

## WHERE IN THE WORLD ARE CANADIAN OIL AND GAS COMPANIES? 2011 \*

Niloo Hojjati, Kai Horsfield and Shantel Jordison

### INTRODUCTION

Canada is well recognized for its prominence as an oil and gas jurisdiction in regard to its resources within its own borders. However, there is little available analysis and information regarding the presence of Canadian companies in the international arena. 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, firm-level data from publicly traded Canadian companies are collected and analyzed, culminating in the development of an online tool for public use. This map allows interested users to geographically locate jurisdictions around the world where publicly traded Canadian oil and gas (hereafter O&G) companies have activities, over time. The map is available at <http://www.policyschool.ca/research-teaching/teaching-training/extractive-resource-governance/ergp-map/>. This project, hereafter referred to as the WIW project, provides a measure that quantifies Canadian oil and gas activity around the world and identifies key jurisdictions that are of particular interest to Canadian O&G companies. The data collected holds value for various stakeholders such as governments, regulatory bodies, academia, civil society, and industry across the extractive resource spectrum.

Prior to further discussion regarding the 2011 annual data results, it is valuable to provide a brief overview of the methodology used in the collection of data for this research project. The WIW project examines the global activities of Canadian O&G companies in 218 countries spanning seven international regions of analysis.<sup>1</sup> The aim of the WIW project is to examine the international presence of Canadian companies in foreign countries. As such, it is important to note that this project does not provide information related to the activities of Canadian companies

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<sup>1</sup> The regions of analysis in the WIW project are organized according to the designation system employed by the U.S. Energy Information Administration (EIA). The regions are as follows: Africa; Asia and Oceania; Central and South America; Eurasia; Europe; Middle East; and North America. The complete list of countries examined in the WIW project is outlined in Appendix A.

within Canada's border, such as the number of active companies or levels of production. The focus of this project is on two types of Canadian O&G companies, namely exploration and production (E&P) companies and service companies. For the purposes of the WIW project, an O&G company is defined to be "Canadian" if it meets two selection criteria: (i) the company must have its headquarters (or head office)<sup>2</sup> in Canada; and (ii) the company must be publicly traded on a Canadian exchange.<sup>3</sup> Companies must fulfill both selection criteria simultaneously to be considered a Canadian O&G company, and thus be included in the findings of this project.

This report, the first in a series, provides an extensive account of annual data collected in the WIW project for the 2011 year of study. It begins with an overview of the international activities of Canadian E&P companies, presenting the level of activities in a regional context, as well as on a country basis. The report then continues by providing the same analysis for Canadian O&G service companies.

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<sup>2</sup> For the purposes of the WIW project, a company's business address, as listed in its annual financial statement, is used as the primary indicator of the location of its headquarters.

<sup>3</sup> Currently, there are three recognized stock exchanges in Canada: the Toronto Stock Exchange (TSX); the TSX Venture Exchange (TSX-V); and the Canadian National Stock Exchange (CNSX).

## OÙ DANS LE MONDE SE TROUVENT LES COMPAGNIES PÉTROLIÈRES ET GAZIÈRES CANADIENNES ? 2011\*

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### INTRODUCTION

Le Canada est reconnu pour sa position de premier plan quant aux ressources pétrolières et gazières à l'intérieur de ses frontières. Cependant, peu d'analyses et d'information documentent la présence des compagnies canadiennes sur la scène internationale. Amorcé en 2011 à titre d'outil interne de recherche pour la mise sur pied du Programme de gouvernance pour les ressources extractives, le présent projet vise à répondre à la question suivante : *où dans le monde se trouvent les compagnies pétrolières et gazières canadiennes?* Pour y répondre, nous avons recueilli et analysé les données des sociétés canadiennes cotées en bourse, ce qui a mené au développement d'un outil accessible en ligne. La carte présentée sur le site Web permet aux usagers de localiser les régions du monde où les sociétés pétrolières et gazières canadiennes cotées en bourse mènent leurs activités, pour une année donnée. Elle est accessible à l'adresse suivante : <http://www.policyschool.ca/research-teaching/teaching-training/extractive-resource-governance/ergp-map/>. Ce projet donne une mesure qui quantifie l'activité pétrolière et gazière canadienne dans le monde et identifie les régions d'intérêt particulier pour les pétrolières et gazières canadiennes. Les données recueillies sont utiles à diverses parties intéressées comme les gouvernements, les organismes de réglementation, les universités, la société civile et l'industrie touchant aux ressources extractives.

Avant d'approfondir la discussion sur les résultats de 2011, il convient de donner un bref aperçu de la méthodologie employée pour la collecte des données aux fins de ce projet. Le projet se penche sur l'activité mondiale des pétrolières et gazières canadiennes dans 218 pays regroupés en sept régions internationales<sup>1</sup> aux fins

\* Cette recherche a été soutenue financièrement en partie par le gouvernement du Canada via Diversification de l'économie de l'Ouest Canada.

<sup>1</sup> Les régions pour l'analyse sont organisées selon le système de désignation de l'Agence américaine d'information sur l'énergie (EIA). Les régions sont les suivantes : Afrique; Asie et Océanie; Amérique centrale et du Sud; Eurasie; Europe; Moyen-Orient; et Amérique du Nord. La liste complète des pays étudiés dans le cadre du projet se trouve à l'annexe A.

de l'analyse. L'objectif du projet est d'étudier la présence internationale des compagnies canadiennes à l'étranger. Il est important de noter que le projet ne donne pas d'information sur les activités des compagnies canadiennes à l'intérieur des frontières du pays, comme le nombre de compagnies actives ou les niveaux de production. Le projet porte sur deux types de pétrolières et gazières canadiennes : d'une part, les compagnies d'exploration et de production, de l'autre, les sociétés de services. Aux fins du projet, les pétrolières et gazières sont désignées « canadiennes » si elles répondent aux deux critères suivants : (i) le siège social<sup>2</sup> de la compagnie doit se trouver au Canada; et (ii) les titres de la compagnie doivent se négocier sur le marché boursier canadien<sup>3</sup>. Les compagnies doivent répondre aux deux critères à la fois pour être considérées comme pétrolières et gazières canadiennes et pour figurer dans les résultats du projet.

Le présent rapport, premier de la série, donne un vaste compte rendu des données recueillies dans le cadre du projet pour l'année 2011. On y présente d'abord un aperçu de l'activité internationale des compagnies canadiennes d'exploration et de production, en présentant le degré d'activité dans le contexte régional ainsi qu'en fonction des pays. Ensuite, on retrouve la même analyse pour les sociétés canadiennes de services.

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<sup>2</sup> Aux fins du projet, la domiciliation d'entreprise, tel qu'indiquée dans ses états financiers, est employée comme principal indicateur de l'emplacement du siège social.

<sup>3</sup> Actuellement, il y a trois marchés boursiers reconnus au Canada : la Bourse de Toronto (TSX); la Bourse de croissance TSX (TSX-V); et la Bourse nationale canadienne (CNSX).

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

In 2011, Canadian E&P companies engaged in activities in every region of the world, participating in the exploration and production of crude oil and natural gas reserves. Canadian E&P companies accounted for 0.75 per cent of worldwide oil, natural gas liquids (NGL), and natural gas production, producing a total amount of 995,814 barrels of oil equivalent per day (boe/d) outside of Canada. This represents approximately 16 per cent of total oil, NGL, and natural gas production within Canada's border in 2011.<sup>4</sup> In total, 191 E&P companies were active in 96 countries. Among the 191 companies, 63 recorded some level of global production.<sup>5</sup>

The following section provides a detailed description of the global exploration activities of Canadian E&P companies in 2011. It begins by presenting a brief account of Canadian international exploration activities within a regional context, followed by a summary of country-specific results. Highlights of notable E&P company activities conclude this section.

### **A. Regional Overview**

The highest concentration of activities by Canadian E&P companies in 2011 occurred in North America, with the presence of 92 companies. Central and South America ranked second in terms of concentration of Canadian E&P activities, with 50 companies active in 19 countries in that region. Africa was host to 44 companies, while Europe ranked fourth with the presence of 31 companies. The number of active E&P companies in the remaining regions are listed in Table 1 below.

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<sup>4</sup> In 2011, oil, NGL, and natural gas production in Canada totalled 6,090,314 boe/d. (Source for data: CanOils).

<sup>5</sup> Information about international operations is not uniformly represented across regulatory filings for similar firms in the O&G industry. For instance, in some cases an E&P company may indicate it is active in a particular region or country, but might not specify more detailed information about its activities, such as production levels.

**TABLE 1 NUMBER OF CANADIAN E&P COMPANIES BY REGION IN 2011**

Region	Ranking	Number of Active E&P Companies	Number of Countries Activity Is Spread Across
Africa	3	44	32
Asia & Oceania	5	30	18
Central & South America	2	50	19
Eurasia	7	6	4
Europe	4	31	17
Middle East	6	21	4
North America (Excluding Canada)	1	92	3
<b>Total Worldwide (Excluding Canada)</b>	<b>N/A</b>	<b>191</b>	<b>96</b>

Source: "Where in the World Are Canadian Oil and Gas Companies?" (2011).<sup>6</sup>

To showcase the magnitude of the role of Canadian exploration activities among various local oil and gas industries worldwide, the following table (Table 2) highlights the share of oil, NGL, and natural gas production by Canadian companies relative to the total production levels in each region of analysis.

**TABLE 2 OIL, NGL AND NATURAL GAS PRODUCTION LEVELS OF CANADIAN E&P COMPANIES BY REGION IN 2011**

Region	Ranking	Total Production (boe/d)	Total Production by Canadian Companies (boe/d)	Share of Total Production That is Canadian (%)
Africa	4	12,603,685	69,842	0.55%
Asia & Oceania	5	16,154,291	59,144	0.37%
Central & South America	3	10,318,349	145,257	1.41%
Eurasia	7	26,305,227	193	0.001%
Europe	1	8,410,634	209,221	2.49%
Middle East	6	35,066,266	54,042	0.15%
North America (Excluding Canada)	2	23,255,293	458,115	1.97%
<b>Total Worldwide (Excluding Canada)</b>	<b>N/A</b>	<b>132,113,746</b>	<b>995,814</b>	<b>0.75%</b>

Source: "Where in the World Are Canadian Oil and Gas Companies?" (2011).<sup>6</sup>

As shown by the table above, the share of Canadian production is the highest in Europe, with Canadian E&P companies accounting for 2.49 per cent of the region's total production levels. Although North America has the largest presence of Canadian E&P companies in 2011, as demonstrated by Table 1, it ranks second in terms of the share of oil, NGL, and natural gas production by Canadian companies. Meanwhile, Canadian exploration activities account for 1.41 per cent of regional production in Central and South America, while Africa ranks fourth, with Canadian production amounting to 69,842 boe/d in the region.

<sup>6</sup> "Where in the World are Canadian Oil and Gas Companies? An Introduction to the Project" University of Calgary School of Public Policy, <http://www.policyschool.ca/research-teaching/teaching-training/extractive-resource-governance/ergp-map/>. 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 (volume 13) (2017).

## B. Country Overview

The international presence of Canadian E&P companies is highly concentrated in a number of jurisdictions around the globe. The United States served as the top destination for Canadian E&P activities in 2011, with nearly 48 per cent of Canadian E&P companies (90 out of a total of 191 companies) engaging in exploration activities in the country. Colombia is host to the second-largest number of Canadian E&P companies, while Peru ranks third with the presence of 12 active companies. The United Kingdom ranks fourth and has the highest concentration of Canadian E&P activities in Europe. The other leading countries with the highest level of Canadian E&P companies are identified in Table 3 below.

**TABLE 3 TOP FIVE COUNTRIES BY NUMBER OF CANADIAN E&P COMPANIES IN 2011**

Country	Ranking	Number of Active E&P Companies
Argentina	4	10
Colombia	2	26
Iraq	4	10
Peru	3	12
Trinidad and Tobago	5	9
United Kingdom	4	10
U.S.	1	90
<b>Total Worldwide (Excluding Canada)</b>	<b>N/A</b>	<b>191</b>

Source: "Where in the World Are Canadian Oil and Gas Companies?" (2011).<sup>6</sup>

To illustrate the international significance of Canadian E&P companies in 2011, Table 4 presents the five countries with the highest levels of Canadian-produced oil, NGL, and natural gas production as a share of the total production levels in each country as a whole.

**TABLE 4 TOP FIVE COUNTRIES BY PERCENTAGE OF CANADIAN OIL, NGL AND NATURAL GAS PRODUCTION AS A SHARE OF TOTAL COUNTRY PRODUCTION IN 2011**

Country	Ranking	Total Production (boe/d)	Total Production by Canadian Companies (boe/d)	Share of Total Production That is Canadian (%)
Colombia	1	1,108,636	139,247	13%
Norway	5	3,633,780	34,603	1%
United Kingdom	3	1,813,561	168,107	9%
U.S.	4	19,516,701	458,173	2%
Yemen	2	317,205	36,442	11%
<b>Total Worldwide (Excluding Canada)</b>	<b>N/A</b>	<b>132,113,746</b>	<b>995,814</b>	<b>0.75%</b>

Source: "Where in the World Are Canadian Oil and Gas Companies?" (2011).<sup>6</sup>

As can be observed, Canadian E&P companies play a relatively large role in the Colombian oil and gas industry, accounting for 13 per cent of the country's total oil, NGL, and natural gas production. The international exploration activities of Canadian companies were also of importance to the Middle East, with Canadian E&P companies responsible for a seven-per-cent share of the total country production in Yemen and Syria combined. Lastly, in Tunisia, Canadian companies accounted for three per cent of the country's total oil, NGL, and natural gas production, the highest share of Canadian-produced levels of production in Africa.



## C. Company Highlights

To gain an understanding of the role of Canadian E&P companies around the globe, it is important to examine the presence of each company in terms of scale of activity and level of company production in the countries under analysis. The following tables highlight the top Canadian E&P companies according to two measures: number of active country operations (Table 5); and total in-country oil, NGL, and natural gas company production (Table 6).

**TABLE 5 TOP THREE CANADIAN E&P COMPANIES BY NUMBER OF COUNTRY OPERATIONS IN 2011**

Company	Ranking	Number of Countries with Recorded E&P Activity
Heritage Oil Corp.	3	9
Simba Energy Inc.	2	10
Talisman Energy Inc.	1	21
<b>Total Worldwide (Excluding Canada)</b>	<b>N/A</b>	<b>96</b>

Source: "Where in the World Are Canadian Oil and Gas Companies?" (2011).<sup>6</sup>

As illustrated by Table 5 above, Talisman Energy Inc. has the largest presence in the international oil and gas arena, with operations in 21 countries in 2011. Simba Energy Inc. ranks second, with operations heavily concentrated in the African continent. Meanwhile, Heritage Oil Corp. ranks as the third most internationally active Canadian E&P company, with operations in nine countries extending to six regions worldwide.

Encana Corp. is responsible for the highest level of total in-country oil, NGL, and natural gas production, producing 322,667 boe/d in the United States in 2011. Nexen Inc. ranks second, with production in the United Kingdom, Yemen, and the United States. Meanwhile, Pacific Rubiales Energy Corp. ranks fourth, with a total company production level of 86,497 boe/d in Colombia, accounting for nearly eight per cent of total in-country production. The remaining top five Canadian E&P companies ranked in accordance to the level of total in-country oil, NGL, and natural gas company production are provided in Table 6 below.

**TABLE 6 TOP FIVE CANADIAN E&P COMPANIES BY LEVEL OF OIL, NGL, AND NATURAL GAS PRODUCTION IN 2011**

Company	Ranking	Total Company Production (boe/d)	Number of Countries With Recorded Production <sup>4</sup>
Encana Corp.	1	322,667	1
Nexen Inc.	2	145,433	3
Pacific Rubiales Energy Corp.	4	86,497	1
Suncor Energy Inc.	5	76,400	3
Talisman Energy Inc.	3	141,611	4
<b>Total Worldwide (Excluding Canada)</b>	<b>N/A</b>	<b>995,814</b>	<b>24</b>

Source: "Where in the World Are Canadian Oil and Gas Companies? (2011)."<sup>6</sup>



## II. WHERE IN THE WORLD ARE CANADIAN OIL AND GAS SERVICE COMPANIES?

Canadian O&G service companies deliver technical expertise to various international oil and gas industries around the globe. Their services include geophysical surveys, seismic testing, and drilling and completion, in addition to numerous other advanced production techniques.<sup>7</sup> However, prior to further discussion regarding their activities in 2011, it is worthwhile to briefly reiterate that the WIW project strictly includes publicly traded companies. This is important to keep in mind, as a large number of Canadian service companies are not publicly listed and thus will not be reflected in our data. Therefore, while certain conclusions about Canadian O&G service companies can be drawn based upon our research findings, one should be cautious about extending these conclusions to the industry more broadly.

The following section provides a summarized account of the international activities of Canadian O&G service companies in 2011. It begins with a regional overview of the presence of service companies around the globe, followed by a brief account of Canadian operations on a country basis. Lastly, notable service companies are highlighted.

### A. Regional Overview

Similar to E&P companies, the presence of Canadian O&G service companies extends to all regions of the world in 2011. A total of 64 service companies are active in 46 countries around the globe. The following table, Table 7, outlines the number of active Canadian service companies by region of analysis.

**TABLE 7 NUMBER OF CANADIAN O&G SERVICE COMPANIES BY REGION IN 2011**

Region	Ranking	Number of Active Service Companies	Number of Countries Activity is Spread Across
Africa	5	8	11
Asia & Oceania	3	14	9
Central & South America	2	19	9
Eurasia	6	8	3
Europe	4	9	7
Middle East	7	7	5
North America (Excluding Canada)	1	46	2
<b>Total Worldwide (Excluding Canada)</b>	<b>N/A</b>	<b>64</b>	<b>46</b>

Source: "Where in the World Are Canadian Oil and Gas Companies?" (2011).<sup>6</sup>

As can be observed above, the vast majority of activities by Canadian O&G service companies is concentrated in two regions, namely North America and Central and South America. Asia and Oceania is the third most active destination for international activities by Canadian service companies, while Europe serves as the fourth region of significance. Interestingly, although Africa is host to a mere 12.5 per cent of Canadian service companies (eight out of a total of 64 service companies), the activities of companies are dispersed in 11 countries, the highest figure among all regions.

<sup>7</sup> Government of Alberta website, "About the Industry," <http://www.albertacanada.com/business/industries/og-about-the-industry.aspx> (last modified on February 3, 2015).

## B. Country Overview

The United States is host to nearly 72 per cent of Canadian O&G service companies (46 out of a total of 64 service companies) engaged in international operations in 2011. Meanwhile, Colombia and Mexico rank second, with 10 active service companies in each country. The third country with the highest proportion of Canadian service companies is Argentina, while the fourth most attractive destination is Australia. The remaining top-five-ranking countries with the largest number of Canadian O&G service companies in 2011 are provided in Table 8 below.

**TABLE 8 TOP FIVE COUNTRIES BY NUMBER OF CANADIAN O&G SERVICE COMPANIES IN 2011**

Country	Ranking	Number of Active Service Companies
Argentina	3	7
Australia	4	6
Brazil	5	5
Colombia	2	10
Mexico	2	10
Russia	4	6
United Kingdom	5	5
U.S.	1	46
<b>Total Worldwide (Excluding Canada)</b>	<b>N/A</b>	<b>64</b>

Source: "Where in the World Are Canadian Oil and Gas Companies?" (2011).<sup>6</sup>

It is worth noting that the countries with the highest presence of Canadian O&G service companies are often jurisdictions that also have significant levels of Canadian E&P activities. The majority of the top-five countries outlined in Table 8 also host a high number of Canadian E&P companies. However, there are notable exceptions, namely Russia and Mexico, which have a relatively strong presence of Canadian service companies despite low levels of Canadian E&P activities. The local oil and gas industries in both Russia and Mexico are dominated by state-controlled E&P companies. As such, while these two countries are among the top destinations for Canadian service companies, there are barriers of entry for Canadian E&P companies.

## C. Company Overview

To establish the key players among the Canadian O&G service companies in the WIW project, the following table (Table 9) outlines the top-three-ranking service companies according to the number of country operations. As can be observed, the top-ranking Canadian O&G service company in 2011 was Enerflex Ltd., with operations in 12 countries spread across six regions worldwide. Tuscany International Drilling Inc. is the second most active company with operations heavily concentrated in Central and South America. Lastly, Prosep Inc. and Shawcor Ltd. are the third-highest-ranking Canadian service companies, with operations extending to every region of the globe with the exception of Africa and Eurasia.

**TABLE 9 TOP THREE CANADIAN O&G SERVICE COMPANIES BY NUMBER OF COUNTRY OPERATIONS IN 2011**

Company	Ranking	Number of Countries with Recorded Service Activity
Enerflex Ltd.	1	12
Pason Systems Inc.	3	7
Prosep Inc.	3	7
Shawcor Ltd.	3	7
Tuscany International Drilling Inc.	2	8
<b>Total Worldwide (Excluding Canada)</b>	<b>N/A</b>	<b>46</b>

Source: "Where in the World Are Canadian Oil and Gas Companies?" (2011).<sup>6</sup>

## CONCLUSION

This report establishes the scope, scale and presence of Canadian oil and gas companies around the world in 2011. In total, 255 Canadian oil and gas companies were engaged in 106 countries worldwide. The United States is the primary destination of Canadian international activities, with nearly 50 per cent of Canadian service and E&P companies concentrated in the country. This figure is not surprising given the close economic ties and geographical proximity of Canada and the United States. Furthermore, Latin American countries, including Argentina, Colombia, and Peru, were also among the key jurisdictions for Canadian exploration and service activities. For further information and country profiles, please visit the accompanying website at <http://www.policyschool.ca/research-teaching/teaching-training/extractive-resource-governance/ergp-map/>.

## APPENDIX A: COUNTRIES OF ANALYSIS

This section outlines the list of countries examined in the WIW project. The countries of analysis 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 & Oceania	Region: Central & 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 Authors

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**Kai Horsfield** has a background and education in public policy and regulatory affairs which he has applied to a policy related role in the energy sector. Since earning his Master of Public Policy at The School of Public Policy at the University of Calgary, he has held a variety of positions focusing on policy research and analytical support. In his current role as the Senior Policy Advisor at the Canadian Energy Pipeline Association (CEPA), he has had the opportunity to work on key federal and provincial policy and regulatory issues such as Indigenous relations/consultation, regulatory policy, environmental protection/monitoring, climate change and pipeline safety.

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