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PROJECT FINAL REPORT

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Project acronym: WASTEKIT

Project title: Wastemanagement focusing on knowledge and integration to create transnational economic development

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This section must be of suitable quality to enable direct publication by the Commission and should preferably not exceed 40 pages. This report should address a wide audience, including the general public.

The publishable summary has to include **5 distinct parts** described below:

- **An executive summary (not exceeding 1 page).**

WasteKIT Executive Summary

'Waste management focussing on Knowledge and Integration to create Transnational economic development' (WasteKIT) is an EU FP7 Regions of knowledge project. The main purpose of this project is to analyse municipal solid waste management in four studied regions based on research & technical development (RTD), innovation and infrastructures in order to identify regional and inter-regional strengths and barriers to waste management related economic development.

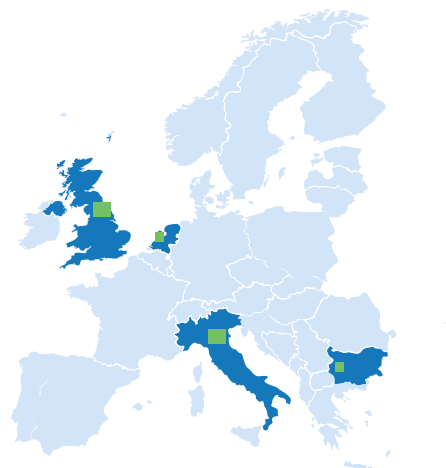
WasteKIT has three main objectives:

1. Expand ambitions of regions with respect to regional economic development based on waste management research & technical development (RTD), innovation & business creation.
1. Expand international mentoring roles of waste management-related actors.
2. Create an international role as a European network of (regional) waste management-related clusters.

There are four different regions involved in WasteKIT: the Amsterdam Metropolitan District (the Netherlands), the Emilia Romagna Region (Italy), Sofia (Bulgaria) and the Yorkshire and Humber Region (UK). Each region is represented via a triple helix of stakeholders: regional/local authority or related organisation, knowledge institution and business. In total there are 19 partners involved in the success of WasteKIT.

The project has strengthened the "research potential" of participating European regions, partly through the development of regional "research-driven clusters" bringing together universities, research centres, enterprises and regional (or local) authorities taking a collaborative approach to waste management opportunities and barriers. The differing nature of partners has encouraged significant knowledge transfer at regional scale.

Each participating region has analysed, developed and implemented areas of research that the regional or cross-border clusters have been interested in pursuing. Areas such as advanced thermal treatment of waste have linked with R&D capacity and regional priorities. Involved regions prepared interregional pilot actions in the Interregional Joint Action Plan. These activities and the activities in the Regional Joint Action Plans were aimed at encouraging community regional funds and other community and national funds to better complement one another. Pilot actions at a Y&H scale include potential initiatives to improve the integration of research actors (Universities) in regional economies, through their interaction in the regional network.



The WasteKIT consortium as a whole feel the project has fostered collaborative learning through the culmination of events and mutual learning in RTD and innovation. A four dimensional model developed and adapted in the mentoring work package (WP6) allows replication of collaborative learning activities and events. This links with RoK aspirations to mobilise "transnational regional consortia" and associate research actors in academia, industry and government to



deliver "guidance" solutions with, and for, technologically less developed regions. This mentoring guide is the main deliverable for project WasteKIT and will be used and elaborated upon for hopefully many years after finishing the project.

- **A summary description of project context and objectives (not exceeding 4 pages).**

WasteKIT is a European Waste research project focusing on Knowledge and Integration to create Transnational Economic Development. The project is funded by the European Commission's Regions of Knowledge, Seventh Framework Programme.

The involved regions share a common ambition to stimulate waste management-related RTD, innovation and business creation at a regional as well as European level. WasteKIT has the following 3 objectives:

Expand ambitions of the involved regions with respect to regional economic development based on waste management RTD, innovation and business creation by means of the following most important approaches: facilitate the creation of knowledge and new technologies, facilitate the creation of spin-off projects, involve SMEs, attract investors, offer investment-related support, develop and implement innovative concepts with the aid of (launching) customers, create and intensify the waste management cluster / network.

Expand the international roles of the waste management-related actors of the involved regions via international collaborations in the field of waste management-related RTD, innovation and business creation projects and initiatives. Expand the mentoring roles of the waste management-related actors in order to commercialise waste management-related knowledge, skills and technologies, exchange best practices and to support regions to upgrade their waste management infrastructures. This will lead to the development of more sustainable wastes management across the European partners.

Create an international role as a European network of (regional) waste management-related clusters to optimise the usage of knowledge spill-overs. This network of networks (clusters) for mutual learning (via best practices) and exchange of knowledge, skills and technologies could lead to an optimisation of waste management-related innovation and competitiveness.

WasteKIT has achieved the above objectives by offering involved regions additional opportunities to learn new European waste management best practice. The project is represented by a triple helix of actors: local / regional authority or related organisation, knowledge institution and companies, including linkages with intermediary actors. In total 19 consortium partners contributed to WasteKIT from four regions: the Sofia region (Bulgaria), Amsterdam Metropolitan Area (the Netherlands), Yorkshire & Humber region (UK) and Emilia-Romagna region (Italy).

Sofia region (Bulgaria): Sofia Municipality – Balkan Science & Education Centre for Technology & Environment Protection – Bulgarian Academy of Sciences – Bulgarian Chamber of Commerce & Industry – Denkstatt Bulgaria BOO.

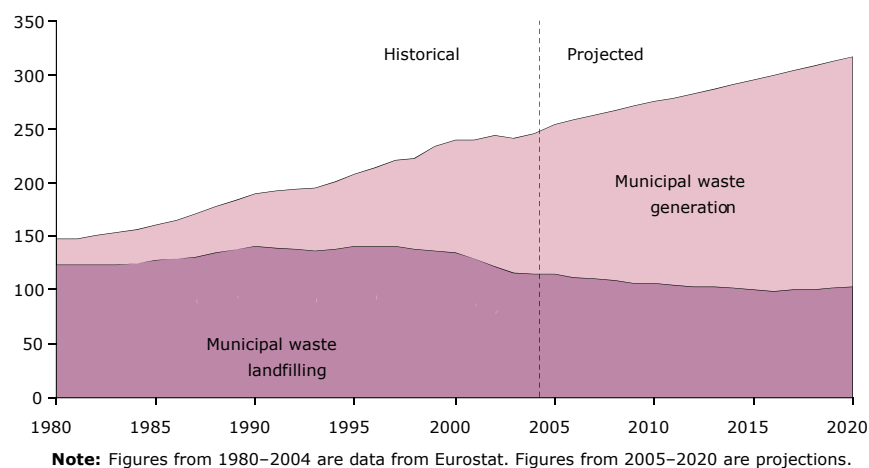
Amsterdam Metropolitan Area (The Netherlands): Amsterdam Innovation Motor AIM – Afval Energie Bedrijf AEB – Oeam BV – Delft University of Technology – Van Gansewinkel.

Yorkshire & Humber region (United Kingdom): Leeds City Council – University of Sheffield – University of Leeds – ITI Energy Ltd – Yorwaste Ltd.

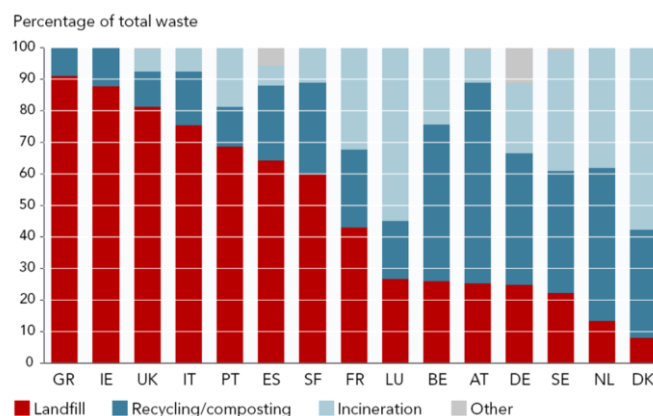
This part describes the deliverables from the seven work packages in the WasteKIT project and the methodology used to analyse and enhance the wastemanagement in regions.

Context

Wastemanagement is on top of the European agenda since waste has a substantial impact on societal and economic challenges we face. As a waste challenge example, the figure below indicates the projected generation and landfilling of municipal waste in the EU



Waste management is related to the processing of waste (municipal solid waste; commercial and office waste; construction and demolition waste; industrial and mining waste; agricultural waste)². The waste hierarchy indicates waste processing options: waste prevention, waste minimisation, waste reuse, waste recycle, waste recovery (including energy recovery and compost) and waste disposal. The figure below indicates differences between several European countries regarding the handling of municipal solid waste.



In order to optimize the results of project WasteKIT, we have identified an overall strategy plan:

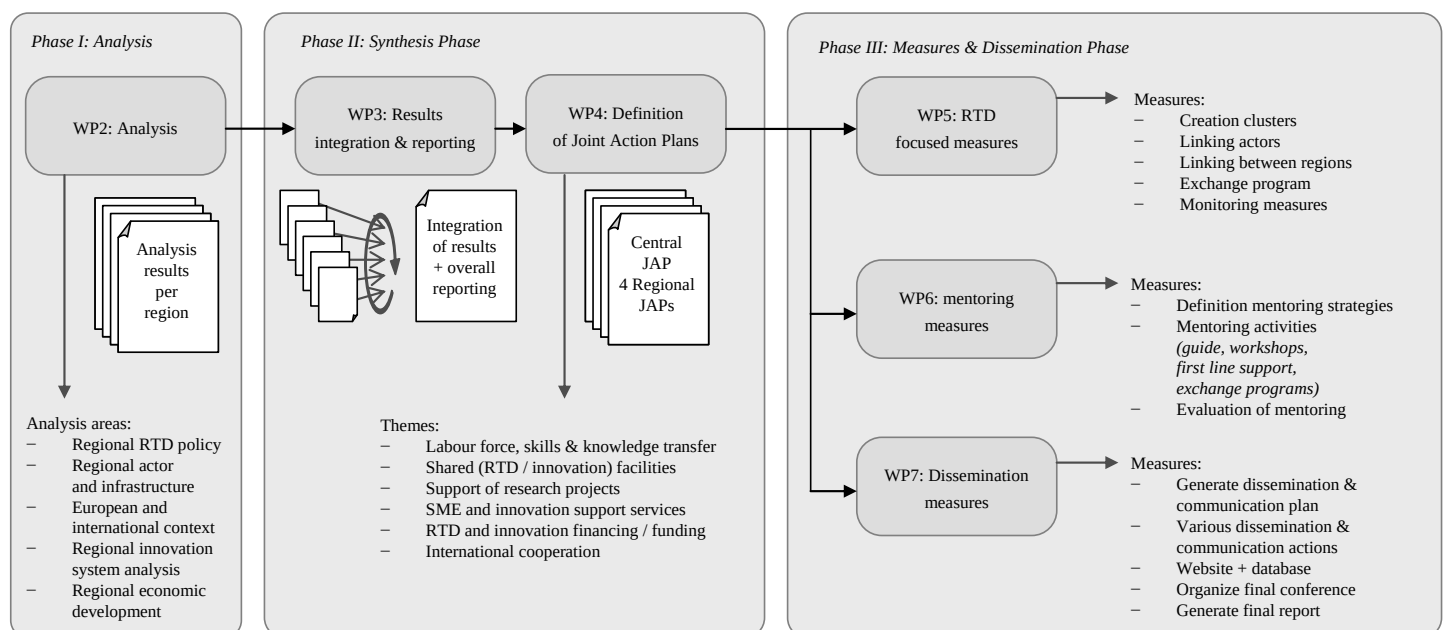
Overall strategy of the work plan

² E.g. EEA (2007), *The road from landfilling to recycling: common destination, different routes*, European Environment Agency. EC (2005), *Waste generated and treated in Europe: Data 1995–2003*, European Commission & EuroStat.



The project has three project phases: Analysis Phase, Synthesis Phase and Measures & Dissemination Phase. Due to the innovation policy and cluster expertise of consortium members, the following work plan was defined:

- Analysis Phase (WP2): WP2 has a clear focus on inventory studies and realising the right information-basis. It involves partners from each of the participating regions. The output of WP2 offers the fundamentals and building blocks for WP3 and WP4.
-
- Synthesis Phase (WP3, WP4): The results of WP2 are processed in WP3 and WP4. WP3 deals with integration of the results, mutual reflection on the results and definition of synergy potentials of the involved regions. Next, WP4 focuses on the actual definition of the Joint Action Plans. With respect to regional opportunities, Regional Joint Actions Plans are generated (one for each region). The Central Joint Action Plan reflects on the overall consortium (and European) potentials for joined RTD, innovation, business creation and network of clusters actions for the coming years.
- Measures & Dissemination Phase (WP5, WP6, WP7): WPs are defined for the following: RTD focused measures (WP5), mentoring focused measures (WP6), and dissemination measures (WP7). RTD focused measures are strongly linked to the academic and innovation actions of the Joint Action Plans. It typically focuses on strengthening the RTD, innovation and business creation fundamentals of the region and among the regions in the consortium. The consortium sees WP6 also as an important part of the project in order to reach the following consortium's objectives: international collaborations, international business development, mentoring of regions (especially in South and Eastern Europe). WP7 covers the activities to share aspects and results of project WASTEKIT. It also focuses on positioning and strengthening of the European network of waste management clusters.



The project has been delivered considering the aims of objectives of the Regions of Knowledge funding programme.



The project has strengthened the “research potential” of participating European regions, partly through the development of regional “research-driven clusters” bringing together universities, research centres, enterprises and regional (or local) authorities taking a collaborative approach to waste management opportunities and barriers. The differing nature of partners has encouraged knowledge transfer at regional scale.

Each participating region has analysed, developed and implemented areas of research that the regional or cross-border clusters have been interested in pursuing. Areas such as advanced thermal treatment of waste have linked with R&D capacity and priorities.

In-line with the RoK programme, WP4 involved regions working together to develop an Interregional Joint Action Plan. These activities and the activities in the Regional Joint Action Plans were aimed at encouraging community regional funds and other community and national funds to better harmonise one another. Such pilot actions at a

regional include potential initiatives to improve the integration of research actors (Universities) in regional economies, through interaction in the regional network.

The WasteKIT consortium as a whole feels that the project has fostered collaborative learning through the culmination of events and mutual learning in RTD and innovation. The four dimensional model adapted in the mentoring work package (WP6) allows the replication of such collaborative learning events, as run in the WP6 Sofia Conference. This links with RoK aspirations to mobilise “transnational regional consortia” and associate research actors in academia, industry and government to deliver “guidance” solutions with and for technologically less developed regions.

The WasteKIT project has identified a number of opportunities for international business collaboration. The project has strengthened connections and contacts between European Members States and will, inevitably, lead to new business.

- **A description of the main S&T results/foregrounds (not exceeding 25 pages),**

Introduction

WasteKIT is an EU-funded project and has governments, knowledge institutions and companies as partners from Sofia region (Bulgaria), Amsterdam Metropolitan Area (the Netherlands), Yorkshire & Humber region (UK) and Emilia-Romagna region (Italy). WasteKIT stimulates the development of waste management strategies and innovations. WasteKIT is funded by the Regions of Knowledge FP7 Programme of the European Commission.

WasteKIT has three main objectives:

1. Expand ambitions of regions with respect to regional economic development based on waste management research & technical development (RTD), innovation & business creation.
2. Expand international mentoring roles of waste management-related actors.
3. Create an international role as a European network of (regional) waste management-related clusters.

Especially the objectives one and two have relevant S&T results according the WasteKIT consortium, mainly in terms of developed methodologies, frameworks and content. Below we will highlight the main developed methodologies and frameworks related to the first two objectives. The actual content – with relevant S&T results – can be found in the WasteKIT deliverables like de regional and interregional analysis report, the WasteKIT Central Joint Action Plan and the four regional Joint Action Plan and of course WasteKIT Mentoring Guide (see deliverable list of WasteKIT).

S&T results related to the first objective of WasteKIT

With respect S&T results in relationship with the **first objective** the WasteKIT project has performed the following main activities:

1. Analysing and defining the dynamic (regional) innovation system looking at the current waste management-related RTD, innovation, business creation and economic development situation.
2. Reflecting on the interconnections between the regions in terms of waste management RTD, innovation, infrastructure, actors and mutual reflection on and analysis of synergy potentials.
3. Transforming analysis results and findings (the above bullets) into Joint Action Plans that gives suggestions to stimulate waste management RTD, innovation, business creation, cluster development and international collaborations.

Ad 1: Analysing and defining the dynamic (regional) innovation system looking

The WasteKIT consortium has developed common methodology for the “Analysing and defining the dynamic (regional) innovation system looking at the current waste management-related RTD, innovation, business creation and economic development situation”. This methodology is labelled as a **S&T result of the WasteKIT consortium**. Some elements of the methodology have been shared with participating regions from STINNO project developing a common dialogue platform which will contribute to strengthen the regions’ capacity for investing in and conducting research and technological development activities. The following methodology is adopted in order to understand the state of the art and the process of change in Waste Sector.

- Analysis focalisation on three areas of waste with high partner skills
 - Thermal Treatment (Including Gasification and Pyrolysis)
 - Biological (Composting & Anaerobic Digestion)
 - Collection and separation
 - Other (‘Other’ may include C&I Waste, or C&D Waste streams if a partner cannot focus on MSW. ‘Other’ could also cover waste minimisation and re-use.)
- Analysis instruments
 - Desk research
 - Actor interviews
 - SWOT analysis
- Analysis outputs to be integrated in the Analysis Reports on Regions
 - Overview
 - Case studies
 - SWOT

An important analysis framework is the dynamic (regional) innovation system (see figure below) indicating that innovation is an interactive process in which various factors & actors play a role: knowledge institutes, business enterprises (large companies, SMEs & start-ups), (launching) customers, intermediary organisations, government, human capital, social/institutional capital, knowledge/creative capital, cultural capital, infrastructural capital etc. All these actors & factors support an efficient productive base to the regional economy.

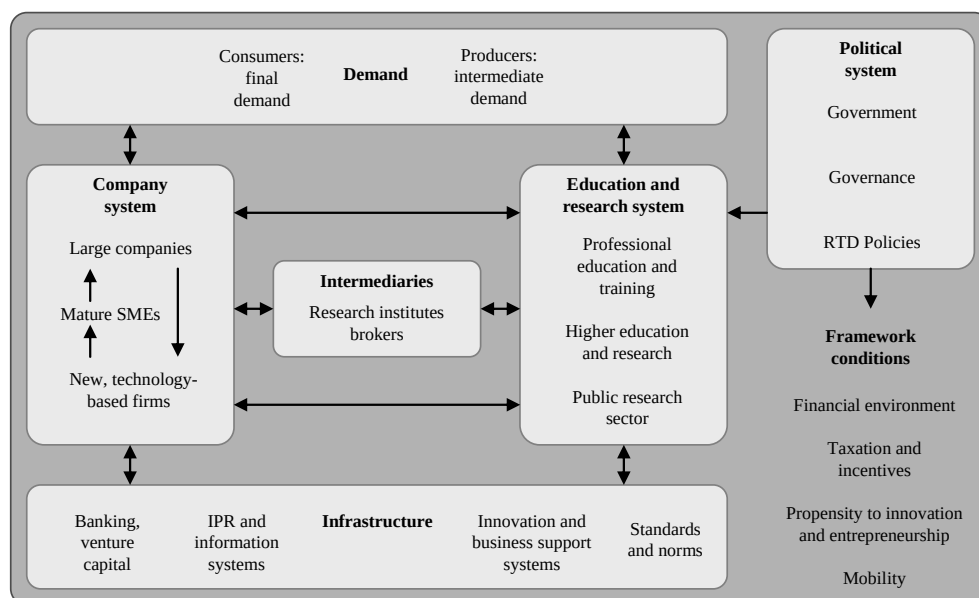


Figure - Dynamic (regional) innovation system (source: Technopolis - S. Kuhlman)

Ad 2: Reflecting on the interconnections between the regions

The WasteKIT consortium has developed a highly detailed analysis framework (so-called meta-table) to reflect on the interconnections between the regions in terms of dozens of waste-related aspects. This meta-table is labelled as a **S&T result of the WasteKIT consortium**. Via the aid of this meta-table several league tables were generated to identify the potential synergies that will ultimately feed into the WasteKIT Joint Action Plans (JAPs) – Work Package 4.

Theme		
Background	Area (km ²)	GDP per capita
	Population	Socio-demographic make up
	Urbanization	Economic context
Key Performance Indicators	Kgs/capita/year	Composting rate %
	Total waste (tonnes)	Landfill rate %
	Recycling rate % (state whether household, commercial / industrial or both)	Energy from waste %
Waste management policy / regulations (incl. targets and current performance against targets)	Municipal waste (Household)	
	Landfill diversion targets (tonnes)	
	Non-household (incl. commercial / industrial and construction / demolition waste)	
EU Producer Responsibility Directives and member state legislation/voluntary policies (state the title of the legislation, its targets and performance against target)	Packaging	Construction and demolition waste
	Waste Electrical and Electornic Equipment (WEEE)	Retail
	End of Life Vehicles (ELV)	Other
	Batteries	
Waste management RTD (highlighting opportunities and threats)	Policy RTD	Recovery - mechanical biological treatment (MBT)
	Waste prevention and recycling practices	Recovery - biomass
	Recovery - composting	Recovery - incineration
	Recovery - anaerobic digestion (AD)	Recovery - gasification/pyrolysis

Current capacity / infrastructure	Landfill	Incineration
	Recycling	Haz waste management
	Composting	
Innovation	Collection	
	Reprocessing	
	Treatment	
Economic drivers	National	
	Regional	
Waste sector strengths		
Waste sector weaknesses		
Waste sector opportunities		
Waste sector threats		
Key observations		
Key waste related themes		

Table - Meta-table for analysing regions and interconnections on the themes

By analysing the Strengths, Weaknesses, Opportunities and Threats (SWOTs) from the regional reports, the meta-table and the league tables that were subsequently generated, 11 synergy potentials have been identified for feeding into the JAPs (see table below).

Original 11 identified synergy potentials	Further reduction to 5 synergies
Technology innovation related to waste processing (pyrolysis, gasification / incineration efficiencies)	Technology waste to energy
Collection of waste data	Knowledge transfer
Knowledge transfer from research to market	
Collection and treatment of food waste	Options for plastics
Recycling of commercial and industrial, and construction and demolition waste	
Options for contaminated plastics	Funding & spin-off projects
Funding for sustainable waste management & technology	
Market development for recycled / recovered materials	
Sustainable procurement (green procurement)	Public perception & understanding of waste
Improvement of public perception of waste increasing levels of re-use, recycling and prevention	
Understanding the definition of waste – is it a resource, fuel or waste?	

Table - Potential synergies have been identified for feeding into the JAPs

Final agreed synergy potentials have been allocated to at least one region to mentor or provide a consultation service to sound-proof ideas and actions on that synergy topic. For example, the Emilia-Romagna region volunteered for the synergy potential “options for plastics”. Providing consultation in this way increases communication in WP4 and ensures knowledge transfer between the differing regions. The regions allocated to synergy potentials are listed below:

- Technology: waste to energy – Sofia and Yorkshire and Humber
- Knowledge transfer (including data and education) – Amsterdam and Sofia
- Options for Plastics – Emilia-Romagna
- Funding & spin-off projects (including procurement) – Amsterdam and Yorkshire and Humber
- Public perception & understanding (of waste and associated technology) – all regions.

The figure below indicates the define synergy potentials in relationship with waste hierarchy. The 11 potential synergies (also in relationship with the waste hierarchy) are labelled as a **S&T result of the WasteKIT consortium**.

Ad 3: Transforming meta-analysis results into Joint Action Plans

In the following scheme (figure below) is described the methodology that is adopted by all cluster regions in order to define comparable and homogeneous Joint Action Plans (both at regional and at consortium level).

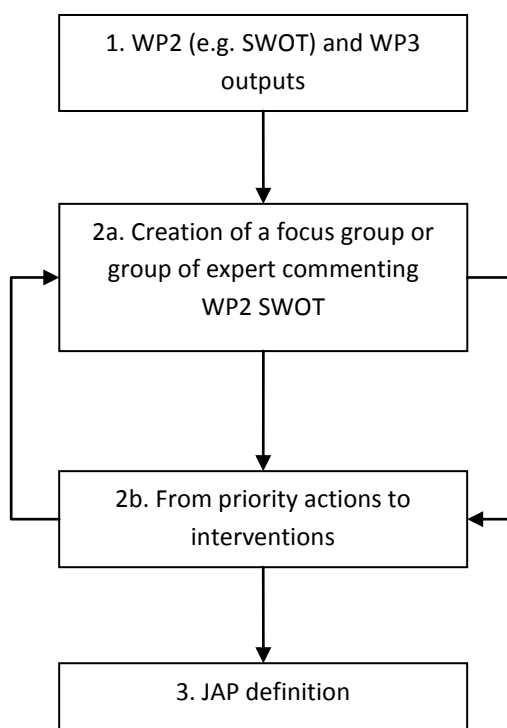


Figure - Methodology to define comparable and homogeneous Joint Action Plans

The starting point of the JAP is the definition of the priority actions. Source of inspiration of the priority actions are, first of all, the produced SWOTs during the WP2 activities. If / when the elements analysed in the regional SWOT are not enough to delineate a number of significant priority actions, the constitution of expert/advisor group is highly recommended. Cluster regions were freely adopt one or more expert/advisor, according to the requirements.

The second step focussed the interventions (i.e. operative measures). Also in this case, the WP2 reports were fruitfully used as source of inspiration. According to schemas below the performed SWOTs focusing on case studies (all listed in the interregional report) supply a number of (common) invention actions.

The above-mentioned methodologies (labelled as a **S&T result of the WasteKIT consortium**) supported the definition of the WasteKIT Central Joint Action Plan and inspired the processes of defining Regional Joint Action Plans. The thematic focus of the WasteKIT Central Joint Action Plan:

1. Technology waste to energy (combustion, gasification, etc.)
2. Options for plastics
3. Knowledge transfer
4. Funding & spin-off projects

5. Public perception & understanding of waste

Key team member to investigate the WasteKIT Central Joint Action Plans:

- Key members from NL
- Key members from UK
- Key member from IT
- Key member from BG

As indicated earlier: from content perspective relevant S&T results can be found in the developed Joint Action Plans.

S&T results related to the second objective of WasteKIT

S&T results related to the second objective of WasteKIT is mainly linked to the methodologies, frameworks, tools and event experiences of the WasteKIT Mentoring Guide. The WasteKIT Mentoring Guide and related deliverables (leaflets, presentations, best practices overviews etc.) give suggestions how to coordinate and facilitate - via mutual learning activities - the first steps in vision and strategy development of waste management policies and interventions in the region (Figure). Important is a shared vision among public and private sector organisations about their waste management sector for the coming decade in the region. Such a shared vision helps various stakeholders to invest structural and long-term in waste management strategies.

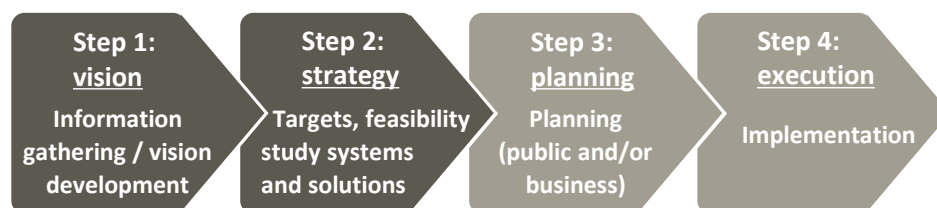


Figure - Coordinate and facilitate vision development and strategy development

Mutual learning is the process of learning by fostering the sharing of knowledge and know-how between stakeholders from various relevant regional stakeholder (Figure). They focus on various waste management related topics like reuse, recycling, waste to energy, waste processing or landfill.

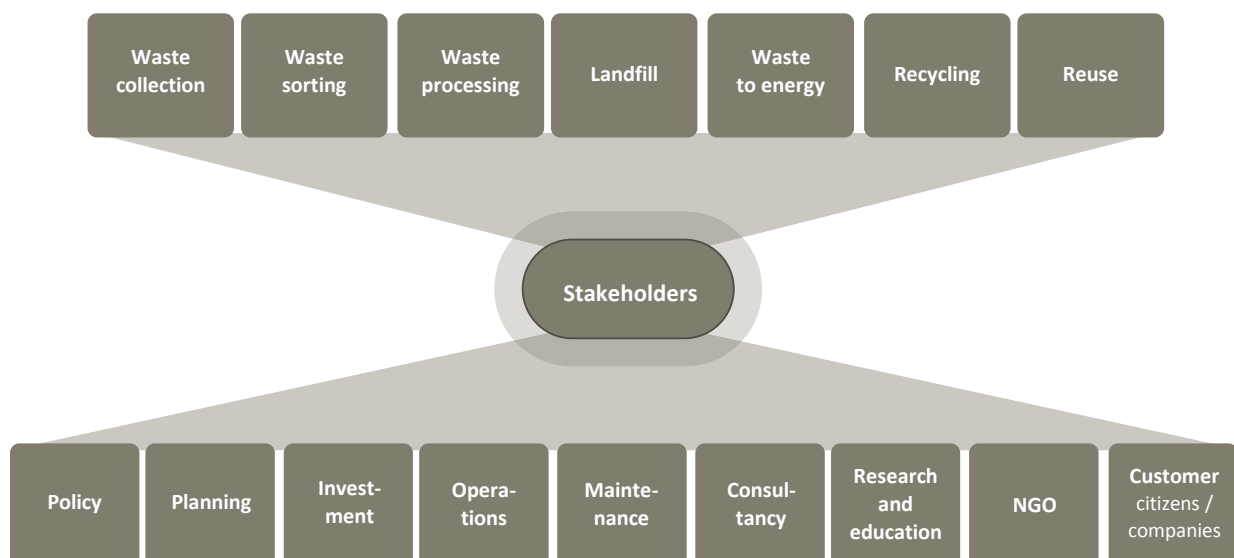


Figure - Stakeholders categories

Mutual learning – via e.g. round table sessions – facilitates the development of a common vision on waste management policies and actions in order to create sustainable and feasible (regional) partnerships and to achieve the objectives in waste management and sustainability (see

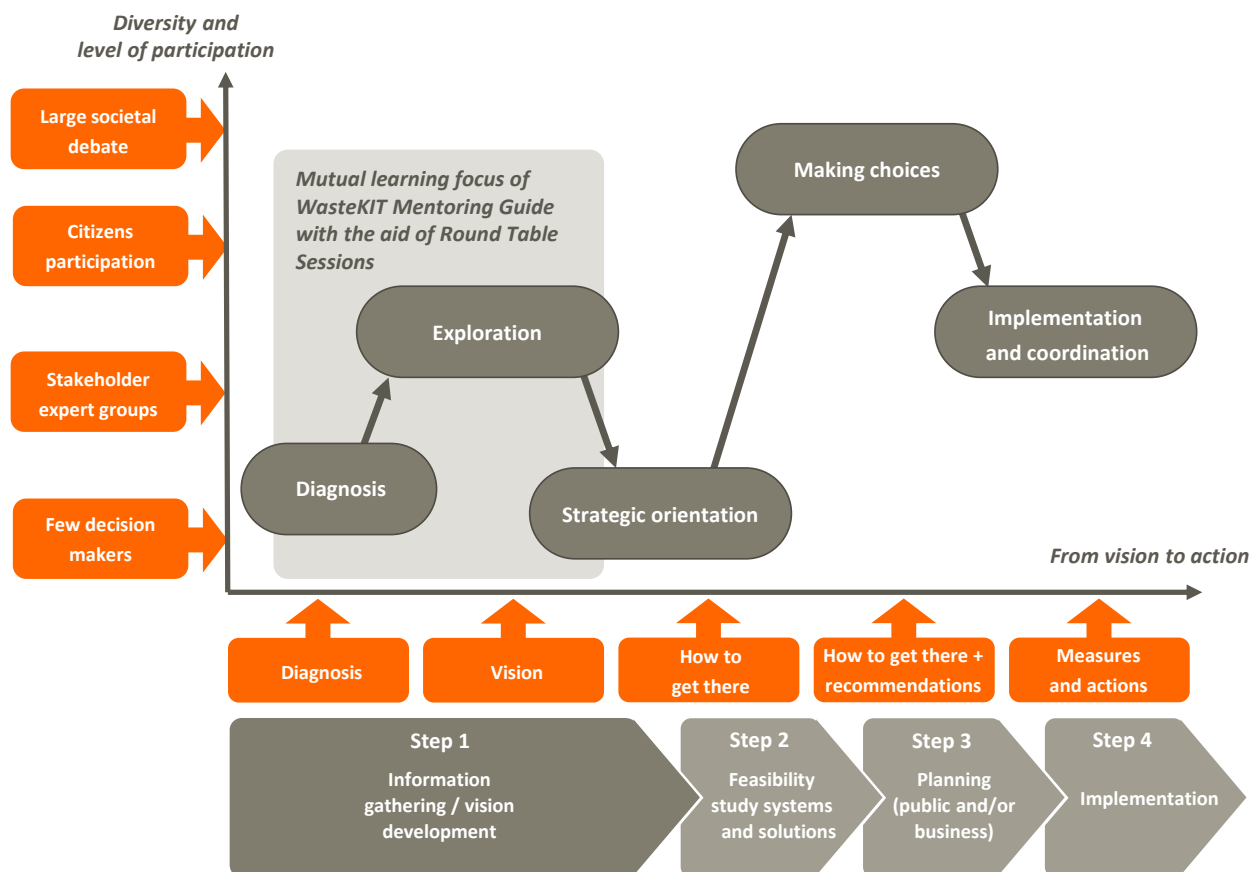


Figure). WasteKIT acknowledges the mechanisms and factors related to mutual learning to stimulate the collaborative development of a regional waste management vision and strategy. Therefore the WasteKIT consortium considered the Ansell & Gash Collaborative Governance Model.

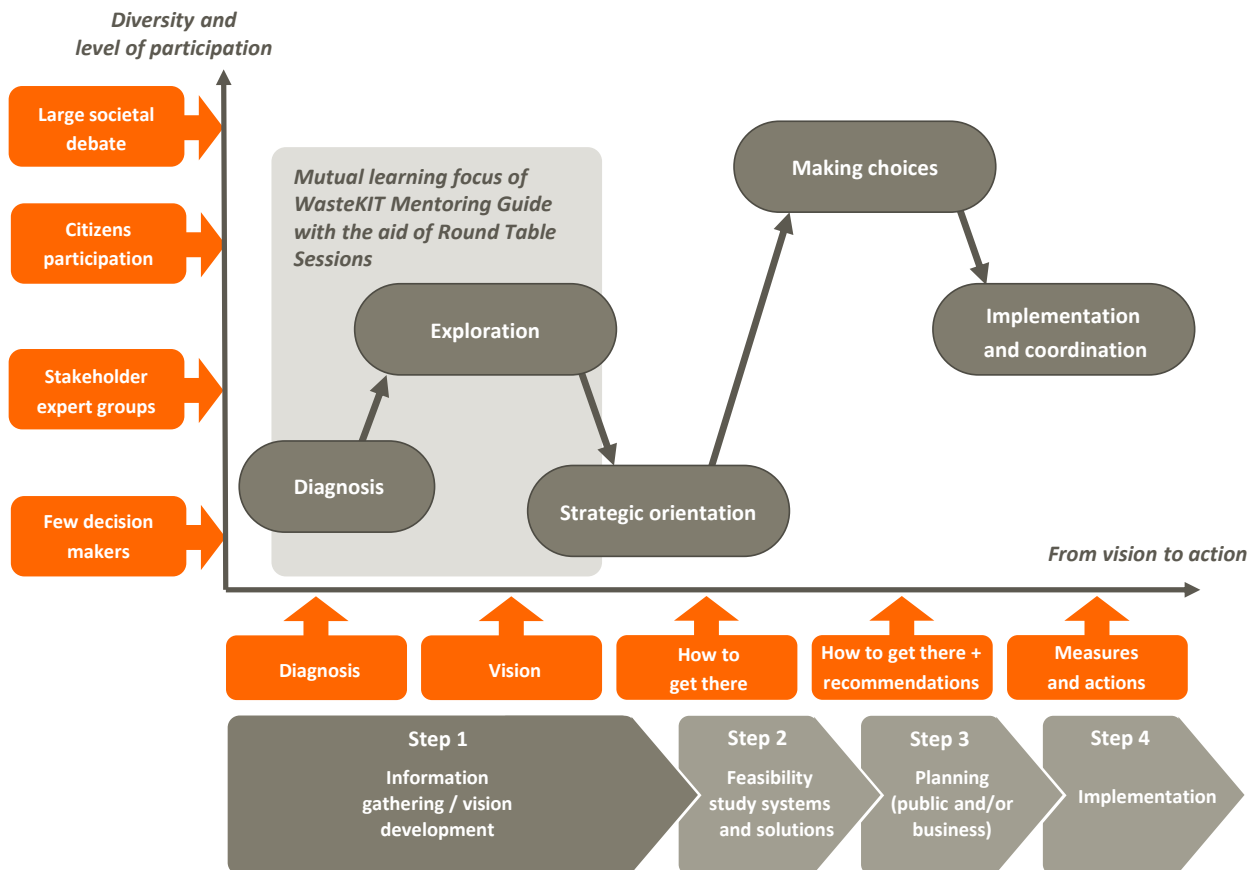


Figure – Mutual learning in relationship with waste management vision and strategy process

WasteKIT has shown that mutual learning on waste management is based on the sharing of knowledge and know-how among different kind of stakeholders. It is important to offer the stakeholders (e.g. participants of round table sessions) a common and consistent framework of “lenses” to accompany a focussed process of knowledge and know-how sharing. The WasteKIT consortium defines the usage of this four-dimension model for learning and knowledge exchange as a **S&T result of the project**.

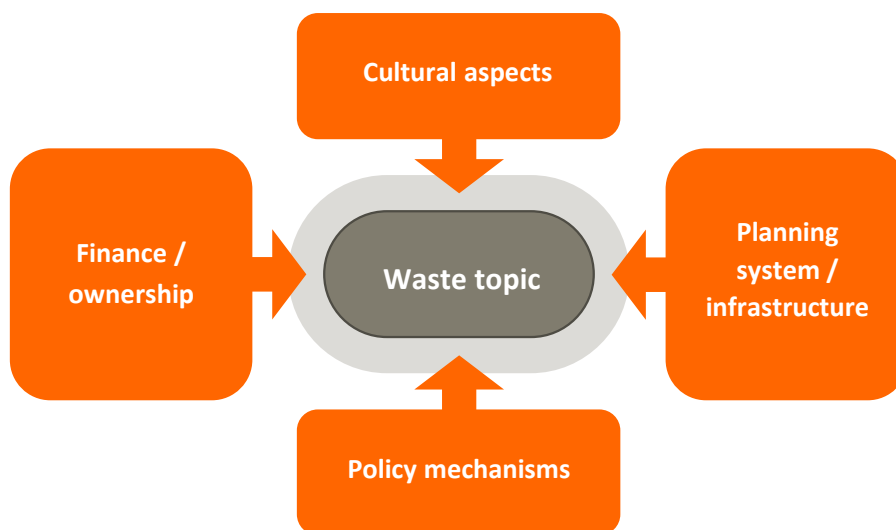


Figure - Four-dimension model regarding waste management

Mutual learning also means considering waste management-related best practices in order to learn and understand policies, projects, infrastructures, solutions and technologies in other regions or relevant contexts. Best practices can be considered via available document and reports. An extra dimension is site visits.

The WasteKIT Mutual Learning Event in Sofia was organized via so-called round table sessions. During a round table session a specific waste topic is discussed from cultural, planning, policy and finance perspectives (four-dimension model) as well as from macro to micro level. It supports a broader waste topic analysis in which participants of the round table session play an active role. The attendees were (very) positive about the added value of the round table sessions and the so-called four-dimension model as an instrument to elaborate on waste management vision, options and solutions. The four-dimension model helped to gain focus when approaching and discuss a certain waste management topic from multiple dimensions.

Stakeholders participating in the mutual learning events should be aware of the different “maturity levels” of best practices. For explorative orientations it is not wrong to discuss and elaborate on “early stage” best practices (like innovative waste processing solutions), but it should be prevented to put these kind of best practise in the centre of a regional waste management vision. To support the stakeholders and the participants of the mutual learning events with balancing the signalling information of best practices. WasteKIT developed a maturity level indication of best practises (**labelled by the WasteKIT consortium as a S&T result**). The figures below give an *indication* of the maturity levels (from European perspective) of various best practices for the waste hierarchy level Recycling known by the WasteKIT partners and/or considered during WasteKIT mutual learning events or other elaborations activities.

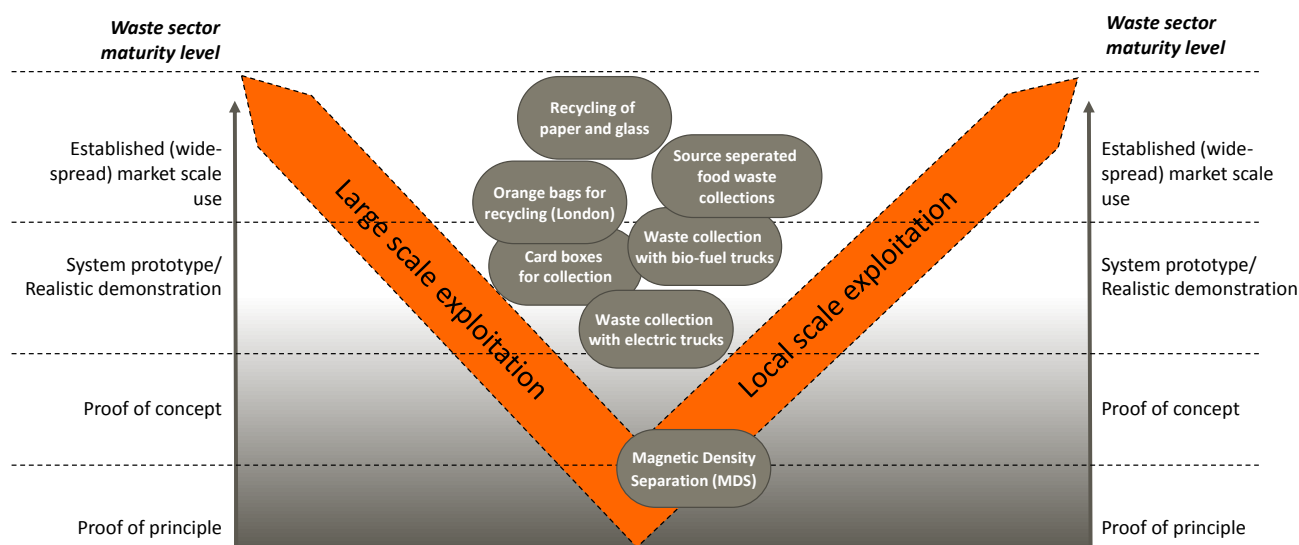


Figure - maturity levels of best practices / concepts related to waste hierarchy recycling

Third WasteKIT objective and S&T results

During the WasteKIT project knowledge transfer channels have been set up as a direct result of the WasteKIT activities (e.g. round table sessions; workshop) in the different regions. E.g., students, at a variety of different levels (MSc through to PhD), have worked in strong collaboration with the industrial and government organisations as the project has been delivered.

Figure – mutual learning and knowledge transfer channels



WasteKIT has encouraged networking. This has taken place at various scales at a local, regional, national and international geography. New communication has been introduced between a variety of partners and stakeholders:

- Public sector bodies – including regional government bodies and local authorities
- Private sector companies – small, medium and large sized businesses
- Academic Institutions – universities and academic networks including colleges
- Third sector organisations – including charities, local groups
- Knowledge transfer and experienced dissemination

- **The potential impact (including the socio-economic impact and the wider societal implications of the project so far) and the main dissemination activities and exploitation of results (not exceeding 10 pages).**

Economic and societal impact of WasteKIT

The consortium believes WasteKIT has provided great societal impact and good economic impact.

The following benefits are identified:

Integrated approach: project WASTEKIT offers the involved regions means to create and expand their waste management clusters via an integrated approach of regional innovation analysis and definition and activation of Joint Action Plans based on strong interactions with regional triple helix actors (research, industry, government, intermediaries) and the other involved regions (clusters). Since every involved region has its own waste management settings (due to directives, historical reasons, knowledge, innovation and business related actions etc) this project offers attractive starting points to exchange waste management-related experiences and collaborations in Joint Action Plans.

'Weak spots' in the regional innovation systems are addressed: project WASTEKIT offers the involved regions to address the 'weak spots' in their regional innovation systems. In this way, the involved regional triple helix actors have insights to enhance the regional innovation systems in order to limited the impacts of the addressed weak spots and act on them according to the Joint Action Plan and the Mentoring Guide.

Research-driven clusters are appropriate settings for creating focused partnerships. Project WASTEKIT offers means for all regional triple helix actors to learn from and contribute to (the spin-off of) this project. It enables partnerships on regional and international level. Authorities can play a role in procurement programs and as launching customers. RTD actors have abilities to strengthen their contact with industrial actors and specifically SMEs. They benefit in terms of qualifying applied research programs at a faster pace and making sure that their research contributes to innovation. Large companies benefit from the partnerships in terms of innovation.

Strengthening the regional RTD and innovation clusters itself: Due to project WASTEKIT involved regions have opportunities to create and/or strengthen their regional RTD and innovation clusters dealing with waste management.

Benefits on European level

A benefit on European level is the fact that a specific Regions of Knowledge project focussing on waste management RTD, innovation, business creation and clustering, results in reflections regarding its impact and best practices. This



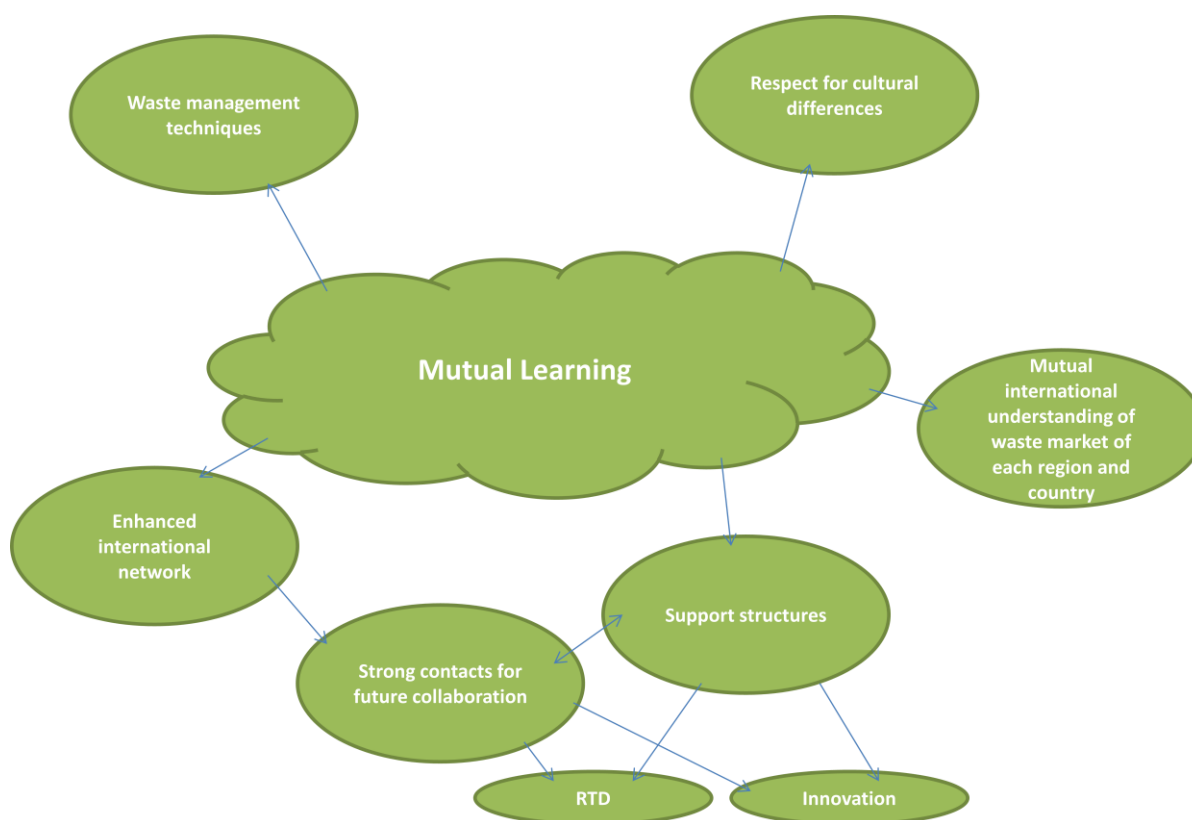
offers policy makers and other relevant actors all over Europe insights regarding opportunities and challenges for creation, enhancing and expansion of waste management research-driven clusters and networking settings.

The fact that project WASTEKIT creates for itself an international role as a European network of (regional) waste management-related clusters (and actors) gives a benefit on European level. A visible entity interesting for a variety waste management related clusters and actors (e.g. research institutes, waste management industry, governmental organisations, intermediaries and others like investors). We have had interest from other projects and also related new proposals.

Furthermore, project WasteKIT has put **mutual learning** in a new perspective. We have identified various ways to organize mutual learning and the impact this has on wastemanagement in regions:

Common vision and strategy development

Mutual learning events based on various round table sessions help to explore specific waste topics from various perspectives and waste management levels. Gaining and sharing information help stakeholders like public organisations (e.g. municipalities) or commercial organisations (e.g. waste processing companies) to develop a shared and common vision to give shape and direction to actions and solutions to current and future waste challenges.



Openness

Mutual learning events are a success when they lead to a shared and common vision on regional waste management policies and actions. This requires openness of the participants: they need to have the desire and the ability to freely share their knowledge and know-how during the round table sessions. If this openness is available, it will magnify learning processes and lead to stronger and more realistic development of a shared and common vision on waste management policies and actions.



Excellence

Mutual learning offers every involved participant (individual and organisation) more insight regarding the various aspects of waste management and therefore contributes to individual and organisational excellence in waste management especially when a trans-disciplinary views, knowledge and skills are required.

Facilitating linkages

Due to the involvement of various stakeholders, these mutual learning events based on round table sessions facilitate linkages among stakeholders on individual and organisational level. These linkages go deeper than networking since the stakeholders have deeper understanding about their knowledge and know-how about waste management as a result of the round table session discussions and participation.

- The address of the project public website, if applicable as well as relevant contact details.

www.wastekit.eu - most contact details are available on the website.

Furthermore, project logo, diagrams or photographs illustrating and promoting the work of the project (including videos, etc...), as well as the list of all beneficiaries with the corresponding contact names can be submitted without any restriction.

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			Maarten de Groot	M.C.deGroot@tudelft.nl
		Van Gansewinkel	Friedus van der Minne	friedus.van.der.minne@vangansewinkel.com
IT	Emilia Romagna			
		Aster	Daniela Sanie	daniela.sani@aster.it
			Stefano Valentino	stefano.valentini@aster.it
			Christina Boccafogli	cristina.boccafogli@aster.it
			financials	controllodigestione@aster.it
		CRPA	Lorella Rossi	l.rossi@crpa.it
		ConIT	Pietro Crudels	pcrudele@ccci.it
		RER	Attilio Raimondi	ARaimondi@regione.emilia-romagna.it
BG	Sofia Region			
		Sofia Municipality	Petar Traynov	ptraykov@sofia.bg
			Nadya Nikolova	nnikolova@sofia.bg
			Teodora Tsanova	t_polimerova@sofia.bg
			Emilia Zheleva	ezheleva@sofia.bg
			Janko Stoyanov	j_stojanov@sofia.bg
		BSECEE	Ekatarina Todorova	ek_todorova@mail.bg
			Vanya Kyoseva	vania225@abv.bg
		BAS	Ivan Krastev	krastev@ipc.bas.bg
			Venko Beschkov	vbeschkov@yahoo.com
				bioreac@bas.bg
			Annie Shoumkova	ashoumkova@ipc.bas.bg
		BCCI	Sabina Nikolova	een_manager@bccci.bg
			Eleonora Carnasa	een_expert@bccci.bg
		Denkstatt	Boyan Rashev	boyan.rashev@denkstatt.bg
			Kimentina Rasheva	klimentina.rasheva@denkstatt.bg
			Rashid Rashid	rashid.rashid@denkstatt.bg
UK	Yorkshire			
		Leeds City Council	Janice Frost	janice.frost@leeds.gov.uk
			Phillip Turpin	phillip.turpin@leeds.gov.uk
			James Richardson	james.richardson@co2sense.co.uk
		USFD	Peter Styring	P.Styring@sheffield.ac.uk
		LUD	Paul Williams	p.t.williams@leeds.ac.uk
		Yorwaste	Tony Sharkey	TonySharkey@yorwaste.co.uk
			John Sinclair	johnsinclair357@btinternet.com
		ITIE	Tony Fordham	Tony@iti-energy.com
				tonyfordham.iti@gmail.com

4.2 Use and dissemination of foreground

A plan for use and dissemination of foreground (including socio-economic impact and target groups for the results of the research) shall be established at the end of the project. It should, where appropriate, be an update of the initial plan in Annex I for use and dissemination of foreground and be consistent with the report on societal implications on the use and dissemination of foreground (section 4.3 – H).

The plan should consist of:

- Section A

This section should describe the dissemination measures, including any scientific publications relating to foreground. **Its content will be made available in the public domain** thus demonstrating the added-value and positive impact of the project on the European Union.

- Section B

This section should specify the exploitable foreground and provide the plans for exploitation. All these data can be public or confidential; the report must clearly mark non-publishable (confidential) parts that will be treated as such by the Commission. Information under Section B that is not marked as confidential **will be made available in the public domain** thus demonstrating the added-value and positive impact of the project on the European Union.

Section A (public)

This section includes two templates

- Template A1: List of all scientific (peer reviewed) publications relating to the foreground of the project.
- Template A2: List of all dissemination activities (publications, conferences, workshops, web sites/applications, press releases, flyers, articles published in the popular press, videos, media briefings, presentations, exhibitions, thesis, interviews, films, TV clips, posters).

These tables are cumulative, which means that they should always show all publications and activities from the beginning until after the end of the project. Updates are possible at any time.

TEMPLATE A1: LIST OF SCIENTIFIC (PEER REVIEWED) PUBLICATIONS, STARTING WITH THE MOST IMPORTANT ONES										
NO.	Title	Main author	Title of the periodical or the series	Number, date or frequency	Publisher	Place of publication	Year of publication	Relevant pages	Permanent identifiers ³ (if available)	Is/Will open access ⁴ provided to this publication?
1	Academic review of advanced thermal technologies	<i>Williams, P.T.</i>	<i>Book - "Waste as a Resource"</i>		Royal Society of Chemistry	<i>London</i>	<i>2013</i>			yes
2	Comparative waste management analysis of four EU regions; Emilia-Romagna (Italy), Yorkshire and Humber (England), Sofia (Bulgaria) and	Wu C., Richardson J., Robb A., Williams P.T	Annual European Biomass Conference	Paper presented at the 19 th European Biomass Conference		Berlin	2011			yes

³ A permanent identifier should be a persistent link to the published version full text if open access or abstract if article is pay per view) or to the final manuscript accepted for publication (link to article in repository).

⁴ Open Access is defined as free of charge access for anyone via Internet. Please answer "yes" if the open access to the publication is already established and also if the embargo period for open access is not yet over but you intend to establish open access afterwards.

	Amsterdam (Netherlands) (EU FP7 Regions of Knowledge WasteKIT Project).									
3	Phd Thesis	Vanya Kyoseva			University of Chemical Technology&Metallurgy	Sofia,	2012			yes

TEMPLATE A2: LIST OF DISSEMINATION ACTIVITIES

Type of activities ⁵	Main leader	Title	Date/Period	Place	Type of audience ⁶	Size of audience	Countries addressed
<i>Conference</i>		<i>European Conference on Nanotechnologies</i>	<i>26 February 2010</i>	<i>London, UK</i>			<i>All European countries</i>
<i>workshop</i>		<i>The Missing Link in the Carbon Debate</i>	<i>16 November 2010</i>	<i>London, UK</i>			<i>UK</i>
<i>forum</i>		<i>Green Innovation Forum</i>	<i>25 November 2011</i>	<i>Sofia, Bulgaria</i>			<i>Bulgaria</i>
<i>workshop</i>		<i>CO₂Chem Network</i>	<i>13 January 2011</i>	<i>Manchester, UK</i>			<i>All European countries</i>

⁵ A drop down list allows choosing the dissemination activity: publications, conferences, workshops, web, press releases, flyers, articles published in the popular press, videos, media briefings, presentations, exhibitions, thesis, interviews, films, TV clips, posters, Other.

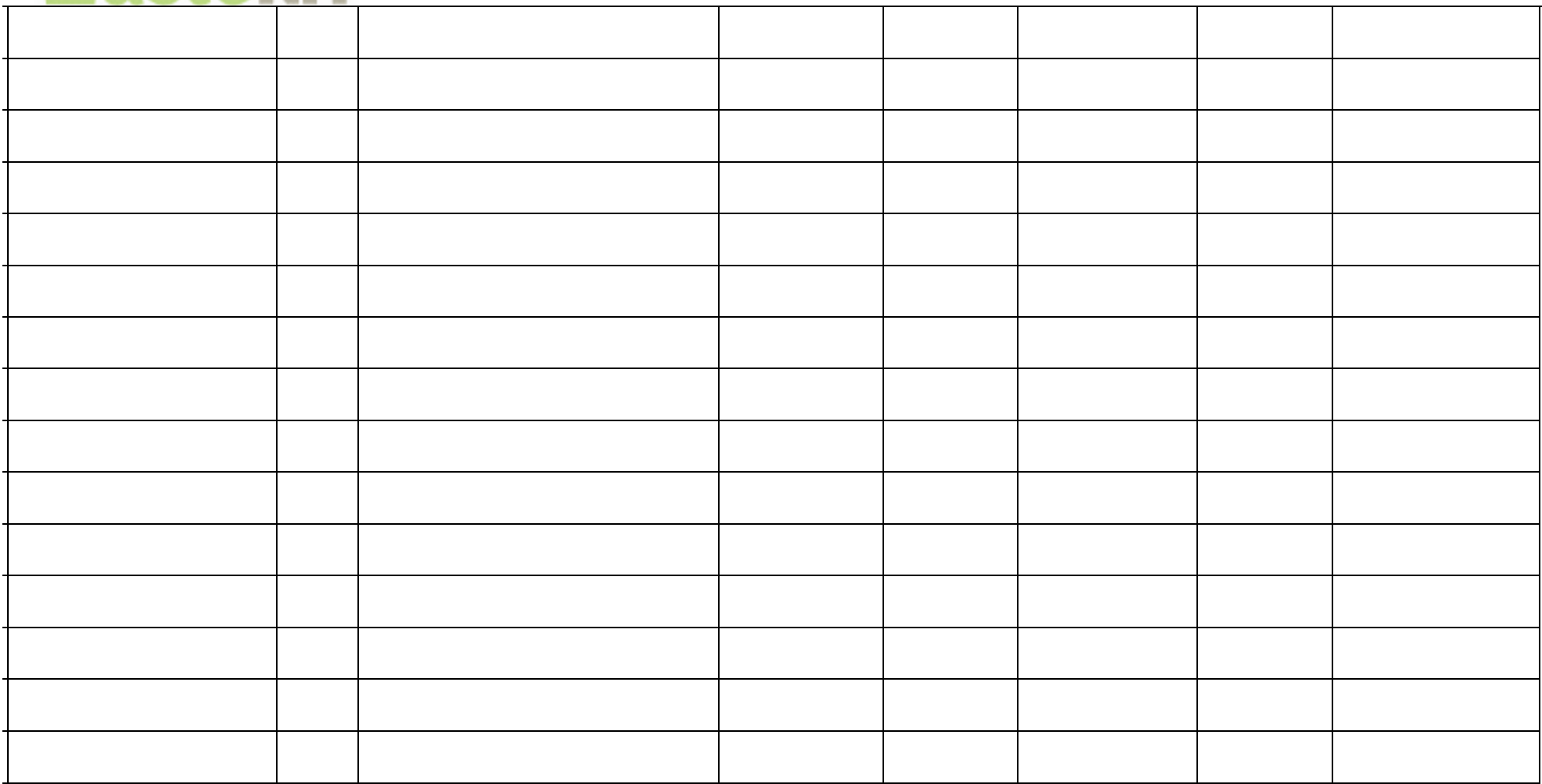
⁶ A drop down list allows choosing the type of public: Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias, Other ('multiple choices' is possible).

conference		Central European Biomass Conference 2011	26 January 2011	Graz, Austria			Central European countries
Study visit		Study Visit Parco Scientifico Padano	10 March 2011	Lodi, Italy			UK, Italy
meeting		Meetings with UK DEFRA (Department of Environment Food and Rural Affairs)	6 April 2011	London, UK			UK
conference		"Save the Planet"	13-15 April 2011	Sofia, Bulgaria			Bulgaria
Study visit		Sudy visit to Conserve Italia plant	13 April 2011	Pomposa, Italy			All project countries
meeting		Meeting with DECC (Department of Environment and Climate Change)	14 April 2011	London, UK			UK
meeting		Meeting with UK Members of Parliament	4 May 2011	London Houses of Parliament			UK
conference		Second International Conference "Green Technologies and Environmental Protection" Seventh National Conference on Chemistry of Bulgaria	26-29 May 2011	Sofia, Bulgaria			Bulgaria
conference		19th European Biomass Conference	6-11 June 2011	Berlin, Germany			All European countries

conference		SMI Conference on Gasification of Waste	7 June 2011	London, UK			
conference		FUTURE-RESOURCE	14-16 June 2011	London, UK			All European countries
conference		I&M in Research to Business	8-9 June 2011	Bologna, Italy			All European countries
conference		11th International Multidisciplinary Scientific Geo-conference & EXPO "Surveying Geology and Mining Ecology Management" (SGEM)	19-25 June 2011	Albena, Bulgaria			All European countries
		Gemeentelijk Afvalcongres	2011	NL			Netherlands
workshop		Workshop on technological innovation of waste	April 2011	Bulgaria			Bulgaria
workshop		Workshop/seminar on waste valorisation	tbc	Bologna, Italy			Italy
workshop		Waste to energy (workshop, WP5)	September 2011	Sofia, Bulgaria			Bulgaria
workshop		WasteKIT Group of Experts Waste management committee, coordinated at regional level by the Emilia-Romagna region - Energy Department, was joined and involved in WasteKIT initiatives to provide relevant expertises and consulting in project topic	22nd and 30th September 2011	Bologna, Italy			Italy

Round table		<i>BAS in the European Research Area (FP7)</i>	<i>Ongoing</i>	<i>Sofia, Bulgaria</i>			<i>Bulgaria</i>
seminar		<i>Advanced Thermal Treatment of Waste Seminar, Yorkshire and Humber WasteKIT partners</i>	<i>11th October 2011</i>	<i>Rotherham, Yorkshire and Humber, UK</i>		<i>50</i>	<i>UK</i>
seminar		<i>Utilisation of University of Leeds National Contact Network. The University of Leeds targeted 3610 organisations</i>	<i>October 2011</i>	<i>UK</i>			<i>UK</i>
seminar		<i>Utilisation of CO₂Sense network. Using WP5 and WP7 CO₂Sense raised awareness of WasteKIT sending information to over 10,000 organisations. CO₂Sense on behalf of Yorkshire Forward</i>	<i>October 2011</i>	<i>UK</i>			<i>UK</i>
seminar		<i>Exploration of waste management networks across the UK. Waste management networks have been contacted with information on WasteKIT and the relevant Advanced Thermal Treatment of Waste Event. Networks contacted include:</i> <i>• Waste improvement network (WIN)</i> <i>• Chartered Institute of Wastes Management (CIWM)</i> <i>• UK advisory network (UKTI)</i> <i>• Resource Recovery Forum (RRF)</i> <i>• The Environmental Sustainability</i>	<i>October 2011</i>	<i>UK</i>			<i>UK</i>

		<i>Knowledge Transfer Network (ESKTN)</i>					
<i>fair</i>		<i>Ecomondo: 15th International Trade Fair on Material & Energy Recovery and Sustainable Development</i>	<i>9-12 November 2011</i>	<i>Rimini, Italy</i>			<i>All European countries</i>
<i>workshop</i>		<i>Meeting regarding Waste and Waste Management, organized by the Department of Environment and Climate Change (DECC) UK Government Department</i>	<i>29 November 2011</i>	<i>London</i>			<i>UK</i>
<i>workshop</i>		<i>Waste Management Workshop, organized by DECC and DEFRA UK Government Departments</i>	<i>15 December 2011</i>	<i>London</i>			<i>UK</i>
<i>course</i>		<i>Waste to energy – LLL course</i>		<i>Piacenza, Italy</i>			<i>Italy</i>
<i>workshop</i>		<i>Workshop/seminar on waste valorisation</i>		<i>Piacenza, Italy</i>			<i>Italy</i>
<i>conference</i>		<i>"Working towards a sustainable waste management system" Conference, Sofia, organized by Sofia Municipality and co-organized by all Bulgarian partners</i>	<i>23-34 April 2012</i>	<i>Sofia, Bulgaria</i>		<i>150</i>	<i>All project countries</i>
<i>fair</i>		<i>Ecofair – a Regional Event being sponsored and part organised by CO2Sense.</i>	<i>1st May 2012</i>	<i>Yorkshire and Humber</i>			<i>UK</i>







Section B (Confidential⁷ or public: confidential information to be marked clearly)

Part B1

The applications for patents, trademarks, registered designs, etc. shall be listed according to the template B1 provided hereafter.

The list should, specify at least one unique identifier e.g. European Patent application reference. For patent applications, only if applicable, contributions to standards should be specified. This table is cumulative, which means that it should always show all applications from the beginning until after the end of the project.

No Patents or Trademarks have been registered during WasteKIT.

TEMPLATE B1: LIST OF APPLICATIONS FOR PATENTS, TRADEMARKS, REGISTERED DESIGNS, ETC.					
Type of IP Rights ⁸ :	Confidential Click on YES/NO	Foreseen embargo date dd/mm/yyyy	Application reference(s) (e.g. EP123456)	Subject or title of application	Applicant (s) (as on the application)

⁷ Note to be confused with the "EU CONFIDENTIAL" classification for some security research projects.

⁸ A drop down list allows choosing the type of IP rights: Patents, Trademarks, Registered designs, Utility models, Others.

Part B2

Please complete the table hereafter:

Please see the report on exploitable foreground.

Type of Exploitable Foreground ⁹	Description of exploitable foreground	Confidential Click on YES/NO	Foreseen embargo date dd/mm/yyyy	Exploitable product(s) or measure(s)	Sector(s) of application ¹⁰	Timetable, commercial or any other use	Patents or other IPR exploitation (licences)	Owner & Other Beneficiary(s) involved
	<i>Ex: New superconductive Nb-Ti alloy</i>			<i>MRI equipment</i>	<i>1. Medical 2. Industrial inspection</i>	<i>2008 2010</i>	<i>A materials patent is planned for 2006</i>	<i>Beneficiary X (owner) Beneficiary Y, Beneficiary Z, Poss. licensing to equipment manuf. ABC</i>

In addition to the table, please provide a text to explain the exploitable foreground, in particular:

- Its purpose
- How the foreground might be exploited, when and by whom
- IPR exploitable measures taken or intended
- Further research necessary, if any
- Potential/expected impact (quantify where possible)

¹⁹ A drop down list allows choosing the type of foreground: General advancement of knowledge, Commercial exploitation of R&D results, Exploitation of R&D results via standards, exploitation of results through EU policies, exploitation of results through (social) innovation.

¹⁰ A drop down list allows choosing the type sector (NACE nomenclature) : http://ec.europa.eu/competition/mergers/cases/index/nace_all.html

Title of Project:

WasteKIT

Name and Title of Coordinator:

Ilse van den Breemer, Amsterdam Innovation Motor

B Ethics

1. Did your project undergo an Ethics Review (and/or Screening)?

- If Yes: have you described the progress of compliance with the relevant Ethics Review/Screening Requirements in the frame of the periodic/final project reports?

oYes XNo

Special Reminder: the progress of compliance with the Ethics Review/Screening Requirements should be described in the Period/Final Project Reports under the Section 3.2.2 'Work Progress and Achievements'

2. Please indicate whether your project involved any of the following issues (tick box) :

YES

RESEARCH ON HUMANS

- | | |
|---|----|
| • Did the project involve children? | NO |
| • Did the project involve patients? | NO |
| • Did the project involve persons not able to give consent? | NO |
| • Did the project involve adult healthy volunteers? | NO |
| • Did the project involve Human genetic material? | NO |
| • Did the project involve Human biological samples? | NO |
| • Did the project involve Human data collection? | NO |

RESEARCH ON HUMAN EMBRYO/FOETUS

- | | |
|---|----|
| • Did the project involve Human Embryos? | NO |
| • Did the project involve Human Foetal Tissue / Cells? | NO |
| • Did the project involve Human Embryonic Stem Cells (hESCs)? | NO |
| • Did the project on human Embryonic Stem Cells involve cells in culture? | NO |
| • Did the project on human Embryonic Stem Cells involve the derivation of cells from Embryos? | NO |

PRIVACY

- | | |
|---|----|
| • Did the project involve processing of genetic information or personal data (eg. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)? | NO |
| • Did the project involve tracking the location or observation of people? | NO |

RESEARCH ON ANIMALS

- | | |
|---|----|
| • Did the project involve research on animals? | NO |
| • Were those animals transgenic small laboratory animals? | NO |
| • Were those animals transgenic farm animals? | NO |
| • Were those animals cloned farm animals? | NO |
| • Were those animals non-human primates? | NO |

RESEARCH INVOLVING DEVELOPING COUNTRIES

- | | |
|---|----|
| • Did the project involve the use of local resources (genetic, animal, plant etc)? | NO |
| • Was the project of benefit to local community (capacity building, access to healthcare, education etc)? | NO |

DUAL USE

- | | |
|---|------------|
| • Research having direct military use | o Yes X No |
| • Research having the potential for terrorist abuse | NO |

C Workforce Statistics		
3. Workforce statistics for the project: Please indicate in the table below the number of people who worked on the project (on a headcount basis).		
Type of Position	Number of Women	Number of Men
Scientific Coordinator	1	
Work package leaders	4	3
Experienced researchers (i.e. PhD holders)	2	5
PhD Students		
Other	19	11
4. How many additional researchers (in companies and universities) were recruited specifically for this project?		o
Of which, indicate the number of men:		

D Gender Aspects		
5.	Did you carry out specific Gender Equality Actions under the project?	☐ Yes ☒ No
6.	Which of the following actions did you carry out and how effective were they?	
		Not at all effective Very effective
	☐ Design and implement an equal opportunity policy ☐ Set targets to achieve a gender balance in the workforce ☐ Organise conferences and workshops on gender ☐ Actions to improve work-life balance ☐ Other:	○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○
7.	Was there a gender dimension associated with the research content – i.e. wherever people were the focus of the research as, for example, consumers, users, patients or in trials, was the issue of gender considered and addressed?	
	☐ Yes- please specify	
	☒ No	
E Synergies with Science Education		
8.	Did your project involve working with students and/or school pupils (e.g. open days, participation in science festivals and events, prizes/competitions or joint projects)?	
	☒ Yes- please specify; within the amsterdam consortium, a competition on plastics was held amongst students from TUDelft and the Amsterdam universities. ☐ No	
9.	Did the project generate any science education material (e.g. kits, websites, explanatory booklets, DVDs)?	
	☒ Yes- please specify; website, mentoring guide as a educational tool how to manage waste ☐ No	
F Interdisciplinarity		
10.	Which disciplines (see list below) are involved in your project?	
	☒ Main discipline ¹¹ : 1 ☒ Associated discipline: 1.4	
	☐ Associated discipline ¹¹ :	
G Engaging with Civil society and policy makers		
11a	Did your project engage with societal actors beyond the research community? (if 'No', go to Question 14)	☐ Yes ☒ No
11b	If yes, did you engage with citizens (citizens' panels / juries) or organised civil society (NGOs, patients' groups etc.)?	
	☐ No ☐ Yes- in determining what research should be performed ☐ Yes - in implementing the research ☐ Yes, in communicating /disseminating / using the results of the project	

¹¹ Insert number from list below (Frascati Manual).

11c In doing so, did your project involve actors whose role is mainly to organise the dialogue with citizens and organised civil society (e.g. professional mediator; communication company, science museums)?	☐ ☐	Yes No
12. Did you engage with government / public bodies or policy makers (including international organisations)		
☐ No ☐ Yes- in framing the research agenda ☐ Yes - in implementing the research agenda ☐ Yes, in communicating /disseminating / using the results of the project		
13a Will the project generate outputs (expertise or scientific advice) which could be used by policy makers? ☐ Yes – as a primary objective (please indicate areas below- multiple answers possible) ☐ Yes – as a secondary objective (please indicate areas below - multiple answer possible) ☐ No		
13b If Yes, in which fields?		
Agriculture Audiovisual and Media Budget Competition Consumers Culture Customs Development Economic and Monetary Affairs Education, Training, Youth Employment and Social Affairs	Energy Enlargement Enterprise Environment External Relations External Trade Fisheries and Maritime Affairs Food Safety Foreign and Security Policy Fraud Humanitarian aid	Human rights Information Society Institutional affairs Internal Market Justice, freedom and security Public Health Regional Policy Research and Innovation Space Taxation Transport

13c If Yes, at which level? ☐ Local / regional levels ☐ National level ☐ European level ☐ International level				
H Use and dissemination				
14. How many Articles were published/accepted for publication in peer-reviewed journals?	3			
To how many of these is open access¹² provided?	3			
How many of these are published in open access journals?				
How many of these are published in open repositories?				
To how many of these is open access not provided?	0			
Please check all applicable reasons for not providing open access:				
☐ publisher's licensing agreement would not permit publishing in a repository ☐ no suitable repository available ☐ no suitable open access journal available ☐ no funds available to publish in an open access journal ☐ lack of time and resources ☐ lack of information on open access ☐ other ¹³ :				
15. How many new patent applications ('priority filings') have been made? <i>("Technologically unique": multiple applications for the same invention in different jurisdictions should be counted as just one application of grant).</i>	0			
16. Indicate how many of the following Intellectual Property Rights were applied for (give number in each box).	Trademark	0		
	Registered design	0		
	Other	0		
17. How many spin-off companies were created / are planned as a direct result of the project?	0			
<i>Indicate the approximate number of additional jobs in these companies:</i>				
18. Please indicate whether your project has a potential impact on employment, in comparison with the situation before your project: <table border="1" style="width: 100%;"> <tr> <td> ☒ Increase in employment, or ☐ Safeguard employment, or ☐ Decrease in employment, ☐ Difficult to estimate / not possible to quantify </td> <td> ☒ In small & medium-sized enterprises ☐ In large companies ☐ None of the above / not relevant to the project </td> </tr> </table>			☒ Increase in employment, or ☐ Safeguard employment, or ☐ Decrease in employment, ☐ Difficult to estimate / not possible to quantify	☒ In small & medium-sized enterprises ☐ In large companies ☐ None of the above / not relevant to the project
☒ Increase in employment, or ☐ Safeguard employment, or ☐ Decrease in employment, ☐ Difficult to estimate / not possible to quantify	☒ In small & medium-sized enterprises ☐ In large companies ☐ None of the above / not relevant to the project			
19. For your project partnership please estimate the employment effect resulting directly from your participation in Full Time Equivalent (FTE = one person working fulltime for a year) jobs:	<i>Indicate figure:</i> 6			

¹² Open Access is defined as free of charge access for anyone via Internet.

¹³ For instance: classification for security project.

Difficult to estimate / not possible to quantify		☐
I Media and Communication to the general public		
20. As part of the project, were any of the beneficiaries professionals in communication or media relations? ☒ Yes ☐ No		
21. As part of the project, have any beneficiaries received professional media / communication training / advice to improve communication with the general public? ☐ Yes ☒ No		
22 Which of the following have been used to communicate information about your project to the general public, or have resulted from your project?		
☒ Press Release ☐ Media briefing ☐ TV coverage / report ☒ Radio coverage / report ☒ Brochures / posters / flyers ☐ DVD / Film / Multimedia	☐ Coverage in specialist press ☐ Coverage in general (non-specialist) press ☒ Coverage in national press ☐ Coverage in international press ☒ Website for the general public / internet ☐ Event targeting general public (festival, conference, exhibition, science café)	
23 In which languages are the information products for the general public produced?		
☐ Language of the coordinator ☒ Other language(s)	☒ English	

Question F-10: Classification of Scientific Disciplines according to the Frascati Manual 2002 (Proposed Standard Practice for Surveys on Research and Experimental Development, OECD 2002):

FIELDS OF SCIENCE AND TECHNOLOGY

1. NATURAL SCIENCES

- 1.1 Mathematics and computer sciences [mathematics and other allied fields: computer sciences and other allied subjects (software development only; hardware development should be classified in the engineering fields)]
- 1.2 Physical sciences (astronomy and space sciences, physics and other allied subjects)
- 1.3 Chemical sciences (chemistry, other allied subjects)
- 1.4 Earth and related environmental sciences (geology, geophysics, mineralogy, physical geography and other geosciences, meteorology and other atmospheric sciences including climatic research, oceanography, vulcanology, palaeoecology, other allied sciences)
- 1.5 Biological sciences (biology, botany, bacteriology, microbiology, zoology, entomology, genetics, biochemistry, biophysics, other allied sciences, excluding clinical and veterinary sciences)

2. ENGINEERING AND TECHNOLOGY

- 2.1 Civil engineering (architecture engineering, building science and engineering, construction engineering, municipal and structural engineering and other allied subjects)
- 2.2 Electrical engineering, electronics [electrical engineering, electronics, communication engineering and systems, computer engineering (hardware only) and other allied subjects]
- 2.3 Other engineering sciences (such as chemical, aeronautical and space, mechanical, metallurgical and materials engineering, and their specialised subdivisions; forest products; applied sciences such as geodesy, industrial chemistry, etc.; the science and technology of food production; specialised



technologies of interdisciplinary fields, e.g. systems analysis, metallurgy, mining, textile technology and other applied subjects)

3. MEDICAL SCIENCES

- 3.1 Basic medicine (anatomy, cytology, physiology, genetics, pharmacy, pharmacology, toxicology, immunology and immunohaematology, clinical chemistry, clinical microbiology, pathology)
- 3.2 Clinical medicine (anaesthesiology, paediatrics, obstetrics and gynaecology, internal medicine, surgery, dentistry, neurology, psychiatry, radiology, therapeutics, otorhinolaryngology, ophthalmology)
- 3.3 Health sciences (public health services, social medicine, hygiene, nursing, epidemiology)

4. AGRICULTURAL SCIENCES

- 4.1 Agriculture, forestry, fisheries and allied sciences (agronomy, animal husbandry, fisheries, forestry, horticulture, other allied subjects)
- 4.2 Veterinary medicine

5. SOCIAL SCIENCES

- 5.1 Psychology
- 5.2 Economics
- 5.3 Educational sciences (education and training and other allied subjects)
- 5.4 Other social sciences [anthropology (social and cultural) and ethnology, demography, geography (human, economic and social), town and country planning, management, law, linguistics, political sciences, sociology, organisation and methods, miscellaneous social sciences and interdisciplinary, methodological and historical S1T activities relating to subjects in this group. Physical anthropology, physical geography and psychophysiology should normally be classified with the natural sciences].

6. HUMANITIES

- 6.1 History (history, prehistory and history, together with auxiliary historical disciplines such as archaeology, numismatics, palaeography, genealogy, etc.)
- 6.2 Languages and literature (ancient and modern)
- 6.3 Other humanities [philosophy (including the history of science and technology) arts, history of art, art criticism, painting, sculpture, musicology, dramatic art excluding artistic "research" of any kind, religion, theology, other fields and subjects pertaining to the humanities, methodological, historical and other S1T activities relating to the subjects in this group]



2. FINAL REPORT ON THE DISTRIBUTION OF THE EUROPEAN UNION FINANCIAL CONTRIBUTION

This report shall be submitted to the Commission within 30 days after receipt of the final payment of the European Union financial contribution.

Report on the distribution of the European Union financial contribution between beneficiaries

Name of beneficiary	Final amount of EU contribution per beneficiary in Euros
1.	
2.	
n	
Total	