2022 ASC Student Open Competition Pre-Problem Statement

Sustainability Problem Sponsored by

SKANSKA

Welcome to the Open Competition Sustainability Problem at the 2022 ASC Student Competition in Sparks, Nevada. We are excited to showcase some of our projects and methodology to make them safer, more environmentally conscious, and more collaborative.

We strive to develop and construct buildings and civil infrastructure that have near-zero effects on the environment, in aspects our projects influence most: energy, carbon, materials and water. We do this in collaboration with our customers and supply chain. We continually improve the green credentials of our people, projects, products and services to help our customers in achieving their green objectives. With ongoing training and sharing of best practices, we further drive green thinking into our culture and ways of working. We offer green solutions that add value to our customers, our business and the Earth.

By its nature, construction has the potential to create negative impacts on the natural environment when not actively managed. Done well, it has the potential to have a significant positive impact. Based on the strong belief that we can make a major contribution to a more sustainable world, Skanska is committed to proactive environmental management at all levels from local to global.

Our objective is to help students understand how to integrate sustainability into any construction project. We hope that this year's problem will help to prepare you for a future in deep green thinking and sustainable construction. The competition is a challenging and stressful environment, not unlike your future in project management, and we appreciate that each of you is dedicating a great deal of time and effort by participating. Thank you for your involvement and for your desire to be a green leader.

We look forward to your response on January 21, 2022, and the competition in February 2022. Good Luck!

Sincerely,

Megan O'Connell

Skanska Problem Statement Team Lead

Meya D. O'Cell

Skanska Values

Care Act Ethically Be Better- Commit to Grustomers



Problem Overview

In keeping with the goal to drive green thinking into our culture and ways that we work, this problem is meant to have you approach projects with the understanding that any project can be built sustainably, whether or not it's pursuing a green certification.

Teams will focus on the environmental aspects that construction projects impact the most, such as energy, carbon, resiliency, materials, water, and healthy environment. This year, the problem statement is showcasing various transit projects through a sustainability lens.

Students will be expected to have a familiarity with green ratings systems, including but not limited to LEED, Living Building Challenge, Envision, and WELL*. Although the problem statement will not be centered around any one of these certifications, teams can study the rating systems to understand best design and construction practices for building sustainably.

*Please note that this is not meant to be an exhaustive list of the green rating systems that may be utilized during the competition. The problem statement may include these or other green certification programs at the judge's discretion.

Problem Statement Understanding

The idea behind the general project overview is to both make the problem statement challenging and, more to the point, to help students understand that being a green leader is about more than any project's particular certification pursuit. Being 'green' is all about doing more with fewer resources and thinking about the environmental consequences of everything we do. This problem statement will focus on the "HOW" - the process to build sustainably.

Our goal this year is to examine sustainable features on various transit projects throughout the country, such as airports and train stations. We'll look at some of the unique challenges associated with these projects. We'll also look at how geographic regions impact sustainable design features.

Skanska is committed to contributing actively to a green society and is equally committed to help instilling that same passion into the next generation of builders.



Goal 5 Achieve gender equality and empower all women and girls.



Goal 8
Promote sustained inclusive and sustainable economic growth, full and productive employment and decent work for all.



Goal 9
Build resilient infrastructure, promote
inclusive and
sustainable industrialization and foster
innovation.



Goal 11 Make cities and human settlements inclusive, safe, resilient and sustainable.



Goal 12Ensure sustainable consumption and production patterns.



Goal 13Take urgent action to combat climate change and its impacts.



Goal 16
Promote peaceful
and inclusive societies
for sustainable development, provide
access to justice for
all and build effective
accountable and
inclusive institutions
at all levels.

Prequalification Statement (5 points)

The Intent of the Prequalification Statement is for Skanska's Problem Statement Team to get acquainted with the team members.

The Prequalification Statement shall be based on actual resumes and experiences of the individuals on the project team. The prequalification shall include, at a minimum, the following information:

Cover Letter and Introduction

Team Contact: Please identify the main team contact person and provide their email address for all electronic correspondence, notifications, and other instructions.

Team Members: Identify all team members. Include a one-page document with all team members' photos and names.

Team Resumes: Include each individuals' information in the form of a resume. Identify green achievements, accreditation and training, applicable work or school experience and any other sustainable awards of note. Please include a photo of each team member.

Individual Statements: Please provide a statement from each team member regarding why they are competing and what they hope to gain from participating in the competition.

Team member changes after submission are acceptable so long as they comply with ASC rules and guidelines. Resumes and statements for changed team members would be appreciated.

Format Requirements-Prequalification Statement

In keeping with sustainable practices, all proposers will provide an electronic submission of the Prequalification Statement. Email attachments are the only acceptable means of submitting materials. All electronic submissions must be in the form of a PDF.

The following proposal format must be adhered to:

Maximum submission of 20 pages, including your cover letter, resumes, statements and any other documentation necessary to support your submission.

Please ensure that all font, text size and border selections are coordinated and organized to ensure that submission appears to be a cohesive package representative of your team.

In preparation for the competition, the selection committee requests that your team submit their Prequalification Statement detailed above **no later than 2:00pm Pacific Standard Time on January 21, 2022 to ASC2022@skanska.com.** It is important to note that this statement is considered part of your overall selection criteria and is a part of the scoring for the Problem Statement. Late submissions will be deducted 25% of their score. Failure to submit this Prequalification <u>will not</u> disqualify your team from further participation.

Questions can be directed to Megan O'Connell at ASC2022@skanska.com