

Using All of the Energy from the Sun to Make Power

I like to talk to people when I fly. They ask me what I do.

I imagine better ways to get energy from the sun.

"We know how to use the sun's light to make power. Most of the sun's light can be caught, but most of its energy (more than two thirds) is lost before we can use it. More of the energy from blue light is lost than from green light and more from green light than from red light."

Imagine a better way to catch the light from the sun and to use all the energy of all its colors. Think of catching the blue and green light from the sun in stuff that is made of line after line of things that look like sticks or hair - but that are really much smaller than hair.

We used computers to figure out where to place the sticks and how tall they should be. Blue sticks get energy from blue light on top of green sticks that get energy from green light, and so on, to allow us to get most of the energy by adding together the power from each color stick.

Right now, some bits of energy still get lost on the way. Every day the people in our team work to figure out ways to keep the bits of energy from being lost. Once they have figured out how to save most of the bits, we will be able to use all of the energy from the sun to make better lives in our world!

When light is caught by one of our colored sticks it makes bits of energy that have to move from the bottom to the top of the stick for us to use it in the real world.