

Problem: Global Plastic Waste Crisis

Innovative Solar Technology

HELIOSTAT INTEGRATION

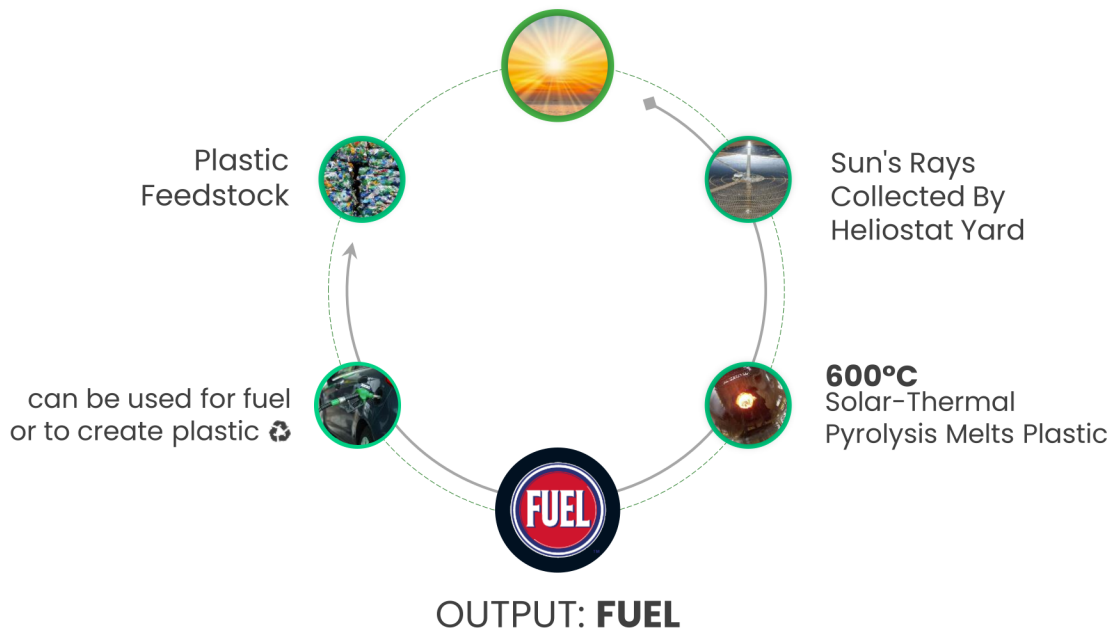
- Uses mirrors to concentrate sunlight
- Achieves necessary temperatures of 600°C for pyrolysis
- Prototype installed and tested on residential roof

ENERGY EFFICIENCY

- Reduces reliance on traditional energy sources
- Sustainable and renewable energy solution

PYROLYSIS PROCESS

- 1. Method:** Heating plastic waste in an oxygen-free environment
- 2. Output:** Produces fuel and reduces waste volume
- 3. Efficiency:** Uses 40 kWh per ton of plastic



Solution: Simplified Heliostats Available Off-the-shelf



Recycler's Exchange

Environmental Impact

01.

- **Reduction in Landfill Waste:** Significant decrease in plastic waste
- **Lower Carbon Footprint:** Solar energy integration
- **Circular Economy:** Converts waste into valuable fuel, reducing dependency on fossil fuels

Current Status and Future Plans

02.

- **Prototype:** Functional heliostat prototype currently being programmed
- **Fundraising:** Live on Netcapital.com to raise funds, SEC Reg CF Web portal
- **Future Development:** High-temperature Tesla turbine for enhanced efficiency

Potential Uses of Heliostat System

03.

- **RESIDENTIAL:** Solar heating, electricity generation, reducing energy bills
- **INDUSTRIAL:** Process heating, power generation, reducing carbon footprint
- **JEDI:** Water desalination and distillation

American-Made Solar Prize Round 8

04.

- **FOCUS:** Innovative solar technology for sustainable pyrolysis and other use cases
- **GOAL:** Advance concentrated solar power in underserved markets, create a heliostat system that is commercially available and affordable

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