

## WHY WE DECIDED FOR A SOLAR ELECTRIC SYSTEM AT CHRIST CONGREGATION, PRINCETON, NEW JERSEY

### OUR BIBLICAL CALLING:

There are many reasons for using solar electric power in our church and most any building because of the environmental benefits to us and the whole community. But our reasons initially are and must be based on our beliefs in a God who is the creator and owner of creation (Ps. 24, “The earth is mine, says the Lord,” Luke 12:43 “Blessed is that servant whom his master will find at work [caring for God’s household of creation].”

Christians and others believe God created the earth and assigned people the job of caring for that creation (Genesis 2:15) with responsible use of the earth, plants and animals as well as peaceful relations with other human beings. The Bible calls us to be responsible “steward” or servants of the God’s creation as opposed to acting like we are the owners and can do what we please with creation.

### BURNING COAL OR USING THE SUN’S ENERGY

Electric energy we use in central New Jersey is derived from burning coal, a fossil fuel like oil and natural gas that is not renewable and very polluting as it pumps greenhouse gases, especially CO<sub>2</sub>, into the atmosphere resulting in global warming, death and sickness such as asthma. One main alternative is natural gas which is less polluting but makes our country more dependent on the explosive Middle East. We believe that we are obligated to stop contributing to this pollution of God’s creation wherever possible. Solar electric energy is one way to do that as it is totally non-polluting and uses only the sun’s energy to provide electricity by means of photo voltaic cells that convert that solar energy to electricity.

### NEW JERSEY’S ADVANCED SUPPORT OF ALTERNATE ENERGY PRODUCTION

New Jersey has an advanced program (better than most states) to encourage alternative energy production such as solar electric systems and provides a rebate that makes the installation of a solar electric system affordable. After the initial costs, it is free. New Jersey law requires the electric companies to receive extra electricity generated by photo voltaic cells on sunny days when we use less than the system produces. (The electric meter then runs backwards pumping the electricity back into the electric grid. That is called “net metering.” This advantage avoids the necessity of storage batteries.)

#### THE COSTS; INSTALLATION BY JERSEY SOLAR

There are more costs to such a system after the rebate of 60%-70% that go for the installation. In our case, the installer is a company with which church members have had a good experience of installing and maintaining two other such systems. That company is Jersey Solar, a reputable firm that has been in business for over a decade and has installed solar electric systems all over New Jersey. The owner, Rick Brook, lives in Hopewell and is an active member of Hopewell Presbyterian Church. He has installed such a system at that church and has offered to install our system for only \$1000. Normally, this would cost about \$15,000, plus the rebate. Mr. Brook has offered this very generous arrangement to these churches as a public service.

#### THE COSTS: AN OAK TREE

Other costs include minimal payments for permits and, most significantly, the cutting down of a large, beautiful oak tree which would shade the collectors and prevent the electric generation. No one wants to see this beautiful tree cut down. We have searched many alternatives to doing that, such as trimming it, placing the collectors in another place not on the roof, etc. No other place is feasible nor would trimming the tree prevent the shading.

As much as we value this one oak tree, we know that trees are renewable unlike

fossil fuel which is not. Trees themselves, of course, absorb some CO<sub>2</sub> and are a benefit to us all. However, there is no comparison to the benefits of a solar electric system which would replace coal-fired generation and its vast pollution of the air we breathe and the atmosphere that is warming to an alarming extent. (One expert we consulted estimates that we would need five acres of these oak trees to off-set the amount of CO<sub>2</sub> that the solar electric replaces.) However, we will replace this tree by planting other trees that absorb as much carbon, but do not block the sun on the solar panel as this oak tree does.

We believe that replacing one beautiful tree with others is a small cost compared to the many benefits to the environment we and others receive from a solar electric system.

The maintenance of our building is also a stewardship concern for Christ Congregation because we must constantly clean debris from this tree as it often causes leaks on our flat roof.

This is hardly the first effort of our church to be good environmental stewards. We have replaced most of our single pane windows for double panes, instituted zoned heating and cooling and provided extensive educational programs on the environment.

Our first commitment at Christ Congregation is to the God of creation and all that God has placed in our care. We believe the use of alternative energy that replaces fossil fuels is one way we can be responsible for God's gift of the earth.

Board of Trustees, Christ Congregation