

PREUSE

The **PREUSE** project

Public Responses to Enable the Use of Salvaged Building Elements

Local Action Plan

Utrecht





Material drop-off at Utrecht's Trechterweide Depot, City of Utrecht, 2025. © City of Utrecht

Colophon

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Table of Contents

Colophon	3
Table of Contents	4
Summary	5
I. Introduction and Framework.....	7
1.1 About the City of Utrecht – local policy context	7
1.2 Objectives and stakeholders of the Trechterweide raw materials depot.....	8
1.3 Executive summary	9
II. Context and problem statement.....	10
2.1 Local diagnosis and methodology	10
2.2 Identified barriers and opportunities.....	10
2.3 Scope of the depot.....	11
III. Strategic priorities.....	12
3.1 ‘Learning by doing’ and ‘Plateau approach’	12
IV Action plan	14
PRIORITY 1 Management of the site	14
PRIORITY 2 Develop the operating model.....	16
PRIORITY 3 Increase cooperation with organisation	19
PRIORITY 4 Changing the mindset and ways of working	20
V. Implementation and Governance.....	23
5.1 Lead team	23
5.2 Resources.....	23
VI. Long-term Perspective	24
6.1 Lessons learned	24
6.2 Scaling up.....	24
6.3 Dependencies.....	25
Annexes.....	26
Annex 1 – Study by Ecomonitor about resource use and related environmental impact for Utrecht Municipality.....	26
Annex 2 – Overview of stored materials (V.1/7/2026)	26
Annex 3 – Organisational model raw materials depot phase 1.0	26
Annex 4 – Vacancy general manager	26
Annex 5 – Vacancy work planner	26
Annex 6 – Vacancy stock manager	26
Annex 7 – Vacancy raw materials broker	26
Annex 8 – Work protocol for supplying materials to the Trechterweide raw materials depot 1.0	26
Annex 9 – Work protocol for the collection of materials from the Trechterweide raw materials depot 1.0	26

Summary

The City of Utrecht aims to become fully circular by 2050 and to halve the use of primary raw materials by 2030, in line with its Coalition Agreement (2022–2026) and the Vision Utrecht Circular 2050. A key enabler of this ambition is the high-quality reuse of construction materials released during municipal maintenance and renovation works—particularly paving materials, which have the highest environmental and financial impact. Historically, the lack of storage and coordination led to valuable materials being downcycled into low-value aggregates, undermining circularity goals and causing avoidable CO₂ emissions and costs.

To address this, the municipality purchased a strategically located site at Sophialaan 7 (Trechterweide) in December 2023, officially acquiring ownership in August 2024. The site was rapidly activated and officially opened as a municipal raw materials reuse depot in March 2025. The depot serves as a central hub for storing, cleaning, conditioning, and redistributing salvaged materials from public works, with a primary focus on road and civil engineering materials. In parallel, the site is intended to host commercial circular activities (such as paper and metal recycling), providing long-term value and operational flexibility.

Purpose and Scope

The Trechterweide depot is designed exclusively for internal municipal use. Its objectives are to:

- Reduce environmental impact by avoiding the production and transport of new materials.
- Achieve financial savings by retaining ownership of existing materials.
- Support municipal project teams with a reliable supply of reusable materials.
- Embed circular working methods into municipal processes, contracts, and culture.

Key stakeholders include municipal project leaders, asset managers, designers, maintenance teams, sustainability advisors, and a limited set

of external contractors and logistics partners involved in city projects.

Strategy: “Learning by Doing” and the Plateau Approach

Given strong political support and urgency, Utrecht adopted a **learning-by-doing strategy**, operationalized through a **plateau approach**. The reuse centre is developed in successive phases (“plateaus”) of approximately two years, each with defined objectives. Progression to the next plateau is based on lessons learned, operational maturity, and organisational support.

- **Plateau 0.1** (mid-2024 – end 2025) focused on rapid activation, experimentation, and laying foundations.
- **Plateau 1.0** (from Q1 2026) aims to consolidate services, scale operations, and embed reuse structurally in municipal workflows.

Results of Plateau 0.1

Despite its experimental nature, Plateau 0.1 delivered tangible results:

- Successful salvage and reuse of high-value materials (e.g. pavers from Amsterdamsestraatweg, rare Chinese slate from Galgenwaard, hand-baked clinkers from Havenstraat).
- Establishment of a functional site with minimal initial investments.
- Development of a core assortment focused on seven high-impact paving types, complemented by selected street furniture.
- Creation of a first inventory management system and a digital marketplace for real-time visibility and reservations.
- Formation of a dedicated team including a materials broker, project manager, stock manager, and specialist advisors.
- Introduction of work protocols, a quality framework for reused pavers, and initial safety plans.
- Broad internal engagement through workshops, guided tours, and targeted communication.

- Initial adaptations of key municipal documents (Public Space Handbook and municipal master specifications) to support reuse.
- Operating model: expansion of staff, professionalization of logistics, and integration of inventory management into SAP to link materials to projects and asset management systems.
- Organizational embedding: Communities of Practice to refine protocols, quality standards, and the digital marketplace; a management agreement on financing and long-term objectives.
- Cultural and procedural change: intensified internal communication and further integration of reuse requirements into contracts, tenders (notably for paving elements), and the Utrecht Planning Process.

Objectives for Plateau 1.0

Phase 1.0 represents the transition from experimentation to operational reliability. Key priorities include:

- Site development: renovation of office facilities, solutions for energy supply in light of grid congestion, and an updated safety plan.



Impression of Utrecht's Trechterweide Depot terrain, City of Utrecht, 2025. © City of Utrecht

1.

Introduction and Framework

1.1

About the City of Utrecht – local policy context

The city of Utrecht has the ambition to lower its use of raw materials and become a circular city by 2050. To achieve this goal, sufficient space is needed to facilitate circular activities, such as the salvage, storage and reuse of materials. The city and its public spaces contain many valuable materials that offer a high potential for reuse: paving stones, playground equipment, light poles, etc. These materials are released during maintenance and renovation works. For a long time, due to a lack of sufficient storage space, many high-quality materials, notably concrete and clay pavers (*klinkers*), were taken over by external contractors and crushed to be turned into recycled granulates for road foundations. This pathway was far from optimal regarding the high environmental impact arising from the making of these construction materials, including significant CO₂ emissions. It was also incompatible with the overall objective of making Utrecht a fully circular city by 2050.

'In Utrecht, we therefore have the goal of being fully circular by 2050, using a maximum of half of primary raw materials by 2030 and making our maximum contribution to achieving national and international targets for CO₂ reduction'

Coalition agreement Utrecht 2022-2026

A reuse centre, also locally referred to as a 'raw material depot', would allow the City of Utrecht to optimally manage its roadworks materials internally. It is a key part of meeting the goal set out in the coalition agreement, both by avoiding the environmental impact of producing new construction materials and by reducing the amount of transport required for these materials.

The reuse centre would also lead to economic savings, since the city council would need to purchase fewer new materials and would retain ownership of materials it has already bought. This principle was set out in the 2050 Circular Vision adopted by Utrecht in 2024:

'To enable high-quality reuse, we integrate circular principles and working methods in all project phases, from design to implementation and management. We retain raw materials in the neighbourhoods where possible and only redesign where this is really necessary. A raw materials depot to temporarily store raw materials is indispensable here. By storing raw materials, we simplify reuse and avoid having to supply raw materials from outside the city for every project.'

Vision Utrecht Circular 2050

This theoretical principle was turned into action in December 2023 when the City decided to purchase a plot of land in the north of Utrecht, in a location later called "Trechterweide", to create a reuse centre for materials salvaged from public construction sites — mostly roadworks. This place was to become the main location for storing, cleaning, conditioning and making materials fit for reuse, effectively lengthening their lifespan over two, and sometimes three or four cycles of use.

1.2

Objectives and stakeholders of the Trechterweide raw materials depot

In December 2023, the municipality of Utrecht decided to purchase a plot of land equipped with warehouse infrastructure and located in Sophialaan 7 in Utrecht, close to the city center. The Municipality officially became the owner of the land in August 2024.

The Municipality's plans for this site are twofold. On one hand, it is intended to become a reuse center for construction materials. On the other hand, it will be used to develop commercial circular activities that are important to the city, such as paper and metal recycling.

This combination of functions was a key factor in convincing the city to approve the purchase of this land. However, since the recycling activity would take some time to develop, it provided the reuse center with more room to experiment in its early stages.

The reuse center was activated very quickly: it officially opened in March 2025, just eight months after the site was purchased. During these eight months, preliminary work was carried out to identify the materials and services handled by the reuse center and its key stakeholders.



Official opening of Trechterweide by the Alderman on the 18th of March 2025. City of Utrecht, 2025. © City of Utrecht

1.3

Executive summary

Territory	<i>This Local Action Plan (LAP) has been developed by the Municipality of Utrecht (Netherlands). The plan is rooted in the local context of the Municipality of Utrecht (99.3 km² ~375,000 inhabitants) and primarily addresses the management of roadwork materials released during municipal maintenance and renovation works. Utrecht also engages with other large Dutch municipalities, adopting similar strategies, with a view to learning from each other's experiences.</i>
Main challenge	<i>The city of Utrecht has the ambition to become fully circular by 2050 and to halve its use of primary raw materials by 2030, in line with its Coalition Agreement (2022–2026) and the Vision Utrecht Circular 2050. For a long time, the lack of sufficient storage space meant that high-quality materials released during municipal maintenance and roadworks (notably concrete and clay pavers) were extracted from the city and devaluated into low-value recycled granulates. This pathway was far from optimal given the significant environmental impact of producing new construction materials, including substantial CO₂ emissions, and was incompatible with the city's circular ambitions.</i>
Strategic priorities	<i>Given strong political support, the Municipality of Utrecht adopted a learning-by-doing approach, operationalised through a plateau planning method. The reuse centre is developed in successive phases, each building on lessons learned, with the objective of reaching successive levels of service. Until 2030, two main plateaus are pursued: Plateau 0.1 (2024–2025), focused on rapid activation and experimentation, and Plateau 1.0 (from Q1 2026), focused on consolidating services and embedding reuse structurally within the municipal organisation.</i>
Key actions (hereunder referred to as work packages)	<i>1. Site management: Preparing and maintaining the acquired Trechterweide site, ensuring a safe working environment and adequate facilities for depot operations.</i> <i>2. Operating model: Developing the core assortment, logistics principles, inventory management system and organisational structure, including the hiring of dedicated staff.</i> <i>3. Cooperation within the organisation: Developing work protocols, a quality framework for reclaimed pavers and a digital marketplace in collaboration with internal stakeholders, supported by a management agreement on financing and objectives.</i> <i>4. Changing mindset and ways of working: Implementing an internal communication campaign and adapting key municipal documents, contracts and processes to structurally embed reuse into municipal workflows.</i>
Expected outcomes (vision 2030)	<i>By 2030, the Trechterweide depot will have developed through successive plateaus into a fully operational and structurally embedded reuse centre, providing municipal project teams and contractors with a reliable supply of high-quality reclaimed materials, generating measurable environmental and financial savings for the city.</i>

II.

Context and problem statement

2.1

Local diagnosis and methodology

The development of the Trechterweide reuse centre was preceded by several internal analyses and assessments aimed at understanding the potential for material reuse within the municipality.

First, the municipality conducted an internal needs assessment to identify which material streams should be prioritised for recovery and storage. Through a structured questionnaire, municipal departments identified the materials with the highest reuse potential and strategic importance. Secondly, the municipality carried out an environmental impact screening based on its 2023 procurement data. This analysis quantified both the environmental and financial impacts of different material categories. The results showed that roadwork materials, particularly paving elements, represented the municipality's highest-impact material group in terms of both sustainability and costs.

Additional studies, including research conducted by Ecomonitor and consultancy support from Orbis, confirmed that paving materials offer the greatest potential for environmental benefits and financial savings through reuse. These studies also informed the initial design of the depot, including its layout, logistics, staffing requirements, and the selection of priority material flows.

The diagnosis demonstrated that a considerable volume of reusable materials becomes available every year through municipal projects and that a dedicated reuse centre could significantly improve the retention of these materials within the city. However, it also highlighted several structural barriers that had previously prevented the municipality from achieving high-quality reuse.

2.2

Identified barriers and opportunities

Identified barriers

The analyses conducted by the municipality identified several obstacles to the development of a circular system for construction materials:

- ❖ **Lack of storage infrastructure.** For many years, Utrecht lacked sufficient space to temporarily store salvaged materials. As a result, high-quality construction materials were often removed from the city, despite their potential for internal reuse.
- ❖ **Fragmented material management.** There was no central mechanism to match available materials with the needs of new projects.

Information regarding material availability was scattered across departments, leading to inefficiencies and missed opportunities for reuse.

- ❖ **Organisational barriers.** Reuse requires cooperation between numerous municipal departments, project leaders, contractors, and asset managers. Existing organisational structures and processes were not designed to facilitate circular material flows and therefore required substantial adaptation.

- ❖ **Lack of operational procedures and standards.** At the start of the project, there were no standard protocols for material acceptance, quality assessment, storage, or redistribution. The absence of these procedures limited confidence in reused materials.
- ❖ **Cultural barriers and limited awareness.** Circular working methods represented a significant change in established practices. Municipal employees and project teams needed to become familiar with the possibilities and benefits of reuse, requiring extensive communication and engagement efforts.

Identified opportunities

Despite these barriers, Utrecht possesses several important opportunities that support the development of a municipal reuse centre.

- ❖ **Strong political support.** The municipality's circular ambitions are firmly embedded in strategic policy documents and enjoy broad political support, which enabled the rapid acquisition and activation of the Trechterweide site.
- ❖ **Significant material flows.** Municipal maintenance and redevelopment projects continuously generate valuable material streams with high reuse potential, particularly paving materials.
- ❖ **Environmental benefits.** Reusing construction materials avoids the environmental impacts associated with extracting, producing, and transporting new materials and contributes directly to the municipality's climate ambitions.
- ❖ **Financial savings.** By retaining ownership of existing materials and reducing the purchase of new materials, the municipality can generate substantial cost savings over the long term.
- ❖ **Existing knowledge and innovation capacity.** Utrecht already collaborates with other Dutch municipalities and has developed expertise through experimentation, creating a strong foundation for further scaling up reuse activities.

2.3

Scope of the depot

Material scope

The term "reuse centre" can cover a wide range of activities and material streams. In Utrecht, however, the scope of the Trechterweide depot is deliberately focused. The depot is intended exclusively for internal municipal use and aims to facilitate the recovery, storage, preparation, and redistribution of materials released during municipal maintenance and renovation projects. During the initial stages of development, no materials are supplied to private citizens or external companies.

Based on internal assessments and environmental impact analyses, the municipality has chosen to prioritise roadwork materials, particularly paving elements, as these offer the greatest potential for environmental benefits and financial savings. The core assortment therefore

consists of seven frequently used paving types, complemented by a limited number of other materials with high reuse potential, such as street furniture and playground equipment.

Beyond material storage, the depot functions as a central hub that connects material supply and demand within the municipality. Through inventory management, quality assurance, and logistical coordination, the Trechterweide depot aims to embed circular working methods in municipal operations and contribute directly to Utrecht's ambition of becoming a fully circular city by 2050.

Target groups

The materials depot is aimed exclusively at customers within the municipality of Utrecht. No salvaged materials will be supplied to external companies or residents of the city for private use, at least in the early stages of development. This choice was made with a view to maximizing the effects of the depot and the efficient use of the available capital and manpower.

Moreover, there are already a number of initiatives in Utrecht that focus on private customers, such as [Buurman](#) and [Hof van Cartesius](#). The stakeholder group of the Trechterweide reuse centre is intentionally focused and can be divided into two main categories:

The first group consists of municipal workers who use salvaged materials in the planning, design, implementation, and management of public space projects. This includes project leaders, urban maintenance and management staff, urban designers, supervisors, sustainability advisors, and asset managers.

A second group of internal stakeholders comprises those responsible for enabling reuse through organisational processes and regulations, such as managers of the municipality's physical domain and colleagues responsible for municipal manuals, specifications, and procedures.

In addition, the reuse centre collaborates with a limited number of external stakeholders that are directly linked to municipal projects. These include contractors delivering municipal works, service providers responsible for logistics and material upgrading, and peer municipalities such as Amsterdam and Rotterdam, with whom Utrecht exchanges knowledge and aligns reuse practices. By focusing on this clearly defined stakeholder group, the municipality aims to maximise the impact of material reuse within its own organisation and establish effective internal material loops before considering a broader expansion of the depot's activities.

III.

Strategic priorities

3.1

'Learning by doing' and 'Plateau approach'

Action planning principles

Given the earlier ambitions, political support enabled a rapid site purchase and immediate start-up, making **'learning by doing'** the guiding principle; this approach creates room for experimentation in the initial phase, and this action plan outlines the actions developed and implemented within that framework. It is based on the principle of a 'plateau planning' in which successive levels of service are strived for. After this plateau has been reached, the next plateau and the corresponding actions are determined. Key principles guide this approach:

- Start small with limited services;
- Learn iteratively and cooperatively;
- Learning what works and what does not;
- Maximise depot's impact at every stage;
- Involve stakeholders in the elaboration and evaluation of each step;
- Cultivate support for expanding services based on the quality of current services.

In the elaboration of the action plan for the materials depot, the city chose to start quickly and create hands-on experience through experimenting with storing and processing

salvaged materials. The first phase was also dedicated to defining the main developments to be initiated and set the framework enabling a successful further development in the medium

and long term. Below is a brief explanation of the ambitions and goals that are pursued in the short and medium to long term and the steps of the action plan.

Plateau planning

Until 2030, the reuse centre will be developed according to the so-called “plateau plans”. These plateaus consist of periods of approximately 2 years. Specific objectives related to the development of the reuse centre are set for each plateau. When reaching the end of a plateau, the objectives of the next period are defined drawing on the lessons learnt during the current plateau.

Plateau 0.1 (2024-2025)

Since mid-2024, experience has been gained under guidance of a commodity broker with the temporary storage of municipal materials, focussing on used raw materials released during maintenance and refurbishment projects that have reuse potential and a high economic value. The role of the material brokers team is to organise the matchmaking between available materials and municipal project's needs. Their role includes reaching agreements regarding materials quality and transport. During this first phase, notable results were achieved:

- Salvage materials from the redevelopment of Amsterdamsestraatweg to reuse them in the redevelopment of the BEFU site.

- Salvage rare Chinese slate from the outdoor areas of the Galgenwaard space stadium in order to reuse them in Griftpark.
- Salvage of hand-baked clinkers in Havenstraat

Plateau 1.0 (to be reached in the first half of 2026)

Plateau 1.0 concentrates on a small set of frequently salvaged materials, prioritising those with the highest economic and environmental impact, and storing or processing them for reuse elsewhere in the city. It builds directly on the work already carried out with the material broker. A core objective is to consolidate the depot model internally, ensuring city employees recognise it as a reliable, predictable asset. Ultimately, Plateau 1.0 aims to position the depot as a trusted resource for municipal teams and contractors planning to reuse construction elements. This entails working at different levels:

- Advertising the services offered by the reuse centre among its target groups.
- Develop the centre's services so they can reliably meet quality requirements, delivery timelines and expected material volumes.

PRIORITY 01

Management of the site

PRIORITY 02

Develop the operating model

PRIORITY 03

Increase cooperation within the organisation

PRIORITY 04

Change the mindset and the ways of working of the organisation

IV

Action plan

Since the start of the activities (phase 0.1, from mid-2024 to the end of 2025), work has been done to reach the development plateau that serves as the starting point for the next phase of development of the depot (phase 1.0, from Q1 2026).

To be ready in time for the next phase and to make a decision on the necessary investments, phase 0.1 mainly focused on the following activities:

- Improve the management of the site
- Develop the operating model
- Increase cooperation within the organisation
- Change the mindset and the ways of working of the organisation

The actions per activity and per plateau are described in more detail in the following sections.

PRIORITY 1

Management of the site

Plateau 0.1

The site on which the raw materials depot is located has been owned by the municipality since the beginning of 2024. In March 2025, the activities of the raw materials depot were officially started. A plan has been drawn up by a real estate expert to make the site and buildings suitable for the desired function. A few aspects/preconditions are considered:

- Desired further development of the services of the materials depot
- Need for housing and workplaces for the staff
- Safety
- Energy supply

Step 1. Preparing the grounds and real estate

The existing layout of the purchased land and the existing buildings form a good basis for the activities to be carried out in phase 1. No major investments were required to start up the activities. The main investments made in this phase are:

- Procurement of prefabricated stackable concrete blocks for the storage of pavers
- Hiring of equipment for handling materials on site
- Hiring of services and materials for maintaining and cleaning the site.

Step 2. Safe working environment

During this phase, a first version of the safety plan has been developed. The Safety plan will be updated during this phase through an iterative process based on the development of the depot and the work that is being carried out. It involves regular external safety checks and advices, as well as periodic toolbox meetings for the employees of the depot.

ACTIONS/DELIVERABLES	KEY MILESTONES	TIMELINE
Preparing the grounds and real estate	- Procurement of pre-fab stackable concrete blocks for the storage of pavers - Hiring of equipment for handling materials on site - Hiring of services and materials for maintaining and cleaning the site.	2024 - 2025
Creating a safe working environment	Delivering safety plan 0.1	2024 - 2025



Prefabricated stackable concrete blocks and truck at Trechterweide. City of Utrecht, 2025. © City of Utrecht



Prefabricated stackable concrete blocks for the storage of pavers at Trechterweide. City of Utrecht, 2025. © City of Utrecht

Plateau 1.0

In order to be able to provide the services required for phase 1.0 to the organisation, investments are needed, especially in real estate. The most important steps to be taken in this context are as follows:

Step 3. Plan for restructuring the office building

In view of the expansion of the activities and the team, better facilities are needed, and the existing office spaces need to be renovated.

Step 4. Plan for dealing with grid congestion

In view of the activities that are carried out (including palletizing the pavers), a plan for the energy supply is needed. In the Netherlands, there is serious grid congestion, which means that further development of the materials depot is not possible without alternative energy supply.

Step 5. Safety plan, version 1.0

An updated safety plan will be drawn up. As for the first phase, this update will be based on regular external safety checks and advice, and toolbox meetings for the employees of the depot.

ACTION / DELIVERABLE	KEY MILESTONES	TIMELINE
Preparing the grounds and real estate	- Plan for restructuring the office building - Plan for dealing with grid congestion	2026-2028
Creating a safe working environment	Delivering Safety plan, version 1.0	2026-2028

PRIORITY 2

Develop the operating model

Plateau 0.1

Step 1. Developing core assortment and logistic principles

Based on internally and externally available information, it was decided to focus on storing and preparing elements for reuse :

- Seven types of paving materials often used in public spaces in Utrecht. Reusing these materials offers the biggest potential for saving environmental impact and public money.
- On top of these, some room is planned for storing other materials presenting a high reuse potential, such as other types of pavers and street furniture including benches, bollards and bicycle racks.

Drawing on the principles of Supply Chain Management, the allocation of the space in the depot is adapted to the supply and demand of the main material flows. A high turnover of materials is privileged, possibly leading to the decision of getting rid of batches of materials that do not meet a

demand. Occasionally, the depot is used to store specific elements like playground equipment, street lighting and city wood. However, these are not managed by the staff of the centre, but by the managers of the projects from where these materials have been salvaged and/or will be reused.

In phase 0.1, the first version of an inventory management system was developed. It uses MS-Excel sheets to keep track of incoming and outgoing materials. The same sheet is used to find where materials are in the depot, and to manage the reservations for the different batches with internal suppliers and users.

Step 2. Developing of the organisational chart and tasks, and hiring staff

The development of the depot started with the hiring of a material broker (1 FTE) and an overall project manager (0.6 FTE).

The material broker is responsible for, among other things:

- Acquiring reusable materials
- Manage the storing and, when relevant, the preparation of the materials
- The management of health and safety on and around the site

To perform these tasks, the commodity broker must have, among other things:

- A relevant network within the municipality with a focus and material flows (origin and destination)
- Knowledge of supply chain management
- Knowledge of the materials to be acquired and logistical process of storage and processing
- Knowledge in the field of safe working practices and relevant environmental legislation

The materials broker is the most important ambassador of the depot within the municipal organisation. They make agreements with municipal workers across different departments to enable the creation of reuse loops. The overall project manager is responsible for, among other things:

- Drawing up and developing a plan for the development of the depot in phase 0.1
- Drawing up an internal communication plan with the aim of informing the organization about the benefits of working with the depot
- Drawing up a plan for phase 1.0 and setting the objectives to be achieved prior to this phase.
- Set the right framework within the organization to ensure the optimal functioning of the depot.

To carry out these tasks, the overall project manager must have, among other things:

- A relevant network within the municipality aimed at realizing the necessary preconditions for the optimal functioning of the depot.
- Experience in advising management and board on the further development of the depot.
- Knowledge and experience with internal communication.

During phase 0.1, a temporary stock manager (0.6 FTE) was additionally appointed to record stocks and develop a system for managing incoming and outgoing materials. The materials broker was supported by a quality advisor (0.8 FTE) with specific knowledge of material management of element paving. The overall project manager was supported by, among others, a real estate advisor (0.4 FTE), a strategic advisor (0.1 FTE), communication advice (0.6 FTE) and an ICT advisor (0.2 FTE).

ACTION / DELIVERABLE	KEY MILESTONES	TIMELINE
Further developing core assortment and logistic principles	• Development of inventory management system 0.1	2024-2025
Developing of the organisational chart and tasks, and hiring staff	• Development of organisational chart 0.1	2024-2025



Trechterweide's material specialist and material brokers at the site. City of Utrecht, 2025. © City of Utrecht

Plateau 1.0

Step 3. Further developing core assortment and logistic principles

Phase 0.1 saw the implementation of a first version of the inventory management system. It will be further developed in phase 1.0 to be better integrated with other municipal systems. To this end, an inventory management system based on SAP will be used. In the SAP environment, the depot's inventory can be linked to project administrations, asset management information systems and planning programs, among other things. This would facilitate the overall use of the materials stored at the depot and increase the opportunities to match supply and demand.

Find an overview of materials stored at the Utrecht's reuse center, as part of the inventory management system in the annex (Annex 2).

Step 4. Developing of the organisational chart and tasks, and hiring staff

Expansion of the team is necessary for the further development of the materials depot in phase 1.0. In addition to the existing team, two additional vacancies will be opened at the start of phase 1.0 (Q2 2026). One for a (permanent) site manager (1 FTE). The other for a permanent stock manager (1 FTE) and a work planner (1 FTE). In time, the site manager will take over the work of the overall project manager entirely. In Annex 3, an organisational model can be found as a reference. In addition, you'll find the vacancy description for a manager (Annex 4), work planner (Annex 5) and stock manager (Annex 6).

ACTION / DELIVERABLE	KEY MILESTONES	TIMELINE
Further developing core assortment and logistic principles	Development of inventory management system 1.0	2026-2028
Developing of the organisational chart and tasks, and hiring staff	Development of organisational chart 1.0	2026-2028

PRIORITY 3

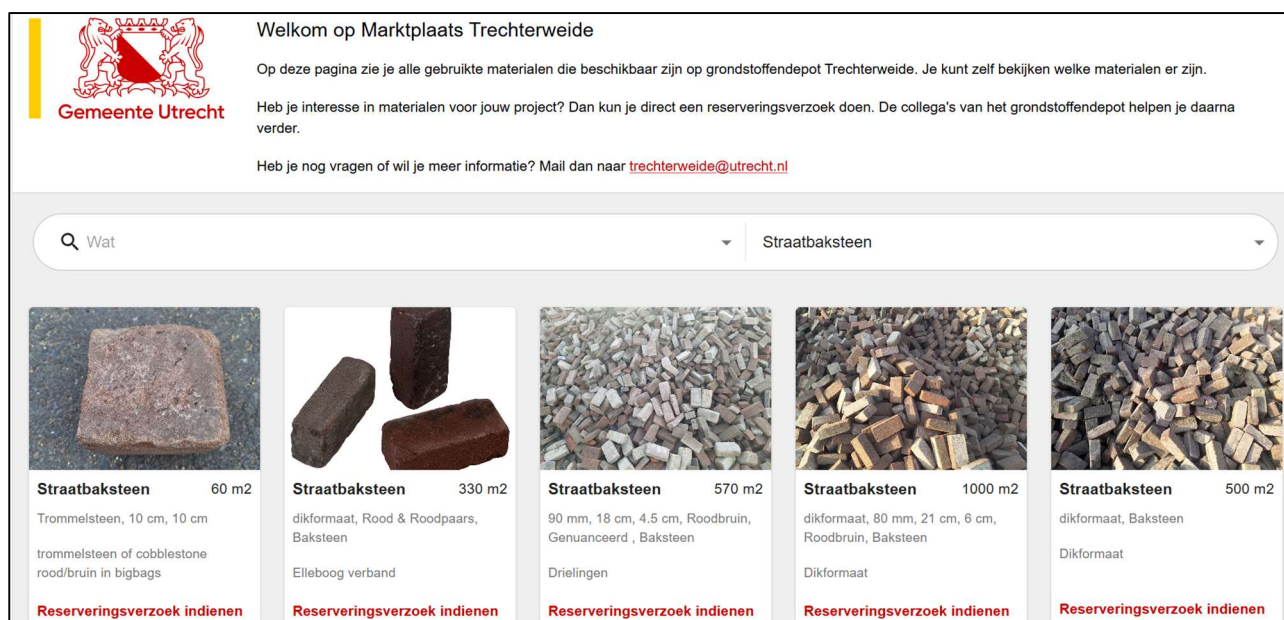
Increase cooperation with organisation

Plateau 0.1

Step 1. Joint workshops on work protocol, quality framework and digital marketplace

Several products have been developed in collaboration with internal stakeholders. The depot's services must align as closely as possible with municipal stakeholders' needs and requirements. This involves:

- **A work protocol:** This protocol sets out the method for the delivery and acceptance of materials by projects. It also details tasks and responsibilities for each party.
- **Quality framework for pavers:** This quality framework describes the criteria that reclaimed pavers must meet to be reused in new projects.
- **Digital Marketplace:** The digital marketplace enables municipal stakeholders to view and reserve materials real time, making it a key tool for accessing salvaged materials and simplifying their use



Screenprint of Trechterweide's digital marketplace. © City of Utrecht

Step 2. Management agreement on finance and objectives of plateau 0.1

Cooperation between municipal stakeholders must be streamlined, and salvaged materials from the depot remain free of charge, which incentivises project managers' offtake. The depot's overhead costs are covered through an internal agreement between municipal departments for 2026–2028, creating the organisational conditions needed to move towards Plateau 1.0.

ACTION / DELIVERABLE	KEY MILESTONES	TIMELINE
Joint workshops on work-protocol, quality framework and digital marketplace	- Developing work-protocol 0.1 - Developing quality framework 0.1 - Developing digital marketplace 0.1	2024-2025
Management agreement on finance and objectives of plateau 0.1	Internal agreements enable the step towards plateau 1.0	2024-2025

Plateau 1.0

Step 3. Communities of practice on work protocol, quality framework and digital marketplace

In phase 1.0, a Communities of Practice (COP) will be put in place to further increase collaboration among municipal stakeholders and better define the needs for salvaged materials. Based on the practical experience gained so far, adjustments will be made to the following instances:

- **A work protocol:** Update of the step-by-step protocol for delivering and receiving materials to and from the depot. Update of terms and conditions regarding tasks division and responsibilities. In the annex you'll find a work protocol for supplying materials to the Trechterweide materials depot (Annex 7), as well as a work protocol for collecting materials for the depot (Annex 8).
- **Quality framework paving:** Update of the quality framework for salvaging and reusing pavers.
- **Digital Marketplace:** The digital marketplace will be updated and improved, notably to make it better integrated into the workflows of the different services of the city.

Step 4. Management agreement on finance and objectives of plateau 1.0

The internal management agreement made about the financing of the raw materials depot applies to the period from 2026 to 2028. After this period, a long-term agreement will need to be made on financial objectives for the materials depot. A periodic management report is drawn up that should contribute to provide insights into 'costs and benefits' of the depot.

ACTION / DELIVERABLE	KEY MILESTONES	TIMELINE
Communities of Practice on work-protocol, quality framework and digital marketplace	• Developing work-protocol 1.0 • Developing quality framework 1.0 • Developing digital marketplace 1.0	2026-2028
Management agreement on finance and objectives of plateau 1.0	• Management agreement enable to continue with plateau 1.0 and beyond	2026-2028

PRIORITY 4

Changing the mindset and ways of working

Plateau 0.1

Step 1. Internal communication plan

To increase the awareness and willingness of the municipal stakeholders to work together with the materials depot, an internal communication campaign has been established and implemented. The core of the campaign was a guided tour program for all municipal stakeholders, from executive level to management and administration. In this context, many municipal employees have been informed and, where possible, have been substantively involved in the further development of the materials depot.



Tour at the reuse centre. © City of Utrecht



Internal campaign to raise awareness about the reuse centre. © City of Utrecht

Step 2. Adjustments in contracts, processes, etc.

The way in which internal and external stakeholders work on projects in the public sector is laid down in many manuals, processes and contracts. These documents are used in the execution of projects and associated decision-making and are often also applicable for external partners such as project developers and contractors. Adapting these documents is a time-consuming process that requires a lot of energy but is essential to ensure that new ways of working are more systematically encouraged.

In phase 0.1, adjustments have been made to the following documents:

- **Handbook for materials in public spaces (HOR):** The Public Space Handbook (HOR) is a municipal guidance document including design requirements and technical guidelines for the design and maintenance of streets, squares and other public places. It is intended for professionals such as architects, developers and contractors, to ensure consistent quality, safety and functionality across the city's many projects. It contains specifications for materials, dimensions (such as road widths), greenery, street furniture and traffic measures, and ensures that all projects in the use of materials are in line with the vision of the municipality.
- **Municipal master specifications, version 2026:** The municipal master specifications are a comprehensive document containing all specifications, requirements, materials, administrative rules and conditions of implementation for a project, to support the specification drawings. The purpose of this document is to create clarity for all parties (architect, contractor, client) by providing a description of the work, materials, technical provisions, performance requirements, guarantees and liabilities.

ACTION / DELIVERABLE	KEY MILESTONES	TIMELINE
Internal communication plan	Internal workshops and tours	2024-2025
Adjustments in contracts, processes, etc.	- Update of the handbook for materials in public spaces - Update of Municipal master specifications	2024-2025

Plateau 1.0

Step 3. Internal communication plan – update plateau 1.0

An internal communication campaign will be launched to target municipal stakeholders. It will pursue the same objectives as the 0.1 communication efforts and will shed light on the updated versions of the work protocol, quality framework and digital marketplace.

Step 4. Further adjustments in contract, processes, etc.

The 0.1 efforts on updating contractual documents, workflows and processes will be pushed further in phase 1.0. More specifically, these efforts will target the following aspects:

- **Adapting contracts for the supply of paving elements:** Paving elements account for the largest proportion of materials reused in public spaces. In 2026, the City will tender a new contract for the supply of paving elements paving for maintenance and management. The reuse of element pavement and the role of the raw materials depot in this will be prominently elaborated in the context of this tender.

- **Update Utrecht Planning Process (UPP):** The Utrecht Planning Process is used for more complex building plans and area developments. This document will be updated to integrate aspects related to reuse strategies at different phases (inception, design and procurement of the works), and opportunities offered by the materials depot.

ACTION / DELIVERABLE	KEY MILESTONES	TIMELINE
Internal communication plan	• Internal communication campaign • Internal workshops and tours	2026-2028
Adjustments in contracts, processes, etc.	• Adapting contracts for the supply of paving elements • Update Utrecht Planning Process	2026-2028

V.

Implementation and Governance

5.1

Lead team

Trechterweide project team:

- Herman van Vuren (project lead)
- Noortje Voulon (strategic advisor)
- Lieske de Jong-Oostveen (policy advisor circular economy)

Project support: Mirjam Scholtens (EU Funding Advisor)

5.2

Resources

The development and implementation of this action plan was funded by a budget allocation of 495.079,15€ from the PREUSE project, co-financed by the Interreg North-West Europe Programme through the European Regional Development Fund.

VI.

Long-term Perspective

6.1

Lessons learned

Learning by doing: A key lesson was the value of starting small and iterating quickly. By testing limited services, adjusting operations step-by-step, and involving colleagues throughout, the project team rapidly identified what worked and what did not. This incremental approach stabilised daily operations, built internal support, and created a practical foundation for professionalising the depot and expanding its services. Taking the organisation along in the process: the starting point was that the services of the materials depot must match the wishes and

Taking the organisation along: Ensuring that depot services match municipal stakeholders' needs required active engagement throughout development. Utrecht achieved this by establishing a community of practice, running an internal communication campaign, and organising regular site tours. These efforts increased awareness, trust and willingness to collaborate, from operational staff to management, administration and relevant external partners, strengthening the depot's position within the municipal organisation.

6.2

Scaling up

Scaling up at Trechterweide requires further developing the conditions for the professionalisation of inventory management and on-site operations, ensuring that the raw materials depot can function optimally and contribute meaningfully to the municipality's circular ambitions. Key steps have already been taken through the plateau approach, which will continue to evolve through the development of digital tools such as a digital stock-management system and the digital materials marketplace. These components form the backbone of a more efficient, transparent and accessible reuse process.

From the outset, the site was organised as a mixed-use setup, with one part dedicated to launching the raw materials depot and another rented out to external parties. This structure provides long-term security and supports a gradual, financially stable scaling of activities. In the coming years, the project team will refine this model in close coordination with colleagues within and beyond City Services, ensuring that operational, spatial and organisational preconditions are jointly realised to maximise the reuse centre's contribution to Utrecht's circularity objectives.

6.3**Dependencies**

To realise a well-functioning raw materials depot that can anchor the municipal shift toward circular inventory management, the actions outlined in this plan must drive the professionalisation of raw-materials management. These efforts will be advanced in the coming years by the project team in close coordination with colleagues within and beyond City Services, maintaining structured dialogue with departments such as spatial planning and the circular economy team to secure the operational, spatial and organisational preconditions needed for the reuse centre to contribute effectively to Utrecht's circularity objectives.

Achieving full professionalisation of the reuse centre requires a long-term organisational commitment, particularly in human resources, expertise development, and financial continuity. Collaboration across municipal departments will be decisive in securing these conditions and embedding the depot as a stable, mature component of Utrecht's circular-economy infrastructure, ensuring it can operate reliably and deliver sustained impact over time.

Annexes

Annex 1 – Study by Ecomonitor about resource use and related environmental impact for Utrecht Municipality

Annex 2 – Overview of stored materials (V.1/7/2026)

Annex 3 – Organisational model raw materials depot phase 1.0

Annex 4 – Vacancy general manager

Annex 5 – Vacancy work planner

Annex 6 – Vacancy stock manager

Annex 7 – Vacancy raw materials broker

Annex 8 – Work protocol for supplying materials to the Trechterweide raw materials depot 1.0

Annex 9 – Work protocol for the collection of materials from the Trechterweide raw materials depot 1.0

Nine project partners



2024-2027



Plus 22 associated organisations

