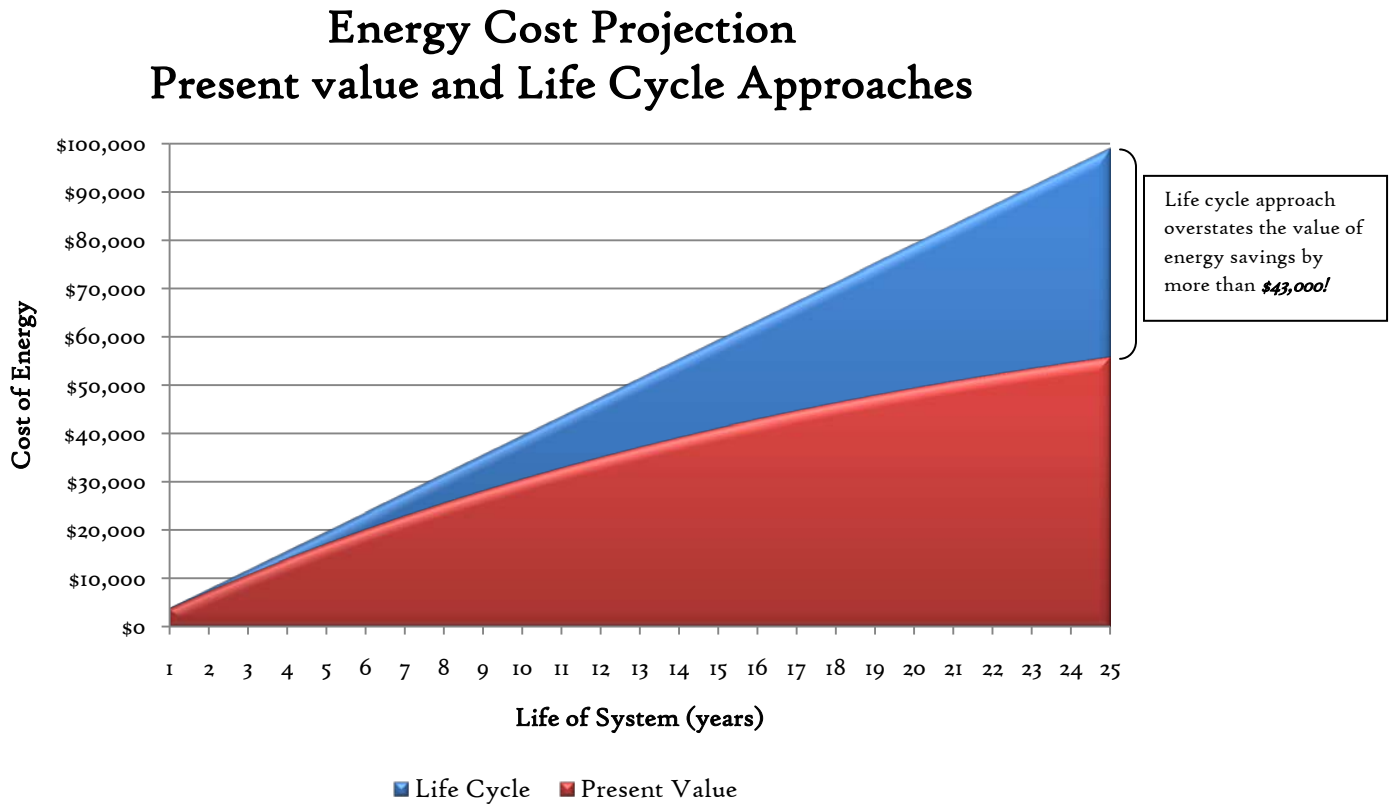
Energy Savings
Present Value Approach

For many years, the sports lighting industry has evaluated the actual cost benefit of energy savings on a so called 'life cycle' basis. This analysis method ignores the time value of money and is not an accurate or reliable method with which to make an educated financial decision. CHM Sports Lighting strongly urges all customers to utilize the present value method to determine the actual cost of energy consumption of the system.



As you can see from the graph above, the life cycle approach introduces severe error into the analysis of total energy cost. The theory behind this approach is simple enough for anyone to understand and is summed up best by a simple question: Would you pay $100 today for a return of $100 in 25 years? The simple answer is no, you would expect to be compensated for the 25 years that you lent your $100 to a third party. If your energy cost is $5000 per year, the present value[1] of the energy consumption in year 25 is the following:

$$PV_{energy} = \frac{\$5000}{(1+0.05)^{25}} = \$1476.51$$

What this means is that you would have to put $1476.51 in the bank today, at a rate of 5% per year to cover a cost of $5000 25 years from now. Therefore the value, in "today's dollars" is $1476.51 and not $5000.

[1] Assuming a 5% cost of capital (discount rate)