

**Draft Meeting Minutes**  
**CABA Intelligent Buildings Council (IBC) Meeting**  
**Friday, July 28, 2016**  
**12 Noon – 1:30 PM (ET) via Webinar**

IBC Chair, Debra Becker (Honeywell International, Inc.)  
IBC Vice-Chair, Trevor Nightingale (National Research Council)  
IBC Vice-Chair, Bob Allan (The Siemon Company)  
IBC Vice-Chair, Robert Lane (Robert H. Lane & Associates Inc.)

Present:

Adappt Intelligence, Molly Bales  
Akhia, Kasey Bertolino  
Algonquin College, Susan Thompson  
Broadcom Corporation, Martin Weetman  
CABA, Greg Walker  
CABA, Ron Zimmer  
CABA, Sashien Godakandae  
Canadian Printable Electronics Industry Association (CPEIA), Peter Kallai  
Cisco Systems, Todd Frederes  
CSA Group, Ana Restovic  
D. Goodyear Fire Consulting, Dave Goodyear  
Electric Imp, Bob Lagoni  
Electric Imp, Carol Schmitt  
Electric Imp, Jaron Abelsohn  
Electric Imp, Kevin Bush  
Electric Imp, Paul Evans  
Electric Imp, Peter Tarbox  
ELECTRO-FEDERATION Canada, Bill Bryans  
European Building Automation and Controls Association (eu.bac), Thomas Mueller  
exp US Services, Inc., Tom Lohner  
FIATECH, Raymond Topping  
Frost & Sullivan, Konkana Khaund  
Fulham Co., Inc., Russ Sharer  
Garal Bravetek, S.A., Jim Hrastovcak  
George Brown College, Leo Salemi  
Gregg D. Ander, LLC, Gregg Ander  
Harold Murray LC, Harold Murray  
Honeywell International, Inc., Brian Casey  
Honeywell International, Inc., Debra Becker  
Honeywell International, Inc., Khalid Nazim  
IBM, Peter Xu  
IEC Systems, Inc., Richard Jackson  
International Society of Automation (ISA), Andre Ristaino

JLL, Darlene Pope  
JLL, Jiri Skopek  
JLL, Tom Sicola  
Johnson Controls Inc., Jim Schwartz  
Ken Wacks Associates, Ken Wacks  
LonMark International, RBCG, LLC, RRon Bernstein  
Lucid Design Group, Inc., Ralf VonSosen  
LumenCache, Inc., Derek Cowburn  
MechoSystems, Inc., William Maiman  
Memtronik Innovations, Howard Campbell  
National Research Council, Trevor Nightingale  
Navigant Research, Noah Goldstein  
OSRAM SYLVANIA Inc., Edie Kramer  
OSRAM SYLVANIA Inc., Suren Thanapal  
Philips, Kevin Coleman  
Philips, Laura Amado  
PLC Multipoint, Inc., Joseph Briscoe  
PragmaTech Waste Solutions, Ron Billings  
Public Services and Procurement Canada, Marek Dziedzic  
Schneider Electric, Peter Wilson  
Schneider Electric, Prashanthi Sudhakar  
Siemens Industry, Inc., David Thurow  
Siemens Industry, Inc., Richard Nortier  
SMART ECO DESIGN-SED, Olcay Oguz  
Southwire Company, LLC, Dave Watson  
StreetLights Residential, Matthew Fisher  
Sustainable Energy and Building Solutions, Philip Ju  
Texas A&M University, David Claridge  
The Siemon Company, Bob Allan

**1. Call to Order** - Greg Walker (CABA)

Greg Walker (CABA) thanked everyone for attending, performed a roll call and outlined the agenda.

**2. Call to Order, Welcome and Introduction** - Debra Becker (Honeywell International, Inc.)

Debra Becker (Honeywell International, Inc.) welcomed everyone and introduced: IBC Vice-Chair, Bob Allan (The Siemon Company), IBC Vice-Chair, Trevor Nightingale (National Research Council), IBC Vice-Chair, IBC White Paper Sub-Committee Chair Ken Wacks (Ken Wacks Associates) and Todd Frederes (Cisco Systems). Debra noted that Robert Lane (Robert H. Lane & Associates Inc.) was unable to attend the meeting and sent his regrets. Debra

also outlined the role of the IBC and alerted everyone that the meeting was being recorded and will be made available to the industry.

**3. Administrative** - Debra Becker (Honeywell International, Inc.)

**3.1 New name “Intelligent Buildings Council (IBC)” and IBC logo**

- Debra Becker (Honeywell International, Inc.)

Debra Becker (Honeywell International, Inc.) announced that the council has changed its name from the Intelligent & Integrated Buildings Council (IIBC) to Intelligent Buildings Council (IBC). There was also an update to the logo.



**3.2 Motion to approve past IBC Minutes** - Debra Becker (Honeywell International, Inc.)

Debra Becker (Honeywell International, Inc.) informed everyone that the meeting minutes from the January, 2016 IBC meeting were circulated and were posted on the CABA website in the IBC section: <http://www.caba.org/IBC>.

Motion to approve the January, 2016 IBC minutes was moved by Tom Lohner (exp US Services, Inc.) and the motion was seconded by Bob Allan (The Siemon Company). Motion passed.

**4. Research Update** - Trevor Nightingale (National Research Council), Greg Walker (CABA)

**4.1 “Improving Organizational Productivity with Building Automation Systems” Update** - Trevor Nightingale (National Research Council)

Trevor Nightingale (National Research Council) gave a brief overview of this research project that launched in May. CABA, the National Research Council (NRC) and the IBC are actively seeking additional funders for this project and a request for funders was made. To receive this research and become a funder please contact Greg Walker, CABA Research Director at [walker@caba.org](mailto:walker@caba.org).

The full prospectus and additional information can be found at: <http://www.caba.org/CABA/Research/NRC-Research-Project.aspx>.

Seven (7) CABA members are currently funding this project:



Ron Zimmer (CABA) and Darlene Pope (JLL) discussed the 3-30-300 concept, which is a trade mark of JLL. This principle states that a typical organization spends \$3 per square foot on annual utilities, \$30 on rent and \$300 on payroll. More information on the 3-30-300 rule please see the following link:

<http://www.energymanagertoday.com/true-false-saving-energy-workplace-automatically-drives-productivity-0105930/>.

#### 4.2 “Intelligent Buildings and Cybersecurity” Update - Greg Walker (CABA)

Greg Walker (CABA) gave a brief overview of the \$150,000 US CABA 2015 Landmark Research Project. The embargo period for this research ends August 11, 2016, at this point it will be available for sale to CABA members for \$4,900 US, for more information please contact CABA. The Executive Summary is available to CABA members and can be downloaded at:

<http://www.caba.org/member-research-library>.

Nineteen (19) CABA members funded this research:

## Intelligent Buildings and Cybersecurity

LANDMARK RESEARCH REPORT



CABA AND THE FOLLOWING CABA MEMBERS FUNDED THIS RESEARCH:

RUBY FUNDER



EMERALD FUNDER



DIAMOND FUNDER



#### 4.3 “Intelligent Buildings and the Impact of the Internet of Things” Update - Greg Walker (CABA)

Greg Walker (CABA) gave a brief overview of this \$150,000 US CABA 2016 Landmark Research Project. CABA and the IBC are actively seeking funders for this research. To receive this research and become a funder please contact the CABA Research Director, Greg Walker at [walker@caba.org](mailto:walker@caba.org). The full prospectus and additional information can be found at: <http://www.caba.org/CABA/Research/IB-IOT.aspx>.

Twenty-One (21) CABA members are currently funding this research:



#### 5. Presentation and open discussion with Cisco Systems on intelligent interior lighting, Power over Ethernet (POE) and the Cisco Digital Ceiling (30 minute) - Todd Frederes (Cisco Systems, Inc.), Bob Allan (The Siemon Company)

Todd Frederes (Cisco Systems, Inc.) gave a 10 minute presentation on PoE Lighting, the Digital Ceiling platform, and how "big data" is shaping the way we operate our buildings. A 20 minute discussion on the topic was led by Bob Allan (The Siemon Company).

Darlene Pope (JLL) asked if there are other systems and products that can be integrated into the Cisco framework. Fred talked about higher level systems that look at user profiles on temperature and lighting, and he mentioned that Cisco is relying on industry partners to develop these new solutions.

Khalid Nazim (Honeywell International, Inc.) mentioned that in the middle east they found that in the contracting process it was very beneficial to have a separate technology contract. He added that the contracting process in buildings is not conducive to technical contractors in North America. Bob Allan (The Siemon Company) added it is important to have a team of companies involved in the process.

Ron Zimmer (CABA) mentioned the CABA “Intelligent Buildings and the Bid Specification Process” Landmark Research Study from 2013. Konkana Khaund (Frost & Sullivan) talked about this research report and mentioned

there were specific recommendations given to the industry in this report. The Executive Summary of this report can be downloaded at:  
<http://www.caba.org/member-research-library>.

Tom Lohner (exp US Services, Inc.) noted that he thought training programs and education were key.

Derek Cowburn (LumenCache, Inc.) explained that controls should be broken out from the rest of the trades because they are something that will last a long time in the building and therefore deserve special consideration. William Maiman (MechoSystems, Inc.) added that controls and controls contractors should be looked at as a special subsection in the specifications process.

Ron Bernstein (RBCG, LLC) said he is working with the Construction Specifications Institute (CSI) to work out specifications. He also mentioned the importance of training and how it is important to elevate the master systems integrator. More information on the Construction Specifications Institute (CSI) can be found at: <http://www.csinet.org>.

Greg Walker (CABA) mentioned he will make the CABA “Intelligent Buildings and the Bid Specification Process” Landmark Research Study Executive Summary available to everyone on the webinar. He also mentioned the white paper that CABA is starting on academic training, titled “Academic Training for the Connected Home and Intelligent Buildings Industries”. He also noted that more information on this white paper will be provided by Ken Wacks (Ken Wacks Associates) in the next section of the IBC meeting.

#### **6. IBC White Paper Sub-Committee (WPSC) Update** - Ken Wacks (Ken Wacks Associates)

An overview was given of the IBC White Paper review process, completed IBC white papers and papers in progress. IBC white papers are secondary literature review articles that are approximately 10-20 pages in length. These papers are written and distributed free of charge to inform the industry. In order for the papers to be approved by the IBC White Paper Sub-Committee (WPSC), they must contain significant technical material of relevance to IBC members – it must not contain marketing material, or promote an agenda. Any CABA member can, and is encouraged to, bring forward a 1-2 paragraph white paper proposal to the WPSC. If needed, CABA will secure a writer and/or a working group for the paper. All completed and approved IBC white papers are placed in the CABA Public Library, Members Library, CABA NewsBrief, and promoted at industry events. To view the IBC white paper terms of reference, published IBC white papers and additional information, please go to:  
<http://www.caba.org/IBC>.

If you or someone that you know would like to join one (1) or more of the following white paper working groups, please contact Greg Walker (CABA) at [walker@caba.org](mailto:walker@caba.org).

**6.1 “The Role of Hybrid AC/DC Building Microgrids in Creating a 21st Century Enernet” Completed** - Ken Wacks (Ken Wacks Associates)

Author:

Brian Patterson      EMerge Alliance

Working Group

Brian Patterson      EMerge Alliance

This Paper can be downloaded at: <http://www.caba.org/White-Papers>.

**6.2 “Printable and Flexible Electronics Enabled Intelligent Buildings” Completed** - Ken Wacks (Ken Wacks Associates)

Authors:

Benjamin Freas      Navigant Research  
Michael Tischler      Cooledge Lighting Inc.  
Noah Goldstein      Navigant Research  
Stephen Brown      CSA Group

Working Group

Benjamin Freas      Navigant Research  
Christopher Larry      exp. US Services, Inc.  
Gaozhi Xiao      National Research Council Canada  
Greg Walker      CABA  
Ken Wacks      Ken Wacks Associates  
Michael Tischler      Cooledge Lighting Inc.  
Mo Salahuddin      National Research Council Canada  
Noah Goldstein      Navigant Research  
Stephen Brown      CSA Group  
Thomas Duceulier      National Research Council Canada  
Vlad Skorokhod      Xerox Research Centre of Canada

This Paper can be downloaded at: <http://www.caba.org/White-Papers>.

**6.3 “EMerge Alliance Hybrid AC/DC – Part 2”** - Ken Wacks (Ken Wacks Associates)

Working Group

Brian Patterson      EMerge Alliance

**6.4 “Smart Cities”** - Ken Wacks (Ken Wacks Associates)

Working Group

Bill Bryans	Electro-Federation Canada
Carolina Gallo	ABB
Bruce Rebel	American Home Appliance Manufacturers Canada
Katherine Thompson	Canadian Advanced Technology Alliance (CAT A)
Barrie Kirk	CANADIAN AUTOMATED VEHICLES CENTRE of EXCELLENCE
Warren Everson	Canadian Chamber of Commerce
Francis Bradley	Canadian Electricity Association
Kevin Wong	Canadian Institute of Plumbing & Heating (CIPH)
Keith Robinson	City of Atlanta
Megan O'Neil	City of Atlanta
Caroline Twigg	City of Bristol (unconfirmed)
Ulrica Ho	City of Toronto
Prashant Bhalja	City of Toronto
Susan Viegas	City of Toronto
Grant Coffey	City of Toronto
Jesse Colema	City of Toronto
Frank Di Palma	City of Vaughan
Ed Tymofichuk	Consultant (Former Manitoba Hydro)
Bill Belt	Consumer Technology Association (CTA)
Stephen Brown	CSA Group
David Messer	Information Technology Association of Canada
Robert Arnold	National Research Council of Canada
Simon Backer	National Research Council of Canada
Gary Rygus	Retail Council of Canada
Robert Lane	Robert H. Lane and Associates Inc.
Jesse Berst	Smart Cities Council
Mark McDonald	Smart Cities Management Consultant
Peter Halsall	Strategic Regional Research Alliance (SRRA)
David Katz	Sustainable Resources Management Inc.
Sonia Higgins	Unmanned Systems Canada
Alan Swain	Wavefront

**6.5 "Intelligent Building Advances in the Quick Service Restaurant Industry" - Ken Wacks (Ken Wacks Associates)**

Working Group

Matt Beattie	AT&T
Glenn Schackmuth	McDonalds Restaurants
Tracy Markie	Small Box Energy
Giovanni Virgilli	Carpigiani
Roberto Lazzarini	Carpigiani
Steve Weeres	Arrow Electronics



**6.6 “The Intelligent Thermostat for Multifamily Apartment Buildings” - Ken Wacks (Ken Wacks Associates)**

Working Group

Francis Gallo	Forest City Reality Trust
Gina Anselmo	Forest City Reality Trust

**6.7 “Academic Training for the Connected Home and Intelligent Buildings Industries” - Ken Wacks (Ken Wacks Associates)**

Working Group

Morad Atif	Texas A&M University
Dean Ford	Automation Federation
Jeff Gardner	ESPA (The Electronic Systems Professional Alliance)
Leo Salemi	George Brown College
Robert Lane	Robert H. Lane and Associates Inc.
Helen Heneveld	Bedrock Learning, Inc.
Steve Hoiberg	Siemens Industry, Inc.,
Mehdi Sheikhzadeh	Lambton College
Blerim Qela	Algonquin College

All previously completed IBC White Papers can be downloaded at:  
[www.caba.org/ibc](http://www.caba.org/ibc) and <http://www.caba.org/White-Papers>.

**7. Announcements - Debra Becker (Honeywell)**

**7.1 New “Intelligent Building & Connected Home Pavilion” at Greenbuild International Conference and Expo, Presented by CABA, Oct 5 - 6, 2016, Los Angeles, CA**

Debra Becker (Honeywell) talked about the new Intelligent Building & Connected Home Pavilion, which will be presented by CABA. If you are a new or existing exhibitor to Greenbuild and would like to join this high traffic pavilion please contact Greenbuild at [info@greenbuildexpo.com](mailto:info@greenbuildexpo.com). More information on the pavilion can be found at:  
<https://greenbuildexpo.com/Attendee/Expohall/Pavilions>.

CABA also has passes (\$150 Value) for Greenbuild 2016 if IBC members request them.

## **7.2 New CABA Forum name, “CABA Intelligent Buildings & Connected Home Forum”**

Debra Becker (Honeywell) mentioned that CABA plans to change the name of the CABA “Intelligent Buildings & Digital Home” Forum to the CABA “Intelligent Buildings & Connected Home” Forum in the future.

## **7.3 CPEIA intelliBUILD Business Network**

Peter Kallai (Canadian Printable Electronics Industry Association, CPEIA) outlined a new business network for organizations interested in the printable electronics and intelligent buildings. The goal of this network is to help organizations develop the capability to enable intelligent building technologies using Printable and Organic Electronics (PE). For more information please go to: [www.cpeia-acei.ca/intellibuild](http://www.cpeia-acei.ca/intellibuild).

## **7.4 Next IBC Meeting**

The next IBC meeting will be held in late October 2016.

## **8. New Business - Ron Zimmer (CABA)**

### **8.1 New CABA Teaming Program**

Ron Zimmer (CABA) announced that CABA is interested in launching a new CABA Teaming Program. This program will bring together organizations to do collaborative R&D to address a specific industry question which needs to be answered. CABA has successfully done collaborative R&D projects like this in the past, for example “Laundry Time”, which was funded by Hewlett-Packard, Microsoft Corporation, Panasonic Corporation, Procter & Gamble Co and Whirlpool Corporation. CABA and the IBC are actively seeking interested organizations to contact CABA Research Director, Greg Walker at [walker@caba.org](mailto:walker@caba.org).

### **8.2 Call for other new IBC business**

Ron Zimmer (CABA) made a call for new business, no new business was proposed.

## **9. Adjournment (1:30 PM ET) - Debra Becker (Honeywell International, Inc.)**

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CABA IBC meetings are open to CABA members and invited guests, and everyone is encouraged to participate. More info on the IBC, past minutes, participants and terms of reference can be found at: <http://www.caba.org/IBC>.

Regards,

Greg Walker  
CABA Research Director  
Continental Automated Buildings Association (CABA)  
Email: [walker@caba.org](mailto:walker@caba.org)  
Phone: 613.686.1814 x227  
Website: <http://www.caba.org>