

## **2025 Global Changemaker Challenge Competitors**

### **Biodegradable Bottles from Sea Plants**

Team Members: Mariam Khukhunaishvili, Ia Khukhunaishvili, Mariam Tsintsadze; Chokhatauri, Georgia

The project explores the potential of using sea plant-based bioplastics, such as those derived from kelp and algae, as a sustainable alternative to traditional plastic bottles. By harnessing natural materials that absorb carbon and biodegrade safely, it aims to reduce plastic pollution and combat climate change.

### **CARBON QUEST**

Team Member: John Onyimbo; Nairobi, Kenya

Carbon Quest is an innovative initiative that transforms carbon footprints into eco-friendly actions by capturing CO2 emissions from buildings and repurposing them into sustainable materials, thereby contributing to a greener future.

### **CarePoint**

Team members: Carl Dela Cruz, Elijah Seth Custodio, Hao G. Pham; Franklin High School, Elk Grove, California

CarePoint is a solar-powered kiosk made from recycled materials, designed to support the homeless community by providing access to essential resources such as food banks, local shelters, job placement centers, and informational programs. It features a digital touch screen, LED lighting, and charging ports to offer both convenience and sustainability.

### **E-Drive Asphalt**

Team Member: Mate Jojua; Tblisi, Georgia

E-Drive Asphalt combines piezoelectric technology with wireless energy transfer to create roads that charge electric vehicles while they drive. This innovative system addresses global environmental challenges by promoting EV adoption, reducing carbon emissions, and revolutionizing transportation infrastructure.

### **Ecobond**

Team Members: Michelle Uche, Deborah Okonkwo; Lagos, Nigeria

Ecobond is a Blockchain based platform that tokenizes traditional green bonds incentivizing climate change mitigation projects. Through this, consumers can generate passive income from both financial return and climate impact.

### **Fireguard Pod**

Team Member: Oluwadarasimi Moses; Ibeju-Lekki, Lagos, Nigeria

The FireGuard Pod is a compact, heat-activated fire suppression device designed to release fire-retardant materials when exposed to high temperatures. It aims to prevent small fires from spreading in homes, forests, and electrical hubs.

### **Freedom Boots**

**Team members:** Keegan Griepenstroh, Elias Hager, Isaac Hager; North High School, Evansville, Indiana

Freedom Boots are advanced motorized leg braces powered by electrical stimulation, designed to deliver an immersive experience when paired with a VR headset—all at an affordable price.

### **Hunter Kellems Cyber Truck**

**Team member:** Hunter Kellems; Perry Central High School, Leopold, Indiana

Introducing a specialized plug designed for the Tesla Cybertruck to prevent accidental activation of the emergency exit mechanism when it is not needed. This innovation enhances safety and convenience by reducing the likelihood of unintentional use, ensuring the emergency feature remains accessible only when necessary.

### **Lovey Duv Sugar Scrub**

**Team member:** Lyla Schultz; Perry Central High School, Leopold, Indiana

Create and sell a homemade all-natural sugar scrub that is made with no chemicals, hormone disturbing fragrances, and is a natural way of exfoliating.

### **LymeListing**

**Team member:** Sohum Mehta; Illinois Mathematics and Science Academy, Aurora, Illinois

An AI-powered app designed to track, manage, and support individuals living with Lyme disease.

This innovative platform leverages advanced technology to monitor symptoms, provide personalized insights, and streamline disease management for improved health outcomes.

### **Safe2Play**

**Team members:** Carson Newton, Márton Pacsay Tomassich; Memorial High School, Evansville, Indiana and

Safe2Play is an online platform that helps prevent injuries by providing free, reliable, medical information and guidelines to all of the Evansville High School community. Safe2Play also creates a network by connecting injured high school athletes with physicians and rehabilitation professionals to guarantee a supervised follow up during recovery.

### **S.H.I.E.L.D.**

**Team Member:** Ellen Lavinia Brandao; Camacan, Bahia, Brasil

S.H.I.E.L.D. – Sustainability for Hydro Innovation, Ecosystem Longevity, and Development is a project focused on implementing natural water purification and conservation solutions. Using biofilters made from eucalyptus and chamomile, along with sustainable water retention techniques, S.H.I.E.L.D. aims to improve water accessibility and ecosystem resilience in vulnerable communities worldwide.

### **Solar Soil**

**Team Member:** Carl Anjelo Tanjay; Butuan City, Caraga, Philippines

Solar Soil is an innovative solution that uses solar-powered microbial activators and nanotech biofertilizers to restore degraded land, combat desertification, and improve global food security by harnessing the power of the sun to revitalize soil. By leveraging cutting-edge technology, Solar Soil ensures sustainable and rapid soil recovery, promoting long-term ecological balance.

### **SolarGlide**

**Team Member:** Ronik Sharma; Cooksville, Maryland

A solar-powered electric tricycle that empowers farmers and micro-entrepreneurs with affordable, sustainable mobility—boosting incomes, reducing costs, and accelerating climate action.

### **Sprouts: Rooted in Education**

**Team member:** Olivia Cooper; North High School, Evansville, Indiana

Sponsored gardens would be constructed at EVSC elementary schools (with summer school options). The gardens will serve to provide fresh food to nearby food pantries and mitigate local climate change.