Austin College
2021 Climate Action Plan

During 2008, former Austin College President Oscar Page signed the American College and University Presidents' Climate Commitment (now the Carbon Commitment). The college's initial climate action plan was prepared in 2010 and updated in 2016. This 2021 plan updates the 2016 plan with more specification about intended means of achieving goals.

The history of greenhouse gas reduction and other environmental impact reduction efforts at Austin College is described in the Austin College Environmental Sustainability Plan (AC Sustainability Plan). The college has reduced its greenhouse gas emissions by nearly 60 percent since 2008, from some 14,000 metric tons of CO_2-equivalent per year (MT CO_2eq/yr) to less than 6,000 MT CO_2eq/yr (https://unhsimap.org/public/institution/648).

2021 Plan

- Carbon neutrality target date: 2035 (as previously specified in our 2016 plan)
- Continued acquisition of third-party-certified renewable energy certificates (RECs) equivalent to campus electricity consumption
- Incremental increases in purchases of carbon offsets beginning in fiscal year 2025 according to the schedule in Table 1, with continued purchases of offsets equal to campus greenhouse gas emissions during 2034 and thereafter

Table 1: Percentage of greenhouse gas emissions to be offset.

Fiscal year	Offset purchase = X% of same FY's net GHG emissions [after accounting for renewable energy credit (REC) purchases]
2025	10%
2026	20%
2027	30%
2028	40%
2029	50%
2030	60%
2031	70%
2032	80%
2033	90%
2034	100%

Between now and the initiation of offset purchases in FY 2025, we will:

- Seek further incremental energy and other resource efficiency improvements. When feasible, these efforts will be funded by various Center for Environmental Studies endowed funds and/or the college's Student Sustainability Fund.
- Develop and implement mechanisms for raising new donations to cover offset purchase costs.
- Encourage those traveling abroad to purchase offsets for the greenhouse gas emissions attributable to air travel, including encouraging faculty planning January terms or other work or study abroad to encourage their students to fund voluntary purchases of offsets associated with that travel.
- Develop a better means of tracking college-associated air travel and offsets purchased for that travel. We have precise data and efficient record keeping for group travel (e.g. sports competitions, January term study abroad courses) but inefficient, unwieldy, and therefore potentially inaccurate and imprecise means of tallying other air travel.
- Continue to educate the campus community about opportunities for and benefits of avoiding resource waste, including energy waste, including the following ongoing activities: course assignments focused on reducing campus environmental impacts, an environmental seminar series, an annual campus-wide energy saving contest, an annual green service day, continual campus education regarding recycling and other opportunities to reduce environmental impacts, etc.

Estimated future costs of college carbon offset purchases

Any estimate of future offset purchase costs requires two important assumptions: the future price of offsets and future campus greenhouse gas emissions.

Assuming offset prices of $20 per ton[1] and no net reduction (or increase) in college greenhouse gas emissions, the schedule of projected carbon offset purchases in Table 1 would require the expenditures projected in Table 2, and thus equivalent fundraising for this purpose.

Note that if the US follows many other countries and imposes a carbon tax, we will either pay for carbon offsets or pay a tax on carbon consumption. If any such tax is higher than the price of

[1] Holder, E. GreenBiz, Carbon offset prices set to increase ten-fold by 2030, https://www.greenbiz.com/article/carbon-offset-prices-set-increase-tenfold-2030. This document states that voluntary offsets can presently be purchased for 3-5 dollars per ton, but that the price is expected to increase soon and substantially due to increase in demand.

World Bank Group, State and Trends of Carbon Pricing 2020, https://openknowledge.worldbank.org/bitstream/handle/10986/33809/9781464815867.pdf?sequence=4&isAllowed=y. This document shows a range of carbon *tax* rates imposed to date in various countries. $20 per ton of emissions was roughly the median value in 2020.

offsets, then offsets would represent a savings compared to paying the tax (though we may lack a means of avoiding the tax, depending how taxes are imposed). European carbon taxes as of 2020 were higher than US carbon offset prices — see World Bank reference at footnote 1.

Table 2: Projected offset purchases, costs, and remaining net greenhouse gas emissions.

Fiscal year	Projected emissions after accounting for REC purchases (MT CO2eq) [2]	Planned number of offsets to purchase	Assumed carbon offset price per metric ton of emissions	Projected offset purchase cost	Net remaining greenhouse gas emissions (MT CO2eq)
2025	6000	600	$20	$12,000	5400
2026	6000	1200	$20	$24,000	4800
2027	6000	1800	$20	$36,000	4200
2028	6000	2400	$20	$48,000	3600
2029	6000	3000	$20	$60,000	3000
2030	6000	3600	$20	$72,000	2400
2031	6000	4200	$20	$84,000	1800
2032	6000	4800	$20	$96,000	1200
2033	6000	5400	$20	$108,000	600
2034	6000	6000	$20	$120,000	0

These projections assume no net change in campus greenhouse gas emissions and a carbon offset price of $20 US dollars per MT CO_2eq. Further improvements in campus energy efficiency or other reductions in resource consumption (as the college has achieved since 2008), would reduce the required number of offsets, in which case costs will be less than projected if the assumed cost per offset is correct.

---- End of 2021 Climate Action Plan ----

[2] College FY 2020 net greenhouse gas emissions were 5817.5 MT CO2eq, https://reporting.secondnature.org/institution/detail!3759##3759.