CABA Intelligent Buildings Council (IBC)
Draft Meeting Minutes
Monday, February 19, 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:
Acuity Brands, Inc., Jazib Frahim
Acuity Brands, Inc., Tanya Hernandez
Alberta Economic Development, Aimee Charest
ARC Advisory Group, Jim Frazer
ARC Advisory Group, Larry O'Brien
Ateka, Alvaro Tuzman
Automated Logic, Troy Maeder
BC Hydro, David Rogers
BC Hydro, Tim Mosley
C&C Group, Danny Davies
CABA, Andrew Glennie
CABA, Conrad McCallum
CABA, Ron Zimmer
CABA, Sashien Godakandae
CAIL, Lindsay Pick
Consortium for Energy Efficiency (CEE), Patrick Casper
Consult, Design, Manage, Produce, Philip Sandstrom
Delos Living LLC, Jie Zhao
Distech Controls Inc., An Acuity Brands company, Asim Baig
Eagle Technology, Inc., Harshad Shah
Echelon Corporation, Apurba Pradhan
ERG Energy Efficiency, Michael Dabbene
exp. US Services, Inc., Chris Larry
Go Green-LED Alternatives, LLC, Sandra Goeken
Honeywell International Inc., Harsha Chandrashekar

Honeywell International Inc., Sathish Nanjappa
ICONICS, Inc., Zhi Wei Li
Inversiones JHP, Jim Hrastovcak
Iota Communications, Inc., Michael Davies
Johnson Controls Inc., Jason Christman
Johnson Controls Inc., Jim Wayner
Johnson Controls Inc., Linnete Velez-McKnight
Johnson Controls Inc., Phillip Bafunno
Johnson Controls Inc., Pierre Porter
Ken Wacks Associates, Ken Wacks
LonMark International, Ron Bernstein
M. D. Anderson Cancer Center, John Prelesnik
National Research Council (NRC), Trevor Nightingale
OSRAM Inc., Roy Harvey
Padi.io, Anto Budiardjo
Parc, Barbara Cromarty
Robert H. Lane & Associates Inc., Robert Lane
SAEG Controls, S.A.C., Fernando Katayama
Schneider Electric, Sera Moffatt
Siemens Industry, Inc., Hans-Joachim Langels
Siemens Industry, Inc., Marybeth Donaldson
Siemens Industry, Inc., Richard Rivera
Siemens Industry, Inc., Vojislav Zekicv
Signify, Andrew Prevost
Signify, Harsha Banavara
Silicon Labs, Alex Koepsel
Silvair, Inc., Simon Slupik
Swinerton Builders, Eric Valleton
TCecure, LLC, Tina Williams-Koroma
Telecommunications Industry Association (TIA), Marta Soncodi
TelNet Management Consulting, Inc., Fawzi Behmann
The Building People, Trevor Morrison
The Cadillac Fairview Corporation Limited, Eran Frank
The Chicago Faucet Company/Geberit Group, Ronn Jefferson
The International Society of Automation, Andre Ristaino
Urban Sky LLC, Silas Shadid

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 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.), IBC White Paper Sub-Committee Chair Ken Wacks (Ken Wacks Associates) and the Keynote Speaker, Larry O'Brien (ARC Advisory Group). 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 November 25, 2019 IBC meeting were circulated and were posted on the CABA website in the IBC section: www.caba.org/ibc.

Motion to approve the November 25, 2019 IBC minutes was moved by Larry O'Brien (ARC Advisory Group) and the motion was seconded by Tim Mosley (BC Hydro). Unopposed motion passed.

4. **"Cybersecurity and Intelligent Buildings" (30 min)** - Harsha Chandrashekar (Honeywell International Inc.), Larry O'Brien (ARC Advisory Group)

Larry O'Brien
Vice President of Research

Abstract: CLICK HERE for more information ARC Advisory Group.

Larry O'Brien (ARC Advisory Group) gave a 30 minute presentation on "Cybersecurity and Intelligent Buildings". CLICK HERE to access the recorded presentation and PowerPoint slides.

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

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

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 of the project. 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.

This is a **$200K, fully-funded research** project with generous support from CABA, the National Research Council (NRC) and 14 other CABA organizations. CABA is currently seeking organizations that may be interested in providing anonymized building and human resource data for this research. Do you know of a building(s) that might qualify for this research? There is no cost involved. **We need this building and human resource data within 3 months, or the research project will be cancelled.**

Contact Greg Walker, CABA Research Director, at walker@caba.org, if you know of a building that might qualify for the research. CLICK HERE for more information.

Fourteen (15) CABA members have already joined this research project:

5.2 2020 IBC Landmark Research "Intelligent Building Energy Management Systems" - Greg Walker (CABA)

Greg Walker (CABA) 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. 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.

Two (2) CABA members have already agreed to help fund this research 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 - 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. 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
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.

6.1 Recently Completed: None

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)
Axis Lighting Inc.
Brainwave Research Corp.
CMG Consulting LLC
Compass Intelligence, LLC
Convergint Technologies Ltd
CopperTree Analytics Inc.

Current, powered by GE
Cyber Power 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.
<u>Working Group</u>
University of Michigan-Shanghai Jiao Tong University Joint Institute (Chair)
Princeton University (Chair)
AirFuel Alliance
Ken Wacks Associates

"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.
<u>Working Group</u>
Wharton County Junior College (Chair)
Acuity Brands, Inc.
ArcoLogix LLC
SnapAV
Ken Wacks Associates
National Electrical Manufacturers Association
Telecommunications Industry Association (TIA)

7. <u>New Business</u> - 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 April 2020 with details to be forwarded in the near future.

8. <u>Announcements</u> - Ron Zimmer (CABA) (CABA)

8.1 Past Events Overview:
CoRETECH 2109, Nov 13-15, San Jose, CA
Greenbuild International Conference and Expo 2019, Nov 19-22, Atlanta, GA
CABA AGM, Dec 5, 11am ET via Webinar
AHR Expo, Feb 3-5, Orlando, FL
DISTRIBUTECH International 2020, Feb 9-11, San Diego, CA

8.2 Upcoming Events:
Light+Building, Mar 8-13, Frankfurt, Germany
Internet of Things World, Apr 6-9, San Jose, CA
Niagara Summit: Connecting the World, Apr 19-21, San Diego, CA
BuildingsNY, Apr 28-29, New York, NY

9. Adjournment (1:30 PM ET) - Trevor Nightingale (National Research Council)

Next IBC Meeting, April 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 March 20, 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 25 CABA Benefits.

Regards,

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

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