2010 Energy Benchmarking Report

Performance of the Canadian Office Sector
About REALpac

The Real Property Association of Canada (“REALpac”) is Canada’s senior national real property association whose mission is to bring together the country’s real property investment leaders to collectively influence public policy, to educate government and the public, and to ensure stable and beneficial real estate capital and property markets in Canada. REALpac members currently own in excess of CDN $180 Billion in real estate assets located in the major centres across Canada and include real estate investment trusts (REITs), publicly traded and large private companies, banks, brokerages, crown corporations, investment dealers, life companies, and pension funds. Visit REALpac at www.realpac.ca.

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The REALpac 2010 Energy Benchmarking Report: Performance of the Canadian Office Sector (the “Report”) includes the results of the first annual REALpac Energy Benchmarking Survey (the “Survey”). The 2010 Survey received a high level of interest and participation with a total of 261 office buildings having submitted data for the calendar year 2009. This data has been aggregated and analyzed to provide a detailed examination of the data trends and a baseline for building energy performance across Canada. The results, analyses, and trends in baseline data are discussed in depth in this first release of the 2010 Report and the insights gained indicate a positive and promising movement within the office sector with many owners and building managers interested and active in monitoring and reducing their energy use.

In September 2009, REALpac, in collaboration with the Canada Green Building Council (“CaGBC”) and the Building Owners and Managers Association of Canada (“BOMA Canada”), adopted an energy consumption target for office buildings of 20 equivalent kilowatt-hours of energy use per square foot of building area per year (“20 ekWh/ft²/year”), to be achieved by 2015. For short, “20 by ‘15”.

After launching the “20 by ‘15” energy reduction target, REALpac again collaborated with CaGBC, BOMA Canada, and various energy experts, to develop tools to help enable the real estate industry to understand their energy use and measure it in a meaningful way. Both the REALpac Energy Normalization Methodology (the “Methodology”) and the REALpac Energy Normalization Template (the “Template”) were released in the summer of 2010, which paved the way for a Canada-wide building energy consumption survey to be performed.

In the fall of 2010, REALpac asked its members, partner organizations, and affiliates, as well as other industry stakeholders, to participate in this groundbreaking, national 2010 Survey by submitting 2009 energy consumption data from office buildings. The Survey is intended to establish a baseline of building energy use in Canada and to begin to grow a database that has a foundation of accurate and robust data, collected through the use of credible and equitable assumptions and a replicable methodology. Participation in the Survey and the insights gained from the results will help owners and managers understand both their building portfolio’s absolute and relative energy efficiency and performance. Comparisons can then be made between buildings within one company’s portfolio as well as externally between owned/managed buildings and competitor buildings, both in the same market and across the country.
Data supporting the original “20 by 15” target was based on normalized energy usage that was collected from national, large-scale pilot projects conducted by CaGBC in 2008. These pilot projects engaged more than 40 commercial office and government real property owners, involved 144 buildings totalling 48 million ft², and created a large, detailed database of Canadian office building energy performance. The pilot project data was normalized for weather differences across the country as well as for material space, occupancy, and energy source differences between buildings. These normalization procedures were re-conceptualized and enhanced in the development of the Methodology and Template. Technical discussions regarding each normalization process and calculation are included in the Methodology (version 1.02 released July 15th, 2010).

To participate in the 2010 Survey, building owners, managers, and/or consultants were asked to collect both building characteristics data (e.g. exterior gross area, gross floor area, number of occupants, average weekly operating hours, vacancy rate) and 2009 energy use data for their buildings from utility bills and/or meters. Once they had entered data for each building into the Template, following the guidance in the Methodology, both the buildings’ actual energy use intensity and its normalized annual energy use intensity in eKWh/ft²/yr were automatically calculated. The normalized value adjusts the total energy consumption for 2009 from all major energy sources for variables such as the building’s gross floor area, different heating power of various energy sources (e.g. natural gas or steam), high intensity or exceptional energy use space types (e.g. data centers), plus occupant dependant variables (e.g. occupant density, vacancy, and operating hours). The use of a normalized approach to calculating a building’s annual energy use accounts fairly for buildings with different characteristics and allows for more meaningful and robust energy intensity reporting and benchmarking between buildings across the country.

After completing one Template for each of their buildings, participants submitted their building energy consumption data to REALpac for review and inclusion in the Survey. Data included in this report has been aggregated to protect the privacy of building owners and the identity of individual buildings. Neither the building data nor the energy use data has been audited by a third-party, although extensive review has been performed to check for errors or omissions. Some sub-market data sets or sub-groups of buildings have not been included in this report in detail as they were either too small (less than 20 buildings) or one participating organization’s submissions comprised more than 60% of a data set.
Buildings participating in the survey represented both large and small office buildings and included a mix of government and commercial owners. The number of buildings included in the 2010 Report totals 261 and represents over 101 million square feet of gross floor area.

The following charts, Figures 1 through 5, illustrate the various characteristics of the data set including the size, age, average weekly operating hours, vacancy rates, and occupant density variations of the buildings. In all of the charts, both the number of buildings in each category and their relative proportion of the data set is included in the data labels.

Figure 1: Building Size – Number and Percentage of Data Set by Category

- Under 100,000 ft²: 28.11%
- 100,000 ft² – 249,999 ft²: 48.18%
- 250,000 ft² – 499,999 ft²: 11.4%
- 500,000 ft² – 749,999 ft²: 6.82%
- 750,000 ft² – 999,999 ft²: 6.82%
- 1,000,000 ft² or Over: 25.10%

Figure 1, above, shows the proportion of buildings in the data set which fall into different categories of size, from small (less than 100,000 ft²) to large (over 1,000,000 ft²). Although 56% of the buildings in the data set are in the smaller range, under 250,000 ft² in gross floor area, 25% of the buildings are in the larger ranges with over 500,000 ft² of gross floor area each. In addition, 10% of the buildings are in the largest range and measure over 1,000,000 ft² in gross floor area.
Figure 2, above, illustrates the proportion of buildings in the data set which fall into different categories of age according to their original construction date, from older (built before 1960) to newer (built after 2000). Although 20% of the building submissions did not report the original construction date, a wide range of building ages can still be seen with 10% built on or before 1969 and 11% built in 2000 or after. The largest segment is the group of buildings erected between 1980 and 1989, which represents 26% of the data set.

Figure 3, above, illustrates the proportion of buildings in the data set which fall into different categories of occupant density, from less dense (2.3 occupants/1,000 ft²) to more dense (5.0 occupants/1,000 ft²). Interestingly, the two largest groups, at 31% and 43% of the data set, are buildings with occupant densities below 2.3/1,000 ft² and between 3.0 and 3.9/1,000 ft². Only 6% of the buildings fall into the highest category as they have occupant densities over 5.0/1,000 ft².
Figure 4: **Vacancy Rate – Number and Percentage of Data Set by Category**

- 0% or Unreported
- 0.01% – 4.9%
- 5.0% – 9.9%
- 10.0% – 14.9%
- 15.0% – 19.9%
- 20% or Over

Figure 4, above, illustrates the proportion of buildings in the data set which fall into different categories of annual tenant vacancy rate, from 0% vacancy (or unreported) for the year to 20% (or over) vacancy for the year. The default vacancy rate in the Template is 0%, thus those buildings that experienced a 0% vacancy rate for the year 2009 and those participants who chose not to enter their vacancy data are grouped together within the largest segment of buildings (45% of data set) in Figure 4. Of those participants that did report vacancy rates, the majority of buildings experienced less than 10% vacancy for 2009 (43% of buildings).

Figure 5: **Average Weekly Operating Hours – Number and Percentage of Data Set by Category**

- 65 hours/week or Below
- Over 65 hours/week

Figure 5, above, illustrates the proportion of buildings in the data set which fall within different categories of average weekly operating hours. In the Methodology and Template, weekly operating hours are defined as the number of hours per week that a building (or space within a building) is occupied by at least 75% of the tenant employees averaged over the year under review. For this Survey, weekly operating hours were calculated for the entire building, as there was no allowance for adjustments in individual tenant spaces. Accordingly, it is not surprising that the vast majority of buildings reported average weekly operating hours at or below 65 hours per week. As shown above, only 5% of the data set’s buildings reported having weekly operating hours greater than 65 hours per week and none of these buildings reported having weekly operating hours greater than 85 hours per week.
The number of buildings included in the 2010 Report totals 261 and represents over 101 million square feet of gross floor area.
Although building size and building age have been shown to impact energy use,† analyses of these variables within the 2010 Survey data set did not show strong trends but are important to note as trends may become more apparent over time.

4.1 Building Characteristics

Although building size and building age have been shown to impact energy use,† analyses of these variables within the 2010 Survey data set did not show strong trends but are important to note as trends may become more apparent over time.

Figure 6 displays both the actual and the normalized average energy use intensity for the group of buildings contained within each size category. Actual energy use intensity ranges from 31.1 to 38.4 ekWh/ft²/yr with the lowest average intensity seen in the 100,000 - 249,999 ft² category and the highest between 500,000 - 749,999 ft². The same pattern can be seen when looking at the normalized energy intensity use ranges where the lowest intensity is in the 100,000 - 249,999 ft² category at 26.7 ekWh/ft²/yr and the highest is in the 500,000 - 749,999 ft² category at 31.2 ekWh/ft²/yr. The largest energy use reduction due to normalization occurred in the 500,000 - 749,999 ft² category as the average percent reduction in this group was 15%.

Similar to the previous chart, Figure 7 displays both the actual and the normalized average energy use intensity for the group of buildings contained within each age category. Actual energy use intensity ranges from 30.1 to 35.6 ekWh/ft²/yr with the lowest average intensity seen in buildings built between 1990-1999 and the highest in buildings built between 1970-1979. The same pattern can be seen when looking at the normalized energy intensity use ranges where the lowest intensity is in buildings built between 1990-1999 at 26.0 ekWh/ft²/yr and the highest is in buildings built between 1970-1979 at 32.4 ekWh/ft²/yr. The largest energy use reduction due to normalization occurred in buildings built between 1980-1989 as the average percent reduction in this group was 14%.

Other building characteristics such as occupant density, operating hours, and vacancy do have an impact on both actual energy consumption and normalized energy consumption in a building. Although the 2010 Survey did collect data on these building attributes, many participants omitted these metrics for their buildings and as a consequence, a robust analysis of these variables cannot be included in the 2010 Report.
4.2 National Trends

The Canada-wide data set of annual building energy intensity shows the mean actual energy use intensity to be 33.0 ekWh/ft²/yr and the mean normalized energy use intensity to be 28.7 ekWh/ft²/yr. Both results are below the Natural Resources Canada (“NRCan”) 2007 national average annual energy use intensity for office buildings of 1.42 GJ/m³ or 36.65 ekWh/ft²/yr. The mean actual energy use intensity represents a 10% decrease in energy intensity per square foot over the NRCan 2007 national average while the mean normalized energy use intensity represents a 22% decrease over the 2007 national average.

Figure 8: Normalized Energy Use Intensity, Canada-wide Data Set

Mean = 28.7 ekWh/ft²/yr
Median = 27.8 ekWh/ft²/yr

Figure 8 shows that the median normalized energy use intensity is lower than the mean at 27.8 ekWh/ft²/yr. The top 25th percentile of the Canada-wide data set begins at 23.7 ekWh/ft²/yr and the bottom 75th percentile begins at 33.2 ekWh/ft²/yr.
The lowest normalized building energy use intensity in the data set is at 11.5 ekWh/ft²/yr and the highest is at 61.2 ekWh/ft²/yr, which equals a multiple of 5.3 over the lowest building. There are 18 buildings with normalized energy use intensities below 20.0 ekWh/ft²/yr, 15 buildings with intensities between 20.0 and 21.0 ekWh/ft²/yr, and there are 65 buildings in total with energy use performance within the top quartile, below 23.7 ekWh/ft²/yr.

Looking deeper into the normalized data set, 84% of the buildings in the sample set experienced an overall lowering of annual energy use from normalization while only 14% of the buildings experienced an overall increase in annual energy use from normalization. The average absolute reduction in annual building energy use through the use of normalization was 4.3 ekWh/ft² which corresponds to an 11.6% average decrease per building. The most common factors contributing to the lowering of a building's normalized energy use is higher than normal occupant density and the sub-metering of data centers and other high intensity energy use spaces, as well as weather normalization.

Figure 9: Normalized Energy Use Intensity Distribution, Canada-wide Data Set

The normalized energy use intensity distribution of buildings highlights the large number of buildings performing below the national average of 36.65 ekWh/ft²/yr. More than half of the buildings in the Canada-wide data set perform better than 28.0 ekWh/ft²/yr and the greatest concentration of energy use intensity is between 20.0 and 30.0 ekWh/ft²/yr.
4.3 Regional Trends

The 2010 Survey collected data on buildings from across Canada. Below, in Figure 10, the chart illustrates the proportion of buildings from large geographic regions including British Columbia, the Prairie Region (Alberta, Manitoba, and Saskatchewan), Ontario, and Québec. The vast majority of buildings are located in Ontario (59%) followed by a significant proportion which are located in the Prairie Region (23%).

Figure 10: Regional Distribution – Number and Percentage of Data Set by Category
The chart below exhibits the normalized annual energy use intensity of each building in the three most represented regions, namely British Columbia, the Prairie Region, and Ontario.

Figure 11 highlights both the mean normalized energy intensity for the Canada-wide data set (purple bar) and the mean normalized energy intensity for each region (red bars). The national mean is 28.7 ekWh/ft²/yr and both British Columbia and the Prairie Region are above that mark with intensities of 32.9 and 30.7 ekWh/ft²/yr, respectively. Ontario’s mean is below that of the Canada-wide data set at 26.9 ekWh/ft²/yr.

Figure 11: Normalized Energy Use Intensity, Regional Data Sets

Normalized Energy Use

British Columbia

Prairie Region

Ontario

ekWh/ft²/year
Since electricity is used in all buildings and natural gas is the most widely used energy source for heating, it is interesting to examine the consumption trends for each of these energy types by region.

Figure 12: **Average Electricity Use Intensity by Region**

Figure 12 displays the average electricity use intensity in each region and shows a disparity between higher intensity in Québec as compared to Ontario, the Prairie Region, and British Columbia. The three regions to the west have a range of average intensities between 19.3 and 22.4 ekWh/ft²/yr while Québec has an average intensity of 29.8 ekWh/ft²/yr.

Regional variations, similar to those shown here, have been observed in other reports and are expected as they correlate with the availability of each energy type and the energy resource distribution pattern across Canada.³
The use of different types and sources of energy vary by region, as illustrated in Table 1, above. Since deep lake water cooling is only available in the downtown core of Toronto and in limited capacity, it is not surprising that only 12% of the buildings in the Ontario region reported to be consuming this energy type. It is also not surprising that 100% of the buildings located in the Prairie Region use only natural gas for heating and power generation. District heating systems are in use in British Columbia and, to a lesser degree, in Ontario and Québec. The final row in Table 1 states the percentage of buildings within the Canada-wide data set (rather than the regional sub-groups) that are consuming each energy type. To note, the percentages displayed may be misleading in that the sample size in Québec is small compared to the other regions and additional data points are needed for a more detailed analysis.

Table 1: **Energy Type and Source – Use by Percentage of Buildings and Region**

<table>
<thead>
<tr>
<th></th>
<th>Electricity</th>
<th>Deep Lake Water Cooling</th>
<th>Natural Gas</th>
<th>District Heating</th>
<th>On-site Steam</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>British Columbia</strong></td>
<td>100%</td>
<td>0%</td>
<td>78%</td>
<td>22%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Prairie Region</strong></td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Ontario</strong></td>
<td>100%</td>
<td>12%</td>
<td>89%</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Québec</strong></td>
<td>100%</td>
<td>0%</td>
<td>83%</td>
<td>17%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Entire Data Set</strong></td>
<td>100%</td>
<td>7%</td>
<td>89%</td>
<td>9%</td>
<td>3%</td>
</tr>
</tbody>
</table>

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4.4 City Center Trends

The 2010 Survey data set is sufficiently large as to provide meaningful break-outs of sub-regional and market data sets. Figures 14 through 17 illustrate the trends in the normalized energy use intensity data for the Greater Toronto Area (GTA), Calgary, and the Greater Vancouver Regional District (GVRD).

The proportion of buildings located in the GTA is more than both Calgary and GVRD combined. There are 120 buildings in the GTA data set (46% of total), 40 buildings in the Calgary data set (15% of total), and 37 buildings in the GVRD data set (14% of total).

Figure 14: City Center Distribution – Number and Percentage of Data Set by Category
Figure 15, above, shows the GTA data set of annual normalized building energy intensity with a mean normalized energy use intensity of 27.6 ekWh/ft²/yr. As described, the median annual normalized energy use intensity is lower than the mean at 26.5 ekWh/ft²/yr. The top 25th percentile of the GTA data set begins at 23.2 ekWh/ft²/yr and the bottom 75th percentile begins at 31.5 ekWh/ft²/yr (as indicated by the dashed lines in Figure 15).

The lowest normalized building energy use intensity in the data set is at 14.8 ekWh/ft²/yr and the highest is at 46.4 ekWh/ft²/yr, which equals a multiple of 3.1 over the lowest building. There are 5 buildings with normalized energy use intensities below 20.0 ekWh/ft²/yr and 30 buildings with energy use performance within the top quartile, below 23.2 ekWh/ft²/yr.
Figure 16: Normalized Energy Use Intensity, Calgary Data Set

Mean = 32.6 ekWh/ft²/yr
Median = 31.7 ekWh/ft²/yr

The lowest normalized building energy use intensity in the data set is at 16.1 ekWh/ft²/yr and the highest is at 61.2 ekWh/ft²/yr, which equals a multiple of 3.8 over the lowest building. There is one building with an normalized energy use intensity below 20.0 ekWh/ft²/yr and 10 buildings with energy use performance within the top quartile, below 28.1 ekWh/ft²/yr.

Figure 16, above, shows the Calgary data set of annual normalized building energy intensity with a mean normalized energy use intensity of 32.6 ekWh/ft²/yr. As described, the median annual normalized energy use intensity is lower than the mean at 31.7 ekWh/ft²/yr. The top 25th percentile of the Calgary data set begins at 28.1 ekWh/ft²/yr and the bottom 75th percentile begins at 35.9 ekWh/ft²/yr (as indicated by the dashed lines in Figure 16).

Figure 17: Normalized Energy Use Intensity, Greater Vancouver Regional District Data Set

Mean = 32.9 ekWh/ft²/yr
Median = 32.8 ekWh/ft²/yr

The lowest normalized building energy use intensity in the data set is at 20.9 ekWh/ft²/yr and the highest is at 50.8 ekWh/ft²/yr, which equals a multiple of 2.4 over the lowest building. There are no buildings with a normalized energy use intensity below 20.0 ekWh/ft²/yr yet there are 10 buildings with energy use performance within the top quartile, below 25.4 ekWh/ft²/yr.

Figure 17, above, shows the GVRD data set of annual normalized building energy intensity with a mean normalized energy use intensity of 32.9 ekWh/ft²/yr. As described, the median normalized energy use intensity is only slightly lower than the mean at 32.8 ekWh/ft²/yr. The top 25th percentile of the GVRD data set begins at 25.4 ekWh/ft²/yr and the bottom 75th percentile begins at 37.2 ekWh/ft²/yr (as indicated by the dashed lines in Figure 17).
Comparing the average actual energy use intensity for each city center and comparing it to the average normalized energy use intensity reveals unanticipated trends. It was expected that most of the buildings in the Survey would experience a reduction in energy use intensity after the normalization procedure was applied and that few would experience an increase in energy use intensity due to normalization. It is notable that on average, the buildings in the GTA and in Calgary follow the expected trend of experiencing a lowered normalized energy use intensity but those in the GVRD, even on average, do not experience any significant difference in energy use intensity.

In the GTA data set, weather normalization methods do not apply, as Toronto is the reference city for weather data. Therefore, the difference between the actual energy use intensity and the normalized energy use intensity seen here is due to building factors (e.g. occupant density, operating hours, vacancy) or exceptional/high intensity space type allowances. In the Calgary data set, weather normalization methods generally adjust the energy use intensity for each building downwards to take into consideration the colder climate in Calgary as compared to Toronto. This data set also contained some buildings that were normalized for building characteristics and high intensity/exceptional space types, as in the GTA data set. In the GVRD data set, weather normalization methods generally adjust the energy use intensity for each building upwards to compensate for the warmer climate in the Vancouver area as compared to Toronto. This data set also contained some buildings that were normalized for building characteristics and high intensity/exceptional space types, as in the other data sets, but the number of buildings reporting sub-metered high intensity/exceptional space types was much lower in this group than in the others, which could have contributed to the small to insignificant impact of normalization in this city center.
4.5 High Intensity or Exceptional Space Type Trends

Many of the 2010 Survey participants reported having sub-metered high intensity space types (e.g. data center, retail) or exceptional space types within the building area. The classification of each is displayed in Table 2, below.

In the Canada-wide data set, 43% of buildings did not report either high intensity space types or enclosed parking. These buildings may contain such space types but they were not reported because there were insufficient area measurements or the areas have not been sub-metered for energy use.

Enclosed parking was recorded for 47% of the buildings in the data set, yet only 2% of those buildings entered sub-metered data for this space type while other submissions relied on the nominal adjustment value given for normalization in the Template.

Only a small proportion of participants recorded both area and sub-metered energy use for high intensity space type such as data centers, call centers, or retail areas. The 2010 Survey data set does contain information regarding call centers but as the sub-set was especially small, the analysis is not included in the 2010 Report.

Table 2: High Intensity or Exceptional Energy Use - Number and Percentage of Data Set by Space Type

<table>
<thead>
<tr>
<th>Space Type</th>
<th>Number of Buildings</th>
<th>Percent of Total Data Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Center</td>
<td>31</td>
<td>12%</td>
</tr>
<tr>
<td>Retail</td>
<td>25</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>19</td>
<td>7%</td>
</tr>
<tr>
<td>Enclosed Parking</td>
<td>123</td>
<td>47%</td>
</tr>
<tr>
<td>None Reported</td>
<td>113</td>
<td>43%</td>
</tr>
</tbody>
</table>

As shown in Figure 19, the ranges for high energy use intensity space types are wide and the mean intensities for each space type are varied. For data centers, the annual energy use intensity range runs between 37.5 and 824.9 kWh/ft²/yr with a mean intensity of 280.1 kWh/ft²/yr. For retail spaces, the annual energy use intensity range extends from 11.1 to 367.9 kWh/ft²/yr and has a mean of 66.2 while other space types average 95.7 kWh/ft²/yr and have a range of intensities from 11.5 to 472.4 kWh/ft²/yr.
REALpac works to establish broad industry frameworks in the area of building sustainability for the Canadian real property community. We strive to draw insights from a community of experts when trying to set priorities and influence policies, and to provide a forum within which to exchange ideas and promote best practices. The development of the REALpac Energy Normalization Methodology and Template, the organization and management of the 2010 Energy Benchmarking Survey, and the release of the 2010 Report, are activities aligned within this sustainability mandate as the intention of the entire program is to move the industry forward in energy use measuring, monitoring, and performance benchmarking. Although the 2010 Survey was a first attempt at gathering national data on whole building energy consumption, this fresh look at the Canada-wide data is positive and promising as it shows owners, tenants, and building managers are interested and active in monitoring energy use.

We are pleased and encouraged that the Canada-wide data set shows the annual mean normalized building energy use intensity to be 28.7 ekWh/ft² as this is below the NRCan national average energy use intensity for office buildings of 36.65 ekWh/ft²/yr. Wide ranges in annual energy use intensity within city centers and regions demonstrate the variety and diversity of building energy performance and the need for a normalized approach. The ranges of energy use intensity for sub-metered spaces also points to the need for more detailed information and deeper understanding of exceptional space types and how they contribute to overall building energy performance. This 2010 Survey provides an initial baseline measurement for the industry to begin to understand where we stand collectively, and individually, and to use as a foundation for future initiatives and improvements. The REALpac Energy Benchmarking Survey will be conducted annually, in the later half of the calendar year, and will be followed by an updated report with comparative analyses of trends and results.

By increasing participation in the REALpac Energy Benchmarking Survey and broadening the scope of the data collected, REALpac aims to fill existing knowledge gaps and deepen the level of analysis in future reports to provide an even more valuable resource for the industry. By participating in surveys year-over-year and having their buildings included in the resulting reports, building owners and managers will have more useful information and tools to:

- track energy use and building performance over time,
- pinpoint where energy is being wasted within their facilities and where adjustments can be made to reduce excess energy use,
- use trends in building energy performance to make more informed asset management decisions,
- use trends and comparisons to inform and guide capital budgeting programs,
- develop more focused training programs for building operations professionals,
- develop employee incentives and compensation programs which incorporate the proven energy performance of a building or portfolio, and
- prioritize future initiatives to be taken with respect to energy reduction targets and initiatives.

The Canada-wide data, as well as the regional and city center data sets, shows how good some buildings can be and will push the industry towards more meaningful and comparable energy reduction initiatives and programs. The next steps will be to drive the real property industry to understand their building energy performance in greater detail while we collectively engage in monitoring and sharing energy use data. Then we can begin to compare performance in a significant way as we also encourage intelligent and cost effective reduction in energy usage in buildings. Ultimately, the Canadian real property sector will be positioned to maintain positive public and government relations, have the capacity to attract the best tenants, and maintain profitability over the long term.
2010 Energy Benchmarking Report

Performance of the Canadian Office Sector