Executive Summary: Circular Material Valuer Curriculum

1. Background and Contextual Review

This report provides a comprehensive overview of the Circular Material Valuer Curriculum (CMVC) project, a citizen science initiative supported by the Hans Sauer Stiftung. The project addressed the urgent need to move beyond traditional waste management, which often focuses solely on collection and disposal, toward a more holistic and community-based approach to waste prevention. Through extensive research into the skills and knowledge required to divert valuable goods from the waste stream, the project has successfully defined the emerging professional role of the Circular Material Valuer and created a collaborative, openly licensed educational resource.

The project's design and execution were firmly rooted in the principles of the Hans Sauer Stiftung's "Citizen Science for Action!" programme. We focused on strengthening civil society actors by engaging them as co-researchers and co-authors of the final outputs. The project has empowered individuals whose lived experiences and embodied knowledge are essential to solving social-ecological challenges, thereby contributing to the Stiftung's mission of promoting social-ecological transformation through science and research. As outlined in our project plan, the work was structured across four completed phases: Preparation, Fieldwork, Analysis, and Publication of Results. This report details our activities and findings in these areas.

2. Fieldwork

The fieldwork phase was a core component of this project, designed to gather qualitative insights from a diverse range of practitioners, community members, and experts in material reuse. This participatory research directly informed the content and structure of the curriculum.

Observations and Visits in Berlin

A series of in-person visits and interviews provided critical insights into the operational realities of material reuse in an urban context.

- **Nochmall:** An interview with staff at this large second-hand store highlighted the efficiency of a highly commercial and organised sorting process, with staff processing thousands of items daily. Key insights included the importance of training retail staff as "valuers" and the challenges of managing high volumes and product "shelf time." It also provided a contrast between an efficient, profit-driven model and the desire to foster a sense of community.
  Notes from visits and interviews available from the public repository:

https://github.com/reuse-city/CMVC/tree/main/fieldwork/Berlin/Nochmall

- **Kunst-Stoffe Workshop:** The in-person "Circular Valuer Skills" workshop, co-hosted with Kunst-Stoffe, convened a diverse group of participants. Discussions focused on the limitations of the "butterfly diagram" in its typical form, which often overlooks the human element. The activity explored six key knowledge areas relevant to the valuer's role, with a final discussion emphasising the importance of soft skills, such as curiosity and imagination, which are often not taught in formal education.
  Notes from visits and the workshop available from the public repository:
  https://github.com/reuse-city/CMVC/tree/main/fieldwork/Berlin/Kunst-Stoffe
  https://github.com/reuse-city/CMVC/tree/main/fieldwork/workshop_Kunst-Stoffe

- **Community Events:** Observations from the Repair Café at Re-Publica and conversations during the GIG Week provided insights into the grassroots, community-driven nature of repair initiatives. These events highlighted the role of volunteers and the types of items commonly brought in for repair, showing how digital and non-digital communities can converge around practical, hands-on activities.
  Notes from the session during GIG Week available from the public repository:
  https://github.com/reuse-city/CMVC/blob/main/fieldwork/gig-week/

- **Other Organisations:** Visits to other Berlin-based organisations, such as Humana, the Haus der Materialisierung (HdM), and VORN, provided a broader perspective on the ecosystem. These visits revealed the immense scale of textile sorting, the logistical challenges of temporary spaces for reuse initiatives, and the role of "Libraries of Things" in sustainable fashion and design.
  Documentation of the visits and observations available from the public repository:
  https://github.com/reuse-city/CMVC/tree/main/fieldwork

International Engagement

The project expanded its scope beyond Berlin to include international and online collaborations, fostering a diverse range of perspectives.

- **Online Sessions:** Two key online sessions were conducted with practitioners experienced in repair, business models, and policy. Discussions focused on the critical distinction between repairing (preventing devaluation) and reusing (restoring value). As one participant stated, *"When we talk about repair, differentiate repair vs reuse... You intend to continue using that thing. No question as to the value. Gigantic difference."* Another participant highlighted repair as a form of resistance, noting, *"The repair movement's ultimate value is not only learning that repair is possible and desirable. It's an ultimate act of resistance towards things losing value."* They also highlighted the

limitations of automated sorting, arguing that it leads to *"lowest common denominator"* assessments that devalue materials. The conversations explored innovative business models, policy examples like the Berlin repair voucher pilot, and the ethical implications of global commodity prices on local waste pickers. The ideas of a distributed "15-minute repair" network and a Europe-wide repair platform were also discussed.
Documentation of the online sessions available from the public repository:
https://github.com/reuse-city/CMVC/tree/main/fieldwork/online-sessions

- **FAB25 Workshop:** The "Designing the Reuse Economy: Material Valuer Skills" workshop at FAB25 was a crucial activity. This open-ended conversation with makers and innovators provided valuable feedback on the project's core concepts. It also served to launch the idea of a "Reuse Academy," positioning the CMVC project as the foundational research for this future initiative.
Research and project reflections after FAB25 were condensed on a public article:
https://is.efeefe.me/stuff/fbr/post-fab

- **Surveys and Feedback:** An online survey was conducted to gather input on the skills and experiences of material valuers from a wider audience. The continuous feedback from project participants, facilitated through an online group, provided an agile and iterative loop for refining our ideas and ensuring the curriculum remained grounded in their needs.
Structure of the online survey available from the public repository:
https://github.com/reuse-city/CMVC/tree/main/fieldwork/online-survey

3. Analysis

The analysis phase synthesised the extensive data gathered during fieldwork, transforming raw observations and conversations into key themes that guided the development of the curriculum. This process of hybrid analysis, which combines qualitative coding with systematic mapping, was central to the citizen science approach.

- **Synthesis of Findings:** The fieldwork revealed a powerful tension between two models of circularity: a centralised, industrial model focused on efficiency (e.g., mass sorting at Nochmall/BSR) and a decentralised, community-based model focused on social value and local needs (e.g., Repair Cafés). It confirmed that the role of a material valuer requires a blend of skills beyond simple sorting, including a deep understanding of product design, market value, and community dynamics. The importance of **tacit knowledge** and the role of storytelling in preserving an object's value emerged as crucial, often-overlooked elements.

- **Conceptual Development:** This synthesis led to the final structure of the curriculum, which integrates these diverse insights into four interconnected modules. The curriculum is designed to address not just the *what* but the *why* of material reuse, preparing practitioners to act as both skilled technicians and engaged community builders.
- **Research Validation:** The participatory nature of all our activities, from the initial survey to the final workshops, validated the project's core hypothesis. Participants confirmed that the "Circular Material Valuer" is a real, albeit often unrecognised, role in the social and solidarity economy. A curriculum of this nature would be a valuable tool for professionalising and empowering these individuals and the organisations they work for. Some samples of participants' views:
    - The situated nature of repairing was emphasised: **"The repair movement's ultimate value is not only learning that repair is possible and desirable. It's an ultimate act of resistance towards things losing value."**
    - Participants argued against limitations like automated sorting, which **"leads to lowest common denominator assessments that devalue materials,"** reinforcing that systemic valuation requires deep human knowledge.

More detailed notes and analysis documentation available from the public repository: https://github.com/reuse-city/CMVC/tree/main/analysis

4. Outputs

Based on the research and analysis, the project has produced two key, openly licensed outputs that are ready for distribution and use.

- **The Curriculum Structure:** The primary output is the four-module curriculum document itself. This resource, entitled CMVC - Curriculum Draft, is a collaborative product that integrates the project's findings into a coherent framework. It is released under a **Creative Commons Attribution (CC-BY) license**, making it freely available for anyone to use, adapt, and build upon. The curriculum is designed to serve as a blueprint for a wide range of educational contexts.

- **The Course Programme:** The accompanying Circular Material Valuer: Initial Course Programme provides a practical guide for implementing the curriculum. It outlines learning objectives, methods, and assignments for each module, offering a clear and actionable path for organisations to train their staff and volunteers. It is designed to be highly flexible and adaptable, suitable for both online and in-person delivery.

- **Documentation:** All research data and ongoing results, including anonymised interview transcripts, analyses, and research notes, have been documented and published as open research notebooks to ensure transparency and enable further

research.

Outputs and complete project documentation available from the public repository: https://github.com/reuse-city/CMVC/tree/main

5. Documentation

Insert images and links to GitHub folders.

6. Future Outlook

With the successful completion of the fieldwork, analysis, and the development of the *Curriculum Structure* and *Course Programme*, the project has established a strong foundation for future work. The final phase of the project will focus on the public release of these outputs and developing a strategy for their long-term impact.

The publicly available outputs will include:

- A comprehensive **Curriculum Draft** and **Course Programme**, released under a CC-BY license, to be shared on platforms such as the Reuse City wiki and the GIG website.
- **Process documentation** of the fieldwork, including research notes and analysis, to provide a transparent and replicable model for citizen science research in this field.
- A **dissemination strategy**, co-developed with participants and partners, to ensure the outputs reach a broad audience, including civil society organisations, educational institutions, and municipalities.

Looking ahead, the project's findings will serve as the intellectual groundwork for a larger, self-sustaining initiative. This future project, tentatively named the **Reuse Academy**, is envisioned as a network of collaborative programmes that will scale the curriculum's principles. It will aim to train a new generation of material valuers and embed a culture of repair and reuse into the fabric of urban environments. This would be a continuation of the work started in the CMVC project, building on the relationships and knowledge co-created with partner projects and organisations, such as the make-a-thek initiative, the Restart Project, and many local stakeholders. It represents a strategic pathway to expand from research into long-term action and systemic transformation.