# The History of Combined Heat and Power (CHP)

CHP is a concept that has been appreciated by scientists and engineers for many decades. However, fluctuation in government policies and the market has greatly affected interest in applying CHP and research for improving the technology.

Thomas Edison Pearl Street Station was the world first commercially viable power plant, and was probably the first instance of energy recycling. It produced electricity and thermal energy while wasted energy was used to heat neighboring buildings. Because of this, Edison's plant was able to achieve 50% efficiency.

CHP has developed differently in Europe and the United States, the former having more actively incorporated CHP into its energy policy throughout the years. In the early 1900's, CHP was a very common, if not the most common, form of energy production in the US. However, as other alternatives became increasingly cheaper and more convenient to produce and distribute, CHP saw a decrease in interest and attention. However, during energy crises, rekindled interest in CHP can be seen. Currently, CHP systems are again being looked into as great generators of electricity.

During the energy crisis of the 1970's, by the time CHP was looked into and finally categorized as a more efficient form of energy generation, many utilities had already gotten used to their markets for electricity, thus there was not much monetary incentive to switch to CHP. To create an incentive for CHP and thus move it forward, the Public Utilities Regulatory Policy Act of 1978 (PURPA) was passed. It created a market for CHP by making utilities who did not purchase from these sources pay an extra cost for not doing so.