

# Social Acceptance of Small Modular Reactors

Working Paper Series in Strategic Business Valuation  
WP 2023-05

**Anton Shevchenko**

John Molson School of Business, Concordia University  
[anton.shevchenko@concordia.ca](mailto:anton.shevchenko@concordia.ca)

**Goran Calic**

DeGroot School of Business, McMaster University  
[calicg@mcmaster.edu](mailto:calicg@mcmaster.edu)

# Social Acceptance of Small Modular Reactors

## Abstract

This study explores the complex process of how audiences perceive a novel technology by focusing on small modular reactors (SMRs), a promising nuclear energy technology. Contrary to the idea that acceptance is merely based on technical attributes, this research emphasizes the role of legitimacy perceptions in technology adoption. Leveraging the legitimacy framework, we analyzed a broad range of media articles on SMRs using a topic modeling algorithm. Our results reveal that legitimacy perceptions of SMRs are entangled with a vast array of concepts that are familiar to the audience, such as a given country's unique needs and the pros and cons of existing alternative technologies. We found that audiences rely heavily on their knowledge of related concepts and imagination to form their perceptions of SMRs. Our study of technological legitimacy highlights the complexity of the social acceptance of a novel technology.

### **Authors:**

Anton Shevchenko and Goran Calic



# Michael Lee-Chin & Family Institute for Strategic Business Studies

## Working Paper Series in Strategic Business Valuation

This working paper series presents original contributions focused on the theme of creation and measurement of value in business enterprises and organizations.

---

**DeGroot School of Business at McMaster University**  
1280 Main Street West  
Hamilton, Ontario, L8S 4M4

[www.degroot.mcmaster.ca](http://www.degroot.mcmaster.ca)

**DeGroot**  
SCHOOL OF BUSINESS  
EDUCATION WITH PURPOSE

**McMaster**  
University 