

WP3 METHODS: STRUCTURAL CONSTRAINTS, ENABLERS AND POLICY LEVERS FOR LIFESTYLE SHIFTS

I. LITERATURE REVIEW, DELPHI-RANKING METHOD, AND EXPERT INTERVIEWS

The first steps in WP3 aimed to identify and evaluate key structural barriers and enablers to achieving 1.5° lifestyles. It was structured into two primary tasks: a systematic literature review and expert interviews, informed by a Delphi-ranking process.

TASK 3.1: SYSTEMATIC LITERATURE REVIEW

A state-of-the-art review was conducted to assess existing research on structural enablers and barriers to sustainable consumption and climate change mitigation. The review covered multiple disciplines, including ecological economics, environmental politics, sociology of consumption, urban planning, and sustainable development. The literature search used databases such as Web of Science and Scopus, with predefined search strings incorporating terms like 'sustainable lifestyles,' 'barriers,' 'enablers,' and relevant consumption fields. The initial search yielded 18,188 articles, which were filtered down to 1,427 and finally to 477 after removing duplicates. The selected studies were categorized based on structural factors (political, economic, technological, and societal) and consumption areas (mobility, housing, nutrition, and leisure). A coding process using MAXQDA software was applied to analyse these studies, ensuring a balanced selection across categories. The final dataset included 120 studies (60 focusing on structural factors and 60 on consumption areas). This method is detailed in Hirth et al. (2023).

DELPHI-RANKING METHOD

To refine findings from the literature review, a Delphi-ranking process was implemented. Experts within the EU 1.5° Lifestyles consortium evaluated the identified barriers and enablers. The ranking involved multiple rounds of peer consulting and voting, where each expert distributed 20 points among various factors. The results led to a consolidated list of 22 key barriers and enablers, which were used for the Expert Interviews in Task 3.2. This method is detailed in Kreinin et al. (2024a).

TASK 3.2: EXPERT INTERVIEWS

A total of 36 international expert interviews were conducted to further discuss and validate the results from the literature review and Delphi ranking. The interviewees included academics, policymakers, NGO representatives, and business professionals specializing in fields such as urban planning, mobility, nutrition, environmental policy, and sustainable business models. The insights from these interviews provided a comprehensive perspective on barriers and enablers, informing the subsequent research stages. In particular, they informed the identification of 7 key structural barriers, which were used in D3.2 and D3.3. The method is detailed in Kreinin et al. (2024a; 2024b)

II. STAKEHOLDER THINKING LABS (STLs) AND BACKCASTING METHOD

The next major step was based on co-creative processes through Stakeholder Thinking Labs (STLs) conducted in five case countries: Germany, Hungary, Latvia, Spain, and Sweden. The STLs engaged diverse stakeholders to explore pathways to overcoming key structural barriers.

TASK 3.3: 1ST STAKEHOLDER THINKING LABS (STL1)

The first STLs (STL1) included policymakers, business representatives, media, and civil society actors. The sessions introduced the participants to the EU 1.5° Lifestyles project via the Climate Puzzle exercise to simulate understanding of demand-side emissions reduction and a backcasting exercise to identify actionable steps towards a 1.5°-aligned future in the four distinct consumption fields (nutrition, mobility, housing, leisure) in overcoming the seven key structures disabling 1.5° C lifestyles (outcome of Task 3.2). Backcasting was chosen as the primary method due to its problem-solving and goal-oriented nature. Unlike forecasting, which extrapolates from current trends, backcasting envisions a desired future and determines the necessary steps to reach it. The process involved defining a scientifically-grounded vision of a sustainable future (2030, 2035, and 2040 were

chosen as milestones), engaging participants in discussions on structural changes needed to reach that vision, and identifying actionable policy steps towards this future in a given field. A structured template was used to document the proposed steps, and a database was compiled for systematic analysis. The analysis employed qualitative clustering to identify common themes and pathways across different case countries. Steps were categorized according to structural barriers and enablers, and initial cross-country comparisons were conducted - this was done with caution owing to the small number of participants (25-30) in each country. Country-Specific Adaptations: Hungary adopted a modified timeline (2050, 2040, and 2030) due to local political and economic constraints. Instead of presenting a top-down vision, participants developed their own future scenarios based on the Climate Puzzle exercise. This participatory approach ensured greater engagement and relevance to the local context. The method is detailed in Kreinin et al. (2024a).

III. MULTI-STEP CO-CREATION WORKSHOPS (EU STL AND STL2)

The third phase built on the preceding ones by conducting two additional rounds of co-creative stakeholder engagement: the EU Stakeholder Thinking Lab (EU STL) and a second round of country-specific Stakeholder Thinking Labs (STL2s). These aimed to refine narratives and develop concrete policy pathways for structural change.

TASK 3.4: EU STAKEHOLDER THINKING LAB (EU STL)

The EU STL, held in Brussels, focused on European-level policy narratives and strategies for a 1.5°-aligned transformation. Participants included EU Commission and EU Parliament representatives, NGOs, researchers, and advocacy groups. The session was divided into three key components: 1) “Actor and Influence Mapping”: Assessing stakeholders' attitudes and power in the EU policy landscape; 2) “Narrative Building”: Co-creating policy narratives to challenge economic growth paradigms and vested interests; and 3) “Policy Narrative Development” Designing actionable strategies to support a 1.5° lifestyle transition, particularly focusing on mobility, nutrition, and labour/work policies. A qualitative thematic analysis was used to assess the co-created emerging narratives and strategic approaches in mobility, nutrition, and labour/work.

TASK 3.5: SECOND ROUND OF STAKEHOLDER THINKING LABS (STL2s)

The second round of STLs (STL2s) was conducted in case countries with smaller groups (three-four stakeholders per session). These sessions delved into six key policy options: 1) Reducing meat consumption (Nutrition); 2) Reducing air travel (Leisure); 3) Introducing upper limits on residential floor space (Housing); 4) Reducing car ownership in cities (Mobility); 5) Reducing working hours (Welfare); 6) Regulations for sufficiency-oriented business models (Business Models).

The discussions in STL2s focused on structural barriers and enablers, key actors, and pathways for policy implementation. Cross-cutting issues such as economic paradigms, vested interests, and policy feasibility were explored. All STL2 sessions were recorded and transcribed. Software was used to deductively analyse the outcomes of the discussions around specific themes (e.g., alliances for change, local actor-networks working towards transformation in the field). The method is detailed in Lehner et al. (2024).

CITED WORKS:

- Hirth, Steffen, Halliki Kreinin, Doris Fuchs... 2023. ‘Barriers and Enablers of 1.5° Lifestyles: Shallow and Deep Structural Factors Shaping the Potential for Sustainable Consumption’. *Frontiers in Sustainability* 4 (March). doi: 10.3389/frsus.2023.1014662.
- Kreinin, Halliki, Doris Fuchs, Pia Mamut... 2024a. ‘Transforming Provisioning Systems to Enable 1.5° Lifestyles in Europe? Expert and Stakeholder Views on Overcoming Structural Barriers’. *Sustainability: Science, Practice and Policy* 20 (1). doi: 10.1080/15487733.2024.2372120.
- Kreinin, Halliki, Pia Mamut, and Doris Fuchs. 2024b. ‘The “Glass Ceiling” of Germany’s Socio-Ecological Transformation: Citizen, Expert, and Local Stakeholder Perspectives on Responsibility for Change’. *Zeitschrift Für Politikwissenschaft* 34 (2): 273-93. doi: 10.1007/s41358-024-00383-9.
- Lehner, Matthias, Jessika Luth Richter, Halliki Kreinin, Pia Mamut, Edina Vadovics, Josefine Henman, Oksana Mont, and Doris Fuchs. 2024. ‘Living Smaller: Acceptance, Effects and Structural Factors in the EU’. *Buildings & Cities* 5 (1). doi: 10.5334/bc.438.