



## Introduction

A greenhouse gas (GHG) inventory is a comprehensive analysis of all emissions created from energy used by an institution. Greenhouse gases are gases which absorb radiated heat in the atmosphere. As these gases absorb heat, the atmospheric temperature rises. This creates climate change. The most common and impactful greenhouse gases are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O).

The tool used to complete the greenhouse gas inventory is SIMAP Sustainability Indicator Management & Analysis Platform. This online tool measures emissions from six primary greenhouse gases:

- Carbon dioxide (CO<sub>2</sub>)
- Methane (CH<sub>4</sub>)
- Nitrous oxide (N<sub>2</sub>O)
- Hydrofluorocarbons (HFC)
- Perfluorocarbons (PFC)
- Sulphur hexafluoride (SF<sub>6</sub>)

These six greenhouse gases measured in SIMAP are calculated as a unit of CO<sub>2</sub>e (carbon dioxide equivalent). Carbon dioxide is used as the normalizing factor because it is so prevalently produced through fossil fuel burning, and it is the most widely known greenhouse gas.

This greenhouse gas inventory report for FY17  
comprehensive greenhouse gas inventory.

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## Methodology

SIMAP details what data are needed for the inventory. As an online tool created specifically for colleges and universities to measure their greenhouse gas emissions, SIMAP streamlines the process and provides an accessible platform to conduct a greenhouse gas inventory. Once all data are entered in SIMAP, the tool calculates all amounts entered and creates total emissions measured in metric tons of carbon dioxide equivalent (mtCO<sub>2</sub>e).

Emissions are categorized by source into three categories: Scope 1, Scope 2, and Scope 3.

Scope 1 emissions are from sources owned and operated by the University; these emissions are also combusted on-site. Scope 2 emissions are from sources purchased





