

Turning reused material into a biogas installation

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Abstract

Biogas is the gas produced from the decomposition of organic matter like food waste. This study focuses on how to create a biogas installation from reusable materials and making it as cheap as possible. The biogas prototype was created with a team of 8 people and with waste material donations from a few companies. Currently, the biogas installation is situated at the former high school of the author of this article. The end goal is to use the biogas to heat the food stoves in the food tech classrooms. This fits in the circular economy plan of using food waste to create energy for cooking food, while the waste of this food will be reused again to create biogas. We started testing the prototype at the end of 2021. This process has not been finalized. We expect that during the testing phase we discover how to improve the prototype to make it more efficient to allow the school to become one step closer to having 100% renewable energy. Also, with this exercise we want to encourage other schools and individuals to use food waste to create renewable energy and to learn about sustainable ways of living.