"The ASCE Report Card provides clues for shaping of Society's future roads, providing safe water, and sources for new and renewable energy."

2023 Rules

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Welcome

The American Society of Civil Engineers (ASCE) supports and encourages a fully inclusive culture that celebrates individual uniqueness, engenders a sense of belonging, and promotes equitable opportunity for all people to participate in the ASCE Innovation Contest. (See ASCE Policy statement 417 - Justice, equity, diversity, and inclusion.) Participation should be inclusive, open, and fair to all interested and eligible students. Welcome!

This document, also available on the ASCE Student Conferences page of the ASCE Website, defines the 2023 ASCE Innovation Contest and the rules for both the student symposium and Society-wide finals competition levels.

Posting Questions and Learning About Updates

Requests for Information (RFI) should be sent to student@asce.org with the subject line "ASCE Innovation Contest RFI." Clarifications will be posted to the ASCE Innovation Contest Collaborate site (https://collaborate.asce.org/communities/community-home?CommunityKey=c874e311-52af-4e00-bdd1-024b2448d196) on every other Friday, starting **September 30, 2022 and ending February 10, 2023.** Each post will address the questions received from the previous two weeks through the Wednesday before (11:59 pm EST). **The cutoff date for submitting a RFI is Wednesday, February 8, 2023, at 11:59 p.m. EST. All teams are responsible for all information provided in the Rules and RFI responses posted to the Collaborate site.**

The rules are intended to stimulate creative infrastructure solutions using three of the ASCE Report Card topics (Water, Energy and Roads). Students and teams should read these rules thoroughly and seek clarifications, as necessary.

Section 1: Mission and Overview

The mission of the 2023 ASCE Innovation Contest is to develop an innovation that addresses one of the following three ASCE Report card topics: Drinking Water, Energy and Roads. There is also a direct connection to the UN Sustainability Goals. Participating teams will develop and pitch their innovation to the judges and at a minimum provide proof-of-concept for its feasibility and innovative potential in the next 10-20 years or more. You may find useful information on the needs and future requirements for Water, Energy and Roads in the ASCE Future World Vision.   The closer your innovation is to having a proof of concept and a business plan, the more persuasive the result.

The competition expects the teams to identify, develop, investigate feasibility, and show a business plan for visionary innovations to address one of the three infrastructure challenges. Some limited examples of what has been submitted in the past include (but are not limited to): automation, integration of technology (artificial intelligence (AI), Internet of Things (IoT), sensors, computer vision), prefabrication and modular construction, large-scale 3D printing, alternative financing models and more. The innovation needs to address improvements in sustainability and resilience of the approach and provided solution. The innovation could be a proprietary solution that creates a new business line or an open source solution that supports humanity over wealth. Visionary innovations have the potential to reshape our infrastructure and construction processes and to create a dramatic improvement in how quickly infrastructure can be built, rebuilt, and reused.

Teams are expected to be student-led and should include interdisciplinary collaborations. We encourage including team members from other colleges or areas of study within your school

and engineering departments and doing so will improve your result. A panel of industry and academic experts will judge the competition. Solutions that can be described as "radical," "out-of-the-box," "transformational," "unconventional," or "breakthrough" are encouraged. We also expect and encourage adjacent (connecting multiple existing techniques often from other uses) and incremental innovation but with high value. The proposed solutions should be carefully thought out, researched, and carried out as a student team effort with a feasible work plan and should be presented through the various types of required deliverables. The use of advanced technologies, including those from disciplines outside of engineering such as digital tools, technologies, and virtual representations are welcome to illustrate the proposed ideas via these deliverables. Prototypes of solutions are also welcomed.

The benefits of the ASCE Innovation Contest are connecting student-led teams to industry and academia leaders and at the same time identifying and developing a broad and robust community of civil engineers who have expertise in innovative and entrepreneurial thinking. This contest also provides the opportunity for students to meet with and be coached by forward thinkers who are developing today's innovative solutions.

The goal of the ASCE Innovation Contest is to connect the best students in our ASCE communities with our best industry thinkers and futurists.

The path to this outcome has several components.

1. To educate students about the thought process and elements needed to bring an idea to market. Having a great idea is not enough to solve future engineering challenges. Developing the idea into a usable and marketable solution requires innovative engineering, business functions as well as collaboration and communication. The benefits of this innovation-focused contest include identifying and developing a civil and environmental engineering community that has skills and success in innovative and entrepreneurial thinking.
2. To provide students an opportunity to explore and collaborate with experts to develop an idea. Before any student member or student chapter decides to participate in the ASCE Innovation Contest, the most important assets needed are faculty, industry, and student advisors who are willing to talk with, mentor, and challenge the team as it develops an innovative idea into a viable innovative solution.
3. To provide students a competitive space that includes feedback for improvement and opportunity to take their idea to the next level of competition.
   a. First place winning teams at the ASCE Student Symposium level will be invited to participate in a virtual mentoring program that will be during the end of the 2023 Spring semester with an additional official mentoring meeting to place close to the end of August 2023.
   b. The cohort of winning teams from the student symposia will participate virtually in the Society-wide semifinals. The semifinal presentations will be recorded, and the resulting video will be shared with convention attendees, which is a public facing venue.

c. Following the virtual semifinal round of competition, teams will be selected to compete in person at the live Society-wide competition finals to present their pitch. More details will be provided in Spring 2023.

d. Winners will be announced at the ASCE Convention Awards Ceremony and Closing Awards event.

e. The student symposium winning pitch will be presented during the Convention closing event.

Section 2: Problem Statement

ASCE seeks out visionary innovations that can be used to stimulate communities and fields of study, pursue new infrastructure directions, or address critical civil and environmental engineering (CEE) problems. The ASCE Innovation Contest encourages students to follow a blue sky ("sky's the limit") approach to their innovation. Those who participate in this competition are unconstrained in their efforts and encouraged to submit revolutionary thoughts that are developed, presented, and used to stimulate new activities and directions to help solve the problems associated with the built environment.

We are looking for innovations that offer big improvements in our approaches to the built environment and infrastructure while improving sustainability and resilience. These improvements can be immediate or may range over a period of no more than thirty years. Recently, for example, there have been huge advances in materials and technology. CEE needs to incorporate these advancements to meet, for example, the Grand Challenge of 50% reduction in lifecycle costs. Innovations in the use of materials, use of new materials, development of new construction methods because of new materials or automation, AI, or robotics, infrastructure funding innovation (e.g., decentralized finance, or "Deify"), etc., and sustainable methodologies are all included as possible focus points for an innovation in this competition.

For 2023, teams will use one of the three selected topics (Clean Drinking Water, Clean Energy and Improved Roads) from the ASCE Infrastructure Report Card as a technical point of reference for your innovation. In addition, teams should reference where their innovation connects to one or more of the UN Sustainability Goals.

All contestants are expected to conduct themselves using the highest ethical standard and address safety criteria throughout the development of their innovation. (For reference, ASCE Policy Statements on Safety are PS283, PS290, PS350, PS351 and PS424.)

Visionary thinking is necessary to develop ideas and solutions that are timely, engaging, innovative, exciting, and beneficial to society. Students can play an important role in the development of these solutions through their education and involvement with ASCE student competitions such as the ASCE Innovation Contest.

You are the inventors, innovators, and imaginers - what will YOUR infrastructure solution be, how will YOU make it happen, how will YOU ensure it adheres to appropriate societal and engineering ethics, and how will it change the way we live?

Section 3: Judging

The ASCE Student Symposium host will recruit judges. Three to five are recommended. Judges should have experience in innovation and incubating new ideas if possible and do not necessarily need to be civil engineers. Local support for the ASCE Innovation Contest is an essential element for the ongoing development of the contest and the development of an innovative community within CEE. Contact ASCE if you need additional clarification or help with recruiting judges.

The judging panel should include educators, professionals, and individuals with knowledge of innovation, sustainability, and the built environment. ASCE will provide each team captain and faculty advisor a secure submission link for ASCE's Cerberus ftp server in February 2023 with instructions for how to submit their final video (recorded presentation or other video) and to in turn give judges access to the submitted material. Judges will have access to the submissions at a minimum of one week prior to the start of the Symposium. Judges will be expected to conduct an initial review of the submitted content and be prepared to complete all scoring within the time provided during the judging of this contest as organized by the ASCE Student Symposium host.

All submission materials must be submitted no later than posted deadlines determined by each student symposium host. These deadlines will be at least one week prior to the start of the particular ASCE Student Symposium.

The contest submission, which is not public-facing, will be held in the ASCE Cerberus ftp server and kept confidential throughout the judging process. Judges are required to sign a Non-Disclosure Agreement to help protect the student teams' intellectual property. Complete submissions consist of a 5-minute video that addresses the three judging categories: 1) Innovation and Creativity, 2) Value Proposition and Relevance, 3) Efficiency and Feasibility. The video can be a recorded PowerPoint presentation, an edited Zoom video, a "marketing" production video, or any presentation captured in a video format.

The students are encouraged to use innovative and broad-based ideas in the development and portrayal of the proposed solution. Resources are provided in the Appendices. Teams are expected to give themselves the best chance at success by taking the time to review the judging criteria, reviewing the ASCE Report Card site, searching the ASCE Library for recent papers on topics they are considering, and using their imagination to extrapolate future needs and how they will use future technologies to develop their proposed solution. Every point

counts. The margins between teams with high scores are often very small. Winning is often by a fraction of a point. Make sure that your team captures every point possible.

Section 4: Scoring and Submissions

A contest submission must address these three scoring areas with a persuasive and interesting presentation. This competition relies heavily on your ability to present an original, innovative infrastructure solution in a professional, engaging, and persuasive manner. Scoring will be based not only on the proposed solution, but also on your approach to presenting your solution to the panel. As with any professional proposal, you control the message you want to convey.

The four areas of scoring and overall weighting are as follows:

Scored using the video submission.
> 1. Innovation and Creativity (40%)
> 2. Value Proposition and Relevance (25%)
> 3. Efficiency and Feasibility (25%)

Scored during the live presentation at the ASCE Student Symposium by the judging panel:
> 4. Communication (10%)

ASCE is using its Cerberus ftp server as a submission platform. All competition deliverables must be submitted in this platform. Submissions outside of this platform will be considered non-responsive and will not be considered.

4.1. Recording Data and Submitting Scores
Scoring data shall be recorded for each team that competes. Examples of the official judging form are included in Appendix A. Judging forms will be posted to the ASCE Innovation Contest Collaborate site (https://collaborate.asce.org/communities/community-home?CommunityKey=c874e311-52af-4e00-bdd1-024b2448d196) no later than January 6, 2023.

4.2 Elements of the Competition
There are two parts of the competition: the video presentation submitted before the conference, and the live conference presentation when scoring will focus on the elements of communication and ability to respond to judges' questions. Note that the video presentation can be created in many forms or processes. For example, it can be a recorded Zoom presentation, a voice over recorded PowerPoint presentation, a custom edited video, etc. The goal is for the judges to be able to watch the "presentation" as a video stream.

4.3. Overall Submission for the Competition

The overall submission (video and oral presentation) will be judged on the following elements on a scale of 1=inferior to 10=excellent in four areas: 1) the level of innovation and creativity, 2) value to society/customer, 3) feasibility, and 4) team communication of the unique and creative properties of their solution. Expectations and descriptions of those judging criteria are as follows:

4.3.1. Innovation and Creativity (40%)

We are looking for creative solutions, preferably new approaches to an innovation that provides more than a small improvement. Lower scores will be given to entries which are not next generation solutions which are incremental, or an iteration of existing solutions. Higher scores will be given to entries that skip a generation of existing solutions and those that use out-of-the-box new approaches to solve a problem.

4.3.2. Value Proposition and Relevance (25%) - How is the innovation valuable to society/customers?

We are trying to solve big problems, not just make life incrementally easier for the customer. By way of an analogy, think of the value of painkillers vs. multi-vitamins. One is addressing a big issue/pain point and the other is routine maintenance. We are looking for painkiller solutions that provide substantial problem-solving, not just a couple of improvements. Is the innovator building a daily supplement or a cure for cancer? Is the innovator addressing one of the things that keeps customers/society up at night or just a nice-to-have solution? Does the innovation appropriately address sustainability and resilience? The submission will receive higher scores if it addresses big problems with large beneficiaries or cost and/or time savings in methodology and receive lower scores for just nice-to-have solutions.

4.3.3. Efficiency and Feasibility (25%) - Is the innovation technically feasible?

We want to showcase, promote, and reward not just for an innovative solution but also entries that have thought through the technical feasibility of their innovation. Is life cycle cost (total cost of ownership, building, selling, delivering and maintaining the innovation) included in the business model? Provide information to support your innovation, including test result summaries and/or prototypes proving the veracity of the solution. Lower scores will be given to an innovation that does not appear to have realistic technical success. Higher scores will be given to innovations that demonstrate the success of the technological solution (through tests, pilot products, sales, etc.). Does the innovation have a scalable business plan or open source approach? We want to showcase, promote, and reward forward-thinkers who do more than just produce a great idea, and reward those who thought about the challenges of developing the innovation for mass application for private commercialization or as an open source path for adoption by multiple users. Even if the market plan or open source adoption plan is long, expensive, or difficult, a well-thought-out plan is important for this category. Lower scores will be given to plans that only consider potential market size. Higher scores will

be given to plans that determine a real market, price sensitivity (if appropriate), distribution models, have a broad societal impact, and have considered the innovation's life cycle.

4.3.4. Communication (10%)
Has the team communicated the unique and creative properties of their infrastructure solution?

Contest winners are often less than a full point apart. Gaining the full 10% of this score is essential to a team's chances for moving forward to the semifinals and finals of this contest.

A good presentation will clearly exhibit or consider the following:
1. Critical thinking, including the ability to integrate different perspectives and "connect the dots" between disparate data points.
2. An ability to communicate and articulate an idea.
3. Demonstration of industry-specific knowledge, though there is no penalty for making assumptions when necessary (e.g., unknown facts, future trends, demands).
4. It is appropriate to question underlying assumptions presented by others who may have examined the problem, if you are convinced a different perspective is appropriate.
5. All things being equal, innovations with broad application will generally be scored higher.

In summary, we are interested in how well you communicate your ability to think through the problem, collaborate with team members and outside resources to develop options, identify competitors, and provide and defend your infrastructure solution and its unique characteristics.

4.4 Contest Video Submission
This video must be submitted by posted deadlines by each ASCE Student Symposium host.

In addition to the elements outlined in the Overall Submission (4.3), the submission will be judged for its ability to communicate the innovation clearly and concisely. This includes thoroughness and completeness as it describes and explains the identified infrastructure issue and the proposed, "reimagined infrastructure" solution to address the issue. The proposal must contain the following elements:

- Background and problem statement for the identified issue.
- Explanation of how the proposed solution could address the identified UN Sustainability Goal(s) as well as any applicable additional societal challenges or needs

related to using new techniques or innovations such as (not limited to): high-tech construction, robotic assembly, advanced materials, sustainable methodology, AI, etc.
- Discussion of how this proposed solution takes advantage of modern or future technology 10-20 years or more in the future. You may find useful information in the ASCE Future World Vision.
- Discussion of how it will appeal to the affected group including all stakeholders. Recognizing that multiple socioeconomic groups should be engaged, share results of any testing, surveys, demonstrations, proof of concept, research, etc., that was conducted or found to address this item. The timeframe over which your innovation will be implemented will determine the number of assumptions needed. You may make assumptions, when necessary, based on future trends and projected demands. Make sure to provide your basis and foundation of information from which you have developed your assumptions.
- Discussion of resources required to enact this solution (this can be general in nature, or more specific and include cost estimates).
- Anticipated engineering and societal value of the proposed solution, and references.

This video entry is an opportunity for the team to demonstrate the thought process used for the development of their solution. Teams are encouraged to use their notes from the provided worksheet or other resources to completely discuss any aspects of their proposed solution that addressed the problem statement and goals of the competition.

4.5 Presentation and Interview with Judging Panel

Each team or individual will be scheduled to participate in the required live presentation part of the competition with the judging panel. You will have 4-6 minutes to present your innovation and the judges will have 5-7 minutes for questions. The content you present shall communicate the approach and team effort on identifying and developing the innovation solution. Although not required, teams are encouraged to incorporate video elements, posters, props, charts, etc. to make the presentation. This will be followed by questions from the judges. Teams are encouraged to use technology as part of this presentation. Each presentation will be judged on how well it communicates the unique characteristics and creativity of the innovation, its value proposition and relevance to society, and its efficiency and feasibility.

Each ASCE Student Symposium host that elects to offer the ASCE Innovation Contest, will announce the specific date and time for their ASCE Innovation Contest. All student symposium hosts are expected to follow and implement the rules and expectations outlined in this document.

Exact dates for the ASCE Innovation Contests and the submission deadlines are determined and posted by each ASCE Student Symposia host and will be at least one week prior to the start of the particular ASCE Student Symposium. Please refer to the symposia host for submission deadlines and other contest details as submission deadlines may be as early as 3

weeks before the competition. Contest appointments will be organized and managed by the host.

All live presentations shall be conducted in a professional manner (defined as a presentation which a professional engineer would give to a prospective client). Teams are encouraged to be entrepreneurial in conveyance of their proposed solution. Oral presentations shall be presented in English. The presentation order shall be randomly selected before the competition begins and subject to scheduling and time availability of teams, judges, and student symposium host representatives. The oral presentations, including the question and answer period, shall be open to the public for viewing. Following the oral presentation, questions by members of the audience may be allowed if the venue and time permits.

Section 5: Awards and Recognition

From the Student Symposium level to the Society-wide Finals at the ASCE Convention, the winners of the ASCE Innovation Contest shall be determined by compiling a team's total number of points.

First place winning teams at the ASCE Student Symposium level, which meet the participation and eligibility requirements in Section 7 and Appendix E, are eligible to compete at the Society-wide competition finals, which begins with a virtual semifinal with individual presentation appointments scheduled in late August/early September 2023 time frame. A select number of wildcard teams that meet ASCE student chapter eligibility requirements may also be invited. Teams that achieve high enough quality presentations in the Society-wide semifinals will be invited to participate in the Society-wide finals event at the ASCE Convention. Quality of presentations is determined through a scoring process similar to the scoring outlined for the Student Symposia competitions by a team of expert judges and comments from coaches as needed.

The path to the Society-wide semifinals
   a. First place winning teams at the ASCE Student Symposium level will be invited to participate in a virtual mentoring program at the end of the 2023 Spring semester with an additional official mentoring meeting to take place close to the end of August 2023. This virtual mentoring experience will provide more in-depth coaching and education about how to develop their innovation into a viable market concept. Winning teams will continue to develop their presentations in preparation for the Society-wide competition finals that takes place during the ASCE Convention, Fall 2023.
   b. The cohort of winning teams from the student symposia will participate virtually in the Society-wide semifinals. The semifinal presentations will be recorded, and the resulting video will be shared with convention attendees, which is a public

facing venue. The semifinal presentations will be recorded, and the resulting video will be shared with convention attendees, which is a public facing venue. (A public-facing document or video is one that is created for the public. It describes the innovation without revealing proprietary information.)

Advancing to the Society-wide finals
   a. Following the virtual semifinal round of competition, teams will be selected to compete in person at the live Society-wide competition finals to present their 1-2 minute investor pitch. These Society-wide finalist teams will have representatives attend the ASCE Convention and compete for the 1st, 2nd, and 3rd place awards. At this time, we plan to host at least the top ten team representatives at the in person Society-wide competition finals and hope to expand. More details will be provided in Spring 2023.
   b. Winners will be announced at the ASCE Convention Awards Ceremony and Closing Awards event.
   c. The winning team of the 2023 ASCE Innovation Contest will be recognized, and their winning pitch will be presented (live--preferred or recorded) during the Convention closing event.

All winning teams at the ASCE Student Symposium level start at the same base line for the next phase (Semi-finals). Scores from the ASCE Student Symposium level are not brought forward for inclusion into the Society-wide semifinals or finals calculation. The summer coaching program provides each team one-on-one meetings with industry experts to discuss their innovation and receive feedback. Participants will have the opportunity to ask questions as a group with other contestants as well as during individual team breakout sessions. They have the support of ASCE staff throughout the summer to assist with requests which may include and are not limited to scheduling a virtual practice session for feedback on voice levels, presentation techniques -- anything except feedback and comments related to technical content. In the ASCE Student Innovation Contest summer coaching and resources program, feedback on technical content is only received during the one-on-one coaching sessions or from judges' comments and questions.

Each winning team at the ASCE Student Symposium level has the opportunity to be invited to the in person Society-wide competition finals where they will compete at the ASCE Convention 2023, Wednesday, October 18 – Saturday, October 21, 2023, in Chicago, IL. Winning teams that participate in the Society-wide semifinals and at the convention will be expected to make a poster for display online and at the convention. Additional details related to participating in the Society-wide competition finals will be provided in the Spring of 2023.

ASCE shall award at least $3,000 in cash prizes to the ASCE Student Chapters of the Society-wide competition finals winning teams.

Total prizes shall be distributed as follows:

- First place overall winner: $1,500 and trophy
- Second place overall winner: $1,000 and trophy
- Third place overall winner: $500 and trophy

Changes to the level of financial rewards will be announced no later than April 30, 2023.

Section 6: Ethics

This competition is to be conducted with the highest regard for ethical responsibility per ASCE's Code of Ethics. All members of ASCE, regardless of their membership grade or job description, commit to all of the ethical responsibilities in this Code. All ASCE members and students should make themselves familiar with ASCE's Code of Ethics (https://www.asce.org/ethics/).

Section 7: Participation and Eligibility

7.1. Student Requirements

Students, regardless of academic major, must be undergraduate students, members of an ASCE Student Chapter in good standing, and Society Student Members of ASCE. (Society student membership is free; be sure to join.)

7.2. Team Requirements

It is an expectation that teams will reflect diversity, foster an inclusive culture, and treat everyone with dignity and respect.

Only one team per ASCE Student Chapter may compete in the competition. A student chapter may compete in only one ASCE Student Symposium. The teams shall consist of undergraduate students enrolled during all or part of the current competition academic year. Each team must have at least one captain. The teams, representing an ASCE Student Chapter in good standing, shall be led by undergraduate CEE students, and may be advised by faculty and/or graduate students. Multi-disciplinary teams are encouraged and preferred; however, the innovation must focus on an improvement, solution, cost savings etc. related to the CEE industry and the built environment. Teams are encouraged to engage experts on and off campus in other engineering fields, such as architecture, social sciences, and the humanities, to develop ideas and solutions that are timely, engaging, innovative, exciting, and beneficial to society. Conference assignments and student symposium host chapters are listed here.

ASCE Student Chapters hosting symposia may invite Official Guest teams, which are teams from Region 10 colleges or universities that have an official ASCE Student Chapter that is not yet assigned to any Student Conference. Official Guest teams are eligible to place and receive awards at the student symposium competition and be invited to the Society-wide competition finals (if they meet the other requirements, including eligibility requirements). Official Guest teams may compete in only one student symposium per year. ASCE Student Services shall be notified by the ASCE Student Symposium host of an Official Guest team prior to the start of the student symposium via e-mail to student@asce.org.

An ASCE Student Chapter team wanting to enter a competition that is NOT being hosted at their assigned student symposium, may request to compete at another ASCE Student Symposium as a guest team. If the student symposium host grants permission, the guest team may compete. The guest team will be scored but shall not win awards at the student symposium competition nor advance to Society-wide competition finals based on competition placement. Guest teams that meet student chapter eligibility requirements may be considered for a Society-wide competition finals wildcard position.

7.3. Levels of Competition

There are two main levels of competition: first the ASCE Student Symposium level, and then the Society-wide competition finals level. The finals level has two steps--first a virtual semifinal which requires a 4-6 minute presentation and a poster image and the finals which requires a 1-2 minute investor pitch that will be delivered in person during the ASCE Convention. The ASCE Convention is a global platform where student symposium winners will be given the opportunity to share their innovation with an international audience. In the event that a team qualifies for the finals event and is restricted from sending a team representative to the ASCE Convention, ASCE will provide the opportunity to virtually deliver their final investor pitch.

7.4. Eligibility Requirements and Advancement to Semifinals and Finals Competition

All participants shall act professionally and respectfully at all times. Failure to act appropriately can result in sanctions, disqualification, and loss of invitations to future student symposium competitions or Society-wide competition finals. The inappropriate use of language or alcohol, uncooperativeness, and general unprofessional or unethical behavior will not be tolerated.

Eligibility criteria for the Student Symposia and Society-wide Competition Finals are shown in Appendix E.

To advance to the Society-wide competition semifinals and finals, teams must meet ASCE eligibility standards (see Appendix E), participate in the coaching resource program, and participate in the virtual Society-wide competition semifinals and receive a score in the semifinals high enough to place as one of the top ten teams. Scoring in the student symposium competitions is not calculated in the semifinals or finals competition scoring.

Additional details related to participating in the Society-wide competition finals will be provided in Spring 2023.

7.5. Post-Symposium Verification of Competition Results

At the end of the student symposium competition, the head judge shall promptly upload the completed official scoring spreadsheet for a student symposium competition to ASCE's Cerberus ftp server. ASCE will provide the head judge a secure submission link for ASCE's Cerberus ftp server in February 2023. Teams will not be invited to the Society-wide semifinals competition until this spreadsheet is received and eligibility is confirmed.

7.5. Intent and Eligibility Acknowledgement Form

Teams shall submit an Intent and Eligibility Acknowledgement Form *(*see Appendix F), **no later than 5:00 p.m. Eastern Standard Time (EST) on November 4, 2022.** By completing this form, a student chapter states their intent to have a team participate in the competition at their assigned student symposium as well as acknowledges the eligibility requirements for student symposium competition participation and advancement to Society-wide competition finals. The form must be signed by the Team Captain, ASCE Student Chapter Faculty Advisor, ASCE Student Chapter President, and Competition Team Faculty Advisor (if different than ASCE Student Chapter Faculty Advisor).

The team captain shall upload the Intent and Eligibility Acknowledgement Form to ASCE's Cerberus ftp server. Refer to Appendix G for upload directions**.**

Section 8: Safety

All participants are responsible for complying with all campus protocols and procedures including but not limited to COVID-19 guidelines related to in-person meetings, masking, social distancing, etc., at all times in connection with planning, preparation, or participation in the competition.

Given the continually changing environment surrounding COVID-19, virtual competition provisions are provided in the rules and may be activated in coordination with ASCE.

Safety is our highest priority and risk of personal injury will not be tolerated. Students should use safe practices in any competition test procedures, proof of concept exercises, or any activities associated with ideas and exercises related to their competition entries and should seek appropriate instruction and supervision as necessary to maintain health and safety.

Safety criteria and considerations related to submitted innovations and their connection to the built environment, if applicable, are expected to be included in the recorded submission. For information about safety in the built environment, please refer to the ASCE website.

For reference, please review [ASCE Policy Statements](#) on Safety are PS283, PS290, PS350, PS351 and PS424)

Section 9: Student Symposium Logistics and Host Requirements

The ASCE Innovation Contest is accessible and feasible for all student chapters to participate in and host.

Student and Student Chapter Logistics

1. People
   a. Before any student or student chapter decides to participate in the ASCE Innovation Contest, the most important assets needed are faculty, industry, and student advisors who are willing to talk with the team and challenge the team as it develops an innovative idea into a viable innovative solution.
   b. There will be ASCE Innovation Contest experts to provide assistance to advisors who may want some ideas about how to coach a student team through the thought process of developing an innovation. Additional resources are included in the Appendices.
   c. Teams that win at their student symposium will be invited to participate in the contest finals. An additional commitment is required to continue on to the final contest event. Teams connect with a practitioner advisor throughout the summer, participate in at least two coaching sessions with industry leaders, prepare a poster, compete in a semi-final judging round and prepare an additional 1-2 minute industry pitch that will be presented live at the ASCE Convention.

2. Materials required to participate in the competition and availability of these materials.
   a. A good innovative idea, and a diverse team of dedicated students.
   b. Students need to think through the innovation idea. They can develop a conceptual innovation or an innovation ready for market, but a vetted innovation is not required.
   c. A contest submission which consists of a recorded presentation that communicates information about their innovation.

3. Equipment, particularly specialized equipment, needed to participate in the competition and availability of the equipment.
   a. A computer and access to the internet
   b. Access to a web camera
   c. A microphone may be useful but not required

d. A stand for the optional poster at the student symposium competition. At the semi-final virtual event, the poster may be submitted as an image and then printed for the final event at the ASCE Convention.

4. Space requirements
    a. Space on a computer hard drive for large video files

5. Cost analysis and impact to student chapters
    a. Upper and lower bound estimates to prepare for and participate in both a student symposium competition and Society-wide competition finals.

    - Cost for Students or Student Chapters – this depends on the specific requirements of the host symposium, but no special requirements other than a computer.

    - Cost for Society-wide finals – ASCE will provide some travel stipends for teams traveling to the ASCE Convention. There may be additional travel related costs depending on how many people plan to attend. Access to the ASCE Convention and some meals will be provided.

    b. Effect of student chapter budget on educational and/or competitive outcomes The ASCE Innovation Contest has gained a lot of interest with the ASCE Student Chapter communities over the past two years. Hosting this contest may attract students to their student chapter and this contest may provide students with a project opportunity that could connect to their academic work.

Student Symposium Host Requirements

Local support for the ASCE Innovation Contest is an essential element for the ongoing development of the contest and the development of an innovative community within CEE. The student symposium hosts are expected to provide volunteer judges.

1. *Materials required to host the competition.*
    None.

2. *There is no special equipment needed to host the competition.* Only a computer, projector and a room for presentations and judging.

3. *Competition venue/space requirements*
    The ASCE Innovation Contest easily adapts to either a virtual or in person venue. If the student symposium host offers an in person competition, the contest needs a room and seating. If the student symposium contest is 100% virtual, then the host needs a

presentation platform such as Teams or Zoom and to coordinate access with student and volunteer participants.

4. *There are no special risks that hosts and participants should be aware of.*

5. *Cost analysis and impact to student chapter hosts. Low-end and high-end for hosting the competition.*

Costs are related to the general costs incurred by the student symposium hosts that may be related to food or breaks offered to student and volunteer participants. A virtual contest may also include specific costs that should be considered before deciding.

9.1 Marketing and Encouragement.

The student symposium host is expected to promote this contest and encourage schools to participate.

9.2 Local judging support is needed.

Local support for the ASCE Innovation Contest is an essential element for the ongoing development of the contest and the development of an innovative community within CEE. ASCE has access to qualified judges and the virtual venue of this competition allows more flexibility of participation from this existing group; however, the student symposium hosts are expected to provide volunteer judges to participate in the in person or virtual judging event.

The ASCE Innovation Contest team will assist by providing head judge training. Dates and times for training sessions will be announced in January 2023.

APPENDICES

Appendix A: Examples from the Excel Scoring Workbook

In the spirit of transparency, these examples are provided for student teams to see the tools being used by the judges. Please make sure that you provide your host team with the information requested.

School Student Symposium Information Worksheet

This worksheet will be filled out by Head Judges and/or the Student Symposia Hosts. Student teams should make sure that they provide this information to the host schools. The information collected here is shared with ASCE after the Student Symposium contest has been held.

School Name School Contact First Name, Last Name, Email, Phone, Student Chapter, Faculty Advisor, Faculty Advisor Email.

Adding information for all fields in the spreadsheets helps ASCE follow up with students and advisors to join future contest related activities and to request feedback about how to improve future innovation contests.

Head Judging Score Sheet

This worksheet is designed for use by the Head Judge only. Scores loaded into this spreadsheet populate the final score sheet that is submitted by the Head Judge or other designee. Below is a sample for Page 1.

There are two parts to each team judging section; the pre-contest score which is scored by viewing the video submission and the total contest score which is finalized after the contest presentation and Q&A session with the judges.

There is a scoring sheet for each team. The full page is shown here. As you move to the next team, the information on the left remains viewable.

This information is provided in the contest rules book to show student teams that the judging is based on the scoring rubric provided in Appendix B.

Appendix B: Scoring Rubric

This Rubric is provided to assist a judge with evaluating the submission and to provide student teams the background information used in scoring the innovation and is based on a ten (10) point scale. The questions in **bold** connect to each of the scoring areas. Judges may have their own version of questions to use when evaluating a submission.

It is also valuable for teams to determine where their innovation fits on these scales and how they might adjust their idea to move toward a higher score.

Judges' scores are averaged. The final score is calculated according to each area's percentage of the total score.

Innovation and Creativity - Is the innovation something nice to have or is it a game changer?

4.3.1 of Rule Book. 25% of the total score. Scored using submitted presentation. Lower scores will be given to entries with next generation, incremental, or iteration of existing solutions. Higher scores will be given to entries that skip a generation of existing solutions and those that use out-of-the-box new approaches or other technologies or different engineering disciplines to solve a problem.

JUDGING CRITERIA	SCORING 1-3	SCORING 4-5	SCORING 6-8	SCORING 9-10
INNOVATION AND CREATIVITY 25% **Scored using the materials submitted prior to the contest event.**	Not a very unique approach to solving a problem. Very minor extension to existing techniques.	Incremental improvement or adaptation of an existing solution. Has some new aspects, but minor.	Creative improvement or adaptation (next generation) of an existing solution. Will render the existing technique or solution much more useful and will attract people's attention.	Out of the box approach to solving a problem. Skips a generation of existing solutions. New or never been applied to this type of problem. One-of-a-kind solution and could change the industry.

Value Proposition and Relevance - How valuable is the innovation to society/customers?

4.3.2. of Rule Book. 25% of the total score. Scored using submitted presentation. We are trying to solve big problems, not just make life incrementally easier for the customer. A key value the judges will be looking for are innovations that address sustainability and resilience. By way of an analogy, think of the value of painkillers vs. multi-vitamins. One is addressing a big issue/pain point and the other is routine maintenance. We are looking for painkiller solutions that provide substantial problem-solving, not just a couple of improvements. Is the innovator building a daily supplement or a cure for cancer? Is the innovator addressing one of the things that keeps customers/society up at night or just a nice-to-have solution? The submission will receive higher scores if it addresses big problems with large beneficiaries or cost and/or time savings in methodology and receive lower scores for just nice-to-have solutions.

JUDGING CRITERIA	SCORING 1-3	SCORING 4-5	SCORING 6-8	SCORING 9-10
VALUE TO SOCIETY OR CUSTOMER 25% **Scored using the materials submitted prior to the contest event.**	Solution addresses a very small or narrow scope problem that has limited impacts. Nice to have but not needed by very many people and/or cost/complexity is too high for results obtained. Limited improvement in sustainability or resilience.	Solution addresses a regional or relatively narrow problem that has a somewhat limited impact. A small but reasonable number of people or corporations would be interested but still a niche market. Identifiable but limited improvement in one of: sustainability or resilience.	Solution addresses a relatively significant problem that could improve life cycle costs, time savings, or environmental improvements, etc. Large market and interest by many. Strong and identifiable in one and identifiable improvement in the other: sustainability or resilience.	Solves a big problem that could have a major impact on improving life cycle costs, societal benefits, time savings, or environmental improvements, etc. Has a large number of beneficiaries. Could create an entire industry or new approach to the problem at a huge cost or complexity savings. Value and demand are obviously there. Strong and identifiable improvement in both: sustainability and resilience.

Efficiency and Feasibility - How technically feasible is the innovation?

4.3.3. of the Rule Book. 25% of the total score. Scored using submitted presentation. We want to highlight, promote, and reward not just an innovative solution but also entries that have thought through the technical feasibility of their innovation. Provides information to support the innovation, including test result summaries and/or prototypes proving the veracity of the solution. Lower scores will be given to an innovation that does not appear to have realistic technical success. Higher scores will be given to innovations that demonstrate the success of the technological solution (through tests, pilot products, sales, etc.).

JUDGING CRITERIA	SCORING 1-3	SCORING 4-5	SCORING 6-8	SCORING 9-10
TECHNICALLY FEASIBLE 25% **Scored using the materials submitted prior to the contest event.**	Not very realistic chance for technical success. No evidence of technical validation through modeling, testing, prototyping, etc. Lacks a realistic business plan for Implementing the proposal. Only potential market size is addressed.	Appears to have some potential for technical success based upon arguments or analogies presented, but there has been no scientific modeling, testing or prototyping performed yet. A rudimentary business plan that requires a lot more development.	Appears to have reasonable potential for technical success based upon some modeling, testing, or prototyping validation. The innovation has a business plan, but it does not address all of the factors that should be considered.	Very high potential for technical success. Based on successful testing, prototypes, or early market successes. The team communicates how the innovation is or could be scalable, has a real market, and cost sensitivity distribution models. Life-cycle cost considerations and benefits are addressed.

Communication - Has the team communicated the unique and creative properties of their infrastructure solution?

4.3.4. of Rule Book. 10% of the final score. Scored during contest presentation.
 A good submission will clearly exhibit or consider the following:
- Critical thinking, including the ability to integrate different perspectives and "connect the dots" between disparate data points.
- An ability to communicate and articulate an idea.

- Demonstration of industry-specific knowledge, though there is no penalty for making assumptions when necessary (e.g., unknown facts, future trends, demands).
- It is appropriate to question underlying assumptions presented by others who may have examined the problem, if you are convinced a different perspective is appropriate.
- All things being equal, innovations with broad application will generally be scored higher.

JUDGING CRITERIA	SCORING 1-3	SCORING 4-5	SCORING 6-8	SCORING 9-10
COMMUNI-CATION 10% **Scored during the contest event.**	Problem statement could have been stated more clearly. The objective needs to be more clearly identified. Presentation/presenter is lacking sufficient knowledge, confidence, or clarity. No clear or obvious market.	Presentation does a fair job at presenting the problem statement and identifying the objective of the innovation. More background information and supporting evidence should have been provided. Market has been mentioned but no real numbers or proof it exists.	Presentation's content was relatively strong in most respects. The presentation was ok, but not stellar. The market has been explored, parallel products compared, some survey or interest shown - already sold some product. Content shows that the presenter has thought through the problem.	Excellent presentation that communicates an innovative solution with broad applications and its unique characteristics. Connects all of the dots. Demonstration of industry specific knowledge. Logical assumptions were made when necessary. The presenter questioned underlying assumptions by others and provided logical conclusions supporting his/her/team perspective. Market is clearly explained. Product is in the hands of investors or beta testers.

The Judging RUBRIC is available as a separate document.

## Appendix C: Innovation discovery/exploration questions worksheet

This document is provided as a guide to help the participating teams develop their innovation. There are many elements to taking a great idea and turning it into a viable innovation. After the team has answered and worked through the steps outlined below, they will have a valuable outline that will help them organize and develop their final contest entry.

2023 Contest Theme: "Propose an innovation that addresses one of the three listed ASCE Report Card Topics: Clean Drinking Water, Clean Energy, Improved Roads"

Step 1: Initial exploration
Review your resources and as a team discuss which of the United Nations sustainability goals, and what elements of the ASCE Report Card are of interest, resonate, or inspire the group to learn more. Make sure that your final idea connects to one of the three ASCE Report Card Topics: Clean Drinking Water, Clean Energy, or Improved Roads.

Review the ASCE Report Card three Topics and match one of the three topics to your interest and innovative idea.
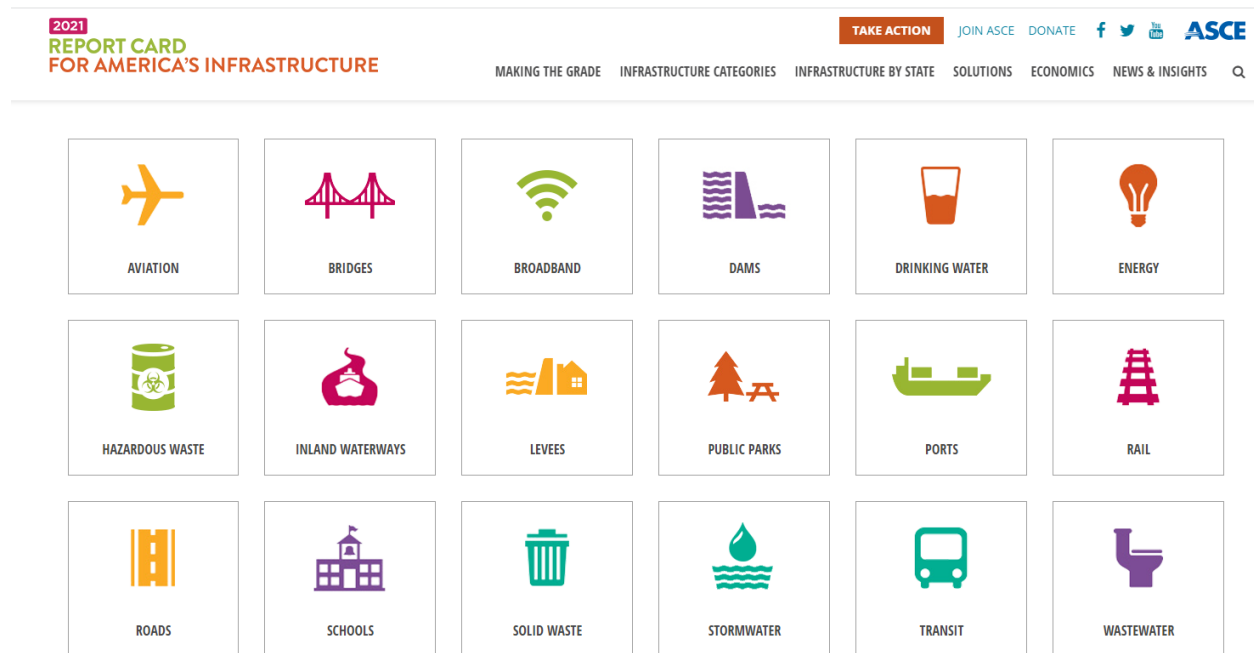
For more information visit the website: https://infrastructurereportcard.org/infrastructure-categories/

You may find useful information on the needs and future requirements for Water, Energy and Roads in the ASCE Future World Vision.

.
Complete Step 1
- Choose the Report Card topic of most interest to your group.

Step 2: Brainstorm opportunities

Discuss as a team, big opportunities for innovation that are connected to your innovation topic. Look at the UN Sustainability goals as additional insight and inspiration for the selected topic.

You are the inventors, innovators, and imaginers - what will YOUR infrastructure solution be, how will YOU make it happen, how will YOU ensure it adheres to appropriate societal and engineering ethics, and how will it change the way we live?

Step 3: Where does your innovative idea fit in the list below?

Select the answers that best match your innovative idea.

There is no correct answer, but you should explore each item on the list with your team. For example, what big problem will your innovation solve, what are the significant benefits it will deliver, what customer will think it is nice to have?

- It is nice to have
- It solves a big problem
- It makes a significant change in the way things are done by saving money and/or reduces time to delivery
- It is an incremental innovation
- It is a disruptive innovation

Keep in mind: Lower scores will be given to entries with next generation, incremental, or iterations of existing solutions. Higher scores will be given to entries that skip a generation of existing solutions and those that use out-of-the-box new approaches to solve a problem.

Step 4: Highlight your creativity

1. Describe your innovation and its creative and technological attributes.
2. How does your innovation perform better, faster or at a lower cost than its competitors?

Why is this important? The submission will receive higher scores if it addresses big problems with large beneficiaries or cost and/or time savings in methodology and receive lower scores for just nice-to-have solutions.

Step 5: Value to society and/or customer. Describe the solutions your innovation delivers.

Think about your innovation in terms of the solutions and value it delivers to industry and society.

Go deeper than listing the specific problem or problems it will solve. Think about the need it addresses, and if that need translates across a broad spectrum of situations.

If your innovation is able to translate across a broad spectrum of situations, then your solution will be relevant to more customers. Value and relevance will also exist if your innovation saves significant time to delivery and/or a significant cost for materials. Explore as many opportunities as possible for your innovation to deliver value.

1. Have you considered the social impact connected to your innovation?
2. How do your ideas and solutions address sustainability and resilience?

3. How does your innovation connect to these topics and others you may have identified?

Step 6: Technically feasible

You have identified solutions that your innovation brings to market, now think about its feasibility and efficiency.

Review the technical attributes of your innovation. What tests would you devise to prove the value of your innovation? Low scoring will be given to an innovation that does not appear to have realistic technical success. Higher scoring will be given to innovations that demonstrate the success of the technological solution.

The time frame over which your innovation will be implemented will determine the number of assumptions needed. You may make assumptions, when necessary, based on future trends, and projected demands.

For example, you may assume that the climate where your innovation will be used will experience extreme storms and your innovation has a solution associated with mitigating the effects of extreme storms. Stating the assumption is not enough, you need to provide your basis.

Step 7: Some additional questions to consider.

1. What are the manufacturing costs to make your innovation? How many can you make at one time? How long does it take to manufacture each batch?
2. Briefly describe the cost of materials and time required to build your innovation with the current resources available. Once your innovation is delivered to market, what, if any, support services or materials does your innovation need to perform as expected?
3. What is the life cycle of your innovation from its initial build to its end of service? At what price will you sell it and how can you prove that the market will pay that price?
4. Is your innovation scalable?

> You might have a great idea for an innovation, but investors need to know how fast you can scale up your manufacturing to meet a growing demand. In the previous question you discussed the right now cost to manufacture your innovation.

> Now describe what resources and expertise will you need to scale up?

> Discuss what you will need to deliver more of your innovations to market and in less time.

How will these changes improve your profit margin?

5. How many competitors are in your market?
6. What other solution choices exist, if any, and how does your innovation surpass these competing options?
7. Once your innovation comes to market, describe its impact.
8. What are some potential follow-on innovations or benefits that may result from the industry's adoption of your innovative solution?

Good Luck!

Appendix D: Tips from the Experts

We reached out to our industry leaders and asked them to answer several questions related to innovation. Their responses are below.

How do you identify something as innovative in civil engineering?

- It provides a solution or approach to a solution that brings new technology and/or new thinking about an infrastructure-environment challenge.

- Something that is either new to civil engineering (has not been done before) or something that makes a current process or material in civil engineering more effective, resilient, sustainable, or efficient.

- Something that is different and valuable. Value can be more efficient, faster, better quality or less resources. It has to be measurable.

- Innovation may be incremental; step change; and/or systemic (industry/world affecting).

- Idea or invention converted into a good or service that creates value for which customers will pay.

Please provide examples and/or resources for innovation to help someone learn more about this topic.

- Development of a robot for rebar-tying on bridge surfaces.

- Expanding use of drones for infrastructure and environmental assessment, project tracking. Monitoring of vibrations in infrastructure and use of machine learning for related near-real-time structural health assessment.

- Development of nanomaterial delivery systems for plant fertilization to reduce nutrient runoff.

- Automated evaluation of video images with AI techniques for traffic assessment, ground movements, changes in pavement, etc.

- Taking advantage of projects in low-income communities to attract apprentices in trades from low-income communities.

- Using composites for reinforcing as it weighs less and is more resistant to corrosion. Or building composite aerospace structures as they are lighter weight and more durable.

- Videos of and books by Clayton Christensen.

Please share one or two examples that exemplify creativity in civil engineering.

- Tuned mass damper in the Citigroup Center
  https://en.wikipedia.org/wiki/Citigroup_Center

- Summerset at Frick brownfield redevelopment
  https://en.wikipedia.org/wiki/Summerset_at_Frick_Park and
  https://www.cmu.edu/steinbrenner/brownfields/Case%20Studies/pdf/Summerset%20-%20Nine%20Mile.pdf

- Mobile LIDAR scanning for topography or as-built conditions 3D CADD

- 3D model-based definition in the construction industry, done properly could enable a 25% reduction in the total non-recurring engineering costs of a new project.

- Immersed tube tunnels; floating permanent bridges; cable-stayed bridges; supertall structures; seismic dampeners......these are creative solutions but not game changing innovations.

- Halley VI Research Station; Bridge cable dehumidification systems; tall, supertall and mega tall buildings.

What does it mean for an innovation to be valuable and relevant to the industry?

- Innovations improve project performance, including quality of life for people and communities that benefit from the projects. Innovations also typically, but not always, reduce project capital and lifecycle costs.

- It must provide value to the owner and civil engineer and be "allowed" by codes and standards. An innovation that is not permitted is not relevant.

- It is not enough for it to be valuable. It still has to have an implementation strategy which will ensure the cost and time savings are actually harvested.

- It delivers benefits not previously achievable (function; quality; cost; schedule; safety); there is a broad-based demand and use for the innovation.

- Solves a real problem, and people will pay for it.

Please share your thoughts with our innovators that will help them find a market for a great idea.

- Good ideas that provide timely solutions will find a way to market. Increasingly, communities and institutions are developing new support structures for innovators. Persistence and hard work will be required, but there will be a way forward for a good idea.

- The Transportation Research Board is great for transportation innovations. National organizations are also helpful (APWA, ARTBA, ACI, AASHTO, AWWA, WEF).

- Need to be able to explain how this new concept can actually be used and the savings achieved.

- Focus should be on early-stage capital. Money talks and they don't let good ideas (commercially attractive) walk.

- Start with a ubiquitous problem and ensure the solution aligns with the market's existing value chain.

Please share some words of wisdom about innovation and the CE industry.

- Because of the scale of civil and environmental engineering projects, the number of stakeholders involved, and the primacy of public health and safety, there are many constraints to innovation in our field. There has been continuous innovation in our field, however, and the need for innovation has never been greater. If we promote and support innovation, and encourage looking beyond constraints to develop new approaches, we in CE can lead innovation in our field rather than waiting for others to bring it to us.

- No idea is a bad idea, and all innovation starts with a risk-taker solving a problem in a non-traditional way.

- The CE Industry is lagging relative to other industries like aerospace and computer science. The CE industry could substantially benefit by examining what has been successfully implemented in other industries and look at how to leverage these ideas.

- The industry requires a stronger focus on systemic innovation. Open innovation is increasingly attractive to crowdsource ideas, expertise and funding. Use "flat" questions (don't pre-suppose the nature of a solution).

- Process innovations are lower hanging fruit; most of the CE product-related innovations face regulatory hurdles. Historically, the CE industry shared their good ideas and did not "protect".

Appendix E: Eligibility for Student Symposium Competition and ASCE Society-wide Competition Finals

Invitations to Student Symposia and Society-wide Competition Finals are a privilege, not a right. Failure to act professionally can result in letters of reprimand, mandatory behavior management plans, and loss of invitations to further competition for individual institutions and/or entire conferences.

Eligibility for Student Symposium Competition
The following qualifications are required of all ASCE Student Chapters to compete at the Student Symposia Competitions:

An ASCE Student Chapter must:
1. Be in good standing with ASCE:
a. Have paid their annual dues, as received by ASCE, **no later than February 1, 11:59 p.m. EST**
b. Have submitted their student chapter's full Annual Report or EZ Annual Reporting Form **no later than February 1, 11:59 p.m. EST**

Eligibility for ASCE Society-wide Competition Finals
The following qualifications are required of all ASCE Student Chapters in order to advance to the ASCE Society-wide Competition Finals:

An ASCE Student Chapter must:
1. Be in good standing with ASCE:
a. Have paid their annual dues, as received by ASCE, **no later than February 1, 11:59 p.m. EST**
b. Have submitted their student chapter's **full Annual Report**, **no later than February 1, 11:59 p.m. EST** and have received a minimum score of 40 points out of a possible 100. **Student Chapters that submit an EZ annual reporting form do not qualify** to advance on to competition finals; and

2. Attend and participate in their assigned Student Symposium as shown through their school's:
a. On-time attendance and active participation by a member of the ASCE Student Chapter at the Student Symposium Business Meeting
b. Participation in the Student Symposium Paper Competition, including submission and presentation by a member of the ASCE Student Chapter. Note that any papers/presentations created for any other competition do not count as an entry into the Student Symposium Paper Competition.

Questions regarding eligibility should be directed to student@asce.org.

Appendix F: Intent and Eligibility Acknowledgement Form

2023 Innovation Contest
Statement of Intent and Acknowledgement of Eligibility Requirements for Student Symposium Competition Participation and Advancement to Society-wide Competition Finals

Teams shall submit an Intent and Eligibility Acknowledgement Form, **no later than 5:00 p.m. Eastern Standard Time (EST) on November 4, 2022.** By completing this form, a student chapter states their intent to have a team participate in the competition at their assigned student symposium as well as acknowledges the eligibility requirements for student symposium competition participation and advancement to Society-wide competition finals. The form must be signed by the Team Captain, ASCE Student Chapter Faculty Advisor, ASCE Student Chapter President, and Competition Team Faculty Advisor (if different than ASCE Student Chapter Faculty Advisor).

The team captain shall upload the Intent and Eligibility Acknowledgement Form to ASCE's Cerberus ftp server. The main folder contains a sub-folder for each Student Symposium. (Note: Please verify that your student symposium host is conducting this competition prior to completing this form and if not, consider the guest team option.) This is a Read/Write link (no delete). Refer to Appendix G – How to Navigate Folders and Upload Intent and Eligibility Acknowledgement Form for directions**.**

File names shall be in the form of "School Name – Innovation Intent and Eligibility Acknowledgement Form Year" (example: George Mason University – Innovation Intent and Eligibility Acknowledgement Form 2023).

Click this hyperlink to submit the Intent and Eligibility Acknowledgement Form

Late and/or incomplete submission of this form may be subject to deduction.

_____
 School/University Name

_____
 ASCE Student Chapter Name

_____
 Assigned Student Symposium Name

Statement of Intent

It is the intent of our student chapter to have a team participate in the 2023 Innovation Contest at our assigned Student Symposium.

Acknowledgement of Eligibility Requirements for Student Symposium Competition Participation and Advancement to Society-wide Competition Finals

Innovation Contest Team Captain (TC) and ASCE Student Chapter Faculty Advisor (FA), please initial next to each statement below to indicate your acknowledgement and understanding of that item. If you have questions about any statement, please contact us at student@asce.org.

	TC	FA
1. We have read the 2023 ASCE Innovation Contest Rules and understand the following:		
a. The student requirements of registered participants per Section 7.1 of		

the Rules.		
b. The <u>team requirements</u> per Section 7.2 of the Rules.		
c. The student chapter eligibility requirements to participate in the <u>ASCE Student Symposium Competition</u> per Appendix E of the Rules, specifically: **An ASCE Student Chapter must:** **1.** Be in good standing with ASCE: **a.** Have paid their annual dues, as received by ASCE, **no later than February 1, 11:59 p.m. EST** **b.** Have submitted their student chapter's full Annual Report or EZ Annual Reporting Form **no later than February 1, 11:59 p.m. EST**		
d. The student chapter eligibility requirements to qualify for advancement to the <u>Society-wide Competition Finals</u> per Appendix E of the Rules, specifically: **An ASCE Student Chapter must:** **1.** Be in good standing with ASCE: **a.** Have paid their annual dues, as received by ASCE, **no later than February 1, 11:59 p.m. EST** **b.** Have submitted their student chapter's **full Annual Report**, **no later than February 1, 11:59 p.m. EST** <u>and have received a minimum score of 40 points out of a possible 100.</u> **Student Chapters that submit an EZ annual reporting form do not qualify** to advance on to competition finals; and **2.** Attend and participate in their assigned Student Symposium as shown through their school's: **a.** On-time attendance and active participation by a member of the ASCE Student Chapter at the Student Symposium Business Meeting **b.** Participation in the Student Symposium Paper Competition, including submission and presentation by a member of the ASCE Student Chapter. Note that any papers/presentations created for any other competition do not count as an entry into the Student Symposium Paper Competition.		
e. The last day to submit a Request for Information (RFI) to the Innovation Contest Rules Committee is February 8, 2023.		
f. The project submission due date is set by our student symposium host, at least one week prior to student symposium. We are responsible for knowing this date and submitting our project on time.		
2. If your team is a winning team that has placed high enough in your Student Symposium Competition to be considered for advancement to the Society-wide Competition Finals, you will be informed if you have met all eligibility requirements about a week after your Student Symposia. (Any student symposium taking place prior to April 1 may have a longer turnaround time.)		
3. Submitting a student chapter full annual report is typically the responsibility of the student chapter officers. As team captain and faculty advisor, ASCE suggests that you connect with your student chapter officers early in the academic school year to discuss the annual report and activities that need to take place to receive the minimum score or higher.		

I have read and understand the student symposium competition information stated above, including eligibility requirements for student symposium competition participation and advancement to Society-wide competition finals.

_____
Team Captain

_____
Date

_____
Email Address

_____
Signature

_____
ASCE Student Chapter President

_____
Date

_____
Email Address

_____
Signature

_____
ASCE Student Chapter Faculty Advisor

_____
Date

_____
Email Address

_____
Signature

_____
Innovation Contest Faculty Advisor (if different than ASCE Student Chapter Faculty Advisor)

_____
Date
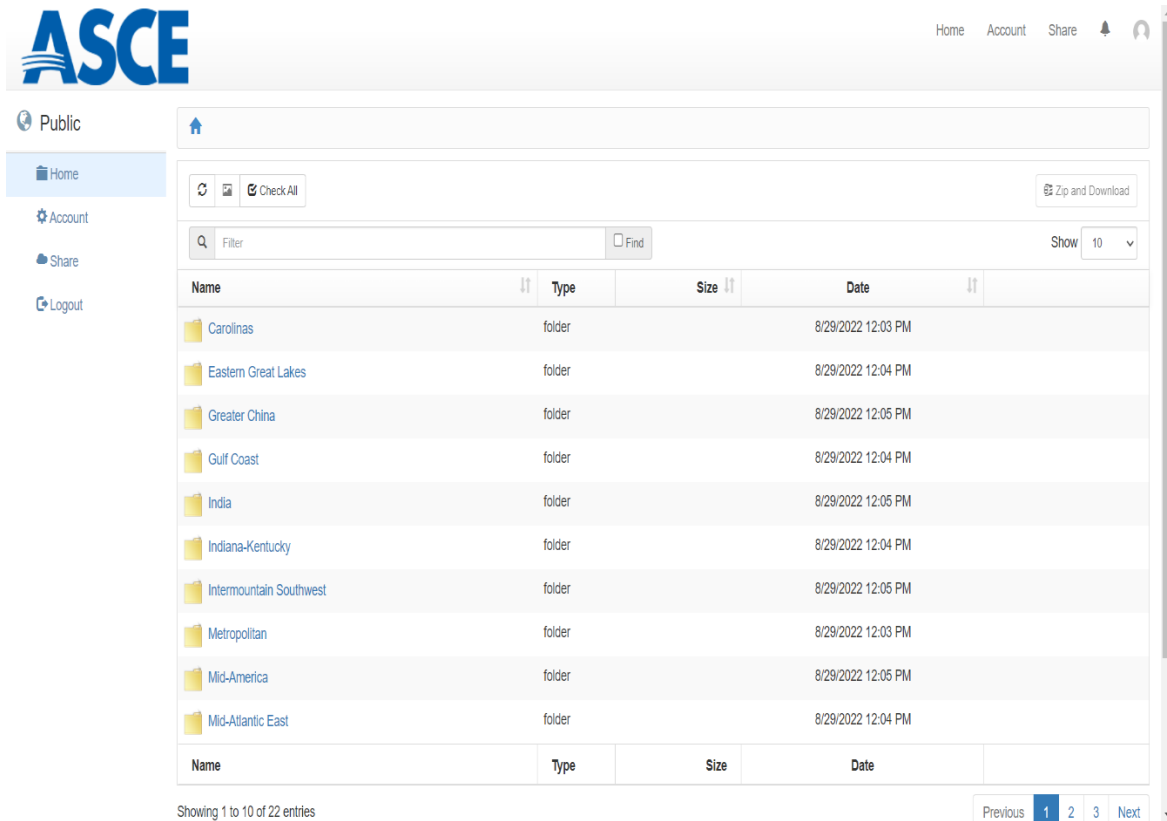
_____
Email Address

_____
Signature

Appendix G: How to Navigate Folders and Upload Intent and Eligibility Acknowledgement Forms
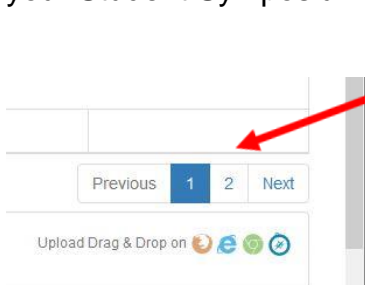
When you first arrive at the upload site, you will see folders labeled for each Student Symposium:

Locate your Student Symposium and click the folder to open it. If you don't see the name of your Student Symposium, click the page navigation to move to the second page:

When you have opened the folder for your Student Symposium, double-check that you are in the correct location before you begin uploading your files (In this case, **The Carolinas** Student Symposium):
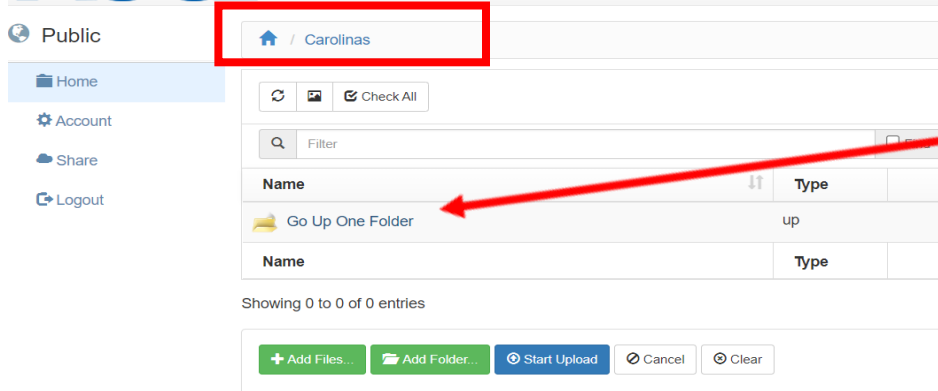
If you accidentally open the wrong folder, you can "back up" by clicking the **Go Up One Folder** and navigate correctly.

When you have confirmed that you have navigated correctly to the proper folder, you can either click the **+Add Files** button and then browse to find the files to upload or drag and drop files to the area directly below the **+Add Files** button.
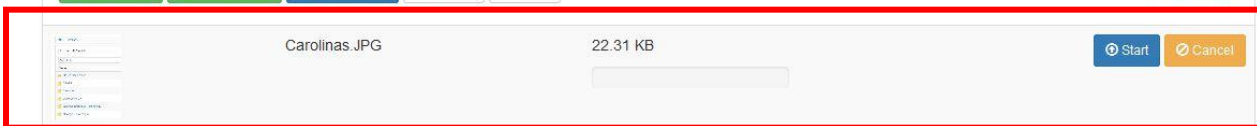
The selected (or dragged and dropped) files will appear in the upload area. To upload the file into the folder, click **Start Upload.**

When the file has been successfully uploaded, the name of the file will appear under the **Go Up One Folder** folder

To clear the uploaded file from the upload area, click **Clear.**

Need help?
If you uploaded a file to the wrong folder, or want to replace an uploaded file with a corrected version, **s**end an email to jupmeyer@asce.org and ask that the incorrect file be deleted. Include both the location (folder path) and **exact name** of the file you want deleted. (Files cannot be moved – you will have to upload the file again to the correct folder after it has been deleted).

Reminder
Please ensure you have uploaded to the correct folder for your symposium and school. Submissions outside of your own symposium folder will be considered non-responsive and will not be considered.