



**Carleton**  
UNIVERSITY

Canada's Capital University

**Infrastructure Resilience Research Group (IRRG)**  
**Office of the Dean, Faculty of Engineering and Design**

## **WORKSHOP: ECONOMIC SECURITY, RESILIENCE AND DE-CARBONIZATION OF HEAVY INDUSTRIES**

Fairmont Chateau Laurier Hotel, Quebec Suite, 1 Rideau Street  
Ottawa, ON

Wednesday, November 28 – Thursday 29, 2018

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***THEME: A Multi-stakeholder, Multidisciplinary Approach to Addressing Challenges and  
Leveraging Opportunities for the De-carbonization of Heavy Industries***

This workshop is meant for public servants, industry, engineers, academics, non-governmental organizations, students, economists, business leaders, and Indigenous peoples interested in seeking solutions for the de-carbonisation of heavy industry in Canada.

### **AGENDA**

#### **Keynote Speakers**

**Prof. Rafik Goubran**, Vice President  
Research and International, former Dean of  
the Faculty of Engineering and Design,  
Carleton University

**Sophie Brocher**, CEO Energir

**Ken Olgivie**, Advisor of Policy at  
Zerofootprint Software Inc.

**Francis Perras**, ArcelorMittal Long

**John Creighton**, Greenfield

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**DAY 1 – Wednesday, November 28, 2018**

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|---------------|--|
| 7:30 – 8:30   | <b>Registration</b>  |
| 8:30 – 8:45   | <b>Co-Hosts' Opening Remarks</b><br><br><i>Felix Kwamena, Ph.D. Adjunct Professor and Director, Infrastructure and Resilience Research Group (IRRG), Faculty of Engineering and Design, Carleton University</i><br><br><i>Shahrzad Rahbar, Ph.D., ICD.D., President, Industrial Gas Users Association (IGUA)</i> |
| 8:45 – 9:30   | <b>Keynote Remarks: The Role of Research and Innovation in the De-Carbonization of Heavy Industry</b><br><br><i>Prof. Rafik Goubran, Vice President Research and International, former Dean of the Faculty of Engineering and Design, Carleton University</i>  |
| 9:30 – 10:30  | <b>Session I: Framing the Need for De-carbonization</b><br><br>Plenary Panel:<br><br>TBC   |
| 10:30 – 11:00 | <b>NETWORKING BREAK</b>  |
| 11:00 – 12:30 | <b>Breakouts: Defining the Challenges of De-carbonization</b>  |
| 12:30 – 1:30  | <b><u>Luncheon Keynote:</u> -</b><br><br><i>Sophie Brocher, CEO Energir</i>  |
| 1:30 – 2:45   | <b>Cases Studies and Lessons Learned</b><br><br>Presenters:<br><br>TBC   |
| 2:45 – 3:00   | <b>BREAK</b>   |



3:00 – 4:00                      **Session II: Panel Discussion**

Panel:

TBC

4:00 - 4:15                      Wrap Up

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**DAY 2 – Thursday, November 29, 2018**

8:00 – 8:15                      **Co-Hosts' Recap of Day 1**

**Felix Kwamena**, *Ph.D. Adjunct Professor and Director, Infrastructure and Resilience Research Group (IRRG), Faculty of Engineering and Design, Carleton University*

**Shahrzad Rahbar**, *Ph.D., ICD.D, President, Industrial Gas Users Association (IGUA)*

8:15 – 9:00                      **Keynote Remarks – Who are the Players and what do they need to do differently?**

**Ken Olgivie**, *Advisor of Policy at Zerofootprint Software Inc.*

9:00 – 10:00                      **Breakout Session – Who needs to act and how?**

10:00 – 10:30                      **NETWORKING BREAK**

10:30 – 12:00                      **Breakout Session – Who needs to act and how?**

12:00 – 1:00                      **Luncheon Keynote - Reinventing Industry**

**Francis Perras**, *ArcelorMittal Long*

**John Creighton**, *Greenfield*

1:00 – 2:30                      **Reporting Breakout Session Results**

2:45 – 3:00                      **BREAK**



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3:00 – 4:00                      **Session III – Plenary Panel Discussion – Next Steps and Actions**

Panel:

TBC

4:00 - 4:15                      Wrap Up

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## **DAY 2 EVENING**

### **DEAN'S LECTURE**

#### **Host:**

**Felix Kwamena**, *Ph.D. Adjunct Professor and Director, Infrastructure and Resilience Research Group (IRRG), Faculty of Engineering and Design, Carleton University*

6:30 – 9:30                      **Refreshments**

6:30 – 6:45                      **Welcome Remarks and Introductions**

**Fred F. Afagh, Ph.D., P.Eng.**, Interim Dean, Faculty of Engineering and Design

6:45 – 8:15                      **Panel Presentation**

8:15 – 8:45                      **Facilitated Discussion**

**Andre Plourde, Ph. D.**, Dean, Faculty of Public Affairs

8:45 – 8:50                      **Closing Remarks**

**Felix Kwamena**, *Ph.D. Adjunct Professor and Director, Infrastructure and Resilience Research Group (IRRG), Faculty of Engineering and Design, Carleton University*

8:50 – 9:30                      **Networking Reception**