

Jagdeep Singh
Centre for Environmental and Climate Science (CEC)
BECC: Biodiversity and Ecosystem services in a Changing Climate
Department of Earth and Environmental Sciences (MGeo)

Type of address: Visiting address.

Ekologihuset, Sölvegatan 37
Rm C 354
223 62
Lund
Sweden

Type of address: Postal address.

Sölvegatan 37
223 62
Lund
Sweden

Type of address: Visiting address.

Sölvegatan 37
223 62
Lund
Sweden

Type of address: Postal address.

Sölvegatan 37
223 62
Lund
Sweden

Type of address: Visiting address.

Sölvegatan 12
223 62
Lund
Sweden

Type of address: Postal address.

Sölvegatan 12
223 62
Lund
Sweden

Email: jagdeep.singh@mgeo.lu.se

Phone: +46462224742



Research

Dr. Jagdeep Singh is Associate Professor in Environmental Science at the Centre for Environmental and Climate Research (CEC). In his academic career so far, he has investigated societal sustainability challenges by applying novel approaches, devising innovative assessment frameworks, and adopting methods and tools from other research fields. Specifically, he has advanced the field of sustainable production and consumption in emerging areas such as circular economy, reuse, product repair and upcycling, the sharing economy, and sustainable business innovation. Dr. Singh has conducted inter- and trans-disciplinary research with an impact on academia and society.

Qualifications

Industrial Ecology, PhD, Beyond Waste Management, KTH Royal Institute of Technology

2010 Aug 18 → 2016 Jun 9

Award Date: 2016 Jun 9

Industrial Ecology, Licentiate of Technology, Towards a Sustainable Resource Management : a broader systems approach to product design and waste management, KTH Royal Institute of Technology

2010 Aug 18 → 2014 Mar 10

Award Date: 2014 Mar 10

Energy Studies, M. Tech., Energy conservation in buildings, Indian Institute of Technology, New Dehli

2007 Aug 23 → 2009 Jun 15

Award Date: 2009 Jun 15

Electrical Engineering, Bachelor of Technology, Speed control of three phase induction motor using fuzzy logic in MATLAB Simulink, Himachal Pradesh University

2002 Aug 18 → 2006 Jun 15

Award Date: 2006 Jun 15

Employment

Researcher

Centre for Environmental and Climate Science (CEC)
Lund University
Lund, Sweden
2020 Jun 11 → present

Member of Strategic Research Area

BECC: Biodiversity and Ecosystem services in a Changing Climate
Lund University
Lund, Sweden
2020 Jun 20 → present

Researcher

Department of Earth and Environmental Sciences (MGeo)
Lund University
Lund, Sweden
2025 Dec 8 → present

Research Fellow in Sustainable Business

Nottingham Trent University
Clifton, Nottingham, United Kingdom
2016 Oct 1 → 2018 Jan 10

Postdoctoral Researcher

KTH Royal Institute of Technology
Stockholm, Sweden
2016 Jun 1 → 2016 Sept 30

Teaching Assistant / Doctoral Candidate

KTH Royal Institute of Technology
Stockholm, Sweden
2010 Aug 18 → 2016 Jul 30

Assistant Professor

Lovely Professional University
Phagwara, India
2009 Jul 1 → 2010 May 30

Research outputs

A process-based life cycle assessment of the climate impact of a Swedish intensive care unit

Hemberg, L., Singh, J. & Bentzer, P., 2025 Dec, In: *Scientific Reports*. 15, 1, 19435.

Farmers' motivations to cultivate biomass for energy and implications

Thomson Ek, H., Singh, J., Winberg, J., Brady, M. V. & Clough, Y., 2024 Oct, In: *Energy Policy*. 193, 114295.

The role of disciplinary, interdisciplinary, and transdisciplinary education in sustainability science: Experiences from my professional journey

Singh, J., 2024 Apr 19, *Research Journeys to Net Zero: Current and Future Leaders*. Sung, K., Isherwood, P. & Moalosi, R. (eds.). Taylor & Francis, p. 23-34 12 p.

Embeddedness

Singh, J., 2023, *Dictionary of Ecological Economics: Terms for the New Millennium*. Edward Elgar Publishing Ltd., p. 174-175

Environmental impact of single-use, reusable, and mixed trocar systems used for laparoscopic cholecystectomies

Boberg, L., Singh, J., Montgomery, A. & Bentzer, P., 2022 Jul 15, In: PLoS ONE. 17, 7, e0271601.

The Sustainability Potential of Upcycling

Singh, J., 2022, In: Sustainability (Switzerland). 14, 10, 5989.

Introduction: State-of-the-Art Upcycling Research and Practice

Sung, K., Singh, J., Bridgens, B. & Cooper, T., 2021 Jun 15, *State-of-the-Art Upcycling Research and Practice: Lecture Notes in Production Engineering*. Sung, K., Singh, J. & Bridgens, B. (eds.). Springer International Publishing, p. 1-6 (LectureNotes in Production Engineering (LNPE)).

Systems Approach to Scaling-Up Global Upcycling: Framework for Empirical Research

Singh, J. & Sung, K., 2021 Jun 15, *State-of-the-Art Upcycling Research and Practice: Lecture Notes in Production Engineering*. Sung, K., Singh, J. & Bridgens, B. (eds.). Springer International Publishing, p. 99-104

Upcycling, Jugaad and Repair Cafes for Prosumption

Singh, J. & Arora, C., 2021 Jun 15, *State-of-the-Art Upcycling Research and Practice: Lecture Notes in Production Engineering*. Sung, K., Singh, J. & Bridgens, B. (eds.). Springer International Publishing, p. 41-43 (LectureNotes in Production Engineering (LNPE)).

State-of-the-Art Upcycling Research and Practice: Proceedings of the International Upcycling Symposium 2020

Sung, K. (Editor), Singh, J. (Editor) & Bridgens, B. (Editor), 2021, Springer Nature. 139 p. (Lecture Notes in Production Engineering)

Reflecting on critical awareness and integration of knowledge in interdisciplinary education: exploring the potential of learning portfolios

Richter, J. L. & Singh, J., 2020 Dec, *Interdisciplinary pedagogy in higher education: Proceedings from Lund University's Teaching and Learning Conference 2019*. Bergvist Rydén, J., Jerneck, A., Richter, J. L. & Karin, S. (eds.). Lund: Lund University, p. 85-95

Systematic Framework to Assess Social Impacts of Sharing Platforms

Curtis, S., Singh, J., Mont, O. & Kessler, A., 2020 Sept 8, In: PLoS ONE. 15, 10, e0240373.

Multi-Stakeholder Perspectives on Scaling up UK Fashion Upcycling Businesses

Sung, K., Cooper, T., Oehlmann, J., Singh, J. & Mont, O., 2020, In: Fashion Practice. 12, 3, p. 331-350 20 p.

Urban Sharing in Toronto

Mont, O., Plepys, A., Voytenko Palgan, Y., Singh, J., Lehner, M., Curtis, S., Zvolska, L. & Arbelaez Velez, A. M., 2020, 75 p.

Urban Sharing in Amsterdam

Mont, O., Plepys, A., Voytenko Palgan, Y., Singh, J., Curtis, S., Zvolska, L. & Arbelaez Velez, A. M., 2019 Oct 10, Lund: Lund University (Media-Tryck). 69 p.

Mobile Lab on Sharing in Malmö

Voytenko Palgan, Y., McCormick, K., Leire, C. & Singh, J., 2019 Aug, The International Institute for Industrial Environmental Economics. 28 p.

An intelligent model for residual life prediction of thyristor

Bhargava, C., Singh, J. & Sharma, P. K., 2019 Jun 1, In: International Journal of Engineering and Advanced Technology. 8, 5, p. 1862-1866 5 p.

An assessment of achievements of the WEEE Directive in promoting movement up the waste hierarchy: experiences in the UK

Cole, C., Gnanapragasam, A., Cooper, T. & Singh, J., 2019, In: Waste Management: international journal of integrated waste management, science and technology. 87, p. 417-427 11 p.

Assessing barriers to reuse of electrical and electronic equipment, a UK perspective

Cole, C., Gnanapragasam, A., Cooper, T. & Singh, J., 2019, In: Resources, Conservation and Recycling: X. 1, 100004.

Challenges and opportunities for scaling up upcycling businesses – The case of textile and wood upcycling businesses in the UK

Singh, J., Sung, K., Cooper, T., West, K. & Mont, O., 2019, In: Resources, Conservation and Recycling. 150, 104439.

Challenges and research needs when evaluating sustainability impacts of alternative consumption models

Plepys, A. & Singh, J., 2019, *A Research Agenda for Sustainable Consumption Governance*. Mont, O. (ed.). Edward Elgar Publishing Ltd., p. 66-84 19 p.

Characterizing the sharing economy state of the research: A systematic map

Laurenti, R., Singh, J., Cotrim, J. M., Toni, M. & Sinha, R., 2019, In: Sustainability (Switzerland). 11, 20, 5729.

Evaluating approaches to resource management in consumer product sectors - An overview of global practices

Singh, J., Cooper, T., Cole, C., Gnanapragasam, A. & Shapley, M., 2019, In: Journal of Cleaner Production. 224, p. 218-237 20 p.

Evaluating the sustainability impacts of the sharing economy using input-output analysis

Plepys, A. & Singh, J., 2019, *A Research Agenda for Sustainable Consumption Governance*. Mont, O. (ed.). Edward Elgar Publishing Ltd., p. 66-84 18 p.

Exploring social, economic and environmental consequences of collaborative production: The case of bike repair maker spaces in three European countries

Singh, J., Mont, O., Winslow, J., Lehner, M. & Voytenko Palgan, Y., 2019. 6 p.

Scaling up British fashion upcycling businesses: Multistakeholder perspectives

Sung, K., Cooper, T., Oehlmann, J., Singh, J. & Mont, O., 2019, (Accepted/In press) In: Fashion Practice: The Journal of Design, Creative Process & the Fashion Industry.

The Socio-Economic Embeddedness of the Circular Economy: An Integrative Framework

Laurenti, R., Singh, J., Frostell, B., Sinha, R. & Binder, C., 2018 Jun 22, In: Sustainability. 10, 7, 2129.

Consumer Perspectives on longevity and Reliability: A National Study of Purchasing Factors Across Eighteen Product Categories

Gnanapragasam, A., Cole, C., Singh, J. & Cooper, T., 2018 Jan 1, *The 25th CIRP Conference on Life Cycle Engineering*. Vol. 69. p. 910-915 6 p. (Procedia CIRP).

Enhancing Reuse and Resource Recovery of Electrical and Electronic Equipment with Reverse Logistics to Meet Carbon Reduction Targets

Cole, C., Gnanapragasam, A., Singh, J. & Cooper, T., 2018 Jan 1, *The 25th CIRP Conference on Life Cycle Engineering*. Vol. 69. p. 980-985 6 p. (Procedia CIRP).

Sustainability assessment of the sharing economy: An overview of various modelling approaches

Singh, J., Plepys, A. & Mont, O., 2018.

Towards a Sustainable Business Model for Plastic Shopping Bag Management in Sweden

Singh, J. & Cooper, T., 2017 Jan 1, *The 24th CIRP Conference on Life Cycle Engineering*. Vol. 61. p. 679-684 6 p. (Procedia CIRP).

Identifying ways of closing the metal flow loop in the global mobile phone product system: A system dynamics modeling approach

Sinha, R., Laurenti, R., Singh, J., Malmström, M. E. & Frostell, B., 2016 Oct 1, In: Resources, Conservation and Recycling. 113, p. 65-76 12 p.

Resource recovery from post-consumer waste: important lessons for the upcoming circular economy

Singh, J. & Ordoñez, I., 2016 Oct 1, In: Journal of Cleaner Production. 134, p. 342-353 12 p.

Beyond Waste Management

Singh, J., 2016 May 12, 145 p.

Unintended Environmental Consequences of Improvement Actions: A Qualitative Analysis of Systems' Structure and Behavior

Laurenti, R., Singh, J., Sinha, R., Potting, J. & Frostell, B., 2016 May 1, In: Systems Research and Behavioral Science. 33, 3, p. 381-399 19 p.

Towards Addressing Unintended Environmental Consequences: A Planning Framework

Laurenti, R., Sinha, R., Singh, J. & Frostell, B., 2016 Jan 1, In: Sustainable Development. 24, 1, p. 1-17 17 p.

Evaluating low-carbon city initiatives from the DPSIR framework perspective

Zhou, G., Singh, J., Wu, J., Sinha, R., Laurenti, R. & Frostell, B., 2015 Dec 1, In: Habitat International. 50, p. 289-299 11 p.

Some pervasive challenges to sustainability by design of electronic products - A conceptual discussion

Laurenti, R., Sinha, R., Singh, J. & Frostell, B., 2015 Jan 1, In: Journal of Cleaner Production. 108, p. 281-288 8 p.

Progress and challenges to the global waste management system

Singh, J., Laurenti, R., Sinha, R. & Frostell, B., 2014 Jan 1, In: Waste Management and Research. 32, 9, p. 800-812 13 p.

Towards a Sustainable Resource Management: a broader systems approach to product design and waste management

Singh, J., 2013 Dec 11, Stockholm. 37 p.

Prizes and Distinctions

Best Research Proposal Poster Award by Academy for Business in Society (ABIS) Brussels

Singh, J. (Recipient), 2017

Erasmus Mundus India4EU Doctoral Scholarship

Singh, J. (Recipient), 2010

ISWA (International Solid Waste Association) Publication Award

Singh, J. (Recipient), 2015

KTH Sustainability, PhD Dialogue 2013 Proposal Competition

Singh, J. (Recipient), 2013

KTH Sustainability, PhD Dialogue 2014 Proposal Competition

Singh, J. (Recipient), 2014

Post Graduate Scholarship, Ministry of Human Resource Development, India

Singh, J. (Recipient), 2007

The Editors' Choice Article of the Month, Waste Management & Research Journal
Singh, J. (Recipient), 2014

Projects

Climate and environmental impact from intensive and perioperative care

Hemberg, L. (Research student), Bentzer, P. (Supervisor) & Singh, J. (Assistant supervisor)
2021/10/01 → 2026/03/30

Land4biomass: Production potential of agricultural biomass and policy instruments to promote a fossil-free society while meeting food production and environmental objectives

Clough, Y. (PI), Boyd, E. (PI), Brady, M. V. (Researcher), Ekroos, J. (Researcher), Smith, H. (Researcher), Alkan Olsson, J. (Researcher), Hedlund, K. (Researcher), Wilhelmsson, F. (Researcher), Börjesson, P. (Researcher), Eklundh, L. (Researcher), Johansson, E. (Researcher), Winberg, J. (Research student), Singh, J. (Researcher), Larsson, C. (Research student) & López I Losada, R. (Research student)
FORMAS, The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning
2019/01/01 → 2025/10/31

Urban Reconomy: sharing for circular resource efficiency

Mont, O. (PI), Voytenko Palgan, Y. (Researcher), Lehner, M. (Researcher) & Singh, J. (Researcher)
2015/06/01 → 2019/12/31

Urban Sharing: From excess economy to access economy

Mont, O. (PI), Plepys, A. (Researcher), Voytenko Palgan, Y. (Researcher), Lehner, M. (Researcher), Enochsson, L. (Researcher), Curtis, S. (Researcher) & Singh, J. (Researcher)
2016/09/01 → 2018/08/31

Urban Sharing: Sustainability and Institutionalisation Pathways

Mont, O. (PI), Voytenko Palgan, Y. (Researcher), Plepys, A. (Researcher), Lehner, M. (Researcher), Singh, J. (Researcher), Curtis, S. (Researcher), Enochsson, L. (Researcher) & Arbelaez Velez, A. M. (Researcher)
European Commission - Horizon 2020
2018/09/01 → 2023/08/31