

MINUTES

PUBLIC WORKS / PARKS & RECREATION COMMITTEE

June 6, 2018

A meeting of the Public Works / Parks & Recreation Committee of the Council of the County of Kaua'i, State of Hawai'i, was called to order by Ross Kagawa, Chair, at the Council Chambers, 4396 Rice Street, Suite 201, Līhu'e, Kaua'i, on Wednesday, June 6, 2018, at 1:45 p.m., after which the following Members answered the call of the roll:

Honorable Arthur Brun
Honorable Mason K. Chock
Honorable Arryl Kaneshiro
Honorable JoAnn A. Yukimura
Honorable Ross Kagawa
Honorable Derek S.K. Kawakami, Ex-Officio Member
Honorable Mel Rapozo, Ex-Officio Member

The Committee proceeded on its agenda item, as shown in the following Committee Report, which is incorporated herein by reference:

CR-PWPR 2018-06: on PWPR 2018-05 Communication (05/30/2018) from Council Chair Rapozo and Council Vice Chair Kagawa, requesting the presence of the Acting County Engineer, to provide a briefing on the County's role in floodplain management, including applicable floodplain management laws and rules. **(Received for the Record.)**

Bill No. 2710 A BILL FOR AN ORDINANCE AMENDING CHAPTER 12, ARTICLE 6, KAUAI COUNTY CODE 1987, AS AMENDED, RELATING TO THE ENERGY CODE **(This item was Amended to Bill No. 2710, Draft 1, and Deferred.)**

Councilmember Yukimura moved to approve Bill No. 2710, seconded by Councilmember Kaneshiro.

Committee Chair Kagawa: Councilmember Chock.

Councilmember Chock: I have an amendment as requested by the Administration.

Committee Chair Kagawa: Please.

Councilmember Chock moved to amend Bill No. 2710, as circulated, and as shown in the Floor Amendment, which is attached hereto as Attachment 1, seconded by Councilmember Kaneshiro.

Committee Chair Kagawa: Any discussion on the amendment? Any public testimony?

The motion to amend Bill No. 2710, as circulated, and as shown in the Floor Amendment, which is attached hereto as Attachment 1 was then put, and unanimously carried.

Committee Chair Kagawa: Motion carried. We are back to the main motion. I have talked to Karen Taketa from the Contractors Association and basically she said that she has no position at this time on the Energy Code and that she hopes that if it will mean pushing significant burden upon residents for building, then perhaps we may consider delaying it as long as we can; however, we have Doug here and maybe he can share some light as far as the Energy Code, why it is important to adopt it now, and we can move forward or backward.

There being no objections, the rules were suspended.

DOUGLAS HAIGH, PW Chief of Buildings: Good afternoon. Doug Haigh, Department of Public Works, Building Division. Thank you for this opportunity to present the International Energy Conservation Code. It has taken us a long time to get the courage up to come and bring it to you, but we finally decided, "No, it is important; we need to at least try to move forward on this code." It has been over one (1) year since it was approved by the Governor and became the State Code. Yes, we are the first county moving forward, but as I said, it has already gone through an extensive vetting at the state-level and we feel that it will really benefit the people. We have put together a quick PowerPoint presentation to just kind of introduce the code and certain issues, and then be ready to answer your questions. Key issues that I am going to be talking about is the code review and amendment process, the significant changes with the code, cost impacts, and the support for making these changes.

First of all, our Energy Conservation Code is based on a 2015 International Energy Conservation Code. So at the national-level, this code had gone through an extensive process for approval. It was widely vetted on the national-level and determinations were made to move forward. At the state-level, we, at the State Building Code Council, which I represent the County of Kaua'i on the Council, we provided Hawai'i amendments to the national code and we are very fortunate that the Department of Business, Economic Development & Tourism (DBEDT) has an energy section that pretty much, through the last twenty (20) years, have been our leaders in Energy Conservation Code and they are very much involved at the national-level and very much involved when we do our local amendments and they get funding to do studies on the code to make sure that it is Hawai'i-appropriate, and then come up with Hawai'i amendments. As you will see, part of this lobbying is they were able to get a change to the national code to reflect tropical homes, which reflects Hawai'i. We will be presenting that, and that to me, is a major reason to move forward with this code at this time. At the State Building Code Council, amendments were repaired by the subcommittee, which were led by our DBEDT representative

and we had many, many meetings, and in fact, the DBEDT guy got really mad at me, because sometimes I brought up things at the last minute, unfortunately, that we wanted to go back and fine-tune a little bit, but we had a lot of input, a lot of back and forth, to come up with the State amendments. The meetings had represented all four (4) county building officials, design professionals, design professionals, contractors, suppliers, developers, the building industry association and architectural association. Then what they did is when we came up with the amendments from the Council, then it went through the Administrative Rule process, managed by Department of Accounting and General Services (DAGS), which included small business review and public hearings. So again, it was further vetted with the public, with public hearings on each item. The State Energy Conservation Code was effective as of March 31, 2017. The State law requires that the counties adopt the code within two (2) years that is it adopted by the State. So by March 31, 2019, if we have not adopted the code on our own, all of a sudden, the Building Division will be enforcing the State code and not the County code, because State law tells us that and they are our big brother.

As we are getting the amendments...pretty much by the time the amendments were finalized by the State Building Code Council, we brought those amendments back to Kaua'i and set up a Kaua'i task force to review the code, specifically for Kaua'i and that task force include members, contractors, and design professionals, and also representatives of the County. The ordinance before you, the bill before you, was finalized and we took the State Energy Conservation Code as our model and we made some changes recommended by task force members and then there were some administrative changes for our code. The counties have the administrative responsibility for all the building codes. The State Building Code Council does not address administrative issues, so that is always handled at a county-level, because the State does not enforce building codes; the counties enforce them.

So significant changes, for commercial buildings, there has been improved on building commissioning and that is really important for us, particularly because for air-conditioning, there is nobody who inspects air-conditioning in our commercial buildings, and by putting commissioning in there, we are forcing inspections to occur, and enforcing mechanical engineers and owners to sign-off that, "Yes, this system has been reviewed and will function as designed." That is very important. Another key change in the commercial building code was an increase in requirements for daylighting, lighting controls, and allowed lighting power densities. This is probably the newest section in the code and the most complex. We have had training on this code at least twice over the last couple of years for the local architects and what not and this is the most complex, so what we did in our task force was say, "Hey, let us look at this. If we use high-efficiency lighting, basically light emitting diode (LED) lighting, then we do not really need all of those controls. I think you folks in this building, particularly in the annex, we did some early projects in lighting controls and they do not work perfectly. We have had maintenance issues and it has been a challenge. Unfortunately, we are on the forefront on these two (2) buildings and we discovered that, and that was part of what helped drive it, "Look, if we go with LED lighting, we will be seventy percent (70%) lower than the required minimum lighting density; so therefore, you do not even really need the controls, because you are already saving so much energy just with the type of lighting." At this point, LED is so prevalent and so economical that it just makes sense. So we did that change.

Another change was sub-metering requirement for tenant spaces. This is one that our DBEDT representative just kept pounding the table over and over, "It saves energy, it saves energy." So we added that. There is another significant change I forgot to put in here, which was a Kaua'i amendment, is that we allow residential-like commercial buildings to use the tropical home code, which will really save them a lot of money in their construction. On Kaua'i, we have small commercial structures that are not fully air-conditioned. So if they use tropical home standards to build it, then they can have a comfortable building without having to go to the full cost of what is required for a commercial building. That was something unique that we developed within the Kaua'i amendments and I think that is a reason to adopt this code, because that even makes it easier than current commercial buildings, because current commercial buildings are held to commercial standard.

Significant changes for residential buildings—like I mentioned, the key change is that we have prescriptive path for compliance for homes built in a tropical zone and this is to design homes that are comfortable with lots of ventilation that are appropriate for a tropical environment. If you do this, and as long as you are doing less than fifty percent (50%) air-conditioning, you are able to do this and your roof installation requirements, your wall installation requirements, a lot of the things are less expensive than current. That is a key change. Overall, you have the minimum number of high-efficacy electrical lighting changes from fifty percent (50%) to seventy-five percent (75%). Really, you cannot buy incandescent bulbs anymore...I guess you can get halogens, but if you are using compact florescent or LED, you are meeting that high-efficacy requirement.

Another change, and this is a change that the contractors are going to have to adjust to, is that we are requiring a minimum of R-13 roofing installation. We have been allowing an alternative method with the current code, but all the studies that were done said, "Hey, that is not adequate." So really, you need to put a minimum of R13 into your roof insulation. So if you are doing a tropical home, you can go with the R13. The base code requires an R38, but if you see the floor amendment, we are changing that to an R30, that is if you have fully air-conditioned home and if you are going with an R30 insulation, we are proposing that and that came from DBEDT saying that they feel that is appropriate for Hawai'i. So we will accept their determination on that.

They also developed a point option section, which gave an increased flexibility in how to comply with the code. Then another key amendment that is really important, we believe, and is actually going to save money for people on Kaua'i, is we have a local amendment that allows reroofing without adding new insulation if certain conditions are met. So basically, when you get the details of the code, if you use an Energy Star roofing material, with attic ventilation, then you do not have to add insulation if you are reroofing, because the current code is if you tear your roof off, down to the plywood, when you reroof, you have to add insulation. So this is something that I think is really important for the people of Kaua'i to get this amendment into the code. In Honolulu, there was a lot of crying from the roofers that, "Hey, this requirement is killing us." It basically can up to double the cost of a reroofing project.

Cost impacts—in the handout that I originally gave you, I provided a 2014 study by Britt/Makela Group and they were showing that there is a thirty-three

percent (33%) to forty percent (40%) energy savings over the 2006. For the County of Kaua'i, it will be a little less, because we did adopt the 2009, but then again, we have higher energy costs in Honolulu, so it kind of balances out a little bit. That number should be fairly decent. Then for residential buildings, we provided a handout today of the 2016 study for the United States Department of Energy and they are showing that the life cost savings of twelve thousand six hundred dollars (\$12,600) over the 2006 Energy Code. Yes, it will cost more money to build the house, and if you look at their study, they are saying that it is costing about four thousand dollars (\$4,000) more to build the house, but you are going to be saving money. So for the contractor and realtors, it is adding money to the cost, but to the homeowner, it is actually decreasing their cost to own the home.

In the package that we provided, we have support from the United States Department of Energy, Hawai'i Energy, Hawai'i Energy Policy Forum, Blue Planet Foundation, National Association of State Energy Officials, and the National Electrical Manufacturers Association, supporting that this is the right thing to move forward on. That ends my presentation and Leolynne and I are here to help answer any questions you might have.

Committee Chair Kagawa: Thank you, Doug. For me, your presentation was so good and detailed. I want to send that exact thing over to Karen, because it basically summarizes all of the major points without having to go through the bill and I think it is much clearer. Thank you for that. The only other thing you could have added in was your approximate cost that you got, four thousand dollars (\$4,000) per house to put in.

Mr. Haigh: Right.

Committee Chair Kagawa: But if you match it on the same page, you will see that the benefits far exceed the cost to put in. It is really a "no-brainer." Members, what I wanted to do is the normal process that we do is before it hits the Committee, we always send our "code" things to Karen over at the Contractors Association because she does a good job of talking to her roofers and generals, and she always comes back with testimony for or against or even written with no position. But we did not go through the process and it is my fault, as Chair, that I should have done it prior to this hitting the Committee; however, I would not have had the presentation yet. I think the presentation would be one that she can actually share with the Members. What I am going to be asking is if it is okay with the majority of the group that we do a two-week deferral, so that way, we do not have any issues next week, should she realize in a week that, "Hey, can we hold-off until another island does it?" I do not know what her position is, but for now, as I look at the presentation, I am comfortable with it. I want to owe her the courtesy because she has always been very open and straightforward with us as far as their position and I think she represents a good majority of the contractors and residents. I do not know if it is agreeable with other members. Councilmember Yukimura.

Councilmember Yukimura: I am fine with a two-week deferral. I hope it is not much longer than that, but two (2) weeks is no problem.

Committee Chair Kagawa: Well, the State has already adopted it. I know at some point, my question to you, Doug, is at what point does the State go into effect anyway?

Mr. Haigh: Two (2) years from the State adoption.

Committee Chair Kagawa: When did they adopt it?

Mr. Haigh: March 17th, so in 2019, then the Building Division will enforce the State Code if we have not adopted our own.

Committee Chair Kagawa: But hopefully, we will do it sooner, because it seems to make sense if you look at the presentation. Councilmember Brun.

Councilmember Brun: I support deferring this for two (2) weeks.

Committee Chair Kagawa: Councilmember Yukimura.

Councilmember Yukimura: I recall something from Randy at our R Electric.

Committee Chair Kagawa: It was about the Electrical Code.

Councilmember Yukimura: Okay, so no problems with this? Great. Thank you.

Committee Chair Kagawa: Wait—you are right, it might have been on the Energy Code. I am sorry, we have it right here. Councilmember Kaneshiro, do you want to summarize what you see right there?

Councilmember Kaneshiro: I do not want to summarize it. It is kind of long.

Councilmember Yukimura: We can take two (2) weeks to check on that, as well as to get Karen's input.

Committee Chair Kagawa: Doug, if you folks do not mind, we will have the questions all at that point. Again, my apologies because I should have sent it.

Councilmember Yukimura: Doug, do you have the latest from Randy?

Mr. Haigh: No, I do not. He was part of our task force, so he was there, so he is very well-aware of what is in the code.

Councilmember Yukimura: Can we get that to Doug so that maybe we can get a response from Buildings in the next two (2) weeks?

Committee Chair Kagawa: Yes. Good memory, Councilmember Yukimura.

Councilmember Yukimura: We have so much paper that it is hard to track.

Councilmember Kaneshiro: For the most part, I think it was in favor, asking about some things that were mandatory, maybe make it voluntary, but I guess my question was by passing our own code, we can make it more specific to Kaua'i, right?

Mr. Haigh: Exactly. That is what we did in the task force and there were key things we did. In fact, one of the things that Randy helped us on is we added the requirement to do rough-in for electric vehicles into garages so that our homes will be ready for electrical vehicles. We kind of massaged that and got the cost down, so we kept trying to keep it as lowest cost possible, but that was one of the changes that we made. Like I mentioned, I think a big one that we made was allowing residential-like commercial structures to come in under the tropical home code and that will save our commercial contractors a lot of money, owners.

Councilmember Kaneshiro: If it goes into effect and contractors say, "You know what, maybe our energy prices go down," or they say, "This mandate is really not paying off the way it was anticipated to pay off," we still have the opportunity to look at what we have passed and maybe change it or make it voluntary or not mandatory, right?

Mr. Haigh: That is one of the good things about this State law is that it allows us to make amendments and it is silent on the issue of being more strict or less strict. So we have the flexibility through the amendments that we feel are appropriate for Kaua'i.

Councilmember Kaneshiro: Okay. Thank you.

Committee Chair Kagawa: That just popped up in my head when he asked, so the rough-ins will be required for an electrical vehicle?

Mr. Haigh: Basically, what we are looking at is you have to provide a thirty-five (35) amp circuit and then provide...

Committee Chair Kagawa: But that is the rough-in?

Mr. Haigh: Yes, then you would bring the wire and junction box to the garage.

Committee Chair Kagawa: So it is not going to be showing...it is just...

Mr. Haigh: Just rough, so the power will be there, so if in the future you do get photovoltaic (PV), then you at least have the power there, so you do not have to bust through walls and change your panel out because it is already there.

Committee Chair Kagawa: That rough-in is not a huge cost?

Mr. Haigh: No, it is not a huge cost.

Committee Chair Kagawa: Okay. Anymore questions until two (2) weeks from now? Seeing none, thank you.

Mr. Haigh: Thank you.

Committee Chair Kagawa: Seeing nobody in the audience, Members, any discussion before the deferral? If not, can we have a motion to defer?

Councilmember Chock moved to defer Bill No. 2710, as amended to Bill No. 2710, Draft 1, seconded by Councilmember Yukimura, and unanimously carried.

Committee Chair Kagawa: Seeing no further business, the meeting is adjourned.

There being no further business, the meeting was adjourned at 3:08 p.m.

Respectfully submitted,



Codie K. Tabalba
Council Services Assistant I

APPROVED at the Committee Meeting held on June 20, 2018:



ROSS KAGAWA
Chair, PWPR Committee

(June 6, 2018)
FLOOR AMENDMENT
Bill No. 2710, Relating to the Energy Conservation Code

Introduced by: Councilmember Mason K. Chock (By Request)

Amend Bill No. 2710 by inserting new amendments as follows in appropriate numerical order, and renumbering all subsequent numbers appropriately:

#. Amend the following items included in Table C402.1.3 Opaque Thermal Envelope Insulation Minimum Requirements, R-Value Method, for “All Other” and “Group R” columns, as follows:

<u>Climate Zone 1</u>	<u>All other</u>	<u>Group R</u>
<u>“Metal Buildings</u>	<u>R-30 or R-19 with cool roof</u>	<u>R-30 or R-19 with cool roof</u>
<u>Attic and other</u>	<u>R-30 or R-19 w/ cool roof</u>	<u>R-30 or R-19 w/ cool roof”</u>

#. Amend Climate Zone 1 included in Table R402.1.2 Insulation and Fenestration Requirements by Component, for “Floor R Value” as follows:

<u>Climate Zone</u>	<u>Floor R Value</u>
<u>“1</u>	<u>NR”</u>

(Material to be added is underscored. All material is new.)
V:\AMENDMENTS\2018\FA 2710 AMK_dmc.docx