

## Grow Don't Throw project

In order for us to carry out our project, we required financial aid from the school. We set up a meeting with Mr Church who is our school bursar and we also invited a representative from Food Nation who is responsible for the food bought in the three different cafeterias of the school. We created a google slides presentation as a team, explaining our idea, time frame, what we need and how it will benefit the school, the community and society as a whole. Mr Church was very positive and supportive and gave us advice, notably about contacting the community organisation "Friends of BSAK" for even more help with funds.



As a team we decided to address the goals that we could more realistically achieve considering our location. We chose to focus on Goal 11 (Sustainable cities and communities), Goal 13 (Climate Action) and Goal 15 (Life above Land) through our Grow Don't Throw composting project. This would further enhance all the work and impacts achieved by the Flip the Switch campaign.

Our main aim was to acquire a machine that would compost the food waste created by the school canteen daily. This was a relevant issue to tackle as the average annual water in the UAE is 195kg per person which costs the national economy \$3.5bn a year. Deducting from our calculations, we found out too much compost would be created to be used solely on the school's garden and plants. Therefore, we wanted to sell (to receive funds for the electricity cost of the machine) or donate the extra compost created to a golf course which uses artificial fertilizers for their grass. This would've reduced the negative environmental impacts of the use of fertilizers such as eutrophication or impacts of Haber process.

After two weeks of research for an appropriate machine that can handle the large food waste produced by our school on a daily basis, we found the 50 kilogram organic waste recycler from Nanjgel Green, a reputable company that had multiple hotels as their clients. The biggest advantage of such a machine was its versatility and speed. Ordinary compost tumblers and bins require a lot of planning and regulation of pH levels, making it difficult to process meat products which are the majority of our school's food waste. They also take up to six weeks to process a batch. The machine, on the other hand, could process anything organic and within 24 hours, which was ideally suited to our school's output. Unfortunately, the cost of the machine was AED 65,000 (£14,000) which was way beyond our school's budget. After a week of negotiation, we succeeded in getting a lightly used product of the same model with two years of free servicing for AED 25,000 (£5,500) which Mr. Church approved once we pitched the "Grow don't Throw" campaign to him. Unfortunately, we couldn't find any partners who would take our compost once it was processed before our school closed due to COVID-19, so we were forced to put the campaign on hold.



Despite the lack of outcome from the project, our communication, negotiation and presentation skills greatly improved during the campaign, which resulted in a 60% discount for the product and the authorisation of the project by our school bursar. If our campaign wasn't halted by COVID-19, we estimate that 7.5 tonnes of food waste would have been recycled, producing about 1.5 tonnes of compost. We hope to continue where we left off when our school reopens next academic year.

## Flip the Switch campaign



The aim of our flip the switch campaign was to raise awareness on the energy consumption both within school and the wider community, and also to show the consequences that over consumption has on the environment. We did this by designing 5 posters with the aim of humanising the effects of climate change, and so each poster showed a way in which humans around the world have been affected by it. We also designed a logo that captures the spirit of our campaign, and that encouraged us to stay motivated. Furthermore, we delivered a number of assemblies to the secondary students that highlighted the importance of reducing their energy consumption, and all the small differences that they can make in their lives that will ultimately lead to a better and safer environment.

Another important objective was to reduce the school's electricity usage. To achieve this we delivered an assembly to the teachers encouraging and urging them to think about their habits in school with regards to switching off lights during the day, computers when they leave and the AC when nobody is in the room. We also spoke to the head of housekeeping to pass on the message that it is vital that housekeeping switch off the lights when they finish cleaning at night.

We also made sure to collect monthly data on BSAK's energy consumption in order to be able to compare the data and assess whether the campaign had an impact or not. We collected information about the schools' electricity usage this year and compared it to previous years. The results were very promising: there has been an average of 12.8% decrease in the consumption of electricity in the period of September 2019 - January



2020 when compared to the same months of the previous year. Aside from the obvious environmental benefit this has, this reduction has also saved the school about 82,500 AED (£18,000). Most notably, there was an almost 30% decrease in electricity usage comparing November 2018 to November 2019 (after the campaign was launched). When the CO<sub>2</sub> that would've been released is converted to the number of trees that would've taken 1 year to absorb, the outcome was 5434 trees. We decided to set up a signboard displaying the results, as this would motivate the school to continue along this path of improvement.

As part of our campaign, we were planning to hold a bike wattage competition between the houses within school to showcase how much energy is required to generate electricity. Everything was all set to go, however we were unable to go through with it due to the cancellation of school (because of COVID-19).

### Intra School Competitions

Throughout the year we have organised a few intra-school competitions, in the hopes of more actively engaging students with the GSL team and introducing themes of awareness and sustainability in a more fun and interesting way to encourage students to join the cause. One of these competitions was a 'Watt-bike house competition' where we had planned to place a watt-bike from the PE department in the reception area and host a house competition where members from each house would be nominated each day for a week and bike for two minutes, and whoever could generate the most power would win house points for their house. We planned for the power output to be used to charge either an iPad or laptop and our view was that this would be an effective way to demonstrate the amount of energy needed for simple everyday tasks to get students to behave more responsibly with their energy consumption. We communicated with various teachers (form tutors, heads of houses etc.) and departments (such as the PE and IT departments) to ensure that it would go smoothly and planned to integrate it within 'epic house week', however due to the onset of the current global pandemic and consequent closing of schools, have been unable to go through with it.

While this is unfortunate, we have organised everything to start as soon as school is back and safe and while in quarantine, we have managed to come up with smaller competitions such as a video competition in honour of Earth Day, where we produced a video sent by teachers around the school asking students to choose an ecosystem to research and make a video of their own about what they learnt. These videos were judged by teachers and a winner received house points. This ensured that students continued to learn about the world around them and this style of independent research is much more impactful as students can learn about what interests them and how they can help, in a more fun format.

### **Inter School Competition**

We also managed to reach a wider community by launching a 'Global Goals competition' between schools to encourage them to start their own campaigns. Our aim was to raise awareness about the 17 sustainable development goals and motivate other schools to launch their own campaigns and raise awareness within their own communities as well. We held a conference and invited 5 other schools around the UAE where we presented our school's ideas and progress and allowed them to do the same to demonstrate possible ways to improve sustainability within their communities. After presentations, each school was given a survey to complete on how best to run the competition (e.g. how it should be judged, criteria for submission, funding etc.) and BSAK's GSL team met to review these surveys and decide how it would be run. Once again, this project has been cut short by current circumstances, however, it is encouraging that we were able to communicate and reach a large community outside of school that is willing to join in furthering the SDGs and fully intend to run and participate in this competition once we can safely do so.

### Conclusion

Throughout the whole process, we persevered and stayed positive which was such an essential part of the process even if it wasn't entirely successful.

The most important skill we realised was communication between one another as well as ensuring we had regular meetings throughout the year so we were consistently reflecting on what we had/hadn't achieved and what we could do to improve. As a team, we worked really well with the school by setting up a meeting with the school bursar to discuss the project as well as helping the school obtain the Eco-Schools Green Flag award.

In reflection, we should've set clearer jobs for each of the team members to avoid having one person working on it more which did happen a few times during this project. Furthermore, it's quite hard to engage the local area here and obtaining reliable contacts is challenging which is an issue we need to learn to overcome better next year as we couldn't complete the project due to having no one to take our extra compost and the COVID-19 situation. Despite this, we are eager to continue pursuing the Grow Don't Throw project and the Flip the Switch campaign next year, making as much as an impact on our school and community.

