September 2022

Subject: **Initial Report of the Zero Carbon Subcommittee of the Faculty Senate Environment Committee for the 2022-2023 UMaine Academic Year**

**Background:**

In the 2021-2022 academic year, the *Zero Carbon Commitment Subcommittee* of the Faculty Senate *Environment Committee* prepared a whitepaper exploring how best to achieve the long-standing University of Maine Commitment to Zero Carbon Emissions by 2040. Extensive campus community involvement and comments resulted in numerous revisions, expansions and improvements to the whitepaper. The last 2021/2022 iteration of the [whitepaper](https://umaine.edu/facultysenate/whitepaperonumainecarbonemissions28april2022/) led to the development of a campus-wide survey titled ***UMaine Campus Actions to Address Climate Change***. That survey was distributed in May 2022 by the [UMaine Faculty Senate Zero Carbon Commitment Subcommittee](https://umaine.edu/facultysenate/committees/environment-committee/#V), [UMaine Faculty Senate Environment Committee](https://umaine.edu/facultysenate/committees/environment-committee/#IV), [UMaine Graduate Student Government Senate](https://umaine.edu/gsg/directory/), and the [Sustainability and Environmental Action Division](https://umaine.edu/umsg/organization/sead/) (SEAD) of [UMaine Student Government](https://umaine.edu/umsg/)

Section I below contains the email sent out to all students, staff and faculty in the campus community. Over one thousand members of the UMaine campus community either partially or fully completed the survey.

Section II below provides summary responses to the 17 substantive questions on the survey. More specific statistics on each of these questions, responses to some background questions, and responses to an final open comment question may be found at the [UMaine Faculty Senate Zero Carbon Commitment Subcommittee](https://umaine.edu/facultysenate/committees/environment-committee/#V) website or directly at [Findings from the May 2022 Climate Change Actions Survey](https://umaine.edu/facultysenate/umaine-climate-change-survey-responses-qualtrix-default-report/) (Default Qualtrics Report Format).

The subcommittee and full Environment Committee will review all of the detailed community responses prior to developing a set of motions for consideration by the full Faculty Senate and subsequent forwarding to the campus administration. This is a first major task of the subcommittee for 2022/2023 with several follow-up actions to be planned and initiated.

**Section I.** EMAIL SENT TO POTENTIAL RESPONDENTS IN MAY 2022

**Subject: Campus Climate Change Survey**

Dear Campus Community Member,

We invite you to complete a survey to help the campus move forward in meeting the challenges of climate change.

* The survey takes about 10 minutes.
* It consists of 20 questions. We recommend that you do it in one quick sitting.

**Follow this link to the Survey:**

${l://SurveyLink?d=Take the Survey}

Or copy and paste the URL below into your internet browser:
${l://SurveyURL}

**Please complete the survey on or before Wednesday May 18.**

ANONYMITY: Your survey responses are completely anonymous. The response database and the participation database are not linked and will not be linked. Your survey responses are completely anonymous unless you expressly identify yourself in a text entry question.

Optional resources:

* Technical terms are defined and linked to a [Technical Glossary](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/), which you may also read in advance.
* We also recommend you read the Zero Carbon Commitment [whitepaper](https://umaine.edu/facultysenate/whitepaperonumainecarbonemissions28april2022/) before taking the survey.

Your response may influence University of Maine environmental and energy priorities in the future.

Thank you so much for contributing.

Best regards,

[UMaine Faculty Senate Zero Carbon Commitment Subcommittee](https://umaine.edu/facultysenate/committees/environment-committee/#V)
[UMaine Faculty Senate Environment Committee](https://umaine.edu/facultysenate/committees/environment-committee/#IV)
[UMaine Graduate Student Government Senate](https://umaine.edu/gsg/directory/)
[Sustainability and Environmental Action Division](https://umaine.edu/umsg/organization/sead/) (SEAD) of [UMaine Student Government](https://umaine.edu/umsg/)

Contact for questions: harlan.onsrud@maine.edu

Follow the link to opt out of future emails:
${l://OptOutLink?d=Click here to unsubscribe}

**Section II.** SURVEY QUESTIONS AND RESPONSE SUMMARIES

**UMAINE CAMPUS ACTIONS TO ADDRESS CLIMATE CHANGE**

Please respond to the following questions to help articulate the desires and priorities of the campus community relative to a selected range of environmental issues. [Links](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/) in questions open in separate web tabs.

**(1) Supporting Campus Actions Responsive to Climate Science Findings:**

The University of Maine should make renewable energy infrastructure a high funding priority to reduce greenhouse gas emissions in furtherance of the findings and recommendations related to global warming published by the [Intergovernmental Panel on Climate Change (IPCC)](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#ipcc).

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 86 % |
| No Opinion | 7 % |
| Disagree or Strongly Disagree | 7 % |

**(2) Building a Campus-wide Societal Problem-Solving Reputation:**

The University of Maine should strive to become a destination campus for students from across the state, nation and the globe who want to make a difference in solving societal problems.

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 86 % |
| No Opinion | 8 % |
| Disagree or Strongly Disagree | 6 % |

<If response is ***strongly agree*** or ***agree***, the following question appears.>

(2a) In which societal issues might you be most interested in addressing through coursework, projects, or research at the University of Maine?

<See full [Survey Report](https://umaine.edu/facultysenate/umaine-climate-change-survey-responses-qualtrix-default-report/) for individual responses>

**(3) Building a Campus-wide Sustainability Reputation:**

The University of Maine should strive to become a magnet for students, researchers, educators, and industry partners who are interested in working from diverse disciplinary perspectives to address the technological, social, economic, and environmental challenges of climate change and sustainability.

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 91 % |
| No Opinion | 5 % |
| Disagree or Strongly Disagree | 4 % |

**(4) Staying the Course in Achieving the**[**UMaine Zero Carbon Emission Commitment**](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#zcec)**:**

The University of Maine should abide by its 2007 widely publicized and annually confirmed long-term commitment to achieve [net-zero carbon emissions](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#nzce) by 2040.

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 87 % |
| No Opinion | 7 % |
| Disagree or Strongly Disagree | 6 % |

**(5) Ensuring Annual Progress:**

The University should decrease [greenhouse gas emissions](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#gge) each and every year at a rate consistent with the required annual minimum or greater to achieve the [2040 commitment](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#zcec) or should expend the funds for [carbon sequestering](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#cs) or [carbon offsets](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#coff) to achieve yearly targets.

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 83 % |
| No Opinion | 8 % |
| Disagree or Strongly Disagree | 9 % |

**(6) No Expansion of Campus**[**Greenhouse Gas Emissions**](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#gge)**- Building Design and Cost:**

New campus construction and renovation projects should not cause expansion of the net campus [carbon footprint](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#cf) during either construction or long-term operation of the new or rebuilt facilities.

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 79 % |
| No Opinion | 11 % |
| Disagree or Strongly Disagree | 10 % |

**(7) No Expansion of Campus**[**Greenhouse Gas Emissions**](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#gge)**- State and Federal Matching Funds:**

The University of Maine administration and the UMS Board of Trustees should not seek or approve the use of any state or federal funds for any new construction or reconstruction that would expand the University of Maine [net](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#nzce) [carbon footprint](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#cf).

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 68 % |
| No Opinion | 17 % |
| Disagree or Strongly Disagree | 15 % |

**(8) Decreasing the Campus Carbon Footprint:**

Decreasing the [carbon footprint](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#cf) of the campus should be made a design and funding requirement of each and every campus building and infrastructure project.

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 81 % |
| No Opinion | 9 % |
| Disagree or Strongly Disagree | 10 % |

**(9) Preference for Non-Combustion**[**Zero Carbon Energy Sources**](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#zces)**:**

The University of Maine should prioritize its clean energy infrastructure core spending on long-term solutions (e.g., heating and electricity powered by wind, solar, hydro, and other non-combustion near-zero carbon energy sources) over a combustion-based wood [renewable biofuels](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#nzce) solution that would continue to emit pollutants and greenhouse gases on campus.

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 79 % |
| No Opinion | 11 % |
| Disagree or Strongly Disagree | 10 % |

**(10) Building Conversions to Enable Primary Use of Wind, Solar, and Other Non-combustion**[**Zero Carbon Energy Sources**](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#zces)**:**

The highest funding priority for the university in the future should be for electrification of existing university buildings to allow their use of wind, solar, hydro, and other non-combustion near-zero carbon energy sources to supply both their heat and electricity, regardless of whether the university pursues primarily a biofuels heating solution with currently available funding.

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 74 % |
| No Opinion | 13 % |
| Disagree or Strongly Disagree | 13 % |

**(11) Banning Addition of Any**[**Fossil Fuel**](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#ff)**Connections:**

The University of Maine should not install fossil fuel connections to any new campus construction or renovation projects.

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 72 % |
| No Opinion | 13 % |
| Disagree or Strongly Disagree | 15 % |

**(12) Campus Clean Energy Spending Priorities with New Funds**

Drag and drop your highest priority project to the top and progressively lower priorities toward the bottom.

 < See full [Survey Report](https://umaine.edu/facultysenate/umaine-climate-change-survey-responses-qualtrix-default-report/) for comprehensive list of all rankings>

**Transition to Non-Combustion Clean Power Sources:** Replacement of the heating systems in numerous major campus buildings to allow all power for heating, cooling, and electricity to be supplied by solar, wind, and other non-combustion clean energy sources rather than burning fossil fuels.

|  |  |
| --- | --- |
| Respondents ranking as #1 | Respondents ranking as #1 or #2 |
| 31 % | 54 % |

**Transition to Renewable Biofuels:** Construction of a new campus steam plant to burn wood chips and other renewable biofuels on campus to supply heating for buildings rather than burning fossil fuels.

|  |  |
| --- | --- |
| Respondents ranking as #1 | Respondents ranking as #1 or #2 |
| 12 % | 29 % |

**Develop Campus-Owned** **Non-Combustion Clean Power Sources**: Construction of a campus-owned solar farm and/or wind farm rather than purchasing clean renewable energy through electric utilities.

|  |  |
| --- | --- |
| Respondents ranking as #1 | Respondents ranking as #1 or #2 |
| 18 % | 39 % |

**Build a Centralized Parking Ramp with Vehicle Recharging Facilities:** Construction of a new centralized parking facility with recharging stations powered by clean energy open to all students and faculty to encourage the use of electric cars, trucks, bicycles, and similar vehicles.

|  |  |
| --- | --- |
| Respondents ranking as #1 | Respondents ranking as #1 or #2 |
| 5 % | 13 % |

**Build High Technology Modern Classrooms:** Construction of latest technology grren energy classrooms supporting synchronous and asynchronous group work and other evidence-based best-learning modalities among on-campus, cross-campus, and online students.

|  |  |
| --- | --- |
| Respondents ranking as #1 | Respondents ranking as #1 or #2 |
| 13 % | 26 % |

**Build Improved Athletic Facilities:** Construction of expanded and improved green energy athletic facilities open and available for use by all students.

|  |  |
| --- | --- |
| Respondents ranking as #1 | Respondents ranking as #1 or #2 |
| 2 % | 4 % |

**Build Improved Cultural and Humanities Facilities**: Construction of a green energy humanities center with a focus on facilities for the learning and advancement of history, literature, language, philosophy, ethics, and jurisprudence.

|  |  |
| --- | --- |
| Respondents ranking as #1 | Respondents ranking as #1 or #2 |
| 7 % | 11 % |

**Build Improved Research Facilities:** Construction of new green energy research facilities for one or more research domains. The facility must support synchronous and asynchronous interdisciplinary and multidisciplinary research group work among on-campus, cross-campus, distant campus, and distant industry collaborators.

|  |  |
| --- | --- |
| Respondents ranking as #1 | Respondents ranking as #1 or #2 |
| 12 % | 24 % |

**(13) Tracking Campus Progress toward Zero Carbon Emissions:**

The Faculty Senate should create a Climate Change Audit Committee under the auspices of the standing Environment Committee to closely track and aid the campus in achieving zero greenhouse gas emissions by 2040. It should regularly communicate and coordinate with the [University of Maine President’s Sustainability Council](https://umaine.edu/sustainability/our-team/council/) and the [UMaine Climate Action Plan Working Group](https://umaine.edu/sustainability/our-team/council/seats/).

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 76 % |
| No Opinion | 15 % |
| Disagree or Strongly Disagree | 9 % |

**(14) Divestment of**[**Fossil Fuels**](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#ff)

Following the lead of State of Maine Legislative Bill LD99 (2021) that now bans new public investments in fossil fuels and full divestment within 5 years, the University of Maine System should formally and publicly commit to stopping any new investments in fossil fuel companies and fully divest funds in fossil fuel companies within 5 years.

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 82 % |
| No Opinion | 9 % |
| Disagree or Strongly Disagree | 9 % |

**(15) Adding Carbon Emission Offset Costs to University Travel Expenses**

The carbon emissions for each university-funded travel trip should be computed and the cost of [offsetting](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#coff)/[sequestering](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#cs) the carbon emissions should be applied to the university travel costs for the trip and actually spent for this purpose.

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 56 % |
| No Opinion | 23 % |
| Disagree or Strongly Disagree | 21 % |

**(16) Annual Public Address on**[**Climate Commitment**](https://umaine.edu/facultysenate/committees/environment-committee/technical-glossary/#zcec)**Progress**

The President of the University of Maine should present annually an oral address open to the campus community and public at large on the *State of the University’s Climate Commitment* toward *Achieving Net-Zero Carbon Emissions by 2040.*

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 69 % |
| No Opinion | 23 % |
| Disagree or Strongly Disagree | 8 % |

**(17) University of Maine Sustainability Pledge**

I would support a sustainability pledge by which students, staff and faculty might personally commit to making the University of Maine as carbon free and environmentally sustainable as possible.

|  |  |
| --- | --- |
| Answer | Percent |
| Agree or Strongly Agree | 71 % |
| No Opinion | 17 % |
| Disagree or Strongly Disagree | 12 % |

**Respondent Relation to the University of Maine**

(18) My primary relation to the University of Maine is best described as:

\_\_ undergraduate student

\_\_ graduate student

\_\_ full-time faculty member

\_\_ part-time faculty member

\_\_ staff in a primarily research setting

\_\_ staff in a departmental or similar setting

\_\_ research unit head (e.g., organized research unit)

\_\_ unit head (e.g., department or school) or associate/assistant dean

\_\_ upper-level administrator (i.e., dean or above)

\_\_ Other: <small text entry field>

< See full [Survey Report](https://umaine.edu/facultysenate/umaine-climate-change-survey-responses-qualtrix-default-report/) for responses>

(19) I am most closely affiliated with the following college.

\_\_ College of Education and Human Development

\_\_ College of Engineering

\_\_ College of Liberal Arts and Sciences

\_\_ College of Natural Sciences, Forestry, and Agriculture

\_\_ Maine Business School

\_\_ All, none, or Other: <small text entry field>

< See full [Survey Report](https://umaine.edu/facultysenate/umaine-climate-change-survey-responses-qualtrix-default-report/) for responses>

(20) Please provide any additional comments you wish to make.

< See full [Survey Report](https://umaine.edu/facultysenate/umaine-climate-change-survey-responses-qualtrix-default-report/) for responses>

**SUBMIT**

We thank you for your time spent taking this survey. Your response has been recorded. Summary results will be made available on the Faculty Senate Environment Committee website.