A design brief is a document used by professional designers and their clients to communicate the context, goals, and requirements of a creative project. This design brief describes the focus of the Biomimicry Youth Design Challenge (YDC) and what your solution must accomplish in order to compete for awards.

The Opportunity

The Sustainable Development Goals (SDGs) are a collection of 17 global goals created by the United Nations to promote prosperity while protecting the planet. They address the global challenges we face, including those related to poverty, inequality, climate, environmental degradation, prosperity, and peace and justice—and recognize that all of these goals are interconnected. Together they represent a shared vision that people around the world are using to work together toward a sustainable future.

In order for us to achieve the Goals, our human-built systems must work together with the systems of the natural world we all are part of. Nature is one of the best models we have for a sustainable, regenerative way of living and biomimicry (nature-inspired design) provides a pathway to the solutions we need. Organisms and ecosystems offer incredible inspiration and time-tested strategies that can be emulated and applied to world-wide and local issues in areas as diverse as energy, water, transportation, buildings and infrastructure, food systems, health, behavior change, and more.

You are challenged to:

Explore the wonders of the natural world and create a nature-inspired innovation that addresses one or more of the United Nations Sustainable Development Goals by solving a problem of your choice.

What are we looking for?

Award-winning teams will:

- Identify a specific problem to focus on and provide evidence that solving it will help address one or more SDGs.
- Propose a well-researched biomimicry solution to the problem. We are especially interested in projects that offer solutions to issues affecting the team’s community or region. Solutions may include any type of innovation, including the design of a physical technology, a process, or a system.
- Demonstrate originality either by proposing an entirely new solution or offering novel improvements on existing ideas and appropriately citing prior works.

For details about judging criteria, please review the YDC Project Rubric.