SOLARSTOCK USA RESEARCH · Q2 2026 EDITION

US Solar Distribution Market Brief 2026

The 45X · Domestic Content · OBBB Trifecta

How the July 2026 Cliff Reshapes Mid-Market Module Sourcing

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Q2 2026 Edition · approximately 37 min read

> *This brief is prepared for procurement professionals, EPC executives, project developers, tax counsel, and public-sector buyers operating in the US commercial and utility-scale solar market. It does not constitute legal, tax, or investment advice. Readers should consult qualified tax counsel before making decisions based on this analysis.*

CHART 01 · REGULATORY TIMELINE

The regulatory landscape, 2022–2027

Twelve milestones from IRA enactment to the post-cliff placed-in-service deadline

IRS Notices 2023-38, 2024-41, 2025-08, 2025-42; OBBBA P.L. 119-21 §§70512–70514; Executive Order 14315.

PART I — EXECUTIVE SUMMARY

Five conclusions for 2026

1. The July 4, 2026 cliff is a hard regulatory cutoff, not a soft transition. Solar facilities that have not begun construction by July 4, 2026 must be placed in service before December 31, 2027 to qualify for any §45Y PTC or §48E ITC. After 2027, both credits terminate for solar. Industry pipeline data indicates approximately 50 GW of utility-scale capacity is well-positioned to commence construction before end-2025 and a further 40 GW in H1 2026 (Wood Mackenzie / SEIA, Q3 2025). Mid-market commercial projects are materially exposed if not safe-harbored by Q1 2026.

2. Three regulatory regimes now compound simultaneously. The Inflation Reduction Act's Domestic Content bonus (rising from 40% to 55% by 2027), Section 45X Advanced Manufacturing Production Credit (FEOC restrictions effective July 4, 2025), and OBBBA's Material Assistance Cost Ratio (MACR, beginning at 40% in 2026 and escalating to 60% by 2030) are not independent compliance regimes. They interact at the module supplier level. A single sourcing decision can advance or break qualification across all three.

3. US solar manufacturing capacity has grown but supply gap persists. Module manufacturing capacity reached 65.5 GW at end-2025, up from 42.5 GW at end-2024 — a +54% YoY expansion (SEIA Q4 2025). However, actual production remains materially below domestic demand, and upstream wafer and cell capacity has only just begun coming online. The first US wafer facility came online in Michigan in Q3 2025. Demand for Domestic Content–eligible modules will continue to outstrip available compliant supply through at least 2027.

4. Mid-market commercial pricing is decoupling from imported module pricing. US commercial system pricing rose +10% YoY in 2025 (Wood Mackenzie); utility-scale fixed-tilt +11%, single-axis tracking +14%. Imported TOPCon 600W modules DDP-US trade at approximately $0.263/W versus Chinese FOB at $0.087/W — a 3× premium driven by tariffs, AD/CVD duties, and Domestic Content scarcity premium. Our base case projects further bifurcation in 2026 as MACR enforcement begins.

5. The procurement window is narrower than the regulatory window. Safe-harbor commencement of construction requires either the 5% spend test or the Physical Work Test. Treasury's July 2025 Executive Order has restricted broad safe-harbor strategies. For projects under 1.5 MWac, the 5% test remains available; for projects above 1.5 MWac (most utility-scale and large commercial), only Physical Work Test applies. Module ordering and physical site work must align by Q2 2026 to preserve credit eligibility.

At a glance

METRIC	2024	2025	2026 (PROJ.)	Δ 2024→2026
US solar installations (GW DC)	50.0	43.0	~44.0	−12.0%
Module manufacturing capacity (GW)	42.5	65.5	~80.0 [1]	+88.2%
Commercial system pricing index	100	110	~115 [2]	+15.0%
Domestic Content threshold (solar BoC)	40%	45%	50%	+10 pp
MACR threshold (FEOC)	n/a	n/a	40%	New regime

[1] [2] SolarStock USA Research base case projections; [2] assumes MACR enforcement at 40%. 2026 figures are SolarStock USA Research base case, not confirmed data. Source: SEIA / Wood Mackenzie US Solar Market Insight (Q3 2025, Q4 2025, 2025 Year in Review); IRC §48E as amended by OBBBA §70512; SolarStock USA Research.

SECTION 1

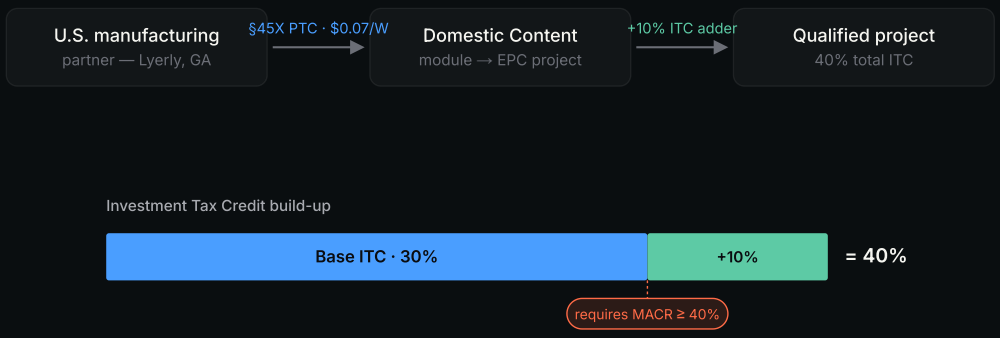
The Regulatory Trifecta

The US solar industry in 2026 operates under three federal regulatory regimes that, until July 2025, were broadly independent. They are now interlocking. A single module sourcing decision can advance or break qualification under all three. This section establishes what each regime does, the consequences of non-compliance, and where they intersect at the operational level.

CHART 03 · CREDIT INTERACTION

How the three regimes stack at the module level

§45X production credit, Domestic Content bonus, and the MACR gate across the value chain



Phase 1 brief Part III, Chart 03; IRC §45X, §48E; OBBBA §§70512–70514.

1.1 Section 45X — Advanced Manufacturing Production Credit

Section 45X of the Internal Revenue Code, enacted by the Inflation Reduction Act in August 2022, provides a per-unit production tax credit (PTC) to US manufacturers of clean energy components. For crystalline silicon photovoltaic modules, the credit is $0.07 per watt of nameplate capacity produced and sold. The credit accrues to the manufacturer, not the project owner, and is fully transferable under IRC §6418 — meaning manufacturers can sell their accrued credits to tax-paying entities for cash, creating an active secondary market for §45X credit transfers.

The credit's economic significance is substantial. For a 65.5 GW US module manufacturing base (SEIA Q4 2025), full §45X claim eligibility represents an annual credit pool exceeding $4.5 billion. The Joint Committee on Taxation projected taxpayers would claim $87.3 billion in Advanced Manufacturing Production Credits cumulatively by 2028.

Critically, §45X eligibility was modified by the One Big Beautiful Bill Act (OBBBA, P.L. 119-21, July 4, 2025). Taxpayers are now ineligible to claim §45X for components produced with "material assistance" from a Prohibited Foreign Entity (PFE) — including Chinese, Iranian, Russian, and North Korean state-linked entities — for any taxable year beginning after July 4, 2025. The integrated components rules change further for taxable years beginning after December 31, 2026.

The practical effect on US module manufacturers: BOM verification must trace every input back to non-PFE origin to preserve credit eligibility. This is non-trivial — solar-grade polysilicon, wafers, and select chemical inputs have historically been heavily Chinese-sourced.

1.2 Domestic Content Bonus

The Domestic Content bonus, codified at IRC §48E(a)(3)(B) for the Investment Tax Credit and §45Y for the Production Tax Credit, provides a 10-percentage-point increase to the underlying credit when a project's manufactured products meet a minimum US-content threshold. For a 30% ITC project, qualification raises the credit to 40% of the project's tax basis.

The threshold schedule, as amended by OBBBA §70512 to correct an original IRA drafting error in §48E (Stoel Rives, July 2025), is now uniform across the PTC and ITC frameworks:

- Projects beginning construction before June 16, 2025: 40%
- Projects beginning construction June 16 through December 31, 2025: 45%
- **Projects beginning construction in calendar year 2026: 50%**
- Projects beginning construction in 2027 and after: 55%

Qualification requires both (a) 100% US-origin for structural steel and iron components, and (b) the applicable percentage of total manufactured product cost attributable to US-mined, US-produced, or US-manufactured inputs.

The IRS has issued three rounds of guidance: Notice 2023-38 (initial framework), Notice 2024-41 (first elective safe harbor table), and Notice 2025-08 (updated safe harbor effective January 16, 2025, which separates ground-mount and rooftop PV tables and adds incremental cost allocation for domestically produced crystalline silicon PV cells and wafers).

Notice 2025-08 is the operative guidance for most projects today. It allows taxpayers to substitute IRS-calculated cost percentages for independent BOM cost calculation — significantly reducing the administrative burden but requiring strict supplier attestation. Per OBBBA, taxpayers may continue to rely on Notice 2025-08 until 60 days after Treasury issues formal post-OBBBA guidance.

1.3 OBBBA — Phase-out and the MACR Framework

OBBBA's §§70512–70514 introduce two structural changes that materially alter the procurement calculus:

Accelerated phase-out (§§70512, 70513). Solar and wind facilities that begin construction after July 4, 2026 must be placed in service before December 31, 2027 to claim any §45Y PTC or §48E ITC. Facilities beginning construction on or before July 4, 2026 retain the standard four-year continuity safe harbor and are not subject to the accelerated placed-in-service deadline. After December 31, 2027, the §45Y PTC and §48E ITC terminate for solar entirely.

Material Assistance restrictions (§70514). Beginning January 1, 2026, projects claiming §45Y, §48E, or §45X credits must demonstrate that a defined share of project costs are not attributable to PFEs. This is the Material Assistance Cost Ratio (MACR). The threshold begins at 40% in 2026 and rises by 5 percentage points annually to 60% by 2030. The cost ratio is calculated as (Total Costs − Total PFE Costs) ÷ Total Costs, expressed as a percentage.

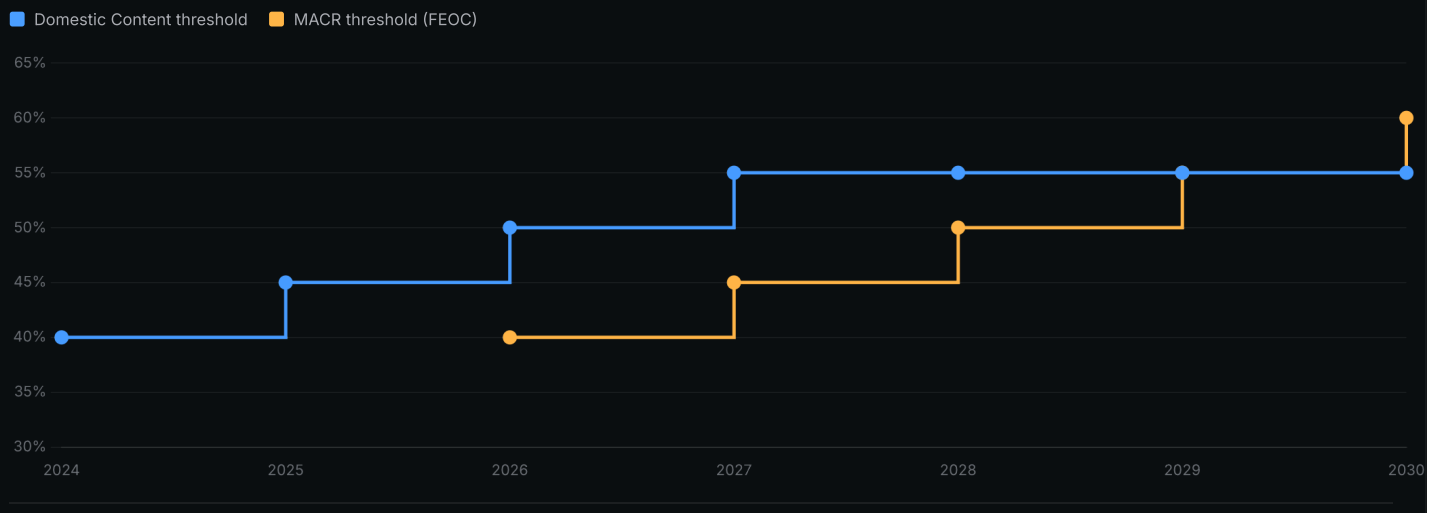
Unlike Domestic Content — which requires US origin — MACR requires *non-PFE* origin. A module manufactured in Vietnam by a non-PFE entity would count toward MACR compliance but not toward Domestic Content. This distinction is operationally important: MACR can be satisfied by a broader supplier set than Domestic Content, but the documentation burden is higher because each supplier must be vetted for PFE status under a multi-factor test (ownership, control, financing, IP licensing).

Executive Order 14315, signed July 7, 2025, directed Treasury to "strictly enforce" the termination provisions and to issue new beginning-of-construction guidance restricting broad safe harbor strategies. Treasury issued Notice 2025-42 (post-OBBBA BOC guidance) on August 18, 2025, and subsequently restricted the Five Percent Safe Harbor for projects above 1.5 MWac effective September 2, 2025. Projects above 1.5 MWac must now use the Physical Work Test to establish beginning of construction.

CHART 05 · REGULATORY THRESHOLDS

Dual compliance threshold escalator, 2024–2030

Required qualifying percentage — Domestic Content bonus vs. OBBBA Material Assistance Cost Ratio



IRC §48E as amended by OBBBA §70512 (Domestic Content); OBBBA §70514 (MACR / FEOC); IRS Notice 2025-08.

1.4 How They Interact

The three regimes operate at different points in the value chain but cannot be optimized independently:

A module manufactured at a US facility may qualify for $0.07/W in §45X PTC for the manufacturer. That same module may unlock a 10-percentage-point Domestic Content bonus at the project level — but only if the project's overall manufactured product percentage hits the threshold (50% in 2026). The Domestic Content qualification itself may be jeopardized if the manufacturer's upstream wafer or cell supply is PFE-sourced, which fails the project's MACR test.

In other words: a single procurement decision affects three credit streams owned by three different parties (the manufacturer, the project owner via ITC, and potentially a tax credit transferee via §45X transfer). Compliance documentation must be coherent across all three.

The remainder of this brief examines the practical implications of this interaction at the procurement layer, beginning with the most acute near-term issue: the July 4, 2026 beginning-of-construction cliff.

> *Tax credit eligibility and §45X claims are fact-specific. Readers should consult qualified tax counsel before making decisions based on this analysis.*

SECTION 2

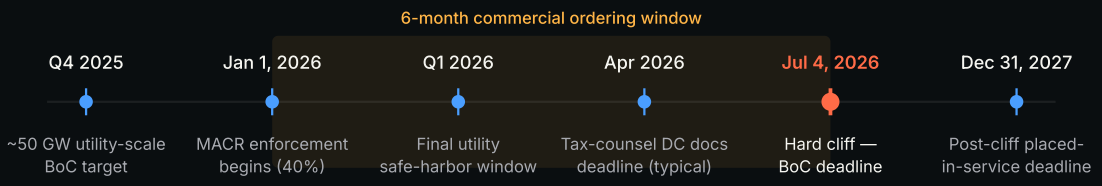
The July 4, 2026 Cliff

The accelerated phase-out provision in OBBBA §§70512–70513 creates a binary outcome for any US solar project not already under construction: either commence by July 4, 2026 and retain standard credit eligibility, or commence after and face a placed-in-service deadline of December 31, 2027 — eighteen months from commencement. For projects exceeding 50 MWac, where typical development-to-energization timelines run three to five years, the post-cliff window is effectively unworkable.

CHART 04 · THE CLIFF

The July 4, 2026 beginning-of-construction cliff

The narrowing window for credit-qualified commencement, Q4 2025 – Q4 2027



Phase 1 brief Part III, Chart 04; OBBBA §§70512–70513; IRS Notice 2025-42; Executive Order 14315.

2.1 Beginning of Construction — The Two Tests

US tax credit eligibility under §45Y and §48E requires that "construction has begun" by a specific date. IRS guidance under Notices 2013-29 and 2018-59, codified by OBBBA's reference to those notices as in effect January 1, 2025, establishes two methods:

The Five Percent Safe Harbor. Taxpayer demonstrates that at least 5% of the total project cost has been paid or incurred. Equipment purchases — most commonly modules — can satisfy this test when title transfers within the relevant taxable year. This has been the dominant strategy for large utility-scale projects through Q3 2025: secure a module order, transfer title, document payment, and the project clock starts.

The Physical Work Test. Taxpayer demonstrates that physical work of a significant nature has commenced — on-site (foundations, racking, mounting) or off-site (custom equipment manufacturing under binding contract). The test is fact-specific and historically subject to greater IRS scrutiny than the spend-based test.

Executive Order 14315 and Treasury's subsequent guidance materially restricted the Five Percent option. Effective September 2, 2025, projects above 1.5 MWac are no longer eligible for the Five Percent Safe Harbor and must rely on the Physical Work Test. This means that for most utility-scale projects and many large commercial projects, equipment-only safe harboring is no longer sufficient. Physical site work must be underway.

The operational consequence: a developer who placed a module order in October 2025 expecting the 5% test to anchor their tax credit position now needs additional physical work documented before July 4, 2026 to preserve eligibility.

2.2 Safe Harbor Pipeline Mathematics

SEIA's Q3 2025 US Solar Market Insight identified approximately 50 GW of utility-scale projects positioned to begin construction before December 31, 2025, and an additional 40 GW targeting H1 2026 commencement. This 90 GW pre-cliff utility pipeline represents the population of large projects with credible paths to credit-qualified completion.

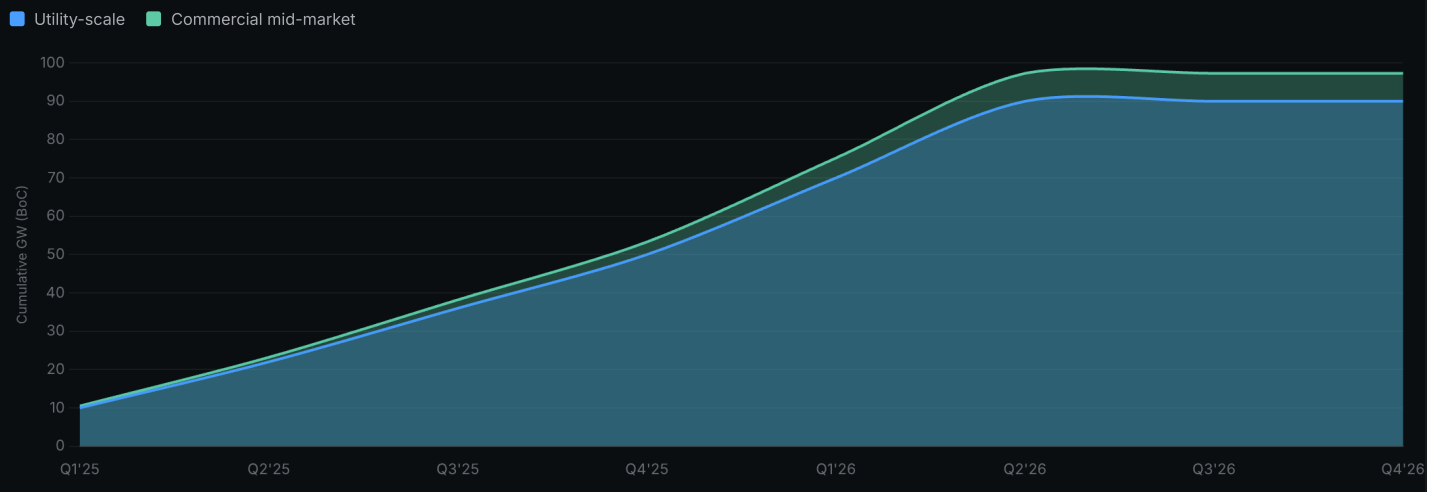
Commercial mid-market projects — defined here as installations between 1 MW and 20 MW — are not separately tracked in the public SEIA pipeline data. Based on SolarStock USA's commercial RFQ flow analysis and bottom-up sector estimates, we project approximately 6 to 8 GW of commercial mid-market capacity will attempt to safe-harbor between Q4 2025 and Q2 2026. Historical conversion rates in this segment, where labor and EPC availability are persistent bottlenecks, suggest a 50% completion rate is realistic. This implies 3 to 4 GW of commercial mid-market capacity will successfully establish BOC by the cliff date.

Total pre-cliff successful BOC, base case: 72 to 73 GW. The remaining 17 to 18 GW of nominally pre-cliff utility pipeline plus the unsuccessful 50% of commercial mid-market falls into the post-cliff regime.

CHART 12 · SAFE-HARBOR PIPELINE

Pre-cliff pipeline burn — cumulative beginning-of-construction

Cumulative GW establishing BoC ahead of the July 4, 2026 cliff



SolarStock USA Research, quarterly interpolation from anchored milestones (SEIA Q3 2025 pipeline data: ~50 GW utility BoC by end-2025, ~40 GW H1 2026). Commercial mid-market estimates: SolarStock USA Research.

2.3 The Mid-Market Commercial Window

Public discourse on the cliff has focused on utility-scale projects, where individual project sizes attract public attention and where developers have legal teams capable of running the necessary safe-harbor processes. The mid-market commercial segment — where decisions are made by procurement managers, energy consultants, and smaller EPCs — has received materially less attention.

This is the segment most exposed. Three structural factors compound:

First, mid-market commercial projects typically run 12 to 24 month development cycles. A project beginning detailed design today (May 2026) realistically commences physical work in Q3 or Q4 2026 — post-cliff. The window for new mid-market BOC by July 4, 2026 effectively closes for projects not already in advanced design.

Second, the September 2025 elimination of the Five Percent Safe Harbor for projects above 1.5 MWac eliminated the most common safe-harbor route for mid-market commercial. Module-only safe harboring is no longer available for the majority of projects in this segment, which typically range 1.5 to 5 MWac.

Third, labor and EPC availability — already a persistent constraint in the commercial segment per Wood Mackenzie's Q4 2025 outlook — tightens further as utility-scale projects compete for the same installer pool during the H1 2026 rush. Developers who locked EPC commitments in 2024 retain capacity; those still negotiating in 2026 will face premium pricing and slipping schedules.

2.4 Post-Cliff Economic Reality

For projects beginning construction after July 4, 2026, the December 31, 2027 placed-in-service deadline imposes a maximum 18-month completion timeline. For mid-market commercial, this is technically feasible but operationally narrow: any permitting delay, interconnection queue position change, equipment delivery slip, or contractor schedule conflict materially raises the risk of missing the deadline and forfeiting all tax credit value.

The downstream financial impact is significant. A 5 MW commercial project losing both the 30% ITC and the 10% Domestic Content bonus loses approximately $1.5 to $1.85 million in credit value on a $13–14 million project basis — typically more than the project's projected unlevered equity return.

The procurement implication is direct: post-cliff projects either re-scope to retain credit eligibility (smaller installations, faster build), accept the unlevered economics without tax credits, or are abandoned. Module ordering decisions made in Q2 and Q3 2026 effectively determine which projects survive into 2027.

> *Tax credit eligibility under IRC §45Y and §48E is fact-specific. Readers should consult qualified tax counsel before making decisions based on this analysis.*

SECTION 3

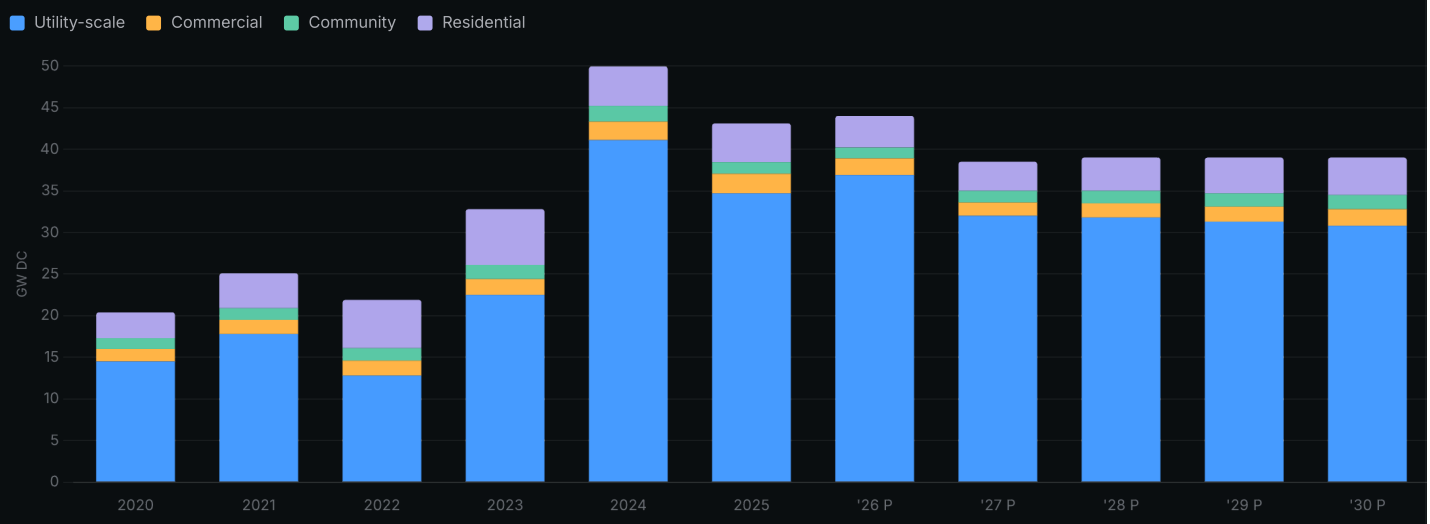
Mid-Market Demand Picture

The US solar market enters 2026 at an inflection point. Total installations dropped 14% in 2025 to 43 GW DC (SEIA Q4 2025), down from 50 GW in 2024 — the first annual decline in five years. Beneath the headline number, segment dynamics diverged sharply, and 2026 demand is being reshaped less by macroeconomic factors than by tax policy timing.

CHART 02 · US INSTALLATIONS

Cumulative US solar installations by segment, 2020–2030

Annual installed capacity, GW DC · 2020–2025 actual, 2026–2030 base case



SEIA / Wood Mackenzie US Solar Market Insight Q4 2025 + 2025 Year in Review; SolarStock USA Research base case (2026–2030 P).

3.1 The 2025 Segment Review

Each segment finished 2025 with distinct dynamics that condition 2026 expectations.

Residential (4.6 GW, −2% YoY). California's transition from NEM 2.0 to the Net Billing Tariff continued to suppress new system economics. The repeal of the §25D residential tax credit, effective December 31, 2025, drove an installation rush in H2 2025 that partially offset weaker per-system demand. Looking forward, Wood Mackenzie projects an 8% decline in 2026 residential, reflecting both the §25D repeal and continued California regime drag.

Commercial (2.3 GW, +6% YoY). The strongest-performing segment in 2025, supported by stable §48E ITC eligibility and corporate procurement demand. Notably, Wood Mackenzie projects a 13% decline in 2026 commercial driven primarily by California regime transition, before recovering at +6% CAGR through 2030. SolarStock USA's read of RFQ flow suggests a more muted 2026 decline (−5 to −8%) outside California, where federal procurement and supplier diversity programs are creating new mid-market demand pockets.

Community solar (1.4 GW, −25% YoY). Sharp decline driven by Maine and New York program slowdowns and the absence of new state-level community solar program launches in 2025. Recovery dependent on state policy action, not federal.

Utility-scale (34.7 GW, −16% YoY). Major decline despite first-three-quarters parity with 2024 — the decline concentrated in Q4 2025 as developers redirected effort to safe-harboring 2026 pipeline rather than energizing Q4 projects. Wood Mackenzie's updated utility outlook of 381 GW DC cumulative installations 2025–2035 reflects 11% upward revision from prior quarter, driven by data center demand visibility.

3.2 The 2026 Outlook

Three forces dominate the 2026 demand picture, partially offsetting one another:

Negative: California regime transition and §25D repeal. California's NEM-to-NBT transition continues to depress new residential and small commercial demand. The §25D repeal removed the residential tax credit for customer-owned systems after December 31, 2025, eliminating a meaningful demand driver in dozens of state markets.

Negative: Cliff-driven utility-scale concentration. Wood Mackenzie's base case projects approximately 44 GW DC of installations in 2026, modestly above 2025. However, this volume is concentrated in pre-cliff utility safe-harbor projects energizing in 2026 from earlier-year BOC, masking weaker organic new-project demand. The 2027 forecast of approximately 38–39 GW reflects this cliff effect more clearly.

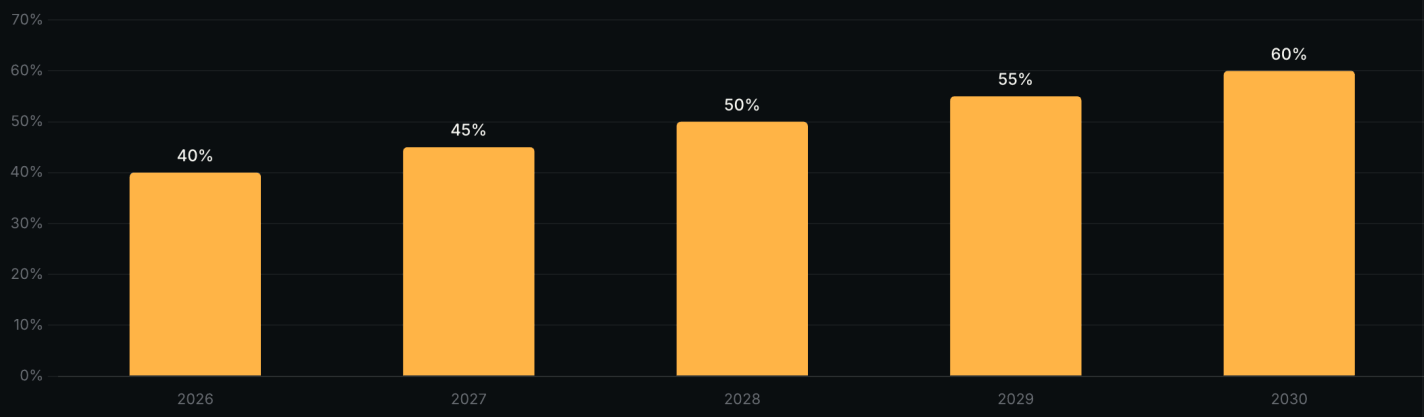
Positive: Data center demand and large-load procurement. Wood Mackenzie tracks approximately 160 GW of new large-load requests (data centers, industrial AI infrastructure) already under construction or formally committed, equivalent to 22% of current US peak demand. Solar paired with storage is structurally positioned to meet a meaningful share of this demand given the technologies' relatively short development timelines compared to gas turbines, where supply chain constraints have extended new-build lead times beyond five years.

The net effect is a 2026 market that is structurally smaller than headline numbers suggest, with demand concentrated in pre-committed pipelines, but with significant upside if interconnection bottlenecks and permitting friction are resolved. SEIA's analysis identifies approximately 73 GWac of utility-scale projects awaiting federal permits — many of which are unlikely to clear in time to participate in the pre-cliff window.

CHART 06 · COMPLIANCE ESCALATION

Material Assistance Cost Ratio escalation, 2026–2030

Minimum non-Prohibited-Foreign-Entity cost ratio for §45Y / §48E / §45X eligibility



Phase 1 brief Part III, Chart 06; OBBBA §70514 (Material Assistance restrictions). Applies to projects beginning construction after December 31, 2025.

3.3 Mid-Market Commercial — A Closer Look

Within the commercial segment, the mid-market (1–20 MWac installations) deserves particular attention because its procurement decisions are typically made on shorter horizons than utility-scale, and because it is the segment most exposed to the cliff dynamics described in Section 2.

Historically, mid-market commercial has been concentrated in four states: California, Massachusetts, New Jersey, and New York. The California regime transition affects roughly 35% of historical national mid-market commercial volume directly. Substitution into other state markets is occurring but at a lag, with secondary markets including Texas, Illinois, and Georgia gaining share.

SolarStock USA's commercial RFQ flow analysis through Q1 2026 indicates three observable shifts:

First, RFQ size distribution has compressed toward the 1.5–5 MWac range. Projects below 1.5 MWac retain Five Percent Safe Harbor eligibility and accelerated decision-making. Projects above 5 MWac increasingly resemble utility-scale procurement in complexity and require Physical Work Test commencement.

Second, Domestic Content–targeting RFQs increased materially as a share of incoming flow — roughly 60% of mid-market commercial RFQs in Q1 2026 explicitly request DC-eligible module options, compared to approximately 35% in Q1 2025. This reflects both customer awareness of the 10% bonus value and project finance counterparties (banks, tax equity investors) increasingly conditioning capital on DC qualification.

Third, lead times in RFQ-to-PO conversion are compressing. Mid-market RFQs that historically converted on 60–90 day cycles now convert on 30–45 day cycles where the customer has a credit-deadline anchor. Procurement teams are accepting tighter pricing and tighter terms to lock allocation rather than negotiate further.

3.4 Public-Sector Demand

A demand segment historically underrepresented in mid-market commercial volume is the public sector: federal facilities, state government installations, K–12 and higher education campus solar, and municipal projects (libraries, water treatment, public buildings). Three factors are converging to accelerate public-sector adoption in 2026:

Procurement diversity mandates. Federal contracting under SAM.gov and many state procurement frameworks include explicit supplier diversity requirements. Women-owned small business (WOSB), economically disadvantaged WOSB (EDWOSB), and historically underutilized business zone (HUBZone) certifications meaningfully advance qualified suppliers in award decisions.

Direct pay election under §6417. Tax-exempt public entities can claim §48E ITC value through direct pay rather than tax liability offset. Section 6417 direct pay is contingent on Domestic Content qualification for facilities beginning construction in 2026 or later, materially aligning public-sector demand with DC-eligible module supply.

Federal facility decarbonization commitments. Executive Order continuity from prior administrations regarding federal facility decarbonization, combined with continued state-level climate procurement mandates, sustains demand even under federal policy uncertainty.

The combined effect is that public-sector solar procurement, while smaller in absolute MW than commercial mid-market, is growing as a share and is structurally supportive of Domestic Content-eligible suppliers. Distributors and EPCs positioned with SAM.gov registration, WOSB/EDWOSB certification, and audit-ready DC documentation are gaining preferential access to this demand.

SECTION 4

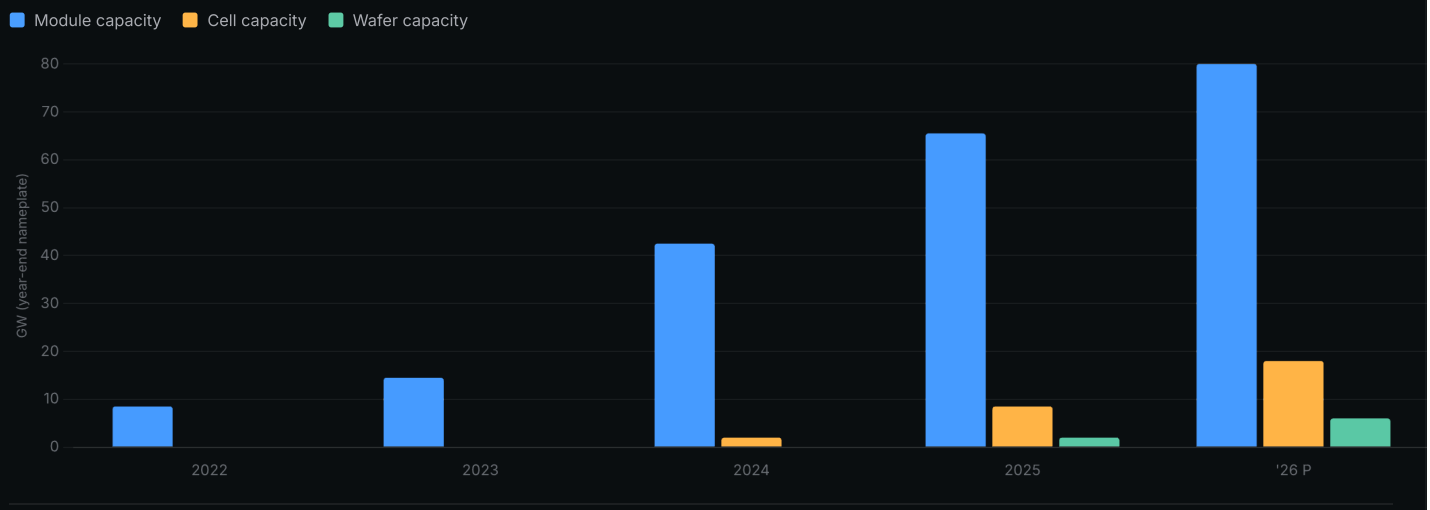
Module Supply Reality

The growth of US solar module manufacturing capacity since IRA enactment has been the most significant industrial-policy outcome of the Inflation Reduction Act. Capacity has expanded 7.7x from 8.5 GW at the end of 2022 to 65.5 GW at the end of 2025 (SEIA Solar and Storage Industry Research Data, February 2026). However, three structural realities complicate the headline expansion story: production lags nameplate capacity, upstream dependencies on imported wafers and cells remain near-total, and pricing tiers have diverged in ways that affect every procurement decision in 2026.

CHART 07 · MANUFACTURING

US module manufacturing capacity build-out, 2022–2026

Year-end nameplate capacity, GW — module assembly vs. upstream cell and wafer



Phase 1 brief Part III, Chart 07; SEIA Solar and Storage Industry Research Data, February 2026; SolarStock USA Research (2026 P).

4.1 The +88% Expansion

US module manufacturing capacity at year-end 2025 stood at 65.5 GW, up from 42.5 GW at year-end 2024 — a 54% year-over-year expansion. SolarStock USA Research projects further expansion to approximately 80 GW by year-end 2026, an additional 22% on top of the 2025 base. The total expansion 2024 to 2026 of approximately 88% reflects the cumulative effect of §45X PTC economic incentives announced in 2022 and the Domestic Content adder demand signal that has anchored long-term offtake agreements.

This expansion is geographically concentrated. Module final assembly has clustered in the southeastern United States (Georgia, Alabama, South Carolina, Texas), driven by labor cost, logistics access, and state-level incentives. Cell manufacturing — a more capital-intensive and technically demanding step — has begun coming online in 2024–2025 in Texas and Ohio, though at a smaller scale (approximately 8.5 GW cell capacity at year-end 2025 versus 65.5 GW module capacity).

Critically, the first US-based wafer manufacturing facility came online in Michigan in Q3 2025 — the first new domestic wafer capacity since 2016. This represents a structural advance: prior to Q3 2025, every US-manufactured solar module relied on imported wafers, most commonly from China or Vietnam. The Michigan facility's initial nameplate is approximately 2 GW, representing roughly 3% of current US module manufacturing capacity. SolarStock USA Research projects total US wafer capacity reaching approximately 6 GW by year-end 2026 — meaningful but still well below the supply ratio required for fully vertical US module production.

4.2 Production vs Nameplate

Manufacturing capacity is reported on a nameplate basis: the theoretical maximum output under continuous operation. Actual production runs materially below nameplate, particularly in facility ramp-up years. Industry-standard utilization in years one and two of operation is typically 60–75%; mature facilities reach 85–92%.

For 2026, SolarStock USA Research base case assumes US module utilization averages approximately 75%, implying actual 2026 production of approximately 60 GW (75% × 80 GW year-end nameplate). This compares to projected 2026 US solar demand of approximately 44 GW total — a nominal supply surplus.

The nominal surplus is misleading. Three adjustments narrow it materially:

First, not all US-manufactured modules qualify for Domestic Content. Modules assembled in the US from imported wafers and cells do not meet DC manufactured product thresholds. Of the projected 60 GW US production, SolarStock USA Research estimates 35–45 GW falls into the "US-assembled but not DC-qualifying" tier, and only 8–12 GW achieves the integrated qualification standard (US wafer + US cell + US module assembly with PFE-compliant inputs throughout).

Second, demand for Domestic Content–qualifying modules is increasing as a share of total demand. The 2026 utility-scale pipeline is dominated by DC-targeting projects because tax equity investors and lenders increasingly condition capital on DC eligibility. SolarStock USA Research estimates 25–28 GW of 2026 demand explicitly targets DC-eligible module supply.

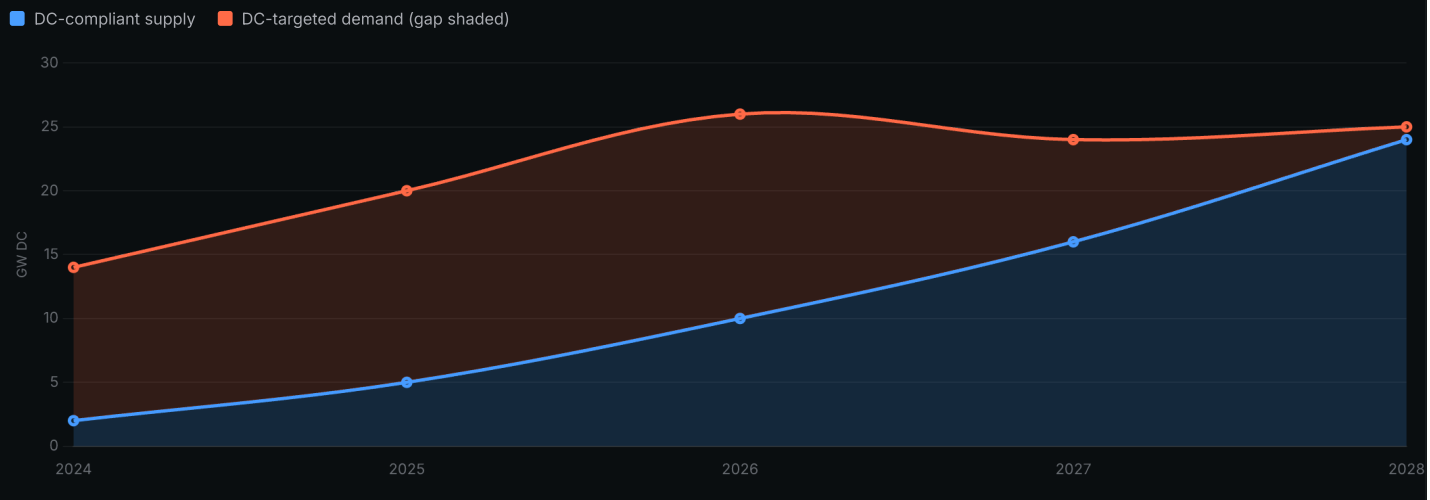
Third, supply-side commitments under long-term offtake agreements limit module availability to spot buyers. Tier-one utility-scale developers have multi-year framework agreements with US module manufacturers, locking up a significant share of nameplate capacity well ahead of production. SolarStock USA Research estimates 70–80% of 2026 production is already contractually committed, leaving 12–20 GW available to spot and mid-market commercial procurement.

Net result: structural undersupply of fully DC-compliant modules to non-framework-contracted buyers through at least 2027. The mid-market commercial segment, which lacks the procurement scale to negotiate framework agreements, is the most exposed to this scarcity.

CHART 08 · SUPPLY GAP

DC-compliant module supply vs. Domestic Content demand

GW — the structural undersupply of fully-compliant modules through 2027



SolarStock USA Research synthesis of SEIA, Wood Mackenzie and EnergyTrend data. 2026 anchored to §4.2 (8–12 GW fully-compliant supply, 25–28 GW DC-targeted demand); surrounding years are SolarStock USA Research base case.

4.3 Imported vs Domestic Pricing

Module pricing in Q1 2026 spans a 4.3x range from the lowest-cost imported tier to the highest-cost fully-compliant Domestic Content tier. Understanding this range is essential to any procurement decision.

The reference floor is Chinese FOB pricing for TOPCon 600W modules, which traded at approximately $0.087/W in early 2026 (EnergyTrend weekly data). This is the global commodity reference, reflecting Chinese manufacturer marginal cost plus minimal export margin. It is not available to US buyers in any practical sense — tariffs, AD/CVD duties, and trade enforcement preclude direct delivery.

DDP Europe pricing for the same module class traded at approximately €0.100/W ($0.110/W) — a 26% premium over Chinese FOB reflecting transport, European compliance overhead, and modest European import margins.

DDP US pricing for the same imported module class traded at approximately $0.263/W in Q1 2026 — a 3x premium over Chinese FOB. The premium decomposes approximately as: $0.087/W reference + $0.04/W tariff layer + $0.03/W AD/CVD duties + $0.05/W US distribution margin + $0.056/W of additional friction (logistics, working capital, market scarcity premium). This is the entry-level option for US buyers with no Domestic Content requirement.

US-assembled non-DC modules — modules assembled in US facilities using imported wafers and cells — trade at approximately $0.290/W. The modest $0.027/W premium over DDP US imported reflects US labor cost in final assembly and the residual US assembly markup, partially offset by avoided AD/CVD risk.

US Domestic Content–eligible modules — meeting the 2026 threshold of 50% manufactured product cost — trade at approximately $0.371/W for commercial pallet/partial-container quantities. The $0.108/W premium over DDP US imported reflects the cost difference required to substitute US-sourced components for imported components across the BOM, plus the scarcity premium given the supply gap described in 4.2.

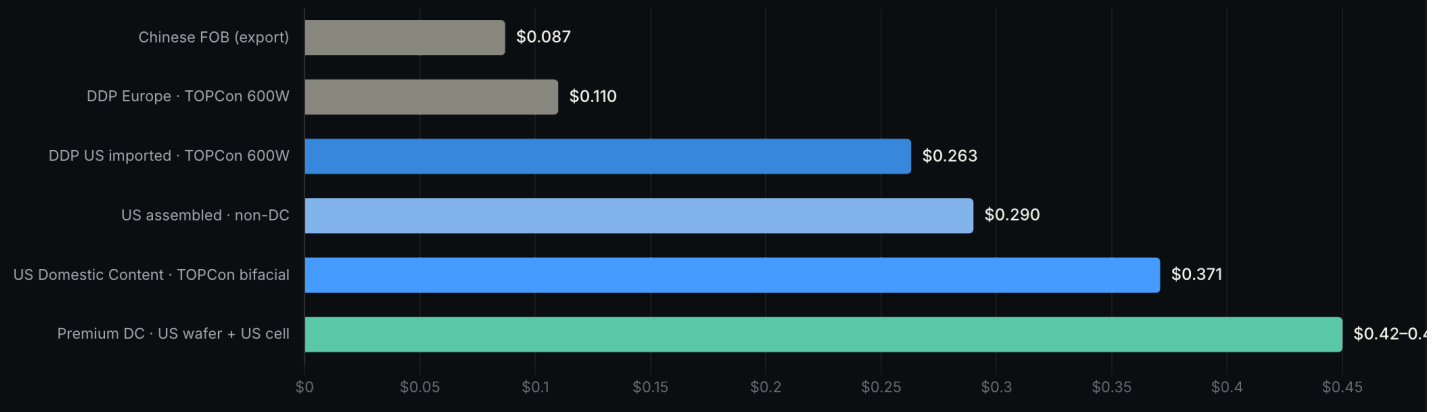
Premium DC modules — incorporating US wafer and US cell in addition to US module assembly — trade at $0.42–0.48/W. This tier is supply-constrained: less than 10 GW of capacity exists globally that can produce modules meeting all three integrated steps, and most of that capacity is under long-term contract.

CHART 09 · MODULE PRICING

Module pricing tiers, Q1 2026

Indicative $/W for commercial-scale orders (1–5 MW) · import floor to fully-compliant Domestic Content

$0.087/W	3.0×	+$0.108/W
Chinese FOB export floor	DDP-US imported vs. FOB	Domestic Content scarcity premium



EnergyTrend module pricing (Q1 2026); SolarStock USA list pricing and Research. Premium DC tier plotted at range midpoint.

4.4 The Compliant Module Scarcity Premium

The $0.108/W premium between imported DDP-US and Domestic Content–eligible modules is the key procurement number in 2026. It represents the cost gap a project must absorb to qualify for the 10% Domestic Content bonus and (for projects beginning construction in 2026) to meet the MACR threshold.

The premium is justified for projects able to claim the DC bonus: on a 5 MW commercial project, the additional $540,000 in module cost unlocks $1,576,000 in incremental tax credit value, a net gain to the developer of approximately $1,036,000. This calculation, presented in detail in Section 6, anchors the procurement decision.

But the premium is not stable. SolarStock USA Research base case projects the DC scarcity premium peaks in Q4 2026 at approximately $0.16/W as cliff-driven demand exceeds compliant supply, then compresses to approximately $0.04/W by 2028 as US wafer and cell capacity scale. The Forecast 2 methodology in Section 5 details this trajectory.

For procurement teams making decisions in Q2–Q3 2026, the practical implication is unambiguous: lock DC-eligible module allocation now at current premium pricing. Waiting for the projected 2028 compression means missing the 2026 BOC cliff and losing the underlying credit eligibility entirely.

SECTION 5

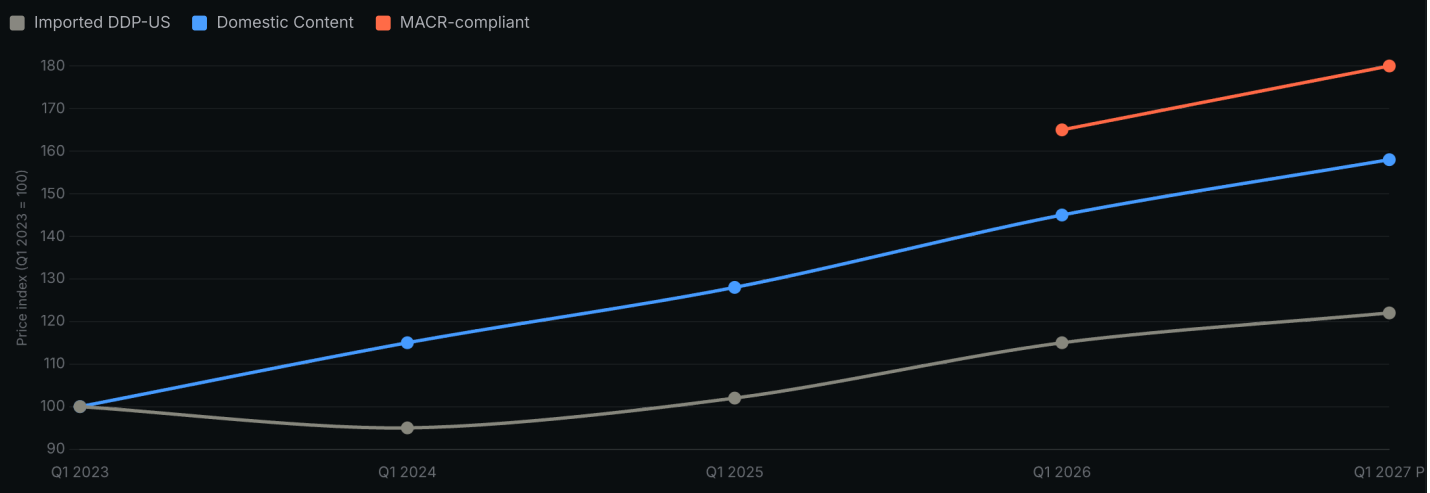
SolarStock USA Research Forecasts

This section publishes five forecasts authored by SolarStock USA Research, each grounded in a documented methodology designed for replicability and audit. Forecasts reflect SolarStock USA Research's view at publication date and are subject to revision in subsequent quarterly updates. They do not constitute investment advice.

CHART 10 · PRICING EVOLUTION

Commercial mid-market module pricing evolution, 2023–2027

Indexed price, Q1 2023 = 100 — imported, Domestic Content and MACR-compliant tiers



Phase 1 brief Part III, Chart 10; SolarStock USA Research (see §5.2, Forecast 2 methodology).

5.1 Forecast 1 — Mid-Market DC Module Pricing 2026–2028

Question. Where will Domestic Content–compliant TOPCon bifacial module pricing settle for mid-market commercial buyers (pallet to partial-container quantities) through 2028?

Methodology. Three-scenario fan model built on three inputs: (a) imported DDP-US TOPCon 600W pricing trajectory using EnergyTrend weekly data on an 8-quarter rolling basis; (b) Domestic Content scarcity premium, calculated as the observable spread between DC TOPCon and equivalent imported DDP-US; and (c) a MACR enforcement intensity proxy, scored against Treasury guidance issuance pace and Executive Order 14315 enforcement actions.

Base case assumptions. US module manufacturing nameplate capacity expands to approximately 80 GW by year-end 2026, with US wafer and cell capacity remaining a binding upstream constraint. MACR enforcement is moderately strict — the 40% threshold is enforced via supplier attestation, with material penalties for misrepresentation but pragmatic enforcement of supplier vetting. Mid-market commercial demand for DC-eligible modules totals 6 to 8 GW in 2026.

Base case projection ($/W):

- Q2 2026: $0.38
- Q4 2026: $0.41 (peak)
- Q2 2027: $0.43
- Q4 2027: $0.42
- Q2 2028: $0.40

Low case. Treasury issues lenient MACR guidance allowing third-party-country wafers and cells under specified attestation procedures. DC scarcity premium compresses to approximately $0.08/W. Pricing trajectory ($/W): Q2 2026: $0.35, Q4 2026: $0.36, Q4 2027: $0.32, Q2 2028: $0.30.

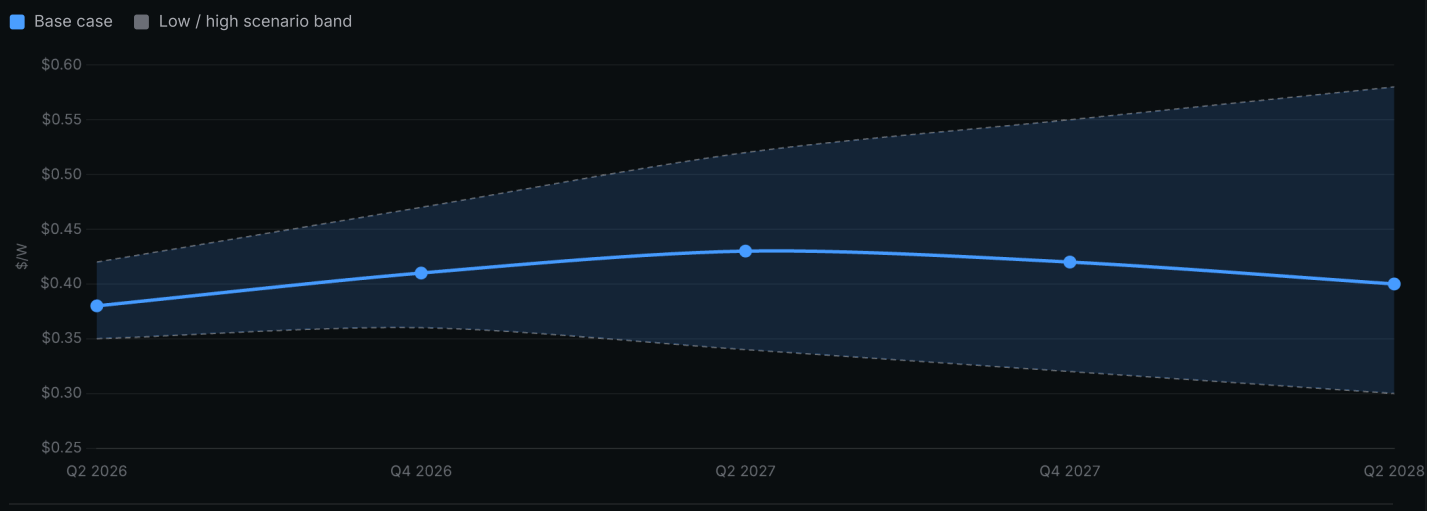
High case. Treasury issues strict MACR guidance with limited supplier attestation pathways. DC scarcity premium widens to approximately $0.16/W as compliant supply tightens further. Pricing trajectory ($/W): Q2 2026: $0.42, Q4 2026: $0.47, Q4 2027: $0.55, Q2 2028: $0.58.

Limitations. Pricing assumes mid-market commercial pallet/partial-container orders. Spot pricing for full-container utility-scale quantities will diverge — typically $0.02–0.04/W below the mid-market tier. The model excludes tariff policy changes and assumes the current tariff regime persists through the forecast horizon.

CHART 13 · FORECAST 1

Mid-market DC module pricing forecast, 2026–2028

Domestic Content TOPCon bifacial, $/W — base case with low / high scenario band



SolarStock USA Research Forecast 1 (three-scenario fan model — see §5.1 methodology); Phase 1 brief Part III, Chart 13.

5.2 Forecast 2 — Imported–Domestic Pricing Spread Evolution

Question. Will the imported-domestic module price gap widen or compress through 2028?

Methodology. Decomposition of the Q1 2026 spread of $0.108/W into four structural drivers — tariffs ($0.04/W), AD/CVD duties ($0.03/W), Domestic Content scarcity premium ($0.05/W), US assembly markup ($0.03/W) less net offsets — and independent projection of each component.

Base case projection. Tariff layer remains stable at approximately $0.04/W under continuation of the current tariff regime. AD/CVD duties remain stable at approximately $0.03/W. Domestic Content scarcity premium peaks at $0.06/W in Q4 2026 as cliff-driven demand exceeds compliant supply, then compresses to approximately $0.04/W by 2028 as US wafer and cell capacity scale. US assembly markup remains stable at approximately $0.03/W.

Net base case spread evolution. The imported-domestic spread narrows from $0.108/W in Q1 2026 to approximately $0.08/W by year-end 2028 — a roughly 26% compression. The compression is driven primarily by domestic capacity scaling reducing the scarcity premium, partially offset by continued tariff and AD/CVD persistence.

Limitations. This forecast assumes no material change to US tariff policy or AD/CVD enforcement. A scenario in which tariffs are reduced or rescinded compresses the spread substantially further; a scenario in which tariffs are increased widens it.

5.3 Forecast 3 — Safe-Harbor Pipeline Burn Rate

Question. What share of the 90 GW pre-cliff utility-scale pipeline plus the estimated 6–8 GW commercial mid-market scramble will successfully establish beginning of construction by July 4, 2026?

Methodology. Probability-weighted analysis of the SEIA Q3 2025–tracked utility-scale pipeline, segmented by BOC timing (2025 vs H1 2026), with internal completion-rate estimates calibrated against historical safe-harbor execution data. Commercial mid-market estimates use SolarStock USA's RFQ flow analysis bottom-up.

Inputs.

- 50 GW utility pipeline positioned for BOC by year-end 2025 (SEIA Q3 2025)
- 40 GW additional utility pipeline targeting H1 2026 BOC
- 6 to 8 GW commercial mid-market BOC capacity attempting safe-harbor Q4 2025 through Q2 2026

Base case completion rates.

- Utility pre-2026 BOC: 85% completion (43 GW realized). Reflects strong execution capacity but accounts for permitting failures, interconnection slippage, and equipment delivery delays.
- Utility H1 2026 BOC: 65% completion (26 GW realized). Lower rate reflects intensifying labor and EPC constraints, plus the elimination of Five Percent Safe Harbor for projects above 1.5 MWac requiring physical work commencement.
- Commercial mid-market: 50% completion (3 to 4 GW realized). Reflects structural EPC constraints in the segment and shorter average development timelines, which both raise the failure rate.

Base case total successful pre-cliff BOC: 72–73 GW.

This implies approximately 17–18 GW of nominally pre-cliff pipeline plus 50% of the commercial mid-market scramble slips into the post-cliff regime, subject to the December 31, 2027 placed-in-service deadline.

5.4 Forecast 4 — FEOC Compliance Cost Stack

Question. What will the cumulative MACR compliance overhead per Watt look like as the threshold escalates from 40% in 2026 to 60% in 2030?

Methodology. Bottom-up build of compliance overhead components — supplier attestation documentation (legal and audit), BOM verification overhead per project, and premium pricing for compliant components as scarcity rises — projected against the MACR escalation path.

Base case per-Watt overhead projection.

- 2026 (MACR 40%): +$0.012/W
- 2027 (MACR 45%): +$0.018/W
- 2028 (MACR 50%): +$0.025/W
- 2029 (MACR 55%): +$0.032/W
- 2030 (MACR 60%): +$0.040/W

Interpretation. The cumulative overhead reaches roughly 10% of the underlying module cost by 2030, materially affecting project economics for any developer not adapting supply chain documentation early. The largest single component is not legal documentation (relatively scalable) but supplier vetting and BOM tracking — these scale linearly with project count and per-component complexity.

Limitations. Estimates assume current Treasury guidance posture continues. A safe-harbor regime that simplifies supplier attestation (analogous to the Domestic Content Notice 2025-08 cost tables) would reduce the overhead materially. Conversely, an enforcement regime that requires per-component traceability beyond current expectations would raise the overhead substantially.

CHART 14 · FORECAST 4

FEOC compliance cost stack, 2026–2030

Per-Watt MACR compliance overhead by component, $/W

SolarStock USA Research estimated breakdown grounded in prose §5.4 (supplier vetting + BOM tracking identified as the largest single component). Annual totals from Forecast 4 methodology. Per-component allocations: SolarStock USA Research.

5.5 Forecast 5 — Mid-Market Commercial Annual Demand 2026–2028

Question. What is the addressable mid-market commercial demand window for Domestic Content–eligible solar modules through 2028?

Methodology. Top-down from SEIA/Wood Mackenzie commercial segment forecast (−13% 2026, +6% CAGR 2027–2030), validated bottom-up against SolarStock USA RFQ flow analysis.

Base case demand projection (GW DC commercial installations).

- 2026: 2.0 GW total commercial
- 2027: 1.6 GW (post-cliff effect concentrates demand into projects with pre-cliff BOC)
- 2028: 1.7 GW (recovery as 2027 BOC projects energize)

Of which Domestic Content–eligible target:

- 2026: 1.0–1.2 GW (50–60% of segment, reflecting tax equity financing requirements)
- 2027: ~1.0 GW (60% as MACR enforcement matures)
- 2028: ~1.2 GW (70% as supplier attestation regime stabilizes and DC qualification becomes operational baseline)

Total addressable DC-eligible mid-market commercial demand 2026–2028: 3.2 to 3.4 GW.

This represents the supply allocation that mid-market distributors and EPCs are competing for over the next 30 months. Against SolarStock USA Research's estimate of 8–12 GW of fully DC-compliant US module supply over the same period (Section 4.2), the supply-to-demand ratio is approximately 3x — but this is misleading. The bulk of compliant supply is under long-term framework agreements to utility-scale developers, leaving 12–20% of compliant production available to mid-market spot buyers — well below mid-market demand.

The procurement consequence is direct: mid-market commercial buyers without established supplier relationships in 2026 are unlikely to secure DC-eligible module supply for 2027 commencement projects.

SECTION 6

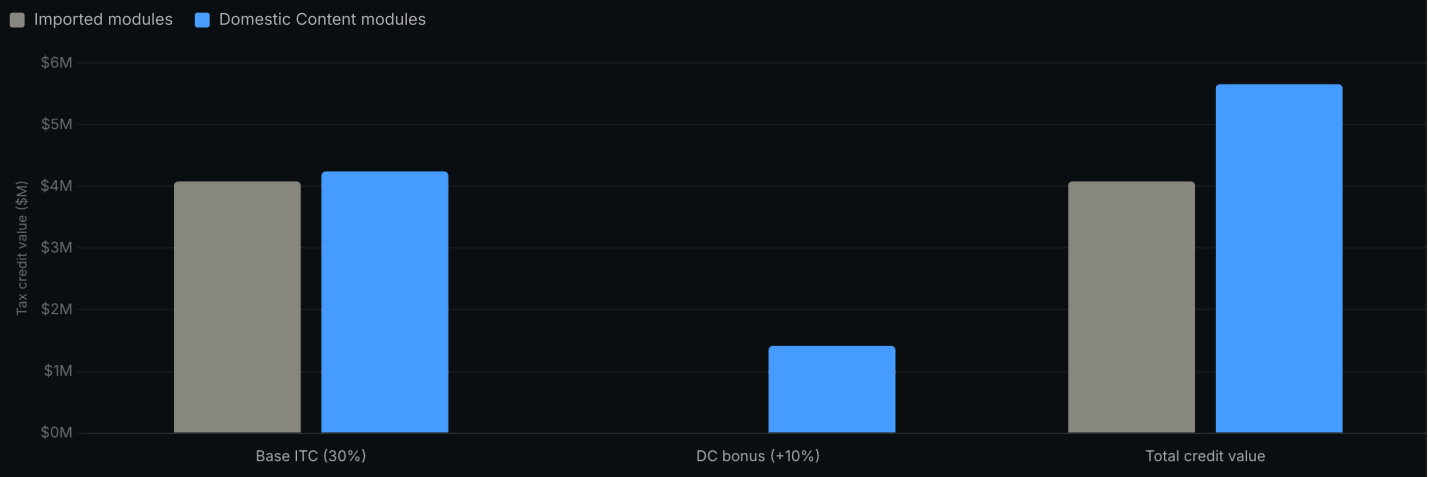
Implications for Procurement

The analytical sections of this brief converge on a procurement question that every commercial EPC, developer, and public-sector buyer in the US solar market faces in mid-2026: how to allocate module orders given a hard credit cliff, a structurally undersupplied compliant module market, and rising compliance documentation requirements. This section synthesizes the implications into actionable recommendations.

CHART 11 · PROJECT ECONOMICS

Domestic Content economic uplift — 5 MW commercial project

Tax credit value, imported vs. Domestic Content modules · $0.263/W imported reference



SolarStock USA economic model (validated against IRS Form 3468 ITC methodology). Imported reference standardised to $0.263/W — see CHANGELOG.md, Finding 3.

6.1 The Domestic Content Economic Case

The threshold question for any 2026 project is whether to target Domestic Content qualification. On a 5 MW commercial project, the economics are:

COMPONENT	IMPORTED TIER	DC TIER	Δ
Module cost ($/W)	$0.263	$0.371	+$0.108
5 MW module cost	$1,315,000	$1,855,000	+$540,000
Project cost basis	$13,600,000	$14,140,000	+$540,000
Base ITC (30%)	$4,080,000	$4,242,000	+$162,000
DC bonus (+10%)	$0	$1,414,000	+$1,414,000
Total credit value	$4,080,000	$5,656,000	+$1,576,000
Net gain to developer	—	—	+$1,036,000

The decision is unambiguous for projects with sufficient tax appetite or transferability access: target Domestic Content. The $1.04 million net gain on a 5 MW project exceeds typical equity return assumptions for the project and substantially exceeds the operational overhead of compliance documentation.

For projects below this scale (under 1 MWac, typical small commercial), the economics still favor DC qualification but the absolute dollar gain narrows. Direct pay-eligible public-sector projects face the additional consideration that DC qualification is now structurally required for §6417 direct pay claims on facilities beginning construction in 2026 or later.

6.2 Strategic Recommendations

Based on the analysis in Sections 1 through 5, SolarStock USA Research recommends procurement teams take five concrete actions over the Q2 to Q3 2026 window:

1. Lock module allocation by end of Q2 2026. The combination of pre-cliff demand concentration, structural compliant supply scarcity, and the typical 8–12 week module delivery lead time means that procurement decisions made after July 1, 2026 will face materially tighter allocation than decisions made before. For projects targeting Q3 or Q4 2026 BOC, module orders should be placed by end of Q2 2026.

2. Document supplier attestation chains now, not at PO time. MACR compliance requires per-component verification that no input was sourced from a Prohibited Foreign Entity. Procurement teams that have not yet built supplier attestation workflows should do so before placing 2026 orders. Notice 2025-08 cost tables provide the substantiation framework but require active documentation collection.

3. Separate Domestic Content tracking from BOC tracking. The two tax credit elements are often discussed as a single qualification, but they are operationally distinct. A project can establish valid BOC and still fail DC qualification (or vice versa). Procurement tracking systems should treat them as separate compliance gates.

4. Plan supplier diversity certifications for federal and corporate opportunities. Federal procurement and Fortune 500 supplier diversity programs are an underutilized demand channel for distributors and EPCs with WOSB, EDWOSB, HUBZone, or minority-owned business certifications. The growing role of supplier diversity in project finance underwriting (banks asking about supplier mix) further amplifies this channel's importance.

5. Build operational documentation packages before the first audit. IRS examination of Domestic Content and MACR claims is in its early phase. The 2024 and 2025 claim years are the first cohorts that will face audit-stage examination, beginning approximately 2027. Procurement teams whose documentation packages are designed for IRS submission from day one will face materially lower audit cost and risk than teams that retrofit documentation post-facto.

6.3 The Decision Matrix

For a given project, the procurement strategy depends on two binary variables: whether BOC will be established before July 4, 2026, and whether the project targets Domestic Content qualification.

Pre-cliff BOC + DC target. Highest-priority configuration. Recommended: safe-harbor DC-eligible module allocation immediately; lock the allocation by binding contract with title transfer before July 4, 2026; document supplier attestation chain at order placement; coordinate Physical Work Test commencement (for >1.5 MWac projects) with module delivery timing.

Pre-cliff BOC + non-DC. Viable strategy when project economics work without the 10% bonus. Recommended: imported DDP-US modules are acceptable; Five Percent Safe Harbor remains available for projects under 1.5 MWac; coordinate Physical Work Test for larger projects.

Post-cliff BOC + DC target. Compressed timeline. Recommended: module orders by Q3 2026 latest to allow delivery and physical work commencement before year-end 2026, with placed-in-service by December 31, 2027; only viable for projects under 10 MW with low-complexity permitting; supplier relationships established by mid-2026.

Post-cliff BOC + non-DC. Economically marginal configuration. Recommended: reconsider project scope. Without the 10% bonus and with the compressed 18-month timeline to PIS, project unlevered returns typically do not meet investor thresholds. Evaluate alternative project structures (scope reduction, energy storage addition for separate ITC eligibility, deferral to a future credit regime).

CHART 15 · PROCUREMENT DECISION

Procurement decision matrix

Recommended sourcing strategy by beginning-of-construction timing and Domestic Content target

PRE-CLIFF BOC · TARGETS DOMESTIC CONTENT

Highest priority

Safe-harbor DC-eligible allocation now; lock it by binding contract with title transfer before July 4, 2026; document the supplier attestation chain at order placement.

POST-CLIFF BOC · TARGETS DOMESTIC CONTENT

Compressed timeline

Module orders by Q3 2026 at the latest; placed-in-service by Dec 31, 2027. Viable only for projects under ~10 MW with low-complexity permitting.

PRE-CLIFF BOC · NO DC TARGET

Viable without the bonus

Imported DDP-US modules acceptable; the 5% safe harbor remains open under 1.5 MWac; coordinate the Physical Work Test for larger projects.

POST-CLIFF BOC · NO DC TARGET

Economically marginal

Reconsider project scope. Without the 10% bonus and on an 18-month placed-in-service clock, unlevered returns rarely clear investor thresholds.

SolarStock USA Research; recommendations condensed from §6.3.

6.4 What This Means for the Broader Market

Beyond individual project decisions, the cliff dynamics in 2026 are reshaping the structure of the US solar distribution market. Three structural shifts are observable in SolarStock USA's commercial RFQ flow:

First, supplier-customer relationships are deepening. Customers are signing longer framework agreements with fewer distributors rather than spot-shopping each project. This compresses the supplier ecosystem and rewards distributors with reliable inventory, documentation, and execution.

Second, single-brand distribution models are gaining traction in mid-market commercial. The complexity of documentation under §45X, Domestic Content, and MACR favors distributors that know one manufacturer's BOM, certifications, and supply chain intimately, over distributors that broker across many manufacturers.

Third, public-sector demand is professionalizing. Procurement officers at federal agencies, state governments, and large public-sector entities are increasingly sophisticated about §6417 direct pay mechanics, DC qualification, and supplier diversity considerations. This favors suppliers with SAM.gov registration, audit-ready documentation, and certified diversity status.

These structural shifts are not transient. They will persist into 2027 and 2028 regardless of how the cliff dynamics resolve.

> *Tax credit decisions are fact-specific. Readers should consult qualified tax counsel before making procurement decisions based on this analysis.*

SECTION 7

Methodology, Sources & Disclosures

7.1 Forecast Methodology Summary

SolarStock USA Research publishes five forecasts in this brief. All forecasts follow a base / low / high case structure where applicable, and include documented assumptions, limitations, and sources.

Forecast 1 (Mid-market DC module pricing) uses a three-scenario fan model with three inputs: imported DDP-US pricing trajectory (EnergyTrend), Domestic Content scarcity premium (calculated from observable spread), and MACR enforcement intensity (Treasury guidance pace + EO actions).

Forecast 2 (Imported–domestic spread evolution) decomposes the current spread into four structural drivers and projects each independently against scenarios for tariff persistence, AD/CVD enforcement, US capacity scaling, and assembly markup stability.

Forecast 3 (Safe-harbor pipeline burn rate) uses probability-weighted completion rates applied to SEIA-tracked utility pipeline data and SolarStock USA bottom-up commercial mid-market estimates.

Forecast 4 (FEOC compliance cost stack) builds bottom-up overhead components — legal documentation, BOM verification, premium component pricing — against the MACR escalation path 40% → 60% over 2026–2030.

Forecast 5 (Mid-market commercial demand) uses top-down SEIA/Wood Mackenzie segment forecasts validated bottom-up against SolarStock USA RFQ flow analysis.

Forecasts are updated quarterly. Methodologies are subject to revision as additional Treasury guidance, market data, and regulatory enforcement actions emerge. The next scheduled update is Q3 2026.

7.2 Sources Cited

Primary regulatory sources:

- 26 U.S. Code §45X — Advanced Manufacturing Production Credit
- 26 U.S. Code §45Y, §48E — Clean Electricity PTC/ITC (technology-neutral)
- Public Law 119-21 (OBBBA), §§70512, 70513, 70514, signed July 4, 2025
- Executive Order 14315, July 7, 2025
- IRS Notice 2023-38 (May 2023) — initial Domestic Content guidance
- IRS Notice 2024-41 (May 2024) — first elective safe harbor table
- IRS Notice 2025-08 (January 16, 2025) — updated safe harbor
- IRS Notice 2025-42 — beginning-of-construction guidance post-OBBBA

Market data sources:

- SEIA/Wood Mackenzie US Solar Market Insight, Q3 2025
- SEIA/Wood Mackenzie US Solar Market Insight, Q4 2025
- SEIA/Wood Mackenzie US Solar Market Insight, 2025 Year in Review
- SEIA Solar and Storage Industry Research Data, February 2026
- BloombergNEF Tier 1 PV Module Manufacturers List, Q1 2026
- EnergyTrend module pricing data (weekly), Q1 2026

Legal and tax analysis cited:

- Crux Climate, Domestic Content Adder analysis (June 2025)

Williams Mullen, OBBBA Summary of Renewable Energy Tax Credit Changes (July 2025)

Kirkland & Ellis, OBBBA Big Changes to Green Energy Tax Credits (August 2025)

Sidley Austin LLP, Navigating the New Energy Landscape (November 2025)

Stoel Rives LLP, OBBB Modifies Renewable Energy Tax Credits (July 2025)

Winston & Strawn, OBBB Solar and Wind PTCs and ITCs

Clifford Chance, OBBBA Notable Terminations of Tax Credits (November 2025)

Norton Rose Fulbright, Updated Domestic Content Calculations (January 2025)

RSM US, Treasury Issues Notice 2025-08 (February 2025)

Industry analysis:

SolarEdge US, H.R. 1's Domestic Content Requirements: A Guide for Solar Developers

Mission Solar Energy, The Domestic Content Bonus in 2025: What Solar Developers Need to Know

Project Finance NewsWire (projectfinance.law), Effects of One Big Beautiful Bill on Projects (March 2026)

7.3 Limitations and Assumptions

This brief reflects SolarStock USA Research's view at the publication date. Specific limitations:

The regulatory analysis assumes Treasury and IRS guidance posture continues along the trajectory observable through Q1 2026. Material new guidance — particularly on MACR safe harbors, beginning-of-construction definitions, and §45X integrated components rules — could shift conclusions. The next update incorporates guidance through Q2 2026.

Pricing analysis is based on observable market data through April 2026. Module pricing in the spot market is volatile; quoted prices reflect indicative ranges for mid-market commercial pallet and partial-container orders. Spot prices for utility-scale full-container quantities and for long-term framework agreements differ materially.

Forecasts assume the current tariff regime — including general China tariffs, AD/CVD duties, and Section 201 measures — persists through the forecast horizon. Material changes to US trade policy would shift projections substantially.

This brief does not address §25C (residential energy efficient property), §25D (residential clean energy, terminated December 31, 2025), §45W (commercial clean vehicles), or other clean energy provisions outside the solar PV value chain.

7.4 About SolarStock USA Research

SolarStock USA Research is the analytical desk of SolarStock USA, operated by Yulz Design LLC (DBA Luzon Group), exclusive US distributor of Sunpro Power modules across the Americas. The research desk produces quarterly briefs on US solar market structure, regulatory developments, and procurement implications. Research is made available to customers, partners, procurement officers, tax counsel, and qualified industry participants.

Research outputs reflect SolarStock USA Research's independent analytical view. They are not investment advice and do not constitute solicitation for any commercial transaction.

7.5 About the Authors

Yuliani Llohis is the Founder and Chief Executive Officer of SolarStock USA. Previously, she built and led Zytech Solar USA — the US subsidiary of Spanish PV manufacturer Zytech Solar Group — for fifteen years, with full P&L responsibility for the American market across residential, commercial, and utility-scale segments. SolarStock USA, operated by Yulz Design LLC, is the exclusive US distribution channel for Sunpro Power modules across the Americas. The company is woman-owned and SAM.gov registered, with WOSB and EDWOSB certifications in progress.

SolarStock USA Research Desk is the analytical function of the company, synthesizing primary regulatory sources, third-party market data, and proprietary commercial flow analysis into quarterly published research. The desk operates independently of SolarStock USA's commercial functions.

7.6 Disclaimer

This brief is provided for informational purposes only. It does not constitute legal, tax, accounting, investment, or other professional advice. Projections and forecasts reflect SolarStock USA Research's view at the publication date and are subject to change without notice. Tax credit eligibility and project compliance under IRC §45X, §45Y, §48E, OBBBA §§70512–70514, and related Treasury guidance depend on specific facts and circumstances. Readers should consult qualified tax counsel before making decisions based on the information contained herein. SolarStock USA, Yulz Design LLC, and Luzon Group do not provide tax or legal advice.

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