

# Revitalizing Solar Energy: SBX's Closed-Loop System for End-of-Life PV Panels

*A Sustainable, Scalable, and Socially-Conscious Approach to Solar Panel Upcycling*

- **SBX Website:** <https://shutterbugexchange.com/>
- **Point of Contact:** Frank Jackson
- **Email:** Frank@Shutterbugexchange.com

## **The SBX Vision:**

- We envision a world where renewable energy is not just a privileged choice but a fundamental right, universally accessible. At SBX, we're not just about creating solar panels; we're about revitalizing communities through repurposed solar technology. Our aim is to close the loop on solar waste while generating economic and social value, particularly for underserved communities. It's not just clean energy; it's cleaner living. It's not just sustainability; it's sustainable justice.

## **SBX Team Introduction:**

SBX is a dedicated team of innovators and change-makers with a shared vision of a sustainable future. Our interdisciplinary team combines expertise in data science, business strategy, anthropology, and sustainability to develop cutting-edge solutions in the clean energy sector.

- **Frank Jackson:** Visionary CEO, data strategy and CleanTech expert
- **Deborah Philip:** Treasurer, community impact advocate, and Ph.D. candidate in Anthropology
- **Collaborative Innovation & Expertise:** Strong ties with top universities and industry experts to ensure cutting-edge innovation and commercialization

## **SBX Project Summary:**

- **SBX** is launching a pioneering initiative aimed at upcycling end-of-life solar panels. Using a model-driven 3D printer technology known as "The Replicator," we revitalize old solar panels and reduce e-waste. Our panel exchange program, SunEx, pioneers a circular economy in the solar energy sector, conserving high-valued resources while reducing environmental impact.
- Leveraging advanced technology and data analytics for an energy-efficient future.

## **SBX Solutions:**

We're introducing a two-fold solution:

- Our solution, the "Solar Revitalizers," transforms end-of-life photovoltaic (PV) panels into new, efficient, and cost-effective energy modules. Imagine not having to discard your solar panels but giving them a 'second life,' thus reducing waste and creating a circular economy in the clean energy sector.
- **SunEx** - A panel exchange program offering remanufactured panels, promoting sustainability, and driving a circular economy in the solar energy sector.

## **SBX Business Model:**

- **Solar Asset Upcycling:** We aim to extend solar panel lifespan, adding value for developers and PV manufacturers, and establishing new revenue channels.
- **SunEx Exchange Program:** Our initiative incentivizes panel returns, creating a constant material flow for upcycling. Our program can decrease raw material expenditure by up to 70%, further reducing costs for developers and manufacturers.
- **Emissions Reduction:** Each upcycled panel reduces CO2 emissions by roughly 75% compared to new production, equating to substantial carbon credits in the future.
- **SaaS Business Insights:** Our tech and algorithms can provide data insights for optimization and monetization for SBX. This intelligence can further reduce operational costs and drive better decision-making.
- **Community Engagement:** Collaboration with community organizations ensures broad access to our upcycled solar panels, fostering renewable energy adoption across diverse socio-economic groups.

*With SBX, be part of the solution, not the pollution.*

