Team: GreenPower Username: danielathomass School: Anáhuac Mayab University Instagram username: daniinpoland

Group member: Natalia Muralles

# **Greenest-ClimateJustice**

# Resources

<u>Article:</u> There is No Climate Justice Without Racial Justice

- https://time.com/6017907/climate-emergency-racial-justice/
- TED talk: Climate Change is a Social Justice Issue by Adriana Laurent
  - https://www.youtube.com/watch?v=NRmHp0VC4K4

Interview: Climate and social justice by Thiagarajan Jayaraman

• https://en.unesco.org/courier/2019-3/climate-and-social-justice

# Questions

- Whose voices are being represented? What stories are and are not included? The voices of the privileged and the unprivileged. Both sides are important and in what I have watched and read today about climate justice, I saw the voices of the people being affected, the ones whose stories are ignored, the ones that are demanding justice and the ones that live ignoring this problem.
- Have you been taught about this in school? If not, how can you change that? How can you educate others?

I was not taught about climate justice at school and honestly I don't remember hearing about it until now, however I have heard about climate change and social justice separately. Climate justice is not an easy topic since it's the combination of two already complex problems. It took me some reading and video watching until I really understood the topic, maybe it was because I hadn't heard before and that is why I think the best way to educate others is talking about it because you can not do anything about something you don't know.

# • What can you learn from looking at this through the lens of the 4 Rs?

- *Reflection:* we need to prioritize climate justice because the problem is happening and if we don't act, many people will keep suffering.
- *Restoration:* climate justice has no simple solution, we have to work hard towards creating a world where the color of your skin or status does not make you more vulnerable to change.
- *Reparation:* climate disasters are happening and affecting whole countries, it is important that we help in any way we can.

- *Right Relationship:* it is important to acknowledge that social justice and climate change have to be seen as one problem instead of two. Trying to solve them individually will not work since they are tied together.
- With all you have learned and read, how would you define "climate justice?"
   Climate justice is the relation between social justice and climate change. How climate change has more negative effects on minorities like black, brown or hispanic people. Why developing countries are being more affected by climate change while developed countries are the ones contributing more to it. Climate justice is not only an environmental problem but a political and ethical problem too.

## Video (Both links lead to the same video)

https://clipchamp.com/watch/Yb6OsvjFRVV https://drive.google.com/file/d/1sZbE0V8rcmXiEWYbSFfiLXiOHfeE9jZ0/view?usp=sharing



### Screenshot of the post

Team: GreenPower Username: danielathomass School: Anáhuac Mayab University

#### **Greener-Wellness**

### Letter

Dear Ceci,

Today I want to tell you how much I love you and how grateful I am that you are my sister. You have so much energy, even though it annoys me sometimes, most of the time it makes me laugh and puts me in a good mood if I am not very happy and if I am it just makes me even happier. I love it when we sing until our lungs are going to explode, I love when you show me the new songs you discover, when we go to the kitchen to create a new snack and learn Tik Tok dances together. I want to thank you because you have always been my number #1 fan and have **encouraged me in everything I do.** You always **push me** into doing things I am afraid to and help me out when I feel I can't do something. You have been an example of kindness and strength, when people took you down you came back stronger and you didn't hold a grudge for them and even if you did, you treated them with respect. You have taught me to focus on myself and don't let other people's actions make me sad. You have shown me to let my creativity flow and have always challenged me to be a better student, friend and person. You are not just my sister but my best friend, you have held me while I've cried and cheered me up when I was sad as well as celebrated with me in my successes. You have taught me so much and even though I don't say it enough I love you very very much and I am going to miss you when I go.

Your favorite sister,

Natalia.

## **Reflection:**

This experience was very liberating, I know I love my sister and my family but with everything everyone has to do daily we don't really take the time to acknowledge each other and to really appreciate we are together and all the things I love about them. Obviously not everything is perfect, sometimes we get angry at each other and fight so it feels nice to remember all the good things and revisit happy memories. At first it felt kind of funny and suddenly there were tears running down my face and reading was hard because my eyes were cloudy, you could say they were happy tears but for me, they were love tears. When I was reading, all this love that I sometimes keep to myself was coming out and it came out strongly, with tears, tears of love. Doing this made me happy and it made my sister happy.

Video: https://drive.google.com/file/d/1\_04nYZgl8-iWY-7qOBIvFtKaIriTcx7B/view?usp=sharing



## Screenshot of the post:



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## **Greenest-Biomimicry**

# Firefly Lamp

A lamp designed from the biological model of a firefly will optimize glowing since it will glow with greater power while spending less energy. The angles of the lamp will make it more effective so it can save energy therefore reduce fuel consumption and greenhouse gas emissions.





A lamp designed from the biological model of a firefly will optimize glowing since it will glow with greater power while spending less energy. The angles of the lamp will make it more effective so it can save energy therefore reduce fuel consumption and greenhouse gas emissions.

**Biomimicry Design Spiral** 



# **Biomimicry Design Spiral Explained**

DEFINE

- Reduce greenhouse gases emitted from homes and buildings.
- The product is a lamp based on the firefly structure to be more efficient.
- A limitation could be producing the lamp.

# BIOLOGIZE

- It needs to use less electricity than a normal light bulb.
- It must shine as bright as a traditional lamp.
- How can fireflies be seen from a great distance despite their tiny size?



# DISCOVER

• Fireflies have an abdomen that allows light from their luminous organs if seen outside. Although these organs are small, the light of this insect can be differentiated from several meters away.

• Other insects that use this are the Firefly-mimicking Longhorn Beetle that produce light with their abdominal segments very similar to a firefly.



# ABSTRACT

The biological strategy that the firefly uses for lighting is the shape of its rib cage.

The design principles to be used are:

- How to design a lamp
- The realization of the structure of a table lamp.
- Make an electronic circuit.
- Handling of metals to form a design.

# EMULATE

Design ideas:

- Use copper wires for the design of the rear of the Firefly.
- The plastic will be used for the formation of the structure that will surround the focus.
- A hook will be required to simulate the firefly's mouth.
- Aluminum cables will be used to generate the animal's legs.
- Tea strainers and filters will be used for the body's eyes.

## **EVALUATE**



The lamp will be able to illuminate with greater power, spending less energy than a conventional lamp. Taking advantage of the biological model of the firefly the use of light energy will be optimized. The difference with traditional lamps are the angles that allow light to pass through the material so it's more effective. From an economic point of view this project will help save money due to the way it optimizes energy; using little energy and being able to illuminate much more than a common light bulb. On the other hand, from the environmental point of view, it would become an alternative to save energy, which leads us to reduce fuel consumption when generating electricity and avoids the emission of polluting greenhouse gases into the atmosphere.

## Notepad from my time in nature:

BIOMIMICRY I can see a firefly form a great distance so many different types of cwhat are they Bird sounds water cycle Drops of rain still in the trees · Small stream is more turbutent · SOIL IS wet. Simbere does the stream " Humidity in the air. begin ? There is movement in some areas where the grass is tall I can't see the insect /animal Relationship between moses and trees so many differnit types of plants. (a lot of diversity) is messy but still perfet

Caption used: We were inspired by a firefly to design a lamp, using the firefly's shape of rib cage the lamp can be more efficient by illuminating more with less power which reduces fuel consumptions and avoids greenhouse gases emissions. Nature is so perfect, when we use it as inspiration for new products we can create incredible things.

@TurningGreenOrg@BiomimicryInstitute
#PGC2021

### Brainstorm:

- Something with spider webs strength
- Architecture with honeycomb structure
  - Firefly lamp
  - Trees design to avoid direct sunlight

### Screenshot of the post:







Team: GreenPower Username: danielathomass School: Anáhuac Mayab University IG account: greeport

## **Extra Credit-Oceans**

## **Social Media Series-Overfishing**

https://www.instagram.com/p/CU-LrpClLAk/?utm\_medium=copy\_link

## Screenshot of the post:









Helping fish stocks and the marine ecosystem by reducing the amount of CO2. in the atmosphere through emission of less CO2 by thing sector itself

Ver estadísticas

stocks and marine ecosystem in the face of climate change

More resilient fish

## Promocionar publicación

greeport If overfishing continues, more species will be driven to extinction and aquatic ecosystems will... más Hace 3 minutos - Ver traducción





# Captions used:

What is overfishing? It may be described as depleting the stock of fish by too much fishing but it is so much more than that. Overfishing destroys habitats and endangered species. It is disrupting nature's balance. @TurningGreenOrg #PGC2021

Not everyone knows the importance of the ocean, and it is that it absorbs 30% of the CO2 from the air and 80% of the heat that is generated worldwide!  $\bigvee \ll \bigvee$ 

In addition to providing food, water, entertainment, among many other things!

Now more than ever we have to take care of our ocean, and the plants and animals that inhabit it.

One of the main pollutants of the ocean is the fishing industry, so it is recommended:

Reduce the consumption of fish and shellfish.

Eliminate sport fishing.

Punish illegal fishing.

If fishing is required, do it locally.

Do not support parks with aquatic animals.

- Do not throw fishing equipment into the water.
- OON'T BE SHY TO SAY YOU WILL NOT SUPPORT THE FISHERIES INDUSTRY.
- @turninggreenorg #pgc2021 #StopSupportingOverfishing

Overfishing is not only a thread to numerous fish species but also to the coral reefs and many other sea creatures. @TurningGreenOrg #PGC2021 @Noaaocean

How can you help eliminate or reduce overfishing? We present to you a few ways you can help from home. @TurningGreenOrg #PGC2021

Overfishing has been around for a while now and the damages have been enormous, we cannot continue the same way or there is not going to be a fishing industry in less than 30 years. @TurningGreenOrg #PGC2021

Did you know that the Mediterranean Sea is the most overfished in the world, with 62% of its fish stocks now overfished and at serious and real risk of being depleted? @TurningGreenOrg #PGC2021

Overfishing also impacts humans and the job market. Many people rely on fishing as their means of income. With the fish population decreasing, fishing jobs will become scarcer causing people to lose jobs and having to find other work. @TurningGreenOrg #PGC2021

Illegal and unregulated fishing constitutes an estimated 11-26 million tonnes (12-28%) of fishing world-wide @TurningGreenOrg #PGC2021

If overfishing continues, more species will be driven to extinction and aquatic ecosystems will collapse. Fisheries should behave responsibly because they are major forces of ecological and evolutionary change and we must take awareness of this problem and fight for our planet. @TurningGreenOrg #PGC2021

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### Greener

Water brings me...

- *My glasses and contacts:* with them I can see clearly.
- *Paper:* for my notebooks from which I study.
- *My clothes*: my favorite dress.
- *Hygiene products:* being clean helps my health.
- *My phone and computer:* from which I communicate with friends, family and entertain myself.
- *My house:* keeps me safe from bad weather and safety.

Person	What surprised you about your relationship with water?	How can you be more mindful and appreciative of water going forward?
Natalia (Me)	It surprised me how water is involved in everything I use, when I used to think of water I only thought of the water I drink or use to shower and wash my hands.Now I can see that even if the product does not have water in it, it did use water to be produced.	Just acknowledging that water is being used to produce most of the things I am surrounded with. I cannot help to reduce the water use in many of these products, so where can I help? I can help to take care of the water I use at home, I can help to inform others, I can help choosing the products I buy
Cecilia (Sister)	It surprises me how much water I waste in daily activities such as showering, washing the dishes, in the toilet, etc.	Knowing how much water I waste in every activity and trying to reduce that waste, for example, showering faster.
Ana (Sister)	That I can't live without it, not only the basic needs of my body but the products I use daily.	Taking care of it when I wash the dishes and brush my teeth.
Ramiro (Father)	The thing that amazes me the most is that without water there wouldn't be life on this planet. It is incredible the many things water can provide us, like hydriation, cleaning and its characteristics such as its solubilizing power and its thermal range, mostly when it evaporates.	I believe that the best way is to think that it's a resource that is not always going to be available.

My interactions with water:



### Screenshot of the post:

