New Functionality



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February 3, 2021

Outline

- New functionality:
 - Biogenic
 - 2020 version of emission factors
 - 20-year GWP
 - Air travel methods
- Commuting guidance for 2020
- Ongoing SIMAP work
- Q&A



Webinar recording and slides will be posted!

Post questions in the chat

Our Team



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What is SIMAP?

A carbon and nitrogen accounting platform that can track, analyze, and improve your campus-wide sustainability





How does SIMAP work?

Enter your activity data:





STARS credit for GHG inventory, N footprint (exemplary practice), air quality (NOx emissions), purchased goods (food), third party GHG inventory review (Data Review)





SUSTAINABILITY INDICATOR MANAGEMENT & ANALYSIS PLATFORM

1. ACCOUNT

2. DATA ENTRY 3. RESULTS REPORTS

ABOUT DATA MGMT

RESOURCES

SIMPLIFYING SUSTAINABILITY DECISIONS

SIMAP[®] is a carbon and nitrogen-accounting platform that can track, analyze, and improve your campus-wide sustainability. Our proven algorithms, based on nearly two decades of work supporting campus inventories with the Campus Carbon Calculator, CarbonMAP and Nitrogen Footprint Tool, will help you:

- Create a baseline
- Benchmark your performance
- Create reports
- Set goals

HOME

Analyze your progress year over year

GET STARTED!





CO2 emissions from generating power, treating waste, daily commuting, and even the use of paper, contribute to a campus' carbon footprint. Reducing these greenhouse gas emissions will help slow the effects of climate change and global warming.

NITROGEN

Reactive nitrogen can result from everyday activities like food service, energy use, transportation, and ground fertilizer. Reducing your nitrogen footprint can provide benefits to air quality, water quality, and climate change.

SUBSCRIPTION TIERS

SIMAP offers two subscription levels (Tier 1 and Tier 2) that help you calculate your carbon and nitrogen footprint at a nominal license fee. We also offer add-on services, such as data reviews and additional user support time. We continue to offer a free 2-month trial (Basic account). Our model allows UNH to cover the costs of continuing to offer and support this tool for the good of the entire campus-based sustainability community.

NEWSFEED

Register for our SIMAP webinar on new functionality, taking place February 3rd at 1pm ET

Read our January 2021 newsletter with announcements on new functionality!

We released new functionality on January 19, 2021 including the 2020 version of emission factors, biogenic updates, 20-year GWPs, air travel methods selections, and commuting data entry guidance. More details are coming in a newsletter this Thursday.

Basic accounts were discontinued on January 4, 2021. Contact us at simap@unh.edu with any questions, or to apply for a need-based Tier 1 fee waiver.

Read our latest guarterly newsletter from November 2020.

Want to learn more about the 2019 version of emission factors? See this table summarizing all 2019 EFs and this list of references.

Check out our new 5-minute training videos, which cover SIMAP data reviews, the local nitrogen footprint, UNH's carbon footprint, and UNH's food nitrogen footprint

The slides and recording are available from our August 2020 webinar on "Complete Scope 3 Progress, Including Upstream Emissions from Energy"

Sign up to join the Nitrogen Working Group, set to launch this fall!

Register for a webinar on "GRITS Goals: A Powerful New Tool for Climate Action Planning," to be held Thursday July 30th from 1:00 - 2:30pm ET

Read our latest guarterly newsletter from July 2020.

ADD-ON SERVICES

SUSTAINABILITY INDICATOR MANAGEMENT & ANALYSIS PLATFORM

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ACCOUNT MANAGEMENT	Account Information
Institution Secondary Campuses Custom Tags	On the 'Account' tab, you can enter required information about your institution, manage users, track information in the notebook, and enter additional optional information for normalizations and goal tracking.
Manage Users	
<u>Notebook</u>	The 'Institution' page has important and required data entry fields, such as your institution name, zip code, and system boundaries. Many of these data points are used to calculate your footprints. If your account is the official tracking account for your institution, then be sure to select 'Yes' for this final question on the 'Institution' page.
NORMALIZATIONS	The 'Manage Users' page allows you to add new users, view current users, and change user roles (if you are the account owner). See the FAQ page for more
Budgets	Information on user roles.
Physical Spaces	The 'Notebook' is a central location for you to track overarching notes about your campus' footprints.
Populations	Normalizations
PROGRAMMATIC	The optional normalization data sets (budgets, physical spaces, and populations) must be entered to view normalized results on the 'Results' page. Normalizing your
Goals	emissions can help with projecting your future emissions and comparing to other campuses. The most commonly used normalization data sets are the number of full- time equivalent students, staff and faculty; and the number of gross square feet.
<u>Initiatives</u>	Programmatic

On these pages, you can track information about your campus' goals and initiatives.



UNH Sustainability Institute

Questions? Tell us here. SIMAP User Agreement

SIMAP | The Sustainability Institute at the University of New Hampshire 131 Main Street, Durham, NH 03824 | P: 603-862-8564 | F: 603-862-0785

SUSTAINABILITY INDICATOR MANAGEMENT & ANALYSIS PLATFORM

HOME	1. ACCOUNT	2. DATA ENTRY	3. RESULTS	REPORTS	DATA MGMT	ABOUT	RESOURCES

Data Entry

On the 'Data entry' tab, you can enter your campus inventory data, view emissions factors, and customize emissions factors.

There are two options for entering your campus' inventory data:

- · Enter data by category using the links on the left panel of this page.
- Import your data from several sources: Campus Carbon Calculator v7.0 9.1, Food Template, CarbonMAP zip file.

Important note: If you are adding sources with 'Other' in the name (e.g., On-campus statonary souces: Other), they are intended to be customized and do not have emissions factors associated with them. Be sure to enter custom emissions factors for those 'Other' sources.

Scope 1

Scope 1 includes sources of direct campus emissions from:

- · Stationary and mobile sources (e.g., energy used in buildings and fleets)
- · Fugitive emissions (e.g., fertilizer application, animal husbandry, the use of chemicals or refrigerants that are also GHGs)

You can enter additional chemicals and refrigerants by selecting 'Other' on the <u>refrigerants and chemicals data entry page</u>, which will make a second drop-down appear. If you need to add a custom chemical or refrigerant, you can do so by selecting the '<u>Add Chemical</u>' button on the '<u>Global Warming Potential</u>' page.

Scope 2

Scope 2 includes emissions from purchased electricity and purchased or sold renewable energy. SIMAP supports the two recommended methodologies for calculating your scope 2 footprint:

- · Market-based (accounts for renewable energy purchases)
- · Location-based (uses regional emissions factors)

For more information on these methodologies, see this <u>purchased electricity methodology overview</u> and this <u>webinar</u>. You can select which approach you would like to use on the <u>Data Mgmt tab</u> and the <u>Results tab</u>. If you have a <u>supplier-specific emissions factor</u>, you can enter that custom factor on the <u>Utility Emission Factors</u> <u>page</u>.

To support users who have historically used the Custom Fuel Mix approach (calculates weighted emissions factor based on your reported fuel mix), we are continuing to offer this methodology for your scope 2 footprint.

SCOPE 1

Stationary Fuels -

Cogen Efficiencies and Outputs

Transport Fuels

<u>Fertilizer</u>

Animals

Refrigerants & Chemicals

SCOPE 2

Utility Consumption

Renewable Energy

SCOPE 3

Commuting

Business Travel & Study Abroad

Student Travel to/from Home

Food

Paper

Waste & Wastewater

SINKS

Compost

Non-Additional Sequestration



Carbon									
Fiscal Year	Scope	Source	CO2 (kg)	CO2 (MTCDE)	CH4 (kg)	CH4 (MTCDE)	N2O (kg)	N2O (MTCDE)	GHG MTCDE
2014	1	Co-gen Electricity	6,840,038	6,840.04	701	17.52	17	4.98	6,862.53
2014	1	Co-gen Steam	9,377,846	9,377.85	961	24.02	23	6.82	9,408.69







2. DATA ENTRY

3. RESULTS

SUSTAINABILITY INDICATOR MANAGEMENT & ANALYSIS PLATFORM

DATA MANAGEMENT

Calculation Sources and

HOME

Methods Status Import Data Import Log Export Data Delete Data Data Review Shared Files

1. ACCOUNT

Calculation Sources and Methods

DATA MGMT

ABOUT

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REPORTS

Emission Factors Version 3	Global Warming Potential Version 3	
2020 (recommended)	✓ AR5 100-year (recommended)	
More information on EF versions	More information on GWP versions	
Air Travel Cost Version 🟮 *	Radiative Forcing Factor 1	
BTS (recommended)	✓ 2.7 (recommended)	
More information on air travel cost version	More information on radiative forcing factor	
Market-Based OLocation-Based OCustom Fuel Mix <u>More information on scope 2 methods</u>		
Main Campus		
eGrid for data prior to 2007 1 *	eGrid for data in 2007 and beyond 🟮 *	
NEWE: NPCC New England	✓ NEWE: NPCC New England	
eGrid map for years < 2007	eGrid map for years >= 2007	
✓ Include in Second Nature API		
UNH Law		
eGrid for data prior to 2007 () *	eGrid for data in 2007 and beyond 3 *	
USA: U.S. Average	✓ USA: U.S. Average	
eGrid map for years < 2007	eGrid map for years >= 2007	
Include in Second Nature API		

New functionality in SIMAP Released January <u>2021</u>



Overview of updates

- Biogenic:
 - Emission factors separated out
 - Biogenic Report
- 2020 version of emission factors
- 20-year GWP
- Air travel methods:
 - Radiative forcing factor selection
 - New \$/mi conversion factors

Biogenic: Sources in SIMAP

Biogenic CO₂ refers to carbon in wood, paper, grass trimmings, and other biofuels that was originally removed from the atmosphere by photosynthesis and, under natural conditions, would eventually cycle back to the atmosphere as CO₂ due to degradation processes.

Scope 1 Stationary Fuels:

- Wood chips, wood pellets, and grass pellets: 100% biogenic
- Incinerated waste: 53% biogenic
- Ethanol: 100% biogenic
- Residual bioheat and distillate bioheat: 20% biogenic (note - this is a correction; this was previously 100%)

Scope 1 Transport Fuels:

- B100: 100% biogenic
- B20: 20% biogenic
- B5: 5% biogenic
- E85: 74% biogenic (note this was updated to reflect the US average; this was previously 85%)

In a future update, we will incorporate scope 2 and scope 3 biogenic emissions factors

Biogenic: Emissions Factors

	AP My account Log out
	SUSTAINABILITY INDICATOR MANAGEMENT & ANALYSIS PLATFORM
HOME 1. ACCOUNT 2. DATA ENT	RESULTS REPORTS DATA MGMT ABOUT RESOURCES CONTENT
SCOPE 1	Emission Factors
Stationary Fuels -	Home / Emission Factors
Cogen Efficiencies and Outputs Transport Fuels	A unique value for scaling emissions to activity data in terms of a standard rate of emissions per unit of activity (e.g., grams of carbon dioxide emitted per barrel of fossil fuel consumed).
Fertilizer	Scope *
Animals	1
Refrigerants & Chemicals	Source *
SCOPE 2	On-Campus Stationary Sources: Other
Utility Consumption	Emission Type *
Renewable Energy	✓ Select emission type CH4 CO2
SCOPE 3	eCO2 N2O
Commuting	NUX Other N Biogenic CO2
Business Travel & Study Abroad	

Biogenic emission factors are now separated out from non-biogenic CO₂

View and customize on the Data Mgmt tab > Emission Factors page

Biogenic: New Report

View your biogenic emissions by category on the Reports tab



Coming Soon: Campus Lands Report and Carbon Neutrality Report

2020 version of emission factors

Key updates to emission factors:

- Updated across all relevant categories:
 - 2018 carbon contents, 2019 heating values, 2015-2017 MPGs
- Scope 1:
 - Separated out biogenic emission factors from CO₂ emission factors
- Scope 2:
 - Updated residual emission factors to 2018
- Scope 3:
 - Updated waste emission factors methodology so they change over time

Corrections:

- Biogenic %
 - E85 changed from 85% to 74%
 - Residual and distillate bioheat changed from 100% to 20%



2020 version of emission factors: Scope 1

Version	2020 (Recommended)					
Date released	January 2021					
Scope 1						
Stationary combustion	Updated to most recent year (Carbon Contents: 2018, Heating values: 2019) Separated out biogenic emission factors from CO ₂ Corrected biogenic % for residual and distillate bioheat (from 100% to 20%)					
Transport fuels	Updated data to most recent year (Carbon Contents: 2018, Heating values: 2019) Updated biogenic % for E85 (from 85% to 74%)					
Fertilizer	No changes					
Animals	Updated data to the most recent year (2018)					
Refrigerants & chemicals	Minor naming corrections Added the option to view results using 20-year GWPs					



2020 version of emission factors: Scope 2

Version	2020 (Recommended)
Date released	January 2021
Scope 2	
Utility consumption	eGrid 2018 report for location-based emission factors (unchanged from 2019 version of EFs)
, ,	Residual emission factors for market-based approach updated through 2018



2020 version of emission factors: Scope 3

Version	2020 (Recommended)					
Date released	January 2021					
Scope 3						
Commuting	Updated data to most recent year (Carbon Contents: 2018, Heating values: 2019, Average MPGs: 2015-2017)					
Business travel & study abroad	Updated data to most recent year (Carbon Contents: 2018, Heating values: 2019, Average MPGs: 2015-2017)					
Student travel to/from home	Updated data to most recent year (Carbon Contents: 2018, Heating values: 2019, Average MPGs: 2015-2017)					
Food	No changes					
Paper	No changes					
Waste & wastewater	Updated waste emission factors across time using the WARM Model. Previously, the same value was used across all years. Current through 2016.					



More information about EF versions

_										My account	Log out
								SI	STAINABILITY INDICATOR MANAGE	IENT & ANALYS	IS PLATFORM
HOME	1. ACCOUNT	2. DATA ENTRY	3. RESULTS	REPORTS	DATA MGMT A	BOUT	RESOURCES				
RESO	URCES		Em	issions	factors ve	ersio	on informat	tion			
<u>Tools</u> <u>Users</u>	s' Guide		Emissic <u>sources</u>	ons factors are rele s and methods form	ased each year as version not see the second s	ons. Each users car	n year's version includes t n always customize their e	he most up to date emissions factors availal amissions factors on the <u>Data Entry tab</u> .	le. You can select which version you wo	uld like to use on	the <u>calculation</u>
<u>Trainir</u> Chang FAQ	<u>ng</u> g <u>es in SIMAP</u>		<u>List of</u> <u>Table s</u>	references used i summarizing all er	in the recommended ve mission factors, with lir	ersion of o	<u>emission factors (2019)</u> tailed reference pages (2019)			
Suppo	ort			Version	2017		2018	2019	2020 (Recommended)		
Our Te	eam			Date released	November 201	7	April 2019	February 2020	January 2021		
Gloss	<u>ary</u>		Scop	e 1	1						
<u>Links</u> <u>Carbo</u> <u>Nitrog</u>	on References gen References							Updated data to most recent year (Carbon Contents: 2017, Heating valu 2019)	Updated data to most recent year (Carbon Contents: 2018, Heating values: 2019)		
Graph	ns Instructions		Station	nary combustion	<u>On-campus stationary</u> <u>changes</u> , new NOx emissions factors		Unchanged from 2017 version	Updated methodology for CH4 from Wood Chips, Wood pellets, and Grass Pellets	Separated out biogenic emission factors		
								Error corrected for Incinerated Waste (reducing CO2 EF by around 70%)	Corrected biogenic % for residual a distillate heating (from 100% to 20%	nd 5)	
			Transp	port fuels	Unchanged from CCC NOx emissions factor), new s	Unchanged from 2017 version	Updated data to most recent year (Carbon Contents: 2017, Heating values: 2019, Average MPGs: 2016) CH4 and N2O update for gasoline and diesel vehicles (emission factors and efficiency)	Updated data to most recent year (Carbon Contents: 2018, Heat values: 2019, Average MPGs: 2017 uel Updated biogenic % for E85 (from 8 to 74%)	ng) 15%	

https://unhsimap.org/cmap/resources/EFVersions

Which emission factor version should I use?

Which version should you use for your current and historic calculations?

- The recommended practice is to use the current recommended emission factor version (2020 version) for ALL years of your footprint calculation
- Every version of emission factors extends back to 1990 in SIMAP
- Historic emission factors can change in new emission factor versions for two reasons:
 - New data sets become available
 - New methodologies are recommended

Why should you update?

- More accurate results
- Comparisons across time reflect real changes not changes in accounting methods

EF versions in SIMAP: 2020 version (recommended) 2019 version 2018 version 2017 version

Select on Data Mgmt tab

https://unhsimap.org/cmap/resources/recommendedEFversion

What is global warming potential?

Global warming potential (GWP) is a normalization metric that

converts all greenhouse gases to the same unit

"GWP measures how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide (CO_2) " – US EPA

Greenhouse gas	100-year AR5 GWP
Carbon dioxide (CO ₂)	1
Methane (CH ₄)	28
Nitrous oxide (N ₂ O)	265

Example calculation:

100 kg CH₄ * 28 GWP = 280 kg CO₂-equivalents



20-year Global Warming Potential

- 100-year global warming potential (GWP) describes the warming effect GHGs will have in atmosphere over 100 years
- 20-year GWP is over 20 years, and emphasizes shorter-lived GHGs like methane and their sources (e.g., natural gas, cows)

Greenhouse gas	100-year AR5 GWP	20-year AR5 GWP
Carbon dioxide (CO ₂)	1	1
Methane (CH ₄)	28	84
Nitrous oxide (N ₂ O)	265	264



Which GWP version should you use?

- Most GHG inventories use 100-year GWP, and we still recommend using the 100-year GWP for your inventory
- 20-year GWP provides a different and additional way to view your GHG inventory results







Select on Data Mgmt tab

Air Travel Methods: Passenger yield (\$/mi)

You can enter your air travel data into SIMAP in US dollars (\$)

SIMAP uses national statistics to calculate air travel passenger yield factors (\$/mi)



Air travel \$/mi options in SIMAP

BTS (recommended)

Pre-2020 (outdated)

Select on Data Mgmt tab

- Pre-2020 data source no longer updated
- Bureau of Transportation Statistics (BTS) is the new recommended data set
- BTS includes taxes; Pre-2020 does not
- BTS miles (and emissions) are lower



Air Travel Methods: Radiative Forcing

Air travel CO₂ emissions are multiplied by a **radiative forcing factor** to account for the higher global warming potential from emissions released at a higher altitude

Air travel CO₂ emissions = Passenger miles * CO₂ emissions factor * radiative forcing factor



DEFRA = UK Department for Environment, Food, and Rural Affairs



Recommended methods and alerts

Calculation Sources and Methods

	Emission Factors Version 3			Global Warn AR4 100-ve						
	2020 (recommended)		~	AR5 100-year (recommended)						
	More information on EF versions			AR4 20-year AR5 20-year						
	Air Travel Cost Version 1 *			Radiative Forcing Factor 3						
	BTS (recommended)	~	2.7 (recon	nmended)			~			
	SIMAP				SUSTAI	NABILITY INDIC	My account	Log out		
1	. ACCOUNT 2. DATA ENTRY 3. RESULTS	REPORTS DA	TA MGM	ABOUT	RESOURCES	CONTENT				

3. Results

ном

 You are not using the recommended EF version (2020). To change it, visit the <u>calculation sources and methods form</u>. You are not using the recommended GWP version (AR5 100-year). To change it, visit the <u>calculation sources and methods form</u>. You are not using the recommended radiative forcing factor (2.7). To change it, visit the <u>calculation sources and methods form</u>. The following years are not marked as complete for the selected campus(es) on the <u>Status form</u>: 2018, 2019, 2020 	

MISSING FACTORS: Food scaling factor not set for the "Main" campus and year 2019. Set food scaling factor

MISSING FACTORS: Custom emission factors must be entered for On-Campus Stationary Sources: Other (2020)

New content pages

		My account Log out
HOME 1. ACCOUNT 2. DATA ENTRY 3. RESULT	S REPORTS DATA MGMT ABOUT	RESOURCES
RESOURCES Bioger	ic Emissions	
Training	MAP	My account Log out
Changes in SIMAP HOME 1. ACCOUNT	2. DATA ENTRY 3. RESULTS REPORTS	TS DATA MGMT ABOUT RESOURCES
Support Our Team	Global Warmir	ng Potential Versions
Glossary IOOIS Links Users' Guide Carbon References Training		My account Log out SUSTAINABILITY INDICATOR MANAGEMENT & ANALYSIS PLATFORM
Nitrogen References Changes in SIMAP Graphs Instructions FAQ	HOME 1. ACCOUNT 2. DATA ENTR	TRY 3. RESULTS REPORTS DATA MGMT ABOUT RESOURCES
<u>Support</u> Our Team Glossary	RESOURCES	Air travel emissions
Links Carbon References	Tools Users' Guide	RADIATIVE FORCING FACTOR What is radiative forcing for air travel?
Nitrogen References Graphs Instructions	Changes in SIMAP FAQ	Radiative forcing is associated with emissions at higher altitudes and results in a higher global warming potential. Your air travel CO ₂ emissions are multiplied by the radiative forcing factor to account for the higher global warming potential from emissions released at higher altitudes. The radiative forcing factor is also sometimes referred to as the radiative forcing index.
	Support Our Team Glossary Links Carbon References Nitrogen References Graphs Instructions	Climate Forcings from Global Aviation Emissions and Cloudiness Warming from global accumulation of crabes divide and water vaper Possible ice cloud Changes from seet Reflected to log randing from increase Possible ice cloud Changes from seet No Contrall plume Contrall plume

Commuting Guidance in SIMAP

2020 Commuting Guidance

Tips for 2020 commuting data entry:

 Enter multiple entries as needed to reflect different commuting patterns in different time periods

Date Range *		Date Range *					
2019-07-01	2020-03-31	2020-04-01	2020-06-30				
E.g., 2021-01-16	E.g., 2021-01-16	E.g., 2021-01-16 E.g., 2021-0					
Category *		Category *					
Staff Commuting		Staff Commuting					
# of Commuters *		# of Commuters *					
1000		50					
One Way Trips per Commuter	per Week 3 *	One Way Trips per Com	muter per Week 🕄 *				
9		9					
Commuting Weeks per Date R	ange *	Commuting Weeks per	Date Range *				
40		10					



2020 Commuting Guidance

Tips for 2020 commuting data entry:

- Enter multiple entries as needed to reflect different commuting patterns in different time periods
- If entering multiple data points by commuter, be sure that the **number of weeks** is correct for that time period

Example calculation:

Student commuter automobile = # of commuters * one-way trips per commuter per week * commuting weeks per date range * % of trips by automobile * vehicle miles / trip * emissions factor



Other commuting updates and tips

Removed commuting data entry restrictions:

- 1. It is now possible to enter multiple data entries by commuting type by date range (e.g., two entries for student commuters for a given time period)
- 2. The commuting modes no longer need to total 100%

Staff Commuting

Automobile	Bike	Carpool	Commuter Rail	Light Rail	Public Bus	Walk
% of Trips	% of Trips	% of Trips	% of Trips	% of Trips	% of Trips	% of Trips
40	5	10				10
Vehicle Miles/Trip	Passenger Miles/Trip	Vehicle Miles/Trip	Passenger Miles/Trip	Passenger Miles/Trip	Passenger Miles/Trip	Passenger Miles/Trip
5	2	5				1



Other commuting updates and tips

- Be sure to avoid double-counting scope 1 fleet vehicles (e.g., buses)
- Check out the **Commuting Report** on the Reports tab:

Reports

R	eport	Footprint *	Fiscal Year Range *	Filter by tags		
	Commuting Report	◎Carbon ○Nitrogen	2014 - 2018	- All - Physical Spaces	DISPLAY	A EXPORT
Me Me	ore information on Second Nature report ore information on the Food Report			Athletic Dining		

Commu	ung																						
Fiscal Year	Start Date	End Date	Category	# of Commuters	Trips per Commuter	Commuting Weeks	Automobile %	Automobile Miles	Bike %	Bike Miles	Carpool %	Carpool Miles	Commuter Rail %	Commuter Rail Miles	Light Rail %	Light Rail Miles	Public Bus %	Public Bus Miles	Walk %	Walk Miles	CO2 (kg)	CO2 (MTCDE)	Bi (M
2014	2013- 07-01	2014- 06-30	Faculty Commuting	844	9	40	81.00	12.00	2.50	0.00	7.50	12.00	0.00	0.00	0.00	0.00	5.00	8.80	4.00	0.00	1,137,956	1,137.96	
2014	2013- 07-01	2014- 06-30	Staff Commuting	2,183	9	50	81.00	15.00	2.50	0.00	7.50	15.00	0.00	0.00	0.00	0.00	5.00	8.80	4.00	0.00	4,570,715	4,570.71	
2014	2013- 07-01	2014- 06-30	Student Commuting	15,902	10	30	24.00	10.25	4.25	0.00	5.50	10.00	0.00	0.00	0.00	0.00	12.50	8.10	7.00	0.00	5,918,755	5,918.75	
2015	2014- 07-01	2015- 06-30	Faculty Commuting	880	9	40	81.00	12.00	2.50	0.00	7.50	12.00	0.00	0.00	0.00	0.00	5.00	8.80	4.00	0.00	1,192,615	1,192.62	
2015	2014- 07-01	2015- 06-30	Staff Commuting	2,201	9	50	81.00	15.00	2.50	0.00	7.50	15.00	0.00	0.00	0.00	0.00	5.00	8.80	4.00	0.00	4,627,185	4,627.18	



Telecommuting

We are not adding telecommuting as a commuting mode this spring, but we will add it in the future!

Telecommuting does have a footprint from:

- Primary effects:
 - At-home electricity and heating
 - Added server space and IT support
- Secondary effects:
 - Many! Living further from work, etc.



Example calculation for added electricity from computer station ONLY:

20 kwh/month/person * 12 months * 0.43 kg CO₂/kwh = 103 kg CO₂/telecommuter/year



How SIMAP can help



		iccount	Log out					
	SUSTAINABILITY INDICATOR MANAGEMENT	& ANALYSIS	PLATFORM					
HOME 1. ACCOUNT 2. DAT	ATA ENTRY 3. RESULTS REPORTS DATA MGMT ABOUT RESOURCES							
RESOURCES	Tools							
Tools	Tools for collecting data for SIMAP							
<u>Users' Guide</u>	These tools can be downloaded and used to assist with data collection and data entry to SIMAP.							
Training	Campus Data Collection Template - ALL NEW VERSION							
Changes in SIMAP	NEW VERSION RELEASED IN OCTOBER 2019! If you are using the Campus Data Collection Template to organize your data							
FAQ	entry, then we encourage you to switch over to this version for improved tracking and data management. We here version to make it easier to use. We added instructions and added a tab for budgets data entry. We also color-	have updated -coded the e	d this Intire file					
Support	to clarify what data will be imported to SIMAP. We removed macros and updated the formatting to better match	h SIMAP. Ple	ease send					
Our Team	any questions, comments, and reedback to us at simap@unn.edu							
Glossary	The Campus Data Collection spreadsheet is a tool to help organizations collect their data day to day in one spreadsheet to help keep track of which input you have for the year. Once this is completed for the entire year, you can import all your data from							
<u>Links</u>	this spreadsheet. This spreadsheet does not have any emission factors or calculationsit is for tracking and in	this spreadsheet. This spreadsheet does not have any emission factors or calculationsit is for tracking and import only. Do not						
Carbon References	forget to check the institutional data like budgets, population, and square footage and to update any changes i vear. Also, please, check your goals and any other notes or changes you should track for your data collection.	in those year	r over ok and					
Nitrogen References	notes fields in the data entry tab to track your assumptions.							
Graphs Instructions								

				My account	Log out			
	ΙΔΟ							
		SUSTAINAE	BILITY INDICATOR M	ANAGEMENT & ANALYS	IS PLATFORM			
HOME 1. ACCOUNT 2. DAT	A ENTRY 3. RESULTS REPORTS DATA MG	AT ABOUT	RESOURCES					
RESOURCES	Users' Guide							
<u>Tools</u> <u>Users' Guide</u>	Please read and provide feedback on the user guide for better.	SIMAP. This is a	draft version and w	e appreciate your input to	o make it			
Training	SIMAP User Guide_DRAFT6.2_2.21.2018.pdf	SIMAP User Guide_DRAFT6.2_2.21.2018.pdf						
Changes in SIMAP	Below, please find instructions for each step of using SIMAP:							
FAQ	1. Log-in: How to access and log in to SIMAP							
Support	2. Account set-up: Entering your institution information	tion						
Our Team	 Data entry: Optional data entry by source Results: Review and compare your results 							
<u>Glossary</u>	5. Resources: Sources you can use for more inform	ation						
Links	1. Login							
Carbon References	Please register for an account at the following: www.unt	simap.org						
Nitrogen References	2. Account setup							
Graphs Instructions		IAP						

SUSTAINABILITY INDICATOR MANAGEMENT & ANALYSIS PLATFORM

		R							My account	Log out
				Y			SUSTAINAB	ILITY INDICATOR M	IANAGEMENT & ANALYS	IS PLATFORM
HOME 1. ACCO	UNT	2. DAT/	A ENTRY	3. RESULTS	REPORTS	DATA MGMT	ABOUT	RESOURCES		
RESOURCE	S		Trai	ning						
<u>Tools</u>										
Users' Guide	2		Training	g videos and sl	lides, organiz	ed by topic				
Training	٦.		Below ar	Below are links to short slide presentations and video webinars about a range of topics from basic account setup to detailed information about purchased electricity methodologies. Please suggest topics for which you would like to see a training video						
Changes in S	SIMA	P	or additional information.							
FAQ			Setting up your account							
Support			Upgrading your SIMAP account [PDF, prepared July 2020]							
Our Team			<u>Account setup</u> [ppt slides] Note: The payment system layout has changed since these slides were put together.							
Glossary			SIMAP	training						
Links			• <u>Q</u>	&A Webinar: answ	ering user's que	estions (presented of	on April 12, 20	019] giog [procented Mc	TALL 1 2 DM EST	
Carbon Refe	rence	es	• <u>St</u>	MAP 101: Refrest	ner webinar slide	es [presented on Fe	ebruary 1, 201	19] and <u>recording o</u>	f the webinar.	
Nitrogen Ref	eren	ces	• <u>SI</u> Scope	MAP Training slide	es [presented or ectricity	n November 30, 20	17]			
Graphs Instr	ns								IAP t & ANALYSIS PLATFORM	

SIM	AP	My account Log out							
HOME 1. ACCOUNT 2. DATA E	NTRY 3. RESULTS REPORTS DATA MGMT	ABOUT RESOURCES							
RESOURCES	FAQs								
<u>Tools</u> <u>Users' Guide</u> <u>Training</u>	Please let us know if there are additional topics you would like to see in the FAQs. Below are questions and answers organized into the following sections: Account Management, Using SIMAP, Methodology in SIMAP, Greenhouse Gas Protocol, Nitrogen Footprint, and University of New Hampshire.								
Changes in SIMAP	Account Management								
FAQ	Using SIMAP								
<u>Support</u> Our Team	Methodology in SIMAP								
Glossary	Which version of emission factors should I use	e?							
Links	The recommended practice is to use the current recomme	nended emission factor version (2020 version) for ALL years of your							
Carbon References	calculation. Every version of emission factors extends bac in new versions for two reasons:	ack to 1990 in SIMAP. However, historic emission factors can change							
Nitrogen References									
Graphs Instructions	 <u>New data sets become available</u>. For example, there is usually a 2-year lag time in when eGrid releases the purchased electricity emission factors. For example, eGrid released the 2018 emission factors in February 2020, so that means 								

that your calculated footprints for 2017 and 2018 changed a little bit with these new and more accurate emission factors.

Request a Data Review

Why do a Data Review with the SIMAP team?

- Structured and systemic evaluation of your data in SIMAP, your results, and any imported files
- Identifies:
 - Outliers
 - Gaps
 - Inconsistencies
 - Errors
- Includes a 1-hour video call to discuss your inventory
- Earn 0.625 AASHE STARS points as an independent validation/verification of your institution's GHG inventory!



Data Review Process has 4 steps:

- 1. If you upgraded your SIMAP account after July 1, 2020, please purchase a data review as an add-on service
- 2. Fill in the Excel-based Data Review Template and email the file to simap@unh.edu
- 3. Fill out the request form (found on the Data Review page)
- 4. We will schedule a joint review to go over our findings and provide any recommendations



Check out a 5-minute video about Data Reviews, which can be found on the Data Review page and the Training page

Data Review Template



SIMAP Data Review: Instructions

Campus	
Contact name	
Email	
SIMAP reviewers	
Date completed	

There are four phases of the review process:

<u>1) User review:</u> The user checks and fills out the questions highlighted in blue cells, including providing some information about boundaries and reporting and sharing the data entry method (e.g., a spreadsheet with original data). Save this document with the name of your institution and the date it was completed. Then please email this document to **simap@unh.edu**.

<u>2) Schedule an appointment</u>: To schedule the appointment, please, fill out the request for appointment form.
 <u>3) SIMAP staff review</u>: After we receive the documents, SIMAP staff will fill out the portions of the document "SIMAP staff to review before the appointment" [highlighted in green] using your information.

<u>4) Joint review</u>: After completing the user and SIMAP staff review, we will schedule a conference call to go over the data and fill in the remaining section "Review together during the appointment" together [highlighted in

Please be sure to let us know if you need to complete your data review before a specific reporting deadline. As always, please let us know if you have any questions at simap@unh.edu

Working groups

Commuting Working Group

Co-facilitated with Second Nature

Bioenergy Working Group

Co-facilitated with Second Nature

Nitrogen Working Group

Co-facilitated with University of Virginia









Summary

New functionality

- Biogenic
- 2020 version of emission factors
- 20-year GWP
- Air travel methods
- And more!



How SIMAP can help

- Resources tab
- Data reviews
- Working groups
- Contact us at simap@unh.edu



www.unhsimap.org

Questions?

SUSTAINABILITY INDICATOR MANAGEMENT & ANALYSIS PLATFORM

www.unhsimap.org

Contact: simap@unh.edu