

Description:

Industry: 61 - Educational Services

Address: 116th St. and Broadway,  
New York, New York,  
US

Contact:  
Samreen Afzal

[www.columbia.edu/](http://www.columbia.edu/)

**Reporting Information**

Inventory Type Complete

Reporting Protocol: GRP 3.0

GWP Standard: AR6

Base Year: 2006

Scope 2 method Location-based and Market-based

Reporting Year Type Calendar Year

Consolidation Methodology: Operational Control Only

Status: TCR Accepted

**Verification Information**

Verification Body: Cameron-Cole, LLC

Level of Assurance: Reasonable

## Entity Emissions | Total in metric tons of CO2e

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t of CO2e)	N2O (t of CO2e)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t of CO2e)	SF6 (t of CO2e)
Stationary Combustion - Scope 1	84,301.371494	84,038.790683	199.953792	62.627019	0	0	0	0
Mobile Combustion - Scope 1	272.508177	271.55124	0.31293	0.644007	0	0	0	0
Fugitive - Scope 1	6,911.806715	349.769666	8.303445	186.127032	1,063.005072	234.3579	0	5,070.2436
<b>Total</b>	91,485.686386	84,660.111589	208.570167	249.398058	1,063.005072	234.3579	0	5,070.2436
<b>Applied Offsets</b>	0							
<b>Net Total</b>	91,485.686386							

Scope 2 - Location Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t of CO2e)	N2O (t of CO2e)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t of CO2e)	SF6 (t of CO2e)
Purchased Electricity - Location Based - Scope 2	134,980.923397	134,774.32723	93.338568	113.257599	0	0	0	0
Purchased Heating - Location Based - Scope 2	0	0	0	0	0	0	0	0
Purchased Steam - Location Based - Scope 2	24,707.8637	24,636.2744	58.9221	12.6672	0	0	0	0
<b>Total</b>	159,688.787097	159,410.60163	152.260668	125.924799	0	0	0	0
<b>Applied Offsets</b>	119,370							
<b>Net Total</b>	40,318.787097							

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t of CO2e)	N2O (t of CO2e)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t of CO2e)	SF6 (t of CO2e)
Purchased Electricity - Market Based - Scope 2	119,369.936321	119,187.250184	82.543185	100.142952	0	0	0	0

Purchased Heating - Market Based - Scope 2	0	0	0	0	0	0	0	0
Purchased Steam - Market Based - Scope 2	24,707.8637	24,636.2744	58.9221	12.6672	0	0	0	0
<b>Total</b>	144,077.800021	143,823.524584	141.465285	112.810152	0	0	0	0
<b>Applied Offsets</b>	119,370							
<b>Net Total</b>	24,707.800021							

Scope 3 Emissions	Total CO2e (t)	CO2 (t)	CH4 (t of CO2e)	N2O (t of CO2e)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t of CO2e)	SF6 (t of CO2e)
Business Travel - Scope 3 (Optional)	19,781.5752	19,717.1874	0.851418	63.536382	0	0	0	0
Employee Commuting - Scope 3 (Optional)	10,625.833459	10,568.525962	16.415919	40.891578	0	0	0	0
Fuel- and Energy-Related Activities - Scope 3 (Optional)	74,956.73613	36,761.326251	38,096.404245	99.005634	0	0	0	0
<b>Total</b>	105,364.144789	67,047.039613	38,113.671582	203.433594	0	0	0	0
<b>Applied Offsets</b>	0							
<b>Net Total</b>	105,364.144789							

## Entity Emissions | Total in metric tons of gas

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC CO2e (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	84,301.371494	84,038.790683	7.405696	0.229403	0	0	0	0
Mobile Combustion - Scope 1	272.508177	271.55124	0.01159	0.002359	0	0	0	0

Fugitive - Scope 1	6,911.806715	349.769666	0.307535	0.681784	1,063.005072	234.3579	0	0.208652
<b>Total</b>	<b>91,485.686386</b>	<b>84,660.111589</b>	<b>7.724821</b>	<b>0.913546</b>	<b>1,063.005072</b>	<b>234.3579</b>	<b>0</b>	<b>0.208652</b>

Scope 2 - Location Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC CO2e (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Location Based - Scope 2	134,980.923397	134,774.32723	3.456984	0.414863	0	0	0	0
Purchased Heating - Location Based - Scope 2	0	0	0	0	0	0	0	0
Purchased Steam - Location Based - Scope 2	24,707.8637	24,636.2744	2.1823	0.0464	0	0	0	0
<b>Total</b>	<b>159,688.787097</b>	<b>159,410.60163</b>	<b>5.639284</b>	<b>0.461263</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC CO2e (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	119,369.936321	119,187.250184	3.057155	0.366824	0	0	0	0
Purchased Heating - Market Based - Scope 2	0	0	0	0	0	0	0	0
Purchased Steam - Market Based - Scope 2	24,707.8637	24,636.2744	2.1823	0.0464	0	0	0	0
<b>Total</b>	<b>144,077.800021</b>	<b>143,823.524584</b>	<b>5.239455</b>	<b>0.413224</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Scope 3 Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC CO2e (t of CO2e)	NF3 (t)	SF6 (t)
Business Travel - Scope 3 (Optional)	19,781.5752	19,717.1874	0.031534	0.232734	0	0	0	0
Employee Commuting - Scope 3 (Optional)	10,625.833459	10,568.525962	0.607997	0.149786	0	0	0	0
Fuel- and Energy-Related Activities - Scope 3 (Optional)	74,956.73613	36,761.326251	1,410.977935	0.362658	0	0	0	0

<b>Total</b>	105,364.144789	67,047.039613	1,411.617466	0.745178	0	0	0	0
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## Simplified Estimation Methods (SEMs)

	Total Estimated CO2e (t)	Total Emissions (t of CO2e)	Estimated CO2e as a Percentage of Total*
Location-based	793	251,175	0.32%
Market-based	793	235,564	0.34%

\*Total based on Scope 1, Scope 2, & biomass emissions

## Facility Emissions | Baker Field Campus Inventory

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	98.832456	98.546268	0.008729	0.000185	0	0	0	0
Fugitive - Scope 1	3.837396	0	0	0	3.837396	0	0	0
<b>Total</b>	102.669852	98.546268	0.008729	0.000185	3.837396	0	0	0

Scope 2 - Location Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Location Based - Scope 2	1,309.662573	1,307.658414	0.033541	0.004024	0	0	0	0

<b>Total</b>	1,309.662573	1,307.658414	0.033541	0.004024	0	0	0	0
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<b>Scope 2 - Market Based - Indirect Emissions</b>	<b>Total CO2e (t)</b>	<b>CO2 (t)</b>	<b>CH4 (t)</b>	<b>N2O (t)</b>	<b>HFC (t of CO2e)</b>	<b>PFC (t of CO2e)</b>	<b>NF3 (t)</b>	<b>SF6 (t)</b>
Purchased Electricity - Market Based - Scope 2	1,309.662573	1,307.658414	0.033541	0.004024	0	0	0	0
<b>Total</b>	1,309.662573	1,307.658414	0.033541	0.004024	0	0	0	0

<b>Scope 3 Emissions</b>	<b>Total CO2e (t)</b>	<b>CO2 (t)</b>	<b>CH4 (t)</b>	<b>N2O (t)</b>	<b>HFC (t of CO2e)</b>	<b>PFC (t of CO2e)</b>	<b>NF3 (t)</b>	<b>SF6 (t)</b>
Fuel- and Energy-Related Activities - Scope 3 (Optional)	488.837816	252.652727	8.724765	0.002258	0	0	0	0
<b>Total</b>	488.837816	252.652727	8.724765	0.002258	0	0	0	0

## Facility Emissions | Columbia University Irving Medical Center

Equity share - 100.00 | Entity controls the facility emissions - Yes

<b>Scope 1 - Direct Emissions</b>	<b>Total CO2e (t)</b>	<b>CO2 (t)</b>	<b>CH4 (t)</b>	<b>N2O (t)</b>	<b>HFC (t of CO2e)</b>	<b>PFC (t of CO2e)</b>	<b>NF3 (t)</b>	<b>SF6 (t)</b>
Stationary Combustion - Scope 1	10,574.493	10,538.4606	0.922	0.0408	0	0	0	0
Mobile Combustion - Scope 1	16.1575	16.1113	0.0007	0.0001	0	0	0	0
Fugitive - Scope 1	789.3447	286.884	0	0.4754	372.6765	0	0	0
<b>Total</b>	11,379.9952	10,841.4559	0.9227	0.5163	372.6765	0	0	0

Scope 2 - Location Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Location Based - Scope 2	42,973.1031	42,907.3236	1.1006	0.1321	0	0	0	0
Purchased Steam - Location Based - Scope 2	24,707.8637	24,636.2744	2.1823	0.0464	0	0	0	0
<b>Total</b>	<b>67,680.9668</b>	<b>67,543.598</b>	<b>3.2829</b>	<b>0.1785</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	37,331.7312	37,274.6034	0.9561	0.1147	0	0	0	0
Purchased Steam - Market Based - Scope 2	24,707.8637	24,636.2744	2.1823	0.0464	0	0	0	0
<b>Total</b>	<b>62,039.5949</b>	<b>61,910.8778</b>	<b>3.1384</b>	<b>0.1611</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Scope 3 Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Business Travel - Scope 3 (Optional)	5,144.2397	5,127.5072	0.008	0.0605	0	0	0	0
Employee Commuting - Scope 3 (Optional)	4,150.7341	4,127.9869	0.2429	0.0593	0	0	0	0
Fuel- and Energy-Related Activities - Scope 3 (Optional)	23,319.8092	11,451.454	438.4393	0.1117	0	0	0	0
<b>Total</b>	<b>32,614.783</b>	<b>20,706.9481</b>	<b>438.6902</b>	<b>0.2315</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Facility Emissions | Lamont Doherty Earth Observatory

**Equity share - 100.00 | Entity controls the facility emissions - Yes**

<b>Scope 1 - Direct Emissions</b>	<b>Total CO2e (t)</b>	<b>CO2 (t)</b>	<b>CH4 (t)</b>	<b>N2O (t)</b>	<b>HFC (t of CO2e)</b>	<b>PFC (t of CO2e)</b>	<b>NF3 (t)</b>	<b>SF6 (t)</b>
Stationary Combustion - Scope 1	1,283.189774	1,279.471553	0.113334	0.002411	0	0	0	0
Mobile Combustion - Scope 1	28.484546	28.38131	0.001225	0.000257	0	0	0	0
Fugitive - Scope 1	22.896421	0.583774	0	0.003175	21.445872	0	0	0
<b>Total</b>	<b>1,334.570741</b>	<b>1,308.436637</b>	<b>0.114559</b>	<b>0.005843</b>	<b>21.445872</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>Scope 2 - Location Based - Indirect Emissions</b>	<b>Total CO2e (t)</b>	<b>CO2 (t)</b>	<b>CH4 (t)</b>	<b>N2O (t)</b>	<b>HFC (t of CO2e)</b>	<b>PFC (t of CO2e)</b>	<b>NF3 (t)</b>	<b>SF6 (t)</b>
Purchased Electricity - Location Based - Scope 2	3,619.51436	3,613.974935	0.092698	0.011123	0	0	0	0
<b>Total</b>	<b>3,619.51436</b>	<b>3,613.974935</b>	<b>0.092698</b>	<b>0.011123</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>Scope 2 - Market Based - Indirect Emissions</b>	<b>Total CO2e (t)</b>	<b>CO2 (t)</b>	<b>CH4 (t)</b>	<b>N2O (t)</b>	<b>HFC (t of CO2e)</b>	<b>PFC (t of CO2e)</b>	<b>NF3 (t)</b>	<b>SF6 (t)</b>
Purchased Electricity - Market Based - Scope 2	597.119268	596.205429	0.015292	0.001835	0	0	0	0
<b>Total</b>	<b>597.119268</b>	<b>596.205429</b>	<b>0.015292</b>	<b>0.001835</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>Scope 3 Emissions</b>	<b>Total CO2e (t)</b>	<b>CO2 (t)</b>	<b>CH4 (t)</b>	<b>N2O (t)</b>	<b>HFC (t of CO2e)</b>	<b>PFC (t of CO2e)</b>	<b>NF3 (t)</b>	<b>SF6 (t)</b>
Business Travel - Scope 3 (Optional)	3,278.8435	3,268.1626	0.0053	0.0386	0	0	0	0
Fuel- and Energy-Related Activities - Scope 3 (Optional)	823.609078	474.297877	12.898787	0.003824	0	0	0	0

<b>Total</b>	4,102.452578	3,742.460477	12.904087	0.042424	0	0	0	0
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## Facility Emissions | Manhattanville Campus Inventory

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	8,421.45603	8,396.037366	0.741596	0.019764	0	0	0	0
Fugitive - Scope 1	30.820731	30.820731	0	0	0	0	0	0
<b>Total</b>	8,452.276761	8,426.858097	0.741596	0.019764	0	0	0	0

Scope 2 - Location Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Location Based - Scope 2	21,052.220676	21,020.000475	0.539162	0.064699	0	0	0	0
<b>Total</b>	21,052.220676	21,020.000475	0.539162	0.064699	0	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	21,052.220676	21,020.000475	0.539162	0.064699	0	0	0	0
<b>Total</b>	21,052.220676	21,020.000475	0.539162	0.064699	0	0	0	0

Scope 3 Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
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Fuel- and Energy-Related Activities - Scope 3 (Optional)	9,901.899416	4,942.721504	183.203332	0.046476	0	0	0	0
<b>Total</b>	9,901.899416	4,942.721504	183.203332	0.046476	0	0	0	0

## Facility Emissions | Morningside Campus Inventory

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	63,455.911256	63,264.557948	5.588339	0.148235	0	0	0	0
Mobile Combustion - Scope 1	227.866131	227.05863	0.009665	0.002002	0	0	0	0
Fugitive - Scope 1	2,206.460679	31.19313	0.307535	0	665.045304	234.3579	0	0.052163
<b>Total</b>	65,890.238066	63,522.809708	5.905539	0.150237	665.045304	234.3579	0	0.052163

Scope 2 - Location Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Location Based - Scope 2	65,347.128403	65,247.114991	1.673586	0.20083	0	0	0	0
Purchased Heating - Location Based - Scope 2	0	0	0	0	0	0	0	0
<b>Total</b>	65,347.128403	65,247.114991	1.673586	0.20083	0	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
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Purchased Electricity - Market Based - Scope 2	58,399.908319	58,310.527651	1.495663	0.179479	0	0	0	0
Purchased Heating - Market Based - Scope 2	0	0	0	0	0	0	0	0
<b>Total</b>	58,399.908319	58,310.527651	1.495663	0.179479	0	0	0	0

Scope 3 Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Business Travel - Scope 3 (Optional)	11,358.492	11,321.5176	0.018234	0.133634	0	0	0	0
Employee Commuting - Scope 3 (Optional)	6,475.099359	6,440.539062	0.365097	0.090486	0	0	0	0
Fuel- and Energy-Related Activities - Scope 3 (Optional)	40,046.439528	19,379.781159	763.49063	0.191983	0	0	0	0
<b>Total</b>	57,880.030887	37,141.837821	763.873961	0.416103	0	0	0	0

## Facility Emissions | NEVIS Laboratories

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	467.488978	461.716948	0.031698	0.018008	0	0	0	0
Fugitive - Scope 1	3,858.446788	0.288031	0	0.203209	0	0	0	0.156489
<b>Total</b>	4,325.935766	462.004979	0.031698	0.221217	0	0	0	0.156489

Scope 2 - Location Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Location Based - Scope 2	679.294285	678.254815	0.017397	0.002087	0	0	0	0
<b>Total</b>	679.294285	678.254815	0.017397	0.002087	0	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	679.294285	678.254815	0.017397	0.002087	0	0	0	0
<b>Total</b>	679.294285	678.254815	0.017397	0.002087	0	0	0	0

Scope 3 Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Fuel- and Energy-Related Activities - Scope 3 (Optional)	376.141092	260.418984	4.221121	0.006417	0	0	0	0
<b>Total</b>	376.141092	260.418984	4.221121	0.006417	0	0	0	0