

The Uprising of Solar: A STEAM Story

by Yael M.
Catalina Ventura School

It was a day like any other, the only difference being it was my first day of eighth grade, of course. I got out of bed tiredly, brushed my teeth, got dressed swiftly, combed my unruly hair, packed my things and went out the door.

I was walking to school today; mom was busy with work so I had no other choice. I was thinking of what kind of a greeting I should give my teachers and friends until... "Hey! Valentina! Wait for me!"

I was confused for a second until I realized it was just my best friend Tito. "Oh, hey Tito, what's up?" I said concerningly.

"Finally, I caught up to you! Why do you walk so fast?" Tito said in a winded voice.

Tito is a pretty short guy so I couldn't blame him for not being able to keep up with me, I'm only a few inches taller but I think just saying that he has to look up at me to talk to me says a lot about our height difference.

"Sorry, force of habit." I replied.

After catching a good deep breath and a drinking an extra juice box I happened to pack in my lunch, Tito then asked me something I wasn't expecting.

"So, are there any clubs or extracurriculars you might join?"

I was a little confused at the question; for the entirety of my summer all I did was take naps, watch TV, and go to the gym. Not once did joining a club cross my mind.

"To be honest, I haven't really found any clubs that caught my eye." I replied.

"You should try the S.T.E.A.M. class! I know you're gonna love it!" Said Tito.

"The S.T.E.A.M. class? Isn't that the class that started the uprising of solar panels?" I asked out of curiosity.

"Yup! That's the one!" Responded eagerly Tito.

I thought about it for a second then responded with, "I'll think about it, how bad could it be? Are you gonna join it too?".

Tito looked at me with a concerned look and playfully remarked "Uh duh, of course I'm gonna join!".

I was relieved to hear that; I didn't really want to be alone in a club I knew nothing about.

We both arrived at the gates and went straight to class. I walked in and sat down in my assigned seat. I then noticed that written on the board in bright red was an announcement, the announcement read "extra class announcements at 6:20." I immediately knew that they were talking about the assembly for the people who want extra curriculums. The morning flew by, and in a matter of minutes we headed out to the gym for the assembly.

I ended up putting my name on the roster of kids to join the S.T.E.A.M. club. After the assembly it was lunchtime; today's lunch looked kinda sloppy but Tito said it was good. After eating we went outside to the field. The sun was burning me alive; I felt like I was in one of those gas station hotdog rollers. I went to go talk to Tito about the S.T.E.A.M. elective and what we could change in the way solar is being used. The day felt short and it was over before I knew it. Not much has changed other than what we learn. It's always been like that.

For the next few months, I'd learn about how solar affects the economy and the environment. After learning about solar it was obvious that it was much more sustainable and cleaner than the power we used back then. I couldn't believe that just 24 years ago we had been harming the environment with greenhouse gases and pollution.

I had so much fun that year in the S.T.E.A.M. class; we even took a trip to La Pradera Park! It was incredible to see the kinds of structures that people from our school made just years before I joined. There were gigantic soccer ball looking structures. They looked like someone took a soccer ball and completely melted it.

The structures were actually made with solar panels. It was incredible to see what you can build with solar panels. The structure covered a bed of flowers. The teacher was explaining how it works.

"The hyperbolic structure covers the plants giving them shade from the sun; the flowers also benefit the solar panel by cooling the underside with the condensation and water that is used to water them. This is called *agrivoltaics*", explained my teacher.

That was the first time I had even heard of agrivoltaics.

Agrivoltaics is when you combine the production of energy and food; the solar panels make their own kind of ecosystem in a way. I'm glad that people are using more solar energy rather than any other kind of energy source.

In 2021, the pollution was so bad you couldn't even breathe fresh air in some places. Now in 2045, the air is much cleaner and the environment isn't as polluted as it used to be thanks to the uprising of solar.

Recently, Tito and I have been talking about how we believe that becoming an engineer could mean that we could help further the future and clean the environment of pollution. I would love to be someone who could change the future of the planet! Fossil fuels and other non-renewable energy sources are harming the environment and I would like to help change that.