



Hyunji Cho, PhD

Sustainability Data & Analytics Specialist | Research Fellow at Trinity College Dublin

Hyunji Cho is a sustainability specialist with extensive experience across European programmes, public-sector initiatives, and data-intensive impact projects. Her work is grounded in a systematic understanding of sustainability frameworks, ranging from EU Green Deal priorities and environmental justice to food system resilience and social inclusion. She specialises in translating these frameworks into practical indicators, KPIs, and evidence requirements that organisations can use to inform real decisions. Through close collaboration with municipalities, NGOs, research institutions, and industry partners, she has supported decision-makers in developing sustainability actions that address environmental and social dimensions in an integrated and accountable way.

A central focus of her expertise lies in identifying where sustainability ambitions break down in practice—most often through data gaps, fragmented information, or indicators that are difficult to operationalise. She works to bridge these gaps by designing analytical frameworks and evidence structures that enable stakeholders to act with greater clarity and confidence. In practice, this involves turning broad sustainability goals into measurable indicators, maintainable data structures, and analytical outputs that support prioritisation, trade-off analysis, and implementation.

Her work combines strategic understanding with hands-on analytical capability. Using Python, SQL, machine learning, GIS, and cloud-based infrastructures, she develops integrated datasets, automated classification systems, and monitoring pipelines that transform complex socio-environmental information into usable insight. These tools are designed not as abstract technical solutions, but as decision-support systems that respond to real organisational constraints, policy requirements, and governance contexts.

Underlying her professional approach is the conviction that sustainability work must be supported by tools and systems that reflect real-world conditions. Rather than treating information as an end in itself, she focuses on improving the clarity, reliability, and usability of sustainability evidence so that it can meaningfully inform action. This orientation has allowed her to contribute to more transparent governance processes, more robust sustainability reporting, and more inclusive policy design, particularly in contexts characterised by uncertainty, competing priorities, or political sensitivity.

Hyunji holds a PhD from University College London and has worked across both academic and industry settings. Her cross-sector experience enables her to bridge theoretical sustainability debates with technical implementation, contributing to projects that move beyond ambition towards tangible, evidence-based outcomes across diverse organisational contexts.

PERSONAL DETAIL

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WORK EXPERIENCE

Mar. 2024 – Present **Sustainability Data & Analytics Specialist (Research Fellow)**
 Trinity College Dublin

Key Responsibilities

Sustainability Impact Assessment & Data Frameworks

- Spearheaded the development of an AI-driven sustainability reporting system aligned with CSRD and GRI standards, leveraging Azure infrastructure.
- Led the methodological review for social impact assessment in partnership with FoodCloud, defining localised metrics.
- Built automated Power BI dashboards integrated with Azure Data Factory pipelines for continuous impact monitoring.

ML/AI Data Analytics & Automation

- Designed an automated classification system to map food sharing initiatives across Europe.
- Built an LLM-based classifier to automate data categorization, boosting accuracy from 32% to 74%.
- Reduced manual verification time by ~50% through automated validation pipelines.

Community Engagement & Dissemination

- Delivered data-driven insights to 1,000+ stakeholders including policymakers and academic audiences.
- Developed a public data platform and published 6 peer-reviewed papers to support evidence-based decision-making.

Business Development & Project Sustainability

- Secured additional research and industry-linked funding (€12,000).
- Managed the Food Sharing Map platform lifecycle, overseeing feature updates, QA, and stakeholder requirements.

Key Projects

- Principal Investigator: Research Ireland SHAREWEAVE Project
- Lead: EU Horizon CULTIVATE (Mapping & Automated Classification)

Nov. 2021 – Feb. 2024 **Senior Data & Sustainability Consultant**

EcoWise, London

Key Responsibilities

Sustainability Strategy & Impact Frameworks

- Designed 63 Sustainability Impact Assessment KPIs covering carbon, air quality, and health monitoring aligned with EU policy frameworks.
- Developed the analytical framework for cost-effective decarbonisation of social housing, focusing on energy efficiency for vulnerable groups.
- Implemented GHG Protocol-compliant methodologies to calculate carbon emissions from district heating systems.
- Aligned diverse environmental metrics across five pilot cities to ensure comparable impact reporting.

Data Engineering & Digital Infrastructure

- Built cloud-based infrastructure and automated Power BI reporting systems, reducing manual workload by 10 hours per week.
- Developed data ontology and relational databases to support robust ETL pipelines and knowledge management.
- Integrated building-level sensor data (heating, IAQ, occupancy) with demographic datasets for multi-layered urban analysis.

- Established data acquisition protocols aligned with GDPR and ethical data-handling requirements.

Strategic Growth & Grant Success

- Played a pivotal role as a core team member in securing a €20 million Horizon Europe project (United Circle).
- Supported the early business development and funding proposal for the Building Material Passport initiative.

Key Projects

- Work Package Leader: EU Horizon 2020 DivAirCity (Inclusive Data Framework)
- Grant Contribution (Data Analytics): EU Horizon United Circle (€20M secured)

Apr. 2019 – Oct. 2021

Sustainability & Social Policy Analytics (Research Associate)

University College London

Key Responsibilities

- Conducted qualitative and quantitative analysis across projects on regional inequality and food insecurity.
- Delivered a presentation at the House of Lords for the Levelling Up Bill; findings cited in the English Devolution White Paper.

Key Projects

- UK 2070 Commission, Food Security & Civil Society, Place profile of left-behind areas in the UK

JOB-RELATED SKILLS

Professional Skills	Sustainability & ESG Strategy AI-Enabled Data Analytics EU Policy Alignment (CSRD, GRI) KPI & Impact Framework Design Evidence Synthesis for Decision-Making Data Governance & Data Gap Analysis Cloud-Based Analytics & Dashboard Development Decarbonisation & Systems-Level Planning Regulatory & Reporting Compliance Stakeholder Engagement across Public, NGO, and Research Sectors Proposal Development & EU-Funded Project Delivery
Technical Skills	Data Science & AI Python, R, NLP, LLM-based Text Classification, Statistical Analysis Data Engineering & Cloud SQL, ETL Pipelines, Azure (Data Factory), Relational Databases Visualization & BI Power BI, Tableau Geospatial & Research QGIS, Spatial Analysis, NVivo
Languages	Korean (mother tongue) and English (spoken: fluent; written: fluent)

EDUCATION

2014–2019	PhD of Planning Studies, University College London
2011–2013	MSc of Landscape Architecture, Seoul National University
2006–2011	BA of Fine Arts in Design, Seoul National University

PROFESSIONAL CERTIFICATIONS & TRAINING

Dec. 2025	CSRD Fundamentals, CSRD institute
Dec. 2025	Essentials with Azure Fundamentals, Coursera
Oct. 2021	12-months Executive Talent Sponsorship Program: Expert Data Scientist, Pairview London

GRANTS & FUNDED PROGRAMMES

2025–2026	Research Ireland New Foundations (PI) Mapping the social value of food sharing; Award: €12,000.
2025–2028	Horizon Europe – UNITED CIRCLES €19.9M project; core contributor to proposal for Data Analytics task.

PUBLIC ENGAGEMENT & OUTREACH

- Oct. 2025 Marketplace Events, CULTIVATE, Milan, Italy
- Led design and facilitation of public booth showcasing the Food Sharing Map and sustainability tools, engaging around 500 participating policymakers from various countries.
- Sep. 2025 European Researchers' Night , Trinity College Dublin
- Proposed and developed a public-facing activity introducing the mapping of local food sharing initiatives, engaging thousands of visitors.

AWARDS & SCHOLARSHIPS

- 2025 COST Action LILY – Short Term Scientific Mission (STSM)
- 2019 Bartlett Doctoral Equality, Diversity and Inclusion award, Conducted research on diversity and inclusion in UK higher education, focusing on Asian female international students at the Bartlett
- 2016, 2017 The Bartlett Student Conference Travel Grants
- 2012 Giljin Lim Memorial Scholarship, awarded as the top student in the school of Graduate School of Environmental Studies, Seoul National University

SELECTED PUBLICATIONS

- Davies, A. R., Cho, H., Vedoia, M., Martinez Varderi, R. & Gatejel, A. M. (2025). Evolving foodscapes: Tracing trajectories of urban food sharing initiatives for just urban food transitions. *Geoforum*, [Advance online publication], DOI: 10.1016/j.geoforum.2025.104318
- Davies, A. R., Cho, H. & McGeever, A. (2025). Assemblages of urban food sharing initiatives: actions, interactions and connections. *People Place and Policy*, 19(1), pp. 1-19. DOI: 10.3351/ppp.2025.6842985999
- Wu, H., Cho, H., Davies, A. R., & Jones, G. J. (2024, October). LLM-based Automated Web Retrieval and Text Classification of Food Sharing Initiatives. In *Proceedings of the 33rd ACM International Conference on Information and Knowledge Management*, 4983-4990. DOI: 10.1145/3627673.3680090
- Cho, H. (2023). Inner-group and inter-group relations in Seoul participatory planning: revisiting the concept of social capital. *Asian Geographer*, 1-15. DOI: 10.1080/10225706.2022.2038221
- Cho, H. (2022). Imagining diversity in Seoul: Gender and immigrant identities. *Journal of Race, Ethnicity and the City*, 1-18. DOI: 10.1080/26884674.2022.2051778
- Auerbach, J., Muñoz, S., Walsh, E., Affiah, U., Barrera de la Torre, G., Börner, S., Cho, H., Cofield, R., DiEnno, C.M., Graddy-Lovelace, G. and Klassen, S. (2022). Call for reimagining institutional support for PAR post-COVID. *Frontiers in Sustainable Food Systems*, 6, pp. ART-916384. DOI: 10.3389/fsufs.2022.916384
- Auerbach, J., Muñoz, S., Affiah, U., Barrera de la Torre, G., Börner, S., Cho, H., Cofield, R., DiEnno, C. M., Graddy-Lovelace, G., Klassen, S., Limeberry, V., Morse, A., Natarajan, L., and Walsh, E. A. (2022). Displacement of the scholar? Participatory action research under COVID-19. *Frontiers in Sustainable Food Systems*, 16. DOI: 10.3389/fsufs.2022.762065
- Cho, H. (2021). The politics of recognition and planning practices in diverse neighbourhoods: Korean Chinese in Garibong-dong, Seoul. *Urban Studies*. 58(14), pp.2863-2879. DOI: 10.1177/0042098020970450

PAPER UNDER REVIEW

- Cho, H., Natarajan, L. & Ilie, E. (under review, *City*). The role of civil society in the changing landscape of democracy.
- Cho, H. & Davies, A. R. (under review, *Cities*). Diversity & sustainability: Urban food sharing initiatives as care infrastructures for a just transition.

PAPERS IN PREPARATION

- Cho, H., Davies, A. R., & Jones, G. J. AI and Data Justice in Social Science: LLM Classifiers for Mapping Urban Food Sharing. In preparation for submission to *Big data & Society* (March 2026)

REPORTS

- Yontem, E., Cho, H. & Yontem, S. (2022). *DivAirCity Digital Innovation and Diversity & Innovation Data Management Framework*.
- Natarajan, L., Grindle, G., Cho, H., Armstrong, M. & Woodward, A. (2022). Food Security & Civil Society. London: University College London, UK
- Natarajan, L. & Cho, H. (2022). Place Profiles: Localizing Understandings of Disadvantage. Working Paper: Lincoln Institute of Land Policy.
- Cho, H., Ilie, E. & Natarajan, L. (2021) A Civil Society Perspective on Inequalities: the COVID revision. UK 2070 Working paper series, Sheffield: Sheffield University, UK

SELECTED CONFERENCE PRESENTATIONS & INVITED TALKS

- Organiser**, Roundtable: "Reclaiming health citizenship: Inclusive governance and community action", UK-Ireland Planning Research Conference 2025
- Cho, H.**, Natarajan, L., & Ille, E (July 2025) Understanding governance as a dynamic local response: England's Civil Society Organisations in the changing landscape of urban governance
- Cho, H.** & Davies, A. R. (July 2025) Diversity & sustainability: Urban food sharing initiatives as care infrastructures for a just transition
- Cho, H.**, Davies, A. R., Jones, G. J. & Wu, H. (November 2024) Exploring the Use of LLM-based Automated Tools for Just Food Transitions: Insights from the EU CULTIVATE Project, paper presented at Turing Urban Analytics Meeting 2024: Transforming Urban Living with AI and Digital Twins
- Cho, H.** (2023), "Inclusive urban futures: Mapping community-perceived air quality in DivAirCity", invited to present at Smart City Talents Seminar, 25 May 2023, organized by Busan National University, Online, Busan, Korea
- Cho, H.** (2023), "Urban data analytics for inclusive regenerative city", invited to present at Bola Forum, 29 January 2023, organized by Bola, Online, Seoul, Korea
- Cho, H.** (2021), "The politics of recognition and participatory planning in Seoul", invited to present at Migration and Regional Development Conference, 24th July 2021, Wuhan University, Online, Wuhan, China
- Cho, H.** (2020), "The Construction of Ethnicity in Seoul", invited to present at Socially Just Planning Seminars Sessions, 11th March 2020, University College London, London, the UK

PROFESSIONAL SERVICE, REVIEW & ENGAGEMENT

- Reviewer** Asian Geographer, Built Environment, BMC Psychology, Cities, Environment and Planning B: Urban Analytics and City Science, Geoforum, Space and Environment, International Journal of Urban and Regional Research, Journal of Regional and City Planning, Race and Social Problems, and Urban Research and Practice
- Book review editor** Built Environment, Alexandre Press (2025–present)
- External Expert** COST Action Proposal Evaluation, COST Association (2025–present)
- Member** Health Citizenship Research Cluster, Bartlett School of Planning, University College London (2024–present), COST Action LILY: Large-scale Interdisciplinary Alliance on Nature-based SoLutions and Health: Indicators, Inequality and Innovation (2025–present); Trinity Centre for Future Cities, Trinity College Dublin (2025–present); Food 2030 Digital Innovation of Food Working Group (2025–present)

MEMBERSHIPS OF PROFESSIONAL BODIES

- Jul. 2018 The Higher Education Academy Associate Fellow

TEACHING

MSc DISSERTATION SUPERVISION

- 2019 – 2021 Supervised eight students at University College London, Bartlett School of Planning

POSTGRADUATE

- 2025 Guest Lecturer, Global Challenges for Sustainability (CHARM-EU Programme), Trinity College Dublin
- 2019 – 2022 Seminar Tutor & Module Co-Designer, Comparative Planning Systems and Cultures, Bartlett School of Planning, University College London
- 2016 – 2019 Teaching Assistant, Field work coordinator & Module Co-Designer, Participatory Urban Planning Project, Bartlett School of Planning, University College London
- 2016 – 2018 Teaching Assistant & Module Co-Designer, Communities and Planning: Concepts and Frameworks, Bartlett School of Planning, University College London

UNDERGRADUATE

- 2020 – 2022 Seminar Tutor & Module Co-Designer, Contemporary Cities, Bartlett School of Planning, University College London

REFERENCE

Available upon request