# Supplemental material

Supplemental table 1. Detailed sample of studies screened, type of methodology used, objective of the study and information regarding the data.

| **Study reference number** | **Type of methodology** | **Objective of the study** | **Sampling/data details** | **Reference** |
| --- | --- | --- | --- | --- |
| 1 | Survey and interview | fashion rental platform entrepreneurs see their contribution to enhance sustainability with their provided service  | 12 surveys and 6 interviews | Amasawa *et al*., 2023 |
| 1 | Life Cycle Assessment (LCA) | comparatively assess the environmental sustainability of various garments in rental platforms  | 11 garments | Amasawa *et al*., 2023 |
| 2 | Case study | to identify polar cases on the basis of the degree of circularity and age of the company  | 7 fashion companies owned by brand owners | Salmi and Kaipia 2022 |
| 3 | Case study | explore scalability solutions from practice | 1 remanufacturing not-for profit organization | Pal *et al*., 2021 |
| 4 | Survey | identify customers’ perceptions of their practices as stated on brands sites and in communication folders and flyers available at their stores  | 118 customers of 1 slow fashion store compared with previously 400 customers on a fast fashion store | de Oliveira *et al*., 2022 |
| 5 | LCA (through scenario development) | understand the strengths and weaknesses of LCA as a tool for assessing circular fashion strategies, using leather bags as a case study | Database of bovine leather handbag inventories | Shou *et al*., 2022 |
| 5 | Framework development | *idem* | Delphi-inspired method complemented with desk research | Shou *et al*., 2022 |
| 5 | Scenario development | *idem* | Current state vs two circular economy scenarios | Shou *et al*., 2022 |
| 6 | Case study | validating whether: Carbon footprint is related to the economic results in major luxury conglomerates  | IPCC-based method, revenue data, and market share data of LVMH and Chanel | López *et al*., 2023 |
| 7 | Mathematical approach | address the uncertainty around the global impacts of fast fashion  | Environmental-extended multi-region input-output (MRIO) analysis on Eora MRIO database | Peters *et al*., 2021) |
| 8 | Framework development | making sustainability communication actionable for consumers  | Development, interviews, pilot, dissemination (50 consumers and 45 industry representatives), test with 14 companies | Turunen and Halme 2021 |
| 9 | Interactive action research | deeper understanding of the company’s current involvement, knowledge, and resources engaged in these circular practices | Work with 5 employees of 1 company | Sandberg, 2023 |
| 10 | Interview | elaborating on existing theoretical frameworks and closing the gap between theory and practice about the dynamic capabilities relevance on implementing circular business models | 12 managers from different companies | Sandberg and Hultberg, 2021 |
| 11 | Survey | better understanding of knitwear small-medium entreprises, from the decisions in the product development process, to the machineries tools and processes in use, and their position for change in the fashion supply chain  | 31 companies recruited around the world | Scott *et al*., 2023 |
| 12 | Case Study | provide rich empirical evidence on circularity solutions adopted by the largest companies in the fast fashion industry  | Analysis of 6 sustainability reports from 6 global fashion players | Dragomir and Dumitru, 2022 |
| 13 | Scenario development | assess what effects a circular economy (CE) transition for apparel sold in the EU could have on employment along its value chains, in particular the distribution across geographies  | Social life cycle assessment (SCLA) databases plus additional databases specific for target industries and industry indicators | Repp *et al*., 2021 |
| 14 | Case Study | unveil the social mechanism that can explain the shift in the legitimacy perceptions of second hand clothes retail markets | Longitudinal analysis of second-hand stores, general and fashion media, and micro-influencers; all in Spain | Valor *et al*., 2022 |
| 15 | Case study | explore the suitability of user-generated online reviews in identifying factors and conditions of acceptance | 3 US-based e-commerce companies offering subscriptions | Camacho-Otero *et al*., 2019 |
| 16 | Index Decomposition Analysis (IDA) through the Logarithmic Mean Divisia Index (LMDI), and Decoupling Analysis | examine the effectiveness of the past measures implemented to reduce greenhouse gases (GHG) emissions and the degree of dissociation, that exists between economic growth and GHG emissions, within the EU-2 textile and clothes industry | Eurostat Database | Román-Collado *et al*., 2023 |
| 17 | Survey | perform a quantitative survey for pre-identified barriers to sustainable sourcing validation and categorization  | 154 participants coming from global sustainable sourcing industry sector | Bhandari *et al*., 2022 |
| 18 | Case study | give actors critical awareness of this issue and provide practical guidance for managers to adopt and combine these strategies decisively to fully embrace the principles of circular economy and a more holistic approach to sustainability  | 10 leading firms commonly related to fast fashion | Garcia-Ortega *et al*., 2023 |
| 19 | Case study | explores the incidence of garment failure, the causes and potential solution  | data from a series of research projects commissioned in the UK by WRAP and Defra and undertaken over the past decade  | Cooper and Claxton, 2022 |
| 19 | Systematic analysis | inform a proposed industry protocol on garment longevity and have not previously been published | 1,476 discarded garments donated to UK charities and not good enough to resale | Cooper and Claxton, 2022 |
| 20 | Interviews | investigate the sustainability benefits achieved by implementing RFID technology in Vietnamese fashion and textile supply chain  | 3 retail sectors, 2 garment manufacturing units, and 5 shoe manufacturing units in Vietnam | Nayak *et al*., 2022 |
| 21 | Material flow analysis (MFA) and Carbon cost analysis | offering the first MFA of the UK clothing economy  | Many data sources plus calculated metrics | Millward-Hopkins *et al*., 2023 |
| 22 | Online questionnaire and Adaptive Choice-Based Conjoint Analysis (ACBA) | analyse if outdoor sporting goods users value circular product attributes  | 1048 respondents from European countries | Fuchs and Hovemann, 2022 |
| 23 | Systematic analysis | understand, evaluate, and challenge the status quo  | Theoretical frameworks such as Design and Systems Thinking | Jain *et al*., 2021 |
| 24 | Case study | understand sustainability and the CE in the Swedish fashion industry,  | 19 interviews with employees of Swedish fashion brands responsible for sustainability initiatives | Brydges, 2021 |
| 25 | Survey and regression analysis | better understand how sustainable business models can be achieved and what this means for the assumptions of extant marketing theories in an increasingly online retail context  | 733 respondents from 56 countries | Johnstone and Lindh, 2022 |
| 26 | Framework development based on The Facility Environment Modile of the Higg index tool 2.0 | collect empirical data regarding the environmental aspects, namely environmental management system, energy use and greenhouse emission, wastewater/effluents, water use, emission to air, waste management and chemical management; to generate sustainability scores achieved by individual factories | 3 knitwear-dyeing factories | Shamsuzzaman *et al*., 2023 |
| 26 | Interviews | not referred | 16 employees of those factories | Shamsuzzaman *et al*., 2023 |
| 27 | Survey | assess the motivations influencing the consumption intentions and purchase behaviours of young adults with regard to traditional handicraft fashion | 382 Chinese respondents younger than 40 years old | Xue *et al*., 2022 |
| 28 | Interview | explain the relationship between the sustainable value proposition created and delivered by the companies, and the value perceived by customers | Theoretical sampling and interview with 2 Finnish clothing libraries and brands (n = 10) and customers (n = 21) | Laukkanen and Tura, 2022 |
| 29 | Survey | examined the effect of individual concern on the consumption attitude and its impact on consumer’s purchase intention of green apparel | 692 respondents from Hyderabad (India) | Pandey and Yadav, 2023 |
| 30 | Framework development | provide managers with a more decisive and sustainable framework to fulfil customer satisfaction  | Linear Programming (LP) and Quality Function Deployment (QFD) methodologies using Intuitionistic Fuzzy Sets (IFSs)  | Aydin *et al*., 2023 |
| 30 | Focus group | increase the service and product quality in order to increase the perceived quality, and loyalty of the customers with the most effective and efficient ways to achieve customer satisfaction, and to gain a competitive advantage in the market | 195 existing and potential customers of a Turkish apparel retailing company operating globally | Aydin *et al*., 2023 |
| 31 | LCA assessment | assess the environmental impact of the proposed face mask and compare it with other commercial or novel face masks | Several sources | Angelis-Dimakis *et al*., 2022 |
| 32 | Theoretical model | explore the effect of motivated consumer innovativeness to use digital voice assistants on purchase intention and awe experience of online shoppers  | Data collected from 538 users of digital voice assistants for online shopping of fashion products | Kautish *et al*., 2023 |
| 33 | Survey | investigates which factors influence green consumer behavioral intention in the clothing industry  | 2,694 Italian customers (students) | Dangelico *et al*., 2022 |
| 34 | Case study | investigates outdoor companies’ sufficiency-promoting marketing strategies and activities | 6 outdoor companies in possess of sustainability strategies and sufficiency-promoting marketing principles | Gossen and Kropfeld, 2022 |
| 35 | Stakeholder analysis | identify key ac- tors active in existing upcycling value chains in the UK | Expert interviews with 6 academics in design, business, waste management, and consumer studies in Nottingham Trent University (UK) | Singh *et al*., 2019 |
| 35 | Interview | collect data on challenges and success factors for upcycling businesses in the textile and furniture sectors in the UK | 22 practitioners and 7 consumers | Singh *et al*., 2019 |
| 35 | Systems model technique (Causal Loop Diagram) | enable a qualitative exploration of variables and their interrelationships in a system  |  | Singh *et al*., 2019 |
| 36 | Thermo-gravimetric analysis | understand how waste cotton reacts to different temperatures  | Second hand personal protective uniforms | Wesley *et al*., 2023 |
| 36 | Thermal transformation of waste cotton textile into carbon fibre | enable testing of the different temperature and time parameters | *Idem* | Wesley *et al*., 2023 |
| 36 | Compositional analysis | understand the concentration of carbon in samples transformed under different temperature and time parameters | *Idem* | Wesley *et al*., 2023 |
| 36 | Scanning electron microscopy | observe changes to the waste cotton textile after carbonisation, | *Idem* | Wesley *et al*., 2023 |
| 36 | X-ray diffraction | understand the extent to which the atoms were ordered, or ‘crystalline’  | *Idem* | Wesley *et al*., 2023 |
| 36 | LCA | demonstrate the benefits of this process compared to conventional methods of preparing carbon fibres from polyacrylonitrile | *Idem* | Wesley *et al*., 2023 |
| 37 | Two-round disaggregative Delphi approach | explore how the use of data could support building sustainability-aligned pathways to circular economy of textiles  | 59 experts of different nationalities from 10 different countries | Louma *et al*., 2022 |
| 38 | Interview | investigate the essential activities innovators in consumer- facing corporations carry out as part of circular business model innovation | Key informants dealing with circular business model innovation from H&M, IKEA, and Philips | Bocken and Konietzko, 2022 |
| 38 | Thematic analysis | key analytical technique that can provide for a rich and deep picture of a set of data  | Previously gathered data | Bocken and Konietzko, 2022 |
| 39 | Interview | gain insights in manifestations of rebound effects by studying the Dutch textile industry as it transitions to a circular system  | 12 experts related to sustainable fashion | Siderius *et al*., 2021 |
| 40 | LCA | assess the environmental performance of the valorised wool system  | Ecoinvent v 3.5 (2018) and literature | Martin and Herlaar, 2021 |
| 40 | Social Life Cycle Assessment (SLCA | understand the potential social implications of the reviewed supply chains  | PSILCA v 2.1 database | Martin and Herlaar, 2021 |
| 41 | Interview | investigates motives for sufficiency-promoting business communication and explores related challenges resulting from the economic growth paradigm  | 6 German companies in the apparel sector | Gossen and Heinrich, 2021 |
| 42 | LCA | study and compare the environmental impacts of introducing different CE strategies (reuse, recycle) into the life cycle of cotton roller towels in terms of climate change impact and water consumption | Manyfold, including Ecoinvest v 3.3, and literature | Mölsä *et al*., 2022 |
| 43 | Interview | explore the relationship between different business forms present on a changing second-hand market and a socially just circular economy  | 3 not-for-profit and 3 for-profit second hand market business in Sweden | Persson and Hinton, 2023 |
| 44 | LCA-enhanced | investigate how global technological and societal processes shape the way we produce, use and dispose of textiles, and what this means for the environmental quality and ecological health of freshwaters.  | Wool and polyethylene terephtalate | Stone *et al*., 2020 |
| 45 | Survey | analyse waste flows generated within Swiss textile companies,  | 14 Swiss textile companies | Schmutz and Som, 2022 |
| 45 | Material flow analysis | understand the flows of textile waste according to their form and material composition | Data previously gathered | Schmutz and Som, 2022 |
| 46 | Interviews | estimate the sorting and recycling capacities, as well as discuss challenges related to collection, sorting, recycling, and enhancing circularity  | 43 participants ranging from municipalities, NGOs, commercial sector, and sorting and recycling companies from Denmark, Finland, Norway, and Sweden | Dukovska-Poposka *et al*., 2023 |
| 47 | Survey | examines the association of environmental knowledge, green trust, and environmental concern with environmental attitude and green apparel buying behaviour  | 387 respondents among Macromill members in Tokyo metropolitan area (Japan) | Dhir *et al*., 2021 |
| 48 | Interview | describes and discusses nominated procurement as a means through which buyers select sub- suppliers to achieve sustainability compliance upstream in emerging economies’ supply chains.  | 20 participants with different roles from 10 distinct organizations related to the fashion industry in Sri Lanka | Fontana *et al*., 2021 |
| 49 | Interview | analysing the influence of the innovation culture in innovation performance of products and processes in the textile industry of Vale do Itajaí, Santa Catarina (Brazil) | 123 participants from small and medium-sized businesses and 164 from large companies | Padilha and Gomes, 2016 |