

## DOCKETED

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CALIFORNIA ENERGY COMMISSION

# Public Meeting on the Water Energy Technology (WET) Program



Oxford Suites  
2035 Business Lane  
Town Meeting Room 1 and 2  
Chico, California 95928

June 29, 2015





## Agenda

- Background
  - Governor’s Direction for the WET Program.
  - Water Appliance Rebate.
  - Other Drought Response Efforts at the Energy Commission.
- WET Program Overview
- Tentative Schedule for the WET Program
- WET Rebate and Grant Program for Agriculture
- Future WET program activities
- Questions



## Background



- In response to California's ongoing drought, Governor Brown directed the first ever statewide mandatory water reductions. (Exec. Order B-29-15)
- The Governor directed the Energy Commission to implement a water energy technology (WET) program as part of its work to address the drought.
- Other drought-related work at the Energy Commission
  - Standards to improve water appliances efficiency.
  - Expedited processing of applications for alternate water supply for power plant operation.
  - Water appliance rebate program.



# Water Appliance Rebate Program Residential Customers Proposed \$30 million

## Launch Summer

### Online Application

- ✓ Clothes washer rebates for \$100
- ✓ Early retirement of inefficient clothes washers
- ✓ Partner and leverage existing programs
- ✓ Easy participation

## Launch Fall

### Direct Install - Disadvantaged Communities

- ✓ Clothes washers
- ✓ Dishwashers
- ✓ Lavatory faucets
- ✓ Kitchen faucets
- ✓ Showerheads

**Program Contact:** Jack Bastida, Jack.Bastida@energy.ca.gov, (916) 653-8906

**Program website:** [energy.ca.gov/drought/rebate/](http://energy.ca.gov/drought/rebate/)

**Sign up for the WaterSaver List Serve to get program updates.**



## WET Program Overview

- Innovative technologies must meet the following criteria:
  - Display significant greenhouse gas emission reductions and water and energy savings.
  - Demonstrate actual operation beyond the research and development stage.
  - Documented readiness for rapid, large-scale deployment in California. (Not currently being widely deployed)
  - Technologies must be commercially available (but not widely used in California)
  - Funds cannot be used for future facilities



## WET Program Overview

**Proposed \$30 million from the California Climate Investments Program**



Phase 1: Agriculture

- Rebates and Grants

Phase 2: Industrial, Commercial & Residential

- Grants

Phase 3: Renewable Energy Powered Desalination

- Grants



## WET Program: Tentative Schedule

Item	Date
Program Development	May – June 2015
Public Workshops for Program Input	June – July 2015
Draft Agriculture Program Guidelines	June
Seek Approval of Agriculture Program Guidelines, Application, and Other Program Requirements	July 2015
Release WET Program Applications for Agriculture	Summer 2015
Seek Public Input on Commercial, Residential, Industrial and Renewable Powered Desalination Program	July-August 2015
Release WET Program Applications for Commercial, Residential, Industrial and Renewable Power Desalination	Summer to Fall 2015





# WET Agricultural Rebate Program





# WET Agricultural Rebate Program Funding

WET Rebate Program – Agriculture (Up to \$7 M)

## Group A

- Up to \$6.10 M available
- Maximum of \$250,000/rebate
- Up to 50% of the eligible project cost

## Group B

- Projects benefit **Disadvantaged Communities**
- Up to \$900,000 available
- Maximum of \$300,000/rebate
- Up to 75% of the eligible project cost



## Who and What is Eligible?

- Program eligibility:
  - Agricultural operations
  - Collaborative applicants
- Project eligibility:
  - Must result in on-site, greenhouse gas (GHG) emission reductions
  - Convert from high pressure to low pressure drip irrigation system – refer to Table 1 in draft WET Rebate Guidebook
  - Minimum requirements
  - System must be installed in a CA agricultural operation.



## Maximum Rebate Amount and Exclusions

- One rebate per federal tax identification number
- Multiple properties can be included up to the max amt.
- An applicant can submit on behalf of multiple agricultural operations up to the maximum amount for Group A or B.
- Can combine with energy and water utility, and state/federal agency programs but total cannot exceed 100% project cost
- First come, first served

### **Exclusions – Combinations of the following not allowed:**

- Group A and Group B
- WET Grants, other CA Climate Investments program funding (e.g., CDFA (SWEEP), DWR (Water Energy Efficiency))
- CEC funding: RD&D and Transportation programs



## What Are Eligible Project Costs?

**All components/elements in Table 1 must be included in the system design and meet the minimum listed requirements**

- Equipment/materials: Includes all items listed in Table 1.
- Installation Labor: Contractor fees for labor to install the equipment/ materials.
- Engineering Design: Costs associated with irrigation design incurred after rebate approval by the Energy Commission.
- Cost associated with performing post-retrofit, monitoring and verification to provide data on technology performance to the Energy Commission and as required by the Air Resources Board.

**Refer to the Draft Guidebook for detailed information.**



## What Are Ineligible Project Costs?

- Post-project service charges and maintenance costs.
- Non-labor costs and fees associated with project management, legal and oversight.
- Supplies & equipment costs not related to the WET Rebate program project.
- Costs incurred before Energy Commission approval of the Rebate.
- Cost associated with preparing the Application, securing financing, securing permits and providing insurance.
- Fines, penalties and legal settlements.
- Personal computers, phones or other personal devices.
- Purchase of real property.
- Food, beverage, advertising, public relations and entertainment costs.

**Refer to the Draft Guidebook for detailed information.**



## Disadvantaged Communities

### **For Group B funding:**

Projects must benefit Disadvantaged Communities in at least one of the following areas:

- 1) project provides water and energy use efficiency incentives or other services that reduce energy use to water users with a physical address in a disadvantaged community; or
- 2) project improves, repairs or replaces water system infrastructure for water and energy savings within a disadvantaged community.

**Refer to the Draft Guidebook for detailed information.**



## Application Process

- Application Form
- Supplemental Information
  - Pre-retrofit energy and water bills, or equivalent, showing baseline usage
  - Irrigation Design by Certified Irrigation Designer
  - Pump tests showing pump efficiency, flow rate, discharge pressure, pumping water level and age of pump
  - Distribution Uniformity Test results, if available
  - Equipment specifications
  - Collaborating applicants
  - Disadvantaged Communities documentation
- Project Budget

**Refer to the Draft Guidebook for detailed information.**





## Application Review Process

### Screening Criteria– Must pass all the following:

- ✓ Application Form is signed where indicated
- ✓ Applicant meets the eligibility requirements specified in the WET Rebate Guidebook
- ✓ Applicant has not exceeded the maximum Rebate amount as indicated in the WET Rebate Guidebook
- ✓ Applicant's site meets all the Rebate requirements specified in Table 1 of the WET Rebate Guidebook and has potential for achieving energy and water savings and GHG emission reductions
- ✓ Site verification or conference call confirms project eligibility
- ✓ Application is complete, and includes all supplemental information and project budget as described in the WET Rebate Guidebook
- ✓ All supplemental information is technically accurate, assumptions are reasonable, and meets technical requirements specified in the WET Rebate Guidebook
- ✓ Applicant has not included a statement or otherwise indicated that it will not accept the Energy Commission terms and conditions, or that acceptance is based on modifications to the terms and conditions



## Other Requirements

- Participant Requirements
  - Access to energy and water billings/documentation and independent monitoring and verification for up to 3 years
  - Prevailing wage
- Payment
  - Up to two payments
  - Requires backup documentation and status report
  - Final payment subject to on-site verification
- Administration and Other Requirements

**Refer to the Draft Guidebook for detailed information.**



## WET Program Rebate Process

### Complete & Submit Application

- Include supporting documentation
- Sign application
- Agree to terms and conditions

### Energy Commission Review

- Is the application complete?
- Minimum requirements met?
- Pre-installation inspection, upon request
- Respond to clarifying questions

### Rebate Reservation, Payment & Follow-up

- Rebate awards posted on the Energy Commission website
- Up to 2 payment requests
- Post-installation inspection, upon request
- Provide annual water and energy bills (pre and post retrofit)



# WET Agricultural Grant Program





## WET Agricultural Grant Program Funding

WET Grant  
Program –  
Agriculture  
(Up to \$3 M)

### Group A

- Up to \$2.70 M available
- Maximum of \$250,000/rebate
- Up to 50% of the eligible project cost

### Group B

- Projects benefit **Disadvantaged Communities**
- Up to \$300,000 available
- Maximum of \$300,000/rebate
- Up to 75% of the eligible project cost



## Who and What is Eligible?

- Program eligibility:
  - Agricultural operations
  - Collaborative applicants
- Project eligibility:
  - Must result in direct, on-site, greenhouse gas (GHG) emission reductions
  - Must result in water savings
  - Must be innovative and not already funded by CDFA's SWEEP program
  - System must be installed in a CA agricultural operation.

**Refer to the Draft Grant Application for additional information.**



## Application Process

- Application
- Project Narrative – Addresses Evaluation Criteria.
- Equipment Specifications
- Market Potential
- Scope of Work and Schedule
- Project Budget
- References and Contacts

**Refer to the Draft Grant Application for detailed information.**



## Competitive Process

- Two Stage
  - First Stage: Screening —must pass all criteria
  - Second Stage: Proposals are scored based on:
    - Technology Innovation
    - Project Design
    - Water Savings
    - Greenhouse Gas Reductions
  - Projects ranked according to criteria; highest funded projects recommended for funding
- All grants must be approved by the Energy Commission

**Refer to the Draft Grant Application for detailed information.**





## WET Program Grant Process

### Complete & Submit Application

- Include supporting documentation
- Sign application
- Agree to terms and conditions

### Energy Commission Review

- Is the application complete?
- Minimum requirements met?
- Pre-installation inspection, upon request
- Evaluation of applications based on set criteria

### Grant Award, Reservation, Payment & Follow-up

- Grant awards posted on the Energy Commission website
- Up to 2 One payment when project complete, no progress payments
- Post-installation inspection, upon request - could include savings verification
- Provide annual water and energy bills-pre and post retrofit



## Phase 2

# WET Program for Industrial, Commercial, and Residential





## Industrial, Commercial and Residential Project Considerations

- Projects must result in on-site, direct GHG emission reductions
- Embedded energy in water cannot count towards the GHG reductions
- Examples of potential projects:
  - Integrated on-site use of recycled water coupled with reduction of on-site pumping energy or waste heat recovery
  - Innovative waterless or reduced water technologies that also reduce thermal and electric use in laundries, food service & other industries
  - Cooling tower improvements that incorporates energy efficiency and use of recycled water
  - Water/wastewater treatment process that incorporates use of recycled water coupled with energy efficiency or other GHG reducing project



## Industrial, Commercial and Residential Potential Elements

- Similar project/applicant eligibility requirements and evaluation criteria as agriculture grants, such as:
  - Individual applicants or collaborative applicants representing multiple projects
  - Projects must be installed in California
  - Evaluation criteria emphasizes GHG emission reductions and water savings, along with technology innovation and project design
- \$16 million in competitive grants with set aside amount for each grouping and projects that benefit disadvantaged communities
  - Potential grant amount \$500,000 to \$1 million



# Phase 3 WET Program for Renewable Energy Powered Desalination





## Renewable Desalination Project Considerations

- Projects must result in on-site, direct GHG emission reductions through use of renewable energy integration while increasing water production efficiency
- Use of commercially available, innovative technologies—not research projects
- Focus is on existing plants or plants currently under construction
  - Can be brackish water or ocean water



## Renewable Desalination - Potential Elements

- Similar project/applicant eligibility requirements and evaluation criteria as agriculture grants, such as:
  - Individual applicants or collaborative applicants representing multiple projects
  - Projects must be installed in California
  - Evaluation criteria emphasizes GHG emission reductions and water savings, along with technology innovation and project design
- \$3 million in competitive grants with potential set aside amount for projects that benefit disadvantaged communities
  - Potential grant amount \$1 to \$3 million





# Questions







## Questions

The Energy Commission welcomes your input on the following questions concerning the WET Program:

1. What emerging technologies should be considered that provide direct on-site GHG emission reductions and water savings for each of the identified sectors?
2. What rebate levels would be most appropriate? What grant award amounts would be most appropriate for customized projects?
3. What changes to the draft guidelines are needed to ensure the purpose, instructions, and eligibility requirements are clear?
4. How can the WET Program best bring benefits to disadvantaged communities?



## Questions (continued)

5. What are some of the main barriers preventing implementation of advanced water and energy saving projects?
6. To what extent is broadband or internet availability a factor that prevents implementation of water and energy saving projects, especially in rural areas?
7. What operational, regulatory, or other constraints may arise to prevent installing projects quickly? How would this differ from typical installation timelines for the equipment listed in the draft guidelines?
8. What is the capability of obtaining utility data for pre- and post-energy and water use? If utility data is unavailable, how will pre- and post results be documented?



## Next Steps

- Comments due by **4:00 p.m. by July 3, 2015.**
  - Email comments to: [docket@energy.ca.gov](mailto:docket@energy.ca.gov)
  - Please include Docket **15-WATER-01** and indicate **Drought Response** in the subject line.
- Sign up for the WaterSaver Listserv for notice of workshops and program updates at [www.energy.ca.gov/wet/](http://www.energy.ca.gov/wet/)



## For Further Information

- WET Program website:  
[www.energy.ca.gov/wet/](http://www.energy.ca.gov/wet/)
- WET Program email:  
[wet@energy.ca.gov](mailto:wet@energy.ca.gov)
- Idea Exchange:  
[http://www.energy.ca.gov/wet/idea\\_exchange.html](http://www.energy.ca.gov/wet/idea_exchange.html)