The new "Campus Carbon Calculator"/CarbonMAP

November 3,2016

SUNY New Platz

Tracking Campus Impact: Why Do We Do It?

1. To manage and plan
2. For accountability
3. For recognition
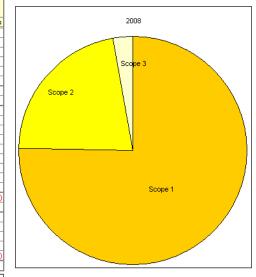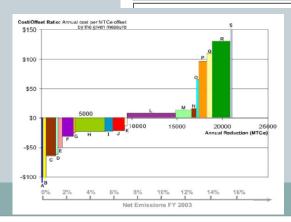4. To communicate, tell stories, educate and engage!

CCC

On this worksheet: Summary information from an inventoried year, a pie chart showing a breakdown of sources, and a graph displaying the amounts of each gas emitted.
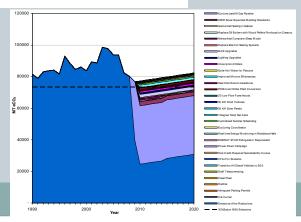
MODULE	Summary
WORKSHEET	Overview of Annual Emissions
UNIVERSITY	Please enter university name on 'Introduction' sheet

Select Year -->	2008	Energy Consumption	CO₂	CH₄	N₂O	eCO₂
		MMBtu	kg	kg	kg	Metric Tonnes
Scope 1	Co-gen Electricity	286,324.0	15,105,211.5	1,510.4	30.2	15,148.9
	Co-gen Steam	316,110.0	16,676,587.8	1,667.5	33.3	16,724.8
	Other On-Campus Stationary	225,957.8	12,774,776.7	1,415.8	46.2	12,821.0
	Direct Transportation	28,809.7	1,927,633.2	264.6	91.7	1,960.9
	Refrigerants & Chemicals	-	-			856.9
	Agriculture	-	-	35,034.8	977.2	1,095.0
Scope 2	Purchased Electricity	172,238.0	13,971,390.7	113.8	196.8	14,032.3
	Purchased Steam / Chilled Water	-	-	-	-	-
Scope 3	Faculty / Staff Commuting	-	-	-	-	-
	Student Commuting	-	-	-	-	-
	Directly Financed Air Travel	-	-	-	-	-
	Other Directly Financed Travel	-	-	-	-	-
	Study Abroad Air Travel	-	-	-	-	-
	Solid Waste	-	-	19,841.9	-	456.4
	Wastewater	-	-	-	-	-
	Paper	-	-	-	-	-
	Scope 2 T&D Losses	17,034.5	1,381,785.9	11.3	19.5	1,387.8
Offsets	Additional					(659.3)
	Non-Additional					34.2
Totals	Scope 1	857,201.6	46,484,209.1	39,892.9	1,178.7	48,607.5
	Scope 2	172,238.0	13,971,390.7	113.8	196.8	14,032.3
	Scope 3	17,034.5	1,381,785.9	19,853.2	19.5	1,844.2
	All Scopes	1,046,474.1	61,837,385.7	59,859.9	1,394.9	64,483.9
	All Offsets					(625.2)
					Net Emissions:	63,858.8

2008

Cost/Offset Ratio: Annual cost per MTCe offset by the given measure

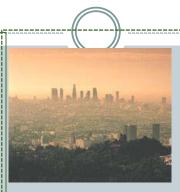# CarbonMAP

Integrated Platform: Overview

Return to roots in understanding true institutional—and sectoral—impact; communicate and engage

Also, provide user-friendly, cost-effective, sustainable resource for the community so individual schools and programs can continue to assist in recognition, accountability and management

Be part of a larger data universe

Integrated Platform: Why N?

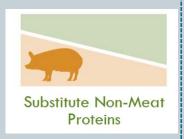**1** Broader picture of **environmental impacts**, including local impacts

Smog   *Eutrophication*   *Climate change*

2 Win-win for most **reduction strategies**

Expand Composting & Food "Recycling"   Reduce Energy Consumption   Substitute Non-Meat Proteins

3 **Reduced data entry** and analysis

Carbon   Food Utilities Transport Research   **Nitrogen**

Integrated Platform: N Data Needs

Data Required:

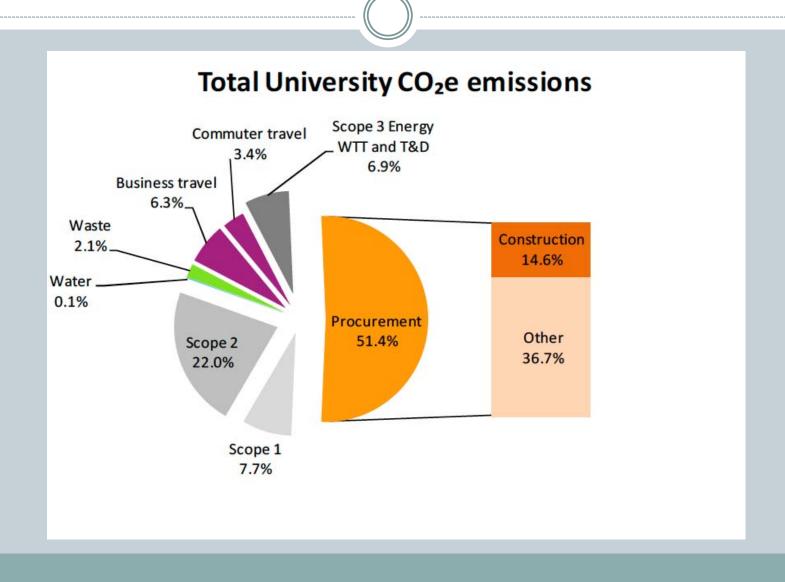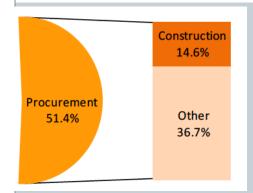| Utilities	Transport	Food	Other
• Energy consumed	• Fuel consumed • Commuter miles	• Food purchases • Food waste	• Research farms • Fertilizer

C & N emissions factors

GHG Inventory Inputs

Food Purchase Records

Integrated Platform: Why Scope 3

Total University CO_2e emissions

Commuter travel 3.4%
Scope 3 Energy WTT and T&D 6.9%
Business travel 6.3%
Waste 2.1%
Water 0.1%
Scope 2 22.0%
Scope 1 7.7%
Procurement 51.4%
Construction 14.6%
Other 36.7%

Integrated Platform: Why Scope 3

University of Cambridge

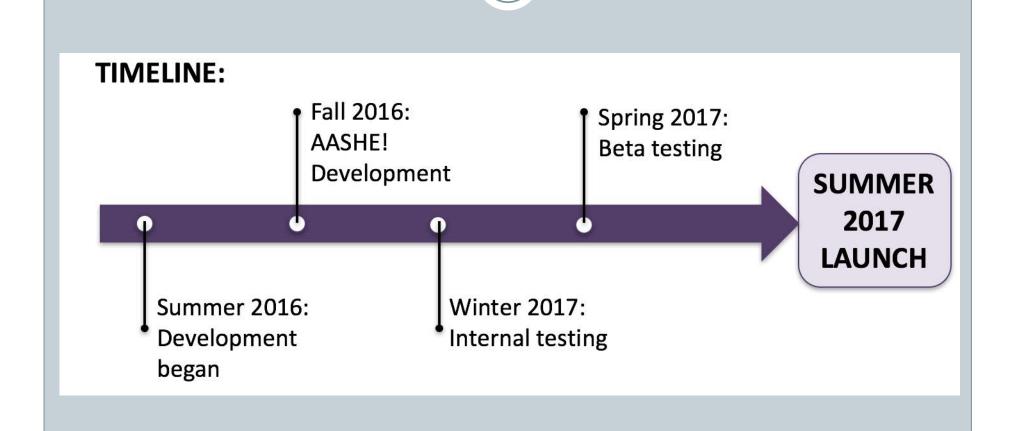| Year	2011-2012
	Tonnes CO_2e
Business services	11,271
Paper products	4,900
Other manufactured products	16,114
Manufactured fuels, chemicals, and gases	10,190
Food and catering	9,962
Construction	35,918
Information and communication technologies	12,272
Waste and water	2,532
Medical and precision instruments	14,269
Other procurement	5,806
Unclassified	2,711
Total	125,943

Integrated Platform: Other Benefits

Additional User Features
- Import/Export
- Customized EF's
- Basic QA/QC features
- Dedicated user support

What Else Will Change?
- "Freemium" model
- Data available for research, contextualization

Questions?

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