

# Claremont McKenna College

## Member Information

<u>Name</u>	<u>Year</u>	<u>Major</u>
Jenifer Hanki	2020	International Relations
Sabrina Chung	2020	Economics
Cole Maizel	2021	Economics & Environmental Analysis
Adam Webber	2021	Economics

**Advisors:** Amy Flanagan & Beth Milev

**Topic:** No Fowl Play: Sifting through the Manure at Tyson Foods

**Division:** Undergraduate

**Audience:** Tyson Foods

## Sustainable Development Goal

SDG #12: Ensure sustainable consumption and production patterns

Target #12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

Target #12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

## Executive Summary

Demand for chicken has grown rapidly throughout the world over the past twenty years. According to the World Animal Protection Organization, demand for chicken grew 40% in Europe, 89% in China, and over 183% in India from 1996-2016. As a result, chicken manufacturers have had to adjust consumption to meet world demand, slaughtering 60 billion meat chickens per year: an average of 2,000 chickens per second.. The massive production of chickens takes a toll on the world's water supply; a pound of chicken requires 468 gallons of water, which is 71% more water than a pound of soy.

Tyson Foods is the leading processor and marketer of chicken, beef, and pork in the United States, producing 1 in 5 lbs of chicken, beef, and pork. As of 2018, Tyson Foods was ranked 80th in the Fortune 500 list with a revenue of \$38.3 billion. Today, Tyson Foods is estimated to raise more than 860 million chickens, and with it, 2 million tons of waste is produced each year. In fact, it was reported that Tyson Foods' wastewater led to the largest toxic dead zone in United States' history. Due to its market power, Tyson Foods has the ability to shape the future by leading the adoption of sustainable solutions. Our consulting group suggests that Tyson Foods integrates a "closed-loop" system of anaerobic digestion – the use of microbes digest organic material and produce biogas – by using waste from its poultry operations. Through biogas, Tyson Foods can cut waste, reduce water pollution, decrease its carbon footprint, and continue its operations in a sustainable manner.