

WEGE PRIZE 2017

Design Brief

Wege Prize, organized by Kendall College of Art and Design's Wege Center for Sustainable Design with support from the Wege Foundation, is a yearly student design competition that gives teams of five the chance to collaborate across institutional and disciplinary boundaries, use design thinking principles, and contend for over \$30,000 in total cash prizes, all while helping to **show the world what the future of problem solving looks like.**

OUR WICKED PROBLEM: HOW CAN WE CREATE A CIRCULAR ECONOMY?

WHAT IS A WICKED PROBLEM? *A wicked problem doesn't imply a sense of 'evil', but rather denotes a problem that is considerably resistant to resolution. Efforts to grapple with one aspect of a wicked problem often reveal or create other obstacles that must be considered and overcome.*

Our current *linear economic system*, in which we "take, make, and dispose," relies on large quantities of easily accessible resources and energy, and as such is unfit for the reality in which it operates. Working towards efficiency—a reduction of resources and fossil energy consumed per unit of manufacturing output—will not alter the finite nature of these resources, but rather can only delay their inevitable extinction. Therefore, *a change of the entire operating system seems necessary.*

One potential new system is a *circular economy*. A circular economy is one that is restorative by design, and which aims to keep products, components and materials at their highest utility and value, at all times.

Some key aspects of the *circular economy* are as follows:

- **Globally decouples** economic growth and development from the consumption of finite resources.
- **Distinguishes** between and separates technical and biological materials, keeping them at their highest value at all times.
- **Focuses on effective design** and use of materials to optimize their flow and maintain or increase technical and natural resource stocks.
- **Provides new opportunities** for innovation across fields such as product design, service and business models, food, farming, and biological feedstocks and products.
- **Establishes a framework** and building blocks for a resilient system able to work in the longer term.

THE CHALLENGE

Each team must leverage its transdisciplinary makeup to collaboratively design and propose a solution to a wicked problem that can help us transition from a linear economic model to a circular economic model. Possible solutions include, but are not limited to products, services, and businesses or non-profit organizations. All teams must consider the economics and viability of their solution within natural, social, and financial systems.

This competition isn't just about sustainability; it's about sustainable systems. It's also not a "start-up" or "pitch" competition. Our judges are looking for solutions that address the shortcomings of a linear economic model on a systemic level, not merely products made from more eco-friendly materials or services/businesses/non-profits focused on reducing harm by changing individual consumer behavior. ***Remember, in the words of architect Bill McDonough, "Doing less bad is not the same as doing more good."*** We want you to work together to help us completely re-think and re-design the way our economy works and create positive, regenerative solutions that have a widespread and lasting impact.



"Rethinking Progress," video from the Ellen MacArthur Foundation. To watch this video, visit wegeprize.org/#what-is-a-circular-economy

THE PROCESS

PHASE I – TEAM INTRODUCTION AND RESEARCH PLAN *DUE 11/30/16*

Your first challenge is to **observe, investigate, and incubate**. Tell us where your interests lie and build a framework of research that will ultimately help you develop your solution. *You do not need to identify and defend a specific solution at this point.* Keep your writing concise and focused on the big picture, and don't worry about being bold with your intentions—we expect your idea to change and grow significantly over the course of competition!

RESEARCH PLAN (500-1000 WORDS) SHOULD ADDRESS:

- What problem or opportunity are you interested in addressing?
- How could addressing the problem or opportunity support the development of a circular economy?
- What basic research have you done to understand the human, technological, and ecological factors involved in your approach?
- How do you plan to involve mentors and/or subject matter experts in your design process?
- What are your next steps?

TEAM INTRODUCTION (500 WORDS) SHOULD ADDRESS:

- *Why?* Explain why you built your team the way you did and how your transdisciplinary makeup will enable you to better understand and address the wicked problem you are tackling.

FEEDBACK LOOP:

Teams that are cleared to move on to Phase II will receive feedback from the judges by 12/15/16.

PHASE II – PROJECT SUMMARY 1ST DRAFT *DUE 1/30/17*

Your next challenge is to respond to the judges' feedback by beginning to develop your research plan into a concrete solution you'll communicate through an informative and visually compelling multi-page 8.5" x 11" document composed of the elements listed below. *For complete details on what should be included in your project summary 1st draft and how it should be designed, visit wegeprize.org/projectssummary. Describe the nature of your team's collaborative work to this point and develop a succinct (2-3 sentence) description of your solution.*

PART ONE – COLLABORATION ANALYSIS/SOLUTION SUMMARY (1 PAGE)

Describe the nature of your team's collaborative work to this point and develop a succinct (2-3 sentence) description of your solution.

PART TWO – CONTEXT (1 PAGE)

Provide information and insight to help others understand the conditions surrounding the wicked problem you're working to solve.

PART THREE – SOLUTION OVERVIEW (2 PAGES)

Describe the solution you are proposing and illustrate how it will work in a real-world context.

PART FOUR – BARRIER ACKNOWLEDGMENT (1 PAGE)

Acknowledge the challenges preventing your solution from succeeding and outline a plan to address them.

PART FIVE – RESOURCE LIST (1 PAGE)

Provide a list of resources (with links included) summarizing the research that informed your project summary.

FEEDBACK LOOP:

Teams that are cleared to move on to Phase III will receive feedback from the judges by 2/13/17.

PHASE III – PROJECT SUMMARY 2ND DRAFT *DUE 4/3/17*

Your next challenge is twofold: you must first respond to the judges' feedback by revising and refining the project material you submitted in Phase II. You must then develop the additional elements below into your document, supporting your conclusions with as much hard data as possible. *For complete details on what should be included in your project summary 2nd draft and how it should be designed, visit wegeprize.org/projectsummary.*

DETAILED MATERIAL ANALYSIS (1 PAGE)

Detail the resources/materials - technological, biological, and/or capital - incorporated into your solutions, provide justification for their use, and illustrate their alignment with the circular economy.

DETAILED ECONOMIC ANALYSIS (1 PAGE)

Detail the business model that will ensure your solution's economic viability, identify the strengths and weaknesses of your business model, and identify risks you may face and how you plan to address them.

PROJECT SUMMARY 2ND DRAFTS SHOULD BE ORGANIZED AS FOLLOWS:

- **PART ONE – REVISED** Collaboration Analysis/Solution Summary (1 page)
- **PART TWO – REVISED** Context (1 page)
- **PART THREE – REVISED** Solution Overview (2 pages)
- **PART FOUR – NEW!** Detailed Material Analysis (1 page)
- **PART FIVE – NEW!** Detailed Economic Analysis (1 page)
- **PART SIX – REVISED** Barrier Acknowledgment (1 page)
- **PART SEVEN – REVISED** Resource List (1 page)

FEEDBACK LOOP:

Teams that are cleared to move on to Phase III will receive feedback from the judges by 4/13/17.

PHASE IV – PROJECT SUMMARY FINAL DRAFT/FINAL PRESENTATION MATERIALS *DUE 5/12/17*

PROJECT SUMMARY FINAL DRAFT*

Your Project Final Draft **must** respond to the judges' feedback on your Phase III submission by revising and refining all elements of your project.

**Your Project Summary final draft should be organized in the exact same way as the 2nd draft.*

FINAL PRESENTATION

*Finalist teams will select **one member** to present and defend the team's solution in its entirety on stage in front of the judges and live/online audiences at the 2017 Wege Prize Awards on May 19, 2017. Teams may present their solution however they wish, but are encouraged to start with a slide show presentation as a base and build from there. Each presenter will be allotted ten minutes on stage, followed by a ten-minute Q+A session with the judges.*

PROJECT FINAL DRAFTS AND FINAL PRESENTATIONS WILL BE JUDGED ON THE FOLLOWING CRITERIA:

A. DEPTH OF RESEARCH

- Have you clearly identified the problem you're trying to solve?
- To what depth have you studied and analyzed the problem?
- Have you researched existing solutions?
- Have you consulted experts to refine your solution?

B. PRESENTATION

- Is your presentation organized, and does it deliver a clear message?
- Have you gotten creative and thought outside the box when developing your presentation?
- Can you provide immediate and thoughtful answers to the judges' questions?

C. INNOVATION AND IMPLEMENTATION

- Does the solution help accelerate us into a circular economy?
- Is your solution technologically feasible?
- Is your solution economically/financially feasible?
- Is there proven customer need for your solution?
- Is there sufficient motivation for people to use your solution?
- What system conditions need to exist to make your solution possible?
- If your solution builds on an existing project or research you're already involved in, have you built upon it?

D. COLLABORATION

- Have you built a strong and balanced transdisciplinary team?
- Have you engaged all of your teammates in the development of your solution?
- Beyond dividing up different tasks, have you worked across disciplinary boundaries and brought your different perspectives together?
- Have you effectively engaged mentors and/or subject matter experts in your design process?

THE TIMELINE



WHO IS ELIGIBLE TO COMPETE?

For complete individual and team participation requirements, visit wegeprize.org/rules

HOW CAN TEAMS REGISTER?

For complete registration details, visit wegeprize.org/registration



Kendall College of Art and Design
of Ferris State University



KCAD's Wege Center for Sustainable Design's
Wege Prize is supported by The Wege Foundation