GSA Crowdsources Climate Change Solutions

INTRODUCTION

With a grant from the National Science Foundation (NSF), the Geological Society of America (GSA) gathered input from the geoscience community to identify bold and creative ideas for translating scientific research to solutions for climate change challenges that can be implemented within a two- to three-year timeframe.

APPROACH

A website was created with information on the various ways to participate. We presented four questions to participants during the two week comment period, which were intended to help responders focus their answers in ways appropriate to the charge of this effort as outlined in communications with NSF.

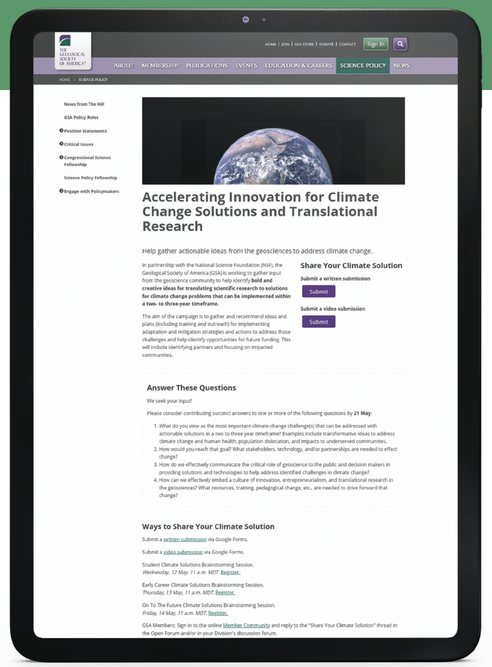

Figure 1. Webpage hosted on www.geosociety.org outlining the project and ways to submit comments. Ipad graphic by zlatko_plamenov on Freepik.

METHODS

To broadly solicit feedback from its membership and community, GSA used email newsletters, social media, and the online member community.

GSA also conducted targeted outreach to ensure the project received responses from multiple disciplines and stakeholders, including students, early career professionals, and groups underrepresented in the geosciences. Targeted outreach included:

1. Three online brainstorming sessions hosted and moderated by GSA leadership, student advisory committee members, and GSA staff. The sessions allowed these targeted groups time and space to discuss these questions and have their answers considered.
2. Announcements in “GeoScene,” GSA’s monthly email to students and early career professionals.
3. Shareable content to encourage submission from GSA’s 22 scientific Divisions’ members.
4. Outreach to its associated societies and other geosceience organziations.
5. Personally contacting leaders in climate science and encourage participlation.

Overall, more than 100 responses were received via the online submssion form, in addition to the responses collected during the climate brainstorming sessions.

Figure 2. Targeted email to On to The Future cohort and alumni inviting participation in brainstorm sessions.

Figure 3. Instagram graphic targeted to students.

RESULTS

GSA’s full report is available online at www.geosociety.org/climate-solutions, along with reports of other societies that conducted similar outreach. Results were shared at Annual Meetings of the Geological Society of America, American Geophysical Union, and American Meteorological Society.

Scan to view report.

CONCLUSION

- Geoscience plays a fundamental role in understanding climate change and its impacts, sourcing needed materials for solutions, and designing effective mitigation, and adaptation measures.
- Geoscience will be critical to understanding the changing conditions that affect communities, such as water resources, agriculture, and extreme events, and developing mitigation measures, such as low-carbon energy sources and carbon capture and storage.
- Equitable partnerships and engagement with communities, particularly those most vulnerable to climate impacts, are needed. These efforts must be prioritized, valued, and funded, which requires a change in the culture and funding structure to be effective.

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