

Amy Choi, amylase, The Meadows School

Script is based on the following:

My business, AmyCo, is a sustainable clothing company. My priorities would be to provide low-income communities with access to affordable, sustainably made clothes, and ensure that my workers have fair working conditions. Oftentimes, my friends mention how they would like to shop sustainability, but they're not willing to pay a lot of money for better quality clothes.

There are fashion companies that work toward carbon neutrality: Patagonia, Tentree, Armedangels, yet one commonality between these companies that I admire is that they are aware that it is not enough. The fashion industry is extremely difficult to make 100% sustainable - the dying process can prove to be toxic, growing cotton and hemp also takes a lot of water to grow, etc. However, these brands choose the option that will waste less water; these brands choose the fabric without microplastics.

I will be implementing 6 main actions for my company. The first consists of two points: we buy in bulk and we buy recycled. Online shops such as Fabscrap and Queen of Raw both sell luxury fabrics that have been thrown out by other brands, and sell them at a cheaper price. In this way, AmyCo will not have to spend too much on purchasing sewing materials. Additionally, using recycled fabrics would be less impactful for the environment than growing actual crops for their fibers, which would increase water usage. Second, for materials such as zippers or elastic, we will buy from local businesses to show our support, and buy less impactful versions of each. For instance, instead of regular elastic filled with microplastics, we will instead purchase elastic made from organic cotton. Third, we will only use sustainable packaging. Similar to Coconut Bowls, one of the B-corporations, my packaging will either be compostable, recycled, or reusable. Fourth, our shops and general facilities will be powered with renewable electricity. Depending on the location, solar power, wind - without the blades to prevent harming birds, kinetic energy - so if you've seen kinetic tile tech, that's the general idea. Fifth, our shops will have a rent option in addition to a repair option to minimize how many products people buy. Lastly, 20% of our profits will be donated to nonprofits such as Citizens Climate Lobby, or even biotech labs in order to fund research on climate change solutions.

LINK TO VIDEO: https://www.instagram.com/tv/CVR8HZGjQKa/?utm_medium=copy_link

Lyrics (if you guys want clarification on anything I sang)

Some people say it's not our place or not our time
They say our ideas won't work
But they won't even try part-time

More importantly is that there is no time to wait
Pollution has no brain it cannot hesitate

All the people, all the animals, plant life too
All affected by this molecule CO2

I don't want to keep seeing the floods on the news
Nor the forest fires, earthquakes, oh droughts too

It's happening now, I know this is frightening
But we're not out of time, you can make a change too

Link: https://www.instagram.com/tv/CUhsWoMslmk/?utm_medium=copy_link

Caption: Climate change affects everyone - especially the health of marginalized communities, and overall biodiversity. To those who say we have a long time until the effects of climate change become apparent, tell that to the people who have lung issues due to pollution plants. Tell that to the people who had to wear masks pre-pandemic to prevent breathing polluted air. It doesn't cost you anything to care.

5:40



Instagram



Your Story



the.greenpo...



pgcteamgre...



turninggreen...



yellowwoo...



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amychoi.pgc A Song on Climate Change - Climate change affects everyone - especially the health of marginalized communities and overall biodiversity. To those who say we have a long time until the effects of climate change become apparent, tell that to the people who have lung issues due to pollution plants. Tell that to the people who had to wear masks pre-pandemic to prevent breathing polluted air. It doesn't cost you anything to care.

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3 seconds ago

Amy Choi, amylase, The Meadows School

DISCLAIMER: I had so much fun talking with all the participants - so I made a newspaper (AmyCo, of course) with articles featuring each team I talked with! However, the specific article I chose to submit for the actual challenge is Ayanna's article! If you're interested in reading the articles for other participants, they are shown below as well!

What's written in the article (keep scrolling for the article in the template!)

Ayanna:

A representative from New Jersey, Ayanna embodies the supportive spirit encouraged by the Project Green Challenge. Throughout the 30 days, she's shown commitment that can only be admired - even when she's under the weather, she'll always turn in that less than 5 MB file, with high quality answers at that. For example, on the day regarding plant based foods, she displayed a variety of talents, including her culinary skills and fluency in writing reflections on the challenge.

When talking to her, she expressed not only an interest in the climate change movement, but also education in itself: "I like how there are different topics to explore...there's so much to do within the climate movement!" This desire to learn more spurred her interest in the Project Green Challenge, to which her expectations have been more than met.

Outside of the Project Green Challenge, Ayanna enjoys pursuing Climate Policy at multiple levels, whether in her general community or within the school setting. She's an active member advocating for the Green Amendment, which guarantees equal environmental rights, and she helps students get resolutions passed in town councils. Even as a minor, Ayanna regularly exercises her political power, illustrating her determination in climate reform, and the sophistication of her activist abilities. In school, as the Vice President of the Environmental Protection Initiative, she proposes constant reform, such as Meatless Mondays, and wants to involve her school in more political action, a daunting yet rewarding task.

Her favorite challenge from these 30 days revolved around soil; more specifically, both of us enjoyed watching *Kiss the Ground*, and found that the documentary was informative in an engaging manner. Even more impressive was its ability to instill a sense of hope within the audience after bringing light to the agricultural industry.

Ayanna is an inspiration to all - her ability to balance schoolwork, the Project Green Challenge, and so many other extracurriculars shows her dedication to the cause, and she will achieve great things!

Palm Trees Almr (Fang)

Although Fang is from Malaysia, she represents Palm Trees Almr from the International School Almere, an IB school in the Netherlands. Unlike many schools in the US, the International School Almere addresses the topic of climate change in terms of its adverse effects on communities in addition to potential solutions to mitigate these issues. Wanting to apply what they've learned in school to real life, Fang, along with her friends, took on the Project Green Challenge, and met with success!

When looking through all that this team has accomplished, it is crucial to bring attention to their creativity. For the ocean topic, as a means to gauge community awareness about plastic pollution, Palm Trees Almr interviewed various peers within their school, a unique and effective means of spreading awareness! Additionally, during the fashion day, this team reformed a shirt, raising awareness of the various methods to reduce clothing waste and make use of objects that would typically be depicted as waste!

Not only is this team an avid participant of the Project Green Challenge, but they regularly volunteer in their community to pick up trash, spread awareness about the environment, etc. In fact, Fang brings up a time in which her school collected trash, and people were able to transform what they found into artwork. Throughout the past 30 days, this team has been the epitome of creativity, carrying an artistic aspect to advocacy wherever they go.

Team Demeter

Not only does Team Demeter from Montgomery College take on the daunting task of majoring in engineering, they've added climate justice to their agenda. This ambitious team was introduced to sustainability through a program known as Engineers without Borders; their specific project dealt with helping construction projects in Panama. While planning the construction, the team mentioned how creativity proved a crucial aspect to the process, and ensuring that one uses their resources responsibly and with as little waste as possible. In their case, they used sediment in nearby areas as a construction material for the cement.

As Team Demeter continued their journey in the Project Green Challenge, they were able to exert their creative skills continuously, taking victories as a memorable group in the minds of many. For instance, on the zero waste day, Silvia made an amazing tree out of what would typically be seen as waste, and they elaborated on the symbolism behind the tree. Additionally, Vivian illustrated a book to bring awareness to plastic pollution in the oceans, once again making an impact even beyond the PGC community!

While balancing this competition with their demanding college workload, these individuals were working on yet another project within their college: a community garden! Unlike other gardens that have previously been installed, Team Demeter stresses the importance of education, and wants the community garden to be a means of encouraging climate change dialogue for both the students and teachers! I have no doubt that they will find success in this endeavor, and Team Demeter's ability to add nuance to their research makes them stand out!

AMYCO NEWS

FEATURING THE PROJECT GREEN CHALLENGE



DAY 26

CONNECT

Overall, this was one of my favorite days, hands-down. The Project Green Challenge community was so uplifting, and I felt re-energized after talking to everyone that I met with over the course of two days!

Whether this was their first clue into the climate campaign, or they were an experienced veterans, there was so much to learn from each of these individuals, and I wanted to stay on call with them forever if I could!

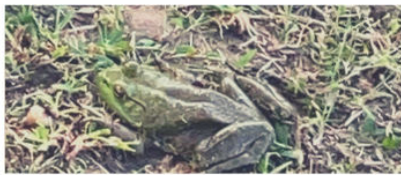
I also enjoyed getting to know Kincoff, Team Nifty, and Marisol! The Project Green Challenge has made me thankful for all the amazing people I've met, and they inspire me in so many different ways!

IN THIS ISSUE

Fang - Palm Trees Almr

Ayanna

Team Demeter



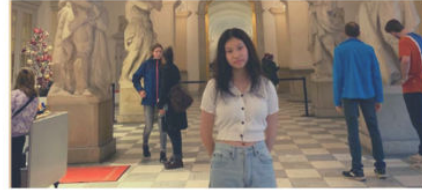
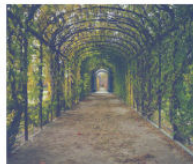
TEAM DEMETER

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As Team Demeter continued their journey in the Project Green Challenge, they were able to exert their creative skills continuously, taking victories as a memorable group in the minds of many. For instance, on the zero waste day, they made an amazing tree out of what would typically be seen as waste, and they elaborated on the symbolism behind the tree.

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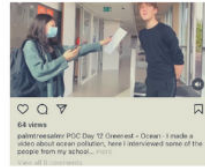
"We've been slowly adding more ... class room engagement as well... and we're turning this from just a community garden to a learning community garden"



FANG - PALM TREES ALMR

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"the information I gained about myself and the environment...is knowledge that I will be applying in the future, whether it be at school or in my life."



AYANNA

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AMYCO NEWS

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ENTERING THE PROJECT GREEN CHALLENGE



DAY 26

CONCEPT

Over a 30-day period in twenty days, we'll close the Project Green Challenge community with an ending, and I hope everyone's taking to everyone that I met with over the course of two days!

Whether this was their first time in the climate campaign, or they were an experienced veteran, there were so much to learn from each of these individuals, and I would love to see you all with them too! (I could)

I also enjoyed getting to know you, connecting, and sharing the Project Green Challenge has made me thankful for all the amazing people I've met, and they inspire me in many & thank you!

IN THIS ISSUE

Fair - Plant Trees Alms

Ayanna

Team Gemeter



amychoi.pgc I loved meeting everyone! This is really such a great community, and I hope to keep in touch! I'd also never miss an opportunity to promote AmyCo ;)

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Amy Choi, amylase, The Meadows School

One biological mechanism I've had a long term interest in was the artificial leaf, which I first encountered while reading the news. The artificial leaf mimics photosynthesis, and splits hydrogen and oxygen from water. During the light reaction part of photosynthesis, as opposed to the Calvin cycle. This splitting, known as electrolysis, occurs in photosystem II. Amazingly, biochemical engineers were able to mimic this process, creating a cost-effective, silicon solar cell. The artificial leaf turns sunlight energy into a wireless flow of electricity, which, with the help of metal catalysts, splits oxygen and hydrogen. With the artificial leaf, hydrogen energy can be produced in a cost effective manner, and without adverse environmental impacts. Nocera, one of the MIT professors leading the team, hoped to make renewable energy sources more available to those of less fortunate communities.

The artificial leaf inspires me; oftentimes, hydrogen energy is disregarded as expensive and inefficient. However, this leaf could create a shift in this perspective, and introduce a feasible means of implementing hydrogen energy into our daily lives. It changes my perspective of nature by allowing me to appreciate a commonly known phenomenon that could typically be overlooked. Additionally, learning about such technology makes me feel like my AP Bio class was worth it!

In the future, panels could collect the solar energy, and then transfer it to the solar leaf when necessary. This would increase energy efficiency, and reduce wasting sources of electricity within households, schools, etc. As the technology develops further, the cost-efficiency only increases, making it even economically favorable to invest in such a product!

Source: <https://news.mit.edu/2011/artificial-leaf-0930>

BIOMIMICRY IN

THE ARTIFICIAL LEAF

The future of hydrogen energy!

THE ISSUE

Hydrogen fuel is expensive right now - it could be difficult to store and transport, and even obtaining the molecule could prove troublesome.

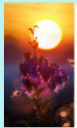
THE SOLUTION - USING BIOMIMICRY

Plants get hydrogen for free! This happens during photosynthesis, more specifically during the light reaction, a process known as electrolysis occurs, splitting a water molecule into hydrogen and oxygen.



Consequently, scientists began the manufacturing of this artificial leaf, which mimics the process of photosynthesis in order to obtain hydrogen.

WHAT ARE THE BENEFITS?



It's cost efficient - more research into this topic could lead to the increase of hydrogen energy as a fuel for cars, houses, etc.



It's energy efficient - future models involving the artificial leaf involve the storage of solar energy, and the activation of the leaf only when necessary!

WHEN WILL WE SEE THIS?

Unfortunately, we are still in the developing area, but with further research, the artificial leaf will be implemented into everyday life!

REFERENCES

<https://news.mit.edu/2011/artificial-leaf-0930>



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At my school, one of my club's goals is to reduce food waste. We have a cafeteria that provides food, but I've noticed that they often have extra food, and no one really knows what happens to the leftovers. Food insecurity disproportionately affects marginalized communities, showing how undernourishment is not only an issue of waste on the part of restaurants, but also one of justice and ensuring that everyone has access to a nutritious diet. I feel fortunate that I have access to food.

One of the organizations that my school works with is Three Square, a food bank that takes donated food, and gives them to homeless individuals. While us students volunteer there occasionally, the organization is not directly reducing our school's food waste. In fact, when I was researching about reducing food waste, most solutions regarded composting, which our school is already in the process of conducting our food waste audit.

Instead, I hope to start a new movement with food waste: encouraging others to incorporate learning about food waste in honors science and economic classes. Students could actually learn about how food waste impacts the climate crisis, increases costs due to waste management, etc. To start, I will reach out to the economics teacher and biology/chemistry teachers to ask them to incorporate food waste education into their curriculum, and relate it to the climate crisis. In this way, climate change could also be effectively introduced into school lectures! Education is always the first step.

Educate about Food Waste!

Let's start a movement to incorporate food waste education into our curriculum!

Over 800 million people are undernourished - restaurants and schools produce tons of food waste

Education within your community is the first step. Here's a comprehensive guide on how to go about the food waste education movement.

Annual food waste by region (kg/person)

Region	Annual food waste (kg/person)
USA, Canada, Australia, New Zealand	~100
Europe	~80
China, India, and Africa	~60
South America, Southeast Asia, and Oceania	~40
Latin America and the Caribbean	~30
Sub-Saharan Africa	~20

The region with the highest waste is the United States and Canada, followed by Europe. The region with the lowest waste is Sub-Saharan Africa.

94% of this waste comes from restaurants, schools, and other food services

4% comes from people's homes

Know your facts

The region with the highest waste of food is chosen every year, according to [FeedingAmerica.org](#).

Reach out to your teachers

Economics
Thinking food waste means "before the food waste center ever and done" and "waste" is a commonly used term of a waste of time.

Chemistry
Food waste is an excellent resource for a lab. You could analyze the pH of a liquid from a food waste sample. You could also analyze the pH of a liquid from a food waste sample.

Biology
Climate change affects ecosystems, a large component of biology. Investigate one of the causes of climate change, food waste, and its impact on the environment.

Stay in contact with them!

Make the transition for your teachers easier - it'll increase the likelihood of them implementing your ideas!

Go big or go home!

Contact your dean, headmaster, or whoever runs your schools assembly.

Prepare a presentation on food waste (feel free to use some of the facts on charts from the inf slide)



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Educate about Food Waste!

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Let's start a movement to reduce food waste education to our children!



amychoi.pgc Food donations can be difficult during the pandemic, but the climate change stops for no one, and neither should we! While schools implement composting programs or host food drives, it's just as crucial for the students to know WHY they should compost or WHY they should donate. I'm proposing that we start a movement - Educate on Food Waste!

@threesquarelv @foodtank @foodprintorg @turninggreenorg #pgc2021

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