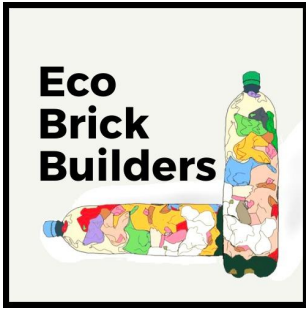


Eco Builders!



One million plastic bottles are purchased every minute. It takes at least 450 years for each bottle to biodegrade.¹ The abundance of plastic in the ocean will outweigh fish by 2050 if serious changes in behavior aren't made.² The Eco Brick Builders is a group of passionate high schoolers from the International School Nido de Aguilas in Santiago, Chile, as a team we are shocked and disturbed by the world's consumption of single use plastic, we had to do something about it. Our group has always encouraged the community to minimize the use of single use plastic as well as recycling yet for many it has been hard to revolutionize their lifestyle. Therefore, we had to think about how we could get rid of plastic and avoid

it from biomagnifying into our ecosystems with a simple and easy solution; eco bricks! Despite the hard health and economic circumstances, the Eco Brick Builders pursued a massive project to encourage an entire school to build ecobricks, collect, clean and perfect the bricks and, as our name says, build! Our plan is to collaborate with La Semilla to build a vegetable garden and greenhouse for a residency of women who struggle with substance abuse. Not only is this a good way to give a use to plastic waste, but it is also an incentive to bring our community together and help other highschoolers be more conscious about their impact on the environment.



The GSL competition was a great opportunity for us to take action and impact our community with a big-scale project. The eco-brick project aims to target goals #12 Responsible Consumption and #14 Life Below Water. An eco-brick reduces the amount of greenhouse gas that enters the atmosphere, as plastic in landfills are usually incinerated, releasing toxic gases and chemicals into the environment. According to ecobricks.org, "1kg of eco-bricks sequesters 3.1 kg of carbon dioxide."³ We have 200 eco bricks, weighing approximately 100 kg, thus sequestering 110 kg of carbon dioxide! A large amount of plastic will be given a second life to build a garden, not only saving ocean life, but harnessing terrestrial life.



Making this Eco Brick Project come to life in such difficult circumstances of the pandemic required a lot of work, planning, and efficient collaboration. We began advertising an Eco Brick Drive, here we made a tutorial explaining the importance of keeping our oceans clean and how to build the bricks. The video was presented within our school's assemblies to raise awareness and motivate all students to become responsible over their plastic waste. Furthermore, to spread the word we contacted the administration of all divisions to get the word out as well as setting up the logistics for the drop-off. After two weeks of advertising, we were able to collect over 200 eco-bricks. Some were in perfect conditions, yet most of them needed to be cleaned or filled up with more plastic. After several weeks of working on the school's garbage plot, we achieved to secure hard and clean eco-bricks ready to be put to use. Overall, we were very impressed by the engagement of our school community as both teachers and students took initiative to make ecobricks, surpassing our expectations.

¹ "15 Horrific Facts About Plastic Pollution in the Ocean - Beach." 22 May. 2019, <https://www.beach.com/conservation/15-horrific-facts-plastic-pollution-in-the-ocean/>. Accessed 29 Apr. 2021.

² "15 Horrific Facts About Plastic Pollution in the Ocean - Beach." 22 May. 2019, <https://www.beach.com/conservation/15-horrific-facts-plastic-pollution-in-the-ocean/>. Accessed 29 Apr. 2021.

³ "Why Make Ecobricks? | Ecobricks.org." <https://www.ecobricks.org/why/>. Accessed 15 Apr. 2021.

While collecting the bricks, we contacted several organizations to collaborate with to build a garden with the eco-bricks. La Semilla was the organization that stood out to us as they had a mission of aiding the social and educational progress of Chile with an environmentally aware focus as they have officially adhered to the Sustainable Development Goals since 2016. Hector, head of La Semilla, said, “we want to develop a strategic alliance that allows us to work together on this project during 2021”. We were all very enthusiastic about collaborating as we proposed a project to renovate the vegetable garden and greenhouse of a residency of women who struggle with substance abuse. With our eco-bricks, we will go and collaboratively build a harmonious and sustainable garden for the foundation. This project would make them approach a self-sustained community with organic food products and include nature for their therapeutic purposes.



The most significant hardships stemmed from the health and economic crisis Chile is going through. Yet, we remain confident that we will go to Comunidad Terapeutica La Tetera and collaborate with environmentalists to build a beautiful garden out of eco-bricks. Our collaboration has introduced the renowned organization to a new sustainable form of building by using eco-bricks that are durable, long-lasting, and eco-friendly. We are committed to building this garden as soon as quarantine is uplifted in May.

We have also raised ecological consciousness within our community through the individual preparation of the eco-bricks. Individuals are able to recognize their own plastic consumptions and may lead to the reduction of plastic within their household. Furthermore, the eco-bricks will be used for the renovation of a garden priorly stated, which will provide a new green space where locals are able to obtain fresh vegetables and hang around. For Life Below Water, the eco-bricks reduce the number of plastics that enter the ocean and threaten marine life.

Overall, there are many skills that this project helped us develop: planning, time management, and collaboration. Planning was critical in making this project successful. Over the course of the project, we had to constantly communicate with each other to plan accordingly how we were going to successfully achieve our aims and goals. We also constantly used planning skills to coordinate which days we would have meetings and when we would go sort eco-bricks. Time management was also a factor that helped us during this project. There were many deadlines that we had to meet to be successful, and the fact that we were always on track with our time reflects the responsibility and organization of our group. This project involved much collaboration in this project. We learned a lot about how to collaborate with each other and different organizations. As we mentioned previously, we are planning on collaborating with a foundation called La Semilla. Communicating and planning with them immensely helped us develop more professional collaboration skills. Regardless of the circumstances, which were not ideal, we still managed to pursue a large project and learned throughout the entire experience as a team.

In conclusion, this project not only protects marine life but harnesses terrestrial life in a garden while revolutionizing the use of single-use plastics. Our eco-brick greenhouse and garden addresses waste management while addressing ecology in a full dimension by reintroducing life as a form of therapy and a new innovative form of building with eco-bricks. We are excited to carry this project into large-scale communities, renovating our thinking on plastic waste, our new building blocks.

