SDTC 2016 Corporate Plan

Empowering Canada's Cleantech Entrepreneurs



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Figures in this document are current as of June 30, 2015, unless otherwise stated.

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Summary of this document is available online at www.sdtc.ca.

Hard copies of this document may be obtained upon request.

Empowering Canada's Cleantech Entrepreneurs

Fostering Collaboration and Innovative Partnerships



Creating Jobs and Growing Global Export



Improving and Expanding Environmental Performance





What is Cleantech?

Buildings heated by natural biogas. Electric vehicles crisscrossing the country. Entire communities powered by garbage. If it sounds like science fiction, it's because not long ago it was. But today, it's not. It's known as cleantech – or clean technologies.

Cleantech improves business performance while using resources more responsibly, and reducing or eliminating negative environmental impact.







Canada has a thriving community of people and businesses investing in cleantech.

From technology developers, to investors, to industry putting cleantech tools to use, thousands of Canadians are involved in putting technology to the task of addressing Canada's need for clean air, clean water, clean soil and climate change solutions.

Cleantech is an opportunity extending far beyond Canada's borders — worth \$12 billion in revenues here at home, and an astonishing \$1 trillion abroad.

It is a sector that generates over 50,000 jobs here in Canada and revenues in the order of \$12 billion - \$6 billion of those in export revenues alone. What's more, the worldwide appetite for cleantech is growing. If Canada maintains its growth, it will represent an opportunity for a \$50 billion Canadian cleantech industry by 2022¹.

Analytica Advisors 2015 Canadian Clean Technology Report.

What is SDTC?

Simply put, Sustainable Development Technology Canada (SDTC) is Canada's best resource for realising the economic and environmental potential of cleantech.

On behalf of the Government of Canada, we fund cleantech development and bring together the necessary players to launch those Canadian innovations to market. We coach the companies and entrepreneurs through the process of scaling up their technology and connect them with potential clients.

SDTC has three different funds to support the development and pre-commercial demonstration of clean technology innovations.

The **SD Tech Fund™** focuses on projects that address environmental performance in terms of climate change, clean air, clean water and clean soil.

A partner with the Canadian Gas Association (CGA), the **SD Natural Gas Fund**™ supports the development and demonstration of new downstream natural gas technologies.

SDTC's **NextGen Biofuels Fund**™ supports the establishment of first-of-kind, large-scale demonstration facilities for the production of next-generation renewable fuels and co-products.

Cleantech uses resources more responsibly.



SDTC builds Canada's economy by investing in its entrepreneurs and enabling the development of clean technologies.



Economic

SDTC-funded companies reported

> \$1.1 Billion in Revenues



Social

SDTC-funded companies created

8,200

Direct and Indirect Jobs

Cleantech

Is a valuable opportunity for **Canadians**

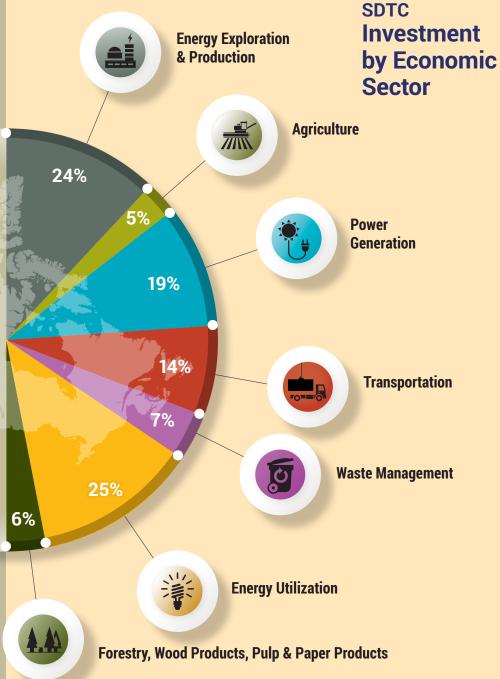


SDTC-funded companies reported

\$600 Million

in Export Revenues





RESULTS TO DATE 🐯 THE YEAR AHEAD

Partnering for Real Results

SDTC's solid project management and partnership-building skills integrate industry and government to work effectively with the financial community—nurturing and growing the almost 300 technology projects that make up the current portfolio. Over 90% of this portfolio consists of projects led by Small and Medium sized Enterprises (SMEs).

We know the technologies we fund have a long road to go before they reach market. We know the companies that lead them need support to launch those technologies. Our focus is on building better projects.

Nurture: SDTC's Virtual Incubator

The Virtual Incubator program nurtures companies to be in a position to obtain valuable SDTC funding. The program provides tailored help to applicants through a coaching program for entrepreneurs who have high-potential, innovative technologies they are looking to move forward. The process helps those but may not be quite ready to take the next step in terms of technology development, business planning, accessing potential partners or funding. Through its virtual and in-person sessions, the Incubator has helped grow the number of companies who apply to SDTC and make it through the decision-making process to become a funded company.

Build: Sound project management and SDTC's consortium model

SDTC builds companies' ability to make it to market by sound project management and support as the project moves through milestones. One key aspect of SDTC's support is help finding the right consortium. Made up of academia, end users, customer and others, this is a group that leads the technology development phase with real-world feedback and guidance.

Launch: Leveraging relationships to help companies reach markets

Finally, SDTC launches companies to find customers in Canada and abroad. Armed with extensive knowledge of the cleantech market worldwide and with relationships with the finance community and other government bodies whose goal it is to move Canadian innovation to market, SDTC has helped its portfolio attract follow-on financing or technology adoption opportunities. We have brokered relationships that have seen our companies meet investors, heads of industry or program leaders that help them make the next steps.

SDTC will work closer with provinces and other industry partners to foster meaningful relationships that translate into opportunities for our portfolio companies.







CHAR Technologies

CHAR Technologies started out in SDTC's Virtual Incubator program, the moved on to obtain funding through the SD Natural Gas Fund.

"We can now build the system and show it to users to get that market validation. Now we can explore the growth we want to achieve."

Andrew White

President & CEO CHAR Technologies

Ostara

Ostara will double the number of in-market installations of the technology funded by SDTC in the next year. Though the project has been completed for a few years, Ostara still credits SDTC for its role in Ostara's success.

"SDTC support really launched us in the commercial phase – especially at a time when it was very difficult to get funding. SDTC support was the key that unlocked the doors to commercial markets."

Phillip Abrary

President & CEO Ostara Nutrient Recovery Technologies

Saltworks

Saltworks is developing an advanced desalination and brine management solution for applications in the oil sands, mining and landfill sectors. Previous versions of this technology are currently used in operations and have even found their way to the International Space Station.

"SDTC has been a key factor in Saltworks' growth and in creating highly skilled jobs. They have made a highly valuable contribution in supporting advancement of technologies much needed by Canadian industry and provided a fundamental step in the commercialization of our advanced desalination and brine management solutions."

Mitchell Frank

Manager, Business Development & Marketing Saltworks



Increased Funding Success Rate

Applicants who participate in SDTC's Virtual Incubator process have almost three times the success rate of receiving finding.



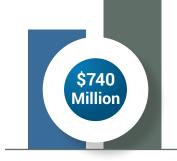
3:1
Receive
Funding



Leveraged Funding

in almost 300 Projects

Portfolio Value over \$2.7 Billion



SDTC Invested Funds Leveraged Funding



Cleaner Air, Water, and Soil, and Waste Reduction

a total of 89 percent of projects have multiple environmental benefits.

89% of Projects have Multiple Benefits

4.5
Million
Tonnes

GHG Reductions

66 Technologies completed by the end of 2014 reported actual GHG emissions reductions of approximately 4.5 Million tonnes of CO₂ equivalent in that year.

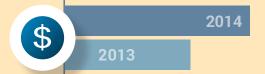
That was like taking nearly 950,000 cars off the road in 2014.



In 2014, 119 completed projects produced an estimated cost savings of \$108 million through the benefits of cleaner air, water, and soil, and waste reduction.

47% Increase in Revenues

\$108 M in savings



6% Increase in Jobs



SDTC 2016 Corporate Plan

Introduction

Supporting Canadian Cleantech

Sustainable Development Technology Canada (SDTC) is a non-profit foundation created and primarily funded by the Government of Canada to foster and fund the development and demonstration of new cleantech projects in Canada. Since its creation in 2002, SDTC has allocated \$761 million to 297 projects relating to climate change, clean air, clean water, and clean soil.¹

SDTC has an independent governance structure led by a Board of Directors comprised of leading Canadian business and sustainability professionals. We are also accountable to Parliament for the funds received through Natural Resources Canada (NRCan), and Environment Canada (EC).

SDTC's performance to date may be measured in terms of the entrepreneurial, environmental, and economic impacts of the Foundation's investment in Canadian cleantech. SDTC portfolio projects are economic drivers attracting significant leveraged funding and many are now mature and in the market reporting economic, environmental, and social benefits for Canada.

Mission Statement

The mission of SDTC is to "act as the primary catalyst in building a sustainable development technology infrastructure in Canada." This mission statement is supplemented by overarching goals which are included in our most recent funding agreement:

- 1. Fund the development and demonstration of new sustainable development technologies related to climate change, clean air, clean water, and clean soil to make progress toward sustainable development;
- 2. Foster and encourage innovative collaboration and partnering among diverse persons in the private sector and in academic and not-for-profit organizations to channel and strengthen the Canadian capacity to develop and demonstrate sustainable development technologies with respect to climate change, clean air, clean water and clean soil; and,
- 3. Ensure timely diffusion by funded recipients of new sustainable development technologies in relevant market sectors throughout Canada.

SDTC's ultimate aim is to fund projects that contribute to Canada's double bottom line: creating quality jobs and economic growth while preserving our ecosystem.

¹ Allocations inclusive of conditionally approved projects and project modifications

Fund Objectives

SD Tech Fund™

SDTC's largest fund is the \$896 million **SD Tech Fund™**. Through this fund the Foundation invests in the development and pre-commercial demonstration of clean technology innovations. Projects supported through the Fund address environmental performance in terms of climate change mitigation, clean air, clean water, and clean soil. Under SDTC's present funding agreement (Funding Agreement Five), the SD Tech Fund™ has some specific sustainable development technology objectives complementary to the environmental goals.

The SD Tech Fund™ is directing the largest portion of the Fund, \$746 million, to technology projects that address climate change and clean air outcomes. The remaining portion, \$150 million has been directed to eligible projects with a primary focus on clean water or clean soil benefits – with the ratio between the two being determined on the basis of demand and merit of proposals received.

In addition to these environmental benefits targets, at least \$50 million of the allocated funds must focus on projects related to the development and demonstration of technologies related to clean fossil fuels, and \$50 million for projects related to the hydrogen economy.

SDTC is also directing at least \$229 million of the new funding from Budget 2013 of the SD Tech Fund™ towards projects addressing specific Priority Technology Areas. These include;

- unconventional oil and gas;
- distributed power generation;
- energy efficiency for industry and communities; and,
- next-generation technologies with potential longer-term benefits (including but not limited to transportation, carbon capture and storage, biorefineries, and fuel cell systems).

To ensure alignment with these Funding Agreement specifications, SDTC tracks carefully the nature of our investments and the specific sustainable development technology profile and expected environmental performance benefits of the funded projects.

SDTC is in compliance with these environmental performance requirements and has successfully identified and invested in a number of projects with more than one environmental outcome. Currently, 88 percent of SDTC projects generate two or more environmental benefits making the cumulative environmental outcome of even greater value to Canadians.

Based on the June 30, 2015 results, SDTC has met our targets for investment in both clean fossil fuel and hydrogen economy projects, allocating \$98 million for clean fossils fuels and \$57 million for the hydrogen economy.

As of June 30, 2015, SDTC has funded 297 projects representing a cumulative value of \$2.8 billion. Of these, 23 projects, totalling \$203 million of project value, were approved for allocation between July 1, 2014, and June 30, 2015. Currently, SD Tech Fund™ allocations include \$543 million for climate change, \$63 million for clean air, \$154 million for clean water and clean soil for a total of \$761 million.²

In 2016 the SD Tech Fund™ will complete two calls for Statements of Interest (SOIs) with the goal of investing greater than \$90 million. The focus of these funding rounds will be on identifying and supporting projects addressing SDTC's investment priorities which align with the priority technology areas as defined in Funding Agreement Five.

² Inclusive of conditionally funded projects

NextGen Biofuels Fund™

The second fund is the \$225 million **NextGen Biofuels Fund™** (NGBF), which supports the establishment of first-of-kind, large-scale demonstration facilities for the production of next-generation renewable fuels and co-products. These projects have very high capital expenditure (CAPEX) requirements and are therefore at greater risk of facing financial uncertainty, making it particularly difficult to secure financing in the development and demonstration phases. The NGBF is targeted directly at helping cleantech producers overcome this high-CAPEX funding gap.

The NGBF is positioned downstream in the innovation chain from the SD Tech Fund^{TM}. While designed to complement the SD Tech Fund^{TM}, the NGBF is different in several important ways. NGBF is a project financing vehicle for first-of-kind, commercial-scale demonstration facilities that has operated with a continuous intake of applications for funding (AFFs).

As of December 2014, the NGBF had received a total of 16 Applications for Funding (AFFs). Since inception, the fund has provided financial support to six eligible projects for front end development toward the full execution of large scale commercial demonstration plants. In the 2014/2015 period covered by this report, five projects were presented to the SDTC Board of Directors for final approval. Two projects were approved for full support.

As per the funding agreement with government, the NGBF must disburse all funds to projects by March 31, 2017. Based on the available time remaining it is unlikely that additional projects will complete requisite project development and construction phases within this timeline. For this reason the fund will not be receiving any additional applications.

SD Natural Gas Fund™

SDTC's newest fund is the **SD Natural Gas Fund™**, which supports the development and demonstration of new downstream natural gas technologies. This fund brings together contributions from the Canadian Gas Association (CGA) through its Energy Technology Innovation Canada initiative with matching contributions from SDTC's SD Tech Fund™.

In the Spring of 2014, the SD Natural Gas Fund™ was formed through a partnership between SDTC and the CGA where CGA will contribute up to \$15 million and SDTC will contribute up to \$15 million, creating a fund valued at up to \$30 million over three years. SD Natural Gas Fund™ makes investments in demonstration of natural gas related clean technologies in the residential, commercial, industrial, power generation, transportation and renewable natural gas sectors identified through an SD Business Case™ for Downstream Natural Gas.

While marketed as a stand-alone fund, the SD Natural Gas Fund^M is a sub-fund of the SD Tech Fund^M, leveraging its process and resources - meeting all requirements under the *Canada Foundation for Sustainable Development Technology Act*.

In 2015, the SD Natural Gas Fund[™] has completed three funding rounds with its Project Finance Committee having now confirmed and approved three investments. In each case, CGA and SDTC will each contribute 50% of the funding contribution to the project.

The SD Natural Gas Fund[™] has an additional nine projects in the pipeline for consideration. In 2016, SDTC will continue to source, screen and fund natural gas projects. SDTC is developing the opportunity to expand the scope, funding commitment and partners of the fund.

Purpose of the Corporate Plan

The Corporate Plan is a mandatory requirement under SDTC's funding agreements with NRCan and must include:

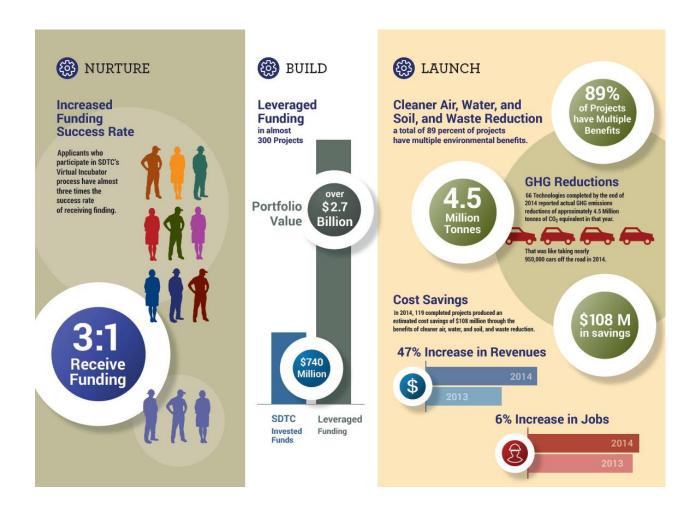
- short and medium term outcomes, (updated as applicable) as per the Foundation's mandate;
- references to the Foundation's previous year's corporate plan, especially its successes and remaining challenges;
- details of the Fund and its management;
- planned expenditures for the upcoming Fiscal Year, including, but not limited to, the amount of revenue to be drawn from the Fund's income for the Fiscal Year;
- planned activities for the upcoming Fiscal Year;
- the anticipated results of those activities;
- the anticipated revenues from other sources;
- risk assessments and mitigation strategies; and
- ongoing performance monitoring strategies.

The Corporate Plan supplements the information provided in the Annual Report which reviews the activities of the preceding fiscal year.

SDTC's Core Business: Nurture, Build, and Launch

SDTC is in the business of supporting companies with early stage cleantech ideas. We do this in three ways: Nurture, Build and Launch. In the "nurture" phase, SDTC coaches entrepreneurs on how to build their business idea and get ready to participate in our investment process. In the "build" phase, we support companies to meet their objectives, to demonstrate that their technologies and ideas can work. In the "launch" phase, we support companies as they transition to the commercial marketplace, supporting them in their efforts to find follow-on-financing and build their first full-scale commercial plant. In this way, the organization becomes more than just a funder because we provide coaching and funding to help Canadian entrepreneurs get ready for the business of innovation. This is necessary because the vast majority of SDTC-funded companies – some 91 percent - are small- and medium-sized enterprises (SMEs).

Because they are relatively mobile and operate in highly competitive markets, SMEs are a strong source of innovation in Canada, making substantial expenditures in research and development.³ Across the country SMEs employ 60 percent of Canada's workforce, account for 45 percent of Canada's GDP and are responsible for 75 percent of net job growth.⁴ However, SMEs often lack the resources, expertise, and funding to bring their innovations to market—and it is not until cleantech innovations are commercialized that their economic and environmental benefits can be realized.



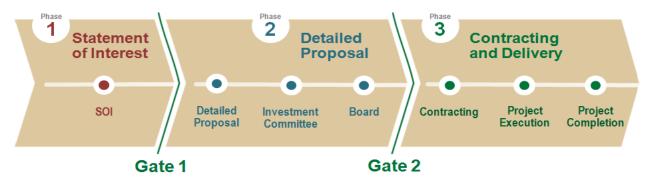
³ The average R&D investment per cleantech SME was \$1.1 million in 2011, up from \$818,000 in 2010. These figures compare favourably with the average R&D investment of \$1.5 million for publicly and privately held cleantech companies of all sizes.

⁴ Public Works and Government Services Canada (2010) *The Importance of SMEs.* Retrieved from: http://www.tpsgc-pwgsc.gc.ca/app-acq/pme-sme/importance-eng.html.

Nurture

SDTC nurtures cleantech entrepreneurs at the early stages of project development. Potential applicants are coached through the stage-gated application process and supported as they prepare their business case and technology presentations. Each year SDTC receives a large number of Statements of Interest (SOI's) from companies seeking project funding. From a low of 72 SOI's in the 2004A funding call to 132 in the most recent round, the interest in SDTC funding support continues to be strong. For the 2014B funding call, there were 94 SOI's submitted and 30 were invited to submit a Detailed Proposal and for the 2015A funding call, there were 132 SOI's – highest since 2003, with 35 applicants invited to submit a Detailed Proposal.

Figure 1. SD Tech Fund™ Stage-Gated Funding Process



Applicant SOIs are scrutinized in the Challenge Session process to determine if there is merit in proceeding to the Detailed Proposal (DP) Stage. Those applicants not advanced to DP stage are offered an opportunity to receive feedback from SDTC experts through a debrief phone call. Approximately 120 of these Post-Challenge Debriefs were completed over the last two rounds. Applicants not proceeding to DP respond positively to the opportunity for a debrief session with SDTC on their SOI and express appreciation for the feedback. Each round, SDTC also conducts an applicant survey to gather information on their experience navigating through the SOI process.

SDTC continues to invest significantly in outreach activities to increase stakeholder awareness of the SD Tech Fund $^{\text{m}}$ investment priorities, application process, and screening criteria. This has led to a continual improvement in the quality and viability of SOIs as well as DP's received.

In 2012 – SDTC launched a series of funding workshops across Canada to raise awareness of SDTC's Call for Applications and provide applicants with high level guidance on SDTC, our mandate, and funding process guidelines. The program partners with regional organizations supportive of the local cleantech community. In 2014, SDTC held 20 funding workshops, partnering with 25 regional organizations, attended by over 700 attendees.

Table 1. How We Nurture

_	SDTC Virtual Incubator™	Small Project Pilot	Post-Challenge Debriefs
Overview	Provides tailored help to applicants through a coaching program for entrepreneurs who have high potential and innovative technology, but who are not quite ready (in terms of the technology itself, their business plan, potential partners or funding) to take the next step.	In 2015, SDTC launched a pilot opportunity targeting small project demonstrations with a lighter touch approach. The objective is to make it easier to access SDTC funding for applicants with small project demonstrations.	Applicants not advanced to DP stage can debrief with an SDTC Funding Advisor and receive coaching on how to improve their SOI. The Funding Advisor speaks to applicants on the key issues and rationale for the non-acceptance. In some cases, if the issues can be addressed, the applicant is encouraged to re-apply at a future round. In many cases, the Applicant is directed to an alternate funding program that is a better fit.
Results	Through its virtual and in-person sessions, the Virtual Incubator™ provides coaching, introductions to potential industry and research partners, and other sources of funding. The goal is to continue to leverage the online application process for reviewing Technology Introduction Forms (TIFs) and build opportunities for future funding. In 2014/15 the Virtual Incubator™ supported 62 companies, with 32 submitting SOIs and 25 navigating their way to a final investment decision.	Support for small projects fulfills SDTC's mandate to serve all Canadian companies. The desired outcome of this pilot was a competitive streamlined model for applicants to access funding from SDTC. SDTC funded three projects with a three month funding and three month contracting model. Contracting time is to be monitored over the balance of 2015/2016.	Applicants not proceeding to DP respond positively to the opportunity for a debrief session with SDTC on their SOI and express appreciation for the feedback. Each round, SDTC also conducts an applicant survey to gather information on their experience navigating through the SOI process. Approximately 120 Post-Challenge Debriefs were completed over the most recent two rounds. Information is used for continuously responding to and improving the process.
2016 Plans	Currently, the Virtual Incubator™ has 106 TIFs submitted to the program with 55 accepted. The 2015 yearend target is to accept up to 100.	In 2016, SDTC plans to partner with a regional or provincial partner that has a program to support small projects in a similar fashion. SDTC will leverage the due diligence conducted by partner funding organizations to reduce the burden on applicants and the SDTC team for small asks.	Plans for 2016 include the continuation of the very successful Post-Challenge Debrief sessions. The debriefs are unique in the government funding world and help SDTC stand out from other programs, as well as ensure good quality projects have an opportunity to re-apply and be successful.

2014/15 Investments⁵

Between July 1, 2014 and June 30 2015, SDTC completed two funding rounds and approved funding for 23 projects. During this period, \$62 million in project funding was allocated for new projects and modifications to existing projects. From 2002 through June 30, 2015, SDTC placed 26 rounds of funding calls. By the end of June 2016, 28 rounds of funding will have been processed to the Board-approval stage. To date, 297 projects have been approved for funding by SDTC, representing a cumulative total of \$761 million of SDTC funding.

The NGBF will have two projects, the Enerkem Alberta Biofuels Project, and the Ensyn AE Côte-Nord RTP Project approval by the board for final construction funding as described below. The two projects represent project construction funding of \$90.6 million from the NGBF.

Build

SDTC bridges the financing gap by helping cleantech innovators carry out practical, 'real-world' demonstrations of their technologies, which allow them to attract funding and advance toward market entry. SDTC operates primarily during the early stages of the innovation process, taking on higher levels of risk than the majority of the venture industry. A large part of attracting further funding is tied to company performance and demonstration of commercial relevance and viability of technologies.

The funding contribution to cleantech SMEs is just the beginning of SDTC's holistic support strategy. From the onset of SDTC's relationship with applicants through to the completion of their projects, SDTC Screening and Evaluation Managers and Project Managers provide coaching on how to structure development and demonstration projects to achieve not only technical and practical success, but also to ensure that what is being demonstrated will have strong relevance to future customers and investors in the technology.

SDTC staff build robust, milestone based contribution agreements with project proponents that define commercially relevant performance metrics that must be achieved during each phase of the project. This is intended to keep the proponent focused on what is most important from a performance point of view and to ensure that market relevant technologies are created through their projects. Ideally, clear evidence of the viability of significant increased performance, revenue and profits, or costs savings that can derived from the technology's diffusion are demonstrated by the end of the project.

SDTC also encourages the participation of potential clients and path to market or supply chain partners in the project to ensure that performance objectives align with the needs of these key diffusion partners. All this to ensure that the technology performance builds the business case for both the technology and company and is demonstrated in an optimum way through this building phase.

In addition to the work done on the project itself during this phase, SDTC works with its portfolio companies to develop value propositions and prepare business plans to help them commercialize and diffuse their technologies post project. During the "build" phase SDTC also links companies with additional consortia partners such as supply chain partners or potential future customers or users of the technology, stakeholders from industry, research partners or other funding sources to provide additional funding and other forms of support and participation in the project and position it for success. As the projects progress, SDTC leverages its network of business relationships to connect technologies to investors, customers and channel partners across Canada and around the world to help them prepare for commercialization.

⁵ Inclusive of conditional approvals. Allocations may be revised as some projects may be cancelled before contracting occurs.

Launch

SDTC portfolio projects are now maturing into competitive businesses. Seventy companies are ready for market entry, either at the point of commercialization or fully in the market; another 165 projects are steadily progressing toward commercialization.

In 2009, SDTC launched the Follow-on Financing Program to facilitate additional private investment for its portfolio companies. As of June 30, 2015, a portion of SDTCs total of 297 companies—into which SDTC has invested \$761 million—have raised more than \$2 billion in follow-on financing from the private sector. Fifty-six percent of this has come from outside of Canada, with seventy three percent of foreign financing coming from the United States.

SDTC held a Capital Connections event in Calgary in January 2015 with the TSX that brought five SDTC portfolio companies in a match making session with five public market financial institutions. We also partnered with the TSX and National Bank to host an Investor Day in London UK which included three SDTC portfolio companies, providing the companies the opportunity to pitch and have one-on-one meetings with leading UK and European institutional investors (June 2015). SDTC partnered with the TSX to put on an "Alternative Financing Event" in Calgary to provide connections and advice to SDTC and non-SDTC companies on how to raise funds from sources other than traditional Venture Capital (June 2015). SDTC will continue to work with partners such as the TSX to broaden the types of asset classes and investors engaged in the cleantech sector. SDTC is actively targeting public market investors, investment bankers, research analysts, debt investors, project financers and institutional pension funds to promote relevant investment opportunities among later-stage SDTC portfolio companies and unlock more institutional capital into the Canadian cleantech market.

Even after a company has proven its technology, critical market-access and growth-capital gaps can make it difficult to take things to the next level. Successfully scaling a company through and beyond the market-entry stage requires different competencies and expertise compared to those needed to demonstrate and scale the technology.

NGBF Launches Projects

The Enerkem Alberta Biofuel Project will produce 38 million liters of commercial next generation cellulosic ethanol annually from 100,000 Bone Dry Metric Tons (BDMT) of sorted Municipal Solid Waste (MSW). The Project will utilize thermochemical gasification process technology developed by Enerkem and will be located in the City of Edmonton. In addition to producing ethanol the facility will have the capability to provide bio-methanol as a co-product. The Enerkem project will receive \$63.6 million in project funding.

The AE Côte-Nord RTP Project will employ Ensyn's fast pyrolysis process to convert wood and woody materials into a liquid fuel product. Renewable Fuel Oil ("RFO"), produced by the Project will be substituted for fossil derived fuel oil in industrial and institutional applications. The project will be located on the existing Arbec Sawmill site in Port Cartier, Quebec and will be capable of processing 36,400 BDMT of feedstock into 21 million liters of RFO annually. The project that represents a joint venture between Arbec Forest Products Inc and Ensyn BioEnergy Canada Inc. has been approved for \$27 million in funding.

The Enerkem project will be a global first of kind disruptive technology project showcasing Canadian entrepreneurial leadership and will deliver strong sustainability benefits linked to the diversion of municipal waste from landfills. Similarly Ensyn a Canadian global technology leader in the area of pyrolysis will help green industrial and institutional sites that use sustainable RFO to replace heavy residual fuel oil.

Table 2. How We Launch

	Outreach	Market Transaction	Market Entry
Overview	At every stage of the project lifecycle: from the SOI phase to project contracting, SDTC connects with stakeholders through a variety of outreach activities, including hosting 'open innovation' events, attending international forums and invitation-only partner events, and meeting with executives to understand their needs.	In the project delivery phase, SDTC links companies with consortia partners who provide project funding. As the projects progress, SDTC leverages its network of business relationships to connect technologies to investors, customers and channel partners across Canada and around the world.	SDTC assists applicants during and after the project demonstration as they prepare to enter the market. During the project phase, SDTC helps applicants strengthen their value propositions by identifying additional consortium partners—particularly technology end users.
Results	SDTC makes information for applicants as clear, credible and easily understood as possible. In 2015 SDTC focused on building our capacity to communicate with Canadians by developing a cross-channel social media strategy, allowing SDTC to communicate with potential applicants daily, and at low cost.	We develop account management plans for top portfolio companies, which explicitly define the kind of support SDTC can provide to accelerate their revenue growth. SDTC Technology Adoption Partnership has engaged more than 100 multinational enterprises since its launch in 2011, with more than 50 subsequently entering into discussions with SDTC portfolio companies.	Creating go-to-market consortia is focused on building a pipeline of corporate investment and commercial opportunities for SDTC portfolio companies. To help it prioritize on the most strategic corporate partners, SDTC developed a Corporate Partnering Scorecard to rate companies relevant to SDTC portfolio companies.
2016 Plans	In 2016 SDTC will leverage this new capacity to further expand outreach efforts.	SDTC will work with its network of partners, including Export Development Canada (EDC), MaRS Discovery District, Climate Change and Emissions Management Corporation (CCEMC), and Department of Foreign Affairs, Trade and Development (DFATD) to align around joint priority clients and provision support from this network to most effectively address management capacity constraints while facilitating access to capital, customers, and foreign markets. SDTC will also seek to build a more formal relationship with BDC to further increase coordination with another critical pillar in the Federal Government's network of capital providers.	Continue to undertake sector- focused events to strengthen SDTC's network of investor relationships and provide an efficient platform for SDTC portfolio companies to meet with and pitch to potential investors.

Grants with Warrants Program

SDTC has decided to re-examine the initiative and place the Grants with Warrants program on hold, absolving all existing warrant obligations. The Grants with Warrants program remains a key component to SDTC's ability to diversify its funding sources in partnership with the Government of Canada to recapitalize the SD Tech Fund $^{\mathsf{TM}}$.

Partnering for Success

SDTC is just one part of a larger federal-provincial innovation funding ecosystem that includes public and private sector partners. SDTC has developed and implemented external communications strategies to educate, raise awareness, and promote the benefits of sustainable development technologies and their potential impacts in communities across the country. Communications stakeholders include clean teach entrepreneurs, applicants, other government departments and jurisdictions, the media and the Canadian public.

Using media, functions and events, SDTC strategically evaluates prospects to reach target audiences. Opportunities to be pursued include:

- Funding announcements that provide the ministers of NRCan and EC (as well as other elected representatives) an opportunity to profile the Government of Canada's contributions with respect to key policy areas;
- Continued development of SDTC portfolio company success stories;
- Media relations campaigns that will generate national or regional media coverage for SDTC portfolio projects;
- Participation in conferences and other events; and
- Increased use of social media to raise awareness of SDTC and the benefits of adopting clean technologies.

Other primary communications tools that will be employed include the SDTC website, brochures, press kits and annual report/annual report supplement.



Table 3. Partner Organizations

Organization	Relationship Profile	Activities
Natural Resources Canada (NRCan) and Environment Canada (EC)	The Public Affairs group provides the interface between SDTC management, elected officials and Government of Canada departments and agencies. In recent years SDTC has made an effort to provide portfolio information that is clear, credible and easily understood. The most obvious example of this effort is the re-boot of www.sdtc.ca in Q1 2015. In 2015 SDTC focused on building its capacity to communicate with Canadians by developing a cross-channel social media strategy, allowing SDTC to communicate with all its stakeholders (NRCan/EC as a priority) daily, and at low cost.	SDTC will continue to develop a more active communications plan and work more closely with partners like NRCan to enhance dissemination of information relating to SDTC's programs and in support of other strategic imperatives. The Public Affairs team will achieve the outputs of its program at the same level of funding as 2014/15 and absorb any cost escalations through a combination of productivity improvements and alternative delivery strategies.
Export Development Canada (EDC)	In October 2012, EDC and SDTC announced a collaborative agreement to bridge the gap between proven technology and commercial bankability and to accelerate the entry of SDTC portfolio companies into some of the most strategic global cleantech markets. Since the agreement was signed, EDC has deployed its range of products—including bonding, guarantees and financing—into more than a dozen later-stage STDC companies.	SDTC has supported EDC transactions directly by sharing stage-appropriate deal flow with EDC and, when requested and authorized to do so, with due diligence and project status information to help facilitate a more streamlined investment review by EDC. In April 2015, EDC once again enabled a second commercial project for SDTC company Nexterra in the UK valued at £51.6M by issuing a performance bond. This follows bonding to support Nexterra's first such project in the UK valued at £47.8 million in December 2013 (as reported in last year's Corporate Plan).
Climate Change and Emissions Management Corporation (CCEMC)	CCEMC and SDTC entered into a memorandum of understanding in order to collaborate and be more integrated. CCEMC and SDTC agreed to explore areas of co-operation including; reduced duplication, process integration, a standardized application, shared technical services, and opportunities for co-funding.	Going forward CCEMC and SDTC plan to offer a joint funding call to applicants with a streamlined, harmonized model with one window for access to two pools of money. The approach will be to offer matching funds available (up to 66.7% per project) which would be more than an applicant could get through either the SDTC or CCEMC processes individually.
Canadian Energy Pipeline Association (CEPA)	In 2015, SDTC will complete an SD Business Case™ in Energy Transmission Pipelines supported by CEPA. It will have synergies to the CEPA Integrity First program goal of zero incidents, outline transmission pipeline technologies generating GHG reductions from leak detection and leak prevention.	For 2016, SDTC will leverage the value of this Business Case to target investments appropriately.
Canadian Association of Petroleum Producers (CAPP)	SDTC is developing an SD Business Case™ in Unconventional Oil and Gas supported by CAPP. It will focus on investment priorities with a focus on three aspects: GHG, water and well bore integrity.	For 2016, SDTC will leverage the value of this Business Case to target investments appropriately.

Our Funds and Their Long-Term Performance

The Foundation supports cleantech entrepreneurs by nurturing start-up efforts, building ideas into demonstration projects, and launching cleantech companies into the global market. Through the publication of an Annual Report, yearly Corporate Plan, and frequent announcements and communications events, SDTC prioritizes transparency and accountability to the public and stakeholders.

SDTC's performance is measured, tracked, and evaluated for the purpose of informing government and Canadians of the value SDTC brings to Canada's cleantech sector and economy as a whole. Over the years this system has become significantly more sophisticated, precise, and responsive to stakeholder requests and interests. Today SDTC measures success using a diversity of metrics and frequent review and verification. This work on measuring and reporting on performance of the cleantech market in Canada has allowed SDTC to develop a unique insight into the success factors that must be in place for entrepreneurs to commercialize their ideas.

SDTC's performance is measured in terms of the entrepreneurial, environmental, and economic impacts of the Foundation's investment in Canadian cleantech. As projects mature into commercial products, revenue growth by SDTC portfolio companies has gone from \$92 million annually in 2010 to \$1.1 billion annually at the end of 2014—a trend that is expected to continue. Growing companies need resources and in 2014 an estimated 8,200 direct and indirect jobs will have been created through SDTC-funded projects.



RESULTS TO DATE (THE YEAR AHEAD

Partnering for Real Results

SDTC's solid project management and partnership-building skills integrate industry and government to work effectively with the financial community-nurturing and growing the almost 300 technology projects that make up the current portfolio. Over 90% of this portfolio consists of projects led by Small and Medium sized Enterprises (SMEs).

We know the technologies we fund have a long road to go before they reach market. We know the companies that lead them need support to launch those technologies Our focus is on building better projects.

Nurture: SDTC's Virtual Incubator

The Virtual Incubator program nurtures companies to be in a position to obtain valuable SDTC funding. The program provides tailored help to applicants through a coaching program for entrepreneurs who have high-potential, innovative technologies they are looking to move forward. The process helps those but may not be quite ready to take the next step in terms of technology development, business planning, accessing potential partners or funding. Through its virtual and in-person sessions, the Incubator has helped grow the number of companies who apply to SDTC and make it through the decision-making process to become a funded company

Build: Sound project management and SDTC's consortium model

SDTC builds companies' ability to make it to market by sound project management and support as the project moves through milestones. One key aspect of SDTC's support is help finding the right consortium. Made up of academia, end users, customer and others, this is a group that leads the technology development phase with real-world feedback and guidance.

Launch: Leveraging relationships to help companies reach markets

Finally, SDTC launches companies to find customers in Canada and abroad. Armed with extensive knowledge of the cleantech market worldwide and with relationships with the finance community and other government bodies whose goal it is to move Canadian innovation to market, SDTC has helped its portfolio attract follow-on financing or technology adoption opportunities. We have brokered relationships that have seen our companies meet investors, heads of industry or program leaders that help them make the next steps

SDTC will work closer with provinces and other industry partners to foster meaningful relationships that translate into opportunities for our portfolio companies.





CHAR Technologies

CHAR Technologies started out in SDTC's Virtu Incubator program, the moved on to obtain funding through the SD Natural Gas Fund.

"We can now build the system and show it to users to get that market validation. Now we can explore the growth we want to achieve."

> **Andrew White** President & CEO CHAR Technologies

Ostara

Ostara will double the number of in-market installations of the technology funded by SDTC in the next year. Though the project has been completed for a few years, Ostara still credits SDTC for its role in

"SDTC support really launched us in the commercial phase - especially at a time when it was very difficult to get funding. SDTC support was the key that unlocked the doors to commercial markets."

> Phillip Abrary President & CEO Ostara Nutrient Recovery

Saltworks

Saltworks is developing an advanced desalinatio and brine management solution for applications in the oil sands, mining and landfill sectors. Previous versions of this technology are currently used in operations and have even found their way to the

"SDTC has been a key factor in Saltworks' growth and in creating highly skilled jobs. They have made a highly valuable contribution in supporting advancement of technologies much needed by Canadian industry and provided a fundamental step in the commercialization of our advanced desalination and brine management solutions."

Mitchell Frank

Manager, Business Development & Marketing



Governance and Accountability

Directors

SDTC is governed by a Board of Directors reflecting the broad interests of the public, private and academic sectors in Canada. It is composed of 15 Directors, seven of whom are appointed by the Government of Canada, including the Chairman of the Board. The remaining eight are appointed by the Members of the Foundation.

There are five Board committees: the Corporate Governance Committee (CGC), the Human Resources Committee (HRC), the Project Review Committee – SD Tech Fund™ (PRC-S), the Project Review Committee – NextGen Biofuels Fund™ (PRC-N), and the Audit and Grant Investment Committee (AC). Committee appointments are as indicated below. Both the Chairman and the President and CEO serve on the Board committees as ex-officio, non-voting members.

Table 4. Directors

Name	ne Title	
Jim Balsillie	Chairman, SDTC; Founder/Chair, Centre for International Governance Innovation	Ex-officio, non-voting member of all committees
Sarah Kavanagh	Vice Chair, SDTC; Corporate Director and Commissioner, Ontario Securities Commission	AC
John Bradlow	Partner, Penfund	AC, HRC*
Geoff Cape	CEO, Evergreen	CGC
K. Ross Creelman	Managing Director, Marwood Ltd.	CGC, HRC
Judy Fairburn	Executive Advisor, Cenovus Energy	HRC
Daniel Gagnier	Independent Advisor and Negotiator on Aboriginal Issues, Province of Québec	AC, PRC-N*
Ronald Koudys	President, Ron Koudys Landscape Architects	CGC
George Lafond	Treaty Commissioner of Saskatchewan	AC
Jason Lee	President, Spry Consulting	PRC-S*, PRC-N
Gary Lunn	Former Minister of Natural Resources	CGC*, PRC-S
Ellen McGregor	CEO, Fielding Chemical Technologies Inc.	PRC-S
Jane Pagel	Corporate Director	HRC, PRC-S
Juergen Puetter	President, Aeolis Wind Power, and CEO, Blue Fuel Energy	HRC
Jacques Simoneau	President and CEO, Univalor	AC*, PRC-N

^{*}Committee Chair

Members

The Members of the Foundation consist of 15 industry leaders, all of whom are appointed/reappointed by the other Members in accordance with the Act. Their function is to provide an informed and representative perspective of sustainability and contribution toward the achievement of SDTC's mission and goals.

Table 5. Members

Name	Title
Bernd Christmas	Partner, Cassels Brock
Timothy Egan	President and CEO, Canadian Gas Association
Johanne Gélinas	Partner, Raymond Chabot Grant Thornton's Strategy and Performance Consulting Group
D. Christine Hollstedt, RPF	Principle, Inspiring Leadership
Wally Hunter	Managing Director, EnerTech
Brenda Kenny	President and CEO, Canadian Energy Pipeline Association
Julie Lepage	President, Acosys Consulting Service Inc.
Sergio Marchi	President and CEO, Canadian Electricity Association
Susan McArthur	Managing Partner, GreenSoil Investments
John Ruffolo	CEO, OMERS Ventures
Kathleen Sendall	Corporate Director, CGG
Andrew T. B. Stuart	President and CEO, Isowater Corporation
Katherine Trumper	Project Management Consultant
Dan Wicklum	Chief Executive, Canada's Oil Sands Innovation Alliance
Joseph D. Wright	Retired, President and CEO, Pulp and Paper Research Institute

Officers

Table 6. Officers

Name	Title
Jim Balsillie	Chairman, SDTC; Founder/Chair, Centre for International Governance Innovation
Leah Lawrence	President and CEO, SDTC
Richard J. Whittaker	Vice President of Investments and CTO, SDTC
Sarah Kavanagh	Vice Chair, SDTC; Corporate Director and Commissioner, Ontario Securities Commission

Evaluation

As outlined in its funding agreements, SDTC is accountable to the Government of Canada through performance and evaluation frameworks known as 'evaluation logic models' (Figures 1 and 2). The logic models illustrate how each activity contributes to the fulfillment of the overarching mission and three supporting goals, and depict the links between the activities and their corresponding long- and short-term outcomes. These outcomes are measured to assess SDTC's success in achieving its purpose and mission. The logic models are also used at the operational level to help define the roles, responsibilities, and annual goals and objectives of SDTC management and staff.

SDTC is preparing for future evaluations required under the conditions of Funding Agreement Five. At this time SDTC is reviewing and refreshing the methodology for conducting cost/benefit analysis of the Foundations operations. These new initiatives will contribute to the accountability and transparency of SDTC.

SDTC is accountable to Canada and takes this seriously including reporting and compliance auditing. Forthcoming audits include:

2016: Interim Evaluation: by an independent third party by 30 June 2016.

2021: Final Evaluation: by an independent third party by 31 December 2021.

The funding agreement under which the NGBF was established has provisions for compliance audits, performance audits and interim evaluations, the next being due in 2017 and 2022.

Figure 2: SD Tech Fund™ Logic Model

Mission Statement

Goal A

SDTC will act

catalyst in

building a

sustainable

development

infrastructure

in Canada

as the primary

Purpose of the Fund

Goal B

Develop and demonstrate new sustainable development technologies (SDTs) related to climate change, clean air, clean water and clean land, in order to make progress towards sustainable development.

Work Scope:







Goal C

Foster and encourage innovative collaboration and partnering amongst diverse persons in the private sector and in academic and not-for-profit organizations to channel and strengthen the Canadian capacity to develop and demonstrate SDTs with respect to climate change, clean air, clean water and clean land.

Work Scope:







Goal D

Ensure timely diffusion by funded recipients of new SDTs in relevant market sectors throughout Canada.

Work Scope:











Work Scope

Protect SDTC's Investment

Provide due diligence screening and excellence in contract definition and project management. Integrate funding activities with the financial sector and, where appropriate, complement other programs.

Project Funding

Invest in creative collaborative partnerships (representing multiple players in the innovation chain) that enable timely development and demonstration of technology solutions for climate change, clean air, clean water and clean land.

Attracting Capital to Clean Tech

Attract additional financing into the clean technologysector and increase the receptivity of the investment community for sustainable development.

Create Go-to-Market Consortia

Build and encourage innovative collaboration and partnering among private, academic and non-profit sectors.

Broker Non-portfolio Projects

Broker relationships that accelerate the dissemination of SDIs towards the marketplace.

Identify Solutions for Barriers to Adoption

Report and communicate to stakeholders and partners, including identification and advocacy around market barriers, energy policy, capital availability, product codes, and standards and regulation.

Outreach

Increase capacity within economic sectors for accessing project funding and improving their management capability.

Communications

Educate, raise awareness and promote benefits of SDIs.

Business Case for SD

Build the business case for SDTs and derive a national strategy for sustainable development (SD).

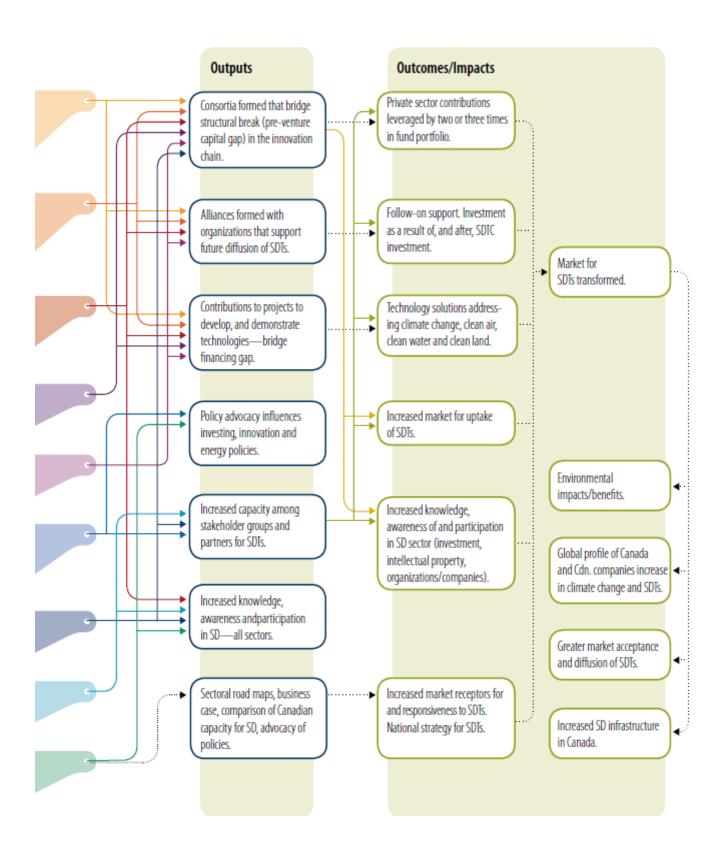
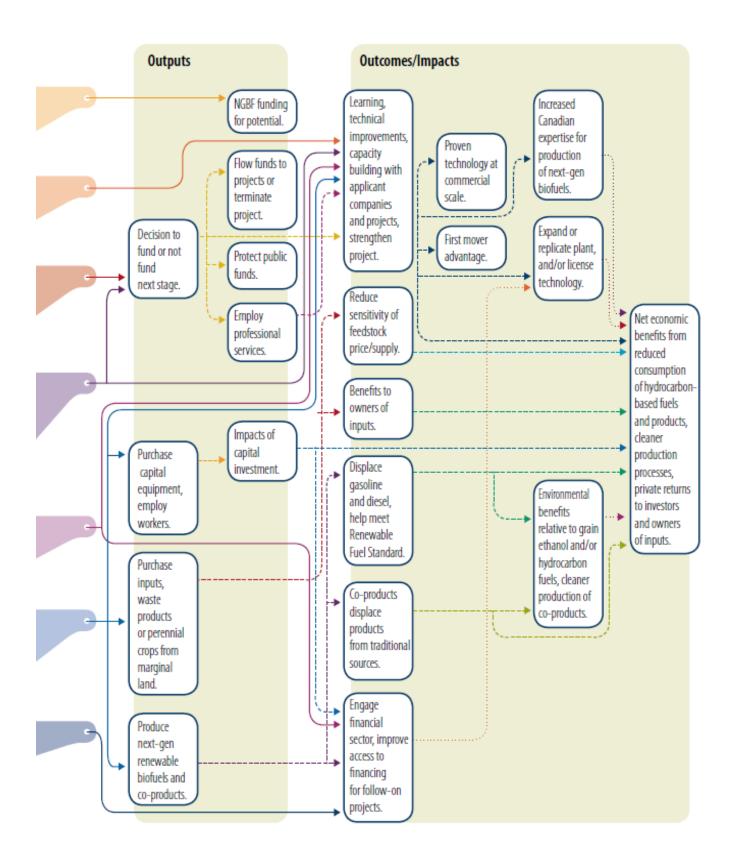


Figure 3: NextGen Biofuels Fund™ Logic Model

Mission Statement Purpose of the Fund Activities/Work Scope NGBF Purpose (c) Outreach Identify and recruit candidate technologies from international Encourage retention and growth outreach and SD Tech Fund. of technology expertise and innovation capacity for the production of next-generation Develop SDTC Knowledge Base renewable fuels in Canada. Collect and conduct biofuels industry studies, identify Work Scope: and maintain roster of experts. **SDTC Mission** SDTC will act Select Qualifying Projects Guide and advise proponent. Proponent develops Application for as the primary Funding (AFF). Conduct due diligence review of AFF, including NGBF Purpose (a) eligibility criteria and technology readiness. catalyst in Facilitate the establishment building a of first-of-kind large Participate in Project Assurance Process sustainable demonstration-scale for Pre-construction Phases facilities for the production development Monitor, advise, assist planning. NGBF expert reviewers conduct of next-generation fuels and infrastructure due diligence review of stage report for funding decision, provide co-products. recommendations to Project Review Committee and Board in Canada Work Scope: for decisions. 00000 Contribute to Structuring the **Project Financing** Advise and assist structure of financing. NGBF Purpose (b) Improve the sustainable Participate as an Active Investor in development impacts arising from the production and use of Construction, Commissioning and renewable fuels in Canada **Plant Operations** Monitor, advise assist, identify barriers, contribute to solutions. Work Scope: 00000 Repay/Close-Out Plant repays NGBF investment and/or operates for 10 years.



Financial Plans

SD Tech Fund™

To date, the Foundation has received \$550 million in grants and is eligible to receive \$365 million in contributions from the Government of Canada for a total of \$915 million to provide support to projects that develop and demonstrate new technologies with the potential to advance sustainable development, including technologies to address climate change, clean air, clean water, and clean soil.

Eligible contributions are to be received based on cash flow requirements up to March 31, 2022.

The Foundation will endeavour to ensure that there are funds available to allocate to new eligible projects at least up to June 30, 2016. With the exception of a reasonable amount reserved for related project monitoring and evaluation, and for wind-up costs, the Foundation will also endeavour to manage and disburse the funds in total by June 30, 2021.

Financial Assumptions

The following assumptions have been made in establishing SDTC's operating budget and disbursement plans for 2016 and 2017:

- A commitment has been made to invest \$896 million to eligible projects over the life of the SD Tech Fund™. Operating expenses over life of the SDTC Tech Fund™ will not exceed \$162 million.
- Projects are typically contracted for up to five years with contracted disbursements linked to
 milestone achievements. Accounting for the time between funding allocation and contracting,
 unforeseen delays in project execution and timing to report on results and release of the final
 holdback payment post-project completion, the full project disbursement period is typically seven
 to eight years. A ten percent contractual holdback provision incents delivery of a final report
 addressing the project results upon completion.
- SDTC's lifecycle budget is calculated based on the knowledge that all annual and otherwise scheduled deliverables required under Funding Agreement Five need to be prepared and delivered throughout the lifetime of the fund. These include the corporate plan, annual report, annual report supplement, public meeting, members meeting, post-contract reports and evaluations, and corporate performance and value-for-money audits, as well as all requirements brought about by the *Federal Accountability Act*.

Table 7. Project Allocations, Disbursements and Operating Expense

(2001 to 2022 Lifecycle Projection)

	2001-2014	2015	2016*	2017-2022	2001-2022
(\$ millions)	Actual	Projection	Projection	Projection	Total
Project Disbursements	494	68	70	264	896
Operating Expenditures	108	11	11	32	162
Interest Earned	(142)	(1)	(0)	(0)	(143)
Government Grant/Contribution					915

^{*} Based on June 30, 2015 estimates. The 2016 budget will be presented to the SDTC Board in December.

Investment Portfolio Status

SDTC continues to closely manage its \$31 million (as of June 30, 2015) investment portfolio placed with RBC Dominion Securities and TD Asset Management. The initial investment strategy remains current; that is, to match the cash flow resulting from interest income and investment maturities as closely as possible to the anticipated future financial requirements of the Foundation.

As of June 30, 2015, the RBC investment account had a market value of \$17 million and the TD account had a market value of \$14 million. The investment portfolios are invested in accordance with the provisions of Funding Agreement Five.

The current investment balance will be depleted in 2016. All further government funding will be received quarterly based on cash flow needs for each quarter; as such no further long term investment balance will be held.

Table 8. Asset Allocation Ratings Breakdown – June 2015

Sum of Market Value (\$000s)

Rating	Government	Other	Total
Money market securities	-	13,964	13,964
High-interest savings accounts	-	16,652	16,652
Total		30,616	30,616

Table 9. Percentage Breakdown

Rating	Current	Maximum	Available
Other AAA	0%	20%	20%
Other AA	0%	70%	70%
Other A	0%	80%	80%
Government AAA	0%	No limit	No limit
Government AA	0%	No limit	No limit
Government A	0%	No limit	No limit
Money market securities	45.6%	No limit	No limit
High-interest savings accounts	54.4%	No limit	No limit
Total	100%		

NextGen Biofuels Fund™

Financial Assumptions

The NextGen Biofuels Fund™ (NGBF) is a \$225 million fund with the disbursement period ending March 31, 2017 and the end of the fund's life is September 30, 2027.

As of December 3, 2014, NGBF is no longer accepting applications for financial support.

When comparing the funding agreements for the SD Tech Fund^{TM} and the NGBF, areas of commonality can be seen: for example, annual report obligations, audit and financial statement requirements, and media announcements. However, the NGBF's primary activity of funding first-of-kind demonstration facilities is significantly different than that of the SD Tech Fund^{TM} and therefore requires additional and distinct work to be undertaken. As such, the budget and financial statements are presented and tracked as individual funds. The NGBF has its own expenditures with different assumptions to be tracked and updated accordingly.

Table 10. Project Disbursements and Operating Expenditures

(2007 to 2027 Lifecycle Projection)

	2007-2014	2015	2016*	2017-2022	2001-2022
(\$ 000s)	Actual	Projection	Projection	Projection	Total
Project Disbursements	892	65,229	12,308	13,463**	91,892
Operating Expenditures	10,631	920	816	3,532	15,900
Interest Earned	(4,323)	(202)	(0)	(0)	(4,525)
Total Government Funding					103,268

^{*} Based on June 30, 2015 estimates. The 2016 budget will be presented to the SDTC Board in December.

Investment Portfolio Status

SDTC continues to closely manage the current \$20 million (as of June 30, 2015) investment portfolio, which is placed with RBC Dominion Securities and TD Asset Management. The initial investment strategy remains current; that is, to match the cash flow resulting from interest income and investment maturities as closely as possible to the anticipated future financial requirements of the NGBF.

As of June 30, 2015, the RBC investment account had a market value of \$7 million and the TD account had a market value of \$13 million. The investment portfolios are invested in accordance with the provisions of the Funding Agreement.

The current investment balance will be depleted in 2015. All further government funding will be received based on cash flow needs biannually, as such no further long term investment balance will be held.

Table 11. Asset Allocation Ratings Breakdown – June 2015

Sum of Market Value (\$000s)

Rating	Government	Other	Total
AA		80	80
Money market securities	-	13,439	13,439
High-interest savings accounts	-	6,810	6,810
Total		20,329	20,329

Table 12. Percentage Breakdown

Rating	Current	Maximum	Available
Other A	0%	20%	20%
Other AA	0.4%	70%	69.6%
Other AAA	0%	80%	80%
Government AAA	0%	No limit	No limit
Government AA	0%	No limit	No limit
Government AA	0%	No limit	No limit
Money market securities	66.1%	No limit	No limit
High-interest savings accounts	33.5%	No limit	No limit
Total	100%		

^{**} Project disbursement 2017-2022 is for 2017 Q1 only as project disbursement shall not occur beyond end March, 2017.

Risks and Mitigation

As part of its corporate risk management strategy, SDTC regularly identifies, assesses and monitors existing and emerging business and organizational risks. This section highlights key emerging risks and identifies the mitigation measures SDTC is putting in place to address them.

SD Tech Fund™

Financial Risk

The issue: SDTC disburses allocated funds to projects when they meet their milestones and the financial resources are required. To ensure that funds are made available when needed and without delays SDTC must ensure accurate disbursement forecasting and manage the risk associated with the uncertainty around technology development and of projects deviating significantly from their schedules.

Mitigation: SDTC works closely with project lead organizations to help them progress their technology development and to identify cases where milestones and financial resource requirements may deviate from the projected timelines. SDTC has implemented procedures to forecast disbursement and manage cash flow and financial information. Reporting procedures will address the financial management requirements while mitigating the risk of failure to provide project disbursements in a timely manner.

Economic/Market Uncertainty Risk

The issue: Cleantech entrepreneurs encounter many challenges in obtaining pre-commercialization financing. Continued and prolonged economic uncertainty has the potential to pose considerable challenges to SDTC-funded technologies, making it difficult to attract the important private sector funding required for commercialization. This particularly affects technologies that are in the pre-commercialization phase because they include inherent risks associated with technology development and performance, policy support and market readiness. It may also increase the difficulty in attracting the follow-on funding that is crucial for commercialization.

Mitigation: SDTC is mitigating the current market risk by cultivating lasting relationships with the investment community, particularly through its initiatives to attract capital to projects and a focus on strategic (long-term) large multi-national technology adopters.

This mitigation effort includes hosting stakeholder sessions with a range of participants, including strategic multinational companies and investors, to ensure that the projects that SDTC approves for funding are in alignment with the needs of those communities. Outreach activities, such as the SDTC Investor Day, and presentations at targeted conferences will facilitate the introduction of portfolio companies to potential investors.

Alignment with Regulation and Policy Risk

The issue: In their early, pre-commercial phases, clean technologies benefit from alignment with regulation or policy directives which provide incentives or mandates that encourage the market to adopt the technology. Lack of such policy, or clarity about its implementation, creates an environment of uncertainty that can inhibit market players from making the investment necessary for the diffusion of the technology.

Continued uncertainty about policy affecting the uptake of SDTC-funded technologies will make it difficult to attract important private sector funding, both in the demonstration and the commercialization phases.

Mitigation: SDTC works with project proponents to identify and address regulatory and policy directives that may have an impact on the market success of their technologies. The Foundation will continue to focus on regulatory/policy instruments that have been implemented at federal, regional, provincial, and/or municipal levels, which are relevant to SDTC portfolio companies.

Evaluation Risk

The issue: Managing public money means that SDTC will be closely scrutinized through various accountability mechanisms. More specifically, it is required to operate in compliance with its Act, the funding agreements, the *Federal Accountability Act*, all other referenced Acts and regulations, and relevant federal government policy and direction.

Mitigation: SDTC has an independent, four-gate selection and funding process that ensures projects are selected on merit (and informed by the private sector through SDTC's Investment Committee) and approved by the Board, and that disbursements follow the required approval levels, with additional financial oversight provided by the Audit and Grant Investment Committee.

SDTC has an extensive evaluation logic model with key performance indicators and results that deliver value to business and industry. This evidence has been collected, reviewed and presented during numerous audits and evaluations for which SDTC has consistently exceeded the benchmark.

SDTC has assessed the requirements of the Funding Agreement Five and has implemented processes to ensure adherence to the reporting and transparency requirements.

NextGen Biofuels Fund™

Construction Timelines Risk

The issue: Due to delays associated with technology readiness and limited access to financing, the global next-generation biofuels industry has been slow to get off the ground. There is some risk that funded projects will not be completed prior to the NGBF deadline for fund disbursement of March 31, 2017. This could lead to projects not being completed prior to the deadline.

Mitigation: Comprehensive reviews of proposed schedules for plant construction are conducted by NGBF experts during project due diligence to assure timelines are realistic with acceptable risk of not meeting project and disbursement deadlines. SDTC continues working closely with project leaders during the construction phase to monitor commitment to scheduled completion times.

International Demand Risk

The issue: As the biofuels industry develops, international perception and the associated demand for biofuels are changing. While some expected biofuel opportunities have not materialized, others are just emerging. It is important that the allocation of funds and prioritization of projects reflect the current and future state of international markets.

Mitigation: This uncertainty represents a good opportunity for the NGBF to continue to provide value through its initiatives to attract capital to projects. The NGBF team will continue to work closely with investors and applicant companies to assist with their financing activities. The NGBF will continue to

conduct outreach activities targeting a range of stakeholders, including technology developers and investors, to identify high-potential project opportunities.

Regulatory Risk

The issue: Renewable fuels are subject to various policy drivers such as sustainability, and environmental, economic and energy policies, as well as various regional and political factors. Those policies create supply, demand and pricing conditions that can vary from one geographical area to the other, thereby affecting the competitiveness of enterprises. This situation represents a market uncertainty or regulatory risk.

Mitigation: Canadian technology developments in the next generation renewable fuels sector are significantly funded by SDTC initiatives. Such developments contribute to improving production factors and thus reducing the cost of producing next generation renewable fuels in Canada. Those improvements should progressively lead to reducing the sector's dependency on government policies for performance.

Industry Momentum

The issue: As conventional fuel sources continue to be discovered at attractive cost structures, the economic business case for next-generation biofuels has weakened.

Mitigation: The NGBF will continue to focus on the strongest business cases in the projects it selects and funds.

