Energy / Geoengineering Proposal Team

The energy/geoengineering proposal team will focus on energy production, energy density and the potential of geoengineering. The proposal team's mission is to use the skills it developed during their workshops to address the proposal team questions below and integrate their answers into a **single-color team video message**.

The Energy Geoengineering Proposal Team may select to address energy and/or geoengineering questions. A minimum of two (2) questions must be addressed in their color team proposal.

Energy

- Energy Where does energy come from?
- How does the generation, storage and transport of power impact global warming?
- How do you recommend we generate the power we use?
- How do you recommend we store and transport power?
- How does population density affect your recommendations?
- What is your recommended solution for rural areas? Urban areas?
- What is your regional strategy?

Geoengineering

- Human impact on global warming has generally been unintentional. Can we intentionally affect human impact on global warming?
- Should we actively engage in geoengineering?
- When would it be appropriate to engage in geoengineering?
- How would you use Carbon geoengineering to address global warming?
- How would you use solar radiation management to address global warming?

<u>Workshops:</u> Members of the Proposal Team will attend energy and geoengineering workshops discussing potential approaches to climate change. Each Proposal Team member will attend three (3) of the following workshops:

- Ethics
- Energy I, it's production and it's effect on global warming.
- Energy II, mitigation strategies and geoengineering topics
- Robert Hazen's workshop on Carbon
- Quantum Computing energy optimization
- STEAM Punk & Januvian Thinking

Library - Additional information will be provided by the PF team. Relevant links and data sites will be listed in the appendix

"We shall require a substantially new manner of thinking if mankind is to survive." Albert Einstein

Appendix/Resources:

NASA -https://climate.nasa.gov/global-warming-vs-climate-change/

Note to scholars: How do you Eat an Elephant? From Michael S. Toon; Artist, Designer, Builder, Engineer - https://treeofwaterandpower.com/lettertoattendeesoffibonacciconference2023/

Carbon -

The Carbon Almanac - https://thecarbonalmanac.org/

The carbon cycle (https://ed.ted.com/lessons/the-carbon-cycle-nathaniel-manning?lesson collection=our-changing-climate#review)

Brief video on why carbon removal is important- https://www.wri.org/videos/what-carbon-removal

CHARM Industrial company- (https://charmindustrial.com)

CarbFix (Iceland) - https://www.carbfix.com/

Ebb carbon - electro chemistry (https://www.ebbcarbon.com)

Captura (https://capturacorp.com)- Harry - floating island that captures carbon

Running Tide company (https://www.runningtide.com)

Solar Impulse Foundation- education (https://aroundtheworld.solarimpulse.com/join-us?ga=2.151941243.339838082.1682348322-1954468437.1682348322#educational-corner)

Center for climate repair at Cambridge - https://www.climaterepair.cam.ac.uk/

XPRIZE.org - https://www.xprize.org/

Cool Effect Projects - https://www.cooleffect.org/projects

Alberta Innovates – (the province of Alberta's next level innovations for net zero) https://learnhow.philespace.com/

Energy -

Wind Turbine Looks Like A Tree

https://www.facebook.com/mashable/videos/10157523963284705/UzpfSTU2OTk5MzQxNjUwMDE1ODoxNDQ3MTAwMTcyMTlyODA3/

Floating Solar Farms

https://www.ecowatch.com/floating-solar-farms-climate-crisis-2638980599.html?fbclid=IwAR1GSFcy55Mph0XPjgLjdVMCXL1oSXq5C0BZFeEb0Tm8ayWiQ1JNA4Pbfs8

Energy - https://www.epa.gov/energy

Solar Impulse Foundation – solutions for cities initiative - https://solarimpulse.com/

XPRIZE - Climate + Energy - https://www.xprize.org/domains/climate

STRIPE/Carbon removal critical to counteract climate change - https://stripe.com/newsroom/news/climate-launch

RTI Center for Climate Solutions - https://www.rti.org/practice-area/climate-solutions

Exploring Hydrogen Fuel Cell Energy Markets - https://www.rti.org/impact/hydrogen-fuel-cell-energy-markets

Geoengineering -

Solar geoengineering - https://geoengineering.environment.harvard.edu/geoengineering

Climate Smart communities - https://climatesmart.ny.gov/actions-certification/participating-communities/

Recycled Roads

https://www.facebook.com/BBCnewsafrica/videos/781081025685132/UzpfSTU2OTk5MzQxNjUwMDE1 ODoxNDQ2ODQyMzUyMTQ4NTg5/

Larvel Bot Sprays Baby Coral to Save Great Barrier Reef

https://www.facebook.com/NowThisFuture/videos/2581499575265235/UzpfSTU2OTk5MzQxNjUwMDE 10DoxNDQ20DAwMzc1NDg2MTlw/

Al: An Al and machine learning software platform to accelerate materials R&D and innovation. https://solarimpulse.com/solutions-explorer/sdlabs?queryID=1d3ecbd946611664740e7aa73d2f68ff

At this link, https://solarimpulse.com/solutions-explorer/city is a city solution-guide: This guide looks at the challenges that cities face to become more sustainable, suggesting solutions that help decision makers to harness the economic opportunities of the ecological transition.

Plastic Bottles and bags into Building Materials-ECO Bricks

https://www.facebook.com/techthatmatters/videos/420174448868021/UzpfSTU2OTk5MzQxNjUwMDE 10DoxNDY2Njc4MDgzNDk4MzQ5/

Bio Plastic made from Fish Scales-Invented by a British Female Student-James Dyson Award Winner https://www.facebook.com/2040Film/videos/2386178841594563/UzpfSTU2OTk5MzQxNjUwMDE1ODoxnDYxMDMwNTQ0MDYzMTAz/

10K 3D Printed House In A Day

https://www.facebook.com/mashable/videos/10157562987129705/UzpfSTU2OTk5MzQxNjUwMDE1ODoxNDQ2Nzg2ODU4ODIwODA1/

The Solar Impulse Foundation has 1,000 plus profitable solutions to protect the environment. https://solarimpulse.com

To address environmental challenges without compromising economic growth, Bertrand Piccard and the Solar Impulse Foundation have identified 1000+ clean and profitable solutions, and are now committed to going even further.

Climate-search-engine: https://solarimpulse.com/solutions-explorer

The Explorer is a one-of-a-kind search engine, that showcases profitable climate solutions from all over the world, which are part of an ever-growing, curated, and publicly-accessible database. Select your profile, your needs and climate goals to discover the solutions that fit best with your situation.

Smart cities – helping cities meet climate building decarbonization goals - https://www.smartcitiesdive.com/news/nrel-energy-audit-tool-cities-climate-building-electrification-decarbonization/650328/

LEED rating system (building a sustainable future)- https://www.usgbc.org/leed

 $DOW\ science\ and\ sustainability-\ reuse\ of\ plastic\ -\ \underline{https://corporate.dow.com/en-us/science-and-sustainability/plastic-waste.html}$

Waste to Worth Innovations: https://www.w2wglobal.com/

Seeing worth in the trash: https://www.nationalgeographic.com/science/article/partner-content-others-see-waste-she-sees-worth