



Planted for the Planet is a local, grassroots initiative that seeks to educate the broader public on the environmental impact of a meat-oriented diet and promote a plant-rich approach to eating. The Seacoast-based effort, backed by [SEAREI.org](http://SEAREI.org), will promote an event across the weekend of Earth Day that seeks to engage the public in enjoying a plant-rich meal from a local restaurant or creating their own dish at home while learning about the externalities of a meat-oriented diet through various presentations from notable local voices. By spreading awareness to the greater Seacoast community, Planted for the Planet will be able

to reduce the greenhouse gas emissions of the region and promote dietary changes in our friends and neighbors that will positively impact the environment.

Climate experts predict that increased global temperatures will have transformative impacts ranging from increased weather extremes and stronger weather events to the loss of Arctic sea ice and the eradication of entire ecosystems. Scientists have identified reducing greenhouse gas emissions as the primary mechanism to curb the trend of global temperature increases. One of the most impactful efforts individuals can take in this effort is to adopt a plant-rich diet.

The agricultural sector accounted for 9.6% of total US greenhouse gas emissions in 2019. These emissions come in the form of many greenhouse gases emitted through crop fertilization, manure management, soil management practices, and enteric fermentation (cow flatulence) among others. Beef and dairy cattle enteric fermentation produced methane emissions equivalent to over 550,000 miles driven by a passenger car.

By reducing the consumption of meat, especially ruminants, we can reduce our emissions substantially. A group of researchers estimate that by adopting a plant-rich diet, we can reduce global emissions by up to 66 billion tons by 2050. For comparison, the US emits roughly 5.8 billion tons of CO<sub>2</sub> equivalent gases per year. Therefore, adopting a plant-rich diet globally could eliminate the equivalent of 10 years of US emissions by 2050.

- Raising livestock accounts for nearly 15% of global greenhouse gases emitted each year; p39
- If cattle were their own nation, they would be the world's 3<sup>rd</sup> largest emitter of GHG; p39
- American cattle digestion accounts for the equivalent of over 400,000 miles driven and the produced manure contributes another 165,000
- The digestion and waste produced by beef and dairy cattle in the United States produces emissions equivalent to over 550,000 miles driven by a car
- If 50% of the world adopts a plant-rich diet by 2050, over 65 gigatons of CO<sub>2</sub>e could be reduced.
- Per gram of protein, beef emits up to 50x more greenhouse gases than plant-based alternatives
- Food accounts for 10-30% of a household's carbon footprint. Of this footprint, meat contributes 57% of the emissions and dairy 18%
- 50% reduction in meat eggs dairy
  - Results in 35-36% reduction in food related GHG
  - 5.0 -> 3.3 kg of CO<sub>2</sub> equivalent person per day
  - This results in a 224 MMT reduction for total us population
  - Achieves 24% of the reduction needed to achieve USA 2017 GHG reduction targets
  - Equivalent to removal of 47.5 million vehicles from the road
  - 50% reduction in meat dairy and eggs, but including 90% reduction in beef, would result in even greater GHG reduction

Beef	6.6
Poultry	1.6
Legumes	0.11

Pounds of CO<sub>2</sub>e emitted per serving

“Coming together over two things that affect us all...eating and the environment”

“It’s not about the plants...it’s about the planet.”

“Eat food. Not too much. Mostly plants.” – Michael Pollan