

Disadvantaged Communities – Single-Family Solar Homes (DAC-SASH) Program

DAC-SASH Semi-Annual Report

Q1 – Q2 2025



Contents

Disadvantaged Communities – Single-Family Solar Homes (DAC-SASH) Program	1
DAC-SASH Semi-Annual Report	1
Q1 – Q2 2025	1
1. Program Overview	3
1.1 Program Summary	3
1.2 Program History	4
2. Projects Summary	7
Applications	8
Interconnected Projects	9
Average System Costs	10
2.1 TPO Projects	11
2.2 Tribal Projects	12
3. Workforce Development & Job Training	15
4. Subcontractor Partnership Program	17
5. Utility Referrals	19
5.1 Referrals to IOUs	19
5.2 Referrals from IOUs	20
6. Complementary Programs	21
6.1 SGIP Integration	21
Applications	21
Installations	22
6.2 EV Charger and Clean Mobility Programs	23
6.3 SCE CRH Program	24
7. Program Budget & Financing	25
8. Barriers to Participation	27
8.1 Income Eligibility Limitations for Homeowners	27
8.2 Need for Gap Financing	28
8.3 Additional Structural Costs	28
8.4 Challenges with SGIP	28
9. Conclusion	30

1. Program Overview

1.1 Program Summary

The Disadvantaged Communities – Single-Family Solar Homes (DAC-SASH) program is overseen by the California Public Utilities Commission (CPUC) and provides incentives for solar photovoltaic (PV) systems to qualifying low-income homeowners living in disadvantaged communities¹ (DACs) or California Indian Country². GRID Alternatives (GRID), a non-profit solar contractor, is the statewide Program Administrator (PA) for the DAC-SASH program.

Through the DAC-SASH program, no-cost solar PV system installations are available to low-income families in California's DACs. Its primary goal is to provide opportunities for low-income homeowners within DACs to overcome barriers to accessing on-site, solar PV systems to decrease electricity usage and bills without increasing monthly household expenses. Low-income families face numerous barriers to accessing solar including financial, lack of marketing and outreach, educational and linguistic barriers, distrust of outside entities and governments, and structural barriers like housing types and roof condition. GRID's experience has demonstrated that dedicated, carefully designed and executed low-income solar programs can overcome these barriers and provide access to solar PV systems and meaningful community co-benefits.

The program is funded primarily through greenhouse gas (GHG) allowance proceeds from California's Cap-and-Trade Program, with additional support from public purpose program funds if needed. The program offers a single incentive level of \$3/W CEC-AC, which covers a significant portion of the cost of solar PV system installations. GRID secures additional funding sources beyond the base incentive to cover financing gaps. To date, GRID has successfully closed the funding gap for approximately 90% of DAC-SASH projects through its Third-Party Ownership (TPO) model, as well as philanthropic contributions, local grants, and funding from programs like the Transformative Climate Communities (TCC) Program, which is a program in

¹ Disadvantaged communities for the DAC-SASH program are defined as census tracts scoring in the top 25% statewide on the CalEnviroScreen 4.0 map. Homeowners in one of 22 additional census tracts that are in the top five percent of pollution burden but that do not have an overall CalEnviroScreen score because of unreliable socioeconomic data are also eligible. See <https://oehha.ca.gov/calenviroscreen/maps-data>.

² CPUC D. 20-12-003 modified the program to allow qualifying homeowners living in California Indian Country as defined in 18 United States Code Section 1151, with the exception of privately held in-holdings, which are defined as non-Indian owned fee land located within the exterior boundaries of California Indian Country; in the event of multiple owners, such land shall be considered Indian owned if at least one owner is a tribe or tribal member, regardless of the use of the land.

California that funds development and infrastructure projects to support major environmental, health, and economic benefits in DACs.

DAC-SASH is part of a broader policy framework aimed at supporting renewable energy adoption in DACs. It complements other CPUC programs like the Disadvantaged Communities Green Tariff (DAC-GT) which provides access to solar PV energy for low-income customers unable to install rooftop systems through bill discounts.

In addition to the requirement of being located in a DAC or California Indian Country, homeowners must be billing customers of Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), or San Diego Gas & Electric Company (SDG&E) (collectively, the California investor-owned utilities or IOUs) to qualify for DAC-SASH. Details for the DAC-SASH program's income qualifications³, other eligibility criteria, and application processes can be found in the [DAC-SASH Program Handbook](#).

The CPUC's Decision (D.) 18-06-027 and GRID's DAC-SASH Administration Contract with SCE outline reporting requirements for this Semi-Annual Report, which will be published by January 30 and July 30 of each program year and detail the progress of the prior two quarters.

1.2 Program History

DAC-SASH was established as part of California's broader initiative to increase access to renewable energy in disadvantaged communities (DACs). The program was developed in compliance with Assembly Bill (AB) 327 (Perea, 2013, ch. 611), which directed the CPUC to create a successor to the existing Net Energy Metering (NEM) tariffs as well as specific alternatives designed for growth among residential customers in DACs. As part of this directive, the CPUC issued Decision (D.) 18-06-027⁴ in June 2018, introducing three programs aimed at promoting renewable energy adoption among residential customers in DACs:

1. **DAC-SASH Program** – Provides upfront financial incentives for installing solar PV energy systems on the homes of low-income, single-family homeowners in DACs.
2. **DAC-GT Program** – Allows income-qualified residential customers in DACs to receive a 20% discount on their electricity bills by participating in utility-scale clean energy programs.

³ California Public Utilities Commission. (n.d.). CARE and FERA program. <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-costs/care-fera-program>

⁴ D. 18-06-027: Alternate decision adopting alternatives to promote solar PV distributed generation in disadvantaged communities. <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M216/K789/216789285.PDF>

3. **Community Solar Green Tariff (CSGT) Program** – Enables DAC residents to benefit from local solar projects while also receiving bill savings. Most of the program was discontinued in D.24-05-065, issued in June 2024, and the remaining capacity was transferred to the DAC-GT program.

The DAC-SASH program was modeled after the earlier Single-Family Affordable Solar Homes (SASH) program, which successfully provided solar PV incentives for low-income homeowners and was discontinued in 2023. The CPUC determined that the DAC-SASH program would be managed by a single statewide PA through a competitive bidding process.⁵ On January 4, 2019, GRID was selected as the statewide PA for DAC-SASH, overseeing all aspects of program implementation.

To ensure ongoing program effectiveness, DAC-SASH has been subject to regulatory updates through Advice Letters (ALs), resulting in various program refinements:

- AL 13-E⁶ (2019) – Established DAC-SASH Handbook v1 and outlined initial program implementation.
- AL 14-E (2019) – Addressed third-party ownership (TPO) contract term lengths, though no handbook changes were made.
- AL 15-E (2020) – Introduced temporary modifications due to the COVID-19 pandemic, leading to the release of DAC-SASH Handbook v2.
- AL 16-E (2021) – Expanded consumer protection measures, workforce development initiatives, the Subcontractor Partnership Program (SPP), and eligibility for tribal communities (Indian Country), culminating in DAC-SASH Handbook v3.
- AL 17-E (2022) – Allowed DAC-SASH solar PV system to be sized up to 150% of historic usage with no extra documentation required and allowed virtual or “desktop review” DAC-SASH compliance inspections, resulting in DAC-SASH Handbook v4.
- AL 18-E (January 2025) - Updated the current system size limit of 5 kilowatts (kW) AC and replaced it with the standard size limits for applicable utility interconnection rules.
- AL 19-E (submitted to CPUC end of June 2025) - Seeks to become a solar system owner for DAC-SASH customers, leveraging federal tax credit provisions to expand equitable access to rooftop solar while maintaining consumer protections and providing an identical or superior experience to the current TPO model.

⁵ D. 18-06-027, p. 33.

⁶ Resulted in Resolution E-5020 Approving GRID Alternatives Advice Letter 13-E/E-A, Proposed Disadvantaged Communities – Single-family Solar Homes (DAC-SASH) Program Handbook and Program Implementation Plan, pursuant to Decision 18-06-027.

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M313/K697/313697139.PDF>

The DAC-SASH program continues to support advances in environmental justice by directly addressing barriers – such as lack of access and capital – that prevent low-income homeowners in DACs from benefiting from solar PV energy. This allows communities that are disproportionately affected by environmental pollutants to have access to solar PV energy, reducing energy costs and carbon footprint. This aligns with the CPUC’s Environmental and Social Justice (ESJ) Action Plan⁷, which calls for increased investment in clean energy resources to benefit ESJ communities, and by ensuring inclusive participation of California’s clean energy transition, as outlined in D.20-07-008⁸ and D.20-12-003⁹. Additionally, by incorporating workforce development into implementation, DAC-SASH promotes long-term economic empowerment and energy equity in historically marginalized neighborhoods, as described in D.18-06-027¹⁰.

⁷ Environmental & Social Justice Action Plan Version 2.0. <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/environmental-and-social-justice.pdf>

⁸ D. 20-07-008: Implementing automatic enrollment of disadvantaged communities green tariff. <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M344/K058/344058812.PDF>

⁹ D. 20-12-003: Modifying DAC-SASH eligibility and enhancing outreach. <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M354/K045/354045228.PDF>

¹⁰ D. 18-06-027: Alternate decision adopting alternatives to promote solar distributed generation in disadvantaged communities. <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M216/K789/216789285.PDF>

2. Projects Summary

In Q3 and Q4 of 2024, many projects experienced delays and administrative challenges that slowed overall progress in program implementation. The integration of solar PV systems with battery storage introduced additional complexity, particularly in navigating Self-Generation Incentive Program (SGIP) approvals and managing equipment procurement. These factors contributed to reduced interconnection activity during the latter half of 2024. This trend has continued into Q1 and Q2 of 2025, where project momentum remains impacted. Financial barriers, such as clients' inability to afford necessary roof repairs, further constrained project completion rates. Despite these challenges, GRID remains committed to supporting clients and streamlining internal processes to help mitigate these issues and improve outcomes.

As of Q4 2024, a total of 3,580 applications had been received across all three investor-owned utilities (IOUs), representing 14,317 kW in CEC-AC capacity and \$42.35 million in funding. As of this reporting, those figures have increased to 3,778 applications, totaling 15,579 kW in capacity and \$46.74 million in funding, demonstrating continued demand and growth in program participation despite recent operational hurdles.

Additionally, a new SGIP funding bucket, the Residential Storage and Solar Equity budget (RSSE), was slated to open in May. In anticipation of this launch, resources and staff time at various regional offices were redirected to follow up on leads that had been disqualified from DAC-SASH eligibility. Significant administrative effort was also required in April and May to regenerate hundreds of contract documents, enabling deeper integration of storage offerings through SGIP and addressing various programmatic challenges. This preparation placed considerable administrative strain on GRID staff, further compounding the operational pressures during this period and leading to reduced capacity for new applications and clients.

Table 1 summarizes the status of DAC-SASH projects from the beginning of the program through Q2 2025 based on the application approval date. Projects are categorized into three steps:

- Step 1: Projects with applications under review
- Step 2: Projects with confirmed applications/reservations
- Step 3: Projects that are completed/installed

Table 1. Status of DAC-SASH projects through Q2 2025 based on the application approved date.

Project Status	Number of Projects				Total Capacity (kW, CEC-AC)	Total Incentives (\$ millions)
	PG&E	SCE	SDG&E	Totals		
STEP 1*	15	20	8	43	172	\$0.52
STEP 2	145	173	10	328	1,628	\$4.88
STEP 3	1,959	1337	111	3407	13,780	\$41.34
Total (all projects)	2119	1530	129	3778	15,579	\$46.74
* Step 1 system sizing (kW) and incentives (\$) are estimates based on an average system size of <u>4.0 kW</u> CEC-AC and incentive level of \$3.00/W CEC-AC. System designs are not completed until the Applicant is confirmed to meet all other program requirements.						

Applications

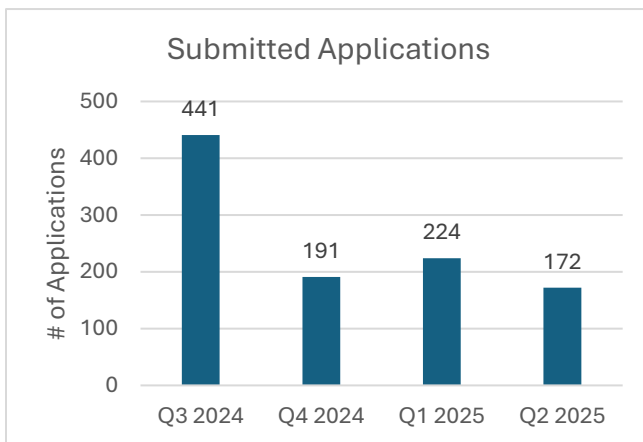


Chart 1. Submitted applications by quarter for the past year (Q3 2024-Q2 2025).

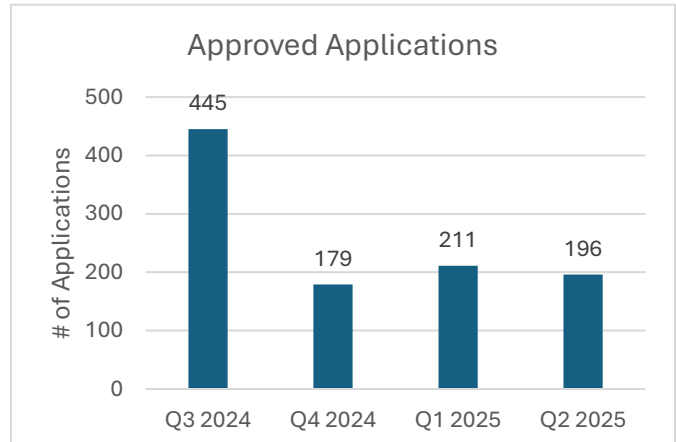


Chart 2. Approved applications by quarter for the past year (Q3 2024-Q2 2025).

So far in 2025, GRID has experienced a notable decline in both submitted and approved applications. While Q3 and Q4 of 2024 saw record-breaking application volumes across all IOU territories, activity dropped significantly in Q1 and Q2 of 2025. This decrease is largely attributed to the operational shifts outlined in the previous section, particularly, the redirection of resources and staff time at regional offices in preparation for the launch of the new SGIP Residential Storage and Solar Equity (RSSE) budget. A substantial

portion of staff capacity was allocated to administrative tasks required to implement the program, including generating client contract documents, supporting regional office operations, and addressing SGIP-related programmatic challenges.

Despite the slowdown in new applications, it is important to note that the high volume of submissions in Q3 and Q4 of 2024 resulted in a large pipeline of active projects. As a result, more staff time than usual was dedicated to post-application activities such as contract signing, system design, and installation support.

As of Q2 2025, GRID has received a total of 5,681 applications through the program, with 5,619 of those applications approved—resulting in an overall approval rate of 98.91%. Annual trends show steady growth in both submissions and approvals from 2019 through 2024, with a peak in 2024 at 1,241 submissions and 1,230 approvals. Notably, 2022 and 2025 saw approval counts that exceeded the number of submissions, indicating successful processing of carryover applications or reactivations.

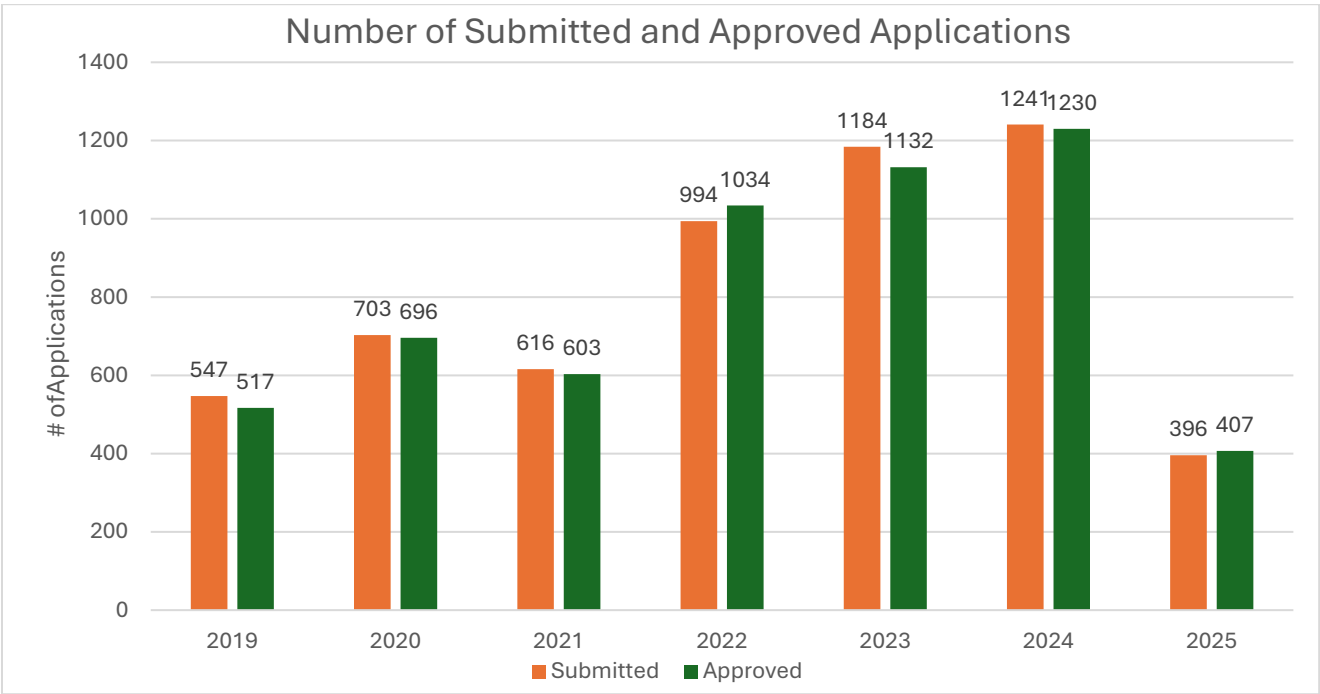


Chart 3. Total number of submitted and approved applications for the program so far by year.

Interconnected Projects

In Q1 2025, GRID experienced a notable decline in interconnected projects, with only 62 projects completed, totaling 274 kW CEC-AC and an expected annual output of 425,290 kWh. This marks a significant drop compared to Q4 2024, which saw 98 interconnected projects, totaling 410.8 kW and 646,230 kWh in expected output. However, this seasonal dip aligns with historical trends. Q1 typically sees fewer

installations due to factors such as client unavailability during holiday travel and adverse weather conditions like rain and snow. Historically, Q1 averages approximately 113 interconnected projects and 456 kW in capacity.

Additional challenges in Q1 2025 included the integration of battery storage with DAC-SASH PV systems, which added complexity and extended installation timelines due to required electrical work and load shifting. Interconnection delays were further exacerbated by the need for Tesla Backup Switch installations by IOUs and delays with the battery supply chain, caused in large part by the launch of the Tesla Cybertruck, which utilizes the same inverter components as the Powerwall. These supply chain issues impacted product availability throughout the year. Availability was limited for much of the period covered by this report (January to July 2025). GRID construction staff also faced a learning curve with battery system installations, requiring additional site visits to capture monitoring screenshots for SGIP participation compliance, placing added strain on staff resources.

Encouragingly, Q2 2025 showed signs of recovery, with 83 interconnected projects totaling 369 kW CEC-AC and an expected annual output of 571,526 kWh. This uptick is consistent with historical patterns, as installation activity typically increases during the summer and fall months due to more favorable weather conditions.

Average System Costs

This year marked a significant milestone for GRID, as completed installations began to include battery storage systems for the first time. Prior to 2025, all completed projects were PV-only. In 2025, the average cost per watt across all projects increased, largely due to the addition of battery systems. However, for projects that were PV-only, the average cost per watt decreased to \$5.73, a reduction compared to the previous year. Of the 145 projects interconnected in Q1 and Q2 2025, 124 were paired with battery storage, underscoring a growing trend toward integrated solar-plus-storage solutions.

Table 2. Average system cost (\$/W) based on the total number of projects by year

Year Interconnected	Number of Projects	Average Cost per Watt (\$/W, CEC-AC)
2019	225	\$5.25
2020	440	\$5.06
2021	409	\$5.02
2022	534	\$5.21
2023	729	\$5.25

2024	676	\$5.85
2025	145	\$9.02

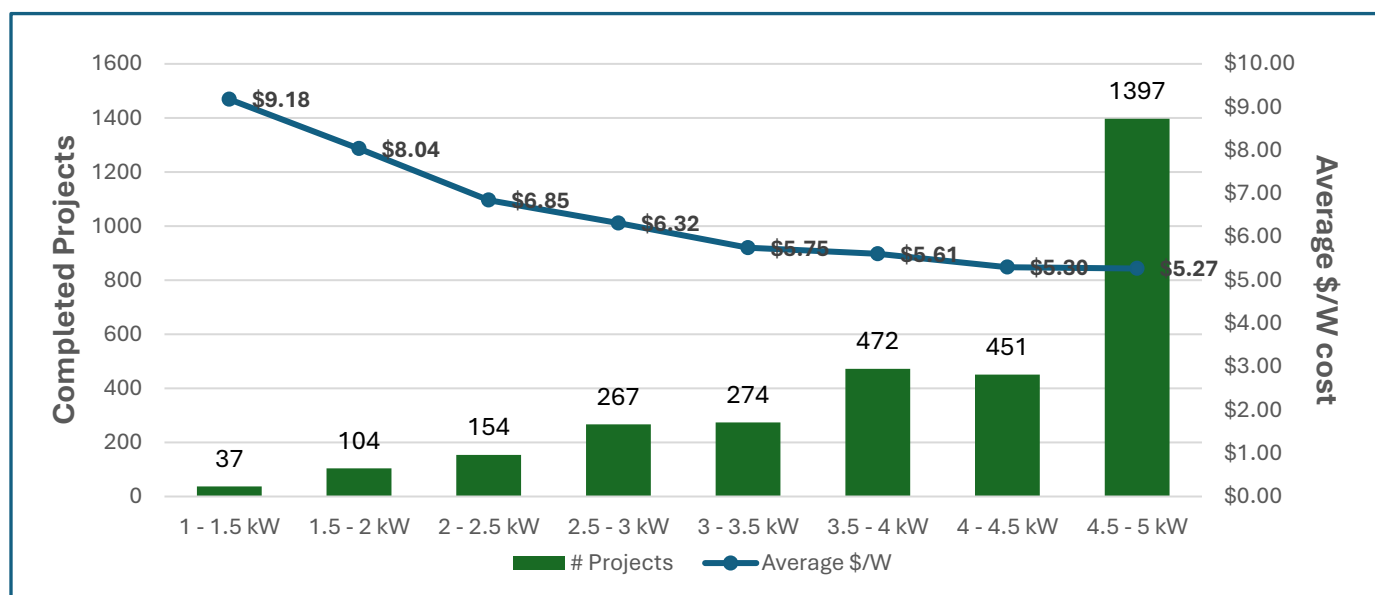


Chart 4. Average cost per watt (\$/W CEC-AC) based on system size

2.1 TPO Projects

As of Q2 2025, 90.4% of GRID projects were TPO, accounting for 92.4% of total installed capacity. GRID's TPO model prioritizes consumer protection and client benefits, leveraging the federal Investment Tax Credit (ITC) to help finance DAC-SASH projects. This model also provides additional advantages to families such as a performance guarantee, system monitoring and warranty coverage for the 20-25 year TPO contract term.

With Resolution E-5020¹¹ (September 2019), the Commission approved GRID's TPO model. The TPO model was first approved under SASH and Sunrun has been GRID's primary TPO partner since 2017. As shown in Chart 9, nearly 90% of DAC-SASH projects and over 90% of the capacity interconnected to date are third-party owned¹².

¹¹ Resolution E-5020: Approving GRID Alternatives Advice Letter 13-E/E-A, Proposed Disadvantaged Communities – Single-family Solar Homes (DAC-SASH) Program Handbook and Program Implementation Plan, pursuant to Decision 18-06-027. <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M313/K697/313697139.PDF>

¹² GRID projects that cannot leverage the TPO model are due to small system size, deed or land ownership documentation that does not meet TPO provider requirements (such as projects on tribal lands), and/or a partner/city/client that is unable or unwilling to approve a TPO ownership structure.

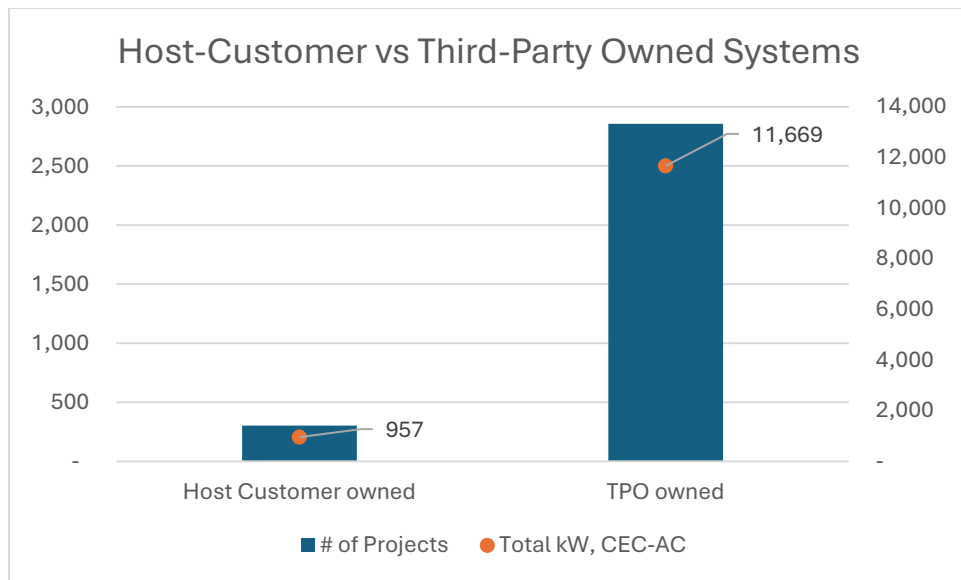


Chart 5. Number of DAC-SASH projects that are host-customer owned or TPO owned (all-time)

2.2 Tribal Projects

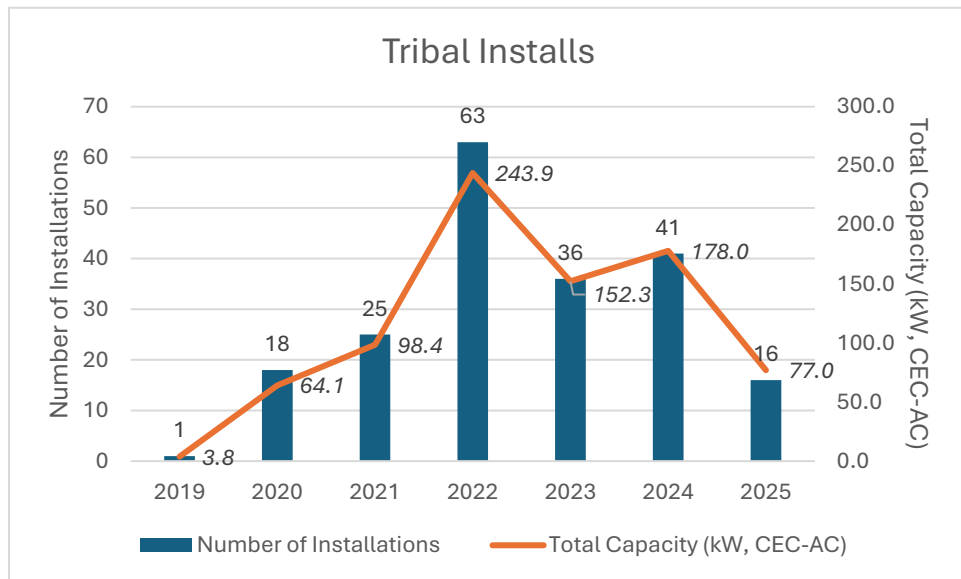


Chart 6. Number of tribal installs by year, includes the sum of total capacity (kW, CEC-AC) for that year.

Following the approval of AL 16-E in 2021, which expanded DAC-SASH eligibility to tribal communities (California Indian Country), GRID staff significantly ramped up outreach and implementation efforts within these communities. Between 2019 and Q2 2025, GRID installed over 740 kW of DAC-SASH tribal solar PV systems across 184 projects.

However, new tribal installations in Q1 and Q2 of 2025 marked the lowest volume since 2019. This decline is largely attributed to a strategic shift in marketing within certain GRID regions (such as the San Diego office) toward serving more urban, non-tribal areas typically located closer to city centers.

Since the approval of AL 16-E in 2021, the San Diego office had focused heavily on tribal projects, as AL 16-E expanded eligibility for tribal communities allowed a large previously unqualified population to qualify for DAC-SASH. Tribal projects in SDG&E territory were particularly abundant and easier to identify, as GRID works directly with tribes and many clients were PV-ready, income-qualified, and geographically concentrated. In contrast, non-tribal projects were more difficult to find due to the region’s higher cost of living, which resulted in a smaller pool of eligible clients within DACs. As a result, tribal projects dominated the workload, and fewer non-tribal projects were pursued.

By 2025, the uptake of new tribal projects began to slow as many of the eligible tribal clients had already been served. In response, the GRID San Diego team has shifted its focus and now has more capacity to pursue marketing and outreach efforts aimed at identifying non-tribal clients. This transition presents new challenges, as DAC-SASH eligibility has historically been more difficult to meet for non-tribal SDG&E clients.

Additionally, several tribal projects from the previous two quarters experienced delays in contracting and system installation. These setbacks stemmed from the complexities of supporting clients through SGIP participation and securing the necessary equipment for paired system installations.

Table 3. Number of tribal solar PV installations by year.

Install Year	Number of Installations	Total Capacity (kW, CEC-AC)
2019	1	3.8
2020	18	64.1
2021	25	98.4
2022	63	243.9
2023	36	152.3
2024	41	178.0
2025	16	77.01

GRID has also expanded its service offerings to include complementary programs that go beyond solar PV installations. These include pairing solar PV with battery storage, electrification upgrades, and other energy resilience services, ensuring that tribal clients have access to the various services offered to their communities. Though participation in DAC-SASH has decreased this year, these additional benefits for clients have made DAC-SASH more relevant and impactful for tribal communities.



Figure 1. DAC-SASH funded solar PV array installed on a home in tribal land

3. Workforce Development & Job Training

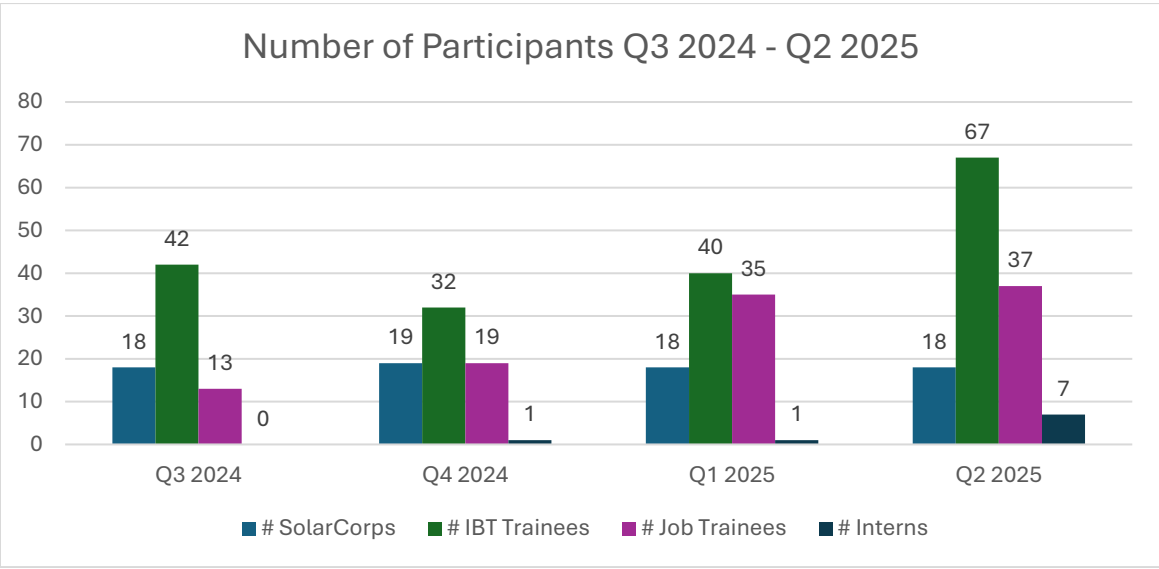


Chart 7. Number of participants by type from the past year.

Q1-Q2 2025 marked a period of high-impact workforce development activity, with significant growth across all areas. A consistent cohort of 18 SolarCorps Fellows contributed 3,551 hours. GRID Alternatives' SolarCorps Fellowship Program creates pathways into the clean energy industry, connecting underrepresented talent with opportunity and advancing economic and environmental justice.

Installation Basics Training (IBT) trainee participation surged, especially in Q2 with 67 trainees, totaling 3,716 hours across both quarters. The IBT program is a competency-based certificate program that supports trainees in developing the skills needed for entry-level solar installation jobs and related construction pathways. IBT emphasizes skills-based assessments, providing trainees with valuable hands-on training and access to potential employment opportunities.

Job trainee engagement was particularly strong, with 35 trainees in Q1 and 37 in Q2, contributing a combined 10,590 hours. This was a significant increase compared to previous quarters. A job trainee is defined as a trainee who participated on a job but was not specifically enrolled in the IBT program.

Internship activity also expanded, with seven interns in Q2 alone contributing 408 hours, compared to just one intern per quarter in Q4 and Q1. An intern is not affiliated with a specific program.

Q1-Q2 2025 saw 106 job placements, reflecting a meaningful connection between training and employment outcomes. This is a positive sign when compared to Q3-Q4 2024, which saw 130 job placements but

significantly lower training hours and participation (484 job trainee hours in Q3 and 270 in Q4, with fewer IBT and intern contributions).

Throughout its history, the program has facilitated 1,222 job placements, supporting 48 active Job Training Organizations (JTOs). Of these, 17 are located in Disadvantaged Communities (DACs) and have served 535 job trainees residing in DACs. Within the last two years alone, 186 trainees from DACs have participated, and 25 JTOs have remained active, with 10 based in DACs.

Chart 8. Number of various workforce development or job training participants by quarter for 2025



Figure 2. Volunteers installing PV at a DAC-SASH funded installation (October 2024)

4. Subcontractor Partnership Program

GRID's Subcontractor Partnership Program (SPP) is a proven model for engaging local installers as subcontractors while also providing paid work opportunities for job trainees. Through SPP, GRID partners with vetted contractors to install PV systems, allowing regional offices to strategically outsource portions of the installation process to stay on track with install goals. In many cases, only the installation portion is subcontracted, while GRID staff continue to manage system design and other project aspects. This approach not only helps maintain installation timelines and meet projections but also increases overall efficiency by enabling GRID to leverage internal design capacity while staying on top of install schedules through trusted contractor partnerships.

Table 4. Summary of completed SPP projects by year (all-time¹³).

Year Installed	Sum of Total Capacity (kw, CEC-AC)	Average System Size (kW, CEC-AC)	Average Cost per Watt (\$/W, CEC-AC)	Average System Cost (\$)	Number of Installations
2020	24.8	3.5	\$3.61	\$12,482.04	7
2021	62.2	3.5	\$3.77	\$12,949.24	18
2022	292.2	4.1	\$4.84	\$19,623.60	72
2023	423.2	4.4	\$5.57	\$23,754.19	97
2024	307.7	4.4	\$6.19	\$27,003.54	70
2025	66.1	4.4	\$9.74	\$40,573.81	15
All-time Data	1176.2	4.0	\$5.62	\$22,731.07	279

There are logistical and quality challenges associated with managing subcontractors, but mission-aligned partnerships add significant capacity and efficiency, particularly during the busy summer season when GRID's construction staff are often spread thin. While subcontractors handle design and installation, GRID's outreach teams in the Inland Empire, Los Angeles, and North Valley manage all client-facing interactions, ensuring quality service and community engagement.

Projects this year include a higher amount of paired projects compared to previous years. There were no paired projects installed by a subcontractor prior to 2025. Costs in 2025 are significantly higher because of the addition of batteries to the system design and installation; inflation, rising costs for labor and materials, and for one subcontractor working with both the North Valley and Central Valley offices, an increase in

¹³ There were zero subcontracted projects completed in 2019.

mileage fees due to increased distance of their warehouse and the geographic spread of where these projects are, have each caused slight increases in coverall costs as well. The average \$/W is \$5.68 for the PV-only projects 2024. This is an increase from 2023 but a decrease from 2024.

As of Q2 2025, subcontractors have completed 15 installations. The average system size has remained consistent at 4.4 kW (CEC-AC). However, the average cost per watt has increased, primarily due to the inclusion of battery energy storage systems (BESS). These paired installations require longer installation times, additional materials, and expanded services to ensure the home is properly equipped for both PV and BESS. Additionally, many of these projects were located far from the warehouses, resulting in extra costs for mileage reimbursement.

To uphold installation quality, most SPP projects undergo third-party independent Quality Assurance (QA) inspections. In 2025, GRID continued to work with third-party inspectors to conduct remote inspections, reducing on-site inspections to save time and program costs. Additionally, each subcontractor is required to hire at least one paid job trainee per DAC-SASH project, reinforcing GRID's workforce development commitments.



Figure 3. PV array installed by a subcontractor (August 2024)

5. Utility Referrals

5.1 Referrals to IOUs

Each month, GRID sends reports to all three IOUs detailing completed projects. These reports serve two key purposes:

- CARE/FERA Enrollment: To help clients enroll in CARE or FERA if they are not already participating. Since DAC-SASH participation is a reliable indicator of income eligibility, it provides the IOUs with a straightforward way to confirm and enroll eligible clients.
- Energy Savings Assistance (ESA) Program: To prompt IOUs to reach out to clients for enrollment in ESA, which offers no-cost weatherization services to eligible low-income households. These upgrades (attic insulation, efficient refrigerators, furnaces, weather stripping) help reduce utility costs through improved energy efficiency.

In Q1-Q2 2025, a total of 378 CARE/FERA applications were submitted. Of these, 312 applicants were already enrolled in either CARE or FERA, while 63 eligible clients were referred to their IOUs for auto-enrollment. Compared to the previous reporting period (Q3-Q4 2024), this was a noticeable decrease in application volume. In Q3-Q4 2014, 614 applications were submitted, with 482 applicants already enrolled and 124 referred for enrollment, which represented an enrollment rate of approximately 78%. In contrast, the current reporting period saw a higher enrollment rate of 83%, indicating that a greater proportion of DAC-SASH participants were already enrolled in CARE or FERA.

Since the start of the program, the average CARE or FERA enrollment rate among applicants has been around 57%. However, in recent years, this percentage has steadily increased. This positive trend suggests clients are becoming more aware of and enrolled in discount programs prior to engaging with GRID or being referred to DAC-SASH.

GRID will continue to refer all applicants, regardless of their DAC-SASH eligibility, to CARE/FERA and ESA if they appear to qualify, ensuring that clients have access to all available support.

The IOUs have cited several challenges in the ESA enrollment process such as difficulty contacting clients, with leads deemed non-viable after three unsuccessful outreach attempts, and delays in subcontractor follow-through, even when clients responded. SCE noted that its ESA processing team was undergoing an internal data cleanup, which may have contributed to the lack of progress.

To address these issues, GRID engaged in discussions with the IOUs during Q1–Q2 2025 to reinstate the ESA referral process and improve outcomes moving forward. The next Semi-Annual Report will have updated findings and data regarding ESA participation of clients GRID has referred to the IOUs.

5.2 Referrals from IOUs

In accordance with Decision 20-12-003, IOUs are required to share DAC-SASH eligible customer profiles (or leads) with GRID Alternatives annually, beginning in February 2021. However, over the past four years, there has been a noticeable decline in the number of ESA leads shared. Additionally, previous datasets often included incomplete contact information and duplicate entries, which limited their effectiveness for outreach. The lack of a standardized data format across IOUs has further complicated GRID's ability to efficiently process and integrate the information into its internal tracking systems.

GRID remains committed to strengthening coordination with IOUs, improving data integrity, and enhancing DAC-SASH participation among ESA-eligible clients. To address these challenges, GRID conducted a comprehensive review of lead data from the past four years with each IOU to confirm receipt and accurate processing. As a result, all leads received prior to May 2025 were successfully uploaded into GRID's internal project tracking system.

In May, IOUs provided a new batch of leads. The datasets included potential DAC-SASH leads based on ESA enrollment status. While the initial review revealed a significant number of older leads (some dating back more than 10 years) many were already present in GRID's system. Nonetheless, receiving these comprehensive datasets was valuable in ensuring that all possible leads were captured.

So far, the volume and quality of leads received in 2025 show improvement compared to 2024. However, GRID has identified follow-up questions regarding the data and will continue working with IOUs to refine the referral process. Collaboration on these efforts will continue through Q3 and Q4 of 2025.

6. Complementary Programs

GRID seeks to integrate the DAC-SASH program into the full landscape of CA programs that can benefit disadvantaged communities. These include, but are not limited to, energy efficiency programs, electric bill payment assistance programs, electric vehicle (EV) and electric vehicle supply equipment (EVSE) programs, the SCE Charge Ready Home (CRH) program, and SGIP. In concert, these programs expand access to clean energy, improve solar readiness, enhance energy resilience, and support the transition to electric transportation.

6.1 SGIP Integration

SGIP supports battery storage adoption with a focus on benefiting disadvantaged communities. In 2019, Decision 19-09-027 expanded SGIP eligibility to DAC-SASH participants under the Equity and Equity Resiliency budgets, increasing access to solar and battery storage solutions. In 2024, GRID intensified outreach efforts targeting the SGIP Equity budget, which offers battery incentives at \$0.85/Wh. In March 2024, GRID shifted its strategy to pair DAC-SASH projects with RSSE funds, a new budget category in SGIP that aimed to provide no-cost PV + battery storage installations.

Applications

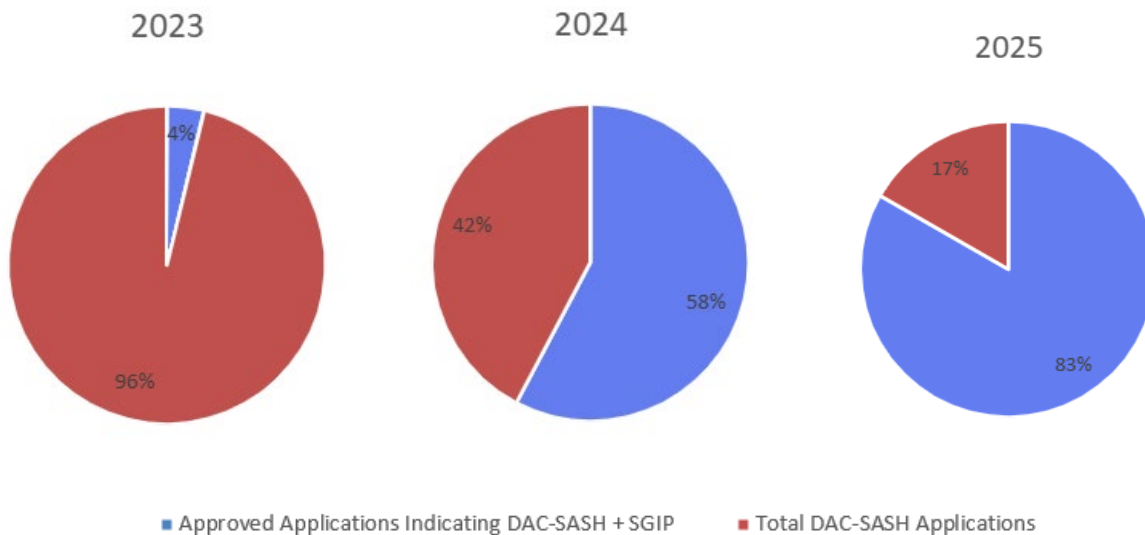


Chart 9. Percentage of DAC-SASH applications approved that indicated pairing with SGIP

GRID’s SGIP outreach efforts have continued to yield strong results, with a notable increase in DAC-SASH applications paired with SGIP in early 2025. In Q1-Q2 2025, 339 out of 407 approved DAC-SASH applications were paired with SGIP, representing 83% of total approvals. This marks a significant increase compared to Q3-Q4 2024, when 520 out of 624 applications were paired (average pairing rate of 83%).

- Q3 2024: 363 paired out of 445 total (82%)
- Q4 2024: 157 paired out of 179 total (88%)
- Q1 2025: 166 paired out of 211 total (79%)
- Q2 2025: 173 paired out of 196 total (88%)

While the overall pairing rate remained high across both periods, Q1-Q2 2025 showed a rebound in volume, with total approved applications rising from 179 in Q4 to 196 in Q2. SCE territory continued to lead in paired applications, followed by PG&E and SDG&E.

Additionally, GRID received 100 applications for BESS add-on projects from past SASH and DAC-SASH participants between Q3 2024 and Q2 2025. The highest volume occurred in Q4 2024, with 47 approvals (38 from SCE, 8 from PG&E, and 1 from SDG&E). SCE maintained strong performance into 2025, while PG&E showed moderate activity and SDG&E remained low.

Installations

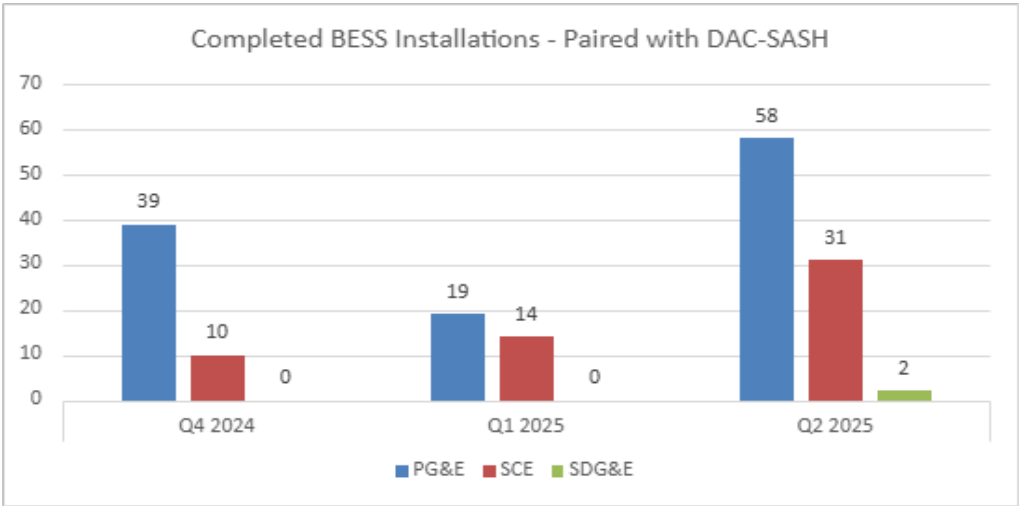


Chart 10. Number of projects installed each quarter since Q3 2024 that were PV + BESS broken out by IOU territory.

From Q4 2024 through Q2 2025, GRID completed a total of 173 installations paired with DAC-SASH across PG&E, SCE, and SDG&E territories. PG&E led the effort with a total of 116 installations, including a peak of 58 in Q2 2025. SCE followed with 55 installations, showing steady growth each quarter. SDG&E had minimal

activity, completing only 2 installations during this period. This data reflects continued progress in paired project completions, particularly in PG&E and SCE service areas.

Between Q2 2024 and Q2 2025, GRID completed 12 BESS installations for clients who had previously participated in SASH or DAC-SASH. PG&E accounted for the majority of these installations, with a peak of 5 in Q4 2024 and smaller numbers in other quarters. SDG&E completed 3 installations, while SCE did not report any BESS-only completions during this timeframe. These figures indicate modest but meaningful progress in enabling energy storage upgrades for previously served clients, with PG&E showing the most consistent activity.



Figure 4. GRID staff inspecting a battery they just installed (November 2024)

6.2 EV Charger and Clean Mobility Programs

GRID administers several low-income EV programs for the California Air Resources Board (CARB), an Air Quality Management District, and the Empower EV Program for PG&E. These initiatives support DAC-SASH participants in accessing clean mobility solutions by providing EV incentives and home chargers alongside solar PV installations.

While these clients are selected from the DAC-SASH pool, the EV programs are separately funded and distinct from DAC-SASH. They are similarly aimed at supporting low-income households, but operate independently in terms of budget and program administration.

- While 36 participants received a car charger through GRID's programs over the last several years, no DAC-SASH clients received these services in the Q1-Q2 2025 reporting period.
- There was an increase in EV + PV combo projects of 11 total installations in Q1 and Q2 2025, compared to the 4 installations in Q3 and Q4 2024.
- EV charger installations in 2024 totaled 5, so far in 2025 there has only been 1 installation.

6.3 SCE CRH Program

The Charge Ready Home (CRH) program, administered by SCE, provides crucial solar PV-readiness and EVSE support to qualifying households. The program began accepting applications in March 2024. As part of GRID's broader effort to integrate complementary programs, CRH presents an opportunity to address a major barrier to solar PV adoption: the need for main service panel (MSP) upgrades.

Many low-income households require MSP upgrades to support solar PV, a common challenge that has prevented DAC-SASH projects from moving forward in the past due to lack of funds available to cover the upgrade work. CRH helps cover the MSP upgrade cost, ensuring more qualified homes are able to accommodate solar PV. Additionally, to qualify for CRH funding, participants must install a level 2 EV Charger as part of the MSP upgrade project. This requirement ensures that households receiving CRH funding are also equipped for future EV adoption, supporting GRID's broader transportation electrification goals. GRID will continue working with CRH to maximize benefits for DAC-SASH participants and support holistic solar PV + EV adoption.

Since the program launched, GRID's utilization of the CRH program in SCE territory has been closely integrated with DAC-SASH. In 2024, GRID submitted 45 CRH applications, 43 of which were for DAC-SASH projects. This reflects a strong alignment between the two programs, with DAC-SASH households making up the vast majority of CRH participation to date.

So far in 2025, GRID submitted 199 CRH applications, 120 of which were for DAC-SASH projects. This continued overlap highlights the ongoing synergy between CRH and DAC-SASH, reinforcing the role of DAC-SASH as a key driver of CRH engagement.

7. Program Budget & Financing

The Commission authorized \$10M per year to be collected for DAC-SASH, beginning on January 1, 2019, and continuing through December 31, 2030. Decision 18-06-027 describes that the state's IOUs will first collect DAC-SASH program funding through available GHG allowance revenues. In the event that there are insufficient funds available from those revenues, the DAC-SASH program will be funded through customer rates via public purpose funds.¹⁴ The \$120M program is funded by PG&E, SCE, and SDG&E according to the percentage allocations listed in Table 7.

Table 5. Budget allocations by utility service territory.

	PG&E	SCE	SDG&E	Total
Budget %	43.7%	46.0%	10.3%	100%
Budget through 2025 (\$ in millions)	\$30.59	\$32.20	\$7.21	\$70.00
Remaining Program Budget (2025-2030) (\$ in millions)	\$21.85	\$23.00	\$5.15	\$50.00
Total Program Budget (\$ in millions)	\$52.44	\$55.20	\$12.36	\$120.00

Table 6. Budget allocation by program function.

	Budget %	Budget through 2025 (\$ in millions)	Expensed Q1- Q2 2025	Expensed prior to 2025	Remaining in 2025 Program Budget
Incentives	85%	\$59,500,000	\$0	\$35,621,928	\$23,878,072
Administration	10%	\$7,000,000	\$0	\$6,000,000	\$1,000,000
Marketing and Outreach	4%	\$2,800,000	\$0	\$2,400,000	\$400,000
Evaluation	1%	\$700,000	Budget resides w/ CPUC	Budget resides w/ CPUC	Budget resides w/ CPUC
Total Program Budget	100%	\$70,000,000.00	\$0	\$44,021,928.00	\$25,278,072

¹⁴ D. 18-06-027, p. 31.

Table 7. Incentive budget by utility service territory.

	PG&E	SCE	SDG&E	Total
Budget %	43.7%	46.0%	10.3%	100%
Budget through 2025 (\$ in millions)	\$26,001,500.00	\$27,370,000.00	\$6,128,500.00	\$59,500,000.00
Expensed through Q2 2025 (\$ in millions)	\$20,688,897.00	\$13,862,802.00	\$1,070,229.00	\$35,621,928.00
Remaining Incentives (\$ in millions)	\$5,312,603.00	\$13,507,198.00	\$5,058,271.00	\$23,878,072.00

8. Barriers to Participation

Clients living in low-income households face multiple barriers to accessing solar PV energy, both independently and through statewide and local solar PV programs. These challenges include financial, structural, and outreach-related obstacles. GRID's approach, which is both community-centric and customer-centric, effectively addresses many of these barriers using proven strategies for engaging low-income households. For example, GRID helps families overcome financial barriers by covering the cost of solar PV systems, with dedicated Outreach Coordinators (often locals themselves) guiding each client through the process. Most installations are completed by GRID staff, and when subcontracted, trusted local partners ensure the same level of care, helping maintain strong, community-rooted relationships. However, there are limitations that can keep qualified households from participating in the program, such as financial constraints related to inverter replacements after ten years for non-TPO projects. Additionally, eligibility requirements present challenges to participation in the DAC-SASH program.

8.1 Income Eligibility Limitations for Homeowners

The DAC-SASH program requires participating households to meet the statewide low-income definition based on the CARE/FERA eligibility criteria. However, a single income threshold across the state limits participation in regions with a higher cost of living, such as San Diego. For example, nearly 50% of SDG&E households that qualified for the SASH program¹⁵—which uses Area Median Income (AMI) to account for regional cost-of-living differences—would not meet the income requirements for DAC-SASH. Similar trends are observed in the Bay Area and Los Angeles, where many households are disqualified under the CARE/FERA benchmark, highlighting how difficult it is for low-income residents in urban or higher-income areas to qualify for DAC-SASH, even with income limits adjusted for area median income.

Furthermore, most affordable housing organizations operate within the 80% AMI income threshold. As a result, many new construction homeowners—who must incorporate solar PV systems under state mandates and often have new roofs suitable for long-term solar PV deployment—do not qualify for the program.

¹⁵ SASH uses 80% or less of AMI to meet the low-income threshold, which is set in PU Code 2852(a)(1) and detailed in Chapter 2 (commencing with Section 50050) of Part 1 of Division 31 of the Health and Safety Code.

8.2 Need for Gap Financing

Gap financing refers to the difference between total project costs and the DAC-SASH incentive on a per-watt basis. While GRID leverages the DAC-SASH TPO model to cover financing gaps for most projects, 10% to 15% of DAC-SASH projects do not qualify for this model. Additionally, some projects incur higher costs due to factors such as electrical service upgrades or the installation of small or ground-mounted systems.

Securing additional gap financing is essential, as low-income participants are not expected to contribute financially. GRID supplements funding through local grants, foundation support, in-kind donations, and philanthropic contributions. However, these resources are insufficient to meet demand. As a result, long waiting lists exist for homeowners requiring new roofs or other essential upgrades before participating in the program.

8.3 Additional Structural Costs

Many homes eligible for DAC-SASH are older and require significant structural improvements, including roof repairs, property rehabilitation, or updates to outdated electrical systems beyond a standard main service panel upgrade. While GRID has established regional partnerships to provide roof repair and replacement assistance—such as agreements with the cities of San Francisco and Richmond and a philanthropic fund supporting veteran homeowners in Los Angeles—these resources are geographically limited and cannot meet the overwhelming demand.

Homeowners requiring these structural upgrades face substantial barriers to DAC-SASH participation, as existing funding sources are insufficient to cover all necessary improvements.

8.4 Challenges with SGIP

While SGIP presents an opportunity for clients to receive additional benefits, navigating the program has posed significant challenges for both clients and GRID staff. Several factors have contributed to difficulties in guiding clients through the SGIP process:

- **Complex and Evolving Program Rules** – SGIP’s eligibility criteria and program requirements have been unclear and subject to frequent changes. These ongoing modifications have created confusion for both clients and GRID staff.
- **Administrative Burden** – Due to program ambiguities and rule changes, applications and contracts often require multiple revisions and additional signatures, creating frustration among clients.

These challenges have led to a decline in client trust, with some participants opting out of the program entirely. While GRID staff have made extensive efforts to mitigate dissatisfaction and communicate that SGIP is not administered by GRID, the complications surrounding the program have nonetheless affected GRID's reputation. The long-standing trust that GRID staff have built over the years has been strained by program inconsistencies, underscoring the need for greater clarity and stability in SGIP's implementation.

9. Conclusion

In the first half of 2025, GRID demonstrated a strategic pivot from high application volumes toward deeper project execution and SGIP integration. While application submissions declined significantly from late 2024, staff maintained a high approval rate and focused on processing a robust pipeline of previously submitted projects. Interconnections dipped early in the year due to seasonal and technical factors but rebounded in Q2, with a notable shift toward PV + BESS installations. Of the 145 interconnected projects, 124 of them included BESS. The third-party ownership model remained dominant, and SGIP pairing surged to 45% of DAC-SASH applications, reflecting GRID's growing emphasis on integrated energy solutions.

Despite reduced tribal activity and subcontractor challenges, GRID continued to advance equity and workforce development goals. Over 14,000 job training hours were logged in Q2 alone, and collaboration with IOUs on CARE/FERA and ESA programs remained active. Complementary initiatives like EV charging and SCE's CRH program further reinforced DAC-SASH's impact.

Advice Letters 18-E and 19-E signal GRID's commitment to modernizing system sizing and exploring direct ownership pathways, positioning the organization for continued innovation and equity-driven service delivery. AL 18-E (January 2025) updated the previous system size limit of 5 kW AC, aligning it with standard size limits under applicable utility interconnection rules. AL 19-E (submitted to CPUC in June 2025) proposes GRID becoming the solar system owner for DAC-SASH customers, leveraging federal tax credit provisions to expand equitable access to rooftop solar while maintaining consumer protections and delivering an experience equal to or better than the current third-party ownership (TPO) model.