City of Anaheim

This page outlines solar PV incentives, financing mechanisms, permitting process, and interconnection information for the City of Anaheim and the utility that serves its territory, Anaheim Public Utilities.

To skip directly to each section please use these hyperlinks:

Find an Installer | Financing | Incentives | Permitting | Interconnection

Contact Information

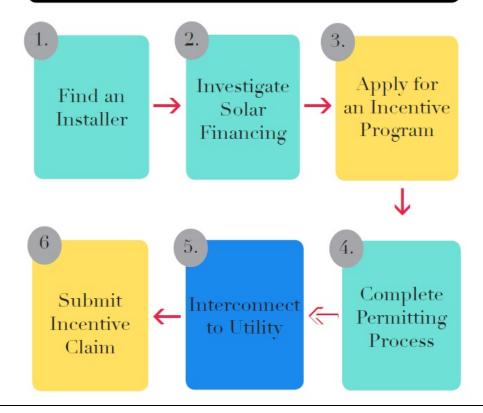
City of Anaheim
Building Division
200 S. Anaheim Blvd., Suite 145
Anaheim, CA 92805
1st Floor City Hall
(714) 765-5153
www.anaheim.net/building

Anaheim Public Utilities
201 S. Anaheim Blvd, Suite 801
Anaheim, CA 92805
(714) 765-4182
http://www.anaheim.net/article.asp?id=1644

Hours:

Monday - Friday: 8:00AM - 5:00PM

OVERALL SOLAR PROCESS:



Find an Installer

- Qualified contractors are your key to getting the most productive solar energy system for your home or business.
 - o Typically solar installers will:
 - Locate financing programs to fit your needs
 - Apply for rebates and incentives on your behalf
 - Apply for local permits
 - Install your PV system
 - Arrange for your PV system to be interconnected to your utility's power grid
- California Solar Statistics provides a searchable/sortable list of Installers, Contractors, and Sellers by area who can help you in the process of going solar:
 - o http://californiasolarstatistics.com/search/contractor/
 - o Important Notes:
 - Costs are measured on a per watt basis

- It is important to remember that cost is not the only factor involved in system installation.
- It is highly recommended to contact a minimum of three installers to compare costs, system sizing, and services offered before signing a contract.

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Financing Information

Federal Solar Incentives

- o Residential Renewable Energy Tax Credit
 - A taxpayer may claim a credit of 30% of qualified expenditures for a solar system that serves a residence located in the United States that is owned and used as a residence by the taxpayer.
 - http://www.dsireusa.org/incentives/incentive.cfm?Incentive Code=U
 S37F&re=1&ee=1
- o Business Energy Investment Tax Credit (ITC)
 - This federal tax credit is equal to 30% of expenditures on a solar system, with no maximum credit.
 - http://www.dsireusa.org/incentives/incentive.cfm?Incentive Code=U
 S02F&re=1&ee=1

Third Party Ownership

- o Solar Leases
 - Solar Leases are similar to Power Purchase Agreements in that a third party pays for and owns the system, but with this financing mechanism a customer pays a fixed monthly fee that is not tied to actual use and is responsible for system performance, operations and maintenance.
 - www.energycenter.org/index.php/incentive-programs/california-solarinitiative/csi-latest-news/2167-why-pay-to-install-solar

Secured Financing

Secured financing is a loan in which the borrower pledges some asset as collateral. Typically for a solar installation this collateral is a home or building. The following secured loans are available in the SCRC region:

- o Home Equity Lines of Credit (HELOCs) and Home Equity Loans (HELs)
 - HELOCs are forms of revolving credit in which a home serves as collateral. A HEL is a
 loan that has a fixed rate and term and also uses a home as collateral. The major
 difference between these two types of financing mechanisms is that HELOCs are
 similar to a credit card you can withdraw money as needed and pay back the debt
 indefinitely whereas an HEL gives you a one-time lump sum of cash that is paid off
 over a fixed amount of time. These types of loans are typically available through
 banks.
 - Home Equity Lines of Credit: www.federalreserve.gov/pubs/equity/equity english.htm
 - Home Equity Loans: http://www.federalreserve.gov/pubs/bulletin/1998/199804lead.pdf

o FHA 203(k) Rehabilitation Loans

- The Federal Housing Administration (FHA), which is part of the U.S. Department of Housing and Urban Development (HUD), administers various single family mortgage insurance programs. These programs operate through FHA-approved lending institutions which submit applications to have the property appraised and have the buyer's credit approved. These lenders fund the mortgage loans which the HUD insures, thereby giving a line of credit to the property owner to make property upgrades, such as solar PV installations.
 - http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/sfh/2
 03k/203kabou

HUD Title 1 PowerSaver Loans (Secured or Unsecured)

- The PowerSaver program insures loans to finance small or moderate improvements to a home, such as a solar energy upgrade. The PowerSaver pilot will provide lender insurance for secured and unsecured loans up to \$25,000 to single family homeowners specifically targeting residential energy efficiency and renewable energy improvements.
 - www1.eere.energy.gov/wip/solutioncenter/financialproducts/PowerSaver.h
 tml

o Low-Interest Energy Efficiency Loan Program

 Anaheim Public Utilities offers Low-Interest Energy Efficiency Loans to small businesses, some landlords, and nonprofit organizations. These loans offer low-cost financing for energy-efficiency measures through the State Assistance Fund for Enterprise, Business and Industrial Development Corporation (SAFE-BIDCO). Under this program, Anaheim customers can obtain low-interest loans with no application fees or points. In addition, APU will provide, at no cost to the customer, a comprehensive energy audit and analysis as required by SAFE-BIDCO to identify and verify energy uses and needs, and evaluate the feasibility of potential measures to improve efficiency.

www.anaheim.net/article.asp?id=4145

Unsecured Financing

Unsecured financing is a loan that is not backed by any collateral. Credit cards and personal loans are the most common examples of unsecured financing. Unsecured financing products available for energy upgrades include personal loans and contractor-sponsored products. However, unsecured financing does come with drawbacks: a good line of credit is typically required with no collateral and the interest rates tend to be higher than with secured loans. However, with some publicly-supported programs, the jurisdiction will pay the interest rate down to attract borrowers.

- o Fannie Mae Energy Loan
 - Fannie Mae offers a direct, non-recourse consumer loan program that will finance up to \$20,000 in energy improvements without putting a lien on your home. Energy Loan is a simple interest, fixed rate loan with longer terms available then typical bank financing.
 - www.energyloan.net/index.php
- Clean Energy Upgrade Financing Program ABX1 14
 - ABX1 14 authorizes the California Alternative Energy and Advanced Transportation
 Financing Authority (CAEATFA) to administer a Clean Energy Upgrade Financing
 Program using up to \$25 million to finance the installation of distributed generation
 renewable energy sources, electric vehicle charging infrastructure, or energy or
 water efficiency improvements on homes or small commercial properties.
 - http://www.treasurer.ca.gov/caeatfa/abx1 14/index.asp

Other Financing Mechanisms

- o Feed-in Tariff (FIT)
 - Under a feed-in tariff, eligible renewable electricity generators are paid for the generating renewable electricity and feeding it into the utility grid.
 - Anaheim Public Utilities FIT Program

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Incentive Information

Federal Solar Incentives

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 - http://www.dsireusa.org/incentives/incentive.cfm?Incentive Code=U
 S02F&re=1&ee=1

*NOTE: The City of Anaheim's solar process has the incentive, permitting, and interconnection processes integrated throughout the Solar Advantage Rebate process. See below for the entire process.

Solar Advantage Rebate Program

http://www.anaheim.net/article.asp?id=1644

Program Administrator

Mark Brownrigg – Solar Advantage Rebate Program Manager

o Phone: (714) 765-4182

o Email: MBrownrigg@anaheim.net

OVERALL SOLAR PROCESS: Anaheim Rebate Submit Building **Application** Rebate Permit Reservation Review and Application | on Powerclerk Reservation Sign Install Solar Interconnection System Agreement Receive Submit Solar System Rebate Incentive Inspection Check Claim Form

Step by Step Process of Getting a Solar Advantage rebate

- o Residential Rebate Program Guidelines
 - http://www.anaheim.net/utilities/adv_svc_prog/pv/ResHndbk.pdf
- Commercial Rebate Program Guidelines
 - http://www.anaheim.net/utilities/adv-svc-prog/pv/CommHndbk.pdf

STEP 1: SUBMIT REBATE RESERVATION ON POWERCLERK

- Rebate Reservations are submitted online via Anaheim's PowerClerk database:
 - PowerClerk: https://anaheim.powerclerk.com/

- The installer will apply for the reservation on the customer's behalf. The installer will register for PowerClerk access by sending their company contact information to the Anaheim Solar Advantage Program Manager.
- To reserve funding, the following support documentation must be uploaded in PowerClerk:
 - PDF copy of customer-approved Itemized cost proposal (detailing costs of modules, inverter(s), and labor) including quote for PMRS Monitoring system
 - 2. Initial roof plan that shows the system layout (including equipment information, and array azimuth and tilt)
 - 3. The PowerClerk Reservation Request Form must be signed and submitted to the Program Manager (only original signature will be accepted.)
 - The Reservation Request Form must be received by the Program Manager within 5 working days from date application is submitted via PowerClerk.

STEP 2: REBATE APPLICATION REVIEW AND RESERVATION

 Anaheim Public Utilities will send you a confirmation letter once your reservation has been approved.

STEP 3: BUILDING PERMIT APPLICATION

Contact Information

Planning Services and Building Division:

200 S. Anaheim Boulevard, Floor 1

Anaheim, CA 92805

Phone: (714) 765-5153

Utilities Electrical Engineering:

201 S. Anaheim Boulevard, Floor 7

Anaheim, CA 92805

Phone: (714) 765-4208

 Permitting Website - Anaheim Planning & Building Department: http://www.anaheim.net/articlenew2222.asp?id=1347

Hours:

Monday - Friday: 8:00AM - 5:00PM

Step-by-Step Permitting Process

- o Residential Rebate Program Guidelines
 - o http://www.anaheim.net/utilities/adv-svc-prog/pv/ResHndbk.pdf
- o Commercial Rebate Program Guidelines:
 - o http://www.anaheim.net/utilities/adv-svc-prog/pv/CommHndbk.pdf

Residential Projects (and small commercial) – service panel rated at less than 200 amps

- Take 3 copies of the solar energy system plans and design package directly to the Building Department and submit them for plan check:
 - Required Documents:
 - Design Package:
 - Site plans, roof plans, 1-line diagram (sized no smaller than 18" x 24"), and all appropriate equipment data sheets
 - Compliance with Anaheim's Interconnection Guidelines
 - Compliance with Anaheim <u>Building Department Plan Check</u>
- If the main service panel is rated at 200 amps or less, an Interconnection Application is NOT required.
- Building and Safety Department plan check takes approximately 10-15 working days.

Commercial Projects – service panel rated at greater than 200 amps

- Take 4 copies of the solar energy system plans and design package (see below) directly to Anaheim Public Utilities Engineering Division for interconnection approval (one copy of your plans will remain with Electrical Engineering)
 - o Required Documents:
 - 1. Design Package:
 - Site plans, roof plans, 1-line diagram (sized no smaller than 18" x 24"), and all appropriate equipment data sheets
 - Compliance with Anaheim's Interconnection Guidelines
 - Compliance with Anaheim Building Department Plan Check
 - Compliance with <u>Anaheim Fire Department's Specifications</u> and <u>Requirements</u>
 - 2. A completed <u>Interconnection Application</u> signed by the property owner
 - Utilities plan check takes approximately 5 working days
 - o After interconnection approval, you will receive approval on your plan
 - Submit your plans and design package to the City of Anaheim Building and Safety Department for plan check and issuance of permit

• Building and Safety Department Plan Check

http://www.anaheim.net/departmentfolders/planning/building/Bldg%20Dptr%20Pln%20Chck% 20Guidelines 2011.pdf

- Customer to takes required documents to Building and Safety Department
- Zoning performs initial screening of application over the counter (reviews site plan, panels and aesthetics)
- If panel upgrade is needed, customer is notified at plan check
 - o Automatic email is sent to utility to send crew to upgrade meter
 - Meter cost is paid for by customer
- Building and Safety take in 2 sets of plans
 - No fees for both residential and non-residential
- Commercial applications will be reviewed by the Fire department
- Systems with microinverters must be approved by the Building Department
 - Utilities may have list of technologies that are approved
- Plan check will take 10 days to review
 - o If there are corrections, applicant is notified by phone
 - With corrections, customer has to pick up plans, resubmit in office
 - Customer has 5 days to make corrections
 - Customer can see that corrections are needed in online database
 - a. Changes cannot be made online, they can only be seen

• Permit Issued

STEP 4: INSTALL SOLAR SYSTEM

Upon receiving your solar permits, you can install your solar PV system.

STEP 5: SIGN INTERCONNECTION AGREEMENT FOR NET ENERGY METERING

- Once a permit has been issued, the City of Anaheim will mail an "Interconnection Agreement for Net Energy Metering" agreement to you for your signature.
 - Sample Interconnection Agreement
 - NOTE: Anaheim will not allow you to operate a grid-tied solar PV system without an approved Interconnection Agreement for Net Energy Metering
 - For detailed information on Interconnection Requirements, see the <u>INTERCONNECTION PROCESS</u> section below

STEP 6: SOLAR SYSTEM INSPECTION

- Solar system inspection is to ensure your solar energy has been installed correctly and safely
- o This is the final stage before you are ready to operate your solar energy system.
 - The following steps will assist you in getting your system approved and operating quickly. Also refer to the "Building Division Inspection Record" that you receive with your permit as a guide.

- 1. Call (714) 765-4626 to schedule final electrical inspection by the Building Department.
- 2. The Electrical inspector will sign the Inspection Record under "Electrical Final" and "Building Final."
- 3. The Electrical inspector will notify Anaheim Public Utilities to install your new meters.
- 4. Once Anaheim Public Utilities receives notice that your meter is released, a new digital meter will be installed on the applicable service panel, and a power production meter will be installed at the new meter socket.
- 5. Your system is ready for operation.

STEP 7: SUBMIT INCENTIVE CLAIM FORM

- Applying for your Solar Advantage rebate
 - After your permits are received, the solar system is installed, and inspections are passed, you are eligible to collect your Solar Advantage rebate.
- Upload the following documents to Anaheim's <u>PowerClerk</u> database:
 - 1. Signed Residential Solar Energy Program Payment Application.
 - 2. Signed <u>Letter of Assignment</u> (if applicable).
 - 3. Signed Solar Map Consent Form
- Upload the following to <u>PowerClerk</u>:
 - 1. Copy of W-9 and CA 590 form if rebate payment is assigned to third-party.
 - 2. Copy of page 1 of the Home Utility Checkup report.
 - 3. Shade study for final installed solar energy system
 - (Note: shade study must reconcile with Anaheim-approved asbuilt roof plan). Electronic files of the obstruction elevations or the angle estimator report shall be sent electronically to the Anaheim Solar Advantage Program Manager at MBrownrigg@anaheim.net.
 - For details on shade study requirements, please see Appendix 2 of the CEC Guidelines for California's Solar Electric Incentive
 - Programs (Senate Bill 1) Third Edition.
 - 4. Copy of final "Proof of Paid" itemized receipt (note: must reconcile with itemized PowerClerk values)
 - 5. Proof of PMRS or receipt of maintenance oversight plan.
 - 6. Copy of warranties that were issued to customer including the following information (with no exceptions):

- Size of System Installed (AC Watts)
- o Description of System
- o Address of where system is installed
- Owner of System
- Warranty information must include proof of 10 year or better warranty on modules
- Warranty information must include proof of 10 year or better warranty on inverter
- Warranty information must include 10 year or better warranty against breakdown or degradation in electrical performance of more than 10 percent of system's rated electrical output from originally rated output
- o Date of when warranty goes into effect
- Any exclusions
- Contact and instructions for customer when they require warranty service
- Signature of contractor providing the warranty
- 7. For New Construction: Title 24 PERF-1 form and supporting documents

STEP 8: RECEIVE REBATE CHECK

 The Solar Advantage Program Manager will review your application. Upon approval, the rebate will be processed after July 1st.

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Anaheim Public Utilities Interconnection Process

Anaheim Public Utilities is the local utility for the City of Anaheim.

Contact Information

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201 S. Anaheim Blvd, Suite 801
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http://www.anaheim.net/article.asp?id=1644

Interconnection Process

*NOTE: Anaheim Public Utilities' Interconnection Process is integrated throughout the <u>Solar Advantage Rebate Program process</u>. Additionally, if your solar PV system is smaller than 30kW, there is no Interconnection Process.

Additional Interconnection Information

The parallel operation of a solar PV system requires interconnection with Anaheim Public Utilities' electrical grid. <u>Electric Rule 22</u> is a tariff that describes the interconnection, operating and metering requirements for generation facilities to be connected to Anaheim Public Utilities' distribution system.

The comprehensive rules of interconnecting to Anaheim Public Utilities' grid are outlined in the Guidelines for Interconnection of Customer Generators:

- Interconnection Guidelines
 - http://www.anaheim.net/Utilities/adv_svc_prog/pv/Interconnection%20Guidelines_2010.pdf
- Frequently Asked Questions about Net Metering Interconnection
 - http://www.anaheim.net/utilities/adv_svc_prog/pv/FAQ_Net%20Metering_201
 1.pdf
- Sample Interconnection Agreement for Net Energy Metering
 - http://www.anaheim.net/utilities/adv_svc_prog/pv/Interconn%20Agreement%2
 Ofor%20Net%20Energy%20Metering.pdf
- Interconnection Application
 - o http://www.anaheim.net/utilities/adv svc prog/pv/InterconnApp.pdf

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