



**CABA Intelligent Buildings Council (IBC)  
Draft Meeting Minutes**

Tuesday, September 3, 2019  
12 NOON – 1:30 PM (ET) via Webinar

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**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.)

**Present:**

Altair Ltd., Bryan Anderson  
Altair Ltd., Charline Hunt  
ASE Smart Energy, Antoine Karam  
BeHome247, Michael Walther  
Bobrick Washroom Equipment, Inc., Peter Nadan  
BSRIA Inc., Lone Hansen  
CABA, Conrad McCallum  
CABA, Sashien Godakandae  
CABA, Greg Walker  
Cimetrics, Inc., Anto Budiardjo  
CMG Consulting LLC, Andres Carvallo  
Consortium for Energy Efficiency, Patrick Casper  
Crosslayer, Ari Konikoff  
CSA Group, Lauro Pilla  
Cyber Power Systems, Inc., Dan Niewirowicz  
Delos Living LLC, Phil Williams  
Domotz, Seth Rubenstein  
Droplit, Inc., David Warner  
DuPont, Arnold Wong  
Ei Electronics US, Inc., Barry Donahoe  
Embedded Sense, Tom Hawkett  
EMerge Alliance, Brian Patterson  
ERG Energy Efficiency, Michael Dabbene  
Evergreen Consulting Group, Barb Hamilton  
Evergreen Consulting Group, Dan Kuhl

Evergreen Consulting Group, Margie McNally  
F & W Electric LLC, Morgan Randolph  
Fluke Networks, Steve O'Hara  
Frost & Sullivan, Maurice Okawaki  
Frost & Sullivan, Roberta Gamble  
Honeywell International Inc., Claude Boudriau  
Honeywell International Inc., Debra Becker  
Honeywell International Inc., Raj Rajagopalan  
Honeywell International Inc., Sathish Nanjappa  
Hydro-Québec, John Gaspo  
ICONICS, Inc., Stewart Paterson  
Iluflex, Ricardo Trauer  
Intel Corporation, Janine Davison  
Johnson Controls Inc., Joseph Klotz  
Johnson Controls Inc., Mark Ziolkowski  
Kele, Inc., Richard Campbell  
Ken Wacks Associates, Ken Wacks  
KNX Association, David Thurow  
Kontagion Hub Limited, Antonio Mendonca  
Layer Zero Services, Chris Frazer  
Leading Cities, Michael Lake  
LonMark International, Ron Bernstein  
Mohawk College, Frank Mesicek  
National Research Council Canada (NRC), Guy Newsham  
National Research Council Canada (NRC), Luc Pellerin  
National Research Council Canada (NRC), Scott Shillinglaw  
National Research Council Canada (NRC), Trevor Nightingale  
NYSERDA (New York State Energy Research and Development Authority),  
Monica Ridgway  
NYSERDA (New York State Energy Research and Development Authority),  
Patrick O'Shei  
Olympic Controls Inc., Dan MacKay  
Origen FM Services Inc., Wayne Collins  
Peterborough Regional Health Centre, Paul Orser  
Preventive Maintenance Services Company, Derek Scott  
Public Services and Procurement Canada, Marek Dziedzic  
Raybased AB, Jan Ryderstam  
RetroLux, Jacob Papka  
Schneider Electric, Devin Sikorski  
Sensinov, Marc Danjou  
Siemens Industry, Inc., Bonnie Brook  
Siemens Industry, Inc., Dan Finnegan  
Siemens Industry, Inc., Daniel Kubala  
Siemens Industry, Inc., Maria Marks  
Siemens Industry, Inc., Richard Rivera  
Stardel Ltd., Andrew Gledhill

STRATIS IoT, Charlie Hill  
Sustainable Resources Management Inc., David Katz  
Syska Hennessy Group, Inc., Valentine Loh  
The Allen Morris Company, Harold Riley  
The Siemon Company, Bob Allan  
Virginia Tech, Ashraful Haque  
WSP USA, Michael Isenberg  
ZANIIO, Nicolas Waern

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** - Trevor Nightingale (National Research Council)

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

3. **Administrative** - Trevor Nightingale (National Research Council)

3.1 **Motion to approve Past IBC Minutes**

Trevor Nightingale (National Research Council) informed everyone that the meeting minutes from the May 8, 2019 IBC meeting were circulated and were posted on the CABA website in the IBC section: [www.caba.org/ibc](http://www.caba.org/ibc).

Motion to approve the May 8, 2019 IBC minutes was moved by Bob Allan (The Siemon Company) and the motion was seconded by Roberta Gamble (Frost & Sullivan). Unopposed motion passed.

4. **“Deploying Scalable Smart Building solutions” (30 min)** - Bryan Anderson (Altair Ltd.)



**Bryan Anderson**  
Consultant - Go To Market  
Altair Engineering Inc.



Abstract: Smart Building solutions are traditionally known for being highly complex and costly, limiting their application mainly to large, commercial buildings. Over the past several years, however, rapidly changing technology has allowed thousands of new, powerful, and inexpensive IoT sensors to hit the market — making it possible to implement smart solutions in small and mid-sized buildings. Learn how to drive additional value for energy and facilities management. [CLICK HERE](#) for more information on the Altair Ltd.

Bryan Anderson (Altair Ltd.) gave a 30 minute presentation on “Deploying Scalable Smart Building solutions”. [CLICK HERE](#) to access the recorded presentation and PowerPoint slides.

## 5. Research Update – Trevor Nightingale (National Research Council)

### 5.1 2019 IBC Landmark Research “Evidence for Building Retrofits that Improve Organizational Productivity (Phase 2)” - Trevor Nightingale (National Research Council)



#### **Evidence for Building Retrofits that Improve Organizational Productivity**

LANDMARK RESEARCH PROJECT



The CABA Board of Directors selected “Evidence for Building Retrofits that Improve Organizational Productivity (Phase 2)” as the 2019 IBC Landmark Research Project. Trevor Nightingale (National Research Council) gave a brief overview. Due to the importance of this research, the CABA Board of Directors unanimously decided that the full research would be made freely available to the entire industry once it is completed. [CLICK HERE](#) to download the full Phase 1 research report and presentation.

Phase 2 will deploy the productivity frameworks from Phase 1 using partner-supplied human resources and real-estate data to demonstrate the value of specific building features and technologies. If you would like to know more about Phase 2 of the research or would like to join Phase 2, please contact Greg Walker (CABA) at [walker@caba.org](mailto:walker@caba.org). More information on Phase 2 of this project will be posted shortly [HERE](#).

CABA members currently signed up to support Phase 2 of this project:



## **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 – it must not contain marketing material or promote an agenda. Any CABA member can and is encouraged to bring forward a one-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, 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](http://www.caba.org/ibc). All completed

CABA White Papers, and those under development, can be found at:  
[www.caba.org/whitepapers](http://www.caba.org/whitepapers).

IBC White Paper Sub-Committee:

Ken Wacks Associates, Kenneth Wacks  
Consultant, Brittany Hack  
Consultant, Steve Samson  
Frost & Sullivan, Dilip Sarangan  
Intelligent Buildings Europe, Nikiforos Panorios  
National Research Council Canada (NRC), Heather Knudsen  
Public Services and Procurement Canada, Marek Dziedzic  
Siemens Industry, Inc., Raphael Imhof  
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](mailto:walker@caba.org).

**6.1 Recently Completed:**

**“IoT Cyber Security Guidelines, Standards and Verification Systems”**

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

Working Group

BC Hydro (Chair)  
Agelight Digital Trust Advisory Group  
ARC Advisory Group  
ArcoLogix LLC  
Automation Standards Compliance Institute  
CANASA (Canadian Security Association)  
Compass Intelligence, LLC  
Consultant  
Control4  
CopperTree Analytics Inc.  
CSA Group  
Domotz  
eMcRey  
EXP  
George Brown College  
Honeywell International Inc.  
Johnson Controls Inc.  
Ken Wacks Associates  
LonMark International  
National Electrical Manufacturers Association (NEMA)  
RYCOM Corporation  
Sustainable Resources Management Inc.  
Syska Hennessy Group  
TC9, Inc

The Siemon Company

## **6.2 In Progress:**

### **“Energy Metering and Power Quality Metering: Energy Management and Billing Services for Commercial, Institutional, Multi-Family, and Industrial Applications”**

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

#### Working Group

EZ Meter Technologies (Chair)  
ARC Advisory Group  
ArcoLogix LLC  
Asian Institute of Intelligent Buildings (AIIB)  
Brainwave Research Corp.  
CMG Consulting LLC  
Compass Intelligence, LLC  
Convergint Technologies Ltd.  
CopperTree Analytics Inc.  
Current, powered by GE  
CyberPower Systems, Inc.  
Domotz  
Enercare Connections Inc.  
Honeywell International Inc.  
Ken Wacks Associates  
Public Services and Procurement Canada  
Renesas Electronics America Inc.  
Robert H. Lane & Associates Inc.  
Schneider Electric  
Sustainable Resources Management Inc.  
Triacta Power Solutions LP  
Zinwave

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

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

#### Working Group

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

### **“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

Control4  
National Electrical Manufacturers Association  
Telecommunications Industry Association (TIA)

7. **New Business** – Roberta Gamble (Frost & Sullivan), Michael Lake (Leading Cities), Bob Allan (The Siemon Company)

**7.1 Frost & Sullivan Research Opportunity** - Roberta Gamble (Frost & Sullivan)

Roberta Gamble (Frost & Sullivan) gave an overview of a research opportunity for CABA members. Frost & Sullivan is providing a new complimentary marketing benchmark survey and analysis for CABA members. This survey is targeted towards marketing budget holders to help them understand 1) If their own marketing trends are on par with the market, and 2) If they are conducting the right activities vis a vis their challenges and successes.

The survey takes about 20 minutes. Both the survey and the resulting 25+ page customized analysis are free. Frost & Sullivan will provide one(1) per company and it gives you a chance to see how over a dozen of your strategies, such as paid vs. unpaid social media, digital or non-digital marketing, events, account-based marketing, and even your overall stacks up to other companies. Frost & Sullivan is also providing high level recommendations, based on the outcomes.

Please contact Roberta Gamble (Frost & Sullivan) at [roberta.gamble@frost.com](mailto:roberta.gamble@frost.com) if you would like to take advantage of this opportunity.

**7.2 Smart Building Challenge (2020 AcceliCITY)** - Michael Lake (Leading Cities)

Leading Cities are interested in partnering with CABA and any one or more of its members to offer a Smart Building Challenge for the 2020 AcceliCITY program. AcceliCITY is a global smart city solution competition. CABA would identify a specific need, which gets turned into an AcceliCITY Challenge Track. In the first two years, AcceliCITY has received more than 500 applications from over 40 countries each year. Ultimately, AcceliCITY reduces the risk and cost of innovation by providing globally sourced solutions, vetting them with a panel of international experts, and validating them with their diligence process.

AcceliCITY have focused on partnering with municipal governments (e.g. this year they have Smart Water and Smart Mobility tracks each hosted by a different city). Recognizing the impact buildings have with quality of life, carbon emissions, etc. in cities, they are interested in having a Smart Building Track. Any interested parties should contact Michael Lake (Leading Cities) at



[M.Lake@LeadingCities.Org](mailto:M.Lake@LeadingCities.Org) if they would like to learn about hosting a Smart Challenge Track.

### 7.3 New Business – Trevor Nightingale (National Research Council)

Trevor Nightingale (National Research Council) 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 late November or early December 2019, 2019, with details to be forwarded in the near future.

## 8. **Announcements** – Greg Walker (CABA), Sashien Godakandae (CABA)

### 8.1 Past Events Overview:

- [2019 Haystack Connect, May 13-15, San Diego, CA](#)
- [Internet of Things World, May 13-16, Santa Clara, CA](#)
- [LIGHTFAIR International 2019, May 21-23, Pennsylvania, PA](#)
- [REMI/ISSA/IFMA '19 Shows, June 11-13, Toronto, ON](#)
- [Realcomm/IBcon, June 13-14, Nashville, TN](#)
- [Global Smart Build Summit 4th Edition, July 17, Pune, India](#)
- [Smart Water Summit, Aug 24-27, Scottsdale, AZ](#)

### 8.2 Upcoming Events:

- [Shanghai Intelligent Building Technology, Sept 3-5, Shanghai, China](#)
- [SCTE-ISBE Cable Tec Expo, New Orleans, LA](#)
- [IFMA's World Workplace Conference & Expo, Oct 16-18, Phoenix, AZ](#)
- [Smart Utility Summit, Oct 27-29, Phoenix, AZ](#)
- [CoRETECH 2109, Nov 13-15, San Jose, CA](#)

### 8.3 Upcoming CABA Event:

- [CABA Smart Buildings Summit \(SBS\), May 3-5, 2020, Ponte Vedra, FL](http://caba.org/SBS)

## 9. **Adjournment** (1:30 PM ET) – Trevor Nightingale (National Research Council)

[Next IBC Meeting, late November / early December](#)

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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 30, 2019 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.

Regards,

Greg Walker  
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Continental Automated Buildings Association (CABA)  
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