

 #LeadingTheCharge

**NSERC**  
**Energy Storage**  
**Technology Network**

# Leading +the Charge CONFERENCE

Wednesday, June 9 & Thursday, June 10, 2021

**Ryerson**  
**University**

Centre for  
Urban Energy



## Event support

- This conference is taking place via Hopin, a fully-fledged virtual event platform. The direct URL for the event is **<https://hopin.com/events/leading-the-charge-conference>**.
- Look out for an email from “Centre for Urban Energy / no-reply@hopin.com” to access the event.
- Once you have entered the event, you have the option to update your profile and upload a headshot (by clicking on your initials in the top-right hand corner).
- If you have an existing Hopin account, you can connect it to this event by clicking on the Hopin logo in the top-left hand corner.
- Please take advantage of the 1:1 networking oppprtunities that this platform provides by clicking on the “People” tab. We also encourage you to visit our virtual expo booths during scheduled breaks.
- If you experience any technical issues or require assistance, there is a helpdesk open throughout the conference. You can find it via the “Sessions” tab.
- If you have trouble accessing the event platform, Hopin, you can visit our Zoom-based helpdesk at **<https://ryerson.zoom.us/j/94150263511>**.
- You can also email **[lrc@ryerson.ca](mailto:lrc@ryerson.ca)** with any event-related questions.

## Day 1

Wednesday, June 9, 2021

9:00 a.m. ET

### WELCOME & OPENING REMARKS

Bala Venkatesh

9:10

### PANEL SESSION PROUDLY SUPPORTED BY INVEST DURHAM

#### The road ahead for electric vehicles

Laura Bryson, Cara Clairman, David W. Paterson

Moderated by Nino Di Cara

10:00

### BREAK

#### Expo and networking

10:15

### PANEL SESSION

#### What's in store for energy storage?

Edward Arlitt, Jim Fonger, Alex Rost, Ramya Swaminathan

Moderated by Frederick Morency

11:15

### LUNCH

#### Expo and networking

12:15 p.m.

### FIRESIDE CHAT

#### Climate, communities and Canada

Andy Fillmore MP

In conversation with Bala Venkatesh

1:00

### BREAK

#### Expo and networking

1:30

### PANEL SESSION

#### How hydrogen can fuel the future

Doug Duimering, Heather Kleb, Ryan Sookhoo, David Zekveld

Moderated by Robert Stasko

2:30

### BREAK

#### Expo & networking

2:45

### PANEL SESSION PROUDLY SUPPORTED BY OPUS ONE SOLUTIONS

#### Transforming the grid with transactive energy

Tanguy Hubert, Elli Ntakou, Ben Ullman

Moderated by Ali Golriz

3:45–4:00

### END OF DAY 1

#### Expo and networking

## Day 2

Thursday, June 10, 2021

9:00 a.m. ET

### KEYNOTE ADDRESS

#### Go with the flow:

#### Liquid-gas batteries & the next generation of energy storage

Nigel Brandon OBE

Introduced by Jenny Young

Opening remarks by Ian Rowlands

10:00

### BREAK

#### Expo and networking

10:15

### WORKSHOP A

#### Nanyang Technological University, Singapore

Hoay Beng Gooi

Introduced by Bala Venkatesh

### WORKSHOP B

#### University of Campinas, Brazil

Walmir Freitas

Introduced by Ian Rowlands

11:15

### LUNCH

#### Expo and networking

12:15 p.m.

### WORKSHOP A

#### University of Birmingham, U.K.

Yulong Ding

Introduced by Bala Venkatesh

### WORKSHOP B

#### University of Oxford, U.K.

David Howey

Introduced by Ian Rowlands

1:15

### BREAK

#### Expo and networking

1:30

### WORKSHOP

#### University of California San Diego

Shirley Meng

Introduced by Bala Venkatesh

2:30–2:45

### END OF DAY 2

#### Expo and networking

# Speakers



**Bala Venkatesh**

Academic Director, Centre for Urban Energy, Ryerson University



**Laura Bryson**

COO & Co-Founder, SWITCH



**Cara Clairman**

President & CEO, Plug'n Drive



**David W. Paterson**

Vice-President, Corporate & Environmental Affairs, General Motors of Canada



**Nino Di Cara**

Founder & President, Electric Autonomy Canada



**Edward Arlitt**

Supervisor, Advanced Technology Research, Independent Electricity System Operator



**Jim Fonger**

Vice-President, Business Development & Distributed Resources, Ameresco Canada



**Alex Rost**

Manager, Resource Qualification, ISO New England



**Ramya Swaminathan**

CEO, Malta Inc.



**Frederick Morency**

Vice-President, Energy & Services, Schneider Electric Canada



**Andy Fillmore MP**

Parliamentary Secretary to the Minister of Infrastructure & Communities



**Doug Duimering**

Vice-President, Business Development Strategy, Next Hydrogen



**Heather Kleb**

Director, Next Generation Nuclear Technology, Bruce Power



**Ryan Sookhoo**

Director, New Initiatives, Fuel Cell & Hydrogen Technologies, Cummins



**David Zekveld**

Senior Manager, Strategic Initiatives, Ontario Power Generation



**Robert Stasko**

Co-Chair, Ontario Hydrogen Strategy Working Group; & Executive Director, Hydrogen Business Council



**Ali Golriz**

Lead, System & Sector Development, Innovation & R&D, Independent Electricity System Operator



**Tanguy Hubert**

Senior Technical Leader, Distributed Energy Resource Integration, Electric Power Research Institute



**Elli Ntakou**

Advisor, Quanta Technology



**Ben Ullman**

Product Manager, Transactive Energy, Opus One Solutions



**Ian Rowlands**

Associate Vice-President, International, University of Waterloo



**Jenny Young**

British Consul General in Toronto & Deputy Trade Commissioner North America



**Nigel Brandon OBE**

Dean, Faculty of Engineering, Imperial College London



**Hoay Beng Gooi**

Associate Professor, Nanyang Technological University



**Walimir Freitas**

Professor, University of Campinas



**Yulong Ding**

Chamberlain Chair of Chemical Engineering, University of Birmingham



**David Howey**

Associate Professor, Department of Engineering Science, University of Oxford



**Shirley Meng**

Zable Endowed Chair in Energy Technologies, University of California San Diego

## Thank you

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 the best way to integrate these technologies into the electricity grid. 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 energy storage industry that is also competitive in the global marketplace.

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

The event will fuse academic and technical expertise with practical industry experience, bringing together high-level talent and decision-makers to explore all aspects of clean energy, including the integration of the latest technologies, the effect of carbon pricing, the rollout of government hydrogen strategies, the push from major automakers into electric vehicles, the potential impact of transactive energy on the electricity grid, and the critical role of university R&D.

### **THIS YEAR'S THEME: THE NEXT 10 YEARS**

With rapid technological advancements and the declining cost of storage, solar and wind transforming energy around the world, the 2020s are a decisive decade for Canada and the global community as it rises to the challenge of climate change. Leading the Charge will discuss the practical steps we need to take and technological leaps we need to make over the next 10 years for Canada to fulfill its long-term climate commitments while building back better from the COVID-19 pandemic.

We would like to offer our sincere thanks for joining us from across Canada and around the world today.

[ryerson.ca/nestnet](https://ryerson.ca/nestnet)

**LEADING THE CHARGE CONFERENCE IS PROUDLY SUPPORTED BY**

