

**COMPLEMENTARY**

**INFORMATION**

**TO THE 2016 ACTIVITY REPORT**

# **ENERGY AND NATURAL RESOURCES CONSUMPTION**

**AS AT DECEMBER 31, 2016**



**Ivanhoé  
Cambridge**

Caisse de dépôt et placement  
du Québec

# ENERGY AND NATURAL RESOURCES DATA

Operating a globally diverse portfolio of real estate assets comes with a great environmental responsibility. Ivanhoé Cambridge is committed to finding ways to continually mitigate the environmental impact that its buildings have and is always looking for opportunities to operate its assets as efficiently as possible. These efforts are yielding results, as the Company continues to see an improvement in overall utility consumption across its managed portfolio of properties.

**The amount of energy consumed at Ivanhoé Cambridge properties decreased in the 2016\* reporting period compared to the same period of the previous reporting year.**

## **Property categorization by type of meter**

Properties are classified based on configuration of the utility metering systems. This model is now used to collect and analyze data to facilitate comparisons between similar properties, which makes it possible to obtain a clear understanding of power consumption patterns and to identify inefficient buildings.

## **On track to reaching targets**

In 2015, electricity targets were established for each managed property. Using a baseline year of 2014, property-specific targets were established and the Company has been monitoring progress on this for the past 18 months. Early results indicate that the team is on track to meet these targets over the initial 3-year target period. Ivanhoé Cambridge will continue to monitor this progress and work with the individual properties to ensure these targets remain a focal point of their operations.

## **Monitoring building performance**

Ivanhoé Cambridge prepares two different sets of data for the retail and office asset portfolio. The initial data set identifies total consumption of the specific portfolio and compares it to the equivalent period of the previous reporting year. This is an ongoing set of figures used to identify its managed portfolio's consumption for a given period of time and it is inclusive of buildings that were sold or acquired throughout the reporting period. The second set of numbers provides a like-for-like comparison of buildings, meaning it identifies the overall performance of buildings that were managed where two consecutive years of data is available. This is an important metric for the Company as it helps to bring clarity to the performance of a consistent set of properties, which is an important indicator of its ongoing performance.

\* Data reported for 2016 follow a 12-month cycle and reflect data measured from July 1, 2015 to June 30, 2016, in order to include the data in the Activity Report, which combines the Company's financial data and CSR-related data. For accurate comparisons to be made, data prior to 2016 were actualized to this cycle.

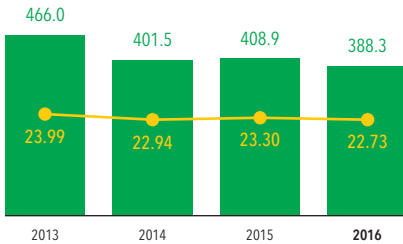
# Electricity consumption

The managed retail portfolio saw a 3.9% decrease in electricity consumption when comparing 2016\* data with the same time period of 2015\*. There were consistent electricity decreases across all the properties when grouped in appropriate meter-type configurations.

When comparing like-for-like properties, the retail portfolio showed a 3.4% improvement when compared to the same reporting period of the year prior.

For the office portfolio, the Company saw an overall decrease in electricity consumption of 7.5%. When comparing like-for-like properties, there was a 3.3% decrease when compared to the previous year. The 7.5% decrease was primarily due to the divestment of several office properties in 2015.

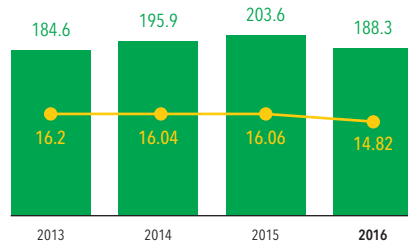
## Retail



■ Total consumption  
kWh (in millions)

● Intensity  
kWh / ft<sup>2</sup>

## Office

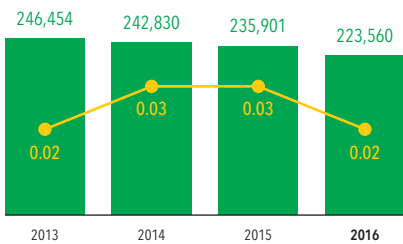


# Natural gas consumption

The retail portfolio showed an overall decrease in natural gas usage by 6% compared to the previous year. Moderately warmer weather was a contributing factor to this decrease. When looking at like-for-like property comparisons, natural gas consumption dropped by 5.2%.

The office portfolio also saw a decrease in natural gas use, showing a 3.6% drop in overall consumption. Like-for-like properties showed an identical decrease of 3.6% compared to the previous year.

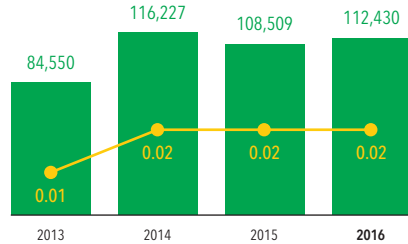
## Retail



■ Total consumption  
GJ

● Intensity  
GJ / ft<sup>2</sup>

## Office

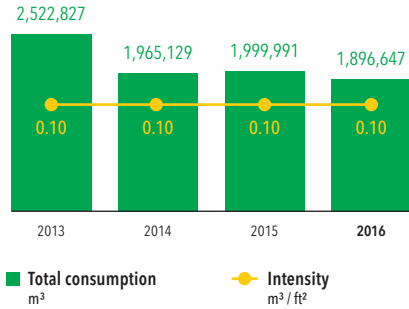


# Water consumption

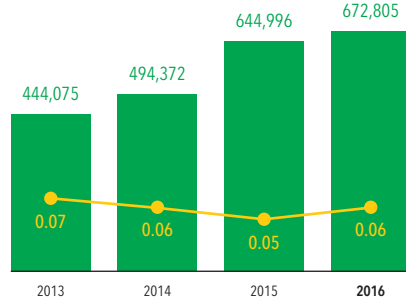
Total water consumption across the retail portfolio decreased by 2.4%. When comparing like-for-like buildings, water consumption remained relatively flat, with a modest increase of 0.5% in the amount consumed. Warmer summer weather with an increase in irrigation requirements and heavier use of some property-specific cooling towers were

the contributing factors to the increase. Municipal systems supply water consumed by Ivanhoé Cambridge buildings. CrossIron Mills collects rainwater from the roof and stores this water in cisterns for irrigation purposes.

## Retail



## Office



## Greenhouse gas emissions

Since 2012, Ivanhoé Cambridge has been tracking the greenhouse gas (GHG) emissions of its managed portfolio. The method of calculating the GHG inventory is aligned with the World Resources Institute's (WRI) and World Business Council for Sustainable Development's (WBCSD) Greenhouse Gas Protocol/ISO 14064-1.

Like previous years, Ivanhoé Cambridge's GHG inventory includes all properties, or parts of properties, where there is operational control and where the authority and ability is in place to impact building performance. Operational control requires access to utility invoices and to metered utility data to identify property energy consumption. The property inventory includes all directly managed retail and office properties in North America and Europe, and all global corporate offices. All energy consumption that contributes to the GHG inventory is based on metered data (electricity, natural gas, and steam).

The GHG inventory identified in this report does not include any biogenic CO<sub>2</sub>.

Ivanhoé Cambridge continues to develop a long-term carbon strategy that is informed and responsive to the reality of climate change and to the economic implications of global carbon markets.

Comparing the 2016\* reporting period to the previous year of data, overall GHG emissions decreased by 8.2%. This decrease is attributable to a number of factors, primarily a decrease in energy consumption, overall milder weather, and divestment of properties during the reporting period. When looking at like-for-like comparisons, GHG emissions decreased by 4% compared to the previous 12-month period.

# 8.2%

reduction in GHG emissions in the past year

Ivanhoé Cambridge prioritizes the use of videoconferencing in order to minimize greenhouse gas emissions.

### Business trips avoided

(by using videoconferencing facilities instead)

# 368

2015 292

2014 234



### Greenhouse gas emissions avoided

(in tonnes, by using videoconferencing facilities)

# 171

2015 106

2014 86



# Boundaries and Limitations for Utility Data

In 2016, Ivanhoé Cambridge merged its Corporate Social Responsibility (CSR) and Activity Reports. As a result, utility data is being presented differently than it has in the past. Rather than reporting on calendar year consumption, the Company is now reporting on a 12-month period that covers July 1, 2015 through June 30, 2016. This adjusted reporting period required the Company to update historical data to match equivalent time-frames. Therefore, data from 2012 to 2015, which had previously reflected calendar year consumption, has been amended to match the revised July to June reporting requirement.

## **In 2016, Ivanhoé Cambridge merged its Corporate Social Responsibility (CSR) and Activity Reports.**

The utility data tables identify year-over-year comparisons of electricity, natural gas, and water consumption at the Company's managed retail centres and office buildings. The data has not been normalized for weather or occupancy variables, however the team has analysed the utility consumption and has used weather and occupancy statistics to help it determine the extent to which either variable has contributed to a change in property performance. Where weather or building occupancy has proven to have an impact, this has been identified.

Remaining consistent with previous reporting years, all reported data reflects metered consumption and was gathered from existing building-level electricity, natural gas, and water meters.

For the retail network of buildings, data provided in the following charts has been prepared to align with property-level utility meter configurations. Energy consumption at shopping centres can vary significantly across a portfolio of buildings, largely based on the manner in which those facilities are metered. Comparing common area utility consumption with that of tenant spaces is not a fair comparison. Furthermore, size and types of tenants can impact overall performance of a property. While each retail property is different, there are typical meter configurations that allow the Company to group the properties in an organized way. Explanations related to meter configuration and respective consumption figures are noted in the accompanying charts.

It remains Ivanhoé Cambridge's goal to develop future reporting that isolates utility consumption statistics into total building, total common area, and total tenant area categories. The team is making strides in improving the utility meter infrastructure across its portfolio.

The results for this year's report continue to show decreases in utility consumption across the Company's managed portfolios. This is partially attributable to nominal changes in weather from 2015 to 2016, but, more importantly, is a reflection of the work being done from an operational perspective at the property level. The Company continues to invest in efficient technology, such as LED lighting and is piloting various initiatives related to analytics and system control strategies.

Energy consumption data is compiled based on the number of buildings at a specific property. For example, Place Ville Marie is in fact composed of five distinct buildings, but is reported as one property.

(...continued)

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**Data is presented based on the following criteria:**

- Utility data coverage varies by property, depending on meter coverage. Some properties are fully metered, some only have common area metering, and others have a combination of the two. Energy-use intensity figures have been isolated for the retail properties based on specific meter configurations.
- Data is presented showing consumption attributed to the overall portfolio, including acquisitions and divestments, as well as showing like-for-like comparisons of consumption. The like-for-like method is important as it shows the Company's performance in a consistent set of buildings from one year to the next and is not impacted by the buying and selling of properties.
- Partial year's data is included for properties that were sold or acquired through the reporting period. For example, if a property was sold in September, consumption data through the end of the August is included in the data. If a property was acquired in September, data commencing on October 1 is included as consumption in this report.
- For properties with retail and office components that are not separately metered, the consumption for each component is pro-rated based on building areas.
- For retail properties, intensity is calculated as total metered consumption per square foot of metered area, and is isolated by meter configuration.
- For office properties, intensity is calculated as total metered consumption per square foot of gross building area (GBA).
- Consumption data for outparcels/exterior consumption not separately metered is included in total retail figures.
- Where outparcel or exterior consumption is on its own meter, consumption data is isolated as "exterior". Energy intensity is not shown for this exterior data, as there is no corresponding area to use in the calculation.
- Energy figures provided in previous CSR reports have been adjusted in the attached tables, where required, to reflect the reconciliation of figures over the course of the past several months, and to reflect the updated reporting period of July 1 to June 30 of the respective reporting periods.

# Energy and natural resources charts

## Electricity consumption by meter type - 2013-2016

### Office overview

POWER (kWh) Sorted by meter type	2013 (new reporting period: July 2012 to June 2013)			2014 (new reporting period: July 2013 to June 2014)			2015 (new reporting period: July 2014 to June 2015)			2016 (new reporting period: July 2015 to June 2016)		
	Square footage	Total consumption	Intensity (kWh / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (kWh / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (kWh / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (kWh / ft <sup>2</sup> )
Meter Type 4	6,241,020	97,089,582	15.56	6,440,313	105,313,442	16.35	6,440,313	103,229,090	16.03	6,105,048	95,954,543	15.72
Meter Type 5	37,122	896,097	24.14	-	-	-	-	-	-	-	-	-
Meter Type 6	5,169,503	86,566,027	16.75	5,770,246	90,549,073	15.69	6,230,517	100,325,767	16.10	6,230,517	92,335,510	14.82

### Retail overview

POWER (kWh) Sorted by meter type	2013 (new reporting period: July 2012 to June 2013)			2014 (new reporting period: July 2013 to June 2014)			2015 (new reporting period: July 2014 to June 2015)			2016 (new reporting period: July 2015 to June 2016)		
	Square footage	Total consumption	Intensity (kWh / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (kWh / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (kWh / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (kWh / ft <sup>2</sup> )
Meter Type 1	1,828,203	30,765,023	16.83	1,511,831	23,256,005	15.38	1,598,232	25,887,463	16.20	1,343,256	22,642,883	16.86
Meter Type 2	9,103,101	240,157,186	26.38	7,529,032	191,169,077	25.39	7,536,887	187,379,316	24.86	7,536,887	182,599,507	24.23
Meter Type 3	4,339,474	91,118,402	21.00	4,730,342	93,280,299	19.72	4,715,713	106,898,019	22.67	4,715,713	104,071,415	22.07
Meter Type 4	3,224,230	82,833,715	25.69	3,224,230	84,747,422	26.28	3,224,230	80,349,079	24.92	3,224,230	75,649,511	23.46
Meter Type 5	283,008	8,411,685	29.72	-	-	-	-	-	-	-	-	-
Meter Type 7	120,833	141,971	1.17	120,833	158,130	1.31	120,833	139,250	1.15	120,833	117,090	0.97
Exterior	584,276	12,613,902	21.59	38,783	8,930,874	230.28	38,774	8,284,633	213.66	38,774	3,200,036	82.53

### Meter type descriptions

- TYPE 1** Common area only, including vacancies where applicable.
- TYPE 2** Total property less large tenant(s).
- TYPE 3** Total property is metered.
- TYPE 4** Total office/retail property combined. Cannot differentiate between office/retail - calculated based on pro-rated building area.

- TYPE 5** Total office/retail property combined less large retail tenant(s). Cannot differentiate between office/retail - calculated based on pro-rated building area less tenant(s).
- TYPE 6** Total office property is metered.
- TYPE 7** Common area and some tenant(s).

Intensity = metered consumption/metered area



## Natural gas consumption by meter type - 2013-2016

### Office overview

NATURAL GAS (GJ) Sorted by meter type	2013 (new reporting period: July 2012 to June 2013)			2014 (new reporting period: July 2013 to June 2014)			2015 (new reporting period: July 2014 to June 2015)			2016 (new reporting period: July 2015 to June 2016)		
	Square footage	Total consumption	Intensity (GJ / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (GJ / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (GJ / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (GJ / ft <sup>2</sup> )
Meter Type 1	-	-	-	51,980	2	0.000	51,980	4	0.000	-	-	-
Meter Type 3	2,766,079	30,608	0.011	2,766,079	49,969	0.018	2,766,079	43,543	0.016	2,766,079	48,591	0.018
Meter Type 4	127,179	2,916	0.023	127,179	3,343	0.026	127,179	2,710	0.021	127,179	2,745	0.022
Meter Type 5	2,970,919	51,026	0.017	2,606,613	62,913	0.024	3,066,884	62,252	0.020	3,066,884	61,094	0.020
Meter Type 8	-	-	-	-	-	-	-	-	-	-	-	-
Meter Type 9	-	-	-	-	-	-	-	-	-	-	-	-

### Retail overview

NATURAL GAS (GJ) Sorted by meter type	2013 (new reporting period: July 2012 to June 2013)			2014 (new reporting period: July 2013 to June 2014)			2015 (new reporting period: July 2014 to June 2015)			2016 (new reporting period: July 2015 to June 2016)		
	Square footage	Total consumption	Intensity (GJ / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (GJ / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (GJ / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (GJ / ft <sup>2</sup> )
Meter Type 1	2,546,282	42,669	0.017	2,283,843	48,488	0.021	2,276,655	42,561	0.019	2,021,679	36,253	0.018
Meter Type 2	4,290,323	107,533	0.025	2,981,813	94,598	0.032	2,984,206	83,942	0.028	2,984,206	77,045	0.026
Meter Type 3	420,914	1,486	0.004	420,914	2,068	0.005	420,914	2,994	0.007	420,914	4,314	0.010
Meter Type 4	575,998	18,702	0.032	575,998	21,251	0.037	575,998	17,230	0.030	575,998	17,454	0.030
Meter Type 6	887,262	24,323	0.027	636,985	23,471	0.037	1,114,307	40,709	0.037	1,114,307	22,746	0.020
Meter Type 7	1,812,070	49,257	0.027	1,751,820	50,930	0.029	1,746,928	44,961	0.026	1,746,928	60,670	0.035
Meter Type 8	-	-	-	-	-	-	-	-	-	-	-	-
Meter Type 9	-	-	-	-	-	-	-	-	-	-	-	-
Exterior	823,635	2,483	0.003	164,725	2,025	0.012	177,757	3,502	0.020	177,757	5,078	0.029

### Meter type descriptions

- TYPE 1** Common area only is metered, including vacancies where applicable.
- TYPE 2** Total property less large tenant(s).
- TYPE 3** Total office/retail property combined. Cannot differentiate between office/retail - calculated based on pro-rated building area.
- TYPE 4** Total office/retail property combined less large retail tenant(s). Cannot differentiate between office/retail - calculated based on pro-rated building area less tenant(s).

- TYPE 5** Total office property is metered.
- TYPE 6** Common area and some tenants (if tenant areas are known).
- TYPE 7** Entire property less tenants excluded from metering. Some tenants may be separately metered, while others are mixed in with common areas.
- TYPE 8** Typically no data as all tenants are billed directly.
- TYPE 9** No gas used at property.
- Intensity = metered consumption/metered area

## Water consumption by meter type - 2013-2016

### Office overview

WATER (m <sup>3</sup> ) Sorted by meter type	2013 (new reporting period: July 2012 to June 2013)			2014 (new reporting period: July 2013 to June 2014)			2015 (new reporting period: July 2014 to June 2015)			2016 (new reporting period: July 2015 to June 2016)		
	Square footage	Total consumption	Intensity (m <sup>3</sup> / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (m <sup>3</sup> / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (m <sup>3</sup> / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (m <sup>3</sup> / ft <sup>2</sup> )
Meter Type 2	-	-	-	29,859	1,604	0.054	29,859	2,379	0.080	-	-	-
Meter Type 4	2,302,719	188,594	0.082	2,129,625	194,831	0.091	6,232,227	323,075	0.052	6,363,008	412,227	0.065
Meter Type 5	4,233,990	255,481	0.060	5,652,089	297,937	0.053	6,112,360	319,542	0.052	5,191,636	260,578	0.050
Meter Type 6	-	-	-	-	-	-	-	-	-	-	-	-

### Retail overview

WATER (m <sup>3</sup> ) Sorted by meter type	2013 (new reporting period: July 2012 to June 2013)			2014 (new reporting period: July 2013 to June 2014)			2015 (new reporting period: July 2014 to June 2015)			2016 (new reporting period: July 2015 to June 2016)		
	Square footage	Total consumption	Intensity (m <sup>3</sup> / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (m <sup>3</sup> / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (m <sup>3</sup> / ft <sup>2</sup> )	Square footage	Total consumption	Intensity (m <sup>3</sup> / ft <sup>2</sup> )
Meter Type 1	484,971	46,083	0.10	484,081	43,679	0.09	554,304	76,592	0.14	554,304	82,670	0.15
Meter Type 2	8,844,420	1,036,066	0.12	8,956,849	1,006,964	0.11	8,957,142	1,031,139	0.12	7,572,619	914,065	0.12
Meter Type 3	8,282,474	794,890	0.10	5,946,448	469,238	0.08	5,931,819	460,318	0.08	4,684,117	465,676	0.10
Meter Type 4	3,778,292	363,796	0.10	3,778,292	332,065	0.09	3,930,816	303,195	0.08	4,916,783	362,966	0.07
Meter Type 6	-	-	-	-	-	-	-	-	-	-	-	-
Exterior	745,201	281,992	0.38	201,167	113,182	0.56	214,199	128,747	0.60	214,199	71,270	0.33

### Meter type descriptions

**TYPE 1** Common area only, including vacancies where applicable. Note no NLA exists for exterior properties.

**TYPE 2** Total property less large tenant(s).

**TYPE 3** Total property is metered.

**TYPE 4** Total office/retail property combined. Cannot differentiate between office/retail - calculated based on pro-rated building area.

**TYPE 5** Total office property is metered.

**TYPE 6** No data. Water consumption based on property taxes or not metered.

Intensity = metered consumption/metered area

For the latest information, please visit the Ivanhoé Cambridge website and its most recent Activity Report.



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