

# 2018 Energy Sector Review

The energy sector is a major economic contributor, generating employment across communities in New Brunswick. In 2018, the sector comprised 74 primary and secondary businesses, generating over 3,700 full-time equivalent jobs. A significant proportion of output produced by the energy sector is generated by processing activities. Part of this output is consumed locally and the rest is shipped out of the country. New Brunswick has the largest oil refinery in Canada. Additionally, New Brunswick is the leading exporter of energy products in the Maritimes, with sales estimated at \$7.4 billion in 2018. The main export destination for New Brunswick's energy products is the United States, accounting for 98 per cent of exports. Together, oil and gas account for 99 per cent of export share.

## Industry at a Glance

|  |               |
|--|---------------|
| Number of primary energy businesses      | 18            |
| Number of secondary energy businesses    | 56            |
| Total energy output (2016)               | \$9.4 billion |
| Value of exports                         | \$7.4 billion |
| GDP (direct)                             | \$1.8 billion |
| Employment-Primary (FTEs) <sup>1</sup>   | 95            |
| Employment-Secondary (FTEs) <sup>2</sup> | 3,615         |

<sup>1,2</sup> These statistics should not be compared to previous years since a different data source was used (Statistics Canada, Table 36-10-0489-01).

## Exports by Country (\$ Million)

| Country       | 2017           | 2018           |
|---------------|----------------|----------------|
| United States | 7,707.4        | 7,219.9        |
| Netherlands   | 22.0           | 42.5           |
| Ireland       | 0.0            | 42.0           |
| Belgium       | 0.0            | 25.2           |
| Venezuela     | 0.0            | 23.2           |
| Other         | 97.2           | 4.9            |
| <b>Total</b>  | <b>7,826.6</b> | <b>7,357.7</b> |

Source: Trade Data Online (December 2019).

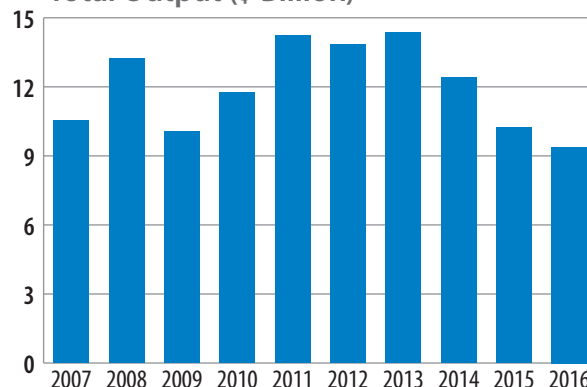
## Exports by Product (\$ Million)

| Product                    | 2017           | 2018           |
|----------------------------|----------------|----------------|
| Refined petroleum products | 7,382.3        | 6,863.4        |
| Natural gas                | 146.0          | 214.0          |
| Liquefied petroleum gases  | 205.4          | 173.6          |
| Electrical energy          | 92.8           | 106.6          |
| Other                      | 0.0            | 0.0            |
| <b>Total</b>               | <b>7,826.6</b> | <b>7,357.7</b> |

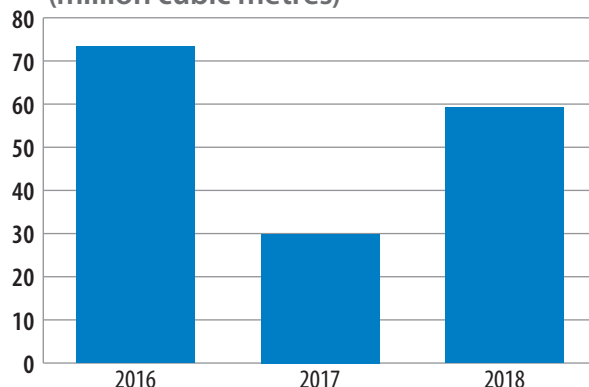
Source: Global Trade Tracker (December 2019).

Note: Due to rounding, numbers in the tables in this report may not add up precisely to the totals provided.

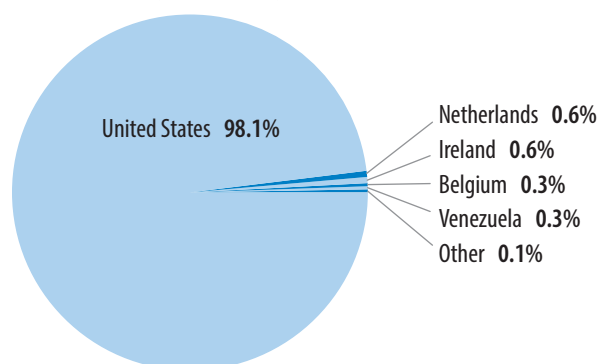
## Total Output (\$ Billion)



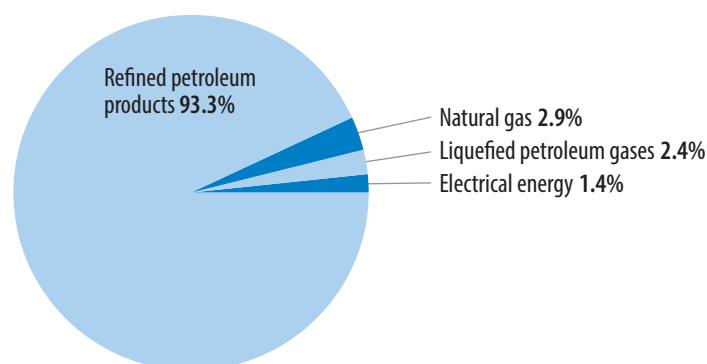
## Marketable Natural Gas Production (million cubic metres)



## Exports by Country (\$7.4 Billion)



## Exports by Product (\$7.4 Billion)



## 2018 Highlights

- Annual output produced by the energy sector has fluctuated considerably over the years, largely due to changes in petroleum product manufacturing in response to world oil prices. Due to a three-year lag in reporting, data on the value of energy output are only available up to 2016. Particularly, output levels fell nine per cent between 2015 and 2016 to \$9.4 billion, largely due to a drop in oil prices.
- In 2018, New Brunswick generated 13 terawatt hours of electricity, marginally higher than that produced in 2017. The top electricity generating sources were nuclear energy, coal and coke, hydraulic energy and natural gas, accounting for 37 per cent, 26 per cent, 19 per cent and eight per cent, respectively.
- Compared to 2017, marketable natural gas production nearly doubled in 2018 to reach 59 million cubic metres, partly due to a longer production period. Particularly, in 2017 natural gas wells in the McCully Field were shut-in from April to December, whereas in 2018, the shut-in period lasted from May to November. Shut-in periods are strategically designed for producers to take advantage of higher sales prices in the winter compared to the summer/fall.
- Production volumes of New Brunswick's refined petroleum products are suppressed by Statistics Canada due to confidentiality requirements.
- New Brunswick's exported energy products were valued at \$7.4 billion in 2018, down six per cent (\$469 million) from 2017. This decline was mostly attributable to lower sales of refined petroleum products, likely due to the temporary shut-down of the refinery following the explosion in fall 2018.
- Exports of refined petroleum products decreased in value by \$519 million (seven per cent) to total \$6.9 billion in 2018. Sales to the United States, Italy and Germany declined most notably by \$538 million (seven per cent), \$40 million (100 per cent) and \$22 million (100 per cent), respectively. Nonetheless, marked increases were seen in Ireland (by \$42 million), Belgium (by \$25 million) and Venezuela (by \$23 million).
- Natural gas exports rose significantly by 47 per cent (\$68 million) to \$214 million in 2018, driven largely by considerably higher market prices. All New Brunswick natural gas exports were destined for the United States. Note that sales were remarkably high in January 2018, nearly seven times that seen in January 2017, as the United States endured an extreme cold wave with record low temperatures.
- Exports of liquefied petroleum gases (LPG) totaled \$174 million in 2018, about 15 per cent (\$32 million) lower than the previous year. This was mostly due to a decline in liquefied propylene sales. All New Brunswick LPG exports went to the United States.
- Electrical energy exports increased by \$14 million (15 per cent) to reach \$107 million in 2018, with all sales going to the United States. This rise in value was attributable to higher market prices.
- The United States continued to be the most significant export market for New Brunswick's energy products with \$7.2 billion in sales in 2018, down by \$487 million (six per cent) from 2017. Other important markets in 2018 included the Netherlands, Ireland and Belgium, valued at \$42 million, \$42 million and \$25 million, respectively.
- Note that the exports reported above are international and do not include interprovincial sales. For instance, a significant proportion of New Brunswick electrical output is sold to other Canadian provinces.

### Electricity generation by type (Gigawatt hours)

| Type               | 2017          | 2018          |
|--------------------|---------------|---------------|
| Nuclear            | 5,120         | 4,874         |
| Coal & coke        | 2,834         | 3,406         |
| Hydro              | 2,597         | 2,535         |
| Natural gas        | 1,295         | 978           |
| Wind               | 781           | 825           |
| Petroleum (liquid) | 262           | 399           |
| <b>Total</b>       | <b>12,891</b> | <b>13,016</b> |

Sources: Statistics Canada, Table 25-10-0020-01 and Table 25-10-0019-01.  
 Note: The table above includes electricity generated by organizations that, as their prime purpose, generate, transmit and/or distribute electric energy for sale. They can be private or public (provincial or municipal).

### Electricity Generation by Type (13,016 GWh)

