

Exhibit 2

Partnership Plan

Innominion 4
Circular Economy with a focus on Plastics and Textiles

The common goal and vision for the Partnership

To address the climate crisis, four Innomissions have been set out in the “Green solutions of the future - Strategy for investments in green research, technology, and innovation” with the goals to reduce GHG emission by 70% by 2030 and achieve net-zero emission by 2050, as well as to contribute to competitiveness of Danish business and industries. A Roadmap has been developed for the Innomission 4 - Circular economy with a focus on plastics and textiles and this Partnership seeks to drive actions based on the directions outlined in the Roadmap (1112-00007A). On global scale the world is challenged by plastic waste and incineration of plastic waste increasing GHG emissions to/concentrations in the atmosphere. The challenges are despite of their magnitude technologically solvable, and the technology needed to meet these challenges are already partly researched, innovated and produced in Denmark. An example of an un-addressed, however, solvable issue, textile overproduction and overconsumption and a particularly linear, trends- and seasonal business logic is responsible for major GHG emissions (+10 % of global GHG emissions alone), depletion of water and other natural resources, and the global textile waste sector is cluttered with low value textiles product that often ends up in landfills or incineration plants. It is necessary to take immediate action to address our use of plastics and textiles. The specific challenges, needs, and suggested initiatives are laid out in the Roadmap 1112-00007A: “Circular economy with a focus on plastics and textiles: A 2030 & 2050 Roadmap”.

One overarching challenge is that research and innovation is currently conducted rather fragmented with individual projects often focusing on single phases of the value chain, such as use or recycling. This provides potential antagonisms, such as increase reuse leading to reduced recycling. Another example is that many products are not designed for reuse/recycling, meaning that even with increased focus on better sorting at the end-of-life stage, most of the resources cannot be kept in the value chain. The transition to a circular economy therefore requires a coherent effort across the entire value chain, which calls for collaboration among research institutions on a new and more advanced scale.

The Partnership will address the need for coordinated efforts within circular economy with a focus on plastics and textiles and the need for a joint framework for research, development, dissemination, dialogue/communication with authorities, in order to ensure implementation and real impact of the efforts/research and innovation.

This Partnership thus has the ambition to provide the framework to fulfill the goals of the objectives of the Innomission and via the pool 1 funding lay down the first core stepping stones of the Roadmap. The Partnership will initiate research and innovation projects (R&I projects) in two steps as well as provide a framework. The framework will ensure the best synergies and coordination between individual projects and keeping direction of R&I projects, as well as pave the way for implementation of results. In addition, the framework will provide a basis for capacity building – mostly focused on SME & start-up innovation ecosystems. From the first, initial steps of pool 1 and 2 and to a wider scaling up of initiatives, it will require ongoing assessments based on the following criteria:

1. it must be ensured in the yearly activities of the partnership that knowledge uptake between initiatives is being interpolated and analyzed for further action. The roadmap initiatives are all interdependent on each other to secure maximum effect, as the roadmap vision is to operate cross-disciplinary and across the full value chain and build up a new CE eco-system in DK. It is thus vital in the decision-making procedures towards pool 2 projects that the entire value chain of the workstreams is roughly covered, so that all elements of the vision are in play right from the beginning.
2. it must be ensured that all partners are actively engaged, and projects are evenly dispersed between partners, securing that all disciplines of science are always operational within the partnership, this way securing the solidity of the partnership itself going forward.
3. it is vital that throughout the yearly activities of the partnership, synergies on both vertical workstream level and horizontal level on all three workstreams are picked up and disseminated to policy makers, to ensure the full impact of the partnership in terms of regulation and political investment in further research.

Objectives

The overall principles governing the challenges and suggested initiatives in the Roadmap are the 4 objectives listed below:

1. Reduce, reuse and recycling of all plastics and textiles
2. Recover at the highest possible level
3. Decouple resource consumption
4. No surplus production

These objectives will, if fully implemented in the Danish society, lead to substantial reduction in resource demand as well as GHG emissions induced by plastic and textile use in Denmark within a timeframe of 2030 or 2050. In the context of the current Partnership application timeframe and resources, a major step will be taken towards these Roadmap objectives. Within the three workstreams, the outlined projects will provide significant progress and push new solutions forward for maturation, implementation and scaling. The projects initiated in the Partnership's first 5-year period will provide the needed elements (by means of data, documentation, knowledge, methods, tools, techniques and technologies) as basis to achieve implementation and scaling of solutions.

Importantly, *the present application is only the initialization of the Partnership* and a first, but important, resource element. The members of the Partnership will use their considerable skill portfolio and competences to enhance and accelerate fund raising for R&I activities to fully address and realize the vision and impacts of the Roadmap the Partnership.

The work within the Partnership is structured around three workstreams, focusing on plastics, textiles, and common, respectively. These three workstreams have the potential to bring together and set the societal innovation ecosystem in motion. Once the Partnership grows and reaches maturity, this workstream strategy will be adapted. The growth phase focuses on expanding the Partnership to include all relevant partners and the maturation stage focuses on consolidating and funding the onwards journey.

Taking the very first steps to answer the unmet needs and realize the vision of the Roadmap, the Partnership describes a pool of R&I projects to start in the immediate future within the scope of this application and its available funding and resources. The Partnership has prioritized to focus pool 1 projects around those topics that can best initiate the buildup of infrastructure conducive to CE. These topics would also enable immediate financial and binding support from external partners such as industry and public entities. This focus is chosen to ensure that the Partnership would commence its mission with as strong bonds to the society as possible, and with the goal of generating significant results within the first few years. However, this implies that a considerable number of central challenges are not addressed in pool 1 and it is the ambition of the Partnership that a further prioritized subset of the remaining challenges must be properly addressed in pool 2, and exhaustively addressed through the additional funding secured in the later phases (i.e. subsequent funding pools) of the Partnership. It is of the utmost importance that the pool 1 and pool 2 projects together form a baseline for further work, ensuring that central issues of the initial suggested initiatives and milestones of the roadmap are covered, dispersed on all involved partners and scientific disciplines involved. The criteria of the individual projects are that they each contribute to this overall aim in the best way possible. It is therefore vital that core themes of the roadmap that are *not* addressed in pool 1 projects will be covered in the pool 2 projects. The installed projects this way function as keys to unlock the further process, and pool 1 & 2 must both be in place within the first year of the partnership. It is thus the aim of the Partnership that pool 1 and pool 2 must be seen in connection and that they, in tandem along with further resources acquired by the Partnership, will meet the challenges and the unmet needs described in the Roadmap.

With the objectives set out for the Partnership, the R&I projects will contribute to the strategic goals for environment by reducing GHG emissions (less consumption and incineration of plastic and textile, less transport, less demand for crops/land, less demand for virgin fossil resources and less demand for energy) and reducing anthropogenic emissions to the terrestrial, freshwater and marine environments as well as contributing to the strategic goals for waste, water, and circular economy, by enabling business models,

enabling public market drivers towards circular economy while contributing to reduce energy- and climate-neutral waste handling (increased resale and reuse). Furthermore, a goal in the “Green solutions of the future - Strategy for investments in green research, technology, and innovation” is to reduce 80 % of plastic waste incinerated, another goal that this Partnership will contribute to.

There are many paths to circularity and there is no immediate solution, therefore many means must be considered. However, it is important that the Partnership prioritize its efforts based on systemic principles. This is because resources are limited and the need to break the consumption and impact trajectory is urgent. An essential prerequisite for success is an active societal ecosystem with a focus on conceiving and supporting circularity in and between different sectors. While the Partnership *a priori* does not know a good solution from a bad solution, the Partnership certainly knows some of the means, but their integration into scalable solutions remain open. This also means that the process will have several iterations and minimal viable products will be tested and refined in the course of the program. This means that the Partnership engages with an agenda with a lot of uncertainties, which calls for an explorative innovation process. The measurement tools must reflect this (see Impact section below). Next step is to ensure that the refined eco-systemic approach of the roadmap vision is secured, and that all partners make sure to activate the full potential of their respective research environments further in this process. It is therefore essential that year 2 of the partnership will have its focus on deciding what types of initiatives are necessary to support pool 1 and 2 initiatives for maximum impact in an open process, and to consolidate the cross-disciplinary and cross-value chain efforts of the partnership further. Years 3-5 will focus mainly on escalating efforts of covering remaining suggested initiatives and milestones of the roadmap and in the process of this secure implementing of eventual adjustments. Figure 1 provides an overview of project initiatives proposed in the program and the color code indicates initiatives selected for the first pool and initiatives which are part of the portfolio for the second pool.

Plastics: With pool 1, the industrial sector is in focus for the plastics track as is the initial steps towards developing and maturing a substituting materials platform (regenerate, bioplastics). The industrial sector provides a good platform to start as the root of the challenge is found here in the design of products and pathways to and from consumption. In addition, the sector is also defined by well characterized and consolidated material flows.

Common: With pool 1, both the private and the public sector is involved and the interlink between these two sectors are in focus. The common track focuses on using public procurement as driver for innovation, reducing consumption in both the public and private sectors as well as on improving end-of-life handling with better recycling and more lean waste handling systems. Finally, the common track addresses regulatory barriers for development and innovation.

Textiles: The private sector is heavily involved in Pool 1, represented by both SMEs and large corporations, while the public sector is broadly represented by municipalities and regions. The textile sector is complex and necessitates a varied, multi-action approach. In the first pool, overall focus is on furthering product development for recirculation and keeping resources in the loop.

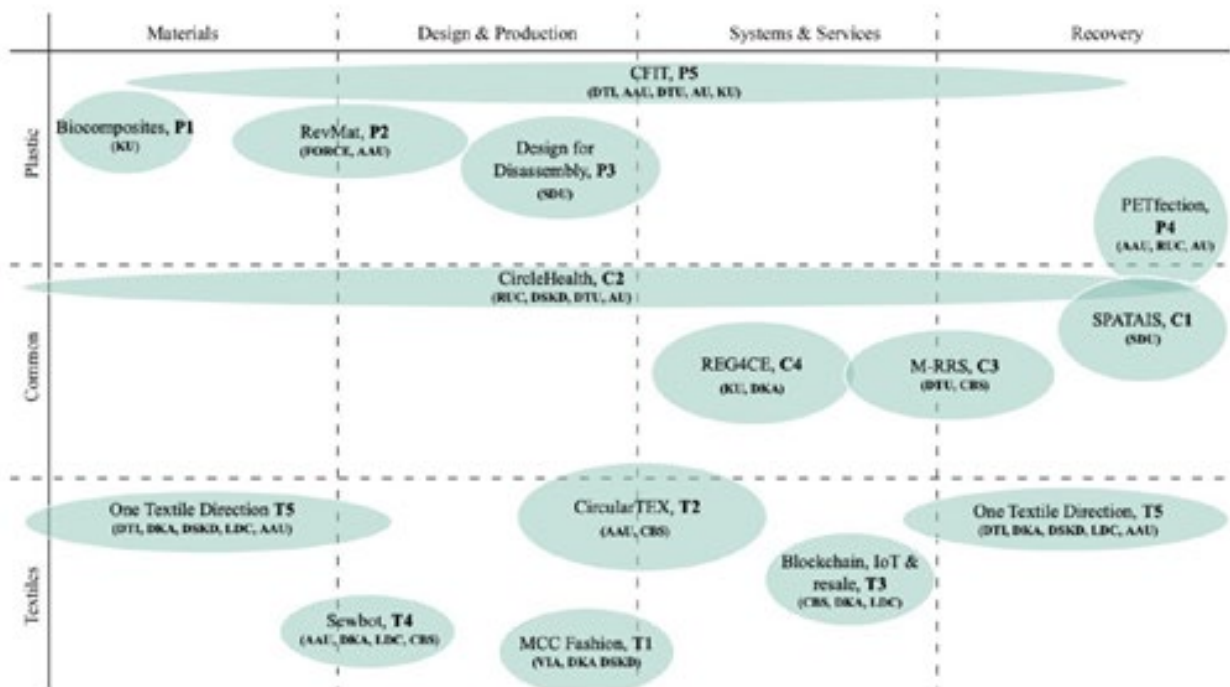


Figure 1: Partnership tracks with indicative positions of project initiatives across the value chain.

In terms of the measures the Partnership have used as foundation for it's aims regarding circular economy, these aims align with the aims promoted by the European Environment Agency:

- Ensure access to resources and raw materials—with the program the Partnership will ensure the increased availability and uptake of materials that meet specifications, and which will have several life cycles. The Partnership also addresses resource conservation by working with innovating design choices (doing more with less) and use phase (application).
- Ensure innovation, new business opportunities, and higher efficiency—with the program the Partnership will supply novel materials, product development, scaled circular business models and value propositions for circularity, cost effective recycling and expanded market opportunities and frontrunner market positioning for Danish industry. The aim is that DK becomes an experimental lab for viable CE solutions.
- Support local job creation and social integration—the Partnership will supply the basis for new jobs in e.g., tertiary industry, but also local jobs based on DK keeping materials in local loops rather than exporting for recycling purposes.

Strategic relevance

The strategic relevance of the Partnership and entailed projects in both pools covers political, industrial and academic relevance at various spatial and temporal scales.

Political strategic relevance

The Partnership addresses political strategies on global, regional and national scales. At the global scale, the Partnership addresses several UN goals and agreements. Most relevant are the UN sustainable development goals (SDGs). The aims of the Partnership align perfectly with several of the SDGs. Through reductions of raw material consumption, extended material service life and less material waste, the projects defining the pool 1 directly addresses SDG 9 (industry, innovation and infrastructure), SDG 11 (sustainable cities), SDG 12 (responsible consumption and production), SDG 13 (climate action), SDG 14 (life below water) and SDG 15 (life on land). The Partnership also indirectly addresses several SDGs through e.g. less material consumption. For textiles, this means less land demand for fiber production leaving more land for agriculture and hence crop production. In this way the Partnership indirectly also addresses SDG 2

(zero hunger) and SDG 3 (good health and well-being). In addition, the Partnership aligns with the UN Environment program. The Partnership also has strategic relevance for the Danish ratification (via EU) of the Paris agreement, since all initiatives defining the pool 1 of the Partnership will unanimously lead to reductions of GHG emissions induced by Danish plastics and textiles production.

The Partnership further addresses the goals set out in the EU strategy for a circular plastics economy as well as the EU Textiles Strategy. One of the aims in these strategies is that product design must allow for greater durability, reuse and high-quality recycling. Several of the projects in pool 1 addresses this, either through increasing the quality of EoL sorting, thus allowing for high-quality recycling, or by focusing on innovation of new and better products. The strategy further aims towards a more integrated value-chain, a goal that is also in accordance with the pool 1 projects, since several of them address more than a single part of the value chain, with some projects spanning the entire value chain. The EU strategy also focuses on job generation, both in the recycling industry and among innovative SMEs. The pool 1 projects will contribute to this with many new jobs in Denmark, both in the waste handling industry and among SMEs and in the public sector. Regarding textiles, the EU aims at establishing separate textiles collection by 2025 and Denmark will initiate this by 2023. The pool 1 projects will aid Denmark in achieving this goal, with several projects focusing on reuse and recycling of textiles through better sorting and collection.

Nationally, the Partnership and the projects defining pool 1 will support the Danish government's ratification of the Paris agreement as well as the national GHG emission reduction targets for 2030 and 2050. This happens through reduction of national as well as global GHG emissions induced by Danish plastic and textile consumption, use and disposal. The Partnership will furthermore play a central role in ensuring that the goals set out in the national plastic action plan (*'Plastik uden spild'*) can be met. The strategy aims at ensuring a more circular plastic consumption in Denmark. The means to this goal is 27 initiatives, which focus on different aspects such as increased understanding of plastic flows in the society, broader take-back schemes for some beverage containers and several initiatives to reduce consumption of single use products. The pool 1 projects are well aligned with the aim of the plastic strategy, and will generate significantly better insight into plastic flows, develop new take-back schemes and facilitate innovation of better and more sustainable products as alternative to single use products.

Industrial strategic relevance

At global and regional scale, the Partnership and projects defining the Partnership will provide crucial assistance for the Danish industry and nation in complying with e.g. the European GHG emission reductions targets. Many participating companies have strategic ambitions on zero-environmental impact. Other large enterprises outside the partnerships have already described a strategy for reducing waste/re- source consumption (as e.g., illustrated by LEGO's phase out single-use plastic bags from LEGO boxes) but need the technology or tools to implement them. Furthermore, the innovation entailed by the Partnership and initiatives will provide technical solutions and products which most likely will appeal to other European countries that need to comply with the European emission targets but are unwilling to invest in the necessary innovation. This will create an export and job creation potential that is strategically relevant to the Danish nation. At the national scale, the Partnership and projects defining the Partnership will accelerate industrial innovation and industrial-academic collaboration relating to GHG emission reductions enabling Danish industries to generate momentum and innovation in climate emission reduction. This holds considerable export and job creation potential.

Academic strategic relevance

For Danish academia, the Partnership and projects provide a chance to further accelerate Danish research within circular economy and thus potentially reposition Denmark among the leading countries within climate mitigation research and circular economy.

Master plan for the whole Partnership

Please find below the Master Plan for the Partnership as presented in Table 1.

Table 1: Gantt chart of Innomission pool 1 including critical milestones.

Activity	Year 1			Year 2			Year 3			Year 4			Year 5												
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Partnership																									
Administrative and R&I coordination																									
Dissemination																									
D1: Partnership Board meeting																									
D2: Advisory Group meeting																									
D3: Annual general meeting																									
D4: Annual Partnership meeting																									
M1: Collaboration agreement signed by all partners																									
M2: Partnership wide activities mapped and initiated																									
M3: Pool 1 projects initiated																									
M4: Annual report to IFD prepared																									
M5: Pool 2 funding announced																									
M6: Pool 2 funding granted																									
M7: Final assessment of partnership impact																									
Workstream - Plastics																									
P1 - Biocomposites to substitute plastic																									
P1D1: Building blocks for WP2																									
P1D2: Material for WP3																									
P1D3: Technoeconomical assessment																									
P2 - Reverse Material & Product Requirement Planning																									
P2D1: Evaluation of customers product design																									
P2D2: Materiale requirement planning																									
P2D3: Optimization of production equipment and process																									
P2D4: Materiale requirement planning based on multiple and non-consistent sources																									
P2D5: Optimal Guides for companies to advice customers																									
P3 - Design for Disassembly																									
P3M1: Joint selection of design and integrative solutions for d4d																									
P3M2: To produce a digital twin catalog, for each company cases																									
P3M3: Impact on recyclability measured																									
P3M4: Individual evaluation and delivery of a tailor-made digital twin catalogue tested																									
P4 - PETfection																									
P4D1: Report on PET volumes and levels of contamination																									
P4D2: Delivery of several characterized PET fractions (20 kg per batch)																									
P4D3: Report on screening tests																									
P4D4: Identification of three monomer purification methods																									
P4D5: Compounding of rPET is demonstrated																									
P4D6: Fabrication of specimen for mechanical testing of rPET																									
P4D7: Report of SOTA.																									
P4D8: Enviro. performance report incl. decision-tree.																									
P5 - Circularity of industrial thermoplastic for high quality recycling																									
P5D1: Semi-closed sourcing system (D1)																									
P5D2: Waste stream without unwanted substance																									
P5D3: Mixed plastic materials separated in individual fractions																									
P5D4: Product of multiple recycled plastic (O4)																									
P5D5: Material recycled by dissolution																									
P5D6: CE-tool (D6)																									
P5D7: User study report																									
P5D8: Status reports																									
P5D9: Papers and talks																									
Workstream - Textiles																									
T1 - Mass Customization for Circularity																									
T1D1: A holistic analysis of users' preferences (D1)																									
T1D2: A set of exemplary riches (D2)																									
T1D3: Development of new datasets based on feedback from user groups.																									
T1D4: Mapping of the companies' ability to adopt and implement																									
T1D5: Plan for scalability																									
T2 - CircularTEX: Circular Textile Pilots																									
T2D1: Tools, methods and plan for workshops for each pilot-test process (D1)																									
T2D2: Method for evaluating the circularity of the developed solutions																									
T2D3: 1-2 public tenders on different types of textiles (D3)																									
T2D4: Inspiration guide for other public purchasers of textiles (D4)																									
T2D5: 1-2 B2B product concepts and a tested circular business model																									
T2D6: Case catalogue for new B2B circular textile developments and collaborations																									
T2D7: 1-2 B2C product concepts, consumer behaviour assessments and tested CBM																									
T2D8: Case catalogue for new B2C circular textile developments and collaborations																									
T2D9: Facilitation Guide for future textile solutions and value propositions																									
T2D10: Steering committee meeting minutes, Project status reports, Financial statements																									
T3 - Develop and test Blockchain and IoT technology for secondhand market																									
T3D1: Current blockchain and IoT solutions for the fashion and reseller market																									
T3D2: Map industry standard of the global supply chain - a set of principles for blockchain																									
T3D3: Trends in the reseller market - data analysis of transactions and interactions																									
T3D4: Trends in the reseller market - qualitative studies of value creation																									
T3D5: Education and dissemination																									
T4 - Robotized textile sewing and handling																									
T4D1: Report and seminar on design guidelines for automation																									
T4D2: Manual of system interface																									
T4D3: Report of fabric modelling																									
T4D4: Seminar demonstration the project outcome																									
T5 - One Textile Direction																									
T5D1: Final report																									
T5D2: Specifications for sustainable public workwear																									
T5D3: Specifications for full-scale plant																									
T5D4: Analysis and mapping of textile waste micro-streams																									
Workstream - Common																									
C1 - Sorting plastic and textiles using AI driven sensing solutions																									
C1D1: Fully functional base system for classification of waste objects																									
C1D2: Full system developed and evaluated																									
C1D3: Strategies developed and tested																									
C1D4: Full system developed and evaluated																									
C2 - Circularity of plastics and textiles in the healthcare sector																									
C2D1: Review of best practice in circular procurement																									
C2D2: Working paper on procurement criteria, procedures and strategies																									
C2D3: Guidelines for design strategies in hospitals																									
C2D4: Report circular procurement based on test results																									
C2D5: Report on overall material flow																									
C2D6: Report on how plastic consumption can be reduced																									
C2D7: Market dialogue concerning selected recommendations reduced.																									
C2D8: Actionplan for testpilot for reduction.																									
C2D9: Market dialogue concerning selected waste fractions																									
C2D10: yearly meetings within the consortium																									
C2D11: halfyear report about progress ultimo year two																									
C2D12: Final report																									
C3 - Mattress Reuse and Recycle System - a pilot to scale																									
C3D1: Overview of mattress handling based on pilot tests on waste plants + evaluation																									
C3D2: Identification + development of best practices for waste plant mattress handling																									
C3D3: Qual interviews and obs of citizens + waste plants																									
C3D4: Analysis of behaviour (categories of practices)																									
C3D5: Final conference																									
C3D6: Drafting roadmap for scale-up and further implementation																									
C3D7: Final report																									
C4 - Scenarios and Regulations for a Circular Plastics and Textile Economy																									
C4D1: Validate Review paper																									

The milestones will be useful as a general management tool for the workstream leaders and the board of directors and the project management team. All projects in pool 1 have their separate milestones and success criteria and PI's of each projects are responsible for reporting on deliveries to the yearly activities of the partnership. Particularly in the continuous procedures for securing the scaling up of the roadmap potential it will be important to measure up if goals have been met, with the purpose of moving ahead with maximum impact.

In order to secure measurable progress of all projects under the partnership, all projects will along with the first already defined milestones be asked to define lang and lead indicators. These indicators will serve as project progress performance indicators.

Partnership structure (activities and work packages)

The Partnership will provide a framework consisting of overarching activities supporting the R&I projects directly and activities ensuring internal and external focus on the challenges and results. To ensure continuous implementation of results and to pave the way for implementation by minimizing barriers, the Partnership will have activities dedicated to outreach and dissemination, stakeholder involvement (including legislators, authorities, end-users etc.), coordination of external national and international collaborations as integrated parts of the Partnership activities. In addition, fundraising (including dialogue with private foundations) and capacity building within innovation ecosystems will also be part of the framework. These activities as well as governance and administration are planned to go on throughout the funding period from IFD and ideally beyond (see Figure 2). The Partnership will also initiate an array of R&I projects to start in 2022 (pool 1), projects were selected based on maturity with respect to company involvement and commitment, detail level of the project plans, job creation potential and GHG emissions mitigation potential. In the prioritization of the projects, noticeable effort was made to distribute the prioritized projects for pool 1 across all workstreams and all areas. This selection process ensured that the projects prioritized for pool 1 are distributed in the 3 workstreams x 4 areas matrix (see Figure 3 of the Roadmap). The process further ensured inclusion of the most relevant projects. The process also ensured full value chain coverage. The selected projects cover many aspects of the Roadmap. It is important to start many of these sooner rather than later, as there are still many parts of the Roadmap, which are not fully covered. In addition, there is a significant group of R&I projects to be initiated later. The selection criteria for these pool 2 projects are presented and elaborated on in the section "Execution". The R&I projects are organized as outlined in the Roadmap in three separate workstreams for the plastics, textiles and common track with the areas Materials, Design & Production, Systems & Services, and Recovery. The three workstreams plastics, textiles and common will be organized as parallel tracks along with a "Partnership track" providing the Partnership with activities including stakeholder management and dissemination, see Execution.

Value creation, impact and outcomes

Implementing and scaling solutions that effectively address the objectives of the mission will contribute with benefits across a wide range of environmental, economic, and societal impacts. These impacts may be associated with direct changes and implementation of solutions directly because of the R&I projects in the Partnership, but also indirect changes outside the plastic and textile value chains. Examples of key impacts include:

- Environmental impacts: GHG emissions and climate impacts, toxicity impacts induced by various kinds of emissions to the environment, resource consumption, biodiversity, and land use.
- Economic impacts: Job creation, export, industrial activity and revenue, reduced cost of operating.
- Societal impacts: Consumer and stakeholder behavior, circular literacy, decision support.

The projects included in the Partnership provides the needed elements (via data, documentation, knowledge, methods, tools, techniques, technologies etc.) enabling implementation and scaling of solutions. The impacts may not necessarily be achieved within the duration of the projects, but through subsequent scaling of the solutions e.g., through export and full-scale implementation beyond the Partnership.

The development process will have multiple iterations, and each element will be evaluated, tested and refined throughout the program. The Partnership is engaging into an agenda with a lot of uncertainties, with needs for adjustments, and which calls for an explorative innovation process. A range of leading and lagging indicators are to be defined (along with the first deliverable) for each project in order to measure and

support the contribution to the above GHG emission savings. This is done in the form of success criteria associated with the individual steps in the value and impact creation chain:

1. Projects: deliverables
2. Outputs: the immediate changes that these deliverables may lead to
3. Outcomes: the mid-term effects of these changes
4. Impacts: the long-term impacts of these changes

Table 2: The anticipated impacts of proposed pool 1 initiatives. Impact will be reduced by 23% due to reductions in pool 1.

Projects	Key deliverables	Outputs	Outcomes	Impacts 2030
T1	Further development of user led mass-customization for better adaptability to market through adjusting fit & sizing schemes for more inclusiveness	Apply and implement niche-based products in mass production for more diversity	Creation of jobs and increased innovation potential for better and more long-lasting clothing products.	Less returns, longer use phases and more value creation of products for better circularity
T2	Install circular design criteria in 4 pilots conducted by users and producers in co-design processes for new CE solutions and value propositions in the areas of public procurement, B2B and B2C.	Facilitation guide for circular solutions and value propositions ready for scaling.	Slowing textile loops along the three application segments.	Push for circular business model strategies in three focus areas for less waste of textiles.
T3	Benchmark for Blockchain and IoT solutions for tracking at upstream level of clothing for better traceability + market insights of secondary market for scaling of resale of clothing	DK secondary market is better prepared for scaling up circular business models for clothing.	Synergy effects to product development for longer use phases in design teams + redirected revenue streams from primary to secondary sale initiated.	Improvement of design strategies for longer use phases and better circularity, first steps of decoupling more virgin resources of economic model.
T4	Initial test and development of automated production of clothing together with development of pattern construction principles for automation.	Test results for further implementation and scaling of automation + methods for pattern construction.	Reshoring of know-how and innovation through taking back workforce to DK for close-to-market, niche production for SMEs.	Less production waste, less dead-stock in retail, more agile and user-led market strategies for circularity. Export of insights and know-how.
T5	Establish a Danish value chain for collection, sorting, reuse, and textiles-to-textiles recycling and to ensure sustainable design, procurement, use, reuse, and recycling of textiles.	Resource optimization is established with regards to automated sorting, full-scale textile recycling, advanced fiber spinning and design schemes for circularity & repurposing	Creation of local jobs at sorting plants and spinning facilities; creation of new products/markets of repurposed design.	Increased utilization of textiles waste as a resource for new circular fibers and products/markets.
C1	Behavior model for soft textile strategies for grasping and handing of flexible materials	Testing of sensor technology, AI database, model for the behavior of textiles, strategy for implementation.	Better sorting of textiles, Improved AI system providing competitive advantage for Danish industry, Reduced CO2 emissions	Improved sorting quality. Joint collection system for textiles and plastics. More lean waste handling infrastructure.

Projects	Key deliverables	Outputs	Outcomes	Impacts 2030
C2	Mapping of plastic/textile flow in hospitals, Identification of potential reduction in consumption, design manuals, better end-of-use utilization	Reduced consumption, increased recycling, innovation of new products, optimized workflow	Job creation, more competitive Danish industry, reduced consumption and CO2 emissions, higher environmental awareness	More sustainable healthcare sector, great potential for scaling (Denmark, Nordic countries, Europe, world)
C3	Test methods, demo of reuse and recycling value-chains, impact measurement, implementation roadmap	Increased reuse and recycling, new industrial solutions, inputs to public tenders	New business potential, increased export, job creation, less climate emissions, changed consumer behavior	Scaling of solutions: Lower climate impacts / resource consumption, Nordic solution for mattress reuse/recycling
C4	Collaborative scenario development that gathers industry, civil society and authorities. Different portfolios of policy instruments for the development of a circular textile economy	Specific scenarios, strategies and policy packages	Facilitate developments of circular textile value chains with effects on maintaining and expanding Danish employment along the textiles value chain	Increase competitiveness of Danish textile industry, reduce environmental footprint of textile production
P1	New material based on food side streams, drop-in technology will be demonstrated with injection molding as proof of concept, and applicability for food packaging	Drop-in technology will be demonstrated with injection molding as proof of concept, and applicability for food packaging	Material platform tested and scaled	Bio-materials integrated in the food packing material portfolio. Scope of application understood and integration with recycling system clarified
P2	Operations and supply system to support increased utilization of regenerate	Capability established across the value system to integrate regenerate at demo level	Scaled solution integrated in SMEs across the value chain.	Cross industry operations system for regenerate established and integrated in standards.
P3	Design catalogue, work process manuals and the robotic simulation of disassembly	Disassembly system developed and tested	Non-destructive automated disassembly system.	System implemented at scale to salvage functional value from components and materials.
P4	Sorting and chemical upcycling capability	PET lifted from incineration to a valuable rPET resource at demo level	Scaled solution integrated in the consumer waste stream	Methodology repeated with other plastic fractions
P5	Take-back, sorting, separation, qualification, reintegration, documentation	Capability established to keep materials in close circles with minimal value and quantity loss at demo level	Scaled solution integrated in the industrial waste stream	Methodology repeated across industrial domain

Table 3: Workstream specific success criteria associated with the initiatives defined for pool 1 of the partnership. Impact will be reduced by 23% due to reductions in pool 1.

Workstream	Success criteria	Impact stage 2030
		J=jobs; C=CO2, EV=economic value, R: reduced resource consumption, O=other
Plastics	Bringing end-of-use plastic back into high quality use (>100,000 ton) Lifting material out of incineration (>80,000 ton)	J: >500 related to waste management, recycling and keeping materials in DK; J: >1000 in emerging bio packaging industry with a raw material base in DK

	<p>Creating viable alternatives to virgin & fossil materials (>1000 jobs in emerging industry)</p> <p>Building capabilities to support high value recycling & reuse, but also for functional value utilization of other components enclosed in plastic (electronics in LEGO, components in a Danfoss Drive)</p>	<p>C: 400,000 ton</p> <p>EV: 500 m/year increased revenue (partner assessment); Potential of keeping end-of-use materials in local loops in DK 1.6 bDKK (McKinsey, 2019)</p> <p>R: reduced virgin resource consumption 30 % (some project partners have announced 100 % target)</p>
Common	<p>Ability to sort mixed plastic and textiles will allow for a joint collection system;</p> <p>Reducing material consumption from more sustainable healthcare sector;</p> <p>Development of circular textile value chains with considerable effects on maintaining and expanding Danish employment along the textiles value chain;</p> <p>Full-scale implementation and scale-up of reuse/recycling system for mattresses.</p>	<p>J: >500 related to waste management, recycling and keeping materials in DK; and sustainable transition within healthcare sector in DK.</p> <p>C: >100,000 ton</p> <p>EV: 100m/year in keeping materials in the value chain, export value of solutions</p> <p>R: Reduced virgin consumption, increased recycling rate</p> <p>O: Reduced loss of single-use products to the environment, Increased awareness of environmental problems related to consumption and pollution</p>
Textiles	<p>Less returns, longer use phases and more value creation of products for better circularity. Less production waste, production closer to market with more flexibility to market needs, less deadstock in retail, more agile and user-led market strategies for circularity. Export of insights and know-how. Improvement of design strategies for longer use phases and better circularity, first steps of decoupling more virgin resources of economic model. More transparency of value chains and more insight into resell markets and tendencies. New techs for sorting and fiber recovery for full circularity.</p>	<p>J:>1000 related to roboticized production closer to market, resales market, textile waste and textile recovery market will grow and create new jobs.</p> <p>C: >150,000 ton</p> <p>EV: 200 m/year increased value by participating partners, export value of solutions: 100 m/year</p> <p>R: Reuse of 50% of all textiles per year. - 3b m³ water per year</p> <p>O: design for circularity will foster higher quality and longer use and reduction in both emission and water, but focus on less consumption will add to reductions.</p>

The Partnership will address the social sustainability of the initiatives to ensure that the initiatives also contribute to a healthy work environment, enriching job content and job satisfaction. Economic measures are related to e.g. reducing the cost of bringing new materials to scale in the market thus addressing the advantage of the incumbent solutions, and social measures related to jobs created in different categories. The circular economy rewrites several underlying logics on the value chain, where the relentless search for cost minimization has created an ecosystem with low resilience and with significant trade-offs (especially visible in e.g. the fast fashion industry). The Partnership will report on the ability of engaged actors to dismantle traditional trade-offs and overcome inherent lock-ins.

Progress of the individual projects are measured through the defined leading and lagging indicators addressing the above success criteria, see Table 2. Each project is regularly evaluated against these success criteria and evaluated with respect to the potential achievements of the project. Charters established at the project level - detailing plans and responsibilities as well as pathways to intended outcomes - will be assessed during biannual meetings in the three workstreams. These meetings will also call on partners from the Partnership who can facilitate links with the wider society (e.g., NGOs like TÆNK), industrial standards (e.g., Danish Standards) and industrial policy (e.g., Confederation of Danish Industries, Danish Fashion & Textiles, The Danish Plastics Federation).

Partnership placement

Dissemination

External dissemination is embedded in the governance model and a dissemination strategy including a detailed plan for the external dissemination will be developed by the Partnership. Below follows first the organization of responsibilities in terms of dissemination towards the target groups like scholars and wider society. Secondly, the overall means and modes of dissemination are outlined.

Organizing dissemination

The members of the GA, the Director, and the Board are overall responsible for promoting the findings and contributions from the Partnership in order to inform the relevant political agendas and communities in Denmark and the EU. This to ensure the accumulating insights, which emerge within the Partnership, for promoting CE in the areas of textiles and plastics have the intended effect and impact in society. This is to take place both at the broader communicative level and through active outreach to relevant policy makers that is coordinated within the Partnership as far as it covers Partnership activities. Midyear and final year activities all have the goal of accumulating the shared milestones of the individual initiatives, making sure that synergetic effects are picked up and fueled into the further process. As the Green Deal of the EU of both areas involved is affecting the framework of CE to a great extent, and as the implementation of regulation and law in DK will be rolled out accordingly, it is essential that the partnership actively engages with policy makers right from the start to secure the foundation for CE to be both environmentally, socially and economically sound and productive. The Secretariat will ensure transparency of governance structure and contact information on the Partnership website. It is also responsible for gathering scholarly publication lists of the conducted projects, for communicating events through website articles and SoMe content, and for ensuring the website is updated with status of projects within the three workstreams textiles, plastics and common. The appointed workstream leaders of the textiles, plastics and common workstreams will be responsible for coordinating project input and strategic proposals for future development of partnership activities based on the bi-annual workstream meetings.

Each project PI is responsible for coordinating input to status reports and shared events to the secretariat, and for ensuring that the relevant group of stakeholders for their specific project are made aware of project insights and deliverables (e.g. peers, foundations, investors, industry organizations, project partners, the wider public etc.). This will take place through scholarly contributions to internationally recognized conferences and scientific journals, contributions to SoMe content and input for Partnership website articles, smaller Partnership events for project partners and broader stakeholder groups, and general interaction and knowledge dissemination to public media.

The annual conference across Innomissions

The annual Partnership event taking place at the end of each year will be closely coordinated with the annual IFD event for all four Innomissions to ensure highlights of the current year's Partnership activities are disseminated. The Partnership will propose speakers from the individual R&I projects and representatives from the overall Partnership to inform about the progress, successes and barriers to the IFD. The Workstream leaders will present knowledge uptake from the bi-annual workstream meetings and strategic proposals for future development and impact creation of the partnership. Members of the Partnership GA, the Director, the board and secretariat will share with the stakeholder network and coordinate with the IFD and across the four Innomissions how to engage with the broader total set of stakeholders.

Means and modes of dissemination

The progress of the Partnership will be of interest to a large group of stakeholders including politicians, authorities, industry organizations as well as individual companies, investors, end-users, NGOs and knowledge institutions, in addition to the Partnerships within the other Innomissions. The Partnership will disseminate broadly through mass communication channels as well as more specialized media and outlets to reach the different target audiences of the different dissemination efforts, and to enhance the interest of the many different stakeholder groups. Elements of the dissemination strategy are outlined below. These lists are non-exhaustive and the different elements will be included if and when the Partnership sees fit.

Communication activities (non-exhaustive):

- An overall communication plan with KPI's will be developed for the Partnership.

- A website will be established with basic information about the Partnership, and with embedded news, social media activity and feeds
- Press releases are used when relevant, e.g. when new publications are made available, when dissemination activities are announced etc.
- Social media accounts are established on the more business oriented SoMe such as LinkedIn and Twitter and all Partnership participants are encouraged to tag the Partnership when posting Partnership relevant news of their activities
 - The annual conference with IFD
 - Participation at for instance Folkemødet Bornholm
 - Debate articles bringing state-of-the-art and new knowledge into debates of broader societal interest concerning the circular economy's role in the green transition, target outlets are e.g. Altinget and the larger newspapers
 - Public conferences on specific challenges and potentials for the circular economy, open for the general public and involving researchers, stakeholders and the relevant representatives of political parties may be held at for instance Christiansborg.

Targeted/specific target groups (non-exhaustive):

- Peer-reviewed scientific publications, open-access, which are expected at the average rate of at least 1/publication per 2 million in turn over for the Partnership
- Presentation at scientific conferences around the world to showcase Danish positions of strength
- Organization of topic specific workshops on progress within specific subjects designed for the targeted industries, investors, NGOs, authorities and end-user
- Guided tours at e.g. waste management facilities or recovery technologies to introduce key stakeholders to new technologies or specific challenges
- Dissemination via popular channels for targeted end-user groups in the form of articles written for sector specific professional journals (typically in Danish).