



2021 Future of Energy Challenge: Net-Zero Emissions Applicant Resources

Table of Contents

Future of Energy Challenge: Net-Zero Emissions	2
The Challenge Question	2
Timeline	2
Articles and Resources	2
Crafting a solution	3
Forming a team	3
Ideating a solution	4
Refining your solution	5
Selection Criteria	5
Business Canvas Template	6



Future of Energy Challenge: Net-Zero Emissions

The Challenge Question

Amidst the complexity of supply chains, addressing scope 3 GHG emissions is an area with substantial opportunities for aspiring entrepreneurs looking to have an impact in the energy space. Sustainability experts and global companies are increasingly looking for ways to tackle scope 3 emissions, setting goals, and tracking improvements.

What solutions, whether applied to individual consumer or commercial activities, could support significant scope 3 emissions reductions?

Timeline

Phase 1

November 16, 2020: Challenge launches, submission form opens

February 15, 2021: Early bird deadline #1. Teams who submit by either one of the two early bird deadlines will get personalized feedback from Net Impact. Teams will have the option to revise and resubmit before the final submission deadline.

March 15, 2021: Early bird deadline #2

April 9, 2021: Final submission deadline

April 30 - May 7, 2021: Teams selected and notified

Phase 2

Approx. June 7 – July 30, 2021 (8 weeks): Accelerator with Edios Global's Social Innovation Warehouse

Approx. July 31, 2021: Final pitch presentation to a panel of expert judges. The winning team will be selected.

Articles and Resources

Review the following list of suggested articles and resources to help get your creativity going around the topic of scope 3 emissions:

- [The Rise of Local Low-Carbon and Renewable Distributed Energy Solutions](#), a GreenBiz article by Gerardo Amado
- A simulator tool from Climate Interactive to help calculate the impact of a variety of climate solutions: <https://www.climateinteractive.org/tools/en-roads/>



- [New Sketch: A US Net-Zero CO₂ Energy System by 2050](#), a publication in which Shell Scenarios team outlines a possible pathway for the US to achieve a net-zero CO₂ emissions energy system by 2050
- [So you want to reduce your supply chain emissions](#), a SupplychainDive article by Emma Cosgrove
- [Walmart: More than 2K suppliers are participating in Project Gigaton](#), a SupplychainDive article by Matt Leonard
- [Greenhouse Gases at EPA](#), a resource outlining the different GHG emissions categories by the U.S. Environmental Protection Agency
- [Big Oil is finally talking about scope 3 emissions. What the heck is scope 3?](#), a Grist article by Emily Pontecorvo
- [What are Scopes 1, 2 and 3 of Carbon Emissions?](#), a Plan A Academy article by Tara Bernoville

Crafting a solution

Forming a team

The first step to create an innovative and strong submission to the Challenge is to form a strong, diverse team. As you are putting together your team for this year's challenge, consider the following:

Does your team have clear roles and responsibilities? Assigning roles to each team member is a smart way to divide up the work, play to each team member's strengths, and provide structure for the team. Consider the following team roles:

- **Team leader:** Ensures engagement of all team members throughout the entire process and leads solution submission
- **Researcher/Connector:** Actively conducts deeper research on the topic (if needed) and finds and connects team members with experts to learn from and further iterates the submission idea
- **Documenter:** Documents and shares all team meetings through written notes, photographs, etc.

Does your team have people who wouldn't usually collaborate? Diverse backgrounds, interests, and skills helps to spark innovative ideas, especially when using a design thinking process. If you are having trouble finding team members, reach out to other departments on your campus (if you're a student) or professionals in your network to ask for introductions to people who would be interested in collaborating.

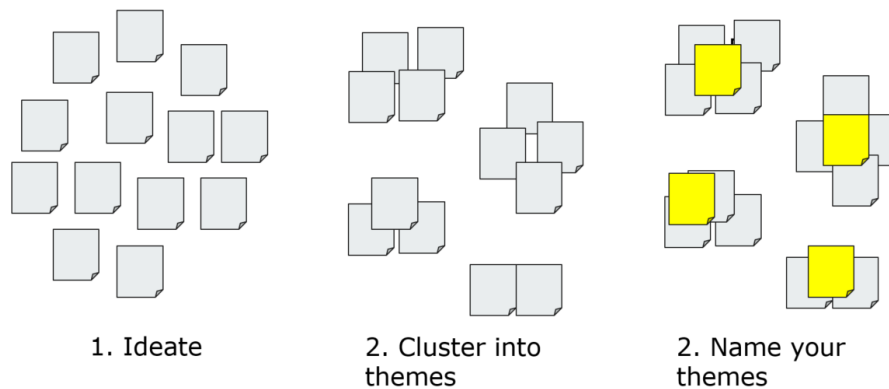
Does your team have people with varying strengths and weaknesses? Depending on your solution, your team will need different strengths. For example, if your solution involves creating an app, it would be a good idea to have someone on your team with that strength. Other key strengths to consider for this project: ideation facilitation,



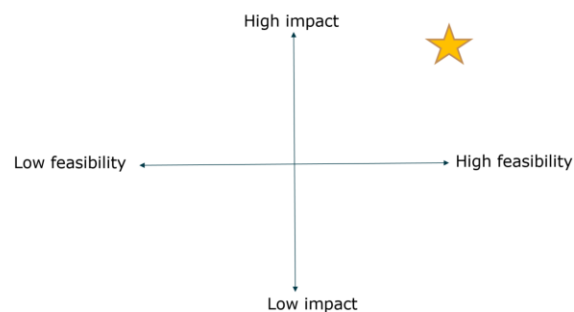
team leadership, research and development, knowledge of this issue, connection to people working on this issue, and business marketing.

Ideating a solution

Once you've formed your team, we recommend you meet for an ideation session to help narrow down your solution. If you aren't sure where to start, ideation and clustering is one creative problem-solving method you can use. In this method, your team writes down every idea you have that could possibly solve the challenge statement. And I mean every idea – both the feasible and the wild. Then after 5 minutes, you come back together and go over all the ideas you came up with and start grouping them into themes. This can help your team see where you have similar ideas and where your out-of-the-box ideas are.



Then, take the top ideas/themes that your team comes up with and map them on the 2X2 matrix by feasibility and impact. As you can tell from the selection criteria in the Challenge Brief, these are the two important categories. So you want to make sure your idea is somewhere by the gold star to ensure that you are hitting both high feasibility and high impact. This is a great tool to remove ideas that are interesting but won't get your team to the finals because they are too infeasible and/or lack a real-world impact.





If design thinking is new to you and you're curious to learn more and also be guided through the step-by-step process, check out this short video [introduction to the design thinking process](#).

If you are interested in learning more about design thinking and want to try different methods, check out the following resources:

- [Brainstorming](#) (IdeoU)
- [Creative workshop module](#) (DIY)
- [Fast idea generator](#) (DIY)
- [Thinking hats](#) (DIY)
- [How to Prototype a New Business](#) (IdeoU)

Refining your solution

Once you have decided on your solution, it's important that your team continue to develop and refine it. As your team begins writing out your submission, consider the following questions. Strong submissions will be able to answer all of these questions:

REMINDER! The early bird deadline on March 15th is a chance to get feedback from Net Impact, which you can use to refine and re-submit your solution! Be sure to submit your final solution prior the final submission deadline on April 9th, 2021

1. What is the specific challenge or need is your solution trying to solve for? Why is this challenge important to solve and how is your solution uniquely suited to address this need or challenge?
2. How is your solution innovative? Are there other similar solutions already in the marketplace? If so, how is your solution different or unique?
3. Where will your solution be implemented (i.e. what geographical location)? How will it be implemented? What are some of the challenges to implementation?
2. What might be a rough outline or timeline for when the solution is expected to be ready to launch? What are the big next steps you will need to take to bring this idea to life?

A business canvas, laid out at the end of this document, is another tool that can help your team refine your solution and ensure that it is responding to the selection criteria.

Selection Criteria

Successful proposals will be those that best demonstrate ability to reach a Proof of Concept stage at the end of the 2021 Net Impact Accelerator, while exhibiting:

- **Clarity of goals and objectives:** Clearly identify which part of the problem (which players, part of the value chain, etc.) you're addressing. The solution should reduce emissions from energy products, while providing energy for a low or no-emission future



- **Innovation:** The proposal should be fundamentally innovative and generate value by applying a unique solution or an existing solution in a new way.
- **Feasibility:** The proposal could be reasonably implemented in the next 3-5 years and could create substantial new value, i.e. >\$ 1M of value per year. *Special consideration will be given to teams who demonstrate a commitment to launching their solution
- **Breakthrough potential:** The proposal focuses on systemic thought and strategy rather than single-solution gadgets, apps, or products. This is innovation in two ways, either it's a brand new solution or an existing solution used in a completely new way.

Business Canvas Template

CHALLENGE QUESTION: Amidst the complexity of supply chains, addressing scope 3 GHG emissions is an area with substantial opportunities for aspiring entrepreneurs looking to have an impact in the energy space. Sustainability experts and global companies are increasingly looking for ways to tackle scope 3 emissions, setting goals, and tracking improvements. **What solutions, whether applied to individual consumer or commercial activities, could support significant scope 3 emissions reductions?**

EXECUTIVE SUMMARY: Briefly describe your solution. What specific challenge of scope 3 emission within the energy field are you addressing and how will addressing it contribute to a lower or no-emission future? What is the value it provides? How is your solution unique or different from others in the market? How feasible is the solution? Will it be able to come to market in the next 3 to 5 years? What are the barriers to implementation?

ANTICIPATED OUTCOMES

- In what ways is your solution a game-changer? Is your idea brand new or an existing solution presented in a brand new way?
- Where do you anticipate your solution being implemented? Why did you chose this location?
- Describe the market for your solution. Who are the end users?

SHORT TERM & MEDIUM TERM GOALS

- What are the first steps toward implementation?
- What will your solution accomplish within the first 5 years after launching?
- What might your solution accomplish in the 5 to 15 years after launching?

IMPACT

- How does your solution reduce scope 3 GHG emission reductions? Describe in detail the impact of said reductions.
- Is this method of scope 3 emissions reductions sustainable over the next 5 to 15 years?
- Are there additional beneficial impacts on consumers, users or the energy field?