CPEIA 2016 Sector Development Report

The Canadian Printable Electronics Industry Association (CPEIA)



Peter Kallai, MBA, PMP President & CEO October 12, 2016



The united voice of Canada's Printable Electronics sector











2016 Highlights

Acquired 21 new Members to date in 2016.

- 3M
- Array Marketing
- Automation Alternatives
- Brilliant Matters
- Centennial College
- EMD Performance Materials
- Henkel AG (pending)
- Information Mediary
- IEEE Canada
- Lomiko Metals
- NFC Authority
- NGTronix Industries
- OM Signal
- PCAS Canada
- Red River College, Research Partnerships & Innovation

- Shimifrez
- Sun Chemical (pending)
- Tech-Access Canada
- TUKU Inc.
- University of British Columbia-Centre for Flexible Electronics and Textiles
- Wibicom

Continued to significantly strengthen the ecosystem, by replacing individual Members and adding more industry-leading corporate Members that contribute substantially more ecosystem and sustaining revenue to the association.



2016 First Quarter Update

Drive toward CPES2016:

- Securing keynotes, speakers, exhibitors, academic posters and finalizing the Agenda, in collaboration with partner organizations
- Expanding the scope of CPES, with addition of the VIP Networking Dinner, inaugural Innovation Awards, XRCC facilities tour
- Massive effort through direct solicitation, email campaign, social media and advance coverage by media sponsors to drive registrations, grow the event
- Majority of CPES2015 sponsors renewed. New sponsors included PAC, AIPIA, Anderson & Vreeland Canada, MGI/ Ceradrop, Sheridan College, Printed Electronics now, IT World Canada.

IntelliBUILD

- Final development of two landmark research papers on applications for printable and flexible electronics in Intelligent Buildings and Connected Homes, with the Continental Automated Buildings Association
- Discussions underway to create an IntelliBUILD Leadership Council

IntelliPACK

- Issued 30+-page white paper for Intelligent Packaging, widely promoted and well received by the packaging industry.
- Held monthly meetings and significantly expanded the scope of participants for the Leadership Council.
- Leadership Council got to work, mapping out key stakeholders, technologies and applications.
- Continued development of programs and initiatives, including plans for a 2016 workshop.

Technical Program

- CPEIA Webinars delivered included Funding Opportunities with Sustainable Development Technology Canada, PE for Automotive Applications.
- IEEE ISCAS 2016: Our Members secured and developed a Special Session on Printable Electronics at the IEEE International Symposium on Circuits and Systems, May 23 in Montreal.
- IEEE ANTEM 2016: Secured and developed a special half-day Session on Printable Electronics at IEEE's 17th International Symposium on Antenna Technology and Applied Electromagnetics, July 10-13 in Montreal.
- Continued to work with CPEIA Members to schedule webinars and facility tours through the second half of 2016.



External Relations

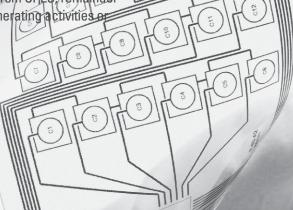
- Met with IEEE to develop an MOU to align CPEIA with IEEE.
- Ongoing discussions with several associations, including ITAC and IPC.
- In late January, CPEIA took over management of the Printed Electronics Network LinkedIn Group, a major industry networking group. The group has since grown by almost 150 Members, to about 2,618.

Admin

- We filed our annual returns with CRA.
- We have made significant effort to fill out our membership directory with our Members.
- We are carefully managing cash-flow.
- We have secured a professional services contract to generate revenues to be delivered in O2.

Membership

- Signed eight new members.
- Major effort to migrate Members to a new sustainable commercial rate structure, from the CPEIA's inaugural introductory rates, to ensure long-term financial stability of the Association.
- Transition to calendar year renewals.
- 90% of corporate Members renewed at new higher rates. Academic Member renewal rate was lower.
- End of individual memberships and migration of these Members to new corporate rate structure.
- Established new revenue targets third of operating budget to come from membership fees, half from CPES, remainder from other revenue-generating a ctivities or professional services.



2016 Second Quarter Update

CPES2016:

- Larger agenda with inaugural CPES Innovation Awards, 12 tabletop exhibitors, VIP networking reception with ~ 50 participants and facilities tour at XRCC.
- Expanded industrial focus and emphasis on market-ready technologies, with participating organizations such as Unilever, Molson Coors, Quebec Hydro.
- Half of attendees were new faces from previous year, including many U.S. and international participants from Europe and as far as Japan.
- Active media participation to build market awareness, with CBC, as well as media sponsors Printed Electronics Now, IT World Canada, Electronic Products & Technology. Numerous features were published by each pub with follow-on stories, through Q1 and Q2.
- Promotional mailings to the CPEIA contact list for Gold and Diamond sponsors NovaCentrix, CSAGroup, FUJIFILM Dimatix, XRCC.

IntelliBUILD

- Launch of two landmark research papers on applications for printable and flexible electronics in Intelligent Buildings and Connected Homes, with the Continental Automated Buildings Association at CPES2016.
- Discussions continue to create an IntelliBUILD Leadership Council.

IntelliPACK

- Held monthly meetings and continued to expand the scope of participation for the Leadership Council.
- Continued development of programs and initiatives for fall/winter 2016-17.
- Developed three use cases with Xerox, NFC Authority, TUKU.
- Use case promotion through social media channels, CPEIA newsletter, producing tangible lead generation results for participating companies.
- Started an intelliPACK network on LinkedIn.

Technical Program

- Delivered workshops with IEEE at ISCAS, IEEE's international conference on circuit design, and ANTEM, IEEE's international conference on antenna design.
- Continued to work with CPEIA Members to schedule webinars and facility tours through the second half of 2016.
- We are currently looking for support for Inks and Pastes whitepaper development that would take place in the fall 2016 upon securing the required financial resources. Two sponsors have committed, but we need at least one more to get this project off the ground.



External Relations

 Secured a landmark strategic partnership with IEEE through its Ottawa Section, to drive awareness and undertake joint activities related to printable and flexible electronics in various market verticals.

Publicity

- Continued growth of the Printed Electronics Network LinkedIn Group, a major industry networking group managed by the CPEIA, to about 2,684 members. We regularly share CPEIA members' information in the network as well as all CPEIA events.
- We secured 10+ features/news segments in four media outlets in this quarter that featured CPEIA Member organizations XRCC, Memtronik Innovations, Myant & Co., IEEE, IDTechEx, as well as several CPES2016 speakers.
- We featured Memtronik, Myant, GGI in the last 3 CPEIA newsletters.

Membership

- Migration completed of Members to a new sustainable commercial rate structure, from the CPEIA's inaugural introductory rates, to ensure long-term financial stability of the Association. This eliminated individual memberships.
 - This ended in mid Ω 2, then focus shifted to CPES.
- Continued discussions with over half a dozen larger organizations to join CPEIA, but those discussions are taking longer due to higher membership dollar commitments.
- We will continue our focused membership drive through Q3.

Admin

- 2016 AGM held at CPES2016, where attending members discussed Association's financials, cash flow challenges going forward. Motions carried to:
- Institute a repayment schedule of monies owing to President and CEO Peter Kallai for his investment in the startup/operating costs of the Association
- Embark on a process to develop a new name and brand identity for the Association more inclusive of the broad spectrum of printable, flexible and wearable electronics.
- We are carefully managing cash flow by reducing activities in the summer months when most of our members are on holidays and increasing focus on the September to June months.
- We delivered on a professional services contract to generate revenues for CPEIA, by facilitating a workshop on Wearables and Smart Textiles.
- We continue to pursue professional services contracts and government funding to generate revenues.
- We are undertaking the process to develop a new name and brand identity for the Association following the motion carried at the 2016 AGM. As a first step, we assessed the cost of such a rebranding exercise. Given the CPEIA's shortage of funds, we will only complete when funds become available.
- We have identified a new client relationship management system and are considering implementation, to streamline and centralize all information related to interactions with our Members and contacts.



2016 Third Quarter Update

IntelliPACK

- Held monthly meetings and continued to expand the scope of participation for the Leadership Council to now include point-ofsale displays for retail in addition to product packaging.
- Continued development of programs and initiatives for fall/winter 2016-17 including:
- 1. intelliPACK fall workshop, taking place at ICI in Montreal October 25.
- 2. Two-day workshop and intelliPACK exhibit at Graphics Canada Expo, April 2017.
- Developed new use cases with TUKU and Unilever.
- Attended, exhibited and facilitated a panel on smart packaging at PAC, Packaging Consortium's annual PAC to the Future conference in Niagara in September, to promote our sector.
- Secured Q&A with leading industry publication Packaging Digest that featured use cases with Xerox, NFC Authority, TUKU.
- Briefed with publisher of Packaging Digest at PAC to the Future, laying groundwork for broader relationship with UBM Canon's family of packaging-related publications.
- Continued to grow new intelliPACK group on LinkedIn.

IntelliBUILD

 Call for expressions of interest launched through September newsletter to create an intelliBUILD Leadership Council – effort endorsed and promoted by CABA on our behalf. Please let us know of you are interested in this.

Technical Program

- Delivered a workshop with IEEE at ANTEM, IEEE's international conference on antenna design, in Montreal in July.
- Developed a first-of-its-kind Research Review of printed antenna capability in Canada. This review is free to CPEIA Members, available to non-Members for a fee.
- Presented at IEEE Standards Association 5G Workshop, Aug. 9 in Ottawa, on uses and applications for printable electronics in the wireless industry.



External Relations

 Secured a landmark strategic partnership with Tech-Access Canada with an MOU. This will help SMEs active in printable, flexible and wearable electronics tap into the applied research and technical development capabilities of NSERC-funded Technology Access Centres at colleges and cegeps across Canada.

Publicity

- Continued growth of the Printed Electronics Network LinkedIn Group, a major industry networking group managed by the CPEIA, to about 2,769 members. We regularly share CPEIA members' information in the network as well as all CPEIA events.
- intelliPACK feature coverage in Packaging Digest Magazine, as noted above.
- Series of momentum press releases through September to showcase and promote new Members

Membership

- Nine new Members secured during the quarter
- Held discussions with many other prospects.

Admin

- Cash flow carefully managed by reducing activities in the summer months when most Members are on holidays and increasing focus on the September to June period.
- We were unable to secure professional services contracts and government funding to generate revenues, but we tried with several organizations.
- We must issue invoices sooner for 2017 to manage cashflow as we are already working on activities for 2017.



What to Expect in the Fourth Quarter

Sector Strategy & Leadership

 Sector Leadership Council Meeting, Nov. 22 at XRCC in Toronto. Full-day, high-level round table to to develop a common vision and growth strategy for the CPEIA and this industry, including avenues for government funding.

IntelliPACK

- intelliPACK smart packaging fall workshop, at ICI in Montreal, October 25.
- Continued use case development.

IntelliBUILD

 Continued effort with our Members and strategic partners to form Leadership Council.

Technical Program

- Developing photovoltaics workshop for March 2017, with the National Research Council of Canada.
- Working on developing a Sensors Workshop for 2017.
- Launched the planning and program development for the 2017 Printable, Flexible, Wearable Electronics Symposium (CPES2017).
- Updating the CPEIA website with a Canadian Technical Capabilities section

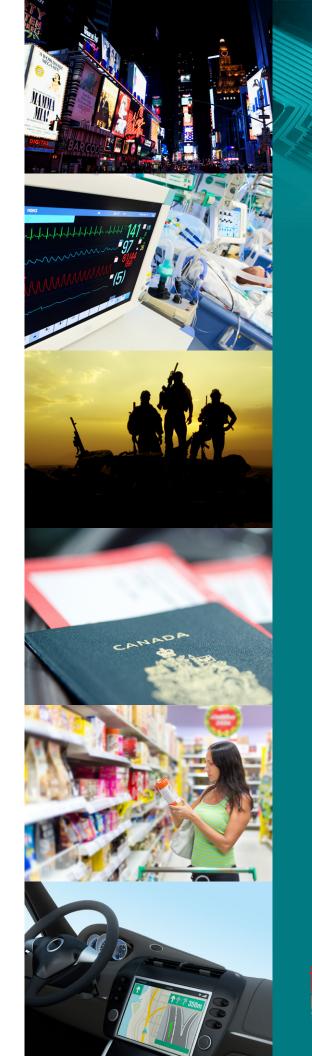
External Relations

- Attendance and exhibition at 72nd Annual General Meeting of the IEEE Ottawa Section and the meeting of the National Board of Directors, October 14.
- Webinar introduction to the CPEIA and the Canadian printable, flexible, wearable electronics industry – with Lambton College, October 24.

Membership

- Invoicing for 2017 Member renewals.
- Continued focused membership drive.
- New Members in Progress: Sun Chemical Henkel AG





CPEIA

Established in 2014, the Canadian Printable Electronics Industry Association (CPEIA) brings together key Canadian and international players in industry, academia and government to build a strong Canadian PE sector. The Association is the united voice for the sector and implements critical development strategies to facilitate growth through networking, stimulate R&D and investment, build a strong PE supply chain and drive the broad adoption of PE by end customers.

Learn more at: cpeia-acei.ca



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