

Replacing Aluminum PV Frames with Roll-Formed Steel

Design – Material – Savings

Since the PV solar industry's founding 20 years ago, module costs have fallen from \$4/Watt to less than \$0.40/Watt while little innovation has occurred in the module frame. Origami Solar plans to change that with the introduction of roll-formed steel frames. Our frames replace existing aluminum frames that have high costs, extreme GHG content, 100% foreign manufacturing, and little racking integration.

Origami Solar's frames:

- Achieve \$2.00-5.00/frame of cost savings
- Create a domestic supply chain with US steel + US manufacturing + US jobs
- Integrate installation features to reduce labor and hardware
- Lessen GHG content by up to 87%
- Improve manufacturing efficiency

GHG EMISSIONS PER FRAME 100 90 kg 80 70 60 50 40 30 20 Aluminum Steel Steel China Steel Europe Recycled



Steel frame undergoing UL and IEC testing

Existing aluminum frames:

- Have a high GHG footprint
- Require foreign material, manufacturing, and supply chain

Steel can transform the solar supply chain through









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