



Municipalities of Sundridge, Strong and Joly are an integral part of the Almaguin Highlands Area. The three municipalities work together through shared services of facilities that benefit the residents and stakeholders of the community. This Energy Management Plan is a joint effort between the three municipalities to reduce greenhouse gas emissions and promote energy conservation to develop a strong and resilient economy and follow an ethic of social caring and environmental stewardship.

The following Energy Management Plan was prepared by; Linda Maurer representing Strong & Joly and Kim Seguin representing Sundridge.

## SUNDRIDGE-STRONG-JOLY ENERGY MANAGEMENT PLAN

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### Our Commitment

- **Declaration of commitment- Council Resolution:** Council will allocate the necessary resources to develop and implement a strategic energy management plan that will reduce our energy consumption and its related environmental impact.
- **Vision:** We will exercise stewardship in our use of finite energy resources in order to demonstrate leadership, optimize our delivery of services, and enhance the overall quality of life in our community.
- **Policy:** We will incorporate energy efficiency into all areas of our activities including our organizational and human resources management procedures, procurement practices, financial management and investment decisions, and facility operations and maintenance.
- **Goals:** To continuously improve the energy efficiency of our facilities and processes in order to reduce our operation costs, our energy consumption and the concomitant greenhouse gas emissions.
- **Overall target:** We will reduce our consumption of fuels and electricity in all municipal operations by an average of 5% per year between 2014 and 2020 with a baseline year of 2012.
- **Objectives:**
  1. To conduct Facility Energy reviews on all municipal facilities on a semi-annual basis;
  2. To attempt to reduce total energy consumption in municipal facilities, normalized to weather conditions by 5% over the next five years between 2014 and 2019 with a baseline year if 2012.
  3. To reduce energy consumption in the municipal recreation complex by 5% during fiscal years 2014 to 2019.

## Our Understanding of the Current Situation

### 1. Organizational

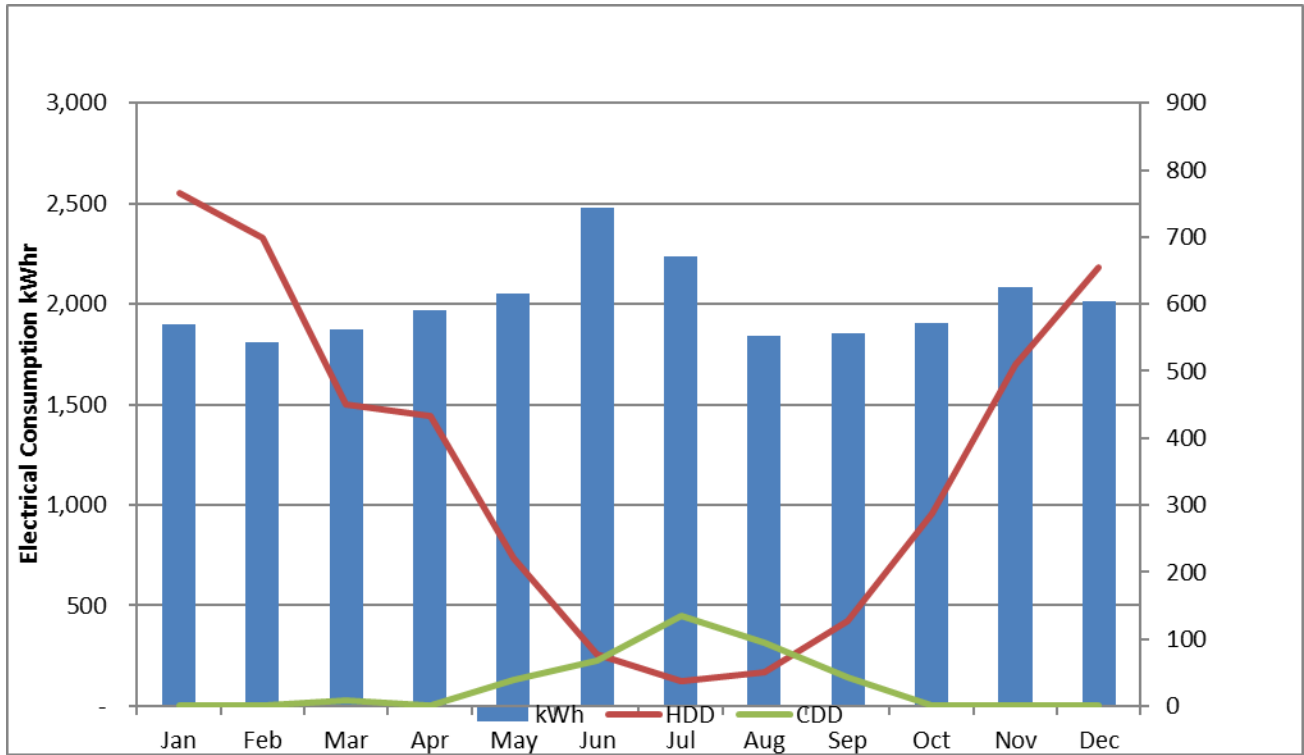
- **Stakeholder Needs:** Internal stakeholders (Council, CAO, staff) need to be able to clearly communicate the corporate commitment to energy efficiency, and to develop the skills and knowledge required to implement energy management practices and measures.
- **Our Municipal Energy Needs:** We need reliable, low costs, sustainable energy sources delivering energy to the most efficient facilities and energy-consuming technology feasible.
- **Municipal Energy Situation:** (Strengths, Weaknesses, Opportunities and Threats): Our assessment of organization structure; employee awareness, skills and knowledge; energy information management; communications; and investment practices indicates the following high, medium and low priorities for development:
- **How We Manage Energy Today:** The management of energy consumption and the energy performance of our facilities and equipment are the responsibilities of Finance (cost management), Works Department (maintenance), and department managers (operations).

### 2. Technical

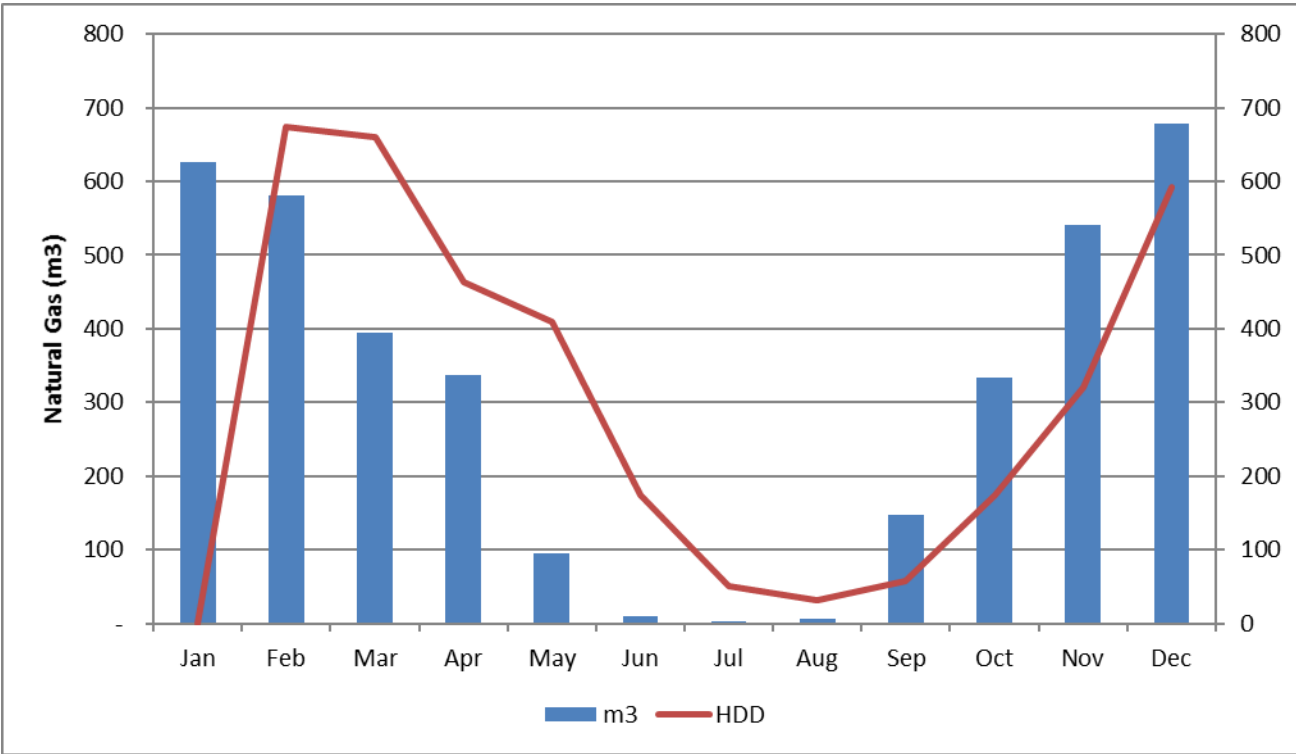
Summary of Current Energy Consumption, cost and GHGs Energy consumption baselines have been established in conformance with the Green Energy Act using 2012 data. All Municipal facilities have been grouped by type for reporting purposes. Energy consumption profiles for each facility type of the GEA baseline consumption year have been developed; these include

- Township of Joly Administration Office - 871 Forest Lake Road
- Township of Strong Administration Office - 28 Municipal Lane
- Village of Sundridge Admin Office/Community Centre - 110 Main Street
- The SSJ Arena/Community Hall - 14 Albert Street
- Landfill Site Building - 483 Forest Lake Road
- Library - 110 Main Street
- Medical Centre - 5 Park Street
- Joly Public Works Garage - 871 Forest Lake Road
- Strong Public Works garage - 64 Municipal Lane
- Village of Sundridge Public Works Garage - 110 Main Street
- Fire Hall - 146 Ontario Street
- Almaguin Highlands Airpark - 521 Airport Road

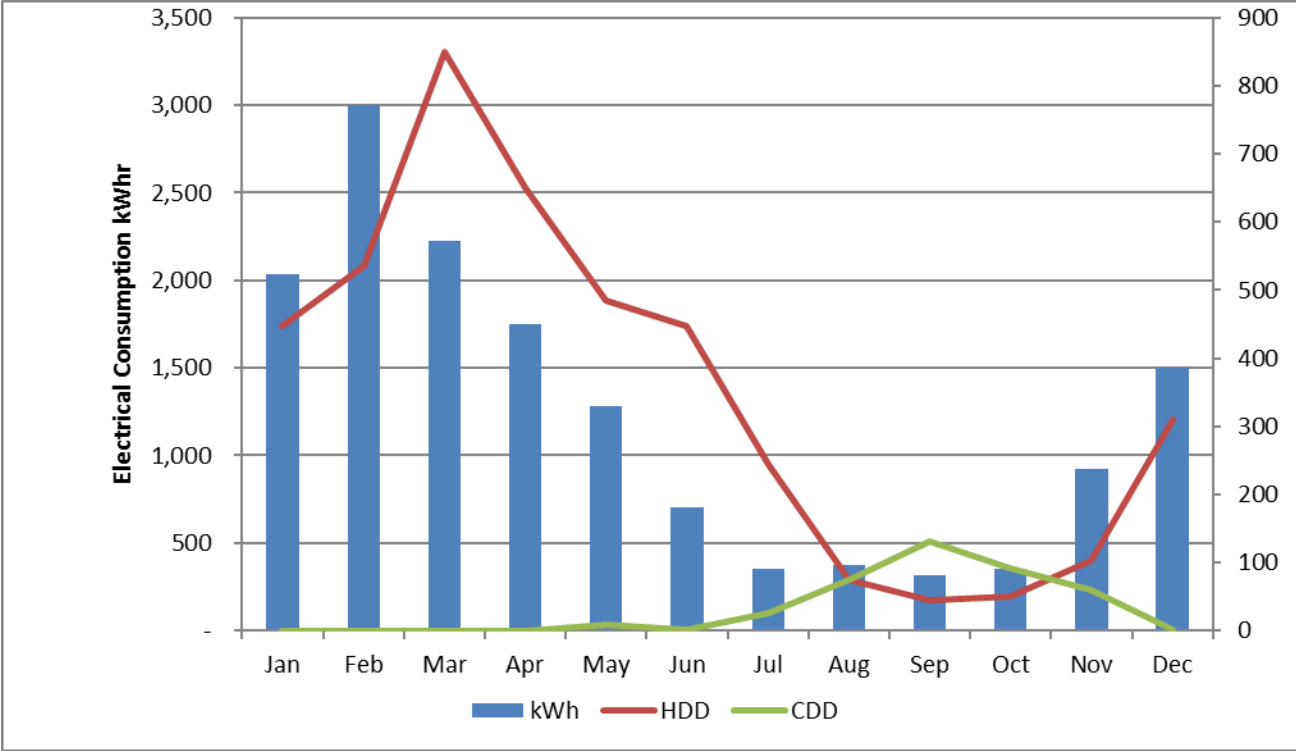
**Strong Township Administration Office 28 Municipal Lane- Hydro 2012**



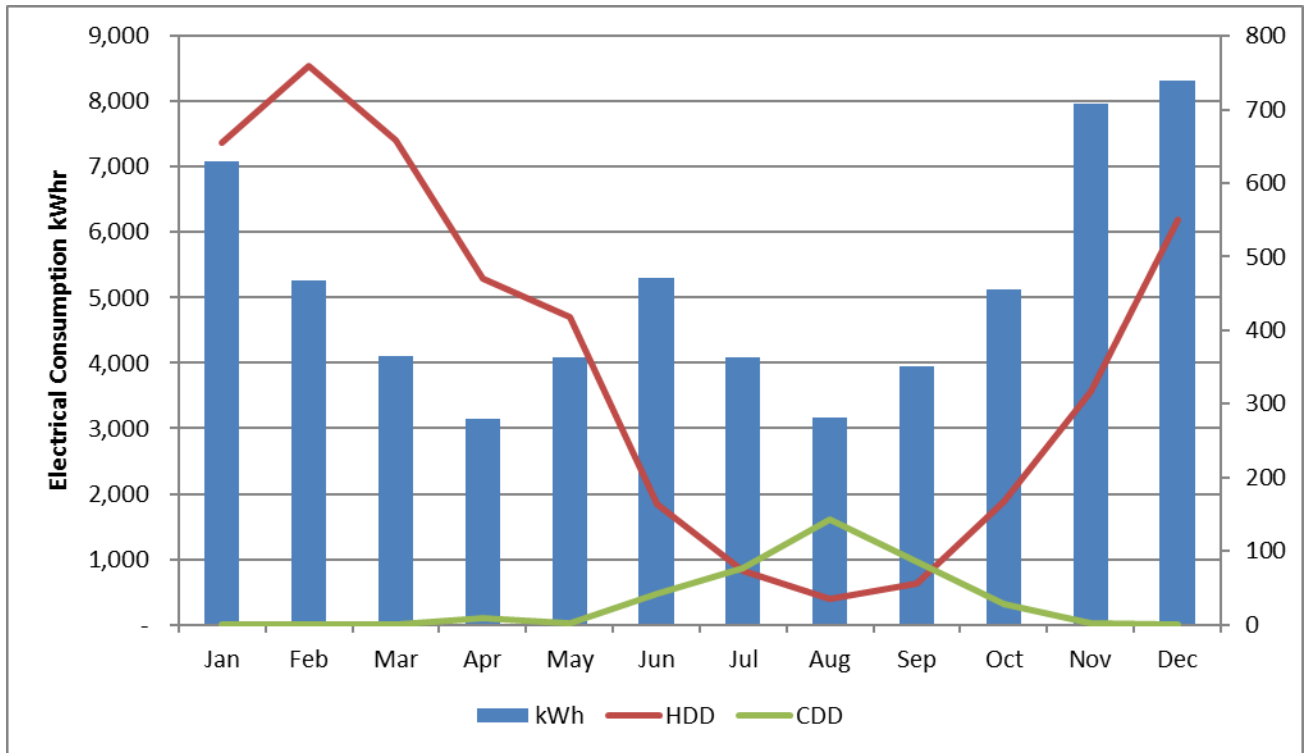
**Strong Township Administration Office 28 Municipal Lane- Natural Gas 2012**



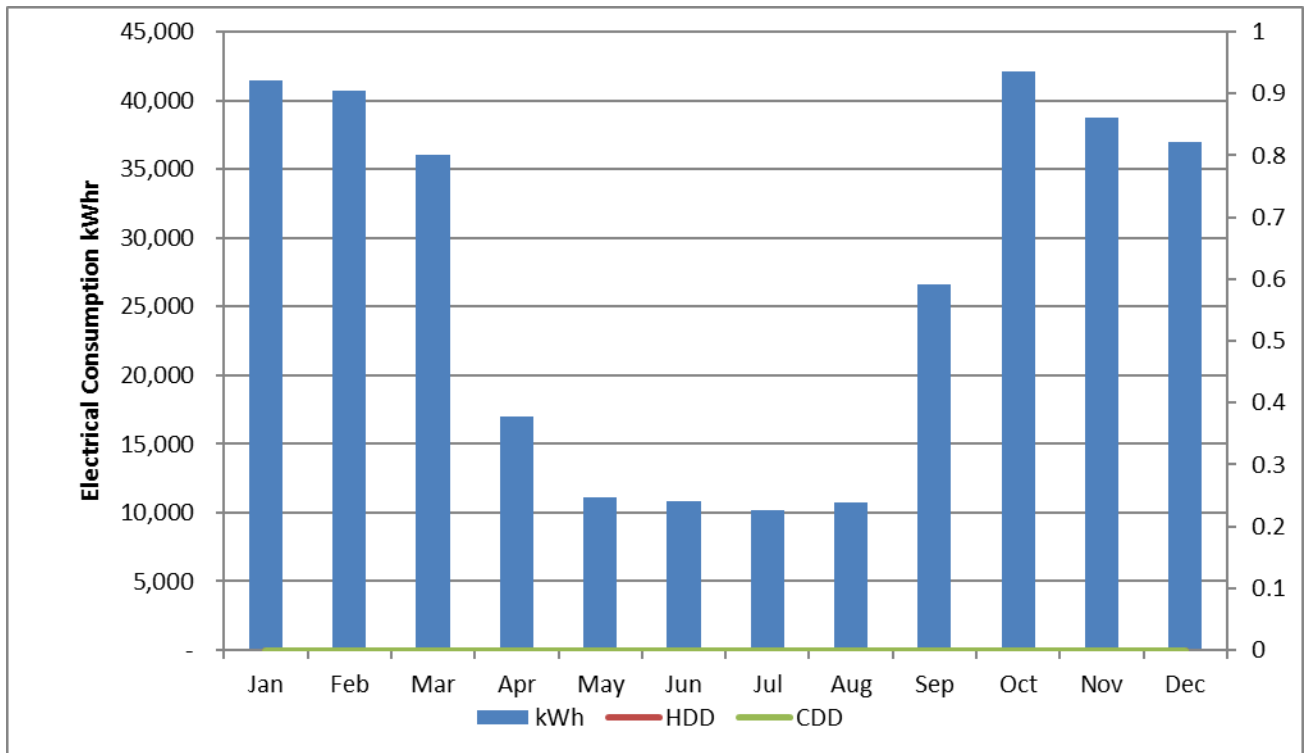
**Joly Township Administration Office– 871 Forest Lake Road – Hydro 2012**



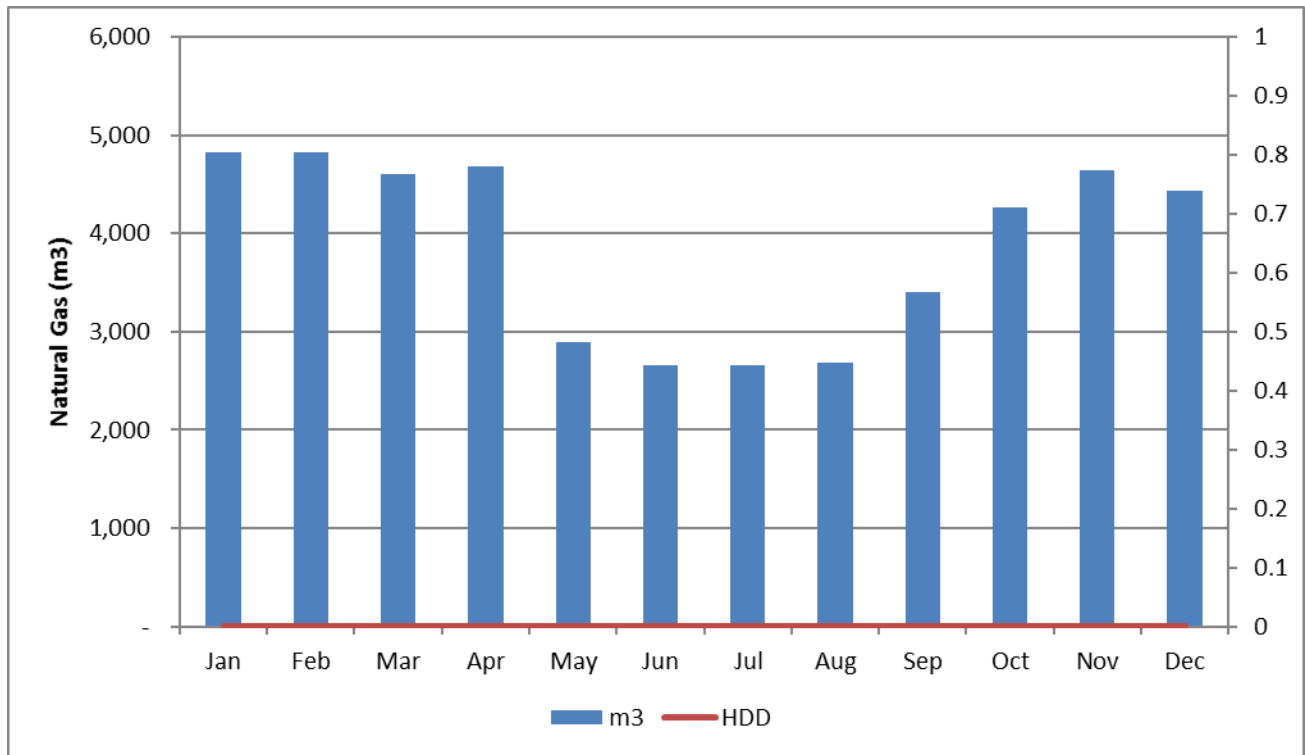
**Village of Sundridge Admin Office/Community Centre–110 Main Street– Hydro 2012**



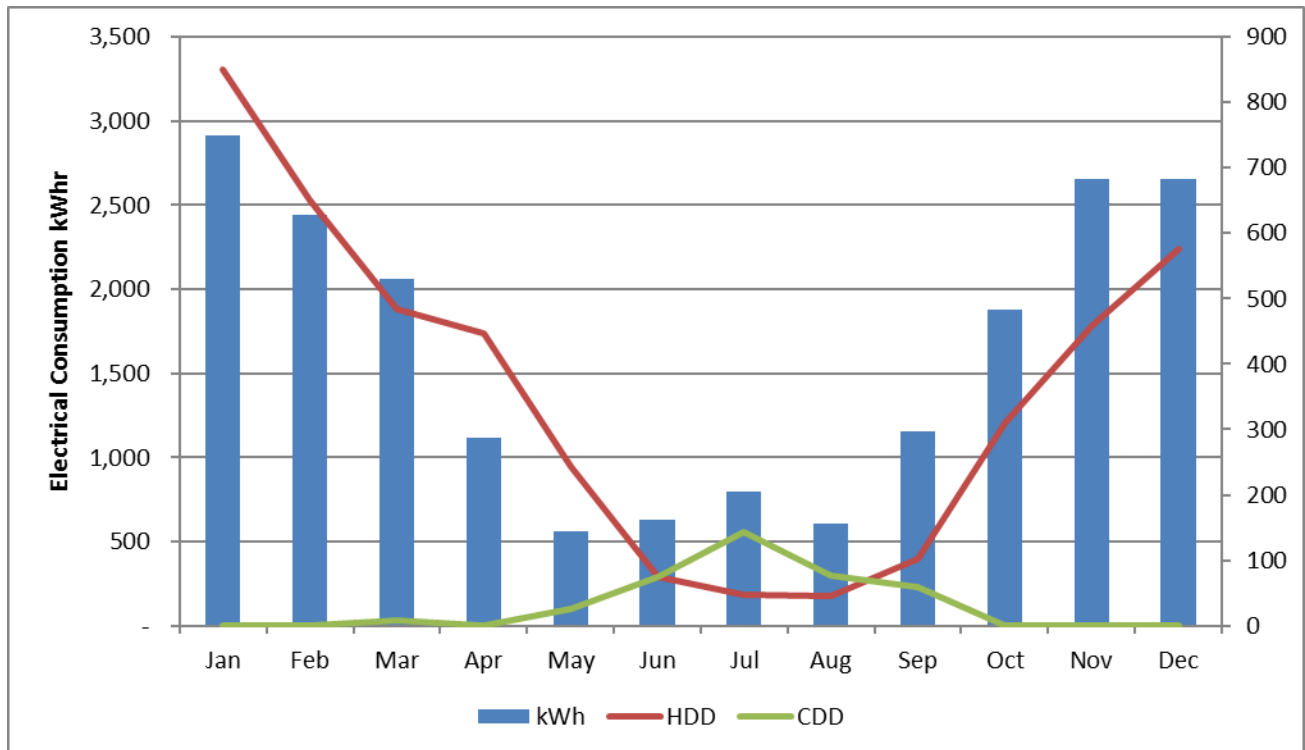
**Sundridge Strong Joly Arena/Community Hall - 14 Albert Street–Hydro 2012**



**Sundridge Strong Joly Arena/Community Hall - 14 Albert Street–Natural Gas 2012**

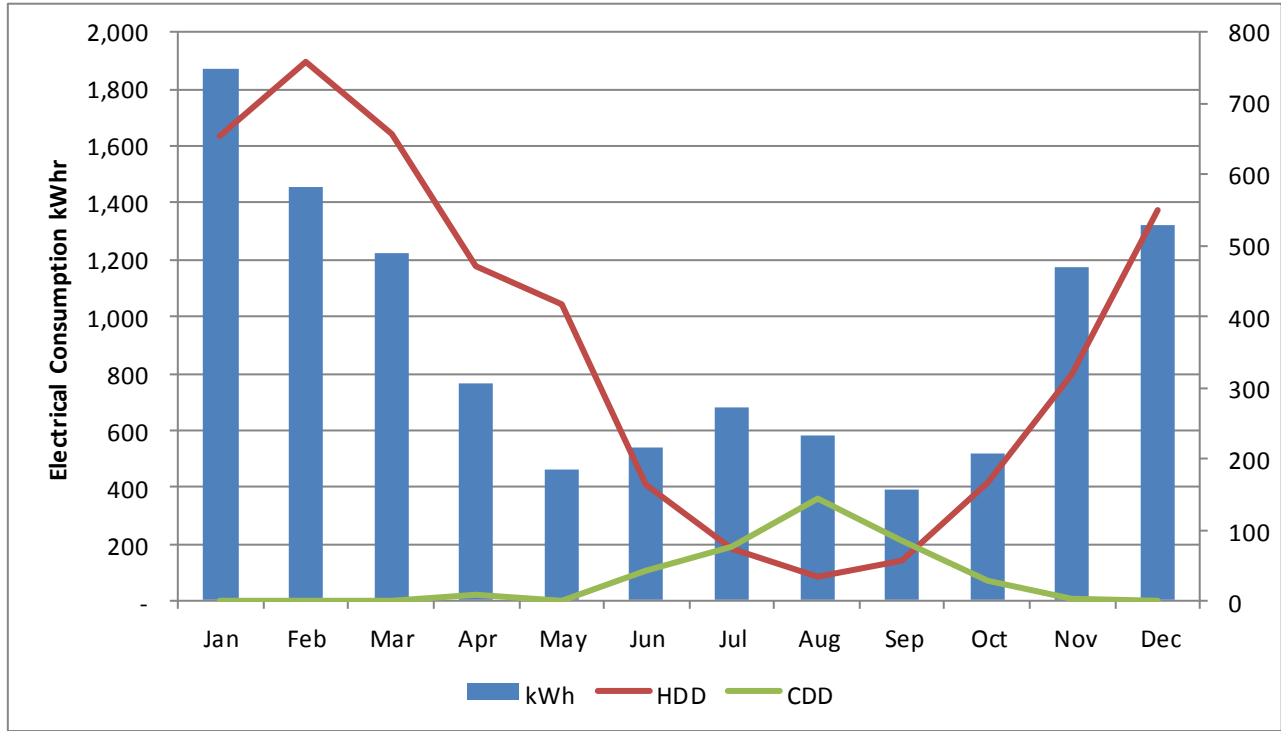


**Strong Landfill Site – 483 Forest Lake Road - Hydro 2012**

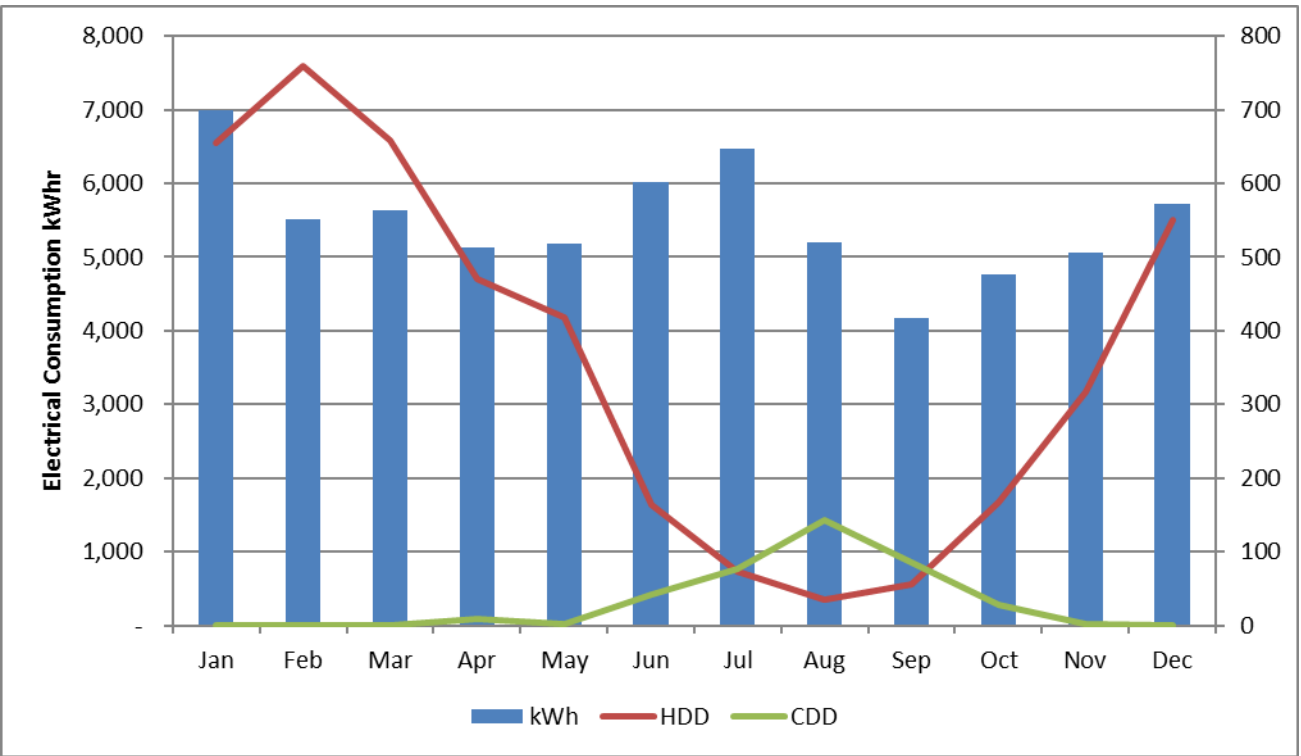




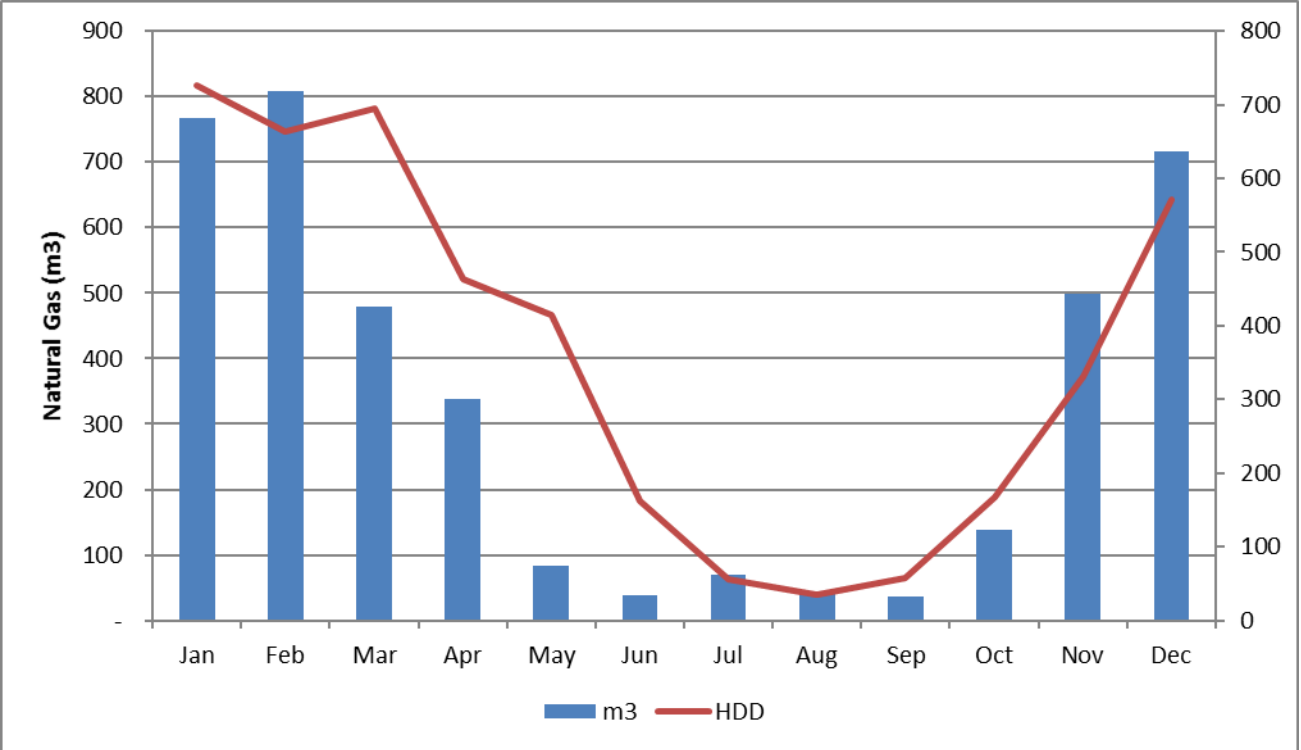
**Sundridge Strong Union Public Library – Hydro 2012**



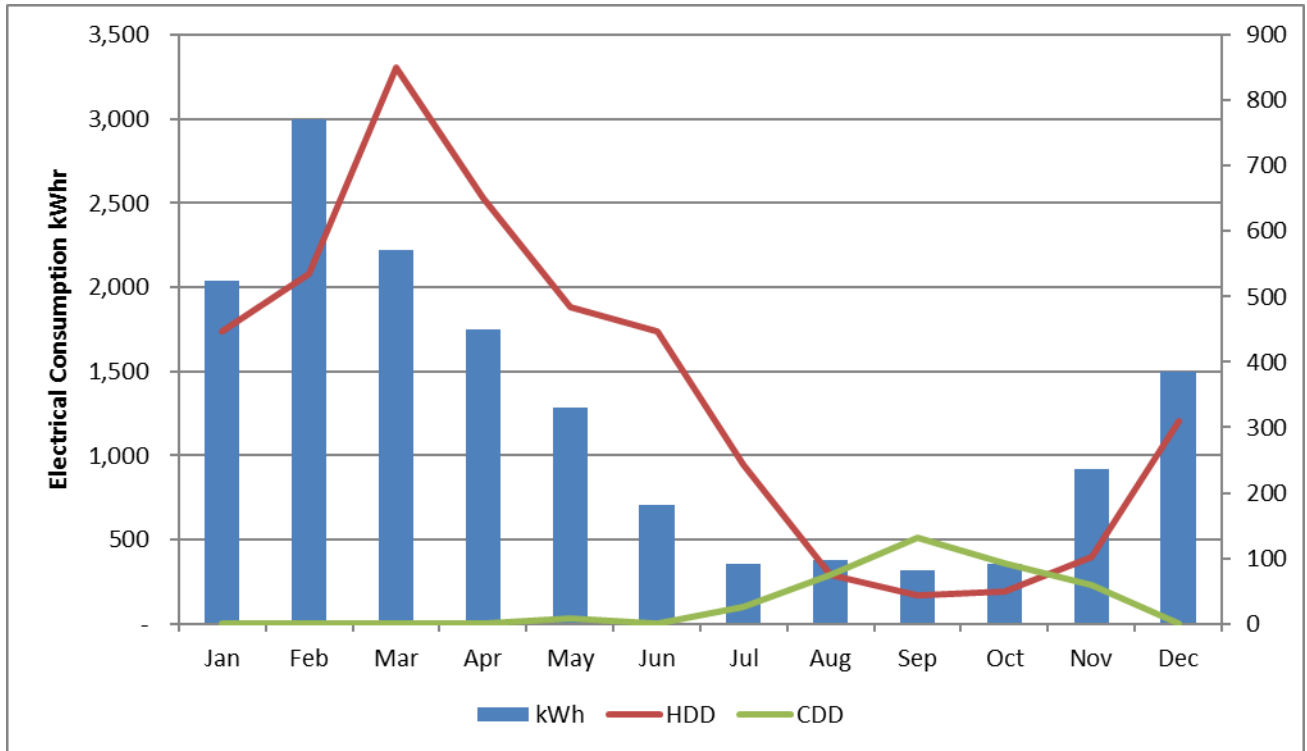
**Sundridge & District Medical Centre – Hydro 2012**



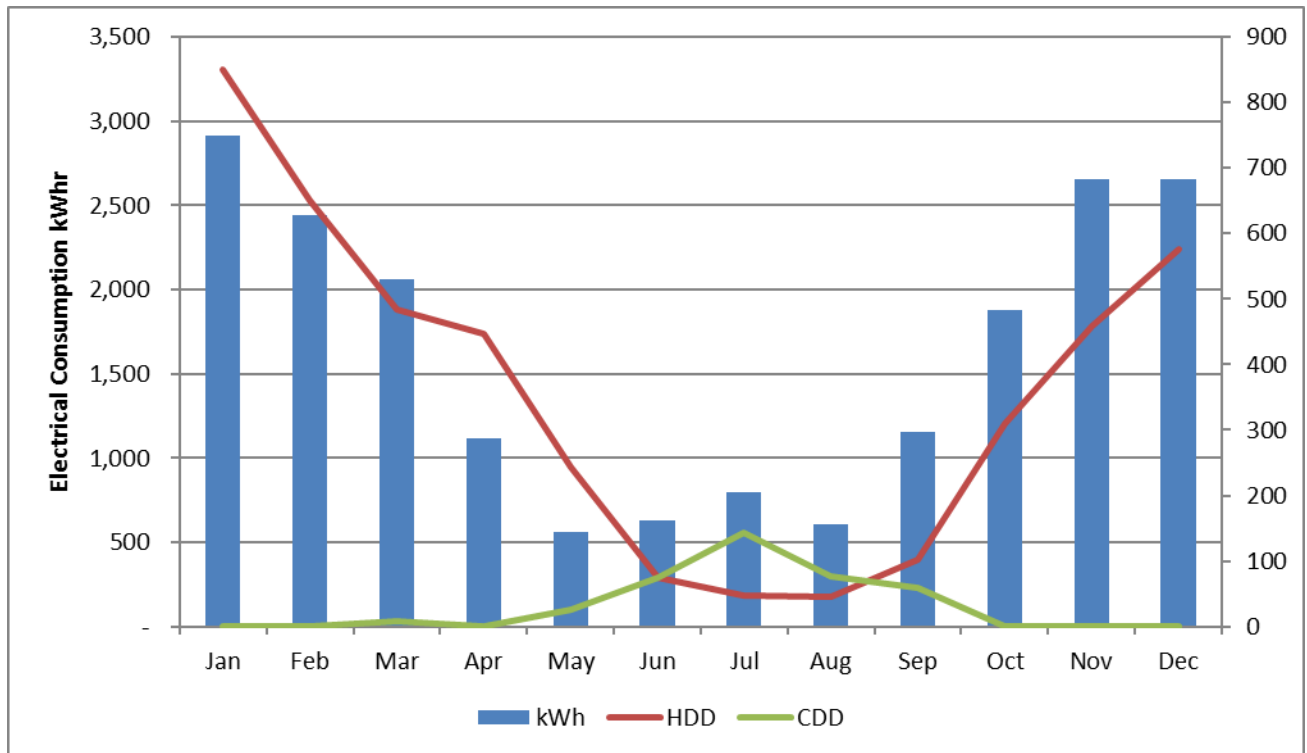
**Sundridge & District Medical Centre – Natural Gas 2012**



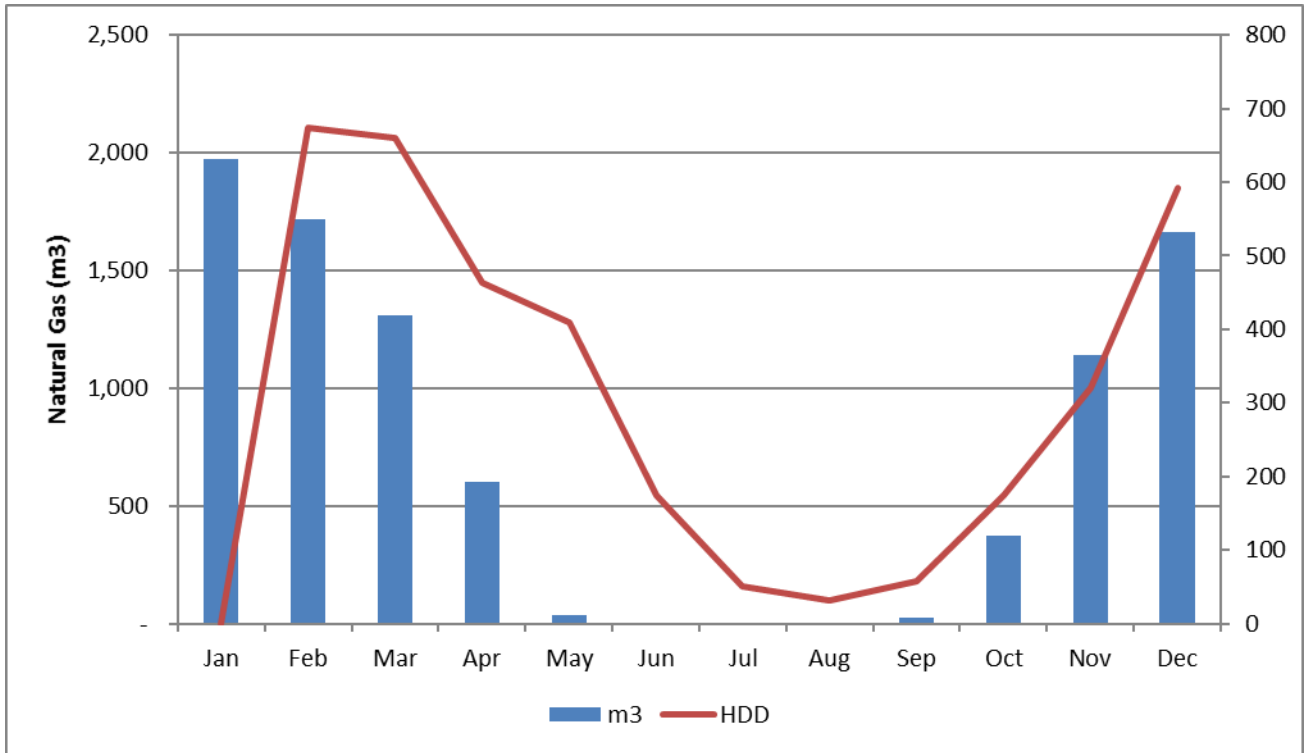
**Joly Public Works Garage -871 Forest Lake Road – Hydro 2012**



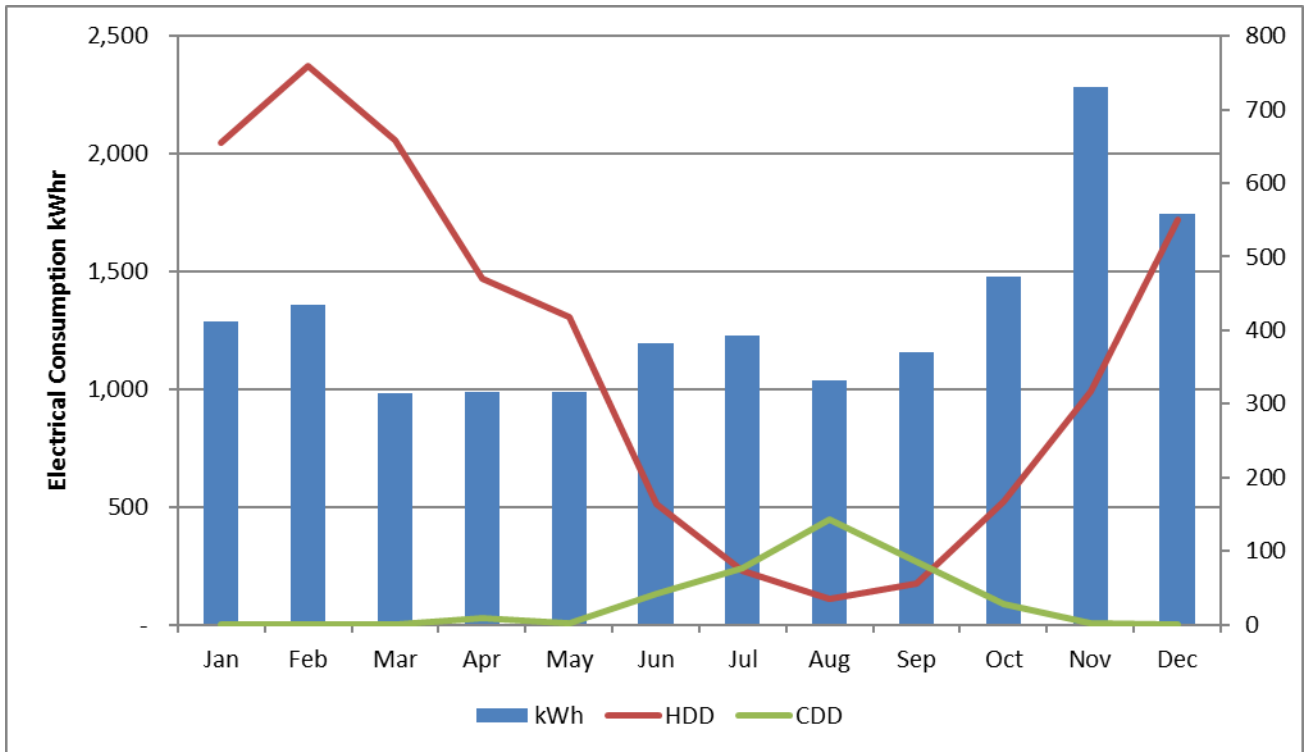
**Strong Public Works Building - 64 Municipal Lane - Hydro 2012**



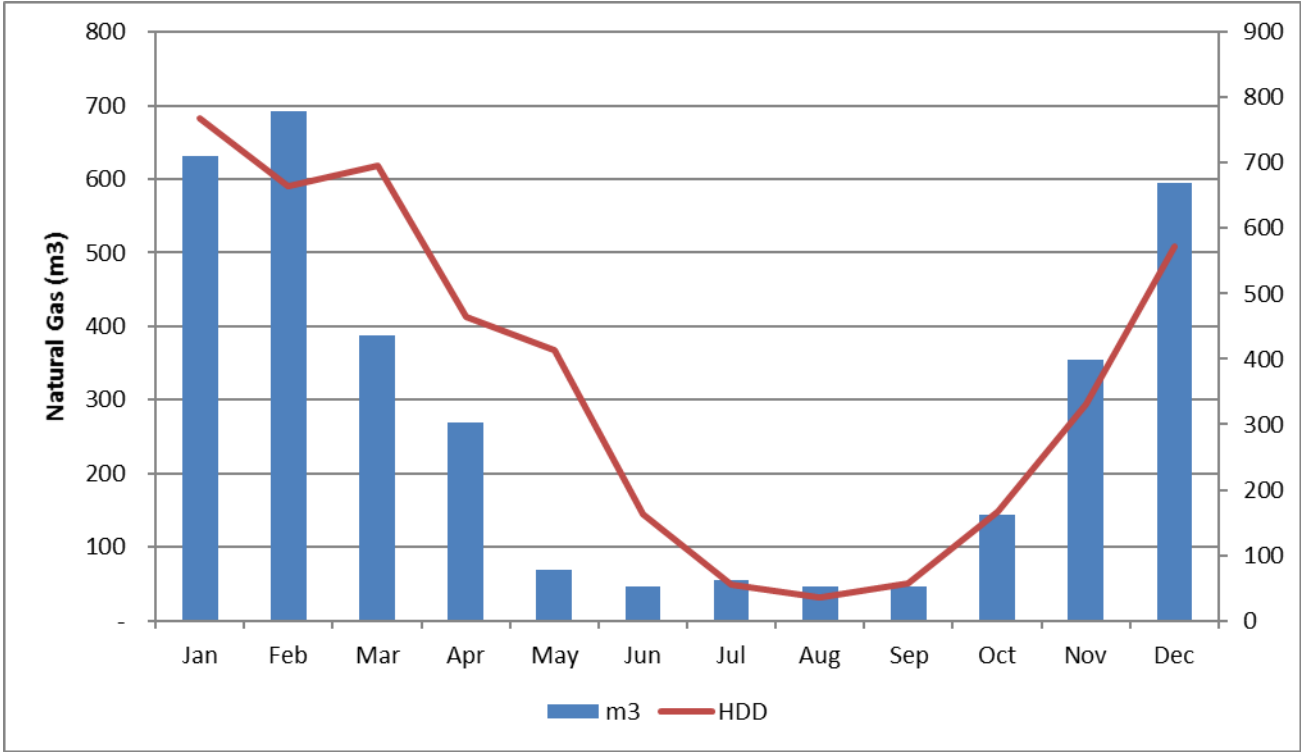
**Strong Public Works Building - 64 Municipal Lane – Natural Gas 2012**



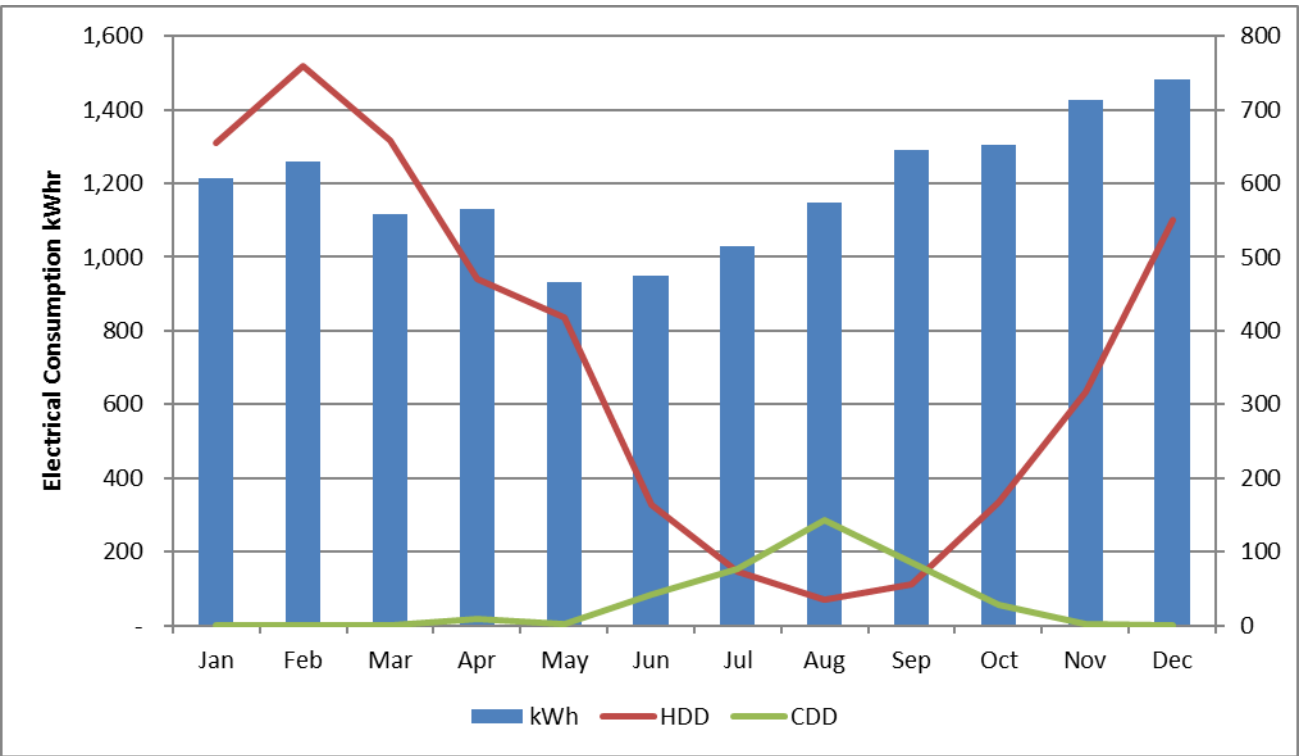
**Village of Sundridge Public Works Garage – 110 Main Street – Hydro 2012**



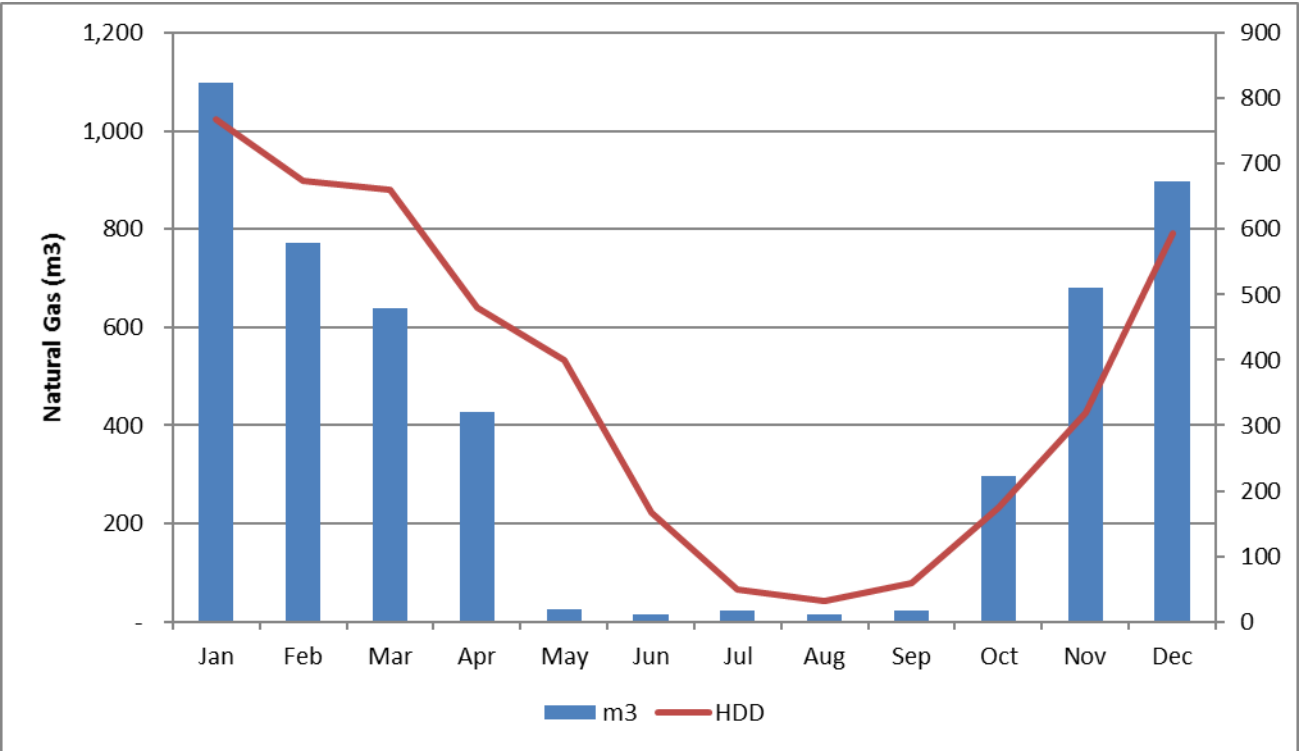
**Village of Sundridge Public Works Garage – 110 Main Street – Natural Gas 2012**



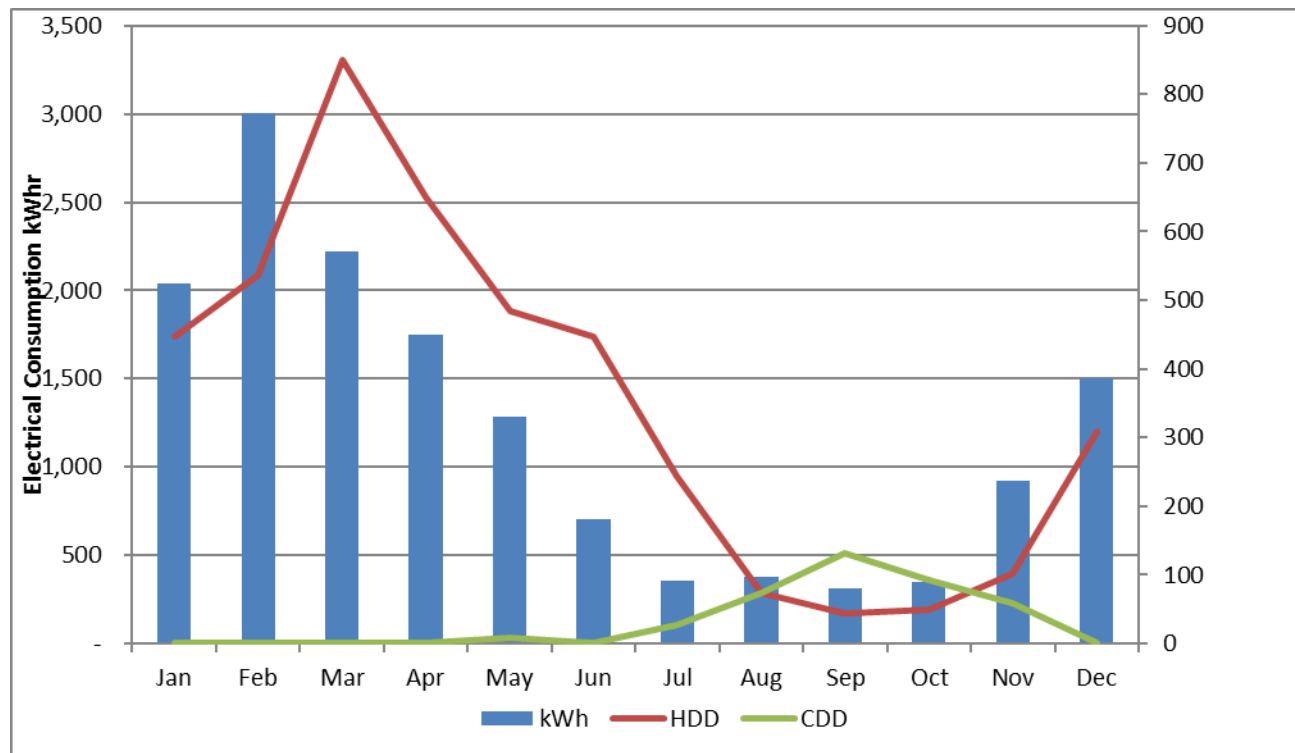
**Sundridge Strong Fire Hall – 146 Ontario Street – Hydro 2012**



**Sundridge Strong Fire Hall – 146 Ontario Street – Natural Gas 2012**



## Almaguin Highlands Airpark -521 Airport Road -2012 Hydro



### **Previous and Current Environmental and Energy Related Initiatives**

The Townships of Joly and Strong along with the Village of Sundridge are in the process of developing and implementing policies related to the environment energy.

- A diverse and sustainable economy with the creation of Official Plans, Strategic Plans and Zoning By-laws.
- A thriving natural environment that is a valued community asset to be protected, maintained and enjoyed through our naturalized zones in parks and open spaces, recycling facilities in each administrative/public works departments.
- A culture of energy conservation and demand management through the energy conservation measures, by facilities as detailed in Section 4 – Our Plan.

### **Our Plan**

#### **Goals:**

Our goals are to create a culture of conservation, to continuously improve the energy efficiency of our facilities and processes in order to reduce operating costs, our energy consumption and the associated greenhouse gas emissions.

#### **Objectives:**

Improve the Townships of Joly and Strong and the Village of Sundridge's understanding of energy consumption and increase staff awareness. Motivate staff to use energy

more efficiently by improving awareness of climate change and greenhouse gas emissions; to report energy performance changes and improvements; and to recognize the relationship of an anticipated goal of 1-2% reductions through actual energy consumption.

## **Development and Energy Projects:**

### Strategic

Long-term strategic issues:

The three municipalities will develop and implement energy policies, organize for energy management, develop the required skills and knowledge, manage energy information, communicate with our stakeholders, and invest in energy management measures. Link with other municipal plans as an integral component of the management structure; the energy management plan is coordinated with the municipality's budget planning process.

Departmental responsibilities:

We will incorporate energy budget accountability into departmental responsibilities.

### Development of Energy Projects

Internal assessments:

The three municipalities will develop a methodology for the internal assessment of energy performance of municipal facilities and their energy loads. In addition, a process will be developed for identifying and cataloguing energy efficiency improvements and will be addressed through semi-annual meetings.

### Investment in Energy Projects

Investment criteria:

The three municipalities will develop and/or clarify as necessary the financial indicators that are applied to investment analysis and prioritization of proposed energy projects, taking due consideration of the priority given to energy efficiency projects versus other investment needs. We will incorporate life cycle cost analysis into the design procedures for facility related projects.

Budgetary resources for energy projects:

Energy projects will be integrated into our capital planning and budget development procedures. The three municipalities will look at creating a Continual Energy Improvement Fund. Contributions to the fund will be made through savings from energy conservation projects. For example, once the Municipality has paid back the capital cost of the energy savings project, the following year's energy savings could be put into the Continual Energy Improvement Fund and be used to fund future energy savings projects.



## **Procurement:**

Consideration of energy efficiency of new or replacement equipment:

Our purchasing procedures will be modified as required to incorporate energy efficiency into the criteria for selection and evaluation of materials and equipment.

Standards for new buildings:

We will consider criteria for the design and/or acquisition of new buildings that include energy performance factors.

## **Our Execution**

All work completed on the plan to date culminates in the development of actions for execution. Generally, an action can be classified as a program, process, or project.

## SUMMARY OF ENERGY CONSERVATION MEASURES (ECMs)

Assessments were completed at each facility in the winter of 2013. A number of common and categorized ECMs were identified. The following table indicates what measures have been identified for each facility. The table is followed by general descriptions of the categorized ECMs.

Energy Conservation Measures, by Location					
Building Name	Envelope	Lighting	HVAC	Heat/Cool	Awareness
Strong Admin Office	√				√
Joly Admin Office	√			√	√
Village of Sundridge Office	√	√		√	√
Community Buildings/Shared Services					
SSJ Arena/Hall	√	√		√	√
Library	√			√	√
Medical Centre	√	√			√
Fire Hall	√	√			
Landfill					√
Airpark	√	√			√
Maintenance					
Strong Public Works	√				√
Joly Public Works	√	√			√
Sundridge Public Works	√	√			√
Type	Objective	Action		Owner	Target Date
Program	Awareness	Add energy awareness to management meetings		Clerk	Ongoing
Program	Training	Host Learning Measures at management meetings		Clerk	Ongoing
Process	Awareness	Visual Displays of Energy Use		Office Staff	Ongoing
Process	Procurement	Incorporate life-cycle costing into procurement process		Treasury	Ongoing
Project	Energy Efficiency	Implement use of programs to shut down PCs at night		Office Staff & Management	Ongoing
Project	Energy Efficiency	Enhance Building Envelope – caulking, weather-stripping in top 2 buildings in terms of energy use		Building Manager/Clerk	2015
Project	Energy Efficiency	Lighting Retrofits in a variety of buildings		Building Manager/Clerk	Ongoing

## **Our Evaluation**

The results of our energy management plan will be evaluated annually by monitoring our progress towards our targeted performance, and by reporting the findings to our various stakeholders. Our evaluation will include a review and update of the energy plan as necessary with a continual improvement and revision to plans. The energy plan will be in effect for a maximum of four (4) years and not exceed a council term. Should a facility use change, the energy plan will be amended accordingly. Ongoing monitoring of consumption: an energy monitoring process will be implemented and maintained as an integral component of our management information system. We will correlate our progress towards corporate goals and objectives, and update those goals and objectives accordingly.