

NITROGEN WORKING GROUP

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Overview

When we think about climate change many of us point to carbon as the culprit, however, nitrogen pollution has equally devastating effects. The main contributors to nitrogen pollution are the food and energy sectors. This pollution causes a cascade of negative impacts: smog, acid rain, coastal dead zones, biodiversity loss, climate change, stratospheric ozone depletion, and more. In 2013, the Board of Visitors updated the carbon reduction goal to also include a nitrogen footprint reduction goal, to reduce emission by 25% by 2025. Energy use and food production and consumption directly affect all three environmental issues. The Nitrogen Working Group approaches the issues of nitrogen from many angles, all working to better understand and minimize our footprint.

Projects:

- UVA's Nitrogen Footprint: This project is focused on working to track institutional nitrogen emissions and reductions and ensuring the attainment of reduction goals
 - Community Nitrogen (N) Footprint Project: The Community Nitrogen (N) Footprint Project is focused on enhancing the newly developed community nitrogen footprint tool (NFT). The tool is now being applied to the City of Charlottesville.
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- Scope 3 Components of UVA's N Footprint: This project is focused on expanding the scope nitrogen emissions tracked by UVA, including business travel and paper purchasing.
 - Hydroponic Food Production Project: This project is focused on comparing the nitrogen usage and efficiency of a hydroponics system to the efficiency of conventional farming
 - Food Labelling Project: This project focuses on studies how labeling and marketing campaigns can effectively shift individual preferences, lowering both individual and institutional environmental footprints.
 - Local Food Project: The focus of this project is to track non-local food purchases by UVA dining and use this research to see how much farther food travels when it isn't bought locally.

Yearly Progress Update

- UVA N Action Plan published (April 2019)
- First N paper calculation completed (Spring 2019)
- First N footprint of hydroponic lettuce calculated (Spring 2019)
- Third food labels study completed (Fall 2019)
- Creation of the Local Food map (Spring 2019)

Resources and Contact Information

- More information can be found on this document, [detailing the work done in our projects](#).
- Please reach out to Jim Galloway (jng@virginia.edu) or Elizabeth Dukes (esm9gq@virginia.edu) with any questions