first learned about climate change in fifth grade after watching *An Inconvenient Truth*. Seeing the connection between a warming climate, melting ice caps, and rising sea levels hit home for me. Living in the small coastal town of Westerly, Rhode Island, I realized that parts of my community and many other coastal regions could one day be submerged if global warming continues at its current rate.

But if the main cause of global warming is human consumption of fossil fuels, I thought, then humans could also provide the solution. I was only 10 years old, but I decided that I would do everything in my power to mitigate this problem.

**It Takes a Team**

My next step was to rally my classmates to action. A group of friends and I formed a community service team—the Jr. WIN (Westerly Innovations Network) Team—dedicated to helping both the community and the environment. The eight of us met at a table in my basement to talk about what we could do to help. We already knew that global warming could be slowed down by replacing fossil fuels with alternative energies, such as biodiesel. We decided to learn more about it.

Soon after this meeting, my father told me about the Energy Solutions Expo that would be held at the University of Rhode Island. I went, and, among many vendors I visited that day, stopped at the booth of a biodiesel refinery. I was excited to learn that biodiesel could be produced from waste cooking oil.

Around the same time, an article appeared in the local paper about a charity in our area called the WARM (Westerly Area Rest and Meals) Center, which had initiated a campaign called One Dollar Makes A Difference. In this campaign, residents donated one dollar each week to go toward emergency heating assistance. My teammates and I were astonished to realize that people in our own community were struggling to heat their homes in our harsh New England winters. Surely, we thought, we could find a way help these local families.

And then the solution came to us: We could Turn Grease Into Fuel.

**A Well-Oiled Machine**

Project TGIF is a system we created to collect grease, convert it into biodiesel, and then distribute the fuel to local families for emergency heating assistance. To make this project work, we first visited different companies to create partnerships. We coordinated with grease collectors, biodiesel refiners, biofuel distributors, and local charities that work with needy families. We raised awareness of grease recycling by handing out flyers and kitchen calendars at supermarkets and town events, airing a public service announcement donated by COX Media, and making presentations to the public, especially at elementary schools, where we asked kids to encourage their parents to recycle. To make it easy for people to recycle used cooking oil, we asked our Town Council to set up a grease receptacle at the transfer station, which they agreed to do. We also asked local restaurants to donate their grease to the program.

Once we had partners in place and the project running, we took it another step forward: we drafted and helped introduce a bill to mandate that all businesses in Rhode Island recycle their used cooking oil. We first showed the bill to our local legislatures, whose members helped us edit it. When it was ready, we testified three times on behalf of our bill at the Rhode Island State House and made presentations to various committees within the state legislature. The bill was signed into law in July 2011 and went into effect on January 1, 2012.

Our project is a win-win situation. The environment wins because we’re using biodiesel, a clean-burning alternative to petroleum-based diesel, to heat homes. By the EPA’s calculations, we’ve prevented 3 million pounds of carbon dioxide from entering the atmosphere. The financially stressed families win because they’re being provided with heat during the winter. In the past six years, we have donated 40,000 gallons of BioHeat (a biodiesel blend) to eight charities, allowing 400 families to stay warm in the winter.
For our efforts, we were recognized by many different media outlets, including CNN Heroes and the Nickelodeon HALO Awards. The awards meant a lot to us personally, but, more importantly, we hope we encouraged young people to start an environmental movement.

**Adversity and Growth**

We have been working on project TGIF for six years. Along the way, we've encountered several difficulties. Some restaurant owners refused to speak with us at all because of our age or were unwilling to switch from their current grease collector. We had to visit them repeatedly to convince them to work with us. We faced additional challenges when our original biodiesel refiner went out of business during the recession and when our oil collecting partner moved his business to Florida. In both cases, we held immediate meetings to strategize and found other partners to keep the project going.

Project TGIF by the Numbers

- 25 recycling stations that Project TGIF has set up in 22 towns in Rhode Island, Connecticut, and Massachusetts
- 132 restaurants participating in the program
- 400 families kept warm with donated biofuel
- 153,000 dollar equivalent of that donation
- 3,000,000 tons of carbon dioxide kept out of the atmosphere by replacing petroleum-based fuel with the donated biofuel
- 40,000 gallons of biofuel that Project TGIF has donated in the past six years
- 6 teens who make it all happen

The challenges we encountered taught us to be flexible and adapt to changes. For example, there is stiff competition for waste cooking oil; many grease collectors pay restaurants for their grease. We responded by giving our restaurants the option of donating just a portion of their waste cooking oil so they could still make a profit. And to strengthen our ties with our restaurant partners, we started to promote TGIF's participating restaurants to increase their business.

We are currently working in Rhode Island, Connecticut, and Massachusetts. Our next step is to work with local governments to expand the program into new areas. In the next five years, we hope to have Project TGIF running in all six New England states.

My story shows that a simple passion—in my case, the environment—can go a long way. I truly believe that youth are the change makers, the leaders of not only tomorrow but today. I started my project with my friends when I was in fifth grade. And honestly, if a group of fifth graders can start a movement and make a real impact, anyone can. I challenge all of you to discover and pursue your passions for good. You might change your community—and together we'll change the world. 

**Cassandra Lin** is a junior at The Williams School in New London, CT. She has won numerous awards for her work with Project TGIF, including a 2011 Prudential Spirit of Community Award, a 2013 Jefferson Award, a 2013 Brower Youth Award, and a 2014 Nickelodeon HALO Award.

Learn more about Project TGIF at www.w-i-n.ws.