1 Annual Report Data

PACE Funding Group suggests that this is an area requiring standardization across the PACE industry in California. In particular, it would be useful if methodologies for calculating savings were standardized. Currently PACE Funding Group uses the following methodologies to calculate savings:

Energy savings; Water savings; Cost savings: CO2 savings; Jobs created.

Energy savings

Electricity will be reported in kWh
Heat energy will be reported in therms (1 therm = 29.3 kWh = 100,000 BTU)
No energy savings will be reported for water efficiency

Sample calculations for energy savings:
Tool used: Energy Periscope on December 29, 2015.
Assumes: 2,000 sq ft, single story house in San Jose, CA
House occupied nights and weekends by 4 occupants
Heat to 70 deg F
Cool to 75 deg F
Central AC, central gas space heating and gas water heating
8 windows, 2 facing south
80 gallons of hot water used every day at 120 deg
10,000 kWh/year electricity
800 therms/year natural gas

Energy Savings for Solar

Assume 1500 kWh/kw production
If kw available, use actual kw
If kw not available, assume 250 W per solar module

Energy Savings for Windows

Switching from single-pane to dual-pane
Saves 1.5 therms/window/year
Saves 8 kWh/window/year

Energy Savings for Programmable Thermostat

39 therms/year saved
197 kWh/year saved

Energy Savings for Air Conditioning

Changing from an older air conditioner to a new EnergyStar-rated air conditioner provides, on average, about 12% in efficiency gain (from 13 SEER to 14.5 SEER rating). 257 kWh/year saved

Energy Savings for Furnace

Changing from an older air conditioner to a new EnergyStar-rated air conditioner provides, on average, about 12% in efficiency gain (from 78% efficient to 90% efficient rating for natural gas).
52 therms/year saved

Energy Savings for Duct Replacement

257 kWh/year saved
52 therms/year saved

Energy Savings for Insulation

148 therms/year saved
887 kWh/year saved

Energy Savings for Cool Wall Coating

Tested by DoE to reduce cooling requirements by up to 21.9%
198 kWh/year saved

Energy Savings for Roof replacement

20 deg F drop in roof temperature
32 kWh/year saved

Energy Savings for Water Heater replacement

Changing from an older water heater to a new high efficiency water heater provides, on average, about 7% in efficiency gain (from 60% efficient to 67% efficient rating for natural gas).
45 therms/year saved

Water savings

50 gal/day (18,000 gal/year) saved for new landscaping

Cost savings

$0.20/kWh for electricity
$1.20/therms for natural gas
$0.005/gallon for water

CO2 Savings

Tons of CO_2 saved
No CO_2 savings will be reported for water efficiency
Electricity: 1.64 lbs. CO_2 per kWh
Natural Gas: 12 lbs. CO_2 per Therm

Jobs Created

One job = 2,000 man-hours per year

One window = 3 man-hours
Solar = 6 man-hours + 3 man-hours per kW
HVAC = 16 man-hours
Insulation = 16 man-hours
Cool Wall Coating = 76 man-hours
Roofing = 72 man-hours
Landscaping = 32 man-hours
Furnace = 9 man-hours
Duct work = 12 man-hours
Water heater = 5 man-hours

2 **Education Program**

In order to allow qualified and scrupulous solicitors to have the freedom to work with more than one PACE program administrator, without onerous switching costs, a solicitor should be able to use the certification from one PACE program administrator for any PACE program administrator

3 Underwriting

AB 1284 contains minimum standards that a property improvement must meet to qualify for a PACE assessment agreement. PACE Funding Group asks that the Commissioner and her Department consider eligible products that meet the qualification. In all cases, our primary objective is to level the playing field such that all PACE administrators are using the same criteria. We are biased towards strict interpretation of both the letter and the intent of PACE legislation, so our initial reaction is to not include the projects below, but if the COB believes that any or all of the projects qualify for PACE, then we would be happy to add them

For example, here is the link to Ygrene's approved products:
https://mailtrack.io/trace/link/2aaa35ecbffb0b6da30c07dc49c723432f447f19?url=http%3A%2F%2Ffiles.constantcontact.com%2F29547931601%2F59aec9cc-e324-4ee7-9457-44f6b98848fe.pdf&userId=2230175&signature=32ea62a40884906f

Most are intuitive or articles can easily be found explaining how the product category improves water or energy efficiency of a home (we do not do seismic upgrades so we do not concern ourselves with those categories).

However, it is very hard for us to justify how these product categories improve water or energy efficiency:

- Air purifier (even if designated as “Energy Efficient”, adding it to a house still causes that house to consume more energy than it did previously. It would only make sense if it were replacing a low efficiency purifier, but that is not listed as a criteria for the project.)
- Energy Efficient Appliances (we think that this is ripe for abuse for financing appliances that may be removed from the property in the future).
- Demand Water Softener. It’s a consumer of energy and does not improve the water efficiency of the house. We could find no water softener manufacturer claiming that water softeners improve the energy or water efficiency of a home.
- Gutters: understandable with a rainwater catchment system, but not as a stand-alone project
- Septic-to-Sewer conversion: not sure how this improves water efficiency
- Sewer, lateral replacement or repair: not sure how this improves water efficiency
- Sunroom: often these require ceiling fans, electrical outlets for TV’s, etc.. Hard to see how it is a net improvement in efficiency. We could find no sunroom manufacturer claiming that sunrooms improve the efficiency of a home.