



# STRATEGIC PLAN 2014 - 2017

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## Message from the Chair

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At the Research & Development Corporation (RDC), we are supporting a vibrant, innovative, and knowledge-based economy in Newfoundland and Labrador. Our efforts have been guided by a holistic approach to R&D that focuses on supporting highly-qualified people, world-class infrastructure and cutting edge research. Our strategy is having a positive impact and we look forward to building on our momentum over the next three years.

In 2011, RDC set out an ambitious 6-year mission to “increase the capacity of our business, academic and government clients to perform and utilize research and development in priority areas towards the creation of long-term economic benefits for the province.” RDC has made significant progress towards this mission through its 2011-2014 Strategic Plan. We have worked closely with clients to develop and implement R&D projects, made targeted investments in people, infrastructure and research, and enhanced collaboration among R&D performers across sectors.

Our strategy is working - RDC’s investments and dedicated staff are having a positive impact on R&D and innovation in the province. In 2013, RDC commissioned Memorial University economist Dr. Wade Locke for an independent, third-party assessment of our economic impact and he concluded that “RDC has had a significant and important impact on R&D, productivity and innovation within Newfoundland and Labrador.” His analysis also found that RDC is having a multiplier effect by leveraging investment from other partners, supporting higher business revenues, and generating employment.

As RDC looks towards 2017, we are committed to further growing R&D in the province and building on our economic impacts to date. We will focus on continuing to grow business investment in R&D and encouraging further R&D in our priority sectors of energy, ocean technology and mining and minerals, to capitalize on the province’s competitive advantages.

As Chair of RDC, and on behalf of the Board of Directors, I am pleased to present RDC’s Strategic Plan for 2014-2017. The Board is accountable for the preparation of the plan and the achievement of its goals and objectives. This plan has been developed in accordance with the legislative requirements of the Transparency and Accountability Act, and in consideration of the strategic directions of the Government of Newfoundland and Labrador. My signature indicates the Board’s full accountability for the strategic directions of the organization.

Sincerely,



Fraser H. Edison  
Chair, Board of Directors  
Research & Development Corporation



# RDC OVERVIEW

## MANDATE

The mandate of Research & Development Corporation (RDC) is to “strengthen the focus, quantity, quality and relevance of research and development undertaken in the province and elsewhere for the long-term economic benefit of the province” (*Research and Development Council Act*).



## VISION

Research and Development (R&D) fuels innovation and creates economic growth and prosperity in Newfoundland and Labrador.

## MISSION

By March 31st, 2017, RDC 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 for the province. This mission guides RDC in the delivery of its mandate, and directly contributes to advancing government's strategic direction of increasing R&D.

**Measure:**

Increase capacity of business, academic and government clients to perform R&D activities.

**Indicators:**

- Increased R&D activity in priority areas
- Increased R&D collaboration between business, academic and government clients

## PRIMARY CLIENTS

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**BUSINESS:** RDC works with industry to increase its R&D capacity, productivity, and ability to build strong collaborative relationships with other R&D performers. To achieve this, RDC offers a full suite of funding programs and targeted initiatives aimed at enhancing the quality and quantity of business-led and collaborative R&D.

**ACADEMIA:** RDC works with academia to identify and deliver R&D projects, develop new or expand existing R&D infrastructure and equipment, and develop highly-qualified researchers and students. RDC also works to facilitate local, national, and international collaborative R&D projects.

**GOVERNMENT:** RDC works with Provincial and Federal Government partners to develop R&D policy and advance strategic initiatives that maximize potential long-term economic benefits. RDC also works with Federal Government departments and agencies as a co-funding partner on R&D projects to leverage national programs supporting R&D.

## LINES OF BUSINESS

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**POLICY AND GOVERNMENT COORDINATION:** RDC is responsible for providing advice on R&D policy and working collaboratively with entities across government to advance R&D in Newfoundland and Labrador.

**ADVOCACY AND COOPERATION WITH CLIENT GROUPS:** RDC establishes and promotes collaboration between businesses, academia, and government to increase R&D capacity in the province.

**RDC PROGRAMS:** RDC has a suite of commercial, non-commercial and priority sector programs to support R&D. These programs reflect RDC's strategy of investing in people, infrastructure and research. These programs are regularly evaluated to ensure they are achieving objectives. Detailed information can be found in Annex A.

**R&D ASSET INVESTMENT:** RDC invests in assets to expand the capacity to perform world-class R&D in the province. This includes actively pursuing the development of RDC-owned labs, test sites and facilities, such as the Coastal Exposure Test Site announced in June 2014.

## STAFF & BUDGET

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RDC currently employs 37 staff (21 female, 16 male) in its St. John's office. In 2014-15 the RDC received an annual budgetary allocation of \$22 million.

## GOVERNANCE

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RDC reports through the Minister Responsible for the RDC. RDC is governed by an independent Board of Directors (the Board) that is comprised of residents and non-residents of the province who represent RDC's key stakeholders, including industry, academia and the Provincial Government.

RDC's Board consists of 7 to 11 members who meet statutory requirements in terms of their research, business, and academic credentials.

## VALUES

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**EXCELLENCE:** We pursue excellence and quality in all that we do. We deliver superior service for our clients and exceptional support for our stakeholders by recruiting and empowering highly capable people. We work to exceed expectations and strive to set new standards for excellence.

**DRIVE:** We believe in what we do. We are committed to making a difference. We bring energy and commitment to every task we undertake. We seek to make a difference in everything we do.

**INTEGRITY:** We behave with integrity. We have high ethical and moral standards. We are trusted by our partners and respected by our stakeholders.

**COLLABORATION:** We focus on team building across the organization and thrive on partnerships with our stakeholders. We believe a strong emphasis on collaboration offers the greatest returns and our success is based upon shared interests and open communication.

**ACCOUNTABILITY:** We are accountable to the public and our clients, employees, and stakeholders. We take this responsibility seriously and are always guided to act in a manner that respects our public mandate.



An aerial photograph of a coastline, showing a mix of green land and blue water. A large, semi-transparent purple circle is centered over the image. The text "INTRODUCTION TO R&D" is written in white, bold, uppercase letters within the circle.

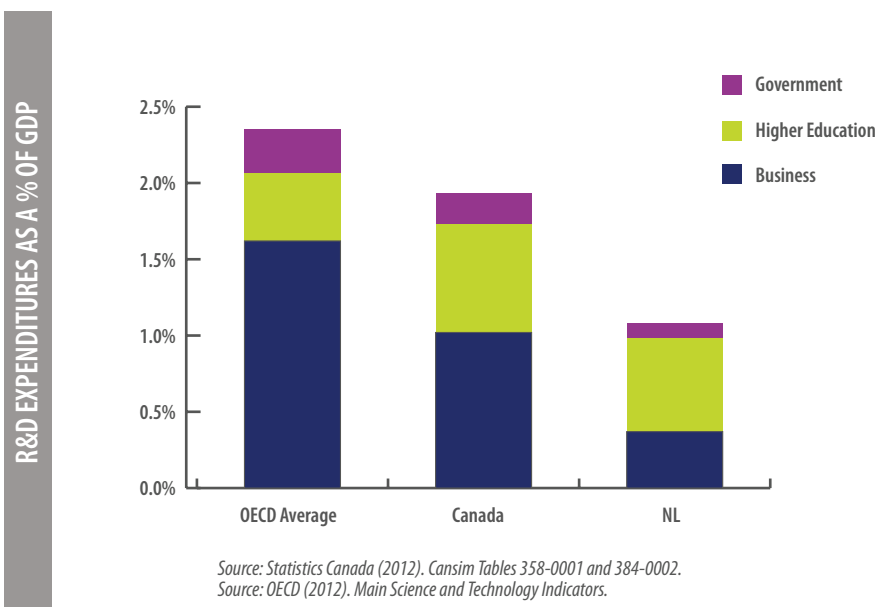
# INTRODUCTION TO R&D



## R&D IN NEWFOUNDLAND AND LABRADOR

Research and Development (R&D) refers to the creation of new knowledge or the application of existing knowledge to improve products, processes or services for economic benefit. Increasing R&D capacity in Newfoundland and Labrador is critical because “knowledge has become one of the main driving forces of economic and social development in both industrialized and developing countries” (*World Bank, 2006*).

Newfoundland and Labrador has experienced growth in R&D investment in recent years. However, the province’s historical R&D expenditure, has lagged that of leading jurisdictions around the world, in particular R&D performed by the business sector. Business R&D is a key element of a strong innovative economy because of its ability to create opportunities, drive productivity and grow competitive advantages.



As the chart above illustrates, R&D in Newfoundland and Labrador is below the national and Organization for Economic and Co-operation and Development (OECD) average in terms of: (a) total R&D expenditures as a percentage of Gross Domestic Product (GDP), and (b) the proportion of business R&D expenditures, which typically accounts for a majority of R&D investments in leading jurisdictions. Through the RDC, the Provincial Government has made a strategic long-term commitment to growing R&D expenditures in the province, and significant progress is being made.



## ROLE & IMPACT OF RDC

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In 2009, the Government of Newfoundland and Labrador created RDC as “a groundbreaking initiative to develop and lead a provincial R&D strategy to build a stronger knowledge-based economy and plot a course toward sustained prosperity” (*Speech from the Throne 2008*).

RDC was established through the *Research and Development Council Act*, with a mandate to “strengthen the focus, quantity, quality and relevance of research and development undertaken in the province and elsewhere for the long-term economic benefit of the province.” To pursue this ambitious mandate, RDC was set up as Crown Corporation with the authority to influence R&D in the province as a funder, collaborator and R&D performer.

RDC is making an impact on the R&D landscape in Newfoundland and Labrador. Up to March 31, 2014, RDC has committed to invest \$79 million in 469 R&D projects. This will leverage \$174 million from other partners, including \$61 million from industry.

RDC’s investments are also having a significant economic impact. In 2013, RDC commissioned Wade Locke Economic Consulting to prepare an independent analysis of the economic impacts of RDC. Dr. Locke’s report concluded that “overall, RDC has had a significant and important impact on R&D, productivity and innovation within Newfoundland and Labrador. It is clear that they have met their mandate.”



*“Overall, RDC has had a significant and important impact on R&D, productivity and innovation within Newfoundland and Labrador. It is clear that they have met their mandate.”*

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Dr. Locke found that every dollar RDC invests generates:

- \$2.4 in total overall R&D project activity
- \$6 in inter-firm sales (business revenues)
- \$2.2 in income (profits and wages)
- \$0.2 in Provincial Government taxes

His analysis further determined that every million dollars invested by RDC results in 21 person years of employment. The report concluded that, “as impressive as these economic impacts are, they pale in comparison to the potential economic impacts that will be realized as RDC supported initiatives continue to improve innovation and productivity within the province over a longer term.”

Over the next three years, RDC will continue to strengthen provincial R&D and build on early success by pursuing three overarching goals: (a) serving as a catalyst to support increased R&D investment, (b) focusing R&D activity into priority sectors, and (c) supporting an increase in business R&D investment.

A scenic coastal landscape featuring a large blue circle overlay. The background shows a rocky coastline with waves crashing against the shore, a clear blue sky, and a mountain range in the distance. The text is centered within the blue circle.

# 2014-2017 STRATEGIC ISSUES AND GOALS

## STRATEGIC ISSUE 1: SERVING AS A CATALYST TO SUPPORT INCREASED R&D

As the Provincial Government's dedicated agency for R&D, RDC serves as a catalyst to grow R&D investment. In this role, RDC will provide R&D leadership and build on the foundation it established through its 2011-2014 Strategic Plan. RDC will continue to promote the role and value of R&D, make strategic investments in R&D projects, and continue to build collaborative relationships among all stakeholders in support of a highly innovative economy in the province.

|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GOAL           | By March 31, 2017, RDC will have served as a catalyst to support increased R&D investment in Newfoundland and Labrador                                                                                                                                                                                                                                                                                                                                                                                                        |
| MEASURE        | Served as a catalyst to support increased R&D investment                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| INDICATORS*    | <ul style="list-style-type: none"> <li>• Number of, and RDC funding for, R&amp;D projects</li> <li>• Amount of R&amp;D investment leveraged</li> <li>• Number of, and RDC funding for, R&amp;D infrastructure and equipment</li> <li>• Number of R&amp;D collaborations supported</li> <li>• Number of outreach and promotional activities in support of R&amp;D</li> <li>• Number of highly qualified people supported</li> </ul> <p><i>*These indicators will be used to measure success on objectives and the goal</i></p> |
| 2015 OBJECTIVE | By March 31, 2015, RDC will have supported R&D activities and promoted collaboration among R&D stakeholders                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 2016 OBJECTIVE | By March 31, 2016, RDC will have continued to support R&D activities and promoted collaboration among R&D stakeholders                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2017 OBJECTIVE | By March 31, 2017, RDC will have undertaken activities to serve as a catalyst to support increased R&D in the province                                                                                                                                                                                                                                                                                                                                                                                                        |

*"Coming together is a beginning; keeping together is progress; working together is success" - Henry Ford*

## STRATEGIC ISSUE 2: FOCUSING R&D IN PRIORITY AREAS

RDC will focus R&D activities into the priority sectors of energy, mining and minerals, and ocean technology to capitalize on the province's competitive advantages. This focused approach offers the highest potential for maximizing economic and social returns on R&D investments. RDC will supplement this approach by continuing to identify and make strategic investments in a diverse range of high potential R&D projects in other sectors.

**GOAL** By March 31, 2017, RDC will have provided support to increase R&D investment in the priority sectors of energy, mining and minerals, and ocean technology

**MEASURE** Supported increased R&D investment in priority sectors

- INDICATORS\***
- Number of, and RDC funding for, projects in priority sectors
  - Amount of R&D investment leveraged in priority sectors
  - Ratio of projects funded in priority sectors versus all other sectors
  - Number of highly qualified people supported in priority sector R&D projects
  - Opportunities advanced to support new R&D facilities that increase R&D investment in priority sectors

*\*These indicators will be used to measure success on objectives and the goal*

**2015 OBJECTIVE** By March 31, 2015, RDC will have delivered programs that focus R&D investment into priority sectors

**2016 OBJECTIVE** By March 31, 2016, RDC will have continued to deliver programs that focus R&D investment into priority sectors

**2017 OBJECTIVE** By March 31, 2017, RDC will have undertaken activities to support increased R&D investment in priority sectors

*"Concentration is the key to economic results" - Peter F Drucker*



### STRATEGIC ISSUE 3: SUPPORT INCREASED BUSINESS R&D INVESTMENT

Business R&D is a critical element of an innovative and sustainable provincial economy due to its ability to drive productivity and growth. Newfoundland and Labrador has historically had lower levels of business R&D relative to other jurisdictions. Through this Strategic Plan RDC will focus on increasing business R&D by making strategic investments in world-class people, infrastructure and research. RDC will also help build business R&D capacity by fostering collaboration between business, academia and government.

|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GOAL           | By March 31, 2017, RDC will have provided support to increase business investment in R&D in Newfoundland and Labrador                                                                                                                                                                                                                                                                                                                                                        |
| MEASURE        | Supported increased business investment in R&D                                                                                                                                                                                                                                                                                                                                                                                                                               |
| INDICATORS*    | <ul style="list-style-type: none"> <li>• Number of, and RDC funding for, business R&amp;D projects</li> <li>• Amount of R&amp;D investment leveraged from businesses</li> <li>• Number of highly qualified people supported in business R&amp;D projects</li> <li>• Opportunities advanced to support new R&amp;D facilities that increase business R&amp;D investment</li> </ul> <p><i>*These indicators will be used to measure success on objectives and the goal</i></p> |
| 2015 OBJECTIVE | By March 31, 2015, RDC will have delivered programs that support an increase in business investment in R&D                                                                                                                                                                                                                                                                                                                                                                   |
| 2016 OBJECTIVE | By March 31, 2016, RDC will have continued to deliver programs that support business investment in R&D                                                                                                                                                                                                                                                                                                                                                                       |
| 2017 OBJECTIVE | By March 31, 2017, RDC will have undertaken activities to support increased business R&D in the province                                                                                                                                                                                                                                                                                                                                                                     |

*"I believe in innovation and that the way you get innovation is you fund research and you learn the basic facts."*  
- Bill Gates



**ANNEX A:  
RDC PROGRAMS**

| TARGET           | PROGRAM                                            | DESCRIPTION                                                                                            | MAXIMUM RDC CONTRIBUTION                                                  |
|------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| BUSINESS         | R&D Vouchers                                       | Helps businesses gain access to scientific and technical equipment, expertise, and research facilities | \$15,000                                                                  |
|                  | R&D Proof of Concept                               | Increases the technical capacity of businesses to perform R&D                                          | \$250,000                                                                 |
|                  | Industrial R&D Fellowships                         | Enables businesses to hire post-doctoral researchers                                                   | \$60,000                                                                  |
| ACADEMIC         | Collaborative R&D                                  | Supports collaboration between industry, academia, and government                                      | \$800,000                                                                 |
|                  | IgniteR&D                                          | Provides funding for new researchers                                                                   | \$100,000                                                                 |
|                  | LeverageR&D                                        | Strengthens R&D capacity through leveraging other funding sources                                      | \$500,000                                                                 |
|                  | Research Inspired Student Enrichment Awards (RISE) | Exposes high school students to research activities at an early stage in their education               | \$100,000 (approximately)<br>Maximum of 15 awards                         |
| PRIORITY SECTORS | ArcticTECH                                         | Advances R&D in support of the development of Arctic technologies                                      | \$500,000                                                                 |
|                  | GeoEXPLORE                                         | Enhances geoscience R&D capacity in support of mineral and petroleum exploration and development       | Academia \$250,000<br>Industry:<br>\$750,000                              |
|                  | PetroleumR&D Accelerator                           | Strengthens R&D in support of petroleum exploration, development and operations.                       | \$5,000,000                                                               |
|                  | Ocean Industries Student Research Award (OISRA)    | Attracts and develops world-class research talent in ocean industries                                  | Undergrad: \$7,500<br>Graduate:<br>(Masters \$40,000)<br>(Ph. D \$90,000) |



**ANNEX B:  
STRATEGIC DIRECTION**

Strategic directions are the high-level physical, social or economic objectives communicated by government through platform documents, Throne and Budget Speeches, policy documents and other communiqués. Strategic directions normally require action by more than one government entity to achieve.

The *Transparency and Accountability Act* requires departments and public bodies to consider the strategic directions of government in the preparation of their performance-based plans. This coordination helps facilitate the integration of planning practices across government and ensure that all entities are moving forward on key commitments in unison.

The strategic directions related to RDC are provided in the chart below. This strategic direction is addressed in RDC's 2014-2017 Strategic Plan.

| STRATEGIC DIRECTION |                                                                                                                                                                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TITLE               | Research and Development (R&D)                                                                                                                                                                                                                                                                                                   |
| INTENDED OUTCOME    | Enhanced R&D activity to support an innovative and knowledge-based economy in Newfoundland and Labrador                                                                                                                                                                                                                          |
| FOCUS AREAS         | <p>RDC strives to strengthen R&amp;D in the province by making strategic investments in:</p> <ul style="list-style-type: none"> <li>• Cutting-edge R&amp;D Projects</li> <li>• Highly Qualified People with R&amp;D Expertise</li> <li>• World-Class R&amp;D Infrastructure</li> </ul>                                           |
| SOURCE OF DIRECTION | <ul style="list-style-type: none"> <li>• <i>Research and Development Council Act</i></li> <li>• Speech from the Throne, 2013: "Government supports economic growth through strategic investments in sector and market development, research and development capacity, key infrastructure, and workforce development."</li> </ul> |



## **CONTACT US**

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Further information about RDC and its programs is available from RDC's website at [www.rdc.org](http://www.rdc.org). Specific inquiries may be directed to [info@rdc.org](mailto:info@rdc.org) or 709.758.0913.

## **RESEARCH & DEVELOPMENT CORPORATION**

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