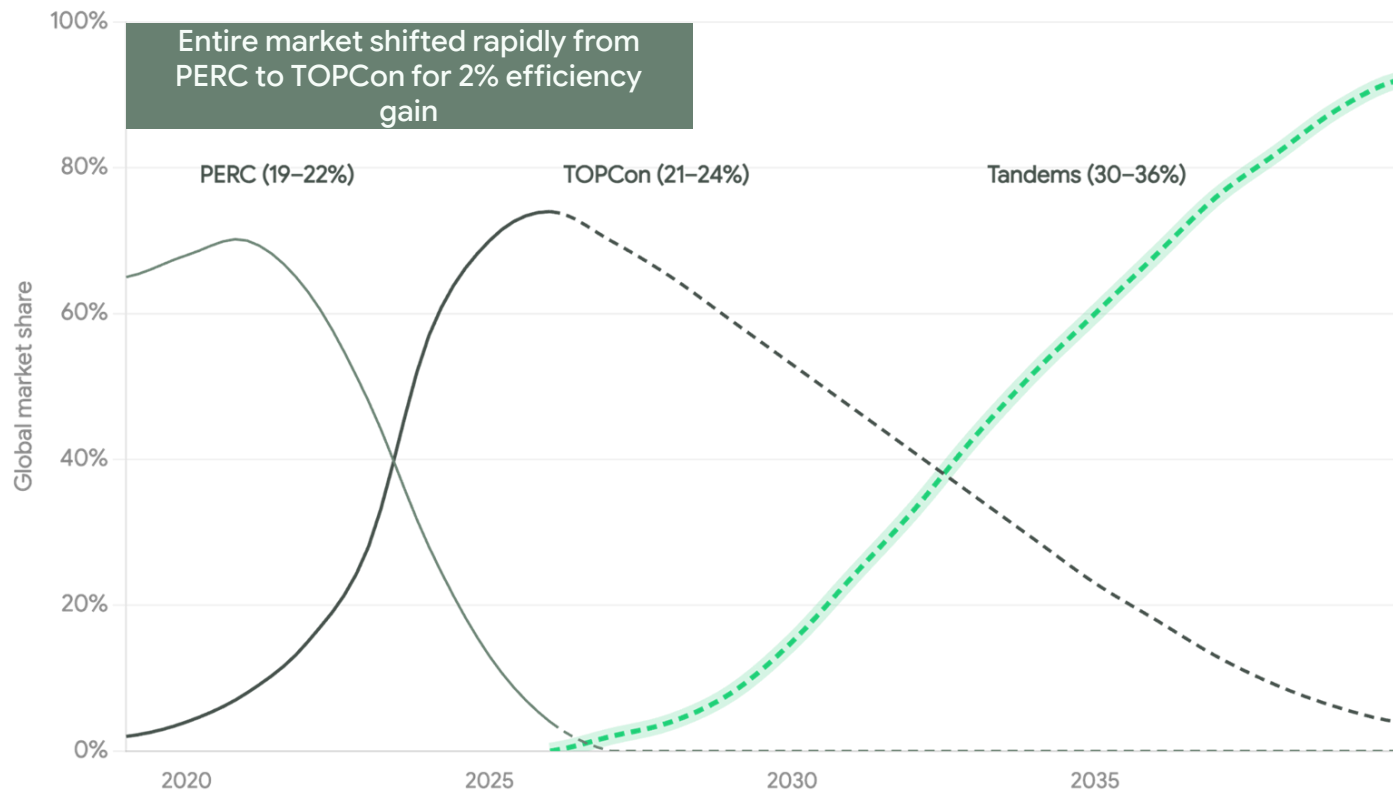


Commercializing Perovskites

Scott Wharton, CEO

Market Shift to Tandems Inevitable



Perovskites are
“by far the most dramatic
technological upgrade on
the horizon for any green
energy technology that’s
in the works, across all
industries.
And solar power is
already the largest
category of fresh power
plant installations
worldwide”

– ReTHINK Technology Research

PERC/TOPCon sources: CEA, CPIA, Exawatt, ITRPV, Wood Mackenzie. Perovskite forecast: Rethink Energy Perovskite Solar Forecast to 2040 (Sep 2024), Tandem PV.

Information Classification: General

About Us

Higher Efficiency

30%+

30-50% higher than
competitive offerings

Commercial Traction

\$1+ Billion

Non-binding LOIs

21-25% Lower
LCOE

Driven by higher efficiency and better performance

Highlights



//

- Founded in 2016 – \$100M raised (equity, debt, grants)
- Deep competitive differentiation and IP moat
- CTO/Co-founder co-authored the first 4T and 2T perovskite/silicon tandem papers at Stanford
- Demo factory — shipping first commercial products
- Giga-scale factory in 2028

Our Product Is a "Drop In" for Ground-Mounted Deployments



- Distributed mid-panel junction box
 - No power electronics
- Silicon panel voltage range (46V)
- Typical module dimensions (e.g., 1.2 x 2.4 m)
- Standard framing with mounting holes
- Industry-standard glass-glass panel construction

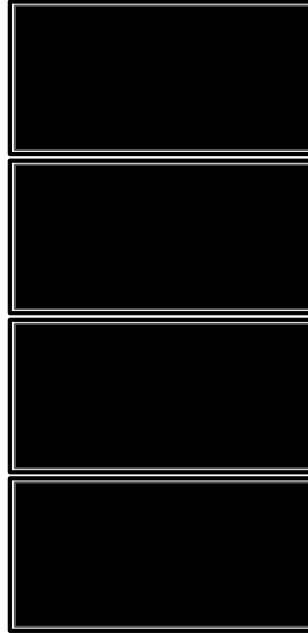
T20s and T70s Today and T80s in 2028



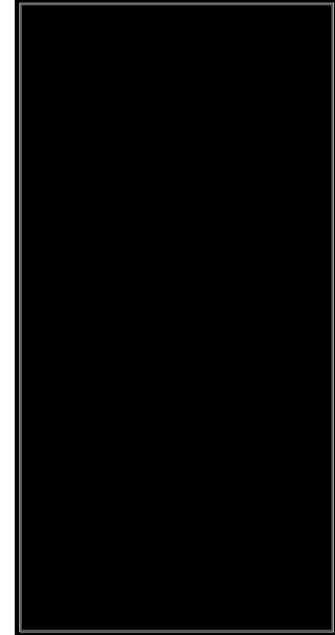
R&D
130 x 130mm



T20
1200 x 600mm



T70
4x T20 co-frame



T80
1200 x 2400mm

Routes to Market: Direct, OEM, and Space

Direct



US · Utility-scale IPPs

- Control destiny, scale faster
- Direct customer relationships
- 80% of US market; savvy buyers
- Mfg learning curve / IP creation

OEM



International / Strategic

- More capital light
- Leverage local expertise & relationships
- Speed and scale global expansion

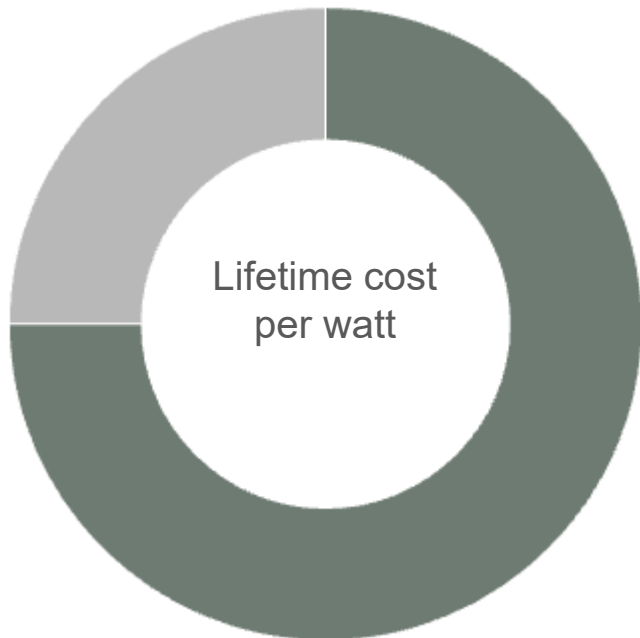
Space



Defense & Satellite

- High margin
- No China supply chain
- Fully funded R&D
- Monetize existing demo line

Key Problem: Non-panel Costs Dominate and Rising



- **~75% Non-panel costs**
Inverter, mounting & racking, install labor, land, grid interconnection, permitting, engineering, developer margin

- **~25% Panel costs**
The solar module itself



Most non-panel costs are set per project, per watt. Higher-efficiency panels spread them over more watts – cutting total \$/W. Tandem benefits most.

Illustrative average for a U.S. utility-scale project; varies by site and financing. Non-panel costs (labor, land) keep rising as module \$/W falls. Source: Tandem PV estimate, informed by NREL benchmark data.

40MW Demo Factory Validates Tech for Scale



- Off-the-shelf equipment
- Established processes
- Modular production lines
- Matches R&D performance

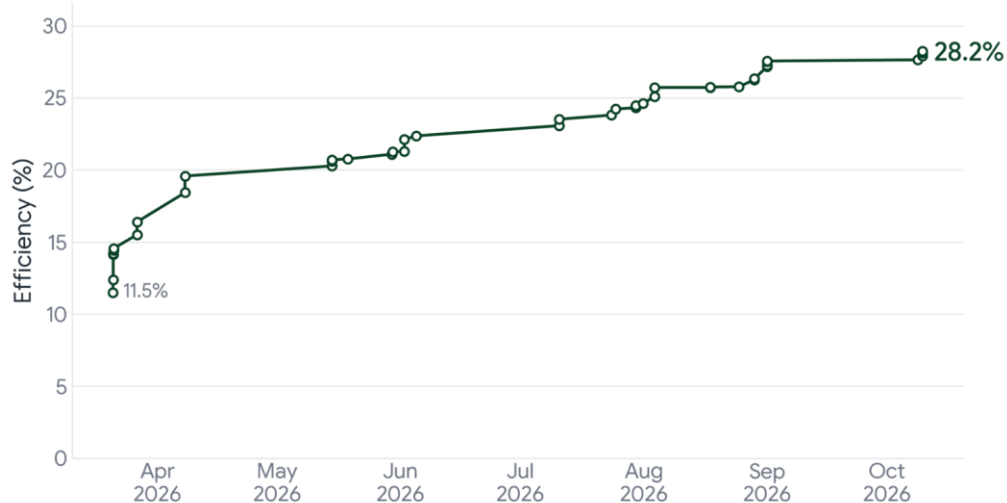
Pilot Panels (0.7 m²) at 28.2%, R&D Mini-Modules >30%

28.2%

Record pilot tandem panel efficiency
with 3% (relative) ARC and 8% Si

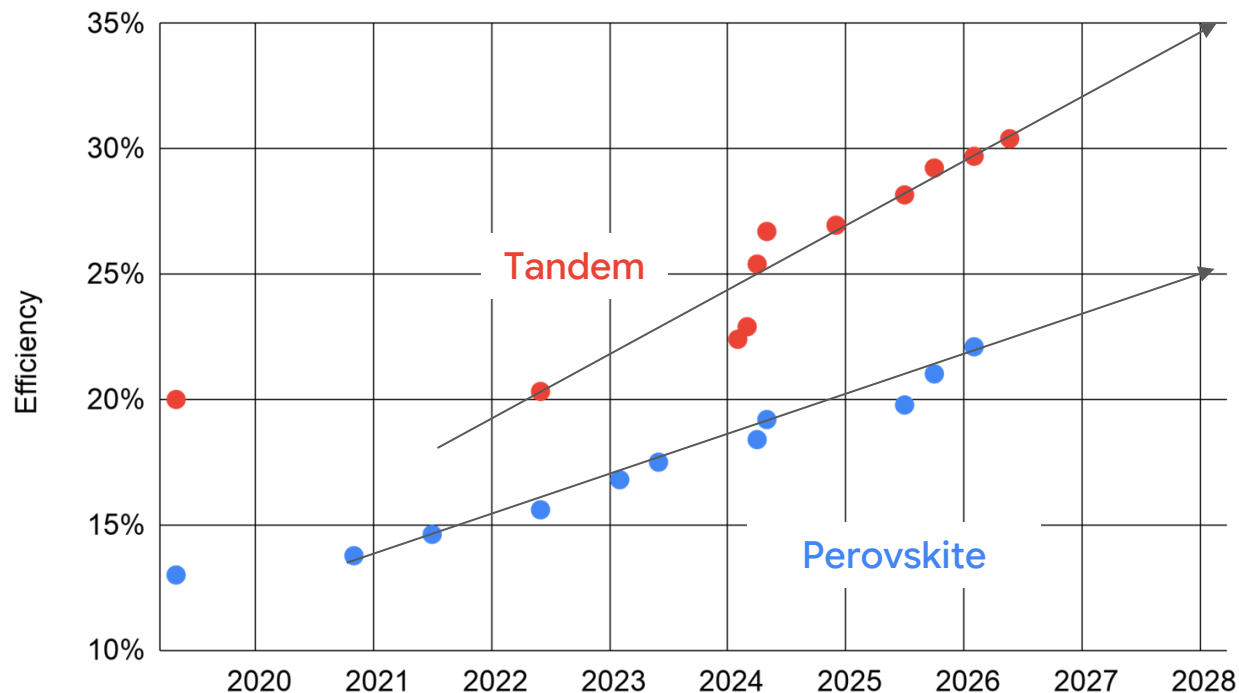
Panels on Test at Fremont, CA Demo Factory

Pilot Tandem Panel Efficiency Progression

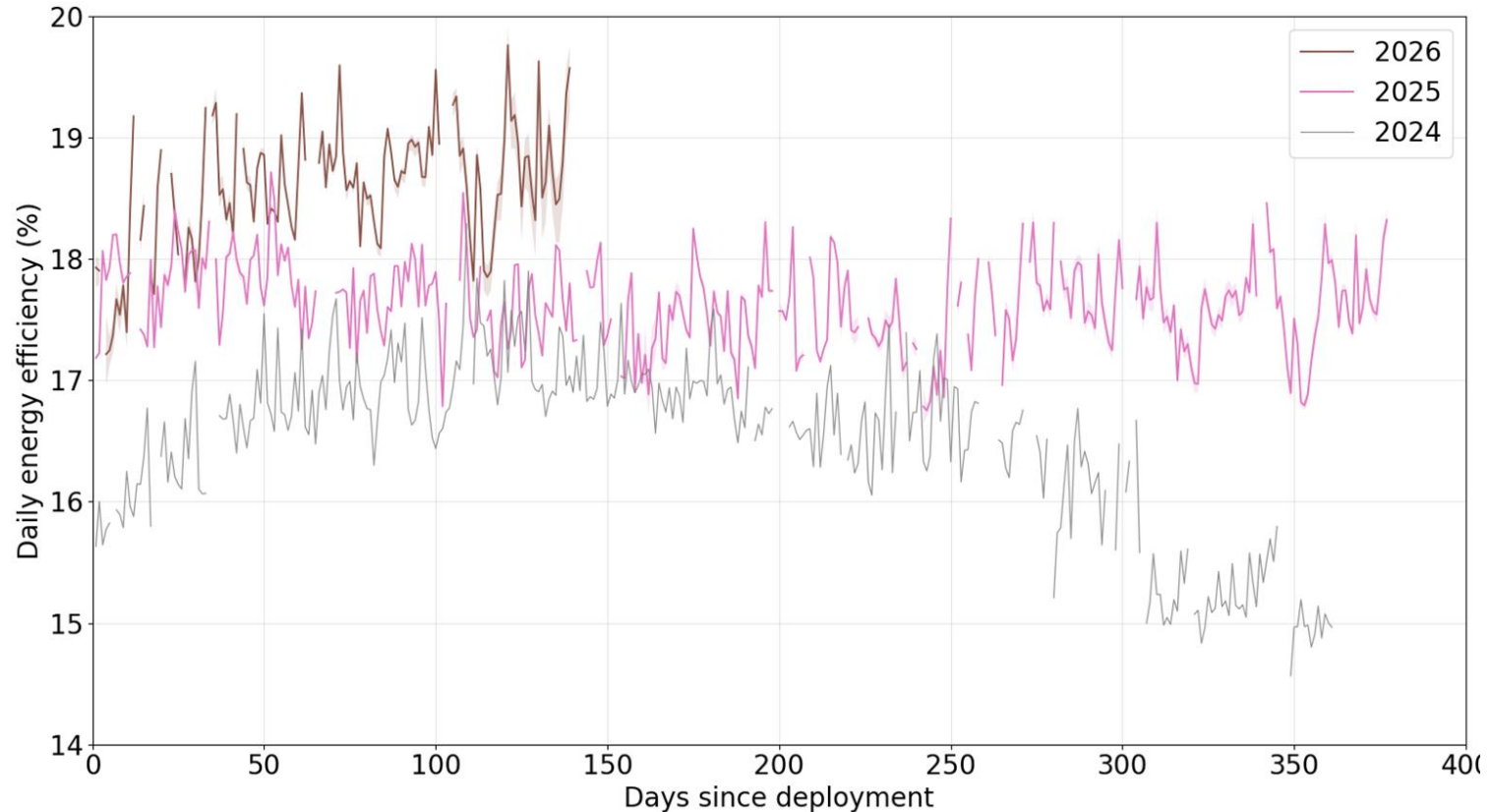


T20 pilot panels outdoors since July 2026; peak power stable (internal testing)

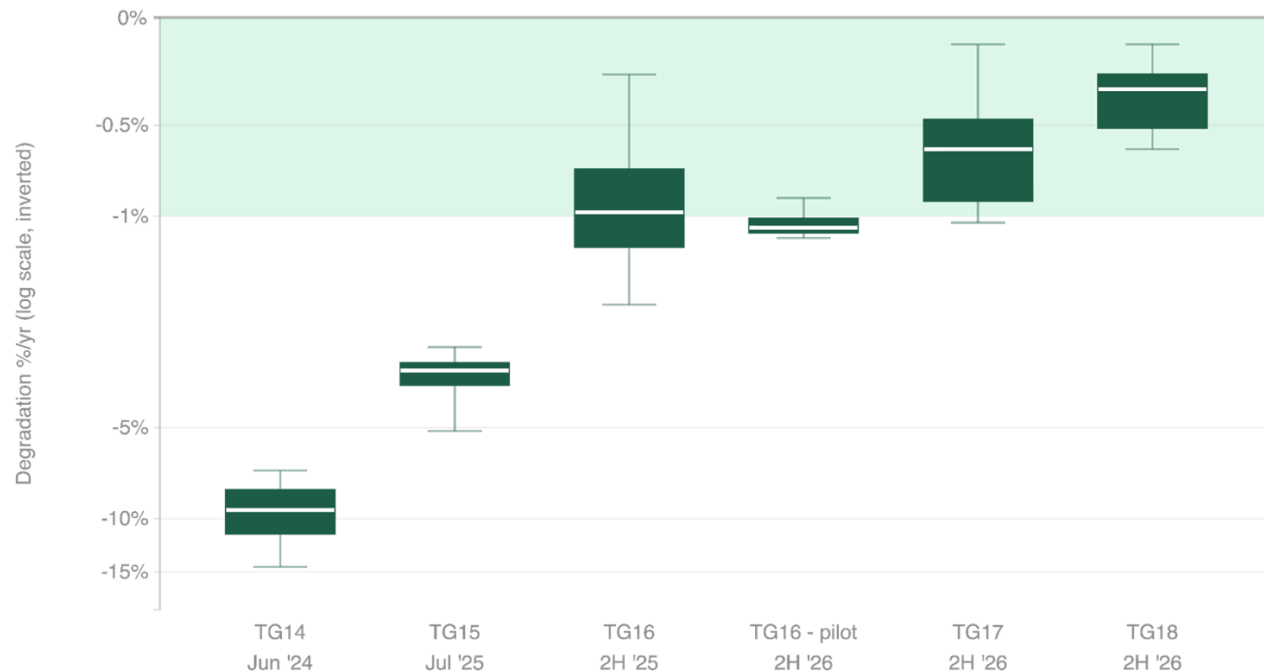
Tandem Mini-Module Learning Rate Points to 35%



Fielded Modules at NLR PACT: Three Generations



<1% Annual Degradation: Now the Norm for Our Modules



10x

lower degradation
TG14 → TG16



1:1

Pilot line already matches
R&D in accelerated tests



<0.5%/yr

Best in class today;
still improving

Manufacturing Roadmap: One De-risked Step at a Time

Phase 1: 2026

Demo

Retires

Technology risk

Milestone

Shipping first panels

Phase 2: 2028

Giga Scale

Retires

Manufacturing risk

Milestone

First giga-scale factory

Phase 3: 2030

Multi-Giga Scale

Retires

Capital risk

Milestone

Replicate proven lines



Thank you - Questions?