

Canada

17 Financial Institutions
made an estimated USD\$ 20,660 million (CAD 27,678 million^a)
available to 26 nuclear weapon producing companies since January 2012.

Introduction

This document contains country specific information from the 2015 Don't Bank on the Bomb report. It includes financial institutions operating in the country that have published policies banning or limiting investment in nuclear weapons producers. Also included is the list of financial institutions that have significant financing relationships with one or more of the nuclear weapons producers identified in the report. There is also a brief summary of the nuclear weapons related work of each of the identified producers. For more detail, see the full report or go to the www.DontBankOnTheBomb.com website.

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^a Exchange rate: 1 USD = 1.3398 CAD, 29 September 2015

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The financial institutions identified include banks, pension funds, sovereign wealth funds, insurance companies and asset managers. They have provided various types of financial services to nuclear weapon companies including loans, investment banking and asset management.

All sources of financing provided since 1 January 2012 to the companies listed were analysed from annual reports, financial databases and other sources. The financial institutions which are most significantly involved in the financing of one or more nuclear weapon companies are shown here. See the full report for both a summary and full description of all financial institutions which are found to have the most significant financing relationships with one or more of the selected nuclear weapon companies, by means of participating in bank loans, by underwriting share or bond issues and/or by share- or bondholdings (above a threshold of 0.5% of all outstanding shares or bonds).

For more information on loans, investment banking, and asset management, please refer to the website.

Hall of Fame and Runners-up

To identify financial institutions with a policy on nuclear weapons, we research a variety of sources: NGO reports, screening-agency information, financial institutions' reports and websites, information from campaigners and other public sources. For practical reasons, the scope of this report is limited to those financial institutions that have an investment policy or a summary of that policy in English. The list of institutions in the Hall of Fame is therefore not exhaustive. We welcome additions from those able to provide them.

The financial institutions for which a nuclear weapons policy was actually found, were grouped in two categories. Financial institutions with a clear and comprehensive nuclear weapons exclusion policy are included in the "Hall of Fame", while financial institutions whose nuclear weapons policy is less strict or clear are included in the "Runners-up" category. This is not a comprehensive list, and others may exist in the country. To be included in the Hall of Fame, the nuclear weapons policy of the financial institution must meet the following criteria:

- The financial institution has published its policy and/or a summary of it;
- The policy excludes investments in nuclear weapon companies (withdrawing past investments and avoiding future investments)
- The policy has an 'all-in' comprehensive scope:
 - no exceptions for any types of nuclear weapon companies
 - no exceptions for any types of activities by nuclear weapon companies
 - no exceptions for any type of financing or investment by the financial institution

Financial institutions whose nuclear weapon policy does not meet all of the above criteria are included in the "Runners-up" category. [For more on the report methodology, see the website.](#)

Hall of Fame institutions

No financial institutions based in Canada were identified with a clear and comprehensive nuclear weapons exclusion policy.

Runners-up institutions

Based in Canada

Royal Bank of Canada (RBC)

The Royal Bank of Canada (RBC) is a Canadian bank that provides personal and commercial banking, wealth management, insurance, investor services and capital markets products and services around the globe. The bank serves more than 16 million personal, business, public sector and institutional clients in 41 countries.¹

RBC does not provide financial services to companies involved in the development, production and trade of nuclear weapons and delivery systems that are specifically designed for these weapons.² Companies involved in maintenance and modernisation are not excluded.³

The policy applies to corporate credit granting and project finance.⁴ RBC also terminates existing loan contracts with nuclear weapon producers on a case-by-case basis.

RBC is currently reviewing its weapons policy and considering expanding the scope to its investment banking and asset management activities. RBC will also consider extending its policy to exclude companies involved in the maintenance of weapons of mass destruction.⁵

RBC uses an exclusion list for certain countries, which is based on the findings of data provider Sustainalytics.⁶ but the potential exclusion of companies is discussed on a case-by-case basis.⁷

We commend RBC for adopting a public policy on nuclear weapons. We recommend RBC apply its policy to all financial products including investment banking and asset management activities. Moreover, RBC should apply the policy to all nuclear weapon producing companies, including those involved in maintenance and modernisation. We look forward to assessing RBC's update of its nuclear weapons policy and to engaging with RBC, so a strong and comprehensively applied policy may be listed in the Hall of Fame in a future update of this report.

Website:
www.rbc.com/

Twitter:
[@RBC](https://twitter.com/RBC)

Facebook:
<https://www.facebook.com/rbc>

Operating in Canada

1. Aegon (the Netherlands)

We commend Aegon for adopting a public policy on nuclear weapons. We recommend Aegon apply its policy to nuclear weapon producing companies regardless of their country of origin. It should also apply the policy to all financial products including all asset classes in jurisdictions outside the Netherlands and apply its policy to all assets managed for customers globally. We look forward to engaging with Aegon, so a strong and comprehensively applied policy may be listed in the Hall of Fame in a future update of this report.

Website:
<http://www.aegon.com/Home/>

Twitter:
[@aegon](https://twitter.com/aegon)

Facebook:
<https://www.facebook.com/Aegon>

2. Barclays (United Kingdom)

We commend Barclays for adopting a public policy on nuclear weapons. We recommend Barclays apply its policy to all activities of nuclear weapon producing companies, and not limit it to project financing. Barclays should exclude investment in all types of nuclear weapons associated companies, including those involved in maintenance and specifically designed delivery systems. In addition, Barclays should expand the scope of its policy to cover all financial products it offers, including on behalf of third parties. We look forward to engaging with Barclays, so a strong and comprehensively applied policy may be listed in the Hall of Fame in a future update of this report.

Website:
<http://www.home.barclays/>

Twitter:
[@barclays](https://twitter.com/barclays)

Facebook:
<https://www.facebook.com/Barclays>

3. BNP Paribas (France)

We commend BNP Paribas for adopting a public policy on nuclear weapons. We recommend BNP Paribas exclude all companies involved in nuclear weapon programs, regardless of their country of origin. In addition, BNP Paribas should apply its exclusion policy to all financial products and services it offer, including asset management activities and third party investments and cover old as well as new financing agreements. We look forward to engaging with BNP Paribas, so a strong and comprehensively applied policy may be listed in the Hall of Fame in a future update of this report.

Website:
<http://www.bnpparibas.com/>

Twitter:
[@BNPPARIBAS_NET](https://twitter.com/BNPPARIBAS_NET)

Facebook:
<https://www.facebook.com/bnpparibas.net>

4. Crédit Agricole (France)

We commend Crédit Agricole for adopting a public policy on nuclear weapons. We recommend Crédit Agricole exclude investments in all companies associated with the production of specifically designed components necessary for nuclear weapons. Furthermore, Crédit Agricole should apply its policy to all of its financial products, including all assets managed. We look forward to engaging with Crédit

Agricole, so a strong and comprehensively applied policy may be listed in the Hall of Fame in a future update of this report.

Website:	Twitter:	Facebook:
http://www.credit-agricole.fr/	@CreditAgricole	https://www.facebook.com/CreditAgricole

5. Credit Suisse (Switzerland)

We commend Credit Suisse for adopting a public policy on nuclear weapons in line with the provisions of the Swiss Materials Act. We recommend Credit Suisse develop policy expanding on the current interpretation of the Swiss Materials Act and exclude the financing of nuclear weapon producing companies as a whole, instead of only the activities related to nuclear weapons. Furthermore, Credit Suisse should apply its policy to all of its financial products, including assets managed. We look forward to engaging with Credit Suisse, so a strong and comprehensively applied policy may be listed in the Hall of Fame in a future update of this report.

Website:	Twitter:	Facebook:
https://www.credit-suisse.com/	@CreditSuisse	https://www.facebook.com/creditsuisse

6. Rabobank (the Netherlands)

We commend Rabobank for adopting a public policy on nuclear weapons. We recommend Rabobank apply its policy to all financial products, including all passively managed funds. We look forward to engaging with Rabobank, so a strong and comprehensively applied policy may be listed in the Hall of Fame in a future update of this report.

Website:	Twitter:	Facebook:
https://www.rabobank.com/	@Rabobank	http://www.facebook.com/rabobank

7. Royal Bank of Scotland (RBS) (United Kingdom)

We commend RBS for adopting a public policy on nuclear weapons. We recommend RBS exclude all activities of nuclear weapon producing companies. Moreover, RBS should apply its exclusion policy to all financial products including assets managed and should terminate existing investments in nuclear weapons associated companies currently in its portfolio. We look forward to engaging with RBS, so a strong and comprehensively applied policy may be listed in the Hall of Fame in a future update of this report.

Website:	Twitter:	Facebook:
www.rbs.com/	@RBSGroup	https://www.facebook.com/royalbankofscotland

8. Standard Chartered (United Kingdom)

We commend Standard Chartered for adopting a public policy on nuclear weapons. We recommend Standard Chartered apply its policy to all of its financial products, including investments for its own account investments on behalf of third parties. Standard Chartered should also apply the policy to all nuclear weapon producing companies, including those only involved in joint ventures. We look forward to engaging with Standard Chartered, so a strong and comprehensively applied policy may be listed in the Hall of Fame in a future update of this report.

Website:	Twitter:	Facebook:
https://www.sc.com/	@StanChart	https://www.facebook.com/StandardChartered

Hall of Shame

This section contains the results of our research into which financial institutions are financially involved with the nuclear weapon producing companies identified in the report. [For the full methodology, see the website.](#) Each section provides the following information for each financial institution:

The types of financial relations which the financial institution has with one or more nuclear weapon companies (loans, investment banking and asset management).

Financial institution	Amount in USD millions	Amount in CAD millions ^b
BMO Financial Group	995	1334
Burgundy Asset Management	108	145
Caisse de dépôt et placement du Québec	578	774
CI Financial	85	114
EdgePoint Investment Group	85	114
Export Development Canada	41	55
Fiera Capital	17	23
Great West Lifeco	20	27
Letko Brosseau & Associates	52	69
Mackie Research Financial	3	3
Manulife Financial	776	1040
Power Financial Corporation	2964	3972
Royal Bank of Canada	1618	2168
Scotiabank	2826	3787
Sprucegrove Investment Management	71	95
Sun Life Financial	6823	9141
Toronto-Dominion Bank	3597	4820

1. BMO Financial Group

BMO Financial Group has made an estimated US\$ 995 million available to the nuclear weapons companies listed in this report since January 2012.

BMO Financial Group provided loans for an estimated amount of US\$ 327 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2012 or maturing after August 2015.

Loans provided by BMO Financial Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	700	35	14-10-2011	19-10-2016

^b Exchange rate: 1 USD = 1.3398 CAD, 29 September 2015

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	1,000	50	14-10-2011	19-10-2016
Aecom	1,050	39	29-1-2014	29-1-2019
Aecom	1,925	77	11-8-2014	17-10-2019
Aecom	1,188	59	11-8-2014	17-10-2021
Aecom	1,050	47	11-8-2014	17-10-2019
Aecom	500	20	11-8-2014	17-10-2019

Source: Thomson ONE Banker, "Loans", viewed in August 2015.

BMO Financial Group owns or manages shares of the nuclear weapon companies for an amount of US\$ 668 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Shareholdings managed by BMO Financial Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	323	0.71	30-6-2015
Huntington Ingalls Industries	United States	85	1.58	30-6-2015
Jacobs Engineering	United States	35	0.69	30-6-2015
Northrop Grumman	United States	225	0.75	30-6-2015

Source: Thomson ONE Banker, "Share ownership: most recent filings", viewed in August 2015.

2. Burgundy Asset Management

Burgundy Asset Management has made an estimated US\$ 108 million available to the nuclear weapons companies listed in this report since January 2012.

Burgundy Asset Management owns or manages shares of the nuclear weapon companies for an amount of US\$ 108 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Shareholdings managed by Burgundy Asset Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Jacobs Engineering	United States	108	1.94	31-3-2015

Source: Thomson ONE Banker, "Share ownership: most recent filings", viewed in August 2015.

3. Caisse de dépôt et placement du Québec

Caisse de dépôt et placement du Québec has made an estimated US\$ 578 million available to the nuclear weapons companies listed in this report since January 2012.

Caisse de dépôt et placement du Québec owns or manages shares of the nuclear weapon companies for an amount of US\$ 578 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Shareholdings managed by Caisse de dépôt et placement du Québec

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
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Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Lockheed Martin	United States	578	0.92	31-3-2015

Source: Thomson ONE Banker, "Share ownership: most recent filings", viewed in August 2015.

4. CI Financial

CI Financial has made an estimated US\$ 85 million available to the nuclear weapons companies listed in this report since January 2012.

CI Financial owns or manages shares of the nuclear weapon companies for an amount of US\$ 30.7 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Shareholdings managed by CI Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Orbital ATK	United States	30.8	0.68	31-3-2015

Source: Thomson ONE Banker, "Share ownership: most recent filings", viewed in August 2015.

CI Financial owns or manages bonds of the nuclear weapon companies for an amount of US\$ 54.7 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Bondholdings managed by CI Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	36.9	1.82	31-3-2015
Huntington Ingalls Industries	United States	17.8	1.35	31-3-2015

Source: Thomson Eikon, "Bond ownership: most recent filings", viewed in August 2015.

5. EdgePoint Investment Group

EdgePoint Investment Group has made an estimated US\$ 85 million available to the nuclear weapons companies listed in this report since January 2012.

EdgePoint Investment Group owns or manages shares of the nuclear weapon companies for an amount of US\$ 85 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Shareholdings managed by EdgePoint Investment Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Jacobs Engineering	United States	85	1.69	30-6-2015

Source: Thomson ONE Banker, "Share ownership: most recent filings", viewed in August 2015.

6. Export Development Canada

Export Development Canada has made an estimated US\$ 41 million available to the nuclear weapons companies listed in this report since January 2012.

Export Development Canada provided loans for an estimated amount of US\$ 41 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2012 or maturing after August 2015.

Loans provided by Export Development Canada

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Larsen & Toubro	47	5	27-8-2013	1-6-2018
Larsen & Toubro	59	7	27-8-2013	1-8-2017
Larsen & Toubro	64	7	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018

Source: Thomson ONE Banker, "Loans", viewed in August 2015.

7. Fiera Capital

Fiera Capital has made an estimated US\$ 17 million available to the nuclear weapons companies listed in this report since January 2012.

Fiera Capital owns or manages bonds of the nuclear weapon companies for an amount of US\$ 17 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Bondholdings managed by Fiera Capital

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	17	0.51	31-3-2015

Source: Thomson Eikon, "Bond ownership: most recent filings", viewed in August 2015.

8. Great West Lifeco

Great West Lifeco has made an estimated US\$ 20 million available to the nuclear weapons companies listed in this report since January 2012.

Great West Lifeco owns or manages bonds of the nuclear weapon companies for an amount of US\$ 20 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Bondholdings managed by Great West Lifeco

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Safran	France	20	1.40	31-3-2015

Source: Thomson Eikon, "Bond ownership: most recent filings", viewed in August 2015.

9. Letko Brosseau & Associates

Letko Brosseau & Associates has made an estimated US\$ 52 million available to the nuclear weapons companies listed in this report since January 2012.

Letko Brosseau & Associates owns or manages shares of the nuclear weapon companies for an amount of US\$ 52 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Shareholdings managed by Letko Brosseau & Associates

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	52	0.67	30-6-2015

Source: Thomson ONE Banker, "Share ownership: most recent filings", viewed in August 2015.

10. Mackie Research Financial

Mackie Research Financial has made an estimated US\$ 3 million available to the nuclear weapons companies listed in this report since January 2012.

Mackie Research Financial underwrote bond issuances for an estimated amount of US\$ 3 million to the nuclear weapon companies since January 2012 (see table below).

Underwriting of bond issuances by Mackie Research Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	250	3	18-2-2015	1-3-2035

Source: Thomson ONE Banker, "Bond and share issue underwritings", viewed in August 2015.

11. Manulife Financial

Manulife Financial has made an estimated US\$ 776 million available to the nuclear weapons companies listed in this report since January 2012.

Manulife Financial owns or manages bonds of the nuclear weapon companies for an amount of US\$ 776 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Bondholdings managed by Manulife Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	76	3.75	31-5-2015
Airbus Group	The Netherlands	127	2.58	31-3-2015
BAE Systems	United Kingdom	64	1.23	31-3-2015
Boeing	United States	128	1.49	31-3-2015
General Dynamics	United States	26	0.77	31-3-2015
Huntington Ingalls Industries	United States	45	3.40	31-5-2015
Lockheed Martin	United States	119	1.29	31-5-2015
Northrop Grumman	United States	55	0.85	31-3-2015
Raytheon	United States	67	1.25	31-3-2015
Textron	United States	69	2.34	31-5-2015

Source: Thomson Eikon, "Bond ownership: most recent filings", viewed in August 2015.

12. Power Financial Corporation

Power Financial Corporation has made an estimated US\$ 2,964 million available to the nuclear weapons companies listed in this report since January 2012.

Power Financial Corporation owns or manages shares of the nuclear weapon companies for an amount of US\$ 2,942 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Shareholdings managed by Power Financial Corporation

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
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Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	47	1.01	31-3-2015
Engility	United States	11	1.02	31-3-2015
Fluor	United States	48	0.56	31-3-2015
General Dynamics	United States	887	2.03	31-3-2015
Honeywell International	United States	560	0.69	31-3-2015
Northrop Grumman	United States	949	3.15	31-3-2015
Raytheon	United States	440	1.33	31-3-2015

Source: Thomson ONE Banker, "Share ownership: most recent filings", viewed in August 2015.

Power Financial Corporation owns or manages bonds of the nuclear weapon companies for an amount of US\$ 22 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Bondholdings managed by Power Financial Corporation

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Huntington Ingalls Industries	United States	8	0.57	31-3-2015
MOOG	United States	14	4.83	31-3-2015

Source: Thomson Eikon, "Bond ownership: most recent filings", viewed in August 2015.

13. Royal Bank of Canada

Royal Bank of Canada has made an estimated US\$ 1,618 million available to the nuclear weapons companies listed in this report since January 2012.

Royal Bank of Canada provided loans for an estimated amount of US\$ 1,315 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2012 or maturing after August 2015.

Loans provided by Royal Bank of Canada

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	4,345	76	14-3-2011	14-4-2016
Airbus Group	3,797	66	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	75	23-9-2014	15-10-2015
Boeing	2,473	75	23-9-2014	16-10-2019
Engility	393	79	23-4-2014	9-5-2020
Engility	250	50	23-4-2014	9-5-2021
Engility	50	10	23-4-2014	9-5-2019
Honeywell International	2,800	62	17-3-2011	31-3-2016
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Lockheed Martin	1,500	90	26-8-2011	26-8-2016
Lockheed Martin	1,500	50	14-8-2014	14-8-2019
Moog	900	49	18-3-2011	18-3-2016

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Moog	900	30	28-3-2013	28-3-2018
Orbital ATK	400	14	9-9-2010	7-10-2015
Orbital ATK	400	14	9-9-2010	7-10-2015
Orbital ATK	600	21	9-9-2010	7-10-2015
Orbital ATK	600	21	9-9-2010	7-10-2015
Orbital ATK	200	13	3-9-2012	3-9-2017
Orbital ATK	250	25	8-10-2013	1-11-2020
Orbital ATK	1,010	67	8-10-2013	1-11-2018
Orbital ATK	700	47	8-10-2013	1-11-2018
Orbital ATK	150	7	24-6-2014	24-12-2018

Source: Thomson ONE Banker, "Loans", viewed in August 2015.

Royal Bank of Canada underwrote bond issuances for an estimated amount of US\$ 200 million to the nuclear weapon companies since January 2012 (see table below).

Underwriting of bond issuances by Royal Bank of Canada

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	350	10	30-4-2013	15-11-2018
Boeing	300	9	28-10-2014	30-10-2021
Boeing	300	9	28-10-2014	30-10-2024
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	13	18-2-2015	1-3-2035
Boeing	250	8	18-2-2015	1-3-2045
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015
Lockheed Martin	750	14	12-2-2015	1-3-2025
Lockheed Martin	500	9	12-2-2015	1-3-2035
Lockheed Martin	1,000	18	12-2-2015	1-3-2045
Moog	300	23	18-11-2014	1-12-2022
Orbital ATK	300	50	22-10-2013	1-10-2021

Source: Thomson ONE Banker, "Bond and share issue underwritings", viewed in August 2015.

Royal Bank of Canada owns or manages shares of the nuclear weapon companies for an amount of US\$ 103 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Shareholdings managed by Royal Bank of Canada

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	68	0.82	31-3-2015
Jacobs Engineering	United States	34	0.61	31-3-2015

Source: Thomson ONE Banker, "Share ownership: most recent filings", viewed in August 2015.

14. Scotiabank

Scotiabank has made an estimated US\$ 2,826 million available to the nuclear weapons companies listed in this report since January 2012.

Scotiabank provided loans for an estimated amount of US\$ 2,357 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2012 or maturing after August 2015.

Loans provided by Scotiabank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	750	20	7-6-2013	7-6-2018
Aecom	1,050	39	29-1-2014	29-1-2019
Aecom	1,925	154	11-8-2014	17-10-2019
Aecom	1,188	95	11-8-2014	17-10-2021
Aecom	1,050	105	11-8-2014	17-10-2019
Aecom	500	40	11-8-2014	17-10-2019
Babcock & Wilcox	700	32	22-5-2012	8-6-2017
Babcock & Wilcox	500	33	11-5-2015	11-5-2020
Babcock & Wilcox	400	27	11-5-2015	11-5-2020
Babcock & Wilcox	600	36	11-5-2015	11-5-2020
Fluor	1,200	90	14-12-2010	14-12-2015
General Dynamics	1,000	35	14-7-2011	14-7-2016
General Dynamics	1,000	125	21-6-2013	21-6-2018
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	480	30-6-2015	10-7-2020
Huntington Ingalls Industries	489	27	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	35	23-9-2013	6-11-2018
Huntington Ingalls Industries	1,250	125	13-7-2015	13-7-2020
Jacobs Engineering	1,160	139	23-3-2012	23-3-2017
Jacobs Engineering	1,140	62	7-2-2014	7-2-2019
Northrop Grumman	575	22	31-3-2011	24-1-2017
Northrop Grumman	650	24	31-3-2011	24-1-2016
Northrop Grumman	1,500	129	8-9-2011	8-9-2016
Northrop Grumman	500	13	18-8-2012	3-9-2013
Northrop Grumman	1,600	320	19-6-2015	8-7-2020
Raytheon	1,400	76	13-12-2011	13-12-2016

Source: Thomson ONE Banker, "Loans", viewed in August 2015.

Scotiabank underwrote bond issuances for an estimated amount of US\$ 469 million to the nuclear weapon companies since January 2012 (see table below).

Underwriting of bond issuances by Scotiabank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Aecom	800	80	17-9-2014	15-10-2022
Aecom	800	80	17-9-2014	15-10-2024

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Fluor	500	18	18-11-2014	15-12-2024
General Dynamics	900	39	1-11-2012	15-11-2017
General Dynamics	1,000	43	1-11-2012	15-11-2022
General Dynamics	500	21	1-11-2012	15-11-2042
Huntington Ingalls Industries	600	34	17-11-2014	15-12-2021
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Northrop Grumman	950	29	28-5-2013	1-6-2043
Raytheon	1,100	60	27-11-2012	15-12-2022
Raytheon	300	5	24-11-2014	15-12-2024
Raytheon	300	5	24-11-2014	15-12-2044

Source: Thomson ONE Banker, "Bond and share issue underwritings", viewed in August 2015.

15. Sprucegrove Investment Management

Sprucegrove Investment Management has made an estimated US\$ 71 million available to the nuclear weapons companies listed in this report since January 2012.

Sprucegrove Investment Management owns or manages shares of the nuclear weapon companies for an amount of US\$ 71 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Shareholdings managed by Sprucegrove Investment Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Jacobs Engineering	United States	71	1.27	31-3-2015

Source: Thomson ONE Banker, "Share ownership: most recent filings", viewed in August 2015.

16. Sun Life Financial

Sun Life Financial has made an estimated US\$ 6,823 million available to the nuclear weapons companies listed in this report since January 2012.

Sun Life Financial owns or manages shares of the nuclear weapon companies for an amount of US\$ 6,618 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Shareholdings managed by Sun Life Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	79	0.95	31-3-2015
Honeywell International	United States	4,214	5.16	31-3-2015
Lockheed Martin	United States	1,464	2.32	31-3-2015
Northrop Grumman	United States	753	2.50	31-3-2015
Textron	United States	108	0.88	31-3-2015

Source: Thomson ONE Banker, "Share ownership: most recent filings", viewed in August 2015.

Sun Life Financial owns or manages bonds of the nuclear weapon companies for an amount of US\$ 205 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Bondholdings managed by Sun Life Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	16	2.82	31-5-2015
BAE Systems	United Kingdom	72	1.38	31-3-2015
Honeywell International	United States	35	0.54	31-3-2015
Huntington Ingalls Industries	United States	17	1.29	31-5-2015
Safran	France	35	2.45	31-3-2015
Textron	United States	30	1.03	31-3-2015

Source: Thomson Eikon, "Bond ownership: most recent filings", viewed in August 2015.

17. Toronto-Dominion Bank

Toronto-Dominion Bank has made an estimated US\$ 3,597 million available to the nuclear weapons companies listed in this report since January 2012.

Toronto-Dominion Bank provided loans for an estimated amount of US\$ 1,605 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2012 or maturing after August 2015.

Loans provided by Toronto-Dominion Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	1,925	77	11-8-2014	17-10-2019
Aecom	1,188	59	11-8-2014	17-10-2021
Aecom	1,050	47	11-8-2014	17-10-2019
Aecom	500	20	11-8-2014	17-10-2019
Airbus Group	4,345	76	14-3-2011	14-4-2016
Airbus Group	3,797	66	14-10-2014	14-10-2019
Babcock & Wilcox	700	32	22-5-2012	8-6-2017
Babcock & Wilcox	500	33	11-5-2015	11-5-2020
Babcock & Wilcox	400	27	11-5-2015	11-5-2020
Babcock & Wilcox	600	36	11-5-2015	11-5-2020
BAE Systems	3,161	132	8-12-2010	8-12-2015
BAE Systems	3,269	131	12-12-2013	12-12-2018
General Dynamics	1,000	35	14-7-2011	14-7-2016
General Dynamics	1,000	125	21-6-2013	21-6-2018
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Huntington Ingalls Industries	489	27	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	35	23-9-2013	6-11-2018
Huntington Ingalls Industries	1,250	71	13-7-2015	13-7-2020
Jacobs Engineering	1,140	62	7-2-2014	7-2-2019
Jacobs Engineering	460	39	7-2-2014	7-2-2019
Jacobs Engineering	460	55	5-3-2015	5-3-2020
Jacobs Engineering	1,140	137	5-3-2015	5-3-2020

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Lockheed Martin	1,500	35	14-8-2014	14-8-2019
Northrop Grumman	575	22	31-3-2011	24-1-2017
Northrop Grumman	650	24	31-3-2011	24-1-2016

Source: Thomson ONE Banker, "Loans", viewed in August 2015.

Toronto-Dominion Bank underwrote bond issuances for an estimated amount of US\$ 170 million to the nuclear weapon companies since January 2012 (see table below).

Underwriting of bond issuances by Toronto-Dominion Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
General Dynamics	900	39	1-11-2012	15-11-2017
General Dynamics	1,000	43	1-11-2012	15-11-2022
General Dynamics	500	21	1-11-2012	15-11-2042
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015
Huntington Ingalls Industries	600	34	17-11-2014	15-12-2021

Source: Thomson ONE Banker, "Bond and share issue underwritings", viewed in August 2015.

Toronto-Dominion Bank owns or manages shares of the nuclear weapon companies for an amount of US\$ 1,822 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Shareholdings managed by Toronto-Dominion Bank

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	231	0.96	19-1-2015
Boeing	United States	1,044	1.03	31-3-2015
Jacobs Engineering	United States	50	0.89	31-3-2015
Lockheed Martin	United States	351	0.55	31-3-2015
Safran	France	146	0.50	31-5-2015

Source: Thomson ONE Banker, "Share ownership: most recent filings", viewed in August 2015.

Nuclear weapon producing Companies

This report identifies 26 companies operating in France, India, Italy, the Netherlands, the United Kingdom and the United States that are significantly involved in maintaining and modernising the nuclear arsenals of France, India, the United Kingdom and the United States. **This is not an exhaustive list.** These companies are providing necessary components and infrastructure to develop, test, maintain and modernise nuclear weapons. The contracts these companies have with nuclear armed countries are for materials and services to keep nuclear weapons in their arsenals. In other nuclear-armed countries – Russia, China, Pakistan and North Korea – the maintenance and modernization of nuclear forces is carried out primarily or exclusively by government agencies.

Aecom (United States)

Aecom provides professional technical and management support services and is part of the joint venture that manages the Nevada National Security Site (NNSS), previously known as the Nevada Test Site, a key fixture in the US nuclear weapons infrastructure.

Aerojet Rocketdyne

Aerojet Rocketdyne, formerly known as GenCorp is involved in the design, development and production of land- and sea-based nuclear ballistic missile systems for the United States. It is currently producing propulsion systems for Minuteman III and D5 Trident nuclear missiles.

Airbus Group (The Netherlands)

Airbus is a Dutch company that produces and maintains the M51 submarine-launched nuclear missiles for the French navy. Through joint venture MBDA, Airbus is also providing medium-range air-to-surface missiles to the French air force.

Babcock & Wilcox (United States)

Babcock & Wilcox manages and operates several US nuclear weapons facilities including the Lawrence Livermore National Laboratory, Los Alamos National Laboratory, and Nevada National Security Site (NNSS), previously known as the Nevada Test Site, each of which are engaged in various aspects of nuclear warhead modernisation.

BAE Systems (United Kingdom)

BAE Systems is involved in the US and UK Trident II (D5) strategic weapons system programmes. It is also the prime contractor for the US Minuteman III Intercontinental Ballistic Missile (ICBM) system. BAE Systems is also part of the joint venture providing medium-range air-to-surface missiles for France.

Bechtel (United States)

Bechtel manages the Los Alamos and Lawrence Livermore national laboratories in the US, which play an important role in the research, design, development and production of nuclear weapons. It also leads the joint venture for management and operation of the Y-12 National Security Complex in Tennessee and the Pantex Plant in Texas.

Boeing (United States)

Boeing is involved in the maintenance of the Minuteman III nuclear intercontinental ballistic missiles in the US arsenal. It also provides the US and UK Trident II (D5) with maintenance, repair, and rebuilding and technical services.

CH2M Hill (United States)

CH2M Hill is one of the joint venture partners in National Security Technologies (NSTec) that manages the Nevada National Security Site (NNSS), previously known as the Nevada Test Site, a key fixture in the US nuclear weapons infrastructure.

Engility Holdings (United States)

In February 2015, Engility acquired US-based TASC. It is involved in the research and development for the Solid Rocket Motor Modernization Study of the Minuteman III system for the US arsenal.

Finmeccanica (Italy)

Finmeccanica is involved in the design, development and delivery of two Transporter Erector Replacement Vehicles to support the US Intercontinental Ballistic Missile (ICBM) Minuteman III-fleet. It is also involved in the joint venture that supplies medium-range air-to-surface missiles for the French arsenal.

Fluor (United States)

Fluor is the lead partner responsible for the management and operation of the US Department of Energy's Savannah River Site and Savannah River National Laboratory, the only source of new tritium for the US nuclear arsenal.

General Dynamics (United States)

General Dynamics provides a range of engineering, development, and production activities to support to US and UK Trident II Strategic Weapons Systems. It is also involved in the guidance systems of the Trident II (D5) nuclear missiles of the US Navy.

Honeywell International (United States)

Honeywell International manages and operates the National Security Campus where an estimated 85% of the non-nuclear components for US nuclear weapons are produced. It is also involved in tritium production at the Savannah River Site and produced components for integrated circuits for the Trident II (D5) nuclear missiles of the US arsenal.

Huntington Ingalls Industries (United States)

Huntington Ingalls Industries is involved in management of the US nuclear arsenal, and tritium production at the Savannah River Site, the only source of new tritium for the US nuclear arsenal.

Jacobs Engineering (United States)

Jacobs Engineering Group is involved in the joint venture AWE-ML, which manages the UK Atomic Weapons Establishment, that designs, manufactures and maintains nuclear warheads for the UK.

Larsen & Toubro (India)

Larsen & Toubro is also responsible for developing the launcher system for the nuclear-capable short-range surface-to-air Akash missile system for the Indian nuclear arsenal.

Lockheed Martin (United States)

Lockheed Martin is responsible for the construction of the Trident II (D5) nuclear missiles for the US and UK. It is also involved in the production and maintenance of the Minuteman III nuclear intercontinental ballistic missiles for the US. It is part of the joint venture AWE-ML, which manages the UK Atomic Weapons Establishment, that designs, manufactures and maintains nuclear warheads for the UK.

MOOG (United States)

Moog develops launch vehicle and strategic missile controls for the Minuteman III and Trident (D5) missiles for the US nuclear arsenal.

Northrop Grumman (United States)

Northrop Grumman is involved with production and maintenance of the Minuteman III nuclear Intercontinental Ballistic Missiles (ICBM) for the US nuclear arsenal. It also provides support for the Trident II (D5) system for the US and the UK. It is also part of the joint venture that manages the Nevada National Security Site (NNSS), previously known as the Nevada Test Site, a key fixture in the US nuclear weapons infrastructure.

Orbital ATK (United States)

Orbital ATK (formerly known as ATK or Alliant Techsystems) produces rocket propulsion systems for Trident II submarine launched ballistic missiles. Orbital ATK is also responsible for refurbishing all three solid propellant stages of the Minuteman III

Intercontinental Ballistic Missile (ICBM) for the US. It is also involved in the joint venture for management and operation of the Y-12 National Security Complex in Tennessee and the Pantex Plant in Texas.

Raytheon (United States)

Raytheon is involved in a project to stretch the lifecycle of the guidance systems of the Trident II (D5) nuclear missiles of the US Navy. It is also involved in studies in support of the new W80-4 Long-Range Standoff missile for the US arsenal.

Safran (France)

Safran is part of a joint venture to build M51 submarine-launched nuclear missiles for the French navy, which each deliver multiple warheads. Its subsidiaries Snecma and Sagem provide the propulsion and navigation systems for these missiles.

Serco (United Kingdom)

Serco owns a one-third share in the joint venture AWE-ML, which runs the UK Atomic Weapons Establishment. It is responsible for manufacturing and maintaining the nuclear warheads for UK arsenal.

Textron (United States)

Textron designs and builds re-entry vehicles for the US Minuteman III inter-continental ballistic missile (ICBM).

Thales (France)

Thales is part of a joint venture to build the M51 submarine-launched nuclear missiles for the French navy

Walchandnagar Industries (India)

Walchandnagar Industries Limited supplies infrastructure and facilities for the production of the surface-to-air short-range Akash missile and the launching systems for Agni and Akash missiles for the Indian arsenal. It also manufactures the main thrust motor casing segment for the intercontinental ballistic Agni-V missile.

References

- ¹ Royal Bank of Canada, "Corporate Profile", *website Royal Bank of Canada* (<http://www.rbc.com/aboutus/index.html>), viewed 10 June 2015.
- ² Royal Bank of Canada, "Corporate Profile", *website Royal Bank of Canada* (<http://www.rbc.com/aboutus/index.html>), viewed 10 June 2015.
- ³ Royal Bank of Canada, written response to PAX dated 27 May 2015.
- ⁴ Royal Bank of Canada, "2012 Corporate Social Responsibility Report and Public Accountability Statement", 2012, p.59, available at http://www.rbc.com/community-sustainability/_assets-custom/pdf/RBC-CRR-Report-e-2012.pdf, viewed 10 June 2015; Royal Bank of Canada, written response to Profundo dated 27 May 2014.
- ⁵ Royal Bank of Canada, written response to Profundo dated 27 May 2014.
- ⁶ Royal Bank of Canada, written response to PAX dated 27 May 2015.
- ⁷ Royal Bank of Canada, written response to PAX dated 27 May 2015.