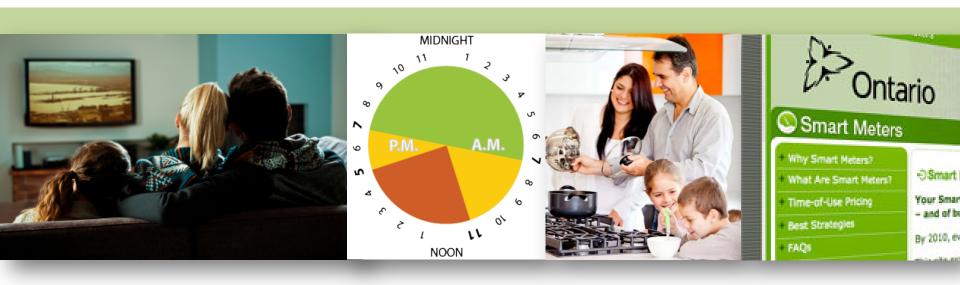




## Time of Use and Electricity Bill Research Residential & Business Survey







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### **Objectives**



### **Objectives**

- The Ontario Energy Board (OEB) commissioned Ipsos Reid to conduct public opinion research about a number of electricity-related topics among electricity bill payers, including both residential and small and medium business consumers.
- Specifically, this research investigates a number of topics and issues, including (but not limited to):
  - Importance and satisfaction with electricity-related issues
  - Knowledge with electricity related topics, including Time of Use Pricing (TOU), electricity conservation, how electricity prices are determined, etc.
  - Effectiveness and satisfaction with Time of Use Pricing
  - Interest in alternative Time of Use Pricing models
  - Knowledge about pricing details included on the electricity bill
  - Attitudes and opinions about various features of the electricity bill
  - Desired changes to the current electricity bill



# **Key Findings Among Residential and Business Customers**



### **Key Findings**

- The opinions and attitudes that both the public and the business community have regarding electricity issues is mixed and at times contradictory, which paints a picture of confusion and a lack of understanding about the electricity system in Ontario.
- This confusion among consumers is most prominent in the area of the price that consumers pay for electricity. This issue is one of the most important to consumers, while few are knowledgeable about how electricity prices are determined. In fact, only 4% of consumers would say that they are 'very knowledgeable' about how the price they pay for electricity is determined. This gap in importance and understanding not only leads to confusion, but it also leads many consumers to be dissatisfied with the price they pay for electricity.
- Attitudes and opinions about Time of Use Pricing are also very mixed. Opinions are not driven by a lack of understanding or knowledge as the majority of residential consumers agree that the pricing system is easy to understand and that it is effective at shifting their consumption to lower peak periods. Consumers generally understand when pricing periods change and have shifted their consumption somewhat accordingly. However, consumers are 'grudgingly accepting' of the pricing system as they understand it and have shifted some consumption, although they are not seeing the benefits of these shifts on their bill.



### **Key Findings (continued)**

- When probed about satisfaction, many consumers provide a more negative opinion about Time of Use pricing because of the impracticality of the current structure and importantly, the understanding that Time of Use system does not provide for an opportunity to reduce electricity costs significantly.
- Therefore, consumers would be responsive to changes in the Time of Use system that would provide the opportunity to reduce electricity costs for their household. This could mean having a larger difference between on-peak and off-peak rates that would provide a greater incentive to shift consumption (57% interested, 19% not interested) and to have multiple pricing plans to add flexibility to the pricing system for different demographic groups (50% interested, 22% not interested).
- Considering that the price of electricity is such a key issue for consumers, educating the public (and businesses) about how electricity prices are set and determined needs to also be a part of any future proposals about Time of Use pricing.
- Opinions about Time of Use pricing among small and medium sized businesses is considerably more negative compared to residential customers as only a minority of businesses are aware of the system, believe in its effectiveness, or are satisfied with the system.



### **Key Findings (continued)**

- These negative opinions among businesses are also driven by the price of electricity, but more prominently by the inflexibility of the pricing system to provide a off-peak time during normal business operating hours.
- Regarding the electricity bill, many residential and business consumers have a lack of understanding about the different charges on their bill and what these various changes mean. Although most consumers are confident that can understand how much electricity they are using based in kilowatt hours, only about half indicate that they know what the delivery charge actually means and even fewer understand what the regulatory charge means. As a result of this lack of understanding about their bill, few consumers pay attention to these charges on their bill.
- The vast majority of both residential and business consumers would like to see more information on their bill, not less. In particular consumers would be interested in seeing more information that explains the various charges on their bill, how electricity prices are determined, and more graphs illustrating how much electricity is consumed and when it is consumed. In particular, consumers would be very interested in seeing fixed and variable changes separated, while few consumers are interested in a more simplified bill that shows only one total charge.



### **Gap Analysis**

- Importance scores are plotted horizontally across the bottom of the chart (along the X-axis). Satisfaction scores are plotted vertically (along the Y-axis).
- Typically, it is most advantageous to focus on improving areas that are of high importance to consumers, but where satisfaction is relatively low. However, it can also make sense to focus on lower importance items if you can make a big difference.

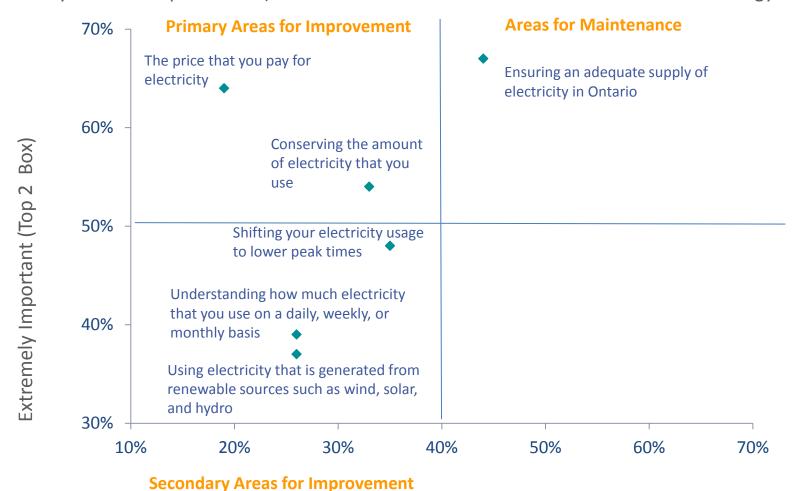
#### On the graph, three areas are identified:

- Primary areas for improvement areas that are considered important, but with lower satisfaction scores. The focus here is on improving these areas to increase satisfaction.
- Secondary areas for improvement areas that are considered less in importance, but with lower satisfaction scores. These are secondary areas of focus to increase satisfaction.
- Areas for enhancement areas with lower satisfaction scores, but are considered relatively less important to consumers. The focus here is on at least maintaining, and where feasible, improving these areas to increase satisfaction.



### **Gap Analysis for Residential Customers (T2B)**

• The largest gaps in importance vs. satisfaction (primary areas of improvement) are centered around the price of electricity and electricity conservation. Areas of lower importance, but also low satisfaction (secondary areas of improvement) include issues associated with TOU and renewable energy sources.



Extremely Satisfaction (Top 2 Box)



### **Residential Customers**



#### **Methodology – Residential Consumers**

- Data collection was conducted via a telephone (CATI) methodology, utilizing both landline and cell phone sample.
- In total, n=800 interviews were conducted by Random Digit Dialing (RDD).
- The margin of error for a sample of n=800 is +/- 3.5%, nineteen times out of twenty. The margin of error for sub-groups will be larger, depending on the sample size.
- Interviews were conducted between November 26<sup>th</sup> and December 14<sup>th</sup>, 2014.
- The sample frame was designed to be representative of electricity bill payers across the province.
- Only those members of the household who have detailed knowledge about the household's utilities and have a responsibility or shared responsibility to manage utility bills qualified for the survey.



### **Executive Summary**



#### **Executive Summary – Electricity Related Issues**

- Electricity bill payers are the most likely to indicate that ensuring an adequate supply of electricity and the price of electricity are the two most important issues to them.
- Shifting electricity usage to lower peak times and generating electricity from renewable sources are also viewed as important, however less important than supply and price.
- When asked about satisfaction with electricity-related issues, bill payers provide high ratings for ensuring an adequate supply of electricity in Ontario. However, there is a considerable gap in satisfaction regarding the price of electricity as this is viewed as one of the most important issues, while satisfaction is the lowest.
- Satisfaction with the ability to shift electricity usage to off-peak times is relatively high as two thirds of electricity bill payers indicate that they are satisfied with their ability to do this.
- Overall, the vast majority (82%) of bill payers indicate that they are knowledgeable with Time of Use Pricing.
- However, significantly fewer (39%) are knowledgeable about how electricity prices are determined in Ontario, with only 4% indicating that they are 'very knowledgeable'.



#### **Executive Summary – Time of Use Pricing**

- Overall, two thirds (66%) of electricity bill payers indicate that Time of Use Pricing is an effective strategy to shift their electricity consumption from the daytime and early evening to later in the evening. Three in ten (32%) feel that Time of Use Pricing is ineffective.
- That being said, fewer bill payers indicate that they are satisfied with Time of Use Pricing (49%), with most being somewhat satisfied and only one in ten (9%) 'very satisfied' indicating that some modifications to the system would be welcomed by consumers. About one in five decision makers are neutral and three in ten indicating that they are dissatisfied with Time of Use Pricing.
- Although the majority (76%) of residential customers mention that the Time of Use system is easy for them to understand, half (53%) of consumers agree that they are not using significantly less electricity because of the pricing structure. One quarter (27%) of consumers 'strongly agree' that they are not consuming less electricity.
- Interest in changes to the time of use pricing system are desired by about half of consumers. Consumers are most interested in having a larger difference between on-peak and off-peak rates or in having multiple pricing plans to choose from for people that use electricity at different times of the day. Slightly fewer bill payers are interested in having fewer price-periods in the day.



#### **Executive Summary – Electricity Bill**

- Not surprisingly, bill payers are the most likely to pay attention the total amount due when reviewing their electricity bill However not all bill payers look at the total charge. One quarter pay attention to the amount of electricity that they use or any graphs that detail how much electricity they used compared to previous months. Few bill payers pay attention to other features or charges on their bill.
- Knowledge about what the various changes on the electricity bill mean is quite low as few electricity bill payers are 'very confident' that they know what the amount of electricity in kilowatt hours they used means, while one in ten are 'very confident' that they know what the delivery charge means. A similar proportion of bill payers are 'very confident' that they know what the Regulatory Charge on their bill means.
- Interest in having an electricity bill that differentiates between fixed and variable changes is high as a strong majority of bill payers would like to see these two types of charges itemized on their bill. Many would also like to see more information that explains what the various changes on the bill means and also more graphs that illustrate detailed consumption patters over time.
- Consumers also mention a number of additional features that they would like to see on their electricity bill, including more information about the various charges on their bill that would make it easier for them to understand, particularly about how electricity prices are set and determined.
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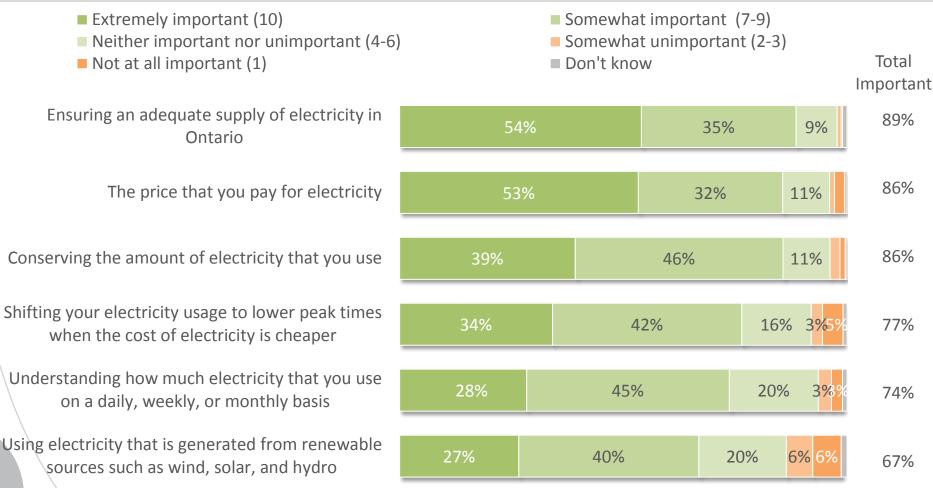


# **Electricity-Related Issues**



#### **Importance of Electricity-Related Issues**

Electricity bill payers indicate that all issues associated with electricity are important to them, but to different degrees. Ensuring an adequate supply of electricity and the price of electricity is deemed as the most important. Shifting electricity usage to lower peak times is viewed as less important, while using electricity that is generated from renewable sources is viewed as the least important.



\*values less than 3% not labelled



### Importance of Electricity-Related Issues (Extremely Important), by Demographics

Bill payers who are over the age of 55, women, reside in Central Ontario, and earn a household income below \$100,000 are the most likely to indicate that shifting electricity usage to lower peak times is 'extremely important' to them.

			A	ge		Ger	Gender Region						Income			
Extremely Important	Total	18 to 44	45 to 54	55 to 64	65+	Male	Female	North	Southw est	Central	East	Toronto	Other GTA	Under \$40,00 0		\$100,00 0 or more
Ensuring an adequate supply of electricity in Ontario	54%	40%	49%	64%	63%	50%	58%	60%	51%	58%	47%	52%	60%	59%	54%	50%
The price that you pay for electricity	53%	53%	60%	54%	48%	50%	56%	63%	53%	61%	47%	49%	56%	53%	57%	50%
Conserving the amount of electricity that you use	39%	30%	41%	46%	39%	33%	45%	42%	37%	44%	33%	35%	46%	44%	43%	31%
Shifting your electricity usage to lower peak times when the cost of electricity is cheaper	34%	28%	31%	38%	39%	27%	41%	36%	35%	43%	31%	30%	35%	44%	35%	27%
Understanding how much electricity that you use on a daily, weekly, or monthly basis	28%	25%	22%	33%	33%	23%	33%	27%	25%	40%	25%	25%	33%	37%	30%	22%
Using electricity that is generated from renewable sources such as wind, solar, and hydro	27%	24%	25%	26%	32%	21%	32%	29%	21%	34%	21%	31%	29%	29%	30%	22%



### Importance of Electricity-Related Issues (Extremely Important), by Demographics (continued)

Those who have attained a high school diploma as the highest level of education and those who are retired are the most likely to see shifting electricity usage to lower peak times as 'extremely important'. Those who work full-time or are unemployed are the least likely to view many of the electricity-related issues as less important.

			Education		Employment Status						
Extremely Important	Total	High School	College/ Some University	Uni. Grad Or Above	Full Time	Part-Time	Unemployed	Retired	Other		
Ensuring an adequate supply of electricity in Ontario	54%	61%	52%	53%	49%	50%	40%	65%	59%		
The price that you pay for electricity	53%	64%	56%	46%	56%	61%	60%	49%	47%		
Conserving the amount of electricity that you use	39%	52%	36%	36%	37%	44%	34%	43%	39%		
Shifting your electricity usage to lower peak times when the cost of electricity is cheaper	34%	46%	31%	31%	30%	44%	23%	40%	41%		
Understanding how much electricity that you use on a daily, weekly, or monthly basis	28%	40%	26%	25%	24%	30%	29%	35%	41%		
Using electricity that is generated from renewable sources such as wind, solar, and hydro	27%	34%	25%	25%	25%	42%	16%	30%	25%		



### Importance of Electricity-Related Issues (Extremely Important), by Electricity Bill

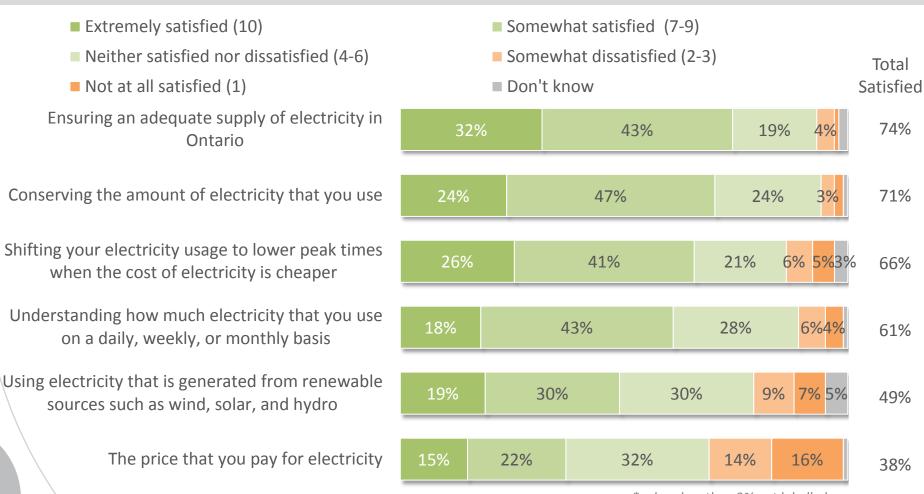
Bill payers who have a monthly electricity bill that is \$200 or more are the most likely to feel that the price of electricity and understanding how much electricity they use on a daily, weekly, or monthly basis is 'extremely important' to them.

		Cost Of Electricity Bill					
Extremely Important	Total	Low (Less than \$100 a month)	Mid (Between \$100 and less than \$200 a month)	High (\$200 or more a month)			
Ensuring an adequate supply of electricity in Ontario	54%	54%	52%	57%			
The price that you pay for electricity	53%	46%	53%	63%			
Conserving the amount of electricity that you use	39%	38%	40%	40%			
Shifting your electricity usage to lower peak times when the cost of electricity is cheaper	34%	38%	35%	30%			
Understanding how much electricity that you use on a daily, weekly, or monthly basis	28%	26%	26%	34%			
Using electricity that is generated from renewable sources such as wind, solar, and hydro	27%	27%	29%	25%			



#### **Satisfaction with Electricity Related Issues**

Bill payers are the most likely to be satisfied that there is a reliable supply of electricity in Ontario and with the amount of electricity that they are able to conserve. Two thirds are satisfied with their ability to shift electricity usage to lower peak times, however only one-quarter are 'extremely satisfied'. Four in ten bill payers are satisfied with the price that they pay for electricity, only 15% are 'extremely satisfied' while three in ten are dissatisfied overall.



\*values less than 3% not labelled

Q2. Now I would like you to rate your satisfaction with the same energy related topics using a scale from 1 to 10 where 1 means that you are not at all satisfied and 10 means that you are extremely satisfied.



### Satisfaction with Electricity Related Issues (Extremely Satisfied), by Demographics

Bill payers between the ages of 18 and 54, men, and those households that earn a household income of \$100,000 or more are the least likely to be 'extremely satisfied' with their ability to shift electricity usage to lower peak periods. Interestingly, those households that earn a higher household income are the least likely to be 'extremely satisfied' with all aspects of electricity-related issues.

			Age			Ger	nder	Region					Income			
Extremely Satisfied	Total	18 to 44	45 to 54	55 to 64	65+	Male	Female	North	Southw est	Central	East	Toronto	Other GTA	Under \$40,00 0		S100,00 0 or
Ensuring an adequate supply of electricity in Ontario	32%	25%	28%	30%	42%	29%	34%	36%	34%	28%	28%	28%	34%	39%	33%	26%
Shifting your electricity usage to lower peak times when the cost of electricity is cheaper	26%	20%	22%	32%	28%	20%	31%	27%	28%	28%	21%	21%	28%	35%	25%	19%
Conserving the amount of electricity that you use	24%	16%	22%	29%	27%	20%	28%	33%	26%	30%	23%	16%	24%	34%	25%	16%
Using electricity that is generated from renewable sources such as wind, solar, and hydro	19%	18%	17%	19%	23%	16%	23%	28%	15%	22%	13%	20%	24%	30%	20%	15%
Understanding how much electricity that you use on a daily, weekly, or monthly basis	18%	16%	15%	20%	21%	14%	22%	22%	17%	22%	17%	16%	19%	25%	21%	11%
The price that you pay for electricity	15%	15%	15%	16%	16%	13%	17%	17%	19%	13%	12%	17%	13%	21%	17%	10%

Q2. Now I would like you to rate your satisfaction with the same energy related topics using a scale from 1 to 10 where 1 means that you are not at all satisfied and 10 means that you are extremely satisfied.

Base: All respondents (n=800)



### Satisfaction with Electricity Related Issues (Extremely Satisfied), by Demographics (continued)

Those who have attained a post secondary education and are currently working full-time are the least likely to be 'extremely satisfied' with all electricity-related issues, including their ability to shift electricity usage to lower peak periods.

			Education		Employment Status						
Extremely Satisfied	Total	High School	College/ Some University	Uni. Grad Or Above	Full Time	Part-Time	Unemployed	Retired	Other		
Ensuring an adequate supply of electricity in Ontario	32%	41%	32%	26%	28%	26%	29%	39%	28%		
Shifting your electricity usage to lower peak times when the cost of electricity is cheaper	26%	40%	22%	22%	22%	32%	30%	30%	26%		
Conserving the amount of electricity that you use	24%	39%	23%	17%	20%	27%	37%	29%	24%		
Using electricity that is generated from renewable sources such as wind, solar, and hydro	19%	27%	15%	19%	18%	20%	25%	23%	17%		
Understanding how much electricity that you use on a daily, weekly, or monthly basis	18%	31%	16%	14%	16%	19%	25%	22%	16%		
The price that you pay for electricity	15%	25%	15%	12%	14%	16%	24%	16%	15%		

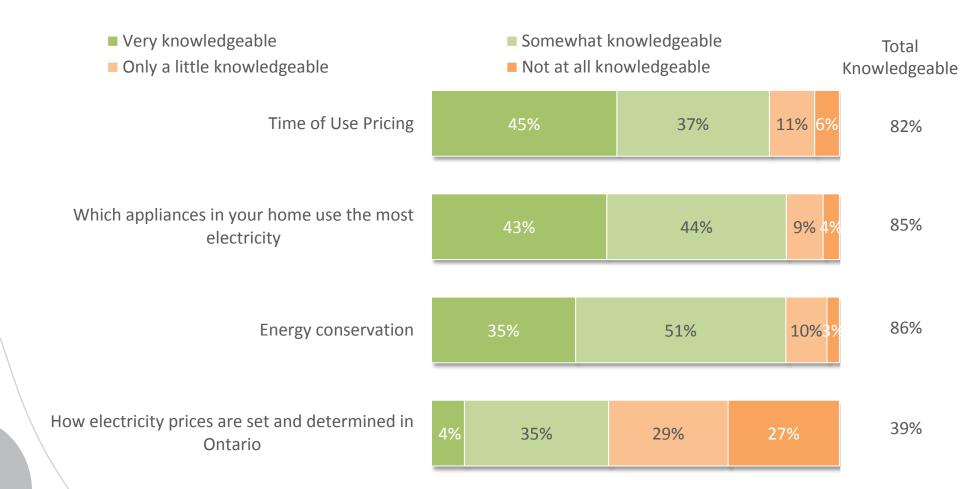
Q2. Now I would like you to rate your satisfaction with the same energy related topics using a scale from 1 to 10 where 1 means that you are not at all satisfied and 10 means that you are extremely satisfied.

Base: All respondents (n=800)



#### **Knowledge About Electricity-Related Issues**

The vast majority of bill payers indicate that they are knowledgeable with Time of Use Pricing, with slightly fewer than half indicating that they are 'very knowledgeable'. Bill payers are also equally as knowledgeable with understanding which appliances in their home use the most electricity and energy conservation. However, significantly fewer bill payers are knowledgeable with how electricity prices are determined, with very few (4%) indicating that they are 'very knowledgeable'.



Q3. Would you say that you are very knowledgeable, somewhat knowledgeable, only a little knowledgeable, or not at all knowledgeable about the following? How about...

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#### **Knowledge About Electricity-Related Issues, by Demographics**

Bill payers who earn a household income of \$40,000 or less are significantly less likely to be knowledgeable about Time of Use Pricing compared to those households that earn a higher household income.

Bill payers under the age of 55, women, and those who reside in Southwestern Ontario are the least likely to be knowledgeable about how electricity prices are determined.

			Age				nder	Region						Income		
Somewhat/Very Knowledgeable	Total	18 to 44	45 to 54	55 to 64	65+	Male	Female	North	Southw est	Central	East	Toronto	Other GTA	Under \$40,00 0		S100,00 0 or
Which appliances in your home use the most electricity?	87%	85%	87%	88%	88%	91%	84%	85%	85%	83%	89%	91%	87%	77%	89%	93%
Energy conservation	86%	83%	94%	85%	84%	89%	84%	90%	86%	77%	86%	87%	89%	75%	86%	92%
Time of Use Pricing	83%	81%	88%	82%	81%	83%	83%	84%	84%	79%	87%	83%	80%	71%	82%	88%
How electricity prices are set and determined in Ontario?	43%	37%	38%	47%	50%	47%	40%	49%	36%	38%	43%	46%	49%	38%	46%	47%

Q3. Would you say that you are very knowledgeable, somewhat knowledgeable, only a little knowledgeable, or not at all knowledgeable about the following? How about...

Base: All respondents (n=800)



### Knowledge About Electricity-Related Issues, by Homeownership and Electricity Bill

Home owners tend to be more knowledgeable about energy conservation and Time of Use Pricing compared to those who rent their residence.

			Status Of lence
Somewhat/Very Knowledgeable	Total	Own	Rent
Which appliances in your home use the most electricity?	87%	88%	82%
Energy conservation	86%	88%	77%
Time of Use Pricing	83%	84%	72%
How electricity prices are set and determined in Ontario?	43%	44%	39%

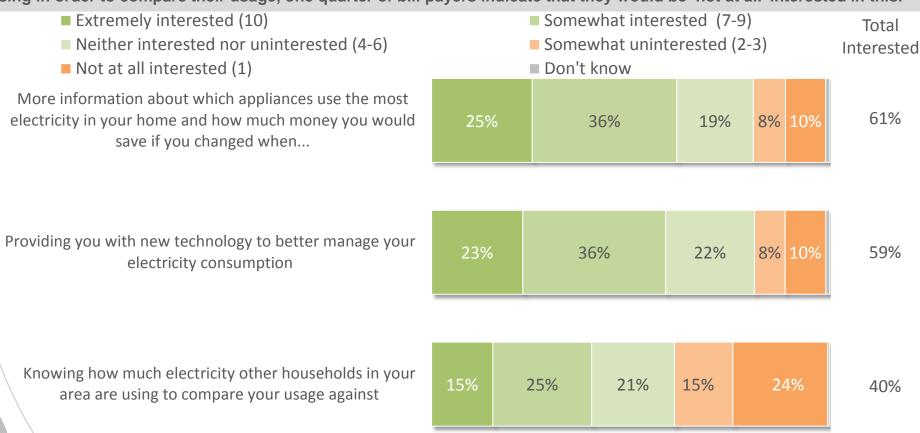
Q3. Would you say that you are very knowledgeable, somewhat knowledgeable, only a little knowledgeable, or not at all knowledgeable about the following? How about...



### **Interest in Energy Conservation Information & Technology**

Despite being knowledgeable about which appliances use the most electricity, the majority of bill payers would be interested in receiving more information about which appliances use the most electricity in their home and also how much money they would saved if they changed the times when they use these appliances.

A similar proportion of bill payers would also be interested in receiving new technologies that would help them to better manage their consumption. Fewer would be interested in knowing how much electricity other households in their area are using in order to compare their usage, one quarter of bill payers indicate that they would be 'not at all' interested in this.



<sup>\*</sup>values less than 3% not labelled

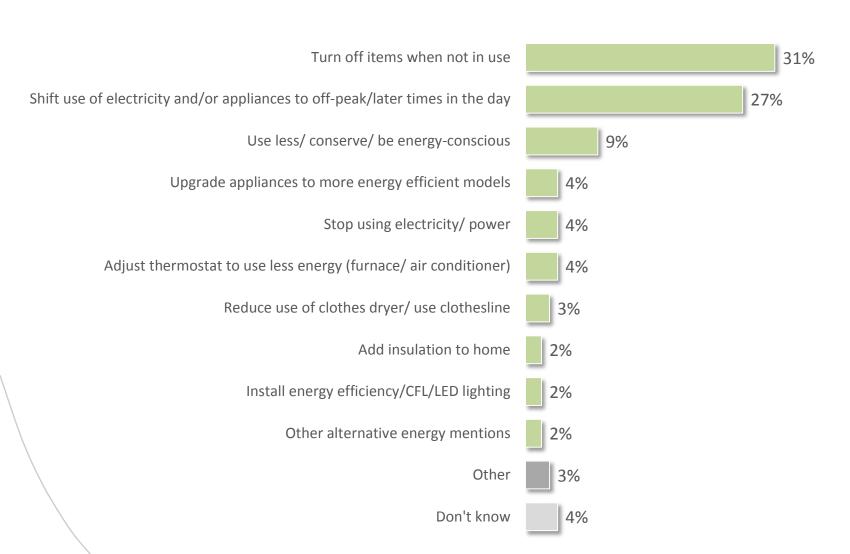
Q12. Using a scale of 1 to 10 where 1 means not at all interested and 10 means extremely interested, how interested would you be in the following proposals about the price of electricity? How about...

Base: All respondents (n=800)



### **Most Important Action for Conserving Electricity**

Bill payers believe that the single most important action that they could take to conserve electricity is to turn off items when not in use, followed closely by shifting use of electricity and appliances to off-peak or later times of the day.



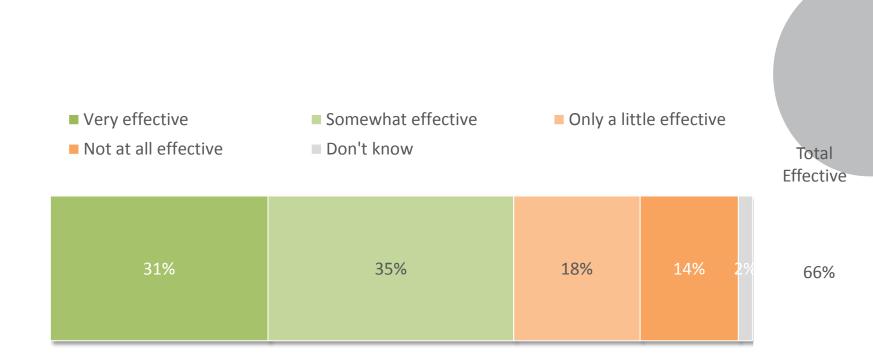


### **Time of Use Pricing**



### **Effectiveness of Time of Use Pricing to Shift Electricity Consumption**

Overall, two thirds of electricity bill payers believe that Time of Use Pricing is an effective strategy to shift their electricity consumption from the daytime and early evening to later in the evening, with three in ten indicating that it is 'very effective'. Three in ten bill payers feel that Time of Use Pricing is ineffective.



Q6. How effective would you say that Time of Use pricing has been to shift your electricity consumption from the daytime and early evening to later in the evening and at night?

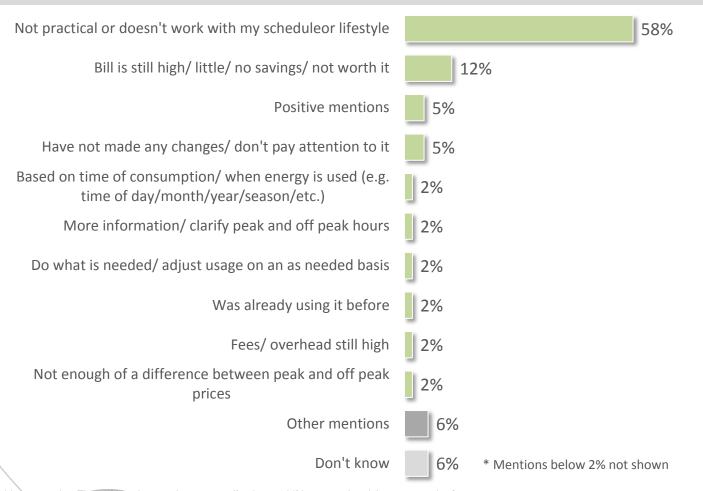
Base: All respondents (n=800)



### Why Time of Use is Ineffective

Most bill payers who indicate that Time of Use Pricing is ineffective mention that the pricing system is not practical or does not work with their schedule or lifestyle. One in ten mention that the savings potentially gained from shifting usage is not worth the effort to them.

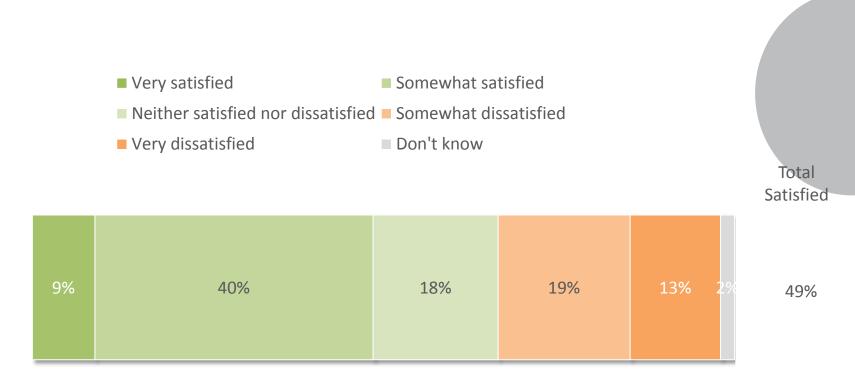
Bill payers between the ages of 18 and 54 are significantly more likely than those over the age of 55 to mention that Time of Use Pricing is not practical for their schedule or lifestyle (65%, compared to 50% respectively), as are those who work full time (65%).





### **Satisfaction With Time of Use Pricing**

Half of bill payers indicate that they are satisfied with Time of Use Pricing with most being somewhat satisfied and only one in ten 'very satisfied'. About one in five decision makers are neutral and three in ten indicating that they are dissatisfied with Time of Use Pricing.





### Satisfaction With Time of Use Pricing, by Electricity Bill

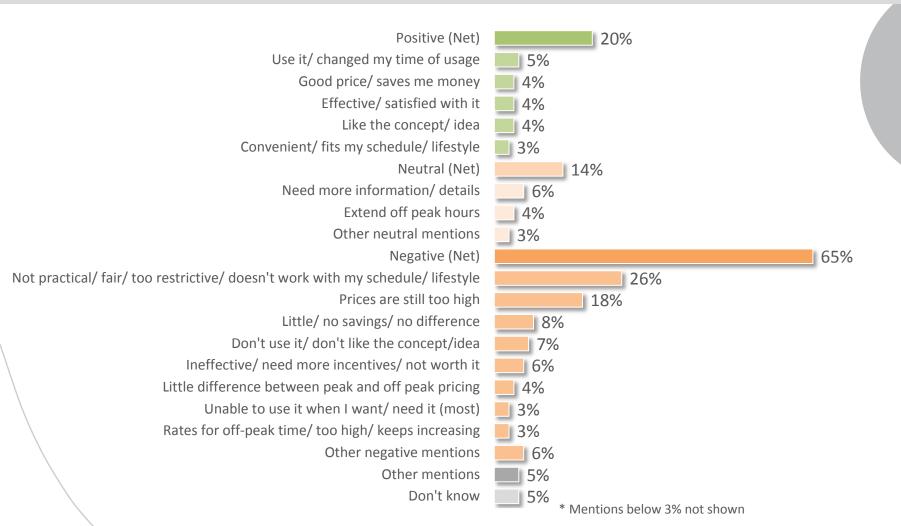
Those who have an average monthly electricity bill of \$200 or more are more likely than those who pay less for electricity on a monthly basis to be dissatisfied with Time of Use Pricing.

		Cost Of Electricity Bill						
	Total	Low (Less than \$100 a month)	Mid (Between \$100 and less than \$200 a month)	High (\$200 or more a month)				
Very/ Somewhat satisfied	49%	53%	50%	44%				
Somewhat/ Very dissatisfied	32%	26%	32%	38%				



### Reasons for Being Satisfied or Dissatisfied with Time of Use Pricing

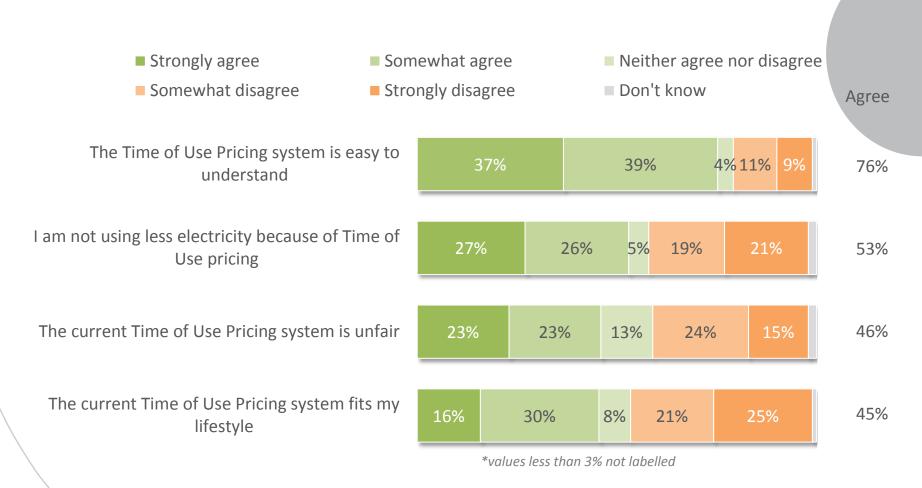
Although half of pill payers mention that they are satisfied with TOU, three-quarters provide a negative comment about the pricing system. Among these, one quarter mention that TOU is not practical for their lifestyle, while 18% mention that the price of electricity is too high. Among those who mention something positive, 5% or fewer mention that TOU has changed their usage times, that it has saved them money, or that its effective or that they like the idea.





### **Attitudes & Opinions Towards Time of Use Pricing**

Three quarters of bill payers agree that the current Time of Use Pricing system is easy to understand and about half agree that the current system fits their lifestyle. On the other hand, half of bill payers agree that they are not using less electricity as a result of Time of Use pricing, while a similar proportion also agree that the current system is unfair.



Q11. Please indicate whether you strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree with the following statements. How about...

Base: All respondents (n=800)



### **Attitudes Towards Time of Use Pricing, by Demographics**

Bill payers between the ages of 18 and 44 and those who earn a household income of \$40,000 or more are the most likely to agree that TOU is easy to understand.

Households that earn \$100,000 or more annually are significantly less likely than lower earning households to agree that they are not using less electricity because of TOU.

Those between the ages of 45 and 64 are the most likely to agree that TOU is unfair. As are those who reside in the City of Toronto and Eastern Ontario as well as those earning a household income of less than \$100,000 annually.

Households that earn \$100,000 or more annually are slightly more likely than those households who earn a lower income to agree that TOU fits their lifestyle.

			Age			Ger	nder	Region						Income		
Strongly/Somewhat Agree	Total	18 to 44	45 to 54	55 to 64	65+	Male	Female	North	Southw est	Central	East	Toronto	Other GTA	Under \$40,00 0		S100,00 0 or
The Time of Use Pricing system is easy to understand	76%	81%	75%	71%	76%	74%	77%	73%	80%	76%	80%	74%	72%	64%	77%	84%
I am not using less electricity because of Time of Use pricing	53%	51%	54%	51%	54%	54%	51%	54%	54%	57%	45%	50%	55%	57%	56%	45%
The current Time of Use Pricing system is unfair	46%	40%	52%	54%	40%	42%	50%	56%	49%	61%	42%	34%	49%	50%	51%	36%
The current Time of Use Pricing system fits my lifestyle	45%	45%	43%	47%	46%	48%	43%	44%	47%	50%	48%	48%	38%	48%	42%	54%

Q11. Please indicate whether you strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree with the following statements. How about...

Base: All respondents (n=800)



### Attitudes Towards Time of Use Pricing, by Demographics (continued)

Those who have earned a university degree are the most likely to agree that TOU is easy to understand. This demographic is on the other hand less likely to agree that they are not using less electricity because of TOU or that the current TOU system is unfair.

		Education					
Strongly/Somewhat Agree	Total	High School	College/ Some University	Uni. Grad Or Above			
The Time of Use Pricing system is easy to understand	76%	69%	74%	80%			
I am not using less electricity because of Time of Use pricing	53%	62%	53%	48%			
The current Time of Use Pricing system is unfair	46%	57%	55%	34%			
The current Time of Use Pricing system fits my lifestyle	45%	46%	42%	48%			



### Attitudes Towards Time of Use Pricing, by Electricity Bill

Those who have a higher monthly electricity bill are more likely than those who pay less per month to agree that the current TOU pricing system is unfair.

		Cost Of Electricity Bill				
Strongly/Somewhat Agree	Total	Low (Less than \$100 a month)	Mid (Between \$100 and less than \$200 a month)	High (\$200 or more a month)		
The Time of Use Pricing system is easy to understand	76%	74%	77%	76%		
I am not using less electricity because of Time of Use pricing	53%	51%	53%	53%		
The current Time of Use Pricing system is unfair	46%	42%	45%	52%		
The current Time of Use Pricing system fits my lifestyle	45%	46%	47%	43%		



#### Interest in Alternative Time of Use Models

Slightly more than half of bill payers would be interested in having a larger difference between on-peak and off-peak rates, while exactly half are interested in having multiple pricing plans to choose from for people to use electricity at different times of the day. Slightly fewer decision makers would be interested in having fewer price-periods in the day. Only about one in five are not interested in any of these proposals.



- Neither interested nor uninterested (4-6)
- Not at all interested (1)

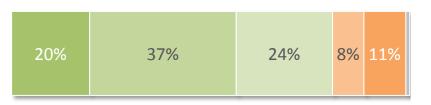
- Somewhat interested (7-9)
- Somewhat uninterested (2-3)
- Don't know

Total Interested

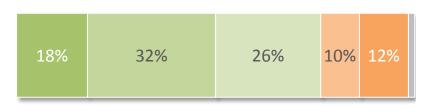
57%

50%

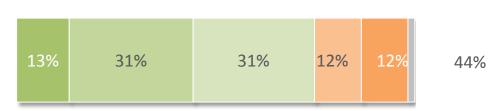
Having a larger difference between on-peak and off-peak rates, where the price would be higher or lower depending on the time



Having multiple pricing plans to choose from for people to use electricity at different times of the day



Having fewer different price-periods in the day, meaning the elimination of a mid-peak time and maintaining only an onpeak and off...



\*values less than 3% not labelled

Q12. Using a scale of 1 to 10 where 1 means not at all interested and 10 means extremely interested, how interested would you be in the following proposals about the price of electricity? How about... **Ipsos Reid** 

Base: All respondents (n=800)



### Interest in Alternative Time of Use Models, by Age and Region

Bill payers between the age of 18 and 44 are significantly more likely than those 65 years of age and older to be interested in having multiple pricing plans to choose from.

Those who reside in the GTA are the most likely to be interested in proposals that include having multiple pricing plans and having different price-periods in the day.

			A	ge			Region						
Interested	Total	18 to 44	45 to 54	55 to 64	65+	North	Southwest	Central	East	Toronto	Other GTA		
Having a larger difference between on-peak and off- peak rates, where the price would be higher or lower depending on the time	57%	55%	56%	56%	59%	55%	53%	60%	54%	63%	56%		
Having multiple pricing plans to choose from for people to use electricity at different times of the day	50%	57%	50%	47%	46%	50%	47%	46%	46%	58%	50%		
Having fewer different price-periods in the day, meaning the elimination of a mid-peak time and maintaining only an on-peak and off	44%	44%	42%	44%	48%	46%	44%	47%	34%	47%	46%		



### Interest in Alternative Time of Use Models, by Education and Dependents

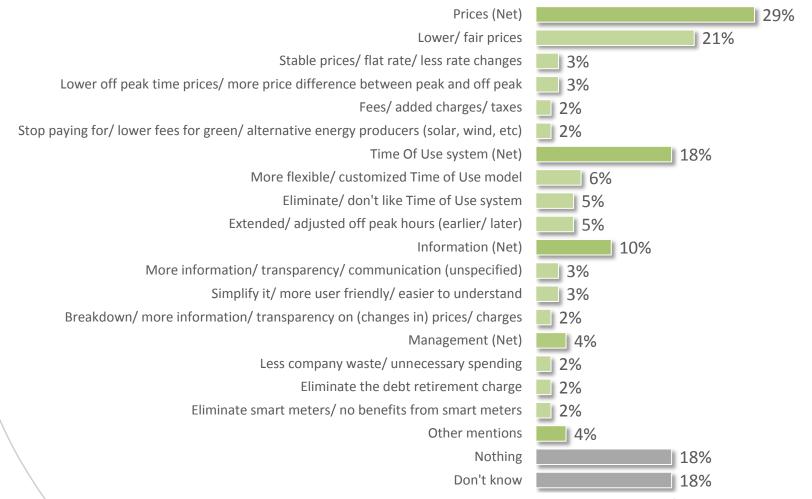
Those that have at least one dependent in the household are significantly more likely to be interested in having different pricing plans to choose from for the price of electricity a different times of the day, as are those who have attained a High School diploma as their highest level of education.

			Education		Dep	oendents Co	unt
Interested	Total	High School	College/ Some University	Uni. Grad Or Above	None	1 To 2	3 Or More
Having a larger difference between on- peak and off-peak rates, where the price would be higher or lower depending on the time	57%	64%	54%	56%	56%	59%	56%
Having multiple pricing plans to choose from for people to use electricity at different times of the day	50%	57%	51%	46%	45%	53%	56%
Having fewer different price-periods in the day, meaning the elimination of a midpeak time and maintaining only an on-peak and off	44%	54%	44%	40%	43%	44%	51%



### **Desired Changes to Electricity Pricing Model**

Bill payers mention a number of changes that they would like to see to the electricity pricing model. Three in ten would like to see a change made to the price of electricity, namely a lower price for the electricity that they use. About one in five mention changing the TOU system by either making it more flexible or eliminating the system all together, while one in ten would like more information about the electricity pricing model.



<sup>\*</sup> Mentions below 3% not shown

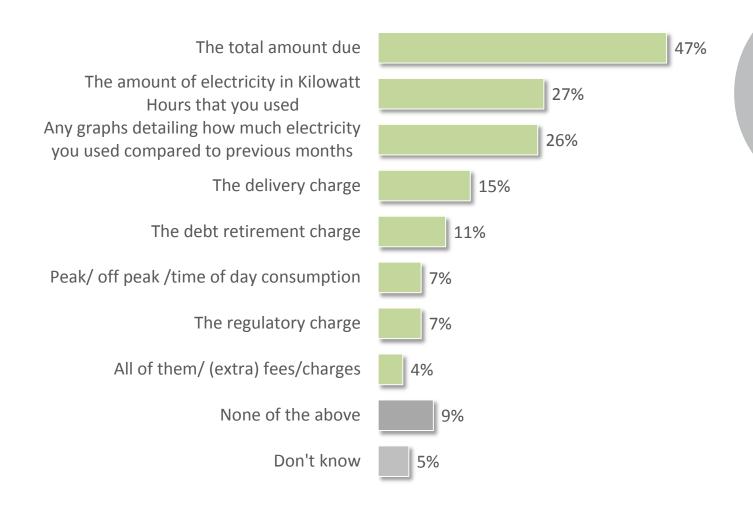


## **The Electricity Bill**



### **Attention Paid to Electricity Bill Details**

Only about half of electricity bill payers indicate that they pay attention the total amount due when reviewing their electricity bill. One quarter pay attention to the amount of electricity that they use or any graphs that details how much electricity they used compared to previous months. Few bill payers pay attention to other features on their bill.





### Attention Paid to Electricity Bill Details, by Electricity Bill

Those who pay more on a monthly basis for electricity are more likely to pay attention to various charges on their electricity bill, including the total amount due and any graphs detailing consumption patterns.

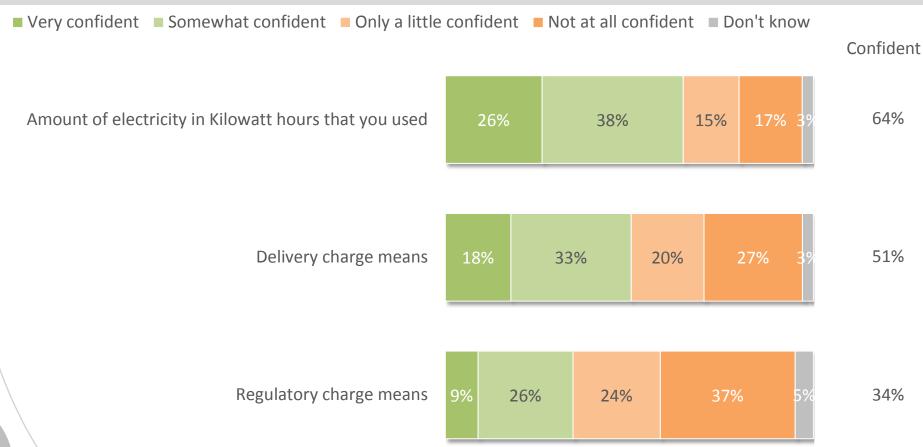
		Cost Of Electricity Bill				
	Total	Low (Less than \$100 a month)	Mid (Between \$100 and less than \$200 a month)	High (\$200 or more a month)		
The total amount due	44%	35%	51%	46%		
The amount of electricity in Kilowatt Hours that you used	26%	21%	35%	25%		
Any graphs detailing how much electricity you used compared to previous months	23%	13%	27%	25%		
The delivery charge	14%	10%	16%	16%		
The debt retirement charge	11%	7%	14%	11%		
The regulatory charge	7%	3%	10%	7%		
Anything else	25%	20%	28%	25%		
None of the above	9%	19%	2%	7%		
Don't know	4%	10%	2%	1%		



### **Knowledge About Charges on Electricity Bill**

Few electricity bill payers are 'very confident' that they know what various changes on their electricity bill mean. One quarter are 'very confident' that they know what the amount of electricity in kilowatt hours they used means, while one in ten are 'very confident' that they know what the delivery charge means. A similar proportion of bill payers are 'very confident' that they know what the Regulatory Charge on their bill means.

Men are significantly more likely than women to be knowledgeable about these different charges on the electricity bill.

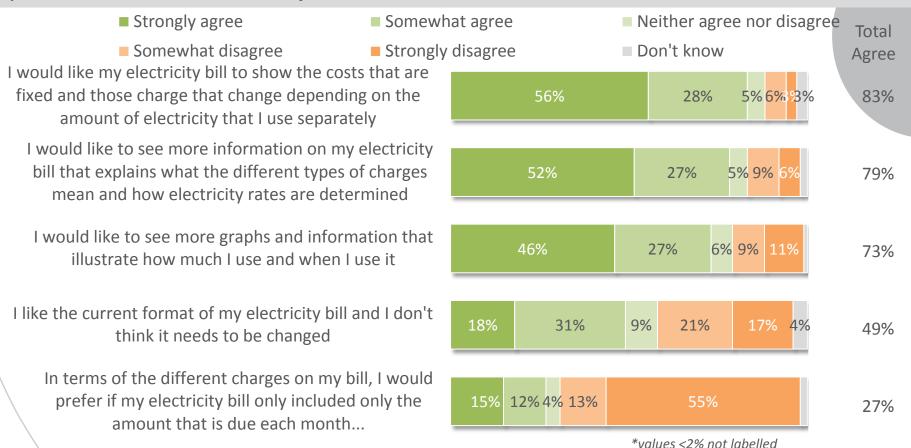




### **Attitudes and Opinions Towards Electricity Bill**

A strong majority of bill payers would like their electricity bill to differentiate between those changes that are fixed and those charges that fluctuate based on consumption. Many would also like to see more information that explains what the various changes on the bill means and also more graphs that illustrate detailed consumption patters over time.

Bill payers are generally undecided as to whether the format of the current bill needs to be changed as about half agree and four in ten disagree. And, few would like to see their bill showing only one single 'amount due' charge, indicating that people do want more details on their utility bill.





### Attitudes and Opinions Towards Electricity Bill, by Age

Bill payers who are 65 years of age and older are significantly less likely than younger bill payers to want to see fixed and variable costs separated on their bill, more information about the various changes on their bill, or more graphs and information detailing when exactly electricity us consumed. These opinions are likely grounded in the opinion that this age group is the most likely to indicate that they like the current format of their electricity bill and they don't want to see this changed.

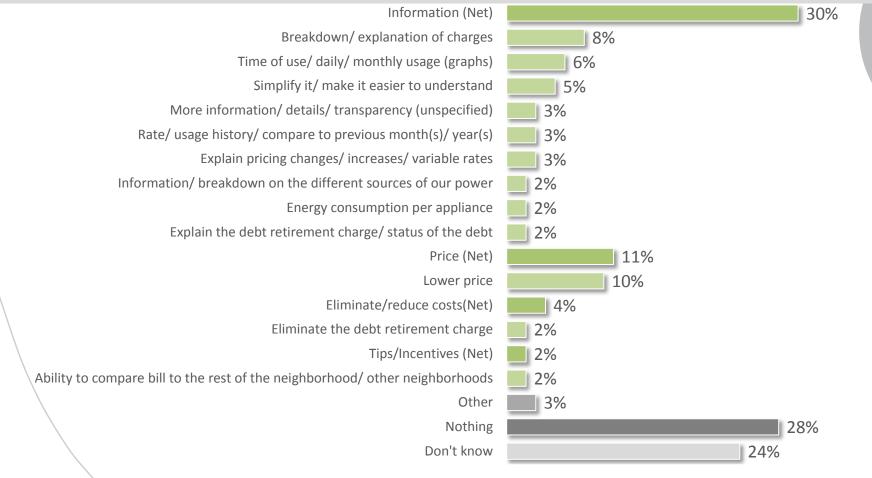
		Age			
Strongly/Somewhat Agree	Total	18 to 44	45 to 54	55 to 64	65+
I would like my electricity bill to show the costs that are fixed (meaning the charges that don't change from month to month like using the poles and	83%	84%	86%	87%	77%
I would like to see more information on my electricity bill that explains what the different types of charges mean and how electricity rates are determined	79%	85%	81%	82%	69%
I would like to see more graphs and information that illustrate how much I use and when I use it	73%	81%	67%	78%	64%
I like the current format of my electricity bill and I don't think it needs to be changed	49%	44%	45%	47%	60%
In terms of the different charges on my bill, I would prefer if my electricity bill only included only the amount that is due each month	27%	25%	29%	26%	27%



### **Additional Information Requested for Electricity Bill**

Among the three in ten electricity bill payers that would like to see more information on their electricity bill a number of items are mentioned, including a breakdown and explanation of the various changes on their bill, information about TOU consumption patterns, and making the bill easier to understand. One in ten would like to see a lower price on their bill, indicating that information about electricity pricing could also be well received.

More than half of electricity bill payers could not mention any additional information that they would like to see on their bill in the future.





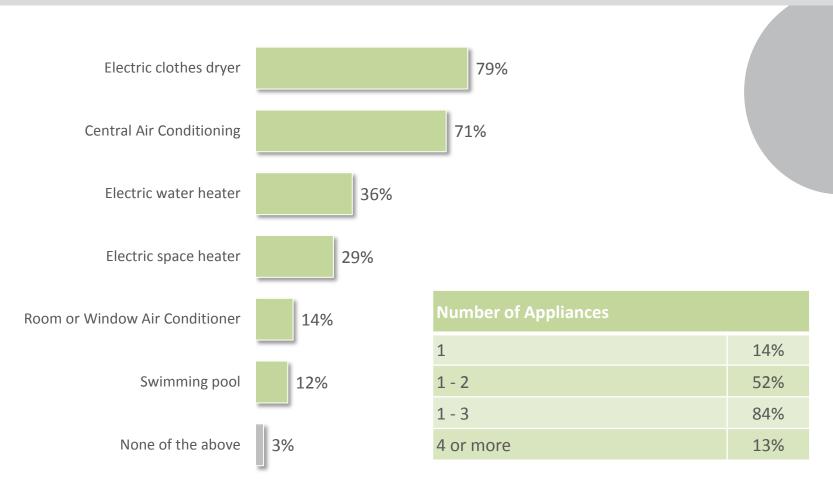
# **Appendix**



### **Ownership of Major Appliances**

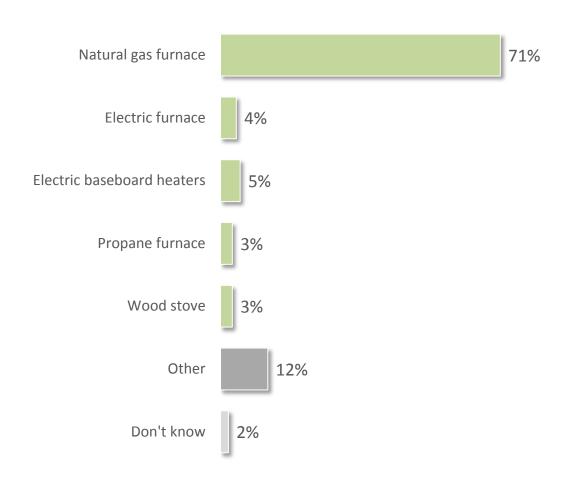
The vast majority of households own an electric clothes dryer or central air conditioning. While, about one third own an electric hot water heater or an electric space heater.

The vast majority of bill payers (84%) own three of these major appliances.





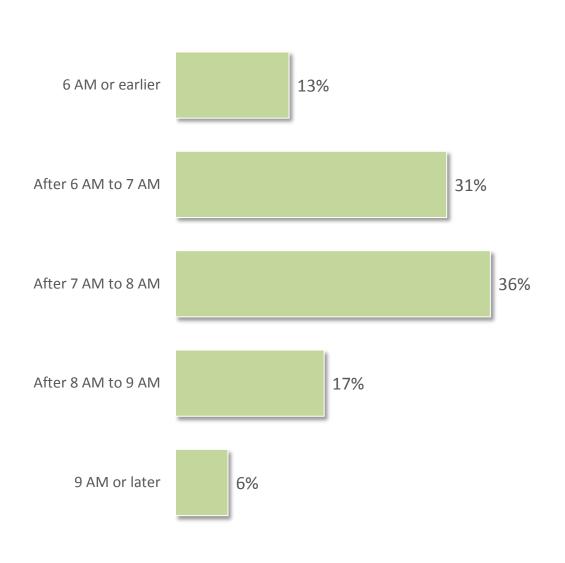
Seven in ten households use natural gas to heat their home, by far the most common method used for heating.





### **Commuting Time in the AM**

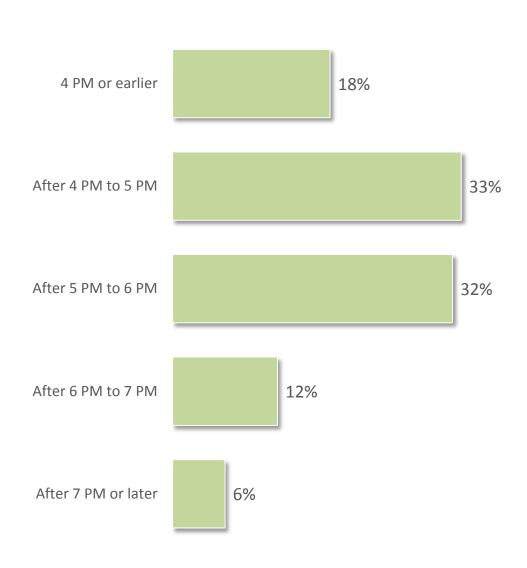
The majority of those that commute for work or school leave their home between 6AM and 8AM (67%).





### **Commuting Time in the PM**

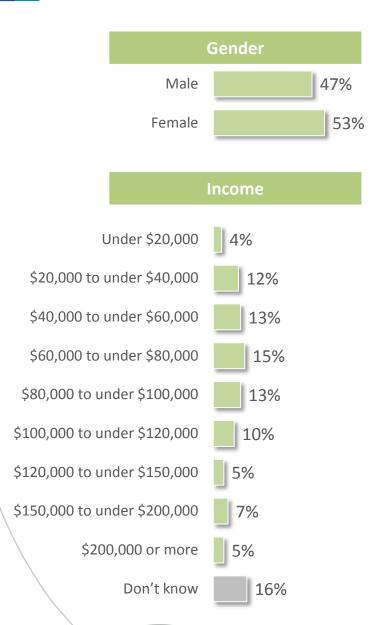
Two thirds of those who leave their home for work or school return home between 4PM and 6PM.

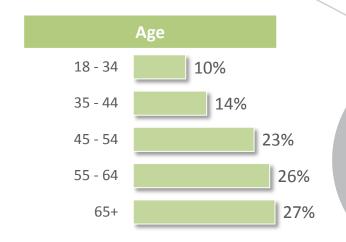


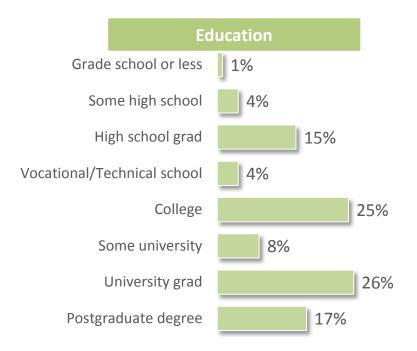


# Demographics

# Demographics

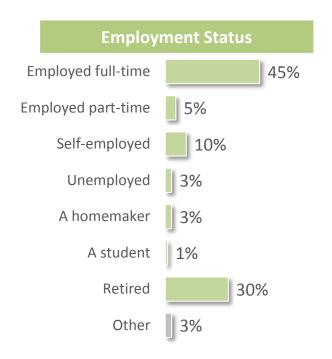


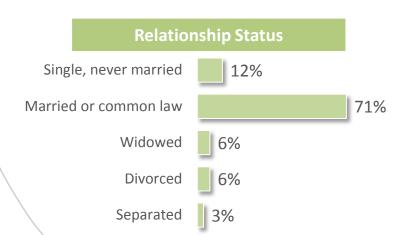


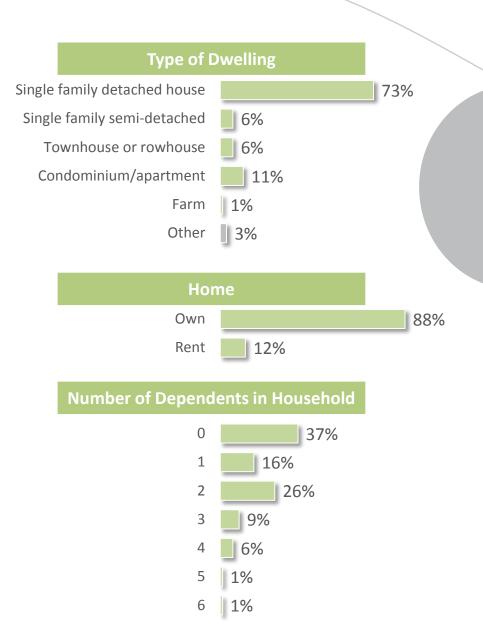




### **Demographics (continued)**









### **Business Customers**



#### **Methodology – Business Consumers**

- Data collection was conducted via a telephone (CATI) methodology, utilizing business sample based on NAICS code.
- In total, n=300 interviews were conducted.
- The margin of error for a sample of n=300 is +/- 5.7%, nineteen times out of twenty. The margin of error for sub-groups will be larger, depending on the sample size.
- Interviews were conducted between December 3<sup>rd</sup> 2014 and January 9<sup>th</sup>, 2015.
- The sample frame was designed to be representative of small and medium business in Ontario, including a variety of business sectors and sizes of businesses.
- Only those individuals within the organization who has detailed knowledge about the businesses utilities and electricity bill specifically qualified for the survey.



### **Executive Summary**



### **Executive Summary – Electricity Related Issues**

- Small and mediums sized business are the most likely to indicate that the price paid for electricity is the most important issue to them (87%), followed closely by conserving the electricity that they use at their organization (80%).
- Issues associated with understanding how much electricity consumed or shifting electricity usage to lower peak times are viewed as less important (68% and 41%, respectively).
- Satisfaction with electricity-related issues is much lower compared to importance. About half of businesses are satisfied with their electricity conservation efforts (57%) or understanding how much electricity they use (53%). Only about three in ten are satisfied with the price of electricity (33%) or shifting their electricity usage to lower peak times (29%).
- Businesses pay the most attention to the price of electricity (84%). Despite relatively lower levels of satisfaction, many organizations pay attention to the amount of electricity that they consume (81%), the energy efficiency of their equipment (76%), and when electricity is consumed at different times of the year (65%). Only half (48%) of firms pay attention the amount of electricity that they consume at different times of the day (48%).



### **Executive Summary – Time of Use Pricing**

- Surprising, only about a quarter of small and medium businesses are aware that they participate in Time of Use pricing. The remaining businesses are either not aware or not sure.
- Only one third (33%) of business who are aware that they participate in time of use pricing indicate that they are satisfied with the pricing structure or that the pricing structure is effective at shifting their consumption to lower peak times (respectively).
- Businesses mention most often that they can't control their hours of operation to meet the TOU schedule, that they need to operate during peak periods, or that TOU is not business friendly.
- In fact, two thirds (66%) of all small and medium business have taken no actions at their organization to shift their electricity consumption from high to low peak times. Among those businesses that have taken some action, fewer than one in ten have shifted use of equipment to lower peak times (8%), installed more efficient lighting (6%), or turn off lights when not in use (6%).
- Reinforcing these opinions, three quarters of business agree that their organization is not using less electricity because of TOU (73%) and that the TOU system is 'unfair' (66%).



### **Executive Summary – Electricity Bill**

- Businesses are most likely to pay attention to the amount due on their bill (42%) or the amount of kilowatt hours used (36%). However, less than half of businesses pay attention to these or any other single item on their bill. Fewer pay attention to other changes on their bill, including the delivery charge (15%), the debt retirement charge (11%), graphs (8%), or the regulatory charge (4%).
- Although many businesses are confident that they know how much electricity they consume (68%), only about half (56%) are confident that they understand what the delivery charge on their bill means (56%) and even fewer (40%) are confident that they know what the regulatory charge means.
- Only about four in ten (43%) agree that they like the current format of their electricity bill, indicating that there is an appetite for change.
- Almost all (84%) businesses would like to see fixed costs and variable costs separated on their electricity bill, while around seven in ten business would like to see more information explaining the various changes on their bill (75%) and also more graphs to illustrate electricity consumption patters (70%).
- Few businesses (33%) want to have less information on their bill, as only one third agree that they would like to see one single charge on their electricity bill.

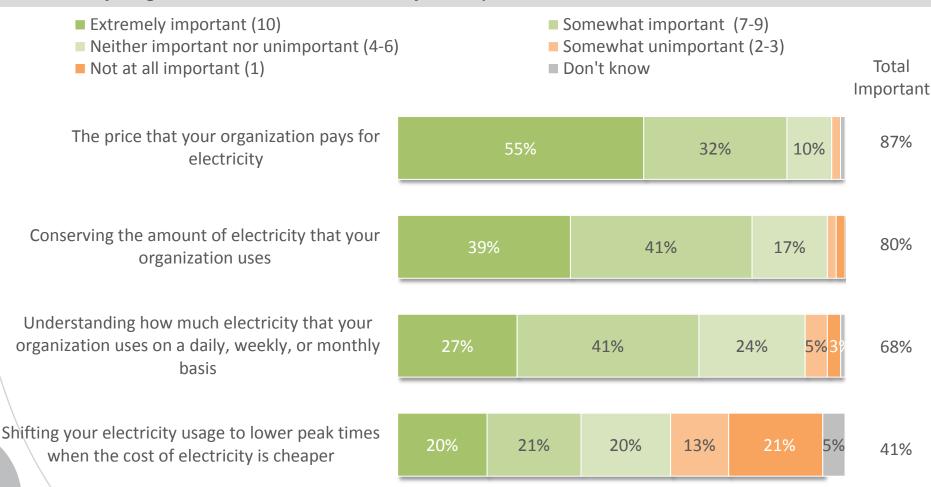


# **Electricity-Related Issues**



### **Importance of Electricity-Related Issues for Business**

The most important electricity-related issue for small and medium businesses is the cost of electricity, this is almost identical in importance compared to residential customers. Conservation and understanding how much electricity is being used is also seen as important by a majority of firms, while fewer than half indicate that it is important for them to shift their electricity usage to different times when electricity is cheaper.

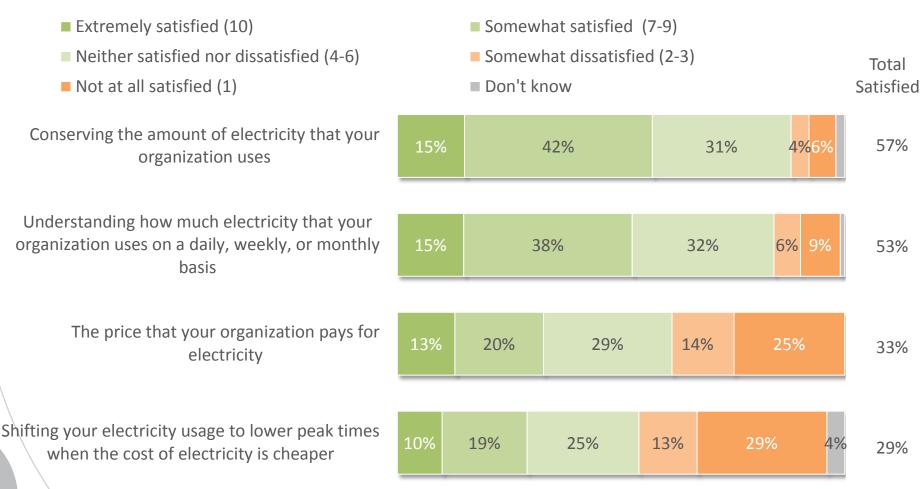


\*values less than 3% not labelled



### **Satisfaction with Electricity Related Issues**

A small majority of firms are satisfied with their electricity conservation efforts and understanding how much electricity they use on a daily, weekly, or monthly basis. Only one third are satisfied with the price that they pay for electricity and slightly fewer than one third are satisfied with their efforts for shift usage to lower peak times.



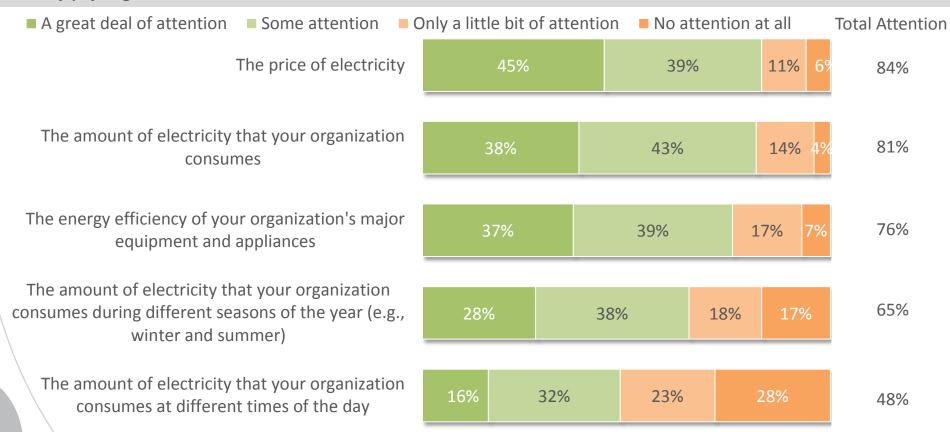
\*values less than 3% not labelled

Q2. Now I would like you to rate your satisfaction with the same energy related topics using a scale from 1 to 10 where 1 means that you are not at all satisfied and 10 means that you are extremely satisfied.



### **Attention Paid to Electricity-Related Issues**

The vast majority of firms pay attention to the price that they pay for electricity and the amount of electricity that they consume (although not all firms). Importantly, less than half of firms 'pay a great deal of attention' to the price of electricity or the amount that they consume despite the fact that price is most important to them. Considerable majorities of firms also pay attention to the energy efficiency of their organizations equipment and the amount of electricity that they consume during different seasons in the year, however fewer than four in ten pay a great deal of attention to this. Only half of firms mention that they pay attention the amount of electricity that they consume at different times of the day, only 16% indicate that they pay 'a great deal of attention' to this.





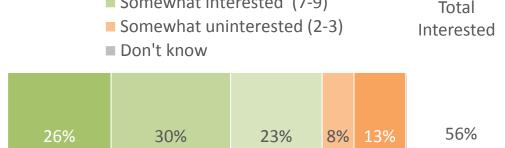
### **Interest in Energy Conservation Information & Technology**

About half of businesses would be interested in new technology to better manage electricity consumption or more information about which types of equipment use the most electricity in their organization. Fewer would be 'very interested' in energy conservation-related equipment and information.



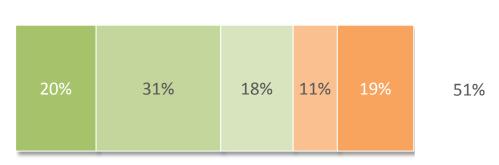
- Neither interested nor uninterested (4-6)
- Not at all interested (1)

Providing your organization with new technology to better manage your electricity consumption



Somewhat interested (7-9)

More information about which type of equipment use the most electricity in your organization

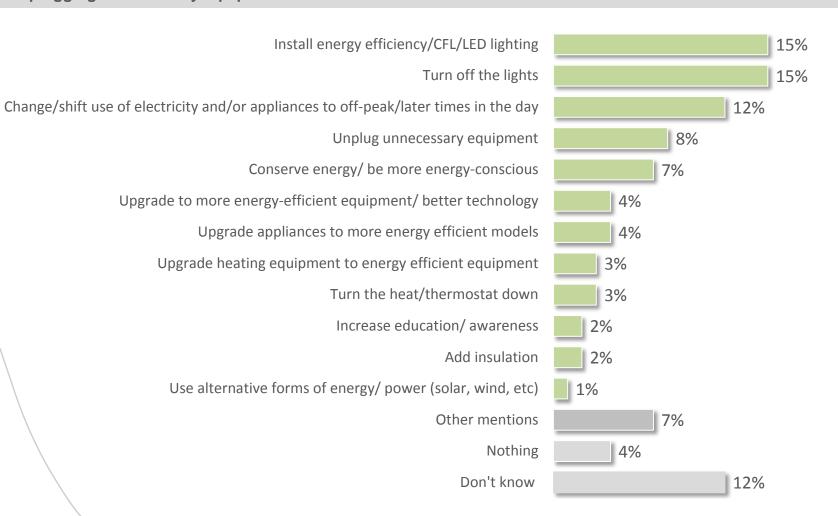


\*values less than 3% not labelled



### **Most Important Action for Conserving Electricity**

When asked about the most important electricity conservation action they could undertake at their organization, three in ten firms mention lighting related actions, relating to the replacement of lighting to more energy efficient types or simply turning off the lights more often. Other actions mentioned including shifting electricity usage to off-peak times or unplugging unnecessary equipment when not in use.

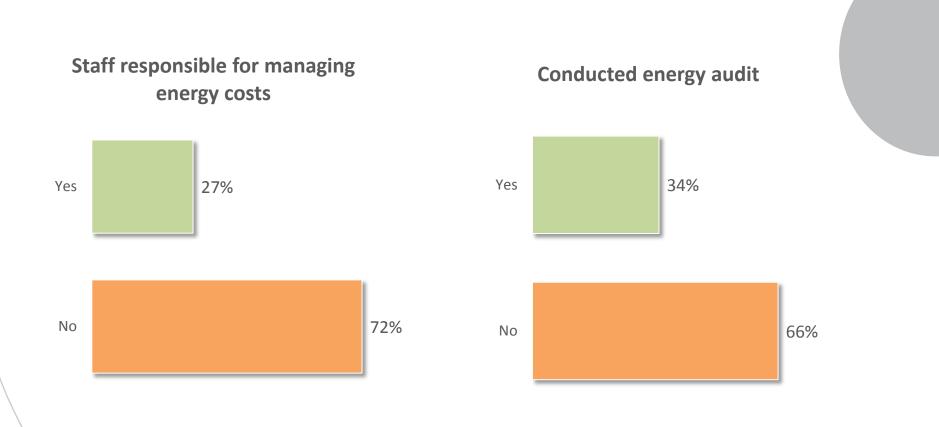




### Having Dedicated Staff for Managing Electricity Consumption & Energy Audits

Only about one quarter of small and medium sized businesses have dedicated staff responsible for managing energy costs. Those that have such staff are significantly more likely to have undertaken an energy audit (43% vs. 20% among those organizations that do not have dedicated staff).

One third of businesses have conducted an energy audit at their organization.



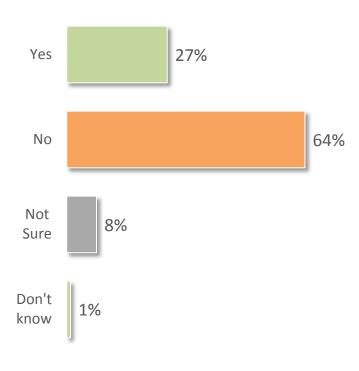


### **Time of Use Pricing**



### **Awareness of Time of Use Pricing**

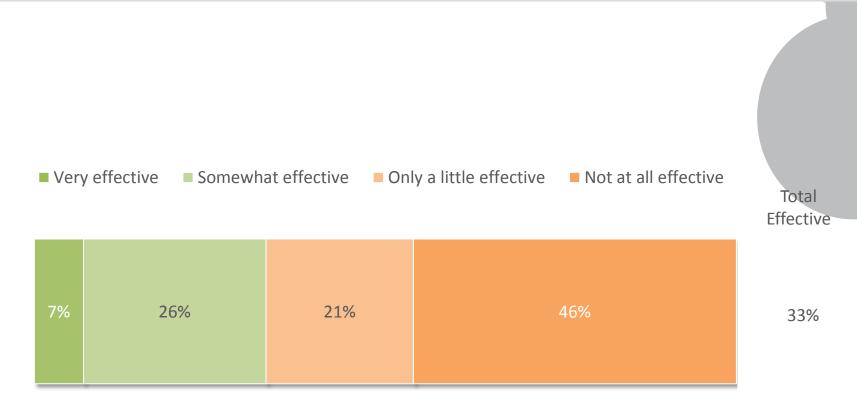
Only one quarter of small and medium sized business are aware that the price that they pay for electricity is different at various times throughout the day.





### **Effectiveness of Time of Use Pricing to Shift Electricity Consumption**

Only one third of business feel that time of use pricing is effective at shifting their electricity consumption from on-peak to off-peak times. Only 7% of businesses mention that this is 'very effective'.



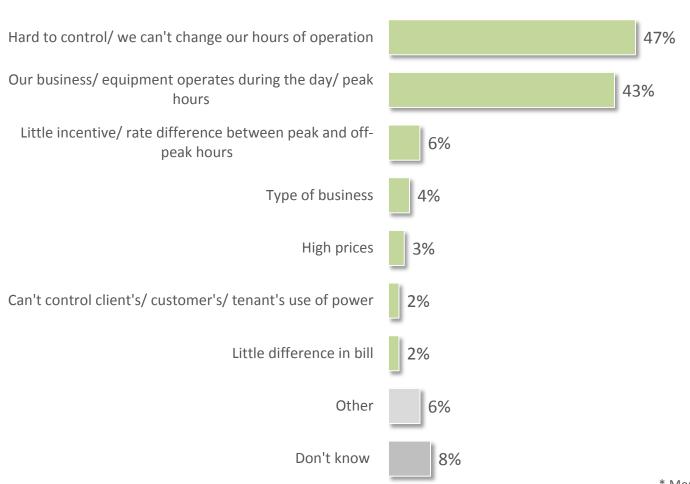
Q6. How effective would you say that Time of Use pricing has been to shift your electricity consumption from the daytime and early evening to later in the evening and at night?

Base: Respondents Whose Organization Participate In Time Of Use Pricing (n=90)



#### Why Time of Use is Ineffective

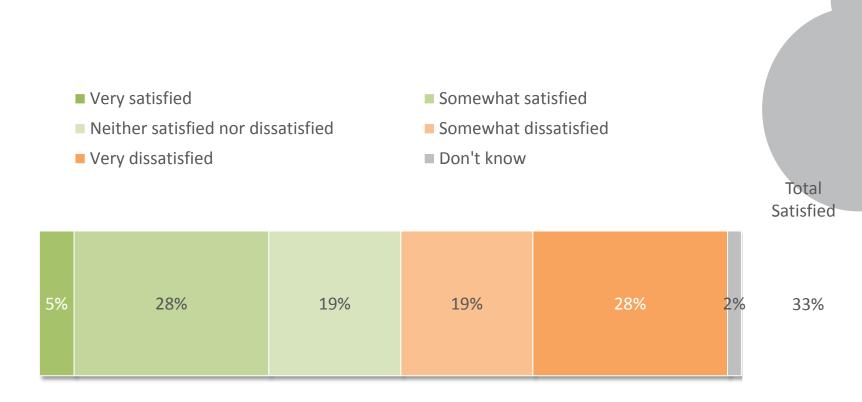
Among those firms that indicate they participate in Time of Use pricing, almost all mention that the pricing scheme is not effective for them because they operate during on-peak times and can't shift their electricity consumption to later times in the evening or early morning.





### **Satisfaction With Time of Use Pricing**

Not surprisingly, only one-third of firms are satisfied with time of use pricing, while about half are dissatisfied, with one quarter being 'very dissatisfied'.

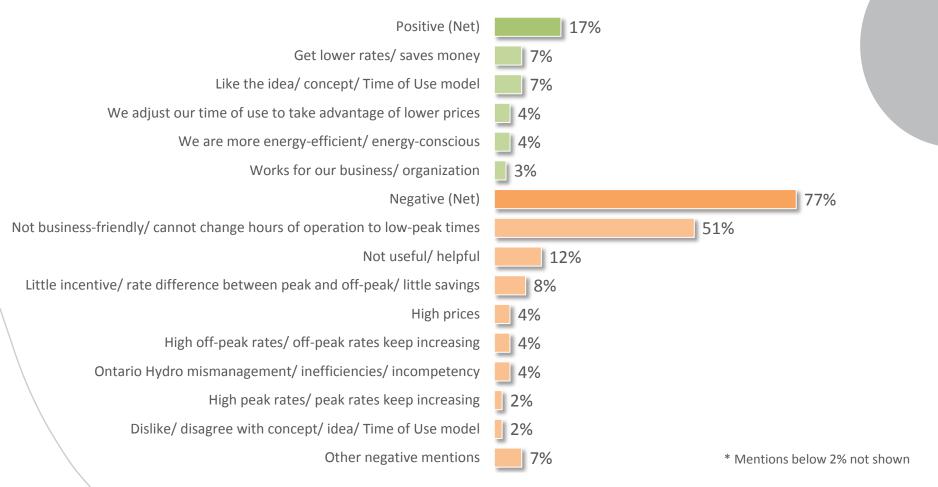




### Reasons for Being Satisfied or Dissatisfied with Time of Use Pricing

Among those that have something positive to mention about Time of Use pricing, some mention they believe it is effective because it provides lower rates or because they like how the pricing system works.

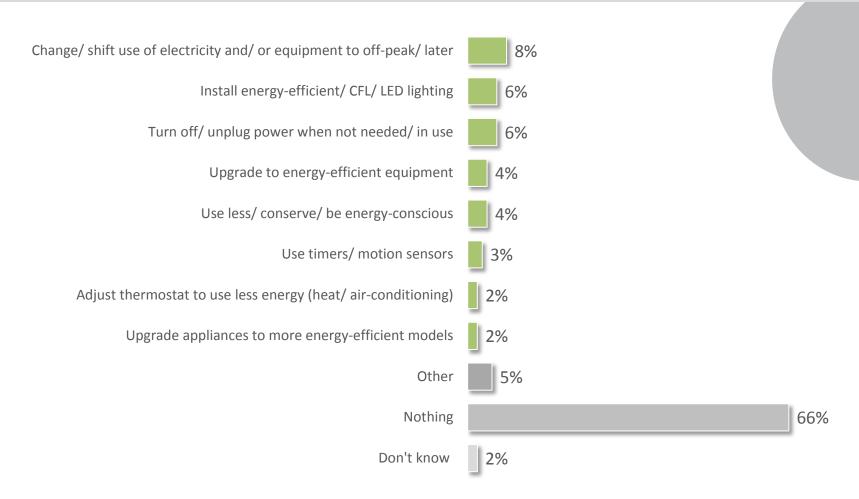
Among those that have something negative to say (77%), most mention that the pricing structure is not business friendly because they can't change their hours of operation to off-peak times. Others also mention that its not useful to them or because there is little incentive to shift consumption times.





### Actions taken by organization in response to Time of Use pricing

Two thirds of small and medium sized businesses indicate that they have done nothing to shift their electricity consumption from on-peak times to off-peak times of the day. Among those that have, some organizations have shifted electricity use or use of certain appliances or equipment during off-peak periods, or that they have installed more efficient lighting, or that they have turned-off certain items when not in use.



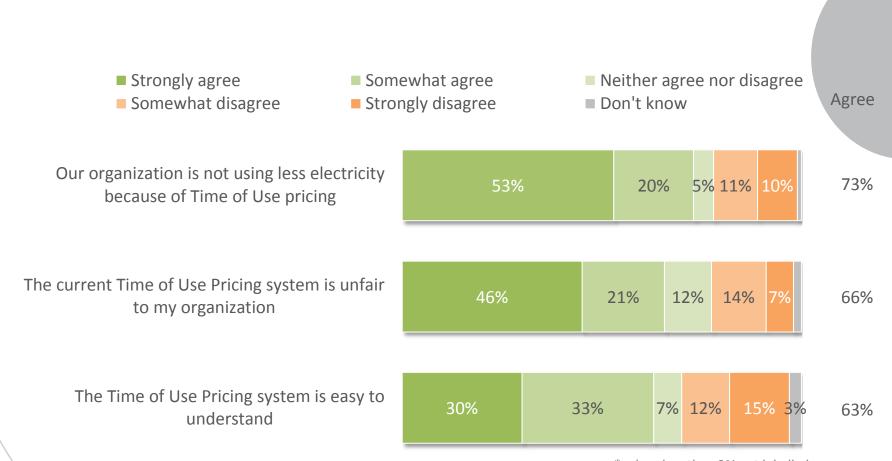
<sup>\*</sup> Mentions below 2% not shown





### **Attitudes & Opinions Towards Time of Use Pricing**

Two thirds of firms or more agree that their organization is not using less electricity because of Time of Use pricing and that the pricing system is unfair for their organization. Despite these opinions, two thirds also indicate that the Time of Use is easy to understand.



\*values less than 3% not labelled

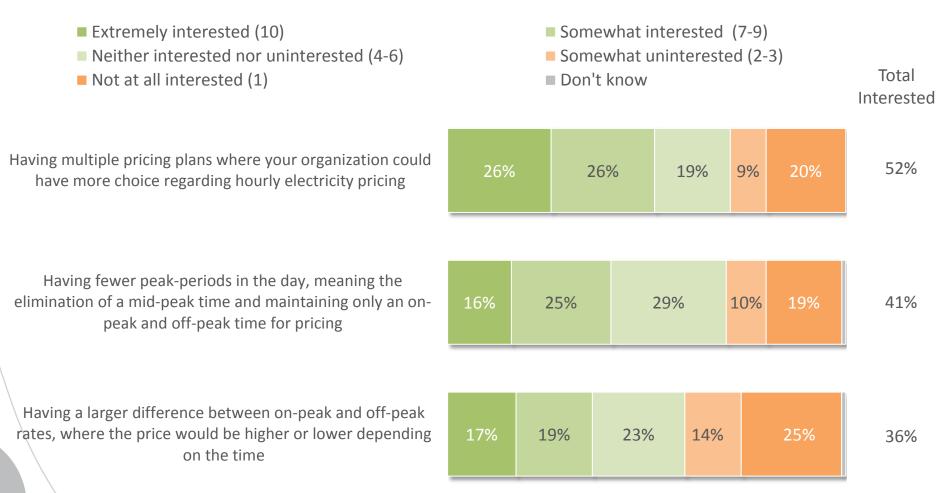
Base: All respondents (n=300)

Q11. Please indicate whether you strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree with the following statements. How about...



#### **Interest in Alternative Time of Use Models**

Half of small and medium business are interested in having multiple pricing plans that would provide more choice regarding hourly electricity pricing (about 30% are not interested in this). About four in ten are interested in having fewer on-peak periods during the day or having larger differences between on-peak and off-peak rates.



<sup>\*</sup>values less than 3% not labelled

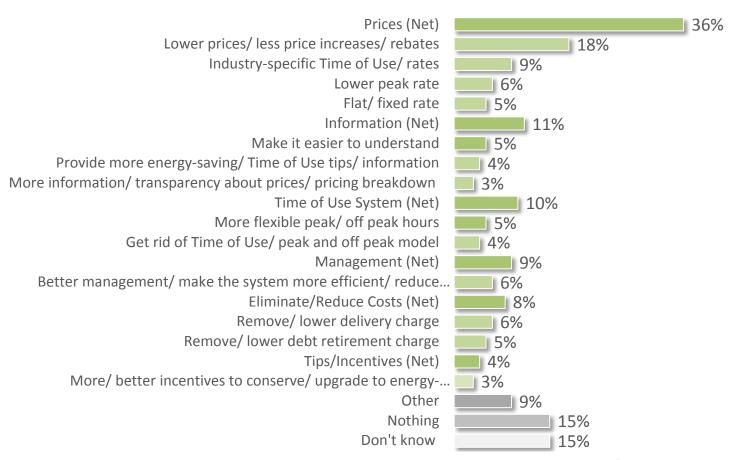
Q12. Using a scale of 1 to 10 where 1 means not at all interested and 10 means extremely interested, how interested would you be in the following proposals about the price of electricity? How about...

Base: All respondents (n=300)



### **Desired Changes to Electricity Pricing Model**

When asked about changes to the current electricity pricing model, one third of businesses mention wanting to see changes as to how electricity prices are determined (including lower prices and more rebates). About one in ten mention other changes such as more information about energy conservation, changes to the TOU system to accommodate businesses, and better management of the electricity sector in general.



<sup>\*</sup> Mentions below 3% not shown

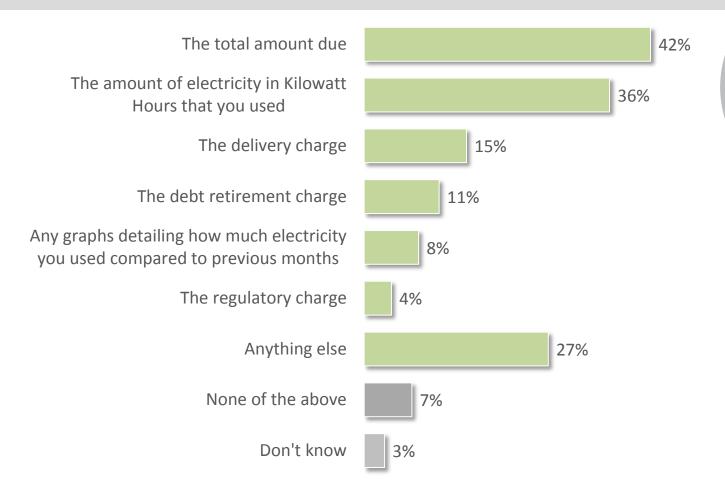


### **The Electricity Bill**



#### **Attention Paid to Electricity Bill Details**

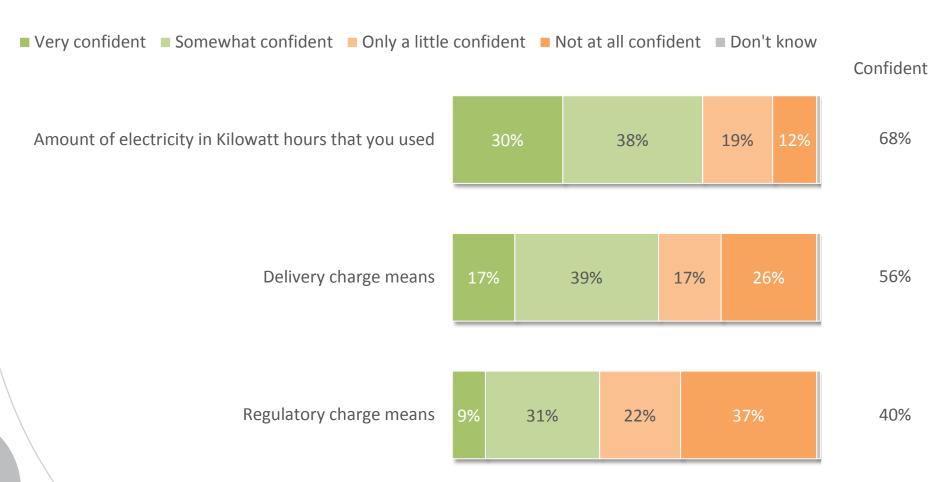
Fewer than half of businesses mention that they pay attention to the total amount due on their bill. One third pay attention to the amount of kilowatt hours used. Significantly fewer pay attention to other charges such as the delivery charge, the debt retirement charge, or the regulatory charge. One quarter of businesses mention that they look at other aspects of their bill.





### **Knowledge About Charges on Electricity Bill**

Business mention that they are most confident about understanding the amount of kilowatt hours used during each period on their bill. Only half are confident that they understand what the delivery charge means on their bill, fewer (40%) are confident that they understand what the regulatory charge means.



<sup>\*</sup> Mentions below 3% not shown

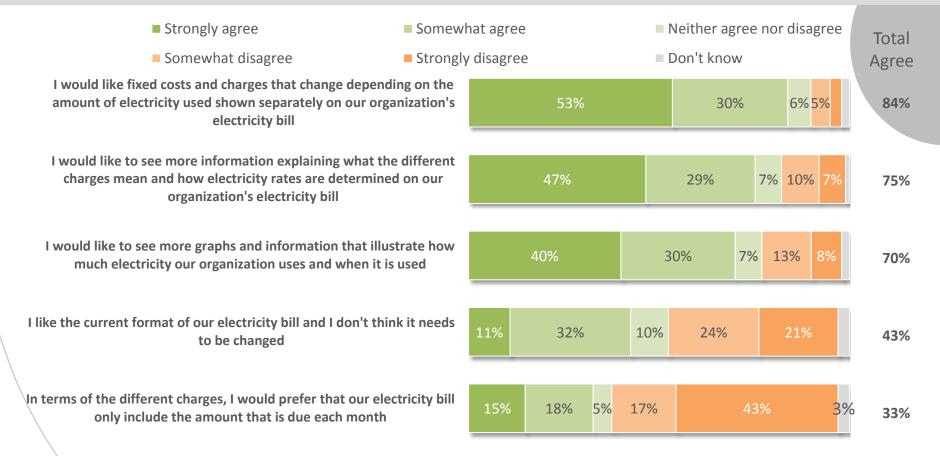


### **Attitudes and Opinions Towards Electricity Bill**

The vast majority agree that they would like to see fixed and variable charges separated on their bill, about half 'strongly agree' with this. About seven in ten businesses would also like to see more information explaining their electricity bill and the various changes, while the same proportion would like to see more graphs and illustrations on their bill.

Fewer than half of businesses agree that they like the current format of their electricity bill.

Only one third of businesses would like to see only one single amount due line item on their bill.

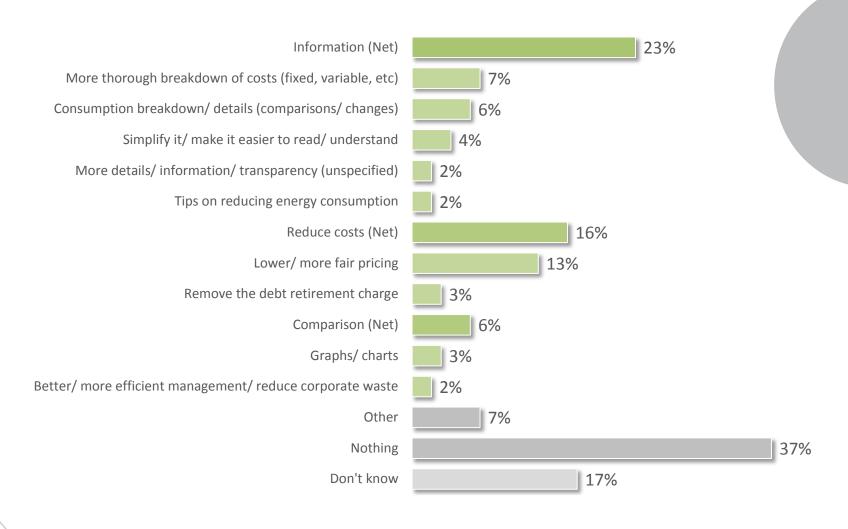


\*values under 3% not labelled



### **Additional Information Requested for Electricity Bill**

More than half of businesses cannot mention any additional information that they would like to see on their electricity bill. Among those that mention wanting more information, some would like to see a better breakdown of costs, a better breakdown of consumption patters, or to simplify the bill.



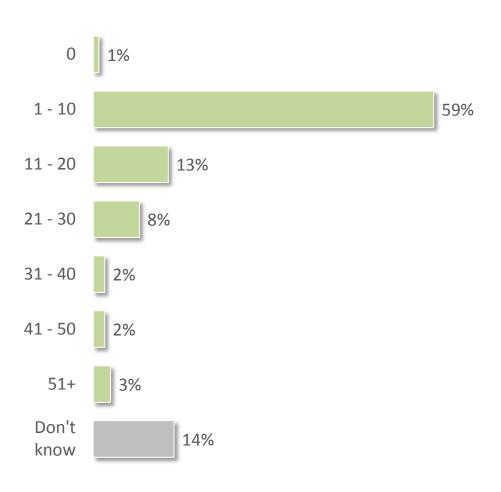


### **Appendix**

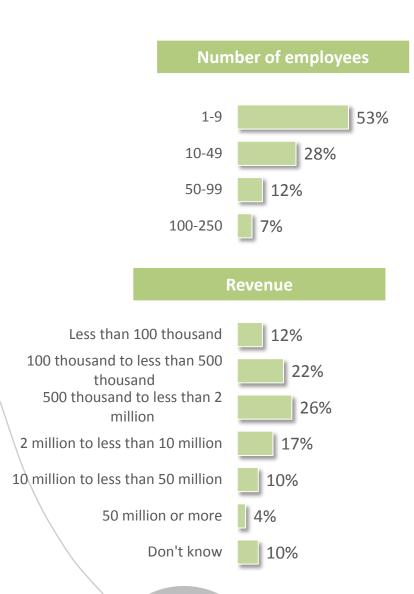


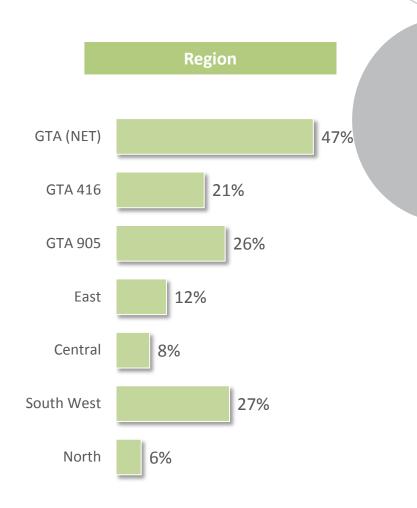
### **Electricity Expenses as a Proportion of Business Expenses**

The majority businesses indicate that electricity costs comprise less than 10 percent of their expenses, while about one if five spend between 11 and 30 percent on electricity-related costs.



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# Time of Use and Electricity Bill Research Residential & Business Survey



