



RDC

RESEARCH & DEVELOPMENT CORPORATION  
NEWFOUNDLAND AND LABRADOR

ANNUAL REPORT 2011-12



RDC

RESEARCH & DEVELOPMENT CORPORATION  
NEWFOUNDLAND AND LABRADOR

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# Message from the Chair



Over the past year, the Research & Development Corporation (RDC) has taken great strides to support the growth of research and development (R&D) in Newfoundland and Labrador. Since RDC was first established in 2009, we have made a considerable effort to build programs, policies, and services that increase R&D in areas in which this province has a competitive advantage. RDC has been given a clear mandate to strengthen the focus, quantity, quality, and relevance of R&D for long-term economic benefit of the province.

In the last year, we focused on guiding and refining our programs, policies, and services to meet the needs of our clients and stakeholders. To that end, RDC has strategically invested in highly-qualified people (HQP), cutting-edge research projects, and world-class infrastructure. While we continued to launch new programs, we also focused on the sustainability of our current programs and investments.

Following through on our commitment to attract and retain highly-qualified researchers, in 2011-12, RDC invested in several research chairs, post-doctoral fellows, and student awards. We funded 20 student researchers through our Ocean Industries Student Research Awards (OISRA), supporting a next generation of leaders in oceans research. RDC also launched the Research Inspired Student Enrichment Awards (RISE) to inspire high school students to pursue a research career focused on science, technology, engineering, and mathematics. Moreover, our various programs helped fund the work of 140 researchers and 51 students while also helping to bring the expertise of their 62 local, national, and international collaborators to the table.

Our programs continue to emphasize research excellence in the ocean technology and natural resources sectors (including fisheries, forestry, agriculture, mining/minerals, energy, petroleum, and aquaculture). These areas provide Newfoundland and Labrador with a competitive advantage for development opportunities. By funding 63 projects focused on these priority areas, this demonstrated that RDC not only provides funding to realize innovative projects, but also takes a leadership role expanding the province's R&D capacity.

World-class R&D infrastructure is essential for creating an environment that is both globally competitive and innovative. This year RDC helped create the Centre for Arctic Resource Development, an institute that is designed to bring industry, academia and technology partners together to improve Canada's international reputation for developing safe, responsible, cost-effective and sustainable hydrocarbon development in the Arctic. Also, RDC's infrastructure investments in the province's post-secondary institutions created the physical environments necessary for research and enhanced collaborative relationships that continue to strengthen R&D partnerships between academia, industry, and other R&D performers.

To ensure that our programs are relevant to the R&D landscape of Newfoundland and Labrador and responsive to the needs of our clients and stakeholders, we conducted a thorough review of our industry programs.

This performance report is based upon the Strategic Plan for 2011-14. The Strategic Plan focuses on three key strategic issues: building a strong foundation for R&D, growing business investment in R&D, and focusing R&D in priority areas. This performance report highlights our accomplishments and the steps we have

taken to further R&D in Newfoundland and Labrador in 2011-12.

As Chair of RDC, and on behalf of our Board of Directors, I am pleased to submit RDC's annual performance report for 2011-12. The Board is accountable for the direction and preparation of the report and results reported herein. Developed in accordance with the legislative requirements of the *Transparency and Accountability Act*, this report fulfils the corporation's obligation as a category 1 entity to provide an account on achievements and progress over the last fiscal year. My signature, below, indicates the Board's full accountability for the annual results of the organization.

Sincerely,



M. Jacqueline (Jackie) Sheppard, Q.C.  
Chair, Board of Directors  
Research & Development Corporation

# Introduction

In accordance with the *Transparency and Accountability Act*, the 2011-12 annual report for the Research & Development Corporation illustrates the success of the corporation over the last year of operations. As a category one entity under the *Transparency and Accountability Act*, RDC is accountable for achieving outcomes, which are defined as the end results of policies, programs, and initiatives.

This performance report is based upon the Strategic Plan of the corporation for 2011-14. The Strategic Plan focuses on three key strategic issues: building a

strong foundation for R&D, growing business investment in R&D, and focusing R&D in priority areas. These strategic issues have the following corresponding goals and objectives: enhance academic, business, and government capacity for R&D excellence, encourage increased business investment in R&D, and realize development opportunities and support areas for competitive advantage.

This progress report uses indicators specified in the Strategic Plan to measure progress towards these goals.

## BACKGROUND

In 2009, the provincial legislature created RDC under the *Research and Development Council Act* to strengthen the focus, quantity, quality, and relevance of R&D in the province. RDC is tasked with achieving public policy objectives that recognize R&D as an important catalyst for innovation and serve the long-term economic benefit of Newfoundland and Labrador. RDC operates at arm's length from the provincial government as a provincial Crown corporation and is held to a high standard for public accountability and transparency.

## GOVERNANCE AND STAFF

RDC was established through legislation in 2009, with provision for an independent Board of Directors responsible for setting the corporate strategy and determining how it will be implemented. The Board comprises seven to eleven members who are both residents and non-residents of the province and who represent RDC's key stakeholders. The current constitution of the Board follows:

Ms. M. Jacqueline Sheppard, Chair	Ms. Hege Rognø, Director
Mr. Alan Brown, Vice Chair	Dr. Laurier L. Schramm, Director
Mr. Gary Dinn, Director	Dr. Brian Veitch, Director
Mr. Glenn Janes, Non-Voting	Dr. Terry-Lynn Young, Director
Mr. Mark Ploughman, Non-Voting	

RDC currently employs 42 staff in its St. John's office, organized in four divisions: Program Delivery & Operations; Strategy & Program Development; Policy, Evaluation & Government Relations; and Finance.

LINES OF BUSINESS	
<b>Policy and Government Coordination</b>	RDC influences and supports the creation and implementation of government initiatives, such as policy and programs, that impact R&D growth and development opportunities in Newfoundland and Labrador.
<b>Advocacy and Cooperation between Client Groups</b>	RDC establishes and promotes collaboration between businesses, academia, and government.
<b>Program Development and Delivery</b>	RDC provides financial support to those who undertake R&D and plays a role in the stewardship of the investment.
<b>R&amp;D Asset Investment</b>	RDC invests in people, equipment, and facilities that support collaborative R&D.

# Vision

Research and development fuels innovation and creates economic growth and prosperity in Newfoundland and Labrador.





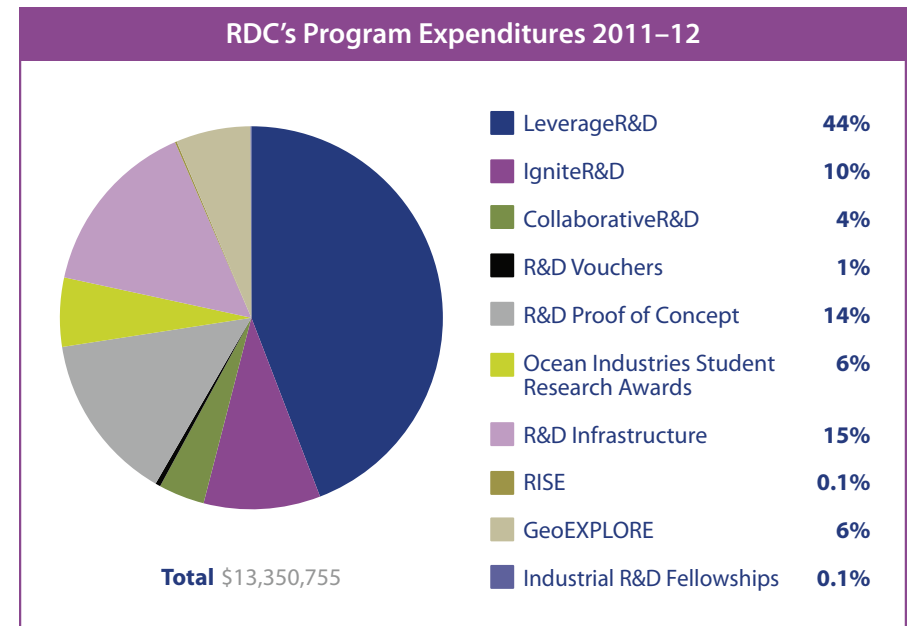


# RDC Overview

RDC PROGRAMS	
<b>R&amp;D Vouchers</b>	Helps businesses gain access to local, national, and international scientific and technical equipment, expertise, and research facilities.
<b>R&amp;D Proof of Concept</b>	Increases the technical capacity of businesses to perform R&D and reduces the financial risk of R&D activities.
<b>PetroleumR&amp;D Accelerator</b>	Strengthens Newfoundland and Labrador's capacity as a R&D performer in support of petroleum exploration, development and operations.
<b>Ocean Industries Student Research Awards</b>	Attracts and develops world-class talent in ocean industries – both the highly-qualified people required by business and the next generation of R&D leaders.
<b>Academic Funding Programs</b>	Strengthens institutional R&D capacity through providing funding for new researchers (IgniteR&D), leveraging against other funding sources (LeverageR&D), and supporting business-academic collaboration (CollaborativeR&D).
<b>Industrial R&amp;D Fellowships</b>	Enables businesses to hire post-doctoral researchers.
<b>GeoEXPLORE</b>	Enhances geoscience R&D capacity and academic, business, and government collaboration in support of mineral and petroleum exploration and development.
<b>Research Inspired Student Enrichment Awards</b>	<p>Exposes top Newfoundland and Labrador high school students to research activities at an early stage in their education and encourages them to pursue research-related career paths.</p> <p>RDC launched this program in 2011-12 to provide high school students with the opportunity to attend research-related enrichment programs. The first round of students will attend enrichment programs in 2012-13.</p>
<b>R&amp;D Infrastructure</b>	<p>Builds a world-class working environment for researchers which will develop, attract and retain highly-qualified scientists and researchers and fosters industrial outreach and R&amp;D collaboration between academia and industry stakeholders.</p> <p>R&amp;D infrastructure was a call that was awarded in 2010-11. Projects are still ongoing.</p>

## EXPENDITURES

In 2011-12, RDC received an annual budgetary allocation of \$25.2 million from the legislature with \$19.3 million dedicated to R&D funding programs. Many of RDC's investments are in multi-year projects, meaning that total project expenditures will occur over a number of years. This chart shows the portion of RDC's expenditures that occurred in 2011-12.



## PRIMARY CLIENTS

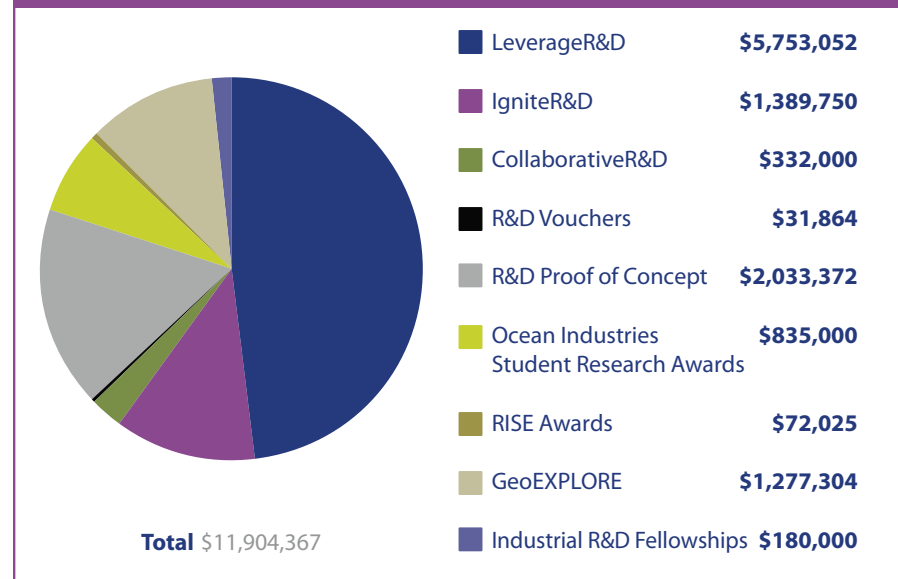
<b>Business</b>	RDC works with companies to increase their R&D capabilities, enhance innovation and competitiveness, and build strong collaborative relationships among R&D performers.
<b>Academia</b>	RDC helps support the development of highly-qualified researchers and works with academia to focus R&D activities on business needs.
<b>Government</b>	RDC works with provincial government departments and agencies on policy and strategic initiatives that align with provincial priorities and with federal government departments and agencies to provide the provincial source of funding often required to leverage national programs that support R&D.

# RDC Overview

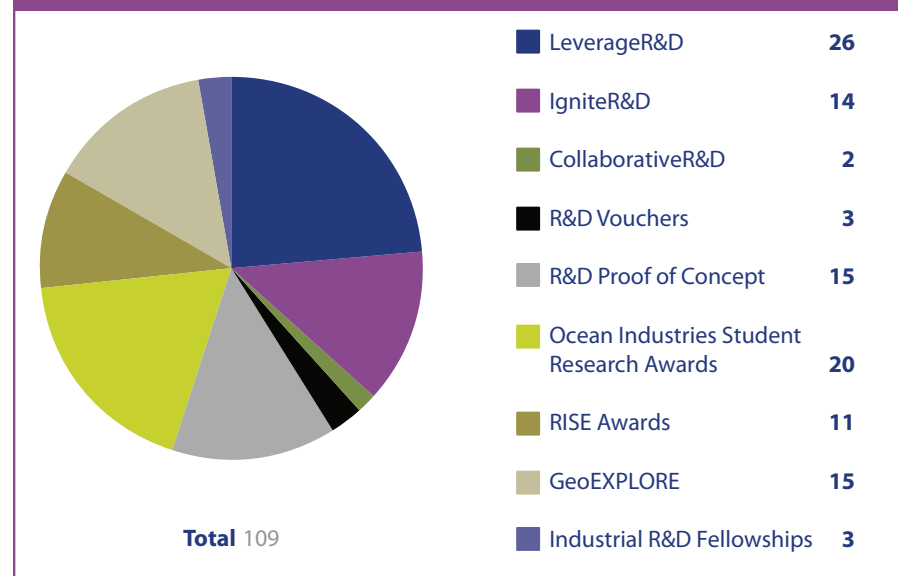
## PROGRAM APPROVALS

Our program approvals illustrate our future commitments to these programs. In 2011-12, RDC funded 109 projects at a total cost of \$11,904,367.

Project Commitments by Program (\$) 2011-12



Project Commitments by Program (#) 2011-12







**By March 31<sup>st</sup>, 2017,**

the Research & Development Corporation will have increased the capacity of business, academic, and government clients to perform and utilize research and development in priority areas towards the creation of long-term economic benefits of the province.



# Shared Commitments



As the provincial public body responsible for strengthening R&D in the province, there are multiple stakeholders that RDC collaborates with to deliver on the provincial government's commitment to R&D. These collaborations provide us with the knowledge, assistance, and leverage needed to deliver R&D in Newfoundland and Labrador. RDC plays a strategic role in establishing the direction of R&D policy through the creation of programs, initiatives, and partnerships.

## **BUSINESS**

One of the key priorities of RDC is to increase business-performed R&D in the province. In support of this priority, RDC is heavily engaged with business clients, industry associations, and business groups. Collaborative relationships are essential to growing the R&D capacity of the province.

Over the past year, RDC worked with industry associations, such as the Newfoundland and Labrador Oil and Gas Industries Association (NOIA) and OceansAdvance Inc., to promote R&D in key industries in the province. RDC also worked with Petroleum Research Newfoundland and Labrador (PRNL), a

not-for-profit organization that facilitates petroleum R&D activities in priority areas identified by industry. RDC engaged with stakeholders and provided information sessions to such organizations as the Newfoundland and Labrador Angel Network, Grant Thornton LLP, and Deloitte and Touche LLP. Collaborations with organizations that are directly aware of industry needs help us expand our client base and take advantage of new opportunities to engage in R&D projects and events.

RDC partnered with such companies as Statoil Canada, to create a research chair in reservoir engineering, and Chevron Canada Limited, to create a research chair in petroleum engineering. Projects that engage companies and academic researchers further business commitment to growing their own capacity and productivity, while supporting RDC's commitment to strengthening R&D in the province.

## **ACADEMIA**

RDC works with Memorial University and the College of the North Atlantic (CNA) to expand R&D activities in the province. RDC and the province's post-secondary institutes share the goal of advancing research in the province. While RDC provides the funding to support academic research, students, and critical infrastructure, the academic researchers drive R&D and are essential to fulfilling our mandate.



Over the past year, RDC has worked with CNA to provide funding for research projects in St. John's and at the College's Burin Campus. RDC is focused on expanding applied R&D in the college environment.

RDC also works closely with Memorial University to administer research funding that will support students and researchers. In 2011-12, we funded 20 Ocean Industries Student Research Awards and launched a third round of the awards. RDC also supports researchers through the funding of workshops and conferences, such as the Faculty of Engineering and Applied Science's workshop on "Offshore Oil Spills in Arctic and Harsh Environments." We continually strive to increase our partnerships with industry collaborators and federal partners to expand the funding environment for R&D in the province.

### **GOVERNMENT**

As a crown corporation, RDC's most significant partnership is with the Province of Newfoundland and Labrador. RDC works with the provincial government as our owner, partner, and client.

RDC is accountable to the provincial government, and receives its annual budget from government. In this role, we provide procurement reports, financial reports, and briefings to our Minister on our activities.

Our government partnerships, both provincially and federally, offer us

opportunities to develop and review funding proposals for R&D, and to create program enhancements that make provincial and federal programs more responsive to the R&D landscape in Newfoundland and Labrador. We engage our federal partners, such as the Atlantic Canada Opportunities Agency (ACOA), Natural Sciences and Engineering Research Council of Canada (NSERC), and the Canada Foundation for Innovation (CFI), among others, to learn about the federal funding environment and to promote the research strengths of this province.

RDC works with the Department of Innovation, Business and Rural Development (IBRD) to fulfil the Provincial Government's commitment to enhance the R&D capacity of the province as stated in the Provincial Innovation Strategy: A Blueprint for Prosperity. RDC funds the beginning of the R&D spectrum, looking at basic and applied research for our academic researchers and pre-commercial activities for our business clients. IBRD furthers our clients' projects, by helping them with the commercial development of their products, processes, and services. In addition, RDC works to promote R&D activities among government departments and agencies. We also provide advice to and seek subject matter expertise from line departments in areas relating to R&D. In 2011-12, we worked with the Department of Natural Resources, Forestry and Agrifoods Agency, Department of Fisheries and Aquaculture and IBRD in this capacity.

# Investing in R&D

Innovation, industry and enterprise competitiveness, and overall economic performance are all impacted by research and development. RDC's mission of increasing overall R&D capacity is of critical importance for the continued economic well-being of the province. The following section will highlight some of RDC's achievements in 2011-12. In particular, we have seen great

success in developing highly-qualified people, encouraging innovative R&D activities that are both sensitive to business needs and focussed on areas of competitive advantage, and in investing in world class infrastructure. Looking ahead, we hope to build RDC's brand to help bring our successful programs to an expanded client base.

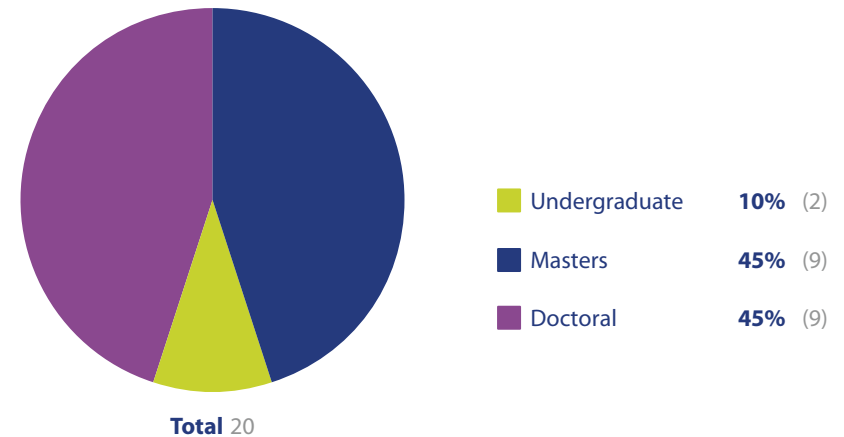
## INVESTING IN PEOPLE

At RDC we recognize the importance of investing in and supporting the innovative and highly-skilled people that will grow the R&D capacity of the province. For this reason, RDC views investments in students and researchers as an essential focus, and accomplishes this through its business and academic programming.

The Research Inspired Student Enrichment (RISE) awards aim to attract students to research early in their academic careers, thereby sowing the seeds for the next generation of innovators. Launched in 2011-12, these awards provided \$72,025 to 11 high school students, helping them to attend research-related enrichment programs focused on science, technology, engineering, and mathematics. The enrichment placements will take place in the summer of 2012.

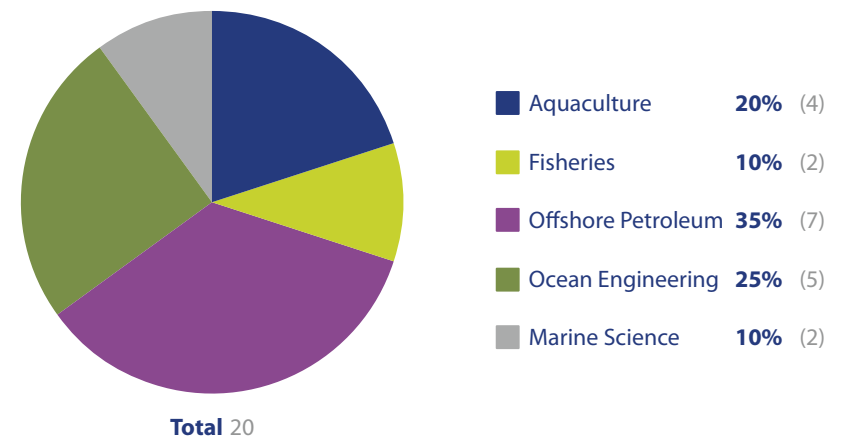
Our investment in students continues with the Ocean Industries Student Research Awards, which are aimed at developing the next generation of R&D leaders. In 2011-12, these awards provided \$835,000 in funding to 20 student researchers studying ocean engineering, offshore petroleum, aquaculture, fisheries, and marine science. Since the awards were first launched in 2009-10, we have supported a total of 42 student researchers. With a record number of applications received for next year's awards, we look forward to even more opportunities to assist student researchers in this province and to increase the capacity of our highly-qualified young people.

## Degree Level of 2011 Ocean Industries Student Research Awards



*In total, nine doctoral, nine masters and two undergraduate student researchers were funded through OISRA.*

## Research Focus of 2011 Ocean Industries Student Research Awards





# Investing in People

## **Brian Claus, Recipient of RDC's Ocean Industries Student Research Awards, Memorial University**

As interest in petroleum resources in harsh climates continues to grow, RDC's support for Brian Claus' research related to propulsion systems of Autonomous Underwater Vehicles (AUV) could provide international oil and gas companies with more exploration opportunities in the future. Brian is also using RDC funding to integrate magnetic instruments into AUVs for positioning underwater and geophysical exploration of underwater resources.

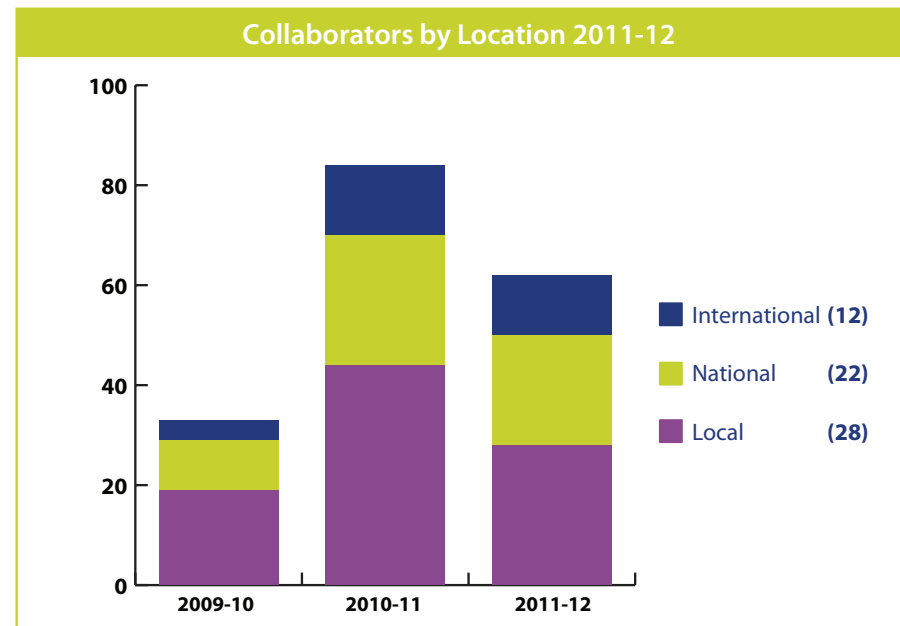


# Investing in R&D

Our Industrial R&D Fellowships, awarded for the first time in 2011-12, serve the dual purpose of helping businesses gain access to highly-qualified researchers while also encouraging post-doctoral students to pursue a career in industry. RDC provided \$180,000 in funding through these awards in 2011-12 to help businesses hire post-doctoral researchers.

Our support for students continues far beyond our awards programs. In 2011-12, 51 students took part in ongoing, faculty-led research as research assistants, technicians, and researchers on projects funded through RDC programs. In addition to supporting students, these same programs provided funding to support the essential R&D work of 140 researchers.

Collaboration is one of RDC's core values and is an integral part of any successful endeavour. RDC's programs not only help fund innovative research, they also encourage communication and collaboration between top-level researchers in both academia and industry. Outside of the researchers that we supported directly, in 2011-12, RDC-funded projects helped bring the expertise of an additional 62 local, national, and international collaborators to Newfoundland and Labrador's R&D performers.

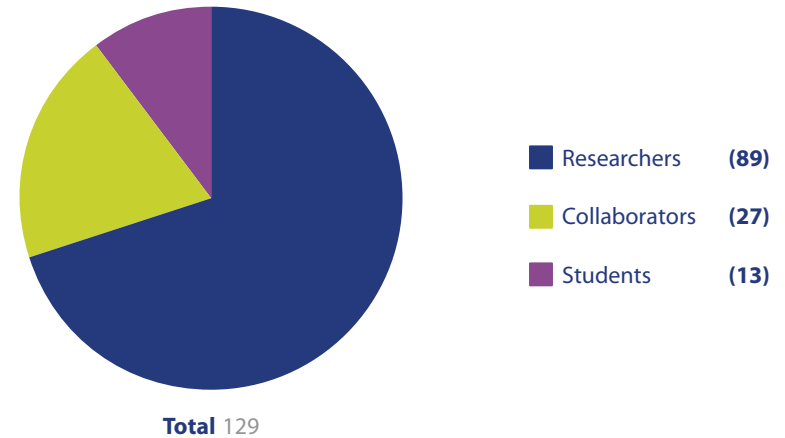


*In 2011-12, 28 local, 22 national, and 12 international collaborators worked on RDC-funded projects.*

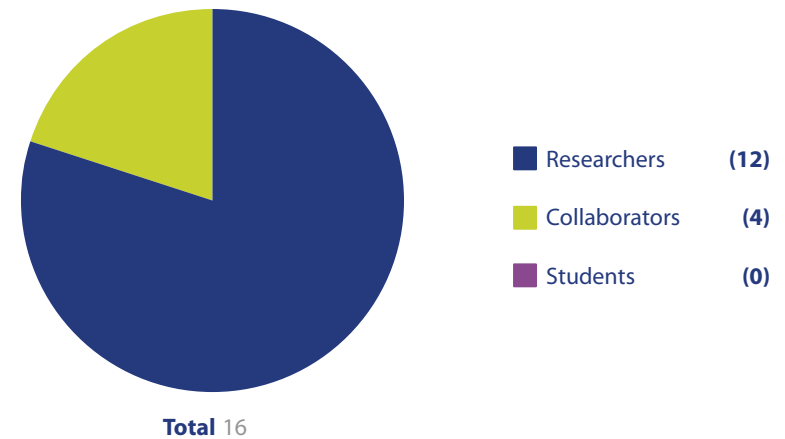
# Investing in R&D

RDC strives to ensure that the highly-qualified people we help to train are undertaking research that is relevant to Newfoundland and Labrador's areas of competitive advantage. Over the past year, 101 researchers, 13 students, and 31 collaborators have gained valuable R&D experience working on projects in the natural resource and ocean technology industries.

## Natural Resources: Researchers, Students, and Collaborators 2011-12



## Ocean Technology: Researchers, Students, and Collaborators 2011-12



*In 2011-12, 12 researchers and four collaborators worked on projects in the ocean technology industry while 89 researchers, 27 collaborators, and 13 students worked on projects in the natural resources.*

# Investing in People

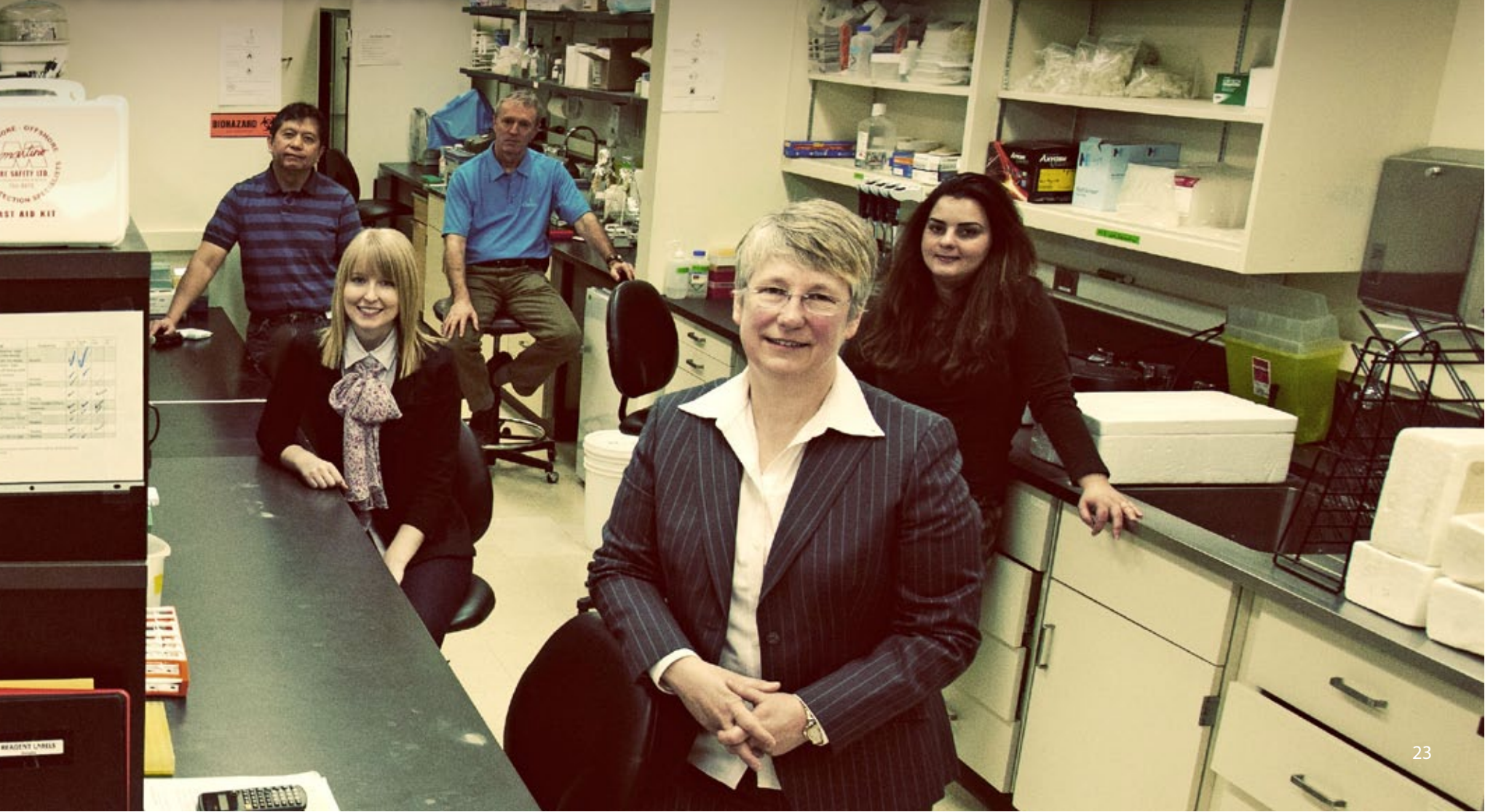




## Investment in Diagnostic Tools to Help Prevent Sudden Cardiac Death

RDC is investing in a team of researchers at Memorial University of Newfoundland that will significantly advance genetics research in the fight against sudden cardiac death. RDC's funding will target a range of activities related to inherited diseases of the heart. In particular, funding will support the acquisition of a state-of-the-art Next Generation DNA Sequencing Platform, which will provide local researchers with the ability to develop diagnostic tools to

help prevent sudden cardiac death. The work of Dr. Terry-Lynn Young, principal investigator, and her collaborators has led to more than 100 Newfoundlanders and Labradorians receiving life-saving treatment. The funding to prevent sudden cardiac death will build on past research to further improve the standard of care and the lives of people living with inherited heart conditions. RDC is investing \$500,000 through its LeverageR&D program while the Department of Innovation, Business and Rural Development is investing \$250,000. The overall value of this project is approximately \$5.1 million.



# Investing in R&D

## INVESTING IN RESEARCH

Over the past year, RDC has continued to invest in innovative R&D projects and has increased the overall number of approved projects. In 2011-12, 109 new R&D projects received funding through RDC's programs, compared to 95 in 2010-11.

RDC PROGRAMS	APPROVED PROJECTS 2009-10	APPROVED PROJECTS 2010-11	APPROVED PROJECTS 2011-12	RDC COMMITMENTS 2009-10	RDC COMMITMENTS 2010-11	RDC COMMITMENTS 2011-12
LeverageR&D	22	26	26	\$12,094,457	\$6,170,770	\$5,753,052
IgniteR&D	14	14	14	\$935,868	\$1,234,109	\$1,389,750
CollaborativeR&D	4	6	2	\$1,192,500	\$2,909,000	\$332,000
R&D Vouchers	5	5	3	\$56,147	\$68,546	\$31,864
R&D Proof of Concept	3	17	15	\$469,072	\$2,916,007	\$2,033,372
Ocean Industries Student Research Awards	N/A	22	20	N/A	\$929,667	\$835,000
GeoEXPLORE	N/A	N/A	15	N/A	N/A	\$1,277,304
Research Inspired Student Enrichment Awards	N/A	N/A	11	N/A	N/A	\$72,025
Industrial R&D Fellowships	N/A	N/A	3	N/A	N/A	\$180,000
R&D Infrastructure Call	N/A	4	N/A	N/A	\$10,568,704	N/A
Government Led R&D	N/A	1*	N/A	N/A	\$1,500,000	N/A
<b>Total</b>	<b>48</b>	<b>95</b>	<b>109</b>	<b>\$14,748,044</b>	<b>\$26,296,803</b>	<b>\$11,904,367</b>

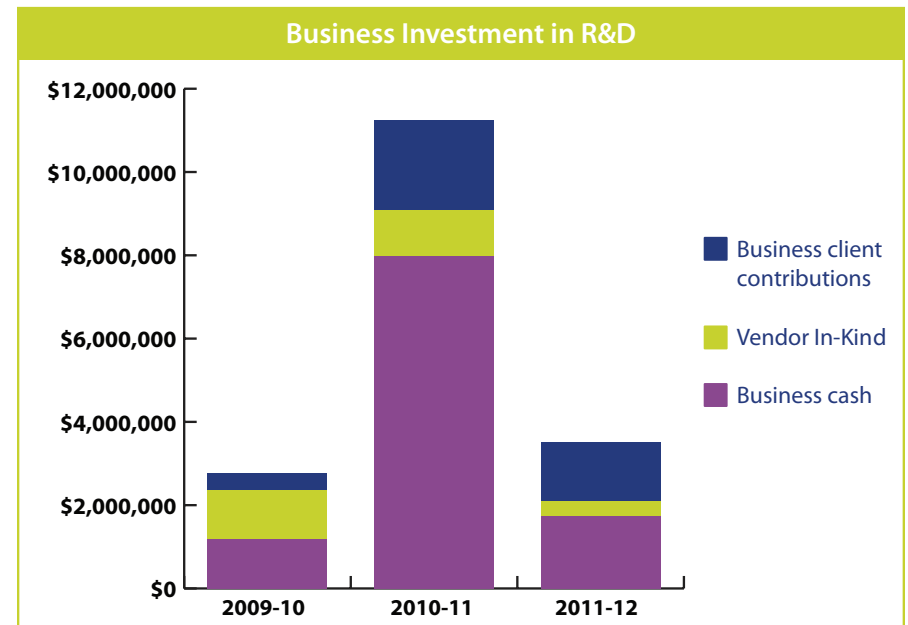
\*Centre for Fisheries Ecosystems Research

This table illustrates our total number of approved projects and investments over the past three years.

# Investing in R&D

Business investment in R&D is a critical component of R&D in high-performing areas. Encouraging business investment in R&D not only helps businesses build the capacity to undertake R&D projects themselves, but also ensures R&D work being carried out by others remains relevant to business needs. To encourage business investment in R&D, RDC approved 43 RDC-business co-funded projects in 2011-12 with a total business investment of \$3.5 million.

While this amount does represent a decrease from last year's levels, such fluctuations are to be expected given the nature of R&D work and the multi-year nature of many of our projects. In 2010-11, RDC delivered a targeted infrastructure call that successfully leveraged a significant business investment in R&D.



*In 2011-12, business cash investments, which consist of non-client business and industry cash, reached \$1.7 million. Business client contributions, the funds required from business clients to be eligible for our business programs, totaled \$1.4 million. Vendor in-kind investments, such as discounts or allowance for the use of facilities, reached \$344,873.*

# Investing in Research

## **SUBC CONTROL**

RDC's support for this Clarenville-based company will be dedicated to the development of a high-definition deep sea prototype camera that can produce videos and stills that satisfy a number of market requirements in the oil, ocean technology and environmental industries, including:

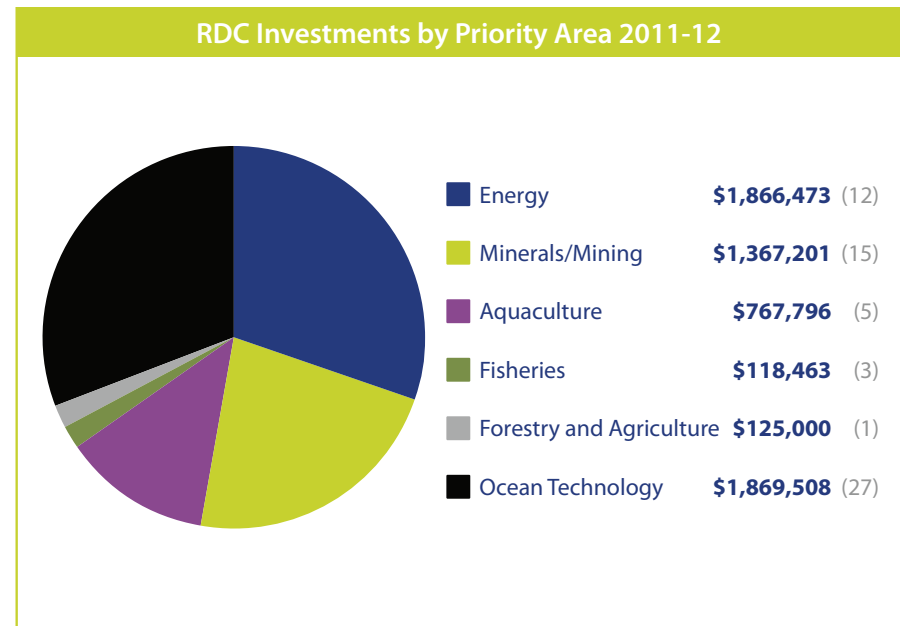
- inspecting the integrity of underwater structures, including leak monitoring;
- confined space inspections;
- scientific studies of target underwater areas;
- ongoing rig and pipeline maintenance.





# Investing in R&D

RDC recognizes the importance of investing in areas where Newfoundland and Labrador has a competitive advantage, such as the ocean technology and natural resources sectors (including fisheries, forestry, agriculture, mining/minerals, energy, petroleum, and aquaculture). In 2011-12, RDC invested \$6.1 million to fund 63 R&D projects in these priority sectors.



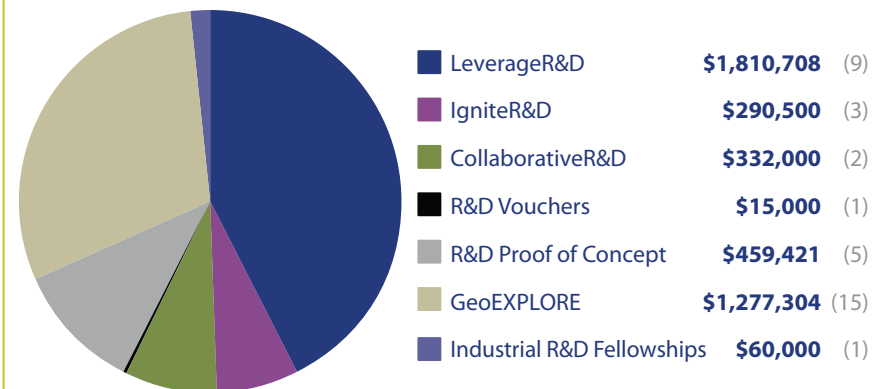
*In 2011-12, RDC provided \$6.1 million in funding for 63 R&D projects focussed in priority areas, an increase from the 56 projects funded in 2010-11.*

# Investing in R&D

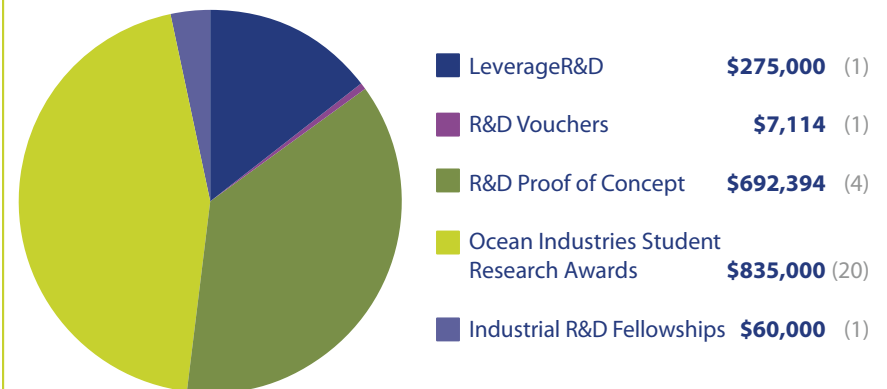
In keeping with our focus on priority sectors, RDC launched GeoEXPLORE in 2011-12 to support R&D activities specific to mineral and petroleum exploration. This three-year program will enhance geoscience R&D capacity, collaboration, and innovation in the province's mineral and petroleum industries. This new program funded the largest number of natural resources projects in 2011-12, awarding \$1.2 million to 15 projects. LeverageR&D committed the most funding, awarding \$1.8 million to nine projects.

In 2011-12, the Ocean Industries Student Research awards both made the largest investment and funded the largest number of projects in the ocean technology sector, awarding \$835,000 to 20 student research projects.

## RDC Investments in Natural Resources by Program 2011-12



## RDC Investments in Ocean Technology by Program 2011-12



*RDC awarded \$4.2 million in funding for 36 projects in the natural resources industry and \$1.9 million in funding for 27 projects in the ocean technology industry.*

# Investing in Research







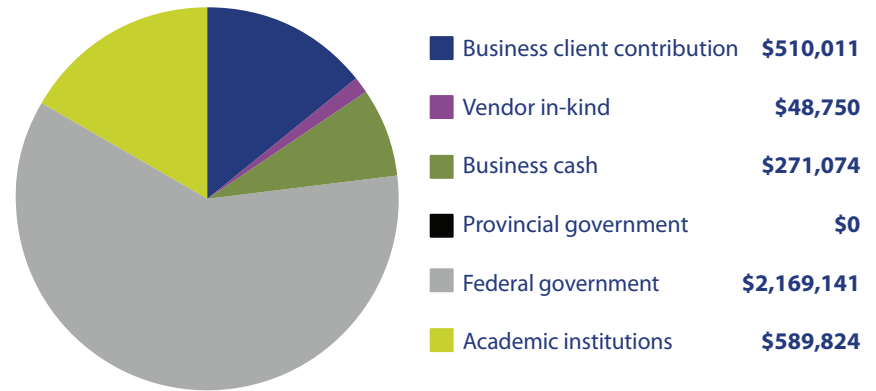
**DR. LESLEY JAMES,** CHEVRON CHAIR IN PETROLEUM ENGINEERING

RDC's financial support of Dr. Lesley James' research at Memorial University will lead to new and innovative ways to maximize the recovery of oil from remote offshore fields. The research is designed to extend the production life of a field through enhanced oil recovery (EOR) methods that will yield tremendous benefits for both industry and the province. Over the next five years, Dr. James' research will strengthen Newfoundland and Labrador's expertise and leadership role in the oil and gas industry.

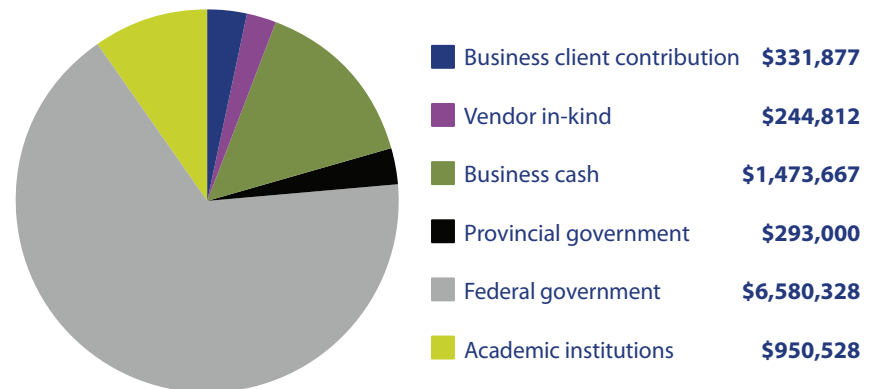
# Investing in R&D

In addition to directly investing \$6.1 million in research in both the ocean technology and natural resources sectors, over the past year, RDC has also leveraged an additional \$13.6 million from other sources to increase the quality of results in these sectors.

## Ocean Technology Leveraging 2011-12



## Natural Resources Leveraging 2011-12



*In 2011-12, RDC leveraged \$3.6 million for projects in the ocean technology sector, and \$10 million for projects in the natural resource sector. The largest contributor to both sectors was the Federal government.*

## INVESTING IN INFRASTRUCTURE

World-class R&D infrastructure is essential for creating an environment that is globally competitive, collaborative, and innovative. In previous years, RDC has made significant investments in infrastructure through RDC's Infrastructure Call that was launched in 2010. The R&D Infrastructure Call had provided funding through two program elements: Research Tools and Equipment, and R&D Platforms. This targeted call was responsible for leveraging a significant business investment in R&D.

Under the Research Tools and Equipment program element, RDC funded two projects for a total investment of \$2,473,357: the creation of a Mechatronic Development and Prototyping Facility and the procurement of state-of-the-art mineral analysis equipment for Memorial University. The Mechatronic Development and Prototyping Facility is a new initiative at Memorial's Faculty of Engineering and Applied Science, and this investment from RDC complements funding from the Boeing Company for research in autonomous systems. The second project supported research in the minerals/mining sector, and was a joint investment from RDC and the Iron Ore Company of Canada.

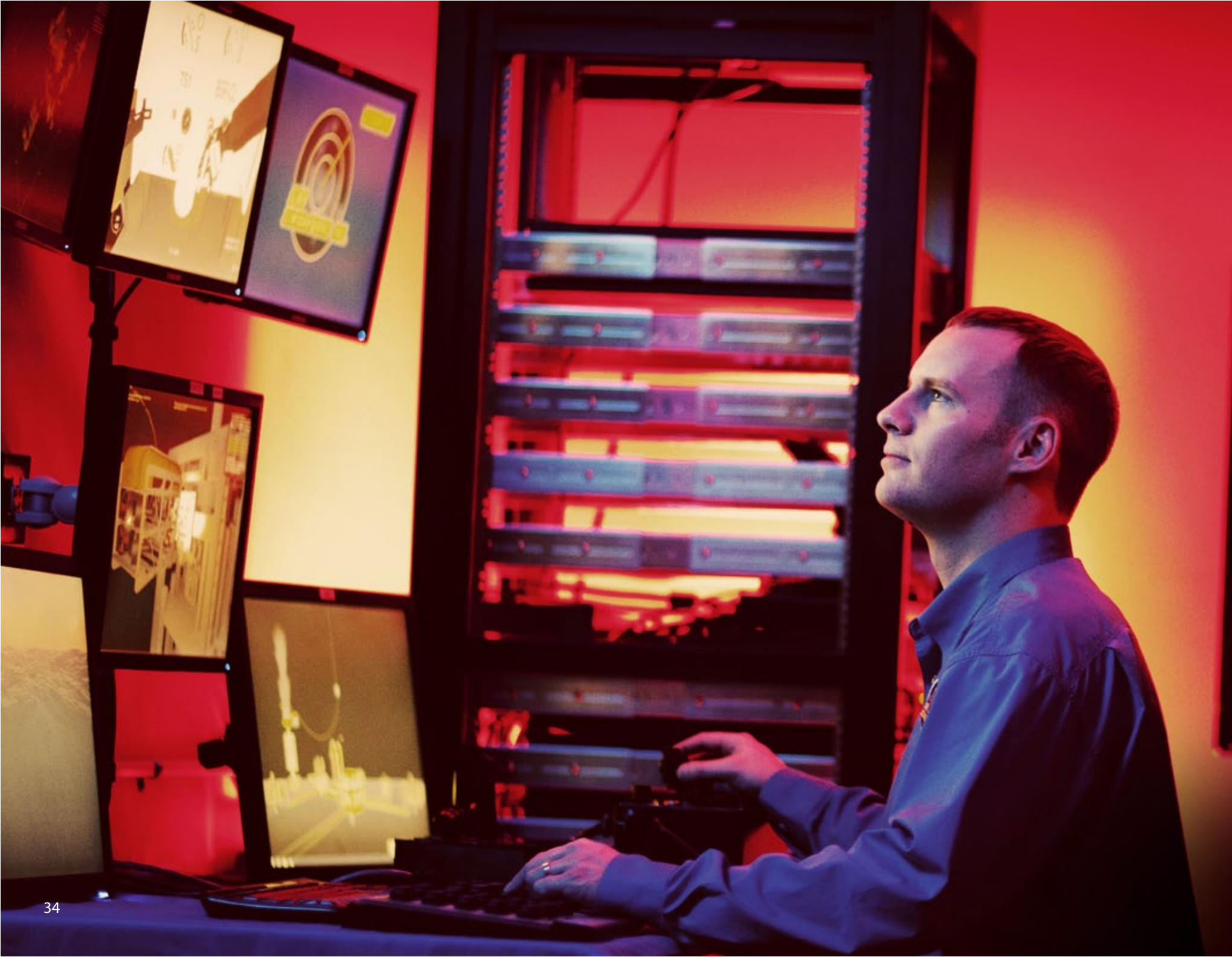
The two R&D Platform projects were C-CORE's Centre for Arctic Resource Development (CARD) and Memorial University's S.J. Carew Building. CARD received \$16.5 million in combined funding from the Hibernia and Terra Nova projects and RDC to support the creation of the new Centre to explore new

technology solutions for operations in the Arctic. The S.J. Carew Building received a combined investment of \$6.8 million from Suncor Energy and RDC to expand the facility to provide dedicated space for ocean technology and offshore petroleum research programs. These projects represent our largest infrastructure investments to date, and due to their multi-year nature, they are still ongoing.

In 2010, RDC invested in Newfoundland and Labrador's cold-oceans research facility, the Ocean Sciences Centre (OSC) at Memorial University, with an infrastructure investment of \$8,325,477 through the LeverageR&D program. This project is ongoing and received additional funding of \$2.15 million in 2011-12 for additional project costs.

The Geoscience Research Tools and Equipment portion of GeoEXPLORE continued our investment in infrastructure in 2011-12. This program provides support to academic-led, industry-engaged projects where new equipment is required to enhance R&D capacity and further exploration and development opportunities. In 2011-12, RDC invested \$238,634 to in various field and bench-top equipment at Memorial University.

These investments in infrastructure will provide Newfoundland and Labrador's world-class researchers with access to cutting edge equipment that is not currently available elsewhere in the province.



# Investing in Infrastructure



## GRI SIMULATIONS INC.

RDC's financial support for this Mount Pearl-based company is allowing for the development and testing of a proprietary 3-D underwater Field Development Kit software, which enables oil and gas companies to:

- picture and map oil field designs and operations in any number of offshore conditions;
- improve efficiency in the design and fabrication and installation of fields and field components;
- simulate oil spill capping and pipeline repair techniques in specific locations and conditions.

# Opportunities and Challenges Ahead



While this document looks back at RDC's performance over the past year, it is critically important to consider the opportunities and challenges ahead as we implement our strategic plan.

Historically, there has been a low level of R&D expenditures in Newfoundland and Labrador compared to Canada and the rest of the world. This is particularly the case if we compare the level of investment by business as an R&D performer across jurisdictions. RDC recognizes that increasing

business R&D is both challenging and necessary to drive business innovation and long-term economic growth. R&D is a demanding and stimulating endeavour that requires creativity and astute business acumen. RDC will strive to demonstrate the value of R&D to the province and promote collaborative R&D as a key component of the innovation system.

Over the past year, RDC worked on creating a sustainable environment for R&D in the province by focusing existing programs on growing the highly-qualified personnel required to expand R&D activities in the province, and by supporting R&D in key areas such as the ocean technology and natural resources sectors, as they are areas of competitive advantage. In the last year, we also launched our directed research program in the mining and minerals sector, GeoEXPLORE,

and launched the Research Inspired Student Enrichment awards aimed at introducing top high school students to careers in R&D. These new programs further focus our efforts in priority areas and in growing the capacity to improve R&D in the province.

Consulting and working collaboratively with business, academia, and government R&D performers continues to be an opportunity to work together to align provincial R&D activities that are responsive to the needs of our stakeholders. The provincial government has placed a high priority on R&D as a key contributor to advancing the province's innovation strategy. To date we have invested in the key components required to grow R&D: research, people, and infrastructure. However, to make a significant impact on R&D in the province,

RDC is continually searching for new strategic opportunities in addition to providing direct support through funding programs.

Looking ahead, the corporation is focused on growing R&D in key areas that provide a competitive advantage for this province. For example, we have decided to focus on strengthening capacity in Arctic R&D. Strengthened capacity in Arctic R&D will expand upon the current R&D environment in the province and provide new opportunities for our clients.

RDC is committed to growing the R&D capacity of this province and will focus on promoting R&D as a key component for strengthening our economy in the long-term.

### STRATEGIC GOAL 1: BUILDING A STRONG FOUNDATION FOR R&D

**OVERVIEW** R&D plays a critical role in innovation, industry and business enterprise competitiveness, and overall economic performance. In order to position this province to reap benefits from R&D and innovation activities, we must increase the quantity of R&D that is performed within Newfoundland and Labrador. Highly-qualified people (HQP), innovative R&D activities, and quality infrastructure are the essential components of a successful R&D environment. RDC strives to improve the foundation conditions for R&D in Newfoundland and Labrador by strengthening these essential components. The following goal supports the strategic direction of RDC by contributing to the improvement of R&D capacity and a stronger knowledge-based economy in Newfoundland and Labrador.

**GOAL** By March 31, 2014, RDC will have enhanced academia, business, and government capacity for R&D excellence

**2012 Objective** By March 31, 2012, RDC will have commenced delivery of programs targeting HQP and innovative R&D activities

**Measure** Commenced delivery of programs

**Indicators** Program delivery commenced  
 Number of students trained through RDC programs<sup>1</sup>  
 Number of researchers employed through RDC programs<sup>1</sup>  
 Number of R&D projects funded through RDC programs<sup>1</sup>

#### INDICATOR 2011-12 ACTUAL RESULTS

**Program delivery commenced** GeoEXPLORE was launched on June 9, 2011. GeoEXPLORE is a three-year directed research program, intended to enhance geoscience research and development (R&D) capacity, collaboration, and industry innovation in support of mineral and petroleum exploration and development in Newfoundland and Labrador. The Research Team Awards component of GeoEXPLORE targets HQP by supporting academic-led research teams that engage industry and other potential collaborators in support of targeted exploration and development opportunities in the province of Newfoundland and Labrador. The Collaborative Research Opportunities component, meanwhile, encourages local, national, and international collaboration among academia, industry, and government researchers in areas that address industry needs and development opportunities. Finally, the Post-doctoral Researchers component targets HQP through focusing on industry-relevant R&D projects, where the Post-doctoral Researcher is embedded (supervised) in either academic or government research environments.

The Research Inspired Student Enrichment Awards (RISE) were launched on August 23, 2011. These awards provide top Newfoundland and Labrador high school students with the opportunity to attend research-related enrichment programs focused on science, technology, engineering and mathematics (STEM). Through these awards, RDC recognizes the need for early development of the talent required by R&D stakeholders and the importance of R&D to innovation and economic growth.

<sup>1</sup>Please note that the RDC Strategic Plan contains a printing error on page 30. These indicators included the word "priority" when they should not have. This is the corrected wording for the three 2012 indicators.



**Number of students trained through RDC programs**

In total, 85 students received training through RDC programs in 2011-12.

The OISRA provided \$835,000 in funding to 20 student researchers in 2011-12. In total, nine doctoral, nine master’s, and two undergraduate students at Memorial University received awards in support of oceans research.

In addition, 51 students were involved in faculty-led research programs funded through IgniteR&D, LeverageR&D, CollaborativeR&D, and GeoEXPLORE.

Finally, 11 high school students received access to training through the RISE Awards and three post doctoral fellows were funded through RDC’s Industrial R&D Fellowship program.

**Number of researchers employed through RDC programs**

Over the past year, 140 researchers have been employed on projects funded through RDC’s academic programs. In addition 45 research staff were employed by companies on projects that received funding through R&D Proof of Concept.

**Number of R&D projects approved through RDC programs**

RDC approved a total of 109 projects in 2011-12. A breakdown of the projects funded by program is provided below.

Program	Number of Projects
R&D Proof of Concept	15
R&D Vouchers	3
IgniteR&D	14
LeverageR&D	26
CollaborativeR&D	2
GeoEXPLORE	15
Ocean Industries Student Research Awards	20
Research Inspired Student Enrichment Awards	11
Industrial R&D Fellowships	3

**DISCUSSION OF RESULTS**

In 2011-12, RDC made great strides in building a strong foundation for R&D. Our GeoEXPLORE and RISE programs, both launched in 2011-12 provided funds to develop the highly-qualified people who will lead the drive to grow the R&D capacity of the province. In addition, our existing programs targeted HQP by providing funding to 109 innovative R&D projects, thereby supporting the work of 140 researchers, 45 research staff members, and 85 students.

**LOOKING AHEAD TO 2013: BUILDING A STRONG FOUNDATION FOR R&D**

**GOAL**

By March 31, 2014, RDC will have enhanced academia, business, and government capacity for R&D excellence

**2013 Objective**

By March 31, 2013, RDC will have identified and assessed opportunities to invest in quality R&D infrastructure

<b>Measure</b>	Identified and assessed investment opportunities
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<b>Indicators</b>	<p>Assessment of R&amp;D infrastructure investment opportunities</p> <p>Action plan for investing in R&amp;D infrastructure opportunities</p> <p>Number and value of infrastructure investments through existing RDC programs</p> <p>Number and value of infrastructure investments through existing RDC programs in priority areas</p> <p>Number and value of leveraged funding for infrastructure</p>
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### STRATEGIC GOAL 2: GROWING BUSINESS INVESTMENT IN R&D

<b>OVERVIEW</b>	<p>The business sector is a critical component of R&amp;D in high performing provinces. Business investment in R&amp;D is important both for business-performance of R&amp;D (R&amp;D carried out directly by businesses and/or their partners) and business utilization of R&amp;D (R&amp;D that is relevant to business and meets technical or identified needs). RDC is fostering R&amp;D capacity in the business sector by encouraging business-initiated R&amp;D projects; providing incentives for industry-relevant R&amp;D projects; and encouraging collaboration amongst business, academic, and government clients. The following goal supports the strategic direction of RDC by contributing to the improvement of R&amp;D capacity and a stronger knowledge-based economy in Newfoundland and Labrador.</p>
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<b>GOAL</b>	<b>By March 31, 2014, RDC will have encouraged increased business investment in R&amp;D in Newfoundland and Labrador</b>
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<b>2012 Objective</b>	By March 31, 2012, RDC will have commenced delivery of programs encouraging business investment in R&D
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<b>Measure</b>	Commenced delivery of programs
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<b>Indicators</b>	<p>Delivery of programs commenced</p> <p>Number and value of RDC-business co-funded projects</p> <p>Number and value of non-commercial R&amp;D projects with demonstrated business-relevance (solved technical need, cost/productivity improved, new product/revenue)</p> <p>Total business contribution to RDC-funded commercial and non-commercial R&amp;D projects</p>
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<b>INDICATOR</b>	<b>2011-12 ACTUAL RESULTS</b>
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<b>Delivery of programs commenced</b>	<p>GeoEXPLORE was launched on June 9, 2011. GeoEXPLORE is a three-year directed research program, intended to enhance geoscience research and development (R&amp;D) capacity, collaboration, and industry innovation in support of mineral and petroleum exploration and development in Newfoundland and Labrador.</p>
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	<p>This program targets business investment in R&amp;D through Industry-led R&amp;D, Technology Development and Demonstration. This program component supports industry-led projects in the mining or petroleum sectors, including related technology providers and collaborators, where geoscience R&amp;D could reduce exploration risk, increase discovery success, and support innovation through to resource development. This includes projects related to production, processing and reducing environmental impact.</p>
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<b>Number and value of RDC-business co-funded projects</b>	In 2011-12, there were 43 RDC-business co-funded projects. The total value of the projects was \$5,336,795.
<b>Number and value of non-commercial R&amp;D projects with business-relevance</b>	In 2011-12, there were 23 non-commercial business co-funded projects with demonstrated business relevance. The value of these projects was \$3,123,772.
<b>Total business contribution to RDC-funded projects</b>	The total business contribution to RDC-business co-funded projects was \$3,506,344. Of that, \$1,416,730 came from business in-kind contributions, \$344,873 from business client contributions, and \$1,744,741 from business cash.
<b>Total business contribution to RDC-funded commercial and non-commercial R&amp;D projects</b>	The total business contribution to RDC-business co-funded projects was \$3,506,344. Of that, \$1,416,730 came from business in-kind contributions, \$344,873 from business client contributions, and \$1,744,741 from business cash. The total business investment in non-commercial R&D projects was \$2,040,864.

**DISCUSSION OF RESULTS** Business investment is a key component of a successful R&D ecosystem, and in 2011-12, RDC’s programs took action to help increase business investment in Newfoundland and Labrador. GeoEXPLORE, launched in 2011-12, specifically targets industry-led R&D, and our existing programs helped to co-fund 43 projects with business with a total value of \$5,336,795. Moreover, in 2011-12 RDC was involved in 23 non-commercial business co-funded projects with demonstrated business relevance. Overall, the total business contribution to RDC-business co-funded projects was \$3,506,344.

## LOOKING AHEAD TO 2013: GROWING BUSINESS INVESTMENT IN R&D

<b>GOAL</b>	By March 31, 2014, RDC will have encouraged increased business investment in R&D in Newfoundland and Labrador
<b>2013 Objective</b>	By March 31, 2013, RDC will have further developed programs to encourage business investment in R&D
<b>Measure</b>	Further developed programs
<b>Indicators</b>	<ul style="list-style-type: none"> <li>Modifications to existing programs</li> <li>New programs that target business investment in R&amp;D</li> <li>Number and value of RDC-business co-funded projects</li> <li>Number and value of non-commercial R&amp;D projects with demonstrated business-relevance (solved technical need, cost/productivity improved, new product/revenue)</li> </ul>

### STRATEGIC ISSUE 3: FOCUSING R&D IN PRIORITY AREAS

**OVERVIEW** Focusing on priority areas is vitally important for the future well-being of Newfoundland and Labrador. Priority areas are identified as those sectors or disciplines that present a development opportunity or potential strategic competitive advantage for R&D in this province. To realize development opportunities and support areas of competitive advantage, RDC will focus new programs and initiatives on priority areas. RDC priority areas, as identified by the Board of Directors in consultation with stakeholders, include ocean technology and natural resource industries (i.e. petroleum, mining, fisheries, and forest products). The following goal supports the strategic direction of RDC by contributing to the improvement of R&D capacity and a stronger knowledge-based economy in Newfoundland and Labrador.

**GOAL** By March 31, 2014 RDC will have realized development opportunities and supported areas of competitive advantage

**2012 Objective** By March 31, 2012, RDC will have commenced delivery of programs targeting RDC priority areas

**Measure** Commenced Delivery of Programs

**Indicators**

- Program delivery commenced
- Number of students trained in priority areas through RDC programs
- Number of researchers employed in priority areas through RDC programs
- Number of R&D priority area projects funded through RDC programs

### INDICATOR 2011-12 ACTUAL RESULTS

**Program delivery commenced** GeoEXPLORE was launched on June 9, 2011. GeoEXPLORE is a three-year directed research program, intended to enhance geoscience research and development (R&D) capacity, collaboration, and industry innovation in support of mineral and petroleum exploration and development in Newfoundland and Labrador.

**Number of students trained in priority areas through RDC programs**

In total, 33 students were trained in priority areas through RDC programs in 2011-12.

The OISRA provided \$835,000 in funding to 20 student researchers in 2011-12. In total, nine doctoral, nine master's, and two undergraduate students at Memorial University received awards in support of oceans research.

The research focus areas for the OISRA include ocean engineering, offshore petroleum, aquaculture, fisheries, and marine science. Projects that support innovation and the commercialization of ocean technologies that do not fit into these categories are also considered.

In addition to the students who were funded directly by the OISRA, RDC's other academic programs involved students in ongoing, faculty-led research projects as research assistants, technicians, and researchers. In total, 13 students gained research experience through their involvement with projects funded through RDC's academic programs and GeoEXPLORE. All of these students gained experience in the priority area of natural resource industries.

**Number of researchers employed in priority areas through RDC programs** In 2011-12, a total of 101 researchers were funded through R&D funded projects. In total, 12 researchers were employed in the ocean technology field, through Leverage R&D, Ignite R&D, and Collaborative R&D. In natural resources, 47 researchers were employed through those same programs, and an additional 42 were employed through GeoEXPLORE.

**Number of R&D projects funded in priority areas through RDC programs** In 2011-12, RDC allocated \$4,244,933 in funding allocated for natural resources projects, and \$1,869,508 for ocean technology projects. Thirty six of the projects funded were in the natural resource sector while 27 were in the ocean technology sector for a total of 63 R&D projects focused in priority areas. In addition to directly investing in both the ocean technology and natural resources sector, RDC also helped to leverage additional sources of funding for projects in both these sectors. In 2011-12, RDC leveraged \$3,588,800 for projects in the ocean technology sector, and \$10,051,198 for projects in the natural resource sector.

**DISCUSSION OF RESULTS** Priority areas present a development opportunity or strategic competitive advantage for Newfoundland and Labrador. GeoEXPLORE, launched in 2011-12, specifically targets the mineral and petroleum exploration sector through its directed research program. Moreover, RDC’s existing programs remain highly focused on Newfoundland and Labrador’s priority areas. In 2011-12, 101 researchers and 33 students who work in priority areas were funded through RDC’s programs. This came through the \$6,114,441 RDC provided to fund 63 R&D projects in priority areas. In addition to investing directly, RDC also helped to leverage \$13,639,998 in support of projects in priority areas.

## LOOKING AHEAD TO 2013: FOCUSING R&D IN PRIORITY AREAS

**GOAL** By March 31, 2014 RDC will have realized development opportunities and supported areas of competitive advantage

**2013 Objective** By March 31, 2013, RDC will have developed one or more directed research programs targeting RDC priority areas

**Measure** Developed directed research program targeting priority area

**Indicators**

- Number of directed research programs developed targeting priority areas
- Number of projects funded under directed research programs
- Value of projects funded under directed research programs
- Number of students trained through directed research programs
- Number of researchers employed through directed research programs

# Financial Statements

## Management Certification

The accompanying financial statements of the Research & Development Corporation of Newfoundland and Labrador have been prepared by the Corporation's management in accordance with Canadian Public Sector Accounting Standards.

Management is responsible for the integrity and objectivity of the information contained in these financial statements, including the note disclosures. Some of the information in the financial statements is based on management's best estimate and judgment, and gives due consideration to materiality.

Management has developed and maintains a financial and management control system and practices designed to provide reasonable assurance that transactions are properly authorized, assets are safeguarded and liabilities are recognized.

Management is also responsible for ensuring that transactions comply with relevant policies and authorities and are properly recorded to produce timely and reliable financial information to maintain accountability of Research & Development Corporation funds.

The Board of Directors is responsible for ensuring that management fulfills its responsibilities for financial reporting and internal control and meets periodically with management to review and discuss the financial information. The Auditor General of Newfoundland and Labrador conducts an independent audit of the annual financial statements of the Corporation in accordance with Canadian auditing standards in order to express an opinion thereon. The Auditor General has full and free access to the financial management of the Corporation and meet when required.



Glenn Janes  
Chief Executive Officer



Beverley Evans, CA  
Chief Financial Officer

St. John's, Newfoundland and Labrador  
June 18, 2012



OFFICE OF THE AUDITOR GENERAL  
St. John's, Newfoundland and Labrador

## AUDITOR'S REPORT

To the Board of Directors  
Research & Development Corporation  
of Newfoundland and Labrador  
St. John's, Newfoundland and Labrador

### Report on the Financial Statements

I have audited the accompanying financial statements of the Research & Development Corporation of Newfoundland and Labrador which comprise the statement of financial position as at 31 March 2012, the statements of operations and accumulated surplus, change in net financial assets, and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

#### *Management's Responsibility for the Financial Statements*

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### *Auditor's Responsibility*

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

# Financial Statements

## Auditor's Report (cont.)

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

### Opinion

In my opinion, the financial statements present fairly, in all material respects, the financial position of the Research & Development Corporation of Newfoundland and Labrador as at 31 March 2012, and its financial performance and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.



**TERRY PADDON, CA**  
Auditor General

St. John's, Newfoundland and Labrador  
18 June 2012

## RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR

### STATEMENT OF FINANCIAL POSITION

As at

	March 31, 2012 \$	March 31, 2011 \$	April 1, 2010 \$
		Restated (Note 2)	Restated (Note 2)
<b>FINANCIAL ASSETS</b>			
Cash	30,873,318	24,740,983	688,782
Other receivables	132,443	31,039	21,171
	<u>31,005,761</u>	<u>24,772,022</u>	<u>709,953</u>
<b>LIABILITIES</b>			
Accounts payable and accrued liabilities (Note 7)	3,378,223	3,494,133	254,352
	<u>3,378,223</u>	<u>3,494,133</u>	<u>254,352</u>
<b>Net Financial Assets</b>	<u>27,627,538</u>	<u>21,277,889</u>	<u>455,601</u>
<b>NON-FINANCIAL ASSETS</b>			
Tangible capital assets, net (Note 8)	718,764	355,300	311,468
Prepaid expenses	15,110	-	5,946
	<u>733,874</u>	<u>355,300</u>	<u>317,414</u>
<b>Accumulated surplus</b>	<u>28,361,412</u>	<u>21,633,189</u>	<u>773,015</u>

Contractual obligations (Note 9)

*The accompanying notes are an integral part of these financial statements.*

Signed on behalf of the Board:

Director

Director

# Financial Statements

## RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR

### STATEMENT OF OPERATIONS AND ACCUMULATED SURPLUS

For the year ended March 31

	2012 \$	2012 \$	2011 \$
	Budget	Actual	Actual
	(Note 13)		Restated (Note 2)
<b>REVENUE</b>			
Government grants	25,220,500	25,226,262	30,413,614
Investment income	199,261	449,232	251,807
	<u>25,419,761</u>	<u>25,675,494</u>	<u>30,665,421</u>
<b>EXPENSES</b>			
Program grants	22,763,000	13,350,755	6,360,816
Salaries and benefits	3,512,511	3,349,080	2,179,751
Transportation and communications	330,000	196,219	128,959
Purchased services	1,728,950	853,525	503,908
Professional services	-	1,028,582	491,541
Amortization of tangible capital assets	307,299	169,110	140,272
	<u>28,641,760</u>	<u>18,947,271</u>	<u>9,805,247</u>
Annual (deficit) surplus	(3,221,999)	6,728,223	20,860,174
Accumulated surplus, beginning of year	13,594,659	21,633,189	773,015
Accumulated surplus, end of year	<u>10,372,660</u>	<u>28,361,412</u>	<u>21,633,189</u>

The accompanying notes are an integral part of these financial statements.

## RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR

### STATEMENT OF CHANGE IN NET FINANCIAL ASSETS

For the year ended March 31

	2012 \$	2012 \$	2011 \$
	Budget	Actual	Actual
	(Note 13)		Restated (Note 2)
Annual (deficit) surplus	(3,221,999)	6,728,223	20,860,174
Acquisition of tangible capital assets	(325,639)	(532,574)	(184,104)
Amortization of tangible capital assets	307,299	169,110	140,272
	<u>(18,340)</u>	<u>(363,464)</u>	<u>(43,832)</u>
Acquisition of prepaid expenses	-	(224,296)	(166,860)
Use of prepaid expenses	-	209,186	172,806
	<u>-</u>	<u>(15,110)</u>	<u>5,946</u>
(Decrease) increase in net financial assets	(3,240,339)	6,349,649	20,822,288
Net financial assets, beginning of year	12,966,018	21,277,889	455,601
Net financial assets, end of year	<u>9,725,679</u>	<u>27,627,538</u>	<u>21,277,889</u>

The accompanying notes are an integral part of these financial statements.



## RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR

STATEMENT OF CASH FLOWS  
For the year ended March 31

	2012 \$	2011 \$
		Restated (Note 2)
<b>OPERATING TRANSACTIONS</b>		
Annual surplus	6,728,223	20,860,174
Non-cash item		
Amortization of tangible capital assets	169,110	140,272
Increase in other receivables	(101,404)	(9,868)
(Increase) decrease in prepaid expenses	(15,110)	5,946
(Decrease) increase in accounts payable and accrued liabilities	(115,910)	3,239,781
<b>Cash provided by operating transactions</b>	<b>6,664,909</b>	<b>24,236,305</b>
<b>CAPITAL TRANSACTIONS</b>		
Acquisition of tangible capital assets	(532,574)	(184,104)
<b>Cash applied to capital transactions</b>	<b>(532,574)</b>	<b>(184,104)</b>
<b>Net increase in cash</b>	<b>6,132,335</b>	<b>24,052,201</b>
<b>Cash, beginning of year</b>	<b>24,740,983</b>	<b>688,782</b>
<b>Cash, end of year</b>	<b>30,873,318</b>	<b>24,740,983</b>

The accompanying notes are an integral part of these financial statements.

## RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR

NOTES TO FINANCIAL STATEMENTS  
March 31, 2012

### 1. Nature of operations

The Research & Development Corporation of Newfoundland and Labrador (the Corporation) was incorporated under the authority of the *Research and Development Council Act (the Act)* and is funded by the Province of Newfoundland and Labrador (the Province). The Act came into effect December 18, 2009. The objective of the Corporation is to strengthen the focus, quantity, quality, and relevance of research and development (R&D) undertaken within the Province and elsewhere for the long-term economic benefit of the Province.

The affairs of the Corporation are managed by a Board of Directors appointed by the Lieutenant-Governor in Council. The Corporation is a Crown entity of the Province and as such is not subject to Provincial or Federal income taxes.

### 2. Transition to Canadian public sector accounting standards

At its inception, the Corporation adopted Canadian generally accepted accounting principles ("CGAAP") for not for profit organizations. In accordance with recent recommendations of the Public Sector Accounting Board ("PSAB"), the Corporation has determined that it is an "other government organization" ("OGO") within the Government Reporting Entity and that Canadian Public Sector Accounting Standards ("CPSA Standards") is the most appropriate framework for reporting purposes. As a result, these are the first financial statements that the Corporation has prepared in accordance with CPSA Standards. The changeover became effective on April 1, 2011 with retroactive application to April 1, 2010.

#### a) Exceptions to retroactive application

The Corporation ensured that the estimates reflected in the opening statement of financial position prepared in accordance with CPSA Standards were consistent with those in the statement of financial position as at the same date prepared under CGAAP adjusted, as needed, for any difference in accounting policy. Estimates required under CPSA Standards that were not required under CGAAP reflect the conditions that existed at the opening statement of financial position date prepared in accordance with CPSA Standards.

#### b) Exemptions applied

In accordance with Section PS 2125, *First-time Adoption by Government Organizations*, the Corporation elected to apply the tangible capital asset impairment exemption. As a result, the Corporation prospectively applied, as of the transition date, the impairment criteria and conditions for tangible capital assets set out in Section PS 3150. The Corporation reviewed the first-time adoption standard and determined that no other exemptions were applicable.

# Financial Statements

## RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR

NOTES TO FINANCIAL STATEMENTS

March 31, 2012

### 2. Transition to Canadian public sector accounting standards (cont.)

In accordance with Section PS 2125, *First-time Adoption by Government Organizations*, the Corporation has prepared reconciliations to enable readers to understand the effects of the changeover on its comparative results and its financial position.

#### Statement of Operations reconciliation

The following table presents the reconciliation of the Statement of Operations from the previous reporting framework to the current method of presentation for the year ended March 31, 2011 (certain amounts have been reclassified to conform to the presentation adopted at March 31, 2012).

Statement of Operations	Notes	CGAAP	Adjustments	CPSA Standards
		March 31, 2011		March 31, 2011
		\$	\$	\$
<b>REVENUE</b>				
Government grants	i.	9,743,500	20,670,114	30,413,614
Investment income		251,807	-	251,807
Amortization of deferred capital contribution	ii.	54,786	(54,786)	-
		10,050,093	20,615,328	30,665,421
<b>EXPENSES</b>				
Program grants		6,360,816	-	6,360,816
Salaries and benefits	iv.	2,172,790	6,961	2,179,751
Professional services	iii.	433,447	58,094	491,541
Property	iii.	238,568	(238,568)	-
Office and computer equipment and supplies	iii.	162,687	(162,687)	-
Amortization of capital assets		140,272	-	140,272
Advertising, printing and promotion	iii.	95,630	(95,630)	-
Communications	iii.	93,867	(93,867)	-
Travel	iii.	86,034	(86,034)	-
Directors' fees	iii.	14,175	(14,175)	-
Transportation and communications	iii.	-	128,959	128,959
Purchased services	iii.	-	503,908	503,908
		9,798,286	6,961	9,805,247
Excess of revenue over expenses		251,807	20,608,367	20,860,174

## RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR

NOTES TO FINANCIAL STATEMENTS

March 31, 2012

### 2. Transition to Canadian public sector accounting standards (cont.)

#### Statement of Financial Position reconciliation

The following tables present the reconciliation of the Statement of Financial Position from the previous reporting framework to the current method of presentation at March 31, 2011 and at the transition date April 1, 2010 (certain amounts have been reclassified to conform to the presentation adopted at March 31, 2012).

Statement of Financial Position	Notes	CGAAP	Adjustments	CPSA
		March 31, 2011		March 31, 2011
		\$	\$	\$
<b>FINANCIAL ASSETS</b>				
Cash		24,740,983	-	24,740,983
Other receivables		31,039	-	31,039
		24,772,022	-	24,772,022
<b>LIABILITIES</b>				
Accounts payable and accrued liabilities	iv.	3,439,929	54,204	3,494,133
Deferred revenue	i.	21,309,475	(21,309,475)	-
Deferred capital contributions	ii.	103,233	(103,233)	-
Accrued severance	iv.	22,878	(22,878)	-
		24,875,515	(21,381,382)	3,494,133
<b>Net (debt) financial assets</b>		(103,493)	21,381,382	21,277,889
<b>NON-FINANCIAL ASSETS</b>				
Tangible capital assets		355,300	-	355,300
		355,300	-	355,300
<b>Accumulated surplus</b>		251,807	21,381,382	21,633,189

## RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR

NOTES TO FINANCIAL STATEMENTS  
March 31, 2012

### 2. Transition to Canadian public sector accounting standards (cont.)

Statement of Financial Position	Notes	CGAAP	Adjustments	CPSA
		April 1, 2010		Standards
		\$	\$	April 1, 2010
				\$
<b>FINANCIAL ASSETS</b>				
Cash		688,782	-	688,782
Other receivables		21,171	-	21,171
		<u>709,953</u>	<u>-</u>	<u>709,953</u>
<b>LIABILITIES</b>				
Accounts payable and accrued liabilities	iv.	213,887	40,465	254,352
Deferred revenue	i.	639,361	(639,361)	-
Deferred capital contributions	ii.	158,019	(158,019)	-
Accrued severance	iv.	16,100	(16,100)	-
		<u>1,027,367</u>	<u>(773,015)</u>	<u>254,352</u>
<b>Net (debt) financial assets</b>		<u>(317,414)</u>	<u>773,015</u>	<u>455,601</u>
<b>NON-FINANCIAL ASSETS</b>				
Tangible capital assets		311,468	-	311,468
Prepaid expenses		5,946	-	5,946
		<u>317,414</u>	<u>-</u>	<u>317,414</u>
<b>Accumulated surplus</b>		<u>-</u>	<u>773,015</u>	<u>773,015</u>

#### NOTES

- i. Under CGAAP, government grants received by the Corporation to fund research and development programs in future periods were deferred in the statement of financial position and recognized through the statement of operations in the period in which related expenditures were incurred. Under CPSA Standards, government grants are recognized as revenue when authorized and any eligibility criteria have been met. As a result, the balance of deferred revenue at the date of transition was reviewed and it was determined that the entire balance should be recognized as revenue in accordance with the definition under CPSA Standards. Accordingly, an adjustment was made to retroactively apply the standard.

## RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR

NOTES TO FINANCIAL STATEMENTS  
March 31, 2012

### 2. Transition to Canadian public sector accounting standards (cont.)

- ii. Under CGAAP, tangible capital assets that were transferred to the Corporation from the Government of Newfoundland and Labrador were recorded as deferred capital contributions and amortized to income on a straight line basis using the same rates as the amortization expense related to the tangible capital assets. Under CPSA Standards, the transfer of tangible capital assets is considered a government transfer and the standards in PS 3410 *Government Transfers* apply. As a result, the balance of deferred capital contributions at the date of transition was reviewed and it was determined that the entire balance should be recognized as revenue in accordance with the definition under CPSA Standards. Accordingly, an adjustment was made to retroactively apply the standard.
- iii. Certain comparative figures have been reclassified to conform to the financial statement classifications adopted in 2012.
- iv. Under CGAAP, no provision was required for non-vested severance or accumulating non-vesting sick leave benefits. Under CPSA Standards the Corporation is required to recognize a liability and an expense for post employment benefits and compensated absences in the period in which employees render services. Accordingly, an adjustment was made to retroactively apply the standard. In addition, since the short-term and long-term distinction is not required under CPSA Standards on the face of the statement of financial position, the balance related to accrued severance and accumulating non-vesting sick leave benefits has been reclassified to accounts payable and accrued liabilities.

### 3. Changes in accounting standards: early adoption of released Handbook sections

The Corporation elected to early adopt the following CICA Public Sector Accounting Handbook section at the transition date.

#### Sections PS 3410 Revised, Government Transfers

Section PS 3410, *Government Transfers*, was amended by PSAB in December 2010. The main changes pertain to recognition criteria for government transfers, affecting how the Corporation accounts for such transfers. These amendments are effective for fiscal years beginning on or after April 1, 2012 and earlier adoption is encouraged. The Corporation decided to early adopt the section for the year ending March 31, 2012. The impact on prior years is as described in Note 2.i. and 2.ii. above. The impact of the change on the current year is an increase in government grants revenue recognized of \$6,278,991.

# Financial Statements

## RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR

NOTES TO FINANCIAL STATEMENTS

March 31, 2012

### 4. Summary of significant accounting policies

These financial statements have been prepared by management in accordance with CPSA Standards which require management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. By their nature these estimates are subject to measurement uncertainty. The most significant items for which an estimate is used are the severance accrual and the useful life of tangible capital assets. The effect on the financial statements of changes in such estimates in future periods could be material and would be accounted for in the period the change occurs.

#### Basis of presentation

These financial statements include the accounts relating to the operations carried on under the name of the Corporation.

These financial statements have been prepared by the Corporation's management in accordance with CPSA Standards. As disclosed in Note 2, these standards have been applied retroactively except as noted. The changeover became effective on April 1, 2011 with retroactive application to April 1, 2010. As a result the comparative figures have been restated to reflect the new standards. The impact on the Corporation's operating surplus and the accumulated surplus of the Corporation is disclosed in Note 2.

#### Cash

Cash includes cash in bank.

#### Revenue recognition

The Corporation recognizes the receipt of government transfers as revenue in the period the transfer is authorized and all eligibility criteria have been met, except when and to the extent that the transfer gives rise to an obligation that meets the definition of a liability for the Corporation. Investment income is recognized as earned.

#### Expenses

The Corporation recognizes expenses on an accrual basis. The cost of all goods consumed and services received during the year is expensed. Program grants are recorded as expenses when they are authorized, eligibility criteria have been met by the recipient, and a reasonable estimate of the amount can be made.

## RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR

NOTES TO FINANCIAL STATEMENTS

March 31, 2012

### 4. Summary of significant accounting policies (cont.)

#### Tangible capital assets

Tangible capital assets are recorded at cost and amortized on a straight-line basis over their estimated useful lives using the following terms:

	Term
Furniture and equipment	5 years
Computer hardware and software	2 years
Network infrastructure	4 years
Enterprise resource package software	3 years
Leasehold improvements	Lease term + one renewal

Tangible capital assets are written down when conditions indicate that they no longer contribute to the Corporation's ability to provide goods and services or when the value of future economic benefits associated with the tangible capital assets is less than their net book value. The net write downs are accounted for as expenses in the statement of operations.

#### Pension costs

Employees of the Corporation are covered by the Public Service Pension Plan administered by the Government of Newfoundland and Labrador or a self-directed RRSP. Contributions to each plan are required from the employees and are matched by the Corporation. The annual contributions for pensions are recognized during the year in which the services are rendered and represent the Corporation's total pension benefit obligation. The Public Service Pension Plan provides defined pension benefits to employees based on their length of service and rates of pay. The maximum contribution rate for eligible employees was 8.6% (2011 - 8.6%). The Corporation is not required to make contributions in respect of any actuarial deficiencies of the plan. Total pension expense for the Corporation at March 31, 2012 was \$203,088 (March 31, 2011 - \$131,872).

#### Severance benefits

Severance is accounted for on an accrual basis and is calculated based upon years of service and current salary levels. The right to be paid severance vests with employees with nine years of continual service and accordingly a liability has been recorded by the Corporation for these employees. For employees with less than nine years of continual service, the Corporation has made a provision in the accounts for the payment of severance which is based upon the Corporation's best estimate of the probability of having to pay severance to the employees and current salary levels. Employees with prior service with the Government of Newfoundland and Labrador or a Crown corporation or agency may be considered for severance provided the previous employer followed the same or equivalent severance policy. Severance is payable when the employee ceases employment with the Corporation provided no

## RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR

NOTES TO FINANCIAL STATEMENTS

March 31, 2012

### 4. Summary of significant accounting policies (cont.)

#### Severance benefits (cont.)

severance has been paid by Government or another Crown corporation or agency for the same period and the employee has at least nine years of continual service. No provision has been made for contractual employees.

#### Accumulating non-vesting sick leave benefits

The Corporation generally does not provide accumulating non-vesting sick leave benefits to its employees. However, a limited number of employees of the Corporation are entitled to receive accumulating non-vesting sick leave benefits due to their previous employment with the Government of Newfoundland and Labrador or a Crown corporation or agency. The Corporation has made a provision in the accounts for the payment of accumulating non-vesting sick leave benefits for these employees which is based upon the Corporation's best estimate of the probability of the employees utilizing the benefits and current salary levels. There is no further accumulation of these benefits and the availability of accumulating non-vesting sick leave benefits ceases upon termination of employment with the Corporation.

#### Other financial assets and liabilities

The Corporation's financial instruments are all recorded at cost. Financial assets consist of assets that could be used to settle existing liabilities or fund future activities, and include cash and accounts receivable. Financial liabilities consist of the Corporation's accounts payable and accrued liabilities. The carrying value of the Corporation's financial instruments approximates their fair value.

### 5. Accounting pronouncements

In March 2011, the PSAB approved new Section PS 3450, *Financial Instruments*, Section PS 2601 to replace current Section PS 2600, *Foreign Currency Translation* and Section PS 1201 to replace current Section PS 1200, *Financial Statement Presentation*. The three sections are effective on April 1, 2012 for government organizations but earlier adoption is permitted. Government organizations are required to adopt the three sections in the same year. The Corporation is still evaluating the impact of adopting these new sections in the coming year but the impact is not expected to be material.

## RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR

NOTES TO FINANCIAL STATEMENTS

March 31, 2012

### 6. Risk management

The Corporation's management recognizes the importance of managing significant risks and this includes policies, procedures and oversight designed to reduce the risks identified to an appropriate threshold. The Board of Directors is provided with timely and relevant reports on the management of significant risks. Significant risks currently managed by the Corporation include liquidity risk.

#### Liquidity risk

Liquidity risk is the risk that the Corporation will be unable to meet its contractual obligations and financial liabilities. The Corporation manages liquidity risk by monitoring its cash flows and ensuring that it has sufficient resources available to meet its obligations and liabilities.

### 7. Accounts payable and accrued liabilities

	March 31, 2012	March 31, 2011	April 1, 2010
	\$	\$	\$
Programs grants payable	2,423,434	2,821,773	-
Trade accounts payable & accruals	880,068	618,156	213,887
Accrued severance/sick leave benefits	74,721	54,204	40,465
	<b>3,378,223</b>	<b>3,494,133</b>	<b>254,352</b>

# Financial Statements

## RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR

NOTES TO FINANCIAL STATEMENTS

March 31, 2012

### 8. Tangible capital assets

	Leasehold Improvements \$	Furniture & Equipment \$	Computer Hardware & Software \$	Network Infrastructure \$	Enterprise Resource Package Software \$	Total \$
<b>COST</b>						
Balance, April 1, 2010	-	151,894	32,905	47,077	163,542	395,418
Additions	-	72,710	15,851	-	95,543	184,104
Balance, March 31, 2011	-	224,604	48,756	47,077	259,085	579,522
Additions	433,155	44,813	54,606	-	-	532,574
Balance, March 31, 2012	<b>433,155</b>	<b>269,417</b>	<b>103,362</b>	<b>47,077</b>	<b>259,085</b>	<b>1,112,096</b>
<b>ACCUMULATED AMORTIZATION</b>						
Balance, April 1, 2010	-	28,472	16,452	11,769	27,257	83,950
Amortization expense	-	37,649	20,416	11,769	70,438	140,272
Balance, March 31, 2011	-	66,121	36,868	23,538	97,695	224,222
Amortization expense	-	49,402	21,577	11,769	86,362	169,110
Balance, March 31, 2012	-	<b>115,523</b>	<b>58,445</b>	<b>35,307</b>	<b>184,057</b>	<b>393,332</b>
Net book value, March 31, 2012	<b>433,155</b>	<b>153,894</b>	<b>44,917</b>	<b>11,770</b>	<b>75,028</b>	<b>718,764</b>
Net book value, March 31, 2011	-	158,483	11,888	23,539	161,390	355,300

Leasehold improvements related to the Corporation's new premises were in progress at March 31, 2012. Amortization will commence once renovations are complete and the space is available for the Corporation's use.

## RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR

NOTES TO FINANCIAL STATEMENTS

March 31, 2012

### 9. Contractual obligations

The Corporation has outstanding contractual obligations under its various programs in respect of approved but not yet disbursed funds in the amount of \$33,425,048. The Corporation has also entered into lease agreements for the rental of office space, a contract for the renovation of office space, and joint cost shared agreements totaling \$4,685,989. Approximate payment of these obligations in future years is as follows:

	Programs \$	Other \$
2013	20,113,148	628,089
2014	8,651,853	442,680
2015	2,849,207	442,680
2016	1,376,292	442,680
2017	434,548	442,680
Thereafter	-	2,287,180
	<b>33,425,048</b>	<b>4,685,989</b>

### 10. Related party transactions

These financial statements include transactions with related parties. The Corporation is related, as a result of common ownership, to all Crown corporations and agencies of the Province.

During the year, the Corporation had the following related party transactions:

- Program grants expense to related parties of \$11,654,188 (2011 - \$5,354,612).
- Purchased supplies and services from related parties for \$138,720 (2011 - \$61,820).

### 11. Economic dependence

As a result of the Corporation's reliance on funding from the Government of Newfoundland and Labrador, the Corporation's ability to continue viable operations is dependent upon the decisions of the Province.

## **RESEARCH & DEVELOPMENT CORPORATION OF NEWFOUNDLAND AND LABRADOR**

NOTES TO FINANCIAL STATEMENTS

March 31, 2012

### **12. Credit facilities**

Subject to the prior approval of the Lieutenant-Governor in Council and the Board, the Corporation may borrow money for purposes related to the attainment of its objectives as set out in the Act. At March 31, 2012, the Corporation had available a revolving credit facility of up to \$1,000,000 bearing interest at prime, a letter of credit of up to \$50,000 bearing interest at 1%, and VISA business card(s) with an aggregate limit of \$50,000. At March 31, 2012, the credit facility, letter of credit, and the VISA business card(s) are inactive.

### **13. Budgeted figures**

Budgeted figures have been provided for comparison purposes and have been derived from the estimates approved by the Province.



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