

JUMP Into STEM Submission Template

Template Instructions:

- Fill in all sections unless marked as optional
- Replace italic text with your own content
- Read through the Student Team Submission Requirements document to make sure you are meeting all submission requirements
- Check that your submission conforms to the page limits
- Remove this page from the document and save your submission as a PDF with the file name JUMP_[SHORT COLLEGIATE INSTITUTION NAME]_SUBMISSION_[SUBMISSION DATE (YYYY-MM-DD)].[EXTENSION] (e.g., JUMP_ORNL_SUBMISSION_2024-06-25.pdf)

Avoid Plagiarism. If a team includes the work of others without citation, the submission will be disqualified. Plagiarism includes but is not limited to copying and pasting the work of others and paraphrasing published works without citation. Photos and images also require citation. Please consider appropriate style guidelines to avoid plagiarism such as APA, Chicago, MLA, and others. Students should review the restrictions around AI and plagiarism in Section 1.3.2 of the Rules document to avoid disqualification.

Project Team Background

(up to two pages, single-spaced)

Project Name

Team Name

Collegiate Institution(s)

Team Mission Statement:

Include mission statement here

Team Member Biographies:

Include a short biography for each team member with information, such as major, level (freshman, sophomore, junior, senior, graduate), and other relevant background information (experience with building science, future career goals, and formative experiences that shaped each individual's contribution to the Challenge).

Diversity Statement:

(minimum one paragraph, five – seven sentences)

One of JUMP into STEM's key objectives is to encourage diversity of thought and background in students entering the building science industry. There is a diversity gap in STEM, meaning that certain groups are underrepresented or have been historically excluded from STEM fields. These groups include, but are not limited to, those based on race, ethnicity, and gender—and this gap needs to be addressed. Diversity of thought can be achieved through teams consisting of students from different majors and minors. If there are barriers to entry present that affect the racial, ethnic, and/or gender breakdown of your team, please elaborate. The diversity statement is your opportunity to describe your team's diversity of background and thought, both generally and as applicable to your chosen Challenge.

Project Challenge Submission

(up to five pages, single-spaced)

I. Background

Discuss the background of the Challenge and consider related stakeholders. Stakeholders are those who are affected by the problem, a part of the supply chain, or manufacturing of the technology product(s), as well as those who may have decision-making power and are able to provide solutions (technical or nontechnical solutions, such as policies). For example, you could include stakeholders who have previously experienced environmental pollution or a high energy burden.

II. Problem Statement

(one – two paragraphs)

Focus on a specific aspect of the problem and the stakeholder groups affected by or involved in the problem. The stakeholder groups can be from a specific location, socioeconomic status, age, or demographic (e.g., people living in subsidized housing).

III. Solution

Describe your solution and how it addresses or solves the specific problem from your problem statement. The solution must be technical and include one or more of the following components, as appropriate: economic, policy, commercialization, codes and standards.

Address the requirements for your selected Challenge as written in the challenge description. Include graphs, figures, and photos. Discuss the feasibility of your solution and how it will impact your stakeholders.

IV. Technology-to-Market Plan

A technology-to-market plan describes how the team envisions bringing its idea from concept to installation on real buildings, or integrated into the design of real buildings, and includes a market characterization, a cost/benefit analysis and a market adoption barrier analysis.

- The cost/benefit analysis does not need to be exhaustive and should include comparing the solution to current or existing technologies or practices. Benefits such as building energy reductions, improved occupant health or productivity, and lowered energy cost burden should be evaluated.*
- The plan should also discuss which key stakeholder(s) should be involved to commercialize the technology and then sell and install the technologies with your target market(s).*
- The plan should also identify at least one key market adoption barrier for implementation and specifically address how the proposed solution will overcome that barrier. Barriers should align with key stakeholder(s) identified by your team. Include how your solution will create value, economic or otherwise, to drive industry adoption.*

Here is some general guidance for your technology-to-market plan:

- Clearly **identify** the technology-to-market section of your submission. Make it easy for the reviewers to find this entry.*
- Make sure that your technology-to-market entry is **well-aligned** with your problem and solution and your responses make **logical** sense. Proofread your entries to make sure they are complete and understandable.*
- The technology-to-market plan and market adoption barriers should be based on an understanding of a **realistic** market.*
- Consider the **scope** of the market. Though you may have specific examples for a region or community, make sure that the solution is scalable and applicable to a wider community also.*

- Describe the **interconnectivity** of stakeholders, cost-benefit analysis, and adoption barriers.

References

(does not count toward five-page maximum)

Appendix

(optional, does not count toward five-page maximum)