CABA Intelligent Buildings Council (IBC)
Draft Meeting Minutes
Tuesday, Nov 1, 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.)

Present:
BC Hydro, Tommy Yim
Belimo Americas, Christoph Graf
Belimo Americas, Dennis Johannesen
Brainwave Research Corp., Rene Pardo
CABA, Andrew Glennie
CABA, Ron Zimmer
CABA, Sashien Godakandae
Cimetrics, Inc., Anto Budiardjo
CSA Group, Rodger Redd
CSA Group, Stephen Brown
CSA Group, Stephen Michell
Cyber Power Systems, Inc., Daniel Niewirowicz
Eagle Technology, Inc., Harshad Shah
Ei Electronics US, Inc., Barry Donahoe
Electronic Systems Professional Alliance (ESPA), Jeff Gardner
Enolgas USA Inc., Vittorio Bonomi
exp US Services, Inc., Chris Larry
Fleet Complete, Galina Korshunova
Fleet Complete, Katerina Gavrikova
Fleet Complete, Maryann Ike
Fleet Complete, Sandeep Kar
GE (General Electric), Chris Auger
GE (General Electric), Jeremy Yon
GE (General Electric), JP Camardo
GGI Solutions, Sylvie Lafreniere
Honeywell International Inc., Debra Becker
Honeywell International Inc., Harsha Chandrashekar
Howard W. Campbell Consultant Corp., Howard Campbell
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)

Bob Allan (The Siemon Company) informed everyone he will be filling in for the IBC Chair, Trevor Nightingale (National Research Council) for the first portion of the meeting. Bob Allan (The Siemon Company) welcomed everyone and introduced: IBC Chair Trevor Nightingale (National Research Council), IBC Vice-Chair Robert Lane (Robert H. Lane & Associates Inc.), IBC Vice-Chair Harsha Chandrashekar (Honeywell International Inc.), IBC White Paper Subcommittee Chair Ken Wacks (Ken Wacks Associates) and Keynote Speaker Sandeep Kar (Fleet Complete). 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 (The Siemon Company) informed everyone that the meeting minutes from the August 14, 2018 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 August 14, 2018 IBC minutes was moved by David Katz (Sustainable Resources Management Inc.) and the motion was seconded by Ron Bernstein (LonMark International). Unopposed motion passed.

4. **“Growth Opportunities Enabled by Connected Vehicle’s Interaction With Smart Infrastructure” (30 min)** - Sandeep Kar (Fleet Complete)

Abstract: Approximately 30-40 percent of all commercial vehicles in North America are connected to the world outside and vice versa through telematics technologies, a figure that is expected to double by 2025. These vehicles are reshaping smart mobility business models and not only driving efficiencies in freight and passenger mobility, but also creating new opportunities for smart buildings and related infrastructure. Sandeep Kar, Chief Strategy Officer at Fleet Complete, shared views on digitization and its impact on connected vehicle eco-systems and discuss emerging business models that will drive connected vehicles’ interactions with smart buildings and vice-versa. Location based data, autonomous driving, freight digitization, smart parking, and several other emerging technologies and applications were the focal points of this presentation.

Bob Allan (The Siemon Company) introduced Sandeep Kar (Fleet Complete) Inc.) and outlined his experience. Sandeep gave a 30 minute presentation on “Growth Opportunities Enabled by Connected Vehicle’s Interaction With Smart Infrastructure”. [CLICK HERE](#) to access the recorded presentation and PowerPoint slides.
5. **Research Update** - Trevor Nightingale (National Research Council), Harsha Chandrashekar (Honeywell International Inc.), Bob Allan (The Siemon Company)

5.1 “Phase 2: Improving Organizational Productivity with Building Automation Systems” - Trevor Nightingale (National Research Council)

Trevor Nightingale (National Research Council) gave a brief overview of this $150,000 US CABA Boutique Multi-Client Research Project. Due to the importance of this research, the research funders have generously and unanimously decided to release the full research for free to the entire industry. [CLICK HERE](#) to download the full research report and presentation.

CABA, the National Research Council (NRC) and the IBC are planning to pursue Phase 2 of this research shortly. 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. The CABA Board of Directors has created a Task Force to help create the prospectus and deliverables or Phase 2. 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:

**Phase 2 Task Force:**
Bianca Van Der Zande (Philips)
Brandon Buckingham (Steelcase Inc.)
David Sapoznikow (Intel Corporation)
Greg Walker (CABA)
Jennifer Veitch (National Research Council)
Rachna Stegall (UL LLC)
Rimes Mortimer (Microsoft Corporation)
5.2 "Monetization of Intelligent Buildings” Update - Harsha Chandrashekar (Honeywell International Inc.)

Harsha Chandrashekar (Honeywell International Inc.) gave brief overview of the $150,000 US 2018 IBC Landmark Research Project, “Monetization of Intelligent Buildings”. This important research project had 22 funders and the research was successfully completed by Harbor Research Inc. All CABA members have received an Executive Summary and it has also been posted in the CABA Members Library. This $150,000 research project will be available shortly to CABA members for only $4,900. For more information please contact Greg Walker (CABA) at walker@caba.org. CLICK HERE for the full research prospectus and webinar recording.

Twenty-two (22) CABA members funded this research:

Only the funders and those who purchase the research will receive the full research report and raw data.

5.3 2019 IBC Landmark Research Topic? - Bob Allan (The Siemon Company)
Bob Allan (The Siemon Company) lead the discussion on potential topics for the next IBC research.


David Katz (Sustainable Resources Management Inc.) suggested net zero buildings market sizing as a topic.

Trevor Nightingale (National Research Council) suggested how buildings interact with utilities and distributed energy behind the meter as a topic.

Bob Allan (The Siemon Company) suggested smart cities as a topic.

Anto Budiardjo (Cimetrics, Inc.) suggested cybersecurity as a topic.

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 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, 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 can be found at: [www.caba.org/White-Papers](http://www.caba.org/White-Papers).
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:

“Human Skin Cells: A Potential Source of Building Contaminants”
Ken Wacks (Ken Wacks Associates) gave an overview of this paper.

Working Group
Environmental Diagnostics Laboratory (EDLab) at Pure Air Control Services, Inc.

6.2 In Progress:

“Impacts of Automated Shading in Building Projects”
Ken Wacks (Ken Wacks Associates) gave an overview of this paper.

Working Group
Axis Lighting Inc.
Ecotay Inc.
HunterDouglas
Ken Wacks Associates
Lawrence Berkeley National Laboratory
Legrand
Lutron Electronics Co., Inc.
MechoSystems, Inc.
NYSERDA (New York State Energy Research and Development Authority)
PLC Multipoint, Inc.
Screen Innovations
Siemens Industry, Inc.
Somfy Systems, Inc.
Sustainable Resources Management
TRC Energy Services
Vistar Energy Consulting
Window Products Management
Ken Wacks (Ken Wacks Associates) gave an overview of this paper.

Working Group
ArcoLogix LLC
Asian Institute of Intelligent Buildings
Brainwave Research Corp.
CMG Consulting LLC
Convergint Technologies
CopperTree Analytics Inc.
Current, powered by GE
Cyber Power Systems, Inc.
Domotz
Enercare Connections Inc.
EZ Meter Technologies
Honeywell International Inc.
Ken Wacks Associates
Public Works and Government Services Canada
Renesas Electronics America Inc.
Robert H. Lane and Associates Inc.
Schneider Electric
Sustainable Resources Management
Triacta Power Solutions
Zinwave

“Automated Control Systems for Zero Emission Buildings”
Ken Wacks (Ken Wacks Associates) gave an overview of this paper.

Working Group
Ecotay Inc.

“IOT cyber security guidelines, standards and verification systems”
Ken Wacks (Ken Wacks Associates) gave an overview of this paper.

Working Group
Agelight Digital Trust Advisory Group
ARC Advisory Group
ArcoLogix LLC
Automation Standards Compliance Institute
BC Hydro
CANASA (Canadian Security Association)
Compass Intelligence, LLC
Consultant
Control4
7. New Business – Andrew Glennie (CABA), Trevor Nightingale (National Research Council)

7.1 New CABA Member Benefit: CABA Affinity Program - Andrew Glennie (CABA)

Andrew Glennie (CABA) gave an update of this CABA Member Benefit. The CABA Affinity Program allows CABA member research firms to offer discounts to CABA members. Participating CABA member research firms provide CABA members with a promotional code for a set percent discount off their research. CABA has a wide range of research firms as members. CLICK HERE for more information.

7.2 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 in January, details will be forwarded in the near future.

8. Announcements – Ron Zimmer (CABA)

8.1 Past Events Overview:
- IBcon 2018 – Realcomm, June 6-7, Las Vegas, NV
- InfoComm 2018, June 6-8, Las Vegas, NV
- BICSI Fall Conference & Exhibition, Sept 29 – Oct 3, Las Vegas, NV
8.2 Upcoming Events:
- Greenbuild International Conference & Expo, Nov 14-16, Boston, MA
- AHR EXPO HVACR Trade Show, Jan 14 – 16, Chicago, IL
- DistribuTECH Feb 5 – 7, San Antonio, TX

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

Next IBC Meeting, Jan

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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. Any CABA Member that attended as a guest will be added to the IBC, unless they notify the CABA office by Nov 30, 2018 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.

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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