

NEW HAVEN CITY PLAN COMMISSION ADVISORY REPORT

RE: **RENEWABLE ENERGY**, Authorization for Mayor to Enter into Power Purchase Agreements through the Zero Emissions Renewable Energy Certificate Program for Solar Arrays on Certain School Buildings (Chief Administrative Officer).

REPORT: 1467-11

ADVICE: Approval

BACKGROUND

The Chief Administrative Officer has requested that the Board of Aldermen authorize the Mayor to enter into agreements with the State of Connecticut to purchase power generated from solar arrays on certain selected schools in New Haven. In its continued effort towards energy efficiency and renewable energy projects to reduce energy costs and protect the environment, the City would negotiate with a third party which would own, install, and maintain solar arrays located on city facilities such as schools while selling the energy produced back to the City under a 15-year agreement. Third party ownership enables the project to take advantage of federal tax credits, which may be up to 33% of the project value and allows the city to avoid further capital bonding.

Renewable energy is energy which comes from natural resources such as sunlight, wind, rain, tides, and geothermal heat, which are renewable (naturally replenished). New Haven is a leader in the State for the adoption of renewable energy technologies, including fuel cells, solar photovoltaic panels, and a large wind turbine (at Phoenix Press on James Street). New Haven was the first municipality in the state to commit to purchasing 20% Class I renewable energy for its operations in 2010. A number of residents and businesses in the City have signed up for renewable electricity through the CT Clean Energy Options Program. Furthermore the City has installed a fuel cell in City Hall which provides nearly all of the complex's electricity, 60% of the heat, and 30% of the cooling needed for the two buildings. Several schools, notably Roberto Clemente, have installed fuel cells which have reduced energy consumption and cost from the grid. Additionally, several public buildings - the Fair Haven Library, caretaker's cottage at Lighthouse Park, and the building at Long Wharf pier - are equipped with solar panels.

PLANNING CONSIDERATIONS

Created under PA 11-80, the Zero Emissions Renewable Energy Certificate (ZREC) program allows for an annual auction of ZRECs generated by renewable energy systems located in Connecticut. The proceeds of the auction will provide the winning renewable energy projects with a guaranteed supplemental income stream for 15 years, paid by the local electricity distribution company.

Under the proposed power purchase agreements, the City would pay per kWh delivered, beginning at \$0.08 /kWh in Year 1 escalating to \$0.106 in Year 15, representing a 35% savings to the Board of Education. Four potential school sites have been identified for the solar array installations (Wilbur Cross, Hillhouse, John C. Daniels, and King-Robinson) which are now designed to have a minimal impact on building roof systems.

The Mayor would also be authorized to enter into any ancillary agreements necessary for the technical execution of the solar array, including agreements with the local electrical distribution company to interconnect.

ADVICE

The Commission has supported the City's efforts in the past to be a state leader in energy efficiency and renewable energy projects. It therefore recommends approval with dispatch to allow the City's Energy Committee to recommend specific projects under the restrictive timeline created by the State.

ADOPTED: June 20, 2012
Edward Mattison
Chair

ATTEST: 
Karyn M. Gilvarg, AIA
Executive Director