

WHERE IN THE WORLD ARE CANADIAN OIL AND GAS COMPANIES? 2017

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SUMMARY

Studying the year-over-year global presence of Canadian oil and gas companies in 218 countries provides a comprehensive picture of industry trends and patterns of exploration, production and services abroad. The “Where in the World” (WIW) project began tracking these trends in 2011. This paper examines data collected in 2017, which reveal a reduction in the level of Canadian companies’ activities overseas between 2015 and 2017.

In 2017, 118 Canadian oil and gas companies operated in 73 countries worldwide. The year highlighted the broad decline of Canadian oil and gas companies’ activities in terms of the total number of Canadian companies operating internationally, the number of countries that the companies are active in, and the total Canadian produced levels of oil, natural gas liquids (NGL) and natural gas.

There were 79 Canadian exploration and production (E&P) companies that were actively engaged in operations in 55 countries in 2017. This was a decrease of 29 companies and 22 countries from the 2015 Where in the World study. Canadian E&P companies produced a total of 721,488 barrels of oil equivalent a day (boe/d) of oil, NGL and natural gas in 30 of the 55 countries where Canadian activity occurred, a decrease of 36 per cent in comparison to 2015. In total, Canadian international production of hydrocarbons in 2017 was 0.497 per cent of the total international production of hydrocarbons.

North America continues to be the primary destination for both Canadian E&P and service companies' activities and operations. Of the 118 Canadian oil and gas companies that operated internationally, 67 operated in the United States.

In 2017, 39 service companies spread their expertise and technology to a total of 43 countries, 11 fewer countries than in 2015, and three fewer than in 2011, the year the "Where in the World" study began. It is noteworthy that the major reduction in the presence of service companies occurred in Africa, which accounted for approximately 21 per cent of this decrease. Nine of the 11 countries, or 82 per cent of the countries where service companies no longer operate were located in Africa.

Overall, 2017 will be distinguished for the notable and continued decrease of Canadian oil and gas companies compared to 2011, when 255 companies were active in 106 countries, and compared to 2015, when 161 companies were active in 96 countries.

INTRODUCTION

Begun in 2011 as an internal research tool for the development of the Extractive Resource Governance Program, this project seeks to answer the vital question: where in the world are Canadian oil and gas companies? To answer this question, we extract firm-level data for publicly traded Canadian companies in order to establish the location of their activities around the globe.¹ The data collected in the “Where in the World” (WIW) project are presented through a publicly accessible interactive world map, which allows users to explore a specific country or region over time. This map can be accessed online at <http://www.policyschool.ca/research-teaching/teaching-training/extractive-resource-governance/ergp-map/>.

For further information regarding the WIW project, including a comprehensive overview of the methodology please refer to <https://www.policyschool.ca/wp-content/uploads/2017/06/Where-in-the-World-Hojjati-Horsfield-Jordison-final.pdf>.

In addition, summary reports of the annual data collection for the 2011, 2012, 2013 and 2015 years of analysis are also available at <https://www.policyschool.ca/research-teaching/teaching-training/where-in-the-world-project/>.

This report provides an account of emerging trends in the 2017 year of study and highlights variations in the level of global activities of Canadian oil and gas (O&G) companies between 2015 and 2017. In 2017, a total of 118 Canadian O&G companies engaged in exploration, production and service activities in 73 countries worldwide. Since the 2015 study, there has been an overall decrease in Canadian exploration and production (E&P) and service companies operating globally. There was also a decrease in Canadian production of oil, natural gas and natural gas liquids (NGL) in six of seven regions of study. This is in contrast to the trends witnessed from 2013 to 2015 where Canadian production of hydrocarbons increased in six of seven regions. In 2017, the number of countries in which E&P and service companies had operations also decreased from 2015.

Section I of this report, similar to the previous reports in this series, begins with a regional overview of the international presence of Canadian E&P companies, followed by a summary of country-level activities for 2017. Section II provides the same analysis for Canadian O&G service companies.

¹ The WIW project examines the global activities of Canadian oil and gas companies in 218 countries spanning seven international regions of analysis. They are as follows: Africa; Asia and Oceania; Central and South America; Eurasia; Europe; Middle East and North America. For a complete list of countries examined in the WIW project, refer to Appendix A.

I. WHERE IN THE WORLD ARE CANADIAN EXPLORATION AND PRODUCTION COMPANIES?

The international presence of Canadian² E&P companies extended to 55 countries in 2017, a decrease of 22 countries since 2015. In total, 79 E&P companies engaged in exploration, development and production of crude oil and natural gas reserves around the world. Of the 79 Canadian E&P companies, 43 had some level of international production,³ six fewer than in 2015. In 2017, Canadian E&P companies produced a total of 721,488 barrels of oil equivalent per day (boe/d),⁴ accounting for 0.497 per cent of the world production of oil, natural gas and NGL. This is a decrease of 0.30 percentage points in the share of worldwide production since 2015 and coincides with a decrease in the number of active E&P companies, which decreased by 27 per cent during the same time period.

A. REGIONAL OVERVIEW

Table 1 presents the number of active Canadian E&P companies in the seven regions of analysis in 2017 and compares it to the regional presence of companies in 2015. In 2017, North America continued to remain the primary destination for Canadian exploration and production operations, as it has since the beginning of the WIW project in 2011. However, for the second straight year, the number of active Canadian E&P companies in North America continued to decrease, with a reduction of 29 per cent across six of the seven regions of analysis. The only region without a decrease in activity was Eurasia, where three E&P companies were active in both 2015 and 2017. Africa represented the largest decrease in Canadian E&P activity, where 13 companies ceased operations, resulting in a decline of 54 per cent from 2015.

² For the purposes of the WIW project, an O&G company is defined to be Canadian according to two selection criteria: (i) The company must have its headquarters (or head office) in Canada; and (ii) the company must be publicly traded on a Canadian stock exchange.

³ Information about international operations is not uniformly represented across regulatory filings for similar firms in the oil and gas industry. For instance, in some cases an E&P company might indicate it is active in a particular region or country, but might not specify more detailed information about its activities, such as production levels.

⁴ The aim of the WIW project is to examine the international presence of Canadian companies in foreign countries. As such, this project does not provide information related to the activities of Canadian companies within Canada's borders, such as the annual levels of oil, NGL and natural gas produced within Canada.

TABLE 1 NUMBER OF CANADIAN E&P COMPANIES BY REGION, 2015 AND 2017

Region	2015			2017		
	Ranking	Number of Active Companies	Number of Countries Activity is Spread Across	Ranking	Number of Active Companies	Number of Countries Activity is Spread Across
Africa	2	24	28	5	11	17
Asia and Oceania	5	19	15	3	14	11
Central and South America	4	20	9	4	13	7
Eurasia	7	3	2	7	3	2
Europe	3	21	14	2	15	13
Middle East	6	12	6	6	6	3
North America	1	52	3	1	37	2
Total Worldwide (Excluding Canada)	N/A	108	77	N/A	79	55

Source: “Where in the World are Canadian Oil and Gas Companies?” (2017).⁵

The international presence of Canadian E&P companies has continued to decline from 2011 levels, when there were 191 active companies worldwide. Between 2013 and 2015, Canadian E&P companies ceased operations in seven countries, declining from 84 countries of operation to 77. However, 2017 witnessed the most drastic reduction in the international presence of Canadian E&Ps yet. A total of 79 active E&Ps were present in 55 countries, which is the lowest recorded levels of activity in the WIW project’s history and represents a decrease of 29 per cent in comparison to 2015, and 43 per cent compared to 2011, when this project began. There are various factors that may have contributed to this drastic decline, including technical factors such as oil prices and a country’s hydrocarbon-export capacity. There are also country-related, non-technical factors such as political risk, marginal effective tax rates and the overall economy that play a significant role in affecting Canadian oil and gas companies’ outward flow of foreign direct investment. An econometric analysis of these factors and their effects on foreign direct investment will be examined in an upcoming School of Public Policy publication titled “Why in the World are Canadian Oil and Gas Companies Reducing International Activities?”.⁶ To illustrate the extent of the impact of Canadian exploration activities worldwide, excluding Canada, Table 2 displays the level of total production of oil, NGL and natural gas in each region by Canadian E&P companies in 2017. The table also includes the 2015 data to compare variations to the last study, particularly the change in total production by Canadian companies between years.

⁵ For further background information regarding the WIW project, including the methodology and sources of data extraction, see Niloo Hojjati, Kai Horsfield and Shantel Jordison, “Where in the World are Canadian Oil and Gas Companies? An Introduction to the Project,” University of Calgary *School of Public Policy Research Paper*, vol. 13 (2017).

⁶ For a more in-depth analysis of the non-technical factors affecting Canadian oil and gas operations globally, please refer to the upcoming publication: Ergete Ferede and Braeden Larson, “Why in the World are Canadian Oil and Gas Companies Reducing International Activities?” University of Calgary School of Public Policy (Forthcoming).

TABLE 2 OIL, NGL AND NATURAL GAS PRODUCTION LEVELS OF CANADIAN E&P COMPANIES BY REGION, 2015 AND 2017

Region	2015			2017			
	Ranking	Total Production (boe/d)	Total Production by Canadian Companies (boe/d)	Ranking	Total Production (boe/d)	Total Production by Canadian Companies (boe/d)	Change in Total Production by Canadian Companies (%)
Africa	4	11,872,958	104,868	5	11,728,249	41,324	-61%
Asia and Oceania	5	17,172,115	73,998	4	17,565,082	67,848	-8%
Central and South America	2	10,650,705	245,338	2	10,142,795	157,627	-36%
Eurasia	7	26,116,699	235	7	27,505,170	931	296%
Europe	3	7,384,460	172,747	3	7,741,212	130,364	-25%
Middle East	6	40,545,984	3,462	6	42,648,485	3,196	-8%
North America	1	24,571,312	525,998	1	27,781,690	320,198	-39%
Total Worldwide (Excluding Canada)	N/A	142,314,231	1,126,648	N/A	145,112,683	721,488	-36%

Source: “Where in the World are Canadian Oil and Gas Companies?” (2017).⁵

Between 2013 and 2015, total Canadian production of oil, NGL and natural gas increased by 37 per cent to 1,126,648 boe/d, and regional production increased in six of seven regions (excluding Eurasia). However, 2017 Canadian production worldwide decreased by 36 per cent, back to near 2013 levels of production. Production by Canadian E&Ps also decreased in six of seven regions, except in Eurasia, where production increased from 235 boe/d to 931 boe/d. Canadian production increased in Eurasia due to Zenith Energy Ltd. and Condor Petroleum Inc. expanding their production of oil and NGLs in Azerbaijan and Kazakhstan respectively. Caspian Energy Inc. also produced oil and NGL in Kazakhstan for the first time in 2017. While production by Canadian companies in the six regions was decreasing, total production of oil, NGL and natural gas in Asia and Oceania, Eurasia, Europe, the Middle East and North America continued to grow. The largest gross decrease in Canadian production occurred in North America, where 205,800 boe/d less was produced than in 2015. However, 44 per cent of Canadian E&Ps’ global production of oil, NGL and natural gas continues to come from North America. In Africa, there was a decline of 61 per cent of Canadian E&P production between 2015 and 2017, making the region the fifth-largest Canadian production centre.

B. COUNTRY OVERVIEW

In 2017, the principal hosts of Canadian E&P international operations were the United States and Colombia. The United Kingdom, which had the second-highest number of Canadian E&P companies active in 2015, went from nine companies to two in 2017. The United States experienced a decrease in Canadian activity by 33 per cent, with only 51 companies now active in the country. Between 2015 and 2017, of the countries in the top five by number of Canadian E&P companies,

only two, France and Italy, saw increases in Canadian E&P activity. Every other country recognized on Table 3, with the exception of Mexico, saw reductions in the number of active Canadian E&Ps during this time period. France had one additional new company operating in the country compared to 2015, while the presence of Canadian companies doubled in Italy (from two companies in 2015 to four in 2017). Meanwhile, Argentina is not noted in Table 3 as a top-five country by number of Canadian E&Ps for the first time since the start of the WIW project in 2011. From 2011 to 2015 there were between five and 10 Canadian E&Ps operating in Argentina. However, in 2017, there were only two Canadian E&P companies operating in the country, a decrease of three companies since 2015.

TABLE 3 TOP FIVE COUNTRIES BY NUMBER OF CANADIAN E&P COMPANIES, 2015 AND 2017

Country	2015		2017	
	Ranking	Number of Active Companies	Ranking	Number of Active Companies
Australia	5	8	3	6
Colombia	2	9	2	7
France	7	3	4	4
Indonesia	5	5	5	3
Iraq	4	6	4	4
Italy	8	2	4	4
Mexico	7	3	5	3
United States	1	51	1	34
Total Worldwide (Excluding Canada)	N/A	108	N/A	79

Source: "Where in the World are Canadian Oil and Gas Companies?" (2017).⁵

Table 4 highlights the countries in which Canadian E&P companies produce the largest shares of total oil, NGL and natural gas production. In 2017, Côte d'Ivoire ranked as the top country with the highest levels of production resulting from Canadian E&P companies. It is worthwhile to highlight that one company, Canadian Natural Resources Ltd., was responsible for the entirety of the 25-per-cent production share in Côte d'Ivoire. This share is a decrease from levels in 2015, when Canadian companies in Côte d'Ivoire produced 34 per cent of the total production in the country. While this decrease was large, it was not as drastic as that which occurred in Albania and France, where in 2015 Canadian E&Ps had the first- and second-largest shares of total production, respectively. Albania in particular, went from zero Canadian production of oil, NGL and natural gas in 2013, to 19,385 boe/d in 2015, representing 94 per cent of the total production in Albania for that year. However, in 2017, the production levels went to zero once again. The reason behind these significant variations in Albania over the years is due to the operations of Bankers Petroleum Ltd. While the company has had a presence in the country since 2013, it did not initially have any production. In 2015, Bankers Petroleum began

producing hydrocarbons in the country, and was responsible for 94 per cent of the country's total production. By 2017, Bankers Petroleum was no longer active in the country, with zero production.

Meanwhile, in France, Canadian E&P production of oil, NGL and natural gas in 2015 represented 73 per cent of total production. This is due to the low production of hydrocarbons by E&P companies that are non-Canadian, which approximately totalled a mere 4,694 boe/d, compared to levels resulting from Canadian production of 12,429 boe/d. In 2017, while Canadian production increased in France by 1,095 boe/d since 2015, E&P companies that were not Canadian increased production by 59,400 boe/d over the same period. This is why, even though Canadian production has increased, the share of total production attributable to Canadian companies has in fact dropped from 73 per cent in 2015 to 17 per cent in 2017. While not noted in these tables, the country with the largest total production by Canadian E&Ps was the United States, where they produced 318,576 boe/d in 2017.

TABLE 4 TOP FIVE COUNTRIES BY PERCENTAGE OF CANADIAN OIL, NGL AND NATURAL GAS PRODUCTION AS A SHARE OF TOTAL COUNTRY PRODUCTION, 2015 AND 2017

Country	2015			2017			
	Ranking	Total Production (boe/d)	Total Production by Canadian Companies (boe/d)	Ranking	Total Production (boe/d)	Total Production by Canadian Companies (boe/d)	Share of Total Production by Canadian Companies (%)
Bangladesh	6	423,640	10,406	5	435,183	9,489	2.18%
Colombia	4	1,184,443	229,822	3	1,014,927	148,193	14.60%
Côte d'Ivoire	3	67,541	23,579	1	94,473	24,002	25.41%
France	2	17,123	12,429	2	77,618	13,524	17.42%
United Kingdom	5	1,601,708	118,504	4	1,674,635	93,326	5.57%
Total Worldwide (Excluding Canada)	N/A	142,314,231	1,126,648	N/A	145,112,683	721,488	0.50%

Source: "Where in the World are Canadian Oil and Gas Companies?" (2017).⁵

C. COMPANY HIGHLIGHTS

This section presents Canadian E&P companies that are the most active internationally in terms of countries of operation and production of oil, NGL and natural gas. Table 5 presents the top three E&P companies in terms of active international operations in 2017. Of the 79 Canadian E&P companies that were engaged in international operations, only 24 operated in more than one country at a time outside of Canada.

TABLE 5 TOP THREE CANADIAN E&P COMPANIES BY NUMBER OF COUNTRY OPERATIONS, 2015 AND 2017

Company	2015		2017	
	Ranking	Number of Countries with Recorded E&P Activity	Ranking	Number of Countries with Recorded E&P Activity
Canadian Natural Resource Ltd.	6	5	3	5
Suncor Energy Ltd.	5	6	2	6
Vermilion Energy Inc.	3	8	1	9
Total Worldwide (Excluding Canada)	N/A	77	N/A	55

Source: “Where in the World are Canadian Oil and Gas Companies?” (2017).⁵

The three companies with the largest spread of operations are Vermilion Energy Inc., Suncor Energy Ltd., and Canadian Natural Resources Ltd. (CNRL). In 2017, Suncor and CNRL entered the top-three-ranked companies with the highest number of country operations, while maintaining the same level of international activity as 2015. Vermilion, which ranked third in both 2013 and 2015, increased its spread of operations to one more country than in 2015 and now ranks first. Meanwhile, Canadian Overseas Petroleum Ltd., which ranked second in the previous year with operations in nine countries, experienced a decrease of 44 per cent in its country operations. It is also worthwhile to mention, as stated in the 2015 edition of this paper series, that Repsol Oil and Gas Canada Inc. (Formerly Talisman Energy Inc.) is no longer considered to be a Canadian company as defined by the methodology of the WIW project.⁷ Repsol/Talisman previously had the largest spread of operations, with activities in 11 countries in 2015 and 15 in 2013.

Table 6 highlights the top five Canadian E&P companies based on their levels of total international production of oil, NGL and natural gas in 2017, while outlining production levels in the 2015 year of study.

⁷ In the second quarter of the 2015 fiscal year, Repsol S.A. purchased Talisman Energy Inc. In our methodology, a Canadian company that operates for any length of time during a fiscal year as reflected in its publicly available regulatory filings is considered to be “active” in a country. As such, Talisman was still considered active and included in the 2015 WIW study given that its annual public filings had recorded activities in that fiscal year, even though at year-end the company became a subsidiary of a non-Canadian company (as defined by the methodology of this project). For more information on the Repsol purchase of Talisman, see Braeden Larson, “Where in the World are Canadian Oil and Gas Companies? 2015,” University of Calgary *School of Public Policy Research Paper*, vol. 11.16 (2018).

TABLE 6 TOP FIVE CANADIAN E&P COMPANIES' LEVEL OF OIL, NGL AND NATURAL GAS PRODUCTION, 2015 AND 2017

Company	2015			2017		
	Ranking	Total Company Production (boe/d)	Number of Countries With Recorded Production (boe/d)	Ranking	Total Company Production (boe/d)	Number of Countries With Recorded Production (boe/d)
Canadian Natural Resources Ltd.	6	51,795	2	5	53,928	2
Encana Corp.	1	268,267	1	1	183,500	1
Enerplus Corp.	5	66,541	1	4	65,034	1
Frontera Energy Corp. (previously Pacific Rubiales Energy Corp.)	3	154,472	2	2	70,082	2
Suncor Energy Inc.	4	67,400	2	3	67,900	2
Total Worldwide (Excluding Canada)	N/A	1,126,648	32	N/A	721,488	30

Source: "Where in the World are Canadian Oil and Gas Companies?" (2017).⁵

In 2017, Repsol/Talisman is not ranked as a top Canadian producer of oil, NGL and natural gas for the first time since the start of the study in 2011. As previously explained, this is a result of the company not fulfilling the necessary criteria of a "Canadian company" as defined by the methodology of this project.² With Repsol/Talisman no longer included in this study, CNRL has become a top-five Canadian producer of oil, NGL and natural gas, producing 53,928 boe/d in 2017, an increase of four per cent since 2015. Encana Corp. is still the largest Canadian producer of international oil, NGL and natural gas, producing 183,500 boe/d, with all production located in the United States. However, the company produced 32-per-cent less in hydrocarbons than in 2015. Encana's production in the United States is responsible for 25 per cent of Canadian E&P companies' international production, overall. Meanwhile, Frontera Energy Corp. (formerly Pacific Rubiales Energy Corp./Pacific Exploration and Production Corp.) experienced the largest decrease in production of oil, NGL and natural gas between 2015 and 2017. The company's production in Colombia and Peru decreased from 154,472 boe/d in 2015 to 70,082 boe/d in 2017, a drastic decrease of 55 per cent. Lastly, between 2015 and 2017, the number of countries where Canadian E&P companies recorded production of oil, NGL and natural gas declined from 32 to 30. As mentioned above, during this same time period there was a decrease of 22 countries where any exploration and production activity occurred by Canadian companies. This highlights that stagnant, low oil prices dissuade companies from exploration activities, while companies that are already producing hydrocarbons are more likely to continue operations even amid poor market conditions.

II. WHERE IN THE WORLD ARE CANADIAN O&G SERVICE COMPANIES OPERATING?

In 2017, 39 Canadian O&G service companies provided technical, production and drilling expertise to 43 countries around the world. This section will provide an account of the international presence of service companies. Similar to the previous section, it will begin with a regional description of the level of service activities, followed by a brief overview of Canadian service operations on a country basis. Finally, there will be highlights of the most notable service companies in 2017.

A. REGIONAL OVERVIEW

In 2017, Canadian O&G service companies' activities decreased in all seven regions compared to 2015, with 14 fewer companies active than in 2015, representing a decrease of 26 per cent. For the fourth straight year North America and Asia and Oceania had the two largest concentrations of Canadian service companies. However, there were declines in the presence of Canadian service companies in both North America and Asia and Oceania, by 31 per cent and 20 per cent, respectively. The largest decrease of Canadian service company activity occurred in Africa, where a single service company, Major Drilling Group International Inc., remained active in Mozambique and Burkina Faso (as compared to four companies being active in Africa in 2015). Overall, 2017 witnessed a major decrease of approximately 82 per cent in the number of countries in the region that Canadian service companies were active in between 2015 and 2017. The drop of activity in African countries in 2017 represents the majority of the reduction of countries that service companies' activity was spread across. Between 2015 and 2017, Canadian service companies operated in 11 fewer countries; nine were from Africa.

TABLE 7 NUMBER OF CANADIAN O&G SERVICE COMPANIES BY REGION, 2015 AND 2017

Region	2015			2017		
	Ranking	Number of Active Service Companies	Number of Countries Activity is Spread Across	Ranking	Number of Active Service Companies	Number of Countries Activity is Spread Across
Africa	6	4	11	7	1	2
Asia and Oceania	2	15	11	2	12	10
Central and South America	3	9	10	6	5	10
Eurasia	7	9	4	4	7	4
Europe	4	9	10	5	6	9
Middle East	5	11	6	3	8	6
North America	1	48	2	1	33	2
Total Worldwide (Excluding Canada)	N/A	53	54	N/A	39	43

Source: "Where in the World are Canadian Oil and Gas Companies?" (2017).⁵

B. COUNTRY OVERVIEW

For the fourth straight year of study, in 2017 the United States, Mexico and Australia were the top three country destinations for Canadian O&G service companies. Between 2013 and 2015, the number of service companies increased by 14 per cent to a total of 45 service companies in the United States. However, in 2017, 12 of these service companies ceased operations in the country, resulting in a decrease of 33 per cent. There was also a reduction in the presence of service companies in Mexico and Australia, where the number of active companies dropped by 36 per cent and 14 per cent, respectively. Another interesting trend that occurred in 2017 was that, for the first time since the inception of the WIW project in 2011, Indonesia is now ranked as a top-five destination for active Canadian service companies. While Indonesia had the same number of active Canadian service companies in both 2015 and 2017 (a total of four), it is included in the top-five-ranking countries list this year as there was a decline of 40 per cent in the United Kingdom and as such, the U.K. is not included in the top eight countries listed in Table 8. From 2011 to 2015, the United Kingdom had the fifth-largest number of Canadian service companies operating, with the exclusion of the 2012 year, when it had the seventh-largest number.

TABLE 8 TOP COUNTRIES BY NUMBER OF CANADIAN O&G SERVICE COMPANIES, 2015 AND 2017

Country	2015		2017	
	Ranking	Number of Active Service Companies	Ranking	Number of Active Service Companies
Argentina	4	6	4	5
Australia	3	7	3	6
China	6	4	5	4
Indonesia	6	4	5	4
Mexico	2	11	2	7
Russia	3	7	4	5
United Arab Emirates	5	5	5	4
United States	1	45	1	33
Total Worldwide (Excluding Canada)	N/A	53	N/A	39

Source: "Where in the World are Canadian Oil and Gas Companies?" (2017).⁵

C. COMPANY HIGHLIGHTS

For the third consecutive year, Shawcor Ltd., Enerflex Ltd. and Major Drilling Group International Inc. are the three most active Canadian service companies. It is worthwhile to note that all three companies operated in two fewer countries in 2017 than in 2015. Precision Drilling Corp. is not included in the top three Canadian service companies by number of country operations in Table 9 below, but it is worth mentioning. Precision had the fourth-largest spread of activity with a total

of six countries. While the level of Precision’s operations on its own is ordinary, it is worth highlighting its activities in order to demonstrate the expansiveness of the operations of the top three companies, which were spread across 14 to 16 countries. In fact, only 17 of the 39 service companies that operated internationally in 2017 operated in more than one country, while only 11 operated in three or more countries. Interestingly, all three of the top-ranked companies actually experienced a decrease in 2017, while still maintaining a relatively large international footprint.

TABLE 9 TOP THREE CANADIAN SERVICE COMPANIES BY NUMBER OF COUNTRY OPERATIONS, 2015 AND 2017

Company	2015		2017	
	Ranking	Number of Countries with Recorded Service Activity	Ranking	Number of Countries with Recorded Service Activity
Enerflex Ltd.	2	17	2	15
Major Drilling Group International Inc.	3	16	3	14
Shawcor Ltd.	1	18	1	16
Total Worldwide (Excluding Canada)	N/A	54	N/A	43

Source: “Where in the World are Canadian Oil and Gas Companies?” (2017).⁵

CONCLUSION

In 2017, 118 Canadian O&G companies operated in 73 countries worldwide. This is in comparison with 161 companies in 2015 and 226 in 2013. The 2017 study continued to highlight the decrease in Canadian E&Ps’ international operations, which have been declining since 2011 when 191 companies operated in 96 countries. The 2017 year of study represented the largest year-over-year decrease in E&P company operations and the number of countries where activity took place in the history of the WIW project, with 27-per-cent fewer companies operating and total Canadian production of oil, NGL and natural gas decreasing by 36 per cent. The 2017 study also represented the most significant year-over-year decrease in service company activity, with a decline of 26 per cent. The United States continues to be the primary destination for Canadian O&G company activity with 67 companies active in the country, with 33 of those companies focused on O&G service activities. The region with the largest Canadian share of total production of oil, NGL and natural gas was Europe, with 1.7 per cent of total regional production coming from Canadian companies. The country in Europe where Canadian E&Ps produced the largest share of total hydrocarbons was France, followed by the United Kingdom. For further information and country profiles, please visit the accompanying website: <http://www.policyschool.ca/research-teaching/teaching-training/extractive-resource-governance/ergp-map/>.

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APPENDIX A: COUNTRIES OF ANALYSIS

This section outlines the list of countries examined in the WIW project. The countries are organized according to the designation system employed by the U.S. Energy Information Administration (EIA).

TABLE A1 COUNTRIES OF ANALYSIS BY U.S. EIA DESIGNATION SYSTEM

Region: Africa	Region: Asia and Oceania	Region: Central and South America
Algeria	Afghanistan	Antarctica
Angola	American Samoa	Antigua and Barbuda
Benin	Australia	Argentina
Botswana	Bangladesh	Aruba
Burkina Faso	Bhutan	Bahamas, The
Burundi	Brunei	Barbados
Cameroon	Burma (Myanmar)	Belize
Cape Verde	Cambodia	Bolivia
Central African Republic	China	Brazil
Chad	Cook Islands	Cayman Islands
Comoros	Fiji	Chile
Congo (Brazzaville)	French Polynesia	Colombia
Congo (Kinshasa)	Guam	Costa Rica
Côte d'Ivoire (Ivory Coast)	Hong Kong	Cuba
Djibouti	India	Dominica
Egypt	Indonesia	Dominican Republic
Equatorial Guinea	Japan	Ecuador
Eritrea	Kiribati	El Salvador
Ethiopia	Korea, North	Falkland Islands (Islas Malvinas)
Gabon	Korea, South	French Guiana
Gambia, The	Laos	Grenada
Ghana	Macau	Guadeloupe
Guinea	Malaysia	Guatemala
Guinea-Bissau	Maldives	Guyana
Kenya	Micronesia	Haiti
Lesotho	Mongolia	Honduras
Liberia	Nauru	Jamaica
Libya	Nepal	Martinique
Madagascar	New Caledonia	Montserrat
Malawi	New Zealand	Netherlands Antilles
Mali	Niue	Nicaragua
Mauritania	Pakistan	Panama
Mauritius	Papua New Guinea	Paraguay
Morocco	Philippines	Peru
Mozambique	Samoa	Puerto Rico
Namibia	Singapore	Saint Kitts and Nevis
Niger	Solomon Islands	Saint Lucia
Nigeria	Sri Lanka	Saint Vincent/Grenadines
Reunion	Taiwan	Suriname
Rwanda	Thailand	Trinidad and Tobago
Saint Helena	Timor-Leste (East Timor)	Turks and Caicos Islands
Sao Tome and Principe	Tonga	Uruguay
Senegal	Tuvalu	Venezuela
Seychelles	U.S. Pacific Islands	Virgin Islands, British
Sierra Leone	Vanuatu	Virgin Islands, U.S.
Somalia	Vietnam	
South Africa	Wake Island	
Sudan and South Sudan		
Swaziland		
Tanzania		
Togo		
Tunisia		
Uganda		
Western Sahara		
Zambia		
Zimbabwe		

Source: U.S. Energy Information Administration website, "Countries," <http://www.eia.gov/countries/#allcountries>.

**TABLE A2 COUNTRIES OF ANALYSIS BY U.S. EIA DESIGNATION SYSTEM
(CONTINUED)**

Region: Eurasia	Region: Europe	Region: Middle East	Region: North America
Armenia	Albania	Bahrain	Bermuda
Azerbaijan	Austria	Iran	Greenland
Belarus	Belgium	Iraq	Mexico
Estonia	Bosnia and Herzegovina	Israel	Saint Pierre and Miquelon
Georgia	Bulgaria	Jordan	United States
Kazakhstan	Croatia	Kuwait	
Kyrgyzstan	Cyprus	Lebanon	
Latvia	Czech Republic	Oman	
Lithuania	Denmark	Palestinian Territories	
Moldova	Faroe Islands	Qatar	
Russia	Finland	Saudi Arabia	
Tajikistan	France	Syria	
Turkmenistan	Germany	United Arab Emirates	
Ukraine	Gibraltar	Yemen	
Uzbekistan	Greece		
	Hungary		
	Iceland		
	Ireland		
	Italy		
	Luxembourg		
	Macedonia		
	Malta		
	Montenegro		
	Netherlands		
	Norway		
	Poland		
	Portugal		
	Romania		
	Serbia		
	Slovakia		
	Slovenia		
	Spain		
	Sweden		
	Switzerland		
	Turkey		
	United Kingdom		

Source: U.S. Energy Information Administration website, "Countries,"
<http://www.eia.gov/countries/#allcountries>.

About the Author

Braeden Larson is a research associate with the Extractive Resource Governance Program (ERGP) at The School of Public Policy. Within the ERGP, Braeden's research focuses on the "Where in the World are Canadian Oil and Gas Companies?" project, which collects data on publicly traded Canadian oil and gas companies' operations around the world. Along with the "Where in the World" project, Braeden is working on the "Why in the World" research project, which provides an econometric analysis of the "Where in the World" data. He is a contributing researcher to the ERGP's Mexico project. Braeden holds a master's degree in public policy from the University of Calgary and bachelor of arts degree with honours in politics from Acadia University.

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