



**Carleton**  
UNIVERSITY

Canada's Capital University

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

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

Fairmont Château Laurier Hotel  
Quebec Suite, 1 Rideau Street (Ottawa, Ontario)

Wednesday, November 28 – Thursday 29, 2018

---

### **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.*

### **PRINCIPAL SPONSOR**





**Carleton**  
UNIVERSITY

Canada's Capital University

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

## AGENDA

### DAY 1 – WEDNESDAY, NOVEMBER 28, 2018

07:30 – 08:30      **REGISTRATION**

08:30 – 08:45      **CO-HOST' OPENING REMARKS**

**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)*

08:45 – 09:15      **INDUSTRY PERSPECTIVE**

**Frank Saunders**, *Vice President  
Nuclear Oversight and Regulatory Affairs  
Bruce Power*

09:15 – 09:45      **KEYNOTE REMARKS**

#### **THE ROLE OF RESEARCH AND INNOVATION IN THE DE-CARBONIZATION OF HEAVY INDUSTRY**

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



**Carleton**  
UNIVERSITY

Canada's Capital University

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

09:45 – 10:45

**SESSION I: FRAMING THE NEED FOR DE-CARBONIZATION**

**Panel:** ☐ Alan Young  
Chair, Int'l Institute of Sustainable Development

☐

☐

10:45 – 11:00

NETWORKING BREAK

11:00 – 12:30

**BREAKOUT - DEFINING THE CHALLENGES OF DE-CARBONIZATION**

12:30 – 13:30

NETWORKING LUNCH

13:30 – 14:45

**CASE STUDIES AND LESSONS LEARNED**

**Panel:** ☐ Chris Bataille  
Author, Inter-governmental Panel on Climate Change

☐

☐

14:45 – 15:00

BREAK

15:00 – 16:00

**SESSION II: PANEL DISCUSSION**

16:00 - 16:15

WRAP-UP



**Carleton**  
UNIVERSITY

Canada's Capital University

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

**DAY 2 – THURSDAY, NOVEMBER 29, 2018**

08:00 – 08:15

**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)*

08:15 – 09:00

**KEYNOTE REMARKS:**

**WHO ARE THE PLAYERS AND WHAT DO THEY NEED TO DO  
DIFFERENTLY?**

09:00 – 10:00

**BREAKOUT – WHO NEEDS TO ACT AND HOW?**

10:00 – 10:30

**NETWORKING BREAK**

10:30 – 12:00

**(cont'd) BREAKOUT – WHO NEEDS TO ACT AND HOW?**

12:00 – 13:00

**LUNCHEON KEYNOTE: RE-INVENTING INDUSTRY**

13:00 – 14:30

**BREAKOUT SESSION RESULTS**

14:45 – 15:00

**BREAK**

15:00 – 16:00

**SESSION III: PLENARY PANEL DISCUSSION - NEXT STEPS AND ACTIONS**

16:00 – 16:15

**WRAP-UP**