

Understanding the Entire Campus Carbon Footprint

Why and How to do Comprehensive Scope 3 Reporting

Jennifer Andrews & Allison Leach

University of New Hampshire
Sustainability Institute



**University of
New Hampshire**

Jim Walker

University of Texas
Office of Sustainability



The University of Texas at Austin

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Outline

Part 1: Context – The Significance of Scope 3

- Frameworks, Protocols, Potential Impact and Best Practices
- Discussion

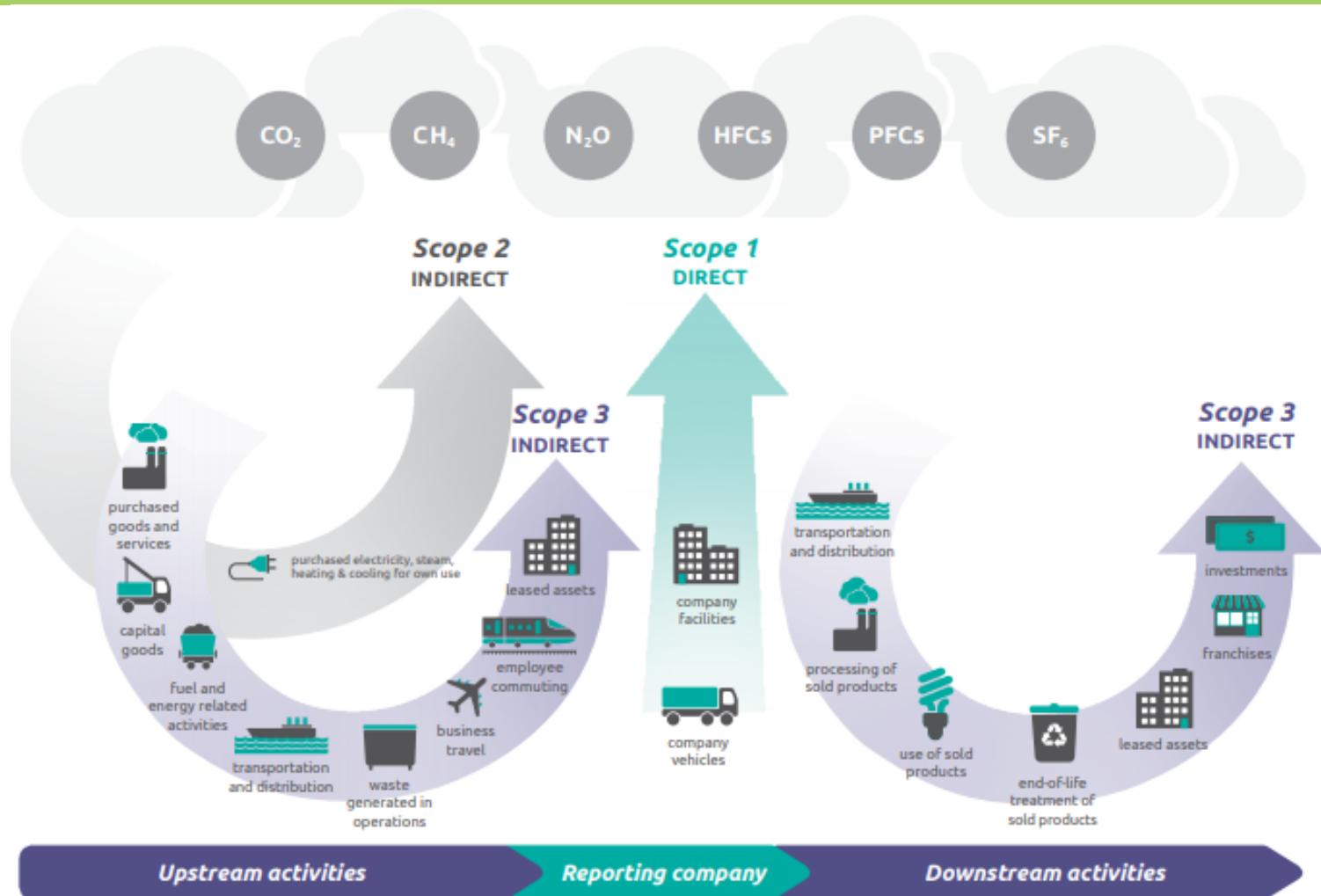
Part 2: Value – How Can Scope 3 Accounting Be Valuable?

- Case study 1: University of Texas - Austin
- Case study 2: University of New Hampshire
- Discussion

Part 3: Data and Methodologies – Challenges and Tradeoffs

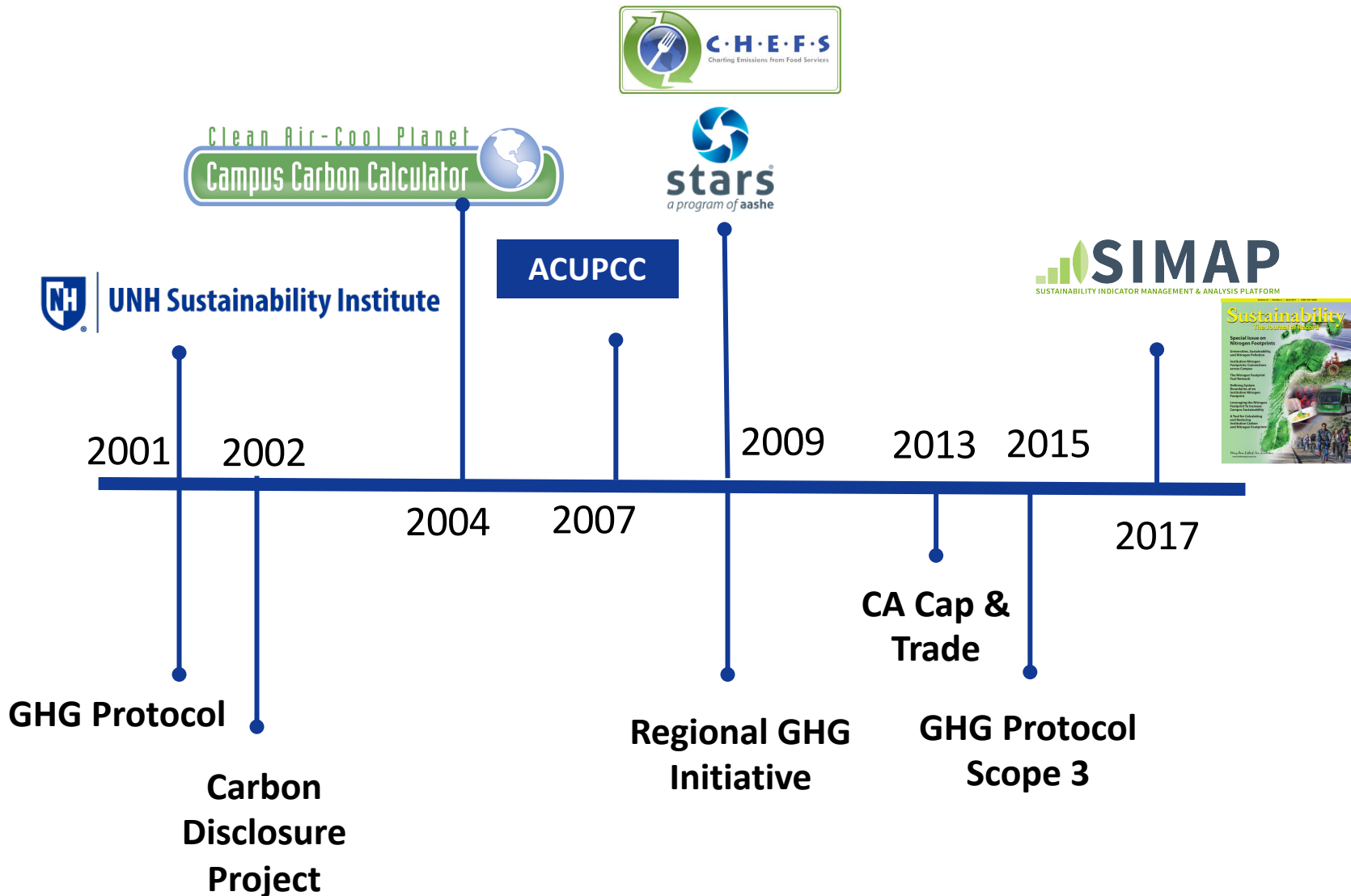
- Case Study: University of Texas - Austin
- NFT Network and SIMAP
- Discussion

What are “Scope 3” Emissions?



Reference: Figure [1.1] Overview of GHG Protocol scopes and emissions across the value chain
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard REVISED EDITION

Evolution of GHG Accounting



What is Typically Reported?

“Organisations of all types are significant contributors to international greenhouse gas emissions. The business case for supporting low-carbon practices is gathering pace, alongside the regulatory demands imposed through carbon emission compliance reporting.

Despite this, guidance for generating carbon footprints through hybrid environmentally extended input-output analysis is under-developed and under-researched.

“A universal methodology which takes a consistent and transparent approach for practitioners in assessing the carbon footprint of HEIs is proposed. The input of environmental practitioners themselves during its development has sought to ensure this methodology is user-friendly.”

Towards a universal carbon footprint standard: A case study of carbon management at universities

Author s: [Oliver J.Robinson^a](#) [AdamTewkesbury^b](#) [SimonKemp^a](#) [Ian D.Williams^a](#)

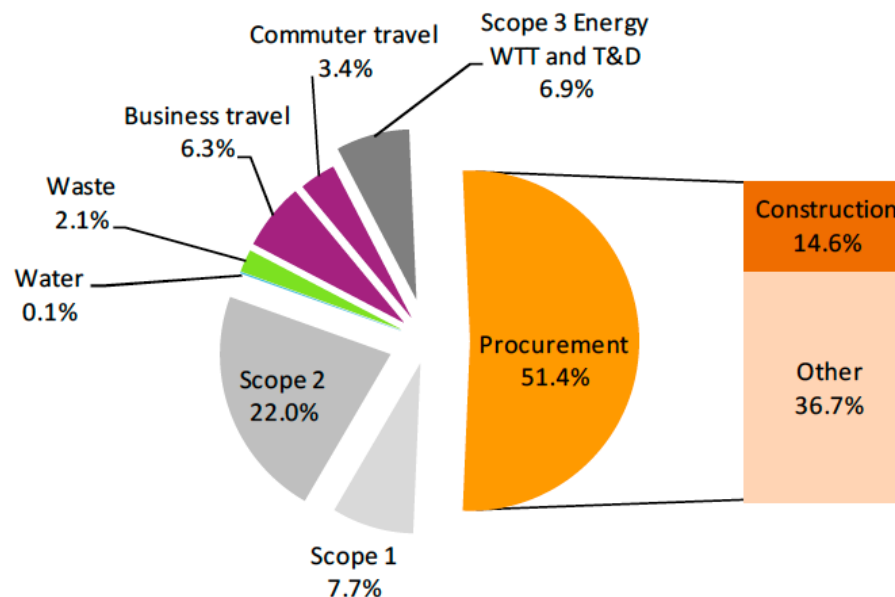
[Journal of Cleaner Production](#), [Volume 172](#), 20 January 2018, Pages 4435-4455

Scope 3: Potential Magnitude

University of Cambridge GHG Inventory 2011-2012 AY

Year	2011-2012
	Tonnes CO ₂ e
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

Total University CO₂e emissions



Applying Scope 3 Protocol

Reference: Figure [5.3] Time boundary of scope 3 categories, Corporate Value Chain (Scope 3) Accounting and Reporting Standard

Scope 3 category	Carbon Commitment	CCC/ CarbonMAP	SIMAP Tier 1
1. Purchased goods & services	o	p paper	p food, paper
2. Capital goods			
3. Fuel- and energy- related activities	o	p T&D losses	p T&D losses
4. Upstream transport & distr			P food
5. Waste generated in operations	o	x	x
6. Business travel	X study abr, biz travel		x study abr, biz travel
7. Employee commuting	X student, faculty, staff		x student, faculty, staff
8. Upstream leased assets			
9. Downstream transport & distr			
10. Processing of sold products			
11. Use of sold products			
12. End of life treatment of sold products			
13. Downstream leased assets			
14. Franchises			
15. Investments			

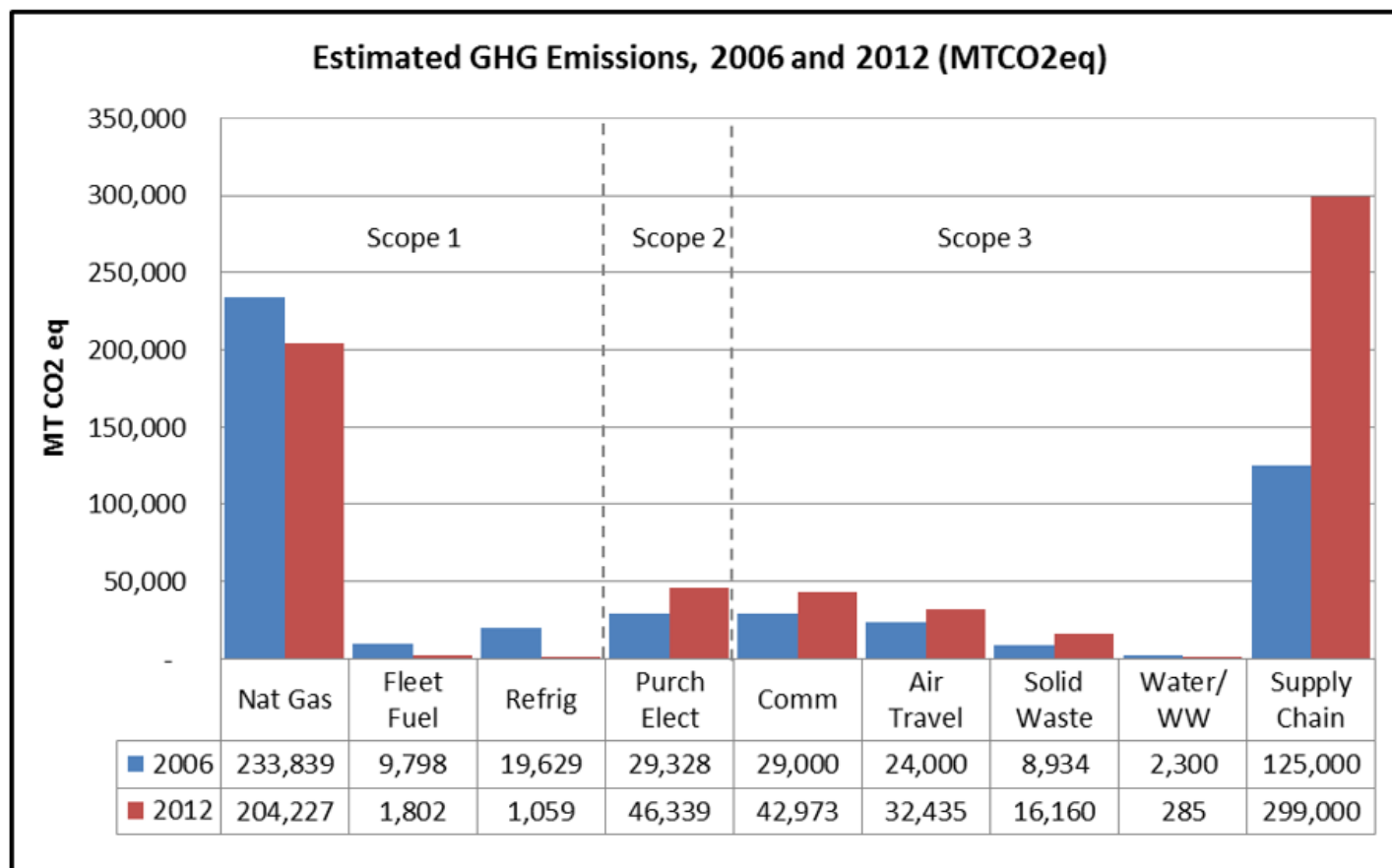
Value proposition of Scope 3 Accounting: UT Austin

1. Right thing to do
 - Lean toward making bigger impact
2. Living Lab opportunity
 - Experiential Learning
3. Leadership opportunity
 - For institution and vendor partners



UT Austin GHG Inventory 2012 Update

Figure 1: Total Emissions by Scope, 2006 and 2012



UT Austin GHG Inventory 2012 Update: Supply Chain

3.05 SUPPLY CHAIN

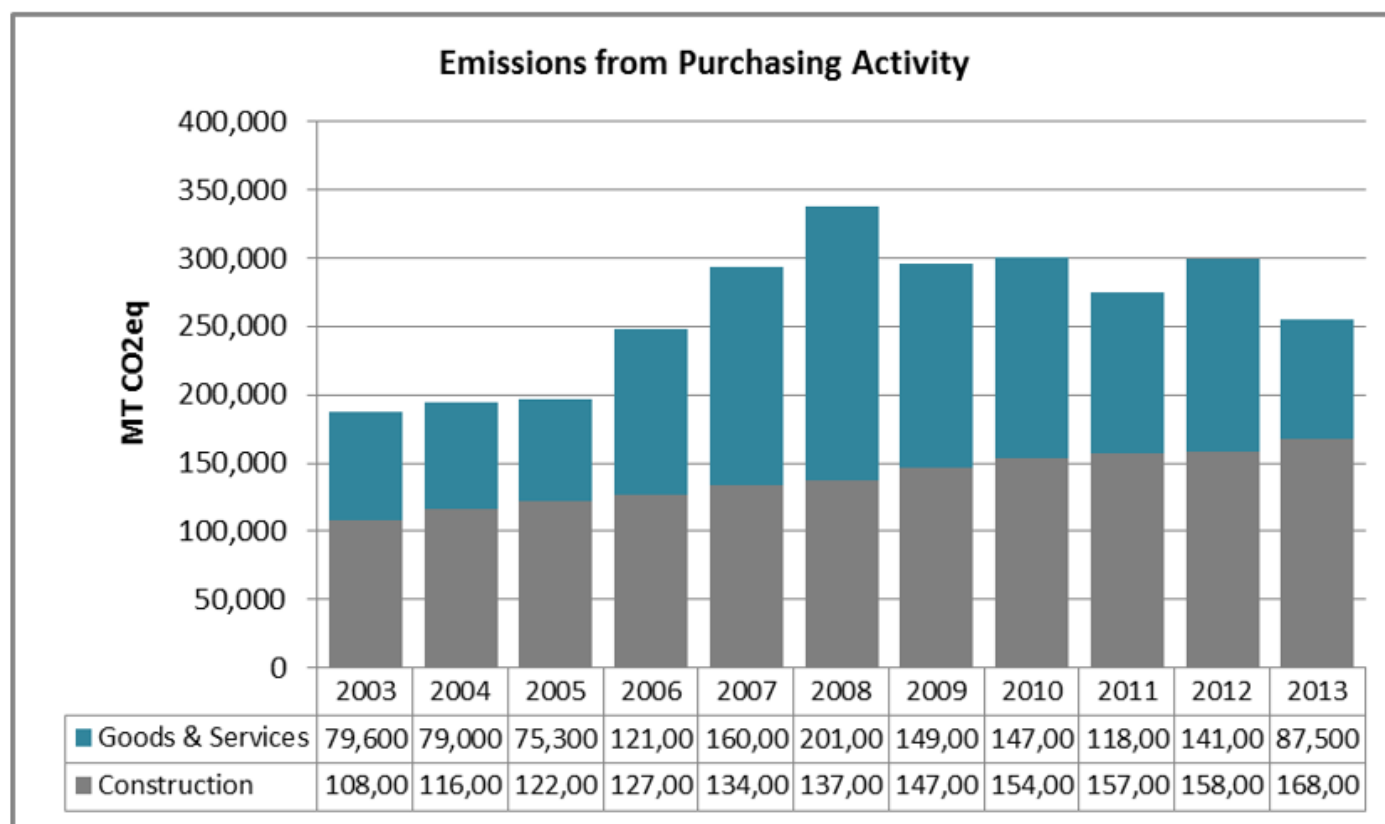
Embodied energy from purchased good and services is estimated in the university's supply chain produced approximately 299,000 MTCO₂e, accountable for 76% of Scope 3 emissions and 46% of total emissions.

While not all universities elect to include supply chain emissions as part of their greenhouse gas inventory, the size and significance of these emissions should be included to reflect a campus' true carbon footprint. In terms of measuring emissions from purchased goods, the CA-CP requires only information about purchased paper. With the addition of all purchases and services, however, the emissions resulting from UT Austin's annual purchasing nearly doubles the overall carbon footprint of the campus. The methodology is detailed in the Appendices.



UT Austin GHG Inventory 2012 Update: Supply Chain

Figure 12: Supply Chain Emissions from University Purchasing

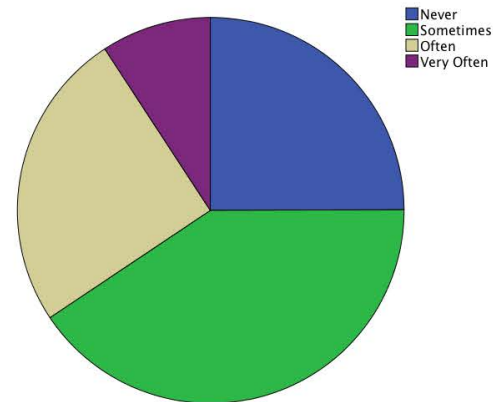
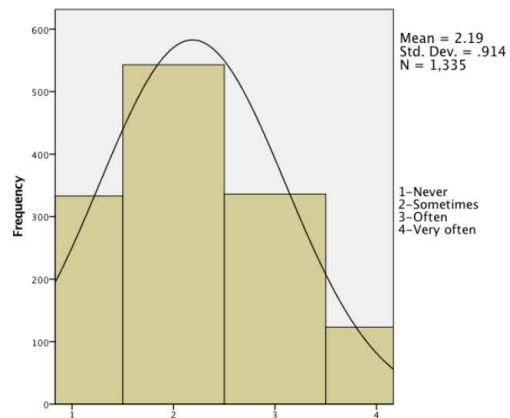


UT Austin: Qualitative Data

13. To what extent has your experience at UT Austin contributed to your knowledge, skills, and personal development in the following areas?

Understanding of the economic dimensions of sustainability

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	333	5.1	24.9	24.9
Sometimes	543	8.3	40.7	65.6
Often	336	5.1	25.2	90.8
Very Often	123	1.9	9.2	100.0
Total	1335	20.3	100.0	



<http://studentsuccess.utexas.edu/surveys/results>



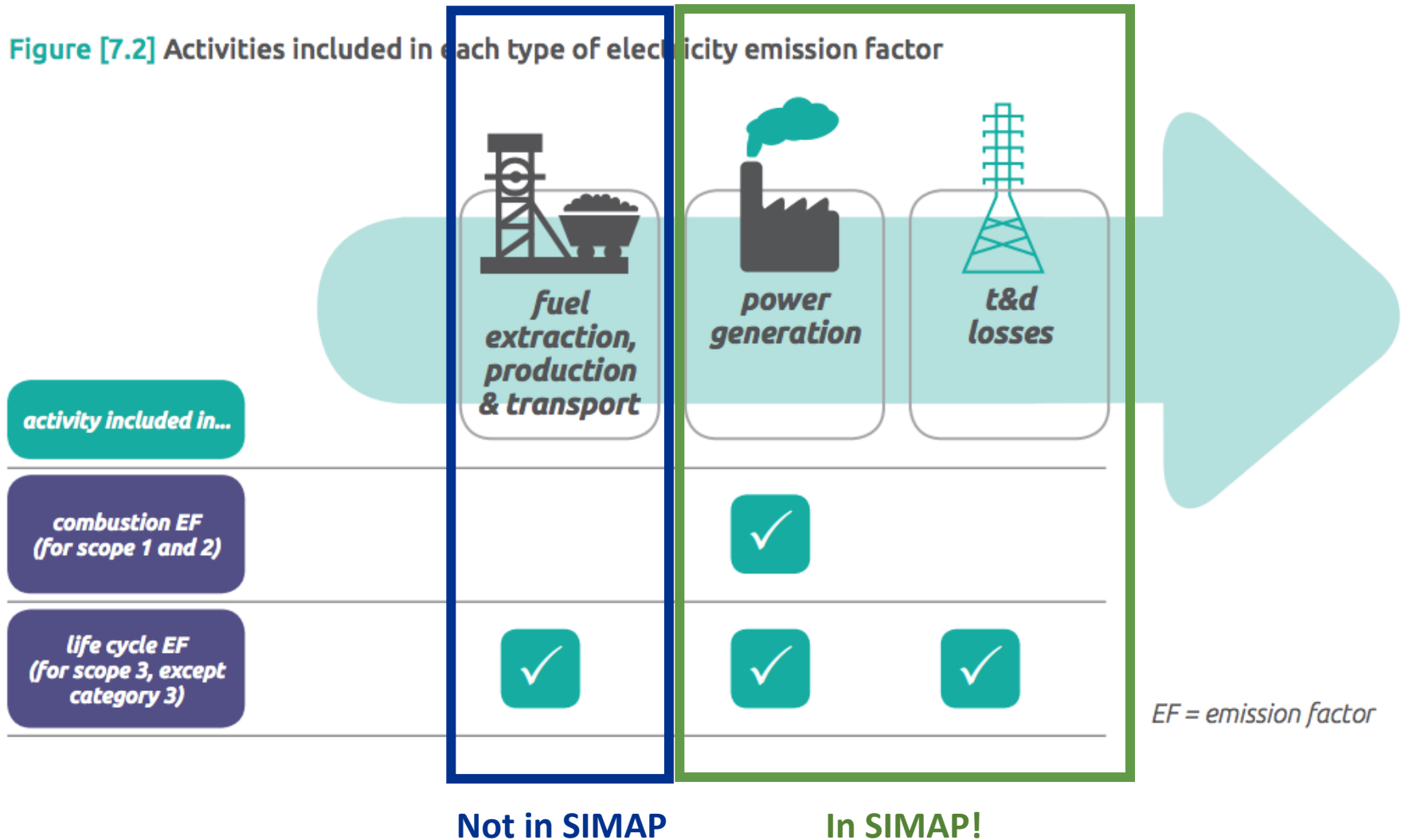
Value proposition of Scope 3 Accounting: UNH

Collecting and analyzing quantitative data about the upstream and downstream carbon impacts of campus activities lends **additional credibility and momentum to numerous campus sustainability initiatives.**



Energy Planning at UNH: We Need More Data

Figure [7.2] Activities included in each type of electricity emission factor



A Broad Range of Value for Scope 3 Accounting

Collecting and analyzing quantitative data about the upstream and downstream carbon impacts of campus activities lends **additional credibility and momentum to numerous campus sustainability initiatives.**

- **Energy:** “Upstream” energy info is vital for next round of climate action planning, long-term energy vision
- **STARS:** Required to collect and reporting various purchasing data (i.e., food, electronics, janitorial, paper, etc.), and it would be nice to get more value from that exercise
- **Zero Waste:** Purchasing, packaging, disposal
- **Investments:** We continue to have a robust conversation on campus regarding the impact of our investments, theoretical divestment
- **Nitrogen footprint:** The original model required looking at food production as the major driver; as a result, we’ve incorporated into SIMAP

What is a nitrogen footprint?

A **nitrogen footprint** is the amount of reactive nitrogen released to the environment as a result of an entity's resource consumption



1 Food*



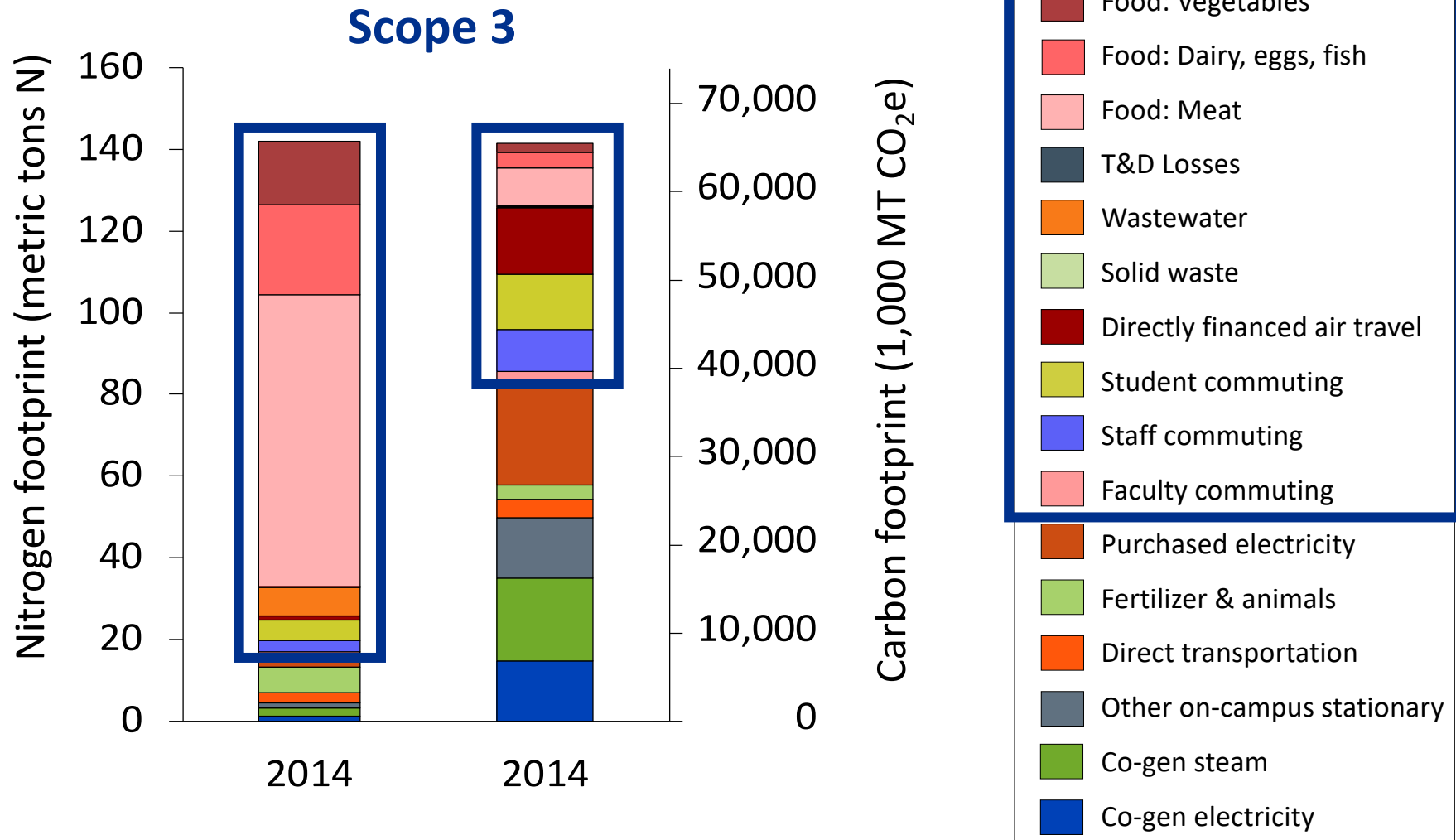
2 Energy



**Food consumption
and production*



Scope 3 Components of UNH Footprint*



FY2014

*Of categories in SIMAP

Wrestling with Changing Boundaries at UNH

How to deal with changing boundaries when we have existing baselines/goals/commitments?

*GHG Reduction Goal: 80% by 2050,
originally adopted using the “Climate Commitment” boundaries*

1. **Keep baseline year;** adjust calculation to incorporate estimated emissions for new sector/s
2. **Adopt new baseline year** in order to have credible estimates of emissions across all included categories; update or set (combined/overarching) new goal/s as needed
3. **Report emissions and set goals separately for Scope 1 and 2 versus Scope 3 emissions** (i.e., carbon neutral by 2050 for S1 and 2; more modest S3 goal, or various goals for different S3 categories)

Data and Methodologies: Challenges and Tradeoffs for Supply Chain

	High level	Sub-sector level	Product level
Inputs Required	Total \$ spent across all sectors (i.e. construction, paper products, food and ag), or in each sector	\$ spent per sub-sector (i.e. for food, beef vs poultry vs produce) OR mass/volume of items per per sub-sector	#/volume/mass of specific products, with sustainability attributes
Emissions and Conversion Factors Required	Economic Input/ Economic Output ("EI/EO")	Combination EI/EO and Process LCA data Sub-sector average conversion factors for \$ to mass/volume	Massive volumes of detailed LCA Process data
Pros	Data is generally very accessible; Able to be completed quickly	Inputs, EFs and conversion factors are generally at a reasonably manageable and relevant scale.	Most useful/accurate for purposes of capturing the impact of institutional decision-making.
Cons	Hard to capture reductions or impact of institutional decision-making	Data can be harder to get and work with; Combo of methodologies potentially problematic	Difficult/ time-consuming/ impossible to get required data.

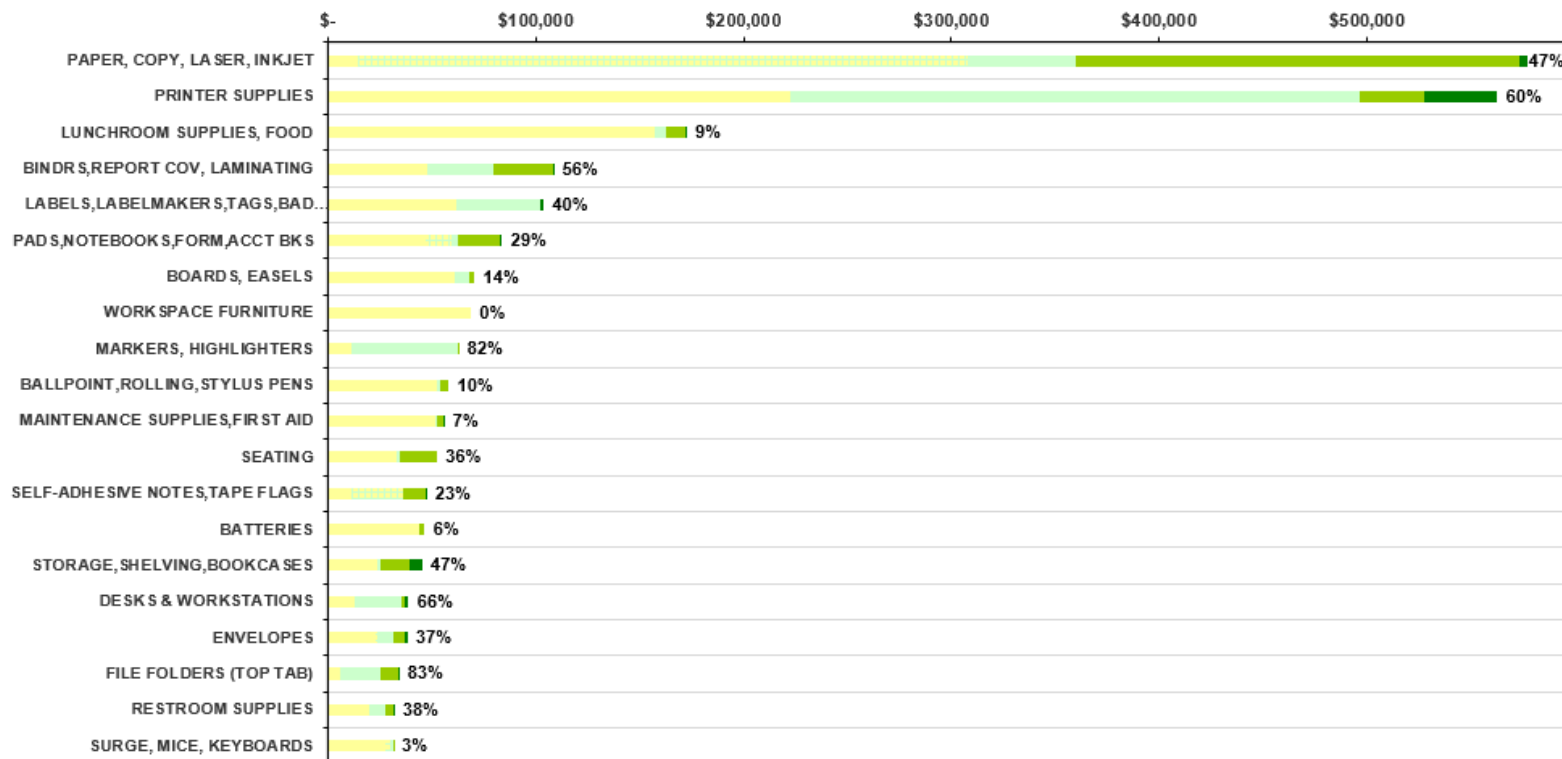


Vendor Partnerships: UT

Office DEPOT
greeneroffice

Top 20 Category Spend Chart

University of Texas
Jan 2015-Dec 2015



NOTE: Office Depot maintains a database of environmental attributes & certifications based on vendor claims. The chart shown is reliant on these vendor claims. Spend is defined as sales, net of returns.

Non-Green Meets Norms Light Green Mid Green Dark Green

Data and Methodologies: UT

Copy of University of Texas Greener Spend Reports 2015 - Excel

Walker, Jim

M/C	Master Class	Product #	NID	Product Description	Vendor	UOM	FRQ	QTY	Office Depot Eco-rating	Eco-attribute 1	Eco-attribute 2	PCR%	TR%	Eco-label
P1	PAPER, COPY, LASER, INKJET		534069	10-REAM CASE X-9 11"	0X9001CTN	CT	539	5752	Meets Norms	certified forestry				SFI Certified Sourcing
P1	PAPER, COPY, LASER, INKJET		108950	ASPEN 30 20# 8 5X11 CS	054901CTN	CT	397	4221	Mid Green	recycled content	certified forestry	30%	30%	SFI Certified Sourcing
J5	WORKSPACE FURNITURE	0		SPECIAL ORDER FURNITURE 9999	TD337368	EA	1	1						
P1	PAPER, COPY, LASER, INKJET		324714	OD COPY 10 RM CASE	0D98023CTN	CT	229	2175	Meets Norms	certified forestry				SFI Certified Sourcing
P1	PAPER, COPY, LASER, INKJET		324714	OMX COPY 10-R CASE	0M98023CTN	CT	142	989	Meets Norms	certified forestry				SFI Certified Sourcing
E2	DESKS & WORKSTATIONS		152221	60X30 DBL PEDESTAL DESK 5509	34962ZP	EA	3	36	Light Green	recycled content		25%	25%	SCS Indoor Advantage
S1	PRINTER SUPPLIES		36249	HP 305A CYM TRIPK LJ TON	CF370AM	EA	28	62						
P1	PAPER, COPY, LASER, INKJET		466888	BOISE SPLOX 24# 92 BRIGH	SP9224	CT	8	271	Light Green	leadership forestry	certified forestry			FSC - Mix
S1	PRINTER SUPPLIES		135713	HP TONER CE505A 05A BLK	CE505A	EA	60	178	Light Green	recycled content		18%	36%	Taiwan Green Mark
E6	ERGONOMIC ACCESSORIES		13118	WORKFIT-S SIT-STAND WKST 6512	33349200	EA	17	33						
Z7	FURN DELIVERY,INSTALL, ASSMBLY		262673	INSTALL PER PROP 337368 2153	4WS1NSTALL	EA	2	2						
S1	PRINTER SUPPLIES		905763	HP TONER CC364A 64A BLK	CC364A	EA	33	70	Light Green	recycled content		16%	16%	Taiwan Green Mark
P1	PAPER, COPY, LASER, INKJET		739457	OD GREEN TOP 30% 11" 10R	0D55953CTN	CT	39	257	Mid Green	recycled content	leadership forestry	30%	30%	FSC - Mix
P1	PAPER, COPY, LASER, INKJET		215093	PPR ASPEN 50 WE 8.5X11	55011	CT	4	147	Mid Green	recycled content	leadership forestry	50%	50%	FSC - Mix
P1	PAPER, COPY, LASER, INKJET		912118	PAPER,XERO WE 8.5X11 24#	CC2241CTN	CT	13	161	Meets Norms	certified forestry				SFI Certified Sourcing
S1	PRINTER SUPPLIES		205233	HP TONER CE411A 305A CYN	CE411A	EA	53	86	Light Green	recycled content		17%	17%	
S1	PRINTER SUPPLIES		205234	HP TONER CE412A 305A YLW	CE412A	EA	46	85	Light Green	recycled content		17%	17%	
S1	PRINTER SUPPLIES		205231	HP TONER CE410A 305A BLK	CE410A	EA	52	119	Light Green	recycled content	helps avoid waste	19%	19%	
S1	PRINTER SUPPLIES		205235	HP TONER CE413A 305A MAG	CE413A	EA	50	82	Light Green	recycled content		17%	17%	
S1	PRINTER SUPPLIES		3550	HP 80A BLACK TONER CARTR	CF280A	EA	48	95	Light Green	recycled content	helps avoid waste	18%	18%	
A5	LABELS,LABELMAKERS,TAGS,BADGES		537989	NAMEBADGE WHT LSR/U 400	5395	BX	123	327						
P1	PAPER, COPY, LASER, INKJET		116477	PPR,LASER 28# 8.5X11 WE	BCP2811CTN	CT	5	139	Light Green	leadership forestry	certified forestry			FSC - Mix
S1	PRINTER SUPPLIES		905777	HP TONER BLACK CC364X	CC364X	EA	8	30	Light Green	recycled content	helps avoid waste	16%	16%	Taiwan Green Mark
S1	PRINTER SUPPLIES		205363	HP TONER CE278D 78A BLK	CE278D	PK	25	65						
S1	PRINTER SUPPLIES		1673	HP TONER 507A CE403A MAG	CE403A	EA	32	41	Light Green	recycled content		14%	14%	
E5	STORAGE,SHELVING,BOOKCASES		62539	FILE, LATERAL RCD 5-DWR	43516	EA	2	8						
S1	PRINTER SUPPLIES		1670	HP TONER 507A CE401A CYN	CE401A	EA	32	39	Light Green	recycled content		14%	14%	
S1	PRINTER SUPPLIES		1671	HP TONER 507A CE402A YLW	CE402A	EA	31	39	Light Green	recycled content		14%	14%	
E4	SEATING		47541	MFTC 200 MULTI-FUNCTN TA	0M06581	EA	15	40						
M1	CALCULATORS		138328	10BII+ FINANCIAL CALCULA 9551	HP10B11	EA	7	257						
S1	PRINTER SUPPLIES		902173	HP TONER CE505D 05A BLK	CE505D	PK	32	51						
P1	PAPER, COPY, LASER, INKJET		426743	OD COLOR LASER REAM	0D44124	RM	9	840	Meets Norms	certified forestry				SFI Certified Sourcing

Spend Chart Category Spend Chart End User Spend Chart Category Spend Data Sheet1 SKU Eco-ratings Usage Report

COUNT: 23474 95%

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Reference:

Data and Methodologies: UT

Copy of Austin Institutional Purchases Analysis v3 - Excel

Walker, Jim

Product Description	Supplier	Institution	ABF/NEA Available	# of Austin Purchasers	LE Rating	ES Rating	VW Rating	AW Rating (blank = NA)	Total Points	% Possible Points	Institution
60 BACON, PORK COOKED 150 COUNT LAID OUT APPLEWOOD SMOKED REF THICK 3-DIAMOND	PATUXENT FARMS (US Foods brand)	UT Austin 16 - 17	(blank)	1	0	0	3	0	3	25%	AISD 16 - 17
76 SHORTENING, FRYING CANOLA LIQUID CLEAR TFF HIGH OLEIC OIL	Optimax (US Foods brand)	UT Austin 16 - 17	(blank)	1	0	0	3	0	3	33%	Austin Convention Ce...
82 CHICKEN, STRIP BREAST MEAT .38 THICK SEASONED COOKED FROZEN	None provided	UT Austin 16 - 17	(blank)	1	0	0	0	0	0	0%	UT Austin 16 - 17
83 TURKEY, BREAST WHOLE MUSCLE APPLEWOOD SMOKED SKINLESS COOKED UNSLICED REF	Jennie O Turkey Store	UT Austin 16 - 17	Yes	2	0	0	3	0	3	25%	
84 CHICKEN, TENDER BREAST MEAT BREADED HOMESTYLE JUMBO PARFRIED STRIP IQF FROZ	Perdue	UT Austin 16 - 17	(blank)	2	0	3	0	0	3	25%	
89 CHICKEN, BREAST 5 OZ BREADED SPICY SOLUTION ADDED 17% RAW FROZEN	FAIR MARKET INC	UT Austin 16 - 17	(blank)	1	0	0	0	0	0	0%	
112 BANANA-PREMIUM	Cawoods Produce	UT Austin 16 - 17	(blank)	1	1	3	0	0	4	44%	
113 CHICKEN, QUARTER 14 HD 3.25-3.5 LB BONE-IN SKIN-ON RAW REF CVP	HOLMES FOODS	UT Austin 16 - 17	(blank)	2	1	0	0	0	1	8%	
117 STRAWBERRIES-CALI	Cawoods Produce	UT Austin 16 - 17	(blank)	1	1	3	0	0	4	44%	
118 CHICKEN, BREAST SINGLE-LOBE 3 OZ BONELESS-SKINLESS RAW IF FROZEN	PATUXENT FARMS (US Foods brand)	UT Austin 16 - 17	(blank)	1	0	0	3	0	3	25%	
121 CHICKEN, 8 PIECE 14 HD 3.25-3.5 LB BONE-IN SKIN-ON RAW REF CVP	HOLMES FOODS	UT Austin 16 - 17	(blank)	2	1	0	0	0	1	8%	
122 SOAP, HAND DIGICLEAN FOAM REFILL YELLOW OPAQUE MILD	Ecolab (Nonfood)	UT Austin 16 - 17	(blank)	1	0	0	0	0	0	0%	
128 PIZZA, CHEESE 16 SELF RISING TFF FROZEN	SCHWAN'S FOOD SERVICE INC	UT Austin 16 - 17	(blank)	1	0	3	3	0	6	67%	
141 POTATO, FRENCH-FRY 5/16 THIN CUT BATTERED SEASONED TFF EXTRA-LONG-FANCY FR	Conagra	UT Austin 16 - 17	(blank)	2	0	3	3	0	6	50%	
142 SHRIMP, RAW LARGE PEELED-&-DEVEINED PIECE FROZEN USA	None provided	UT Austin 16 - 17	(blank)	1	0	0	0	0	0	0%	
149 BEEF, PATTY GROUND 80/20 4:1 ROUND RAW FRESH-TO-FROZEN	National Beef Packing Co	UT Austin 16 - 17	(blank)	2	0	0	3	0	3	25%	
151 BEEF, BRISKET CHOICE ANGUS 120 DECKLE OFF RAW REF	STOCK YARDS (US Foods brand)	UT Austin 16 - 17	Yes	1	0	0	3	0	3	25%	
179 BEEF, PATTY GROUND 80/20 5:1 ROUND .33 THICK DOUBLE SCORED RAW IQF FROZEN	CATTLEMAN'S SELECTION (US Foods brand)	UT Austin 16 - 17	(blank)	1	0	0	3	0	3	25%	
180 BEEF, PLATE INSIDE SKIRT CHOICE 121D FAJITA SEASONED RAW REF	CATTLEMAN'S SELECTION (US Foods brand)	UT Austin 16 - 17	(blank)	1	0	0	3	0	3	25%	
182 CROISSANT, MARGARINE 3 OZ TFF SLICED BAKED LARGE TRAY PACK FROZEN	HILLTOP HEARTH (US Foods brand)	UT Austin 16 - 17	(blank)	1	0	0	3	0	3	33%	
183 CHICKEN, TENDERLOIN BREADED FRITTER SMALL SEASONED SOLUTION ADDED 15% RAW S	FIELDALE FARMS CORPORATION	UT Austin 16 - 17	(blank)	1	0	0	0	0	0	0%	
185 POTATO, FRENCH-FRY 3/8 STRAIGHT-CUT EXTRA-LONG-FANCY FROZEN	MCCAIN FOODS USA	UT Austin 16 - 17	(blank)	2	0	0	3	0	3	33%	
187 BEEF, BRISKET WHOLE SEASONED SMOKED COOKED FROZEN 2 PIECE	Hormel	UT Austin 16 - 17	(blank)	3	0	0	3	0	3	25%	
189 CHICKEN, WING 1ST-&-2ND-JOINT BREADED SEASONED RANDOM COOKED FROZEN	GOOD SOURCE/TOOLS FOR SCHOOLS	UT Austin 16 - 17	(blank)	1	0	0	0	0	0	0%	
190 DOUGH, PIZZA CRUST 16 PAN SHEETED FROZEN	ROSELI (US Foods brand)	UT Austin 16 - 17	(blank)	1	0	0	3	0	3	25%	
193 CHICKEN, BREAST RAW IQF FROZEN	FAIR MARKET INC	UT Austin 16 - 17	(blank)	1	0	0	0	0	0	0%	

Summary by Product | Summary by Supplier | Raw 1 | Raw 2

READY FILTER MODE

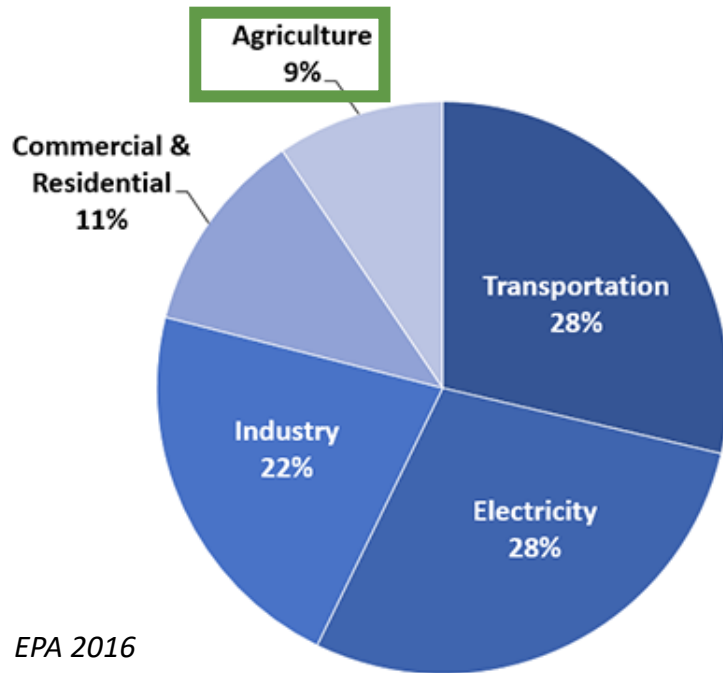
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Reference:

Data and Methodologies: Food Data in SIMAP

Why is food important for footprinting?

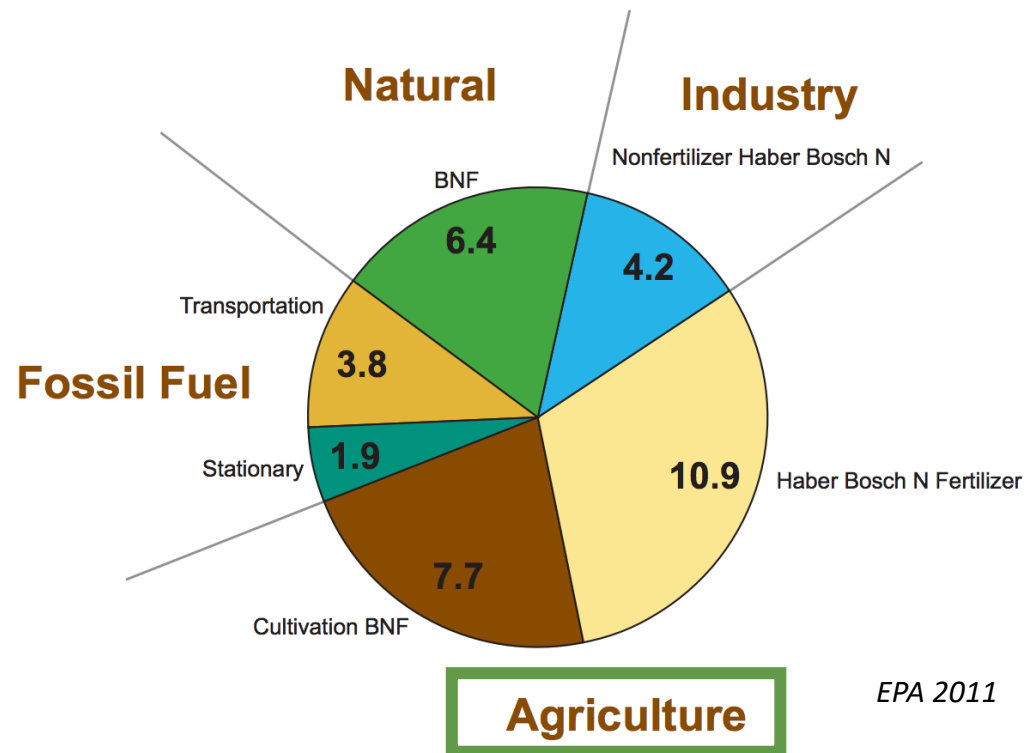
US greenhouse gas emissions
by sector in 2016



EPA 2016

9% of US carbon emissions

Sources of reactive nitrogen
in US in 2002 (Tg N/yr)



EPA 2011

50% of US nitrogen creation

Data and Methodologies: Food Data in SIMAP

NFT Network

- 1. Food data collection and processing**
- 2. Emissions factor calculation**
- 3. Using the results**

1. Food data collection and processing

Request purchase records

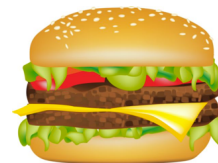
ITEM	BRAND	DESCRIPTION	PK	SIZE	QTY
337045	WEST CRK	EGG WHL W/CITRIC BNB TFF	1	20 LB	5264
362013	WEST CRK	FRUIT SALAD DLX ORANGE GRAPE	1	8 LB	3724
293477	ROMA	BEEF SIRLOIN STK PHILLY SLCD FZ	2	5 LB	3622
310503	ASSOLUTI	CHICKEN TNDRLN BRD PAR FRIED	2	5 LB	3099
158754	WEST CRK	CHICKEN TNRD JUMBO CLPPD CVP	4	10 LB	2740
904599	NLS NEST	EGG BRWN LG CAGE FREE	1	15 DZ	2607
276878	APPLAUSE	CHICKEN BRST NUGGET BRD FC FZ	2	5 LB	2303
861588	STONY	YOGURT STRWBRY LF ORGANIC BULK	6	32 OZ	2270
247412	WEST CRK	BEEF PATTY 5/1 GRND 80/20 FZ	50	3.2 OZ	2208
950233	STONY	YOGURT FRNCH VANILLA ORGANIC NF	6	32 OZ	2119
310514	ASSOLUTI	CHICKEN BRST STRIPS FC GRILL	2	5 LB	2109
882098	OLD CAL	SAUCE MARINARA FCY POUCH	6	106 OZ	1862
38268	TYSON	CHICKEN BRST PATTY HS FC CN FZ	60	3.53 OZ	1754
264197	ROMA	SAUCE ALFREDO RTU TFF	4	80 OZ	1612
53381	GOLD MED	FLOUR FULL STRENGTH TFF	1	50 LB	1494
197448	WEST CRK	CHICKEN DICED WHI & DARK FC 1/2	1	10 LB	1475
993262	SLVR SRC	CORN CUT YLW	1	20 LB	1398
259374	DOLE	STRAWBERRIES DICED IQF	2	5 LB	1314
887415	SLVR SRC	CHICKEN TNDRLN FRITTER BRD FZ	1	10 LB	1303
890881	STONY	YOGURT BANANA VANILLA ORGANIC	6	32 OZ	1280
29137	LAMBSEAS	FRIES CRISSCUT SEASND	6	4.5 LB	1249
85236	TYSON	CHICKEN POPCORN BITE ORGNL RTC	2	5 LB	1217
51380	HEINZ	KETCHUP VOL-PAK TFF	1	3 GA	1208
320328	ROMA	CHEESE MOZZ WM PROV WHI CHED	6	5 LB	1179
395018	PACKER	BEEF FOR STEW CH FZ	2	5 LB	1159
43045	MIN MAID	JUICE ORANGE CONC 5+1	4	90 OZ	1091
52221	AUNT JEM	FRNCH TOAST STICKS OVENABLE FZ	2	5 LB	1035
39276	SNDW MKR	TURKEY BRST	2	9.71 LB	1011
76957	TYSON	CHICKEN WING JUMBO APPROX 105	2	5 LB	931
307212	PIERCE	CHICKEN BRST NUGGET BTTRD FZ	2	5 LB	929

Categorize items & calculate weights

18 food categories

Calculate weights, for example:

20 lb/pack x 5264 packs purchased
= 105,280 lb eggs



Data and Methodologies: Food Data in SIMAP

- Food purchase data can be in two forms:
 - Dollars (\$)
 - Weight (pounds)
- \$ / lb varies within food groups:
 - Ground beef = \$3.80/lb → Steak = \$8.60/lb
 - Flour = \$0.50/lb → Bread = \$1.30/lb
- Emissions factors are per unit weight:
 - 26 kg CO₂e/kg beef
 - 390 g N/kg beef

1 REQUIRED food data entry:

- Date range
- Label (descriptive text)
- **Food category 1**
- **Weight**
- Unit (kg, lb)

2 OPTIONAL food data entry:

- Vendor name
- Organic
- Local
- Food category 2 & 3 (multi-ingredient)
- Dollars
- Confidence level
- Notes

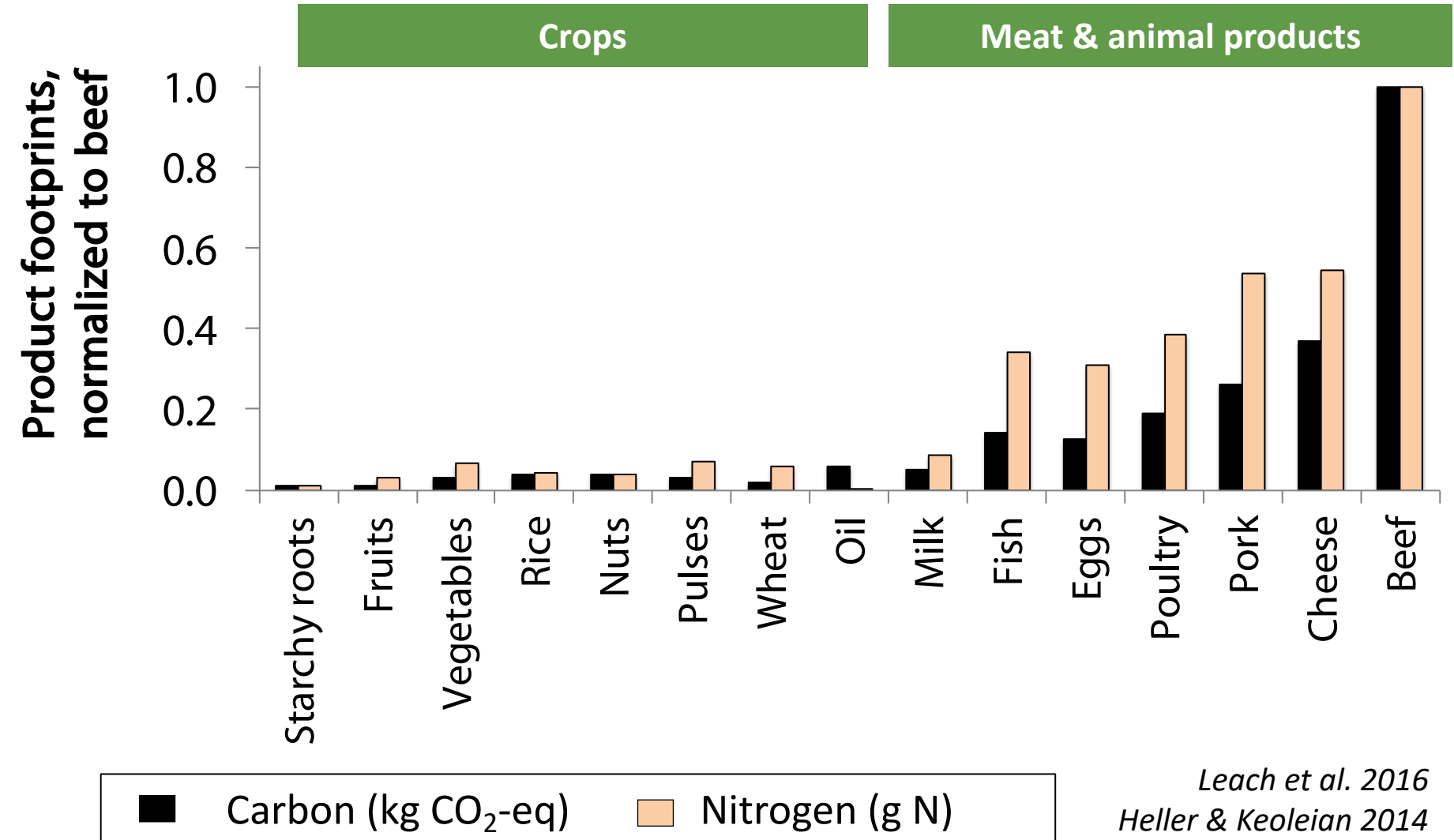
3

FOOD SCALING FACTORS

For more information:

- User's Guide (Resources tab)
- Food Template (Resources tab)

2. Emissions factors for food



Consistent trends across C & N footprints

3. Using the results

Data to back up other food sustainability initiatives:

Carbon &
Climate
Commitments

STARS
(AASHE)

Real Food
Challenge

Menus
of
Change

Communication/education/outreach AND inform new goals

- Food labels!

Sustainability Rating



- Nitrogen footprint reduction goals

Data and Methodologies: Food Data in SIMAP

Next steps for food:

- Calculate reasonable \$/lb conversion for food
- Improve food data processing alignment with STARS and Real Food Challenge
- Share food scenarios template

Applying Scope 3 Protocol

Reference: Figure [5.3] Time boundary of scope 3 categories, Corporate Value Chain (Scope 3) Accounting and Reporting Standard

Scope 3 category	Carbon Commitment	CCC/ CarbonMAP	SIMAP Tier 1	SIMAP Tier 2
1. Purchased goods & services	o	p paper	p food, paper	X
2. Capital goods				
3. Fuel- and energy- related activities	o	p T&D losses	p T&D losses	X
4. Upstream transport & distr			P food	X
5. Waste generated in operations	o	x	x	X
6. Business travel	X study abr, biz travel		x study abr, biz travel	X
7. Employee commuting	X student, faculty, staff		x student, faculty, staff	X
8. Upstream leased assets				
9. Downstream transport & distr				
10. Processing of sold products				
11. Use of sold products				
12. End of life treatment of sold products				
13. Downstream leased assets				
14. Franchises				
15. Investments				

Summary

Scope 3 Accounting :

- Challenging to do, but can be of strategic value, especially if coupled with related initiatives (e.g. student research, STARS, etc)
- Need to move toward “dual reporting”
- SIMAP will hopefully help!

Next steps

- Working groups on different categories
- Build new Scope 3 module/s in SIMAP
- Beta testing (let us know if you want to participate!)
- Launch in 2019