AVL Energy

Your extra solar is worth more than the utility pays for it.

US MARKET SIZE

AVL Solar Miner · November 2026

ADDRESSABLE US SURPLUS SOLAR, MINED AT TODAY'S BTC (~$81K)

$1.45B / year

Gross mining value of ~17.9 TWh of surplus solar a year across US homes, businesses, off-grid sites and portable generators. That's under 20% of the 93 TWh small-scale US solar produced in 2025.[3]

AVL 20% share: **~$289M/yr** | Low-export SAM: **$639M/yr** | 6.2M US solar installs[2]

THE VALUE LINE

About 2–3× midday export credits

Export credit CA NEM 3.0	2–4¢
Mined, to owner after AVL 20%	6.5¢
Mined, gross	8.1¢

Per kWh. Canaan Avalon Q, 90 TH/s at 1,674 W, BTC ~$81k.[12] CA net-billing export credits average 3.7–4.6¢/kWh across PG&E, SCE and SDG&E, and run lower at midday, when surplus peaks; 6.5¢ is roughly 2–3× a typical 2–3¢ midday credit.[7]

FOUR US SEGMENTS

Residential solar

Homeowners exporting midday surplus for low credits

~6.0M
home systems (97% of 6.2M US installs)[2]

40.3 GW · 63 TWh
capacity and annual output, 2025[3]

+4.65 GWdc
installed in 2025[1]

Commercial solar

Businesses, schools, farms, public buildings

15.8 GW · 25 TWh
capacity and annual output, 2025[3]

+2.35 GWdc
installed in 2025, a record year (+6%)[1]

39%
of 2025 installs were in California, where new projects get net billing[1]

Off-grid & remote

IN DEVELOPMENT

No export credit at all; surplus is simply curtailed

~180,000
off-grid households (widely cited estimate; no official count)[8]

$320M
US off-grid solar market, 2025[9]

11% CAGR
forecast to 2035[9]

Portable generators

EcoFlow, BLUETTI, Jackery: mines on a full battery charged by its own panels, never from the wall

$1.45B
US portable power station market, 2025[10]

~2.8M units/yr
US estimate: 8.2M global units[11] × 34.7% US share[10]

AVL OPPORTUNITY ESTIMATE · AT BTC ~$81K

SEGMENT	ADDRESSABLE BASE	SURPLUS KWH / UNIT / YR	SURPLUS TWH / YR	MINING VALUE / YR	AVL 20% / YR
Residential	6.0M homes	2,500	15.0	$1,219M	$244M
Commercial	15.8 GW	10% of output	2.5	$200M	$40M
Off-grid	180k homes	1,500	0.27	$22M	$4.4M
Portable	285k units/yr	300	0.09	$6.9M	$1.4M
Total (TAM)			**17.9**	**$1,447M**	**$289M**

Annual mining value by segment (gross, $M)

Residential	$1,219M
Commercial	$200M
Off-grid	$22M
Portable	$6.9M

If bitcoin rises (difficulty held flat)

BTC	GROSS ¢/KWH	OWNER ¢/KWH	AVL SHARE, SAM
~$81k (today)	**8.1¢**	**6.5¢**	**$128M/yr**
$150k	15.0¢	12.0¢	$237M/yr
$250k	25.0¢	20.1¢	$394M/yr

TAM
$1.45B
All four segments, all US systems. AVL share $289M/yr

SAM
$639M
Res. + commercial in low-export states (43%)[5], plus all off-grid and portable. AVL share $128M/yr

SOM
$6.4M
Illustrative 1% of SAM (~26k homes). AVL share ~$1.3M/yr, before hardware and partner revenue

Method: addressable units × surplus kWh/yr × mined value per kWh = annual mining value; AVL keeps 20%, owners keep 80%. **Assumptions (conservative):** Residential: 2,500 surplus kWh/home/yr (~4 hrs/day of one 1.67 kW miner), about 24% of average output, versus 47–72% typically exported by solar-only homes.[6] Commercial: 10% of EIA small-scale commercial output is surplus. Off-grid: 1,500 kWh/home/yr of otherwise curtailed solar. Portable: 10% of yearly US unit sales are large enough (≈1.8 kW+ output) and paired with panels; 300 kWh/unit/yr; installed base excluded. SAM uses NREL's estimate that ~43% of US households live in states that no longer require net metering[5] as a proxy for low-export systems; California alone holds 34% of US small-scale solar capacity.[4] Sensitivity scales linearly with BTC at today's network difficulty, fees and hardware; in practice difficulty tends to rise with price. Unit counts for residential (97% × 6.2M) and portable (8.2M × 34.7%) are derived estimates.

Estimates only, not guaranteed. Mining revenue depends on bitcoin price, network difficulty, hardware, and available surplus solar.

1 SEIA / Wood Mackenzie, US Solar Market Insight: 2025 Year in Review (2026). seia.org/research-resources/solar-market-insight-report-2025-year-in-review
2 SEIA, 6 Million Solar Installations and Solar Cheat Sheet, Q3 (Sep 2026). seia.org/research-resources/6-million-solar-installations
3 US EIA, Electric Power Monthly, Tables 6.1.B, 1.2.C, 1.2.E (Oct 2026; 2025 data final). eia.gov/electricity/monthly
4 US EIA, Electricity in the US: generation, capacity and sales (2026). eia.gov/energyexplained
5 NREL, Rooftop Solar Deployment, Potential Electricity Rate Impacts, and the Timing of Revisions to State Net Metering Policy (2025), NREL/TP-91888.
6 LBNL (Forrester, Barbose, Miller), Private vs. Public Value of US Residential Battery Storage (2022). emp.lbl.gov
7 NRG Clean Power, NEM 3.0 Is Final (Oct 2026), citing CPUC Avoided Cost Calculator values. nrgcleanpower.com
8 Home Power Magazine estimate (2006), as reported by GoOffGrid (2026). Dated; no official US count exists.
9 Market Research Future, US Off-Grid Solar Market (2026). marketresearchfuture.com
10 Grand View Research, US Portable Power Station Market Outlook (Dec 2025). Other firms size the market far smaller (Fortune Business Insights: $266M, 2024).
11 Frost & Sullivan, via EcoFlow / PR Newswire (Jun 2026): 8.2M units, $3.3B global sales in 2025.
12 Canaan Avalon Q spec (90 TH/s, 1,674 W); AVL Energy mining model at BTC ~$81k, Nov 2026.

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