



 **Our Kids**
 **Our Schools**
 **Our Future**
ANN ARBOR PUBLIC SCHOOLS



Greenhouse Gas Inventory Update and Environmental Sustainability Next Steps



 **Our Kids**
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Greenhouse Gas Inventory Update

Environmental Sustainability Framework

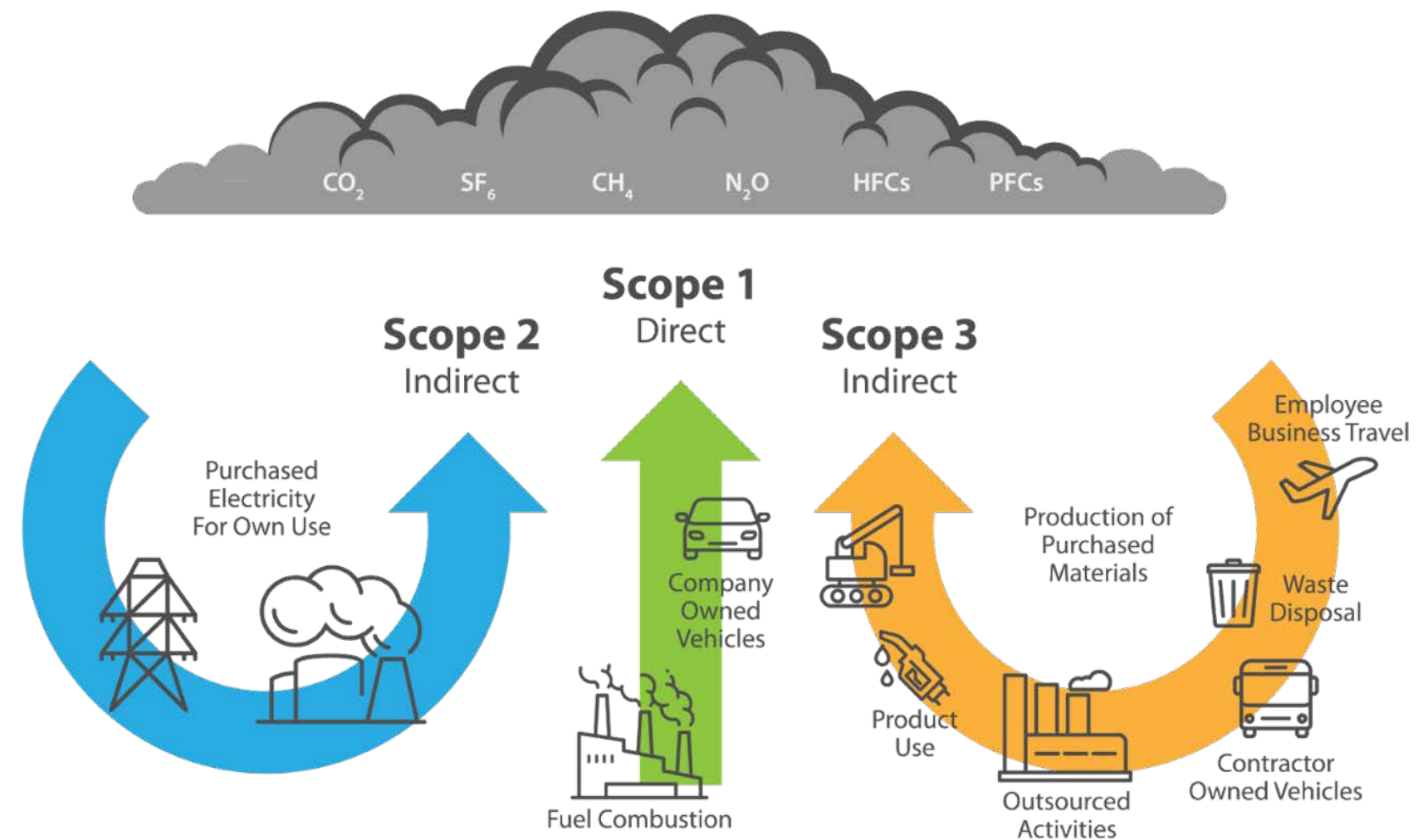
Greenhouse Gas Emissions (GHG) - Overview

AAPS accounts for less than 1% of our community's greenhouse gas (GHG) emissions. Though this is a small amount of the total emissions in Washtenaw County, the district is committed to doing what it can to be part of a carbon-neutral future.

AAPS Environmental Sustainability Framework includes important steps to reduce the district's GHG footprint. These actions are organized based on the three scopes of emissions utilized by the [Intergovernmental Panel on Climate Change](#) (IPCC) of the United Nations, major corporations, countries, and municipalities worldwide, including in the United States.

[The IPCC defines](#) Scope 1, 2 and 3 emissions as:

'Scope 1' indicates direct greenhouse gas (GHG) emissions that are from sources owned or controlled by the reporting entity. 'Scope 2' indicates indirect GHG emissions associated with the production of electricity, heat, or steam purchased by the reporting entity. 'Scope 3' indicates all other indirect emissions, i.e., emissions associated with the extraction and production of purchased materials, fuels, and services, including transport in vehicles not owned or controlled by the reporting entity, outsourced activities, waste disposal, etc. (WBCSD and WRI, 2004).



Greenhouse Gas Inventory

Components

SCOPE 1:

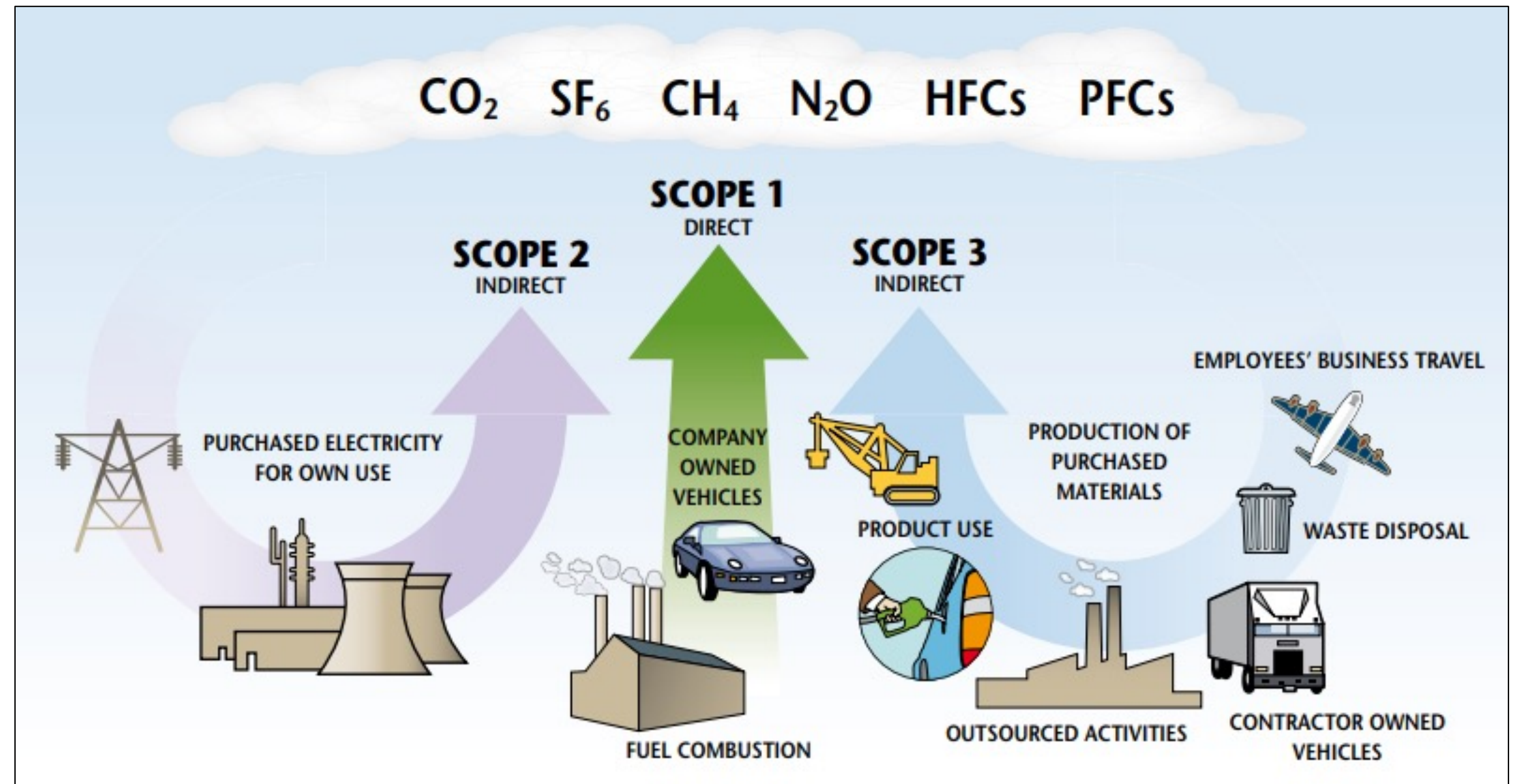
- Natural Gas Combustion
- Transportation Fuels
- Site Sequestration

SCOPE 2:

- Electricity Consumption

Scope 3:

- Water Usage



UPDATES: Greenhouse Gas Inventory (GHGI)

Please follow the links below for detailed AAPS Greenhouse Gas Inventory (GHGI) information:

[District Level GHGI \(1.46 MB Excel\)](#)

[District Level GHGI \(2.23 MB PDF\)](#)

[Elementary and K8 Schools GHGI \(2.65 MB Excel\)](#)

[Elementary and K8 Schools GHGI \(4.22 MB PDF\)](#)

[Middle Schools, High Schools, and Others GHGI \(2.82 MB Excel\)](#)

[Middle Schools, High Schools, and Others GHGI \(4.63 MB PDF\)](#)

Updates include:

- *School by School Reports*
- *Overall Emissions*
- *Emissions per Student*
- *Emissions per Square Foot*

Published on the AAPS Website here:

<https://www.a2schools.org/Page/19185>

Greenhouse Gas Inventory (GHGI)

Electricity Usage per Student

Electricity Usage per student (kWh/student)												* COVID Remote Learning	* COVID Enhanced Ventilation and New AC systems
Fiscal Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Preschool	1,177	794	959	685	930	814	874	1,078	1,092	1,216	1,233	988	1,260
Abbot Elementary	1,087	1,039	976	858	736	806	716	852	851	1,452	1,733	690	847
Allen Elementary	893	824	814	728	682	747	682	724	765	807	785	571	948
Angell Elementary	453	432	432	360	329	313	276	408	332	296	341	221	376
Bach Elementary	807	726	605	580	597	598	614	710	766	844	617	564	871
Bryant Elementary	1,538	1,218	1,186	1,134	996	1,183	1,198	1,293	1,662	1,640	1,378	1,163	1,346
Burns Park Elementary	726	706	617	540	528	615	538	558	318	427	695	490	808
Carpenter Elementary	926	860	676	661	593	613	526	583	592	593	483	382	487
Dicken Elementary	673	745	641	495	485	509	469	537	598	578	517	444	743
Freeman Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eberwhite Elementary	1,005	894	761	671	708	731	674	841	753	666	614	493	804
Haisley Elementary	709	687	602	570	602	631	608	578	660	688	547	387	528
King Elementary	964	1,001	852	694	680	717	592	712	930	968	860	733	963
Lakewood Elementary	803	760	738	652	580	583	570	672	702	682	660	558	769
Lawton Elementary	888	996	863	679	681	637	612	485	460	501	512	490	702
Logan Elementary	1,847	1,791	1,719	1,617	1,629	1,865	1,696	1,902	1,543	1,560	1,217	1,013	1,379
AA Open Elementary	1,257	1,082	1,034	964	913	1,029	998	1,192	809	430	351	60	370
Mitchell Elementary	1,019	1,109	884	704	725	735	1,171	727	647	649	661	530	606
A2 STEAM	1,028	1,091	1,011	848	1,045	617	589	624	579	464	427	405	678
Pattengill Elementary	992	982	917	808	653	735	843	885	789	982	919	748	987
Pittsfield Elementary	1,297	1,036	872	804	810	797	828	883	909	794	742	623	1,039
Thurston Elementary	814	809	827	612	608	666	533	657	764	726	640	476	850
Wines Elementary	included with Forsythe												
Clague Middle School	1,430	1,329	1,189	1,063	1,028	1,214	1,283	1,375	1,477	1,457	1,437	1,174	1,674
Forsythe Middle School	1,389	1,408	1,077	963	901	957	934	1,044	1,100	1,148	987	808	1,276
Scarlett Middle School	2,133	2,028	2,175	1,935	1,803	1,526	1,638	1,903	1,757	1,710	1,531	1,192	2,118
Slauson Middle School	1,532	1,148	1,022	906	812	883	1,007	1,085	1,145	1,136	1,024	790	1,386
Tappan Middle School	1,356	1,262	1,085	988	818	1,020	969	1,121	1,091	1,120	1,055	914	1,521
Pathways to Success	2,202	1,997	1,913	2,094	2,148	1,217	1,337	1,783	1,883	3,007	1,363	1,139	1,297
Huron High School	2,602	2,762	2,487	2,318	2,445	2,616	2,572	2,870	2,503	2,540	2,497	1,958	2,499
Pioneer High School	1,922	2,152	2,270	2,168	2,082	2,028	1,881	2,028	1,904	1,841	1,719	1,534	1,969
Community High School	680	681	666	610	499	602	482	632	538	537	503	426	933
Skyline High School	7,138	5,313	3,863	4,294	4,766	4,564	4,108	3,985	3,578	3,901	3,657	4,564	8,099
Balas Bldg	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Transportation -Main Bldg	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Greenhouse Gas Inventory (GHGI)

Natural Gas Usage per Student

Natural Gas Usage per student (CCF/student)												* COVID Remote Learning	* COVID Enhanced Ventilation
Fiscal Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Preschool	50	37	46	34	49	43	36	45	57	52	56	59	58
Abbot Elementary	74	73	53	62	88	77	76	77	74	88	74	76	80
Allen Elementary	70	79	61	74	94	73	70	77	98	99	81	76	119
Angell Elementary	104	120	100	116	114	105	66	77	78	85	86	78	167
Bach Elementary	106	78	58	58	78	86	63	54	67	73	59	69	93
Bryant Elementary	41	34	25	34	46	42	31	52	56	62	62	62	75
Burns Park Elementary	31	29	22	29	37	78	86	66	69	68	62	72	79
Carpenter Elementary	92	77	57	72	86	70	58	65	72	74	62	64	63
Dicken Elementary	54	59	39	44	59	52	56	64	69	71	62	61	114
Freeman Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eberwhite Elementary	118	117	74	89	119	118	95	98	135	117	97	101	148
Haisley Elementary	69	71	55	60	75	80	74	79	150	118	106	91	107
King Elementary	74	72	67	57	78	69	64	84	78	89	82	82	85
Lakewood Elementary	71	72	53	54	60	68	68	68	73	60	64	69	67
Lawton Elementary	47	50	42	46	55	83	51	54	57	66	74	62	69
Logan Elementary	64	44	52	48	78	49	36	53	70	67	42	45	54
AA Open Elementary	87	101	90	92	106	112	80	78	104	125	94	87	105
Mitchell Elementary	88	91	58	72	99	86	61	70	73	73	69	63	70
A2 STEAM	149	163	149	172	267	73	47	83	88	83	67	81	84
Pattengill Elementary	74	88	75	76	93	74	73	73	82	94	90	125	162
Pittsfield Elementary	133	88	55	64	92	122	69	84	100	86	81	99	135
Thurston Elementary	64	73	48	47	55	40	31	41	55	49	47	53	64
Wines Elementary	included with Forsythe												
Clague Middle School	172	140	113	144	134	93	122	97	99	123	174	131	158
Forsythe Middle School	127	128	101	110	115	99	98	112	121	141	108	110	141
Scarlett Middle School	177	171	145	165	184	151	152	178	148	158	141	139	197
Slauson Middle School	143	162	107	146	170	289	158	146	148	90	132	156	193
Tappan Middle School	125	141	112	105	149	125	100	116	147	123	121	118	143
Pathways to Success	230	248	196	226	271	138	139	146	205	330	140	139	126
Huron High School	123	122	122	149	156	150	100	117	105	91	103	98	109
Pioneer High School	122	158	148	198	215	154	134	140	154	144	134	133	148
Community High School	107	107	62	66	69	52	54	53	66	74	63	60	54
Skyline High School	31	24	17	25	23	21	21	21	20	23	27	28	43
Balas Bldg	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Transportation -Main Bldg	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Heating Degree Days	6254	6861	5466	6532	7487	7136	5814	5832	6701	6808	6307	6287	6374

Greenhouse Gas Inventory (GHGI)

Electricity Usage per Square Foot

Electricity Usage per SF (CCF/SF)												* COVID Remote Learning	* COVID Enhanced Ventilation and New AC systems
Fiscal Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Preschool	9.0	8.1	7.9	7.7	7.2	7.2	6.9	8.2	8.0	8.9	8.5	6.3	9.6
Abbot Elementary	6.1	6.2	5.5	4.8	4.4	4.6	4.0	4.8	5.1	8.3	9.7	3.8	5.2
Allen Elementary	5.2	4.9	4.8	4.2	3.9	4.4	4.0	4.5	4.6	5.1	5.2	3.7	5.4
Angell Elementary	3.8	3.5	3.4	2.9	2.6	2.8	2.6	3.7	3.0	2.8	3.3	2.0	3.0
Bach Elementary	5.3	5.3	4.4	4.3	4.0	4.1	4.2	4.8	5.3	6.0	4.8	3.9	5.6
Bryant Elementary	8.0	7.5	7.4	6.6	5.4	6.1	6.0	6.7	8.5	8.0	6.6	5.1	5.8
Burns Park Elementary	5.0	5.0	4.2	3.7	3.6	4.5	4.1	4.3	2.5	3.5	5.4	3.5	5.5
Carpenter Elementary	5.9	5.9	5.1	4.9	4.5	4.6	4.2	4.8	4.7	4.2	3.7	2.8	3.8
Dicken Elementary	5.9	6.4	5.5	4.2	4.1	4.2	3.7	4.3	4.8	4.2	3.9	3.3	5.1
Freeman Elementary	9.7	10.0	10.3	9.7	8.5	8.5	8.3	7.8	7.3	5.8	6.6	7.4	6.2
Eberwhite Elementary	5.4	5.2	4.5	3.8	3.9	3.9	3.4	4.8	4.3	4.1	3.8	2.7	5.1
Haisley Elementary	5.1	4.9	4.4	4.1	4.1	4.4	3.8	3.3	3.8	4.1	3.4	2.4	3.1
King Elementary	7.7	7.8	6.7	5.9	5.8	6.1	5.5	6.7	8.2	8.9	7.9	6.3	8.5
Lakewood Elementary	5.8	6.0	6.1	5.1	4.8	4.6	4.1	4.8	5.0	4.8	4.6	3.5	4.8
Lawton Elementary	7.0	7.1	6.1	5.2	5.0	5.1	4.9	4.1	3.9	4.5	4.6	4.1	5.5
Logan Elementary	10.7	10.4	10.2	9.0	9.5	10.5	9.0	10.4	8.2	8.7	7.4	5.7	8.2
AA Open Elementary	6.9	6.1	5.9	5.6	5.3	5.8	6.1	7.1	4.7	2.5	2.1	0.4	2.1
Mitchell Elementary	5.0	5.1	4.4	3.5	3.5	3.1	5.7	4.0	3.7	3.5	3.3	2.9	3.6
A2 STEAM	5.8	5.8	4.8	3.8	3.1	3.9	4.9	5.9	5.5	4.6	4.2	4.0	6.3
Pattengill Elementary	5.8	5.9	5.6	5.0	4.1	4.6	4.5	4.9	4.4	5.0	4.3	3.2	4.0
Pittsfield Elementary	7.1	6.3	5.4	4.7	4.6	4.7	4.9	5.4	5.6	5.2	4.9	3.8	6.2
Thurston Elementary	6.0	5.8	5.5	4.4	4.4	4.8	4.2	5.0	6.0	5.9	5.0	3.6	6.2
Wines Elementary	included with Forsythe												
Clague Middle School	6.7	6.1	5.8	5.0	4.7	5.2	5.3	6.1	6.2	6.3	6.2	5.3	7.4
Forsythe Middle School	6.2	6.4	5.1	4.5	4.3	4.5	4.5	5.0	5.3	5.4	4.6	3.4	5.1
Scarlett Middle School	7.1	7.1	6.9	6.0	5.4	5.2	5.8	6.7	6.7	6.6	6.0	4.4	7.9
Slauson Middle School	5.8	4.4	4.1	3.6	3.3	3.6	4.1	4.6	4.7	4.3	3.7	2.9	5.1
Tappan Middle School	4.5	4.2	3.7	3.5	2.8	3.5	3.4	4.0	3.9	4.0	3.6	3.2	4.7
Pathways to Success	7.6	6.9	6.3	6.4	5.9	6.4	6.1	7.2	7.0	7.4	6.7	5.4	7.6
Huron High School	11.4	11.1	9.8	9.2	9.1	9.7	9.5	10.9	10.1	10.8	10.1	7.8	10.1
Pioneer High School	10.8	10.2	9.1	8.8	8.4	8.4	8.1	8.9	8.6	8.9	8.3	7.4	9.2
Community High School	5.6	5.7	5.5	5.0	4.2	4.9	4.4	5.8	4.9	4.9	4.6	3.8	8.3
Skyline High School	16.3	17.1	15.5	16.9	18.3	17.4	15.8	15.7	13.9	14.9	13.4	16.6	28.2
Balas Bldg	22.2	22.4	21.6	19.5	16.1	16.0	15.2	16.0	15.8	16.3	14.7	13.1	14.1
Transportation -Main Bldg	15.4	19.8	14.3	11.6	16.3	15.4	11.8	13.4	12.6	9.8	8.9	8.2	10.5

Greenhouse Gas Inventory (GHGI)

Natural Gas Usage per Square Foot

Natural Gas Usage per SF (CCF/SF)												* COVID Remote Learning	* COVID Enhanced Ventilation
Fiscal Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Preschool	0.38	0.38	0.38	0.38	0.38	0.38	0.28	0.34	0.41	0.38	0.39	0.38	0.44
Abbot Elementary	0.41	0.44	0.30	0.35	0.53	0.44	0.42	0.44	0.44	0.50	0.42	0.41	0.49
Allen Elementary	0.41	0.47	0.36	0.43	0.53	0.44	0.41	0.47	0.59	0.63	0.54	0.50	0.68
Angell Elementary	0.87	0.96	0.79	0.93	0.89	0.92	0.61	0.70	0.71	0.81	0.83	0.70	1.34
Bach Elementary	0.69	0.57	0.43	0.43	0.52	0.58	0.43	0.37	0.47	0.52	0.45	0.48	0.60
Bryant Elementary	0.21	0.21	0.16	0.20	0.25	0.22	0.16	0.27	0.28	0.30	0.30	0.27	0.33
Burns Park Elementary	0.21	0.20	0.15	0.19	0.25	0.57	0.67	0.50	0.55	0.55	0.48	0.51	0.54
Carpenter Elementary	0.58	0.53	0.43	0.53	0.64	0.52	0.46	0.54	0.57	0.53	0.48	0.47	0.50
Dicken Elementary	0.48	0.51	0.33	0.37	0.49	0.43	0.44	0.51	0.55	0.52	0.47	0.45	0.78
Freeman Elementary	0.66	0.68	0.55	0.59	0.60	0.61	0.56	0.56	0.84	0.69	0.66	0.62	0.72
Eberwhite Elementary	0.64	0.68	0.44	0.50	0.65	0.63	0.49	0.56	0.76	0.72	0.61	0.55	0.93
Haisley Elementary	0.50	0.51	0.40	0.43	0.52	0.56	0.47	0.45	0.87	0.70	0.66	0.55	0.62
King Elementary	0.59	0.56	0.53	0.49	0.67	0.58	0.59	0.80	0.69	0.82	0.75	0.70	0.75
Lakewood Elementary	0.51	0.57	0.43	0.42	0.50	0.54	0.49	0.49	0.51	0.42	0.44	0.43	0.42
Lawton Elementary	0.37	0.36	0.30	0.36	0.40	0.67	0.41	0.45	0.49	0.58	0.67	0.52	0.54
Logan Elementary	0.37	0.26	0.31	0.27	0.45	0.28	0.19	0.29	0.37	0.38	0.25	0.26	0.32
AA Open Elementary	0.48	0.57	0.51	0.53	0.61	0.63	0.49	0.46	0.61	0.74	0.55	0.52	0.61
Mitchell Elementary	0.43	0.42	0.29	0.35	0.48	0.36	0.29	0.38	0.42	0.40	0.35	0.35	0.42
A2 STEAM	0.85	0.87	0.71	0.77	0.79	0.46	0.39	0.78	0.83	0.82	0.66	0.80	0.78
Pattengill Elementary	0.43	0.52	0.46	0.47	0.59	0.46	0.39	0.41	0.46	0.48	0.42	0.54	0.66
Pittsfield Elementary	0.73	0.53	0.34	0.38	0.53	0.73	0.41	0.52	0.62	0.57	0.54	0.61	0.81
Thurston Elementary	0.47	0.52	0.32	0.34	0.40	0.29	0.25	0.31	0.43	0.39	0.37	0.40	0.47
Wines Elementary	included with Forsythe												
Clague Middle School	0.80	0.65	0.55	0.68	0.61	0.40	0.50	0.43	0.42	0.53	0.75	0.59	0.70
Forsythe Middle School	0.57	0.58	0.48	0.51	0.55	0.47	0.47	0.54	0.59	0.66	0.50	0.46	0.56
Scarlett Middle School	0.59	0.60	0.46	0.51	0.55	0.52	0.54	0.63	0.56	0.61	0.55	0.51	0.73
Slauson Middle School	0.54	0.62	0.43	0.59	0.69	1.17	0.65	0.61	0.60	0.34	0.48	0.57	0.71
Tappan Middle School	0.42	0.47	0.38	0.37	0.51	0.43	0.35	0.42	0.53	0.44	0.42	0.41	0.44
Pathways to Success	0.80	0.85	0.65	0.69	0.75	0.73	0.63	0.59	0.76	0.82	0.69	0.66	0.74
Huron High School	0.54	0.49	0.48	0.59	0.58	0.56	0.37	0.44	0.42	0.38	0.41	0.39	0.44
Pioneer High School	0.68	0.75	0.59	0.81	0.86	0.64	0.58	0.61	0.69	0.70	0.65	0.64	0.69
Community High School	0.89	0.90	0.51	0.53	0.57	0.43	0.49	0.49	0.60	0.68	0.57	0.54	0.48
Skyline High School	0.07	0.08	0.07	0.10	0.09	0.08	0.08	0.08	0.08	0.09	0.10	0.10	0.15
Balas Bldg	0.34	0.42	0.22	0.38	0.48	0.45	0.38	0.42	0.46	0.53	0.44	0.40	0.45
Transportation -Main Bldg	0.85	0.90	0.67	0.84	1.10	0.88	0.62	0.62	0.71	0.80	0.67	0.63	0.69
Heating Degree Days	6254	6861	5466	6532	7487	7136	5814	5832	6701	6808	6307	6287	6374

Greenhouse Gas Inventory (GHGI)


Sample School Report

Fiscal Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021*	2022**
Square Feet	53,800	53,800	53,800	53,800	53,800	53,800	53,800	53,800	53,800	53,800	53,800	53,800	53,800
Student Enrollment	312	322	329	330	340	334	285	298	302	276	253	232	220
CO2 Sequestration (tons)***	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5
ELECTRICITY													
kWh	309,437	316,179	301,820	266,571	221,953	245,416	240,160	263,646	238,413	271,168	232,415	173,620	217,232
kWh/SF	5.75	5.88	5.61	4.95	4.13	4.56	4.46	4.90	4.43	5.04	4.32	3.23	4.04
kWh/student	992	982	917	808	653	735	843	885	789	982	919	748	987
MT CO2eq	238	240	225	210	163	178	171	179	163	187	151	91	131
NATURAL GAS													
CCF	23,126	28,203	24,645	25,227	31,623	24,667	20,865	21,791	24,614	26,022	22,666	29,048	35,607
CCF/SF	0.43	0.52	0.46	0.47	0.59	0.46	0.39	0.41	0.46	0.48	0.42	0.54	0.66
CCF/student	74	88	75	76	93	74	73	73	82	94	90	125	162
MT CO2eq	155	189	165	169	212	166	140	146	165	175	152	195	239
WATER													
kgal	428	263	209	185	276	383	300	319	313	217	209	113	305
kgal/ SF	0.0080	0.0049	0.0039	0.0034	0.0051	0.0071	0.0056	0.0059	0.0058	0.0040	0.0039	0.0021	0.0057
kgal/student	1.371	0.818	0.635	0.560	0.811	1.147	1.054	1.070	1.037	0.786	0.827	0.487	1.388
MT CO2eq	1.360	0.837	0.664	0.587	0.877	1.218	0.955	1.014	0.996	0.689	0.665	0.359	0.971
SOLAR													
kWh												80,750	115,425
kWh/1000 SF												1.5	2.1
kWh/student												348	525
MT CO2eq avoidance****												-43	-69
TOTAL METRIC TONS OF CO2 EQUIVALENT EMISSIONS													
Total MT CO2eq	387	423	384	372	369	337	305	318	321	355	296	279	363
MT CO2eq/SF	0.0072	0.0079	0.0071	0.0069	0.0069	0.0063	0.0057	0.0059	0.0060	0.0066	0.0055	0.0052	0.0068
MT CO2eq/student	1.24	1.31	1.17	1.13	1.09	1.01	1.07	1.07	1.06	1.29	1.17	1.20	1.65
Abbreviations						Notes:							
MT CO2eq	kWh	SF	CCF	kgal	MG	* COVID Remote Learning							
Metric Tons of Carbon Dioxide Equivalent Emissions	Kilowatt-hour	Square Feet	100 Cubic Feet	Kilogallon	Million Gallons	** COVID Enhanced Ventilation							
						*** CO2 Sequestration occurs when CO2 is removed from the atmosphere by trees, grasses, ponds, and other processes.							
						****Not included in Total MT CO2eq							



Greenhouse Gas Inventory (GHGI)

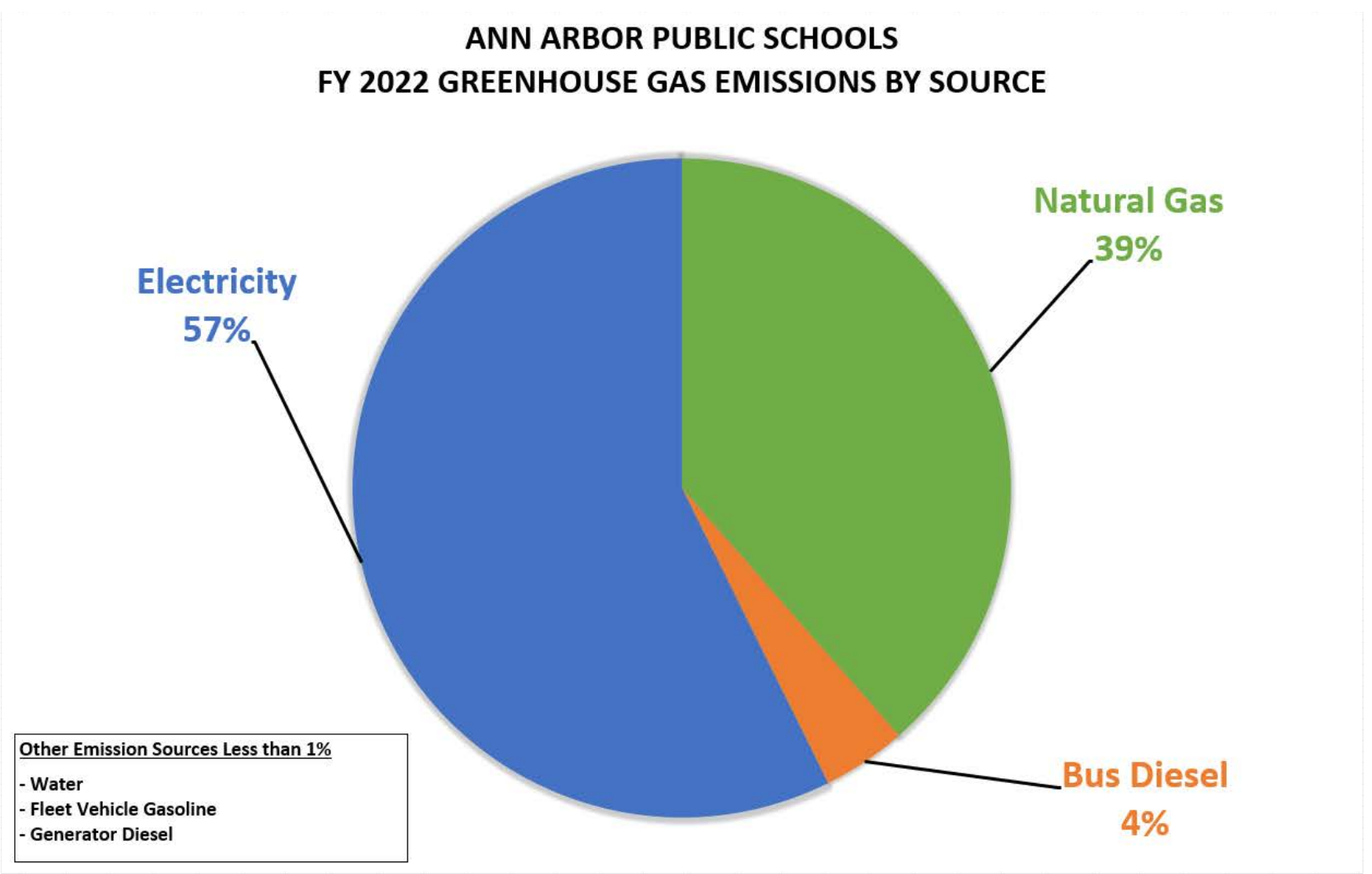
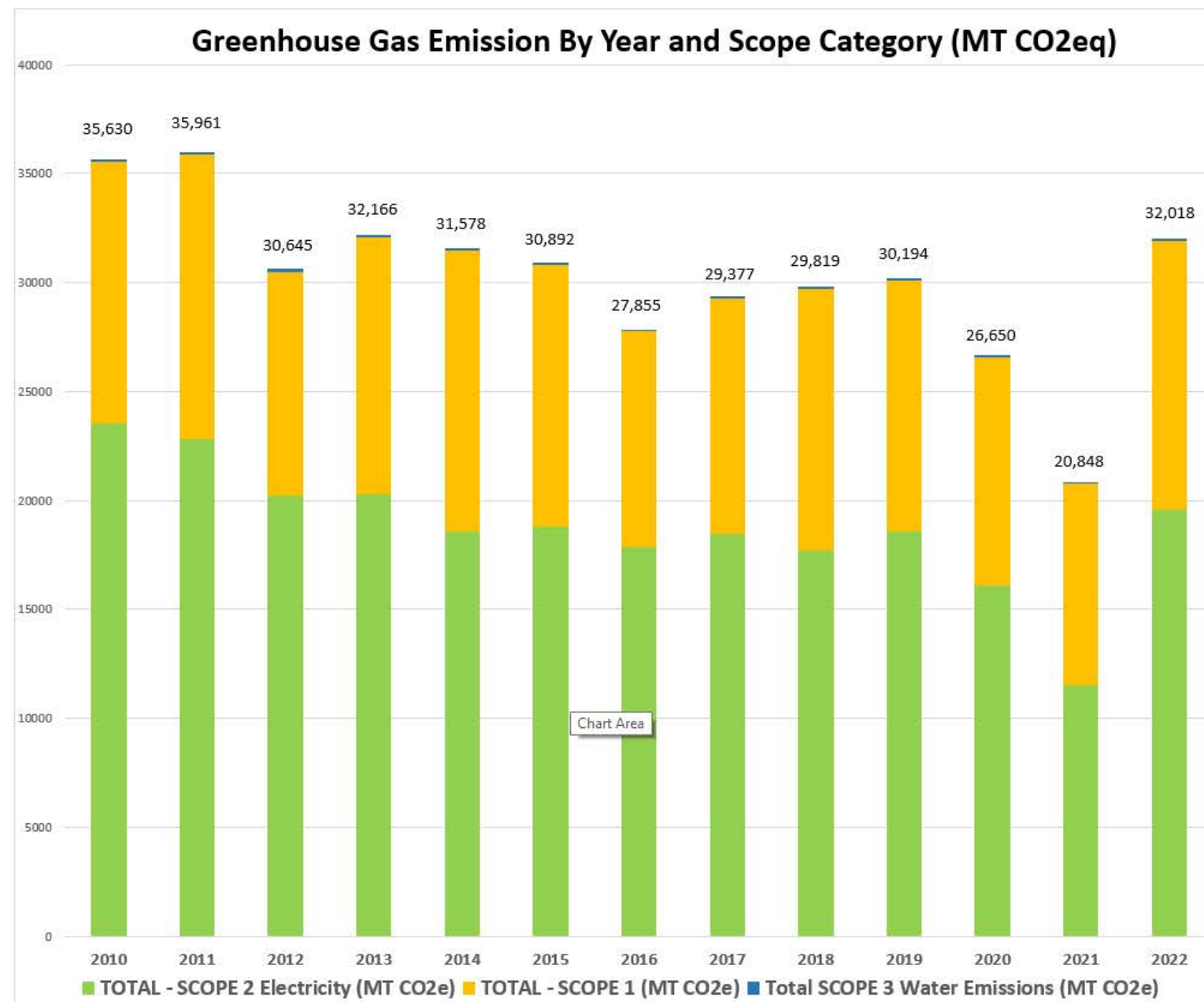
Sample School Report

Fiscal Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021*	2022**
Pioneer High School													
Greenhouse Gas Inventory													
A Greenhouse Gas Inventory (GHGI) is a report that quantifies the amount of direct and indirect greenhouse gas emissions produced by an organization. This document captures an individual AAPS school's electricity, natural gas, and water data to calculate the school's carbon emissions.													
Square Feet	404,692	404,692	404,692	404,692	404,692	404,692	404,692	404,692	404,692	404,692	404,692	404,692	404,692
Student Enrollment	2,269	1,910	1,620	1,651	1,627	1,673	1,749	1,775	1,822	1,960	1,948	1,947	1,881
CO2 Sequestration (tons)***	-599.0	-599.0	-599.0	-599.0	-599.0	-599.0	-599.0	-599.0	-599.0	-599.0	-599.0	-599.0	-599.0
ELECTRICITY													
kWh	4,361,037	4,109,455	3,676,982	3,579,709	3,387,017	3,392,779	3,290,610	3,599,904	3,468,410	3,608,318	3,348,082	2,987,083	3,703,845
kWh/SF	10.78	10.15	9.09	8.85	8.37	8.38	8.13	8.90	8.57	8.92	8.27	7.38	9.15
kWh/student	1,922	2,152	2,270	2,168	2,082	2,028	1,881	2,028	1,904	1,841	1,719	1,534	1,969
MT CO2eq	3,354	3,119	2,743	2,814	2,493	2,463	2,349	2,441	2,365	2,493	2,173	1,574	2,230
NATURAL GAS													
CCF	276,824	302,378	239,769	326,356	349,187	258,367	235,005	247,745	280,786	281,330	261,545	258,623	278,683
CCF/SF	0.68	0.75	0.59	0.81	0.86	0.64	0.58	0.61	0.69	0.70	0.65	0.64	0.69
CCF/student	122	158	148	198	215	154	134	140	154	144	134	133	148
MT CO2eq	1,858	2,029	1,609	2,190	2,343	1,734	1,577	1,662	1,884	1,888	1,755	1,735	1,870
WATER													
kgal	3885	7747	10353	5105	4116	4802	3826	4125	5751	4711	3557	1258	1346
kgal/ SF	0.0096	0.0191	0.0256	0.0126	0.0102	0.0119	0.0095	0.0102	0.0142	0.0116	0.0088	0.0031	0.0033
kgal/student	1.712	4.056	6.390	3.092	2.530	2.870	2.188	2.324	3.156	2.404	1.826	0.646	0.716
MT CO2eq	12.349	24.628	32.911	16.228	13.085	15.266	12.163	13.112	18.282	14.977	11.307	4.000	4.279
TOTAL METRIC TONS OF CO2 EQUIVALENT EMISSIONS													
Total MT CO2eq	4,625	4,574	3,786	4,421	4,250	3,613	3,340	3,517	3,669	3,797	3,340	2,715	3,505
MT CO2eq/SF	0.0114	0.0113	0.0094	0.0109	0.0105	0.0089	0.0083	0.0087	0.0091	0.0094	0.0083	0.0067	0.0087
MT CO2eq/student	2.04	2.39	2.34	2.68	2.61	2.16	1.91	1.98	2.01	1.94	1.71	1.39	1.86
Abbreviations						Notes:							
MT CO2eq	kWh	SF	CCF	kgal	MG	* COVID Remote Learning							
						** COVID Enhanced Ventilation							
Metric Tons of Carbon Dioxide Equivalent Emissions	Kilowatt-hour	Square Feet	100 Cubic Feet	Kilogallon	Million Gallons	*** CO2 Sequestration occurs when CO2 is removed from the atmosphere by trees, grasses, ponds, and other processes.							

Fiscal Year 2022 Greenhouse Gas Inventory – SCOPE 1+2+3

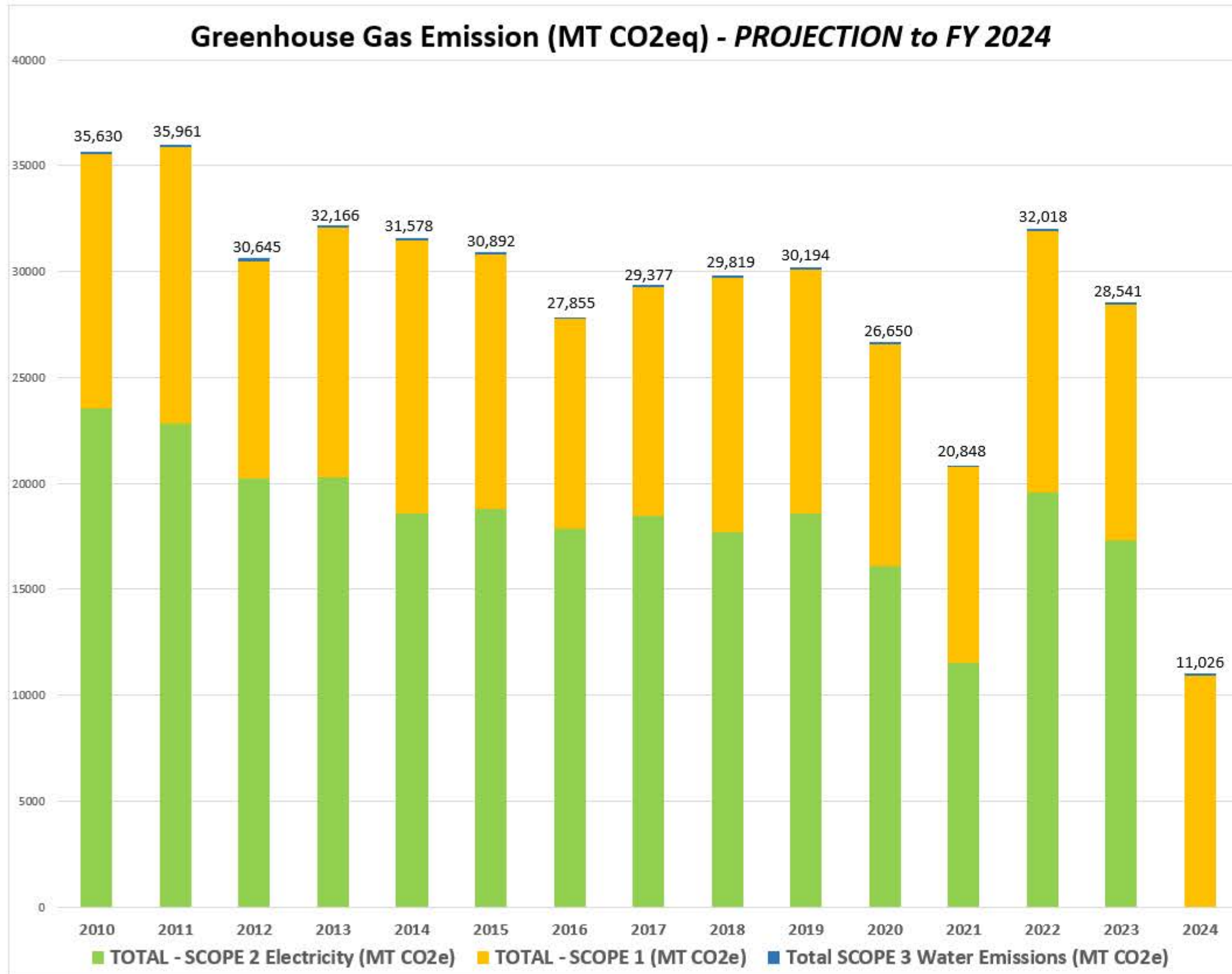
TOTALS

SCOPE 1+2+3	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022 vs. 2010
Fiscal Year	Baseline													
TOTAL - SCOPE 1+2+3 (MT CO2e)	35,630	35,961	30,646	32,167	31,579	30,893	27,855	29,378	29,819	30,194	26,650	20,848	32,018	89.86%
Per Student (MT CO2e/student)	2.17	2.17	1.84	1.93	1.92	1.84	1.63	1.68	1.69	1.70	1.50	1.20	1.88	86.53%
Per 1000 SF (MT CO2e/1000 SF)	10.15	10.25	8.73	9.17	8.96	8.77	7.90	8.34	8.42	8.46	7.47	5.84	8.97	88.36%



Greenhouse Gas Emissions

Projection to Fiscal Year 2024



Green Power Purchase and AAPS Owned Solar will eliminate Scope 2 Electricity Emissions by FY 2024

Overall GHG Emissions will be reduced by ~60%!



 **Our Kids**
 **Our Schools**
 **Our Future**
ANN ARBOR PUBLIC SCHOOLS



Environmental Sustainability Next Steps

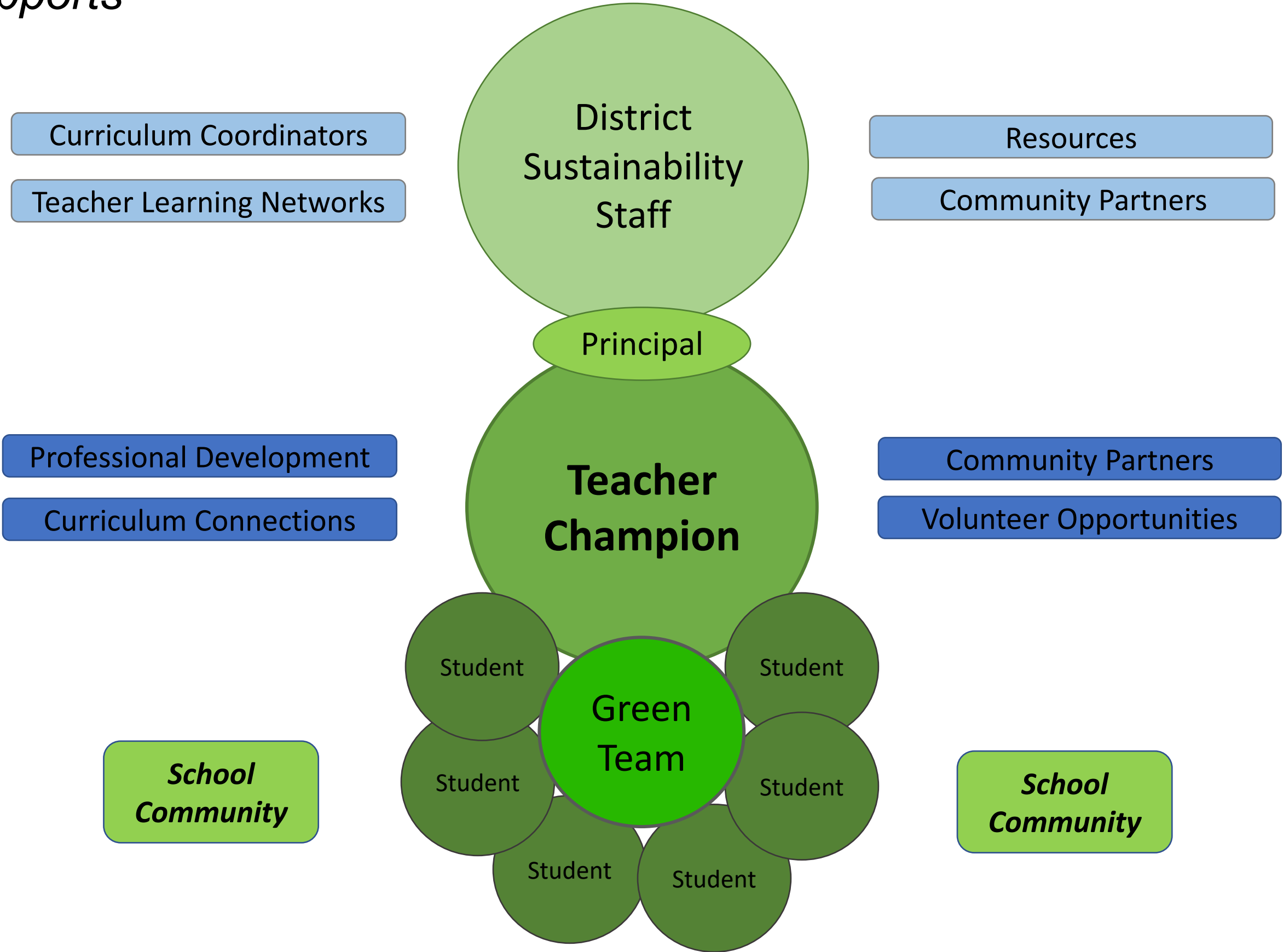
Environmental Sustainability

Next Steps and Opportunities

- Reuse, Recycling, and Composting
- School Action Mini-Grant Program
- Outdoor and Nature Learning
- Annual Greenhouse Gas Emissions Reporting
- AAPS Environmental Sustainability Advisory Group
- National, State, and Local Networks and Resources
- AmeriCorps VISTA Partnership
- Federal, State, and Local Incentives
- Bond Program Commitments
- *AAPS Go Green Challenge*

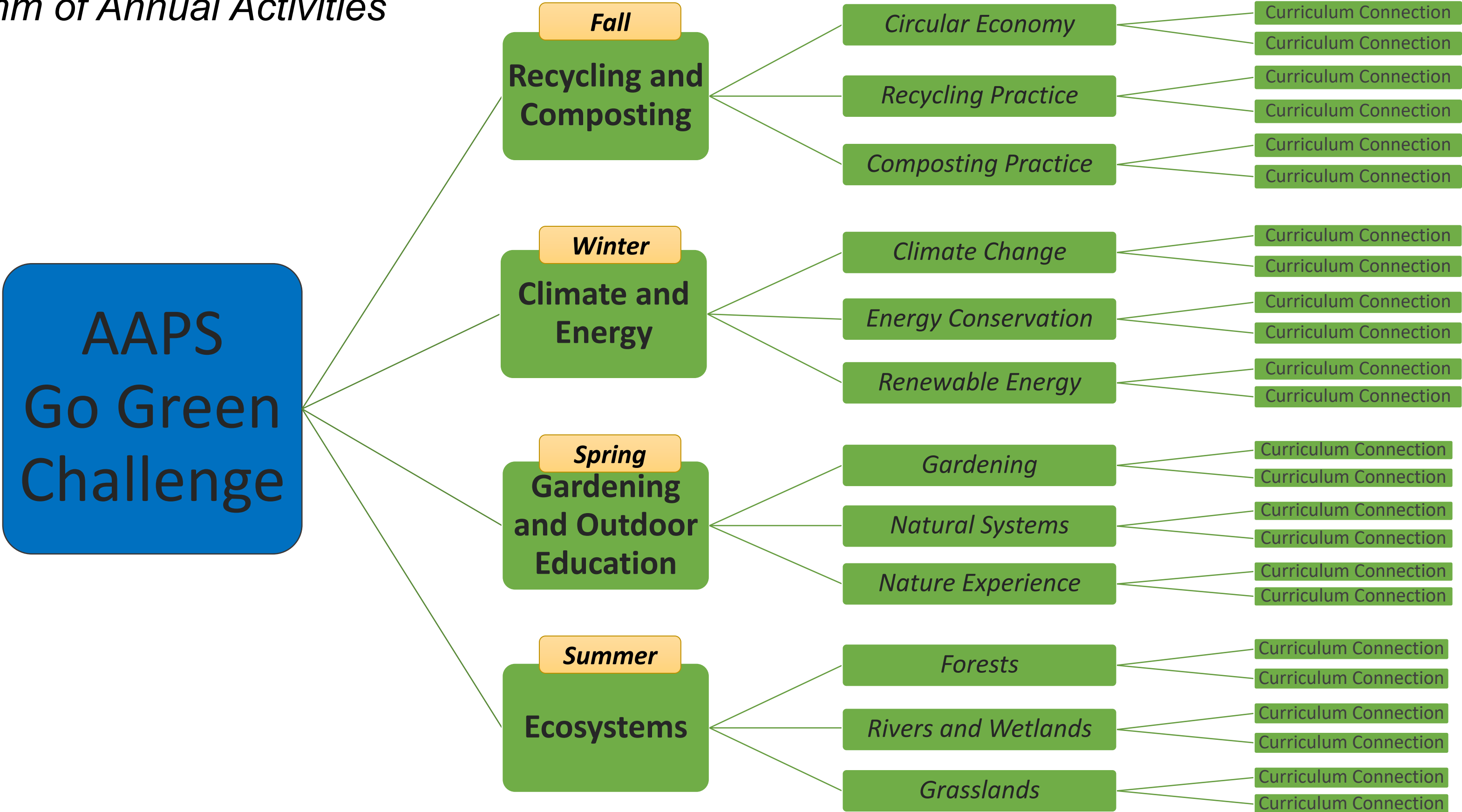
AAPS Green Teams

Structure and Supports



AAPS Green Teams

Rhythm of Annual Activities



THANK YOU!

People



Systems



Ecology

