



CABA Intelligent Buildings Council (IBC)
Draft Meeting Minutes
Monday, August 24, 2020
12 NOON - 1:30 PM (ET) via Webinar

IBC Executive:

IBC Chair, Trevor Nightingale (National Research Council)
IBC Vice-Chair, Bob Allan (The Siemon Company)
IBC Vice-Chair, Harsha Chandrashekar (Honeywell International Inc.)
IBC Vice-Chair, Robert Lane (Robert H. Lane & Associates Inc.)
IBC Vice-Chair, Terrence DeFranco (Iota Communications, Inc.)

Present:

2030 Districts Network, Jiri Skopek
ABB, Inc., Julie Petrone
Aconterra Capital Partners, Gedelegeerd Bestuurder
Albireo Energy, LLC, Hector Lizarraga
Albireo Energy, LLC, Pete Chicarelli
Altair Ltd., Rob Schmitz
Albireo Energy, LLC, Paul Czerwin
Armstrong Monitoring, Joanne Johnson
ASE Smart Energy, Joseph Ruddy
AVIXA, Rochelle Richardson
BC Housing, Denisa Ionescu
BC Hydro, Graham Henderson
Belden Inc., Henry Franc
Belden Inc., Ronald Tellas
BGH Tech Partner, Jorge Haran
Brainwave Research Corp., Rene Pardo
BROAD U.S.A. Inc, sunny wang
BSRIA Inc., Colin Goodwin
Building Commissioning Association (BCA), Andrew Gledhill
CABA, Greg Walker
CABA, Andrew Glennie
CABA, Conrad McCallum
CABA, Marta Klopotoska
CABA, Robert World
CABA, Ron Zimmer

Cenmar Enterprises Inc., Frank Spitzer
Cisco Systems, Inc., Jason Potterf
City of Pickering, Negar Pakzadian
ComEd, An Exelon Company, Rick Tonielli
Crombie REIT, Michael Glynn
CSA Group, Dwayne Torrey
CSA Group, Karim Nazarali
CSA Group, Parag Phalak
CSA Group, Sam Loggia
CUNY Building Performance Lab, Michael Bobker
Day-View Electric Inc., Doug McBeth
Delta Controls, A Delta Group Company, Kelly Jenkins
Distech Controls Inc., An Acuity Brands company, Kevin Ridder
Distech Controls Inc., An Acuity Brands company, Sabatino Castaldo
Drewlo Holdings, Andre Harris
Dwyer Instruments, Inc., Javed Rafiq
Eagle Technology, Inc., Harshad Shah
EcovertCx, Kate Nelson
Ei Electronics US, Inc., Barry Donahoe
Embedded Sense, Tom Hawkett
EMerge Alliance, Tim Martinson
Energy ISA LLC, George Belich
Energy Metrics, Rajendran Avadaippan
Energy@Work Inc., Amir Kamandlooie
Engineered Systems Magazine, Herb Woerpel
European Building Automation and Controls Association (eu.bac), Peter Hug
Automated Logic, Troy Maeder
exp. US Services, Inc., Chris Larry
ExteNet Systems, Inc., Ron Scott
Ezenics, Inc., Jim Boler
Facility Data Standard Consortium, Daniel Messer
Federal Reserve Bank of Cleveland, Kelly Robbins
Frost & Sullivan, Maurice Okawaki
FUNDO GROUP Inc, Ilirjan Fundo
Harbor Research, Inc., Michael Levy
HELLA Sonnen- und Wetterschutztechnik GmbH, Robert Weitlaner
Homestead Land Holdings Limited, Steve Vidal
ICONICS, Inc., Gary Kohrt
ICONICS, Inc., Jotham Kildea
ICONICS, Inc., Melissa Topp
ICONICS, Inc., Russ Agrusa
IMI Hydronic Engineering International SA, Bhumika Lathia
Informa Tech LLC, Lisa Wittman
J.L. Richards & Associates Limited, John Graf
Jasco Products Company, David Aguilar
Ken Wacks Associates, Kenneth Wacks

Kiwi Power Ltd., Jay Zoellner
KMC Controls, Inc., Jason Mills
KNX Association, David Thurow
L&T Technology Services Limited, Hari Natarajan
Layer Zero Services, Chris Frazer
LonMark International, Ron Bernstein
LumenRadio, Inc., Maciej Oldziej
METZ CONNECT USA, Inc., Hugh Daly
Mohawk College, Frank Mesicek
MW Consulting Corp, Michael Wiebe
National Research Council (NRC), Guy Newsham
National Research Council (NRC), Natalia Cooper
Natural Resources Canada (NRCan), CanmetENERGY, Antoine Langlois
Padi LLC, Anto Budiardjo
Panduit Corp., Marc Goodman
Parity, Inc., Maxwell Payne
PLC Multipoint, Inc., Bart Manguno
Robert H. Lane & Associates Inc., Robert Lane
RYCOM Inc., Laura Towsley
RYCOM Inc., Ryan Garner
Schneider Electric, Hugo Lafontaine
Scitek Canada, Sylvain Pelletier
Sentinel Connector Systems Inc., Dave Jeskey
Service Robotics & Technologies, Inc. (SRT Labs), Jessica Bryan
Shaw Communications Inc., Clarke Stevens
SI2 Integrated Intelligent Solutions, Jayme Neto
Siemens Canada Limited, Mark Byvelds
Siemens Industry, Inc., Bonnie Brook
Siemens Industry, Inc., Hans-Joachim Langels
Siemens Industry, Inc., Pornsak Songkakul
Siemens Industry, Inc., Roberto Ramirez
Sierra Controls, Frank Jungton
Smaart House, Bijou Lulla
Stanpro Lighting Systems, Stephane Boni
Sustainable Resources Management Inc., David Katz
Sustainable Resources Management Inc., Philip Ju
Switch Automation Inc., Peter Rake
Synapse Wireless, Jim Doyle
tekmar Control Systems Ltd., Cleber Alves
The Cadillac Fairview Corporation Limited, Saeid Ansari
The Hartman Company, Thomas Hartman
The Siemon Company, Bob Allan
Thomas Duke Company, Trevor Duke
Toronto Community Housing, Michael Lam
U.S. General Services Administration (US GSA), Joseph Eberly
Unify AE, Junaid Mohiuddin

University of Strathclyde, George Chen
University of Waterloo, Dan Hergott
Vaisala Inc., Justin Walsh
Watts Water Technologies Inc., Eric Balt
WeHaus, Gaston Bouvier
Welltower, Patrick O'Donnell
WSP Canada Inc., Ali Hoss
Threshold, Erin Elmiger
Z3 Controls, Mike Zambakkides

1. **Agenda** - Greg Walker (CABA)

Greg Walker (CABA) thanked everyone for attending, outlined the agenda and alerted everyone that the meeting was being recorded and will be made available to the industry.

2. **Call to Order, Welcome and Introduction** - Bob Allan (The Siemon Company)

IBC Vice-Chair, Bob Allan (The Siemon Company) Chaired this meeting as the IBC Chair, Trevor Nightingale (National Research Council) was unable to attend.

Bob Allan (The Siemon Company) welcomed everyone and introduced: IBC Vice-Chair Harsha Chandrashekar (Honeywell International Inc.), IBC Vice-Chair Robert Lane (Robert H. Lane & Associates Inc.), IBC White Paper Sub-Committee Chair Ken Wacks (Ken Wacks Associates) and the Keynote Speaker, Guy Newsham (National Research Council). Bob also outlined the role of the IBC.

3. **Administrative** - Bob Allan (The Siemon Company)

3.1 **Motion to approve Past IBC Minutes**

Bob Allan informed everyone that the meeting minutes from the May 13, 2020 IBC meeting were circulated and were posted on the CABA website in the IBC section: www.caba.org/ibc.

Motion to approve the May 13, 2020 IBC minutes was moved by Ken Wacks (Ken Wacks Associates) and the motion was seconded by Michael Levy (Harbor Research, Inc.). Unopposed motion passed.

4. **“Smart Buildings: BEMS, EMIS, FDD, M&V, DCV and COVID” (30 min)** - Bob Allan (The Siemon Company), Guy Newsham (National Research Council) (30 min)



Guy R. Newsham Ph.D.
Principal Research
Officer



Bob Allan (The Siemon Company) introduced Guy Newsham (National Research Council) and lead the Q&A session following the presentation.

Description: NRC-Construction is working with its federal partners to implement smart building approaches into building portfolios. Results to date have been impressive, with fault detection associated with an average 7% energy savings, and short paybacks, in large office buildings. We are now extending these benefits to smaller commercial buildings. Low-cost occupancy detection is also a route to HVAC energy savings and may now also support a safe return to work during the pandemic.

5. **Research Update** - Greg Walker (CABA), Michael Levy (Harbor Research, Inc.), Ron Zimmer (CABA)

- 5.1 **2019-2020 IBC Landmark Research “Intelligent Buildings and COVID-19”** - Greg Walker (CABA)



This research will provide actionable information on how building technologies can be leveraged to create safer, healthier and more productive work environments in buildings post COVID-19. The post COVID-19 era has refocused efforts in building technology, operations and design with disease prevention and occupant health at the forefront. There are more questions than answers which has led many companies to promote ill-conceived technology solutions not backed by science. With this research, CABA will be leveraging key industry thought leaders from a wide range of multi-national corporations to provide evidence based and actionable information on technology solutions post COVID-19. This is a \$100,000 research project and the full research is only available to the funders. The cost to fund the research is only \$6K, if you would like more information or you would like to become a funder please contact Greg Walker, CABA Research at walker@caba.org. [CLICK HERE](#) for more information on the project.

Sixteen (16) CABA members have already joined this research project:



5.2 2020 IBC Landmark Research “Intelligent Building Energy Management Systems” - Michael Levy (Harbor Research, Inc.)



Michael Levy (Harbor Research, Inc.) gave a brief overview of this 2020 IBC Landmark Research Project, “Intelligent Building Energy Management Systems”. CABA and the IBC are still actively seeking funders for this research. Only the funders will receive the full \$130,000 of research. Harbor Research was selected to conduct this research. To receive this research and become a funder, please contact Greg Walker (CABA) at walker@caba.org. [CLICK HERE](#) for the full research prospectus and webinar recording explaining the project.

Due to the current economic conditions related to COVID-19, the CABA Board of Directors has moved to extend a special one-time discount to organizations potentially interested in joining.

Special pricing is now \$3K (normally \$5K) for the Bronze Funder Level and \$6K (normally \$10K) for the Silver Funder Level. [CLICK HERE](#) to see the benefits associated with each funding level and to learn more about this CABA research project. Equivalent discounts are available for the CABA Landmark Research Project: "[Privacy and Cybersecurity in the Connected Home](#)" For information on becoming a funder for either project, please contact the CABA Research Director, Greg Walker, at walker@caba.org.

Twenty (20) CABA members have already agreed to help fund this research project:



5.3 Potential New IBC Research “BACS” – Ron Zimmer (CABA)

Ron Zimmer (CABA) gave an overview of a potential new collaborative research project on market sizing and building automation control systems (BACS). The CABA Board of Directors have authorized this project and BSRIA Inc. would undertake this research. This project will cover both the United States and Canada. CABA has invited the following organizations to participate: Distech Controls Inc., An Acuity Brands company, Belimo Americas, Delta Controls, A Delta Group Company, Honeywell International Inc., Trane Technologies, Johnson Controls Inc., Schneider Electric, Siemens Industry, Inc., and Carrier Corporation/Automated Logic.

6. White Paper Sub-Committee 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 have significant technical material of relevance to IBC members - they must not contain marketing material or promote an agenda. Any CABA member can and is encouraged to bring forward a one (1) paragraph White Paper proposal to the WPSC. If needed, CABA will secure a writer and/or a working group for the paper. If a CABA Member brings forward a proposal but is not able to author, the paper, the Member will send CABA \$500 USD. CABA will try to find an author from one of our CABA Member

research firms. The \$500 will be given to the author(s) as an honorarium for their work in writing the paper. If an author cannot be found, the \$500 will be returned to the Member. All completed and approved IBC White Papers are placed in the CABA Public Library, Members Library, CABA NewsBrief, CABA Twitter Feed, CABA LinkedIn Group and promoted at industry events. To view the IBC White Paper terms of reference, previous IBC White Papers and additional information, please go to: www.caba.org/ibc. All completed CABA White Papers, and those under development, can be found at: www.caba.org/whitepapers.

IBC White Paper Sub-Committee:

Ken Wacks Associates, Kenneth Wacks
Consultant, Brittany Hack
Consultant, Steve Samson
Frost & Sullivan, Dilip Sarangan
National Research Council Canada (NRC), Heather Knudsen
Sustainable Resources Management Inc., David Katz

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.

6.1 Recently Completed:

“The Evolution of Integrating LiFi Technology into Smart Lighting and Control Systems for the Intelligent Building”

Ken Wacks (Ken Wacks Associates) gave an overview of this paper.

Working Group

Wharton County Junior College (Chair)
Acuity Brands, Inc.
ArcoLogix LLC
SnapAV
Ken Wacks Associates
Telecommunications Industry Association (TIA)

6.2 In Progress:

“Multi-MHz Wireless Power Transfer and Its Commercial Applications”

Ken Wacks (Ken Wacks Associates) gave an overview of this paper.

Working Group

University of Michigan-Shanghai Jiao Tong University Joint Institute (Chair)
Princeton University (Chair)
AirFuel Alliance
Ken Wacks Associates

Part 2: “Impacts of Automated Shading in Building Projects”

Ken Wacks (Ken Wacks Associates) gave an overview of this paper.

Working Group

TRC Energy Services (Chair)

Axis Lighting Inc.

Draper, Inc.

Ecotay Inc.

Ken Wacks Associates

Lawrence Berkeley National Laboratory (LBNL)

Lutron Electronics Co., Inc.

Springs Window Fashions/Mecho

NYSERDA (New York State Energy Research and Development Authority)

PLC-Multipoint, Inc.

Screen Innovations

Somfy Systems, Inc.

Sustainable Resources Management Inc.

Vistar Energy Consulting

Window Products Management

“Fire Alarm Systems in Buildings”

Ken Wacks (Ken Wacks Associates) gave an overview of this paper.

Working Group

Canadian Fire Alarm Association

Part 2: “The Evolution of Integrating LiFi Technology into Smart Lighting and Control Systems for the Intelligent Building”

Ken Wacks (Ken Wacks Associates) gave an overview of this paper.

Working Group

Wharton County Junior College

Acuity Brands, Inc.

ArcoLogix LLC

SnapAV

Ken Wacks Associates

National Electrical Manufacturers Association

Telecommunications Industry Association (TIA)

7. New Business - Robert Lane (Robert H. Lane and Associates Inc.)

7.1 Other new IBC business?

Robert Lane (Robert H. Lane and Associates Inc.) made a call for new business such as: future IBC Guest/Keynote presentation topics and speakers, new IBC White Papers, new research projects and meeting ideas, etc. He also indicated that the next IBC meeting will be held November 2020 with details to be forwarded in the near future.

David Katz (Sustainable Resources Management Inc.) announced they now have a draft of the BIQ 2.0 building rating system. He made a call for volunteers. Ron Zimmer mentioned that two other groups are also developing “intelligent building rating systems, including the TIA, with UL LLC support. He mentioned that the three (3) groups should try to collaborate and not have competing rating systems.

David Katz (Sustainable Resources Management Inc.) volunteered to do a keynote for the IBC on how to improve existing windows and then adjusting the energy management systems to reflect the new heat and cooling loads and how these options reduces GHG at lower cost than new windows using the information I learned in this LCA course. He also mentioned Canadian Green Building Council (CaGBC) may have interest in doing a keynote on life-cycle environmental assessment and he can get them involved.

Ron Zimmer (CABA) mentioned the strong growth in smart cities. Robert Lane (Robert H. Lane and Associates Inc.) mentioned that there will be an announcement soon around smart cities and he would be open to doing a keynote at the next meeting.

The Monday Live Group would be open to giving a COVID webinar to CABA. www.mondaylive.org.

8. Adjournment (1:30 PM ET) - Bob Allan (The Siemon Company)

[Next IBC Meeting, November 2020](#)

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CABA IBC meetings are open to CABA Members and invited guests, and everyone is encouraged to participate. [CLICK HERE](#) for more info on the IBC, past minutes, participants, and terms of reference. Any CABA Member that attended as a guest will be added to the IBC, unless they notify the CABA office by September 18, 2020 that their name should not be added. Non-CABA members that attended this meeting as a guest, should contact Greg Walker, CABA Research Director, to indicate if they wish to join the IBC or CABA. [CLICK HERE](#) for more information on the 24 CABA Benefits and please circulate them to others in your organization.

Regards,

Greg Walker
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Continental Automated Buildings Association (CABA)
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Phone: 613.686.1814 x227

Website: <http://www.caba.org>

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