DOCKETED	
Docket Number:	22-EVI-06
Project Title:	Vehicle-Grid Integration
TN #:	273650
Document Title:	2026-11-10 -- CEC V2H Webinar -- KIA
Description:	N/A
Filer:	Spencer Kelley
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	11/16/2026 11:59:30 AM
Docketed Date:	11/16/2026

Kia – Scaling Vehicle-to-Grid Parallel



Alex Pawlowski – Regulatory Strategy
Kia America

Kia America, Inc. Shared for CEC V2H Webinar

Kia America

- Part of Hyundai Motor Group; share technical platforms, investments with Hyundai / Genesis; separate brands
- **CA company since 1992**
  Kia North America HQ: 500+ employees
- Mojave Proving Grounds in California City: 200+ employees
- 66 California Kia dealers: 3,962 employees
- 2025 Kia California sales(units): 89,910
- 2025 ZEV sales(units) (17% tot.): 14,840
  - EV: 9,600
  - PHEV: 5,240

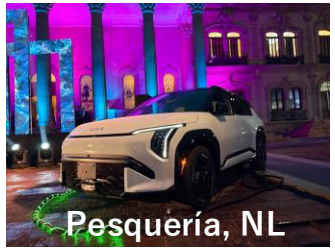

Irvine, CA

- Manufacturing in Georgia
  - 2008 opened plant in West Point, GA
    - Invested $216M to expand plant in 2022 to build EVs (previously ICE only)
    - EV6 and EV9
  - 40% stake in Hyundai Motor Group Metaplant America in Savannah, GA that opened in 2024
  - Battery supply with SK On and LG Chem in GA facilities
- EV3 built in previously ICE-only Pesquería, NL plant
  - $649M investment in EV expansion as well as investments i n solar + water recycling


West Point, GA



Savannah, GA


Pesquería, NL

V2X portfolio



EV9



EV6



EV3

V2X Status	MYs	Capability
Active Customers: 15+ w/ PTO 30 in queue 45 in pipeline	2024-2025 (CCS) 2026+ (NACS)	DC today, all AC capable
Rolling out now	2025+	DC all, AC capable select trims
Coming Soon	2027+	DC all, AC capable select trims

- Our approach is **grid-parallel with export capable**:
  - Push for most capability at expense of cheaper more limited systems
  - Offer V2L in most trims to power up to 2 appliances
- We chose to wait for standards; which took some time in AC-V2X
- DC
  - work with UL 1741 SB certified EVSEs that communicate with ISO 15118-20
- AC
  - ensured that on-board inverter could be available once UL 1741 SC certified EVSEs came available
  - Started pilots in other countries with established grid codes for AC-V2X
  - lower priced vehicles made capable inverter optional to offset increased cost
  - Have not pursued UL 1741 CRD pathway

AllDayEnergy – Hyundai Motor Group's global V2X identity



- AllDayEnergy was announced in July as Hyundai Motor Group's new global identity across brands
  - Initially cover V1G smart charging, before rolling out to V2X services
  - The Group's launch to dedicated telematic capability to support V2X services (to-date, only EVSE based control)
  - Launched with Kia UK in August
  - Anticipated launch in the U.S. late next year

Kia Models Becoming Available; Crawling to More Permission to Operate

Standards in-place, certificate exchange, trying to deliver value for customers

Active

EV9



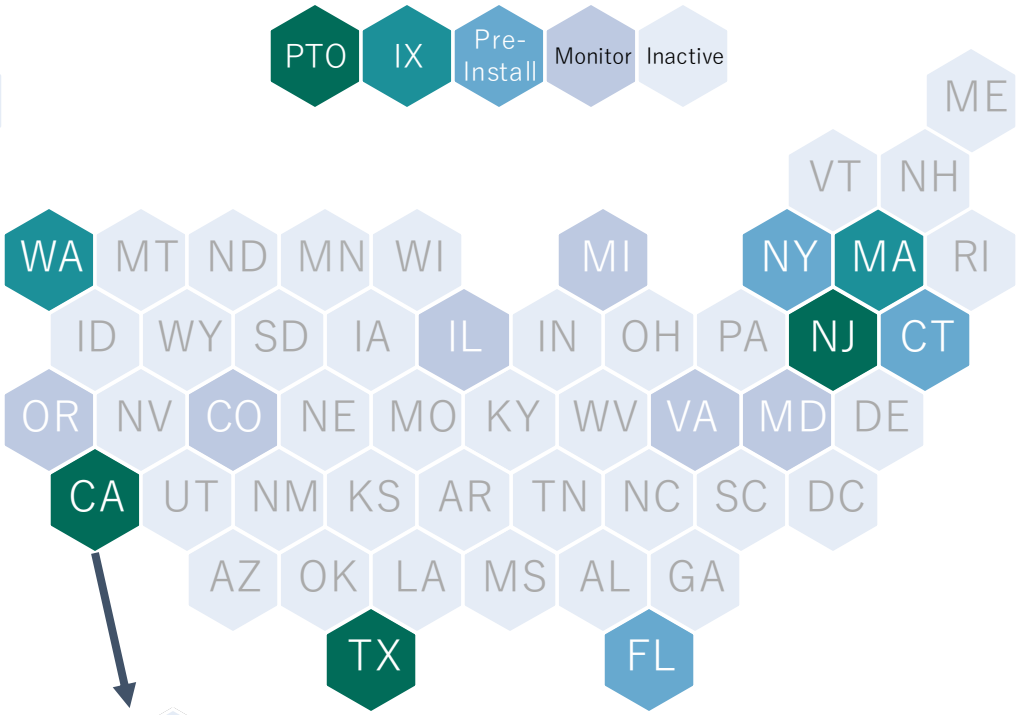
Coming Soon

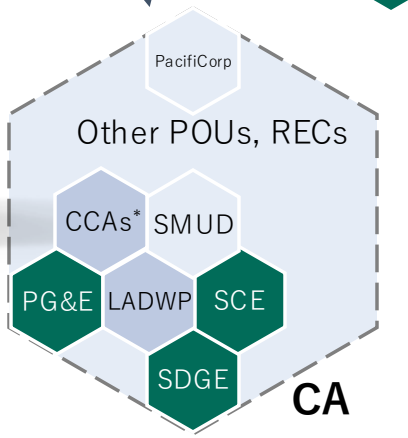
EV3

EV6



Kia V2X rollout

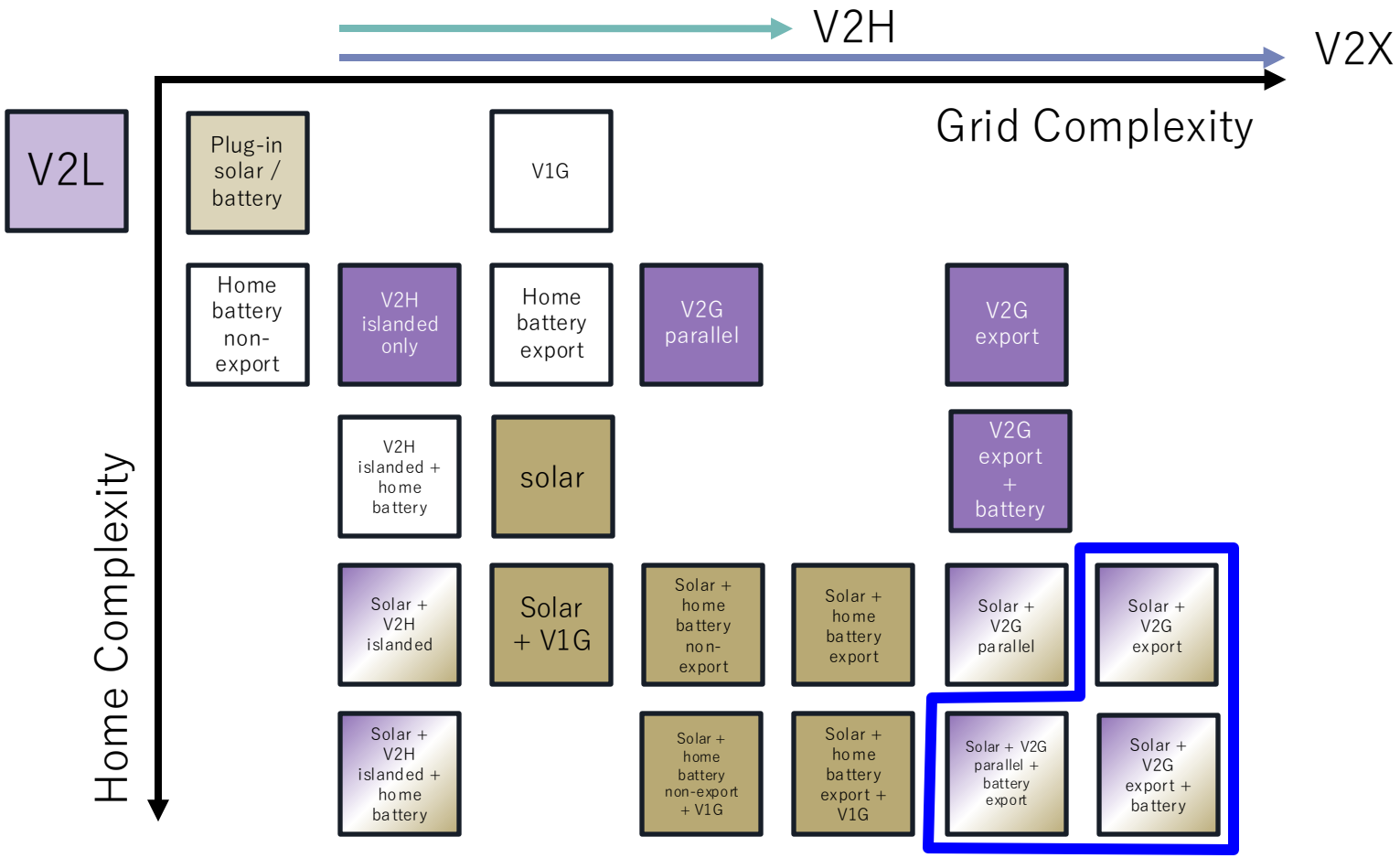




*CCAs have so far been excluded from programs, but some IoUs are allowing CCA customers to participate in own programs

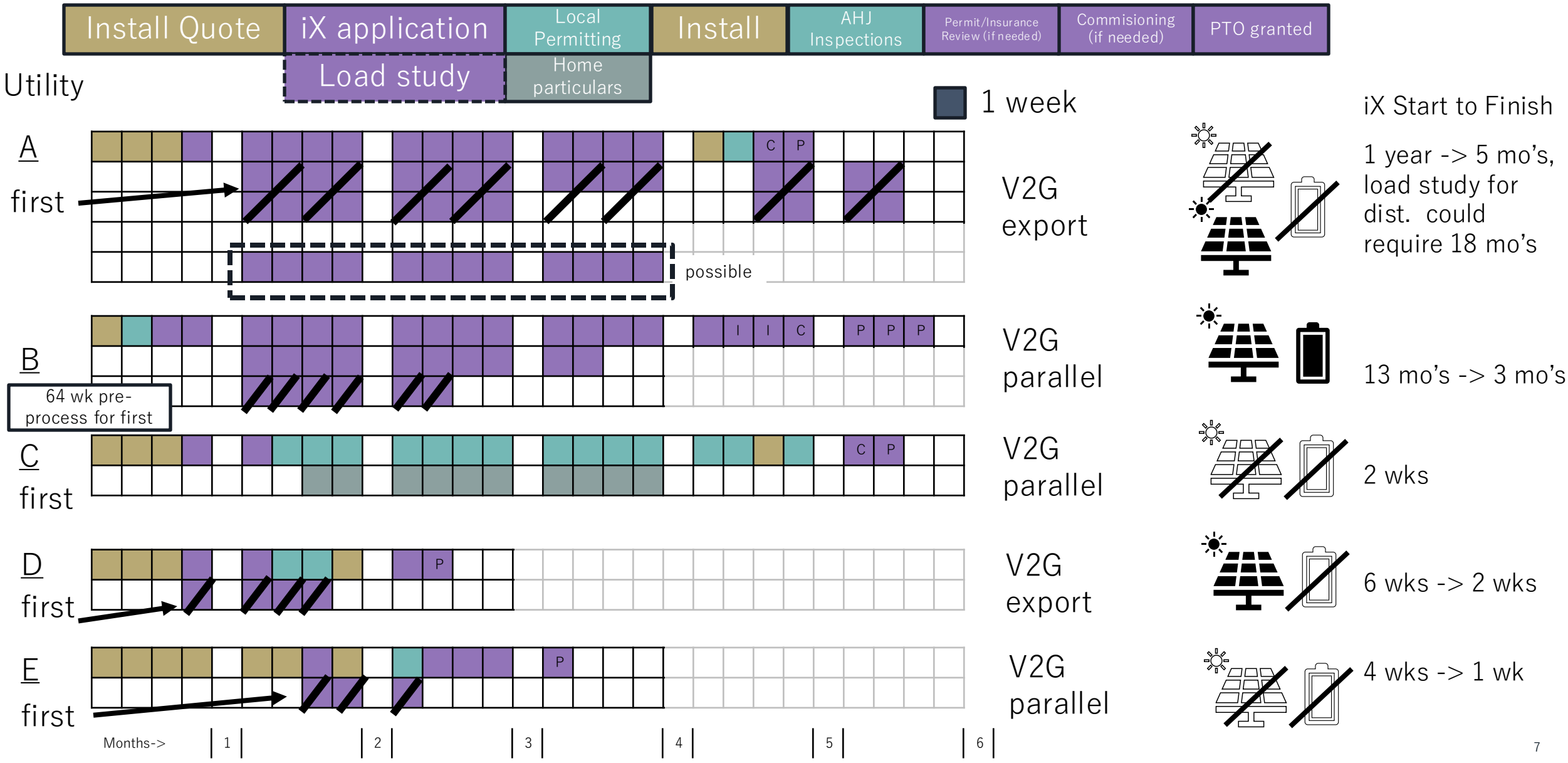
Kia's experience in V2X so far

- The many flavors of residential bidirectional charging have been a slog to get through thus far in a search to maximize home consumer value, Kia started with some of the hardest



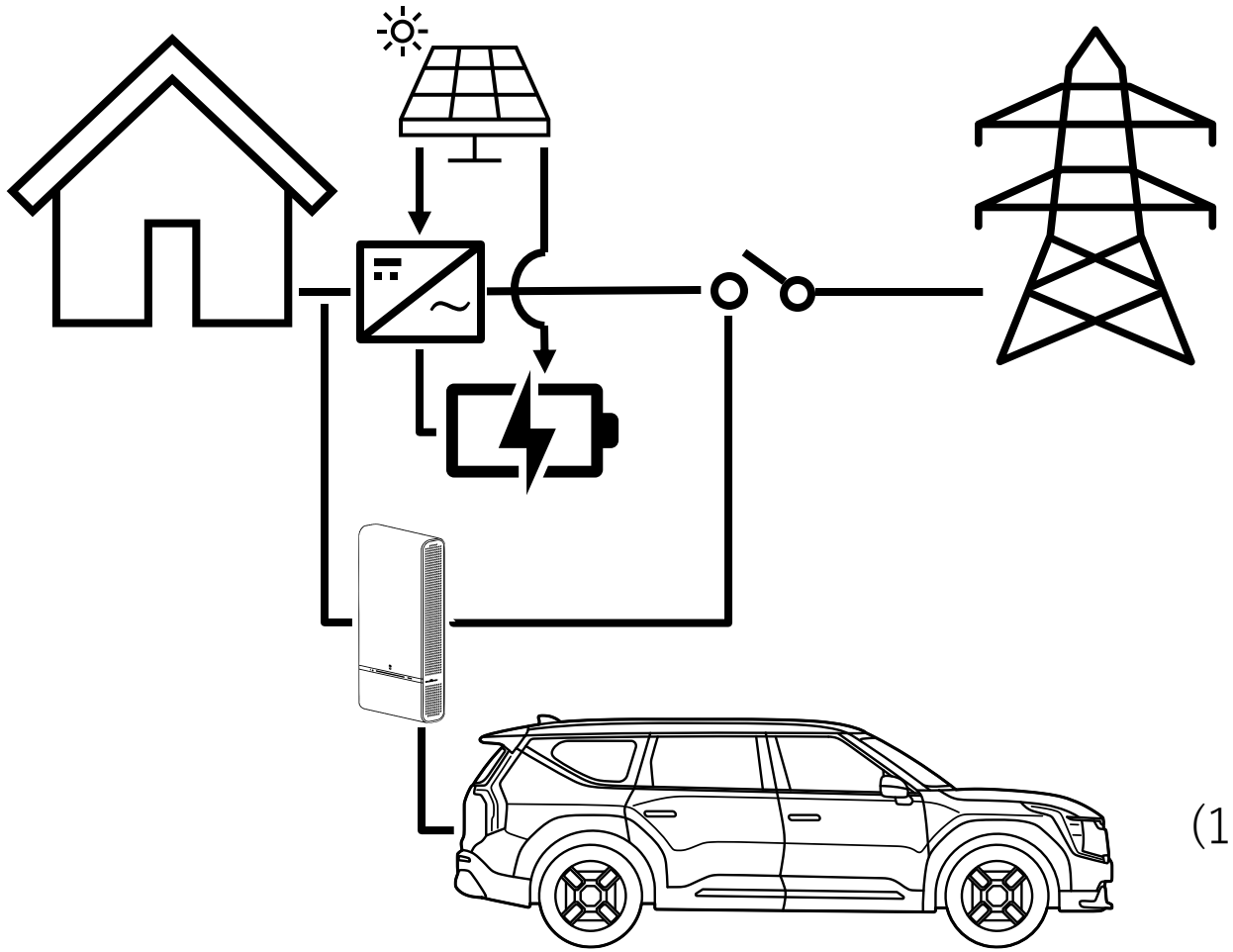
State programs have been helpful to jump-start stand-off of upfront investment vs. return-on-investment questions posed

Kia's partners' experiences in V2X so far: iX is a major barrier to scale

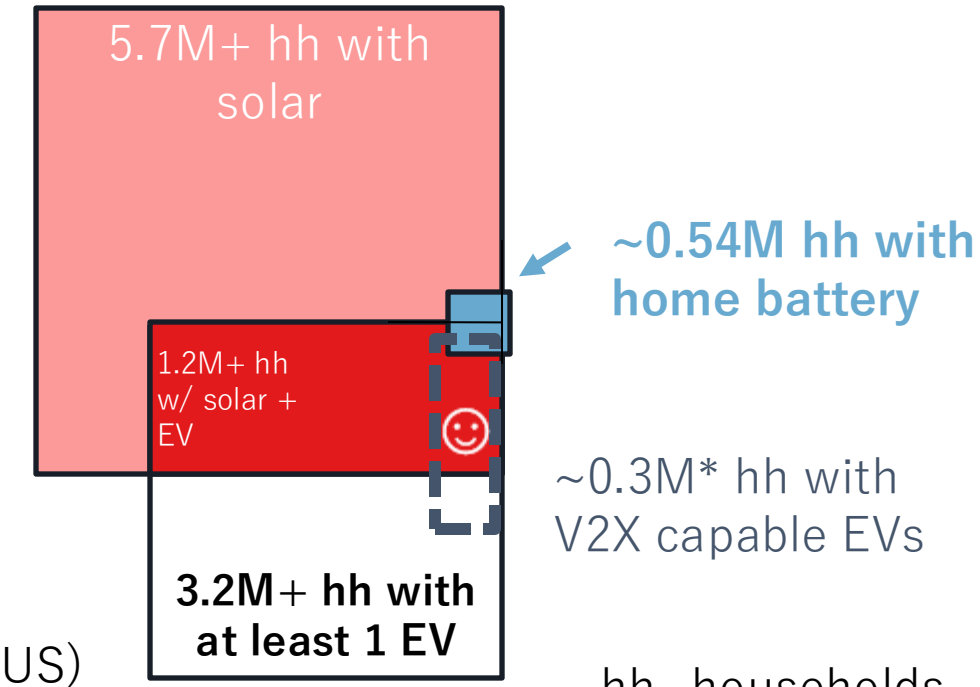


Where Kia wants to see the most help: solar customers

- **Simple interplay with existing home solar (and battery) is far from easy … complex**



- **Kia wants to see value in bidirectionality expand**
- A lot of early adopter interest of V2X are solar customers:
  - V2X is not only an alternative to home battery, depending on needs, **complementary**
  - Need quick scaling optimization to address implementation delay



(131M hh in US)

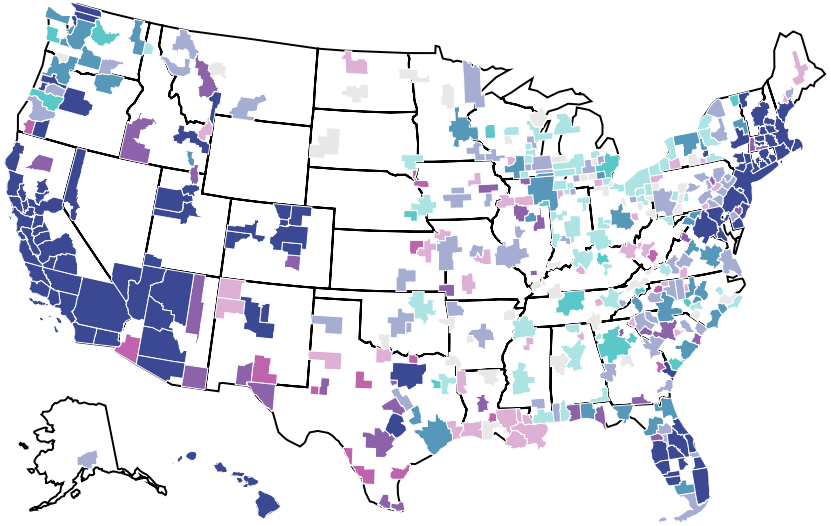
hh- households

*compiled estimates from OEM announcements

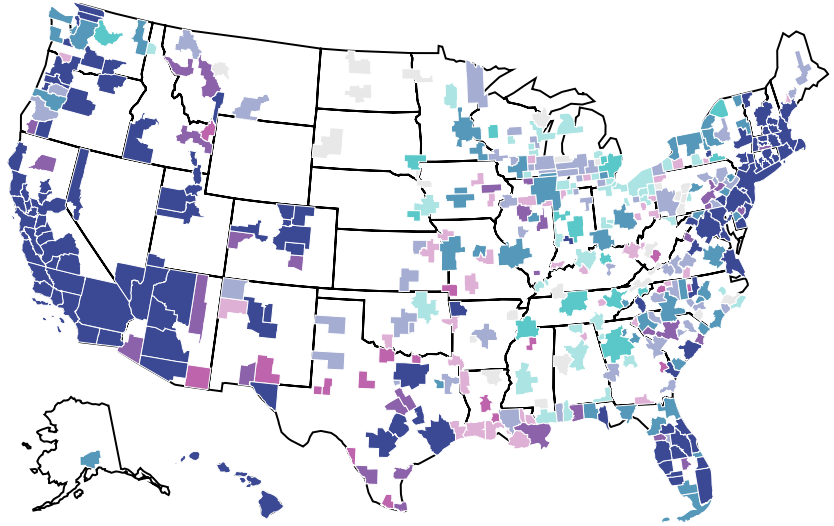
Estimates from 20261H: Wood MacKenzie Solar Market Insight, WM US Energy Storage Monitor; SEIA, 2nd; NLR, Argonne; SEIA 26Q2 ; EIA-861M July 2026

Solar Customers overlap with our EV customers

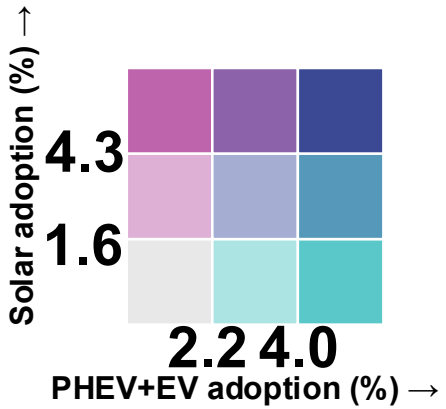
- Late October, Census released a new questionnaire in ACS on PHEV+EV adoption by household as well as rooftop solar that mirrors some of the industry-level estimates
- All coastal + Mountain-West owner-occupied households have a higher propensity of both
  - As-expected rental drops in both categories, coastal CA and Miami MSA maintain high in both
- Midwest and South hold lower solar and EV adoption

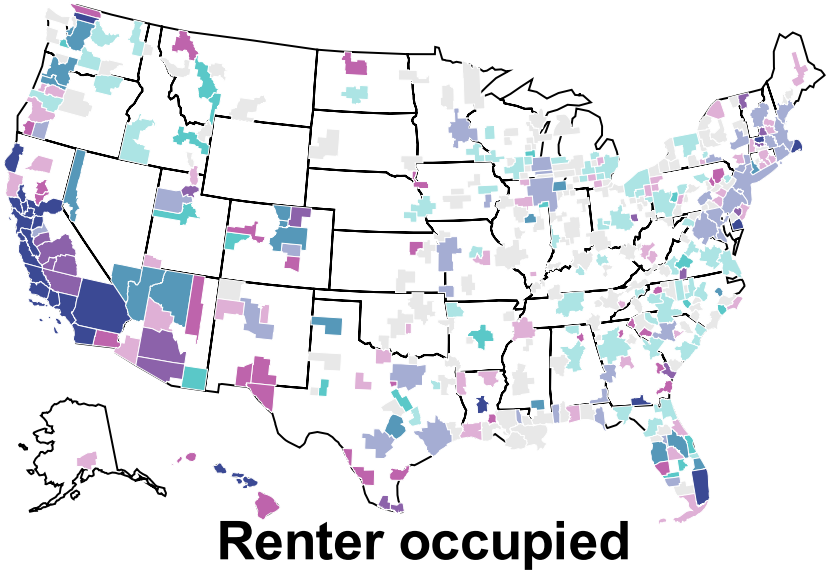


All households



Owner occupied





Renter occupied

Source: 2025 ACS 1-year, tables B25148 and B25145.