



European Union
European Regional
Development Fund

Innovation in Waste Management Policies

SMART WASTE

Interreg Europe

Action Plan



**Kolding
Kommune**

en del af trekantområdet

**Municipality
of Kolding**



Table of Contents

Introduction & General information	3
Policy context	4
Details of the Action Envisaged	5
Signature	17

General Information

Smart Waste
Kolding Municipality
Denmark
DK03
Martin Pedersen Stub
mastu@kolding.dk
+45 7979 6567

Introduction

Kolding Municipality entered the Smart Waste project in 2019 to contribute to and gain insights and contribute to the circular economy agenda. This has been an important agenda for the organizations since the beginning of the last Waste Management Plan (WMP) that went into effect in 2016.

Kolding Municipality has especially contributed to the project with experience in reuse and recycling, knowledge work, and the advantage of the organizations relatively small size, that enabled us to test and execute proposed changes and policy evaluations very quickly, to create learnings in the project.

The learnings and experiences we gained through participating in SMART WASTE highlighted the weaknesses in the development of our Policy instrument “The Municipal Waste Management Plan” and inspired us to develop a toolkit for easy project and portfolio management, called the Project Kit, to increase the standard of planning, execution and evaluation of both the Waste Management Plan as a whole and the many actions and projects that follows in its execution.

Policy context

Waste Management Plan of Kolding Municipality

The Waste Management Plan of Kolding Municipality is the name of the plan, which governs the strategic direction and project investments for a twelve year period. The plan has to be revised and adapted every six years at least, to make sure the strategy is still viable. Therefore the scope of any given waste management plan can vary from 1 to 12 years depending on when it was finished in relation to the national deadline and when it was last revised. The current plan "Affaldsplan 2019-2024" builds upon the intentions and goals in the former plan "Affaldsplan 2014-2024".

The creation of the plan is dictated by national law, but the scope and form of the plan and the approach to creating it varies between municipalities.

The Waste Management Plan serves as a political approval of the strategic direction of the municipal waste department and provides insight into the main focus areas and intended investments for the coming period.

The activities in the waste department are financed by a separate tax that varies between household types, based on their average expected waste production. Therefore the waste area is separate from the municipal tax and funds that typically finances municipal activities, and is approved separately.

The Waste Management Plan is typically created by examining waste and finance data, to understand our current status, and then looking at which initiatives is most likely to take the organization towards its strategic goals. This process could be characterized as a quantitative inside-out approach.

Details of the Action Envisaged

Title of the action

Development and implementation of a toolkit for project and portfolio management to improve planning, execution and evaluation of the Waste Management Plan in Kolding Municipality.

Policy Need Addressed

The quantitative inside-out approach to the WMP that is described in the policy context chapter, has several draw backs. When quantitative data is the sole basis for decisions and strategy development, a lacking insight into the citizens actual wants and needs is very likely to occur. This increases the risk of faulty assumptions on the effects of possible solutions and increase the risk of project blind spots. This can lead to groundless, or poorly defined, criteria for success which impact both project execution, results and evaluation.

A lacking focus on qualitative data is likely to (and has in the past) lead to low stakeholder involvement/engagement, which provides a low level of argumentation for both actions and strategies. Without better stakeholder involvement, projects and strategies have an increased risk of missing the intended goals, providing solutions to non-existing problems and using vast resources to mitigate problems that affect very few people.

An examples of this could be introducing new waste fractions on the recycling station without a proper understanding of the user journey. This will almost certainly result in misuse and subsequent poor results and material quality in the fraction.

Introducing new services aimed at reuse (rather than recycling) also require a clear criteria and vision. When introducing multiple initiatives without coherent and clear criteria for success

the result can be disjointed and create confusion for the users – again resulting in poor sorting and subsequent material quality or quantity in the fraction. This is especially true when evaluation is overlooked or not prioritized. In these cases it can take a significant time before problems or lacking features are addressed.

Project standard and evaluation practice is directly related to material quality and quantity, and the user's satisfaction with the services that is provided in waste management.

One of the main challenges in waste management is the diversity in project types. Large scale procurement, development of citizen action, social engineering and nudging projects, construction, innovation of machinery and IT-projects is all part of the work in waste management.

None of the traditional project management methodologies such as scrum, waterfall method, agile projects management or critical path methodology provides a suitable framework for all of the above.

That leaves a need for a project management framework, which draws on the best features of the mentioned methodologies, yet leaves enough flexibility to manage all of them in a single portfolio, to ensure the consistent and coherent progress and innovation which is needed to create better systems for waste management, reuse and consumption.

Overview of the Policy Improvement that this Action refers to

To address the policy need described above, within SMART WASTE the Municipality of Kolding has developed a new tool: the "Project Kit". This has been done to secure consistent and improved planning, execution and evaluation of both projects, portfolios and strategies. As such, this is an improvement Type 2 – Improved Management of the Policy Instrument.

The objective of the tool is to make it easy to raise all projects to a certain standard regardless of previous experience of the project manager. The results of this are expected to be significant in any project, and in the organization as a whole, but in relation to the Waste Management Plan of Kolding Municipality (WMP) we especially expect an improved stakeholder inclusion and evaluation. This will increase democratic anchoring and develop the organizations service level so that matches the needs of the citizens even better.

This should provide insights that will be converted into actionable steps and projects that can be realized within the WMP.

The Project Kit strengthens the planning, execution and evaluation of the WMP and its projects by creating a tool that anyone can use to improve their projects and strategic development and execution regardless of their previous level of experience and professional background.

This is important to address the serious weakness of lacking project consensus and of person-centred knowledge and projects, which leave the organization vulnerable when employees move on.

From a meta perspective this will change the quantitative inside-out approach so we switch between inside-out and outside-in perspectives and combine both quantitative and qualitative approaches to give a higher level of insight and produce better results.

This Project Kit will be living documents during the entire test phase which began in early spring of 2020. New projects have to start out by filling

in the forms of the project kit, and argue for the reasoning behind spending time, money and material resources on the project, which could either be saved or spend on other projects and project-related activities. In the end this new approach would secure that projects and activities in future waste management plans lives up to certain criteria, are based on real needs, has a set evaluation and evaluation points, considers which design tools to use and how to go about working with stakeholders etc. All in all increasing the quality of future waste management plans.

The Project Kit

The Kit provides a set of tools to guarantee common standards for aspects such as target stakeholder involvement, success criteria and evaluation plan, communication and finance. It sets standard procedures, e.g. creation of working groups/Steering Committees to ensure regular discussion/monitoring.

Daily use and integrated practise is essential for the Project Kit to be implemented successfully. The quality and potential of the system is only relevant if it is actually used, and therefore it is essential to get the Project Kit on the agendas of both team and management meetings.

The management group will approve and prioritize new projects and follow up on procedures and secure a strong base for evaluation and knowledge sharing in the organization. Project progress, milestones and evaluation will be a set agenda on management meetings, so project managers can get consistent feedback after these meetings. Status evaluations will become the main basis for decision in the steering groups to ensure project direction and handover.

Though the Project Kit consist of several documents, they have been gathered in a single one page document. The one-pager also serves as usage guide and process overview. All other documents are accessed through links in this document.

The Project Kit

Better projects, coherence and development

The kit helps you to get a handle on the essentials and avoid the worst problems that typically occur during projects.

It gives you a solid foundation for success and for achieving your goals.

How to use the kit

How do we really know if the activities we are working on are helping us towards our goals in the best way? How do we avoid wasting time and resources? How do we know if what we are doing is done because it is tradition or habit or if it actually works?

Clear criteria for success highlight the common thread in our work. But before we can see how the common thread makes the individual project create a real difference for the organization and in the larger context, it is necessary to have both a good overview and insight. Therefore, the kit is divided into precisely these two levels.

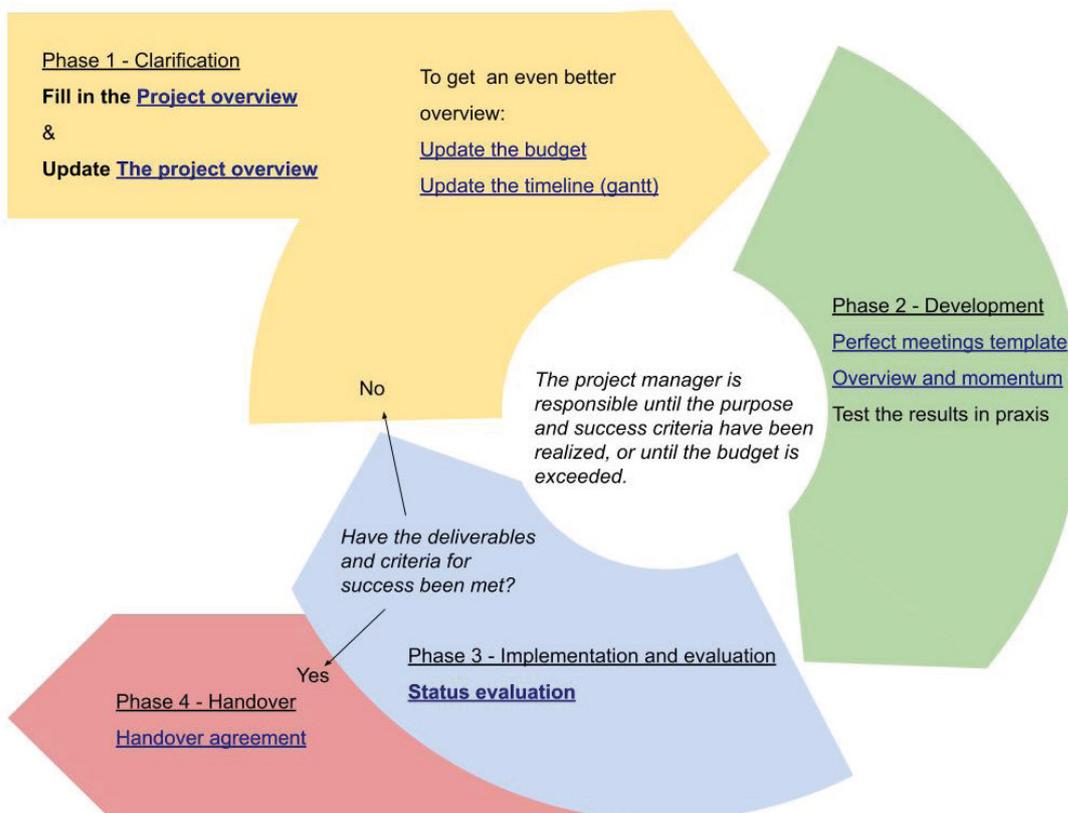
The [project overview](#) provides an overview, when it is used in everyday operations, for example at team and management meetings. It's a great way to keep track of resources, momentum and knowledge sharing. Even the best tools and systems make little difference if they are not part of everyday practice.

Insight comes from the tools used on the individual projects and is found in the links below. .

The good project

Some tools are essential for all projects, and others are best for projects of a certain size and shape.

*The **essential tools are marked in bold**. The others can be accessed by you and your team as needed.*



This lesson was learned during the process of evaluating good practises and failures, the stakeholder interviews along with the subsequent workshops and meetings with the Smart Waste Partner 6 - Municipality of Apeldoorn.

These learnings helped facilitate the development of a toolkit structure, which could improve coordination on an organizational level and mitigate the problems employees felt with too many projects and project-related activities, no time for evaluation, involvement of stakeholders and using the municipality's design tools. The design tools are a set of tools that help with everything from idea development to stakeholder involvement.

Regional / Local input including input from SMART WASTE Stakeholder Group

From the very beginning of SMART WASTE, stakeholder involvement has been crucial for the development and the implementation of our Action.

Our stakeholder group includes both internal stakeholders (other Municipality's departments / executive board) and external ones (local businesses and citizens). As described in sections "Specific activities and timeframe" and "Stakeholders" below, both categories have been engaged on a regular basis to gather input on the development, management, implementation of the policy instrument and of its related projects.

Combined input from these two categories has helped us to develop the Action and to implement it.

In the initial phases of SMART WASTE, we carried-out a round of interviews with stakeholders, from which a key point emerged: we (as an organization) were not doing enough to involve internal and external stakeholders (colleagues, citizens, companies) when working with future Waste Management Plans (both the process and the content).

This will be addressed with the Project Kit, which follows its own principles in its own development. Thus the development process in-

cludes editing meetings with several teams in Kolding Municipality to make sure it is applicable to projects with different levels of complexity and different levels experience in managing projects. This includes the stakeholder group and the management group.

After developing the kit we have had an increased focus on stakeholder involvement in the creation of the next Waste Management Plan. We have had more than 1000 inputs from questionnaires, interviews and workshops with citizens, businesses and employees. These inputs have now been organized, sorted and distilled into 45 actionable initiatives that are within our scope of operations.

Some of the initiatives have commonalities and overlap, so it is important to get a good overview of how we can help solve multiple issues with the least amount of initiatives.

This in itself is a positive side effect of the stakeholder involvement. Where we previously focused on the operations side of the initiatives when planning, the outside-in perspective that this level of stakeholder involvement provides allow us to solve more issues and provide a better service with fewer initiatives.

Additionally, we have evaluated all the activities/initiatives and all related projects in the current waste management plan 2019-2024 with the templates in the Project Kit. This has provided great insight into the current state of affairs, and given the management a clear overview of which initiatives have been successfully completed, which need more work and should be carried counted among initiatives in the next waste management plan. Most importantly the evaluations revealed several important learnings to be carried forth with the new waste management plan and coming projects.

From November 2021 to February 2022 we have gathered feedback on the Project Kit to developed and ensure its practical applicability with six workshops involving all employees that are involved in project work, and the team leaders and department chief.

The workshop feedback were rather consistent, and highlighted some great points

1. General positive feedback on the kit and the prospects of having clearer responsibilities, frameworks and goals.

2. It is important to focus on process evaluation instead of result evaluations. After a project is implemented and handed over to general operations the results of an evaluation is of little use, when problems should have been mitigated beforehand.

3. Culture around errors and failure differs across the organization. This should be addressed to avoid misunderstandings and align expectations.

4. We need to establish a practice for evaluation to ensure better resource management.

5. Common language and visual representations will aid communication and understanding.

6. It would be beneficial to make the Project Portfolio a permanent addition to the agenda at management meetings, to provide a good overview of active projects, milestones and deadlines.

Specific Activities and Timeframe

Activities implemented in Phase 1

September 2019

Exchange at the SMART WASTE kick-off meeting highlighted the difference of our approach compared to the one of other municipalities. Discussion in the bilateral working group with P6 – Municipality of Apeldoorn provided particularly important elements, including the need to focus more on qualitative evaluation of the policy instrument.

Sep 2019 - Dec 2019

Local evaluation activities demonstrating the failures of our policy instrument and the need to improve our approach.

November 2019

The Plan and Circular Economy team starts working on the Project Kit

Dec 2019 - Jan 2020

2 virtual meetings with P6 to discuss a common benchmark and methodology for designing a more qualitative approach and for peer reviewing the Kit;

January 2020

Interregional exchange at Partner Meeting in Kolding provides input on evaluation activities, to be integrated in the Project Kit;

Jan 2020 - Mars 2020

Internal agreement on Kit testing. First version of the Kit piloted on new / ongoing projects in the framework of the Waste Management Plan;

June 2020

Interviews to stakeholders in the framework of GP mapping provide useful input that is also integrated in the Kit.

June - December 2021

WMP design, stakeholder involvement and data analysis. This includes a cost benefit approach to categorize and selecting the best inputs.

July 2021 - March 2022

Field testing and adjustment of the Project Kit

January - July 2022

Strategy and project selection and development for the WMP based on the results in the analysis.

March - July 2022

Establishing processes in the organization that anchor and implement the Project Kit for continuous use.

Activities implemented in Phase 2

August 2022

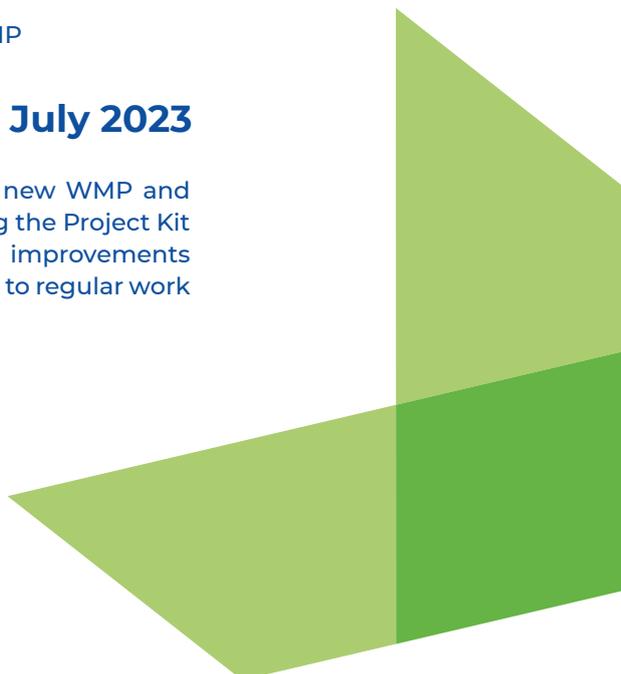
(continued from Phase 1) Establishing processes in the organisation that anchor and implement the Project Kit for continuous use.

September 2022

Political approval of WMP

October 2022 – July 2023

Implementation of the new WMP and related projects by using the Project Kit (including continuous improvements to the Project Kit thanks to regular work with stakeholders).



Stakeholders involved

Name of Organisation / person (where possible)	Role in Action Plan
<p>Local Businesses</p>	<p>Supplying input to the WMP by questionnaire in the period 20th of August 2021 – 16th of September 2021. The questionnaires were distributed via e-boks (official mailbox for business' in Denmark) to 3500 local businesses and 300+ surveys were completed.</p>
<p>Head of Anlæg og Drift Citizens in the municipality</p>	<p>Supplying input to the WMP by questionnaire in the period 11th of August 2021 – 16th of September 2021. The questionnaire were distributed via social media (Facebook and Instagram), municipality's website, ad in local newspaper and e-mail to our "Reuse community group" (genbrugsfællesskabet in Danish). 300+ surveys were completed.</p>
<p>11 teams of 4-6 employees in Kolding Municipalities Waste Department</p>	<p>Participating in workshops to the WMP on the 6th, 7th and 8th of September 2021, to gain perspectives, feedback and ideas on how to reduce waste production, better procurement and improved waste sorting.</p>
<p>Kolding Municipality Executive Management Team</p>	<p>Participating in workshop to the WMP on the 6th of September 2021</p>
<p>Kolding Municipality, Every team</p>	<p>Developing the process and delivery system of the Project Kit that fit their workstyle best. Participating in workshops to the WMP on the 10th og October, 22nd of November, 9th, 13th and 20th of December 2021</p>
<p>Kolding Municipality, Management team</p>	<p>Implementing the processes that secure continuous use of the Project Kit starting with the workshop on the 8th of February 2022</p>

Costs and Funding Sources

Costs	Funding Sources
<p>6000 EUR worth of man-hours for development and meetings. Little to no additional monetary cost.</p>	<p>Kolding Municipality</p>
<p>11500 EUR worth of additional man hours, compared to the traditional process of creating the waste management plan. "16000 EUR for external support to implement the Action Plan" "Kolding Municipality"</p>	<p>Kolding Municipality</p>

Risk and Contingency Plans

Description of Risk	Level of probability (High, Medium, Low)	Description of Contingency Plan
Poor implementation of established processes for continuous use of Project Kit	Medium	The implementation process is key to success. It is important that someone are responsible for this process and champions the use and benefits thereof.
Low compatibility with existing workstyle	Medium	It is important that the Kit is adaptable both in form and function. Different teams use different systems, and the templates will either be available in different formats or a common system will be made available for everyone.
When using the Project Kit on the WMP we risk spending a lot of time collecting data only to find out, that our initial thoughts and strategies were right.	Low-medium	This is not really a real risk. If it happens we might have spent time finding data that cooperate existing thoughts on strategies, but rather than viewing this as a waste of resources we view it as a strong foundation for our work witch gives us a big advantage in project communications.
When using the Project Kit on the WMP we risk focusing on data that supports existing strategies and disregarding data that explores new once because they seem farfetched or unrealistic. This is an issue in every innovation project.	Medium	When gathering this much data from stakeholders with a very varying insight into a field, the organisation or the politics behind it, it is inevitable to receive ideas, which initially seem unrealistic or farfetched. Overlooking these as irrelevant because they do not support the current way of thinking in the field would be a real mistake, as this might be where the real possibility for innovation resides.

Monitoring

Self-defined Performance Indicators		
Indicator	Target	Means of Verification
Number of Project Kit developed and adopted	1	Project Kit released
Number of new and improved Waste Management Plans with actions developed with clear criteria for success, tangible deliverables, stakeholder involvement and pre-planned evaluations thanks to the Project Kit	1	Official act adopted by the Municipality to approve the WMP
Output Indicators		
Indicator	Target	Means of Verification
Number of actions in the existing Waste Management Plan evaluated to secure a good foundation for creating the new plan.	9	Documented using the evaluations.
Percentage of managers and employees, which have a good overview of existing projects and their status.	100% Managers 70% Employees	Qualitative interviews and surveys
Percentage of projects that used the kit, and have an evaluation or a target date for evaluation. This is to ensure consistent evaluation practice of both WMP and supporting projects	100% projects that used the kit has an evaluation or a target date for evaluation.	Project overview sheets

Signature

Institution Municipality of Kolding

Name of Signatory Mads Astrup Sørensen

Position Head of Anlæg og Drift

Date 18. maj 2022

Stamp (if available)

Signature





**Kolding
Kommune**

en del af trekantområdet