DOCKETED

Docket Number:	15-WATER-01
Project Title:	Water Energy Technology (WET) Program
TN #:	205052
Document Title:	StopWaste: Energy Council Comments: WET program
Description:	N/A
Filer:	System
Organization:	StopWaste: Energy Council/Heather Larson
Submitter Role:	Public Agency
Submission Date:	6/16/2015 4:14:07 PM
Docketed Date:	6/16/2015

Comment Received From: Heather Larson
Submitted On: 6/16/2015
Docket Number: 15-WATER-01

WET program

Additional submitted attachment is included below.

BEFORE THE CALIFORNIA ENERGY COMMISSION

COMMENTS OF

StopWaste: Energy Council

ON

Water Energy Technology program (15-WATER-01)

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For **StopWaste: Energy Council**

June 16, 2015

Introduction

StopWaste is pleased to provide these comments on the California Energy Commission's ("CEC") *Water Energy Technology (WET) Program* as presented in the June 2, 2015 webinar. The Energy Council is a public Joint Powers Authority created in 2013 by the County of Alameda and 12 cities in the county to assist them with developing and implementing programs and policies that reduce energy demand, increase energy efficiency, advance the use of clean, efficient and renewable resources, and help create climate resilient communities. The Energy Council's initiatives are carried out by StopWaste, a public agency whose staff and programmatic work are governed by the Alameda County Waste Management Authority (established in 1976) and the Alameda County Source Reduction and Recycling Board (established in 1990). The Energy Council's activities are an extension of StopWaste's pioneering work over more than two decades helping local governments, businesses, schools and residents solve critical waste, water, energy and climate issues. Since the 1990s our green building team has been working with our member jurisdictions and the building industry to develop programs, policies and tools that can, and have been, replicated and scaled throughout the state.

We offer these comments based upon our experience working with projects in the residential, multifamily, schools, commercial, and municipal sectors.

In order to recommend specific emerging technologies for inclusion in this program, it will be necessary for the **CEC to clarify their relative weighting of energy, water and GHG savings priority** for the program as a whole. Some technologies (measures) deliver high water savings with limited energy savings, and vice versa. There are also measures which can deliver water and GHG savings, but not end-use energy efficiency. CEC should clarify in the grant guidelines whether individual measures, or packages of measures, need to deliver all three of these savings categories, and what the relative savings thresholds should be for each savings category. In partnership with consultants and our local government member agencies in Alameda County, we have identified and analyzed technologies that could have a high impact in either water, energy or both, and which are commercially available in the market but needing technical and/or financial assistance for implementation. The following sector specific technologies are pulled from a much more comprehensive list of potential technologies; we recommend that you consider these for inclusion in the grant program to the extent possible.

Residential:	• demand pumps in conjunction with instantaneous water heaters • shower thermostatic shut-off valve • laundry to landscape systems • irrigation moisture sensors and controls
Multifamily:	• water and hot water sub metering systems • hot water drain heat recovery
Commercial:	• ozone laundry
Municipal/Schools:	• solar pre-heat and co-generation on pools • irrigation moisture sensors and controls • recycled water projects

While many **barriers preventing implementation of advanced water and energy savings projects** are going to be sector and technology specific, it is generally true across sectors that innovative measures/technologies are not currently as cost effective as lower hanging fruit such as fixture upgrades.

As such, we encourage the CEC to consider a weighting of proposed projects that does not discredit measures, or packages of measures, that are slightly up the cost-effectiveness curve but are otherwise ripe for implementation. If projects need to demonstrate a competitive cost-effectiveness, perhaps consider an approach where more expensive deeper savings measures are bundled as a scope of work with more standard highly cost effective water or energy measures already incented by energy or water utilities but on an individual measures basis. We also encourage the CEC to consider approaches where they can leverage programs that have already engaged participation partners who could incorporate an additional innovative technology.

Most emerging technologies do have specific **barriers to quick deployment on a broad scale**. It requires lead time to identify willing and viable implementation projects. After projects are identified with scopes of work identified, it can often take time to work through the details of installation and permitting when non-standard technologies are in-play. The CEC will be able to get the WET program resources to the market more quickly if they include among the scoring criteria for proposals a factor which includes consideration for the readiness of real projects- not on a speculative market basis- who have been pre-identified as interested to install specific technologies.

It should not be a problem to demonstrate **pre and post water and energy utility savings** for most measures/market sectors where property owners are engaged as ready partners on the project. The primary application where it will be difficult, and potentially not possible, to demonstrate pre and post savings from billing data is in buildings/properties where there are multiple meters and it is either difficult to attribute savings from a particular measure to a specific meter or to readily aggregate the data from multiple meters (such as in commercial tenant buildings, multifamily rental and condo buildings, and in schools/campuses where landscape and interior water might not be sub-metered from one another).

The limited definition of benefitting a **Disadvantaged Community DAC**, as identified by targeting specific census tracts in the Cal Enviroscreen, should be carefully applied to avoid the un-intended consequence of under prioritizing markets where technologies could most readily be installed. The top 20% of Cal Enviroscreen census tracts include some brownfield areas which are currently completely undeveloped; this implies that some of these areas do not immediately include any "community" to benefit since they are uninhabited, and do not lend to the implementation of any technologies. It is important that grant program's use of the DAC criteria does not preclude the program's ability to fund projects which deliver significant water, energy and GHG savings which is the primary intended purpose of cap and trade funding.

We look forward to providing more detailed comment on the CEC's Water Energy Technology (WET) program once the draft guidelines are developed.

Respectfully submitted,

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April 21, 2015