. MindSet encourages and promotes:

- scientific and technological awareness, knowledge, ability and skills;
- improved school-to-work transition in science and technology areas; and
- innovation in science and technology.

In particular, MindSet's role is primarily one of facilitating, networking, communicating and implementing activities, especially in areas important to the provincial economy. These areas include information technology, biotechnology, aerospace, advanced manufacturing, composites and new materials and new media. MindSet's key activities in 2003/04 included:

- Aventis Biotechnology Challenge
- Biotech Alive Lecture Series
- MindSet Summer Institutes
- Manitoba Science and Technology Recognition Lunch
- Digitized Student Technology Conference
- New Media Master Classes
- Women in Technology Workshops
- Computer Information Processing Society's Adopt-a-School Program
- Canada's Community IT Heroes Awards
- Harnessing the Gray Matter
- International Biotechnology Student Programs
- Life Science Educators' Group

- **Incubat**

Incubat is a business incubator formed by a joint venture between the University of Manitoba (including Smart Park) and two Incubat managers; Genesys Venture Inc. (GVI) and e-Stage Capital Inc (e-Stage). Incubat's objective is to provide critically needed management, business, and financing

- experience to early stage companies in the Life Science and Information Communication Technology (ICT) sectors. The University of Manitoba provides Incubat with new technology ventures through a University program called VentureBox and the SpringBoard Fund provides initial financing for the first year. GVI will provide business incubation to Life Science companies while e-Stage will incubate ICT companies. Other new local innovative enterprises are also eligible to locate in the facility.

- To date, e-Stage has accepted five companies from the community into the incubator and is assessing a number of prospective University-based opportunities. GVI is presently engaged with one university-based company at the Incubat facility and is evaluating several other opportunities. The Province has committed operational funding of \$200,000/year for three years to Incubat.

International Centre for Infectious Diseases (ICID) Task Force

The Governments of Canada (Western Diversification) and the Province of Manitoba (Energy, Science and Technology) sponsored a task force in May 2003 to identify economic and community development opportunities that should be pursued for the Winnipeg cluster of health and life sciences research, academic, biotechnology industry and related facilities involved in infectious diseases.

The International Centre for Infectious Diseases (ICID) Task Force, co-chaired by Terry Duguid and Dr. Frank Plummer focused primarily on opportunities related to developments around the Canadian Science Centre for Human and Animal Health (CSCHAH), Health Sciences Centre, University of Manitoba medical facilities and associated health research institutions, and Manitoba's life science industry.

The International Centre for Infectious Diseases (ICID) Task Force's report was released on January 26, 2004. The Task Force proposed a vision for further developing an extensive world-class infectious diseases research, development and training cluster around the National Microbiology Laboratory and the University of Manitoba's downtown medical faculty campus.

Knowledge Based Business Development

Convergys Corporation

Through the collaborative effort of the Province of Manitoba and the City of Brandon, Convergys Corporation announced an expansion of its contact centre operations into Brandon. Operations are expected to begin in July of 2004 with employment to reach 300 by the end of year two. By choosing to establish operations in Brandon, Convergys will spur job creation and economic spin-offs in the local community and their commitment to downtown will help support efforts to revitalize the downtown area. The Province of Manitoba will provide up to \$1.5 million over three years in training assistance which will benefit the local workforce in the Brandon area.

- **TRLabs**

This was the third year of the government's new 5-year investment of \$2.4 million in TRLabs' Winnipeg facility. With this investment the Government and TRLabs agreed on new commercially focussed targets for the organization including the commercialization of research, creation of spin-off companies, increases in small and medium sized enterprises (SME) membership and in the number of personnel trained and retained within Manitoba.

Information Communications Technology (ICT) Procurement Reform

Knowledge Enterprises branch provided secretariat support to the Premier's Economic Advisory Council's task force on ICT procurement. Working in conjunction with stakeholders, the branch is developing an implementation plan for the task force recommendations.

Short Term Accelerator Program (STAP)

The branch supported the Short Term Accelerator Program for emerging Information and Communications Technology Workshops in the fall of 2003. The objective of the program is to better position small and medium ICT and New Media enterprises to attract early stage financing. The ability to attract the appropriate level of early stage financing is critical to the development of these enterprises.

New Media Centre of Excellence

Knowledge Enterprises branch continues to work with partners to investigate the potential of a world-class digital imaging/New Media Centre of Excellence to promote and develop research, technological innovation and new products within the New Media industry which will lead to the creation of new jobs, provide important social and economic benefits to the province and enhance new employment opportunities in science & technology for the youth of our Province. The centre will provide a focal point for the New Media Industry and other stakeholders in Manitoba, encompassing industry, government and educational institutions.

Virtual Incubation Manitoba

The branch is supporting a virtual incubator focussed on technology companies called Virtual Incubation Manitoba. Knowledge Enterprises has secured funding through Community Connections in partnership with WD to fund the expansion of the virtual incubator to target rural and northern businesses.

Applied Bioinformatics Research Centre

Staff are working with the University of Manitoba and key stakeholders in genomics and proteomics to build a proposal for a Bioinformatics Research Centre or Consortium.

Information and Communications Technology and New Media Sector Directory

A survey of companies was undertaken for the Information and Communications Technology Sector as well as New Media companies.

Industry Support Activities

A number of industry initiated events were supported throughout the past year, including:

- Tech 2003 in Brandon
- TR Labs Data Networking Symposium
- Frontier School Division for New Media exposure for northern students
- Co-hosting of TR Labs Community Dinner
- Winnipeg Chamber of Commerce BIG Conference

Information and Communication Technologies Association of Manitoba (ICTAM)

The Branch assisted representatives of the ICT industry to establish a new industry association as a working forum for Manitoba's information technology community with a focus on helping to create an environment that fosters economic growth throughout the technology ecosystem. The overall goals of the organization include: nurturing the growth of an advanced technological infrastructure; accelerating the deployment of information technology; and fostering the development of Manitoba-based content and applications

Assistance Programs

Through its financial assistance programs the branch has, over the past year, assisted a number of technology-based companies to perform technological assessments and marketing evaluations for business expansion purposes. Six companies in the areas of software application development, wireless networking, microwave transmission and electronics have been supported successfully through the Feasibility Studies Program (FSP) and the Technology Commercialization Program (TCP).

Life Sciences

Atlanta Outreach Mission

In February 2004, the Life Sciences Branch coordinated an outreach mission to Atlanta, Georgia to explore opportunities for collaboration between life science focused research and industry stakeholders in the two jurisdictions. The Manitoba delegation was lead by Premier Doer and included representatives from Cangene Corporation, the National Microbiology Laboratory, Red River College, Smith Carter Architects, St. Boniface General Hospital Research Centre, and the University of Manitoba. Premier Doer and the Honorable Sonny Perdue, Governor of the State of Georgia signed a Letter of Intent to work co-operatively on innovation, economic and entrepreneurship development endeavors. The mission also provided the delegation with the opportunity to visit the Centres for Disease Control and Prevention and learn of the advantages in linking in one location infectious disease researchers with those responsible for the public health and safety.

AusBiotech 2003 Conference

AusBiotech 2003 conference and exhibition was held in Adelaide, South Australia August 16 to 19, 2003. The theme of the AusBiotech 2003 Conference was "Invention to Product" reflecting the nature of Australia's maturing and entrepreneurial biotechnology industry. The Life Sciences Branch in collaboration with Manitoba Trade and Investment Corporation secured exhibit space within the Canadian pavilion and participated in partnering meetings at the event to showcase and promote Manitoba's life sciences sector and to identify opportunities to increase collaboration between the two jurisdictions. Approximately 1,000 participants from Australia and the international community were in attendance. In addition, meetings were held with government and life science industry representatives in Sydney, New South Wales; Melbourne, Victoria; Brisbane, Queensland; and Auckland, New Zealand. Opportunities for inward investment, partnerships and research collaborations were identified at the meetings.

BIO 2003 International Biotechnology Convention and Exhibition

Each year the Biotechnology Industry Organization (BIO) hosts the world's premier biotechnology conference, bringing together scientists, entrepreneurs and innovators from around the world. Held in Washington DC, BIO 2003 saw over 16,000 registrants (3,500 from outside North America, 990 Canadians, and 11,600 Americans) and 1,268 exhibitors (47 US states and 57 nations).

In response to interest from Manitoba biotechnology companies and research centres, 1200 sq ft of exhibit space was purchased for a Manitoba pavilion at BIO 2003. Within the pavilion, there were 10 Manitoba exhibitors: Cangene Corporation; Institute for Biodiagnostics; University of Manitoba; Lombard Life Sciences; Richardson Centre for Functional Foods and Nutraceuticals; BCY Life Sciences; TRILabs; Medicure Inc.; National Microbiology Laboratory; and Manitoba Energy, Science and Technology. In addition to the individuals working within the Pavilion, a number of Manitobans went to the convention itself. In total, 45 Manitobans participated in BIO 2003, including Ministers Sale and Mihychuk.

The Province's participation at BIO 2003 was one of two jurisdictions profiled in a *Washington Post* feature article. In a post-event evaluation, the companies believed that they identified, on average, ten solid business leads. It was felt that it would take about twelve months to pursue these contacts. In 2003, however, two exhibitors were able to confirm contracts within 3 months of the convention; one contract was for \$400,000 and the other was a multi-year, multi million dollar contract.

Bio Energy Conference

Manitoba Energy, Science and Technology in conjunction with Manitoba Hydro, National Research Council – IRAP, and Natural Resources Canada – CANMET held a two-day seminar for North American bioenergy stakeholders in February 2004. The seminar showcased experts from across North America speaking on crops and wastes, recovery and handling, conversion technologies and energy marketing, the key components of bioenergy. In excess of 100 people participated in this inaugural event. Discussions are underway with respect to a follow-up conference in 2005.

Business of Science Symposium

The Business of Science Symposium is a two-day conference designed to raise awareness, educate, celebrate and promote business and career opportunities in Manitoba's growing life sciences industry. The main objective of the Symposium is to strengthen the province's primary life sciences sectors - agriculture, health and environment - by creating awareness of industry and member capabilities and facilitating connectivity between stakeholders. The second annual Symposium was held in Winnipeg on October 8 and 9, 2003.

The event was highly successful in capturing the momentum of Manitoba's dynamic life sciences industry and celebrating its scientific and business expertise. More than 450 people attended the Symposium, including business leaders, researchers, science and technology innovators, life sciences students and educators, capital providers, and government officials who support the life sciences sector. The event is a joint initiative between two departments: Energy, Science and Technology and Industry, Economic Development and Mines.

-
- The symposium featured three Keynote speakers, Manitoba's Premier Gary Doer, Carl B. Feldbaum, President of the Biotechnology Industry Organization (BIO), Washington, DC and Mr. W. Steven Burke, Senior Vice-President for Corporate Affairs & External Relations at the North Carolina Biotechnology Centre.

This year's symposium explored emerging links between Manitoba's health, agriculture, information and communications technology, and environment sectors. Featured topics for discussion include biodefence, bioinformatics, biocomposites, functional foods and health.

Federal/Provincial/Territorial Life Sciences Working Group

A Federal/Provincial/Territorial Working Group on Life Sciences was formed in 2003 to provide a collaborative forum which encourages a national approach to policies intended to foster development and commercialization of innovation in the life sciences. The working group consists of a representative from each province and Industry Canada. The Director General, Life Sciences Branch, Industry Canada and the Director, Life Sciences Branch, Manitoba Energy, Science and Technology co-chair the working group. Meetings are held quarterly and rotate across the country. The working group identified three priority issues in need of attention in 2004 – human resource development, the attraction of private sector investment, and technology transfer, adoption, diffusion and commercialization.

Industrial Biotechnology Training Initiative

Staff within the Life Sciences Branch coordinated with Manitoba Advanced Education and Training and Red River College on the development of an industrial biotechnology training initiative to respond to the growing human resource needs of Manitoba's life sciences industry. Programs focused on biopharmaceutical manufacturing, quality assurance/quality control and technology transfer are to be delivered by Red River College beginning in September 2004. The training initiative is unique within Western Canada and is expected to attract to Manitoba students interested in the life sciences.

Ottawa Mission to Secure CDC North

In March, 2003, Premier Doer led a delegation of 41 representatives from Manitoba's business and life sciences community to Ottawa to meet with the Prime Minister as well as senior federal ministers to ensure that the advantages of co-locating in Manitoba the scientific research with the command-and-control centre for public health were communicated to those decision-makers seeking to establish a national public health agency. The advice from the CDC in Atlanta was to ensure that the nation's health in a crisis situation such as an infectious disease outbreak should be managed by scientists and administrators working side-by-side. Specific meetings were held with Ministers McClellan, Bennett and Pettigrew to brief them on the Manitoba advantage.

PharmaTech Summit 2003

Energy, Science and Technology was invited to participate in the 2004 PharmaTech Summit based upon the Province's strong showing at the BIO 2002 International Conference in Toronto. The event provided an opportunity to showcase Manitoba's world class life science expertise, unique infrastructure and investment climate to an exclusive group of R&D, clinical and management executives from the most respected pharmaceutical organizations around the world.

Wellness West

Wellness West is a western Canadian collaboration dedicated to the development of an economically viable functional foods and natural health products industry in western Canada. In September 2003, partner organizations including: Agriculture and Agri-Food Canada; Alberta Agriculture, Food and Rural Development; British Columbia Ministry of Agriculture, Food and Fish; Canadian Technology Network; Manitoba Agriculture and Food; Manitoba Energy, Science and Technology; National Research Council, Industrial Research Assistance Program; Saskatchewan Agriculture Food and Rural Revitalization; Saskatchewan Industry and Resource; and Western Economic Diversification, agreed to create "Wellness West" as an interim mechanism to collaboratively respond to industry issues that had been identified in a March 2003 consultation report, "A Framework to Support the Functional Foods and Nutraceutical Industry in Western Canada". The overall goal of this collaborative alliance is to ensure that innovative functional food and nutraceutical SMEs in Western Canada receive value-added advice, technology development and commercialization support, strategic information and innovation-related financing.

Broadband Initiative

Since its creation in September 2001, the Broadband Project Office has been active on several fronts in terms of partnership development with the private sector and community based organizations in order to provide high speed internet/Broadband solutions to various regions of the Province where that service does not currently exist.

It is this Province's vision to utilize high speed Internet connectivity to secure all of those economic and social benefits available through the use of information and communications technologies for the benefit of all Manitobans.

As directed by the Community Economic Development Committee of Cabinet, the Broadband Initiative of Energy, Science and Technology, in conjunction with Manitoba Education Research Learning Information Networks, has developed a business case to provide High-Speed Internet access to all Manitoba schools. High Speed in this case is defined at 2Mbps synchronous, the data processing rate needed for real-time video. Based on the highly successful Swan River School Division pilot project, the province will soon be in a position to allow public school traffic to flow over the Provincial Data Network backbone in a secure environment. Potentially 272 rural schools could take advantage of this offering.

The Manitoba Provincial Data Network (PDN) is a secure Wide Area Network (WAN) service that connects computer systems in government offices, departments, hospitals, agencies, crown corporations, and boards, throughout the Province of Manitoba.

Broadband Initiative continues to lend support to the activities undertaken by Industry Canada's Broadband for Rural and Northern Development (BRAND) Program. This \$105-million National initiative announced in September 2002 has provided 118 Manitoba communities with a total of \$6.6 million in matching funds to enable the creation of broadband networks throughout the province.

Broadband is currently redeveloping the province's broadband strategy. The document outlining details of the strategy is scheduled for review by cabinet in the Fall of 2004.

Community Connections

On March 7, 2000 the Governments of Canada and Manitoba announced a cost-sharing Memorandum of Agreement (MOA) of up to \$11.1 million that was to increase the number of public Internet access sites in Manitoba from 146 to 586. The Memorandum of Agreement (MOA) with Industry Canada was extended providing a further \$2.48 million for the 2002/2003 and 2003/2004 fiscal years. These funds were used to; support the existing access sites, further develop the Community Resource Networks (CRN's) and the content of their websites, develop enhancements to the CIMnet application used by the CRN's for their websites, provide Help Desk support and, to support the Canada Access Program Youth Initiative (CAPYI).

In Winnipeg, 201 sites were established, 61 in Northern Manitoba and 338 in rural Manitoba; sites were established in a variety of community organizations. The capacity of all public libraries was significantly increased. Also of note is that 24 rural Canada Post Offices were included in this initiative with the specific objective of making their EPOST services available throughout Manitoba. Funding support available to the access sites included funds for connectivity, assistive technology and small grants for local communities' broadband initiatives.

Community access sites are organized into Community Resource Networks (CRN's) that jointly develop and host local websites. The Seniors Resource Network, for example, has developed a website-<http://seniors.cimnet.ca> that presents the best of senior's related information. This is the default homepage for the access sites in the 30 senior's resource centres throughout Manitoba. Sites in the Transcona Resource Network are linked to community information through <http://transcona.cimnet.ca>. Approximately 25 CRN's are currently under development. Many Northern communities are beginning to use public access and CIMnet applications to create virtual communities. The Hudson Bay Neighbors (<http://hbn.cimnet.ca>) and the Bayline Regional Roundtable (<http://baylinerrt.cimnet.ca>) are recent examples.

Out of the work being done through the Community Connections Initiative the youth development team (from Brandon University) has developed into a small Manitoba software development company (Function Four, Inc.)

Technical and application support was provided to access sites by a Help Desk established by the Swan Valley Resource Network with support from Community Connections. This has since developed into a small Manitoba company (83 North, Inc.). A similar Francophone helpdesk was developed in partnership with Réseau de ressources communautaires franco-manitobain (CDEM) Communities Connections has funded approximately 50 access sites in bilingual Manitoba municipalities. The Help Desks was expanded in 2003/2004 to provide service to Saskatchewan, Alberta, Nunavut and the North West Territories. Toward the end of 2003/2004 the two separate services merged to form a not-for-profit organization known as HelpCan. All help desk services are now provided through that organization.

The CAP Youth Employment Initiative employs approximately 160 Youth (to age 29). Youth employees are funded through a partnership with funding of approximately \$1.0 M from various partners including; Community Connections, Industry Canada, MB Education, and HRDC. Youth support the operation of access sites and the CRN web sites. Toward the end of 2003/2004 The Manitoba E-Association a not-for-profit organization was established to serve as the delivery agent for the CAPYI program.

Community Connections worked with Service Manitoba on the evaluation of this initiative. Anecdotal success stories can be found at the Community Connections newsletter site <http://lux.ccimnet.ca>.

18-3(a) Science, Innovation and Business Development

| Expenditures by Sub-Appropriation | Actual | Estimate | | Variance Over (Under) | Expl. No. |
|---|-----------------|--------------|-----------------|-----------------------------|--------------|
| | 2003/04 \$ | FTE | 2003/04 \$ | | |
| Total Salaries & Employee Benefits | 1,419.5 | 22.00 | 1,514.4 | (94.9) | |
| Total Other Expenditures | 754.5 | | 806.1 | (51.6) | |
| Program Delivery: | | | | | |
| - Manitoba Research & Innovations Fund | 12,041.3 | | 12,250.0 | (208.7) | |
| - Manitoba Centres of Excellence | 483.8 | | 483.8 | - | |
| Total Expenditures | 14,699.1 | 22.00 | 15,054.3 | (355.2) | |

THE INDUSTRIAL TECHNOLOGY CENTRE

The Industrial Technology Centre (ITC) is a special operating agency of the Department of Energy Science and Technology. The Department supports ITC's contribution to economic development activities in Manitoba via an Economic Development Contribution Agreement (a performance contract). ITC provides a wide range of technical services in support of technology based economic development in Manitoba. ITC tables its annual report under separate cover with the Manitoba Legislature.

18-3(b) Industrial Technology Centre

| Expenditures by Sub-Appropriation | Actual 2003/04 \$ | Estimate 2003/04 FTE \$ | Variance Over (Under) | Expl. No. |
|--|----------------------------------|--|----------------------------------|----------------------|
| Total Expenditures | 750.0 | 750.0 | - | |

MANTITوبا HEALTH RESEARCH COUNCIL

The Manitoba Health Research Council (MHRC) provides funding for health research initiatives. The Manitoba Health Research Council tables its annual report under separate cover with the Manitoba Legislature.

18-3(c) Manitoba Health Research Council

| Expenditures by Sub-Appropriation | Actual 2003/04 \$ | Estimate 2003/04 FTE \$ | Variance Over (Under) | Expl. No. |
|--|----------------------------------|--|----------------------------------|----------------------|
| Total Expenditures | 1,746.6 | 1,752.6 | (6.0) | |

MANITOBA INFORMATION AND COMMUNICATION TECHNOLOGY

eMANITOBA SECRETARIAT

OBJECTIVES

eManitoba Secretariat provides support to an advisory council, eManitoba Council, which is comprised of Deputy Ministers, in the area of innovation in service delivery and technology. eManitoba Secretariat connects the eManitoba Council with executive government and serves as an interface between government and stakeholders from business, industry, institutions and academia.

ACTIVITIES/RESULTS

eManitoba Secretariat began work on a comprehensive Service Strategy for the province that builds on strengths in our business, education and government community. Work on the strategy will continue through 2004/05.

- The “*At Your Service Manitoba*” (AYSM) initiative approaches the electronic, telephone and in-person channels of government/citizen in a unified approach on a government-wide basis.
 - Funding introduced in 2003/04 to support application development specific to direct service delivery was implemented and a number of departmental projects moved through the process.
 - Projects that support the AYSM initiative such as Integrated Service Centres, the employee Contact Directory and service delivery standards are ongoing.
- eManitoba Secretariat will continue to support and work on government decision-making processes that are aligned with provincial strategic goals.

18-4(a) eManitoba Secretariat

| Expenditures by Sub-Appropriation | Actual 2003/04 \$ | Estimate 2003/04 FTE | \$ | Variance Over (Under) | Expl. No. |
|--|----------------------------------|-------------------------------------|--------------|----------------------------------|----------------------|
| Total Salaries & Employee Benefits | 472.3 | 7.00 | 502.5 | (30.2) | |
| Total Other Expenditures | 72.2 | | 83.3 | (11.1) | |
| Total Expenditures | 544.5 | 7.00 | 585.8 | (41.3) | |

INFORMATION AND COMMUNICATION TECHNOLOGY POLICY

Manitoba Information and Communication Technology Policy branch (MICT-Policy) provides ICT planning, development and operational activities that support the major strategic direction of government. It is also responsible for leveraging and coordinating the government's investment in ICT to ensure best value from investment and maximum economic and community development opportunities.

ACTIVITIES/RESULTS

MICT-Policy established the following targets in support of activities undertaken in 2003/04:

- establish ICT governance to give clear direction and leadership;
- develop corporate ICT policies, procedures and standards;
- seek long term strategy for desktop infrastructure and related services for the government of Manitoba, to ensure government is equipped appropriately to deliver services in a manner that meets departments strategies for citizen's needs most efficiently;
- develop an ICT Strategic Plan for government to identify actions required to support the goals of the Manitoba Innovation Framework;
- develop and implement an Enterprise Architecture for government, defining the target hardware platforms and software development frameworks; and
- develop Value Management strategies and Contract Management strategies to ensure best value for ICT dollars, enhance the current RFP process, improve vendor relationships and consider economic development opportunities.

MICT-Policy reports the following results in 2003-04:

- developed a multi year desktop refresh strategy that sets the stage for the long term vitality of the Government network at reduced costs;
- negotiated an extension with EDS Canada that will start the process to revitalize the network infrastructure (NIS), this revitalization project will work to consolidate government servers, improve service delivery and reduce the outsourcing costs to Manitoba;
- worked with Department of Health and the WRHA to release a Request for Proposal for the HISP system for St. Boniface Hospital;
- developed Investment Review Guideline;
- developed the Investment Prioritization Framework;
- in conjunction with eManitoba Secretariat, launched the Software Application Development Fund (SADF), the fund was established to promote investment in software development that supports the government's desire to improve access to provincial government information and services to Manitoba citizens;
- as part of the Premier's Economic Advisory Council ICT Procurement sub-committee, developed a strategy and implementation plan for addressing concerns of SME's (small and medium enterprises) with regard to a fair and open procurement process; and
- assisted departments with their information technology initiatives through the provision of advice, RFP and contract reviews, technical guidance and proposal reviews.

18-4(b) Information and Communication Technology Policy

| Expenditures by Sub-Appropriation | Actual 2003/04 \$ | Estimate 2003/04 FTE | \$ | Variance Over (Under) | Expl. No. |
|--|----------------------------------|-------------------------------------|----------------|----------------------------------|----------------------|
| Total Salaries & Employee Benefits | 1,372.9 | 20.00 | 1,437.1 | (64.2) | |
| Total Other Expenditures | 1,056.9 | | 1,483.7 | (426.8) | 1 |
| Total Expenditures | 2,429.8 | 20.00 | 2,920.8 | (491.0) | |

1. Training provided by the competency development program was deferred and an information technology research contract was not renewed.

INFORMATION AND COMMUNICATION TECHNOLOGY SERVICE DELIVERY

Manitoba Information and Communication Technology Service Delivery branch (MICT-SD) develops, maintains and supports Manitoba's ICT infrastructure and associated services to meet the current and future needs of the public sector and citizen-centered programming.

ACTIVITIES/RESULTS

MICT-SD has established the following targets in support of activities undertaken in 2003-04:

- Develop, maintain and support the corporate ICT infrastructure and associated services to ensure that desktop services, application hosting services and telecom and network management meet current and future needs.
- Provide systems development, deployment and maintenance capability related to core business and corporate applications.
- Develop strategies to safeguard information assets, including government ICT systems, electronic transactions and confidential information gathered through all channels.
- Develop and deliver a security education awareness program for all staff across government toward ensuring the secure use of government network and data.

MICT-SD reports the following results in 2003-04:

- Deployed 2350 computers as part of the multi-year Refresh Initiative to maintain a current technology environment.
- Implemented the remote access service that will greatly improve the productivity of remote Government workers, this solution increases the access speed by users by 2000% while significantly reducing dial costs to the Government.
- Completed the Active Directory Planning document, MICT is deploying an initial Directory framework into the Managed Environment which allows for departmental deployment of Active Directory applications within a corporate framework.
- Implemented a Storage Area Network (SAN) to address increasing shortages of disk space within the environment.
- Completed the rollout of the Next Generation provincial data network.
- Conducted a Voice over Internet Protocol (VoIP) pilot over the provincial data network (PDN).
- Negotiated a 2-year agreement for cellular telephone services with Manitoba Telecom Services (MTS); the new rates will result in estimated cost savings of approximately \$579.6 per annum across government.
- Completed the third phase of development for the Child Day Care system.
- Completed the Manitoba Business Links system.
- Extended the corporate credit card service to Energy Development Initiative Division for internet credit card transactions and functionality.
- Partnered with department of Family Services and Housing (FSH) to replace the FSH legacy system for all HR functions for approximately 2000 Direct Service workers, the payroll has been incorporated with the government payroll system (SAP).
- Assisted the Winnipeg Regional Health Authority in the development of a secure wireless networking infrastructure to support the delivery of patient service in personal care homes in Winnipeg.
- Launched an education and awareness campaign to educate end users regarding network security.

18-4(c) Information and Communication Technology Service Delivery

| Expenditures by Sub-Appropriation | Actual 2003/04 \$ | FTE | Estimate 2003/04 \$ | Variance Over (Under) | Expl. No. |
|--|----------------------------------|--------------|------------------------------------|--------------------------------------|----------------------|
| Total Salaries & Employee Benefits | 3,165.9 | 54.12 | 3,472.2 | (306.3) | |
| Total Other Expenditures | 19,604.2 | | 20,382.8 | (778.6) | |
| Less: Recoveries from other Appropriations | (11,121.2) | | (10,961.8) | (159.4) | |
| Total Expenditures | 11,648.9 | 54.12 | 12,893.2 | (1,244.3) | |

LEGISLATIVE BUILDING INFORMATION SYSTEMS

OBJECTIVES

To provide a secure technological environment, with highly responsive support services and reliable systems, that address business requirements of all staff in the Legislative Building; Government, Legislative Assembly and Caucuses.

ACTIVITIES/RESULTS

2003-04 Activities include:

- Direction and planning for information technology initiatives in the Legislative Building;
- Development and implementation of security strategies that monitor intrusions, detect viruses and enable recovery from disasters;
- Provision of desktop management services including help desk support, requirements analysis, purchasing and asset management;
- Management of server and communications infrastructure;
- Analysis, implementation and support of business applications; and
- Provision of consultative and project management services on in-house or outsourced requests.

In addition to provision of operational services major accomplishments for 2003/04 include:

- Refreshed desktops in the building, migrated Users to the most current Windows operating system and Office Automation software, and re-engineered custom applications for the new environment;
- Completed the second phase of a three-phased project to upgrade the computing environment in the building which includes a refresh of all server hardware, a migration of server operating systems to Active Directory and Windows XP, and a migration of e-mail to the latest software;
- Implemented a system that allows high-speed secure access to the computing environment in the building through the Internet;
- Installed wireless Internet access from the Chambers;
- Upgraded the LBIS Enterprise Blackberry System to allow viewing of attachments and synchronization of the calendaring function.
- Provided enhancements to the corporate web-based Activity & Issues Management System, including services to migrate and implement over 120 external departmental Users on the system and upgrades to hardware and software on the Oracle database server;
- Implemented a thin-client environment and migrated applications onto this architecture;
- Updated the Legislative Building Intranet;
- Implemented the second phase of a multi-phased project for migrating Hansard to digital recording;
- Implemented over-the-shoulder assistance on the help desk; and
- Provided consulting, technical, and project management services for Treasury Division in support of the Treasury function. This included desktop hardware and software migration, an upgrade to the Treasury Management System, enhanced reporting for the Treasury Management System, and upgrades to financial management systems.

18-4(d) Legislative Building Information Systems

| Expenditures by Sub-Appropriation | Actual 2003/04 \$ | Estimate 2003/04 FTE | \$ | Variance Over (Under) | Expl. No. |
|--|----------------------------------|-------------------------------------|----------------|----------------------------------|----------------------|
| Total Salaries & Employee Benefits | 854.9 | 13.00 | 807.5 | 47.4 | |
| Total Other Expenditures | 267.3 | | 288.4 | (21.1) | |
| Total Expenditures | 1,122.2 | 13.00 | 1,095.9 | 26.3 | |

MANITOBA EDUCATION, RESEARCH AND LEARNING INFORMATION NETWORKS

- The Manitoba Education, Research and Learning Information Networks (MERLIN), is a special operating agency of the Department of Energy Science and Technology. MERLIN tables its annual report under separate cover with the Manitoba Legislature.

18-4(e) Manitoba Education, Research and Learning Information Networks (MERLIN)

| Expenditures by Sub-Appropriation | Actual 2003/04 \$ | Estimate 2003/04 FTE | Variance Over (Under) | Expl. No. |
|--|----------------------------------|-------------------------------------|----------------------------------|----------------------|
| Total Expenditures | 445.8 | 445.8 | - | |

AMORTIZATION AND OTHER COSTS RELATED TO CAPITAL ASSETS

- Commencing in 1999/2000, it is the policy of the Province of Manitoba to record in the accounts of the Province, the tangible capital assets owned and used by the Province along with appropriate amortization costs. The Provincial Comptroller has established standard asset classes, along with capitalization thresholds and corresponding amortization rates.
-
- Consistent with this policy, the department records amortization of:
 - the Enterprise System allocated to departments based on projected use;
 - the Desktop Management Initiative costs allocated to the departments as a percentage of total units;
 - the departments share of the total estimated costs of the Desktop Management Initiative and Enterprise System Management;
 - the amortization of other departmental and government assets; and
 - the interest related to the assets.

18-5 Amortization and Other costs Related to Capital Assets

| Expenditures by Sub-Appropriation | Actual 2003/04 \$ | Estimate 2003/04 FTE \$ | Variance Over (Under) | Expl. No. |
|--|----------------------------------|---|----------------------------------|----------------------|
| (a) DESKTOP MANAGEMENT INITIATIVE | | | | |
| Government-wide Desktop Costs | 6,462.5 | 6,463.7 | (1.2) | |
| Less: Recoverable from other appropriations | (6,462.5) | (6,463.7) | 1.2 | |
| (b) ENTERPRISE SYSTEM | | | | |
| Amortization Expense | 3,447.6 | 3,447.6 | - | |
| Less: Recoverable from other appropriations | (3,447.6) | (3,447.6) | - | |
| (c) DESKTOP SERVICES | | | | |
| Amortization Expense | | | | |
| - Hardware and Transition | 38.4 | 36.5 | 1.9 | |
| Amortization Expense | | | | |
| - Enterprise Software | 27.8 | 34.8 | (7.0) | |
| (d) Amortization Expense | 2,171.3 | 2,140.4 | 0.9 | |
| (e) Interest Expense | 4,373.2 | 4,372.0 | 1.2 | |
| Total Expenditures | 6,610.7 | 6,613.7 | 3.0 | |

ENERGY, SCIENCE AND TECHNOLOGY

Reconciliation Statement

| EXPENDITURE DETAILS | |
|--|----------|
| 2003/04 MAIN ESTIMATES | 44,028.8 |
| Transfer of Functions from: Internal Reform, Workforce Adjustment and General Salary Increases | 982.3 |
| 2003/04 ESTIMATE | 45,011.1 |

Energy, Science and Technology**Expenditure Summary**

For Fiscal Year Ended March 31, 2004 (with comparative figures for the previous year)

| Estimate 2003/04 \$ | | Appropriation | Actual 2003/04 \$ | Actual 2002/03 \$ | Increase (Decrease) \$ | Explanation Number |
|---------------------------|-------------|---------------------------------------|-------------------------|-------------------------|------------------------------|-----------------------|
| | 18-1 | Administration and Finance | | | | |
| 29.0 | (a) | Minister's Salary | 28.8 | 28.4 | 0.4 | |
| | (b) | Executive Support | | | | |
| 344.6 | | (1) Salaries and Employee Benefits | 308.1 | 339.0 | (30.9) | |
| 83.0 | | (2) Other | 80.1 | 85.1 | (5.0) | |
| 150.0 | (c) | Financial and Administrative Services | 150.0 | - | 150.0 | 1 |
| 606.6 | | Total 18-1 | 567.0 | 452.5 | 114.5 | |
| | 18-2 | Energy Development Initiative | | | | |
| | (a) | Energy Development Initiative | | | | |
| 813.8 | | (1) Salaries and Employee Benefits | 803.1 | 714.9 | 88.2 | |
| 502.8 | | (2) Other | 553.6 | 497.6 | 56.0 | |
| | (b) | Climate Change | | | | |
| 416.3 | | (1) Salaries and Employee Benefits | 243.4 | 284.0 | (40.6) | |
| 145.2 | | (2) Other | 188.7 | 225.2 | (36.5) | |
| 14.3 | | (3) Grants | 6.9 | 1.0 | 5.9 | 2 |
| 400.0 | (c) | Energy and Climate Change Initiatives | 319.2 | - | 319.2 | 3 |
| 2,292.4 | | Total 18-2 | 2,114.9 | 1,722.7 | 392.2 | |

| 18-3 Science, Innovation and Business Development | | | | | |
|--|-----|--|----------|----------|-----------|
| | (a) | Science, Innovation and Business Development | | | |
| 1,514.4 | | (1) Salaries and Employee Benefits | 1,419.5 | 1,274.6 | 144.9 4 |
| 806.1 | | (2) Other | 754.5 | 746.2 | 8.3 |
| 12,250.0 | | (3) Manitoba Research and Innovation Fund | 12,041.3 | 10,616.6 | 1,424.7 5 |
| 483.8 | | (4) Manitoba Centres of Excellence Fund | 483.8 | 410.0 | 73.8 6 |
| 750.0 | (b) | Industrial Technology Centre | 750.0 | 750.0 | - |
| 1,752.6 | (c) | Manitoba Health Research Council | 1,746.6 | 1,752.6 | (6.0) |
| 17,556.9 | | Total 18-3 | 17,195.7 | 15,550.0 | 1,645.7 |

| Estimate 2003/04 \$ | Appropriation | Actual 2003/04 \$ | Actual 2002/03 \$ | Increase (Decrease) \$ | Explanation Number |
|------------------------------------|---|----------------------------------|----------------------------------|---------------------------------------|-------------------------------|
| 18-4 | MB Information and Communication Technology | | | | |
| | (a) eManitoba Secretariat | | | | |
| 502.5 | (1) Salaries and Employee Benefits | 472.3 | 447.7 | 24.6 | |
| 83.3 | (2) Other | 72.2 | 65.8 | 6.4 | |
| | (b) Information and Communication Technology Policy | | | | |
| 1,437.1 | (1) Salaries and Employee Benefits | 1,372.9 | 1,267.7 | 105.2 | |
| 1,483.7 | (2) Other | 1,056.9 | 1,020.1 | 36.8 | |
| | (c) Information & Communication Technology Service Delivery | | | | |
| 3,472.2 | (1) Salaries and Employee Benefits | 3,165.9 | 3,077.1 | 88.8 | |
| 20,382.8 | (2) Other | 19,604.2 | 19,606.4 | (2.2) | |

| | | | | | |
|------------|--|------------|------------|-----------|---------|
| (10,961.8) | (3) Less: Recoverable from other appropriations | (11,121.2) | (10,635.8) | (485.4) | |
| | (d) Legislative Building Information Systems | | | | |
| 807.5 | (1) Salaries and Employee Benefits | 854.9 | 802.5 | 52.4 | |
| 288.4 | (2) Other | 267.3 | 262.1 | 5.2 | |
| 445.8 | (e) Manitoba Education, Research and Learning Network | 445.8 | 445.7 | 0.1 | |
| 17,941.5 | Total 18-4 | 16,191.2 | 16,359.3 | # | (168.1) |
| | 18-5 Amortization and Other Costs Related to Capital Assets | | | | |
| | (a) Desktop Management Initiative | | | | |
| 6,463.7 | (1) Government-wide Desktop Costs | 6,462.5 | 12,685.9 | (6,223.4) | 7 |
| (6,463.7) | (2) Less: Recoverable from other appropriations | (6,462.5) | (12,685.9) | 6,223.4 | 7 |
| | (b) Enterprise System | | | | |
| 3,447.6 | (1) Amortization | 3,447.6 | 3,444.6 | 3.0 | |
| (3,447.6) | (2) Less: Recoverable from other appropriations | (3,447.6) | (3,444.6) | (3.0) | |
| | (c) Desktop Services | | | | |
| 36.5 | (1) Amortization Expense-Hardware and Transition | 38.4 | 86.2 | (47.8) | 8 |
| - | (2) Amortization Expense - Enterprise Software | - | 14.2 | (14.2) | 9 |
| 34.8 | (3) Enterprise Software Licenses | 27.8 | 34.8 | (7.0) | 10 |
| 2,170.4 | (d) Amortization Expense | 2,171.3 | 1,744.4 | 426.9 | 11 |
| 4,372.0 | (e) Interest Expense | 4,373.2 | 4,799.4 | (426.2) | 12 |
| 6,613.7 | Total 18-5 | 6,610.7 | 6,679.0 | (68.3) | |
| 45,011.1 | TOTAL ENERGY, SCIENCE AND TECHNOLOGY | 42,679.5 | 40,763.5 | 1,916.0 | |

Energy, Science and Technology Expenditure Summary Explanations

Explanations:

1. *Variance due to no recovery in 2002/03; Department was established in late 2002.*
2. *Timing and level of activities determine payout of grant funds.*
3. *No comparable figures for 2002/03; new initiative in 2003/04.*
4. *Lower expenditures in 2002/03 related to vacant positions.*
5. *Increased funding in 2003/04.*
6. *Increased funding in 2003/04.*
7. *Final full year of hardware related amortization in 2002/03, 2003/04 costs reflect this reduction. The recovery is inversely related to cost reduction.*
8. *Amortization costs for government decreased, therefore reducing the total cost to the department in 2003/04.*
9. *Amortization for Enterprise Software costs was higher in 2002/03.*
10. *Enterprises Software Licence was higher in 2002/03.*
11. *Amortization increase is related to the desktop refresh initiative.*
12. *Interest expenses are related to an increase in capital investment.*

Energy, Science and Technology

Expenditure Summary

For Fiscal Year Ended March 31, 2004 (with comparative figures for the previous year)

| Actual 2002/03 \$ | Actual 2003/04 \$ | Increase (Decrease) \$ | Source | Actual 2003/04 \$ | Estimate 2003/04 \$ | Variance \$ | Explanation Number |
|----------------------------------|----------------------------------|---------------------------------------|---------------|----------------------------------|------------------------------------|------------------------|-------------------------------|
| Revenue | | | | | | | |
| 14.0 | 28.0 | 14.0 | Sundry | 28.0 | 23.0 | 5.0 | 1 |
| 14.0 | 28.0 | 14.0 | TOTAL | 28.0 | 23.0 | 5.0 | |

Explanations:

- 1 **Comparison to Previous Year**
Revenue was higher in 2003/04 than in 2002/03.

FIVE YEAR HISTORY

**Energy, Science and Technology
Five-Year Expenditure and Staffing Summary by Appropriation**

(\$000s)

For Five Years Ended March 31, 2004

| Appropriation | Actual/*Adjusted Expenditures | | | | | | | | | |
|---|-------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|
| | 1999-2000 | | 2000-2001 | | 2001-2002 | | 2002-2003 | | 2003-2004 | |
| | FTE | \$ | FTE | \$ | FTE | \$ | FTE | \$ | FTE | \$ |
| Administration and Finance | | | | | | | 7.00 | 452.5 | 7.00 | 567.0 |
| Energy Development Initiative | | | | | | | 18.00 | 1,722.7 | 18.00 | 2,114.9 |
| Science, Innovation and Business Development | 16.92 | 15,267.2 | 17.78 | 14,239.9 | 27.00 | 15,023.4 | 24.00 | 15,550.0 | 22.00 | 17,195.7 |
| Manitoba Information & Communication Technology | | | | | | | 81.12 | 16,359.3 | 92.12 | 16,191.2 |
| Amortization of Capital Assets | | | | | | | | 6,679.0 | | 6,610.7 |
| TOTAL OPERATING | 16.92 | 15,267.2 | 17.78 | 14,239.9 | 27.00 | 15,023.4 | 130.12 | 40,763.5 | 139.12 | 42,679.5 |
| Expenditures Related to Capital | | | | | | | | 268.0 | | 5,936.0 |
| TOTAL | 16.92 | 15,267.2 | 17.78 | 14,239.9 | 27.00 | 15,023.4 | 130.12 | 41,031.5 | 139.12 | 48,615.5 |

* - Adjusted figures reflect historical data on a comparable basis in those appropriations affected by reorganizations during the five years

PART B - CAPITAL INVESTMENT

Capital Investment is provided in the Estimates of Expenditures under Part B. For the year ended March 31, 2003, the department's capital authority provided for the purchase of hardware and software to provide for the development of an information technology infrastructure refresh business plan. Support for internal reform initiatives involving the use of information technology in the delivery of government's services, including the Better Systems Initiative, are reported separately.

Part B - CAPITAL INVESTMENT

| Expenditures by Sub-Appropriation | Actual 2003/04 \$ | Estimate 2003/04 FTE \$ | Variance Over (Under) | Expl. No. |
|---|-------------------------|-------------------------------|--------------------------|--------------|
| B.4a – Enterprise System | 54.3 | 100.0 | (45.7) | 1 |
| B.4b – Other Information Technology Projects | 47.8 | 200.0 | (152.2) | 2 |
| B.4c – Desktop Refresh Initiative | 5,577.7 | 5,600.0 | (22.3) | |
| B.4d – New Equipment | 255.8 | 270.0 | (14.2) | |
| Total Capital | 5,936.0 | 6,300.0 | (364.0) | |

1. *Deferred training related to the upgrade of the enterprise systems.*
2. *The investment in other information technology related to security was deferred and the investment in development was less than anticipated.*

APPENDIX A

ASSOCIATED AGENCIES, COMMISSIONS and COUNCILS

THE INDUSTRIAL TECHNOLOGY CENTRE

The Industrial Technology Centre (ITC) is a special operating agency of the Department of Energy Science and Technology. The Department supports ITC's contribution to economic development activities in Manitoba via an Economic Development Contribution Agreement (a performance contract). ITC provides a wide range of technical services in support of technology based economic development in Manitoba. ITC tables its annual report under separate cover with the Manitoba Legislature.

MANITOBA EDUCATION, RESEARCH AND LEARNING INFORMATION NETWORKS

The Manitoba Education, Research and Learning Information Networks (MERLIN), is a special operating agency of the Department of Energy Science and Technology. MERLIN tables its annual report under separate cover with the Manitoba Legislature.

MANITOBA HEALTH RESEARCH COUNCIL

The Manitoba Health Research Council (MHRC) provides funding for health research initiatives. The Manitoba Health Research Council tables its annual report under separate cover with the Manitoba Legislature.

MANITOBA GAMING CONTROL COMMISSION

The Manitoba Gaming Control Commission is an independent commission created to regulate and control gaming activity in the Province of Manitoba with the aim of ensuring that the gaming activity is conducted honestly, with integrity and in the public interest. Manitoba Gaming Control Commission tables its annual report under separate cover with the Manitoba Legislature.

ECONOMIC INNOVATION TECHNOLOGY CENTRE

The Economic Innovation and Technology Council (EITC) acts as a catalyst in establishing partnerships and alliances for increased economic development through innovation. EITC tables its annual report under separate cover with the Manitoba Legislature.

APPENDIX B

FINANCIAL INFORMATION

Energy, Science and Technology
Summary of Business Assistance
2003/2004 Fiscal Year

| | |
|---------------------------------------|-------------------------------|
| ASSOCIATION CONTRIBUTIONS | 20,000.00 |
| MANITOBA CENTRES OF EXCELLENCE FUND | 483,800.00 |
| MANITOBA RESEARCH AND INNOVATION FUND | 12,041,293.99 |
| TRANSFER PAYMENTS | <u>2,942,468.00</u> |
| | <u>\$17,487,561.99</u> |

APPENDIX C

FINANCIAL INFORMATION

Energy, Science and Technology
List of Business Assistance
2003/2004 Fiscal Year

ASSOCIATION CONTRIBUTIONS

| | |
|--|---------------------|
| Information and Communication Technology Association | 20,000.00 |
| | \$ 20,000.00 |

MANITOBA CENTRES OF EXCELLENCE FUND

| | |
|--|----------------------|
| University of Manitoba, Centres of Excellence Fund | 483,800.00 |
| | \$ 483,800.00 |

MANITOBA RESEARCH AND INNOVATION FUND

MANITOBA HEALTH RESEARCH INITIATIVE

| | |
|---|------------------------|
| CancerCare Manitoba | 177,574.54 |
| Manitoba Institute for Child Health | 57,986.57 |
| Health Sciences Centre | 440,694.35 |
| St. Boniface General Hospital Research Centre | 451,518.31 |
| University of Manitoba | 872,226.23 |
| | \$ 2,000,000.00 |

RESEARCH

| | |
|----------------------------------|------------------------|
| Manitoba Health Research Council | 566,752.00 |
| Red River College | 275,394.00 |
| Brandon University | 111,600.00 |
| University of Manitoba | 8,046,254.00 |
| | \$ 9,000,000.00 |

INNOVATION

| | |
|---|------------------------|
| Incubat | 200,000.00 |
| International Academy of Cardiovascular Science | 25,000.00 |
| MindSet | 336,293.99 |
| TR Labs | 480,000.00 |
| | \$ 1,041,293.99 |

TOTAL MANITOBA RESEARCH AND INNOVATION FUND

\$ 12,041,293.99

TRANSFER PAYMENTS

| | |
|----------------------------------|------------------------|
| Manitoba Health Research Council | 1,746,668.00 |
| MERLIN | 445,800.00 |
| Industrial Technology Centre | 750,000.00 |
| | \$ 2,942,468.00 |

TOTAL

\$ 17,487,561.99