



## CITY COUNCIL SUSTAINABILITY COMMITTEE MEETING

Hayward City Hall – Council Chambers  
777 B Street, Hayward, CA 94541-5007

### *Mission Statement:*

*Make Hayward a more sustainable community in order to ameliorate negative impacts of climate change, conserve natural resources and promote a clean environment.*

March 2, 2011  
4:30 p.m. – 6:00 p.m.

## A G E N D A

- I. Call to Order
- II. Roll Call
- III. Public Comments: *(Note: All public comments are limited to this time period on the agenda. For matters not listed on the agenda, the Committee welcomes public comments under this section, but is prohibited by State Law from discussing items not listed on the agenda. Items not listed on the agenda brought up under this section will be taken under consideration and may be referred to staff for follow-up as appropriate. Speakers will be limited to 5 minutes each; organizations represented by more than one speaker are limited to 5 minutes per organization.)*
- IV. Approval of Minutes of February 2, 2011
- V. Residential Energy Conservation Ordinance (RECO)  
Erik Pearson, Senior Planner
- VI. Summary of Last Climate Action Management Team Meeting
- VII. General Announcements and Information Items from Staff
- VIII. Committee Referrals and Announcements
- IX. Next Meeting: Wednesday, April 6, 2011  
Update on Food Scraps Programs  
Senate Bill 7 – Water Conservation  
Annual Review of CAP Implementation and Priorities
- X. Adjournment



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CITY COUNCIL SUSTAINABILITY COMMITTEE MEETING  
Hayward City Hall – Conference Room 2A  
777 B Street, Hayward, CA 94541-5007

February 2, 2011  
4:30 p.m.

**MEETING MINUTES**

I. Call to Order – Meeting called to order at 4:33 p.m. by Mayor Sweeney.

II. Roll Call

**Members:**

- Michael Sweeney, Mayor
- Olden Henson, Council Member (Absent)
- Bill Quirk, Council Member
- Diane McDermott, Planning Commissioner
- Sara Lamnin, Planning Commissioner
- Al Mendall, Planning Commissioner
- Doug Grandt, Keep Hayward Clean and Green Task Force (Absent)

**Staff:**

- David Rizk, Development Services Director
- Bob Bauman, Public Works Director
- Erik Pearson, Senior Planner
- Mike Gable, Gable Associates, LLC
- Kelly Morariu, Assistant City Manager
- Marc McDonald, Sustainability Coordinator
- Katy Ramirez, Administrative Secretary (recorder)

**Public Comments Speakers:**

- Vicky Rodriquez, Realtor
- Tina Hand, Realtor
- David Stark, Public Affairs Director, Bay East Association of Realtors®
- Rich DiBona, Resident
- Heather Reyes, Resident
- Patrick Virgin, Resident
- Don Rettig, Legacy Real Estate Associates
- Jan Lebby, Resident
- Cheryl Zuur, Resident
- Ernest Pacheco, CAP

**Others:**

- Simon Wong, Tri-City Voice Newspaper

- Carrol Stegall, Resident
- Margaret Squires, Resident
- Judy Virgin, Resident
- Cristina Bales, Realtor
- Brenda McClellan, Resident
- Louis G. Colindres
- Flavia Cesa, KB Homes
- Murline Monat, Coldwell Banker
- Judith D. Rose, Prudential California Realty
- Jerry Ahuja, Paramount Buildings
- Michael Chaney, Better Homes and Gardens

### III. Public Comments

Vicky Rodriquez, Realtor, said it is her understanding that Hayward is planning to implement an ordinance prior to the sale of homes and for homes built prior to 1978. Ms. Rodriquez said that this is going to be suicidal to their already hurting real estate industry and suicidal for Hayward financially because the ordinance is going to prevent sales in the Hayward area.

Tina Hand, Realtor, said that she wants to echo Vicky's sentiments and add that although the real estate market and REO's have reduced over the past year, she believes that we are going to start seeing an increase. Ms. Hand said that when you are dealing with banks and short sales, the banks are not going to pay for retrofitting, that it will fall back on the buyers. She said that in this industry it is hard enough for buyers to get credit and loans, and with so many other properties in other areas, the buyers will walk away from Hayward. Ms. Hand said that this ordinance would hurt the City more than it will help.

David Stark, Public Affairs Director, Bay East Association of Realtors, said that more than a year ago Bay East Association of Realtors identified in a letter to the Sustainability Committee some of the concerns about Point of Sale (POS) requirements and the whole concept of RECO. Mr. Stark said he would like to address three problems that have not been discussed by the Committee in response to the letter. First, our conclusion is POS requirements would complicate real estate transactions. Second, they can affect the ability of a homebuyer to qualify for purchase financing and to keep the City of Hayward from achieving its stated goal of 70 percent homeownership. This is a serious unintended consequence of POS requirements and that has not been addressed. Mr. Stark said that there has been no response to the impact of short sale and foreclosed properties on the effectiveness of retrofit requirements triggered by the sales of property. Third, Mr. Stark said that enforcing POS requirements would have significant administrative burdens and tax city resources, and that they have seen no analysis of how that would impact the effectiveness of the City's residential energy efficiency.

Mr. Stark said that the latest RECO proposal that is being discussed by the Committee has even more problems. The obligation to retrofit within two years of purchase in this

“buyer’s market” combined with the delay of sales forced on a seller in a “buyers market” to comply with retrofit requirements can force sellers to further drop their prices; obviously, this is impossible for short sale or foreclosed properties. Mr. Stark said that there has been no analysis of how a deferred compliance trigger can affect the buyer qualifying for a mortgage.

For remodels - adding \$3,000 or more in energy retrofits can be a deterrent for the homeowner who wants to improve their property, and is a direct assault on private property rights. The trigger for pre-1978 homes - this proposal would ignore any energy efficiency work that has already been completed if the work was not done by a Building Performance Institute (BPI)-certified contractor. It also ignores the fact of whether homeowners can afford the upfront cost of these retrofits.

Mr. Stark said that all these issues should raise enough questions about RECO to see if it is the best way to make homes efficient. Finally, staff has proposed an alternative he fully supports; it is the last sentence in the staff report, as follows: “The City’s incentive program will allow enable the collection of data to confirm the cost-effectiveness of the measures currently being considered in the draft RECO.” Mr. Stark said that he urges the Committee to take this suggestion. Use the three quarters of a million dollars to validate energy efficiency programs based on incentives. Do test cases on a variety of Hayward homes, based on the measures the Committee is proposing. Mr. Stark said see if this really works, and if they do, then come back and revisit the RECO concept. Mr. Stark said that we simply do not have enough information specific to Hayward to pursue this course of action.

Rich DiBona - said that he is curious and wondering about the number of units that would sell or that have sold in the last year. He said he just did some calculations to figure it out and roughly, 69 properties were transferred over. This way, it would take 21 years to turn over all the properties to comply with the energy improvements. In other words, how much real impact is this going to have in the Bay Area? Is it worth the effort and the expense?

Heather Reyes – said that she would speak for the homeowners in the area in saying that they are probably not aware of the RECO and that she just found out about it today. Ms. Reyes said that she urges the Committee to take into consideration the economy, incomes, and the struggles that families are experiencing in Hayward today, and making it mandatory to spend \$3,000 in retrofits, is just not affordable. She said that she is all for energy savings and for making Hayward a better place; however, at this time she cannot think of a good reason to put more money into Hayward. Ms. Reyes urges the Committee to think about the families that are working to put their kids through school and working to keep a roof over their heads. If there were incentives and somebody was going to pay for it, then she might support the idea.

Patrick Virgin, resident, said that he was able to buy a fixer upper home 18 years ago. He said that he has been doing his own upgrades, one project per year, such as replace the

roof, tear down the inside walls, insulation, etc. Mr. Virgin said that he has replaced some of his appliances with energy efficient appliances. He said that he has time and not money for these type of upgrades, and to make him have to buy and replace what he has already done, all over again, all at once, will not do him any good and that he will lose his house. Mr. Virgin said that there are many people who cannot do these types of upgrades themselves, that they are asking friends to help them. He said that contractors don't want to deal with the City because there is so much litigation and red tape, and RECO is going to make it harder. Mr. Virgin said that global warming has not been proven and he was taught in elementary school that if we do not get rid of refrigerants and lead that we are going to have an ice age. He said that it is a cycle, we cannot control the sun and the water levels are not going anywhere. Mr. Virgin said that things are not changing and there is no science to prove it. Mr. Virgin said that we need to do things slowly and mandated is not a good thing.

Don Rettig, Legacy Real Estate Associates in Fremont, said he currently lives in San Leandro but said he knows Hayward very well. Mr. Rettig said that his folks bought their first house in Hayward in 1950; he owned three Shell stations on Tennyson Road and Fairway Park; attended Cal State Hayward and Burbank Schools, and taught high school in the area for 15 years. Mr. Rettig said that he has been in real estate for 21 years, and over the last 5-6 years, he has watched property values decline in Hayward. He said that he is a member of Bay East Association and agrees with Mr. Stark's sentiments. Mr. Rettig said that he does not want to see prices continue to fall in Hayward, and he thinks the RECO plan will continue to make the prices fall and that it is not good for the tax base.

Jan Leppy said that she got married and bought a house in the Hayward hills in 1977, and is still currently living there. Ms. Leppy said that they have done remodels to their home and updates to their kitchen. She said that some of the issues that are being discussed are basic necessary upgrades such as attic insulation, attic sealing, duct sealing, low-flow shower heads, smoke alarms, etc. Ms. Leppy questioned if sealing up the home air tight is healthy. Ms. Leppy said that this is her 30<sup>th</sup> year in real estate and that she works in the area. She said that the cost of these energy upgrades to either the buyer or the seller is not affordable; the buyers can barely come up with enough money to get into a home, and many of the sellers are losing their homes and certainly cannot afford additional upgrades. Ms. Leppy said that she is not certain that these requirements are going to make it any better, perhaps down the line but not at this time.

Cheryl Zuur, resident of Hayward, said that she had no idea that something like this was in the works. Ms. Zuur said her first concern is that fact that people don't know about this and if you put yourself in the shoes of the average citizen, this thing actually looks like cruel and unusual punishment done behind closed doors. She said that in the last month, she was fortunate enough to attend a Neighborhood Partnership meeting. She said that Mayor Sweeney was there and she thought to herself, "this is good government, I like this; they are attempting to improve things for us." Ms. Zuur said that to her, this experience with the RECO proposal is the opposite of that meeting. She said she

completely supports energy improvements and, personally, she thinks global warming is real; that we need to completely revolutionize our whole situation of energy, but not through this approach. Good intentions, bad method. Ms. Zuur said that if the mandatory section of this continues to be part of this proposal, she promises to campaign against it. She said that she supports energy improvements but not this way. She said the City is not in a position to help with the financial aid that the City is barely surviving now and this sounds like a backdoor way of getting money from people, although it will go to contractors. Ms. Zuur said that we have her promise that she will tell all her neighbors about this and she will go to a Council meeting and recommend another way of going about this that is truly community-spirited.

Ernest Pacheco, CAP, said that he would like to applaud the Sustainability Committee for working towards passing the RECO. He said that it is overdue and hopes that it will pass as soon as possible. Mr. Pacheco said that climate change is real. He said that this is a chosen issue of the Sustainability Committee and it is their job to do what the City can do to address the reality of climate change. Mr. Pacheco said that the RECO is a good step and realizes that the Committee is receiving a lot of heat; however, he supports the Committee and encourages them to move forward and pass this as soon as possible.

Mayor Sweeney thanked all the speakers for their comments and closed the Public Comments period. Mayor Sweeney indicated that there will be more discussion on the RECO item and invited the audience to stay for the remainder of the meeting.

IV. Approval of Minutes of January 5, 2011 – minutes approved.

Residential Energy Conservation Ordinance (RECO) Discussion

Erik Pearson, Senior Planner, provided background on the RECO stating that it would require energy efficiency improvements be made to existing homes in Hayward. Mr. Pearson said that the City already has a Green Building Ordinance that addresses energy efficiency in new construction for new homes. There are approximately 48,000 housing units in Hayward, and about half of those units are single-family. Mr. Pearson said that of the total emissions citywide, about 34 percent are associated with building energy use; 40 percent is from residential; and single-family homes make up about 13 percent of total citywide.

Mr. Pearson said that the City of Hayward has a Climate Action Plan (CAP) that was adopted in the summer of 2009 and includes greenhouse gas emissions reduction targets that are in line with those of the State of California. For Hayward, it means reducing those emissions by 12.5 percent below 2005 levels by 2020, and 82.5 percent below 2005 levels by 2050.

Mr. Pearson provided a PowerPoint presentation that outlined the RECO process and outlined some of the basis of the proposed ordinance, trigger options, date certain, recommended retrofit measures, cost-cap recommendations, exemptions and incentives

for compliance; and a schedule of upcoming meetings. Mr. Pearson indicated that RECO reports, presentations, and background information are available on the RECO page of the City of Hayward's website.

Mr. Pearson addressed the safety issue that were raised at the October 25, 2010 special meeting of the Sustainability Committee regarding the potential for hazardous gas after cracks are sealed up in a home. Mr. Pearson said because of this safety issue, the air sealing work would have to be done by contractors that are certified by the Building Performance Institute (BPI) and who are trained in doing this type of specialized work.

Discussion and questions from the Committee followed Mr. Pearson's PowerPoint presentation, as follows:

Al Mendall, Planning Commissioner, said that the 10 percent cap for a remodel seems high, and he would be more comfortable in the range of 5 percent. Mr. Mendall said that he would suggest that the maximum cost the homeowner would have to spend on energy efficiency upgrades during a remodel would be 5 percent of the remodel cost; or 1 percent of the value of the home, whichever is lower.

Mr. Mendall said another one of his concerns is with number nine under exemptions of the staff report regarding the work being completed by a BPI-certified contractor. Mr. Mendall indicated that he did not get a BPI-certified contractor to come out to his home when he put a \$13,000 solar array on the roof of his house, and he no longer consumes electricity. Mr. Mendall said that he would have to be exempt after spending this amount of money on a solar array and with no BPI contractor, and asks how this exemption would be captured from the ordinance.

Mike Gable, Gable Associates, LLC, said that for safety purposes only air sealing and duct sealing would have to be done by a BPI-certified contractor. Mr. Gable said that if your house is already efficient (i.e., built in 2001), then you have already met the requirements or you might have to do other little upgrades to meet the requirements. Mr. Pearson said to determine the score of an existing home you would have to have a comprehensive energy assessment.

Mr. Mendall said that he likes the possibility of a two-year delay of POS trigger for remodels and thinks it is important. He said that some delay of activation of the requirements overall, until the housing market is in more of a normal state, is also important. Mr. Mendall said that many real estate agents have made very good points that this is not necessarily the best time to be adding on new requirements. He said that although there will never be a perfect time, some sort of trigger that says the POS trigger will not become active until the percentage of distressed sales fall below 20 percent for two quarters, would be good addition. He said that activation might be delayed for a year; however, it widely addresses the timing in terms of the real estate.

Bill Quirk, Council Member, said that we need to be politically real and one way to be politically real is to say that if you have a house where you are not using a lot of energy, then you don't have to go through with this. The other way is to look at a date certain where someone has six years to do the upgrades on their own. Mr. Quirk said that we are going to have to do things that will make it easy for the homeowner to comply, and if they have a house where they are not using a lot of energy, then we all say, "that's great." Mr. Quirk said that he thinks that square footage should be included and somehow attached to Title 24. For example, if an older home matches Title 24 for post 1979 homes in terms of its energy use, then that home should be exempt. Mr. Quirk said that he thinks that is probably the best way to do it.

Mr. Quirk said that he doesn't understand what the mandatory measures are that are related to water efficiency are supposed to do with energy. Mr. Quirk said that people should not have to replace toilets.

Mayor Sweeney asked – What if you replaced your toilet in the 1990's and the standards and efficiencies have gone up, does that mean that you have to replace it again. Mr. Pearson responded that you would have to refer to the Water Conservation Ordinance, which has been in place for a while.

Mr. Quirk addressed Mr. Stark and said that at the last meeting in January, the City Council agreed that they are going to find out what the PG&E bills were before we did these things, and after, and will find out what the payback time was in terms of years. He said that we are only going to put things into effect if they are cost effective. Mr. Quirk said that if you can do the PG&E basic upgrade and incentive, then that is what you are suppose to do. Some people cannot do the PG&E basic upgrades and incentives because they do not have attics that they can insulate, or forced air systems. For those people, we would look at alternatives.

Mr. Quirk said that he thinks the closer we can get to the PG&E program, the better off we are, for two reasons. One is just because it is additional money. Second, these programs are being done by energy experts and the PUC demands that these be cost effective. Mr. Quirk said that PG&E has been dealing with these programs since the 1970s and they are, basically, on a three-year time span. The current cycle ends in 2012 and they are already projecting something for 2013, 2014, 2015, so it has to be shown to be cost effective; these are being looked at by real engineers and the closer we are to having a final program, the better off we are.

Mr. Quirk said that he believes in the RECO program and he thinks the advantage of a time scale of at least six years, and one that looks at an energy bill, it's going to be simple. He said that this is something that people can prepare for, and for those that want to do it themselves, can. Mr. Quirk said that if they have lower energy bills, if they fit in with Title 24 of 1979 or later, then we don't have to worry about it.

Sara Lamnin, Planning Commissioner, said that she wants to make sure to use a mechanism that is going to recognize work that has already been done. She said it maybe the PG&E bill; however, we need to remember that the goal is about decreasing CO2 emissions and making sure that we have a healthy community for the long-term. Ms. Lamnin said that she does not think we can continue to wait; she thinks we can be realistic about a balance between making sure that it actually happens, that changes are made where they need to be made, and not slowing down the economy any further. Ms. Lamin said that she likes the date certain approach, which doesn't put that much burden on the real estate industry as a whole, but it evens out the requirement. She said that education is important and that we need to have community involvement and community engagement, always and ongoing. Ms. Lamnin agrees that it is absolutely the truth that if it is not required, then it will not happen for some people. Ms. Lamnin said we need to make the best change for the community, and she is hearing good conversations with PG&E, contractors, etc. to make sure that for this house, this is the right answer. Ms. Lamnin said that she realizes that it is hard to mandate; however, she appreciates that we are not saying that everyone has to spend \$7,000 on improvements that does not make a difference on the CO2 level.

Ms. Lamnin said that focusing water conservation items with the Water Conservation Ordinance to not over-complicate the RECO, is a good point. Ms. Lamnin said that she thinks there needs to be a feed-back group on an on-going basis, maybe in collaboration with PG&E, so to monitor progress and collect feedback.

Dianne McDermott, Planning Commissioner, said that she first wants to make a comment and say that what goes on at these meetings is always open for public discussion, and she apologizes if the audience knew nothing about the meeting. She asked that you never think that what is being done or discussed at these meetings, is being done in secrecy and is not for public consumption. Ms. McDermott said that she is very conscientious about what she does.

Ms. McDermott asked how staff will be notifying the homeowners that are going to be affected by the proposed RECO. She said that she wants the community to feel comfortable that they have had proper notification about what is going on so they can prepare for it and comment on the RECO.

David Rizk, Development Services Director, asked Mr. Pearson to bring up the City's website on the screen noted that he thinks the RECO webpage is the best place to review updated information. He indicated that it also might be helpful for David Korth to advertise information at the Neighborhood Partnership meetings, and noted there will be a City Council Work Session on May 31. Mr. Rizk said that other ideas are to work with Bay East Association of Realtors to get the word out, provide information to neighborhood groups and the various homeowners associations, and advertise in the newspaper.

Ms. McDermott asked if a notice will be mailed to everyone advising them of what is being discussed and what the City is trying to achieve. She said that she thinks the City's website is a valuable tool; however, not everybody goes to the website to look for information. Ms. McDermott said that she wants to feel comfortable that we tried and we that we did the best we could to notify the community.

Mayor Sweeney said that all these meetings are public, the press is invited and all the information is on the website. If after the Committee does its work, at some point this item will go to City Council, and at some point the City Council will hold a formal public hearing where they may make a decision.

Mr. Rizk suggested that a notice be included with water bills.

Mr. Quirk said that he has concern about putting a notice in the water bill. He said that when he sees his water bill in the mail, he always throws it away and pays his bill online. He said that he prefers a separate mailing but not until we have a good idea of what we are going to do.

Mayor Sweeney said that it sounds like the Committee has a consensus on certain points, as outlined below:

- At Mr. Mendall's suggestion, go from a 10 percent to 5 percent cap on the remodels, or 1 percent of the value of the home, whichever is less;
- Protecting the homeowners that have already done the upgrades, and from spending a lot of money or going through a lot of time. There has to be simple way to allow them to show that they have met the requirements.
- Keep the city program close to the PG&E program in an effort to keep it simple for folks to leverage funds and incentives.
- Research PG&E's program regarding toilets.

Mayor Sweeney said that there was not a consensus amongst the Committee about restructuring the timing in relation to the housing market. Mr. Quirk said that he prefers the date certain and not the POS, and prefers the date certain and not remodel. Mr. Mendall said for remodeling or buying a house, that it is not a logical time to ask people to make these changes rather than picking a random date. Mr. Quirk said that he would support Mr. Mendall's approach as a second choice. Ms. McDermott said that working in an industry that is very cognizant of what is going on with the market, she would agree with Mr. Mendall about the market conditions, and that we have to be sensitive.

Mayor Sweeney asked staff to bring back a couple of options on this item. He indicated that there the options the Committee mentioned, and maybe staff can bring back an inventive third option.

Mayor Sweeney said it is the consensus of the Committee about the importance of tracking the data to see what is working, what is not working; what measures work, and what measures are producing the kinds of savings we are hoping to get.

V. Summary of Last Climate Action Management Team Meeting (CAMT)

Mr. Mendall said that many of the points that were discussed today were also discussed at the last CAMT meeting. He said that one point that came up at the CAMT meeting is what sort of enforcement measures there will be, compliance or non-compliance, that sort of thing. He said this will need to be discussed and decided before we pass the final ordinance.

Mr. Rizk indicated that there is a section in the draft ordinance that addresses enforcement measures.

Mr. Mendall said that the next CAMT meeting is in two weeks and he doesn't know if there are other topics for the agenda; however, he suggested that this might be a good topic for discussion and for receiving early feedback.

VI. General Announcements and Information Items from Staff

None.

VII. Committee Referrals and Announcements

Ms. McDermott said that she would like to announce that the Hayward Education Foundation is holding its annual fundraiser for future grants for students in the Hayward area. Ms. McDermott said that the event is scheduled for Friday, March 25, 2011, and will be held at Cal State East Bay. She said that the million-dollar winner of Survivor will be a guest speaker, and the auctioneer will be John Kessler, who is a former anchor at CBS. Ms. McDermott said that this should be a good program and encouraged everyone to participate.

Mr. Mendall said that he thinks he speaks for everyone here in saying that it is wonderful to have people come to the meetings and share their thoughts. He said that it makes a difference and it really helps. He said that we had comments at previous meetings that helped refine this item and move it in a better direction, and that we also received good comments and feedback from this meeting today that will help move it in a better direction. Mr. Mendall thanked the audience for attending and for speaking.

Mr. Rizk indicated that the March 2 Sustainability Committee meeting will probably be held in the Council Chambers to accommodate a large group.

Next Meeting: Wednesday, March 2, 2011

Update on Food Scraps Programs  
Senate Bill 7 – Water Conservation

Mayor Sweeney invited everyone to attend the next meeting on March 2. He said as Mr. Mendall correctly pointed out, it does help the Committee to hear from the community and, hopefully, what the audience heard today, also helps them. Mayor Sweeney said that the back and forth is what makes this process more productive.

VIII. Adjournment: Meeting adjourned at 6:00 p.m.

DRAFT

DATE: March 2, 2011  
TO: Mayor and City Council Sustainability Committee  
FROM: Development Services Director  
SUBJECT: Residential Energy Conservation Ordinance (RECO) for Single-Family Homes

## **RECOMMENDATION**

That the Committee reads and comments on this report.

## **SUMMARY**

Staff is seeking direction from the Committee on the major components of the draft Residential Energy Conservation Ordinance (RECO). Staff will consider the input of the Committee to develop a draft ordinance, which will be presented to the City Council during a work session on May 31, 2011, and to the Planning Commission during a work session on June 9, 2011. The RECO, which would require energy efficiency improvements in some existing single-family and duplex homes, would provide for a variety of options for homeowners to comply. Two of the three primary compliance options would require most of what is required to earn a rebate through PG&E's existing incentive programs. The third compliance option allows a homeowner to take credit for work already completed and includes improvements that may be installed by a homeowner. Cost caps would be included to limit a homeowner's financial obligation to comply with the RECO. Exemptions would be provided for low-income households, disabled homeowners, distressed property sales (foreclosures and short sales) and households using 15% less energy than the average Hayward home. Background information about the RECO, including previous reports to the Sustainability Committee, are available on the RECO webpage<sup>1</sup> on the City's website.

## **BACKGROUND**

*What is a RECO?* - A Residential Energy Conservation Ordinance (RECO) would require that energy efficiency improvements be made – or be shown to have been made previously -- to existing single-family and duplex homes in Hayward. A RECO consists of four major components:

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<sup>1</sup> <http://www.hayward-ca.gov/forums/RECO/recoforum.shtm>

- Triggers – An event that triggers the requirement to comply with the RECO may be a transfer of ownership, a significant remodel or addition to a home, or a date certain (a fixed deadline by which homes must be in compliance). All three such triggers are proposed for the Hayward RECO, with a “point after sale” trigger of two years after a property sale.
- Measures – Energy conservation measures (ECMs) are improvements or upgrades that result in more energy efficient homes. ECMs considered as options for compliance with the RECO include: attic, wall, and floor insulation; duct sealing; replacement of water heaters and furnaces; and air sealing. Air sealing is the practice of reducing air leakage in areas such as gaps in the roof, exterior walls, window frames, etc.
- Cost caps – The RECO would include cost caps or the maximum amount of money a homeowner would be required to spend to comply. If the required efficiency improvements cannot be completed for less than the applicable cost cap, then the owner may obtain a partial or full exemption.
- Exemptions – The RECO would provide exemptions for low-income households, disabled homeowners, distressed sale transactions, and households using 15% less energy than the average Hayward home.

Very few cities in the United States have RECOs. As indicated in a research paper titled *Options for Hayward’s Residential Energy Conservation Ordinance* by Kali Steele, available on the RECO webpage, the other cities with RECOs are Berkeley, Boulder, CO, Burlington, VT, Marin County, Palo Alto, Rohnert Park, Roseville, and San Francisco. The existing RECOs vary in design and enforcement. Staff is not aware of any existing RECO that uses a date certain trigger. Staff from other cities in the Bay Area are following the development of the RECO in Hayward and have expressed interest in adopting a similar ordinance.

*Why Develop a RECO in Hayward?* – The California Public Utilities Commission’s Long Term Energy Strategic Plan includes a goal to reduce energy consumption in existing homes by 20 percent by 2015 and by 40 percent by 2020, listing RECOs as a role for local governments in reaching this goal. Hayward’s Climate Action Plan<sup>2</sup> (CAP), adopted by the City Council on July 28, 2009, is Hayward’s primary policy document regarding reducing greenhouse gas emissions and responding to climate change. The CAP sets the following goals, which align with the targets identified in California’s Global Warming Solutions Act of 2006 (AB32) and Executive Order S-3-05, signed by then Governor Schwarzenegger in 2005:

- Reduce greenhouse gas emissions 12.5 percent below 2005 levels by 2020
- Reduce greenhouse gas emissions 82.5 percent below 2005 levels by 2050

The development of Residential Energy Conservation Ordinances for both single-family and multiple-unit homes are recommended actions in the CAP. Table 1 in the CAP lists the RECO as a relatively high priority (11 and 12 out of 25 community-wide actions). Priorities were determined, as explained in Appendix D of the CAP, by considering factors such as the ease of implementation, the potential to reduce emissions, and the cost of implementation. The top ten actions include four actions related to financing energy efficiency and renewable energy

<sup>2</sup> The CAP is available at <http://www.hayward-ca.gov/CAP08/CAP08.shtm>

improvements and three actions related to the City's existing Green Building Ordinance. Efforts to establish property assessed clean energy (PACE) financing programs for residential properties have been significantly impacted by the position of Federal Housing Finance Agency (FHFA) and concerns with the debt associated with energy efficiency improvements being senior to the property mortgage. The remaining top ten actions are either currently being addressed by staff or will be considered by the Council Sustainability Committee in 2011.

The CAP estimated that implementation of a RECO for single-family homes could save 639 metric tons of carbon dioxide equivalent<sup>3</sup> (CO<sub>2</sub>e) annually by 2020 and 39,304 metric tons of CO<sub>2</sub>e per year by 2050. As indicated in Appendix B of the CAP, these estimated emission savings represent 0.4 percent of the City's overall 2020 target and 3.7 percent of the 2050 target. As provided in Appendix C of the CAP, the following assumptions were made when RECO energy savings were estimated:

**Phase 1 (2012 – 2017)** – The goal of the first phase is to reduce electricity use by 1% and reduce natural gas use by 2.5% on average in participating single-unit homes. The goal is to get **12.5%** of residential units that were constructed before the City's Green Building Ordinance took effect to participate in the program by the end of the phase.

**Phase 2 (2018 – 2030)** – The goal of the second phase of this program is to reduce electricity and natural gas use by 20% on average in participating single-unit homes. The goal is to get **45%** of residential units that were constructed before the City's Green Building Ordinance took effect to participate in the program by the end of the phase.

**Phase 3 (2031 – 2050)** – The goal of the third phase of this program is to reduce electricity use by 100% and reduce natural gas use by 75% on average in participating single-unit homes. The goal is to get **100%** of residential units that were constructed before the City's Green Building Ordinance took effect to participate in the program by the end of the phase.

*Previous Sustainability Committee Meetings* – Staff and consultants provided the Sustainability Committee with an introduction to RECO on February 3, 2010 and updates on research needed for the development of a RECO during the June 2, 2010 and September 1, 2010 meetings. A community meeting was held on August 11, 2010 and a special meeting of the Sustainability Committee was held on October 25, 2010 to discuss the components of a RECO. The RECO has also been discussed at the October, 2010, December, 2010, January, 2011, and February, 2011 meetings of the Climate Action Management Team (CAMT). Staff has incorporated input received during those meetings to draft *potential* ordinance provisions presented in this report. An example of such input resulted in developing an exemption for those households that use 15% less energy than the average Hayward home. All reports and presentations for these meetings are available on the City's RECO webpage<sup>4</sup>.

*Cost-Effectiveness of Measures*– An August, 2010 report prepared by Mike Gabel of Gabel Associates, LLC, titled *Research Report on a Hayward Residential Energy Conservation Ordinance (RECO)* and available on the City's RECO webpage, evaluated the cost-effectiveness

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<sup>3</sup> Carbon dioxide is not the only gas that contributes to the greenhouse effect. Each greenhouse gas causes a discrete amount of heating. For example, one ton of CH<sub>4</sub> causes the same amount of warming as 21 tons of CO<sub>2</sub> (1 ton of CH<sub>4</sub> = 21 tons CO<sub>2</sub>e). To simplify reporting, it is standard practice to report the carbon equivalent emissions as opposed to the actual emissions of each gas.

<sup>4</sup><http://www.hayward-ca.gov/forums/RECO/recoforum.shtm>

of a variety of potential energy efficiency improvements. According to the report, for the average Hayward home of 1,292 square feet, the average cost of compliance would be in the range of approximately \$2,500 to \$3,000. Using a computer model, Gabel provides estimates of the potential energy and greenhouse gas savings associated with various ECMs in the average Hayward home. Data from actual home retrofits will be available in the next year or two as homeowners participate in the City's incentive program (discussed below in the Economic Impact section). The report recommended a number of combinations of retrofit measures with the following attributes:

- an installed cost of \$3,000 or less;
- a payback period of approximately 30 years where the cost of installations would be recovered with energy cost savings (applying PG&E and/or Hayward incentives would result in shorter payback periods);
- greenhouse gas emission reduction in the range of 8 to 9 percent; and
- a Home Energy Rating System (HERS 2) score improvement of more than 10 percent.

The Gabel report also recommends including low-cost mandatory improvements (such as water-efficient toilets and faucets as well as weather stripping). Finally, in recognition of the potential that mandatory improvements might impose a financial burden on homeowners, the report recommended a limit on the cost of required retrofit measures.

*Proposed Triggers* – In an effort to advance the City's Climate Action Plan goals of achieving greenhouse gas emissions reductions by the years 2020 and 2050, staff developed a schedule of "Trigger" events, which would require a homeowner to make energy efficiency improvements.

Trigger events presented are:

- 1) Remodel Trigger - when the homeowner makes substantial remodel improvements to the home;
- 2) Transfer Trigger - the transfer of a home from one person to another
- 3) Date Certain Trigger - a fixed date by which compliance must be achieved.

*Remodel Trigger* – A remodel trigger was established based on a statistical analysis of remodel projects permitted by the City over the last nine years. During this time period, an average of approximately 100 remodel permits for work exceeding \$30,000 were issued annually by the City for the following types of projects:

- Room Additions
- Kitchen remodels
- Bathroom remodels
- Fire Damage Repair
- Water damage Repairs
- New Roof Structures or Re-Roofs (excluding overlays)

Based on the historical average of 100 permits per year, a RECO based on this trigger alone would achieve approximately 40 percent of the City's 2020 goal for emissions savings related to the RECO. The \$30,000 RECO threshold would exempt costs associated with repair of fire, and water damage or other eminent life/safety repairs, and re-roofs that are only overlays.

*Transfer Trigger* - Such trigger would occur upon the sale or exchange of a home. In response to concerns raised by the residential real estate community, who noted that the imposition of the costs and duties associated with a RECO could negatively affect home sales, impact financing, and decrease home values at the date of sale, the compliance date was extended beyond the point of sale. The RECO would require compliance within two years after the date of transfer which would allow either the seller or buyer to complete improvements required by the RECO.

Staff suggests that a "Sale or Exchange" be defined as:

The transfer of title of a single-family or duplex residential building pursuant to any agreement to sell or exchange, or any agreement that transfers ownership of such residential building after the effective date of the RECO, except that Sale or Exchange does not include situations in which a transfer of title occurs as a result of any of the following:

- a. A court order, including an order by a probate court in the administration of an estate;
- b. A foreclosure, or short sale;
- c. The exercise of eminent domain;
- d. The administration of a deceased person's estate, guardianship, conservatorship, or trust;
- e. A transfer, sale, or exchange of title between title co-holders;
- f. A transfer of title, without consideration, from one family member to another family member; or
- g. A decree of dissolution of marriage, a decree of legal separation, or a property settlement agreement incidental to such a decree.

*Date Certain Trigger* - To ensure that the RECO would result in a sufficient number of homes being upgraded to contribute to timely GHG reductions, staff has considered a series of deadlines by which all homes built prior to 1978 would have to comply with RECO. This trigger only applies to homes built prior to 1978, which is when California's first energy code (Title 24) became effective.

## **DISCUSSION**

Potential sections of the draft ordinance include:

- Standards for Compliance
- Applicability
- Energy Conservation Measures
- Maximum required expenditure
- Compliance documentation and deadlines
- Inspections
- Exemptions

Staff seeks feedback from the Committee on the following for possible inclusion in the draft RECO.

### **Standards for Compliance**

The ordinance will contain standards of compliance that will identify specific technical standards, etc., for those that choose compliance options that involve air sealing, duct sealing, insulation, etc. Below is some suggested language for that purpose.

- A. The Standards for Compliance include, but are not limited to, the following:
- i. The Building Performance Institute (BPI) Standard 104 Envelope Professional Standard shall be the 8/3/2010 or later edition. References to the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) rule 62-89 shall be replaced with the requirements of the most current edition of the ASHRAE 62.2 Residential Ventilation Standard.

*Concerns about indoor air quality have been raised at previous public meetings. Reference to this nationally-accepted ventilation standard is necessary to ensure that the minimum of 0.35 air changes per hour is maintained in homes where air sealing is performed.*

- ii. The California Energy Commission publication “*Measured Home Performance, A Guide to Best Practices for Home Energy Retrofits in California*” shall be the October, 2010 or later edition.
- iii. “Duct Sealing” shall mean the testing and reduction of air leakage in a ducted space conditioning system in accordance with the procedures specified in Section RA3, “Residential Field Verification and Diagnostic Test Protocols”, in the 2008 Reference Appendices associated with the 2008 Building Energy Efficiency Standards and published by the California Energy Commission.
- iv. The Title 24, Part 6 standards intended to be referenced in the ordinance are the 2008 Building Energy Efficiency Standards contained in the California Code of Regulations, Title 24, Part 6
- v. Group 2 Energy Conservation Measures Technical Specifications (under the 2008 Title 24, Part 6 Standards)
  - Roof U-factor shall be 0.043 or less
  - Exterior Wall U-factor shall be 0.102 or less
  - Raised Floor U-factor shall be 0.037 or less
  - Dual pane vertical fenestration shall have an NFRC-rating or CEC default U-factor of 0.58 or less.
- vi. Low Energy Use Exemption:

- Natural Gas CO<sub>2</sub>e Conversion Factor = 11.69 Lb./Therm [from the California Energy Commission]
- Electricity CO<sub>2</sub>e Conversion Factor = 0.69 Lb./KWh [from the California Energy Commission]
- Total CO<sub>2</sub>e emissions of Average Annual Hayward Single Family Home (2007 through 2009): (469.76 Therms x 11.69) + (5,872 KWh x 0.69) = 9,543 Lbs./Year
- Exemptions apply to Applicants whose homes release no more than 85% of the average CO<sub>2</sub>e of Hayward Single-Family Homes, or 0.85 x 9,543 = 8,112 Lbs./Year

### **Applicability**

- A. The following applies to all Single-Family or Duplex Residential buildings or projects, subject to any exemptions and compliance deadlines outlined in the RECO:
  - i. Renovations of existing Residential buildings (regardless of date the Residential building was originally constructed);
  - ii. Existing Residential buildings constructed before January 1, 1978, as determined by the records of the Alameda County Assessor; and
  - iii. Sale or Exchange of any existing Residential buildings, excluding foreclosure or short sales
  
- B. Except for section (A)(ii), this Article shall not apply to any Residential building or project for which a building permit application has been submitted prior to the effective date of the RECO, or a sale of exchange of property occurring prior to the effective date of the RECO.

### **Energy Conservation Measures (ECMs)**

*Note the RECO would require compliance with Group One and Group Two ECMs outlined below.*

- A. Group One ECMs: Completion and verification of all of the following Group One ECMs is required, and compliance shall be documented as to be outlined in the RECO:
  - i. Installation or replacement of the following fixtures and faucets with low-flow devices designed to achieve a maximum flow rate of no more than:
    - a. two gallons per minute for all shower fixtures,
    - b. two and two tenths gallons per minute for all kitchen sink faucets,
    - c. one and one half gallons per minute for all lavatory faucets,
    - d. four gallons per minute for all other faucets.

*The above flow rates are consistent with those listed in the City's Indoor Water Use Efficiency Ordinance.*

- ii. Insulation of exposed hot water pipes and cold water pipes within sixty inches of the water heater to at least a thermal resistance of R-3; and insulation of hot water pipes in pumped, recirculating domestic water heating systems to at least a thermal resistance value of R-3. Insulation shall not be required where hot water pipes are between floors, inside interior walls, or otherwise inaccessible without alteration.
- iii. Installation of weather stripping on all exterior doors.
- iv. Installation of dampers, doors or other devices to obstruct or block air-flow to reduce heat loss through chimneys.

*In previous reports to the Sustainability Committee, Group One ECMs were referred to as "Mandatory Measures," and included requirements for low-flow toilets and insulation on water heaters (which have been deleted). If Air Sealing is chosen from the list of Group Two ECMs (below), then items iii and iv (above) would be installed.*

B. Group Two ECMs: Applicants may select any one of the following Group Two ECM compliance options, and compliance with any one of the Group Two ECM compliance options shall be documented as to be outlined in the RECO:

- i. Option One. A Qualified Building Performance Institute (BPI) Professional shall perform Combustion Safety Testing, install a carbon monoxide (CO) monitor, and shall install and verify any two of the following:
  - a. Air Sealing;
  - b. Duct Sealing;
  - c. Attic Insulation rated R-38.

*While the RECO would require only two of the above ECMs, the PG&E Basic Upgrade program, which offers a \$1,000 rebate, requires all three to be completed. The PG&E Basic Upgrade program would also require all of the Group One ECMs as well as a couple more measures. Until its federal Energy Efficiency and Conservation Block Grant funds are exhausted within the next few months, the City will offer a rebate of \$750 in addition to the PG&E rebate. If it is not physically possible to complete all three ECMs under Option One (for homes that don't have attics, for example), then the \$750 rebate will be available from the City for completion of only two of the Option One ECMs. Air Sealing and Duct Sealing must be completed by a BPI Professional due to the need to do combustion safety testing and ensure the home maintains a minimum rate of air changes per hour (ACH).*

*Previously, the retrofit combinations presented by staff were:*

- *Air Sealing + R-30 Attic Insulation (from no insulation)*
- *Air Sealing + Duct Sealing*
- *Air Sealing + R-19 Raised Floor Insulation (from no insulation)*

- ii. Option Two. The Applicant shall install and have verified any two of the following:
  - a. A minimum of R-30 attic insulation, or attic insulation with an overall U-factor less than or equal to the Roof U-factor for R-30 between wood framing in the current Title 24, Part 6 standard; and a minimum of R-19 insulation in roofs without an attic or non-attic roof insulation with an overall U-factor less than or equal to the Roof U-factor for R-19 between wood framing in the current Title 24, Part 6 standard;
  - b. A minimum of R-13 exterior wall insulation, or exterior wall insulation with an overall U-factor equal to or less than the Wall U-factor for R-13 wall insulation between wood framing in the current Title 24, Part 6 standards; or if the insulation was installed with a permit prior to 1993, a minimum of R-11 exterior wall insulation shall meet this requirement;
  - c. A minimum of R-19 raised floor insulation, or raised insulation with an overall U-factor equal to or less than the Raised Floor U-factor for R-19 floor insulation over a crawl space and between wood framing in the current Title 24, Part 6 standards;
  - d. At least 90% of the total area of vertical fenestration (glazed) is dual pane with wood, vinyl or fiberglass frames or has an NFRC-rated U-factor equal to or less than the current Title 24, Part 6 Standards default U-factor for “Nonmetal Double Pane Operable” fenestration; and all skylights and greenhouse windows shall be dual pane of any frame type;
  - e. Central natural gas furnace with an Annual Fuel Utilization Efficiency (AFUE) of 90% or greater;
  - f. Duct Sealing;
  - g. Natural gas water heater with an Energy Factor (EF) of 0.80 or greater.

*Option Two was added at the direction of the Sustainability Committee on February 2, 2011 to allow previously completed work to qualify for RECO compliance. It is envisioned verification would be done by a City inspector via a requested inspection and nominal fee, or by a BPI qualified or similar professional, or by other special 3<sup>rd</sup> party inspectors approved by the City.*

- iii. Option Three. Completion of a Home Energy Rating System (HERS II) Performance audit and assessment and submission of the assessment report to the City, demonstrating either:
  - a. an improvement in the Residential building’s HERS II score by at least 10%, or
  - b. a HERS II score of 120 or less; or

- c. completion of an alternative performance audit, assessment and 10% score improvement, as approved by the Administrator.

*A HERS II score of 120 or less is equivalent to a home built to Title 24 standards in 2001 or later. Also, subsection c. allows alternative rating systems to be used and accepted, including those used by PG&E and others.*

### **Maximum required expenditure (cost caps)**

- A. Expenditures for the ECMs required are deemed to be reasonable, in order to achieve the purpose of the RECO.
- B. The maximum required expenditure to bring a single-family Residential building into compliance shall be:
  - i. For the Sale or Exchange of a Residential building: one percent of the final Sale or Exchange price;
  - ii. For existing Residential buildings that must comply by a date certain: one percent of the building's assessed value, as calculated by the County Assessor's Office;
  - iii. For Renovations of thirty thousand dollars or more: five percent of the Renovation cost or one percent of the building's assessed value, whichever is less, as calculated by the Alameda County Assessor's Office.

*Previous reports indicated the cost cap in the case of renovations would be ten percent of the project cost. Per the direction of the Sustainability Committee, this was reduced to five percent.*

### **Compliance Documentation and Deadlines**

- A. The Administrator, envisioned to be the City's Building Official or his/her designee, shall promulgate rules and regulations necessary or appropriate to achieve the compliance requirements of the RECO. The rules and regulations shall provide, at a minimum, for the incorporation of the requirements of the RECO into supporting documentation, such as a RECO Notice of Completion.
- B. In the case of Sale, Exchange or Renovation of a Residential Building:
  - i. Prior to the Sale or Exchange of any Residential building, or within 24 months after such Sale or Exchange:
    - a. The Applicant shall be responsible for documenting completion of the relevant ECMs that meet the standards of the RECO.
    - b. The Applicant shall file a RECO Notice of Completion with the City's Building Division.
    - c. The RECO Notice of Completion shall be on a form provided by the Administrator, and shall include evidence that the relevant ECMs have

been completed and meet the standards of the RECO, including, as applicable, verification by a third-party inspector approved by the Administrator, or a City inspector, or a Qualified BPI professional.

- d. A Qualified BPI certified professional must certify installation of all Group Two ECMs that include air sealing or duct sealing, and may certify all other Group Two ECMs.
  - e. If the RECO Certificate of Compliance has been completed prior to the sale of the Residential building, the seller or agent (if any) must provide the purchaser with a copy of the RECO Certificate of Compliance for that building.
  - f. Except as otherwise provided in this Article, the seller and/or licensed real estate agent or broker handling a Sale of a Residential building is responsible for disclosing non-compliance with this section.
- ii. Prior to the City's final approval of a Renovation project, as evidenced by the City's approval of a final inspection:
- a. The Applicant shall be responsible for documenting completion of the relevant ECMs that meet the standards of this Article.
  - b. The Applicant shall file a RECO Notice of Completion with the City's Building Division.
- iii. The RECO Notice of Completion shall be on a form provided by the Administrator and shall include evidence that the relevant ECMs have been completed and meet the standards of the RECO, including, as applicable, verification by a City inspector or a Qualified BPI professional.
- iv. A Qualified BPI Professional must certify installation of all Group Two ECMs that include air sealing or duct sealing; and may certify all other Group Two ECMs.
- v. After all applicable ECMs have been completed, as evidenced by a duly filed RECO Notice of Completion, and the completion of any required inspections, the Residential building will be considered in full compliance with the RECO and a RECO Certificate of Compliance shall be issued by the City.
- C. Compliance by a Date Certain. For other Residential buildings not covered under Section B, the following trigger is recommended. It should be noted, however, that staff is not aware of another RECO that contains a "Date Certain" trigger and the legality of such trigger has not been tested to date.
- D. The Homeowner shall be responsible for documenting completion of the relevant ECMs that meet the standards of this Article.

- i. The Homeowner or Qualified BPI Professional shall file a RECO Notice of Completion with the City's Building Division by the following compliance deadlines:
  - a. Residential buildings constructed before 1950: January 1, 2018;
  - b. Residential buildings constructed from 1950 through 1959: January 1, 2020;
  - c. Residential buildings constructed from 1960 through 1969: January 1, 2022;
  - d. Residential buildings constructed from 1970 through 1977: January 1, 2024.
- ii. The RECO Notice of Completion shall be on a form provided by the Administrator, and shall include evidence that the relevant ECMs have been completed and meet the standards of the RECO, including, as applicable, verification by a third-party inspector approved by the Administrator, or a City inspector, or a Qualified BPI professional.
- iii. A Qualified BPI Professional must certify installation of Group Two ECMs that include air sealing and duct sealing, and may certify all other Group Two ECMs.

After all applicable ECMs have been completed, as evidenced by a duly filed RECO Notice of Completion, and the completion of any required inspections, the Residential building is considered in full compliance with the RECO and a RECO Certificate of Compliance shall be issued by the City.

### **Inspections**

- A. When no building permit is required to complete the work associated with the selected ECMs, a Qualified BPI Professional or other third-party inspector approved by the Administrator may perform, on behalf of the City, any inspections required to verify compliance with any or all requirements of this Article.
- B. When a building permit is required to complete the work associated with the selected ECMs, a City building inspector shall perform any inspections required to verify compliance with any or all requirements of the RECO.
- C. The City shall charge a fee to cover the costs of inspections, with such fee to be set by resolution adopted by the City Council.
- D. Upon verification that the Residential building meets the requirements of the RECO, a RECO Certificate of Compliance shall be issued.

## Hardship, Infeasibility or Low Home Energy Use Exemptions

- A. Exemption. If an owner believes that the application of the RECO would be unreasonable, or believes that circumstances exist that make it a hardship or infeasible to meet the requirements of the RECO, the owner may request an exemption as set forth below. In applying for an exemption, the burden is on the owner to show hardship, infeasibility or low home energy use, as defined by this Section.
- i. Complete Exemption for Hardship or Infeasibility. Circumstances that constitute hardship or infeasibility and qualify an owner for a complete exemption from compliance with the RECO include, but are not limited to, the following:
    - a. The current owner's household income qualifies for federal Low Income Home Energy Assistance Program assistance, based on U.S. Department of Health and Human Services guidelines.
    - b. The current owner qualifies as disabled under federal Social Security Administration guidelines, receives disability benefits from the Social Security Administration's Disability Insurance Program or Supplemental Security Income Program, or provides other suitable evidence of disability on a form to be provided by the Administrator.
  - ii. Complete Exemption for Low Home Energy Use. Residential building owners currently residing at a property who are required to comply with the RECO by a date certain, may apply for a complete exemption from the requirements of the RECO if the Residential building owner demonstrates that the Residential building's annual energy use is substantially below the average home energy use in the City as described in the Standards for Compliance provisions. This exemption shall expire upon transfer or sale or renovation of the property.

*The Low Home Energy Use exemption was added per direction from the Sustainability Committee on February 2, 2011.*

- iii. Partial Exemption for Hardship or Infeasibility. Circumstances that constitute hardship or infeasibility and qualify an owner for a partial exemption from compliance with the RECO include, but are not limited to, the following:
  - a. The owner demonstrates that no two Group Two ECMs can be completed for less than the maximum required expenditure as outlined in Section 10-25.170. In this case, completion of applicable Group One ECMs and Air Sealing only shall constitute compliance with the RECO.
  - b. The owner demonstrates that implementation of the required ECMs is impossible. In this case, the Applicant or Qualified BPI Professional may pose an alternate course of action to be implemented at the discretion of the Administrator. Factors to be considered include the lack of an attic or crawl space.

- c. The owner demonstrates that there is a lack of Qualified BPI Professionals or other similarly qualified individuals available to complete the Group Two ECMs required by the RECO.
- d. The owner demonstrates that there is conflict with the compatibility of the RECO requirements and the City's historic preservation requirements, the California Building Standards Code (CAL Green), and/or the City's Zoning Ordinance.

B. Application.

- i. The owner may apply for a full or partial exemption, and shall indicate the maximum number of Group One and Group Two ECMs, if any, he or she believes are feasible for the Covered Project, and the circumstances that he or she believes qualify the Applicant for an exemption from the RECO.
- ii. Residential building owners applying for a low energy use exemption, as described in Subsection A(ii) above, must submit 24 consecutive months of utility energy use data in order to meet the Standards for Compliance provisions of the RECO.

C. Granting of Exemption. If the Administrator determines that an exemption from the requirements of the RECO is warranted based on the information provided, the Administrator shall determine the maximum number of ECMs reasonably achievable for the Residential building, if any. The decision of the Administrator shall be provided to the Applicant in writing. If an exemption is granted, the Applicant shall be required to comply with the RECO in all other respects and shall be required to achieve the number of ECMs determined to be achievable by the Administrator.

D. Denial of Exemption. If the Administrator determines that it is reasonably possible for the Applicant to fully meet the requirements of the RECO, the request shall be denied and the Administrator shall so notify the Applicant in writing. The project and compliance documentation shall be modified in accordance with the Administrator's determination to comply with the RECO prior to further review of any pending RECO Certificate of Compliance.

*Staff envisions establishing an appeal process for decisions of the Administrator that would involve a hearing before the City's Hearing Officer, which is a similar process used for the City's Rental Housing and Community Preservation programs.*

## **Other Items**

*Penalties* – Staff is exploring the possibility of linking enforcement of the RECO to the City's existing *Administrative Citation* or developing enforcement provisions similar to those contained in the City's *Community Preservation and Improvement* ordinance, which could result in fines being assessed and/or recording a notice of noncompliance against the property so that

compliance is accomplished prior to sale of a property. Staff intends to develop provisions for the May 31 City Council work session that emphasize and seek/encourage compliance.

*Effectiveness of RECO* – To determine how effective the RECO will be at reducing greenhouse gas emissions related to the Climate Action Plan emission reduction targets, the following assumptions have been made regarding the number of homes that might be eligible for exemptions from the date certain trigger. Remodels would result in a very small number of additional homes retrofitted as a result of the RECO. Sales and transfers would affect homes built in or after 1978, but most will likely already comply with Group 2 ECMs.

*Summary of Assumptions*

Low-Income/Disability Exemption Rate:	<b>20.0%</b>
Low Energy Use Exemption Rate:	<b>20.0%</b>
% of Homes Anticipated to Meet RECO*:	<b>60.0%</b>
Number of Pre-1978 Single-Family and Duplex Homes	<b>19,503</b>
Date Certain Homes to Meet RECO:	<b>11,702</b>

\*assumes 90% of homes not eligible for exemptions subject to the Date Certain trigger would comply

Assuming a total of 40 percent of homes would qualify for exemptions under the low-income or disability provisions, then 60 percent, or 11,702, of the pre-1978 homes would have to comply with the RECO. As shown in the following table, assuming the average home complying with the RECO saves 905 pounds per year (or 371.96 metric tons) of CO<sub>2</sub>e, then by 2024, which is the latest Date Certain compliance deadline, a total of 4,681 metric tons of CO<sub>2</sub>e would be saved annually, which is 7.3 times the Climate Action Plan’s 2020 target, but is only approximately 12 percent toward the 2050 target.

*Possible Total Greenhouse Gas Savings as a Result of RECO for Pre-1978 Homes*

Year Structure Built	Approximate Number of Single Family/Duplex Homes in Hayward	Recommended Compliance Deadlines	Homes in Category to Meet RECO	Average CO <sub>2</sub> e Reduction (Metric Tons per Year)
1949 and Earlier	3,074	2018	1,844	757
1950 - 1959	7,483	2020	4,490	1,842
1960 - 1969	4,700	2022	2,820	1,157
1970 - 1977	4,246	2024	2,548	1,045
Total Subject to RECO Pre-1978 Homes	19,503		11,702	4,801
Total Homes in Hayward	27,805			

## ECONOMIC IMPACT

RECO compliance would require improvements that, without incentives, may take 30 to 35 years for the energy cost savings to exceed the initial investment. As mentioned previously in this report, an August, 2010 report prepared by Mike Gabel of Gabel Associates, LLC, evaluated the cost-effectiveness of a variety of potential energy efficiency improvements. When a draft RECO is presented to the City Council on May 31, staff intends to have a more complete cost estimate for each of the RECO compliance options.

*Incentives* – On January 25, 2011, the City Council adopted a resolution obligating approximately \$750,000 of the City’s Energy Efficiency and Conservation Block Grant (EECBG) funds for three energy efficiency incentive programs. One of the incentive programs is targeted for single-family homes and will enable the collection of data to confirm the cost-effectiveness of the measures currently being considered in the draft RECO. The Residential Energy Users Incentive Program will provide three types of rebates:

- Energy efficiency improvements installed for Group Two, Option One - \$750;
- Energy efficiency improvements installed Group Two, Option Three - \$1,500 for a 15 percent reduction in energy use and \$2,000 for a 20 percent reduction in energy use;
- Comprehensive home energy audit - \$250

The rebate for the audit will only be available to homeowners who follow through with installation of efficiency improvements either through the Group Two - Option One or the Group Two - Option Three energy conservation measures. Improvements installed per Option One may or may not have an audit conducted on the home, while Option Three requires an audit to determine which improvements are most appropriate for the home.

The \$750 rebate would be eligible to homeowners who participate in PG&E’s Basic Upgrade option or who install any of the combinations of improvements currently being considered for RECO compliance. To receive a \$1,000 rebate through PG&E’s Basic Upgrade option, all of the following improvements must be made to a home:

- Attic sealing
- Attic insulation
- Duct sealing
- Hot water pipe insulation
- Low-flow shower heads
- Smoke alarm/carbon monoxide detector
- Combustion safety testing

Through the Advanced Upgrade option, which is a performance-based program, PG&E currently offers a \$1,500 incentive for a 15 percent reduction<sup>5</sup> from baseline energy use, and an additional

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<sup>5</sup> When this program was presented to the Sustainability Committee on January 5, 2011, PG&E’s program required a minimum of a20 percent energy reduction. On January 10, 2011, PG&E announced that the program now has a minimum of 15 percent.

\$500 for each additional 5 percent of energy reduction up to \$4,000 for a 40 percent reduction. As noted above, one of the compliance options recommended for the RECO would require a 10 percent reduction from baseline energy use. The City's program would provide an additional \$1,500 incentive for a 15 percent reduction or \$2,000 for 20 percent (or more) reduction.

## **FISCAL IMPACT**

Administration of the RECO will require significant staff resources. This will include setting up a database for tracking compliance of homes subject to the RECO, reviewing Notices of Completion, issuing Certificates of Compliance, tracking real estate transactions, notifying homeowners of RECO requirements, enforcement actions for non-compliance, and fielding questions from owners, contractors, and realtors. As the ordinance is developed and refined, staff will prepare an estimate of the staff time necessary to administer the RECO. When the draft RECO is presented to the City Council on May 31, staff will have an estimate of staff resources necessary to administer the recommended RECO.

## **PUBLIC CONTACT**

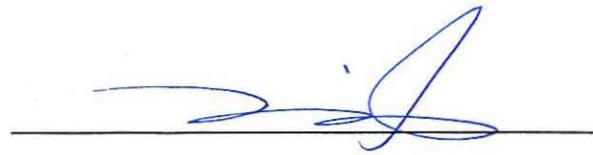
Since February 2010, the RECO has been discussed at twelve public meetings. At the February 2, 2011, Sustainability Committee meeting, the Committee directed staff to find means of getting the word out about the RECO. Starting the week of February 21, 2011, an insert will be delivered with each City of Hayward water bill. Due to the billing cycle, it will take approximately two months for all Hayward water accounts to receive a copy of the notice. In addition, since the February 2 Sustainability Committee meeting, staff has and will attend all Neighborhood Partnership meetings prior to the scheduled June 9 Planning Commission work session to summarize the RECO and to announce this meeting and upcoming work sessions. Also, staff has created a link from the City's homepage directly to the RECO webpage. A newspaper article about the RECO appeared in *The Daily Review* newspaper on February 11, 2011 (see Attachment I). Prior to the May 31 City Council work session, staff will place notices about the RECO on the KHRT cable channel and on the electronic signs at Southland Mall and near the Hayward/San Mateo bridge.

On January 10, 2011, staff received a letter from David Stark of the Bay East Association of Realtors with questions and comments regarding the August, 2010 Gabel Associates report referenced in this report. Mr. Stark's letter (Attachment II) questions several of the methods and assumptions upon which the costs and effectiveness of potential RECO measures were based. In a letter dated February 17, 2011 (Attachment III), Mike Gabel responds to Mr. Stark's letter point by point. In summary, the assumptions and information presented in Mr. Gabel's report relies on actual data from Gabel and Associates as well as from local contractors. Finally, on February 2, 2001, staff received an e-mail from Kenneth Paulson (Attachment IV), registering opposition to mandatory energy conservation measures.

*Prepared by:* Erik J. Pearson, AICP, Senior Planner

*Recommended by:* David Rizk, AICP, Development Services Director

Approved by:



Fran David, City Manager

Attachments:

- Attachment I Daily Review dated February 11, 2011
- Attachment II Letter from David Stark dated January 10, 2011
- Attachment III Letter from Mike Gabel dated February 17, 2011
- Attachment IV E-mail from Kenneth Paulson dated February 2, 2011



## Hayward considering energy-saving requirements for homeowners

By Eric Kurhi  
Oakland Tribune

Posted: 02/11/2011 12:00:00 AM PST

Updated: 02/11/2011 06:49:45 PM PST

HAYWARD -- The latest plan to make the city greener could come at a cost of thousands of dollars for Hayward homeowners and those looking to buy a house in the city, something real estate agents fear will be "the final nail in the coffin" of a floundering market.

The Residential Energy Conservation Ordinance would require homeowners to make their domiciles more energy-efficient. Those fixes include some of the cheap and easy variety -- adding weatherstripping, insulating water heaters and pipes -- as well as more intensive projects, such as having air leaks professionally analyzed and sealed, and adding attic and floor insulation.

City staff members are working up a draft ordinance and considering different triggers that would require compliance. One would require the work be done within two years of the property being sold. Another trigger would be when the owner does extensive remodeling. A third would set a compliance deadline for homes built before 1978, when statewide efficiency standards for new construction were adopted.

City planner Erik Pearson said the average cost would be less than \$3,000. Spending caps are being considered: 1 percent of the sale price or

assessed value, or 10 percent of the cost of a remodel. Pearson recommended exemptions for low-income or disabled residents.

Pearson added that an energy audit on newer homes being sold "may show that the home is already relatively efficient and no improvements would

be required."

Real estate agents were many of the two dozen people who turned up at the city's Sustainability Committee meeting on the subject this month. They said the ordinance would be a huge mistake, some calling it "suicidal" for home sales in Hayward.

"They don't realize how distressed Hayward is," said Judy Rose, who has sold real estate for 34 years. "It's the most difficult city to sell in right now."

According to real estate analyst David Stark of the Bay East Association of Realtors, 60 percent of transactions in Hayward are distressed -- short sales or foreclosures.

"Homeowners don't have any money to do the retrofitting, and buyers are strapped just trying to get into a house," Rose said. "People are struggling, homeowners are upside down. "... This would be the final nail in the coffin for the Hayward market."

Stark said that in addition to being a complicating factor and a deterrent to people buying in Hayward, there hasn't been enough analysis to make the case that the upgrades would be beneficial in the city's mild climate.

During an earlier meeting, a city consultant said energy use for heating and cooling is far less significant in Hayward than in areas with greater fluctuations in temperature, meaning the retrofits would take longer to pay for themselves.

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Without taking incentives into account, it would take 30 to 35 years to recoup the initial investment, a staff report states.

The incentives are crucial to the program, Pearson said, and money offered by the city and PG&E go a long way toward making the improvements. PG&E offers \$1,000 for people participating in a basic upgrade program, while the city would pay for \$750 of ordinance-related measures. With those rebates, sealing and insulation work would cost between \$1,690 and \$2,266 on average, according to a staff report.

While Stark and Rose said the city would better serve residents with an education campaign to let them know about such incentives, resident Ernest Pacheco told officials he applauds the ordinance and urged its passage as soon as possible.

"There will never be a time when real estate brokers say, 'Let's put something out there that will hurt our business,' " he said. "You are going to (anger) people sometime or other."

Sustainability Committee member and Planning Commissioner Al Mendall said the concerns about the economy are valid.

"Maybe we can delay it until the housing market recovers," he said. "There may never be a perfect time, but maybe some sort of trigger, such as having it take effect when distressed sales fall below 20 percent for two straight quarters. It would be a good addition, it might delay (implementation), but it addresses the concern of timing."

Committee member and Councilman Bill Quirk said they need to be "politically realistic" about the ordinance.

"We have to do things that make it easy for people to

comply," he said. "If everyone comes down to City Hall to speak against it, we're not going to do this."

San Francisco and Berkeley passed similar ordinances in the early 1980s.

The draft ordinance is slated to return to the Sustainability Committee on March 2, with a City Council work session on the item scheduled for May 31.

For details, go to [www.hayward-ca.gov](http://www.hayward-ca.gov) and click on the RECO link under "News and Announcements."

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January 10, 2011

Hayward Climate Action Management Team  
City of Hayward  
777 B Street  
Hayward, CA 94541

Dear CAMT Members:

The *Research Report on a Hayward Residential Energy Conservation Ordinance*, prepared by Gabel Associates, LLC, is an important document given its potential role as a foundation for public policy that could impact thousands of home buyers and current home owners in Hayward. The report was presented as an attachment to the September 1, 2010 report to the Hayward Sustainability Committee and has been referenced several times during subsequent meetings.

The report claims to answer four “key questions that will inform the development” of a Residential Energy Conservation Ordinance (RECO). The following is a brief analysis of each question presented in the Executive Summary of the report (page 2):

*What retrofit measures make sense to consider in Hayward and what do they cost?* The report lacks specific information about the City of Hayward, its population, economic conditions and the status of the Hayward residential real estate market. The cost estimates are based on over-simplified modeling techniques that ignore the diversity of Hayward’s housing stock, subjective anecdotal information from retrofit contractors and an incomplete analysis of the implementation costs to the City of Hayward.

*How much energy do these measures save annually, and are they cost-effective?* The report cannot objectively answer this question because it assumes a high rate of compliance with mandatory retrofit measures. It fails to define “cost effective” in terms of potential Hayward home buyers or current Hayward home owners.

*What is the amount of greenhouse gas reduction that results from specific retrofit measures for an individual dwelling?* The report addresses this question using computer-based modeling techniques for an “average” home in Hayward. Given the diversity of Hayward’s housing stock the information about energy savings for the “average” home from mandatory retrofits is incomplete and cannot be used to responsibly answer this question. The report does not provide specific examples of energy savings from retrofit measures performed on homes located in Hayward.

*How do the potential criteria that might trigger an ordinance. . . affect how the City is able to meet its Climate Action Plan goals?* This question is not answered because the analysis ignores the current status of the residential real estate market and the problems associated with implementation and compliance with mandatory retrofit measures. These problems were presented in writing to the City of Hayward in January 2010 and at several public meetings held prior to the preparation of this report. None of these problems were directly addressed in the report.

The report fails to provide adequate objective information specific to the City of Hayward about the effectiveness of a RECO in reducing green house gas (GHG) emissions for the following reasons:

- The report ignores economic conditions specific to the City of Hayward.
- The report relies heavily on anecdotal information and lacks quantitative evidence for its conclusions.
- By ignoring the proliferation of “short-sale” and foreclosed properties, the report over-estimates the effectiveness of individual RECO triggers.
- The report fails to address the economic feasibility of imposing mandatory retrofits on Hayward home owners and home buyers.
- The report recommends exemptions and exceptions to mandatory retrofit requirements yet does not quantify the impact they will have on the ultimate effectiveness of these requirements to reduce GHG emissions.
- The report fails to address the health risks related to sealing air gaps in homes and the legal liabilities that the City of Hayward and other parties to a real estate transaction may face by mandating these measures.

The following analysis supports the preceding conclusions:

### **Executive Summary - Costs and Cost-Effectiveness: Page 2**

The report claims that mandated retrofits are “cost-effective.” This assumption is questionable for a variety of reasons. In the scope of this report the “cost-effectiveness” of the retrofits is based on the amount of time it would take for savings based on assumed lower energy usage to equal the cost of the upgrades. This methodology assumes that all Hayward home owners will be able to afford the “up front” cost of the retrofits. The report does not address current economic conditions in Hayward related to household income, incidence of poverty among home owners or even an estimate of the number of Hayward home owners with mortgage balances greater than the current value of their home. This final issue has a significant impact on the fundamental economics of mandatory retrofit requirements.

The report assumes that home buyers will be able to fold the cost of the retrofits into their purchase financing. The Hayward residential real estate market is considered by many lenders to be a declining market. Given these conditions it is unlikely a loan underwriter would approve financing the costs of mandated retrofits.

The report claims retrofits will increase resale value which will reduce the “payback” period. However, it fails to present any evidence or examples that show the proposed energy retrofits will increase the resale value of homes in Hayward.

#### **Executive Summary - Mandatory Features: Page 4**

The report references “relatively inexpensive” and “cost-effective” retrofit measures mandated by other “Bay Area” communities. It does not identify those communities or demonstrate any demographic similarities with the City of Hayward. The report assumes the East Bay Municipal Utilities District will provide low-flow toilets, showerheads and faucet aerators at no cost. It does not address the installation costs for the low-flow toilets by a plumbing professional. It fails to present any evidence that the mandatory installation of low-flow plumbing fixtures will reduce GHG emissions.

#### **Executive Summary - Cost Cap: Page 5**

The cost-cap proposal assumes the cost of improving energy efficiency will be the same for all homes in Hayward. It ignores the diversity of the Hayward housing stock vis a vis age, construction type, condition and any retrofits already completed.

#### **Introduction: Page 6**

The energy model used as a basis for much of the analysis was “calibrated to typical Hayward residential building conditions.” This is a flawed approach and does not provide a strong foundation for public policy that will impact all Hayward home owners and home buyers. The Hayward housing stock is diverse and an oversimplified modeling technique could overestimate the benefits of mandatory retrofits while underestimating the cost, complexity and other impacts on home buyers and home owners.

#### **Energy Efficiency Measures: Page 7**

Air sealing is listed among the mandatory energy retrofit measures. However, the report did not address the potential negative health impacts of that measure; disclosure of those impacts to potential home buyers or the legal liability the City of Hayward (and other parties involved in a real estate transaction) may face by requiring that measure.

#### **Attic Insulation: Page 11**

The report refers to current Title 24 energy standards that require attic insulation which meet the R-30 standards. However, the report does not quantify how many homes in Hayward (either newly-constructed or rehabilitated) that have already met this requirement.

#### **Sealing Existing Duct Systems: Page 12**

The report refers to “interviews” with home performance contractors one of whom claims there was an average 37.5% duct leakage in 200 existing homes tested. However, there is no evidence that any of these homes were either located in Hayward or reflect the diversity of the Hayward housing stock. This is an example of anecdotal information not supported by any objective quantitative analysis.

## **Costs of Measures, Energy Savings and Cost-Effectiveness: Page 21**

The report alludes to various rebate programs but provides no information about the total funds available or the long-term feasibility of the programs. The report claims the installation costs of energy reduction measures could be offset by the U.S. Home Star Program, then admits the enabling legislation “has not yet passed or been funded by the Congress.” Finally, it fails to assess the ability of home owners to afford the up-front installation costs.

## **Greenhouse Gas Reductions: Page 24**

The GHG reduction calculations in the report were done “assuming all single family and duplex units meet the proposed RECO requirements.” This assumption ignores the reality of the Hayward residential real estate market and the documented fact that more than half of the homes listed for sale and sold in Hayward during the preparation of this report were “troubled properties” - either sold for less than the outstanding balance on their mortgage or “bank-owned” foreclosed properties which are typically sold in an “as-is” condition. The report provides no analysis regarding whether the banks that own foreclosed properties would comply with RECO requirements and the impact that these types of properties would have on the effectiveness of the mandatory retrofit requirements in reducing GHG emissions.

It further assumes all home owners subject to these requirements would be able to afford the costs of the retrofit-related work. It provides no analysis about how mandatory retrofit work would impact the City of Hayward’s stated goal to increase the percentage of residents who are home owners. Finally, it fails to address the impact these requirements would have on private property rights.

## **Findings and Recommendations: Page 26**

The report provides no evidence that “retrofit measures add real and substantial value.” It also claims “air sealing improves. . . indoor air quality” which is contradictory to scientific evidence presented at public hearings on the proposed RECO that showed a link between air sealing and health problems. It presents no quantitative evidence to support that assertion that “air sealing increases the value of the home.”

## **Possible RECO Triggers - Remodels: Page 26**

The report states “the cost of RECO compliance is considered a reasonable incremental cost” but provides no definition of “reasonable” or any other quantitative analysis related to the impact that mandatory requirements would have on the basic economic feasibility of home remodeling projects. It also provides no analysis of the impact the requirements would have on private property rights. For example, a property owner may need to adjust the scope of work in a remodel project to accommodate the RECO requirement. The resulting project may not meet the property owner’s expectations. The report fails to assess the impact such requirements could have on the ability of a property owner to complete a remodeling project that addresses fundamental health and safety issues.

## Possible RECO Triggers – Point of Sale: Page 27

The report refers to point-of-sale requirements in place in San Francisco and Berkeley. These real estate markets share little in common with the Hayward market. Sales prices and demand for real estate are much higher in both communities. Subsequently, home buyers and sellers may be willing to comply with expensive mandatory retrofit requirements. The report provides no evidence that the RECOs in either community have reduced GHG emissions.

The report states “the City can track and enforce the RECO provisions” but provides no analysis of the costs related to RECO implementation or the ability of City staff to track every residential real estate transaction. It fails to address how the ability (or lack thereof) of the City to implement RECO requirements would have on the claimed GHG emissions reductions from a RECO. It fails to address how inspection fees and fines associated with RECO implementation would impact home buyers and home owners in Hayward in terms of the basic economics of home buying and home ownership.

The report assumes a net compliance rate of 90%. It provides no analysis of the impact “short sale” and foreclosed properties (which account for the majority of residential real estate transactions in Hayward) would have on this compliance rate.

The report claims there is no “statistical data” that shows the Berkeley RECO has had “any effect on home sales as compared with home sales in surrounding communities.” It fails to identify which communities were included in this comparison. Regardless, the demand for residential real estate in Berkeley is significantly higher than in other Alameda and Contra Costa County communities. It ignores the fundamental difference between these communities and assumes that amenities and demand is the same throughout the region. It also ignores the factors that drive home sales (including public safety and school district performance) which could mitigate the problems RECO compliance bring to real estate transactions in other communities characterized by attractive real estate markets.

The purpose of this report is to determine if RECO is best for Hayward – not if it is best for Berkeley. Many real estate professionals with extensive experience conducting transactions in Hayward provided examples of how the point-of-sale requirements would be problematic including:

1. the impact of expensive retrofit work on declining home values;
2. the impact of disclosing mandatory retrofit requirements to potential home buyers;
3. the impact of mandatory retrofit requirements on home purchase financing;
4. problems associated with using real estate professionals to implement the RECO provisions;
5. the inability of many home owners and lower-income first-time buyers to afford retrofit work;  
and
6. RECO requirements compounding the difficulty of selling Hayward homes.

None of these concerns, each specific to the residential real estate market in Hayward, were addressed in the report.

## **Possible RECO Triggers – Date Certain: Page 27**

The report claims a date-certain trigger has an “advantage” over other triggers if it can be “successfully implemented and enforced.” It ignores many factors that could impact successful implementation including the ability of home owners to afford to pay for retrofit work and the impact that mandatory requirements will have on private property rights.

The date-certain trigger receives additional support on page 28 but all of the reasons presented for using this trigger are based on speculation. There are no examples of the successful implementation of date-certain triggers in other communities.

## **Conclusions and Recommendations: Page 29**

The report claims the three prescriptive RECO measures will “significantly reduce energy use and are cost-effective.” This conclusion is based on incomplete analysis, generalizations about the Hayward housing stock and a disregard for economic conditions and private property rights.

## **Recommended Retrofit Measures: Page 29**

The report suggests the mandatory installation of low-flow plumbing fixtures but presents no link between these items and the reduction of GHG emissions. The compliance options ignore any energy efficiency work already completed by a homeowner that may make it difficult or impossible to meet the “performance approach” requirement of increasing the HERS score by 10%.

## **Cost Cap: Page 30**

There is no analysis about retrofit work performed on homes in Hayward to support the cost caps presented in the report. The cap amounts appear to be based only on anecdotal information from a limited number of retrofit contractors. There are no examples of costs to perform work on Hayward homes or the ability of Hayward home owners to afford this work – regardless of the amount of the cost caps.

## **Triggers: Page 30**

The report acknowledges “strong opposition” by the real estate community yet fails to directly address any of the issues raised in written communication to the City of Hayward or during public meetings prior to the preparation of the report. It states point-of-sale has “significant advantages” but provides no description of these “advantages.” It claims the “grace period” to comply with RECO requirements “may take pressure off buyers and real estate agents negotiating a sale.” This is speculation unsupported by any analysis. It fails to address the concerns raised earlier including the impact that disclosing the RECO requirements to a potential homebuyer may have on the marketability of a home.

## **Appendix A. Analytic Method: Page 30**

The modeling techniques that form a key foundation for the report are based on “a reasonably accurate profile of what existing conditions and energy-related features and efficiencies comprise an *average* Hayward home.” (Emphasis added) This simplified approach – basing the performance

outcomes on a “1,292 square foot existing 1-story house” (sic) overlooks entire Hayward neighborhoods that do not match this description. Given that public policy impacting thousands of home owners may be based on this report, it is impossible to predict the outcome of the mandatory measures using a methodology that does not account for the diversity of the Hayward housing stock or the basic feasibility of performing the mandatory retrofits.

The report refers to home energy cost data from “retrofits of smaller homes typically of Hayward” yet provides no information about these homes including their climate zone location.

These oversights call into question the accuracy of the modeling technique and its value as a foundation for public policy.

#### **Appendix B. Detailed Cost Data: Page 36**

Cost Data Set A: The report bases its retrofit cost estimates on data collected from “three home performance contractors.” There is no information provided about these contractors, their experience in general and their specific experience performing retrofit work on homes located in Hayward.

The “adjusted cost data” presented in Table A-1 excludes costs associated with any interior repair work that may be needed as a result of adding insulation via holes in the exterior of a home to be retrofitted. These costs could be significant and should have been included in the modeling process.

Cost Data Set B: The report acknowledges the examples provided by “five Northern California home performance contractors” may not be relevant to work performed in Hayward. This calls into question the value of the data presented in Data Set “B.”

The conclusions and recommendations presented in the *Research Report on a Hayward Residential Energy Conservation Ordinance* should be considered only as one subjective perspective on the feasibility of a RECO. Additional analysis that accurately and objectively reflects the implications of adopting a RECO in the City of Hayward is needed.

Sincerely,

David C. Stark, Public Affairs Director  
Bay East Association of REALTORS®

CC:

Erik J. Pearson, AICP, Senior Planner, City of Hayward

Attachment:

Research Report on a Hayward Residential Energy Conservation Ordinance (RECO)



February 17, 2011

**Re: January 10, 2011 Letter from David Stark of the Bay East Association of Realtors Discussing the 8/30/10 Research Report on a Hayward RECO**

Mr. Stark's letter states that, "*The report claims to answer four key questions that will inform the development of a RECO.*" What the Executive Summary actually says is that "*The purpose of this report is to answer key questions ..*", and attempts to present analysis and data in the context of the issues raised by the City Council Sustainability Committee and Staff on June 2, 2010; and within the three month period between June 2<sup>nd</sup> and the release date of the Report. The following remarks are referenced to the headings in David Stark's letter (*in blue italics*).

*What Retrofit Measures make sense to consider in Hayward?*

The emphasis in the report is the understanding of the current building science of recommended retrofit measures and local climatic factors as summarized by the California Home Energy Retrofit Coordinating Committee. See:

- <http://cahercc.blogspot.com/>
- [http://www.builditgreen.org/attachments/files/817/CA%20HERCC%20Recommended%20Tech%20Specs\\_doc.pdf](http://www.builditgreen.org/attachments/files/817/CA%20HERCC%20Recommended%20Tech%20Specs_doc.pdf)

The population and number of single family/duplex homes is known and stated, as is the average size according to the real estate web site Zillow.com, which also lists the current median sale price to be approximately \$275,000.

The cost estimates are unrelated to modeling techniques, but have to do more with specific descriptions of the proposed retrofits that were provided as part of spreadsheets for contractors to complete. Since cost estimates were derived from a compilation of seven different contractors, we would not characterize the cost data as "anecdotal". Cost Data Set A was obtained from two contractors who have performed retrofit work on over 1,000 homes in the Bay Area in the past three years. Not stated in the report, is that other home performance contractors have since confirmed that the cost estimates are "about right" based on their current knowledge.

Implementation costs are now being evaluated, but were not the subject of the 8/30/10 report.

*How much energy do these measures save annually, and are they cost-effective?*

The reference to how much energy is saved annually refers to the measures that make sense for a typical Hayward home, and whether those measures will pay back in utility bill savings during the useful life of those measures. An additional focus of the study is comparing the relative impacts of different RECO triggers on overall CO<sub>2</sub>e reductions. At the time that the study was released, no decisions had been yet reached as to what parts of the single family housing stock would be included, and what portion of Hayward homeowners might be eligible for RECO exemptions based on family income and/or disabilities and/or other contingencies.

*How much energy do these measures save annually? What is the amount of greenhouse gas reduction that results from specific retrofit measures for an individual dwelling?*

Calculating the value of the annual energy and greenhouse gas savings for an average home is a useful in two ways: (1) it provides a metric that is representative of typical existing house conditions which are calibrated with three years of actual Hayward utility data; and, (2) as a result, it can be used to evaluate the larger impacts of a citywide ordinance. Trying to evaluate the diversity in occupant behavior in how often and how much homeowners heat their homes, as well as the diversity in size, type and age of homes is beyond the scope of this study. Given the fact that primarily space heating retrofit measures are the subject of the study, the computer model is a good indicator of the typical percent (%) change and ranking of measures with respect to space heating energy use in homes of a broader range of sizes (e.g., 900 sq. ft. to 2,000 sf. ft.). This analytic approach was taken to obtain useful data for the effectiveness of both individual home retrofit measures and the larger citywide impacts of RECO criteria.

*How do the potential criteria that might trigger an ordinance affect how the City is able to meet its Climate Action Plan goals?*

The question is in fact answered, and answered within the framework in which it is asked as shown in Table 2 which addresses the issue of how an ordinance might achieve citywide CO<sub>2</sub>e reductions goals with different RECO triggers. This section in the report is not intended to explore and solve all implementation and compliance problems.

- *The report ignores economic conditions specific to the City of Hayward*

The report includes average home price in the analysis, a cap on the cost of RECO compliance, and recommends full exemptions for low-income families and homeowners with disabilities. These demonstrate an awareness of economic conditions of homeowners in Hayward.

- *The report relies heavily on anecdotal information and lacks quantitative evidence for its conclusions*

We disagree with this assertion based on the responses and information included below.

- *By ignoring the proliferation of “short sale” and foreclosed properties, the report over-estimates the effectiveness of individual RECO triggers*

It is not clear, within this statement, how short sale and foreclosed properties are purported to impact the number of homes affected by individual RECO triggers. The assumptions in the report on the number of homes affected by RECO are listed, with the main purpose of Table 5 to illustrate the overall comparative impacts of different triggers. A more precise calculation can be performed once it is known what specific exemptions will be included in the RECO, and data on the impact of each of those exemptions.

- *The report fails to address the economic feasibility of imposing mandatory retrofits of Hayward home owners and home buyers*

It is not clear, from this assertion, what criteria would be applied to determine economic feasibility, and what research and analysis would be conducted to support the statement.

- *The report recommends exemptions and exceptions to mandatory retrofit requirements yet does not quantify the impact they will have on the ultimate effectiveness of these requirements to reduce GHG emissions*

As explained above, the impacts of specific exemptions and exceptions to the RECO requirements can be included once those are clarified and quantified. The working assumptions made in Table 5 are listed.

- *The report fails to address the health risks related to sealing air gaps in homes and the legal liabilities that the City of Hayward and other parties to a real estate transaction may face by mandating these measures*

Subsequent to this report, other research on indoor air quality has established the need for every home to undergo installation protocols by a qualified professional including:

- (a) Testing of the natural ventilation air change rate (ACH) by a Building Performance Institute (BPI) trained and certified contractor to ensure that the ASHRAE 62.2 ventilation standard of at least 0.35 ACH is maintained;
- (b) Combustion safety testing, as an integral part of air sealing, when combustion appliances are present.

## Executive Summary, Costs and Cost-Effectiveness

The report does not explicitly claim that mandated retrofits are or are not “cost-effective”, but rather provides installed costs of retrofit measures and simple paybacks based on stated assumptions. Also explained, but not quantifiable, are improvements to home indoor air quality, moisture control and thermal comfort.

The report makes no assumptions regarding how Hayward homeowners pay for retrofit upgrades, either “up front” or “folding the cost of the retrofits into their purchase financing.”

There is no claim that retrofits will increase resale value, and the paybacks listed in Table 1, in fact, assume no increase in resale value. However, an example is presented at the end of page 2 simply to illustrate how some increased resale value, should it occur, would affect net payback of retrofit measures.

## Executive Summary, Mandatory Features

The “Bay Area” communities referenced in the report are San Francisco and Berkeley, and with reference to this issue, the demographic similarities to Hayward are not relevant. The report makes no assumption that the City of Hayward and the EBMUD will provide low-flow toilets, showerheads and faucet aerators at no cost, but simply that they are “generally offered at low cost or no cost”.

Because reduction in water use also reduces energy use associated with the transport of water throughout Hayward, reduced water use also reduces greenhouse gas emissions. The City currently offers rebates for the purchase of some high efficiency water fixtures, subject to availability of funds. Also, note that water conservation is included within past and current Title 24 Building Energy Efficiency Standards.

## Executive Summary, Cost Cap

The cost cap proposal does not assume the cost of improving energy efficiency will be the same for all homes in Hayward, as the cost data methodology in Appendix B explains (i.e., different costs were proposed for different sized homes). Because the cost cap is a percentage of home value, it actually accommodates the large diversity of Hayward housing stock by being sensitive to the size of the retrofit investment as compared with valuation.

Retrofit measures already completed (e.g., attic and/or raised floor insulation, or the mandatory measures discussed earlier) can be counted toward meeting the RECO requirements. Only air sealing and duct sealing, if not previously completed by a qualified home performance contractor, must be performed in accordance with RECO specifications.

## Introduction

The analysis is calibrated to typical Hayward residential building conditions, as explained under “Average Base Case” on page 33. For that reason, it stands as a good foundation for assessing the overall impact of a RECO as an implementation of public policy. With respect to assessing the impact of a RECO on some diversity of homes (e.g., home sizes that capture at least 80% of the single family housing stock), additional analysis could be conducted to address that specific issue.

By obtaining and averaging three years of utility use data for all Hayward single family homes, great care has been taken to calibrate model results and not overstate energy savings and energy cost savings within the modeling approach.

The data from the costs obtained in Appendix B has been applied as explained.

## Energy Efficiency Measures

Neither the positive health impacts of air sealing, as done properly by a qualified home performance contractor, nor potential problems if done improperly, are addressed in the report. Subsequently, indoor air quality issues have been raised and addressed by Hayward Staff, and RECO language shall explicitly deal with maintaining adequate natural ventilation in accordance with California and ASHRAE 62.2 residential ventilation standards; and with respect to combustion safety testing as an integral part of air sealing per the BPI 104 standard.

## Attic Insulation

The data referenced on page 33 (“Existing Roof/Ceiling, Wall, Raised Floor and Windows”) compiled by Gabel Associates indicates that less than 10% of 200 existing East Bay homes have R-30 or greater in attics. There is no data to suggest that Hayward homes vary significantly either way from the overall East Bay data.

## Sealing Existing Duct Systems

In studies which test air sealing or duct sealing, building scientists assume that results obtained in a general area (e.g., the greater Bay Area) are highly likely to be statistically the same as in a very small area (e.g. Hayward) unless there are specific factors identified which would cause a difference. No specific factors unique to Hayward have been identified as to why duct leakage in Hayward homes would be, on average, different from a larger group of homes in the Bay Area. We assert that carefully tested duct leakage data on 200 homes, as was done, is not anecdotal.

## Cost of Measures, Energy Savings and Cost-Effectiveness

The specific level of funding of incentive programs is not known conclusively at any point in time. However, it is worth pointing out that the report presents results assuming no incentives as the base case in Table 1. Also worth mentioning is the firm commitment by the California Public Utility Commission and the investor owned

utilities (IOUs) to promote incentive programs that support energy retrofits in existing buildings. That commitment is to ongoing home retrofit incentives for many years to come. The second residential goal in the *California Energy Efficiency Strategic Plan* is to “.. transform home improvement markets to apply to whole house energy solutions to existing homes”, with a focus of completing all existing homes by 2020.

While it is not clear what criteria or metrics would be applied to determine affordability of “up-front” installation costs in Hayward, the report recommendations are sensitive to affordability with the establishment of a cost cap. Further refinement of these recommendations that have been made since the release of the report include exemptions for low-income and disabled homeowners.

### Greenhouse Gas Reductions

Table 4 has been created specifically to illustrate the maximum theoretical GHG reduction potential of a RECO based on the recommendations provided. Table 5 is presented to illustrate how real world compliance rates may reduce the values listed in Table 4. Table 5 can be revised with data on pre-1978 homes and the percentage of those homeowners who are likely to be exempt from the RECO based on the final criteria established for exemptions.

The 1/10/11 letter implies that Point-of-Sale properties would require that the seller would have to meet RECO requirements, while the report discusses the option of the buyer to meet RECO within a grace period (e.g. 2 years).

The issue of affordability of retrofit measures is discussed above.

### Findings and Recommendations

The report presents examples of “substantial value beyond energy and cost savings” that most readers of the report would deem self-evident: improvement in indoor air quality, completion of a key retrofit measures required for utility incentives, and, as a result, improved marketability in the eyes of a prospective educated buyer. The point here is to emphasize qualitative value rather than quantitative value.

The reference to the “scientific evidence presented at public hearings” is at odds with the fact that (a) the data presented does not correspond to homes that have actually been tested for natural ventilation rate by a qualified home performance contractor, a requirement in the proposed RECO; and (b) that building scientists associated with the development of the ASHRAE 62.2 residential ventilation standards do not accept the conclusions drawn by the individuals who presented that data at public hearings.

### **Possible RECO Triggers - Remodels**

Under the scenario listed on page 26, the report is simply asserting that meeting RECO requirements that would cost approximately \$3,000 as compared with overall construction costs > \$50,000 would be reasonable. What is finally considered reasonable is up to the City Council.

With respect to property rights: remodels sometimes trigger several aspects of the building code that impact the ability of a property owner to complete a project; and apart from a RECO ordinance, homeowners may also need to adjust the scope of work in a remodel project simply to meet all other current codes. Health and safety issues are addressed as discussed above.

### **Possible RECO Triggers – Point of Sale**

The City of Berkeley has compiled utility data which indicates a significant reduction in average home natural gas use, and hence GHG emissions, over the course of its RECO ordinance which is designed primarily to reduce natural gas use.

Specific costs related to RECO implementation were not within the scope of the report. Staff is currently developing an analysis of costs related to RECO implementation.

As explained earlier in this response letter, the compliance rates assumed in the report were to illustrate maximum potential energy savings and GHG reductions. The report does not connect the obvious dots: if the City is only half as effective in enforcing the ordinance, then only half of the GHG emission reductions will be achieved.

The statement concerning no “statistical data that the Berkeley RECO has had any effect on home sales as compared with home sales in surrounding communities” is based on the current lack of clear data, to our knowledge, indicating that the Berkeley RECO has had a negative impact on home sales as compared with nearby areas which do not have a RECO.

### **Possible RECO Triggers – Date Certain**

Again, the issue of affordability has been addressed previously with respect to cost caps and exemptions for low-income and disabled homeowners. Both potential disadvantages and advantages of a Date Certain trigger are discussed.

### **Conclusions and Recommendations**

The report speaks for itself in the analysis and data it presents, and the conclusions and recommendations stated.

## Recommended Retrofit Measures

The report incorrectly assumes that readers understand that there is a clear link between reducing water usage and reducing energy use by the City of Hayward and EBMUD to transport and pump water.

Energy efficiency work already completed, such as attic or raised floor insulation, can count toward completing one of the prescriptive draft RECO compliance options. If a performance HERS II score of 120 or less is achieved (e.g. roughly equivalent to a new home built in 2001), the RECO performance requirement would be automatically met. Unless a home performance gets to that level of performance, reducing energy use by 10% is not difficult or impossible; and in fact the duct sealing by itself almost achieves the 10% reduction in energy use.

## Cost Cap

The report provides sufficient cost data to design cost caps that typically will achieve the specific improvements listed for Hayward homes of average or above-average valuation. The cost data was requested of home performance contractors to reflect the type and size of homes in Hayward.

## Triggers

There have been issues raised since the report was released on September 1<sup>st</sup>, 2010 that Staff has responded to in public meetings and in Staff reports.

The grace period to comply with RECO requirements has been tested for several decades within the City of Berkeley. That is, having a mechanism and a working procedure in place for a home buyer to complete RECO measures and have them verified 12 to 24 months after home purchase has not posed any significant reported problems.

## Appendix A: Analytic Method

As discussed earlier, the approach used is appropriate to answer not only questions regarding typical energy savings and costs for homeowners, but also with respect to citywide GHG emission reductions. Diversity of home size can be modeled as an addendum to the report, in conjunction with new and additional cost data reflecting that same diversity of costs for retrofit measures.

## Appendix B: Detailed Cost Data

The contractors referenced in Cost Data Set A are BPI-certified, and as with all similar research studies, are not identified. They have experience doing home performance contracting work on over 1,000 homes in the greater Bay Area during the past three years.

Table A-1 does include the cost of drilling and repairing holes on the inside of exterior walls; and exterior wall insulation is not a prescriptive RECO option.

All seven Northern California home performance contractors' submitted cost data is independent of where a prospective home is located.

Sincerely,

A handwritten signature in black ink that reads "Michael D. Gabel". The signature is written in a cursive style with a large, stylized initial "M".

Michael D. Gabel  
Gabel Associates, LLC

**Erik Pearson**

---

**From:** Kenneth Paulson [kenneth.paulson@sbcglobal.net]  
**Sent:** Wednesday, February 02, 2011 8:19 PM  
**To:** Erik Pearson  
**Subject:** proposed energy improvements

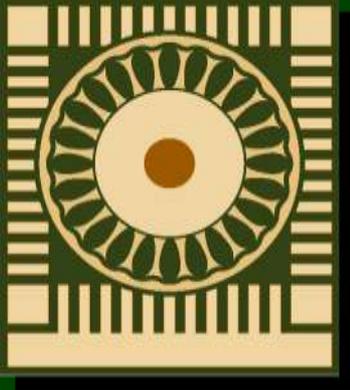
I am a real estate broker and a California contractor. My position, on the proposed items, is that I am in favor of most of the recommended changes except that they should be only suggestions and NOT MANDATORY.

When our government becomes this intrusive in our lives it erodes our freedoms. Also regulations such as these smack of kowtowing to special interests (i.e. the various unions and contractors who would benefit from such lucrative contracts).

Further, have there been any verified studies even suggesting there would be any real savings, economic or energy wise, when the total cost of these retrofits is taken into account? Often times what may seem a savings on the surface doesn't take into account the energy of manufacture, shipping, disposal, etc.

Additionally, our economy in California is very precarious at present, and while these required retrofits would help some special interests, they could further tax a severely stressed economy.

Kenneth Paulson



CITY OF  
**HAYWARD**  
HEART OF THE BAY

**Sustainability Committee Meeting**  
**March 2, 2011**

**Residential Energy Conservation**  
**Ordinance (RECO)**

Erik Pearson, *Senior Planner*  
Development Services Department



# RECO Defined

- **A Residential Energy Conservation Ordinance would require energy efficiency improvements in some existing single-family and duplex homes.**
- **The existing Hayward Green Building Ordinance addresses new construction.**



# Why Consider a RECO?

## - State Policy Context

### California's Global Warming Solutions Act & Executive Order S-3-05

- Reduce GHG emissions to 1990 levels 2020
- Reduce GHG emissions to 80% below 1990 levels by 2050

### California Public Utilities Commission- *Long Term Energy Efficiency Strategic Plan*

- Reduce energy consumption in existing homes by
  - 20% by 2015
  - 40% by 2020
- **Recommends that local governments adopt RECOs**

# Why Consider a RECO?

## - Local Policy Context

### Hayward's Climate Action Plan was adopted in 2009

- Reduce GHG emissions by 12.5% below 2005 levels by 2020
- Reduce GHG emissions to 82.5% below 2005 levels by 2050

### Climate Action Plan recommends adoption of a RECO

- Save 639 metric tons annually by 2020
- Save 39,000 metric tons annually by 2050

# Hayward RECO Process – 2010 Meetings

- Feb 3, 2010 – Council Sustainability Committee
- June 2, 2010 – Council Sustainability Committee
- August 11, 2010 – RECO Community Meeting
- September 1, 2010 – Council Sustainability Committee Meeting
- October 20, 2010 – Climate Action Management Team Meeting
- October 25, 2010 – Special Sustainability Committee Meeting
- December 15, 2010 – Climate Action Management Team Meeting

# Hayward RECO Process – 2011 Meetings

- January 19, 2011 – Climate Action Management Team Meeting
- February 2, 2011 – Council Sustainability Committee Meeting
- February 16, 2011 – Climate Action Management Team Meeting
- March 2, 2011 – Council Sustainability Committee Meeting
- May 31, 2011 – Draft Ordinance to City Council for Work Session
- June 9, 2011 – Draft Ordinance to Planning Commission



**ABOUT HAYWARD**  
**MAYOR & CITY COUNCIL**  
**CITY COUNCIL MEETINGS**  
**PLANNING COMMISSION MEETINGS**  
**BOARDS, COMMISSION & COMMITTEES**  
**COUNCIL STANDING COMMITTEES**  
**OTHER MEETINGS**

**AIRPORT**  
**CODES, ORDINANCES & FEES**  
**DEPARTMENTS**  
**EMPLOYMENT**  
**LOCAL LINKS**  
**VOLUNTEERING**



## *Residential Energy Conservation Ordinance (RECO)*

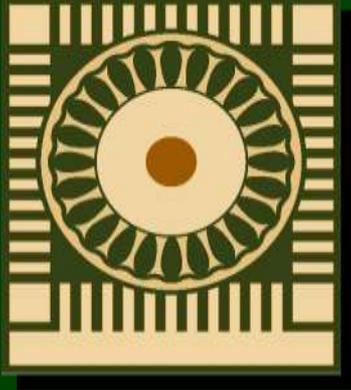
### ■ Overview

#### What is a Residential Energy Conservation Ordinance?

- A Residential Energy Conservation Ordinance (RECO) is a policy tool local governments can use to improve the energy efficiency of existing homes.
- RECOs typically require property owners to implement specific measures to reduce energy and water use.
- A RECO can be apply to single family, duplex and/or multi-family buildings.
- The design of the RECO will determine the types of improvements required as well as which properties are subject to the ordinance. "Triggers" for compliance can include, but are not limited to, the point of sale of a property, a significant remodel or addition, or a specific date by which all subject properties must comply. Examples of typical improvements include air sealing and insulation.

#### Why Develop a RECO?

- Hayward's **Climate Action Plan (CAP)**, adopted by the City Council on July 28, 2009, sets the following goals:
  - Reduce greenhouse gas emissions 12.5 percent below 2005 levels by 2020
  - Reduce greenhouse gas emissions 82.5 percent below 2005 levels by 2050
- Hayward's residential buildings produce:
  - 13% of the community's total Greenhouse Gas (GHG) emissions and
  - 37% of the community's non-transportation GHG emissions
- Hayward's CAP calls for the development of a RECO to help meet GHG reduction goals in existing buildings
- The California Public Utilities Commission Long Term Energy Strategic Plan includes a goal to reduce energy consumption in existing homes by 20% by 2015 and 40% by 2020, listing RECOs as a role for local governments in reaching this goal
- Economic benefits:
  - annual energy and cost savings:



## RECO Elements

- **Retrofit Measures**
- **Triggers**
- **Cost Caps**
- **Exemptions**



# Recommended Retrofit Measures

## Group One Measures (Mandatory Measures):

- Install approved dampers, doors or other devices reduce heat loss through chimneys
- Install low-flow devices in showerheads and faucets
- Insulate pipes within 60 inches of water heater
- Install weather stripping on all exterior doors

# Recommended Retrofit Measures

Group Two (must do one of 3 Options in addition to Group One Measures):

Option 1 – do two of the following three:

1. Air Sealing
2. Attic or Roof Insulation
3. Duct Sealing

# Incentives

	Estimated Average Cost	PG&E Rebate	City Rebate (if available)*	Net Cost
Group One Measures +Air Sealing + Attic Insulation	\$2,600	\$0	\$750	\$1,850
Group One Measures +Air Sealing + Duct Sealing	\$2,400	\$0	\$750	\$1,650
Group One Measures +Air Sealing + Duct Sealing + Attic Insulation	\$3,600	\$1,000	\$750	\$1,850

\* Until \$250,000 in grant funds is depleted – on first come, first served basis.

# Recommended Retrofit Measures

## Group Two:

Option 2 – do two of the following seven (this option added in response to Feb. 2 Committee Mtg.):

1. Attic Insulation
2. Wall Insulation
3. Raised floor insulation
4. Windows
5. Furnace
6. Duct Sealing
7. Water heater



# Recommended Retrofit Measures

## Group Two:

### Option 3 – do one of the following:

1. HERS II – improve building's score by at least 10%
2. Demonstrate an existing HERS II score of 120 or less
3. Complete an alternative performance audit and improve score by at least 10%

HERS = Home Energy Rating System

# Incentives

<b>Advanced Upgrade Package</b>			
<b>Efficiency Improvement</b>	<b>PG&amp;E Rebate</b>	<b>City of Hayward Rebate *</b>	<b>Total Possible Rebate</b>
10%		\$1,000	\$1,000
15%	\$1,500	\$1,500	\$3,000
20%	\$2,000	\$2,000	\$4,000
25%	\$2,500	\$2,000	\$4,500
30%	\$3,000	\$2,000	\$5,000
35%	\$3,500	\$2,000	\$5,500
40%	\$4,000	\$2,000	\$6,000

\* Until \$250,000 in grant funds is depleted – on first come, first served basis.



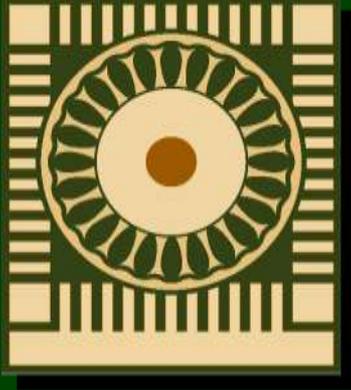
# Trigger Options

- **Remodels > \$30,000:** RECO improvements would be installed as part of the regular permit process
- **Point of Sale/Time After Sale:** RECO would be met within 2 years after property sale
- **Date Certain:** RECO would be met by a fixed date (e.g., 6 to 12 years after effective date)

# Date Certain - Recommended Dates

<b>Year Structure Built</b>	<b>Number Housing Units in Hayward</b>	<b>Approximate Number of Single-Family Homes</b>	<b>Recommended Compliance Deadlines</b>
1949 and earlier	5,336	3,074	<b>2018</b>
1950 – 1959	12,992	7,483	<b>2020</b>
1960 – 1969	8,160	4,700	<b>2022</b>
1970 – 1977*	7,372	4,246	<b>2024</b>
Total subject to RECO	35,703	<b>20,565</b>	
Total homes in Hayward	48,273	27,805	

\* Estimate of Housing Units and Single Family Homes based on 10-year data



# **Recommendations for Reducing Costs to Homeowners**



# Cost Cap Recommendations

- Maximum expenditure by homeowner:
  - **Remodels/Additions > \$30,000:** 5% of project cost
  - **Point of Sale/Time After Sale:** 1.0% of sale price
  - **Date Certain:** 1.0% of assessed property value

# Exemptions

- Low Income (per Federal guidelines)
- Disabled (per Federal guidelines)
- **Foreclosure or Short Sale**
- Compliance cannot be completed for less than cost cap
- Compliance is impossible (lack of attic or ducts)



# Exemptions (cont.)

## Low Energy User (added in response to Feb. 2 Committee Mtg. ):

- Current Owner can obtain exemption by providing two years of utility bill data
- If annual energy use is at least 15% less than the average Hayward home



# Effectiveness

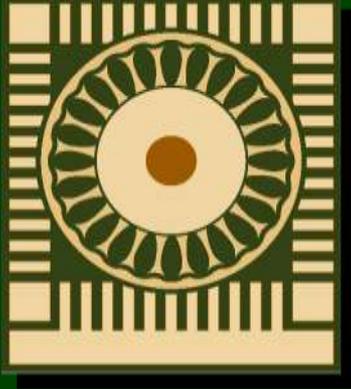
Year Structure Built	Approximate Number of Single Family/Duplex Homes in Hayward	Recommended Compliance Deadlines	Homes in Category to Meet RECO	Average CO <sub>2</sub> e Reduction (Metric Tons per Year)
1949 and Earlier	3,074	2018	1,844	757
1950 - 1959	7,483	2020	4,490	1,842
1960 - 1969	4,700	2022	2,820	1,157
1970 - 1977	4,246	2024	2,548	1,045
Total Subject to RECO Pre-1978 Homes	19,503		11,702	<b>4,801</b>
Total Homes in Hayward	27,805			



# Sustainability Committee Options

Recommend that the City Council:

1. Adopts a RECO consistent with today's report (effective approx. 2 years after adoption)
2. Adopts a RECO that differs with today's report (effective approx. 2 years after adoption)
3. Delays adopting a RECO until a County-wide model ordinance is developed
4. Doesn't adopt a RECO and amends the City's Climate Action Plan
  - Or - No recommendation at this time



# Questions & Discussion



## Sustainability Committee Monthly Meeting Topics for 2011

Presenting Department	Date	Topics	Climate Action Plan Action Number (Community-Wide Action Priority per Appendix D in the CAP)
DS & Facilities	January 5	Energy Audits of City Facilities	
		Energy Efficiency and Conservation Block Grant (EECBG) Programs (Large Energy Users, Audits, etc.)	
DS	February 2	Residential Energy Conservation Ordinance (RECO)	3.1 (11)
DS	March 2	Residential Energy Conservation Ordinance (RECO)	3.1 (23)
PW	April 6	Update on Food Scraps Programs	6.2 (26)
PW		Senate Bill 7 – Water Conservation	
DS		Annual Review of CAP Implementation and Priorities	
Finance	May 4	Environmentally Preferred Purchasing	6.10 (14*)
DS		Green Building - Requirements for Commercial Buildings, Parking Requirements, and Solar Requirements	4.1 (20), 4.2 (18), 5.3 (19)
DS		Update on Education/Outreach Efforts	9.1 (15), 9.2 (16), 9.3 (17)
PW	June 1	Transportation Demand Management (TDM) Programs/Strategies	1.1 (36)
DS		Commercial Energy Conservation Ordinance (CECO)	3.3 (2)
DS		Local Food Production/Healthy Eating	8.1
PW	July 6	Report on Public Transportation	1.4 (30)
		Update on Sea Level Rise Studies	Strategy 8
DS/PW		Pedestrian Master Plan ( <i>may be addressed in Circulation Element when General Plan is next updated</i> )	1.6 (39)
	August	<i>No Meeting – annual recess</i>	
PW	September 7	Update on Recycling Programs (food scraps, construction & demolition debris, multi-family recycling, City facilities and waste to energy)	6.1 (28), 6.2 (26), 6.3 (14), 6.6 (34), 6.7 (11), 6.8 (16*), 6.9 (13*)
		CECO Update	3.3 (3)
	October 5	Update on Property Assessed Clean Energy (PACE) and Energy Upgrade California (EUC)	5.1 (29), 5.2 (8), 3.7 (6), 3.8 (7), 3.9 (1)
DS		Update on Green Team Efforts	
DS	November 2	Multi-Family RECO (introduce topic)	3.2 (24)
DS		Discussion of Topics for 2012	
PW	December 7	Plastic Bag Ordinance	6.4 (40)

\*Municipal Actions Priority per Appendix D in the CAP

**From:** Greg Jones [mailto:gregjones@gregjonesrealestate.com]  
**Sent:** Monday, February 28, 2011 2:17 PM  
**To:** Michael Sweeney; Olden Henson; Bill Quirk; David Rizk; Erik Pearson  
**Cc:** Kim Huggett; Michael Mahoney; Timothy May CCRM; Barbara Halliday; Francisco Zermeno - Forward; Marvin Peixoto; Mark Salinas  
**Subject:** Fwd: Residential Energy Conservation Ordinance

Dear Mayor and CSC Members,

I am resending the email I sent last October on the issue you are once again considering at the CSC on Wednesday. The points I raised five months ago remain relevant, and will continue to be so.

Education and voluntary compliance, as well as the economics of energy will create the conditions necessary to reach your intended policy objectives. RECO elements should focus on these principles.

Thank you for your work on these and other issues of interest to the community.

Greg Jones  
Director, Hayward Chamber of Commerce

----- Forwarded message -----

**From:** **Greg Jones** <gregjones@gregjonesrealestate.com>  
**Date:** Sat, Oct 23, 2010 at 4:03 PM  
**Subject:** Residential Energy Conservation Ordinance  
**To:** [michael.sweeney@hayward-ca.gov](mailto:michael.sweeney@hayward-ca.gov), Bill Quirk <[billquirkforhayward@comcast.net](mailto:billquirkforhayward@comcast.net)>, Olden Henson <[olden.henson@hayward-ca.gov](mailto:olden.henson@hayward-ca.gov)>  
**Cc:** [fran.david@hayward-ca.gov](mailto:fran.david@hayward-ca.gov)

Dear Mayor Sweeney and Councilmembers Quirk and Henson:

As a member of the Chamber of Commerce Board of Directors, I want to share my serious concerns regarding what the Council Sustainability Committee is considering related to a proposed Residential Energy Conservation Ordinance (RECO).

Let me begin by saying that this isn't a debate about the need to make changes, but is a disagreement about how best to approach the making the changes we would like to see. Do we force these changes down people's throats or do we educate and incentivize people to make the changes? Which approach has been more effective in your experience? The path currently being contemplated, requiring a buyer or the seller to make energy savings investments upon transfer of property is ill advised. Taking that a step further, laying involuntary costs on a business transaction for community members is in essence a "tax", and should be voted on by the people of the community if there is a desire to impose any such measures. If you truly believe you are representing the community's views, there should be no fear in doing so.

All policy making creates unintended consequences: consider the unintended consequences of what you are discussing. Forcing people to make changes to their homes that are not direct structural health and safety issues, especially first time home buyers just trying to enjoy home ownership, makes no sense. A new home buyer, who probably has saved for years to buy a home, doesn't then need the burden of a legally mandated further investment in their home. Such an approach will only serve to further depress home values in what is an extremely depressed local real estate market, one depressed by the poor quality of our schools, a weakly supported business environment, and other conditions that remain unresolved. I deal with the realities of the housing market everyday now in my work, and the conditions under which buyers and sellers are trying to function are incredibly difficult. The costs of buying and selling a home, in addition to the costs of maintaining a home, are a struggle for many in our community without *any* new requirements. Any form of requirements, whether they are imposed upon property transfer or based on some arbitrary time frame like the ones being considered, add to the list of reasons people will vote with their feet.

Such requirements are also directly counter to the Council's stated goals related to home ownership in our community. We are already a community with a heavy proportion of rental properties; any ordinance that increases the cost of ownership or transfer of ownership is in direct contradiction to Council's own desires to increase home ownership. I caution the CSC in general that there will be backlash to these kind of requirements which will serve to polarize and strengthen opposition to what are big-picture wise, admirable aspirations.

It is also my understanding that this ordinance would apply to multi-family housing units. As we have observed in relation to our rent control requirements, rental property re-investment has declined over the years. There are a number of reasons for this lack of re-investment, but placing RECO requirements on transfer of multi-family/rental properties will be the nail in the coffin for any incentive for rental property turnover. Neither buyers nor sellers will want to trigger RECO requirements, perpetuating the unique problems already observed in our rental housing market here in Hayward.

I have changed windows, insulation and doors on two houses I have purchased in other communities over the past 25 years. I did it because it made sense financially, environmentally, and I could afford to do it. The first house I bought was on a VA loan and I had NO funds to put into that house for several years. How would I have been treated under such an ordinance? People in similar circumstances will not buy a house in Hayward. People will not move here due to a RECO policy, but they certainly may choose NOT to move here because of it.

On a more personal note, we as the City team had been working hard to change Hayward's image related to our business environment. In my time as your City Manager, I felt great pride in our progress, initiating the business visitation program, launching our Open For Business website, making continuous improvements to the permit center, hiring an economic development manager and bringing that program in to the City Manager's Office. The recent override of the Economic Development Committee's recommendations on polystyrene and placing additional costs on our small local businesses is a set back to our previous hard work. This proposed RECO action is another anti-business message that we can ill afford.

The City has so many higher and more immediate priorities requiring your and staff's attention. Please use your limited resources wisely in addressing them. Set this RECO issue aside in favor of more pressing issues, including more work on encouraging a healthy business environment that will increase the wealth and well being of our overall community.

**Gregory T. Jones**  
**REALTOR® /Commercial/Residential/Land Use Consulting**  
My Blog: [www.GregJonesRealEstate.com](http://www.GregJonesRealEstate.com)  
[www.twitter.com/GregoryTJones](http://www.twitter.com/GregoryTJones)  
[Facebook--Gregory T Jones](#)  
[LinkedIn--Gregory T Jones](#)

Direct: (510) 886-GREG

**Realty World Neighbors**  
**22470 Foothill Blvd., Suite C**  
**Hayward CA 94541**  
My DRE#: 01879280

**From:** tmay [mailto:tmay@rhosource.com]  
**Sent:** Tuesday, March 01, 2011 3:03 PM  
**To:** Michael Sweeney; Olden Henson; Bill Quirk; David Rizk; Erik Pearson  
**Cc:** Kim Huggett; Michael Mahoney; tmay; Barbara Halliday; Francisco Zermeno - Forward; Marvin Peixoto; Mark Salinas  
**Subject:** Residential Energy Conservation Ordinance Correspondence

Mayor Sweeney and CSC Members,

I am writing in support of the position stated by Greg Jones in his correspondence dated October 23rd and again on February 28th.

We agree that, "Education and voluntary compliance, as well as the economics of energy will create the conditions necessary to reach your intended policy objectives."

Other communities in the Bay Area have found positive, constructive ways to meet the goals without instituting RECO's using the very standards cited by Mr. Jones. We believe it is also possible in Hayward.

We encourage you to continue following a path that builds a positive image of Hayward for those looking for a place to call home. Hayward is known for its strong neighborhood organization and pride. We think that tapping into this resource could help accomplish, not only energy efficiency improvements, but also build a more resident friendly and business friendly image for Hayward that would serve you well into the future.

Thank you for your consideration.

Timothy May

+++++

Timothy May  
Rental Housing Owners Association of Southern Alameda County  
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