Solar energy is so plentiful that it has the potential to replace oil, coal, and other fossil fuels as the source of most of the world’s energy, if it can be harnessed more efficiently. According to The Union of Concerned Scientists, the sun emits more energy in one second than every human being has used since life on Earth began, and enough energy reaches the surface of the U.S. every 20 minutes to power every electrical device in the entire country for approximately one year. How do we capture and efficiently use this source of totally free energy?

Olafur Eliasson’s new project Little Sun is part of an initiative to make solar powered flashlights available throughout Sub-Saharan Africa. In many rural areas of the world, local communities use kerosene for indoor lighting, which leads to asthma, poor quality of light, and the desperate cycle of oil-based products that continually degrade the environment. This project is both a real world use of solar energy for communities desperately in need of energy and an art project. His installation, Olafur Eliasson: Little Sun, is on display at Tate Modern in London during the London 2012 Festival.
Your work has focused on the intersection of art, design, science, and architecture. In the tradition of Buckminster Fuller, your work could be said to really explore how design can radically change perception, and with that, change life. How do you feel about the idea that electricity can change everyday life?

I believe that access to electricity and light can radically improve people’s lives. There are 1.3 billion people today who have no access to electricity. Many of them rely on kerosene lanterns for light, but kerosene is both expensive and hazardous to the health. This is why, together with engineer Frederik Ottesen, I have created a new work of art that works to bring light to people who do not have access to electricity: the Little Sun solar-powered lamp. Little Sun is aimed at off-grid communities all over the world.

Is there a “sustainable design” component to your approach?

Little Sun is sustainable because it is not just about creating the lamp itself; it is also about successfully integrating it into the off-grid communities where it can have a lasting effect on the quality of life. It will help create local growth and sustainable trade, so that distributors will be able to make a profit, and those who use the lamp for everyday life will be able to save money on what they would normally waste on kerosene.

You collaborated with the renowned architect David Adjaye on the installation about light at the 51st Venice Biennial entitled “Your Black Horizon.” In this capacity, light and architecture came together in some fascinating ways. One could argue that, like Sir Isaac Newton, that light was “corpuscular,” made of particles. The design of your “Little Sun” is an elegant use of solar energy. How did you arrive at this model?

Over the years, in making art, I have constantly explored issues dealing with space, time, light, and society. I am particularly interested in how the light of a space determines how we see that space and similarly, in how light and color are actually phenomena within us, within our own eyes. So, the viewer brings something individual to the experience of any artwork. I always try to make work that activates the viewer to be a co-producer of our shared reality.

Little Sun unites these different strands of my work into a small object with a huge impact, and in this sense, it is probably one of my most important artworks to date. Since light has an evident, functional and aesthetic impact on our lives, by changing the light we use to see the world, Little Sun can change the world.