



BUILT IN TOMBALL

Turning upstream supply into
dependable U.S.-made modules.

Marvin Yang
Business Development, Imperial Star Solar

I'm Marvin

Business Development, Imperial Star Solar · UCLA alumn



Meet Mila

My dachshund, head chef at home



Third year speaking at PV CellTech USA

From a strategy/finance background



Off the clock

Golf and freediving

IMPERIAL STAR

14+ years experience. Now built in Tomball.

2 GW to 5 GW

Opened in 2024 at 2 GW.
3 GW expansion underway.

Tomball, TX

300+ employees.
1,200+ by 2027.

14+ years

Solar manufacturing experience

Proven quality

RETC 2026 Highest Achiever.
A+ CEA factory audit rating.



Built in Tomball. Proven in delivery.

4 GW

Shipment volume

Tomball module shipments
since end of 2024



99.3%

First-pass yield

Modules passing without rework



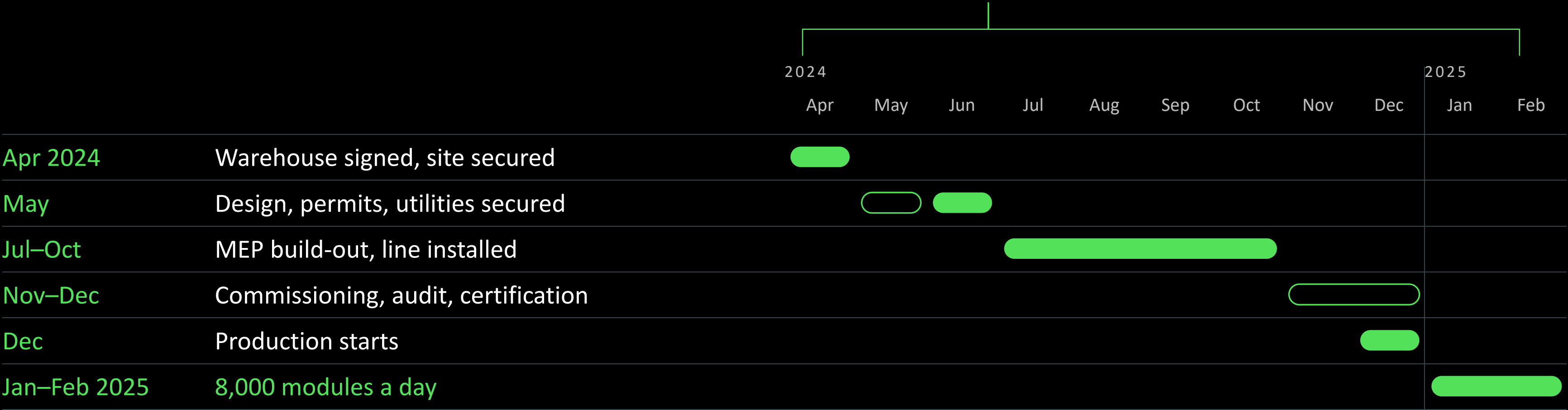
15 GW

U.S. deliveries

From our global plants since 2023



Tomball track record: Building to production in 10 months.



10 months vs. 18–24

We ramped from building acquisition to production in about half the time a typical module plant needs.¹

Experience accelerated Phase 1.

Experience is what makes that speed possible: a proven playbook, with key roles hired and trained early.

¹ Source: IMARC Group, solar module manufacturing plant feasibility study, 2026 (typical setup timeline).

TOMBALL CAMPUS

Replicating Phase 1 success.

Phase 2 in Q4 2026 · Phase 3 on the horizon for Q3 2027

Scale with flexibility

Lines adapt to different module formats and project requirements.

Imperial Star Test Lab
Reliability testing, on site.

Additional warehouse

Phases 1–2 · 4 GW
~800,000 sq ft

Phase 3 · 1 GW
250,000 sq ft

TOMBALL CAMPUS

Expand the campus. Build on experience.

Capacity growth: 2 to 5 GW



01

Long-term investment

\$120M of our own capital already invested in Phases 2–3. No reliance on outside financing.

02

Experience transferred

14+ years of know-how transferred: key roles hired and trained early. 20% of the local team always preparing for the next phase.

03

Proven in the ramp

In-depth support from key equipment suppliers.
Real-time/always-on troubleshooting for key equipment.

DOMESTIC SUPPLY

Key suppliers within reach of Tomball.

16

U.S. component suppliers tested, certified and onboarded

40%+

of the modules we deliver contain domestic components

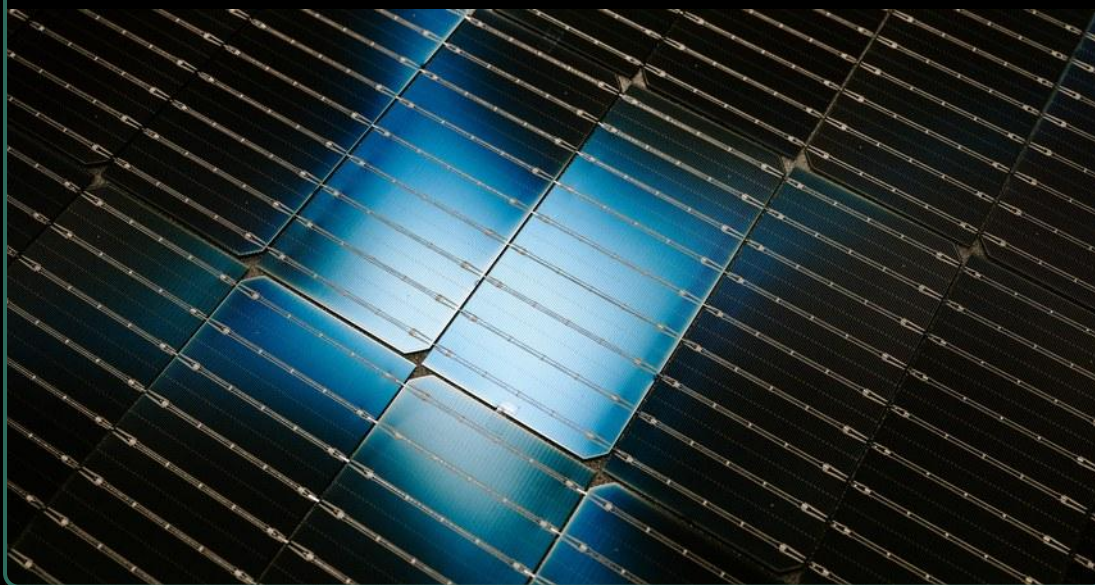


● In supply ● Qualifying, or plant to confirm ○ Other Texas plants nearby: junction boxes, steel frames

A 2-year head start on domestic materials, **tuned with our U.S. suppliers**

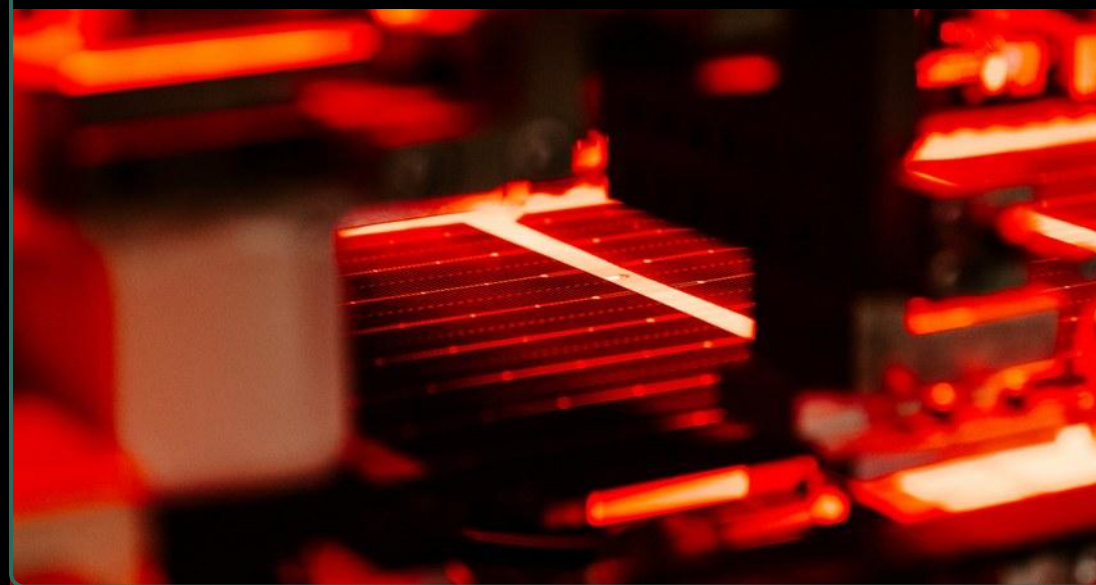
Tuned together

We know which materials clash and how to fix them.



Pre-qualified BOMs

Every material has run together on our line.



New sources certified

Samples → trials → certification before any customer order.



QUALITY RECORD

Manufacturing excellence. Verified performance.

95%

automated, every
module tracked in
MES

50+

AI checkpoints,
100% of output
reviewed

<1%

NG rate at the
stringer

8,000

modules a day,
steady on 2 lines

RELIABILITY

RETC PV Module Index 2026:
Overall Highest Achiever

FACILITY AUDIT

A+ third-party factory audit
rating (CEA)

"14+ years of discipline, independently verified."

QUALITY

Preventive quality, built into the line.

Every module passes four AI-assisted inspections before it leaves the line.

01 STRINGER



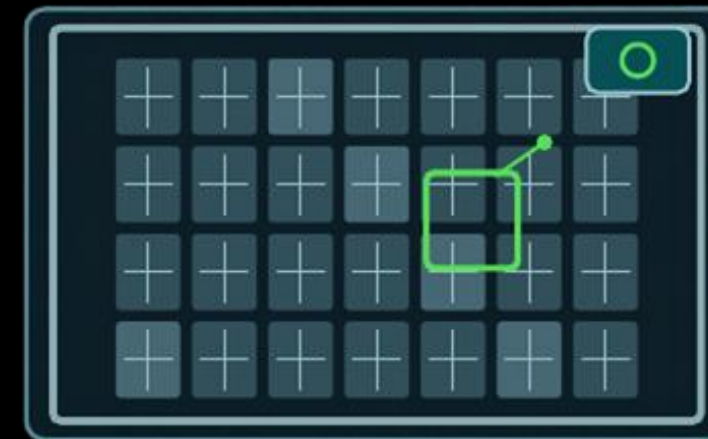
AI-assisted EL + visual

02 PRE-LAMINATION



AI-assisted EL + visual

03 POST-LAMINATION



AI-assisted EL + visual

04 FINAL



AI-assisted EL + visual

TARGETED VISION CHECKS



Ribbon bend
Tab alignment



J-box weld
Solder integrity



Potting fill
Coverage / voids

Junction box failures rise. We check every weld.

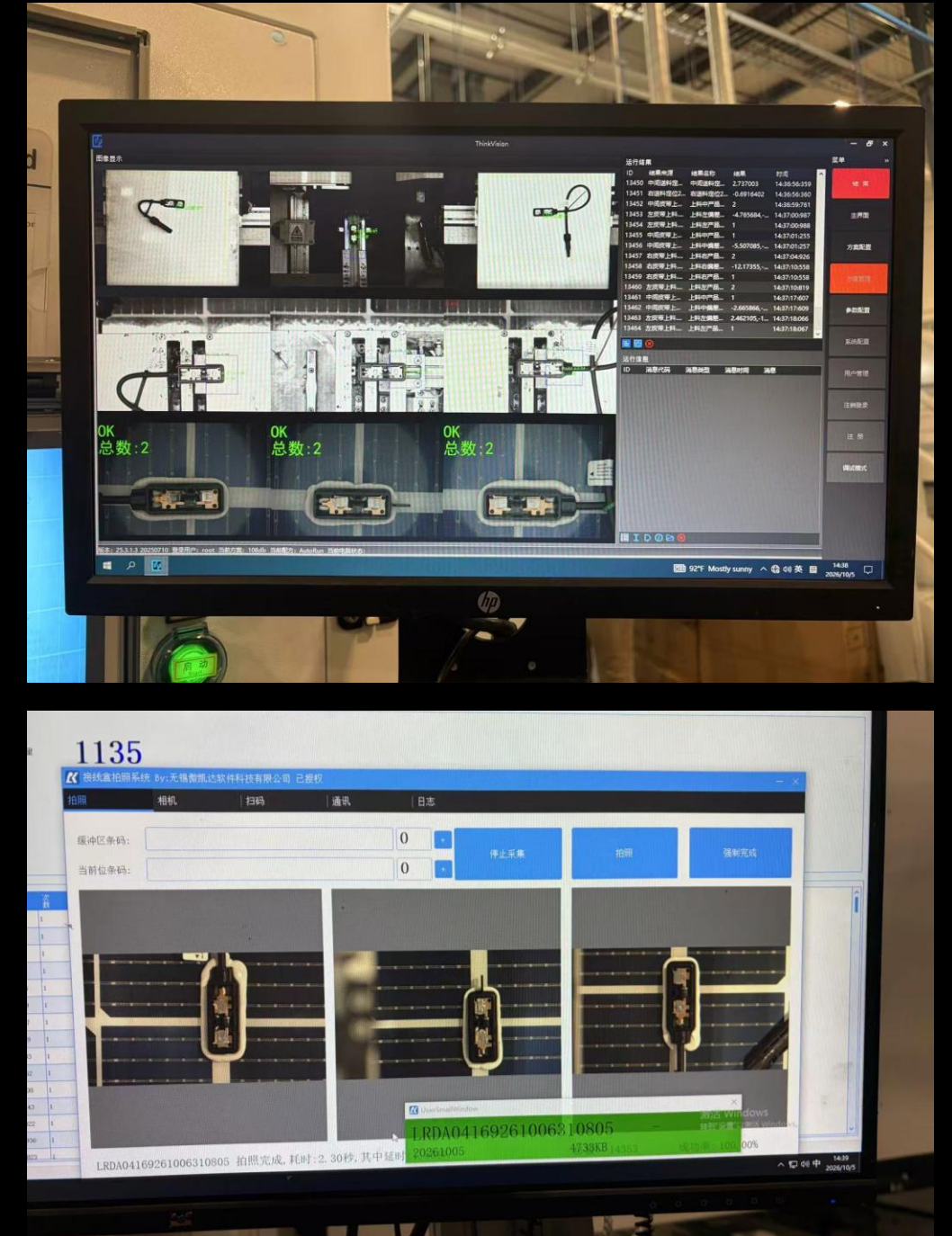
Shrinking current margins mean more failures.

01 100% diode testing
Every diode is tested in line + incoming lot inspection

02 Controlled welding
Calibrated settings and carefully maintained weld heads.

03 100% weld review
Every weld image is reviewed by AI and an inspector.

+ Full audit every 4 hours and monthly pull-force tests.





14+ years in. Still listening.

- What's been your biggest headache with U.S. supply this year?
- When a module fails in the field, what do you wish your manufacturer had caught?
- What would make domestic content easier for your team to prove?

Come find us.
We'd love to hear your answers.