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## Education

### Chalmers University of Technology

Ph.D. – Energy and Environment/Space, Earth and Environment	2011 –2018
(60% of the MSc teacher education Learning and Leadership)	2015 –2017
M.Sc. in Physics - Complex Adaptive Systems CAS	2009 - 2011
(90% of a B.Sc. in bioengineering)	2005 -2009

### The University of Gothenburg, 2003 – 2005 & 2009

B.Sc. In mathematics

## Work

<b>University of Gothenburg</b>	2019-
Researcher and pedagogical developer (permanent position)	

<b>Klimatkoll Guldheden AB</b>	2019-
Pedagogical developer and marketing (part-time, sideline activity)	

<b>Chalmers University of Technology</b>	2018-2019
Researcher and pedagogical developer (part-time)	
Responsible for a project that created a web page for the master's program CAS. 2010-2011	

<b>Intize (A student driven organization)</b>	2006-2009
Vice director, responsible for development and recruitment of mentors. (full-time)	
Responsible for recruitment and project manager for high school mentors. (part-time)	

## Awards and Prizes

Individual: Best Entrepreneurship, the Bert-Inge Hogsved prize (2011). Best poster award at Gothenburg Atmospheric Science Centre's 5:th conference (2012). Recognition by Intize, at its ten year anniversary, of individuals who were key-contributors to building Intize and the work resulting in Chalmersmedaljen (2015).

Group (Intize): Chalmersmedaljen (2012), SIFE spirit award(2007) and Guldtummen (2007).

## Publications

Sterner, T., Ewald, J., & Sterner, E. (2023). **Taxing carbon. Peace not Pollution How Going Green Can Tackle Both Climate Change and Toxic Politics.**

Ewald, J., Sterner, T., & Sterner, E. (2022). **Understanding the resistance to carbon taxes: Drivers and barriers among the general public and fuel-tax protesters.** *Resource and Energy Economics*, 70, 101331.

Sterner, E. et al. (2021). **Klimatet – en ödesfråga där fakta, värderingar och känslor möts.** In Flensner, K.K., Larsson, G., & Säljö, R. (Ed.), *Känsliga frågor, nödvändiga samtal. Studentlitteratur*

Sterner, EO, Adawi, T, Persson, UM, Lundqvist, U (2019) **Knowing how and knowing when: unpacking public understanding of atmospheric CO2 accumulation,** *Climatic Change*,

Sterner, E (2018). **Climate Change: Models, Metrics and Meaning Making.** (PhD Thesis)

Sterner, EO, Robinson, EJ, & Albers, HJ (2018) **Location choice for renewable resource extraction with multiple non-cooperative extractors: a spatial Nash equilibrium model and numerical implementation.** *Letters in Spatial and Resource Sciences*, 11(3), 315-331.

Sterner, E, Hagvall Svensson, O, Toivonen, S, Bill, J, & Adawi, T (2017) **Evaluating the flipped classroom approach in engineering education: Students' attitudes, engagement and performance in an undergraduate sustainability course.** In *45th SEFI Conference*, September 2017, Azores, Portugal (pp. 1-8).

Sterner, EO, & Johansson, DJA (2017) **The effect of climate-carbon cycle feedbacks on emission metrics.** *Environmental Research Letters*, 12(3), 034019.

Sterner E (2015) **Comparing climate forcers on a common scale,** *Licentiate thesis, Chalmers.*

Sterner E, Johansson DJA, Azar C (2014) **Emission metrics and sea level rise.** *Climatic Change* 127:335–351.

Albers, HJ, White, B, Robinson, EJ & Sterner, EO (2020) **Spatial Protected Area Decisions to Reduce Carbon Emissions from Forest Extraction,** *Spatial Economic Analysis*

### **Other publications incl. popular science, interviews and course material**

"Vad har störst klimatpåverkan?" Popular science article/educational material by E Sterner & D Olsson in "Kemilärarnas Informationsbrev" nr 2, 2019. [Link](#)

"Han vill göra klimatfrågorna lättbegripliga" (2019) Interview by Anna Skoog in Syre. [Link](#)

"Kolets kretslopp ger svaren på den stora klimatfrågan" (2023) by M. Backman in Göteborgs Posten. [Link](#)

Short video interview of me by Hugo Gustafsson (GMV) on SDG 13. [Link](#)

Example video clip on AI use in a course on Policymaking for climate action & circular economy. [Link](#)

"Kortspel ger eleverna koll på värsta klimatbovarna" (2020) Interview By Maria B. in Ämnesläraren. [Link](#)

Short video "Klimatutmaningen – vad behöver elever lära sig och få uppleva", for Den Globala Skolan. [Link](#)

Debattartikel, "Utan skolorna dör klimatomställningen" (2022) co-authored, in Miljö & Utveckling. [Link](#)

### **Pedagogics, Teaching, Science Communication and AI**

MOOC designer and project leader for [Policies in Climate Action and Circular Economy \(teaser\)](#). Pedagogics and AI expert for Efd (e.g. [Inclusive Green Economy program](#) for civil servants in eastern Africa and Efd teacher trainings). Co-creator to the engineering program Global Systems and the master's program Learning and Leadership at Chalmers. Co-founder of five 7.5 ECTS university courses and involved in the pedagogical development of a few more courses: 1. Mathematics and Society, 2. Game Theory and Rationality, 3. Innovation and Transition, 4. Introduction to Global Systems, 5. The Environment and Mathematical Modelling, 6-8. three versions of an environmental policy instruments course (Msc, Bsc and professional level) and 9. Strategic sustainability assessment.

Co-creator, chairman of the board etc. for the mathematics mentorship Intize during the period 2006-2013).

Climate communication in creating and managing two growing start-ups: Klimatkoll Guldheden AB and Svalna AB. Which together have reached and engaged more than 600 000 people (mostly in Northern Europe). Invited trainer of over 750 teachers in climate education. Jury member of WinWin Gothenburg Sustainability Award (2022-).

Experimenting with generative AI and invited speaker on how AI can facilitate the green transition.

### **Selection of programs/activities**



### **International experiences**

Lived in the US for one year. I've since 2017 been engaged in transnational collaborative educational pilot projects, in sharing pedagogical tools, training of and coaching teachers in improving their teaching. Currently heading a cross-continental capacity building group for the creation of the proposed type of educational programs and the pedagogical design of a civil servants training in Eastern Africa (funded by Sida).