# **ACTIVE SURFACES**

## ULTRALIGHT FLEXIBLE THIN-FILM SOLAR FOR THE BUILT ENVIRONMENT

Target segment: Low-load commercial warehousing and community solar



Our thin-film flexible technology will unlock terawatts of dual land use solar deployment

### Compared to conventional solar panels

- 120x lighter
- Significantly lower BOS and labor costs
- Competitive LCOE at scale
- Flexible form factor allowing new applications
- Mechanically flexible for rollable deployment

### Compared to other thin-film and perovskites

- 20%+ efficiency
- Significantly lower module cost
- Glass-free, flexible packaging
- Single junction vs Tandem
- Solution processing vs Vacuum
- Built Environment vs Utility Scale

Co-founded by Dr. Richard Swartwout (MIT PhD) & Shiv Bhakta (MIT MBA/MS) in 2022 at MIT

### Significant momentum to date

- Raised \$5.6M from top VCs, CVCs, and family offices
- Founders featured on Forbes 30 under 30 and TedX
- 1 JDA, 2 pilot partnerships, and 2+ LOIs under discussion
- Pilot scale in-house R&D manufacturing capabilities

### Innovation are IP protected (6 patents)

- Manufacturing: High speed roll-to-roll slot die allowing manufacturing cost reduction at scale
- Packaging: In-house substrates enabling thinner durable packaging and limited delamination
- **Materials:** Perovskite chemical, solvent and passivation with high efficiency (MIT record: 25.2%)

#### WE NEED YOUR HELP TO DERISK, PILOT, AND SCALE!

TECHNOLOGY GOAL: Demonstrate an efficient (>18%), low upfront cost (<\$0.5/W), economic (\$0.2/kWh) lightweight (200W/kg), mechanically flexible perovskite module

