

## Solar Power in NJ

While not in the same league as Florida or the Southwest, the solar potential for NJ is huge. A fully developed network in NJ could generate 40-60% of the other regions full capability. That much power flowing back into the grid would be a major contribution to reduction of fossil fuel use and emissions.

I would suggest that the CAC investigate and recommend the use of Distributive Generation (DG) to bring the NJ solar grid online. Just like distributive computing, large numbers of small contributions add up to a lot of work - in this case generating electricity. Drops collect to form a stream, streams converge to form a river. Rivers create an ocean of energy. Likewise, small projects, or installations, are easier to fund, deploy and maintain, and are less critical if taken off-line, or if they fail - safety in numbers.

If covered in solar panels, the sheer square footage of usable roofs in our commercial sector should be able to supply the energy needs of the state several times over. Add to that the number of our private residences, and we could have an energy over-abundance to share or sell - certainly in such quantity that NJ residents would never again have to pay for electricity.

PSE&G and JCP&L have fledgling DG programs in the works. The CAC should with them, and involve state government, to foster and expand DG to all business entities with roof space, and as many homeowners as possible, as soon as possible.

## Reducing Energy Use

The CAC should develop a program with business and government to SHUT OFF THE LIGHTS!

Why to buildings and parking lots need to be fully lit all night (and day)?

Project Power Down would flip the switch on all unnecessary lighting and appliances at the end of the day. Designated floor captains would check their areas before leaving work, ensuring that coffee makers, copiers, faxes, lamps, PCs, and other non-essential electrical appliances are turned off. Building management would ensure that unneeded building systems are shut off, and that work and cleaning crews power down after work is done. HVAC systems should be adjusted to maximize efficiency, with special attention to off-hours reduction or elimination. In state facilities alone, the utility savings could reach 10-25%.

Wide spread use of motion sensors would provide light in critical safety areas as needed.

At night, retail and commercial signage could run on lower voltage, reducing energy consumption, while still sending the message. Better, conversion to LEDs would reduce consumption by over 90% - and yes its out of pocket expense, but its also tax deductible.

## Vehicle Emissions

Retrofit devices and fleet turnover have limited and longer term impacts respectively. The value of controlling existing, older, higher polluting engines of mobile, especially non-road, sources, cannot be understated. As in California, consider the value of implementing a mandatory inspection and maintenance program for all on- and non-road vehicles and equipment.

Please note that these are my personal ideas and opinions.

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