

OFFICE OF SUSTAINABILITY
JANUARY UPDATE

SOLAR PHASE 3: The Basics

The Basics of Global Warming

- ▶ Carbon emissions are the primary cause of global warming. Much of this carbon comes from electric power plants.
- ▶ The 4th National Climate Assessment report concludes that temperature rise could reach 9.5 degrees Fahrenheit by the end of this century. Aggressive action will be required to reverse this trend.
- ▶ The effects of global warming include sea level rise, extreme weather, drought, forest fires, and floods.
- ▶ The World Bank says that 143 million people could be displaced internally by 2050 due to sea level rise, drought, famine.
- ▶ Phase 3 Solar includes 17 locations around the city. It will generate carbon free electricity in place of electricity from fossil fuels. This will offset 2,192 tons of carbon emissions annually. The equivalent of 2,340 acres of forest and reducing VMT by 4,861,000 miles.

Why the City of Newton? Why Not Let Someone Else Do It?

- ▶ Answer: every single one of us needs to take individual action. Not just the City.
- ▶ We all have to be in this together and collectively to make an impact.
- ▶ It is more important than ever to take action on the state, local and individual level due to a lack of national leadership.
- ▶ State and local governments can provide a clear plan, a regulatory framework to support a plan, financial incentives, guidance, encouragement and leadership.
- ▶ With Phase 3 solar, we are trying to provide leadership that shows that we walk the talk and to show how to do it.
- ▶ This will put us in a better position to assist, encourage and secure commitments from businesses, non-profits and residents.
- ▶ The Mayor's Climate Action Plan will set climate goals for the community and spell out actions for attaining these goals.

How Urgent Is It To Take Action?

- ▶ It is very urgent. Why?
- ▶ Partly because it is so hard to do. And while we are trying to do it the situation is getting worse.
- ▶ Financial consideration for Phase 3 Solar: the State's financial incentives decline over time.

The City's Progress in Reducing its Electricity Carbon Footprint

- ▶ Reduction in electricity use since 2008: 20%
- ▶ Solar energy since 2013, Phases 1 and 2: 21%
- ▶ Phase 3 Solar: 21%

PPA (Purchase Power Agreement) Basics

- ▶ 20 year contracts.
- ▶ The project economics are based on the State's solar incentive programs.
- ▶ Solar company responsibilities:
 - ▶ Design, finance, own, maintain and operate.
 - ▶ Provide a minimum performance guarantee.
- ▶ City responsibilities:
 - ▶ Provide site.
 - ▶ Review and approve project designs.
 - ▶ Provide access to site for maintenance and operation.
 - ▶ Purchase electricity generated by the projects at a reduced cost.

Procurement Basics

- ▶ RFP issued by City Purchasing in July 2018.
- ▶ Reviewed by each member of the evaluation committee independently.
- ▶ Two-part evaluation:
 - ▶ Technical Evaluation and Qualifications of proposer: This carried the most weight.
 - ▶ Pricing: Pricing information is withheld from the evaluation committee until all members submit their Technical evaluations. Analysis of pricing by Cadmus. This analysis is then reviewed independently by each member of the evaluation committee.
- ▶ CPO then compiles the results.
- ▶ Two firms were selected in order to mitigate the City's risk. We did not want to put all of our eggs in one basket.



South High School

Solar Canopies
on line since
January 2017

SOUTH HIGH SCHOOL

Solar canopies
on line since
January 2017

