

Ohm Analytics

November Update - Abridged

Residential and Commercial Solar

<https://ohmanalytics.com/>

Full Report Content Summary

November Executive Summary

Residential Segment

Market Demand Trends

- Monthly & Weekly Permit Issuance
- Upstream Consumer Demand
- Sales Pipeline – includes sampling of NEM 3.0 California
- Notes from the Field – market color from our installer network
- **Preliminary Q4-23 Forecast**

Other Market Trends – Pricing, Financing, Policy

- Final Installed PV and ESS Pricing
- Financing Trends (APRs & Third Party Ownership)
- Policy & Incentive Update

Market Share Insights

- Installer Market Share
- OEM Market Share (Inverter/ Storage/ Module) – includes NEM 3.0
- Storage Attachment Rates – includes post NEM 3.0 view

Commercial Segment

Market Demand Trends

- Monthly Permit Issuance
- **Commercial Solar Market Overview: Non-Resi & Community Solar**

Other Market Trends – Pricing, Financing, Policy

- Final Installed PV and ESS Pricing

Market Share Insights

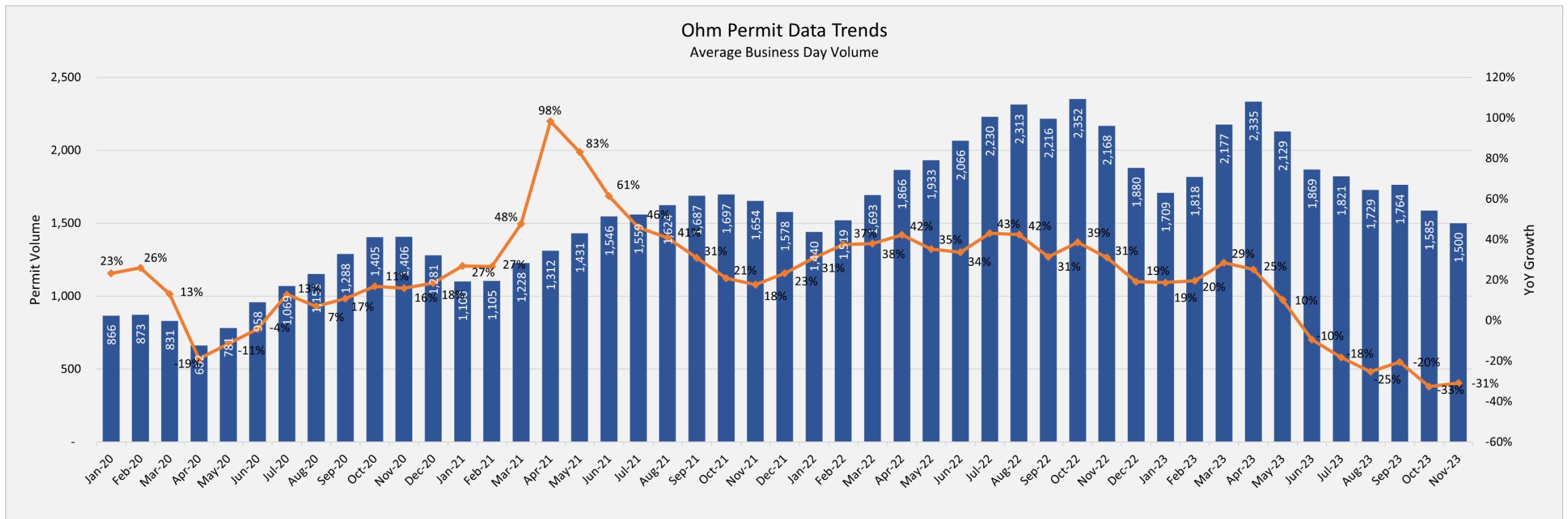
- OEM Market Share (Inverter/ Module)

Executive Summary

- **Ohm leading indicators from November and early December data suggest Ex. CA Q4-23 exit rates will likely be in the -25% to -30% YoY range, suggesting the market will bottom in H1-24 and prompting a downward revision to our 2024 U.S. Resi forecast to -13% (vs -10%)**
 - **Permitting Ex. CA (adjusted for business days) came in at -25% YoY in November vs -26% in October and -22% in August**
 - **The November and early December data suggests the rate of YoY decline may not only be slowing, but also entering a potential flattening trend**
- **Softness in leading CA Market data, which we noted in previous reports, continued into November and lead us to lower our 2024 CA forecast from -35% to -42% YoY**
 - **Sales proposal activity of NEM 3.0 projects remains in the -65% YoY range and lead volume remains around -40% YoY. Note proposal activity & consumer demand datasets are skewed to private installers and does not reflect the performance reported by the largest/public Co.'s**
- **APRs & Resi PV pricing continued flattening trend**
 - **November customer facing APRs remained in the 4.5% range**
 - **Third party ownership (TPO) in California NEM 3.0 market rose above 40% in November (vs 24% TPO in Nov NEM 2.0 backlog installs), while Nevada, Arizona and New York also continued an upward trajectory**

Monthly Residential Permits Issued Trends

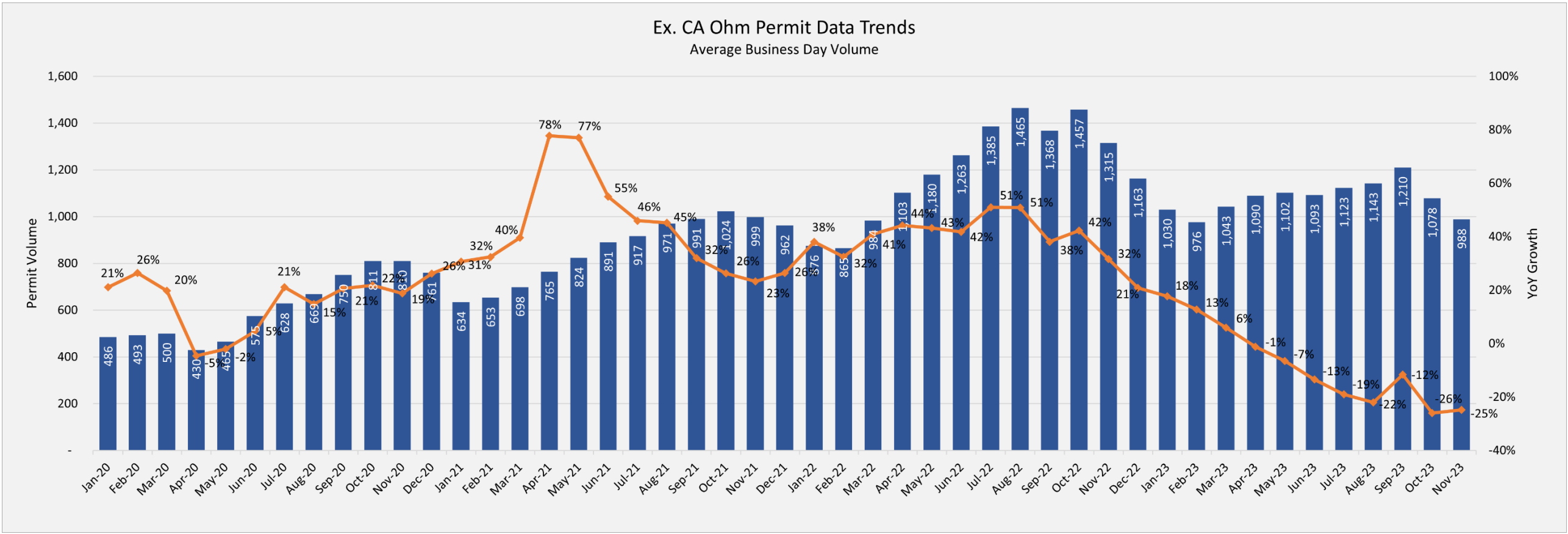
- Average business day volume of November permits issued was at -31% YoY growth (vs -33% in October)
- November permits continued the slow down in rate of YoY decline, driven by California growth plateauing over the last 2 months in the -40% YoY range and Ex. CA in the -25% range



*Permit data is a leading indicator of strong demand, however economic uncertainty and labor/supply constraints may impact installation timelines and final install trends

Monthly Residential Permits Issued Trends (Ex. CA)

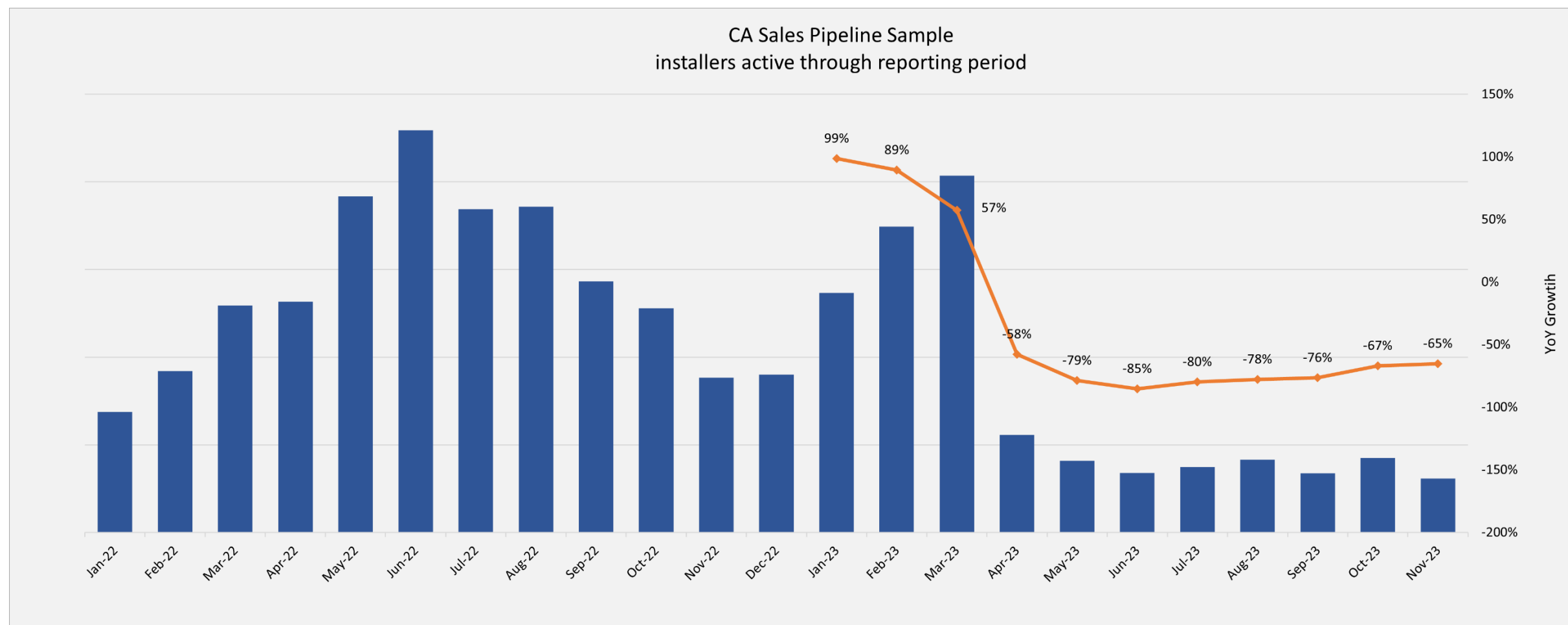
- Average business day volume of Ex. CA November permits issued was at -25% YoY (vs -26% in Oct)
- November YoY growth continued slowing trend in the rate of YoY decline, with growth remaining in the mid -20% range since August (September was a favorable comp)
- Nov was down -8% sequentially over Oct, which is a slight improvement compared to Nov-22 o. Oct-22 (-10%)



*Permit data is a leading indicator of strong demand, however economic uncertainty and labor/supply constraints may impact installation timelines and final install trends

CA Sales Pipeline Trend Sample

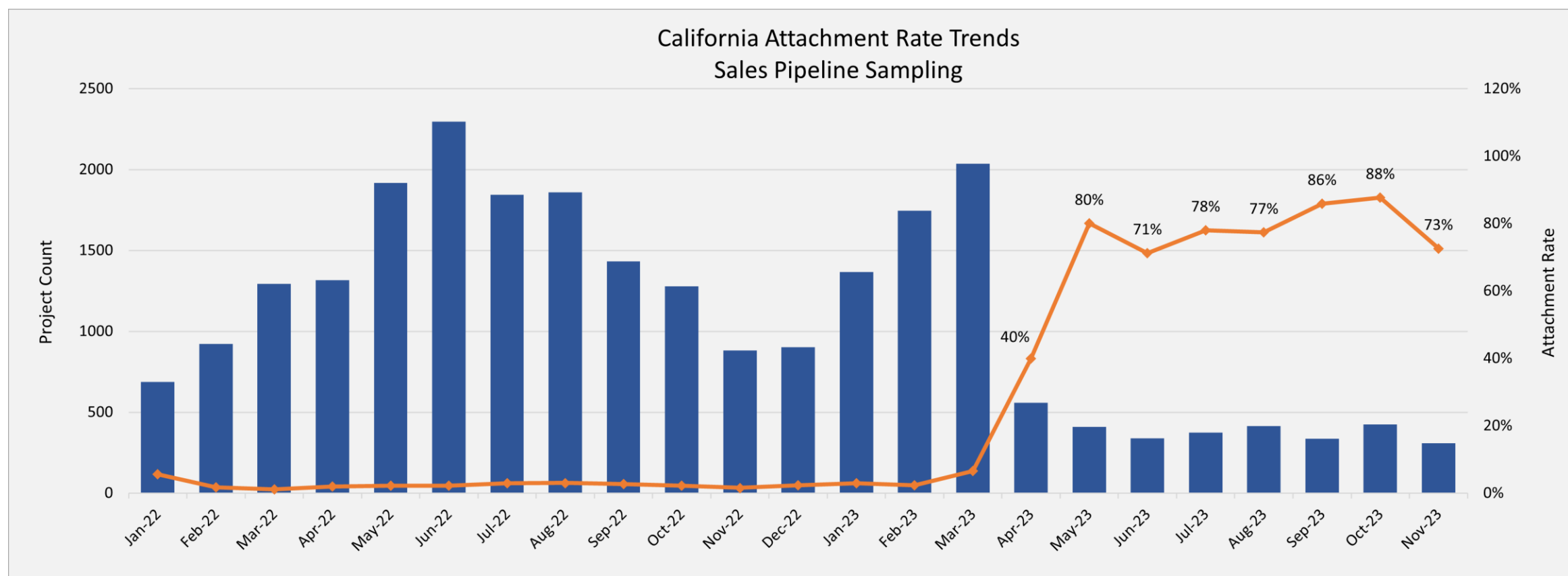
- Sales proposal activity in November continued its slight upwards trend in YoY growth (-65% in Nov vs -67% in Oct and -80% in July), despite a sequential/seasonal dip in absolute volume



**Sales pipeline data (proposal/software platforms) from a sampling of median sized private installers provides transparency into NEM 3.0 impact (stronger reported performance of the larger/public companies are not reflected in this sample)*

U.S. Sales Pipeline Sample – CA Attach Rates

- Sales pipeline data from a sampling of median sized private installers active in California market shows attachment rates steady in the 70 - 80% range post NEM 3.0
 - Note that this data set does not include larger/public companies that had higher than market rates under NEM 2.0, but is in line with feedback from our network of private CA installers (see “Notes from the Field” slide)



Ohm Analytics

Residential and Commercial Solar

Schedule a demo to see the full report and the
Ohm Market Intelligence Platform

<https://ohmanalytics.com/schedule/>