# WEGE PRIZE 2016

## DESIGN BRIEF

Wege Prize 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 $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*.

A *circular economy*, on the other hand, 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.

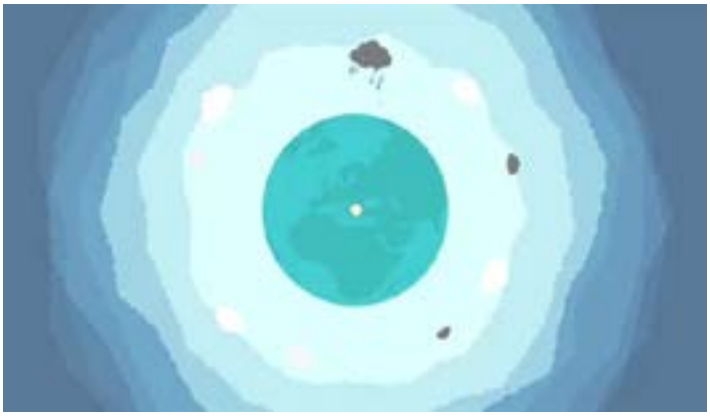
Some key aspects of the *circular economy* are as follows:

- 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, or businesses/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.*** 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", from the Ellen MacArthur Foundation (click video to watch)*

# THE PROCESS

## PHASE I – TEAM REGISTRATION AND RESEARCH PLAN DUE 10/1/15

Your team's 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** - we're looking for a written research plan (500-1000 words) that answers the following questions:

- What problem or opportunity are you interested in addressing?
- How could addressing that 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?

*Keep your research plan 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!

### *FEEDBACK LOOP:*

***In order to move on to Phase II*, teams must show evidence of organization, understanding, and commitment in their research plan. Teams that are cleared to move on will receive feedback from the judges by 10/15/15.**

## PHASE II – VISUAL COMMUNICATION DRAFT DUE 11/30/15

Your team's next challenge is to begin developing your research plan into a concrete solution. *Teams must submit a draft of a poster – exactly 23"x48", 300dpi resolution, and in PDF format* – that visually communicates their solution. *Effective boards will illustrate the following*:

- CREATING EFFECTIVE FLOWS – If your solution utilizes materials or nutrients, how are you helping them flow? If your solution connects 'needs' to 'haves,' how does it work?
- CUSTOMER/USER NEED – How does your solution fill a need, and for whom?
- ECONOMIC FEASIBILITY – Can your solution make money and be financially viable?
- BUSINESS MODEL – How will you fund the startup costs of your solution, and how will you make it profitable in the long-term?
- BRANDING DESIGN – Have you given your solution a strong visual identity?
- POSITION WITHIN LARGER SYSTEM – How does your solution fit into larger systems such as farming, education, or transportation, as well as the larger system of the circular economy?
- RESEARCH – Are your ideas and conclusions grounded in reality and backed by in-depth research?

### *FEEDBACK LOOP:*

***In order to move on to Phase III*, teams must show significant progress towards answering the above questions. Teams that are cleared to move on will receive feedback from the judges by 12/20/15.**

## PHASE III – VISUAL COMMUNICATION FINAL DRAFT DUE 3/1/16

Teams that move on to the third phase of the competition must *submit a revised final draft of their poster that shows they have clearly built upon the judges' feedback* and moved towards a fully developed solution. In this stage, teams are also encouraged, but not required, to *illustrate their solution beyond the confines of the poster* by submitting some or all of the following for consideration:

- digital or physical prototypes
- promotional materials
  *advertisements, posters, videos, social media, etc.*
- fully-developed business plans
- written/video summary of collaborative process
- summary of research
- other

### *FEEDBACK LOOP:*

**The judges will then select the teams they feel have the strongest solutions to move on to the final phase of the competition. Teams that move on to the final phase will receive feedback from the judges by 3/13/16.**

## PHASE IV – **FINAL PRESENTATION** ALL PRESENTATION MATERIALS DUE 5/7/16

*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 the audience at the 2016 Wege Prize Awards on May 14, 2016. 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.

In addition to the materials submitted in Phase III, **finalist teams will be judged on the following criteria** (see complete rubric for more details):

### A. DEPTH OF RESEARCH

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

### B. 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?

### C. 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?

### 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?

# THE TIMELINE