



POOP, PLAY, POWER!

The available volume of the dome is approximately 200 cubic meters and is designed to store energy produced from approximately 585 dogs and 500 restroom visitors per day with extra room for household biodegradable waste. A total of 400 cubic meters of methane gas will be captured per day and approximately 850 kWh of electricity is produced.

The design can be scaled to create a network of Poop, Play, Power rest stops throughout the future Rhine-Neckar Green Corridor and can also be scaled to include food waste and other biodegradable household waste by using household style digesters. A network of this design would foster sustainable cities and communities throughout Mannheim, help combat climate change through reduction of greenhouse gas emissions, provide affordable and clean energy for residents of Mannheim, promote clean water and sanitation through proper disposal and treatment of dog poop, and practicing responsible consumption and production by turning waste into energy.

The estimated dog population for Mannheim in 2020 is approximately 39,735 dogs. If we start treating and utilizing poop as a source of renewable energy, we can produce approximately 8,600 kWh of electricity per day with dog poop alone. That's enough to power about 1,265 households or 1,500 electric vehicles.

Besides the direct physical environmental impact, we expect our proposal to outcome on another level. Our goal is to raise energy consciousness through energy literacy. We hope to engage people, encourage them to make smart energy choices, and reduce energy consumption on a daily basis. We would like to see our proposal being applied as a prototype throughout the city to inspire communities to come together and create more sustainable urban living for our planet. People will never look at poop the same way again! to see our proposal being applied as a prototype throughout the city to inspire communities to come together and create more sustainable urban living for our planet. **People will never look at poop the same way again!**