## Welcome

Ryerson University and the Natural Sciences and Engineering Research Council of Canada (NSERC) are proud to lead a five-year, \$5 million pan-Canadian network of 15 universities and 26 industry and government partners focused on the future of energy storage — an essential technology in the global transition to clean energy.

The NSERC Energy Storage Technology Network (NESTNet) collaboratively explores many different types of energy storage, including flywheels, lithium-ion batteries and compressed air, while determining how best to integrate these technologies into electricity grids. In addition, researchers consider the implications arising from the increasing adoption of energy storage and how consumers will perceive, adopt and interact with these technologies. By partnering with the private sector, NESTNet enables directed progress — without duplication of efforts — towards a strong domestic Canadian energy storage industry that is also competitive in the global marketplace.

As our energy systems transform to integrate clean technologies, cooperation from all sections of society is required. With that in mind, we welcome you to the fourth annual Leading the Charge Conference. This event provides a platform for stakeholders — including technology providers, local distribution companies, government and academia — to come together and share their perspectives on the promise and progress of energy storage.

We would like to offer our sincere thanks for joining us today.

#### ryerson.ca/nestnet

The Centre for Urban Energy at Ryerson University is an academic-industry partnership that explores and develops sustainable solutions to urban energy challenges such as the advancement of smart grid technologies, energy storage, electric vehicles, net-zero buildings and renewables.

#### ryerson.ca/cue



## **Sponsors**

We gratefully acknowledge the support from our sponsors and partners, without whom this event would not have been possible.



Opus One Solutions helps utility partners gain visibility into electricity distribution systems and better manage distributed energy resources.

opusonesolutions.com



Schneider Electric is leading the digital transformation of energy management and automation.

schneider-electric.ca



The Clean Energy Zone is a startup incubator focused on bringing clean, sustainable energy products, services and technologies to market.

ryerson.ca/cue/cez



## **Notes**



# NSERC Energy Storage Technology Network

# LEADING THE CHARGE CONFERENCE

Thursday, June 20, 2019 Centre for Urban Innovation

#LeadingTheCharge







### Schedule

# 8:30 a.m. ET Breakfast and registration

Level 1 (Atrium)

#### 9:00

Welcome and opening remarks

Jessie Ma

Level 3 (CUI 317)

#### 9:15

Keynote: Realizing the full potential of renewable energy Jocelyn Millette

Introduced by Bala Venkatesh

**Level 3 (CUI 317** 

#### 10:00

Break and networking

Level 2 (CUI 219)

#### <u> 10:30</u>

Panel session: Energy for smart cities

Sören Hohmann Adrian Thomas Mohamed Dhanani Moderated by Sean Conway

12:00 p.m.

Level 2 (CUI 219)

#### 1:00

Panel session: Economics of energy storage for utilities

Shuvo Chowdhury Harneet Panesar Neetika Sathe

Moderated by Vivek Somasundaram

Level 3 (CUI 317)

#### 2:00

Break and networking

Level 2 (CUI 219)

#### 2:30

Presentations: Energy storage marketplace

Miguel Anjos Ye Hua Nitin Padmanabhan Ian Rowlands Vijay Sood Danica Sun Behnam Temami Moderated by Jennifer MacInnis

#### 3:30

Closing remarks

Jessie Ma

Level 3 (CUI 317)

3:40-4:30

Reception and poster session

# **E**

**Speakers** 

<u>Jessie Ma</u> is an IESO research fellow at Ryerson University's Centre for Urban Energy



<u>Bala Venkatesh</u> is the Academic Director of Ryerson University's Centre for Urban Energy and Director of the NSERC Energy Storage Technology Network



Jocelyn Millette is the Director General of CanmetENERGY-Varennes



<u>Sean Conway</u> is a visiting professor at Ryerson University



<u>Sören Hohmann</u> is the Head of the Institute of Control Systems at Karlsruhe Institute of Technology in Germany



Adrian Thomas is the Vice President, Building at Schneider Electric Canada



<u>Mohamed Dhanani</u> serves as special advisor to the president of Ryerson University and serves as a director at Waterfront Toronto



<u>Vivek Somasundaram</u> is the Manager of Market Development at Opus One Solutions



Shuvo Chowdhury is the Senior Director of Strategy at Amp



<u>Harneet Panesar</u> is the Director of Strategy and Integrated Planning at Hydro One



<u>Neetika Sathe</u> is the Vice President of the Alectra Green Energy & Technology (GRE&T) Centre



Jennifer MacInnis is the Senior Legal Counsel and Senior Director of Applied Research and Commercialization at Ryerson University



<u>Miguel Anjos</u> is a professor and the Chair of Operational Research at the University of Edinburgh's School of Mathematics



Ye Hua is a postdoctoral research fellow at the University of Ottawa



<u>Nitin Padmanabhan</u> is a PhD candidate in the Electrical and Computer Engineering Department at the University of Waterloo



<u>lan Rowlands</u> is the Associate Vice President, International at the University of Waterloo



Vijay Sood is the Director of the Power Workers
Union Smart Grid and EV Research Laboratory and an associate professor at Ontario Tech University



 $\underline{\textbf{Danica Sun}}$  is a Master of Science candidate at the University of Alberta



<u>Behnam Temami</u> is a postdoctoral fellow at the University of Waterloo

Speakers are listed in order of appearance. To view their complete bios, please visit www.ryerson.ca/ltc4.