

**BROOKFIELD ENERGY AD-HOC COMMITTEE**  
**Marcia Wilkins, Peter Donnelly, Rick Knowles and Jack Ludwig**

**Introduction**

The Brookfield Energy Committee focused initially on a single objective: To save the town of Brookfield money by reducing energy consumption in town buildings. This report addresses this objective by recommending that the 2011 budget support several low cost, low risk, quick payback projects. The projects were chosen because the savings can be quantified, the capital outlay is recovered quickly, and the impact on the town's budget is close to negligible. Although the impact of these projects is modest, they will be a learning experience which will hopefully build the confidence necessary to proceed with more ambitious projects in the future. As will be detailed below, we commend the town for the significant, but generally unpublicized, steps already taken to reduce energy costs.

**Town of Brookfield Energy / Cost Saving Accomplishments to Date**

The Brookfield Energy Ad-hoc Committee (established on July 12, 2010) has met with ~~Ralph~~ Ralph Tedesco, Art Colley and others to establish a benchmark for our Committee as we begin an assessment of actions which will bring energy and cost savings to the Town of Brookfield.

Shortly before our Committee's first meeting on August 5, 2010, HRP Associates, Inc., had completed an energy audit of the Brookfield Municipal Buildings under Ralph Tedesco's leadership with no cost to the town since funds were obtained under the Connecticut Office of Policy Management Municipal Energy Efficiency and Conservation Block Grant (\$9,000 of \$72,000 total grant). This provided an excellent start for us in enabling the Brookfield Energy Committee to move forward in a very timely manner with recommendations to the town in areas which could bring energy and cost savings to Brookfield in a cost effective manner. Many towns in Connecticut have not had such an audit and we are fortunate to have this detailed report.

The Committee has reviewed these findings and will report within this presentation.

In addition to this energy audit report we have met with Mr. Tedesco and Mr. Colley to determine what accomplishments have been completed to date or will be in the near future. We also included items within the recent year (or so) relative to energy and cost savings that have benefited our residents from a cost standpoint.

**BROOKFIELD ENERGY AD-HOC COMMITTEE**  
**Marcia Wilkins, Peter Donnelly, Rick Knowles and Jack Ludwig**

The following items have been accomplished or are planned by Mr. Tedesco and Mr. Colley:

**Municipal Buildings** (Ralph Tedesco and/or prior)

- Municipal Center – replacement of selected windows and re-caulking (energy/cost savings)
- Municipal Center – all light switches were changed to motion detector types (energy/cost savings)
- Municipal Center – all lights were changed from fluorescent to T-23 type lights (energy/cost saving)
- Police Station – In-process. Revamping HVAC system funds came from balance of Connecticut Office of Policy Management Municipal Energy and Conservation Block Grant using balance of the original \$72,000 grant)
- A pilot program (installation) of a new type light pole, fixture and bulb, will be evaluated in the municipal parking lot in the very near future, if not completed already. If successful, all light fixtures will be replaced in the municipal center parking lot (energy/cost savings)
- Mr. Tedesco implemented and oversaw Energy Conservation Study by HRP Associates, Inc. for all municipal buildings

**Schools** (Art Colley)

- Energy efficient lighting within all schools (CES, HHES and WMS)
- A proposal has been set for parking lot lighting which will be 50% more efficient for all 4 parking lots with 0% financing and no cost to town. The life expectancy of the newer lights is 10-15 years
- Final phase of BHS parking lot to start in November 2010
- All lighting projects financed over a three year period utilizing saving – no additional budgetary impact
- Electrical power purchased as part of a consortium through Constellation New Energy
- Mr. Colley has negotiated a 13.2% reduction in electrical charges effective July 1, 2009
- Reduced electrical costs by \$126,408 (from \$784.084 to \$661.676) in 2010

**BROOKFIELD ENERGY AD-HOC COMMITTEE**  
**Marcia Wilkins, Peter Donnelly, Rick Knowles and Jack Ludwig**

- Anticipate an additional 13% in cost savings or approximately \$65,000 annually by negotiating lower rates

The Municipal buildings include the Town Hall, Library, Police Department and Public Works Garage & Maintenance Buildings.

A total of 46 conservation measures were advised by HRP Associates costing approximately \$240,612.00 with an estimated payback of 11.5 years.

After reviewing and setting more achievable goals by setting parameters of each conservation measure to be under \$10,000.00 and a payback within five year range, the Committee has greatly reduced the initial numbers to a minimal amount while taking major steps to decrease energy consumption throughout the town buildings.

The Committee recommends a total of 24 measures resulting in \$41,871.00 project cost an annual savings of \$17,268.00 and estimated payback of less than 3 years after utility incentives.

PLEASE SEE THE FOUR ATTACHED SPREADSHEETS.

**Recommendation to contract HRP Associates for additional survey work**

The Committee recommends that HRP Associates be engaged to conduct an energy survey on the Brookfield schools similar to the one performed on the Library, Public Works & Maintenance Garage, Police Station, and Town Hall. We found this survey to be a practical and useful guide to the relative merits of various energy saving projects. We believe the modest cost of the survey appears to be justified by the expected savings.

**Conclusion**

Our future endeavors will continue to be guided by the the Statement of Purpose for our Committee. Not only do we wish to promote energy efficiency but we will seek initiatives

**BROOKFIELD ENERGY AD-HOC COMMITTEE**  
**Marcia Wilkins, Peter Donnelly, Rick Knowles and Jack Ludwig**

designed to accomplish this objective.

Our primary goal of reducing energy consumption in all of the municipal buildings including schools should be extended to homes and local businesses in Brookfield. These structures ultimately consume the largest overall percentage of energy in our town. Educational programs directed at our citizens on the subject of energy management will increase awareness of these issues and foster the need for action.

Thank you for your attention to this issue and look forward to receiving any feedback and direction that you may offer on this report.

**BROOKFIELD ENERGY AD-HOC COMMITTEE**

**Marcia Wilkins**  
**Peter Donnelly**  
**Rick Knowles**  
**Jack Ludwig**