Silicon Solar Panel Recycling Process Programs

Cost-effective and Eco-Friendly recycling programs

SPWR – Solar Panel Waste Recycling

SPWR Process Programs

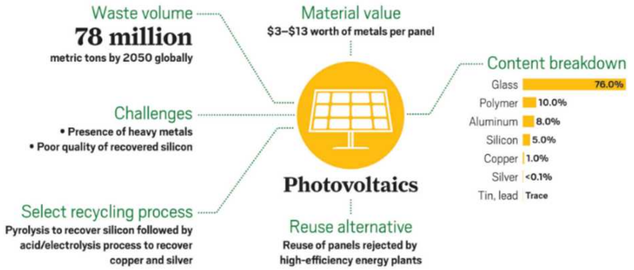
Problem

- Solar panels are set to reach end-of-life → Landfill or recycled?
- Heavy metals presence in solar panels → waste is managed poorly → another recycling crisis
- EU standard PV recycling → ash, metals Tin, Al, Lead, Zinc → Landfill
- 30,000 metric tons/year → 500,000 metric tons/year of waste PV panels next two decades
- Too little ~$3 metals worth/panel in current recycling process, not enough to pay for recycling
- Low quality of silicon recycled materials

Our approach SPWR and plan – SET!

- More eco-friendly chemical processes very little go to landfill - COMPLETED
- **Obtain Ultra-Pure recycled Si dust is the key to profit** -
- +$12 metals worth/panel to pay for recycling
- Demonstrated high efficiency, throughput and reliable
- PV Si SPWR process programs commercialization

SET!VOUCHERS for VALIDATION and IMPROVE



Ready	▪ Set up evaluation/validation and test team Si SPWR	COMPLETED
Set	▪ Manufacturing test run, improvements and efficiency test Si SPWR – Improve purity of Si for Ultra-pure Si	On Going for Improvements
Go	▪ Completed Si SPWR, well into SPWR commercialization and time to scale!	

Impact

- Eco-friendly, cost-effective recycling process programs for both Si PV panels.
- With higher $ metals worth than current recycling program
- More ultra-pure Nano-structured recycled silicon
- No vaporization of heavy metals or go to landfill

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