**Application to NBER Innovation Research Boot Camp 2026**

2026-02-12

I am writing to apply for the 2026 NBER Innovation Research Boot Camp. I am currently a early career researcher at Luleå University of Technology, where my work focuses on environmental policy design and its implications for firm behavior and technological change.

My research agenda is increasingly focused on understanding how regulatory design and institutional contexts shape innovation incentives in regulated industries. Participation in the Boot Camp would provide valuable exposure to foundational and frontier research in the economics of innovation and allow me to further develop this line of inquiry at a critical stage of my career.

My recommendation letter will be provided by Patrik Söderholm, Professor, Luleå University of Technology.

Thank you for your consideration.

Sincerely,
Kristoffer Sundström

E-mail: Kristoffer.Sundstrom@ltu.se
Telephone: +4673 07 92 449

# CURRICULUM VITAE

Uno Kristoffer Sundström

**Personal information**
Date of birth: May 30th, 1991.
Citizenship: Swedish

Telephone: +4673 07 92 449
Email: kristoffer.sundstrom@ltu.se

**Contact information**
Luleå University of Technology
Universitetsområdet, Porsön, 971 87 Luleå, SWEDEN

**Overarching Research Theme**
Environmental permitting processes, environmental regulation, regulatory regime changes, environmental economics, energy economics.

**Education and Academic Degree**

- PhD, Economics. 2020-2026. **Luleå University of Technology**.
  - Dissertation title: *Effectiveness of Industrial Pollution Regulations: The role of institutions, design and implementation.*
- Master of Arts in Economics. 2019-2020. **University of Toledo**, USA.
  - Master thesis: *Impact of a small airport on nearby house prices: A hedonic price analysis.*
- Master of Science in Economics, 2018-2019. **Luleå University of Technology.**
  - Master thesis: *Creating Hot Incentives: The case of Luleå Energi's new price model for district heating.*
- Bachelor of Science in Economics, 2016-2019. **Luleå University of Technology.**
  - Bachelor Thesis: *Mining booms impact on local labor markets in Norrbotten county, Sweden.*

**Current Positions**
Researcher at Luleå University of Technology – 260115 – Ongoing.
Associated Researcher at Ratio – 200801 – Ongoing.

**Earlier Academic Positions**
PhD Student at Luleå University of Technology – 200801-260114.
Graduate Assistant at University of Toledo, USA – 190815-200515.
Research Assistant at Luleå University of Technology – 190115-190615
Research Assistant at Ratio – 181001-190115.

**Peer reviewed Journal Publications**

Söderholm, P., & Sundström, K. (2025). The Institutional Blind-Spot in the Green Transition: Market Incentives versus Command-and-Control. *Journal of Economic Issues*, *59*(2), 438-444.

Aldieri, L., Grafström, J., Sundström, K., & Vinci, C. P. (2020). Wind power and job creation. *Sustainability*, 12(1), 45.

**Work-in-progress papers**

Sundström, K. & Söderholm, P. (Revise & Resubmit ongoing). *Environmental Regulation and Institutional Change: Industry Responses over Four Decades and Two Regulatory Regimes.*

Sundström, K & Söderholm, P. (Submitted 2025). *Time Flexibility in Environmental Regulation: Discharge Limits and Compliance Periods in the Swedish Pulp and Paper Industry.*

Sundström, K., Pettersson, M., and Söderholm, P. (To be submitted 2026) *Environmental Licensing in the Green and Digital Transitions: Case Study Insights from Sweden*

Sundström. K. (To be submitted 2026). *Incomplete and Delayed: How Uncertainty Drives Prolonged Environmental Licensing Processes.*

**Conferences & Workshops**

Presenter, Conference: 31st Ulvön Conference on Environmental Economics, *"Incomplete and Delayed: How Uncertainty Drives Prolonged Environmental Licensing Processes"*, Ulvön, Sweden, 2025.

Presenter, Conference: AFEE at 2025 ASSA Annual Meeting, *"The Institutional Blind-spot in the Green Transition: Market Incentives versus Command-and-Control"*, San Francisco, USA, 2025.

Presenter & Opponent, Workshop: 6th NAERE, *"Stretched Timelines in Industrial Pollution Regulation: The role of Probation Periods for Reducing Water Pollution in Swedish Pulp Production"*, Bergen, Norway, 2024.

Presenter, Conference: 30th Ulvön Conference on Environmental Economics, *"Stretched Timelines in Industrial Pollution Regulation: The role of Probation Periods for Reducing Water Pollution in Swedish Pulp Production"*, Ulvön, Sweden, 2024.

Presenter, Workshop: CERE-LTU Workshop, *"The Impact of Trial Periods on Effluent Limits Effectiveness: The Case of COD Effluents from Swedish Pulp Mills in 1981-2020"*, Umeå, Sweden, 2024.

Presenter, Workshop: 5th NAERE, *"The Effectiveness of Environmental Regulations: The Case of Effluent Limits in the Swedish Pulp and Paper Industry During 40 years"*, Majvik, Finland, 2023.

Presenter, Workshop: CERE-LTU Workshop, *"The Effects of Effluent Limits on Swedish Pulp and Paper Mills Effluent Levels".* Skellefteå, Sweden, 2023.

**Teaching Assignments (Type of assignment)**
Sustainable Development (Teaching, seminars and grading).
Introductory Macroeconomics (Teaching, seminars and grading).
Economics for Teachers (Teaching, seminars, exercises and grading).
Economics for Real Estate Agents (Teaching, seminars, grading).
Introductory Microeconomics (Grading).
Applied Microeconomics (Grading).
Introductory Macroeconomics (Grading).
Applied Macroeconomics (Teaching, seminars, grading).
Financial Economics (Grading).
Applied Statistics for Economists (Grading, seminars).
Introduction to Real Estate Brokerage (Teaching).
Industrial Management with a Sustainability Perspective (Teaching).

**Program/ Course Development Assignments**
Introduction to Real Estate Brokerage (Course development).
DASBE - Data Science for Business and Economics (Program Development).

**Academic Service**
ETKS PhD Student Representative at LTU's PhD Student Association – 2021-2022.
Secretary and Vice-Chair at LTU's PhD Student Association – 2020-2021.

**Completed PhD Courses**

Mathematical Economics 1 & 2

Econometrics 1 & 2

Applied Econometrics 1 & 2

Microeconomic Analysis 1 & 2

Applied Econometrics 1 & 2

Macroeconomic Analysis 1

Basic R Programming

Advanced R Programming

Introduction to Data Science and Machine Learning

Gender and Equality

Dissertations in Economics (Reading course)

Qualifying course for university teachers' part 1 & 2 (Pedagogical courses)

Examinations – Principles and Methods (Pedagogical course)

Course design (Pedagogical course)

Digital course room development (Pedagogical course)

AI for teachers in higher education (Pedagogical course)

**Regulatory Design, Institutional Context, and Innovation Incentives**

I am Kristoffer, an early career researcher at Luleå University of Technology (LTU). My earlier research examines environmental policy effectiveness, with a particular focus on how policy design, implementation, and institutional contexts shape firm behavior. Using the Swedish pulp and paper industry as an empirical setting, I have studied how institutional change and regulatory flexibility affect environmental outcomes.

While my earlier research centers on environmental outcomes, its underlying focus is on how firm respond to policy incentives through technological adaptation and experimentation. Regulatory flexibility in the form of trial periods allows firms to test and develop new production technologies tailored to their processes. My research show that such flexibility has contributed to significant reductions in effluent levels in the Swedish pulp and paper industry. These findings raise broader questions about how environmental policy design influences innovation incentives, technological development and industrial transformation.

Although earlier literature examines the innovation-inducing effects of environmental regulation, comparatively little empirical work investigates how specific features of policy design, implementation practices, and institutional contexts shape firms' innovation incentives and technological trajectories. Understanding these mechanisms is crucial for designing policies that not only improve environmental performance but also direct technological change in socially desirable ways.

Going forward, I aim to develop a research agenda at the intersection of environmental policy and the economics of innovation. In particular, I am interested in understanding how different regulatory design choices affect firms' incentives to invest in new technologies, how flexibility shapes the direction and intensity of innovation, and how policy-induced technological change diffuses across firms and regions. At this stage of my career, deeper engagement with the economics of innovation is essential to situate my work within broader theoretical and empirical frameworks. The NBER Innovation Research Boot Camp would provide structured exposure to foundational ideas and research in innovation economics, while also providing valuable interaction with scholars that share the same interests and research focus.

LULEÅ
UNIVERSITY
OF TECHNOLOGY

Luleå University of Technology
Economics Unit
971 87 Luleå
Sweden

Luleå, 12 February 2026

**Letter of recommendation for Kristoffer Sundström**

I am happy to write this letter of recommendation for Kristoffer Sundström, with whose Ph.D. studies in economics I am familiar with. In my capacity as professor of economics at Luleå University of Technology, I was the main supervisor of Sundström's thesis work.

It is a pleasure for me to attest that Kristoffer has been a hard-working, energetic, independent and curious Ph.D. candidate. In his Ph.D. dissertation, he demonstrates a capability to combine theoretical insights and empirical investigations to make important contributions to literature. Kristoffer's work involves, among other things, the use of microdata (industrial plants) and instrumental variable estimations to investigate the impacts of environmental regulations on reduced water pollution in industry, also including the role of endogenous green technological innovation.

In a word, Kristoffer Sundström is a young, skilled scholar, who will benefit from, and repay, the opportunities that are made available to him.

Sincerely,

Patrik Söderholm

Professor of Economics
Luleå University of Technology